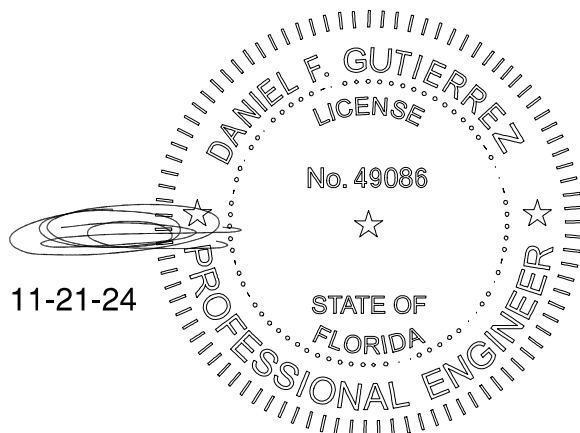


## GS JPD 10635 LLC



11-21-24

*"This item has been digitally signed and sealed by Daniel F. Gutierrez on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies"*

Location  
Building owner  
Program user  
Company  
Comments

10635 SW 63 Ave Miami FL  
GS JPD 10635 LLC  
Daniel F Gutierrez

By  
Dataset name  
Calculation time  
TRACE® 700 version

DFG  
E:\Heat Load\2024\Giorgio Balli\GS McDonough 2.trc  
06:58 PM on 11/21/2024  
6.0

Location  
Latitude  
Longitude  
Time Zone  
Elevation  
Barometric pressure

Miami, Florida  
25.0 deg  
80.0 deg  
5  
7 ft  
29.9 in. Hg

Air density  
Air specific heat  
Density-specific heat product  
Latent heat factor  
Enthalpy factor

0.0760 lb/cu ft  
0.2444 Btu/lb·°F  
1.1151 Btu/h·cfm·°F  
4,908.6 Btu·min/h·cu ft  
4.5619 lb·min/hr·cu ft

Summer design dry bulb  
Summer design wet bulb  
Winter design dry bulb  
Summer clearness number  
Winter clearness number  
Summer ground reflectance  
Winter ground reflectance

90 °F  
77 °F  
47 °F  
0.95  
0.95  
0.20  
0.20

Design simulation period  
Cooling load methodology  
Heating load methodology

January - December  
TETD-TA1  
UATD



# ENGINEERING CHECKS

By DFG

| System       | Zone       | Room                          | Type                 | Floor Area<br>ft² | COOLING                          |         |         |         | HEATING    |       |         |            |      |        |
|--------------|------------|-------------------------------|----------------------|-------------------|----------------------------------|---------|---------|---------|------------|-------|---------|------------|------|--------|
|              |            |                               |                      |                   | % OA                             | cfm/ft² | cfm/ton | ft²/ton | Btu/hr-ft² | % OA  | cfm/ft² | Btu/hr-ft² |      |        |
| System - 001 | Zone - 001 | Kitchen                       | Room                 | 528               | 31.61                            | 0.30    | 259.0   | 864.5   | 13.88      | 31.61 | 0.30    | -8.43      |      |        |
|              |            | Staff Room                    | Room                 | 197               | 0.00                             | 0.79    | 463.7   | 588.7   | 20.38      | 0.00  | 0.79    | -16.64     |      |        |
|              |            | Family Room                   | Room                 | 783               | 0.00                             | 1.01    | 514.7   | 507.8   | 23.63      | 0.00  | 1.01    | -21.41     |      |        |
|              |            | Laundry Room                  | Room                 | 299               | 0.00                             | 0.57    | 438.7   | 770.0   | 15.58      | 0.00  | 0.57    | -12.04     |      |        |
|              |            | Study                         | Room                 | 235               | 0.00                             | 1.07    | 491.6   | 461.4   | 26.01      | 0.00  | 1.07    | -22.50     |      |        |
|              |            | Zone - 001                    | Zone                 | 2,042             | 3.27                             | 0.75    | 451.3   | 603.3   | 19.89      | 3.27  | 0.75    | -16.35     |      |        |
| System - 001 |            |                               | System - Single Zone | 2,042             | 3.27                             | 0.75    | 451.3   | 603.3   | 19.89      | 3.27  | 0.75    | -16.35     |      |        |
| System - 002 | Zone - 002 | Billards                      | Room                 | 347               | 0.00                             | 2.14    | 607.5   | 284.3   | 42.21      | 0.00  | 2.14    | -31.28     |      |        |
|              |            | Lounge 1                      | Room                 | 616               | 0.00                             | 0.44    | 500.8   | 1,140.6 | 10.52      | 0.00  | 0.44    | -6.43      |      |        |
|              |            | Media                         | Room                 | 440               | 0.00                             | 1.00    | 527.0   | 524.9   | 22.86      | 0.00  | 1.00    | -14.70     |      |        |
|              |            | Zone - 002                    | Zone                 | 1,403             | 0.00                             | 1.04    | 559.3   | 540.1   | 22.22      | 0.00  | 1.04    | -15.16     |      |        |
|              |            | System - 002                  |                      |                   | System - Single Zone             | 1,403   | 0.00    | 1.04    | 559.3      | 540.1 | 22.22   | 0.00       | 1.04 | -15.16 |
|              |            | Great Room                    | Room                 | 768               | 0.00                             | 1.30    | 613.0   | 472.1   | 25.42      | 0.00  | 0.00    | -12.64     |      |        |
| System - 003 | Zone - 003 | Dinning Room                  | Room                 | 361               | 0.00                             | 1.77    | 590.9   | 334.4   | 35.88      | 0.00  | 0.00    | -16.13     |      |        |
|              |            | Foyer 1st Floor               | Room                 | 246               | 0.00                             | 2.39    | 611.2   | 255.5   | 46.97      | 0.00  | 0.00    | -21.26     |      |        |
|              |            | Zone - 003                    | Zone                 | 1,375             | 0.00                             | 1.21    | 569.8   | 471.8   | 25.44      | 0.00  | 0.00    | -15.10     |      |        |
|              |            | System - 003                  |                      |                   | System - VAV w/Baseboard Heating | 1,375   | 0.00    | 1.21    | 569.8      | 471.8 | 25.44   | 0.00       | 0.00 | -15.10 |
|              |            | Bedroom #3 2nd Floor          | Room                 | 410               | 0.00                             | 0.90    | 452.4   | 500.6   | 23.97      | 0.00  | 0.00    | -16.53     |      |        |
|              |            | Bedroom #2 & Bath 2nd Floor   | Room                 | 357               | 0.00                             | 0.75    | 466.5   | 624.9   | 19.20      | 0.00  | 0.00    | -11.60     |      |        |
| System - 004 | Zone - 004 | Bedroom #1 2nd Floor          | Room                 | 403               | 0.00                             | 0.84    | 474.9   | 565.2   | 21.23      | 0.00  | 0.00    | -9.28      |      |        |
|              |            | Open to below                 | Room                 | 255               | 0.00                             | 2.13    | 542.8   | 255.3   | 47.01      | 0.00  | 0.00    | -18.26     |      |        |
|              |            | Hallway 2nd                   | Room                 | 245               | 0.00                             | 0.33    | 356.7   | 1,086.7 | 11.04      | 0.00  | 0.00    | -5.61      |      |        |
|              |            | Lounge 2                      | Room                 | 407               | 0.00                             | 0.75    | 528.5   | 709.4   | 16.92      | 0.00  | 0.00    | -9.78      |      |        |
|              |            | Zone - 004                    | Zone                 | 2,078             | 0.00                             | 0.85    | 463.4   | 544.4   | 22.04      | 0.00  | 0.00    | -11.88     |      |        |
|              |            | System - 004                  |                      |                   | System - VAV w/Baseboard Heating | 2,078   | 0.00    | 0.85    | 463.4      | 544.4 | 22.04   | 0.00       | 0.00 | -11.88 |
| System - 005 | Zone - 005 | Primary MAster Room Bath & WC | Room                 | 1,126             | 0.00                             | 0.80    | 483.1   | 603.3   | 19.89      | 0.00  | 0.80    | -12.31     |      |        |
|              |            | Zone - 005                    | Zone                 | 1,126             | 0.00                             | 0.80    | 483.1   | 603.3   | 19.89      | 0.00  | 0.80    | -12.31     |      |        |
|              |            | System - 005                  |                      |                   | System - Single Zone             | 1,126   | 0.00    | 0.80    | 483.1      | 603.3 | 19.89   | 0.00       | 0.80 | -12.31 |
|              |            | Guest Suite                   | Room                 | 366               | 0.00                             | 1.29    | 509.7   | 396.6   | 30.26      | 0.00  | 0.00    | -21.32     |      |        |
|              |            | Zone - 006                    | Zone                 | 366               | 0.00                             | 1.29    | 509.7   | 396.6   | 30.26      | 0.00  | 0.00    | -21.32     |      |        |
|              |            | System - 006                  |                      |                   | System - VAV w/Baseboard Heating | 366     | 0.00    | 1.29    | 509.7      | 396.6 | 30.26   | 0.00       | 0.00 | -21.32 |

# System Checksums

By DFG

System - 001

Single Zone

| COOLING COIL PEAK  |  |                          |  |           | CLG SPACE PEAK   |                |        | HEATING COIL PEAK     |                       |                   |                    | TEMPERATURES     |         |          |                 |      |         |       |      |
|--------------------|--|--------------------------|--|-----------|------------------|----------------|--------|-----------------------|-----------------------|-------------------|--------------------|------------------|---------|----------|-----------------|------|---------|-------|------|
| Peaked at Time:    |  | Mo/Hr:                   |  |           | Mo/Hr: Sum of    |                |        | Mo/Hr: Heating Design |                       |                   |                    | Cooling          |         |          | Heating         |      |         |       |      |
| Outside Air:       |  | OADB/WB/HR: Sum of Peaks |  |           | OADB: Peaks      |                |        | OADB: 47              |                       |                   |                    | SADB             |         |          | 56.9            | 85.9 |         |       |      |
| Space Sens. + Lat. |  | Plenum Sens. + Lat       |  | Net Total | Percent Of Total | Space Sensible |        | Percent Of Total      | Space Peak Space Sens |                   | Coil Peak Tot Sens | Percent Of Total | Plenum  |          | 77.0            | 66.9 |         |       |      |
| Btu/h              |  | Btu/h                    |  | Btu/h     | (%)              | Btu/h          |        | (%)                   | Btu/h                 |                   | Btu/h              | (%)              | Return  |          | 76.9            | 66.9 |         |       |      |
| Envelope Loads     |  |                          |  |           | Envelope Loads   |                |        |                       |                       | Fn MtrTD          |                    |                  |         |          | 0.0             | 0.0  |         |       |      |
| Skylite Solar      |  | 0                        |  | 0         | 0                | 0              |        | 0                     | Skylite Solar         |                   | 0                  | 0                | 0.00    | Fn BldTD |                 | 0.0  | 0.0     |       |      |
| Skylite Cond       |  | 0                        |  | 0         | 0                | 0              |        | 0                     | Skylite Cond          |                   | 0                  | 0                | 0.00    | Fn Frict |                 | 0.1  | 0.0     |       |      |
| Roof Cond          |  | 0                        |  | 2,964     | 7                | 0              |        | 0                     | Roof Cond             |                   | 0                  | -930             | 2.78    |          |                 |      |         |       |      |
| Glass Solar        |  | 8,182                    |  | 0         | 8,182            | 20             | 13,232 |                       | 43                    | Glass Solar       |                    | 0                | 0       | 0.00     |                 |      |         |       |      |
| Glass Cond         |  | 6,753                    |  | 0         | 6,753            | 17             | 4,625  |                       | 15                    | Glass Cond        |                    | -11,929          | -11,929 | 35.74    |                 |      |         |       |      |
| Wall Cond          |  | 3,935                    |  | 1,785     | 5,720            | 14             | 2,934  |                       | 10                    | Wall Cond         |                    | -3,809           | -5,568  | 16.68    |                 |      |         |       |      |
| Partition          |  | 4,223                    |  |           | 4,223            | 10             | 4,014  |                       | 13                    | Partition         |                    | -6,306           | -6,306  | 18.89    |                 |      |         |       |      |
| Exposed Floor      |  | 0                        |  |           | 0                | 0              | 0      |                       | 0                     | Exposed Floor     |                    | 0                | 0       | 0.00     |                 |      |         |       |      |
| Infiltration       |  | 5,662                    |  |           | 5,662            | 14             | 1,446  |                       | 5                     | Infiltration      |                    | -2,789           | -2,789  | 8.36     |                 |      |         |       |      |
| Sub Total ==>      |  | 28,755                   |  | 4,749     | 33,504           | 82             | 26,251 |                       | 85                    | Sub Total ==>     |                    | -24,833          | -27,521 | 82.45    |                 |      |         |       |      |
| Internal Loads     |  |                          |  |           | Internal Loads   |                |        |                       |                       |                   |                    |                  |         |          | AIRFLOWS        |      |         |       |      |
| Lights             |  | 1,707                    |  | 0         | 1,707            | 4              | 1,707  |                       | 6                     | Lights            |                    | 0                | 0       | 0.00     | Cooling         |      | Heating |       |      |
| People             |  | 2,500                    |  |           | 2,500            | 6              | 1,250  |                       | 4                     | People            |                    | 0                | 0       | 0.00     | Vent            |      | 50      | 50    |      |
| Misc               |  | 683                      |  | 0         | 683              | 2              | 683    |                       | 2                     | Misc              |                    | 0                | 0       | 0.00     | Infil           |      | 119     | 119   |      |
| Sub Total ==>      |  | 4,889                    |  | 0         | 4,889            | 12             | 3,639  |                       | 12                    | Sub Total ==>     |                    | 0                | 0       | 0.00     | Supply          |      | 1,528   | 1,528 |      |
| Ceiling Load       |  | 1,269                    |  | -1,269    | 0                | 0              | 981    |                       | 3                     | Ceiling Load      |                    | -700             | 0       | 0.00     | MinStop/Rh      |      | 0       | 0     |      |
| Ventilation Load   |  | 0                        |  | 0         | 2,603            | 6              | 0      |                       | 0                     | Ventilation Load  |                    | 0                | -1,171  | 3.51     | Return          |      | 1,647   | 1,647 |      |
| Dehumid. Ov Sizing |  |                          |  |           | 0                | 0              |        |                       |                       | Ov/Undr Sizing    |                    | -4,890           | -4,890  | 14.65    | Exhaust         |      | 169     | 169   |      |
| Ov/Undr Sizing     |  | 0                        |  |           | 0                | 0              | 0      |                       | 0                     | Exhaust Heat      |                    |                  | 204     | -0.61    | Rm Exh          |      | 0       | 0     |      |
| Exhaust Heat       |  |                          |  | -381      | -381             | -1             |        |                       |                       | OA Preheat Diff.  |                    |                  | 0       | 0.00     | Auxiliary       |      | 0       | 0     |      |
| Sup. Fan Heat      |  |                          |  |           | 0                | 0              |        |                       |                       | RA Preheat Diff.  |                    |                  | 0       | 0.00     |                 |      |         |       |      |
| Ret. Fan Heat      |  |                          |  | 0         | 0                | 0              |        |                       |                       | Additional Reheat |                    |                  | 0       | 0.00     |                 |      |         |       |      |
| Duct Heat Pkup     |  |                          |  | 0         | 0                | 0              |        |                       |                       |                   |                    |                  |         |          | ENGINEERING CKS |      |         |       |      |
| Reheat at Design   |  |                          |  |           | 0                | 0              |        |                       |                       |                   |                    |                  |         |          | % OA            |      |         | 3.3   | 3.3  |
| Grand Total ==>    |  | 34,913                   |  | 3,099     | 40,614           | 100.00         | 30,871 |                       | 100.00                | Grand Total ==>   |                    | -30,423          | -33,378 | 100.00   | cfm/ft²         |      |         | 0.75  | 0.75 |

| COOLING COIL SELECTION |     |           |              |                |                |       |             |      |       | AREAS |                       |          | HEATING COIL SELECTION |         |      |      |  |
|------------------------|-----|-----------|--------------|----------------|----------------|-------|-------------|------|-------|-------|-----------------------|----------|------------------------|---------|------|------|--|
| Total Capacity         |     | Sens Cap. | Coil Airflow | Enter DB/WB/HR | Leave DB/WB/HR |       | Gross Total |      |       | Glass | Capacity Coil Airflow |          |                        |         | Ent  | Lvg  |  |
| ton                    | MBh | MBh       | cfm          | °F             | °F             | gr/lb | °F          | °F   | gr/lb | ft²   | (%)                   | MBh      | cfm                    | °F      | °F   |      |  |
| Main Clg               | 3.4 | 40.6      | 33.7         | 1,527.6        | 77.3           | 63.7  | 66.7        | 56.7 | 54.9  | 61.6  |                       | Main Htg | -33.4                  | 1,527.6 | 66.3 | 85.9 |  |
| Aux Clg                | 0.0 | 0.0       | 0.0          | 0              | 0              | 0     | 0           | 0    | 0     | 0     |                       | Aux Htg  | 0.0                    | 0       | 0    | 0    |  |
| Opt Vent               | 0.0 | 0.0       | 0.0          | 0              | 0.0            | 0.0   | 0.0         | 0.0  | 0.0   | 0.0   |                       | Preheat  | 0.0                    | 0       | 0    | 0    |  |
| Total                  | 3.4 | 40.6      |              |                |                |       |             |      |       |       |                       | Humidif  | 0.0                    | 0       | 0.0  | 0.0  |  |

|       |  |       |     |    |  |  |  |  |
|-------|--|-------|-----|----|--|--|--|--|
| Floor |  | 2,042 |     |    |  |  |  |  |
| Part  |  | 774   |     |    |  |  |  |  |
| ExFlr |  | 0     |     |    |  |  |  |  |
| Roof  |  | 1,363 | 0   | 0  |  |  |  |  |
| Wall  |  | 1,656 | 532 | 32 |  |  |  |  |
| Total |  | -33.4 |     |    |  |  |  |  |

By DFG

## System - 002

## Single Zone

| COOLING COIL PEAK  |  |                          |  |           | CLG SPACE PEAK   |                |        | HEATING COIL PEAK |                       |                |                    | TEMPERATURES     |        |         |
|--------------------|--|--------------------------|--|-----------|------------------|----------------|--------|-------------------|-----------------------|----------------|--------------------|------------------|--------|---------|
| Peaked at Time:    |  | Mo/Hr:                   |  |           | Mo/Hr:           |                |        | Mo/Hr:            |                       | Heating Design |                    | Cooling          |        | Heating |
| Outside Air:       |  | OADB/WB/HR: Sum of Peaks |  |           | OADB: Peaks      |                |        | OADB:             |                       | 47             |                    | SADB             |        | 80.3    |
| Space Sens. + Lat. |  | Plenum Sens. + Lat       |  | Net Total | Percent Of Total | Space Sensible |        | Percent Of Total  | Space Peak Space Sens |                | Coil Peak Tot Sens | Percent Of Total | Plenum |         |
| Btu/h              |  | Btu/h                    |  | Btu/h     | (%)              | Btu/h          |        | (%)               | Btu/h                 |                | Btu/h              | (%)              | 76.0   |         |
| Envelope Loads     |  |                          |  |           | Envelope Loads   |                |        |                   |                       |                |                    |                  |        |         |
| Skylite Solar      |  | 0                        |  | 0         | 0                | 0              |        | 0                 | Skylite Solar         |                | 0                  | 0                | 0.00   | 80.3    |
| Skylite Cond       |  | 0                        |  | 0         | 0                | 0              |        | 0                 | Skylite Cond          |                | 0                  | 0                | 0.00   | 67.2    |
| Roof Cond          |  | 0                        |  | 132       | 0                | 0              |        | 0                 | Roof Cond             |                | 0                  | -52              | 0.24   | 67.2    |
| Glass Solar        |  | 12,575                   |  | 0         | 40               | 12,575         |        | 48                | Glass Solar           |                | 0                  | 0                | 0.00   | 67.2    |
| Glass Cond         |  | 4,331                    |  | 0         | 14               | 4,331          |        | 16                | Glass Cond            |                | -10,465            | -10,465          | 49.20  | 67.2    |
| Wall Cond          |  | 5,213                    |  | 1,949     | 23               | 5,213          |        | 20                | Wall Cond             |                | -3,969             | -5,704           | 26.82  | 67.2    |
| Partition          |  | 1,103                    |  | 0         | 4                | 1,103          |        | 4                 | Partition             |                | -1,760             | -1,760           | 8.27   | 67.2    |
| Exposed Floor      |  | 0                        |  | 0         | 0                | 0              |        | 0                 | Exposed Floor         |                | 0                  | 0                | 0.00   | 67.2    |
| Infiltration       |  | 3,439                    |  | 0         | 11               | 989            |        | 4                 | Infiltration          |                | -1,916             | -1,916           | 9.01   | 67.2    |
| Sub Total ==>      |  | 26,661                   |  | 2,081     | 92               | 24,211         |        | 92                | Sub Total ==>         |                | -18,110            | -19,897          | 93.55  | 67.2    |
| Internal Loads     |  |                          |  |           | Internal Loads   |                |        |                   |                       |                |                    |                  |        |         |
| Lights             |  | 1,024                    |  | 0         | 3                | 1,024          |        | 4                 | Lights                |                | 0                  | 0                | 0.00   | 67.2    |
| People             |  | 1,500                    |  | 0         | 5                | 750            |        | 3                 | People                |                | 0                  | 0                | 0.00   | 67.2    |
| Misc               |  | 0                        |  | 0         | 0                | 0              |        | 0                 | Misc                  |                | 0                  | 0                | 0.00   | 67.2    |
| Sub Total ==>      |  | 2,524                    |  | 0         | 8                | 1,774          |        | 7                 | Sub Total ==>         |                | 0                  | 0                | 0.00   | 67.2    |
| Ceiling Load       |  | 461                      |  | -461      | 0                | 461            |        | 2                 | Ceiling Load          |                | -368               | 0                | 0.00   | 67.2    |
| Ventilation Load   |  | 0                        |  | 0         | 0                | 0              |        | 0                 | Ventilation Load      |                | 0                  | 0                | 0.00   | 67.2    |
| Dehumid. Ov Sizing |  | 0                        |  | 0         | 0                | 0              |        | 0                 | Ov/Undr Sizing        |                | -1,446             | -1,446           | 6.80   | 67.2    |
| Ov/Undr Sizing     |  | 0                        |  | 0         | 0                | 0              |        | 0                 | Exhaust Heat          |                | 76                 | -0.36            | 67.2   | 67.2    |
| Exhaust Heat       |  | -95                      |  | -95       | 0                | 0              |        | 0                 | OA Preheat Diff.      |                | 0                  | 0.00             | 67.2   | 67.2    |
| Sup. Fan Heat      |  | 0                        |  | 0         | 0                | 0              |        | 0                 | RA Preheat Diff.      |                | 0                  | 0.00             | 67.2   | 67.2    |
| Ret. Fan Heat      |  | 0                        |  | 0         | 0                | 0              |        | 0                 | Additional Reheat     |                | 0                  | 0.00             | 67.2   | 67.2    |
| Duct Heat PkUp     |  | 0                        |  | 0         | 0                | 0              |        | 0                 |                       |                |                    |                  |        | 67.2    |
| Reheat at Design   |  | 0                        |  | 0         | 0                | 0              |        | 0                 |                       |                |                    |                  |        | 67.2    |
| Grand Total ==>    |  | 29,646                   |  | 1,525     | 31,171           | 100.00         | 26,446 | 100.00            | Grand Total ==>       |                | -19,925            | -21,267          | 100.00 | 67.2    |

| COOLING COIL SELECTION |  |           |  |              | AREAS                  |  |                |  |  | HEATING COIL SELECTION |  |         |  |                       |  |                   |  |
|------------------------|--|-----------|--|--------------|------------------------|--|----------------|--|--|------------------------|--|---------|--|-----------------------|--|-------------------|--|
| Total Capacity         |  | Sens Cap. |  | Coil Airflow | Enter DB/WB/HR         |  | Leave DB/WB/HR |  |  | Gross Total            |  | Glass   |  | Capacity Coil Airflow |  | Ent Lvg           |  |
| ton MBh                |  | MBh       |  | cfm          | °F °F gr/lb            |  | °F °F gr/lb    |  |  | ft² (%)                |  | ft² (%) |  | MBh cfm               |  | °F °F             |  |
| Main Clg               |  | 2.6 31.2  |  | 28.0         | 1,452.8 75.8 62.9 64.9 |  | 58.7 55.7 61.6 |  |  | Floor 1,403            |  | 0       |  | Main Htg -21.3        |  | 1,452.8 67.2 80.3 |  |
| Aux Clg                |  | 0.0 0.0   |  | 0.0          | 0 0 0                  |  | 0 0 0          |  |  | Part 216               |  | 0       |  | Aux Htg 0.0           |  | 0 0 0             |  |
| Opt Vent               |  | 0.0 0.0   |  | 0.0          | 0 0.0 0.0 0.0          |  | 0.0 0.0 0.0    |  |  | ExFlr 0                |  | 0       |  | Preheat 0.0           |  | 0 0 0             |  |
| Total                  |  | 2.6 31.2  |  |              |                        |  |                |  |  | Roof 75                |  | 0 0     |  | Humidif 0.0           |  | 0 0.0 0.0         |  |
|                        |  |           |  |              |                        |  |                |  |  | Wall 1,613             |  | 467 29  |  | Opt Vent 0.0          |  | 0 0.0 0.0         |  |
|                        |  |           |  |              |                        |  |                |  |  |                        |  |         |  | Total -21.3           |  |                   |  |

# System Checksums

By DFG

System - 003

VAV w/Baseboard Heating

| COOLING COIL PEAK                      |                    |           |                  |        | CLG SPACE PEAK        |                  |   |                   |         | HEATING COIL PEAK     |                    |                  |  |  | TEMPERATURES    |  |  |
|----------------------------------------|--------------------|-----------|------------------|--------|-----------------------|------------------|---|-------------------|---------|-----------------------|--------------------|------------------|--|--|-----------------|--|--|
| Peaked at Time: Mo/Hr: 8 / 17          |                    |           |                  |        | Mo/Hr: 8 / 17         |                  |   |                   |         | Mo/Hr: Heating Design |                    |                  |  |  | Cooling Heating |  |  |
| Outside Air: OADB/WB/HR: 89 / 76 / 116 |                    |           |                  |        | OADB: 89              |                  |   |                   |         | OADB: 47              |                    |                  |  |  | SADB            |  |  |
| Space Sens. + Lat.                     | Plenum Sens. + Lat | Net Total | Percent Of Total |        | Space Sensible        | Percent Of Total |   |                   |         | Space Peak Space Sens | Coil Peak Tot Sens | Percent Of Total |  |  | Plenum          |  |  |
| Btu/h                                  | Btu/h              | Btu/h     | (%)              |        | Btu/h                 | (%)              |   |                   |         | Btu/h                 | Btu/h              | (%)              |  |  | Return          |  |  |
| <b>Envelope Loads</b>                  |                    |           |                  |        | <b>Envelope Loads</b> |                  |   |                   |         | <b>Envelope Loads</b> |                    |                  |  |  | Ret/OA          |  |  |
| Skylite Solar                          | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Solar     | 0       | 0                     | 0                  | 0.00             |  |  | Fn MtrTD        |  |  |
| Skylite Cond                           | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Cond      | 0       | 0                     | 0                  | 0.00             |  |  | Fn BldTD        |  |  |
| Roof Cond                              | 0                  | 822       | 822              | 2      | 0                     | 0                | 0 | Roof Cond         | 0       | -192                  | 0                  | 0.93             |  |  | Fn Frict        |  |  |
| Glass Solar                            | 14,448             | 0         | 14,448           | 41     | 14,448                | 49               | 0 | Glass Solar       | 0       | 0                     | 0                  | 0.00             |  |  |                 |  |  |
| Glass Cond                             | 8,059              | 0         | 8,059            | 23     | 8,059                 | 27               | 0 | Glass Cond        | -13,256 | -13,256               | 64.50              | 0.00             |  |  |                 |  |  |
| Wall Cond                              | 819                | 1,381     | 2,200            | 6      | 819                   | 3                | 0 | Wall Cond         | -549    | -1,359                | 6.61               | 0.00             |  |  |                 |  |  |
| Partition                              | 2,911              |           | 2,911            | 8      | 2,911                 | 10               | 0 | Partition         | -4,074  | -4,074                | 19.82              | 0.00             |  |  |                 |  |  |
| Exposed Floor                          | 0                  |           | 0                | 0      | 0                     | 0                | 0 | Exposed Floor     | 0       | 0                     | 0                  | 0.00             |  |  |                 |  |  |
| Infiltration                           | 4,095              |           | 4,095            | 12     | 1,243                 | 4                | 0 | Infiltration      | -1,878  | -1,878                | 9.14               | 0.00             |  |  |                 |  |  |
| Sub Total ==>                          | 30,331             | 2,203     | 32,534           | 93     | 27,480                | 93               | 0 | Sub Total ==>     | -19,757 | -20,759               | 101.00             | 0.00             |  |  |                 |  |  |
| <b>Internal Loads</b>                  |                    |           |                  |        | <b>Internal Loads</b> |                  |   |                   |         | <b>Internal Loads</b> |                    |                  |  |  |                 |  |  |
| Lights                                 | 1,024              | 0         | 1,024            | 3      | 1,024                 | 3                | 0 | Lights            | 0       | 0                     | 0                  | 0.00             |  |  |                 |  |  |
| People                                 | 1,500              |           | 1,500            | 4      | 750                   | 3                | 0 | People            | 0       | 0                     | 0                  | 0.00             |  |  |                 |  |  |
| Misc                                   | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Misc              | 0       | 0                     | 0                  | 0.00             |  |  |                 |  |  |
| Sub Total ==>                          | 2,524              | 0         | 2,524            | 7      | 1,774                 | 6                | 0 | Sub Total ==>     | 0       | 0                     | 0                  | 0.00             |  |  |                 |  |  |
| Ceiling Load                           | 411                | -411      | 0                | 0      | 411                   | 1                | 0 | Ceiling Load      | -1,002  | 0                     | 0                  | 0.00             |  |  |                 |  |  |
| Ventilation Load                       | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Ventilation Load  | 0       | 0                     | 0                  | 0.00             |  |  |                 |  |  |
| Dehumid. Ov Sizing                     |                    |           | 0                | 0      |                       |                  | 0 | Ov/Undr Sizing    | 0       | 0                     | 0                  | 0.00             |  |  |                 |  |  |
| Ov/Undr Sizing                         | 0                  |           | 0                | 0      | 0                     | 0                | 0 | Exhaust Heat      |         | 206                   | -1.00              | 0.00             |  |  |                 |  |  |
| Exhaust Heat                           |                    | -84       | -84              | 0      |                       |                  | 0 | OA Preheat Diff.  |         | 0                     | 0.00               | 0.00             |  |  |                 |  |  |
| Sup. Fan Heat                          |                    |           | 0                | 0      |                       |                  | 0 | RA Preheat Diff.  |         | 0                     | 0.00               | 0.00             |  |  |                 |  |  |
| Ret. Fan Heat                          |                    | 0         | 0                | 0      |                       |                  | 0 | Additional Reheat |         | 0                     | 0.00               | 0.00             |  |  |                 |  |  |
| Duct Heat Pkup                         |                    | 0         | 0                | 0      |                       |                  | 0 |                   |         |                       |                    |                  |  |  |                 |  |  |
| Reheat at Design                       |                    |           | 0                | 0      |                       |                  | 0 |                   |         |                       |                    |                  |  |  |                 |  |  |
| Grand Total ==>                        | 33,266             | 1,707     | 34,974           | 100.00 | 29,665                | 100.00           | 0 | Grand Total ==>   | -20,759 | -20,553               | 100.00             | 0.00             |  |  |                 |  |  |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 0       | 0       |
| Infil      | 80      | 80      |
| Supply     | 1,661   | 0       |
| MinStop/Rh | 0       | 0       |
| Return     | 1,741   | 0       |
| Exhaust    | 80      | 80      |
| Rm Exh     | 0       | 0       |
| Auxiliary  | 0       | 0       |

| ENGINEERING CKS |         |         |
|-----------------|---------|---------|
|                 | Cooling | Heating |
| % OA            | 0.0     | 0.0     |
| cfm/ft²         | 1.21    | 0.00    |
| cfm/ton         | 569.83  |         |
| ft²/ton         | 471.78  |         |
| Btu/hr-ft²      | 25.44   | -15.10  |
| No. People      | 3       |         |

| COOLING COIL SELECTION |     |           |              |                |      |       |      |                |      | AREAS |  |       | HEATING COIL SELECTION |       |        |        |     |
|------------------------|-----|-----------|--------------|----------------|------|-------|------|----------------|------|-------|--|-------|------------------------|-------|--------|--------|-----|
| Total Capacity         |     | Sens Cap. | Coil Airflow | Enter DB/WB/HR |      |       |      | Leave DB/WB/HR |      |       |  | Glass | Capacity Coil Airflow  |       | Ent °F | Lvq °F |     |
| ton                    | MBh |           |              | °F             | °F   | gr/lb |      | °F             | °F   | gr/lb |  |       | MBh                    | cfm   |        |        |     |
| Main Clg               | 2.9 | 35.0      | 31.4         | 1,660.8        | 75.9 | 62.9  | 65.1 | 59.0           | 56.0 | 62.0  |  |       | Main Htg               | -20.8 | 0.0    | 0.0    | 0.0 |
| Aux Clg                | 0.0 | 0.0       | 0.0          | 0              | 0    | 0     | 0    | 0              | 0    | 0     |  |       | Aux Htg                | 0.0   | 0      | 0      | 0   |
| Opt Vent               | 0.0 | 0.0       | 0.0          | 0              | 0.0  | 0.0   | 0.0  | 0.0            | 0.0  | 0.0   |  |       | Preheat                | 0.0   | 0      | 0      | 0   |
| Total                  | 2.9 | 35.0      |              |                |      |       |      |                |      |       |  |       | Humidif                | 0.0   | 0      | 0.0    | 0.0 |
|                        |     |           |              |                |      |       |      |                |      |       |  |       | Opt Vent               | 0.0   | 0      | 0.0    | 0.0 |
|                        |     |           |              |                |      |       |      |                |      |       |  |       | Total                  | -20.8 |        |        |     |

# System Checksums

By DFG

System - 004

VAV w/Baseboard Heating

| COOLING COIL PEAK                      |  |  |  |  | CLG SPACE PEAK |  |  | HEATING COIL PEAK     |  |  |  |  | TEMPERATURES     |  |  |
|----------------------------------------|--|--|--|--|----------------|--|--|-----------------------|--|--|--|--|------------------|--|--|
| Peaked at Time: Mo/Hr: 8 / 17          |  |  |  |  | Mo/Hr: 8 / 17  |  |  | Mo/Hr: Heating Design |  |  |  |  | Cooling Heating  |  |  |
| Outside Air: OADB/WB/HR: 89 / 76 / 116 |  |  |  |  | OADB: 89       |  |  | OADB: 47              |  |  |  |  | SADB 57.6 68.0   |  |  |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |  | Plenum 77.8 64.1 |  |  |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |  | Return 77.8 64.1 |  |  |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |  | Ret/OA 77.8 47.0 |  |  |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |  | Fn MtrTD 0.0 0.0 |  |  |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |  | Fn BldTD 0.0 0.0 |  |  |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |  | Fn Frict 0.0 0.0 |  |  |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |  |                  |  |  |
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|                                        |  |  |  |  |                |  |  |                       |  |  |  |  |                  |  |  |

# System Checksums

By DFG

System - 005

Single Zone

| COOLING COIL PEAK  |  |                          |  |           | CLG SPACE PEAK   |                |                  | HEATING COIL PEAK     |           |          |          | TEMPERATURES |         |  |
|--------------------|--|--------------------------|--|-----------|------------------|----------------|------------------|-----------------------|-----------|----------|----------|--------------|---------|--|
| Peaked at Time:    |  | Mo/Hr:                   |  |           | Mo/Hr: Sum of    |                |                  | Mo/Hr: Heating Design |           | Cooling  |          |              | Heating |  |
| Outside Air:       |  | OADB/WB/HR: Sum of Peaks |  |           | OADB: Peaks      |                |                  | OADB: 47              |           | SADB     |          |              | 80.3    |  |
| Space Sens. + Lat. |  | Plenum Sens. + Lat       |  | Net Total | Percent Of Total | Space Sensible | Percent Of Total | Space Peak            | Coil Peak | Percent  | Plenum   | 78.4         |         |  |
| Btu/h              |  | Btu/h                    |  | Btu/h     | (%)              | Btu/h          | (%)              | Space Sens            | Tot Sens  | Of Total | Return   | 66.5         |         |  |
|                    |  |                          |  |           |                  |                |                  | Btu/h                 | Btu/h     | (%)      | Ret/OA   | 66.5         |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          | Fn MtrTD | 0.0          |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          | Fn BldTD | 0.0          |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          | Fn Frict | 0.0          |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |
|                    |  |                          |  |           |                  |                |                  |                       |           |          |          |              |         |  |

# System Checksums

By DFG

System - 006

VAV w/Baseboard Heating

| COOLING COIL PEAK                      |                    |           |                  |        | CLG SPACE PEAK        |                  |   |                   |        | HEATING COIL PEAK     |                    |                  |  |  | TEMPERATURES |         |         |
|----------------------------------------|--------------------|-----------|------------------|--------|-----------------------|------------------|---|-------------------|--------|-----------------------|--------------------|------------------|--|--|--------------|---------|---------|
| Peaked at Time: Mo/Hr: 8 / 17          |                    |           |                  |        | Mo/Hr: 8 / 17         |                  |   |                   |        | Mo/Hr: Heating Design |                    |                  |  |  |              |         |         |
| Outside Air: OADB/WB/HR: 89 / 76 / 116 |                    |           |                  |        | OADB: 89              |                  |   |                   |        | OADB: 47              |                    |                  |  |  |              |         |         |
| Space Sens. + Lat.                     | Plenum Sens. + Lat | Net Total | Percent Of Total |        | Space Sensible        | Percent Of Total |   |                   |        | Space Peak Space Sens | Coil Peak Tot Sens | Percent Of Total |  |  |              |         |         |
| Btu/h                                  | Btu/h              | Btu/h     | (%)              |        | Btu/h                 | (%)              |   |                   |        | Btu/h                 | Btu/h              | (%)              |  |  |              |         |         |
| <b>Envelope Loads</b>                  |                    |           |                  |        | <b>Envelope Loads</b> |                  |   |                   |        | <b>Envelope Loads</b> |                    |                  |  |  |              |         |         |
| Skylite Solar                          | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Solar     | 0      | 0                     | 0                  | 0.00             |  |  | SADB         | Cooling | Heating |
| Skylite Cond                           | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Cond      | 0      | 0                     | 0                  | 0.00             |  |  | Plenum       | 59.0    | 68.0    |
| Roof Cond                              | 0                  | 974       | 974              | 9      | 0                     | 0                | 0 | Roof Cond         | 0      | -173                  | 2.27               |                  |  |  | Return       | 78.2    | 60.8    |
| Glass Solar                            | 1,154              | 0         | 1,154            | 10     | 1,154                 | 14               |   | Glass Solar       | 0      | 0                     | 0.00               |                  |  |  | Ret/OA       | 78.2    | 60.8    |
| Glass Cond                             | 1,913              | 0         | 1,913            | 17     | 1,913                 | 23               |   | Glass Cond        | -3,147 | -3,147                | 41.24              |                  |  |  | Fn MtrTD     | 0.0     | 0.0     |
| Wall Cond                              | 3,652              | 1,154     | 4,806            | 43     | 3,652                 | 44               |   | Wall Cond         | -2,801 | -3,460                | 45.35              |                  |  |  | Fn BldTD     | 0.0     | 0.0     |
| Partition                              | 373                | 0         | 373              | 3      | 373                   | 4                |   | Partition         | -521   | -521                  | 6.83               |                  |  |  | Fn Frict     | 0.0     | 0.0     |
| Exposed Floor                          | 0                  | 0         | 0                | 0      | 0                     | 0                |   | Exposed Floor     | 0      | 0                     | 0.00               |                  |  |  |              |         |         |
| Infiltration                           | 1,090              | 0         | 1,090            | 10     | 331                   | 4                |   | Infiltration      | -500   | -500                  | 6.55               |                  |  |  |              |         |         |
| Sub Total ==>                          | 8,181              | 2,128     | 10,309           | 93     | 7,422                 | 89               |   | Sub Total ==>     | -6,969 | -7,802                | 102.24             |                  |  |  |              |         |         |
| <b>Internal Loads</b>                  |                    |           |                  |        | <b>Internal Loads</b> |                  |   |                   |        | <b>Internal Loads</b> |                    |                  |  |  |              |         |         |
| Lights                                 | 341                | 0         | 341              | 3      | 341                   | 4                |   | Lights            | 0      | 0                     | 0.00               |                  |  |  |              |         |         |
| People                                 | 500                | 0         | 500              | 5      | 250                   | 3                |   | People            | 0      | 0                     | 0.00               |                  |  |  |              |         |         |
| Misc                                   | 0                  | 0         | 0                | 0      | 0                     | 0                |   | Misc              | 0      | 0                     | 0.00               |                  |  |  |              |         |         |
| Sub Total ==>                          | 841                | 0         | 841              | 8      | 591                   | 7                |   | Sub Total ==>     | 0      | 0                     | 0.00               |                  |  |  |              |         |         |
| Ceiling Load                           | 372                | -372      | 0                | 0      | 372                   | 4                |   | Ceiling Load      | -833   | 0                     | 0.00               |                  |  |  |              |         |         |
| Ventilation Load                       | 0                  | 0         | 0                | 0      | 0                     | 0                |   | Ventilation Load  | 0      | 0                     | 0.00               |                  |  |  |              |         |         |
| Dehumid. Ov Sizing                     | 0                  | 0         | 0                | 0      | 0                     | 0                |   | Ov/Undr Sizing    | 0      | 0                     | 0.00               |                  |  |  |              |         |         |
| Ov/Undr Sizing                         | 0                  | 0         | 0                | 0      | 0                     | 0                |   | Exhaust Heat      | 171    | -2.24                 |                    |                  |  |  |              |         |         |
| Exhaust Heat                           | -76                | -76       | -1               | -1     | 0                     | 0                |   | OA Preheat Diff.  | 0      | 0.00                  |                    |                  |  |  |              |         |         |
| Sup. Fan Heat                          | 0                  | 0         | 0                | 0      | 0                     | 0                |   | RA Preheat Diff.  | 0      | 0.00                  |                    |                  |  |  |              |         |         |
| Ret. Fan Heat                          | 0                  | 0         | 0                | 0      | 0                     | 0                |   | Additional Reheat | 0      | 0.00                  |                    |                  |  |  |              |         |         |
| Duct Heat Pkup                         | 0                  | 0         | 0                | 0      | 0                     | 0                |   |                   |        |                       |                    |                  |  |  |              |         |         |
| Reheat at Design                       | 0                  | 0         | 0                | 0      | 0                     | 0                |   |                   |        |                       |                    |                  |  |  |              |         |         |
| Grand Total ==>                        | 9,394              | 1,680     | 11,074           | 100.00 | 8,385                 | 100.00           |   | Grand Total ==>   | -7,802 | -7,631                | 100.00             |                  |  |  |              |         |         |

| TEMPERATURES |         |         |
|--------------|---------|---------|
|              | Cooling | Heating |
| SADB         | 59.0    | 68.0    |
| Plenum       | 78.2    | 60.8    |
| Return       | 78.2    | 60.8    |
| Ret/OA       | 78.2    | 47.0    |
| Fn MtrTD     | 0.0     | 0.0     |
| Fn BldTD     | 0.0     | 0.0     |
| Fn Frict     | 0.0     | 0.0     |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 0       | 0       |
| Infil      | 21      | 21      |
| Supply     | 470     | 0       |
| MinStop/Rh | 0       | 0       |
| Return     | 492     | 0       |
| Exhaust    | 21      | 21      |
| Rm Exh     | 0       | 0       |
| Auxiliary  | 0       | 0       |

| ENGINEERING CKS |         |         |
|-----------------|---------|---------|
|                 | Cooling | Heating |
| % OA            | 0.0     | 0.0     |
| cfm/ft²         | 1.29    | 0.00    |
| cfm/ton         | 509.71  |         |
| ft²/ton         | 396.59  |         |
| Btu/hr-ft²      | 30.26   | -21.32  |
| No. People      | 1       |         |

| COOLING COIL SELECTION |           |              |                |                |      |      |      |      |      | AREAS       |         |  | HEATING COIL SELECTION |      |     |     |     |
|------------------------|-----------|--------------|----------------|----------------|------|------|------|------|------|-------------|---------|--|------------------------|------|-----|-----|-----|
| Total Capacity         | Sens Cap. | Coil Airflow | Enter DB/WB/HR | Leave DB/WB/HR |      |      |      |      |      | Gross Total | Glass   |  | Capacity Coil Airflow  | Ent  | Lvg |     |     |
| ton                    | MBh       | MBh          | °F °F gr/lb    | °F °F gr/lb    |      |      |      |      |      |             | ft² (%) |  | MBh                    | cfm  | °F  | °F  |     |
| Main Clg               | 0.9       | 11.1         | 10.1           | 470.4          | 78.2 | 63.7 | 65.1 | 59.0 | 56.0 | 62.0        |         |  | Main Htg               | -7.8 | 0.0 | 0.0 | 0.0 |
| Aux Clg                | 0.0       | 0.0          | 0.0            | 0              | 0    | 0    | 0    | 0    | 0    | 0           |         |  | Aux Htg                | 0.0  | 0   | 0   | 0   |
| Opt Vent               | 0.0       | 0.0          | 0.0            | 0              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0         |         |  | Preheat                | 0.0  | 0   | 0   | 0   |
| Total                  | 0.9       | 11.1         |                |                |      |      |      |      |      |             |         |  | Humidif                | 0.0  | 0   | 0.0 | 0.0 |
|                        |           |              |                |                |      |      |      |      |      |             |         |  | Opt Vent               | 0.0  | 0   | 0.0 | 0.0 |
|                        |           |              |                |                |      |      |      |      |      |             |         |  | Total                  | -7.8 |     |     |     |



# Room Checksums

By DFG

## Bedroom #1 2nd Floor

| COOLING COIL PEAK                      |  |  |  |  | CLG SPACE PEAK |  |  |  |  | HEATING COIL PEAK     |  |  |  |  | TEMPERATURES |  |  |         |      |
|----------------------------------------|--|--|--|--|----------------|--|--|--|--|-----------------------|--|--|--|--|--------------|--|--|---------|------|
| Peaked at Time: Mo/Hr: 8 / 17          |  |  |  |  | Mo/Hr: 8 / 17  |  |  |  |  | Mo/Hr: Heating Design |  |  |  |  | Cooling      |  |  | Heating |      |
| Outside Air: OADB/WB/HR: 89 / 76 / 116 |  |  |  |  | OADB: 89       |  |  |  |  | OADB: 47              |  |  |  |  | SADB         |  |  | 57.6    | 68.0 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Plenum       |  |  | 77.8    | 64.1 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Return       |  |  | 77.8    | 64.1 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Ret/OA       |  |  | 77.8    | 47.0 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn MtrTD     |  |  | 0.0     | 0.0  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn BldTD     |  |  | 0.0     | 0.0  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn Frict     |  |  | 0.0     | 0.0  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |

# Room Checksums

By DFG

## Bedroom #2 & Bath 2nd Floor

| COOLING COIL PEAK                      |                    |              |                  |               | CLG SPACE PEAK        |                  |   |                           |               | HEATING COIL PEAK     |                    |                  |   |   | TEMPERATURES    |                |                |
|----------------------------------------|--------------------|--------------|------------------|---------------|-----------------------|------------------|---|---------------------------|---------------|-----------------------|--------------------|------------------|---|---|-----------------|----------------|----------------|
| Peaked at Time: Mo/Hr: 8 / 15          |                    |              |                  |               | Mo/Hr: 8 / 10         |                  |   |                           |               | Mo/Hr: Heating Design |                    |                  |   |   |                 |                |                |
| Outside Air: OADB/WB/HR: 90 / 77 / 118 |                    |              |                  |               | OADB: 84              |                  |   |                           |               | OADB: 47              |                    |                  |   |   |                 |                |                |
| Space Sens. + Lat.                     | Plenum Sens. + Lat | Net Total    | Percent Of Total |               | Space Sensible        | Percent Of Total |   |                           |               | Space Peak Space Sens | Coil Peak Tot Sens | Percent Of Total |   |   |                 |                |                |
| Btu/h                                  | Btu/h              | Btu/h        | (%)              |               | Btu/h                 | (%)              |   |                           |               | Btu/h                 | Btu/h              | (%)              |   |   |                 |                |                |
| <b>Envelope Loads</b>                  |                    |              |                  |               | <b>Envelope Loads</b> |                  |   |                           |               | <b>Envelope Loads</b> |                    |                  |   |   |                 |                |                |
| Skylite Solar                          | 0                  | 0            | 0                | 0             | 0                     | 0                | 0 | Skylite Solar             | 0             | 0                     | 0                  | 0                | 0 | 0 | <b>SADB</b>     | <b>Cooling</b> | <b>Heating</b> |
| Skylite Cond                           | 0                  | 0            | 0                | 0             | 0                     | 0                | 0 | Skylite Cond              | 0             | 0                     | 0                  | 0                | 0 | 0 | <b>Plenum</b>   | 57.6           | 68.0           |
| Roof Cond                              | 0                  | 834          | 834              | 12            | 0                     | 0                | 0 | Roof Cond                 | 0             | -208                  | 5                  | 0                | 0 | 0 | <b>Return</b>   | 77.6           | 64.1           |
| Glass Solar                            | 523                | 0            | 523              | 8             | 2,941                 | 57               | 0 | Glass Solar               | 0             | 0                     | 0                  | 0                | 0 | 0 | <b>Ret/OA</b>   | 77.6           | 64.1           |
| Glass Cond                             | 948                | 0            | 948              | 14            | 556                   | 11               | 0 | Glass Cond                | -1,446        | -1,446                | 36                 | 0                | 0 | 0 | <b>Fn MtrTD</b> | 0.0            | 0.0            |
| Wall Cond                              | 1,342              | 537          | 1,879            | 27            | 458                   | 9                | 0 | Wall Cond                 | -663          | -892                  | 22                 | 0                | 0 | 0 | <b>Fn BldTD</b> | 0.0            | 0.0            |
| Partition                              | 762                |              | 762              | 11            | 363                   | 7                | 0 | Partition                 | -1,100        | -1,100                | 27                 | 0                | 0 | 0 | <b>Fn Frict</b> | 0.0            | 0.0            |
| Exposed Floor                          | 0                  |              | 0                | 0             | 0                     | 0                | 0 | Exposed Floor             | 0             | 0                     | 0                  | 0                | 0 | 0 |                 |                |                |
| Infiltration                           | 1,128              |              | 1,128            | 16            | 204                   | 4                | 0 | Infiltration              | -488          | -488                  | 12                 | 0                | 0 | 0 |                 |                |                |
| <b>Sub Total ==&gt;</b>                | <b>4,704</b>       | <b>1,371</b> | <b>6,075</b>     | <b>89</b>     | <b>4,523</b>          | <b>87</b>        |   | <b>Sub Total ==&gt;</b>   | <b>-3,696</b> | <b>-4,133</b>         | <b>102</b>         |                  |   |   |                 |                |                |
| <b>Internal Loads</b>                  |                    |              |                  |               | <b>Internal Loads</b> |                  |   |                           |               | <b>Internal Loads</b> |                    |                  |   |   |                 |                |                |
| Lights                                 | 341                | 0            | 341              | 5             | 341                   | 7                | 0 | Lights                    | 0             | 0                     | 0                  | 0                | 0 | 0 |                 |                |                |
| People                                 | 500                |              | 500              | 7             | 250                   | 5                | 0 | People                    | 0             | 0                     | 0                  | 0                | 0 | 0 |                 |                |                |
| Misc                                   | 0                  | 0            | 0                | 0             | 0                     | 0                | 0 | Misc                      | 0             | 0                     | 0                  | 0                | 0 | 0 |                 |                |                |
| <b>Sub Total ==&gt;</b>                | <b>841</b>         | <b>0</b>     | <b>841</b>       | <b>12</b>     | <b>591</b>            | <b>11</b>        |   | <b>Sub Total ==&gt;</b>   | <b>0</b>      | <b>0</b>              | <b>0</b>           |                  |   |   |                 |                |                |
| <b>Ceiling Load</b>                    | <b>295</b>         | <b>-295</b>  | <b>0</b>         | <b>0</b>      | <b>66</b>             | <b>1</b>         |   | <b>Ceiling Load</b>       | <b>-447</b>   | <b>0</b>              | <b>0</b>           |                  |   |   |                 |                |                |
| <b>Ventilation Load</b>                | <b>0</b>           | <b>0</b>     | <b>0</b>         | <b>0</b>      | <b>0</b>              | <b>0</b>         |   | <b>Ventilation Load</b>   | <b>0</b>      | <b>0</b>              | <b>0</b>           |                  |   |   |                 |                |                |
| <b>Dehumid. Ov Sizing</b>              | <b>0</b>           |              | <b>0</b>         | <b>0</b>      | <b>0</b>              | <b>0</b>         |   | <b>Ov/Undr Sizing</b>     | <b>0</b>      | <b>0</b>              | <b>0</b>           |                  |   |   |                 |                |                |
| <b>Exhaust Heat</b>                    |                    | <b>-61</b>   | <b>-61</b>       | <b>-1</b>     |                       |                  |   | <b>Exhaust Heat</b>       |               | <b>92</b>             | <b>-2</b>          |                  |   |   |                 |                |                |
| <b>Sup. Fan Heat</b>                   |                    |              | <b>0</b>         | <b>0</b>      |                       |                  |   | <b>OA Preheat Diff.</b>   |               | <b>0</b>              | <b>0</b>           |                  |   |   |                 |                |                |
| <b>Ret. Fan Heat</b>                   |                    |              | <b>0</b>         | <b>0</b>      |                       |                  |   | <b>RA Preheat Diff.</b>   |               | <b>0</b>              | <b>0</b>           |                  |   |   |                 |                |                |
| <b>Duct Heat Pkup</b>                  |                    |              | <b>0</b>         | <b>0</b>      |                       |                  |   | <b>Additional Reheat</b>  |               | <b>0</b>              | <b>0</b>           |                  |   |   |                 |                |                |
| <b>Reheat at Design</b>                |                    |              | <b>0</b>         | <b>0</b>      |                       |                  |   | <b>System Plenum Heat</b> |               | <b>-9</b>             | <b>0</b>           |                  |   |   |                 |                |                |
| <b>Grand Total ==&gt;</b>              | <b>5,840</b>       | <b>1,016</b> | <b>6,856</b>     | <b>100.00</b> | <b>5,180</b>          | <b>100.00</b>    |   | <b>Grand Total ==&gt;</b> | <b>-4,143</b> | <b>-4,051</b>         | <b>100.00</b>      |                  |   |   |                 |                |                |

| TEMPERATURES |         |         |
|--------------|---------|---------|
|              | Cooling | Heating |
| SADB         | 57.6    | 68.0    |
| Plenum       | 77.6    | 64.1    |
| Return       | 77.6    | 64.1    |
| Ret/OA       | 77.6    | 47.0    |
| Fn MtrTD     | 0.0     | 0.0     |
| Fn BldTD     | 0.0     | 0.0     |
| Fn Frict     | 0.0     | 0.0     |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 0       | 0       |
| Infil      | 21      | 21      |
| Supply     | 267     | 0       |
| MinStop/Rh | 0       | 0       |
| Return     | 287     | 0       |
| Exhaust    | 21      | 21      |
| Rm Exh     | 0       | 0       |
| Auxil      | 0       | 0       |

| ENGINEERING CKS |         |         |
|-----------------|---------|---------|
|                 | Cooling | Heating |
| % OA            | 0.0     | 0.0     |
| cfm/ft²         | 0.75    | 0.00    |
| cfm/ton         | 466.47  |         |
| ft²/ton         | 624.87  |         |
| Btu/hr-ft²      | 19.20   | -11.60  |
| No. People      | 1       |         |

| COOLING COIL SELECTION |                |            |              |                |      |       |                |      |       |
|------------------------|----------------|------------|--------------|----------------|------|-------|----------------|------|-------|
|                        | Total Capacity | Sens Cap.  | Coil Airflow | Enter DB/WB/HR |      |       | Leave DB/WB/HR |      |       |
|                        | ton            | MBh        | cfm          | °F             | °F   | gr/lb | °F             | °F   | gr/lb |
| Main Clg               | 0.6            | 6.9        | 247          | 77.6           | 63.5 | 65.1  | 57.6           | 54.2 | 57.5  |
| Aux Clg                | 0.0            | 0.0        | 0            | 0.0            | 0.0  | 0.0   | 0.0            | 0.0  |       |
| Opt Vent               | 0.0            | 0.0        | 0            | 0.0            | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   |
| <b>Total</b>           | <b>0.6</b>     | <b>6.9</b> |              |                |      |       |                |      |       |

| AREAS |             |       |     |
|-------|-------------|-------|-----|
|       | Gross Total | Glass |     |
|       |             | ft²   | (%) |
| Floor | 357         |       |     |
| Part  | 135         |       |     |
| ExFlr | 0           |       |     |
| Roof  | 357         | 0     | 0   |
| Wall  | 252         | 65    | 26  |

| HEATING COIL SELECTION |             |              |     |     |
|------------------------|-------------|--------------|-----|-----|
|                        | Capacity    | Coil Airflow | Ent | Lvg |
|                        | MBh         | cfm          | °F  | °F  |
| Main Htg               | -4.1        | 0            | 0.0 | 0.0 |
| Aux Htg                | 0.0         | 0            | 0.0 | 0.0 |
| Preheat                | 0.0         | 0            | 0.0 | 0.0 |
| Humidif                | 0.0         | 0            | 0.0 | 0.0 |
| Opt Vent               | 0.0         | 0            | 0.0 | 0.0 |
| <b>Total</b>           | <b>-4.1</b> |              |     |     |

# Room Checksums

By DFG

## Bedroom #3 2nd Floor

| COOLING COIL PEAK                      |                    |           |                  |        | CLG SPACE PEAK        |                  |        |                    |        | HEATING COIL PEAK     |                    |                  |        |        | TEMPERATURES |         |         |
|----------------------------------------|--------------------|-----------|------------------|--------|-----------------------|------------------|--------|--------------------|--------|-----------------------|--------------------|------------------|--------|--------|--------------|---------|---------|
| Peaked at Time: Mo/Hr: 7 / 17          |                    |           |                  |        | Mo/Hr: 8 / 16         |                  |        |                    |        | Mo/Hr: Heating Design |                    |                  |        |        |              |         |         |
| Outside Air: OADB/WB/HR: 88 / 75 / 113 |                    |           |                  |        | OADB: 90              |                  |        |                    |        | OADB: 47              |                    |                  |        |        |              |         |         |
| Space Sens. + Lat.                     | Plenum Sens. + Lat | Net Total | Percent Of Total |        | Space Sensible        | Percent Of Total |        |                    |        | Space Peak Space Sens | Coil Peak Tot Sens | Percent Of Total |        |        |              |         |         |
| Btu/h                                  | Btu/h              | Btu/h     | (%)              |        | Btu/h                 | (%)              |        |                    |        | Btu/h                 | Btu/h              | (%)              |        |        |              |         |         |
| <b>Envelope Loads</b>                  |                    |           |                  |        | <b>Envelope Loads</b> |                  |        |                    |        | <b>Envelope Loads</b> |                    |                  |        |        |              |         |         |
| Skylite Solar                          | 0                  | 0         | 0                | 0      | 0                     | 0                | 0      | Skylite Solar      | 0      | 0                     | 0                  | 0                | 0      | 0      | SADB         | Cooling | Heating |
| Skylite Cond                           | 0                  | 0         | 0                | 0      | 0                     | 0                | 0      | Skylite Cond       | 0      | 0                     | 0                  | 0                | 0      | 0      | Plenum       | 57.6    | 68.0    |
| Roof Cond                              | 0                  | 1,106     | 1,106            | 11     | 0                     | 0                | 0      | Roof Cond          | 0      | -240                  | 4                  | 4                | 4      | 4      | Return       | 77.9    | 64.1    |
| Glass Solar                            | 953                | 0         | 953              | 10     | 914                   | 13               | 13     | Glass Solar        | 0      | 0                     | 0                  | 0                | 0      | 0      | Ret/OA       | 77.9    | 64.1    |
| Glass Cond                             | 1,612              | 0         | 1,612            | 16     | 1,835                 | 25               | 25     | Glass Cond         | -2,857 | -2,857                | 43                 | 43               | 43     | 43     | Fn MtrTD     | 0.0     | 0.0     |
| Wall Cond                              | 2,773              | 936       | 3,709            | 38     | 2,537                 | 35               | 35     | Wall Cond          | -2,039 | -2,661                | 40                 | 40               | 40     | 40     | Fn BldTD     | 0.0     | 0.0     |
| Partition                              | 542                |           | 542              | 6      | 584                   | 8                | 8      | Partition          | -815   | -815                  | 12                 | 12               | 12     | 12     | Fn Frict     | 0.0     | 0.0     |
| Exposed Floor                          | 0                  |           | 0                | 0      | 0                     | 0                | 0      | Exposed Floor      | 0      | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| Infiltration                           | 1,151              |           | 1,151            | 12     | 392                   | 5                | 5      | Infiltration       | -561   | -561                  | 8                  | 8                | 8      | 8      |              |         |         |
| Sub Total ==>                          | 7,031              | 2,042     | 9,074            | 92     | 6,263                 | 87               | 87     | Sub Total ==>      | -6,271 | -7,132                | 107                | 107              | 107    | 107    |              |         |         |
| <b>Internal Loads</b>                  |                    |           |                  |        | <b>Internal Loads</b> |                  |        |                    |        | <b>Internal Loads</b> |                    |                  |        |        |              |         |         |
| Lights                                 | 341                | 0         | 341              | 3      | 341                   | 5                | 5      | Lights             | 0      | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| People                                 | 500                |           | 500              | 5      | 250                   | 3                | 3      | People             | 0      | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| Misc                                   | 0                  | 0         | 0                | 0      | 0                     | 0                | 0      | Misc               | 0      | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| Sub Total ==>                          | 841                | 0         | 841              | 9      | 591                   | 8                | 8      | Sub Total ==>      | 0      | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| <b>Ceiling Load</b>                    |                    |           |                  |        | <b>Ceiling Load</b>   |                  |        |                    |        | <b>Ceiling Load</b>   |                    |                  |        |        |              |         |         |
| Ventilation Load                       | 377                | -377      | 0                | 0      | 354                   | 5                | 5      | Ventilation Load   | -514   | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| Dehumid. Ov Sizing                     | 0                  | 0         | 0                | 0      | 0                     | 0                | 0      | Dehumid. Ov Sizing | 0      | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| Ov/Undr Sizing                         | 0                  |           | 0                | 0      | 0                     | 0                | 0      | Ov/Undr Sizing     | 0      | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| Exhaust Heat                           |                    | -77       | -77              | -1     |                       |                  |        | Exhaust Heat       |        | 105                   | -2                 | -2               | -2     | -2     |              |         |         |
| Sup. Fan Heat                          |                    |           | 0                | 0      |                       |                  |        | OA Preheat Diff.   |        | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| Ret. Fan Heat                          |                    | 0         | 0                | 0      |                       |                  |        | RA Preheat Diff.   |        | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| Duct Heat Pkup                         |                    | 0         | 0                | 0      |                       |                  |        | Additional Reheat  |        | 0                     | 0                  | 0                | 0      | 0      |              |         |         |
| Reheat at Design                       |                    |           | 0                | 0      |                       |                  |        | System Plenum Heat |        | 348                   | -5                 | -5               | -5     | -5     |              |         |         |
| Grand Total ==>                        | 8,250              | 1,588     | 9,838            | 100.00 | 7,209                 | 100.00           | 100.00 | Grand Total ==>    | -6,785 | -6,679                | 100.00             | 100.00           | 100.00 | 100.00 |              |         |         |

| TEMPERATURES |         |         |
|--------------|---------|---------|
|              | Cooling | Heating |
| SADB         | 57.6    | 68.0    |
| Plenum       | 77.9    | 64.1    |
| Return       | 77.9    | 64.1    |
| Ret/OA       | 77.9    | 47.0    |
| Fn MtrTD     | 0.0     | 0.0     |
| Fn BldTD     | 0.0     | 0.0     |
| Fn Frict     | 0.0     | 0.0     |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 0       | 0       |
| Infil      | 24      | 24      |
| Supply     | 371     | 0       |
| MinStop/Rh | 0       | 0       |
| Return     | 395     | 0       |
| Exhaust    | 24      | 24      |
| Rm Exh     | 0       | 0       |
| Auxil      | 0       | 0       |

| ENGINEERING CKS |         |         |
|-----------------|---------|---------|
|                 | Cooling | Heating |
| % OA            | 0.0     | 0.0     |
| cfm/ft²         | 0.90    | 0.00    |
| cfm/ton         | 452.37  |         |
| ft²/ton         | 500.61  |         |
| Btu/hr-ft²      | 23.97   | -16.53  |
| No. People      | 1       |         |

| COOLING COIL SELECTION |           |              |                |                |      |      |      |      |      |
|------------------------|-----------|--------------|----------------|----------------|------|------|------|------|------|
| Total Capacity         | Sens Cap. | Coil Airflow | Enter DB/WB/HR | Leave DB/WB/HR |      |      |      |      |      |
| ton                    | MBh       | cfm          | °F °F gr/lb    | °F °F gr/lb    |      |      |      |      |      |
| Main Clg               | 0.8       | 9.8          | 8.8            | 370            | 77.9 | 63.6 | 65.1 | 57.6 | 54.8 |
| Aux Clg                | 0.0       | 0.0          | 0.0            | 0              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Opt Vent               | 0.0       | 0.0          | 0.0            | 0              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total                  | 0.8       | 9.8          |                |                |      |      |      |      |      |

| AREAS       |       |     |    |
|-------------|-------|-----|----|
| Gross Total | Glass |     |    |
|             | ft²   | (%) |    |
| Floor       | 410   |     |    |
| Part        | 100   |     |    |
| ExFlr       | 0     |     |    |
| Roof        | 410   | 0   | 0  |
| Wall        | 684   | 127 | 19 |

| HEATING COIL SELECTION |              |     |     |     |
|------------------------|--------------|-----|-----|-----|
| Capacity               | Coil Airflow | Ent |     |     |
| MBh                    | cfm          | °F  | °F  | Lvg |
| Main Htg               | -6.8         | 0   | 0.0 | 0.0 |
| Aux Htg                | 0.0          | 0   | 0.0 | 0.0 |
| Preheat                | 0.0          | 0   | 0.0 | 0.0 |
| Humidif                | 0.0          | 0   | 0.0 | 0.0 |
| Opt Vent               | 0.0          | 0   | 0.0 | 0.0 |
| Total                  | -6.8         |     |     |     |

## By DFG

| COOLING COIL PEAK      |                                |                                |                       |                               | CLG SPACE PEAK                |                            |                    | HEATING COIL PEAK                 |                                |                                  |            | TEMPERATURES |                        |  |  |  |
|------------------------|--------------------------------|--------------------------------|-----------------------|-------------------------------|-------------------------------|----------------------------|--------------------|-----------------------------------|--------------------------------|----------------------------------|------------|--------------|------------------------|--|--|--|
| Peaked at Time:        |                                | Mo/Hr: 8 / 10                  |                       |                               | Mo/Hr: 8 / 10                 |                            |                    | Mo/Hr: Heating Design             |                                |                                  |            |              |                        |  |  |  |
| Outside Air:           |                                | OADB/WB/HR: 84 / 73 / 105      |                       |                               | OADB: 84                      |                            |                    | OADB: 47                          |                                |                                  |            |              |                        |  |  |  |
|                        | Space<br>Sens. + Lat.<br>Btu/h | Plenum<br>Sens. + Lat<br>Btu/h | Net<br>Total<br>Btu/h | Percent<br>Of Total<br>(%)    | Space<br>Sensible<br>Btu/h    | Percent<br>Of Total<br>(%) |                    | Space Peak<br>Space Sens<br>Btu/h | Coil Peak<br>Tot Sens<br>Btu/h | Percent<br>Of Total<br>(%)       | SADB       | Cooling      | Heating                |  |  |  |
| Envelope Loads         |                                |                                |                       |                               |                               |                            | Envelope Loads     |                                   |                                |                                  | Plenum     | 58.7         | 80.3                   |  |  |  |
| Skylite Solar          | 0                              | 0                              | 0                     | 0                             | 0                             | 0                          | Skylite Solar      | 0                                 | 0                              | 0                                | Return     | 75.4         | 67.2                   |  |  |  |
| Skylite Cond           | 0                              | 0                              | 0                     | 0                             | 0                             | 0                          | Skylite Cond       | 0                                 | 0                              | 0                                | Ret/OA     | 75.4         | 67.2                   |  |  |  |
| Roof Cond              | 0                              | 5                              | 5                     | 0                             | 0                             | 0                          | Roof Cond          | 0                                 | -17                            | 0                                | Fn MtrTD   | 0.0          | 0.0                    |  |  |  |
| Glass Solar            | 9,127                          | 0                              | 9,127                 | 62                            | 9,127                         | 68                         | Glass Solar        | 0                                 | 0                              | 0                                | Fn BldTD   | 0.0          | 0.0                    |  |  |  |
| Glass Cond             | 2,956                          | 0                              | 2,956                 | 20                            | 2,956                         | 22                         | Glass Cond         | -7,681                            | -7,681                         | 71                               | Fn Frict   | 0.0          | 0.0                    |  |  |  |
| Wall Cond              | 567                            | 371                            | 938                   | 6                             | 567                           | 4                          | Wall Cond          | -1,255                            | -2,074                         | 19                               |            |              |                        |  |  |  |
| Partition              | 0                              |                                | 0                     | 0                             | 0                             | 0                          | Partition          | 0                                 | 0                              | 0                                |            |              |                        |  |  |  |
| Exposed Floor          | 0                              |                                | 0                     | 0                             | 0                             | 0                          | Exposed Floor      | 0                                 | 0                              | 0                                |            |              |                        |  |  |  |
| Infiltration           | 767                            |                                | 767                   | 5                             | 198                           | 1                          | Infiltration       | -473                              | -473                           | 4                                |            |              |                        |  |  |  |
| Sub Total ==>          | 13,417                         | 376                            | 13,793                | 94                            | 12,848                        | 95                         | Sub Total ==>      | -9,409                            | -10,245                        | 95                               |            |              |                        |  |  |  |
| Internal Loads         |                                |                                |                       |                               |                               |                            | Internal Loads     |                                   |                                |                                  |            |              |                        |  |  |  |
| Lights                 | 341                            | 0                              | 341                   | 2                             | 341                           | 3                          | Lights             | 0                                 | 0                              | 0                                | Vent       | Cooling      | Heating                |  |  |  |
| People                 | 500                            |                                | 500                   | 3                             | 250                           | 2                          | People             | 0                                 | 0                              | 0                                | Infil      | 0            | 0                      |  |  |  |
| Misc                   | 0                              | 0                              | 0                     | 0                             | 0                             | 0                          | Misc               | 0                                 | 0                              | 0                                | Supply     | 20           | 20                     |  |  |  |
| Sub Total ==>          | 841                            | 0                              | 841                   | 6                             | 591                           | 4                          | Sub Total ==>      | 0                                 | 0                              | 0                                | MinStop/Rh | 740          | 740                    |  |  |  |
| Ceiling Load           | 38                             | -38                            | 0                     | 0                             | 38                            | 0                          | Ceiling Load       | -91                               | 0                              | 0                                | Return     | 0            | 0                      |  |  |  |
| Ventilation Load       | 0                              | 0                              | 0                     | 0                             | 0                             | 0                          | Ventilation Load   | 0                                 | 0                              | 0                                | Exhaust    | 761          | 761                    |  |  |  |
| Dehumid. Ov Sizing     |                                |                                | 0                     | 0                             |                               |                            |                    |                                   |                                |                                  | Rm Exh     | 20           | 20                     |  |  |  |
| Ov/Undr Sizing         | 0                              |                                | 0                     | 0                             | 0                             | 0                          | Ov/Undr Sizing     | -654                              | -654                           | 6                                | Auxil      | 0            | 0                      |  |  |  |
| Exhaust Heat           |                                | -8                             | -8                    | 0                             |                               |                            | Exhaust Heat       |                                   | 19                             | 0                                |            |              |                        |  |  |  |
| Sup. Fan Heat          |                                |                                | 0                     | 0                             |                               |                            | OA Preheat Diff.   |                                   | 0                              | 0                                |            |              |                        |  |  |  |
| Ref. Fan Heat          |                                | 0                              | 0                     | 0                             |                               |                            | RA Preheat Diff.   |                                   | 0                              | 0                                | % OA       | 0.0          | 0.0                    |  |  |  |
| Duct Heat PkUp         |                                | 0                              | 0                     | 0                             |                               |                            | Additional Reheat  |                                   | 0                              | 0                                | cfm/ft²    | 2.14         | 2.14                   |  |  |  |
| Reheat at Design       |                                |                                | 0                     | 0                             |                               |                            | System Plenum Heat |                                   | 42                             | 0                                | cfm/ton    | 607.46       |                        |  |  |  |
| Grand Total ==>        | 14,297                         | 330                            | 14,627                | 100.00                        | 13,478                        | 100.00                     | Grand Total ==>    | -10,154                           | -10,839                        | 100.00                           | ft²/ton    | 284.27       |                        |  |  |  |
|                        |                                |                                |                       |                               |                               |                            |                    |                                   |                                |                                  | Btu/hr-ft² | 42.21        | -31.28                 |  |  |  |
|                        |                                |                                |                       |                               |                               |                            |                    |                                   |                                |                                  | No. People | 1            |                        |  |  |  |
| COOLING COIL SELECTION |                                |                                |                       |                               |                               |                            |                    |                                   |                                | AREAS                            |            |              | HEATING COIL SELECTION |  |  |  |
|                        | Total Capacity<br>ton MBh      | Sens Cap.<br>MBh               | Coil Airflow<br>cfm   | Enter DB/WB/HR<br>°F °F gr/lb | Leave DB/WB/HR<br>°F °F gr/lb |                            | Gross Total        | Glass<br>ft² (%)                  |                                | Capacity Coil Airflow<br>MBh cfm | Ent<br>°F  | Lvg<br>°F    |                        |  |  |  |
| Main Clg               | 1.2                            | 14.6                           | 13.8                  | 740                           | 75.4 62.7 64.9                | 58.7 56.1 63.3             | Floor              | 347                               |                                | Main Htg                         | -10.8      | 740          | 67.2 80.3              |  |  |  |
| Aux Clg                | 0.0                            | 0.0                            | 0.0                   | 0                             | 0.0 0.0 0.0                   | 0.0 0.0 0.0                | Part               | 0                                 |                                | Aux Htg                          | 0.0        | 0            | 0.0 0.0                |  |  |  |
| Opt Vent               | 0.0                            | 0.0                            | 0.0                   | 0                             | 0.0 0.0 0.0                   | 0.0 0.0 0.0                | ExFlr              | 0                                 |                                | Preheat                          | 0.0        | 0            | 0.0 0.0                |  |  |  |
| Total                  | 1.2                            | 14.6                           |                       |                               |                               |                            | Roof               | 25                                | 0 0                            | Humidif                          | 0.0        | 0            | 0.0 0.0                |  |  |  |
|                        |                                |                                |                       |                               |                               |                            | Wall               | 761                               | 343 45                         | Opt Vent                         | 0.0        | 0            | 0.0 0.0                |  |  |  |
|                        |                                |                                |                       |                               |                               |                            |                    |                                   |                                | Total                            | -10.8      |              |                        |  |  |  |

# Room Checksums

By DFG

## Dinning Room

| COOLING COIL PEAK                      |                     |           |                  |        | CLG SPACE PEAK        |                  |        |                    |        | HEATING COIL PEAK     |                    |                  |        |        | TEMPERATURES |  |  |
|----------------------------------------|---------------------|-----------|------------------|--------|-----------------------|------------------|--------|--------------------|--------|-----------------------|--------------------|------------------|--------|--------|--------------|--|--|
| Peaked at Time: Mo/Hr: 8 / 17          |                     |           |                  |        | Mo/Hr: 8 / 17         |                  |        |                    |        | Mo/Hr: Heating Design |                    |                  |        |        |              |  |  |
| Outside Air: OADB/WB/HR: 89 / 76 / 116 |                     |           |                  |        | OADB: 89              |                  |        |                    |        | OADB: 47              |                    |                  |        |        |              |  |  |
| Space Sens. + Lat.                     | Plenum Sens. + Lat. | Net Total | Percent Of Total |        | Space Sensible        | Percent Of Total |        |                    |        | Space Peak Space Sens | Coil Peak Tot Sens | Percent Of Total |        |        |              |  |  |
| Btu/h                                  | Btu/h               | Btu/h     | (%)              |        | Btu/h                 | (%)              |        |                    |        | Btu/h                 | Btu/h              | (%)              |        |        |              |  |  |
| <b>Envelope Loads</b>                  |                     |           |                  |        | <b>Envelope Loads</b> |                  |        |                    |        | <b>Envelope Loads</b> |                    |                  |        |        |              |  |  |
| Skylite Solar                          | 0                   | 0         | 0                | 0      | 0                     | 0                | 0      | Skylite Solar      | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Skylite Cond                           | 0                   | 0         | 0                | 0      | 0                     | 0                | 0      | Skylite Cond       | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Roof Cond                              | 0                   | 274       | 274              | 2      | 0                     | 0                | 0      | Roof Cond          | 0      | -64                   | -64                | 1                | 1      | 1      |              |  |  |
| Glass Solar                            | 6,791               | 0         | 6,791            | 52     | 6,791                 | 60               | 60     | Glass Solar        | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Glass Cond                             | 1,833               | 0         | 1,833            | 14     | 1,833                 | 16               | 16     | Glass Cond         | -3,016 | -3,016                | -3,016             | 52               | 52     | 52     |              |  |  |
| Wall Cond                              | 580                 | 417       | 997              | 8      | 580                   | 5                | 5      | Wall Cond          | -423   | -703                  | -703               | 12               | 12     | 12     |              |  |  |
| Partition                              | 1,164               |           | 1,164            | 9      | 1,164                 | 10               | 10     | Partition          | -1,629 | -1,629                | -1,629             | 28               | 28     | 28     |              |  |  |
| Exposed Floor                          | 0                   |           | 0                | 0      | 0                     | 0                | 0      | Exposed Floor      | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Infiltration                           | 1,075               |           | 1,075            | 8      | 326                   | 3                | 3      | Infiltration       | -493   | -493                  | -493               | 9                | 9      | 9      |              |  |  |
| Sub Total ==>                          | 11,443              | 691       | 12,135           | 94     | 10,695                | 94               | 94     | Sub Total ==>      | -5,561 | -5,905                | -5,905             | 102              | 102    | 102    |              |  |  |
| <b>Internal Loads</b>                  |                     |           |                  |        | <b>Internal Loads</b> |                  |        |                    |        | <b>Internal Loads</b> |                    |                  |        |        |              |  |  |
| Lights                                 | 341                 | 0         | 341              | 3      | 341                   | 3                | 3      | Lights             | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| People                                 | 500                 |           | 500              | 4      | 250                   | 2                | 2      | People             | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Misc                                   | 0                   | 0         | 0                | 0      | 0                     | 0                | 0      | Misc               | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Sub Total ==>                          | 841                 | 0         | 841              | 6      | 591                   | 5                | 5      | Sub Total ==>      | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| <b>Ceiling Load</b>                    |                     |           |                  |        | <b>Ceiling Load</b>   |                  |        |                    |        | <b>Ceiling Load</b>   |                    |                  |        |        |              |  |  |
| Ventilation Load                       | 108                 | -108      | 0                | 0      | 108                   | 1                | 1      | Ventilation Load   | -263   | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Dehumid. Ov Sizing                     | 0                   | 0         | 0                | 0      | 0                     | 0                | 0      | Dehumid. Ov Sizing | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Ov/Undr Sizing                         | 0                   |           | 0                | 0      | 0                     | 0                | 0      | Ov/Undr Sizing     | 0      | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Exhaust Heat                           |                     | -22       | -22              | 0      |                       | 0                | 0      | Exhaust Heat       |        | 54                    | -1                 | -1               | -1     | -1     |              |  |  |
| Sup. Fan Heat                          |                     |           | 0                | 0      |                       | 0                | 0      | OA Preheat Diff.   |        | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Ret. Fan Heat                          |                     | 0         | 0                | 0      |                       | 0                | 0      | RA Preheat Diff.   |        | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Duct Heat Pkup                         |                     | 0         | 0                | 0      |                       | 0                | 0      | Additional Reheat  |        | 0                     | 0                  | 0                | 0      | 0      |              |  |  |
| Reheat at Design                       |                     |           | 0                | 0      |                       | 0                | 0      | System Plenum Heat |        | 81                    | -1                 | -1               | -1     | -1     |              |  |  |
| Grand Total ==>                        | 12,393              | 561       | 12,954           | 100.00 | 11,394                | 100.00           | 100.00 | Grand Total ==>    | -5,824 | -5,770                | -5,770             | 100.00           | 100.00 | 100.00 |              |  |  |

|          | Cooling | Heating |
|----------|---------|---------|
| SADB     | 59.0    | 68.0    |
| Plenum   | 75.9    | 65.7    |
| Return   | 75.9    | 65.7    |
| Ret/OA   | 75.9    | 47.0    |
| Fn MtrTD | 0.0     | 0.0     |
| Fn BldTD | 0.0     | 0.0     |
| Fn Frict | 0.0     | 0.0     |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 0       | 0       |
| Infil      | 21      | 21      |
| Supply     | 638     | 0       |
| MinStop/Rh | 0       | 0       |
| Return     | 659     | 0       |
| Exhaust    | 21      | 21      |
| Rm Exh     | 0       | 0       |
| Auxil      | 0       | 0       |

| ENGINEERING CKS |         |         |
|-----------------|---------|---------|
|                 | Cooling | Heating |
| % OA            | 0.0     | 0.0     |
| cfm/ft²         | 1.77    | 0.00    |
| cfm/ton         | 590.92  |         |
| ft²/ton         | 334.42  |         |
| Btu/hr-ft²      | 35.88   | -16.13  |
| No. People      | 1       |         |

| COOLING COIL SELECTION |                |           |              |                |      |       |                |      |       |
|------------------------|----------------|-----------|--------------|----------------|------|-------|----------------|------|-------|
|                        | Total Capacity | Sens Cap. | Coil Airflow | Enter DB/WB/HR |      |       | Leave DB/WB/HR |      |       |
|                        | ton            | MBh       | cfm          | °F             | °F   | gr/lb | °F             | °F   | gr/lb |
| Main Clg               | 1.1            | 13.0      | 638          | 75.9           | 62.9 | 65.1  | 59.0           | 56.2 | 63.1  |
| Aux Clg                | 0.0            | 0.0       | 0            | 0.0            | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   |
| Opt Vent               | 0.0            | 0.0       | 0            | 0.0            | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   |
| Total                  | 1.1            | 13.0      |              |                |      |       |                |      |       |

| AREAS |             |       |     |
|-------|-------------|-------|-----|
|       | Gross Total | Glass |     |
|       |             | ft²   | (%) |
| Floor | 361         |       |     |
| Part  | 200         |       |     |
| ExFlr | 0           |       |     |
| Roof  | 100         | 0     | 0   |
| Wall  | 281         | 135   | 48  |

| HEATING COIL SELECTION |          |              |     |     |
|------------------------|----------|--------------|-----|-----|
|                        | Capacity | Coil Airflow | Ent | Lvg |
|                        | MBh      | cfm          | °F  | °F  |
| Main Htg               | -5.8     | 0            | 0.0 | 0.0 |
| Aux Htg                | 0.0      | 0            | 0.0 | 0.0 |
| Preheat                | 0.0      | 0            | 0.0 | 0.0 |
| Humidif                | 0.0      | 0            | 0.0 | 0.0 |
| Opt Vent               | 0.0      | 0            | 0.0 | 0.0 |
| Total                  | -5.8     |              |     |     |

# Room Checksums

By DFG

## Family Room

| COOLING COIL PEAK                      |  |  |  |  | CLG SPACE PEAK |  |  |  |  | HEATING COIL PEAK     |  |  |  |  | TEMPERATURES |  |  |         |      |
|----------------------------------------|--|--|--|--|----------------|--|--|--|--|-----------------------|--|--|--|--|--------------|--|--|---------|------|
| Peaked at Time: Mo/Hr: 9 / 14          |  |  |  |  | Mo/Hr: 9 / 10  |  |  |  |  | Mo/Hr: Heating Design |  |  |  |  | Cooling      |  |  | Heating |      |
| Outside Air: OADB/WB/HR: 88 / 74 / 106 |  |  |  |  | OADB: 82       |  |  |  |  | OADB: 47              |  |  |  |  | SADB         |  |  | 56.9    | 85.9 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Plenum       |  |  | 76.6    | 66.9 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Return       |  |  | 76.6    | 66.9 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Ret/OA       |  |  | 76.6    | 66.9 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn MtrTD     |  |  | 0.0     | 0.0  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn BldTD     |  |  | 0.0     | 0.0  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn Frict     |  |  | 0.1     | 0.0  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |

# Room Checksums

By DFG

## Foyer 1st Floor

| COOLING COIL PEAK                      |                          |                 |                      |        | CLG SPACE PEAK       |                      |   |                    |        | HEATING COIL PEAK           |                          |                      |   |   | TEMPERATURES |         |         |
|----------------------------------------|--------------------------|-----------------|----------------------|--------|----------------------|----------------------|---|--------------------|--------|-----------------------------|--------------------------|----------------------|---|---|--------------|---------|---------|
| Peaked at Time: Mo/Hr: 9 / 17          |                          |                 |                      |        | Mo/Hr: 9 / 17        |                      |   |                    |        | Mo/Hr: Heating Design       |                          |                      |   |   |              |         |         |
| Outside Air: OADB/WB/HR: 87 / 75 / 110 |                          |                 |                      |        | OADB: 87             |                      |   |                    |        | OADB: 47                    |                          |                      |   |   |              |         |         |
| Space Sens. + Lat. Btu/h               | Plenum Sens. + Lat Btu/h | Net Total Btu/h | Percent Of Total (%) |        | Space Sensible Btu/h | Percent Of Total (%) |   |                    |        | Space Peak Space Sens Btu/h | Coil Peak Tot Sens Btu/h | Percent Of Total (%) |   |   |              |         |         |
| Envelope Loads                         |                          |                 |                      |        | Envelope Loads       |                      |   |                    |        | Envelope Loads              |                          |                      |   |   |              |         |         |
| Skylite Solar                          | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | Skylite Solar      | 0      | 0                           | 0                        | 0                    | 0 | 0 | SADB         | Cooling | Heating |
| Skylite Cond                           | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | Skylite Cond       | 0      | 0                           | 0                        | 0                    | 0 | 0 | Plenum       | 59.0    | 68.0    |
| Roof Cond                              | 0                        | 252             | 252                  | 2      | 0                    | 0                    | 0 | Roof Cond          | 0      | -64                         | 1                        | 0                    | 0 | 0 | Return       | 75.9    | 65.7    |
| Glass Solar                            | 7,035                    | 0               | 7,035                | 61     | 7,035                | 67                   | 0 | Glass Solar        | 0      | 0                           | 0                        | 0                    | 0 | 0 | Ret/OA       | 75.9    | 65.7    |
| Glass Cond                             | 2,098                    | 0               | 2,098                | 18     | 2,098                | 20                   | 0 | Glass Cond         | -3,900 | -3,900                      | 75                       | 0                    | 0 | 0 | Fn MtrTD     | 0.0     | 47.0    |
| Wall Cond                              | 0                        | 179             | 179                  | 2      | 0                    | 0                    | 0 | Wall Cond          | 0      | -135                        | 3                        | 0                    | 0 | 0 | Fn BldTD     | 0.0     | 0.0     |
| Partition                              | 518                      | 0               | 518                  | 4      | 518                  | 5                    | 0 | Partition          | -815   | -815                        | 16                       | 0                    | 0 | 0 | Fn Frict     | 0.0     | 0.0     |
| Exposed Floor                          | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | Exposed Floor      | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Infiltration                           | 647                      | 0               | 647                  | 6      | 197                  | 2                    | 0 | Infiltration       | -336   | -336                        | 6                        | 0                    | 0 | 0 |              |         |         |
| Sub Total ==>                          | 10,298                   | 431             | 10,729               | 93     | 9,848                | 94                   | 0 | Sub Total ==>      | -5,051 | -5,249                      | 101                      | 0                    | 0 | 0 |              |         |         |
| Internal Loads                         |                          |                 |                      |        | Internal Loads       |                      |   |                    |        | Internal Loads              |                          |                      |   |   |              |         |         |
| Lights                                 | 341                      | 0               | 341                  | 3      | 341                  | 3                    | 0 | Lights             | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| People                                 | 500                      | 0               | 500                  | 4      | 250                  | 2                    | 0 | People             | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Misc                                   | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | Misc               | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Sub Total ==>                          | 841                      | 0               | 841                  | 7      | 591                  | 6                    | 0 | Sub Total ==>      | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Ceiling Load                           |                          |                 |                      |        | Ceiling Load         |                      |   |                    |        | Ceiling Load                |                          |                      |   |   |              |         |         |
| Ventilation Load                       | 73                       | -73             | 0                    | 0      | 73                   | 1                    | 0 | Ventilation Load   | -179   | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Dehumid. Ov Sizing                     | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | Dehumid. Ov Sizing | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Ov/Undr Sizing                         | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | Ov/Undr Sizing     | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Exhaust Heat                           | 0                        | -15             | -15                  | 0      | 0                    | 0                    | 0 | Exhaust Heat       | 0      | 37                          | -1                       | 0                    | 0 | 0 |              |         |         |
| Sup. Fan Heat                          | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | OA Preheat Diff.   | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Ret. Fan Heat                          | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | RA Preheat Diff.   | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Duct Heat Pkup                         | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | Additional Reheat  | 0      | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Reheat at Design                       | 0                        | 0               | 0                    | 0      | 0                    | 0                    | 0 | System Plenum Heat | 19     | 0                           | 0                        | 0                    | 0 | 0 |              |         |         |
| Grand Total ==>                        | 11,212                   | 343             | 11,555               | 100.00 | 10,512               | 100.00               | 0 | Grand Total ==>    | -5,230 | -5,193                      | 100.00                   | 0                    | 0 | 0 |              |         |         |

| COOLING COIL SELECTION |              |               |                  |             |       |          |             |       |          | AREAS       |           |     |    | HEATING COIL SELECTION |                  |        |        |     |
|------------------------|--------------|---------------|------------------|-------------|-------|----------|-------------|-------|----------|-------------|-----------|-----|----|------------------------|------------------|--------|--------|-----|
| Total Capacity ton     | Capacity MBh | Sens Cap. MBh | Coil Airflow cfm | Enter DB/°F | WB/°F | HR gr/lb | Leave DB/°F | WB/°F | HR gr/lb | Gross Total | Glass ft² | (%) |    | Capacity MBh           | Coil Airflow cfm | Ent °F | Lvg °F |     |
| Main Clg               | 1.0          | 11.6          | 10.9             | 589         | 75.9  | 62.9     | 65.1        | 59.0  | 56.4     | Floor       | 246       |     |    | Main Htg               | -5.2             | 0      | 0.0    | 0.0 |
| Aux Clg                | 0.0          | 0.0           | 0.0              | 0           | 0.0   | 0.0      | 0.0         | 0.0   | 0.0      | Part        | 100       |     |    | Aux Htg                | 0.0              | 0      | 0.0    | 0.0 |
| Opt Vent               | 0.0          | 0.0           | 0.0              | 0           | 0.0   | 0.0      | 0.0         | 0.0   | 0.0      | ExFlr       | 0         |     |    | Preheat                | 0.0              | 0      | 0.0    | 0.0 |
| Total                  | 1.0          | 11.6          |                  |             |       |          |             |       |          | Roof        | 100       | 0   | 0  | Humidif                | 0.0              | 0      | 0.0    | 0.0 |
|                        |              |               |                  |             |       |          |             |       |          | Wall        | 204       | 174 | 85 | Opt Vent               | 0.0              | 0      | 0.0    | 0.0 |
|                        |              |               |                  |             |       |          |             |       |          |             |           |     |    | Total                  | -5.2             |        |        |     |

| AIRFLOWS   |         |         | ENGINEERING CKS |         |         |
|------------|---------|---------|-----------------|---------|---------|
|            | Cooling | Heating |                 | Cooling | Heating |
| Vent       | 0       | 0       | % OA            | 0.0     | 0.0     |
| Infil      | 14      | 14      | cfm/ft²         | 2.39    | 0.00    |
| Supply     | 589     | 0       | cfm/ton         | 611.20  |         |
| MinStop/Rh | 0       | 0       | ft²/ton         | 255.47  |         |
| Return     | 603     | 0       | Btu/hr-ft²      | 46.97   | -21.26  |
| Exhaust    | 14      | 14      | No. People      | 1       |         |
| Rm Exh     | 0       | 0       |                 |         |         |
| Auxil      | 0       | 0       |                 |         |         |

# Room Checksums

By DFG

## Great Room

| COOLING COIL PEAK                      |                    |           |                  |        | CLG SPACE PEAK        |                  |   |                    |        | HEATING COIL PEAK     |                    |                  |   |   | TEMPERATURES |         |         |
|----------------------------------------|--------------------|-----------|------------------|--------|-----------------------|------------------|---|--------------------|--------|-----------------------|--------------------|------------------|---|---|--------------|---------|---------|
| Peaked at Time: Mo/Hr: 8 / 9           |                    |           |                  |        | Mo/Hr: 8 / 9          |                  |   |                    |        | Mo/Hr: Heating Design |                    |                  |   |   |              |         |         |
| Outside Air: OADB/WB/HR: 82 / 73 / 107 |                    |           |                  |        | OADB: 82              |                  |   |                    |        | OADB: 47              |                    |                  |   |   |              |         |         |
| Space Sens. + Lat.                     | Plenum Sens. + Lat | Net Total | Percent Of Total |        | Space Sensible        | Percent Of Total |   |                    |        | Space Peak Space Sens | Coil Peak Tot Sens | Percent Of Total |   |   |              |         |         |
| Btu/h                                  | Btu/h              | Btu/h     | (%)              |        | Btu/h                 | (%)              |   |                    |        | Btu/h                 | Btu/h              | (%)              |   |   |              |         |         |
| <b>Envelope Loads</b>                  |                    |           |                  |        | <b>Envelope Loads</b> |                  |   |                    |        | <b>Envelope Loads</b> |                    |                  |   |   |              |         |         |
| Skylite Solar                          | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Solar      | 0      | 0                     | 0                  | 0                | 0 | 0 | SADB         | Cooling | Heating |
| Skylite Cond                           | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Cond       | 0      | 0                     | 0                  | 0                | 0 | 0 | Plenum       | 59.0    | 68.0    |
| Roof Cond                              | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Roof Cond          | 0      | -64                   | 1                  | 0                | 0 | 0 | Return       | 75.2    | 65.7    |
| Glass Solar                            | 14,352             | 0         | 14,352           | 74     | 14,352                | 81               | 0 | Glass Solar        | 0      | 0                     | 0                  | 0                | 0 | 0 | Ret/OA       | 75.2    | 65.7    |
| Glass Cond                             | 1,966              | 0         | 1,966            | 10     | 1,966                 | 11               | 0 | Glass Cond         | -6,341 | -6,341                | 66                 | 0                | 0 | 0 | Fn MtrTD     | 0.0     | 47.0    |
| Wall Cond                              | 58                 | 199       | 257              | 1      | 58                    | 0                | 0 | Wall Cond          | -127   | -521                  | 5                  | 0                | 0 | 0 | Fn BldTD     | 0.0     | 0.0     |
| Partition                              | 441                |           | 441              | 2      | 441                   | 2                | 0 | Partition          | -1,629 | -1,629                | 17                 | 0                | 0 | 0 | Fn Frict     | 0.0     | 0.0     |
| Exposed Floor                          | 0                  |           | 0                | 0      | 0                     | 0                | 0 | Exposed Floor      | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Infiltration                           | 1,672              |           | 1,672            | 9      | 354                   | 2                | 0 | Infiltration       | -1,049 | -1,049                | 11                 | 0                | 0 | 0 |              |         |         |
| Sub Total ==>                          | 18,489             | 199       | 18,689           | 96     | 17,171                | 96               | 0 | Sub Total ==>      | -9,146 | -9,605                | 100                | 0                | 0 | 0 |              |         |         |
| <b>Internal Loads</b>                  |                    |           |                  |        | <b>Internal Loads</b> |                  |   |                    |        | <b>Internal Loads</b> |                    |                  |   |   |              |         |         |
| Lights                                 | 341                | 0         | 341              | 2      | 341                   | 2                | 0 | Lights             | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| People                                 | 500                |           | 500              | 3      | 250                   | 1                | 0 | People             | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Misc                                   | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Misc               | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Sub Total ==>                          | 841                | 0         | 841              | 4      | 591                   | 3                | 0 | Sub Total ==>      | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| <b>Ceiling Load</b>                    |                    |           |                  |        | <b>Ceiling Load</b>   |                  |   |                    |        | <b>Ceiling Load</b>   |                    |                  |   |   |              |         |         |
| Ventilation Load                       | 48                 | -48       | 0                | 0      | 48                    | 0                | 0 | Ventilation Load   | -560   | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Dehumid. Ov Sizing                     | 0                  | 0         | 0                | 0      | 0                     | 0                | 0 | Dehumid. Ov Sizing | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Ov/Undr Sizing                         | 0                  |           | 0                | 0      | 0                     | 0                | 0 | Ov/Undr Sizing     | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Exhaust Heat                           |                    | -10       | -10              | 0      |                       | 0                | 0 | Exhaust Heat       |        | 115                   | -1                 | 0                | 0 | 0 |              |         |         |
| Sup. Fan Heat                          |                    |           | 0                | 0      |                       | 0                | 0 | OA Preheat Diff.   |        | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Ret. Fan Heat                          |                    | 0         | 0                | 0      |                       | 0                | 0 | RA Preheat Diff.   |        | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Duct Heat Pkup                         |                    | 0         | 0                | 0      |                       | 0                | 0 | Additional Reheat  |        | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Reheat at Design                       |                    |           | 0                | 0      |                       | 0                | 0 | System Plenum Heat |        | -101                  | 1                  | 0                | 0 | 0 |              |         |         |
| Grand Total ==>                        | 19,379             | 141       | 19,520           | 100.00 | 17,811                | 100.00           | 0 | Grand Total ==>    | -9,705 | -9,590                | 100.00             | 0                | 0 | 0 |              |         |         |

| TEMPERATURES |         |         |
|--------------|---------|---------|
|              | Cooling | Heating |
| SADB         | 59.0    | 68.0    |
| Plenum       | 75.2    | 65.7    |
| Return       | 75.2    | 65.7    |
| Ret/OA       | 75.2    | 47.0    |
| Fn MtrTD     | 0.0     | 0.0     |
| Fn BldTD     | 0.0     | 0.0     |
| Fn Frict     | 0.0     | 0.0     |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 0       | 0       |
| Infil      | 45      | 45      |
| Supply     | 997     | 0       |
| MinStop/Rh | 0       | 0       |
| Return     | 1,042   | 0       |
| Exhaust    | 45      | 45      |
| Rm Exh     | 0       | 0       |
| Auxil      | 0       | 0       |

| ENGINEERING CKS |         |         |
|-----------------|---------|---------|
|                 | Cooling | Heating |
| % OA            | 0.0     | 0.0     |
| cfm/ft²         | 1.30    | 0.00    |
| cfm/ton         | 612.98  |         |
| ft²/ton         | 472.13  |         |
| Btu/hr-ft²      | 25.42   | -12.64  |
| No. People      | 1       |         |

| COOLING COIL SELECTION |           |              |                |                |      |      |      |      |      |
|------------------------|-----------|--------------|----------------|----------------|------|------|------|------|------|
| Total Capacity         | Sens Cap. | Coil Airflow | Enter DB/WB/HR | Leave DB/WB/HR |      |      |      |      |      |
| ton                    | MBh       | cfm          | °F °F gr/lb    | °F °F gr/lb    |      |      |      |      |      |
| Main Clg               | 1.6       | 19.5         | 18.0           | 997            | 75.2 | 62.7 | 65.1 | 59.0 | 56.2 |
| Aux Clg                | 0.0       | 0.0          | 0.0            | 0              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Opt Vent               | 0.0       | 0.0          | 0.0            | 0              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total                  | 1.6       | 19.5         |                |                |      |      |      |      |      |

| AREAS       |       |     |    |
|-------------|-------|-----|----|
| Gross Total | Glass |     |    |
|             | ft²   | (%) |    |
| Floor       | 768   |     |    |
| Part        | 200   |     |    |
| ExFlr       | 0     |     |    |
| Roof        | 100   | 0   | 0  |
| Wall        | 396   | 283 | 71 |

| HEATING COIL SELECTION |              |     |     |     |
|------------------------|--------------|-----|-----|-----|
| Capacity               | Coil Airflow | Ent | Lvg |     |
| MBh                    | cfm          | °F  | °F  |     |
| Main Htg               | -9.7         | 0   | 0.0 | 0.0 |
| Aux Htg                | 0.0          | 0   | 0.0 | 0.0 |
| Preheat                | 0.0          | 0   | 0.0 | 0.0 |
| Humidif                | 0.0          | 0   | 0.0 | 0.0 |
| Opt Vent               | 0.0          | 0   | 0.0 | 0.0 |
| Total                  | -9.7         |     |     |     |



# Room Checksums

By DFG

## Guest Suite

| COOLING COIL PEAK                      |  |  |  |  | CLG SPACE PEAK |  |  |  |  | HEATING COIL PEAK     |  |  |  |  | TEMPERATURES     |  |  |
|----------------------------------------|--|--|--|--|----------------|--|--|--|--|-----------------------|--|--|--|--|------------------|--|--|
| Peaked at Time: Mo/Hr: 8 / 17          |  |  |  |  | Mo/Hr: 8 / 17  |  |  |  |  | Mo/Hr: Heating Design |  |  |  |  | Cooling Heating  |  |  |
| Outside Air: OADB/WB/HR: 89 / 76 / 116 |  |  |  |  | OADB: 89       |  |  |  |  | OADB: 47              |  |  |  |  | SADB 59.0 68.0   |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Plenum 78.2 60.8 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Return 78.2 60.8 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Ret/OA 78.2 47.0 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn MtrTD 0.0 0.0 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn BldTD 0.0 0.0 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn Frict 0.0 0.0 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  | </             |  |  |  |  |                       |  |  |  |  |                  |  |  |

# Room Checksums

By DFG

## Hallway 2nd

| COOLING COIL PEAK                      |  |  |  |  | CLG SPACE PEAK |  |  |  |  | HEATING COIL PEAK     |  |  |  |  | TEMPERATURES |  |  |         |      |
|----------------------------------------|--|--|--|--|----------------|--|--|--|--|-----------------------|--|--|--|--|--------------|--|--|---------|------|
| Peaked at Time: Mo/Hr: 8 / 17          |  |  |  |  | Mo/Hr: 8 / 16  |  |  |  |  | Mo/Hr: Heating Design |  |  |  |  | Cooling      |  |  | Heating |      |
| Outside Air: OADB/WB/HR: 89 / 76 / 116 |  |  |  |  | OADB: 90       |  |  |  |  | OADB: 47              |  |  |  |  | SADB         |  |  | 57.6    | 68.0 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Plenum       |  |  | 77.8    | 64.1 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Return       |  |  | 77.8    | 64.1 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Ret/OA       |  |  | 77.8    | 47.0 |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn MtrTD     |  |  | 0.0     | 0.0  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn BldTD     |  |  | 0.0     | 0.0  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn Frict     |  |  | 0.0     | 0.0  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |              |  |  |         |      |

# Room Checksums

By DFG

## Kitchen

| COOLING COIL PEAK                      |                              |                    |                         |        | CLG SPACE PEAK          |                         |  |  |  | HEATING COIL PEAK                 |                                |                         |        |  | TEMPERATURES |         |         |
|----------------------------------------|------------------------------|--------------------|-------------------------|--------|-------------------------|-------------------------|--|--|--|-----------------------------------|--------------------------------|-------------------------|--------|--|--------------|---------|---------|
| Peaked at Time: Mo/Hr: 8 / 16          |                              |                    |                         |        | Mo/Hr: 7 / 17           |                         |  |  |  | Mo/Hr: Heating Design             |                                |                         |        |  |              |         |         |
| Outside Air: OADB/WB/HR: 90 / 76 / 116 |                              |                    |                         |        | OADB: 88                |                         |  |  |  | OADB: 47                          |                                |                         |        |  |              |         |         |
| Space Sens. + Lat.<br>Btu/h            | Plenum Sens. + Lat.<br>Btu/h | Net Total<br>Btu/h | Percent Of Total<br>(%) |        | Space Sensible<br>Btu/h | Percent Of Total<br>(%) |  |  |  | Space Peak<br>Space Sens<br>Btu/h | Coil Peak<br>Tot Sens<br>Btu/h | Percent Of Total<br>(%) |        |  | SADB         | Cooling | Heating |
| <b>Envelope Loads</b>                  |                              |                    |                         |        | <b>Envelope Loads</b>   |                         |  |  |  | <b>Envelope Loads</b>             |                                |                         |        |  | Plenum       | 77.2    | 66.9    |
| Skylite Solar                          | 0                            | 0                  | 0                       | 0      | 0                       | 0                       |  |  |  | Skylite Solar                     | 0                              | 0                       | 0      |  | Return       | 77.2    | 66.9    |
| Skylite Cond                           | 0                            | 0                  | 0                       | 0      | 0                       | 0                       |  |  |  | Skylite Cond                      | 0                              | 0                       | 0      |  | Ret/OA       | 81.1    | 60.6    |
| Roof Cond                              | 0                            | 625                | 625                     | 9      | 0                       | 0                       |  |  |  | Roof Cond                         | 0                              | -164                    | 4      |  | Fn MtrTD     | 0.0     | 0.0     |
| Glass Solar                            | 157                          | 0                  | 157                     | 2      | 198                     | 6                       |  |  |  | Glass Solar                       | 0                              | 0                       | 0      |  | Fn BldTD     | 0.0     | 0.0     |
| Glass Cond                             | 305                          | 0                  | 305                     | 4      | 268                     | 8                       |  |  |  | Glass Cond                        | -474                           | -474                    | 11     |  | Fn Frict     | 0.1     | 0.0     |
| Wall Cond                              | 483                          | 145                | 628                     | 9      | 579                     | 18                      |  |  |  | Wall Cond                         | -552                           | -730                    | 16     |  |              |         |         |
| Partition                              | 421                          |                    | 421                     | 6      | 391                     | 12                      |  |  |  | Partition                         | -587                           | -587                    | 13     |  |              |         |         |
| Exposed Floor                          | 0                            |                    | 0                       | 0      | 0                       | 0                       |  |  |  | Exposed Floor                     | 0                              | 0                       | 0      |  |              |         |         |
| Infiltration                           | 1,603                        |                    | 1,603                   | 22     | 443                     | 14                      |  |  |  | Infiltration                      | -721                           | -721                    | 16     |  |              |         |         |
| Sub Total ==>                          | 2,969                        | 770                | 3,739                   | 51     | 1,878                   | 59                      |  |  |  | Sub Total ==>                     | -2,334                         | -2,676                  | 60     |  |              |         |         |
| <b>Internal Loads</b>                  |                              |                    |                         |        | <b>Internal Loads</b>   |                         |  |  |  | <b>Internal Loads</b>             |                                |                         |        |  |              |         |         |
| Lights                                 | 341                          | 0                  | 341                     | 5      | 341                     | 11                      |  |  |  | Lights                            | 0                              | 0                       | 0      |  |              |         |         |
| People                                 | 500                          |                    | 500                     | 7      | 250                     | 8                       |  |  |  | People                            | 0                              | 0                       | 0      |  |              |         |         |
| Misc                                   | 341                          | 0                  | 341                     | 5      | 341                     | 11                      |  |  |  | Misc                              | 0                              | 0                       | 0      |  |              |         |         |
| Sub Total ==>                          | 1,183                        | 0                  | 1,183                   | 16     | 933                     | 29                      |  |  |  | Sub Total ==>                     | 0                              | 0                       | 0      |  |              |         |         |
| <b>Ceiling Load</b>                    |                              |                    |                         |        | <b>Ceiling Load</b>     |                         |  |  |  | <b>Ceiling Load</b>               |                                |                         |        |  |              |         |         |
| Ventilation Load                       | 363                          | -363               | 0                       | 0      | 386                     | 12                      |  |  |  | Ventilation Load                  | -181                           | 0                       | 0      |  |              |         |         |
| Dehumid. Ov Sizing                     | 0                            | 0                  | 2,603                   | 36     | 0                       | 0                       |  |  |  | Dehumid. Ov Sizing                | 0                              | -1,171                  | 26     |  |              |         |         |
| Ov/Undr Sizing                         | 0                            |                    | 0                       | 0      | 0                       | 0                       |  |  |  | Ov/Undr Sizing                    | -636                           | -636                    | 14     |  |              |         |         |
| Exhaust Heat                           |                              | -195               | -195                    | -3     |                         |                         |  |  |  | Exhaust Heat                      |                                | 98                      | -2     |  |              |         |         |
| Sup. Fan Heat                          |                              |                    | 0                       | 0      |                         |                         |  |  |  | OA Preheat Diff.                  |                                | 0                       | 0      |  |              |         |         |
| Ret. Fan Heat                          |                              | 0                  | 0                       | 0      |                         |                         |  |  |  | RA Preheat Diff.                  |                                | 0                       | 0      |  |              |         |         |
| Duct Heat Pkup                         |                              | 0                  | 0                       | 0      |                         |                         |  |  |  | Additional Reheat                 |                                | 0                       | 0      |  |              |         |         |
| Reheat at Design                       |                              |                    | 0                       | 0      |                         |                         |  |  |  | System Plenum Heat                |                                | -67                     | 2      |  |              |         |         |
| Grand Total ==>                        | 4,514                        | 212                | 7,329                   | 100.00 | 3,197                   | 100.00                  |  |  |  | Grand Total ==>                   | -3,151                         | -4,452                  | 100.00 |  |              |         |         |

| TEMPERATURES |         |         |
|--------------|---------|---------|
|              | Cooling | Heating |
| SADB         | 56.9    | 85.9    |
| Plenum       | 77.2    | 66.9    |
| Return       | 77.2    | 66.9    |
| Ret/OA       | 81.1    | 60.6    |
| Fn MtrTD     | 0.0     | 0.0     |
| Fn BldTD     | 0.0     | 0.0     |
| Fn Frict     | 0.1     | 0.0     |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 50      | 50      |
| Infil      | 31      | 31      |
| Supply     | 158     | 158     |
| MinStop/Rh | 0       | 0       |
| Return     | 189     | 189     |
| Exhaust    | 81      | 81      |
| Rm Exh     | 0       | 0       |
| Auxil      | 0       | 0       |

| ENGINEERING CKS |         |         |
|-----------------|---------|---------|
|                 | Cooling | Heating |
| % OA            | 31.6    | 31.6    |
| cfm/ft²         | 0.30    | 0.30    |
| cfm/ton         | 259.01  |         |
| ft²/ton         | 864.48  |         |
| Btu/hr-ft²      | 13.88   | -8.43   |
| No. People      | 1       |         |

| COOLING COIL SELECTION |                       |                 |                  |                     |                      |                |       |                      |                |       | AREAS       |              |     |          | HEATING COIL SELECTION |                     |           |           |     |
|------------------------|-----------------------|-----------------|------------------|---------------------|----------------------|----------------|-------|----------------------|----------------|-------|-------------|--------------|-----|----------|------------------------|---------------------|-----------|-----------|-----|
|                        | Total Capacity<br>ton | Capacity<br>MBh | Sens Cap.<br>MBh | Coil Airflow<br>cfm | Enter DB/WB/HR<br>°F | DB/WB/HR<br>°F | gr/lb | Leave DB/WB/HR<br>°F | DB/WB/HR<br>°F | gr/lb | Gross Total | Glass<br>ft² | (%) |          | Capacity<br>MBh        | Coil Airflow<br>cfm | Ent<br>°F | Lvg<br>°F |     |
| Main Clg               | 0.6                   | 7.3             | 4.2              | 158                 | 81.1                 | 67.8           | 81.0  | 56.7                 | 53.0           | 54.1  | Floor       | 528          |     | Main Htg | -4.5                   | 158                 | 60.6      | 85.9      |     |
| Aux Clg                | 0.0                   | 0.0             | 0.0              | 0                   | 0.0                  | 0.0            | 0.0   | 0.0                  | 0.0            | 0.0   | Part        | 72           |     | Aux Htg  | 0.0                    | 0                   | 0.0       | 0.0       |     |
| Opt Vent               | 0.0                   | 0.0             | 0.0              | 0                   | 0.0                  | 0.0            | 0.0   | 0.0                  | 0.0            | 0.0   | ExFlr       | 0            |     | Preheat  | 0.0                    | 0                   | 0.0       | 0.0       |     |
|                        |                       |                 |                  |                     |                      |                |       |                      |                |       | Roof        | 240          | 0   | 0        | Humidif                | 0.0                 | 0         | 0.0       | 0.0 |
| Total                  | 0.6                   | 7.3             |                  |                     |                      |                |       |                      |                |       | Wall        | 168          | 21  | 13       | Opt Vent               | 0.0                 | 0         | 0.0       | 0.0 |
|                        |                       |                 |                  |                     |                      |                |       |                      |                |       |             |              |     | Total    | -4.5                   |                     |           |           |     |

# Room Checksums

By DFG

## Laundry Room

| COOLING COIL PEAK                      |       |      |       |        | CLG SPACE PEAK |        |        |                    |        | HEATING COIL PEAK     |        |        |        |        | TEMPERATURES     |  |  |
|----------------------------------------|-------|------|-------|--------|----------------|--------|--------|--------------------|--------|-----------------------|--------|--------|--------|--------|------------------|--|--|
| Peaked at Time: Mo/Hr: 8 / 16          |       |      |       |        | Mo/Hr: 8 / 16  |        |        |                    |        | Mo/Hr: Heating Design |        |        |        |        | Cooling Heating  |  |  |
| Outside Air: OADB/WB/HR: 90 / 76 / 116 |       |      |       |        | OADB: 90       |        |        |                    |        | OADB: 47              |        |        |        |        | SADB 56.9 85.9   |  |  |
|                                        |       |      |       |        |                |        |        |                    |        |                       |        |        |        |        | Plenum 77.2 66.9 |  |  |
|                                        |       |      |       |        |                |        |        |                    |        |                       |        |        |        |        | Return 77.2 66.9 |  |  |
|                                        |       |      |       |        |                |        |        |                    |        |                       |        |        |        |        | Ret/OA 77.2 66.9 |  |  |
|                                        |       |      |       |        |                |        |        |                    |        |                       |        |        |        |        | Fn MtrTD 0.0 0.0 |  |  |
|                                        |       |      |       |        |                |        |        |                    |        |                       |        |        |        |        | Fn BldTD 0.0 0.0 |  |  |
|                                        |       |      |       |        |                |        |        |                    |        |                       |        |        |        |        | Fn Frict 0.1 0.0 |  |  |
| Envelope Loads                         |       |      |       |        | Envelope Loads |        |        |                    |        | Envelope Loads        |        |        |        |        |                  |  |  |
| Skylite Solar                          | 0     | 0    | 0     | 0      | 0              | 0      | 0      | Skylite Solar      | 0      | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Skylite Cond                           | 0     | 0    | 0     | 0      | 0              | 0      | 0      | Skylite Cond       | 0      | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Roof Cond                              | 0     | 495  | 495   | 11     | 0              | 0      | 0      | Roof Cond          | 0      | -130                  | 4      | 4      | 4      | 4      |                  |  |  |
| Glass Solar                            | 123   | 0    | 123   | 3      | 123            | 4      | 4      | Glass Solar        | 0      | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Glass Cond                             | 238   | 0    | 238   | 5      | 238            | 7      | 7      | Glass Cond         | -371   | -371                  | 10     | 10     | 10     | 10     |                  |  |  |
| Wall Cond                              | 314   | 98   | 412   | 9      | 314            | 9      | 9      | Wall Cond          | -359   | -479                  | 13     | 13     | 13     | 13     |                  |  |  |
| Partition                              | 1,344 |      | 1,344 | 29     | 1,344          | 39     | 39     | Partition          | -1,874 | -1,874                | 52     | 52     | 52     | 52     |                  |  |  |
| Exposed Floor                          | 0     |      | 0     | 0      | 0              | 0      | 0      | Exposed Floor      | 0      | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Infiltration                           | 908   |      | 908   | 19     | 286            | 8      | 8      | Infiltration       | -408   | -408                  | 11     | 11     | 11     | 11     |                  |  |  |
| Sub Total ==>                          | 2,927 | 592  | 3,519 | 76     | 2,305          | 67     | 67     | Sub Total ==>      | -3,012 | -3,262                | 91     | 91     | 91     | 91     |                  |  |  |
| Internal Loads                         |       |      |       |        | Internal Loads |        |        |                    |        | Internal Loads        |        |        |        |        |                  |  |  |
| Lights                                 | 341   | 0    | 341   | 7      | 341            | 10     | 10     | Lights             | 0      | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| People                                 | 500   |      | 500   | 11     | 250            | 7      | 7      | People             | 0      | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Misc                                   | 341   | 0    | 341   | 7      | 341            | 10     | 10     | Misc               | 0      | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Sub Total ==>                          | 1,183 | 0    | 1,183 | 25     | 933            | 27     | 27     | Sub Total ==>      | 0      | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Ceiling Load                           | 206   | -206 | 0     | 0      | 206            | 6      | 6      | Ceiling Load       | -103   | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Ventilation Load                       | 0     | 0    | 0     | 0      | 0              | 0      | 0      | Ventilation Load   | 0      | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Dehumid. Ov Sizing                     |       |      | 0     | 0      |                |        |        | Ov/Undr Sizing     | -278   | -278                  | 8      | 8      | 8      | 8      |                  |  |  |
| Ov/Undr Sizing                         | 0     |      | 0     | 0      | 0              | 0      | 0      | Exhaust Heat       |        | 21                    | -1     | -1     | -1     | -1     |                  |  |  |
| Exhaust Heat                           |       | -42  | -42   | -1     |                |        |        | OA Preheat Diff.   |        | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Sup. Fan Heat                          |       |      | 0     | 0      |                |        |        | RA Preheat Diff.   |        | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Ret. Fan Heat                          |       | 0    | 0     | 0      |                |        |        | Additional Reheat  |        | 0                     | 0      | 0      | 0      | 0      |                  |  |  |
| Duct Heat Pkup                         |       | 0    | 0     | 0      |                |        |        | System Plenum Heat |        | -80                   | 2      | 2      | 2      | 2      |                  |  |  |
| Reheat at Design                       |       |      | 0     | 0      |                |        |        |                    |        |                       |        |        |        |        |                  |  |  |
| Grand Total ==>                        | 4,315 | 345  | 4,660 | 100.00 | 3,443          | 100.00 | 100.00 | Grand Total ==>    | -3,393 | -3,599                | 100.00 | 100.00 | 100.00 | 100.00 |                  |  |  |

| COOLING COIL SELECTION |     |               |                  |                |      |       |                |      |       | AREAS       |       |     |              | HEATING COIL SELECTION |        |        |  |  |
|------------------------|-----|---------------|------------------|----------------|------|-------|----------------|------|-------|-------------|-------|-----|--------------|------------------------|--------|--------|--|--|
| Total Capacity         |     | Sens Cap. MBh | Coil Airflow cfm | Enter DB/WB/HR |      |       | Leave DB/WB/HR |      |       | Gross Total | Glass |     | Capacity MBh | Coil Airflow cfm       | Ent °F | Lvg °F |  |  |
| ton                    | MBh |               |                  | °F             | °F   | gr/lb | °F             | °F   | gr/lb |             | ft²   | (%) |              |                        |        |        |  |  |
| Main Clg               | 0.4 | 4.7           | 3.8              | 170            | 77.2 | 63.3  | 64.9           | 56.7 | 54.1  | 58.5        | Floor | 299 | -3.6         | 170                    | 66.9   | 85.9   |  |  |
| Aux Clg                | 0.0 | 0.0           | 0.0              | 0              | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   | 0.0         | Part  | 230 | 0.0          | 0                      | 0.0    | 0.0    |  |  |
| Opt Vent               | 0.0 | 0.0           | 0.0              | 0              | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   | 0.0         | ExFlr | 0   | 0.0          | 0                      | 0.0    | 0.0    |  |  |
| Total                  | 0.4 | 4.7           |                  |                |      |       |                |      |       |             | Roof  | 190 | 0            | 0                      | 0.0    | 0.0    |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             | Wall  | 113 | 17           | 15                     | 0.0    | 0.0    |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |
|                        |     |               |                  |                |      |       |                |      |       |             |       |     |              |                        |        |        |  |  |

# Room Checksums

By DFG

## Lounge 1

| COOLING COIL PEAK                      |                              |                    |                         |        | CLG SPACE PEAK          |                         |   |                    |        | HEATING COIL PEAK                 |                                |                         |   |   | TEMPERATURES |         |         |
|----------------------------------------|------------------------------|--------------------|-------------------------|--------|-------------------------|-------------------------|---|--------------------|--------|-----------------------------------|--------------------------------|-------------------------|---|---|--------------|---------|---------|
| Peaked at Time: Mo/Hr: 7 / 18          |                              |                    |                         |        | Mo/Hr: 7 / 18           |                         |   |                    |        | Mo/Hr: Heating Design             |                                |                         |   |   |              |         |         |
| Outside Air: OADB/WB/HR: 87 / 74 / 108 |                              |                    |                         |        | OADB: 87                |                         |   |                    |        | OADB: 47                          |                                |                         |   |   |              |         |         |
| Space Sens. + Lat.<br>Btu/h            | Plenum Sens. + Lat.<br>Btu/h | Net Total<br>Btu/h | Percent Of Total<br>(%) |        | Space Sensible<br>Btu/h | Percent Of Total<br>(%) |   |                    |        | Space Peak<br>Space Sens<br>Btu/h | Coil Peak<br>Tot Sens<br>Btu/h | Percent Of Total<br>(%) |   |   | SADB         | Cooling | Heating |
| <b>Envelope Loads</b>                  |                              |                    |                         |        | <b>Envelope Loads</b>   |                         |   |                    |        | <b>Envelope Loads</b>             |                                |                         |   |   | Plenum       | 58.7    | 80.3    |
| Skylite Solar                          | 0                            | 0                  | 0                       | 0      | 0                       | 0                       | 0 | Skylite Solar      | 0      | 0                                 | 0                              | 0                       | 0 | 0 | Return       | 76.2    | 67.2    |
| Skylite Cond                           | 0                            | 0                  | 0                       | 0      | 0                       | 0                       | 0 | Skylite Cond       | 0      | 0                                 | 0                              | 0                       | 0 | 0 | Ret/OA       | 76.2    | 67.2    |
| Roof Cond                              | 0                            | 67                 | 67                      | 1      | 0                       | 0                       | 0 | Roof Cond          | 0      | -17                               | 0                              | 0                       | 0 | 0 | Fn MtrTD     | 0.0     | 0.0     |
| Glass Solar                            | 1,317                        | 0                  | 1,317                   | 20     | 1,317                   | 27                      | 0 | Glass Solar        | 0      | 0                                 | 0                              | 0                       | 0 | 0 | Fn BldTD     | 0.0     | 0.0     |
| Glass Cond                             | 399                          | 0                  | 399                     | 6      | 399                     | 8                       | 0 | Glass Cond         | -773   | -773                              | 20                             | 0                       | 0 | 0 | Fn Frict     | 0.0     | 0.0     |
| Wall Cond                              | 1,266                        | 414                | 1,680                   | 26     | 1,266                   | 26                      | 0 | Wall Cond          | -908   | -1,205                            | 30                             | 0                       | 0 | 0 |              |         |         |
| Partition                              | 656                          |                    | 656                     | 10     | 656                     | 13                      | 0 | Partition          | -1,027 | -1,027                            | 26                             | 0                       | 0 | 0 |              |         |         |
| Exposed Floor                          | 0                            |                    | 0                       | 0      | 0                       | 0                       | 0 | Exposed Floor      | 0      | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| Infiltration                           | 1,571                        |                    | 1,571                   | 24     | 473                     | 10                      | 0 | Infiltration       | -842   | -842                              | 21                             | 0                       | 0 | 0 |              |         |         |
| Sub Total ==>                          | 5,209                        | 481                | 5,690                   | 88     | 4,111                   | 83                      | 0 | Sub Total ==>      | -3,550 | -3,864                            | 98                             | 0                       | 0 | 0 |              |         |         |
| <b>Internal Loads</b>                  |                              |                    |                         |        | <b>Internal Loads</b>   |                         |   |                    |        | <b>Internal Loads</b>             |                                |                         |   |   |              |         |         |
| Lights                                 | 341                          | 0                  | 341                     | 5      | 341                     | 7                       | 0 | Lights             | 0      | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| People                                 | 500                          |                    | 500                     | 8      | 250                     | 5                       | 0 | People             | 0      | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| Misc                                   | 0                            | 0                  | 0                       | 0      | 0                       | 0                       | 0 | Misc               | 0      | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| Sub Total ==>                          | 841                          | 0                  | 841                     | 13     | 591                     | 12                      | 0 | Sub Total ==>      | 0      | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| <b>Ceiling Load</b>                    |                              |                    |                         |        | <b>Ceiling Load</b>     |                         |   |                    |        | <b>Ceiling Load</b>               |                                |                         |   |   |              |         |         |
| Ventilation Load                       | 224                          | -224               | 0                       | 0      | 224                     | 5                       | 0 | Ventilation Load   | -162   | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| Dehumid. Ov Sizing                     | 0                            | 0                  | 0                       | 0      | 0                       | 0                       | 0 | Dehumid. Ov Sizing | 0      | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| Ov/Undr Sizing                         | 0                            |                    | 0                       | 0      | 0                       | 0                       | 0 | Ov/Undr Sizing     | 0      | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| Exhaust Heat                           |                              | -46                | -46                     | -1     |                         |                         |   | Exhaust Heat       |        | 33                                | -1                             | 0                       | 0 | 0 |              |         |         |
| Sup. Fan Heat                          |                              |                    | 0                       | 0      |                         |                         |   | OA Preheat Diff.   |        | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| Ret. Fan Heat                          |                              | 0                  | 0                       | 0      |                         |                         |   | RA Preheat Diff.   |        | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| Duct Heat Pkup                         |                              | 0                  | 0                       | 0      |                         |                         |   | Additional Reheat  |        | 0                                 | 0                              | 0                       | 0 | 0 |              |         |         |
| Reheat at Design                       |                              |                    | 0                       | 0      |                         |                         |   | System Plenum Heat |        | -131                              | 3                              | 0                       | 0 | 0 |              |         |         |
| Grand Total ==>                        | 6,274                        | 211                | 6,485                   | 100.00 | 4,927                   | 100.00                  |   | Grand Total ==>    | -3,712 | -3,962                            | 100.00                         |                         |   |   |              |         |         |

| TEMPERATURES |         |         |
|--------------|---------|---------|
|              | Cooling | Heating |
| SADB         | 58.7    | 80.3    |
| Plenum       | 76.2    | 67.2    |
| Return       | 76.2    | 67.2    |
| Ret/OA       | 76.2    | 67.2    |
| Fn MtrTD     | 0.0     | 0.0     |
| Fn BldTD     | 0.0     | 0.0     |
| Fn Frict     | 0.0     | 0.0     |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 0       | 0       |
| Infil      | 36      | 36      |
| Supply     | 271     | 271     |
| MinStop/Rh | 0       | 0       |
| Return     | 307     | 307     |
| Exhaust    | 36      | 36      |
| Rm Exh     | 0       | 0       |
| Auxil      | 0       | 0       |

| ENGINEERING CKS |          |         |
|-----------------|----------|---------|
|                 | Cooling  | Heating |
| % OA            | 0.0      | 0.0     |
| cfm/ft²         | 0.44     | 0.44    |
| cfm/ton         | 500.79   |         |
| ft²/ton         | 1,140.55 |         |
| Btu/hr-ft²      | 10.52    | -6.43   |
| No. People      | 1        |         |

| COOLING COIL SELECTION |                       |                 |                  |                     |                               |                               |  |  |  |
|------------------------|-----------------------|-----------------|------------------|---------------------|-------------------------------|-------------------------------|--|--|--|
|                        | Total Capacity<br>ton | Capacity<br>MBh | Sens Cap.<br>MBh | Coil Airflow<br>cfm | Enter DB/WB/HR<br>°F °F gr/lb | Leave DB/WB/HR<br>°F °F gr/lb |  |  |  |
| Main Clg               | 0.5                   | 6.5             | 5.1              | 271                 | 76.2 63.0 64.9                | 58.7 55.0 58.6                |  |  |  |
| Aux Clg                | 0.0                   | 0.0             | 0.0              | 0                   | 0.0 0.0 0.0                   | 0.0 0.0 0.0                   |  |  |  |
| Opt Vent               | 0.0                   | 0.0             | 0.0              | 0                   | 0.0 0.0 0.0                   | 0.0 0.0 0.0                   |  |  |  |
| Total                  | 0.5                   | 6.5             |                  |                     |                               |                               |  |  |  |

| AREAS |             |                  |  |
|-------|-------------|------------------|--|
|       | Gross Total | Glass<br>ft² (%) |  |
| Floor | 616         |                  |  |
| Part  | 126         |                  |  |
| ExFlr | 0           |                  |  |
| Roof  | 25          | 0 0              |  |
| Wall  | 276         | 35 13            |  |

| HEATING COIL SELECTION |                 |                     |           |           |
|------------------------|-----------------|---------------------|-----------|-----------|
|                        | Capacity<br>MBh | Coil Airflow<br>cfm | Ent<br>°F | Lvg<br>°F |
| Main Htg               | -4.0            | 271                 | 67.2      | 80.3      |
| Aux Htg                | 0.0             | 0                   | 0.0       | 0.0       |
| Preheat                | 0.0             | 0                   | 0.0       | 0.0       |
| Humidif                | 0.0             | 0                   | 0.0       | 0.0       |
| Opt Vent               | 0.0             | 0                   | 0.0       | 0.0       |
| Total                  | -4.0            |                     |           |           |

# Room Checksums

By DFG

## Lounge 2

| COOLING COIL PEAK                      |                          |                 |                      |                            | CLG SPACE PEAK             |                      |   |                    |               | HEATING COIL PEAK           |                          |                      |        |  | TEMPERATURES    |         |           |
|----------------------------------------|--------------------------|-----------------|----------------------|----------------------------|----------------------------|----------------------|---|--------------------|---------------|-----------------------------|--------------------------|----------------------|--------|--|-----------------|---------|-----------|
| Peaked at Time: Mo/Hr: 8 / 9           |                          |                 |                      |                            | Mo/Hr: 8 / 9               |                      |   |                    |               | Mo/Hr: Heating Design       |                          |                      |        |  |                 |         |           |
| Outside Air: OADB/WB/HR: 82 / 73 / 107 |                          |                 |                      |                            | OADB: 82                   |                      |   |                    |               | OADB: 47                    |                          |                      |        |  |                 |         |           |
| Space Sens. + Lat. Btu/h               | Plenum Sens. + Lat Btu/h | Net Total Btu/h | Percent Of Total (%) |                            | Space Sensible Btu/h       | Percent Of Total (%) |   |                    |               | Space Peak Space Sens Btu/h | Coil Peak Tot Sens Btu/h | Percent Of Total (%) |        |  |                 |         |           |
| Envelope Loads                         |                          |                 |                      |                            | Envelope Loads             |                      |   |                    |               | Envelope Loads              |                          |                      |        |  |                 |         |           |
| Skylite Solar                          | 0                        | 0               | 0                    | 0                          | 0                          | 0                    | 0 | Skylite Solar      | 0             | 0                           | 0                        | 0                    |        |  | SADB            | Cooling | Heating   |
| Skylite Cond                           | 0                        | 0               | 0                    | 0                          | 0                          | 0                    | 0 | Skylite Cond       | 0             | 0                           | 0                        | 0                    |        |  | Plenum          | 57.6    | 68.0      |
| Roof Cond                              | 0                        | -2              | -2                   | 0                          | 0                          | 0                    | 0 | Roof Cond          | 0             | -238                        | 6                        | 0                    |        |  | Return          | 75.3    | 64.1      |
| Glass Solar                            | 4,145                    | 0               | 4,145                | 60                         | 4,145                      | 70                   | 0 | Glass Solar        | 0             | 0                           | 0                        | 0                    |        |  | Ret/OA          | 75.3    | 64.1      |
| Glass Cond                             | 568                      | 0               | 568                  | 8                          | 568                        | 10                   | 0 | Glass Cond         | -1,831        | -1,831                      | 47                       | 0                    |        |  | Fn MtrTD        | 0.0     | 0.0       |
| Wall Cond                              | 161                      | 96              | 257                  | 4                          | 161                        | 3                    | 0 | Wall Cond          | -350          | -527                        | 14                       | 0                    |        |  | Fn BldTD        | 0.0     | 0.0       |
| Partition                              | 198                      |                 | 198                  | 3                          | 198                        | 3                    | 0 | Partition          | -733          | -733                        | 19                       | 0                    |        |  | Fn Frict        | 0.0     | 0.0       |
| Exposed Floor                          | 0                        |                 | 0                    | 0                          | 0                          | 0                    | 0 | Exposed Floor      | 0             | 0                           | 0                        | 0                    |        |  |                 |         |           |
| Infiltration                           | 887                      |                 | 887                  | 13                         | 188                        | 3                    | 0 | Infiltration       | -556          | -556                        | 14                       | 0                    |        |  |                 |         |           |
| Sub Total ==>                          | 5,958                    | 94              | 6,052                | 88                         | 5,259                      | 89                   | 0 | Sub Total ==>      | -3,471        | -3,885                      | 100                      | 0                    |        |  |                 |         |           |
| Internal Loads                         |                          |                 |                      |                            | Internal Loads             |                      |   |                    |               | Internal Loads              |                          |                      |        |  |                 |         |           |
| Lights                                 | 341                      | 0               | 341                  | 5                          | 341                        | 6                    | 0 | Lights             | 0             | 0                           | 0                        | 0                    |        |  | AIRFLOWS        |         |           |
| People                                 | 500                      |                 | 500                  | 7                          | 250                        | 4                    | 0 | People             | 0             | 0                           | 0                        | 0                    |        |  | Cooling         | Heating |           |
| Misc                                   | 0                        | 0               | 0                    | 0                          | 0                          | 0                    | 0 | Misc               | 0             | 0                           | 0                        | 0                    |        |  | Vent            | 0       | 0         |
| Sub Total ==>                          | 841                      | 0               | 841                  | 12                         | 591                        | 10                   | 0 | Sub Total ==>      | 0             | 0                           | 0                        | 0                    |        |  | Infil           | 24      | 24        |
| Ceiling Load                           | 43                       | -43             | 0                    | 0                          | 43                         | 1                    | 0 | Ceiling Load       | -510          | 0                           | 0                        | 0                    |        |  | Supply          | 303     | 0         |
| Ventilation Load                       | 0                        | 0               | 0                    | 0                          | 0                          | 0                    | 0 | Ventilation Load   | 0             | 0                           | 0                        | 0                    |        |  | MinStop/Rh      | 0       | 0         |
| Dehumid. Ov Sizing                     | 0                        |                 | 0                    | 0                          | 0                          | 0                    | 0 | Dehumid. Ov Sizing | 0             | 0                           | 0                        | 0                    |        |  | Return          | 327     | 0         |
| Ov/Undr Sizing                         | 0                        |                 | 0                    | 0                          | 0                          | 0                    | 0 | Ov/Undr Sizing     | 0             | 0                           | 0                        | 0                    |        |  | Exhaust         | 24      | 24        |
| Exhaust Heat                           |                          | -9              | -9                   | 0                          |                            |                      | 0 | Exhaust Heat       |               | 105                         | -3                       | 0                    |        |  | Rm Exh          | 0       | 0         |
| Sup. Fan Heat                          |                          |                 | 0                    | 0                          |                            |                      | 0 | OA Preheat Diff.   |               | 0                           | 0                        | 0                    |        |  | Auxil           | 0       | 0         |
| Ret. Fan Heat                          |                          |                 | 0                    | 0                          |                            |                      | 0 | RA Preheat Diff.   |               | 0                           | 0                        | 0                    |        |  |                 |         |           |
| Duct Heat Pkup                         |                          |                 | 0                    | 0                          |                            |                      | 0 | Additional Reheat  |               | 0                           | 0                        | 0                    |        |  |                 |         |           |
| Reheat at Design                       |                          |                 | 0                    | 0                          |                            |                      | 0 | System Plenum Heat |               | -95                         | 2                        | 0                    |        |  |                 |         |           |
| Grand Total ==>                        | 6,843                    | 42              | 6,885                | 100.00                     | 5,894                      | 100.00               | 0 | Grand Total ==>    | -3,980        | -3,876                      | 100.00                   | 0                    |        |  | ENGINEERING CKS |         |           |
| COOLING COIL SELECTION                 |                          |                 |                      |                            | AREAS                      |                      |   |                    |               | HEATING COIL SELECTION      |                          |                      |        |  |                 |         |           |
| Total Capacity ton                     | MBh                      | Sens Cap. MBh   | Coil Airflow cfm     | Enter DB/WB/HR °F °F gr/lb | Leave DB/WB/HR °F °F gr/lb |                      |   | Gross Total        | Glass ft² (%) | Capacity MBh                | Coil Airflow cfm         | Ent °F               | Lvg °F |  |                 |         |           |
| Main Clg                               | 0.6                      | 6.9             | 5.9                  | 303                        | 75.3 62.7 65.1             | 57.6 55.1 60.9       |   | Floor              | 407           |                             |                          |                      |        |  | Main Htg        | -4.0    | 0 0.0 0.0 |
| Aux Clg                                | 0.0                      | 0.0             | 0.0                  | 0                          | 0.0 0.0 0.0                | 0.0 0.0 0.0          |   | Part               | 90            |                             |                          |                      |        |  | Aux Htg         | 0.0     | 0 0.0 0.0 |
| Opt Vent                               | 0.0                      | 0.0             | 0.0                  | 0                          | 0.0 0.0 0.0                | 0.0 0.0 0.0          |   | ExFlr              | 0             |                             |                          |                      |        |  | Preheat         | 0.0     | 0 0.0 0.0 |
| Total                                  | 0.6                      | 6.9             |                      |                            |                            |                      |   | Roof               | 407           | 0                           | 0                        |                      |        |  | Humidif         | 0.0     | 0 0.0 0.0 |
|                                        |                          |                 |                      |                            |                            |                      |   | Wall               | 194           | 82                          | 42                       |                      |        |  | Opt Vent        | 0.0     | 0 0.0 0.0 |
|                                        |                          |                 |                      |                            |                            |                      |   |                    |               |                             |                          |                      |        |  | Total           | -4.0    |           |

# Room Checksums

By DFG

## Media

| COOLING COIL PEAK                      |                     |           |                  |        | CLG SPACE PEAK        |                  |   |                    |        | HEATING COIL PEAK     |                    |                  |   |   | TEMPERATURES |  |  |
|----------------------------------------|---------------------|-----------|------------------|--------|-----------------------|------------------|---|--------------------|--------|-----------------------|--------------------|------------------|---|---|--------------|--|--|
| Peaked at Time: Mo/Hr: 9 / 18          |                     |           |                  |        | Mo/Hr: 9 / 18         |                  |   |                    |        | Mo/Hr: Heating Design |                    |                  |   |   |              |  |  |
| Outside Air: OADB/WB/HR: 86 / 74 / 108 |                     |           |                  |        | OADB: 86              |                  |   |                    |        | OADB: 47              |                    |                  |   |   |              |  |  |
| Space Sens. + Lat.                     | Plenum Sens. + Lat. | Net Total | Percent Of Total |        | Space Sensible        | Percent Of Total |   |                    |        | Space Peak Space Sens | Coil Peak Tot Sens | Percent Of Total |   |   |              |  |  |
| Btu/h                                  | Btu/h               | Btu/h     | (%)              |        | Btu/h                 | (%)              |   |                    |        | Btu/h                 | Btu/h              | (%)              |   |   |              |  |  |
| <b>Envelope Loads</b>                  |                     |           |                  |        | <b>Envelope Loads</b> |                  |   |                    |        | <b>Envelope Loads</b> |                    |                  |   |   |              |  |  |
| Skylite Solar                          | 0                   | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Solar      | 0      | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Skylite Cond                           | 0                   | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Cond       | 0      | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Roof Cond                              | 0                   | 60        | 60               | 1      | 0                     | 0                | 0 | Roof Cond          | 0      | -17                   | 0                  | 0                | 0 | 0 |              |  |  |
| Glass Solar                            | 2,131               | 0         | 2,131            | 21     | 2,131                 | 27               | 0 | Glass Solar        | 0      | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Glass Cond                             | 976                 | 0         | 976              | 10     | 976                   | 12               | 0 | Glass Cond         | -2,010 | -2,010                | 31                 | 0                | 0 | 0 |              |  |  |
| Wall Cond                              | 3,380               | 1,164     | 4,544            | 45     | 3,380                 | 42               | 0 | Wall Cond          | -1,806 | -2,425                | 38                 | 0                | 0 | 0 |              |  |  |
| Partition                              | 446                 |           | 446              | 4      | 446                   | 6                | 0 | Partition          | -733   | -733                  | 11                 | 0                | 0 | 0 |              |  |  |
| Exposed Floor                          | 0                   |           | 0                | 0      | 0                     | 0                | 0 | Exposed Floor      | 0      | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Infiltration                           | 1,101               |           | 1,101            | 11     | 318                   | 4                | 0 | Infiltration       | -601   | -601                  | 9                  | 0                | 0 | 0 |              |  |  |
| Sub Total ==>                          | 8,035               | 1,224     | 9,259            | 92     | 7,252                 | 90               | 0 | Sub Total ==>      | -5,151 | -5,787                | 89                 | 0                | 0 | 0 |              |  |  |
| <b>Internal Loads</b>                  |                     |           |                  |        | <b>Internal Loads</b> |                  |   |                    |        | <b>Internal Loads</b> |                    |                  |   |   |              |  |  |
| Lights                                 | 341                 | 0         | 341              | 3      | 341                   | 4                | 0 | Lights             | 0      | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| People                                 | 500                 |           | 500              | 5      | 250                   | 3                | 0 | People             | 0      | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Misc                                   | 0                   | 0         | 0                | 0      | 0                     | 0                | 0 | Misc               | 0      | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Sub Total ==>                          | 841                 | 0         | 841              | 8      | 591                   | 7                | 0 | Sub Total ==>      | 0      | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| <b>Ceiling Load</b>                    |                     |           |                  |        | <b>Ceiling Load</b>   |                  |   |                    |        | <b>Ceiling Load</b>   |                    |                  |   |   |              |  |  |
| Ventilation Load                       | 198                 | -198      | 0                | 0      | 198                   | 2                | 0 | Ventilation Load   | -116   | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Dehumid. Ov Sizing                     | 0                   | 0         | 0                | 0      | 0                     | 0                | 0 | Dehumid. Ov Sizing | 0      | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Ov/Undr Sizing                         | 0                   |           | 0                | 0      | 0                     | 0                | 0 | Ov/Undr Sizing     | -792   | -792                  | 12                 | 0                | 0 | 0 |              |  |  |
| Exhaust Heat                           |                     | -41       | -41              | 0      |                       | 0                | 0 | Exhaust Heat       |        | 24                    | 0                  | 0                | 0 | 0 |              |  |  |
| Sup. Fan Heat                          |                     |           | 0                | 0      |                       | 0                | 0 | OA Preheat Diff.   |        | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Ret. Fan Heat                          |                     | 0         | 0                | 0      |                       | 0                | 0 | RA Preheat Diff.   |        | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Duct Heat Pkup                         |                     | 0         | 0                | 0      |                       | 0                | 0 | Additional Reheat  |        | 0                     | 0                  | 0                | 0 | 0 |              |  |  |
| Reheat at Design                       |                     |           | 0                | 0      |                       | 0                | 0 | System Plenum Heat |        | 89                    | -1                 | 0                | 0 | 0 |              |  |  |
| Grand Total ==>                        | 9,075               | 984       | 10,059           | 100.00 | 8,042                 | 100.00           | 0 | Grand Total ==>    | -6,058 | -6,467                | 100.00             | 0                | 0 | 0 |              |  |  |

|          | Cooling | Heating |
|----------|---------|---------|
| SADB     | 58.7    | 80.3    |
| Plenum   | 76.4    | 67.2    |
| Return   | 76.4    | 67.2    |
| Ret/OA   | 76.4    | 67.2    |
| Fn MtrTD | 0.0     | 0.0     |
| Fn BldTD | 0.0     | 0.0     |
| Fn Frict | 0.0     | 0.0     |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 0       | 0       |
| Infil      | 26      | 26      |
| Supply     | 442     | 442     |
| MinStop/Rh | 0       | 0       |
| Return     | 467     | 467     |
| Exhaust    | 26      | 26      |
| Rm Exh     | 0       | 0       |
| Auxil      | 0       | 0       |

| ENGINEERING CKS |         |         |
|-----------------|---------|---------|
|                 | Cooling | Heating |
| % OA            | 0.0     | 0.0     |
| cfm/ft²         | 1.00    | 1.00    |
| cfm/ton         | 526.99  |         |
| ft²/ton         | 524.89  |         |
| Btu/hr-ft²      | 22.86   | -14.70  |
| No. People      | 1       |         |

| COOLING COIL SELECTION |                |           |              |                |      |       |                |      |       |
|------------------------|----------------|-----------|--------------|----------------|------|-------|----------------|------|-------|
|                        | Total Capacity | Sens Cap. | Coil Airflow | Enter DB/WB/HR |      |       | Leave DB/WB/HR |      |       |
|                        | ton            | MBh       | cfm          | °F             | °F   | gr/lb | °F             | °F   | gr/lb |
| Main Clg               | 0.8            | 10.1      | 442          | 76.4           | 63.1 | 64.9  | 58.7           | 55.5 | 60.7  |
| Aux Clg                | 0.0            | 0.0       | 0            | 0.0            | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   |
| Opt Vent               | 0.0            | 0.0       | 0            | 0.0            | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   |
| Total                  | 0.8            | 10.1      |              |                |      |       |                |      |       |

| AREAS |             |       |     |
|-------|-------------|-------|-----|
|       | Gross Total | Glass |     |
|       |             | ft²   | (%) |
| Floor | 440         |       |     |
| Part  | 90          |       |     |
| ExFlr | 0           |       |     |
| Roof  | 25          | 0     | 0   |
| Wall  | 576         | 90    | 16  |

| HEATING COIL SELECTION |          |              |      |      |
|------------------------|----------|--------------|------|------|
|                        | Capacity | Coil Airflow | Ent  | Lvg  |
|                        | MBh      | cfm          | °F   | °F   |
| Main Htg               | -6.5     | 442          | 67.2 | 80.3 |
| Aux Htg                | 0.0      | 0            | 0.0  | 0.0  |
| Preheat                | 0.0      | 0            | 0.0  | 0.0  |
| Humidif                | 0.0      | 0            | 0.0  | 0.0  |
| Opt Vent               | 0.0      | 0            | 0.0  | 0.0  |
| Total                  | -6.5     |              |      |      |

# Room Checksums

By DFG

Open to below

| COOLING COIL PEAK                      |  |  |  |  | CLG SPACE PEAK |  |  |  |  | HEATING COIL PEAK     |  |  |  |  | TEMPERATURES     |  |  |
|----------------------------------------|--|--|--|--|----------------|--|--|--|--|-----------------------|--|--|--|--|------------------|--|--|
| Peaked at Time: Mo/Hr: 8 / 17          |  |  |  |  | Mo/Hr: 8 / 17  |  |  |  |  | Mo/Hr: Heating Design |  |  |  |  | Cooling Heating  |  |  |
| Outside Air: OADB/WB/HR: 89 / 76 / 116 |  |  |  |  | OADB: 89       |  |  |  |  | OADB: 47              |  |  |  |  | SADB 57.6 68.0   |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Plenum 77.8 64.1 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Return 77.8 64.1 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Ret/OA 77.8 47.0 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn MtrTD 0.0 0.0 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn BldTD 0.0 0.0 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  | Fn Frict 0.0 0.0 |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
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|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |
|                                        |  |  |  |  |                |  |  |  |  |                       |  |  |  |  |                  |  |  |



# Room Checksums

By DFG

## Primary MAster Room Bath & WC

| COOLING COIL PEAK                      |  |  |  |  | CLG SPACE PEAK |  |  | HEATING COIL PEAK     |  |  |  | TEMPERATURES    |        |        |
|----------------------------------------|--|--|--|--|----------------|--|--|-----------------------|--|--|--|-----------------|--------|--------|
| Peaked at Time: Mo/Hr: 9 / 17          |  |  |  |  | Mo/Hr: 9 / 17  |  |  | Mo/Hr: Heating Design |  |  |  | Cooling Heating |        |        |
| Outside Air: OADB/WB/HR: 87 / 75 / 110 |  |  |  |  | OADB: 87       |  |  | OADB: 47              |  |  |  | SADB            | 58.5   | 80.3   |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Plenum          | 78.4   | 66.5   |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Return          | 78.4   | 66.5   |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Ret/OA          | 78.4   | 66.5   |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Fn MtrTD        | 0.0    | 0.0    |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Fn BldTD        | 0.0    | 0.0    |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Fn Frict        | 0.0    | 0.0    |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |                 |        |        |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | AIRFLOWS        |        |        |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Cooling Heating |        |        |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Vent            | 0      | 0      |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Infil           | 66     | 66     |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Supply          | 901    | 901    |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | MinStop/Rh      | 0      | 0      |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Return          | 967    | 967    |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Exhaust         | 66     | 66     |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Rm Exh          | 0      | 0      |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Auxil           | 0      | 0      |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |                 |        |        |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | ENGINEERING CKS |        |        |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Cooling Heating |        |        |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | % OA            | 0.0    | 0.0    |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | cfm/ft²         | 0.80   | 0.80   |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | cfm/ton         | 483.12 |        |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | ft²/ton         | 603.26 |        |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | Btu/hr-ft²      | 19.89  | -12.31 |
|                                        |  |  |  |  |                |  |  |                       |  |  |  | No. People      | 1      |        |
|                                        |  |  |  |  |                |  |  |                       |  |  |  |                 |        |        |
| Grand Total ==>                        |  |  |  |  | 16,629 100.00  |  |  | Grand Total ==>       |  |  |  |                 |        |        |

| COOLING COIL SELECTION |     |           |              |                |      |       |                |      |       | AREAS       |         |                       | HEATING COIL SELECTION |     |      |      |
|------------------------|-----|-----------|--------------|----------------|------|-------|----------------|------|-------|-------------|---------|-----------------------|------------------------|-----|------|------|
| Total Capacity         |     | Sens Cap. | Coil Airflow | Enter DB/WB/HR |      |       | Leave DB/WB/HR |      |       | Gross Total | Glass   | Capacity Coil Airflow |                        | Ent | Lvg  |      |
| ton                    | MBh | MBh       | cfm          | °F             | °F   | gr/lb | °F             | °F   | gr/lb |             | ft² (%) | MBh                   | cfm                    | °F  | °F   |      |
| Main Clg               | 1.9 | 22.4      | 20.1         | 901            | 78.4 | 63.7  | 64.9           | 58.5 | 55.6  | 61.3        | Floor   | 1,126                 | -13.9                  | 901 | 66.5 | 80.3 |
| Aux Clg                | 0.0 | 0.0       | 0.0          | 0              | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   | 0.0         | Part    | 90                    | 0.0                    | 0   | 0.0  | 0.0  |
| Opt Vent               | 0.0 | 0.0       | 0.0          | 0              | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   | 0.0         | ExFlr   | 0                     | 0.0                    | 0   | 0.0  | 0.0  |
| Total                  | 1.9 | 22.4      |              |                |      |       |                |      |       |             | Roof    | 1,126                 | 0                      | 0   | 0.0  | 0.0  |
|                        |     |           |              |                |      |       |                |      |       |             | Wall    | 1,345                 | 246                    | 0   | 0.0  | 0.0  |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |
|                        |     |           |              |                |      |       |                |      |       |             |         |                       |                        |     |      |      |

# Room Checksums

By DFG

## Staff Room

| COOLING COIL PEAK                      |                              |                    |                         |        | CLG SPACE PEAK          |                         |        |                    |        | HEATING COIL PEAK                 |                                |                         |        |        | TEMPERATURES |         |         |
|----------------------------------------|------------------------------|--------------------|-------------------------|--------|-------------------------|-------------------------|--------|--------------------|--------|-----------------------------------|--------------------------------|-------------------------|--------|--------|--------------|---------|---------|
| Peaked at Time: Mo/Hr: 7 / 17          |                              |                    |                         |        | Mo/Hr: 7 / 17           |                         |        |                    |        | Mo/Hr: Heating Design             |                                |                         |        |        |              |         |         |
| Outside Air: OADB/WB/HR: 88 / 75 / 113 |                              |                    |                         |        | OADB: 88                |                         |        |                    |        | OADB: 47                          |                                |                         |        |        |              |         |         |
| Space Sens. + Lat.<br>Btu/h            | Plenum Sens. + Lat.<br>Btu/h | Net Total<br>Btu/h | Percent Of Total<br>(%) |        | Space Sensible<br>Btu/h | Percent Of Total<br>(%) |        |                    |        | Space Peak<br>Space Sens<br>Btu/h | Coil Peak<br>Tot Sens<br>Btu/h | Percent Of Total<br>(%) |        |        | SADB         | Cooling | Heating |
| <b>Envelope Loads</b>                  |                              |                    |                         |        | <b>Envelope Loads</b>   |                         |        |                    |        | <b>Envelope Loads</b>             |                                |                         |        |        | Plenum       | 77.3    | 66.9    |
| Skylite Solar                          | 0                            | 0                  | 0                       | 0      | 0                       | 0                       | 0      | Skylite Solar      | 0      | 0                                 | 0                              | 0                       | 0      | 0      | Return       | 77.3    | 66.9    |
| Skylite Cond                           | 0                            | 0                  | 0                       | 0      | 0                       | 0                       | 0      | Skylite Cond       | 0      | 0                                 | 0                              | 0                       | 0      | 0      | Ret/OA       | 77.3    | 66.9    |
| Roof Cond                              | 0                            | 204                | 204                     | 5      | 0                       | 0                       | 0      | Roof Cond          | 0      | -51                               | 2                              | 2                       | 2      | 2      | Fn MtrTD     | 0.0     | 0.0     |
| Glass Solar                            | 181                          | 0                  | 181                     | 5      | 181                     | 6                       | 6      | Glass Solar        | 0      | 0                                 | 0                              | 0                       | 0      | 0      | Fn BldTD     | 0.0     | 0.0     |
| Glass Cond                             | 244                          | 0                  | 244                     | 6      | 244                     | 8                       | 8      | Glass Cond         | -433   | -433                              | 13                             | 13                      | 13     | 13     | Fn Frict     | 0.1     | 0.0     |
| Wall Cond                              | 722                          | 211                | 933                     | 23     | 722                     | 23                      | 23     | Wall Cond          | -688   | -901                              | 28                             | 28                      | 28     | 28     |              |         |         |
| Partition                              | 1,085                        |                    | 1,085                   | 27     | 1,085                   | 35                      | 35     | Partition          | -1,629 | -1,629                            | 50                             | 50                      | 50     | 50     |              |         |         |
| Exposed Floor                          | 0                            |                    | 0                       | 0      | 0                       | 0                       | 0      | Exposed Floor      | 0      | 0                                 | 0                              | 0                       | 0      | 0      |              |         |         |
| Infiltration                           | 553                          |                    | 553                     | 14     | 165                     | 5                       | 5      | Infiltration       | -269   | -269                              | 8                              | 8                       | 8      | 8      |              |         |         |
| Sub Total ==>                          | 2,785                        | 415                | 3,200                   | 80     | 2,397                   | 77                      | 77     | Sub Total ==>      | -3,019 | -3,283                            | 100                            | 100                     | 100    | 100    |              |         |         |
| <b>Internal Loads</b>                  |                              |                    |                         |        | <b>Internal Loads</b>   |                         |        |                    |        | <b>Internal Loads</b>             |                                |                         |        |        |              |         |         |
| Lights                                 | 341                          | 0                  | 341                     | 9      | 341                     | 11                      | 11     | Lights             | 0      | 0                                 | 0                              | 0                       | 0      | 0      | Vent         | 0       | 0       |
| People                                 | 500                          |                    | 500                     | 12     | 250                     | 8                       | 8      | People             | 0      | 0                                 | 0                              | 0                       | 0      | 0      | Infil        | 11      | 11      |
| Misc                                   | 0                            | 0                  | 0                       | 0      | 0                       | 0                       | 0      | Misc               | 0      | 0                                 | 0                              | 0                       | 0      | 0      | Supply       | 155     | 155     |
| Sub Total ==>                          | 841                          | 0                  | 841                     | 21     | 591                     | 19                      | 19     | Sub Total ==>      | 0      | 0                                 | 0                              | 0                       | 0      | 0      | MinStop/Rh   | 0       | 0       |
| Ceiling Load                           | 144                          | -144               | 0                       | 0      | 144                     | 5                       | 5      | Ceiling Load       | -68    | 0                                 | 0                              | 0                       | 0      | 0      | Return       | 166     | 166     |
| Ventilation Load                       | 0                            | 0                  | 0                       | 0      | 0                       | 0                       | 0      | Ventilation Load   | 0      | 0                                 | 0                              | 0                       | 0      | 0      | Exhaust      | 11      | 11      |
| Dehumid. Ov Sizing                     | 0                            |                    | 0                       | 0      | 0                       | 0                       | 0      | Dehumid. Ov Sizing | 0      | 0                                 | 0                              | 0                       | 0      | 0      | Rm Exh       | 0       | 0       |
| Ov/Undr Sizing                         | 0                            |                    | 0                       | 0      | 0                       | 0                       | 0      | Ov/Undr Sizing     | 0      | 0                                 | 0                              | 0                       | 0      | 0      | Auxil        | 0       | 0       |
| Exhaust Heat                           |                              | -30                | -30                     | -1     |                         |                         |        | Exhaust Heat       |        | 14                                | 0                              | 0                       | 0      | 0      |              |         |         |
| Sup. Fan Heat                          |                              |                    | 0                       | 0      |                         |                         |        | OA Preheat Diff.   |        | 0                                 | 0                              | 0                       | 0      | 0      |              |         |         |
| Ret. Fan Heat                          |                              | 0                  | 0                       | 0      |                         |                         |        | RA Preheat Diff.   |        | 0                                 | 0                              | 0                       | 0      | 0      |              |         |         |
| Duct Heat Pkup                         |                              | 0                  | 0                       | 0      |                         |                         |        | Additional Reheat  |        | 0                                 | 0                              | 0                       | 0      | 0      |              |         |         |
| Reheat at Design                       |                              |                    | 0                       | 0      |                         |                         |        | System Plenum Heat |        | -4                                | 0                              | 0                       | 0      | 0      |              |         |         |
| Grand Total ==>                        | 3,770                        | 241                | 4,011                   | 100.00 | 3,132                   | 100.00                  | 100.00 | Grand Total ==>    | -3,087 | -3,274                            | 100.00                         | 100.00                  | 100.00 | 100.00 |              |         |         |

## AIRFLOWS

|            | Cooling | Heating |
|------------|---------|---------|
| Vent       | 0       | 0       |
| Infil      | 11      | 11      |
| Supply     | 155     | 155     |
| MinStop/Rh | 0       | 0       |
| Return     | 166     | 166     |
| Exhaust    | 11      | 11      |
| Rm Exh     | 0       | 0       |
| Auxil      | 0       | 0       |

## ENGINEERING CKS

|            | Cooling | Heating |
|------------|---------|---------|
| % OA       | 0.0     | 0.0     |
| cfm/ft²    | 0.79    | 0.79    |
| cfm/ton    | 463.67  |         |
| ft²/ton    | 588.71  |         |
| Btu/hr-ft² | 20.38   | -16.64  |
| No. People | 1       |         |

## COOLING COIL SELECTION

|          | Total Capacity<br>ton | Capacity<br>MBh | Sens Cap.<br>MBh | Coil Airflow<br>cfm | Enter DB/WB/HR<br>°F °F gr/lb | Leave DB/WB/HR<br>°F °F gr/lb |
|----------|-----------------------|-----------------|------------------|---------------------|-------------------------------|-------------------------------|
| Main Clg | 0.3                   | 4.0             | 3.4              | 155                 | 77.3 63.4                     | 56.7 54.7                     |
| Aux Clg  | 0.0                   | 0.0             | 0.0              | 0                   | 0.0 0.0                       | 0.0 0.0                       |
| Opt Vent | 0.0                   | 0.0             | 0.0              | 0                   | 0.0 0.0                       | 0.0 0.0                       |
| Total    | 0.3                   | 4.0             |                  |                     |                               |                               |

## AREAS

|       | Gross Total | Glass<br>ft² (%) |
|-------|-------------|------------------|
| Floor | 197         |                  |
| Part  | 200         |                  |
| ExFlr | 0           |                  |
| Roof  | 75          | 0 0              |
| Wall  | 200         | 19 10            |

## HEATING COIL SELECTION

|          | Capacity<br>MBh | Coil Airflow<br>cfm | Ent<br>°F | Lvg<br>°F |
|----------|-----------------|---------------------|-----------|-----------|
| Main Htg | -3.3            | 155                 | 66.9      | 85.9      |
| Aux Htg  | 0.0             | 0                   | 0.0       | 0.0       |
| Preheat  | 0.0             | 0                   | 0.0       | 0.0       |
| Humidif  | 0.0             | 0                   | 0.0       | 0.0       |
| Opt Vent | 0.0             | 0                   | 0.0       | 0.0       |
| Total    | -3.3            |                     |           |           |

# Room Checksums

By DFG

## Study

| COOLING COIL PEAK                      |                     |           |                  |        | CLG SPACE PEAK        |                  |   |                    |        | HEATING COIL PEAK     |                    |                  |   |   | TEMPERATURES |         |         |
|----------------------------------------|---------------------|-----------|------------------|--------|-----------------------|------------------|---|--------------------|--------|-----------------------|--------------------|------------------|---|---|--------------|---------|---------|
| Peaked at Time: Mo/Hr: 7 / 18          |                     |           |                  |        | Mo/Hr: 7 / 18         |                  |   |                    |        | Mo/Hr: Heating Design |                    |                  |   |   |              |         |         |
| Outside Air: OADB/WB/HR: 87 / 74 / 108 |                     |           |                  |        | OADB: 87              |                  |   |                    |        | OADB: 47              |                    |                  |   |   |              |         |         |
| Space Sens. + Lat.                     | Plenum Sens. + Lat. | Net Total | Percent Of Total |        | Space Sensible        | Percent Of Total |   |                    |        | Space Peak Space Sens | Coil Peak Tot Sens | Percent Of Total |   |   |              |         |         |
| Btu/h                                  | Btu/h               | Btu/h     | (%)              |        | Btu/h                 | (%)              |   |                    |        | Btu/h                 | Btu/h              | (%)              |   |   |              |         |         |
| <b>Envelope Loads</b>                  |                     |           |                  |        | <b>Envelope Loads</b> |                  |   |                    |        | <b>Envelope Loads</b> |                    |                  |   |   |              |         |         |
| Skylite Solar                          | 0                   | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Solar      | 0      | 0                     | 0                  | 0                | 0 | 0 | SADB         | Cooling | Heating |
| Skylite Cond                           | 0                   | 0         | 0                | 0      | 0                     | 0                | 0 | Skylite Cond       | 0      | 0                     | 0                  | 0                | 0 | 0 | Plenum       | 56.9    | 85.9    |
| Roof Cond                              | 0                   | 199       | 199              | 3      | 0                     | 0                | 0 | Roof Cond          | 0      | -51                   | 1                  | 0                | 0 | 0 | Return       | 77.3    | 66.9    |
| Glass Solar                            | 1,119               | 0         | 1,119            | 18     | 1,119                 | 22               | 0 | Glass Solar        | 0      | 0                     | 0                  | 0                | 0 | 0 | Ret/OA       | 77.3    | 66.9    |
| Glass Cond                             | 1,244               | 0         | 1,244            | 20     | 1,244                 | 25               | 0 | Glass Cond         | -2,410 | -2,410                | 46                 | 0                | 0 | 0 | Fn MtrTD     | 0.0     | 0.0     |
| Wall Cond                              | 710                 | 393       | 1,103            | 18     | 710                   | 14               | 0 | Wall Cond          | -493   | -773                  | 15                 | 0                | 0 | 0 | Fn BldTD     | 0.0     | 0.0     |
| Partition                              | 1,042               |           | 1,042            | 17     | 1,042                 | 21               | 0 | Partition          | -1,629 | -1,629                | 31                 | 0                | 0 | 0 | Fn Frict     | 0.1     | 0.0     |
| Exposed Floor                          | 0                   |           | 0                | 0      | 0                     | 0                | 0 | Exposed Floor      | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Infiltration                           | 599                 |           | 599              | 10     | 180                   | 4                | 0 | Infiltration       | -321   | -321                  | 6                  | 0                | 0 | 0 |              |         |         |
| Sub Total ==>                          | 4,714               | 592       | 5,306            | 87     | 4,295                 | 85               | 0 | Sub Total ==>      | -4,853 | -5,185                | 98                 | 0                | 0 | 0 |              |         |         |
| <b>Internal Loads</b>                  |                     |           |                  |        | <b>Internal Loads</b> |                  |   |                    |        | <b>Internal Loads</b> |                    |                  |   |   |              |         |         |
| Lights                                 | 341                 | 0         | 341              | 6      | 341                   | 7                | 0 | Lights             | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| People                                 | 500                 |           | 500              | 8      | 250                   | 5                | 0 | People             | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Misc                                   | 0                   | 0         | 0                | 0      | 0                     | 0                | 0 | Misc               | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Sub Total ==>                          | 841                 | 0         | 841              | 14     | 591                   | 12               | 0 | Sub Total ==>      | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| <b>Ceiling Load</b>                    |                     |           |                  |        | <b>Ceiling Load</b>   |                  |   |                    |        | <b>Ceiling Load</b>   |                    |                  |   |   |              |         |         |
| Ventilation Load                       | 173                 | -173      | 0                | 0      | 173                   | 3                | 0 | Ventilation Load   | -81    | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Dehumid. Ov Sizing                     | 0                   | 0         | 0                | 0      | 0                     | 0                | 0 | Dehumid. Ov Sizing | 0      | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Ov/Undr Sizing                         | 0                   |           | 0                | 0      | 0                     | 0                | 0 | Ov/Undr Sizing     | -52    | -52                   | 1                  | 0                | 0 | 0 |              |         |         |
| Exhaust Heat                           |                     | -35       | -35              | -1     |                       |                  |   | Exhaust Heat       |        | 17                    | 0                  | 0                | 0 | 0 |              |         |         |
| Sup. Fan Heat                          |                     |           | 0                | 0      |                       |                  |   | OA Preheat Diff.   |        | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Ret. Fan Heat                          |                     | 0         | 0                | 0      |                       |                  |   | RA Preheat Diff.   |        | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Duct Heat Pkup                         |                     | 0         | 0                | 0      |                       |                  |   | Additional Reheat  |        | 0                     | 0                  | 0                | 0 | 0 |              |         |         |
| Reheat at Design                       |                     |           | 0                | 0      |                       |                  |   | System Plenum Heat |        | -68                   | 1                  | 0                | 0 | 0 |              |         |         |
| Grand Total ==>                        | 5,728               | 384       | 6,111            | 100.00 | 5,059                 | 100.00           | 0 | Grand Total ==>    | -4,986 | -5,288                | 100.00             | 0                | 0 | 0 |              |         |         |

| TEMPERATURES |         |         |
|--------------|---------|---------|
|              | Cooling | Heating |
| SADB         | 56.9    | 85.9    |
| Plenum       | 77.3    | 66.9    |
| Return       | 77.3    | 66.9    |
| Ret/OA       | 77.3    | 66.9    |
| Fn MtrTD     | 0.0     | 0.0     |
| Fn BldTD     | 0.0     | 0.0     |
| Fn Frict     | 0.1     | 0.0     |

| AIRFLOWS   |         |         |
|------------|---------|---------|
|            | Cooling | Heating |
| Vent       | 0       | 0       |
| Infil      | 14      | 14      |
| Supply     | 250     | 250     |
| MinStop/Rh | 0       | 0       |
| Return     | 264     | 264     |
| Exhaust    | 14      | 14      |
| Rm Exh     | 0       | 0       |
| Auxil      | 0       | 0       |

| ENGINEERING CKS |         |         |
|-----------------|---------|---------|
|                 | Cooling | Heating |
| % OA            | 0.0     | 0.0     |
| cfm/ft²         | 1.07    | 1.07    |
| cfm/ton         | 491.56  |         |
| ft²/ton         | 461.43  |         |
| Btu/hr-ft²      | 26.01   | -22.50  |
| No. People      | 1       |         |

| COOLING COIL SELECTION |                |           |              |                |      |       |                |      |       |
|------------------------|----------------|-----------|--------------|----------------|------|-------|----------------|------|-------|
|                        | Total Capacity | Sens Cap. | Coil Airflow | Enter DB/WB/HR |      |       | Leave DB/WB/HR |      |       |
|                        | ton            | MBh       | cfm          | °F             | °F   | gr/lb | °F             | °F   | gr/lb |
| Main Clg               | 0.5            | 6.1       | 250          | 77.3           | 63.4 | 64.9  | 56.7           | 55.2 | 62.9  |
| Aux Clg                | 0.0            | 0.0       | 0            | 0.0            | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   |
| Opt Vent               | 0.0            | 0.0       | 0            | 0.0            | 0.0  | 0.0   | 0.0            | 0.0  | 0.0   |
| Total                  | 0.5            | 6.1       |              |                |      |       |                |      |       |

| AREAS |             |       |     |
|-------|-------------|-------|-----|
|       | Gross Total | Glass |     |
|       |             | ft²   | (%) |
| Floor | 235         |       |     |
| Part  | 200         |       |     |
| ExFlr | 0           |       |     |
| Roof  | 75          | 0     | 0   |
| Wall  | 264         | 108   | 41  |

| HEATING COIL SELECTION |          |              |      |      |
|------------------------|----------|--------------|------|------|
|                        | Capacity | Coil Airflow | Ent  | Lvg  |
|                        | MBh      | cfm          | °F   | °F   |
| Main Htg               | -5.3     | 250          | 66.9 | 85.9 |
| Aux Htg                | 0.0      | 0            | 0.0  | 0.0  |
| Preheat                | 0.0      | 0            | 0.0  | 0.0  |
| Humidif                | 0.0      | 0            | 0.0  | 0.0  |
| Opt Vent               | 0.0      | 0            | 0.0  | 0.0  |
| Total                  | -5.3     |              |      |      |

# ENTERED VALUES

## ROOM BY ROOM

By DFG

### Room Description: Family Room

### Zone Description: Zone - 001

### System Description: System - 001

| GENERAL INFORMATION                               |  |  |  | PEOPLE AND LIGHTS                                                  |  |  |  | AIRFLOW INFORMATION                 |  |                         |  |
|---------------------------------------------------|--|--|--|--------------------------------------------------------------------|--|--|--|-------------------------------------|--|-------------------------|--|
| Floor Area: 783 ft <sup>2</sup>                   |  |  |  | People Type: None                                                  |  |  |  | <u>Cooling</u>                      |  | <u>Heating</u>          |  |
| Flr-Flr Height: 9.0 ft                            |  |  |  | # of People: 1 People                                              |  |  |  | Vent Type: None                     |  | None                    |  |
| Plenum Height: 2.0 ft                             |  |  |  | People Sensible: 250 Btu/h                                         |  |  |  | Vent Value: 0.00 cfm                |  | 0.00 cfm                |  |
| Floor Cnstr Type: 4* LW Concrete                  |  |  |  | People Latent : 250 Btu/h                                          |  |  |  | Vent Schedule: Available (100%)     |  | Neutral, Average Const. |  |
| Room Mass: None                                   |  |  |  | People Schedule: Cooling Only (Design)                             |  |  |  | Infil Type: Neutral, Average Const. |  | Neutral, Average Const. |  |
| Ceiling R-Value: 1.786 hr·ft <sup>2</sup> ·°F/Btu |  |  |  | Lighting Type: Fluorescent, hung below ceiling, 100% load to space |  |  |  | Infil Value: 0.50 air changes/hr    |  | 0.50 air changes/hr     |  |
| Is There Carpet?: YES                             |  |  |  | Fixture Type: SUSFLUOR                                             |  |  |  | Infil Schedule: Available (100%)    |  |                         |  |
| Design Clg DB: 75.0 °F                            |  |  |  | % Load to RA: 0 %                                                  |  |  |  | Vav Min Airflow:                    |  |                         |  |
| Design Htg DB: 68.0 °F                            |  |  |  | Lighting Schedule: Cooling Only (Design)                           |  |  |  | Vav Min Sched: Available (100%)     |  |                         |  |
| Design RH: 50 %                                   |  |  |  | Lighting Amount: 100.0 W                                           |  |  |  | Supply: To be calculated            |  | To be calculated        |  |
| Height Above Floor: 0 ft                          |  |  |  | Ballast Factor: 1.0                                                |  |  |  | Aux Supply: To be calculated        |  | To be calculated        |  |
| Floor Multiplier: 1                               |  |  |  |                                                                    |  |  |  | Room Exhaust:                       |  |                         |  |
| Room Multiplier: 1                                |  |  |  |                                                                    |  |  |  |                                     |  |                         |  |
| Moisture Capacitance: None                        |  |  |  |                                                                    |  |  |  |                                     |  |                         |  |
| Humidistat Location: Room                         |  |  |  |                                                                    |  |  |  |                                     |  |                         |  |

### ROOM COMPONENTS

| Description   | Area/<br>Amount     | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft <sup>2</sup> ·°F | Alpha | Type               | Glass                   |               |                                      | External<br>Shading | Internal<br>Shading | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|---------------|---------------------|-----|------|-------------------------|--------------------------------------|-------|--------------------|-------------------------|---------------|--------------------------------------|---------------------|---------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
|               |                     |     |      |                         |                                      |       |                    | Area<br>ft <sup>2</sup> | Shade<br>Coef | U Value<br>Btu/h·ft <sup>2</sup> ·°F |                     |                     |                              |                            |                           |                            |                             |
| Roof - 1      | 783 ft <sup>2</sup> | 0   | 90   | 1* Wood, 8* Ins         | 0.03                                 | 0.90  |                    | 0                       |               |                                      | Overhang - None     | None                |                              |                            |                           |                            |                             |
| Wall - 1      | 341 ft <sup>2</sup> | 0   | 0    | 8* LW Block, 1* Ins     | 0.24                                 | 0.90  | Single Coated 1/4* | 25                      | 0.24          | 1.04                                 | Overhang - None     | None                | 1.00                         |                            |                           |                            |                             |
| Wall - 3      | 240 ft <sup>2</sup> | 180 | 0    | 8* LW Block, 1* Ins     | 0.24                                 | 0.90  | Single Coated 1/4* | 171                     | 0.24          | 1.04                                 | Overhang - None     | None                | 1.00                         |                            |                           |                            |                             |
| Wall - 2      | 330 ft <sup>2</sup> | 90  | 0    | 8* LW Block, 1* Ins     | 0.24                                 | 0.90  | Single Coated 1/4* | 171                     | 0.24          | 1.04                                 | Overhang - None     | None                | 1.00                         |                            |                           |                            |                             |
| Partition - 1 | 72 ft <sup>2</sup>  |     |      | 0.75* Gyp Frame         | 0.39                                 |       |                    |                         |               |                                      |                     |                     | Hourly C                     |                            |                           |                            |                             |

### Room Description: Kitchen

### Zone Description: Zone - 001

### System Description: System - 001

| GENERAL INFORMATION                               |  |  |  | PEOPLE AND LIGHTS                                                  |  |  |  | AIRFLOW INFORMATION                 |  |                         |  |
|---------------------------------------------------|--|--|--|--------------------------------------------------------------------|--|--|--|-------------------------------------|--|-------------------------|--|
| Floor Area: 528 ft <sup>2</sup>                   |  |  |  | People Type: None                                                  |  |  |  | <u>Cooling</u>                      |  | <u>Heating</u>          |  |
| Flr-Flr Height: 9.0 ft                            |  |  |  | # of People: 1 People                                              |  |  |  | Vent Type: None                     |  | None                    |  |
| Plenum Height: 2.0 ft                             |  |  |  | People Sensible: 250 Btu/h                                         |  |  |  | Vent Value: 50.00 cfm               |  | 50.00 cfm               |  |
| Floor Cnstr Type: 4* LW Concrete                  |  |  |  | People Latent : 250 Btu/h                                          |  |  |  | Vent Schedule: Available (100%)     |  | Neutral, Average Const. |  |
| Room Mass: None                                   |  |  |  | People Schedule: Cooling Only (Design)                             |  |  |  | Infil Type: Neutral, Average Const. |  | Neutral, Average Const. |  |
| Ceiling R-Value: 1.786 hr·ft <sup>2</sup> ·°F/Btu |  |  |  | Lighting Type: Fluorescent, hung below ceiling, 100% load to space |  |  |  | Infil Value: 0.50 air changes/hr    |  | 0.50 air changes/hr     |  |
| Is There Carpet?: YES                             |  |  |  | Fixture Type: SUSFLUOR                                             |  |  |  | Infil Schedule: Available (100%)    |  |                         |  |
| Design Clg DB: 75.0 °F                            |  |  |  | % Load to RA: 0 %                                                  |  |  |  | Vav Min Airflow:                    |  |                         |  |
| Design Htg DB: 68.0 °F                            |  |  |  | Lighting Schedule: Cooling Only (Design)                           |  |  |  | Vav Min Sched: Available (100%)     |  |                         |  |
| Design RH: 50 %                                   |  |  |  | Lighting Amount: 100.0 W                                           |  |  |  | Supply: To be calculated            |  | To be calculated        |  |
| Height Above Floor: 0 ft                          |  |  |  | Ballast Factor: 1.0                                                |  |  |  | Aux Supply: To be calculated        |  | To be calculated        |  |
| Floor Multiplier: 1                               |  |  |  |                                                                    |  |  |  | Room Exhaust:                       |  |                         |  |
| Room Multiplier: 1                                |  |  |  |                                                                    |  |  |  |                                     |  |                         |  |
| Moisture Capacitance: None                        |  |  |  |                                                                    |  |  |  |                                     |  |                         |  |
| Humidistat Location: Room                         |  |  |  |                                                                    |  |  |  |                                     |  |                         |  |

### ROOM COMPONENTS

| Description   | Area/<br>Amount     | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft <sup>2</sup> ·°F | Alpha | Type               | Glass                   |               |                                      | External<br>Shading | Internal<br>Shading | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|---------------|---------------------|-----|------|-------------------------|--------------------------------------|-------|--------------------|-------------------------|---------------|--------------------------------------|---------------------|---------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
|               |                     |     |      |                         |                                      |       |                    | Area<br>ft <sup>2</sup> | Shade<br>Coef | U Value<br>Btu/h·ft <sup>2</sup> ·°F |                     |                     |                              |                            |                           |                            |                             |
| Roof - 1      | 240 ft <sup>2</sup> | 0   | 90   | 1* Wood, 8* Ins         | 0.03                                 | 0.90  |                    | 0                       |               |                                      | Overhang - None     | None                |                              |                            |                           |                            |                             |
| Wall - 1      | 168 ft <sup>2</sup> | 0   | 0    | 8* LW Block, 1* Ins     | 0.24                                 | 0.90  | Single Coated 1/4* | 21                      | 0.24          | 1.04                                 | Overhang - None     | None                | 1.00                         |                            |                           |                            |                             |
| Misc Equip 1  | 0.1 kW              |     |      | Cooling Only (Design)   |                                      |       |                    |                         |               |                                      |                     |                     |                              |                            | 100                       | 100                        | 0 60.00                     |
| Partition - 1 | 72 ft <sup>2</sup>  |     |      | 0.75* Gyp Frame         | 0.39                                 |       |                    |                         |               |                                      |                     |                     | Hourly C                     |                            |                           |                            |                             |

# ENTERED VALUES

## ROOM BY ROOM

By DFG

### Room Description: Laundry Room

### Zone Description: Zone - 001

### System Description: System - 001

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                       |                 |     |      |                         |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                    |             |               |                         |                     | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                 |                              |                            |                           |                            |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|---------------|-------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 299 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Moisture Capacitance: None<br>Room Multiplier: 1<br>Humidistat Location: Room |                 |     |      |                         |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                    |             |               |                         |                     | Cooling<br>Heating<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust: |                              |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     |                              |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                                                                               | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               | Type               | Glass       |               |                         | External<br>Shading | Internal<br>Shading                                                                                                                                                                                                                                                                                                                                 | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                    | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                                                                                                                                                                                                                                                                                                                                                     |                              |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 190 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                    | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                |                              |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 113 ft²         | 0   | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Coated 1/4* | 17          | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                | 1.00                         |                            |                           |                            |                             |
| Misc Equip 1                                                                                                                                                                                                                                                                                                                                                                                              | 0.1 kW          |     |      | Cooling Only (Design)   |                         |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     |                              | 100                        | 100                       |                            | 0.60.00                     |
| Partition - 1                                                                                                                                                                                                                                                                                                                                                                                             | 180 ft²         |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     | Hourly C                     |                            |                           |                            |                             |
| Partition - 2                                                                                                                                                                                                                                                                                                                                                                                             | 50 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     | Hourly C                     |                            |                           |                            |                             |

### Room Description: Staff Room

### Zone Description: Zone - 001

### System Description: System - 001

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                       |                 |     |      |                         |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                   |             |               |                         |                     | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                 |                              |                            |                           |                            |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|---------------|-------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 197 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Moisture Capacitance: None<br>Room Multiplier: 1<br>Humidistat Location: Room |                 |     |      |                         |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                   |             |               |                         |                     | Cooling<br>Heating<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust: |                              |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     |                              |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                                                                               | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               | Type              | Glass       |               |                         | External<br>Shading | Internal<br>Shading                                                                                                                                                                                                                                                                                                                                 | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                                                                                                                                                                                                                                                                                                                                                     |                              |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 75 ft²          | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                   | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                |                              |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 200 ft²         | 0   | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Clear 1/4* | 19          | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                | 1.00                         |                            |                           |                            |                             |
| Partition - 2                                                                                                                                                                                                                                                                                                                                                                                             | 100 ft²         |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     | Hourly C                     |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                                                                             | 100 ft²         |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     | Hourly C                     |                            |                           |                            |                             |

# ENTERED VALUES

## ROOM BY ROOM

By DFG

### Room Description: Study

### Zone Description: Zone - 001

### System Description: System - 001

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                            |                 |     |      |                         |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                   |             |               |                         |                     | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |                            |                           |                            |                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|---------------|-------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 235 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Room Multiplier: 1 |                 |     |      |                         |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                   |             |               |                         |                     | Cooling<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust:<br>Heating<br>None<br>0.00 cfm<br>Neutral, Average Const.<br>0.50 air changes/hr<br>To be calculated<br>To be calculated |                     |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                    | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               | Type              | Glass       |               |                         | External<br>Shading | Internal<br>Shading                                                                                                                                                                                                                                                                                                                                                                                                                                               | Adj<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                       | 75 ft²          | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                   | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                     |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                       | 156 ft²         | 0   | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Clear 1/4* | 108         | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                |                            |                           |                            |                             |
| Wall - 2                                                                                                                                                                                                                                                                                                                                       | 108 ft²         | 270 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                   | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                |                            |                           |                            |                             |
| Partition - 2                                                                                                                                                                                                                                                                                                                                  | 100 ft²         |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Hourly C            |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                  | 100 ft²         |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Hourly C            |                            |                           |                            |                             |

### Room Description: Billards

### Zone Description: Zone - 002

### System Description: System - 002

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                            |                 |     |      |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |       |                    |             |               | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |                     |                              |                            |                           |                            |                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------|-------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 347 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Room Multiplier: 1 |                 |     |      |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |       |                    |             |               | Cooling<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust:<br>Heating<br>None<br>0.00 cfm<br>Neutral, Average Const.<br>0.50 air changes/hr<br>To be calculated<br>To be calculated |                     |                     |                              |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |       |                    |             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                     |                              |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                    | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F                                                                                                                                                                                                                                                                                                                                             | Alpha | Type               | Glass       |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | External<br>Shading | Internal<br>Shading | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |       |                    | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                     |                              |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                       | 25 ft²          | 0   | 90   | 1* Wood, 8* Ins         | 0.03                                                                                                                                                                                                                                                                                                                                                                | 0.90  |                    | 0           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Overhang - None     | None                |                              |                            |                           |                            |                             |
| Wall - 2                                                                                                                                                                                                                                                                                                                                       | 281 ft²         | 90  | 0    | 8* LW Block, 1* Ins     | 0.24                                                                                                                                                                                                                                                                                                                                                                | 0.90  | Single Clear 1/4*  | 171         | 0.24          | 1.04                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Overhang - None     | None                | 1.00                         |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                       | 240 ft²         | 0   | 0    | 8* LW Block, 1* Ins     | 0.24                                                                                                                                                                                                                                                                                                                                                                | 0.90  | Single Coated 1/4* | 171         | 0.24          | 1.04                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Overhang - None     | None                | 1.00                         |                            |                           |                            |                             |
| Wall - 3                                                                                                                                                                                                                                                                                                                                       | 240 ft²         | 180 | 0    | 8* LW Block, 1* Ins     | 0.24                                                                                                                                                                                                                                                                                                                                                                | 0.90  |                    | 0           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Overhang - 10Ft     | None                | 1.00                         |                            |                           |                            |                             |

# ENTERED VALUES

## ROOM BY ROOM

By DFG

### Room Description: Lounge 1

### Zone Description: Zone - 002

### System Description: System - 002

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                            |                 |     |      |                         |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                    |             |               |                         |                     | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |                            |                           |                            |                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|---------------|-------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 616 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Room Multiplier: 1 |                 |     |      |                         |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                    |             |               |                         |                     | Cooling<br>Heating<br>Vent Type: None<br>None<br>Vent Value: 0.00 cfm<br>0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>To be calculated<br>Aux Supply: To be calculated<br>To be calculated<br>Room Exhaust: |                              |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                    | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               | Type               | Glass       |               |                         | External<br>Shading | Internal<br>Shading                                                                                                                                                                                                                                                                                                                                                                                                                                               | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                    | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                       | 25 ft²          | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                    | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                              |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                       | 276 ft²         | 315 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Coated 1/4* | 35          | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                  | 63 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Hourly C                     |                            |                           |                            |                             |
| Partition - 2                                                                                                                                                                                                                                                                                                                                  | 63 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Hourly C                     |                            |                           |                            |                             |

### Room Description: Media

### Zone Description: Zone - 002

### System Description: System - 002

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                       |                 |     |      |                         |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                    |             |               |                         |                     | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                            |                           |                            |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|---------------|-------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 440 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Moisture Capacitance: None<br>Room Multiplier: 1<br>Humidistat Location: Room |                 |     |      |                         |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                    |             |               |                         |                     | <div>Cooling</div> <div>Heating</div> <div>Vent Type: None</div> <div>None</div> <div>Vent Value: 0.00 cfm</div> <div>0.00 cfm</div> <div>Vent Schedule: Available (100%)</div> <div>Infil Type: Neutral, Average Const.</div> <div>Neutral, Average Const.</div> <div>Infil Value: 0.50 air changes/hr</div> <div>0.50 air changes/hr</div> <div>Infil Schedule: Available (100%)</div> <div>Vav Min Airflow:</div> <div>Vav Min Sched: Available (100%)</div> <div>Supply: To be calculated</div> <div>To be calculated</div> <div>Aux Supply: To be calculated</div> <div>To be calculated</div> <div>Room Exhaust:</div> |                              |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                              |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                                                                               | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               | Type               | Glass       |               |                         | External<br>Shading | Internal<br>Shading                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                    | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                              |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 25 ft²          | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                    | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |                            |                           |                            |                             |
| Wall - 2                                                                                                                                                                                                                                                                                                                                                                                                  | 300 ft²         | 180 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                    | 0           |               |                         | Overhang - 10Ft     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1.00                         |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 276 ft²         | 270 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Coated 1/4* | 90          | 0.24          | 1.04                    | Overhang -          | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1.00                         |                            |                           |                            |                             |
| Partition - 2                                                                                                                                                                                                                                                                                                                                                                                             | 45 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Hourly C                     |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                                                                             | 45 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Hourly C                     |                            |                           |                            |                             |

# ENTERED VALUES

## ROOM BY ROOM

By DFG

### Room Description: Dinning Room

### Zone Description: Zone - 003

### System Description: System - 003

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                            |                 |     |      |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |       |                   |             |               | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |                     |                     |                            |                           |                            |                             |
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| Floor Area: 361 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Room Multiplier: 1 |                 |     |      |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |       |                   |             |               | Cooling<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust:<br>Heating<br>None<br>0.00 cfm<br>Neutral, Average Const.<br>0.50 air changes/hr<br>To be calculated<br>To be calculated |                     |                     |                     |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |       |                   |             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                     |                     |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                    | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F                                                                                                                                                                                                                                                                                                                                             | Alpha | Type              | Glass       |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | External<br>Shading | Internal<br>Shading | Adj<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |       |                   | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                     |                     |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                       | 100 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03                                                                                                                                                                                                                                                                                                                                                                | 0.90  |                   | 0           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Overhang - None     | None                |                     |                            |                           |                            |                             |
| Wall - 2                                                                                                                                                                                                                                                                                                                                       | 89 ft²          | 180 | 0    | 8* LW Block, 1* Ins     | 0.24                                                                                                                                                                                                                                                                                                                                                                | 0.90  |                   | 0           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Overhang - 10Ft     | None                | 1.00                |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                       | 192 ft²         | 270 | 0    | 8* LW Block, 1* Ins     | 0.24                                                                                                                                                                                                                                                                                                                                                                | 0.90  | Single Clear 1/4* | 135         | 0.24          | 1.04                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Overhang - None     | None                | 1.00                |                            |                           |                            |                             |
| Partition - 2                                                                                                                                                                                                                                                                                                                                  | 100 ft²         |     |      | 0.75* Gyp Frame         | 0.39                                                                                                                                                                                                                                                                                                                                                                |       |                   |             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                     | Hourly C            |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                  | 100 ft²         |     |      | 0.75* Gyp Frame         | 0.39                                                                                                                                                                                                                                                                                                                                                                |       |                   |             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                     | Hourly C            |                            |                           |                            |                             |

### Room Description: Foyer 1st Floor

### Zone Description: Zone - 003

### System Description: System - 003

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                       |                 |     |      |                         |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                    |             |               |                         |                     | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |                            |                           |                            |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|---------------|-------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 246 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Moisture Capacitance: None<br>Room Multiplier: 1<br>Humidistat Location: Room |                 |     |      |                         |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                    |             |               |                         |                     | Cooling<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust:<br>Heating<br>None<br>0.00 cfm<br>Neutral, Average Const.<br>0.50 air changes/hr<br>To be calculated<br>To be calculated |                              |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                                                                               | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               | Type               | Glass       |               |                         | External<br>Shading | Internal<br>Shading                                                                                                                                                                                                                                                                                                                                                                                                                                               | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                    | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 100 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                    | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                              |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 204 ft²         | 270 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Coated 1/4* | 174         | 0.24          | 1.04                    | Overhang - 10Ft     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                                                                             | 100 ft²         |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Hourly C                     |                            |                           |                            |                             |



# ENTERED VALUES

## ROOM BY ROOM

By DFG

### Room Description: Great Room

### Zone Description: Zone - 003

### System Description: System - 003

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                            |                 |     |      |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |       |                   |             |               | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                      |                     |                     |                              |                            |                                                                                                                       |                            |                             |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------|-------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------|--|--|
| Floor Area: 768 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Room Multiplier: 1 |                 |     |      |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |       |                   |             |               | Cooling<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust: |                     |                     |                              |                            | Heating<br>None<br>0.00 cfm<br>Neutral, Average Const.<br>0.50 air changes/hr<br>To be calculated<br>To be calculated |                            |                             |  |  |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |       |                   |             |               |                                                                                                                                                                                                                                                                                                                                          |                     |                     |                              |                            |                                                                                                                       |                            |                             |  |  |
| Description                                                                                                                                                                                                                                                                                                                                    | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F                                                                                                                                                                                                                                                                                                                                             | Alpha | Type              | Glass       |               |                                                                                                                                                                                                                                                                                                                                          | External<br>Shading | Internal<br>Shading | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp                                                                                             | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |  |  |
|                                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |       |                   | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F                                                                                                                                                                                                                                                                                                                  |                     |                     |                              |                            |                                                                                                                       |                            |                             |  |  |
| Roof - 1                                                                                                                                                                                                                                                                                                                                       | 100 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03                                                                                                                                                                                                                                                                                                                                                                | 0.90  |                   | 0           |               |                                                                                                                                                                                                                                                                                                                                          | Overhang - None     | None                |                              |                            |                                                                                                                       |                            |                             |  |  |
| Wall - 1                                                                                                                                                                                                                                                                                                                                       | 396 ft²         | 90  | 0    | 8* LW Block, 1* Ins     | 0.24                                                                                                                                                                                                                                                                                                                                                                | 0.90  | Single Clear 1/4* | 283         | 0.24          | 1.04                                                                                                                                                                                                                                                                                                                                     | Overhang - None     | None                | 1.00                         |                            |                                                                                                                       |                            |                             |  |  |
| Partition - 2                                                                                                                                                                                                                                                                                                                                  | 100 ft²         |     |      | 0.75* Gyp Frame         | 0.39                                                                                                                                                                                                                                                                                                                                                                |       |                   |             |               |                                                                                                                                                                                                                                                                                                                                          |                     |                     | Hourly C                     |                            |                                                                                                                       |                            |                             |  |  |
| Partition - 1                                                                                                                                                                                                                                                                                                                                  | 100 ft²         |     |      | 0.75* Gyp Frame         | 0.39                                                                                                                                                                                                                                                                                                                                                                |       |                   |             |               |                                                                                                                                                                                                                                                                                                                                          |                     |                     | Hourly C                     |                            |                                                                                                                       |                            |                             |  |  |

### Room Description: Bedroom #1 2nd Floor

### Zone Description: Zone - 004

### System Description: System - 004

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                            |                 |     |      |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |       |                   |             |               | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                      |                     |                     |                              |                            |                                                                                                                       |                            |                             |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------|-------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------|--|--|
| Floor Area: 403 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Room Multiplier: 1 |                 |     |      |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |       |                   |             |               | Cooling<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust: |                     |                     |                              |                            | Heating<br>None<br>0.00 cfm<br>Neutral, Average Const.<br>0.50 air changes/hr<br>To be calculated<br>To be calculated |                            |                             |  |  |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |       |                   |             |               |                                                                                                                                                                                                                                                                                                                                          |                     |                     |                              |                            |                                                                                                                       |                            |                             |  |  |
| Description                                                                                                                                                                                                                                                                                                                                    | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F                                                                                                                                                                                                                                                                                                                                             | Alpha | Type              | Glass       |               |                                                                                                                                                                                                                                                                                                                                          | External<br>Shading | Internal<br>Shading | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp                                                                                             | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |  |  |
|                                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |       |                   | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F                                                                                                                                                                                                                                                                                                                  |                     |                     |                              |                            |                                                                                                                       |                            |                             |  |  |
| Roof - 1                                                                                                                                                                                                                                                                                                                                       | 403 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03                                                                                                                                                                                                                                                                                                                                                                | 0.90  |                   | 0           |               |                                                                                                                                                                                                                                                                                                                                          | Overhang - None     | None                |                              |                            |                                                                                                                       |                            |                             |  |  |
| Wall - 1                                                                                                                                                                                                                                                                                                                                       | 192 ft²         | 270 | 0    | 8* LW Block, 1* Ins     | 0.24                                                                                                                                                                                                                                                                                                                                                                | 0.90  | Single Clear 1/4* | 65          | 0.24          | 1.04                                                                                                                                                                                                                                                                                                                                     | Overhang - None     | None                | 1.00                         |                            |                                                                                                                       |                            |                             |  |  |
| Partition - 1                                                                                                                                                                                                                                                                                                                                  | 50 ft²          |     |      | 0.75* Gyp Frame         | 0.39                                                                                                                                                                                                                                                                                                                                                                |       |                   |             |               |                                                                                                                                                                                                                                                                                                                                          |                     |                     | Hourly C                     |                            |                                                                                                                       |                            |                             |  |  |
| Partition - 2                                                                                                                                                                                                                                                                                                                                  | 50 ft²          |     |      | 0.75* Gyp Frame         | 0.39                                                                                                                                                                                                                                                                                                                                                                |       |                   |             |               |                                                                                                                                                                                                                                                                                                                                          |                     |                     | Hourly C                     |                            |                                                                                                                       |                            |                             |  |  |

# ENTERED VALUES

## ROOM BY ROOM

By DFG

Room Description: Bedroom #2 & Bath 2nd Floor

Zone Description: Zone - 004

System Description: System - 004

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                       |                 |     |      |                         |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                   |             |               |                         |                     | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                 |                              |                            |                           |                            |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|---------------|-------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 357 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Moisture Capacitance: None<br>Room Multiplier: 1<br>Humidistat Location: Room |                 |     |      |                         |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                   |             |               |                         |                     | Cooling<br>Heating<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust: |                              |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     |                              |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                                                                               | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               | Type              | Glass       |               |                         | External<br>Shading | Internal<br>Shading                                                                                                                                                                                                                                                                                                                                 | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                                                                                                                                                                                                                                                                                                                                                     |                              |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 357 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                   | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                |                              |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 252 ft²         | 90  | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Clear 1/4* | 65          | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                | 1.00                         |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                                                                             | 45 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     | Hourly C                     |                            |                           |                            |                             |
| Partition - 3                                                                                                                                                                                                                                                                                                                                                                                             | 45 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     | Hourly C                     |                            |                           |                            |                             |
| Partition - 2                                                                                                                                                                                                                                                                                                                                                                                             | 45 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                     | Hourly C                     |                            |                           |                            |                             |

Room Description: Bedroom #3 2nd Floor

Zone Description: Zone - 004

System Description: System - 004

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                       |                 |     |      |                         |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                   |             |               |                         |                     | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |                            |                           |                            |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|---------------|-------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 410 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Moisture Capacitance: None<br>Room Multiplier: 1<br>Humidistat Location: Room |                 |     |      |                         |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                   |             |               |                         |                     | Cooling<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust:<br>Heating<br>None<br>0.00 cfm<br>Neutral, Average Const.<br>0.50 air changes/hr<br>To be calculated<br>To be calculated |                              |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                                                                               | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               | Type              | Glass       |               |                         | External<br>Shading | Internal<br>Shading                                                                                                                                                                                                                                                                                                                                                                                                                                               | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                                                                           |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 410 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                   | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                              |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                                                                                  | 264 ft²         | 0   | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Clear 1/4* | 54          | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Wall - 4                                                                                                                                                                                                                                                                                                                                                                                                  | 180 ft²         | 270 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                   | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Wall - 2                                                                                                                                                                                                                                                                                                                                                                                                  | 180 ft²         | 90  | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Clear 1/4* | 65          | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Wall - 3                                                                                                                                                                                                                                                                                                                                                                                                  | 60 ft²          | 90  | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Clear 1/4* | 9           | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Partition - 2                                                                                                                                                                                                                                                                                                                                                                                             | 50 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Hourly C                     |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                                                                             | 50 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Hourly C                     |                            |                           |                            |                             |

# ENTERED VALUES

## ROOM BY ROOM

By DFG

Room Description: Hallway 2nd

Zone Description: Zone - 004

System Description: System - 004

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                            |                 |     |      |                         |              | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |      |             |               |                         |  | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                      |                     |                     |                              |                            |                           |                                                                                                                           |                             |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------|---------------|-------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|------------------------------|----------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------|--|--|--|--|
| Floor Area: 245 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Room Multiplier: 1 |                 |     |      |                         |              | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |      |             |               |                         |  | Cooling<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust: |                     |                     |                              |                            |                           | Heating<br>None<br>0.00 cfm<br>Neutral, Average Const.<br>0.50 air changes/hr<br><br>To be calculated<br>To be calculated |                             |  |  |  |  |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |              |                                                                                                                                                                                                                                                                                                                                                                     |      |             |               |                         |  |                                                                                                                                                                                                                                                                                                                                          |                     |                     |                              |                            |                           |                                                                                                                           |                             |  |  |  |  |
| Description                                                                                                                                                                                                                                                                                                                                    | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value      |                                                                                                                                                                                                                                                                                                                                                                     | Type | Glass       |               |                         |  |                                                                                                                                                                                                                                                                                                                                          | External<br>Shading | Internal<br>Shading | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len                                                                                                | Rad<br>Frc/<br>Loss<br>Coef |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         | Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               |      | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |  |                                                                                                                                                                                                                                                                                                                                          |                     |                     |                              |                            |                           |                                                                                                                           |                             |  |  |  |  |
| Roof - 1                                                                                                                                                                                                                                                                                                                                       | 245 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03         | 0.90                                                                                                                                                                                                                                                                                                                                                                |      | 0           |               |                         |  |                                                                                                                                                                                                                                                                                                                                          | Overhang - None     | None                |                              |                            |                           |                                                                                                                           | Hourly C                    |  |  |  |  |
| Partition - 2                                                                                                                                                                                                                                                                                                                                  | 45 ft²          |     |      | 0.75* Gyp Frame         | 0.39         |                                                                                                                                                                                                                                                                                                                                                                     |      |             |               |                         |  |                                                                                                                                                                                                                                                                                                                                          |                     |                     |                              |                            |                           |                                                                                                                           | Hourly C                    |  |  |  |  |
| Partition - 1                                                                                                                                                                                                                                                                                                                                  | 45 ft²          |     |      | 0.75* Gyp Frame         | 0.39         |                                                                                                                                                                                                                                                                                                                                                                     |      |             |               |                         |  |                                                                                                                                                                                                                                                                                                                                          |                     |                     |                              |                            |                           |                                                                                                                           |                             |  |  |  |  |

Room Description: Lounge 2

Zone Description: Zone - 004

System Description: System - 004

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                            |                 |     |      |                         |              | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                    |             |               |                         |  | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                      |                     |                     |                              |                            |                           |                                                                                                                           |                             |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|---------------|-------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|------------------------------|----------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------|--|--|--|--|
| Floor Area: 407 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Room Multiplier: 1 |                 |     |      |                         |              | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                    |             |               |                         |  | Cooling<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust: |                     |                     |                              |                            |                           | Heating<br>None<br>0.00 cfm<br>Neutral, Average Const.<br>0.50 air changes/hr<br><br>To be calculated<br>To be calculated |                             |  |  |  |  |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |              |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |  |                                                                                                                                                                                                                                                                                                                                          |                     |                     |                              |                            |                           |                                                                                                                           |                             |  |  |  |  |
| Description                                                                                                                                                                                                                                                                                                                                    | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value      |                                                                                                                                                                                                                                                                                                                                                                     | Type               | Glass       |               |                         |  |                                                                                                                                                                                                                                                                                                                                          | External<br>Shading | Internal<br>Shading | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len                                                                                                | Rad<br>Frc/<br>Loss<br>Coef |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         | Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               |                    | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |  |                                                                                                                                                                                                                                                                                                                                          |                     |                     |                              |                            |                           |                                                                                                                           |                             |  |  |  |  |
| Roof - 1                                                                                                                                                                                                                                                                                                                                       | 407 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03         | 0.90                                                                                                                                                                                                                                                                                                                                                                |                    | 0           |               |                         |  |                                                                                                                                                                                                                                                                                                                                          | Overhang - None     | None                |                              |                            |                           |                                                                                                                           |                             |  |  |  |  |
| Wall - 1                                                                                                                                                                                                                                                                                                                                       | 194 ft²         | 90  |      | 0 8* LW Block, 1* Ins   | 0.24         | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Coated 1/4* | 82          | 0.24          | 1.04                    |  |                                                                                                                                                                                                                                                                                                                                          | Overhang - None     | None                | 1.00                         |                            |                           |                                                                                                                           |                             |  |  |  |  |
| Partition - 2                                                                                                                                                                                                                                                                                                                                  | 45 ft²          |     |      | 0.75* Gyp Frame         | 0.39         |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |  |                                                                                                                                                                                                                                                                                                                                          |                     |                     | Hourly C                     |                            |                           |                                                                                                                           |                             |  |  |  |  |
| Partition - 1                                                                                                                                                                                                                                                                                                                                  | 45 ft²          |     |      | 0.75* Gyp Frame         | 0.39         |                                                                                                                                                                                                                                                                                                                                                                     |                    |             |               |                         |  |                                                                                                                                                                                                                                                                                                                                          |                     |                     | Hourly C                     |                            |                           |                                                                                                                           |                             |  |  |  |  |

# ENTERED VALUES

## ROOM BY ROOM

By DFG

Room Description: Open to below

Zone Description: Zone - 004

System Description: System - 004

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                            |                 |     |      |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |  |       |                    |             | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                 |                         |                     |                     |          |                            |                           |                            |                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|--------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------|---------------------|----------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 255 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Room Multiplier: 1 |                 |     |      |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |  |       |                    |             | Cooling<br>Heating<br>Vent Type: None<br>Vent Value: 0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>Aux Supply: To be calculated<br>Room Exhaust: |                         |                     |                     |          |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |  |       |                    |             |                                                                                                                                                                                                                                                                                                                                                     |                         |                     |                     |          |                            |                           |                            |                             |
| Glass                                                                                                                                                                                                                                                                                                                                          |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |  |       |                    |             |                                                                                                                                                                                                                                                                                                                                                     |                         |                     |                     |          |                            |                           |                            |                             |
| Adj<br>Temp/<br>Grnd<br>Refl                                                                                                                                                                                                                                                                                                                   |                 |     |      |                         |                                                                                                                                                                                                                                                                                                                                                                     |  |       |                    |             |                                                                                                                                                                                                                                                                                                                                                     |                         |                     |                     |          | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
| Description                                                                                                                                                                                                                                                                                                                                    | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F                                                                                                                                                                                                                                                                                                                                             |  | Alpha | Type               | Area<br>ft² | Shade<br>Coef                                                                                                                                                                                                                                                                                                                                       | U Value<br>Btu/h·ft²·°F | External<br>Shading | Internal<br>Shading |          |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                       | 255 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03                                                                                                                                                                                                                                                                                                                                                                |  | 0.90  |                    | 0           |                                                                                                                                                                                                                                                                                                                                                     |                         | Overhang - None     | None                |          |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                       | 204 ft²         | 270 |      | 0 8* LW Block, 1* Ins   | 0.24                                                                                                                                                                                                                                                                                                                                                                |  | 0.90  | Single Coated 1/4* | 137         | 0.24                                                                                                                                                                                                                                                                                                                                                | 1.04                    | Overhang - None     | None                | 1.00     |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                  | 50 ft²          |     |      | 0.75* Gyp Frame         | 0.39                                                                                                                                                                                                                                                                                                                                                                |  |       |                    |             |                                                                                                                                                                                                                                                                                                                                                     |                         |                     |                     | Hourly C |                            |                           |                            |                             |
| Partition - 2                                                                                                                                                                                                                                                                                                                                  | 50 ft²          |     |      | 0.75* Gyp Frame         | 0.39                                                                                                                                                                                                                                                                                                                                                                |  |       |                    |             |                                                                                                                                                                                                                                                                                                                                                     |                         |                     |                     | Hourly C |                            |                           |                            |                             |

Room Description: Primary MAster Room Bath & WC

Zone Description: Zone - 005

System Description: System - 005

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                         |                 |     |      |                         |                         | PEOPLE AND LIGHTS                                                                                                                                                                                                                                                                                                                                                   |                   |             |               |                         |                     | AIRFLOW INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |                            |                           |                            |                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----|------|-------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|---------------|-------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|
| Floor Area: 1,126 ft²<br>Flr-Flr Height: 9.0 ft<br>Plenum Height: 2.0 ft<br>Floor Cnstr Type: 4* LW Concrete<br>Room Mass: None<br>Ceiling R-Value: 1.786 hr·ft²·°F/Btu<br>Is There Carpet?: YES<br>Design Clg DB: 75.0 °F<br>Design Htg DB: 68.0 °F<br>Design RH: 50 %<br>Height Above Floor: 0 ft<br>Floor Multiplier: 1<br>Moisture Capacitance: None<br>Room Multiplier: 1<br>Humidistat Location: Room |                 |     |      |                         |                         | People Type: None<br># of People: 1 People<br>People Sensible: 250 Btu/h<br>People Latent : 250 Btu/h<br>People Schedule: Cooling Only (Design)<br>Lighting Type: Fluorescent, hung below ceiling, 100% load to space<br>Fixture Type: SUSFLUOR<br>% Load to RA: 0 %<br>Lighting Schedule: Cooling Only (Design)<br>Lighting Amount: 100.0 W<br>Ballast Factor: 1.0 |                   |             |               |                         |                     | Cooling<br>Heating<br>Vent Type: None<br>None<br>Vent Value: 0.00 cfm<br>0.00 cfm<br>Vent Schedule: Available (100%)<br>Infil Type: Neutral, Average Const.<br>Neutral, Average Const.<br>Infil Value: 0.50 air changes/hr<br>0.50 air changes/hr<br>Infil Schedule: Available (100%)<br>Vav Min Airflow:<br>Vav Min Sched: Available (100%)<br>Supply: To be calculated<br>To be calculated<br>Aux Supply: To be calculated<br>To be calculated<br>Room Exhaust: |                              |                            |                           |                            |                             |
| ROOM COMPONENTS                                                                                                                                                                                                                                                                                                                                                                                             |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                            |                           |                            |                             |
| Description                                                                                                                                                                                                                                                                                                                                                                                                 | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha                                                                                                                                                                                                                                                                                                                                                               | Type              | Glass       |               |                         | External<br>Shading | Internal<br>Shading                                                                                                                                                                                                                                                                                                                                                                                                                                               | Adj<br>Temp/<br>Grnd<br>Refl | Pct<br>Sen/<br>Cool<br>Tmp | Pct<br>Rm/<br>Heat<br>Tmp | Pct<br>Ret/<br>Perm<br>Len | Rad<br>Frc/<br>Loss<br>Coef |
|                                                                                                                                                                                                                                                                                                                                                                                                             |                 |     |      |                         |                         |                                                                                                                                                                                                                                                                                                                                                                     |                   | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                            |                           |                            |                             |
| Roof - 1                                                                                                                                                                                                                                                                                                                                                                                                    | 1,126 ft²       | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                   | 0           |               |                         | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                              |                            |                           |                            |                             |
| Wall - 3                                                                                                                                                                                                                                                                                                                                                                                                    | 274 ft²         | 270 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Clear 1/4* | 73          | 0.24          | 1.04                    | Overhang - 10Ft     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Wall - 4                                                                                                                                                                                                                                                                                                                                                                                                    | 144 ft²         | 0   | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                |                   | 0           |               |                         | Overhang - 10Ft     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Wall - 1                                                                                                                                                                                                                                                                                                                                                                                                    | 324 ft²         | 90  | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Clear 1/4* | 82          | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Wall - 2                                                                                                                                                                                                                                                                                                                                                                                                    | 604 ft²         | 180 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90                                                                                                                                                                                                                                                                                                                                                                | Single Clear 1/4* | 91          | 0.24          | 1.04                    | Overhang - None     | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                         |                            |                           |                            |                             |
| Partition - 1                                                                                                                                                                                                                                                                                                                                                                                               | 90 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |                                                                                                                                                                                                                                                                                                                                                                     |                   |             |               |                         |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Hourly C                     |                            |                           |                            |                             |

ENTERED VALUES  
ROOM BY ROOM  
By DFG

Room Description: Guest Suite      Zone Description: Zone - 006      System Description: System - 006

| GENERAL INFORMATION                  |  |  | PEOPLE AND LIGHTS                                                  |  |  | AIRFLOW INFORMATION                 |  |                         |
|--------------------------------------|--|--|--------------------------------------------------------------------|--|--|-------------------------------------|--|-------------------------|
| Floor Area: 366 ft²                  |  |  | People Type: None                                                  |  |  | Cooling                             |  | Heating                 |
| Flr-Flr Height: 9.0 ft               |  |  | # of People: 1 People                                              |  |  | Vent Type: None                     |  | None                    |
| Plenum Height: 2.0 ft                |  |  | People Sensible: 250 Btu/h                                         |  |  | Vent Value: 0.00 cfm                |  | 0.00 cfm                |
| Floor Cnstr Type: 4* LW Concrete     |  |  | People Latent : 250 Btu/h                                          |  |  | Vent Schedule: Available (100%)     |  |                         |
| Room Mass: None                      |  |  | People Schedule: Cooling Only (Design)                             |  |  | Infil Type: Neutral, Average Const. |  | Neutral, Average Const. |
| Ceiling R-Value: 1.786 hr·ft²·°F/Btu |  |  | Lighting Type: Fluorescent, hung below ceiling, 100% load to space |  |  | Infil Value: 0.50 air changes/hr    |  | 0.50 air changes/hr     |
| Is There Carpet?: YES                |  |  | Fixture Type: SUSFLUOR                                             |  |  | Infil Schedule: Available (100%)    |  |                         |
| Design Clg DB: 75.0 °F               |  |  | % Load to RA: 0 %                                                  |  |  | Vav Min Airflow:                    |  |                         |
| Design Htg DB: 68.0 °F               |  |  | Lighting Schedule: Cooling Only (Design)                           |  |  | Vav Min Sched: Available (100%)     |  |                         |
| Design RH: 50 %                      |  |  | Lighting Amount: 100.0 W                                           |  |  | Supply: To be calculated            |  | To be calculated        |
| Height Above Floor: 0 ft             |  |  | Ballast Factor: 1.0                                                |  |  | Aux Supply: To be calculated        |  | To be calculated        |
| Floor Multiplier: 1                  |  |  |                                                                    |  |  | Room Exhaust:                       |  |                         |
| Moisture Capacitance: None           |  |  |                                                                    |  |  |                                     |  |                         |
| Room Multiplier: 1                   |  |  |                                                                    |  |  |                                     |  |                         |
| Humidistat Location: Room            |  |  |                                                                    |  |  |                                     |  |                         |

| ROOM COMPONENTS |                 |     |      |                         |                         |       |                   |             |               |                         |                     |                     | Adj                   | Pct                 | Pct                | Pct                 | Rad                  |
|-----------------|-----------------|-----|------|-------------------------|-------------------------|-------|-------------------|-------------|---------------|-------------------------|---------------------|---------------------|-----------------------|---------------------|--------------------|---------------------|----------------------|
| Description     | Area/<br>Amount | Dir | Tilt | Const Type/<br>Schedule | U Value<br>Btu/h·ft²·°F | Alpha | Type              | Glass       |               |                         | External<br>Shading | Internal<br>Shading | Temp/<br>Grnd<br>Refl | Sen/<br>Cool<br>Tmp | Rm/<br>Heat<br>Tmp | Ret/<br>Perm<br>Len | Frc/<br>Loss<br>Coef |
|                 |                 |     |      |                         |                         |       |                   | Area<br>ft² | Shade<br>Coef | U Value<br>Btu/h·ft²·°F |                     |                     |                       |                     |                    |                     |                      |
| Roof - 1        | 366 ft²         | 0   | 90   | 1* Wood, 8* Ins         | 0.03                    | 0.90  |                   | 0           |               |                         | Overhang - None     | None                |                       |                     |                    |                     |                      |
| Wall - 4        | 204 ft²         | 270 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90  | Single Clear 1/4* | 9           | 0.24          | 1.04                    | Overhang - None     | None                | 1.00                  |                     |                    |                     |                      |
| Wall - 3        | 252 ft²         | 180 | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90  | Single Clear 1/4* | 24          | 0.24          | 1.04                    | Overhang - None     | None                | 1.00                  |                     |                    |                     |                      |
| Wall - 2        | 187 ft²         | 90  | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90  | Single Clear 1/4* | 90          | 0.24          | 1.04                    | Overhang - None     | None                | 1.00                  |                     |                    |                     |                      |
| Wall - 1        | 252 ft²         | 0   | 0    | 8* LW Block, 1* Ins     | 0.24                    | 0.90  | Single Clear 1/4* | 18          | 0.24          | 1.04                    | Overhang -          | None                | 1.00                  |                     |                    |                     |                      |
| Partition - 1   | 64 ft²          |     |      | 0.75* Gyp Frame         | 0.39                    |       |                   |             |               |                         |                     |                     | Hourly C              |                     |                    |                     |                      |