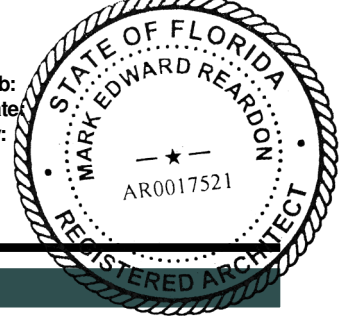




Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Notes:

Design Information

Weather: Miami Intl AP, FL, US

Winter Design Conditions

Outside db	50 °F
Inside db	70 °F
Design TD	20 °F

Summer Design Conditions

Outside db	90 °F
Inside db	75 °F
Design TD	15 °F
Daily range	L
Relative humidity	50 %
Moisture difference	56 gr/lb

Heating Summary

Structure	22401 Btuh
Ducts	7119 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	29521 Btuh

Sensible Cooling Equipment Load Sizing

Structure	37338 Btuh
Ducts	7810 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	45148 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft²)	1834	1834
Volume (ft³)	20172	20172
Air changes/hour	0.23	0.12
Equiv. AVF (cfm)	78	42

Latent Cooling Equipment Load Sizing

Structure	1588 Btuh
Ducts	2969 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	4557 Btuh
Equipment total load	49705 Btuh
Req. total capacity at 0.85 SHR	4.4 ton

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	13.7 kW
Heating output	46818 Btuh
Temperature rise	24 °F
Actual air flow	1800 cfm
Air flow factor	0.061 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ60AJ3
Coil	RH3VZ6024STACN
AHRI ref	
Efficiency	11.0 EER, 16 SEER2
Sensible cooling	47600 Btuh
Latent cooling	8400 Btuh
Total cooling	56000 Btuh
Actual air flow	1800 cfm
Air flow factor	0.040 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.85

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Notes:

Design Information

Weather: Miami Intl AP, FL, US

Winter Design Conditions

Outside db	50 °F
Inside db	70 °F
Design TD	20 °F

Summer Design Conditions

Outside db	90 °F
Inside db	75 °F
Design TD	15 °F
Daily range	L
Relative humidity	50 %
Moisture difference	56 gr/lb

Heating Summary

Structure	26076 Btuh
Ducts	5432 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	31508 Btuh

Sensible Cooling Equipment Load Sizing

Structure	31665 Btuh
Ducts	5892 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	37557 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft²)	1433	1433
Volume (ft³)	15761	15761
Air changes/hour	0.35	0.19
Equiv. AVF (cfm)	92	49

Latent Cooling Equipment Load Sizing

Structure	1871 Btuh
Ducts	2121 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	3992 Btuh
Equipment total load	41548 Btuh
Req. total capacity at 0.85 SHR	3.7 ton

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	16.4 kW
Heating output	55983 Btuh
Temperature rise	35 °F
Actual air flow	1450 cfm
Air flow factor	0.046 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ48AJ3
Coil	RH3VZ4821STACN
AHRI ref	
Efficiency	11.5 EER, 16 SEER2
Sensible cooling	39525 Btuh
Latent cooling	6975 Btuh
Total cooling	46500 Btuh
Actual air flow	1450 cfm
Air flow factor	0.039 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.85

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Notes:

Design Information

Weather: Miami Intl AP, FL, US

Winter Design Conditions

Outside db	50 °F
Inside db	70 °F
Design TD	20 °F

Summer Design Conditions

Outside db	90 °F
Inside db	75 °F
Design TD	15 °F
Daily range	L
Relative humidity	50 %
Moisture difference	56 gr/lb

Heating Summary

Structure	20833 Btuh
Ducts	4639 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	25473 Btuh

Sensible Cooling Equipment Load Sizing

Structure	22896 Btuh
Ducts	5066 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	27962 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft²)	1692	1692
Volume (ft³)	18614	18614
Air changes/hour	0.20	0.11
Equiv. AVF (cfm)	62	33

Latent Cooling Equipment Load Sizing

Structure	2252 Btuh
Ducts	1885 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	4138 Btuh
Equipment total load	32100 Btuh
Req. total capacity at 0.85 SHR	2.7 ton

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	7.5 kW
Heating output	25740 Btuh
Temperature rise	21 °F
Actual air flow	1125 cfm
Air flow factor	0.044 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ36AJ3
Coil	RH3V3617STACN
AHRI ref	
Efficiency	12.5 EER, 16 SEER2
Sensible cooling	29580 Btuh
Latent cooling	5220 Btuh
Total cooling	34800 Btuh
Actual air flow	1125 cfm
Air flow factor	0.040 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.85

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Notes:

Design Information

Weather: Miami Intl AP, FL, US

Winter Design Conditions

Outside db	50 °F
Inside db	70 °F
Design TD	20 °F

Summer Design Conditions

Outside db	90 °F
Inside db	75 °F
Design TD	15 °F
Daily range	L
Relative humidity	50 %
Moisture difference	56 gr/lb

Heating Summary

Structure	22507 Btuh
Ducts	7034 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	29541 Btuh

Sensible Cooling Equipment Load Sizing

Structure	30206 Btuh
Ducts	7590 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	37796 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft²)	2610	2610
Volume (ft³)	28707	28707
Air changes/hour	0.28	0.15
Equiv. AVF (cfm)	135	72

Latent Cooling Equipment Load Sizing

Structure	2735 Btuh
Ducts	2725 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	5460 Btuh
Equipment total load	43257 Btuh
Req. total capacity at 0.85 SHR	3.7 ton

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	13.7 kW
Heating output	46866 Btuh
Temperature rise	29 °F
Actual air flow	1450 cfm
Air flow factor	0.049 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ48AJ3
Coil	RH3VZ4821STACN
AHRI ref	
Efficiency	11.5 EER, 16 SEER2
Sensible cooling	39525 Btuh
Latent cooling	6975 Btuh
Total cooling	46500 Btuh
Actual air flow	1450 cfm
Air flow factor	0.038 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.875

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Notes:

Design Information

Weather: Miami Intl AP, FL, US

Winter Design Conditions

Outside db	50 °F
Inside db	70 °F
Design TD	20 °F

Summer Design Conditions

Outside db	90 °F
Inside db	75 °F
Design TD	15 °F
Daily range	L
Relative humidity	50 %
Moisture difference	56 gr/lb

Heating Summary

Structure	13834 Btuh
Ducts	4325 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	18159 Btuh

Sensible Cooling Equipment Load Sizing

Structure	23164 Btuh
Ducts	4738 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	27902 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft²)	1470	1470
Volume (ft³)	16166	16166
Air changes/hour	0.26	0.14
Equiv. AVF (cfm)	69	37

Latent Cooling Equipment Load Sizing

Structure	2001 Btuh
Ducts	1713 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	3715 Btuh
Equipment total load	31617 Btuh
Req. total capacity at 0.85 SHR	2.7 ton

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	6.8 kW
Heating output	23048 Btuh
Temperature rise	19 °F
Actual air flow	1125 cfm
Air flow factor	0.062 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ36AJ3
Coil	RH3VZ3617STACN
AHRI ref	
Efficiency	11.5 EER, 16 SEER2
Sensible cooling	29580 Btuh
Latent cooling	5220 Btuh
Total cooling	34800 Btuh
Actual air flow	1125 cfm
Air flow factor	0.040 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.85

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Notes:

Design Information

Weather: Miami Intl AP, FL, US

Winter Design Conditions

Outside db	50 °F
Inside db	70 °F
Design TD	20 °F

Summer Design Conditions

Outside db	90 °F
Inside db	75 °F
Design TD	15 °F
Daily range	L
Relative humidity	50 %
Moisture difference	56 gr/lb

Heating Summary

Structure	14851 Btuh
Ducts	3524 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	18374 Btuh

Sensible Cooling Equipment Load Sizing

Structure	24841 Btuh
Ducts	3883 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	28724 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft²)	932	932
Volume (ft³)	10251	10251
Air changes/hour	0.44	0.24
Equiv. AVF (cfm)	75	40

Latent Cooling Equipment Load Sizing

Structure	1530 Btuh
Ducts	1334 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	2864 Btuh
Equipment total load	31588 Btuh
Req. total capacity at 0.85 SHR	2.8 ton

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref	
Efficiency	80 AFUE
Heating input	0 Btuh
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	1125 cfm
Air flow factor	0.061 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ36AJ3
Coil	RH3VZ3617STACN
AHRI ref	
Efficiency	12.0 EER, 16 SEER2
Sensible cooling	29580 Btuh
Latent cooling	5220 Btuh
Total cooling	34800 Btuh
Actual air flow	1125 cfm
Air flow factor	0.039 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.85

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Conditions

Location:

Miami Intl AP, FL, US
Elevation: 13 ft
Latitude: 26°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

50
-
-
15.0

Cooling

90
11 (L)
77
7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
20
50
11.9

Cooling

75
15
50
55.7

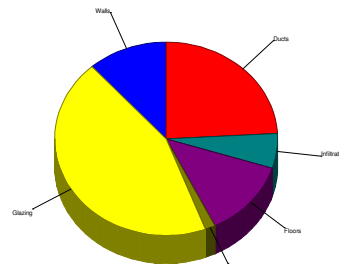
Infiltration:

Method
Construction quality
Fireplaces

Simplified
Average
0

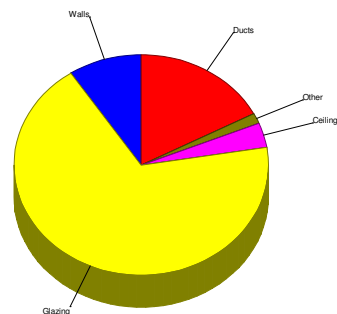
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	2.9	3429	11.6
Glazing	23.6	13021	44.1
Doors	0	0	0
Ceilings	0.6	438	1.5
Floors	2.1	3791	12.8
Infiltration	1.1	1722	5.8
Ducts		7119	24.1
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		29521	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	3.5	4220	9.3
Glazing	55.7	30805	68.2
Doors	0	0	0
Ceilings	2.4	1626	3.6
Floors	0	0	0
Infiltration	0.4	687	1.5
Ducts		7810	17.3
Ventilation		0	0
Internal gains		0	0
Blower		0	0
Adjustments		0	0
Total		45148	100.0



Latent Cooling Load = 4557 Btuh
Overall U-value = 0.243 Btuh/ft²·°F

WARNING: window to floor area ratio = 30.1% - more than 25%.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Conditions

Location:

Miami Intl AP, FL, US
Elevation: 13 ft
Latitude: 26°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

50
-
-
15.0

Cooling

90
11 (L)
77
7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
20
50
11.9

Cooling

75
15
50
55.7

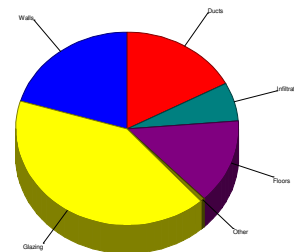
Infiltration:

Method
Construction quality
Fireplaces

Simplified
Average
0

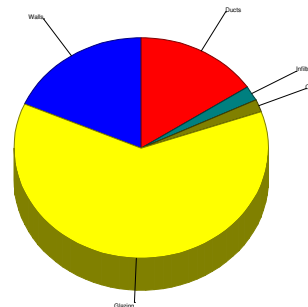
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	5.2	6415	20.4
Glazing	23.0	12985	41.2
Doors	0	0	0
Ceilings	0.6	181	0.6
Floors	3.1	4466	14.2
Infiltration	1.1	2029	6.4
Ducts		5432	17.2
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		31508	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	5.6	6928	18.4
Glazing	41.1	23254	61.9
Doors	0	0	0
Ceilings	2.4	673	1.8
Floors	0	0	0
Infiltration	0.4	810	2.2
Ducts		5892	15.7
Ventilation		0	0
Internal gains		0	0
Blower		0	0
Adjustments		0	0
Total		37557	100.0



Latent Cooling Load = 3992 Btuh
Overall U-value = 0.341 Btuh/ft²·°F

WARNING: window to floor area ratio = 39.5% - more than 25%.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Conditions

Location:

Miami Intl AP, FL, US
Elevation: 13 ft
Latitude: 26°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

50
-
-
15.0

Cooling

90
11 (L)
77
7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
20
50
11.9

Cooling

75
15
50
55.7

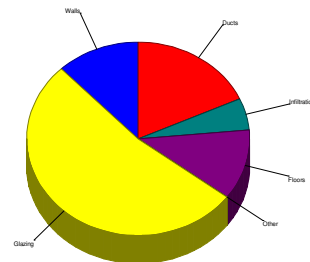
Infiltration:

Method
Construction quality
Fireplaces

Simplified
Average
0

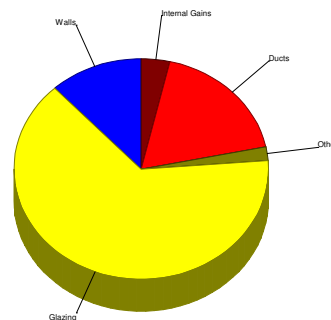
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	5.2	3087	12.1
Glazing	21.9	13395	52.6
Doors	0	0	0
Ceilings	0.6	4	0.0
Floors	1.8	2990	11.7
Infiltration	1.1	1358	5.3
Ducts		4639	18.2
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		25473	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	5.6	3333	11.9
Glazing	29.4	17986	64.3
Doors	0	0	0
Ceilings	2.4	15	0.1
Floors	0	0	0
Infiltration	0.4	542	1.9
Ducts		5066	18.1
Ventilation		0	0
Internal gains		1020	3.6
Blower		0	0
Adjustments		0	0
Total		27962	100.0



Latent Cooling Load = 4138 Btuh
Overall U-value = 0.335 Btuh/ft²·°F

WARNING: window to floor area ratio = 36.2% - more than 25%.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Conditions

Location:

Miami Intl AP, FL, US
Elevation: 13 ft
Latitude: 26°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

50
-
-
15.0

Cooling

90
11 (L)
77
7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
20
50
11.9

Cooling

75
15
50
55.7

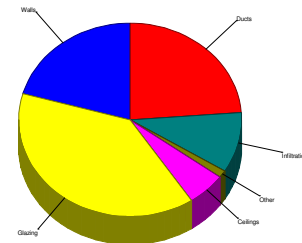
Infiltration:

Method
Construction quality
Fireplaces

Simplified
Average
0

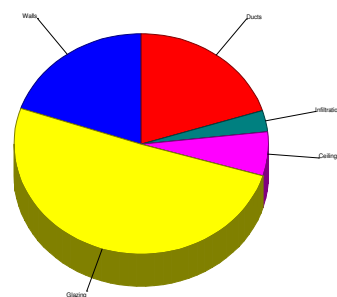
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	2.9	6094	20.6
Glazing	21.3	11412	38.6
Doors	0	0	0
Ceilings	0.6	1670	5.7
Floors	4.1	364	1.2
Infiltration	1.1	2966	10.0
Ducts		7034	23.8
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		29541	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	3.5	7466	19.8
Glazing	35.6	19118	50.6
Doors	0	0	0
Ceilings	0.9	2438	6.4
Floors	0	0	0
Infiltration	0.4	1184	3.1
Ducts		7590	20.1
Ventilation		0	0
Internal gains		0	0
Blower		0	0
Adjustments		0	0
Total		37796	100.0



Latent Cooling Load = 5460 Btuh
Overall U-value = 0.183 Btuh/ft²·°F

Data entries checked.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Conditions

Location:

Miami Intl AP, FL, US
Elevation: 13 ft
Latitude: 26°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

50
-
-
15.0

Cooling

90
11 (L)
77
7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
20
50
11.9

Cooling

75
15
50
55.7

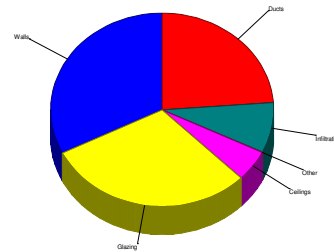
Infiltration:

Method
Construction quality
Fireplaces

Simplified
Average
0

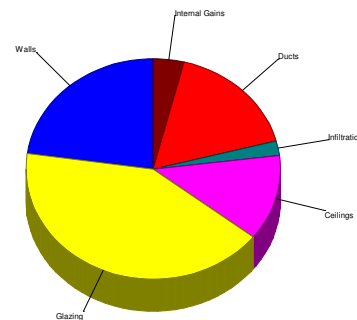
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	5.2	5877	32.4
Glazing	25.4	5482	30.2
Doors	0	0	0
Ceilings	0.6	941	5.2
Floors	2.1	14	0.1
Infiltration	1.1	1520	8.4
Ducts		4325	23.8
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		18159	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	5.6	6347	22.7
Glazing	53.9	11630	41.7
Doors	0	0	0
Ceilings	2.4	3489	12.5
Floors	0	0	0
Infiltration	0.4	606	2.2
Ducts		4738	17.0
Ventilation		0	0
Internal gains		1090	3.9
Blower		0	0
Adjustments		0	0
Total		27902	100.0



Latent Cooling Load = 3715 Btuh
Overall U-value = 0.217 Btuh/ft²·°F

Data entries checked.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Conditions

Location:

Miami Intl AP, FL, US
Elevation: 13 ft
Latitude: 26°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

50
-
-
15.0

Cooling

90
11 (L)
77
7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
20
50
11.9

Cooling

75
15
50
55.7

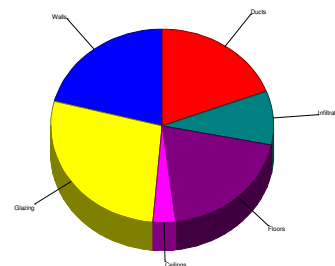
Infiltration:

Method
Construction quality
Fireplaces

Simplified
Average
0

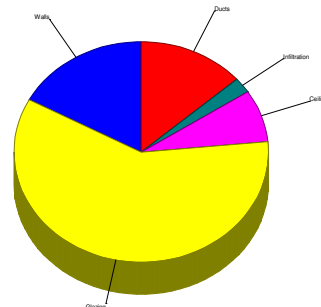
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	3.1	3835	20.9
Glazing	20.8	5108	27.8
Doors	0	0	0
Ceilings	0.6	595	3.2
Floors	3.9	3653	19.9
Infiltration	1.1	1659	9.0
Ducts		3524	19.2
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		18374	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	4.0	4928	17.2
Glazing	69.5	17043	59.3
Doors	0	0	0
Ceilings	2.4	2208	7.7
Floors	0	0	0
Infiltration	0.4	662	2.3
Ducts		3883	13.5
Ventilation		0	0
Internal gains		0	0
Blower		0	0
Adjustments		0	0
Total		28724	100.0



Latent Cooling Load = 2864 Btuh
Overall U-value = 0.198 Btuh/ft²·°F

WARNING: window to floor area ratio = 26.3% - more than 25%.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	50	90	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	20	15	Fireplaces	0
Daily range	-	L		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	12	56		

HEATING EQUIPMENT

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	13.7 kW
Heating output	46818 Btuh
Temperature rise	24 °F
Actual air flow	1800 cfm
Air flow factor	0.061 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ60AJ3
Coil	RH3VZ6024STACN
AHRI ref	
Efficiency	11.0 EER, 16 SEER2
Sensible cooling	47600 Btuh
Latent cooling	8400 Btuh
Total cooling	56000 Btuh
Actual air flow	1800 cfm
Air flow factor	0.040 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.85

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
LAUNDRY	139	1642	1516	100	60
GARAGE HALL	171	3254	7842	198	313
MAIDS BATH	99	1528	2490	93	99
MAIDS RM	125	1965	4959	120	198
PANTRY	86	1100	769	67	31
KITCHEN	447	2785	6025	170	240
POWDER RM	97	0	0	0	0
FAMILY	671	17246	21547	1052	859

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

ZONE 1	1834	29521	45148	1800	1800
Other equip loads		0	0		
Equip. @ 1.00 RSM			45148		
Latent cooling			4557		
TOTALS	1834	29521	49705	1800	1800

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	50	90	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	20	15	Fireplaces	0
Daily range	-	L		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	12	56		

HEATING EQUIPMENT

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	16.4 kW
Heating output	55983 Btuh
Temperature rise	35 °F
Actual air flow	1450 cfm
Air flow factor	0.046 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ48AJ3
Coil	RH3VZ4821STACN
AHRI ref	
Efficiency	11.5 EER, 16 SEER2
Sensible cooling	39525 Btuh
Latent cooling	6975 Btuh
Total cooling	46500 Btuh
Actual air flow	1450 cfm
Air flow factor	0.039 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.85

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
BEDRM 5	269	9745	12463	448	481
BATH 5	60	2157	2644	99	102
CLO 5	104	699	468	32	18
LOWER STAIR	402	6770	9041	312	349
EXERCISE RM	271	6656	6964	306	269
MEDIA RM	327	5481	5976	252	231

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

ZONE 2	1433	31508	37557	1450	1450
Other equip loads		0	0		
Equip. @ 1.00 RSM			37557		
Latent cooling			3992		
TOTALS	1433	31508	41548	1450	1450

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	50	90	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	20	15	Fireplaces	0
Daily range	-	L		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	12	56		

HEATING EQUIPMENT

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	7.5 kW
Heating output	25740 Btuh
Temperature rise	21 °F
Actual air flow	1125 cfm
Air flow factor	0.044 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ36AJ3
Coil	RH3V3617STACN
AHRI ref	
Efficiency	12.5 EER, 16 SEER2
Sensible cooling	29580 Btuh
Latent cooling	5220 Btuh
Total cooling	34800 Btuh
Actual air flow	1125 cfm
Air flow factor	0.040 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.85

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
STUDY	211	4726	5539	209	223
FOYER	147	3272	3641	145	146
BAR	279	3634	3593	160	145
CABANA BATH	108	1498	1022	66	41
GREAT RM	439	7300	8600	322	346
CRAFT RM	131	1852	1543	82	62
DINING	377	3191	4025	141	162

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

ZONE 3	1692	25473	27962	1125	1125
Other equip loads		0	0		
Equip. @ 1.00 RSM			27962		
Latent cooling			4138		
TOTALS	1692	25473	32100	1125	1125

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For: 5900 LLC RESIDENCE
5900 SW 114 TER, PINECREST, FL

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	50	90	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	20	15	Fireplaces	0
Daily range	-	L		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	12	56		

HEATING EQUIPMENT

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	13.7 kW
Heating output	46866 Btuh
Temperature rise	29 °F
Actual air flow	1450 cfm
Air flow factor	0.049 cfm/Btuh
Static pressure	0.40 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Rheem
Trade	RA16AZ SERIES
Cond	RA16AZ48AJ3
Coil	RH3VZ4821STACN
AHRI ref	
Efficiency	11.5 EER, 16 SEER2
Sensible cooling	39525 Btuh
Latent cooling	6975 Btuh
Total cooling	46500 Btuh
Actual air flow	1450 cfm
Air flow factor	0.038 cfm/Btuh
Static pressure	0.40 in H2O
Load sensible heat ratio	0.85

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
bedrm 4	241	3983	6017	196	231
bath 4	64	1402	1774	69	68
clo 4	53	45	61	2	2
bedrm 3	240	3265	5351	160	205
bath 3	77	984	1177	48	45
clo 3	100	84	115	4	4
upper laundry	160	1003	1225	49	47
upper great rm	(400)	4744	6571	233	252
upper stair	(278)	6653	7185	327	276
common area	186	3061	3531	150	135
bedrm 2	262	2150	2413	106	93
bath 2	72	1424	1510	70	58
clo 2	48	384	378	19	15
2nd fl hall	427	359	489	18	19

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

ZONE 4	1882	29541	37796	1450	1450
Other equip loads		0	0		
Equip. @ 1.00 RSM			37796		
Latent cooling			5460		
TOTALS	1882	29541	43257	1450	1450

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.