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(Subject to Renew July 1, 2024 or next code cycle)

EVALUATION SUBJECT: DAIKIN DUCTLESS AND DUCTED SYSTEMS**TER-20-34269****REPORT HOLDER:**DAIKIN COMFORT TECHNOLOGIES MANUFACTURING L.P.
19001 KERMIER ROAD
WALLER, TX 77484, USA
877-254-4729 | DAIKINCOMFORT.COM**SCOPE OF EVALUATION (compliance with the following codes):****THIS IS A STRUCTURAL (WIND) PERFORMANCE EVALUATION ONLY.
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CERTIFICATIONS ARE OFFERED OR IMPLIED HEREIN.****UNDER NO CIRCUMSTANCE DOES THIS PERFORMANCE
EVALUATION GUARANTEE, IMPLY, OR STATE PERFORMANCE OF
THE UNIT IS MAINTAINED DURING OR AFTER A DESIGN EVENT.**

This Product Evaluation Report is being issued in accordance with the requirements of the **Florida Building Code Seventh Edition (2020)** per ASCE 7, FBC Building Ch. 16, FBC Building Sections 104.11 & 1522.2, FBC Existing Building Sections 707.1 & 707.2, FBC Mechanical 301.15, FBC Residential M1202.1 & M1301.1, FS 471.025, and Broward County Administrative Provisions 107.3.4. This report is also in accordance with the **International Building & Residential Codes (2012, 2015, & 2018)**. The product noted on this report has been tested and/or evaluated as summarized herein.

**IN ACCORDANCE WITH THESE CODES EACH OF THESE REPORTS
MUST BEAR THE ORIGINAL SIGNATURE & RAISED SEAL OR DIGITAL
SEAL OF THE EVALUATING ENGINEER.****SUBSTANTIATING DATA:****• Product Evaluation Documents**

Substantiating documentation has been submitted to provide this TER and is summarized in the sections below.

• Structural Engineering Calculations

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

- Max. allowable lateral & uplift wind pressures certified herein
- Max. allowable sliding forces, uplift forces, & overturning moments (see Unit Reactions from Wind Guide on last page)
- Tie-down configuration and anchor capacity for concrete, aluminum, and steel host substrates (host by others).
- Unit panel wind pressure connection integrity

Calculation summary is included in this TER and appears herein. NOTE: No 33% increase in allowable stress has been used in the design of this product.

LIMITATIONS & CONDITIONS OF USE:

Use of the product(s) listed herein shall be in strict accordance with this TER as noted herein and manufacturer-provided model specifications. Installation shall conform to the minimum standards stated in the referenced building code(s) in addition to the specifications and limitations stated herein. See herein for complete limitations & conditions of use.

OPTIONS:

This evaluation is valid for the DAIKIN models described herein. The critical unit designs have been determined and used in this evaluation. Any structural changes outside of the design as described herein would void this certification.

UNIT CASING MATERIALS:

25ga galv. sheet steel equivalent to ASTM A653 CS Cold Rolled Steels. Removable top & side covers secured with M4 SAE 1016 SMS screws (see Panel Integrity Table for screw minimum quantity). Knockouts provided for utility & control connections. Contact Report Holder for further unit construction information.

**NOTE: THE GRAPHICAL DEPICTIONS IN THIS REPORT ARE FOR
ILLUSTRATIVE PURPOSES ONLY AND MAY DIFFER IN APPEARANCE.****STRUCTURAL PERFORMANCE:**

Models referenced herein are subject to the following design limitations:

**Maximum Rated Wind Pressures*:
± 119 psf Lateral, 94 psf Uplift**

- Required design wind pressures shall be determined according to the guide provided in the Appendix (see last page of this report) or on a site-specific basis in accordance with ASCE 7 and applicable sections of the building code(s) being referenced in accordance with ASD methodology.
- Required design pressures shall be less than or equal to the maximum pressures listed herein.
- *Maximum Rated Wind Pressures indicate the maximum pressures that all units listed herein are approved for. Valid for at-grade and rooftop applications. See limitations herein.
- Valid for use inside and outside the High-Velocity Hurricane Zone (HVHZ).
- Site-specific wind analysis may produce alternate limitations provided maximum rated wind pressures stated herein are not exceeded.

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MODEL INFORMATION

TABLE 1 (CONTINUED ON THE NEXT PAGE)

Cabinet Group	Model Number	Unit Dimensions (in)		
		Width	Depth	Height
Single Fan I	RZQ30PVJU	35.44	12.63	30.31
	RZR18PVJU	35.44	12.63	30.31
	RZR24PVJU	35.44	12.63	30.31
	RZR30PVJU	35.44	12.63	30.31
	RXS24LVJU	35.44	12.63	30.31
	RZQ18PVJU9	35.44	12.63	30.31
	RZQ24PVJU9	35.44	12.63	30.31
	DX17VSS181A*	36.63	13.75	27.38
	DX17VSS241A*	36.63	13.75	27.38
	DX17VSS301A*	36.63	13.75	27.38
	DX17VSS361A*	36.63	13.75	27.38
	DZ17VSA181A*	36.63	13.75	27.38
	DZ17VSA241A*	36.63	13.75	27.38
	DZ17VSA301A*	36.63	13.75	27.38
	DZ17VSA361A*	36.63	13.75	27.38
	DX17VSS181B*	36.63	13.75	27.38
	DX17VSS241B*	36.63	13.75	27.38
	DX17VSS301B*	36.63	13.75	27.38
	DX17VSS361B*	36.63	13.75	27.38
	DZ17VSA181B*	36.63	13.75	27.38
	DZ17VSA241B*	36.63	13.75	27.38
	DZ17VSA301B*	36.63	13.75	27.38
	DZ17VSA361B*	36.63	13.75	27.38
	DX6VSS1810**	36.63	13.75	27.38
	DX6VSS2410**	36.63	13.75	27.38
	DX6VSS3010**	36.63	13.75	27.38
	DX6VSS3610**	36.63	13.75	27.38
	DZ6VSA1810**	36.63	13.75	27.38
	DZ6VSA2410**	36.63	13.75	27.38
	DZ6VSA3010**	36.63	13.75	27.38
	DZ6VSA3610**	36.63	13.75	27.38
	DX6VSA181W**	36.63	13.75	27.38
	DX6VSA241W**	36.63	13.75	27.38
	DX6VSA301W**	36.63	13.75	27.38
	DX6VSA361W**	36.63	13.75	27.38
	RXM18VVJU	34.25	12.63	28.94
	RXM24VVJU	34.25	12.63	28.94
	DZ6VSA1810AA	36.63	13.75	27.38
	DZ6VSA2410AA	36.63	13.75	27.38
	DZ6VSA3010AA	36.63	13.75	27.38
	DZ6VSA3610AA	36.63	13.75	27.38
	DX6VSS1810AA	36.63	13.75	27.38
	DX6VSS2410AA	36.63	13.75	27.38
Single Fan II	DX6VSS3010AA	36.63	13.75	27.38
	DX6VSS3610AA	36.63	13.75	27.38
	DX6VSA181WAA	36.63	13.75	27.38
	DX6VSA241WAA	36.63	13.75	27.38
	DX6VSA301WAA	36.63	13.75	27.38
	DX6VSA361WAA	36.63	13.75	27.38
	RXM18WVJU9	34.25	12.63	28.94
	RXM24WVJU9	34.25	12.63	28.94
	RXS15LVJU	32.5	11.81	28.94
	RXS18LVJU	32.5	11.81	28.94
	RXN15KEVJU5	31.94	11.81	23.44
	RXN18KEVJU5	31.94	11.81	23.44
	RXN24KEVJU5	31.94	11.81	23.44
	RKN15KEVJU5	31.94	11.81	23.44
	RKN18KEVJU5	31.94	11.81	23.44
	RKN24KEVJU5	31.94	11.81	23.44
	RXM09VVJU	33.25	11.81	23.44
	RXM12VVJU	33.25	11.81	23.44
	RXM09WVJU9	33.25	11.81	23.44
	RXM12WVJU9	33.25	11.81	23.44
	RXG09HVJU	31.31	11.25	22.38
	RXG12HVJU	31.31	11.25	22.38
	RXG15HVJU	31.31	11.25	22.38
	RXS09LVJU	30.13	11.25	21.63
	RXS12LVJU	30.13	11.25	21.63
	RXN09KEVJU5	25.94	10.75	21.69
	RXN12KEVJU5	25.94	10.75	21.69
	RKN09KEVJU5	25.94	10.75	21.69
	RKN12KEVJU5	25.94	10.75	21.69
	RXB09AXVJU	25.94	10.75	21.69
	RXB12AXVJU	25.94	10.75	21.69
	RKB09AXVJU	25.94	10.75	21.69
	RKB12AXVJU	25.94	10.75	21.69
	2MX18AXVJU	26.5	11.19	21.69
	RXB09BXVJU	26.56	11.19	21.69
	RXNG09AXVJU	26.56	11.19	21.69
	RXB12BXVJU	26.56	11.19	21.69
	RXNG12AXVJU	26.56	11.19	21.69
	RXB18BXVJU	36.63	13.81	27.41
	RXNG18AXVJU	36.63	13.81	27.41

SEE MODEL INFORMATION NOTES HEREIN

TABLE 1 (CONTINUED FROM PREVIOUS PAGE)

Cabinet Group	Model Number	Unit Dimensions (in)		
		Width	Depth	Height
Single Fan Tall	RXS30LVJU	37	12.63	38.94
	RXS36LVJU	37	12.63	38.94
	RKS30LVJU	37	12.63	38.94
	RKS36LVJU	37	12.63	38.94
	RXSQ36TAVJU*	37	12.63	39
	RXTQ36TAVJU9*	37	12.63	38.94
	RXSQ48TAVJU*	37	12.63	39
	RXTQ48TAVJU*	37	12.63	38.94
	RZQ18TAVJU*	37	12.63	39
	RZR18TAVJU*	37	12.63	39
	RXSQ24TAVJU*	37	12.63	39
	RZQ24TAVJU*	37	12.63	39
	RZR24TAVJU*	37	12.63	39
	DX17VSS421A*	37	12.63	39
	DX17VSS481A*	37	12.63	39
	DX17VSS601A*	37	12.63	39
	DZ17VSA421A*	37	12.63	39
	DZ17VSA481A*	37	12.63	39
	DZ17VSA601A*	37	12.63	39
	DX17VSS421B*	37	12.63	39
	DX17VSS481B*	37	12.63	39
	DX17VSS601B*	37	12.63	39
	DZ17VSA421B*	37	12.63	39
	DZ17VSA481B*	37	12.63	39
	DZ17VSA601B*	37	12.63	39
	DX6VSS4210**	37	12.63	39
	DX6VSS4810**	37	12.63	39
	DX6VSS6010**	37	12.63	39
	DZ6VSA4210**	37	12.63	39
	DZ6VSA4810**	37	12.63	39
	DZ6VSA6010**	37	12.63	39
	4MXL36TVJU	43.31	18.13	34.25
	5MXS48TVJU	43.31	18.13	34.25
	RXB18AXVJU	33.69	12.94	25.69
	RXB24AXVJU	33.69	12.94	29.69
	RKB18AXVJU	33.69	12.94	25.69
	RKB24AXVJU	33.69	12.94	29.69
	DZ6VSA4210AA	37	12.63	39
	DZ6VSA4810AA	37	12.63	39
	DZ6VSA6010AA	37	12.63	39
	DX6VSS4210AA	37	12.63	39
	DX6VSS4810AA	37	12.63	39
	DX6VSS6010AA	37	12.63	39
Single Fan Tall	5MXS48WVJU9	43.31	18.13	34.25
	4MXL36WVJU9	43.31	18.13	34.25
	4MXLH36WVJU9	43.31	18.13	34.25
	RXB24BXVJU	36.6	13.7	27.3
	RXTQ36TBVJU**	37	12.63	38.94
	RXTQ48TBVJU**	37	12.63	38.94
	RXSQ24TBVJU**	37	12.63	38.94
	RXSQ36TBVJU**	37	12.63	38.94
	RXSQ48TBVJU**	37	12.63	38.94
	RZQ18TBVJU**	37	12.63	38.94
	RZQ24TBVJU**	37	12.63	38.94
	RZR18TBVJU**	37	12.63	38.94
	RZR24TBVJU**	37	12.63	38.94
Double Fan	RZR36PVJU	35.44	12.63	52.94
	RZR42PVJU	35.44	12.63	52.94
	RMXS48LVJU	35.44	12.63	52.94
	RXYMQ36PVJU	35.44	12.63	52.94
	RXYMQ48PVJU	35.44	12.63	52.94
	RXTQ60TAVJU*	35.44	12.63	52.94
	RZQ30PVJU9	35.44	12.63	52.94
	RZQ36PVJU9	35.44	12.63	52.94
	RZQ42PVJU9	35.44	12.63	52.94
	RZQ30TAVJU*	35.44	12.63	52.94
	RZR30TAVJU*	35.44	12.63	52.94
	RZQ36TAVJU*	35.44	12.63	52.94
	RZR36TAVJU*	35.44	12.63	52.94
	RZQ42TAVJU*	35.44	12.63	52.94
	RZR42TAVJU*	35.44	12.63	52.94
	RZQ48TAVJU*	35.44	12.63	52.94
	RXSQ60TAVJU*	35.44	12.63	52.94
	RZR48TAVJU*	35.44	12.63	52.94
	RXTQ60TBVJU**	35.44	12.63	52.94
	RXSQ60TBVJU**	35.44	12.63	52.94
	RZQ30TBVJU**	35.44	12.63	52.94
	RZQ36TBVJU**	35.44	12.63	52.94
	RZQ42TBVJU**	35.44	12.63	52.94
	RZQ48TBVJU**	35.44	12.63	52.94
	RZR30TBVJU**	35.44	12.63	52.94
	RZR36TBVJU**	35.44	12.63	52.94
	RZR42TBVJU**	35.44	12.63	52.94
	RZR48TBVJU**	35.44	12.63	52.94

SEE MODEL INFORMATION NOTES HEREIN

MODEL INFORMATION NOTES (TABLE 1)

Unit dimensions listed above are unit net dimensions (as opposed to packing/shipping dimensions). Unit net weights shall be between 20 lb and 310 lb, typ. Model information listed herein is based on information provided by the client. See Detail below for definitions of unit dimensions and panel designations (related to the Panel Integrity evaluation summarized herein). In the detail, “W” is short for unit width, “D” for unit depth, and “H” for unit height. Unit appearance may vary. Please contact Report Holder for more information.

TABLE 1 – SINGLE FAN

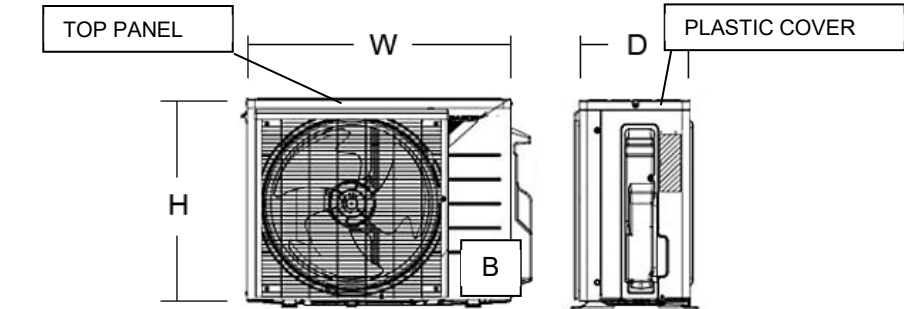


TABLE 1 – SINGLE FAN TALL

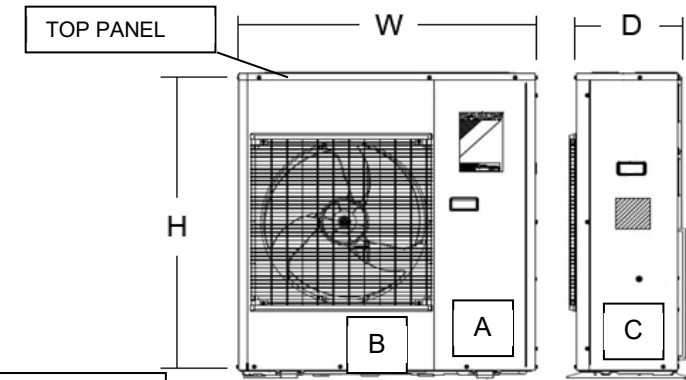
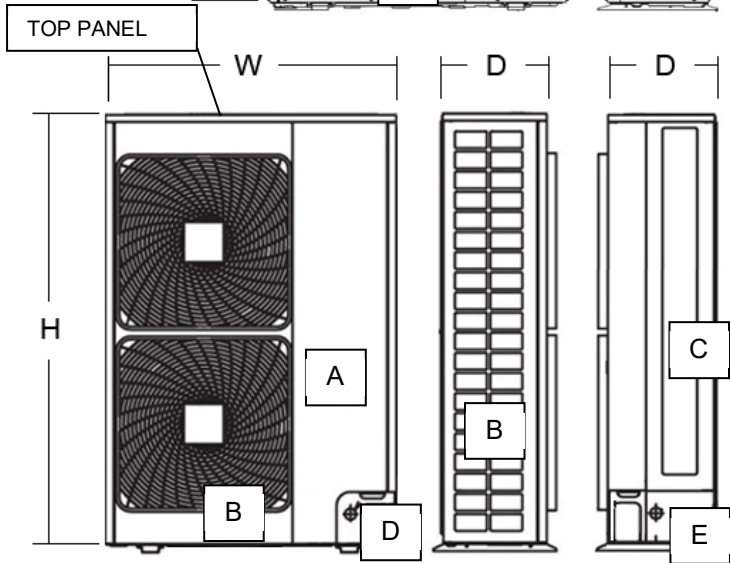


TABLE 1 – DOUBLE FAN



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MODEL INFORMATION (TABLE 2)

Cabinet Group	Model Number	Unit Dimensions (in)		
		Width	Depth	Height
Large Cabinet	2MXS18WMVJU9	34.25	12.63	28.94
	3MXS24WMVJU9	34.25	12.63	28.94
	4MXS36WMVJU9	34.25	12.63	28.94
	2MXL18WMVJU9	34.25	12.63	28.94
	2MXLH18WVJU9	34.25	12.63	28.94
	3MXL24WMVJU9	34.25	12.63	28.94
	3MXLH24WVJU9	34.25	12.63	28.94
	RK30WMVJU9	34.25	12.63	28.94
	RK36WMVJU9	34.25	12.63	28.94
	RX30WMVJU9	34.25	12.63	28.94
	RX36WMVJU9	34.25	12.63	28.94
	RX15WMVJU9	34.25	12.63	28.94
	RX18WMVJU9	34.25	12.63	28.94
	RX24WMVJU9	34.25	12.63	28.94
	RXL15WMVJU9	34.25	12.63	28.94
	RXL18WMVJU9	34.25	12.63	28.94
	RXL24WMVJU9	34.25	12.63	28.94
	RK18BXVJU	36.6	13.7	27.3
	RK24BXVJU	36.6	13.7	27.3
	RX18BXVJU	36.6	13.7	27.3
	RX24BXVJU	36.6	13.7	27.3
	RX*AXVJU*	34.25	12.63	28.94
	RK*AXVJU*	34.25	12.63	28.94
	RXN*NMVJU*	34.25	12.63	28.94
	RKN*NMVJU*	34.25	12.63	28.94
	RX*NMVJU*	34.25	12.63	28.94
	RK*NMVJU*	34.25	12.63	28.94
	RXL*QMVJU*	34.25	12.63	28.94
	RXL*UMVJU*	34.25	12.63	28.94
	RX*QMVJU*	34.25	12.63	28.94
	RX*RMVJU*	34.25	12.63	28.94
	RX*RMVJU9*	34.25	12.63	28.94
	(2/3)MXL*(QM/RM)VJU†	34.25	12.63	28.94
	(2/3/4)MXS*(NM/RM)VJU†	34.25	12.63	28.94
	2MX*AXVJU	34.25	12.63	28.94
	RXM*VVJU	34.25	12.63	28.94
Small Cabinet	RX09WMVJU9	26.56	11.19	21.63
	RX12WMVJU9	26.56	11.19	21.63
	RXL09WMVJU9	26.56	11.19	21.63
	RXL12WMVJU9	26.56	11.19	21.63
	RK09BXVJU	26.56	11.19	21.63
	RK12BXVJU	26.56	11.19	21.63
	RX09BXVJU	26.56	11.19	21.63
	RX12BXVJU	26.56	11.19	21.63
	RX*AXVJU*	26.56	11.19	21.63
	RK*AXVJU*	26.56	11.19	21.63
	RXN*NMVJU*	26.56	11.19	21.63
	RKN*NMVJU*	26.56	11.19	21.63
	RX*NMVJU*	26.56	11.19	21.63
	RK*NMVJU*	26.56	11.19	21.63
	RXL*QMVJU*	26.56	11.19	21.63
	RXL*QMVJU9*	26.56	11.19	21.63
	RX*QMVJU*	26.56	11.19	21.63
	RX*RMVJU*	26.56	11.19	21.63
	RX*RMVJU9*	26.56	11.19	21.63

MODEL INFORMATION NOTES (TABLE 2)

Unit dimensions listed above are unit net dimensions (as opposed to packing/shipping dimensions). Unit net weights shall be between 30 lb and 100 lb for small cabinet and between 130 and 180 lb for large cabinet, typ. Model information listed herein is based on information provided by the client. See Detail below for definitions of unit dimensions and panel designations (related to the Panel Integrity evaluation summarized herein). Unit appearance may vary. Please contact Report Holder for more information.

†Note: Model example: Large cabinets 4MXS36RMVJU, 3MXL24RMVJU.

Note: Model number characters marked by an asterisk () do not pertain to this structural certification and may be any combination of number and/or letters. Models shall comply with the specifications stated herein.

TABLE 2 – SMALL CABINET

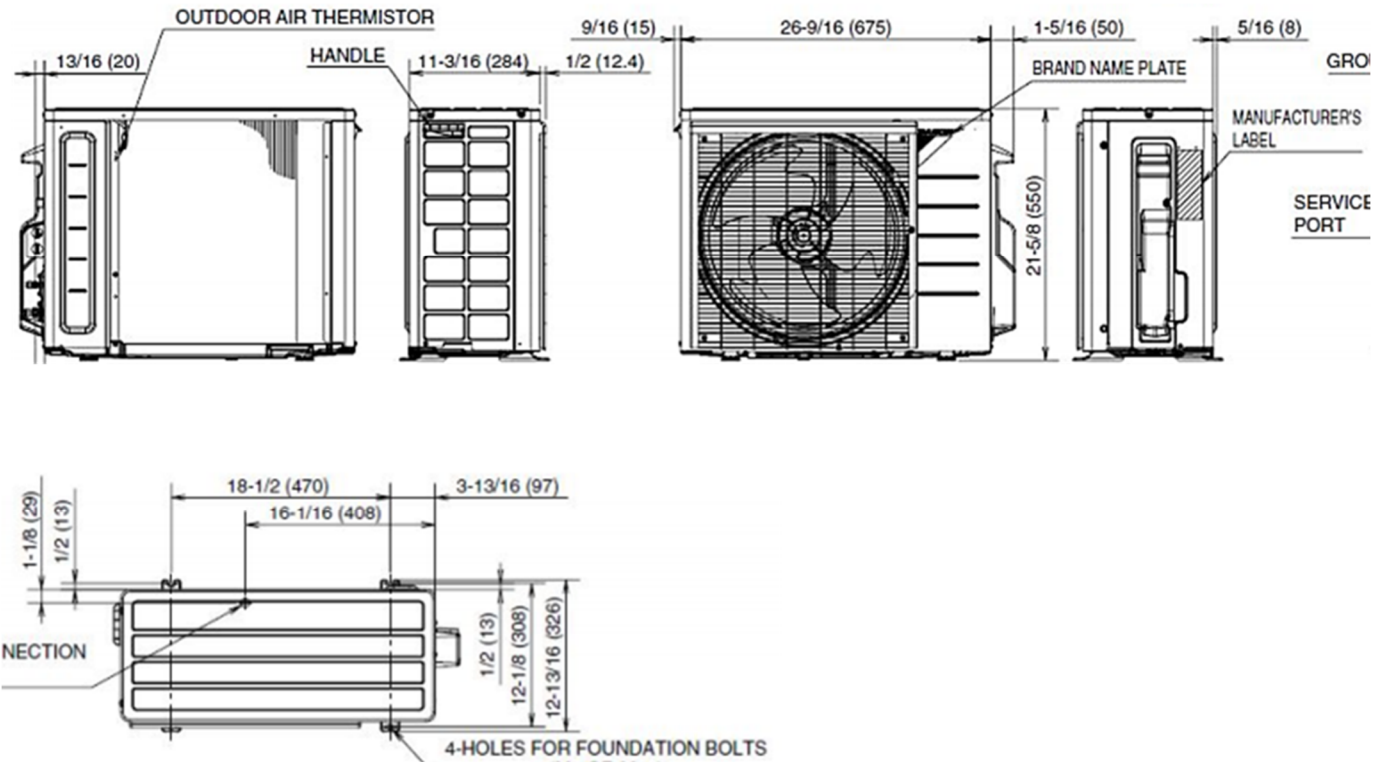
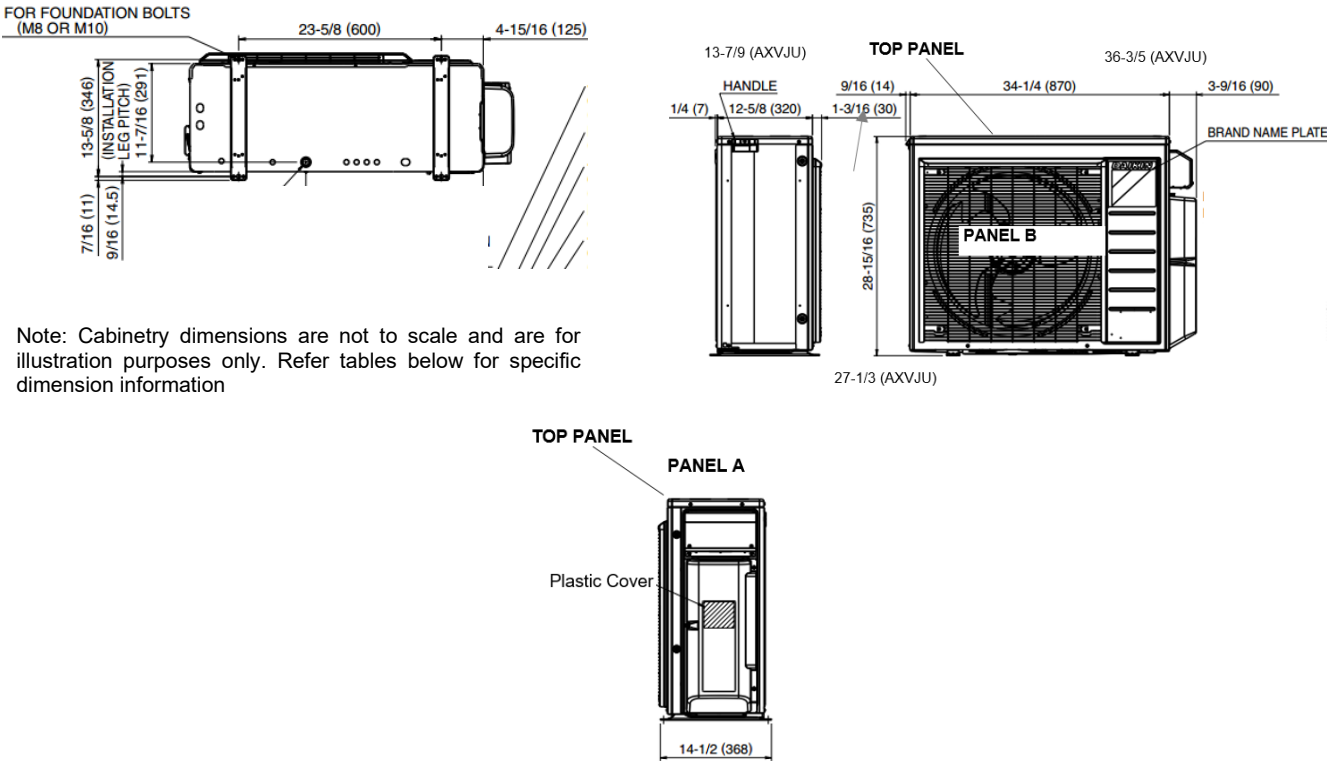
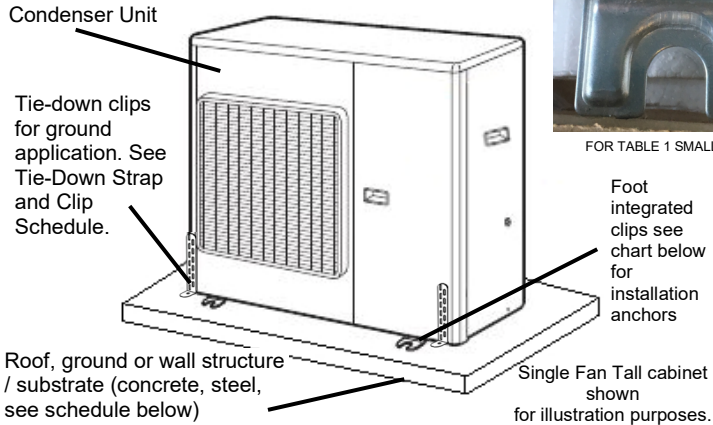


TABLE 2 – LARGE CABINET



Note: Cabinetry dimensions are not to scale and are for illustration purposes only. Refer tables below for specific dimension information

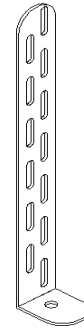
PRODUCT INSTALLATION



FOR TABLE 1 SMALL UNITS



FOR TABLE 1 LARGE UNITS


FOR TABLE 2
SMALL & LARGE UNITS


TIE-DOWN CLIP (GROUND APPLICATION)

Miami Tech CUTD 1" wide and any length ASTM A653 galvanized steel 0.07" thick for cabinets shown in Schedule tied down at ground; fasten clip to host structure using anchor from Anchor Schedule to Host Structure Table and (4) #10-16 x 3/8" SS 410 self-drilling screw to fasten clip to unit. Install at the unit corners with quantities shown in Tie-down strap and clip schedule table.

UNIT INTEGRATED FOOT

Equivalent to ASTM A653 galvanized cold rolled steel 0.027" thick for small cabinetry and 0.0538" for tall cabinetry; fasten cabinet using Anchor from Anchor Schedule to Host Structure Table and SAE GR5 ASTM-A449 OD 1" washer & nut to secure anchor to supporting structure.

Anchor to Host Structure Schedule

Unit Model	Max Lateral Pressure	Max Uplift Pressure	Concrete 3,000 psi	1/8" Min A36 Steel	1/8" Min 6061-T6 Aluminum
Table 1	Single Fan Tall, Single Fan I, Double Fan	50 psf	39 psf	A, C	N/A
		119 psf	94 psf	N/A	B
	Single Fan II, III, IV, V, VI	50 psf	39 psf	C	N/A
		119 psf	94 psf	N/A	B
Table 2	Small & Large Cabinets	50 psf	39 psf	A	N/A
		119 psf	94 psf	N/A	B

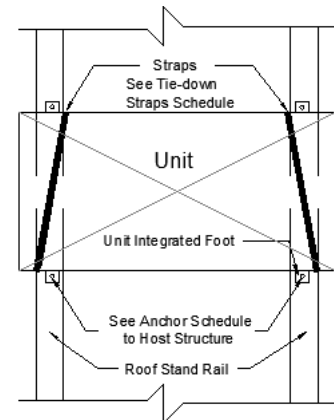
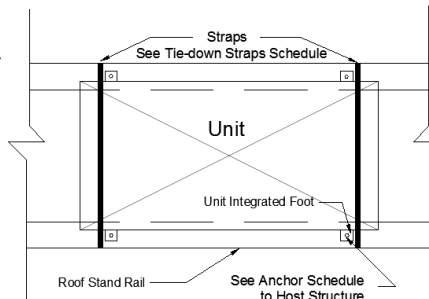
Anchor Types to Host Structure:

A. - 3/8" x 2 1/4" embed Dia Dewalt Wedge-bolt, embedded 1-3/4" in 3,000 psi concrete, 2 1/2" min from edge.

B. - 3/8" -16 UNC SAE Grade 5 screw minimum 1/2" from edges with nut and washer specified, for integrated foot installed at roof.

C. - 1/4" Dewalt ULTRACON SS4 Anchor embedded 3" in 3,000 psi concrete. 2 1/2" from edge minimum. NOA No. 15-0226.11 for tie-down clip at ground.

NA. - NOT APPLICABLE



Note:

Tie-down straps shall be wrapped around unit and roof stand rail and shall be tightened using the buckle. Provide two straps per unit.

Straps material shall be high strength webbing and shall be compliant for exterior grade use if they contain plastic components, per FBC chapter 26. Select strap from table based on WLL requirements, 3. For 200 MPH Non-HVHZ, use (2) metal straps, up to 56' MRH Exposure C

Tie-down Strap Type:

(for roof applications)

Working Load Limit (WLL) is strap's manufacturer - specified per strap.

1" wide ASTM A653 steel strap is acceptable in substitution of webbing strap, secured with (2) #14 410 SS SMS to the bottom of the stand rail. Double Fan shall use double straps per location.

Note: Calculations performed according to the information provided by the Client. Cabinets were assumed solid (0% porosity) for shear and tension calculation purposes. Screw quantities were checked to reinforce unit panels as needed. They shall be spaced evenly at the panel bottom, validating that the screw joins the panel with the panel and base pan. Screw sizes, quantities on panel, and panel characteristics are according to client's description. Thousand hours of ASTM B117 are required with zero red rust for any additional screw. Reinforce Panel if required by the AHJ.

Tie-Down Strap & Clip Schedule

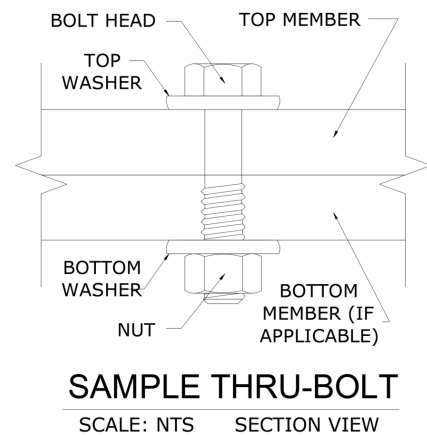
Unit Model	Max Lateral Pressure	Max Uplift Pressure	Tie-Down Straps (qty)	Minimum WLL (lbs)	Tie-Down Clips Per Long Side
All cabinets Tables 1 & 2	50 psf	39 psf	N/A	N/A	2
	119 psf	94 psf	2	1000	N/A

Panel Integrity Summary

Unit Model	Max Lateral Pressure	Max Uplift Pressure	Additional Screws Required
All Cabinets Tables 1 & 2 (All Panels)	50 psf	39 psf	NONE
	119 psf	94 psf	NONE

TERMINOLOGY

The following abbreviations may appear in this report: "Addtl." for "additional", "AHJ" for "Authority Having Jurisdiction", "alum" for "aluminum", "ASCE" for "American Society of Civil Engineers", "ASD" for "Allowable Stress Design", "ASTM" for "American Society for Testing and Materials", "EA." for "each", "E.D." for "edge distance", "EDDS" for "extra deep drawing steel", "e.g." for "*exempli gratia*" or "for example", "equiv." for "equivalent", "FBC" for "Florida Building Code", "FEA" for "Finite Element Analysis", "FLCA" for "Florida Certificate of Authorization", "FS" for "Florida Statutes", "Fu" for "ultimate tensile strength" or "ultimate tensile stress", "Fy" for "yield strength" or "yield stress", "GA" for "gauge", "GR." or "Gr." for "grade", "HVAC" for "heating, ventilation, and air conditioning", "HVHZ" for "High-Velocity Hurricane Zone", "i.e." for "*id est*" or "in other words", "in" for "inch", "lb" for "pound (force)", "max." for "maximum", "min." for "minimum", "mm" for "millimeter", "NTS" for "not to scale", "O.C." for "on center", "OD" for "outer diameter", "PE" for "Professional Engineer", "qty" for "quantity", "SAE" for "Society of Automotive Engineering", "SMS" for "sheet metal screws", "SS" for "stainless steel", "TER" for "Technical Evaluation Report", "typ." for "typical", "U.N.O." for "unless noted otherwise", "UTS" for "ultimate tensile strength" or "ultimate tensile stress", "WLL" for "working load limit", "w/o" for "without", "YS" for "yield strength" or "yield stress", "#" for "number", "&" for "and", and "Ø" for "diameter". For additional abbreviation/terminology clarifications, please contact this office.



Note: The term "Thru-Bolt" or through bolt, if used herein, refers to a bolt passing through the member(s) in contact and is fastened by a nut at the end opposite the screw head. Nut shall be equivalent to or exceed the strength of the bolt U.N.O. Nut shall be sized to accommodate the same nominal diameter as the bolt U.N.O. See diagram above-right for a sample thru-bolt configuration.

Note: For instances herein which list material specifications as "[material type] or stronger":

U.N.O. herein, the term "stronger" refers to a material with a UTS value equal to or greater than the UTS value of the stated material type. Consult appropriate literature for established material UTS values.

Note: Equivalent steel gauge thicknesses as used in this evaluation, U.N.O., are as follows:
22 GA (.030"), 20 GA (.036"), 18 GA (.048"), 16 GA (.060"), 14 GA (.075"), 12 GA (.098").

LIMITATIONS & CONDITIONS OF USE, CONTINUED

Use of this product shall be in strict accordance with this TER as noted herein. The supporting host structure shall be designed to resist all superimposed loads as determined by others on a site-specific basis as may be required by the authority having jurisdiction. Host structure conditions that are not accounted for in this product's respective anchor schedule shall be designed for on a site-specific basis by a registered Professional Engineer. No evaluation is offered for the host supporting structure by use of this document. Adjustment factors noted herein and the applicable building codes must be considered, where applicable. Product components shall be of the material(s) specified in the manufacturer-provided product specifications. All supporting components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times. All fasteners and anchors shall be installed in accordance with the applicable provisions specified herein in addition to the anchor/fastener manufacturers' published installation instructions. Fasteners must penetrate the supporting members such that the full length of the threaded portion is embedded within the main member.

All of the wind-resisting exterior panels (with accompanying retrofits) individually meet or exceed their capacity to resist the design wind loads as stated in the calculations as required by the codes and standards stated herein. Due to the indeterminate nature of these units, distortion, deflection, and material deformation cannot be accurately evaluated, but with the diaphragm action of external components and internal stiffeners, the base unit (with accompanying retrofits stated herein as applicable) has the capacity to withstand the design wind loads without detaching from the unit and becoming flying debris.

Survivability: Evaluation reports are valid for a newly installed unit and do not include certification of the product beyond a design event or if impacted by any debris. Inspections shall be implemented annually by the end user and after every named storm. All fasteners and cabinet components are to be verified, and all damaged, loose, corroded and/or broken fasteners and cabinet components shall be replaced to ensure structural integrity against hurricane wind forces. Contact this office for any reevaluation needs or as designated by the Authority Having Jurisdiction.

Durability: Components or component assemblies shall not deteriorate, crack, fail, or lose functionality due to galvanic corrosion or weathering. All supporting components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times. Each component or component assembly shall be supported and oriented in its intended installation position. All exposed plastic components shall be certified to resist sunlight exposure as specified by ASTM B117, or ASTM G155 in Broward or Miami Dade counties.

Extent of Certification: Certification pertains to the overall structural integrity of the unit components listed within the evaluation as required by code, subject to the limitations and criteria stated herein. Operability during or after a design event is not included in this certification. Water infiltration is outside the bounds of this certification. No other certifications are intended other than as described herein. This evaluation alone does not offer any evaluation for large missile impact debris or cyclic wind requirements unless specifically stated herein.

Proj. #	Remarks	By	Checked	Date	Proj. #	Remarks	By	Checked	Date
16-3146.1	Daikin Ductless Initial Issue	LAO	FLB	7/6/16	20-34269	Add new model numbers	RWN	RWN	7/7/2021
16-3088	Initial Issue	LAO	FLB	7/6/16	20-34269	Add models	ANC	EPR	7/28/2022
20-34269	Combine above TER's & Update to 2020 FBC	CCB	RWN	12/29/20	20-34269	Add models & format update	MRT	EPR	10/19/2022

APPENDIX A: DESIGN WIND PRESSURE GUIDE

Max. Ult. Wind Speed (V _{ult})	Max. MRH (Roof Height)	Exposure Category	Required Design Wind Pressures (ASD)	
			Lateral Pressure	Uplift Pressure
140 mph	At-Grade (0 ft)	C	± 26 psf	0* psf
		D	± 31 psf	0* psf
	100 ft	C	± 63 psf	50 psf
		D	± 71 psf	56 psf
	200 ft	C	± 72 psf	57 psf
		D	± 80 psf	63 psf
175 mph	At-Grade (0 ft)	C	± 40 psf	0* psf
		D	± 49 psf	0* psf
	100 ft	C	± 98 psf	77 psf
		D	± 111 psf	87 psf
	200 ft	C	± 113 psf	89 psf
		D	± 124 psf	98 psf
186 mph	At-Grade (0 ft)	C	± 46 psf	0* psf
		D	± 54 psf	0* psf
	100 ft	C	± 111 psf	87 psf
		D	± 125 psf	99 psf
	200 ft	C	± 127 psf	100 psf
		D	± 140 psf	111 psf

100 psf

Note: Any table values with the format shown left, if present, indicate design wind pressures and site conditions that are **not approved for use** by this evaluation. Seek additional engineering or contact this firm for design solutions.

DIRECTIVE: This design pressure guide is for reference only and shall be approved for use by the Authority Having Jurisdiction (AHJ). If the design pressures listed in this guide are not used, required design pressures shall be calculated separately. For site-specific scenarios classified as Exposure Category B, the required design pressures stated for Exposure Category C in the above guide shall be used or design pressures shall be calculated separately. For heights and parameters beyond the parameters listed in this guide, visit our Online Calculator via the website link (<https://ecalc.io/forces>) or QR Code below, or obtain calculations separately by others.

The required ASD design pressures listed in this guide were calculated per the table's listed corresponding site conditions. The project design professional or permitting contractor shall verify that the site-specific conditions are equal to or less than the approved design parameters listed in the guide. Per the note below table: any values shown as "XX psf", indicate wind pressures and corresponding site conditions that are **not valid for use** with this evaluation (exceeds the max. rated pressures).

*Note: Per the codes and standards referenced herein, uplift is not required for mechanical equipment at-grade. If uplift at-grade is required by the AHJ, contact this firm for a site-specific evaluation.

At-Grade (0 ft MRH) Required Design Pressures:

- ASCE 7 "Design Wind Loads: Other Structures"
- Structure Shape = Square, flat terrain
- Height of structure (unit + stand or curb, if used) = 6 ft max.
- Width of unit = 1 ft min., Depth of unit = 11 in min.

Rooftop (>15 ft MRH) Required Design Pressures:

- ASCE 7 "Design Wind Loads: Other Structures: Rooftop Structures and Equipment for Buildings"
- Structure Shape = Square, flat terrain
- z = up to 7 ft, where z = height of stand or curb + ½ unit height
- Lateral GC_r = 1.90; Uplift GC_r = 1.50

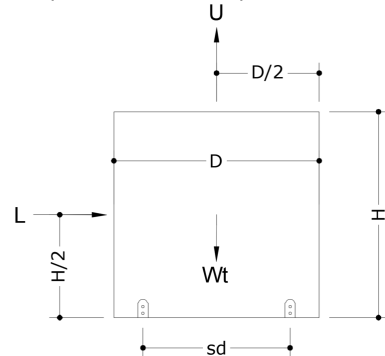
VISIT [ECALC.IO/FORCES](https://ecalc.io/forces)

FOR DESIGN AID CALCULATORS AND RESOURCES RELATED TO THIS TER & GUIDES HEREIN, OR SCAN THE QR CODE RIGHT >



UNIT REACTIONS FROM WIND GUIDE

DIRECTIVE: This guide is intended for use by a design professional. Design parameters shall abide all specifications and limitations stated in this report. Design professional shall consider all forces, including seismic and snow loads, per the governing building code. Unit reactions obtained from this guide shall be verified by a registered Professional Engineer. Reactions are applicable for unit-to-host connections only. Sample calculations are provided below.



Design Parameters:

- Lateral Wind Pressure, P_{lat}
- Unit Height, H
- Unit Width, W
- Support Spacing across Depth, sd
- Uplift Wind Pressure, P_{up}
- Unit Depth, D
- Unit Weight, Wt
- Support Spacing across Width, sw

Unit Reaction Equations:

Long Side (Width x Height):

- Sliding Force, L = P_{lat} x W x H
- Uplift Force, U = P_{up} x W x D
- Total Tension per Long Side = (L x H/2 + U x sd/2 - Wt x 0.6 x sd/2) / sd

Short Side (Depth x Height):

- Sliding Force, L = P_{lat} x D x H
- Uplift Force, U = P_{up} x W x D
- Total Tension per Short Side = (L x H/2 + U x sw/2 - Wt x 0.6 x sw/2) / sw

Example: A (48" W x 36" D x 42" H), 250 lb net weight unit at wind pressures of 120 psf lateral and 95 psf uplift, on a 24" wide roof stand, shall have the following unit reactions:

Long Side (Width x Height):

- Sliding Force, L = P_{lat} x W x H
= (120 psf) x (48 in) x (42 in) x (1 in² / 144 ft²) = **1680 lb**
- Uplift Force, U = P_{up} x W x D
= (95 psf) x (48 in) x (36 in) x (1 in² / 144 ft²) = **1140 lb**
- Total Tension per Long Side =
= (L x H/2 + U x sd/2 - Wt x 0.6 x sd/2) / sd
= ((1680 lb x 42/2 in) + (1140 lb x 24/2 in) - (250 lb x 0.6 x 24/2 in)) / 24 in = **1965 lb**

Short Side (Depth x Height):

- Sliding Force, L = P_{lat} x D x H
= (120 psf) x (36 in) x (42 in) x (1 in² / 144 ft²) = **1260 lb**
- Uplift Force, U = P_{up} x W x D
= (95 psf) x (48 in) x (36 in) x (1 in² / 144 ft²) = **1140 lb**
- Total Tension per Short Side =
= (L x H/2 + U x sw/2 - Wt x 0.6 x sw/2) / sw
= ((1260 lb x 42/2 in) + (1140 lb x 48/2 in) - (250 lb x 0.6 x 48/2 in)) / 48 in = **1046 lb**

IN ALL CONDITIONS IT IS THE RESPONSIBILITY OF THE PERMIT HOLDER TO ENSURE THE HOST STRUCTURE IS CAPABLE OF WITHSTANDING THE RATED GRAVITY, LATERAL, AND UPLIFT FORCES BY SITE-SPECIFIC DESIGN. NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, IS OFFERED BY ENGINEERING EXPRESS AS TO THE INTEGRITY OF THE HOST STRUCTURE TO CARRY DESIGN FORCE LOADS INCURRED BY THIS UNIT.