

Installation Instructions for Roof Mount Tie-Down Kit

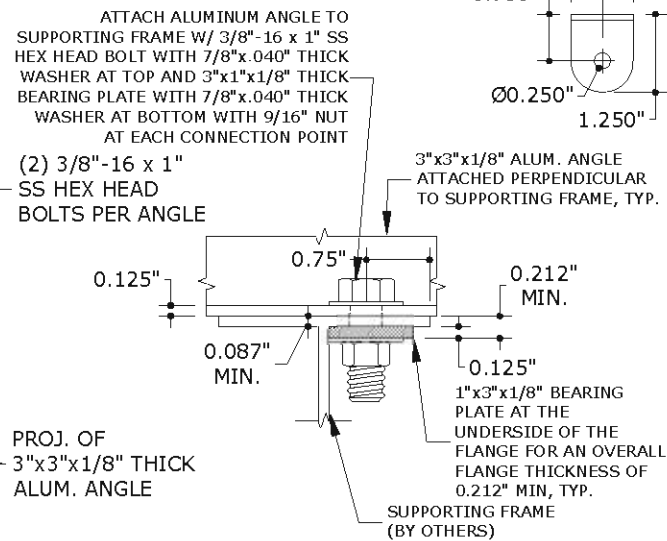
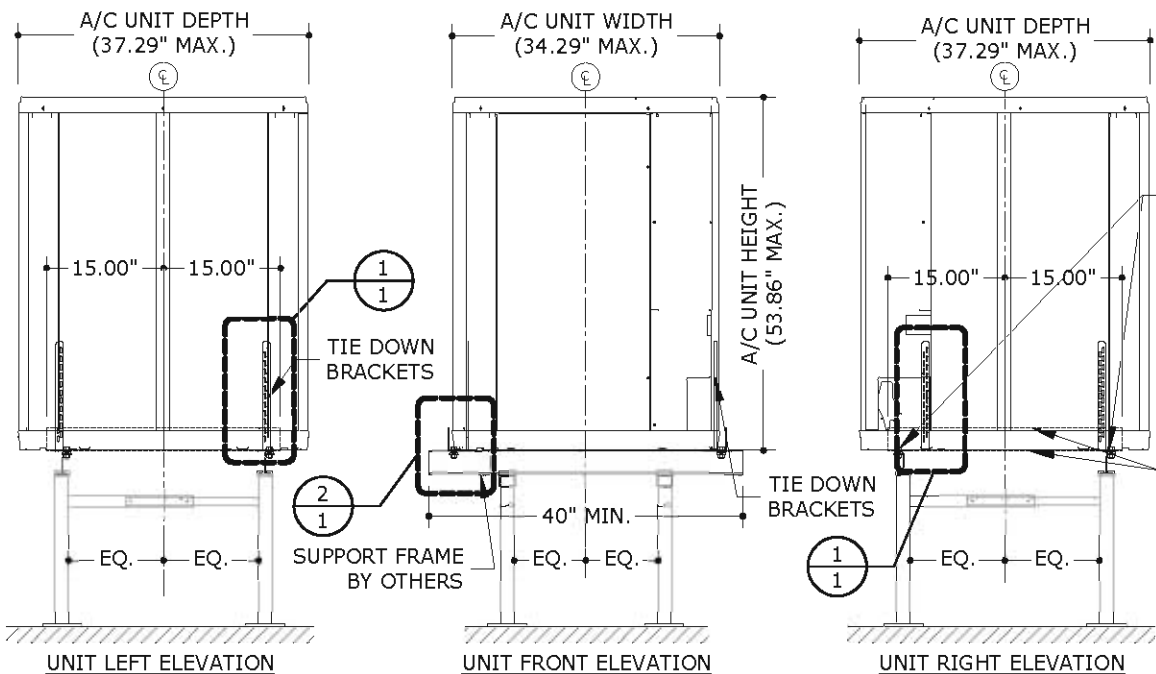
Trane and American Standard Outdoor Units

Kit Numbers: TASSB30K & TASSB36K

- 1) Refer to drawing on the reverse side for unit mounting and orientation details.
- 2) Center unit on roof mounted I-beams. I-beams must be at least 20" apart on center.
- 3) Place the (2) 3" x 3" aluminum angles included in the kit across the I-beams and against the unit base on opposite sides of the unit as shown in the provided drawing. Note that one of the legs of the angles must be positioned underneath the unit.
- 4) Push the 3" x 3" angles against the side of the unit base pan and orient them perpendicular or square to the I-beams.
Note: clamps are recommended for holding the angle frame in place while drilling through the angles and I-beams.
- 5) Remove any excess length on the 3" x 3" angles to maximize access and safety for service personnel.
- 6) Drill a 3/8" diameter hole through each of the 3" x 3" aluminum angles where they intersect the I-beams and then through the top flange of the I-beam, as shown in detail 2 (for a total of 4 holes).
- 7) Insert the (4) 3/8" bolts included with the kit through the holes (drilled in the previous step) in the angle and I-beam.
- 8) Install the (4) 1" x 3" reinforcement plates, washers, and nuts included with the kit underneath the I-beam flange as shown in detail 2. Tighten the nuts using a backup wrench on the bolt heads.
- 9) Attach the (4) steel "L" brackets included with the kit to the sides of the louver panels using (9) #10 x 3/4" self-drilling screws – also included with the kit – as shown in detail 1. Ensure that the bottom of the "L" bracket is resting on the aluminum angle before attaching to the louver panels.
- 10) Using the hole in the bottom of each "L" bracket as a guide, drill a 1/4" hole through the aluminum angle, for a total of 4 holes.
- 11) Install the 1/4" bolts, washers, and nuts included with the kit at each of the (4) holes drilled in the previous step, as shown in Detail 1. Tighten the nuts using a backup wrench on the bolt heads.

A/C UNIT HOUSING AND ROOF MOUNTING CERTIFICATION

*CERTIFIES BOTH UNIT INTEGRITY AND ANCHORAGE TO HOST STRUCTURE FOR WIND RESISTANCE



2 REINFORCING PLATE

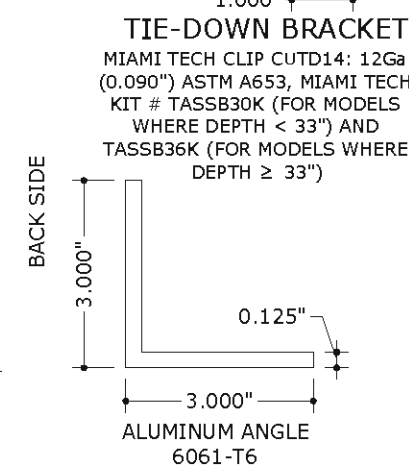
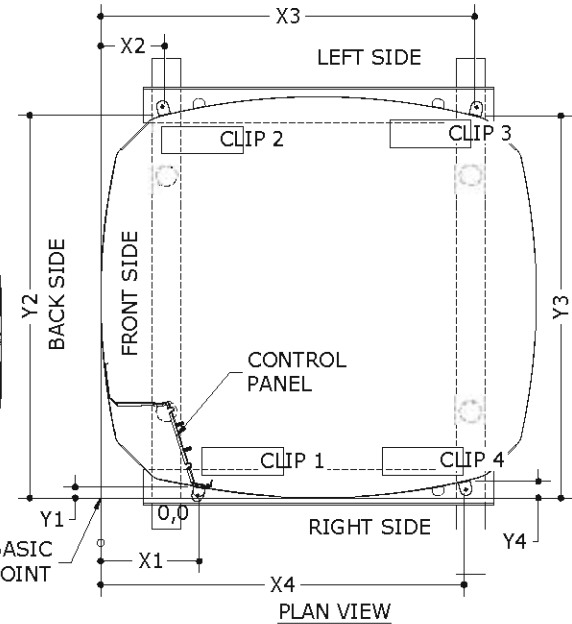
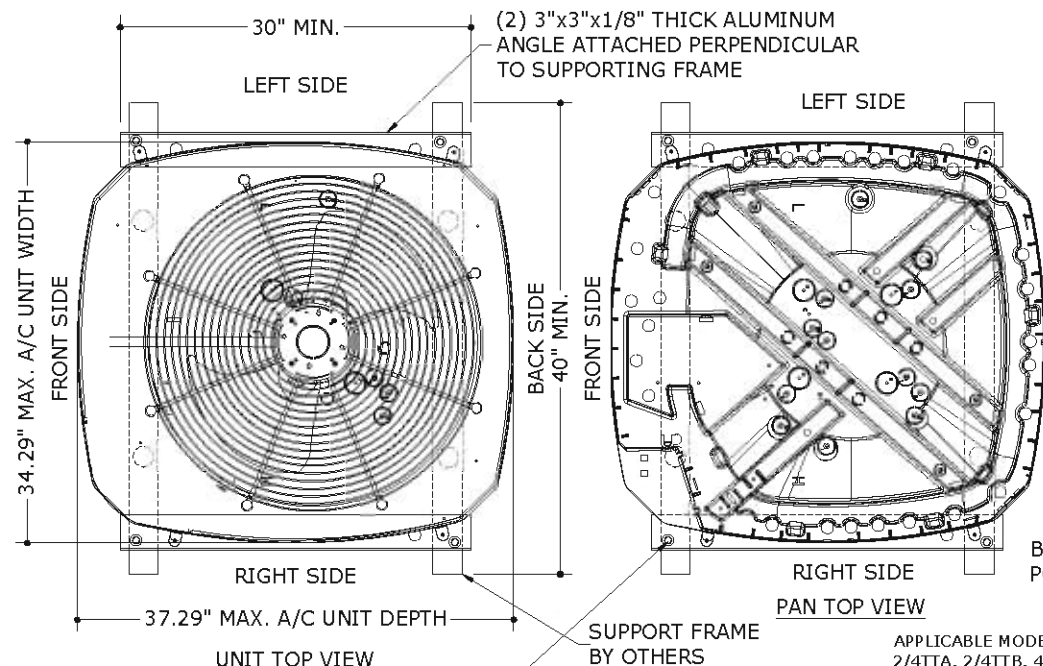
SCALE: 6" = 1'-0" SECTION

APPROVED DESIGN PRESSURES (ASD):

LATERAL	UPLIFT
200 PSF	100 PSF

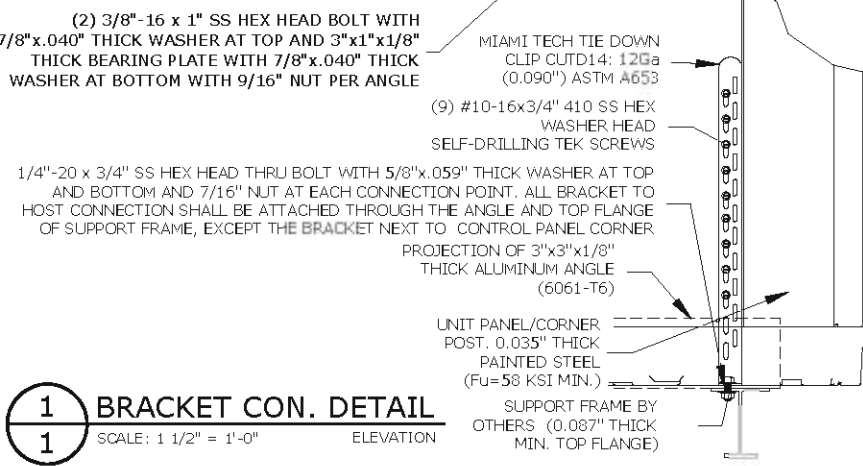
GENERAL NOTES

- THIS SYSTEM HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE SEVENTH EDITION (2020). THIS SYSTEM MAY BE USED WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE. REQUIRED DESIGN PRESSURES SHALL BE FOUND ON A SITE SPECIFIC BASIS FOR USE WITH THE ALLOWABLE LOADS LISTED HEREIN. THIS DESIGN IS NOT INTENDED TO CERTIFY IMPACT RESISTANCE OF THE MECHANICAL UNIT CABINETRY.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM.
- DESIGN & CERTIFICATION OF THE UNIT CABINETRY IS APPROVED THROUGH TEST REPORT #0708.01-15 BY AMERICAN TEST LAB OF SOUTH FLORIDA.
- ALL DIMENSIONS AND THE MINIMUM WEIGHT OF MECHANICAL UNIT SHALL CONFORM TO LIMITATIONS STATED HEREIN. ALL MECHANICAL SPECIFICATIONS (CLEAR SPACE, TONNAGE, ETC.) SHALL BE AS PER MANUFACTURER RECOMMENDATIONS AND ARE THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.
- ALL SUPPORTING FRAME SHOWN HEREIN SHALL BE BY OTHERS AND IS NOT PART OF THIS CERTIFICATION. A MINIMUM 0.087" THICK ALUMINUM (6063-T6 MIN.) OR STEEL (Fy=33 KSI MIN.) FLANGE IS REQUIRED. ADDITIONALLY A 1"x3"x1/8" REINFORCEMENT PLATE SHALL BE USED AT THE UNDERSIDE OF THE FLANGE FOR AN OVERALL FLANGE THICKNESS OF 0.337" MIN.
- ALL SHEET METAL SCREWS USED TO FASTEN BRACKETS TO MECHANICAL UNITS SHALL BE #10 (16 MIN THREADS PER INCH) ASTM F593 410 STAINLESS STEEL OR EQUIVALENT ONLY. BOLTS USED TO FASTEN ALUMINUM ANGLES TO SUPPORTING FRAME (BY OTHERS) SHALL BE ASTM F593 410 STAINLESS STEEL OR EQUIVALENT AND SHALL UTILIZE SAE GRADE WASHERS & NUTS. PROVIDE (5) PITCHES MINIMUM PAST THE THREAD PLANE FOR SHEET METAL SCREWS. ALL FASTENERS SHALL HAVE APPROPRIATE CORROSION PROTECTION TO PREVENT ELECTROLYSIS. ALL FASTENER CONNECTIONS TO ALUMINUM SHALL PROVIDE 2X DIAMETER EDGE DISTANCE.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS.
- THE ADEQUACY OF ANY EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS SHALL BE VERIFIED BY THE ON-SITE DESIGN PROFESSIONAL AND IS NOT INCLUDED IN THIS CERTIFICATION. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- BASEPANEL MATERIAL CHOPPED FIBER LAMINATE W/ Fy=15 KSI. PLASTIC COMPONENTS USED WITHIN THE HVHZ MUST MEET ALL APPLICABLE FIRE/SMOKE/UV PERFORMANCE REQUIREMENTS AS SET FORTH IN THE ABOVE-NOTED BUILDING CODE.
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- WATER-TIGHTNESS OF EXISTING HOST SUBSTRATE SHALL BE THE FULL RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL ENSURE THAT ANY REMOVED OR ALTERED WATERPROOFING MEMBRANE IS RESTORED AFTER FABRICATION AND INSTALLATION OF STRUCTURE PROPOSED HEREIN. THIS ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY WATERPROOFING OR LEAKAGE ISSUES WHICH MAY OCCUR AS WATER-TIGHTNESS SHALL BE THE FULL RESPONSIBILITY OF THE INSTALLING CONTRACTOR.



APPLICABLE MODELS:
 2/4TTA, 2/4TTB, 4TRR, 4TTX, 4TTZ, 4TTV, 4TWA, 2/4TWB, 4TWR, 4TWX, 4TWZ, 4TWW

DESIGNATION	ITEM	UNIT WEIGHT (LB)	UNIT DIMENSIONS (IN)			ANCHOR LOCATION DIMENSIONS (IN)							
			WIDTH	DEPTH	HEIGHT	CLIP 1		CLIP 2		CLIP 3		CLIP 4	
						X1	Y1	X2	Y2	X3	Y3	X4	Y4
TYPE XB / XR / XV	1	120	25.69	28.42	32.77	6 1/2	5/8	4 1/8	24 7/8	24 3/8	24 7/8	23 5/8	1
	2	120	25.69	28.42	25.60	6 1/2	5/8	4 1/8	24 7/8	24 3/8	24 7/8	23 5/8	1
	3	120	29.69	32.65	40.70	7 3/8	3/4	4 3/4	28 1/4	28	28 1/4	27 1/4	1 1/4
	4	120	29.69	32.65	28.77	7 3/8	3/4	4 3/4	28 1/4	28	28 1/4	27 1/4	1 1/4
	5	245	34.29	37.29	45.77	8 1/2	7/8	5 1/2	32 3/4	32	32 3/8	31	1 3/8
TYPE XL / XV	6	120	34.29	37.29	29.18	8 1/2	7/8	5 1/2	32 3/4	32	32 3/8	31	1 3/8
	7	302	34.29	37.29	51.44	8 1/2	7/8	5 1/2	32 3/4	32	32 3/8	31	1 3/8
	8	120	29.69	32.65	46.38	7 3/8	3/4	4 3/4	28 1/4	28	28 1/4	27 1/4	1 1/4
	9	120	34.29	37.29	39.44	8 1/2	7/8	5 1/2	32 3/4	32	32 3/8	31	1 3/8
	10	120	29.69	32.65	38.38	7 3/8	3/4	4 3/4	28 1/4	28	28 1/4	27 1/4	1 1/4



ENGINEERING EXPRESS
 CORPORATE OFFICE:
 160 SW 12th AVE, SUITE 106
 DEERFIELD BEACH, FL 33442
 (954) 354-0660 | (866) 396-9999
 TEAM@ENGINEERINGEXPRESS.COM
 ENGINEERINGEXPRESS.COM

TRANE US, INC
 6200 TROUP HWY
 TYLER, TX 75707
 PHONE: (903) 730-4602

A/C UNIT HOUSING AND MOUNTING CERTIFICATION
 FLORIDA BUILDING CODE SEVENTH EDITION (2020)
 FL19588.4

DRWN	CHKD	DATE
TSB	FLB	09-07-10
AML	TSB	03-20-12
AML	FLB	6-16-15
2010 FBC	FLB	8-02-17
2017 FBC	L/AO	7-08-20
2020 FBC	CCB	RWN

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