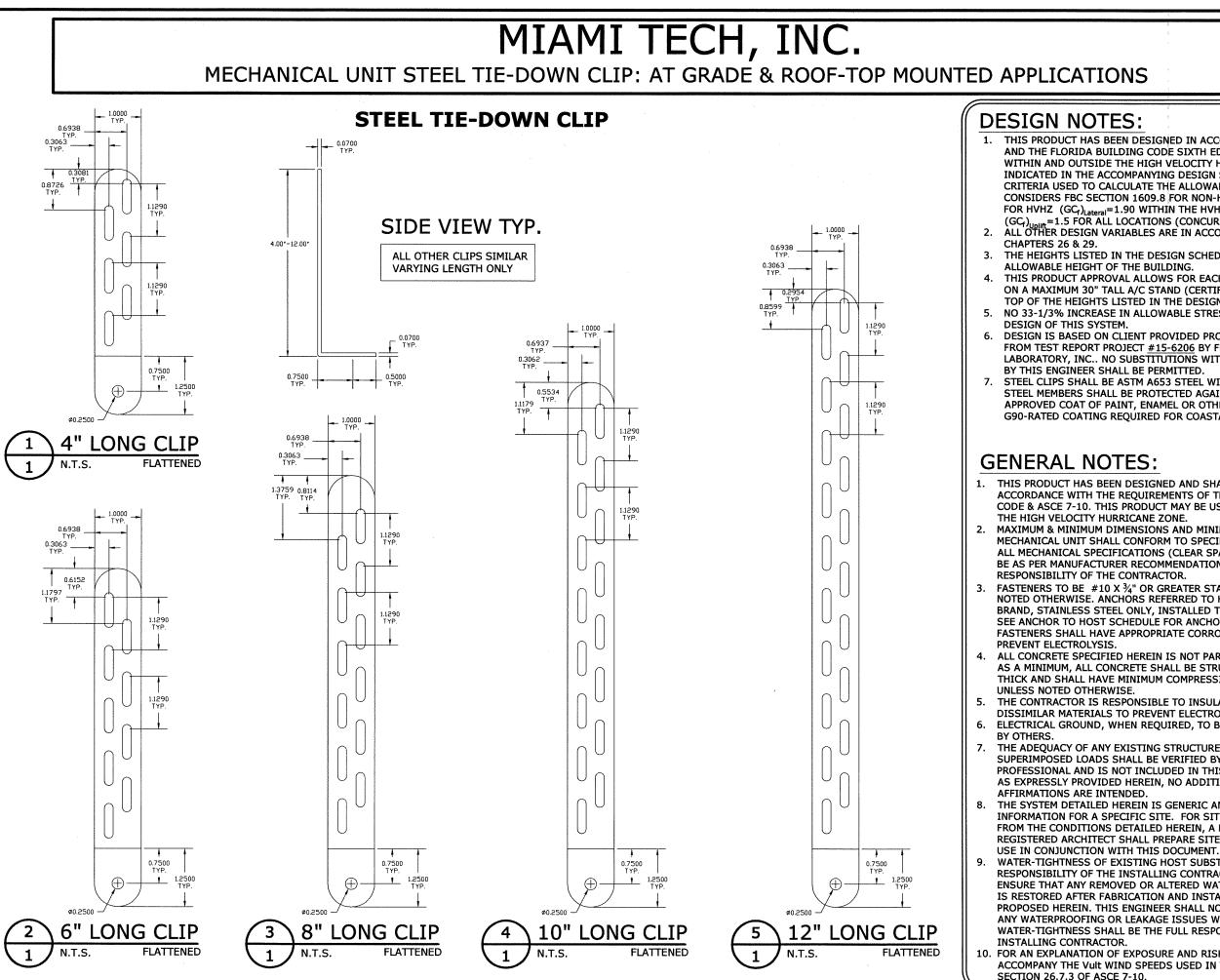


### Installation Instructions for <u>Ground / Concrete Slab Mount</u> Tie-Down Kits FBC 6<sup>th</sup> Edition (2017)

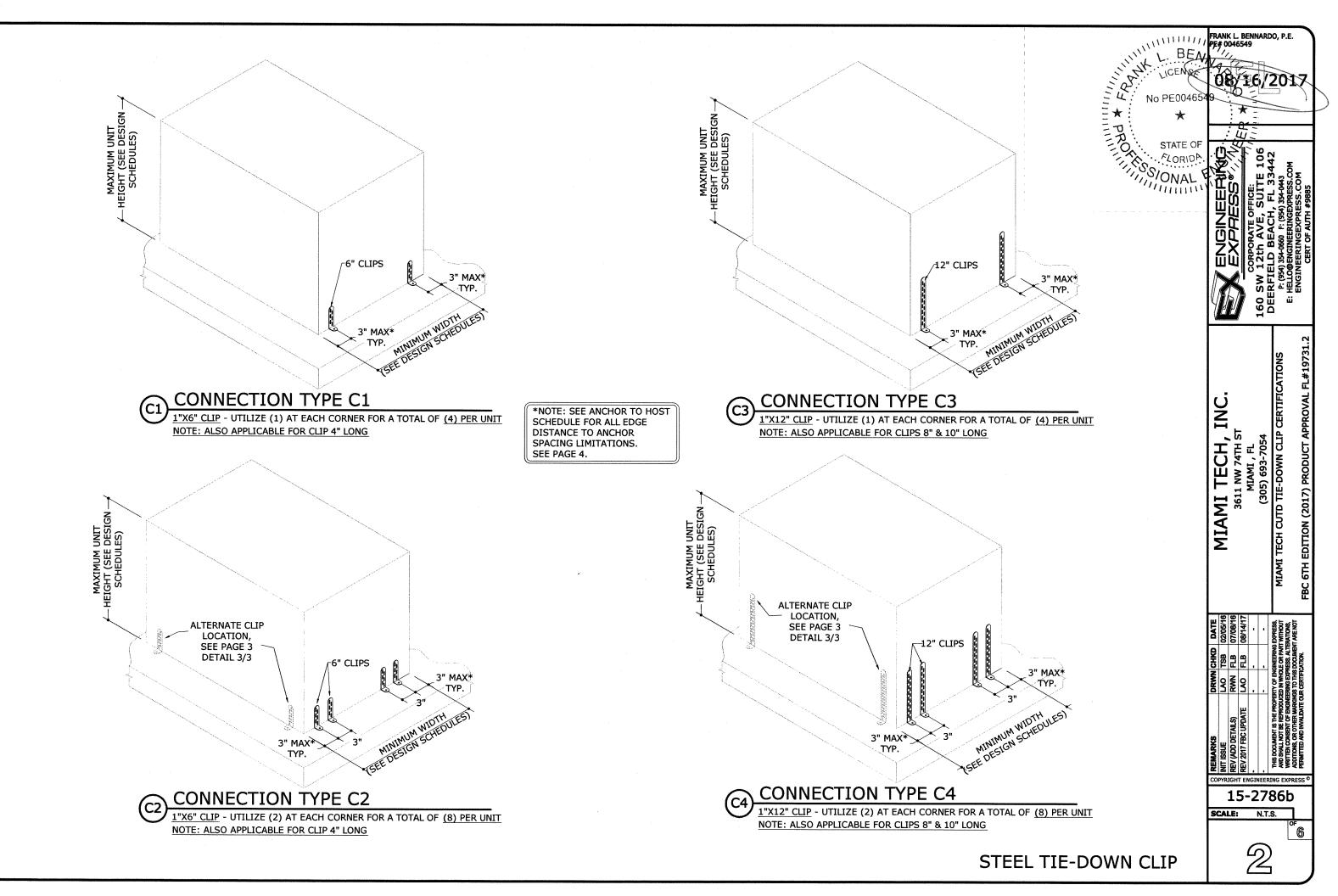
Kit Numbers

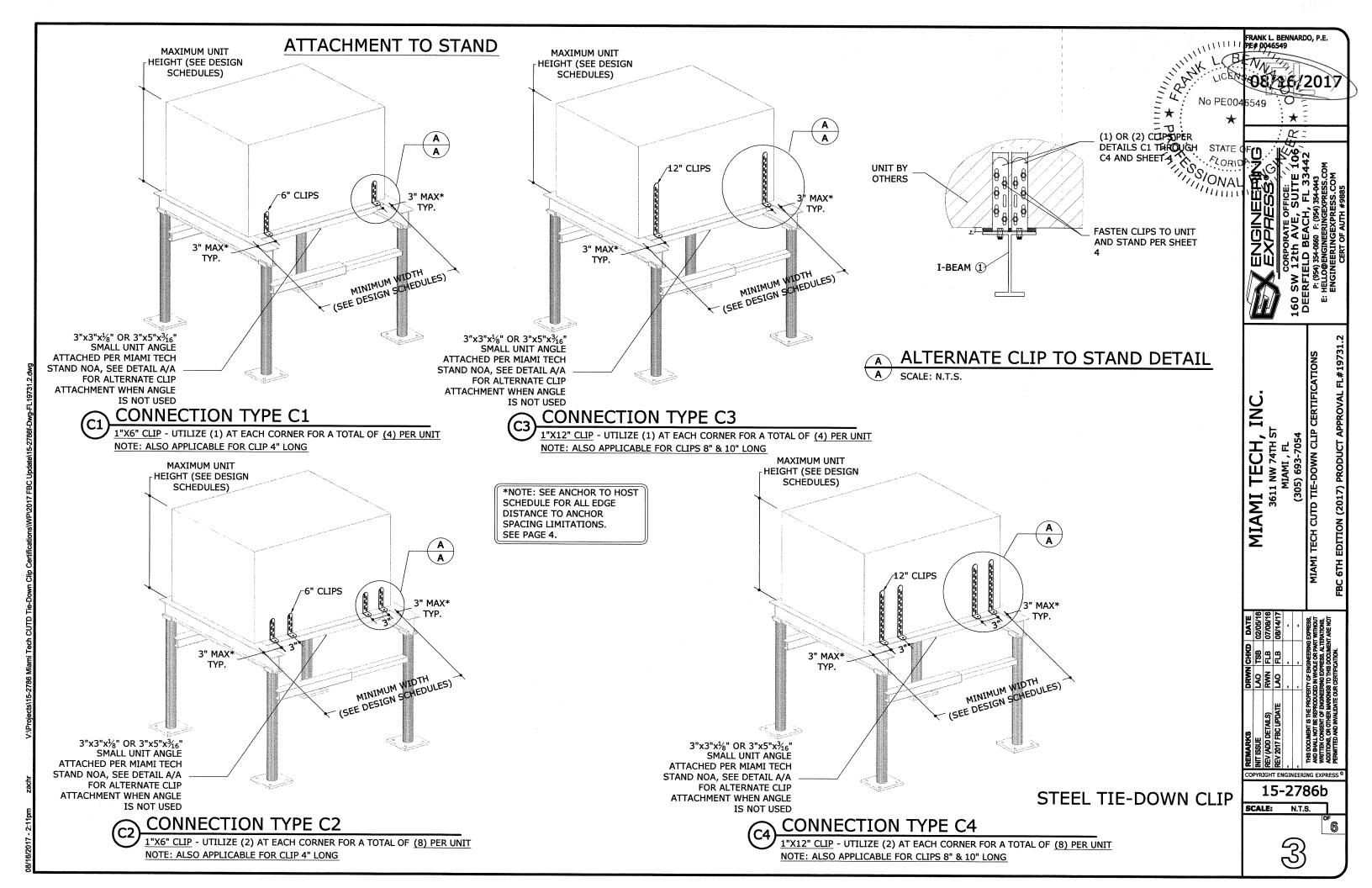
FL14CUTD6KG (Steel Tie Down Clips) FL14CUTD8KG (Steel Tie Down Clips) FL14CUTDA6KG (Aluminum Tie Down Clips) FL14CUTDA8KG (Aluminum Tie Down Clips)

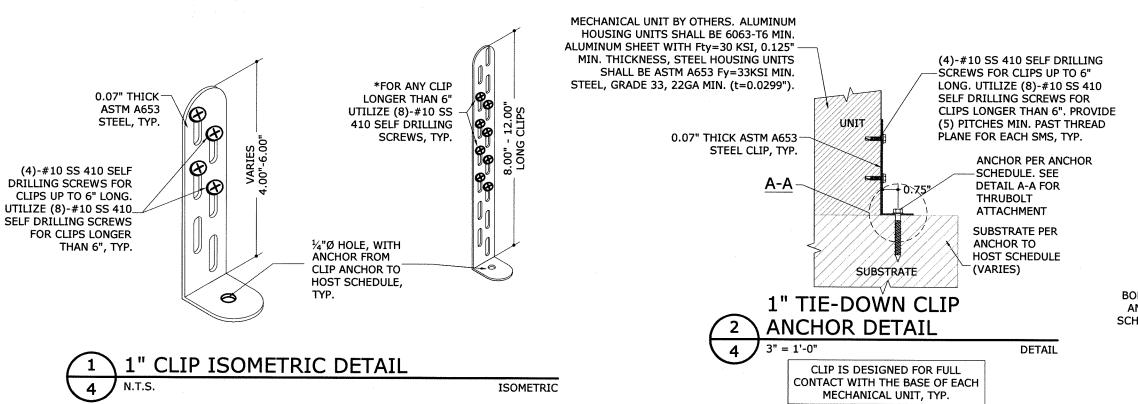
- Carefully review the included installation drawings before proceeding to anchor the condensing unit. If installing steel tie-down clips, please refer to the Mechanical Unit Steel Tie-Down Clip engineering drawing dated 8/16/2017. If installing aluminum tiedown clips, please refer to the Mechanical Unit Aluminum Tie-Down Clip engineering drawing dated 8/16/2017. The tie-down kits must be installed per the included installation drawings and the following instructions to maintain certification of the tiedown method.
- 2) Center the condensing unit on the concrete slab built with the minimum dimensions as illustrated in the included installation drawings. Use the appropriate drawing for the condensing unit being installed.
- 3) Using the bottom part of the tie down clip to rest on the concrete slab, attach the four (4) tie-down clips included in the kit with the appropriate quantity of #10 stainless steel 410 self-drilling screws. For 6" tie-down clips, use four (4) #10 stainless steel 410 selfdrilling screws per each tie-down clip. For 8" tie-down clips, use eight (8) #10 stainless steel 410 self-drilling screws per each tie-down clip.
- 4) Drill a 2" deep pilot hole for the ¼" stainless steel 410 Elco Ultracon screw through the hole of the bottom part of the tie down clip. These holes must be at least 2.5" inches from the edge of the concrete slab.
- 5) Secure the tie down clip to the concrete slab with the included ¼" stainless steel 410 Elco Ultracon screw per each tie-down clip.



FRANK L. BENNARDO, P.E. 0046549 1. THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH ASC 10-10 AND THE FLORIDA BUILDING CODE SIXTH EDITION (2017) FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE AS INDICATED IN THE ACCOMPANYING DESIGN SCHEDULES. THE DESIGN CRITERIA USED TO CALCULATE THE ALLOWABLE ROOF-TOP HEIGHTS/ A. CONSIDERS FBC SECTION 1609.8 FOR NON-HVHZ AND SECTION 1620.6/ FOR HVHZ  $(GC_{f})_{Lateral}$ =1.90 WITHIN THE HVHZ & OUTSIDE THE HVHZ,  $(GC_{f})_{Uplift}$ =1.5 FOR ALL LOCATIONS (CONCURRENT). ALL OTHER DESIGN VARIABLES ARE IN ACCORDANCE WITH ASCE 7-10 THE HEIGHTS LISTED IN THE DESIGN SCHEDULES REPRESENT THE THIS PRODUCT APPROVAL ALLOWS FOR EACH UNIT TO BE INSTALLED ШЦ ON A MAXIMUM 30" TALL A/C STAND (CERTIFICATION BY OTHERS) ON TOP OF THE HEIGHTS LISTED IN THE DESIGN SCHEDULES. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DEE DESIGN IS BASED ON CLIENT PROVIDED PRODUCT AND DIE SHEETS FROM TEST REPORT PROJECT <u>#15-6206</u> BY FENESTRATION TESTING LABORATORY, INC.. NO SUBSTITUTIONS WITHOUT WRITTEN APPROVAL STEEL CLIPS SHALL BE ASTM A653 STEEL WITH Fy=33 KSI OR BETTER. STEEL MEMBERS SHALL BE PROTECTED AGAINST CORROSION WITH AN APPROVED COAT OF PAINT, ENAMEL OR OTHER APPROVED PROTECTION. G90-RATED COATING REQUIRED FOR COASTAL INSTALLATIONS. CERTIFICA<sup>-</sup> (305) 693-7054 TECH CUTD TIE-DOWN CLIP TECH, THIS PRODUCT HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING EDITION (2017) PRODUCT CODE & ASCE 7-10. THIS PRODUCT MAY BE USED WITHIN AND OUTSIDE MAXIMUM & MINIMUM DIMENSIONS AND MINIMUM WEIGHT OF MECHANICAL UNIT SHALL CONFORM TO SPECIFICATIONS STATED HEREIN. ALL MECHANICAL SPECIFICATIONS (CLEAR SPACE, TONNAGE, ETC.) SHALL MIAMI BE AS PER MANUFACTURER RECOMMENDATIONS AND ARE THE EXPRESS FASTENERS TO BE #10 X  $3\!\!\!/_4$  " or greater stainless steel 410 unless noted otherwise. Anchors referred to herein shall be elco BRAND, STAINLESS STEEL ONLY, INSTALLED TO 3000 PSI MIN CONCRETE. SEE ANCHOR TO HOST SCHEDULE FOR ANCHOR REQUIREMENTS. ALL FASTENERS SHALL HAVE APPROPRIATE CORROSION PROTECTION TO ALL CONCRETE SPECIFIED HEREIN IS NOT PART OF THIS CERTIFICATION. AS A MINIMUM, ALL CONCRETE SHALL BE STRUCTURAL CONCRETE 4" MIN. THICK AND SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS. ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED THE ADEQUACY OF ANY EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS SHALL BE VERIFIED BY THE ONSITE DESIGN PROFESSIONAL AND IS NOT INCLUDED IN THIS CERTIFICATION.EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR 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 2 S **FSF** REV REV WATER-TIGHTNESS OF EXISTING HOST SUBSTRATE SHALL BE THE FULL RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL COPYRIGHT ENGINEERING EXPRESS ENSURE THAT ANY REMOVED OR ALTERED WATERPROOFING MEMBRANE 15-2786b IS RESTORED AFTER FABRICATION AND INSTALLATION OF STRUCTURE PROPOSED HEREIN. THIS ENGINEER SHALL NOT BE RESPONSIBLE FOR SCALE: N.T.S. ANY WATERPROOFING OR LEAKAGE ISSUES WHICH MAY OCCUR AS WATER-TIGHTNESS SHALL BE THE FULL RESPONSIBILITY OF THE 6 10. FOR AN EXPLANATION OF EXPOSURE AND RISK CATEGORIES THAT ACCOMPANY THE Vult WIND SPEEDS USED IN THIS APPROVAL, SEE









SUBSTRATE	DESCRIPTION
CONCRETE: (4" THICK MIN, 3000 PSI MIN.)	(1)-1/4"Ø STAINLESS STEEL 410 ELCO ULTRACON, 1¾" FULL EMBED TO CONCRETE, 2½" MIN. EDGE DISTANCE, 3" MIN. SPACING TO ANY ADJACENT ANCHOR.
ALUMINUM: (0.125" MIN. THICK, 6061-T6 MIN. ALUMINUM)	(1)-#14 SAE STAINLESS STEEL BOLT 410 WITH NUT AND WASHER TOP & BOTTOM SS OD 1", ½" MINIMUM EDGE DISTANCE TO METAL EDGE
STEEL: (0.125" MIN. THICK, 50 KSI MIN. STEEL)	(1)-#14 SAE STAINLESS STEEL BOLT 410 WITH NUT AND WASHER TOP & BOTTOM SS OD 1", ½" MINIMUM EDGE DISTANCE TO METAL EDGE

EMBEDMENT AND EDGE DISTANCE EXCLUDES FINISHES, IF APPLICABLE. 1.

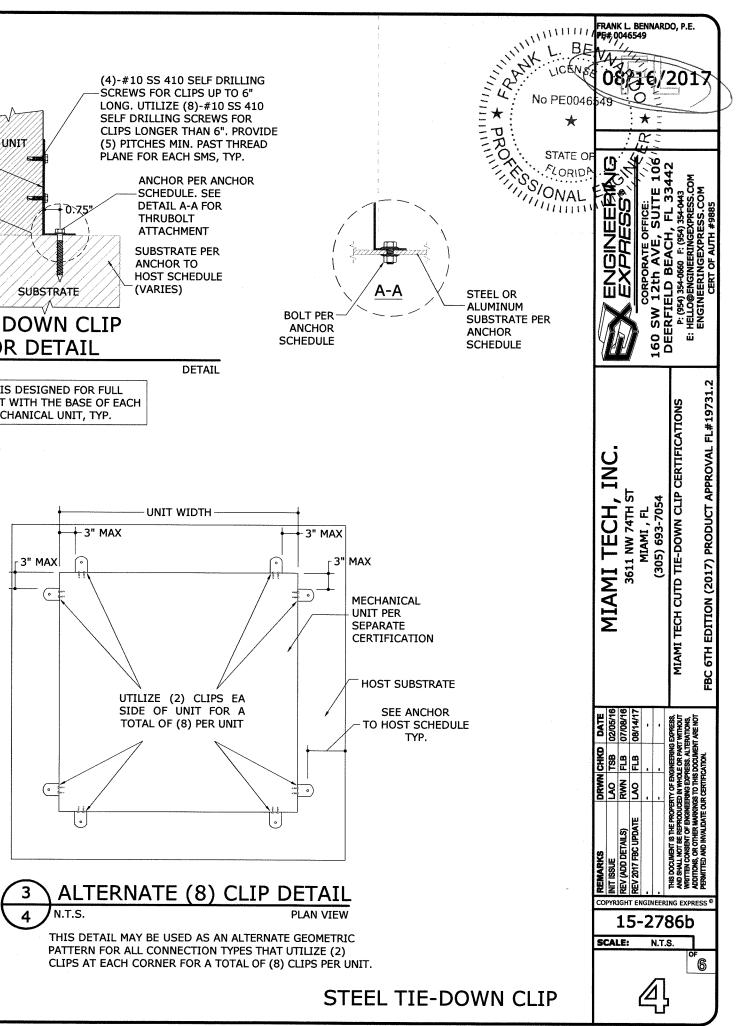
ENSURE MINIMUM EDGE DISTANCE AS NOTED IN ANCHOR SCHEDULE. 2.

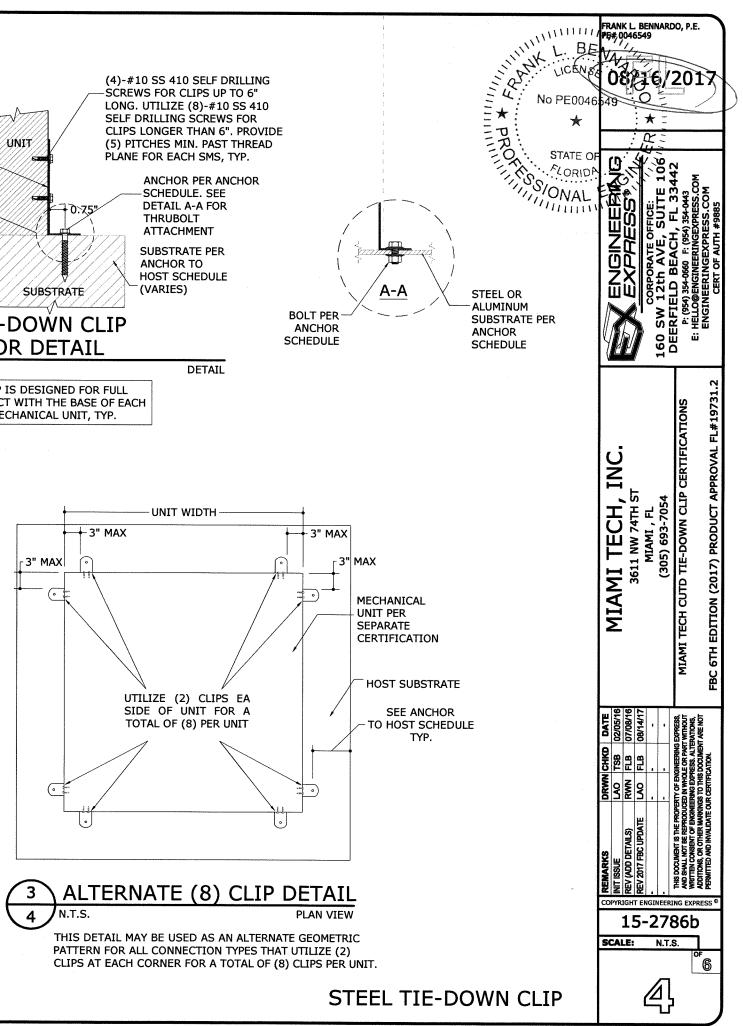
ENSURE MINIMUM SPACING TO ANY ADJACENT ANCHORS. 3.

SEE DETAILS ON SHEET 4 FOR ANCHORS ATTACHING TO MECHANICAL UNIT. 4

5.

PROTECT ALL METALS FROM DISSIMILAR METALS GENERAL NOTE #5





# TABLE 1 PERMISSIBLE INSTALLATION HEIGHTS: Vult=175 MPH, EXPOSURE C

(FOR USE WITH A RISK CATEGORY II STRUCTURE IN THE HIGH VELOCITY HURRICANE ZONE (HVHZ)\*) RISK CATEGORY II IS PER ASCE 7-10

IT IS PER ASCE 7-10				OWABLE ROO		<u>. /</u>
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	C3	C4
6 FT <sup>2</sup>	29" MAX	15" MIN	AT GRADE	H ≤ 200 FT	AT GRADE	H ≤ 200 FT
9 FT <sup>2</sup>	36" MAX	27" MIN	AT GRADE	H ≤ 200 FT	AT GRADE	H ≤ 200 FT
4 FT <sup>2</sup>		H ≤ 160 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	
6 FT <sup>2</sup>			H ≤ 15 FT	H ≤ 200 FT	H ≤ 30 FT	H ≤ 200 FT
9 FT <sup>2</sup>	48" MAX	36" MIN	AT GRADE	H ≤ 200 FT	AT GRADE	H ≤ 200 FT
12 FT <sup>2</sup>			N/A	H ≤ 60 FT	N/A	H ≤ 100 FT
16 FT <sup>2</sup>			N/A	H ≤ 15 FT	N/A	H ≤ 15 FT
20 FT <sup>2</sup>			N/A	AT GRADE	N/A	AT GRADE
25 FT <sup>2</sup>	60" MAX	48" MIN	N/A	AT GRADE	N/A	AT GRADE
30 FT <sup>2</sup>	OU IVIAA	40 IVIIN	N/A	N/A	N/A	N/A
36 FT <sup>2</sup>			N/A	N/A	N/A	N/A

\*THIS TABLE IS PERMISSIBLE TO BE USED WITHIN THE **HVHZ** WHICH CONTAINS BROWARD AND MIAMI-DADE COUNTIES. CHECK WITH LOCAL AUTHORITY HAVING JURISDICTION FOR THE APPLICABILITY OF THIS TABLE WITHIN CERTAIN FLORIDA COUNTIES.

MAXIMUM URFACE AREA OF UNIT'S LARGEST FACE 6 FT <sup>2</sup> 9 FT <sup>2</sup> 4 FT <sup>2</sup> 6 FT <sup>2</sup> 9 FT <sup>2</sup> 12 FT <sup>2</sup> 16 FT <sup>2</sup> 20 FT <sup>2</sup> 25 FT <sup>2</sup>	UNIT HEIGHT 29" MAX 36" MAX 48" MAX	27" MIN	C1 N/A N/A H≤80 FT	-DOWN CONF C2 H ≤ 200 FT H ≤ 140FT	СЗ			ROLES	ATE OF B
FACE 6 FT <sup>2</sup> 9 FT <sup>2</sup> 4 FT <sup>2</sup> 6 FT <sup>2</sup> 9 FT <sup>2</sup> 12 FT <sup>2</sup> 16 FT <sup>2</sup> 20 FT <sup>2</sup>	29" MAX 36" MAX	( 15" MIN ( 27" MIN	N/A H ≤ 80 FT			C4			
9 FT <sup>2</sup> 4 FT <sup>2</sup> 6 FT <sup>2</sup> 9 FT <sup>2</sup> 12 FT <sup>2</sup> 16 FT <sup>2</sup> 20 FT <sup>2</sup>	36" MAX	27" MIN	N/A H ≤ 80 FT			1		11,5/0	
4 FT <sup>2</sup> 6 FT <sup>2</sup> 9 FT <sup>2</sup> 12 FT <sup>2</sup> 16 FT <sup>2</sup> 20 FT <sup>2</sup>	_		H ≤ 80 FT		AT GRADE	H ≤ 200 FT		111	M n E S
6 FT <sup>2</sup> 9 FT <sup>2</sup> 12 FT <sup>2</sup> 16 FT <sup>2</sup> 20 FT <sup>2</sup>	48" MAX	36" MIN			N/A	H ≤ 200 FT			I HIÛ FO F Ø
9 FT <sup>2</sup> 12 FT <sup>2</sup> 16 FT <sup>2</sup> 20 FT <sup>2</sup>	48" MAX	36" MIN		H ≤ 200 FT	H ≤ 140FT	H ≤ 200 FT		··· ·· ·· ·· ·· ·· ··	
12 FT <sup>2</sup> 16 FT <sup>2</sup> 20 FT <sup>2</sup>	48" MAX	36" MIN	AT GRADE	H ≤ 200 FT	AT GRADE	H ≤ 200 FT			
16 FT <sup>2</sup> 20 FT <sup>2</sup>	_		N/A	H ≤ 160 FT	AT GRADE	H ≤ 200 FT			<b>ビジ</b>   版12 m 8號
20 FT <sup>2</sup>	1		N/A	H ≤ 30 FT	N/A	H ≤ 40 FT			
			N/A	AT GRADE	N/A	AT GRADE			
2J F I	-		N/A N/A	AT GRADE N/A	N/A N/A	AT GRADE			N K S L S
30 FT <sup>2</sup>	60" MAX	48" MIN	N/A N/A	N/A N/A	N/A N/A	N/A N/A			
30 FT <sup>2</sup>			N/A N/A	N/A N/A	N/A N/A	N/A N/A			
			ALLATIC	ON HEIG	GHTS: v	ult=170 MF	H, EXPOS	URE D	TECH, 1 NW 74TH S MIAMI , FL 05) 693-7054 (E-DOWN CLI
4 PERM	ORY II STRU		ALLATIC	ON HEIG	GHTS: v	ult=170 MF	H, EXPOS	URE D	MI T 3611 N 311 N MIX (305) TTD TIE-D
ITH A RISK CATEG ORY II IS PER ASCI	ORY II STRU	CTURE**)	OWABLE INST	nikker (	DF HEIGHT	'ult=170 MF	H, EXPOS	URE D	Σ <sup>m</sup> e
ITH A RISK CATEG ORY II IS PER ASCI M UNIT L	ORY II STRU	CTURE**)	OWABLE INST	ALLATION ROC	DF HEIGHT N TYPE	/ult=170 MF	H, EXPOS	URE D	IΣ <sup>™</sup> ⊂ I₽
TH A RISK CATEG ORY II IS PER ASCI UNIT HEIGHT W	ORY II STRU E 7-10 JNIT IDTH	CTURE**) <u>ALL</u> C1 AT GRADE	OWABLE INST TIE-DOWN CC	ALLATION ROC	DF HEIGHT N TYPE		H, EXPOS	URE D	MIAM 34 MIAM
TH A RISK CATEG DRY II IS PER ASCI UNIT HEIGHT W CE 29 in	ORY II STRU E 7-10 JNIT IDTH	CTURE**) <u>ALL</u> C1	OWABLE INST TIE-DOWN CC C2	ALLATION ROC DNFIGURATION C3	DF HEIGHT N TYPE ADE ≤	C4	H, EXPOS	URE D	MIAM 34 MIAM
TH A RISK CATEG DRY II IS PER ASCI UNIT HEIGHT CE 29 in 36 in 36 in 38 in 36 in	ORY II STRU 57-10 JNIT IDTH 55 in 27 in 36 in	CTURE**) ALL C1 AT GRADE N/A ≤ 120 FT	OWABLE INST. TIE-DOWN CC C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT	ALLATION ROO DNFIGURATION C3 AT GR/ AT GR/ ≤ 200	DF HEIGHT N TYPE ADE $\leq$ FT $\leq$	C4 200 FT 200 FT 200 FT	H, EXPOS	URE D	MIAM 34 MIAM
TH A RISK CATEG ORY II IS PER ASCI UNIT HEIGHT W CE 29 in 36 in 48 in 38 in 36 in	ORY II STRU 5 7-10 JNIT /IDTH 55 in / 27 in 36 in /	CTURE**) <u>ALL</u> C1 <u>AT GRADE</u> N/A ≤ 120 FT AT GRADE	OWABLE INST. TIE-DOWN CC C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT	ALLATION ROO DNFIGURATION C3 AT GR/ AT GR/ ≤ 200 H ≤ 15	DF HEIGHT N TYPE ADE S ADE S FT S FT S	C4 200 FT 200 FT 200 FT 200 FT 200 FT	H, EXPOS	URE D	MIAM 34 MIAM
TH A RISK CATEG ORY II IS PER ASCI UNIT HEIGHT W CE 29 in 36 in 48 in 48 in 48 in 36 in	ORY II STRU 27-10 JNIT JDTH 25 in 27 in 36 in 36 in 36 in	CTURE**) <u>ALL</u> C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A	OWABLE INST. TIE-DOWN CC C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT	ALLATION ROO DNFIGURATION C3 AT GR/ ≤ 200 H ≤ 15 AT GR/	DF HEIGHT N TYPE ADE $\leq$ ADE $\leq$ FT $\leq$ ADE $\leq$	C4 200 FT 200 FT 200 FT 200 FT 200 FT 200 FT	H, EXPOS	URE D	MIAM 34 MIAM
TH A RISK CATEG ORY II IS PER ASCI UNIT HEIGHT W CE 29 in 1 36 in 2 48 in 3 48 in 3 48 in 3	ORY II STRU E 7-10 JNIT JNIT JDTH 55 in 27 in 36 in 36 in 36 in 36 in	CTURE**) <u>ALL</u> C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A	OWABLE INST. TIE-DOWN CC C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT H ≤ 40 FT	ALLATION ROC DNFIGURATION C3 AT GR/ AT GR/ ≤ 200 H ≤ 15 AT GR/ N/A	DF HEIGHT N TYPE ADE $\leq$ ADE $\leq$ FT $\leq$ ADE $\leq$ ADE $\leq$ ADE $\leq$ ADE $\leq$ ADE $\leq$ ADE $\leq$ ADE $\leq$	C4 200 FT 200 FT 200 FT 200 FT 200 FT 200 FT ≤ 60 FT	H, EXPOS	URE D	MIAM 34 MIAM
A RISK CATEG ORY II IS PER ASCI UNIT HEIGHT W CE 29 in 36 in 36 in 48 in 48 in 48 in 48 in 348 in 34	ORY II STRU 57-10 JNIT JNIT JDTH 55 in 27 in 36 in 36 in 36 in 36 in 36 in	CTURE**) <u>ALL</u> C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A N/A N/A	OWABLE INST. TIE-DOWN CC C2 $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $H \leq 40 \text{ FT}$ AT GRADE	ALLATION ROC DNFIGURATION C3 AT GR/ AT GR/ ≤ 200 H ≤ 15 AT GR/ N/A N/A	DF HEIGHT N TYPE ADE $\leq$ ADE $\leq$ FT $\leq$ ADE $\leq$	C4 200 FT 200 FT 200 FT 200 FT 200 FT \$ 60 FT GRADE	H, EXPOS	URE D	DRWN CHKD         DATE         MIAM           IAO         TSB         02/05/16           RWN         FLB         07/06/16           LAO         FLB         07/06/16           LAO         FLB         08/14/17           -         -         -           -         -         -           NEEWIN OF ENGINEERING DRRESS, LITERAND OF RESS,
TH A RISK CATEG ORY II IS PER ASCI UNIT HEIGHT W CE 29 in 36 in 36 in 48 in 48 in 48 in 48 in 5 48 in 5 60 in 48 in	ORY II STRU 57-10 JNIT JNIT JDTH 55 in 77 in 36 in 36 in 36 in 36 in 36 in 38 in	CTURE**) <u>ALL</u> C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A N/A N/A N/A	OWABLE INST. TIE-DOWN CC C2 $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $H \leq 40 \text{ FT}$ AT GRADE AT GRADE	ALLATION ROC DNFIGURATION C3 AT GR/ AT GR/ ≤ 200 H ≤ 15 AT GR/ N/A N/A N/A	DF HEIGHT N TYPE ADE $\leq$ ADE $\leq$ FT $\leq$ ADE $=$ ADE $=$	C4 200 FT 200 FT 200 FT 200 FT 200 FT 200 FT 5 60 FT GRADE GRADE	H, EXPOS	URE D	DRWN CHKD         DATE         MIAM           IAO         TSB         02/05/16           RWN         FLB         07/06/16           LAO         FLB         07/06/16           LAO         FLB         08/14/17           -         -         -           -         -         -           NEEWIN OF ENGINEERING DRRESS, LITERAND OF RESS,
ITH A RISK CATEG ORY II IS PER ASCI UNIT HEIGHT W CE 29 in 36 in 36 in 48 in 40 in 4	ORY II STRU 57-10 JNIT JNIT JDTH 55 in 27 in 36 in 36 in 36 in 36 in 36 in	CTURE**) <u>ALL</u> C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A N/A N/A	OWABLE INST. TIE-DOWN CC C2 $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $H \leq 40 \text{ FT}$ AT GRADE	ALLATION ROC DNFIGURATION C3 AT GR/ AT GR/ ≤ 200 H ≤ 15 AT GR/ N/A N/A	ADE S FT S ADE S ADE S FT S ADE	C4 200 FT 200 FT 200 FT 200 FT 200 FT \$ 60 FT GRADE	H, EXPOS	URE D	CHICD         DATE         MIAM           TSB         02/05/16         MIAM           FLB         07/06/16         31           FLB         08/14/17         31           -         -         -           -         -         -           AMMERING SCRESS.         MIAMI TECH CUTD

# TABLE 3 PERMISSIBLE INSTALLATION HEIGHTS: Vult=170 MPH, EXPOSURE C

(FOR USE WITH A RISK CATEGORY II STRUCTURE\*\*) RISK CATEGORY II IS PER ASCE 7-10

			AL	LOWABLE INSTALL TIE-DOWN CONF	ATION ROOF HEIG	HT
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	C3	C4
6 ft²	29 in	15 in	AT GRADE	≤ 200 FT	AT GRADE	≤ 200 FT
9 ft²	36 in	27 in	AT GRADE	≤ 200 FT	AT GRADE	≤ 200 FT
4 ft <sup>2</sup>	48 in	36 in	≤ 200 FT	≤ 200 FT	≤ 200 FT	≤ 200 FT
6 ft <sup>2</sup>	48 in	36 in	H ≤ 30 FT	≤ 200 FT	H ≤ 40 FT	≤ 200 FT
9 ft²	48 in	36 in	AT GRADE	≤ 200 FT	AT GRADE	≤ 200 FT
12 ft <sup>2</sup>	48 in	36 in	N/A	≤ 80 FT	N/A	≤ 140 FT
16 ft²	48 in	36 in	N/A	H ≤ 15 FT	N/A	H ≤ 30 FT
20 ft <sup>2</sup>	60 in	48 in	N/A	AT GRADE	N/A	AT GRADE
25 ft <sup>2</sup>	60 in	48 in	N/A	AT GRADE	N/A	AT GRADE
30 ft <sup>2</sup>	60 in	48 in	N/A	N/A	N/A	AT GRADE
36 ft <sup>2</sup>	60 in	48 in	N/A	N/A	N/A	N/A

MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACEUNIT HEIGHT6 FT229" MAI9 FT236" MAI4 FT26 FT26 FT248" MAI12 FT216 FT220 FT225 FT230 FT260" MAI30 FT236 FT2*THIS TABLE IS PERMISSIBLE MIAMI-DADE COUNTIES. CHE OF THIS TABLE WITHIN CERT/	T WIDTH X 15" MIN X 27" MIN X 36" MIN X 48" MIN TO BE USED WI ECK WITH LOCA	N/A           H ≤ 80 FT           AT GRADE           N/A           N/A           N/A           N/A           N/A           N/A           N/A           N/A           H           AT GRADE           N/A           N/A           N/A           N/A           N/A           N/A           N/A           N/A           N/A           N/A					ROFK		EXPRESS EXPRESS CORPORATE OFFICE	DEERFIELD BEACH, FL 33440. P: (954) 334-0660 F: (954) 334-043 7. E: HELLO@ENGINEERINGEXPRESS.COM 7. 1.
6 FT <sup>2</sup> 29" MAX           9 FT <sup>2</sup> 36" MAX           4 FT <sup>2</sup> 6 FT <sup>2</sup> 6 FT <sup>2</sup> 48" MAX           12 FT <sup>2</sup> 48" MAX           12 FT <sup>2</sup> 48" MAX           12 FT <sup>2</sup> 60" MAX           30 FT <sup>2</sup> 60" MAX           36 FT <sup>2</sup> 60" MAX           *THIS TABLE IS PERMISSIBLE         MIAMI-DADE COUNTIES. CHE	AX         27" MIN           AX         36" MIN           AX         48" MIN           E TO BE USED WI           ECK WITH LOCA	N/A           H ≤ 80 FT           AT GRADE           N/A           N/A	$H \le 140FT$ $H \le 200 FT$ $H \le 200 FT$ $H \le 160 FT$ $H \le 30 FT$ $AT GRADE$ $AT GRADE$ $N/A$ $N/A$ $N/A$ $N/A$ $Z WHICH CON$	N/A H ≤ 140FT AT GRADE AT GRADE N/A N/A N/A N/A N/A N/A N/A N/A	$H \le 200 \text{ FT}$ $AT \text{ GRADE}$ $AT \text{ GRADE}$ $N/A$ $N/A$ $N/A$					DEERFIELD BEACH, FL 3/3 P: (934) 334-0660 F: (934) 334-0443 E: HELLO@ENGINEERINGEZORESS.C
9 FT <sup>2</sup> 36" MAX           4 FT <sup>2</sup> 6 FT <sup>2</sup> 9 FT <sup>2</sup> 48" MAX           12 FT <sup>2</sup> 48" MAX           12 FT <sup>2</sup> 48" MAX           12 FT <sup>2</sup> 60" MAX           30 FT <sup>2</sup> 60" MAX           36 FT <sup>2</sup> 60" MAX           *THIS TABLE IS PERMISSIBLE         MIAMI-DADE COUNTIES. CHE	AX         27" MIN           AX         36" MIN           AX         48" MIN           E TO BE USED WI           ECK WITH LOCA	N/A           H ≤ 80 FT           AT GRADE           N/A           N/A	$H \le 140FT$ $H \le 200 FT$ $H \le 200 FT$ $H \le 160 FT$ $H \le 30 FT$ $AT GRADE$ $AT GRADE$ $N/A$ $N/A$ $N/A$ $N/A$ $Z WHICH CON$	N/A H ≤ 140FT AT GRADE AT GRADE N/A N/A N/A N/A N/A N/A N/A N/A	$H \le 200 \text{ FT}$ $AT \text{ GRADE}$ $AT \text{ GRADE}$ $N/A$ $N/A$ $N/A$				EXPRESE CORPORATE OFFICE 160 SW 12th AVE. SUI	DEERFIELD BEACH, FL P: (954) 354-0660 F: (954) 354-0 E: HELLO@ENGINEERINGEXPREE
6 FT <sup>2</sup> 48" MAX           9 FT <sup>2</sup> 48" MAX           12 FT <sup>2</sup> 48" MAX           16 FT <sup>2</sup> 60" MAX           30 FT <sup>2</sup> 60" MAX           36 FT <sup>2</sup> 60" MAX           *THIS TABLE IS PERMISSIBLE         MIAMI-DADE COUNTIES. CHE	X 48" MIN TO BE USED WI ECK WITH LOCA	AT GRADE N/A N/A N/A N/A N/A N/A THIN THE HVH	$H \le 200 \text{ FT}$ $H \le 200 \text{ FT}$ $H \le 160 \text{ FT}$ $H \le 30 \text{ FT}$ $AT \text{ GRADE}$ $AT \text{ GRADE}$ $N/A$ $N/A$ $N/A$ $N/A$ $Z  WHICH CON$	H ≤ 140FT AT GRADE AT GRADE N/A N/A N/A N/A N/A N/A N/A N/A	$H \le 200 \text{ FT}$ $H \le 200 \text{ FT}$ $H \le 200 \text{ FT}$ $H \le 40 \text{ FT}$ $AT \text{ GRADE}$ $AT \text{ GRADE}$ $N/A$ $N/A$ $N/A$				EXPERIME EXPRESS CORPORATE OF 160 SW 12th AVE. S	DEERFIELD BEACH, P: (954) 354-0660 F: (954); E: HELLO@ENGINEERINGEX
9 FT <sup>2</sup> 48" MAX           12 FT <sup>2</sup> 48" MAX           12 FT <sup>2</sup> 60" MAX           30 FT <sup>2</sup> 60" MAX           36 FT <sup>2</sup> 60" MAX           *THIS TABLE IS PERMISSIBLE MIAMI-DADE COUNTIES. CHE	X 48" MIN TO BE USED WI ECK WITH LOCA	N/A N/A N/A N/A N/A N/A THIN THE <b>HVH</b>	H ≤ 160 FT H ≤ 30 FT AT GRADE AT GRADE N/A N/A N/A Z WHICH CON	AT GRADE N/A N/A N/A N/A N/A N/A ITAINS BROW	$H \le 200 \text{ FT}$ $H \le 40 \text{ FT}$ $AT \text{ GRADE}$ $AT \text{ GRADE}$ $N/A$ $N/A$ $N/A$				EXPRIME EXPR	
12 FT <sup>2</sup> 16 FT <sup>2</sup> 20 FT <sup>2</sup> 25 FT <sup>2</sup> 30 FT <sup>2</sup> 36 FT <sup>2</sup> *THIS TABLE IS PERMISSIBLE MIAMI-DADE COUNTIES. CHE	X 48" MIN TO BE USED WI ECK WITH LOCA	N/A N/A N/A N/A N/A THIN THE <b>HVH</b>	H ≤ 30 FT AT GRADE AT GRADE N/A N/A N/A Z WHICH CON	N/A N/A N/A N/A N/A N/A N/A	H ≤ 40 FT AT GRADE AT GRADE N/A N/A N/A ARD AND				EXE CORPORT 160 SW 12th A	DEERFIELD BE P: (954) 354-0660 E: HELLOØENGINEE
16 FT220 FT225 FT230 FT236 FT2*THIS TABLE IS PERMISSIBLEMIAMI-DADE COUNTIES. CHE	TO BE USED WI	N/A N/A N/A N/A THIN THE <b>HVH</b>	AT GRADE AT GRADE N/A N/A N/A Z WHICH CON	N/A N/A N/A N/A N/A ITAINS BROW	AT GRADE AT GRADE N/A N/A N/A ARD AND				160 SW 12th	
20 FT <sup>2</sup> 25 FT <sup>2</sup> 30 FT <sup>2</sup> 36 FT <sup>2</sup> *THIS TABLE IS PERMISSIBLE MIAMI-DADE COUNTIES. CHE	TO BE USED WI	N/A N/A N/A N/A THIN THE <b>HVH</b>	AT GRADE N/A N/A N/A Z WHICH CON	N/A N/A N/A N/A ITAINS BROW	AT GRADE N/A N/A N/A ARD AND	74			160 SW 11	
25 FT <sup>2</sup> 30 FT <sup>2</sup> 36 FT <sup>2</sup> *THIS TABLE IS PERMISSIBLE MIAMI-DADE COUNTIES. CHE	TO BE USED WI	N/A N/A N/A THIN THE <b>HVH</b>	N/A N/A N/A Z WHICH CON	N/A N/A N/A ITAINS BROW	N/A N/A N/A ARD AND	74			160 SW	
30 FT <sup>2</sup> 36 FT <sup>2</sup> *THIS TABLE IS PERMISSIBLE MIAMI-DADE COUNTIES. CHE	TO BE USED WI	N/A N/A THIN THE <b>HVH</b>	N/A N/A Z WHICH CON	N/A N/A ITAINS BROW	N/A N/A ARD AND	rv.			160 5	
36 FT <sup>2</sup> *THIS TABLE IS PERMISSIBLE MIAMI-DADE COUNTIES. CHE	ECK WITH LOCA	N/A THIN THE <b>HVH</b>		N/A	N/A ARD AND	ry.				입 
*THIS TABLE IS PERMISSIBLE MIAMI-DADE COUNTIES. CHE	ECK WITH LOCA	THIN THE HVH		TAINS BROW	ARD AND					
ATEGORY II IS PER ASCE 7-10	UCTURE**)					ης Π <b>, ΕΛ</b> Ι	XPOSURE	· · ·	L ICCT 511 NW 74TH MIAMI , FL 2063 602-706	(305) 693-7054 TIE-DOWN CLIP
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RFACE UNIT UNIT EA OF HEIGHT WIDTH ST FACE 29 in 15 in	ALLC C1 AT GRADE	TIE-DOWN CO	NFIGURATION	ІТҮРЕ	C4 200 FT	η <b>ΓΠ, Ε</b> ΔΙ	XPOSURE			MIAMI TECH CUTD
FACE A OF IIT'S     UNIT HEIGHT     UNIT WIDTH       ST FACE     29 in     15 in       ft <sup>2</sup> 36 in     27 in	<u>ALLC</u> C1	TIE-DOWN CO	NFIGURATION C3	I TYPE DE ≤		η <b>ΓΠ, Ε</b> ΔΙ	XPOSURE			MIAMI TECH CUTD
FACE (A OF IIT'S ST FACEUNIT HEIGHTUNIT WIDTHft²29 in15 inft²36 in27 inft²48 in36 in	ALLC C1 AT GRADE N/A ≤ 120 FT	TIE-DOWN CO C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT	NFIGURATION C3 AT GRA AT GRA ≤ 200 I	DE S TTYPE	200 FT	η <b>ΓΠ, Ε</b> ΔΙ	XPOSURE		02/05/16 [VILAIVI 07/08/16 3611 08/14/17 M M	Ē
FACE A OF IIT'S ST FACE         UNIT HEIGHT         UNIT WIDTH           ft²         29 in         15 in           ft²         36 in         27 in           ft²         48 in         36 in           ft²         48 in         36 in	C1 C1 AT GRADE N/A ≤ 120 FT AT GRADE	TIE-DOWN CO C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT	NFIGURATION C3 AT GRA AT GRA ≤ 200 I H ≤ 15	ITYPE	200 FT 200 FT 200 FT 200 FT	η <b>ΓΠ, Ε</b> Δ	XPOSURE		TSB         02/05/16         IVILAIVI           FLB         07/06/16         3611           FLB         08/14/17         7011	EBNING EDPRESS, MIAMI TECH CUTD     SEMENTARE NOT     COMENTARE NOT     COMENTARE NOT
$ \begin{array}{c} FACE \\ A OF \\ IIT'S \\ ST FACE \\ ft^2 \\ t^2 \\ t$	ALLC C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A	TIE-DOWN CO C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT	NFIGURATION C3 AT GRA AT GRA ≤ 200 I H ≤ 15 AT GRA	I TYPE	200 FT 200 FT 200 FT 200 FT 200 FT	η <b>ΓΠ, Ε</b> Δ	XPOSURE		TSB         02/05/16         IVILAIVI           FLB         07/06/16         3611           FLB         08/14/17         7011	
$\begin{array}{c c} FACE \\ A OF \\ IIT'S \\ ST FACE \\ \hline tt^2 & 29 \text{ in } 15 \text{ in } \\ ft^2 & 36 \text{ in } 27 \text{ in } \\ ft^2 & 48 \text{ in } 36 \text{ in } \\ ft^2 & 48 \text{ in } ft^2 & 48 \text{ in } ft^2 & 48 \text{ in } ft^2 & 68  in $	C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A	TIE-DOWN CO C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT H ≤ 40 FT	NFIGURATION C3 AT GRA AT GRA ≤ 200 I H ≤ 15 AT GRA N/A	ITYPE	200 FT 200 FT 200 FT 200 FT 200 FT 6 60 FT	η <b>ΓΠ, Ε</b> Δ	XPOSURE		02/05/16 [VILAIVI 07/08/16 3611 08/14/17 M M	
$\begin{array}{c c} FACE \\ A OF \\ IIT'S \\ ST FACE \\ ft^2 \\ t^2 \\ $	C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A N/A N/A	TIE-DOWN CO C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT ≤ 200 FT H ≤ 40 FT AT GRADE	NFIGURATION C3 AT GRA AT GRA ≤ 200 I H ≤ 15 AT GRA N/A N/A	DE S DE S DE S FT S DE S H AT	200 FT 200 FT 200 FT 200 FT 200 FT 3 60 FT GRADE	η <b>ΓΠ, Ε</b> Δ	XPOSURE		LAO TSB 02/05/16 [VILAIVI] 3611 RWN FLB 07/09/16 2011 LAO FLB 08/14/17 3611	EBNING EDPRESS, MIAMI TECH CUTD     SEMENTARE NOT     COMENTARE NOT     COMENTARE NOT
$ \begin{array}{c c} FACE \\ A OF \\ IIT'S \\ ST FACE \\ \hline tr^2 & 29 \text{ in } 15 \text{ in } \\ ft^2 & 36 \text{ in } 27 \text{ in } \\ ft^2 & 48 \text{ in } 36 \text{ in } \\ ft^2 & 48 \text{ in } 36 \text{ in } \\ ft^2 & 48 \text{ in } 36 \text{ in } \\ ft^2 & 48 \text{ in } 36 \text{ in } \\ ft^2 & 48 \text{ in } 36 \text{ in } \\ ft^2 & 60 \text{ in } 48 \text{ in } \\ \end{array} $	C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A N/A N/A N/A	TIE-DOWN CO C2 $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $H \leq 40 \text{ FT}$ AT GRADE AT GRADE	NFIGURATION C3 AT GRA AT GRA ≤ 200 I H ≤ 15 AT GRA N/A N/A N/A	DE S DE S DE S TT S TT S DE S TT S DE S TT S DE S TT S T	200 FT 200 FT 200 FT 200 FT 200 FT 200 FT 3 60 FT GRADE GRADE	η <b>ΓΠ, Ε</b> Δ	XPOSURE		LAO         TSB         02/05/16         IVILAIVI           RWN         FLB         07/08/16         3611           F         LAO         FLB         07/08/16           -         -         -         -	
FACE A OF IIT'S         UNIT HEIGHT         UNIT WIDTH $5T$ FACE         29 in         15 in $ft^2$ 29 in         15 in $ft^2$ 36 in         27 in $ft^2$ 48 in         36 in $ft^2$ 60 in         48 in	C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A N/A N/A N/A N/A N/A	TIE-DOWN CO C2 $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $H \leq 40 \text{ FT}$ AT GRADE AT GRADE N/A	NFIGURATION C3 AT GRA AT GRA ≤ 200 I H ≤ 15 AT GRA N/A N/A N/A	DE ≤ DE ≤ TTYPE DE ≤ TT ≤ DE ≤ DE ≤ AT AT	200 FT 200 FT 200 FT 200 FT 200 FT 200 FT 3 60 FT 2 00	η <b>ΓΠ, Ε</b> Δ	XPOSURE	D D D D D D D D D D D D D D D D D D D	LAO         TSB         02/05/16         IVILAIVI           RWN         FLB         07/08/16         3611           F         LAO         FLB         07/08/16           -         -         -         -	In the property of enclanearing both each of the property of enclanearing both each mout a mean of the property of enclanearing both each of the property
RFACE IEA OF NIT'SUNIT HEIGHTUNIT WIDTHSEST FACE29 in15 in9 ft236 in27 in4 ft248 in36 in	ALLC C1 AT GRADE N/A ≤ 120 FT	TIE-DOWN CO C2 ≤ 200 FT ≤ 200 FT ≤ 200 FT	NFIGURATION C3 AT GRA AT GRA ≤ 200 I	DE S TTYPE	200 FT 200 FT 200 FT	η <b>ΓΠ, Ε</b> Δ	XPOSURE		02/05/16 [VILAIVI 07/08/16 3611 08/14/17 M M	MIAMI TECH CUTD
RFACE EA OF NIT'S         UNIT HEIGHT         UNIT WIDTH           5 ft <sup>2</sup> 29 in         15 in           9 ft <sup>2</sup> 36 in         27 in           4 ft <sup>2</sup> 48 in         36 in           9 ft <sup>2</sup> 60 in         48 in	C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A N/A N/A N/A	TIE-DOWN CO C2 $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $H \leq 40 \text{ FT}$ AT GRADE AT GRADE	NFIGURATION C3 AT GRA AT GRA ≤ 200 I H ≤ 15 AT GRA N/A N/A N/A	DE S DE S DE S TT S TT S DE S TT S DE S TT S DE S TT S T	200 FT 200 FT 200 FT 200 FT 200 FT 200 FT 3 60 FT GRADE GRADE	η <b>ΓΠ, Ε</b> Δ	XPOSURE		LAO         TSB         02/05/16         IVILAIVI           RWN         FLB         07/08/16         3611           F         LAO         FLB         07/08/16           -         -         -         -	
FACE (A OF) IIT'S         UNIT HEIGHT         UNIT WIDTH $ft^2$ 29 in         15 in $ft^2$ 36 in         27 in $ft^2$ 48 in         36 in $ft^2$ 60 in         48 in $ft^2$ 60 in         48 in	C1 AT GRADE N/A ≤ 120 FT AT GRADE N/A N/A N/A N/A N/A	TIE-DOWN CO C2 $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $\leq 200 \text{ FT}$ $H \leq 40 \text{ FT}$ AT GRADE AT GRADE	NFIGURATION C3 AT GRA AT GRA ≤ 200 I H ≤ 15 AT GRA N/A N/A N/A	DE ≤ DE ≤ TTYPE DE ≤ TT ≤ DE ≤ DE ≤ AT AT	200 FT 200 FT 200 FT 200 FT 200 FT 200 FT 3 60 FT GRADE GRADE	η <b>ΓΠ, Ε</b> Δ	XPOSURE	D DRWNICHKO DATE MIAMI 2	LAO TSB 02/05/16 [VILAIVI] 3611 RWN FLB 07/09/16 2011 LAO FLB 08/14/17 3611	

\*\*AS AN EXAMPLE, THESE TABLES ARE PERMISSIBLE TO BE AUTHORITY HAVING JURISDICTION FOR THE APPLICABILITY

## TABLE 5 PERMISSIBLE INSTALLATION HEIGHTS: Vult=140 MPH, EXPOSURE B

(FOR USE WITH A RISK CATEGORY II STRUCTURE\*\*\*) RISK CATEGORY II IS PER ASCE 7-10

	,		<u>A</u>		ATION ROOF HEIGH	T
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	Unit Height	UNIT WIDTH	C1	C2	C3	C4
6 ft <sup>2</sup>	29 in	15 in	≤ 100 FT	≤ 200 FT	≤ 140 FT	≤ 200 FT
9 ft²	36 in	27 in	≤ 80 FT	≤ 200 FT	≤ 100 FT	≤ 200 FT
4 ft²	48 in	36 in	≤ 200 FT	≤ 200 FT	≤ 200 FT	≤ 200 FT
6 ft²	48 in	36 in	≤ 200 FT	≤ 200 FT	≤ 200 FT	≤ 200 FT
9 ft²	48 in	36 in	≤ 80 FT	≤ 200 FT	≤ 120 FT	≤ 200 FT
12 ft <sup>2</sup>	48 in	36 in	H ≤ 30 FT	≤ 200 FT	H ≤ 40 FT	≤ 200 FT
16 ft²	48 in	36 in	AT GRADE	≤ 200 FT	H ≤ 15 FT	≤ 200 FT
20 ft <sup>2</sup>	60 in	48 in	AT GRADE	≤ 160 FT	AT GRADE	≤ 200 FT
25 ft <sup>2</sup>	60 in	48 in	N/A	H ≤ 60 FT	AT GRADE	≤ 100 FT
30 ft <sup>2</sup>	60 in	48 in	N/A	H ≤ 30 FT	N/A	H ≤ 40 FT
36 ft <sup>2</sup>	60 in	48 in	N/A	H ≤ 15 FT	N/A	H ≤ 15 FT

## TABLE 6 PERMISSIBLE INSTALLATION HEIGH

(FOR USE WITH A RISK CATEGORY II STRUCTURE\*\*\*) RISK CATEGORY II IS PER ASCE 7-10

			<u>A</u>		ATION ROOF HEIGH	<u>T</u>
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	С3	<b>C4</b>
6 ft²	29 in	15 in	H ≤ 30 FT	≤ 200 FT	H ≤ 40 FT	≤ 200 FT
9 ft <sup>2</sup>	36 in	27 in	H ≤ 15 FT	≤ 200 FT	H ≤ 30 FT	≤ 200 FT
4 ft <sup>2</sup>	48 in	36 in	≤ 200 FT	≤ 200 FT	≤ 200 FT	≤ 200 FT
6 ft <sup>2</sup>	48 in	36 in	≤ 200 FT	≤ 200 FT	≤ 200 FT	≤ 200 FT
9 ft <sup>2</sup>	48 in	36 in	H ≤ 15 FT	≤ 200 FT	H ≤ 40 FT	≤ 200 FT
12 ft <sup>2</sup>	48 in	36 in	AT GRADE	≤ 200 FT	AT GRADE	≤ 200 FT
16 ft <sup>2</sup>	48 in	36 in	N/A	≤ 140 FT	AT GRADE	≤ 200 FT
20 ft <sup>2</sup>	60 in	48 in	N/A	H ≤ 40 FT	N/A	≤ 80 FT
25 ft <sup>2</sup>	60 in	48 in	N/A	H ≤ 15 FT	N/A	H ≤ 30 FT
30 ft <sup>2</sup>	60 in	48 in	N/A	AT GRADE	N/A	AT GRADE
36 ft <sup>2</sup>	60 in	48 in	N/A	AT GRADE	N/A	AT GRADE

## TABLE 7 PERMISSIBLE INSTALLATION HEIGHTS: Vult=140 MPH, EXPOSURE D

(FOR USE WITH A RISK CATEGORY II STRUCTURE\*\*\*) RISK CATEGORY II IS PER ASCE 7-10

			4	ALLOWABLE INSTALL TIE-DOWN CONF	ATION ROOF HEIGH	<u>IT</u>
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	СЗ	C4
6 ft²	29 in	15 in	AT GRADE	≤ 200 FT	H ≤ 15 FT	≤ 200 FT
9 ft²	36 in	27 in	AT GRADE	≤ 200 FT	AT GRADE	≤ 200 FT
4 ft <sup>2</sup>	48 in	36 in	≤ 200 FT	≤ 200 FT	≤ 200 FT	≤ 200 FT
6 ft <sup>2</sup>	48 in	36 in	≤ 100 FT	≤ 200 FT	≤ 180 FT	≤ 200 FT
9 ft <sup>2</sup>	48 in	36 in	AT GRADE	≤ 200 FT	H ≤ 15 FT	≤ 200 FT
12 ft <sup>2</sup>	48 in	36 in	AT GRADE	≤ 200 FT	AT GRADE	≤ 200 FT
16 ft <sup>2</sup>	48 in	36 in	N/A	≤ 80 FT	N/A	≤ 120 FT
20 ft <sup>2</sup>	60 in	48 in	N/A	H ≤ 15 FT	N/A	H ≤ 40 FT
25 ft <sup>2</sup>	60 in	48 in	N/A	AT GRADE	N/A	AT GRADE
30 ft <sup>2</sup>	60 in	48 in	N/A	AT GRADE	N/A	AT GRADE
36 ft <sup>2</sup>	60 in	48 in	N/A	N/A	N/A	AT GRADE

\*\*\*AS AN EXAMPLE, THESE TABLES ARE PERMISSIBLE TO BE USED WITHIN BREVARD COUNTY. CHECK WITH LOCAL AUTHORITY HAVING JURISDICTION FOR THE APPLICABILITY OF THIS TABLE WITHIN CERTAIN FLORIDA COUNTIES.

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### STEEL TIE-DOWN CLIP