



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY, FLORIDA
PRODUCT CONTROL SECTION
11805 S.W. 26 Street, Room 208
T (786) 315-2590, F (786) 315-2599

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/economy

F & L Aluminum Parts, Inc.
1720 N.W. 22nd Court, Unit #3
Pompano Beach, Florida 33069

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Aluminum Stands for Rooftop Equipment

APPROVAL DOCUMENT: Drawing No. FNL.13001, titled "Aluminum Stands for Rooftop Equipment (Round Posts)", sheets 1 through 3 of 3, with latest revision date 08/16/2018 prepared by Milton Cubas, P.E., Inc, signed and sealed by Milton Cubas, P.E. on 08/16/2018, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises **NOA No. 17-1226.24** and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Sifang Zhao, P. E.**



S.Z.
12/06/2018

NOA No. 18-0828.09
Expiration Date: May 15, 2024
Approval Date: December 06, 2018
Page 1

F & L Aluminum Parts, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. FNL.13001, titled “Aluminum Stands for Rooftop Equipment (Round Posts & Telescopic Crossbar)”, sheets 1 through 3 of 3, prepared by Milton Cubas, P.E., Inc., signed and sealed by Milton Cubas, P.E., on 08/16/18.

B. TESTS

1. None.

C. CALCULATIONS

1. Structural analysis and calculations, complying with FBC-2017, 6th edition, submitted, sheets 1 through 80 of 80, prepared, signed, sealed, and dated 08/07/18 by Milton Cubas, P. E.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement of conformance complying with FBC-2017 along with structural calculations sheets 1 through 80 of 80, prepared, signed, sealed, and dated 08/07/18 by Milton Cubas, P. E.

G. OTHERS

1. Notice of Acceptance No. **17-1226.24**, issued to F & L Aluminum Parts, Inc., for their “**Aluminum Stands for Rooftop Equipment.**”, approved on 07/05/18 and expiring on 05/15/24.



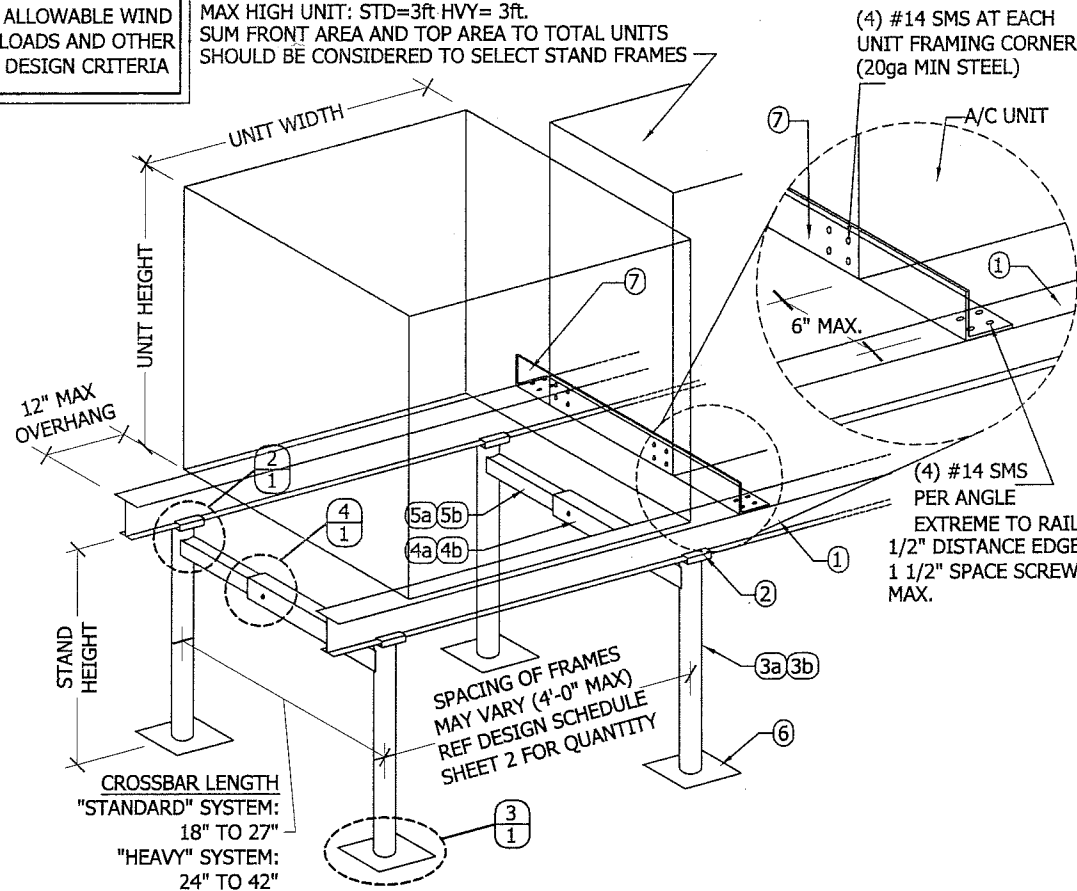
Sifang Zhao, P. E.
Product Control Examiner
NOA No. 18-0828.09
Expiration Date: May 15, 2024
Approval Date: December 06, 2018

ALUMINUM ROOFTOP EQUIPMENT STAND

WITH ROUND POSTS & TELESCOPIC CROSSBAR

REFER TO DESIGN SCHEDULE FOR ALLOWABLE WIND LOADS AND OTHER DESIGN CRITERIA

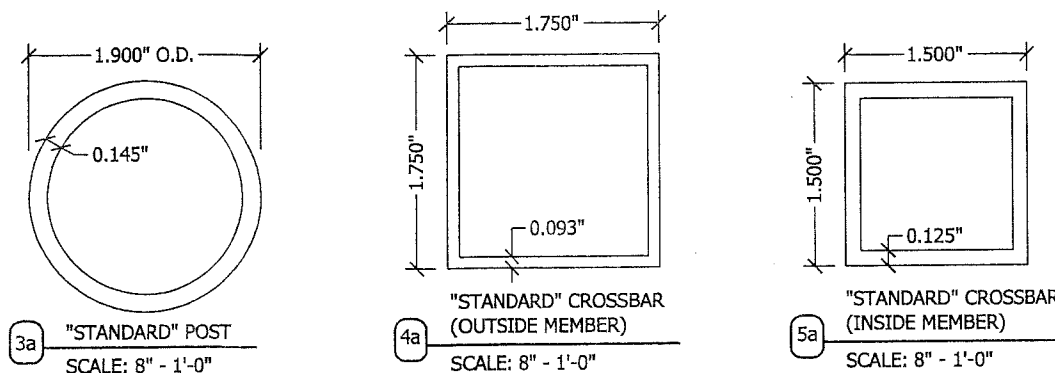
FRONT AREA SMALLER UNIT MAX: STD=16 ft² HVY= 25 ft²
 TOP AREA SMALLER UNIT MAX: STD=7.50 ft² HVY= 16.0 ft²
 MAX HIGH UNIT: STD=3ft HVY= 3ft.
 SUM FRONT AREA AND TOP AREA TO TOTAL UNITS SHOULD BE CONSIDERED TO SELECT STAND FRAMES



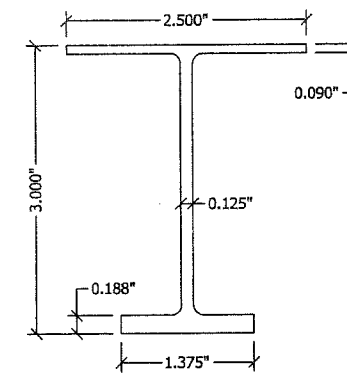
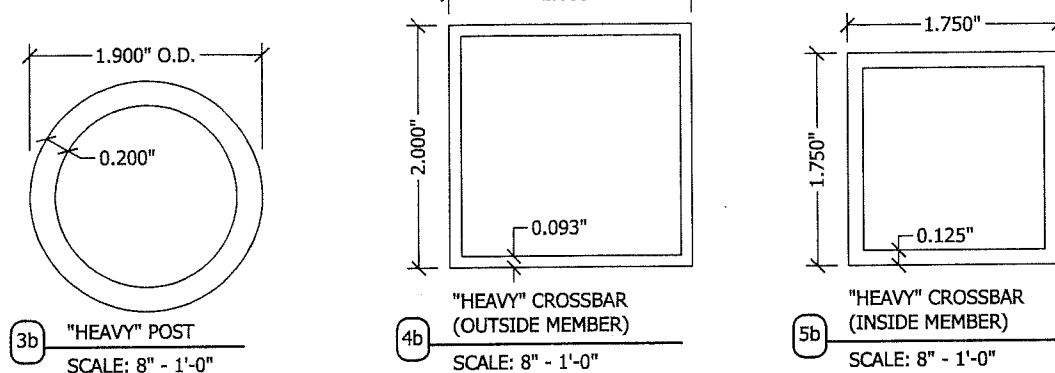
1 STAND ASSEMBLY

SCALE: N.T.S. ISOMETRIC VIEW

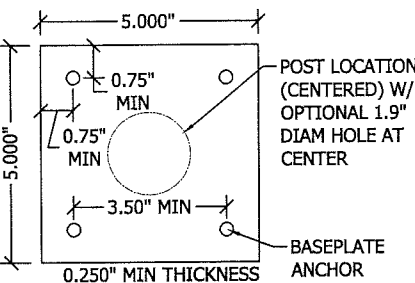
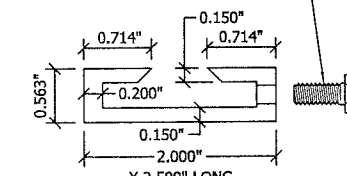
"STANDARD" SYSTEM



"HEAVY" SYSTEM

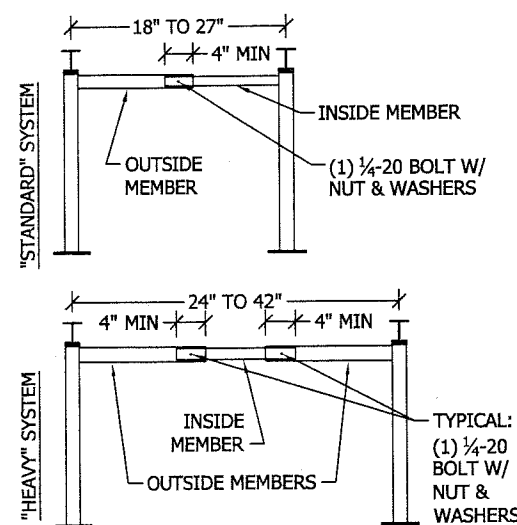
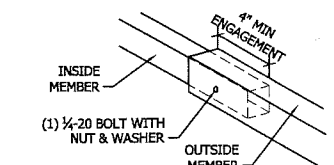
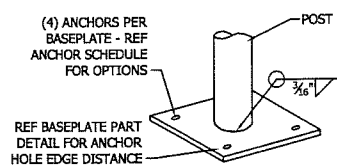


1/4-20 SET SCREW TO HOLD RAIL IN POSITION AFTER INSTALLATION (ANY HEAD STYLE: HEX, THUMB, ETC.)



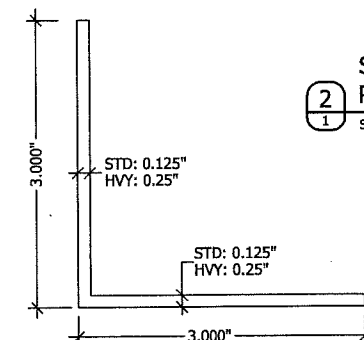
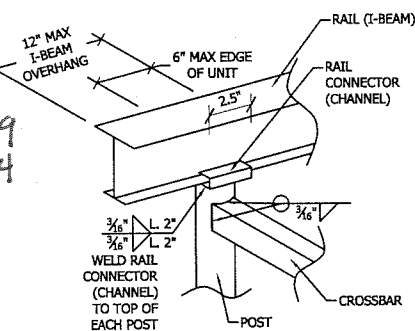
GENERAL NOTES

- THIS SYSTEM HAS BEEN EVALUATED IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE, FOR USE WITHIN & OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- SITE WIND PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A SITE-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE USING ALLOWABLE STRESS DESIGN METHOD.
- 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 PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE-SPECIFIC DOCUMENTS AND APPLY FOR ONE-TIME MIAMI-DADE NOA FOR USE IN CONJUNCTION WITH THIS APPROVAL.
- PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS (ASD) - REF "REACTION SCHEDULE".
- ALL ALUMINUM EXTRUSIONS SHALL BE 6061-T6 ALLOY & TEMPER, UNLESS NOTED OTHERWISE. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS REQUIREMENTS, USING FILLER ALLOYS 4043, 4047, 5183, 5356, OR 5556.
- STANDS SHALL BE INSTALLED WITH MINIMUM CLEAR HEIGHT AS SPECIFIED IN THE ABOVE-NOTED BUILDING CODE. "STAND HEIGHT" AS USED HEREIN IS NOT NECESSARILY EQUIVALENT TO "STAND CLEAR HEIGHT" AS SPECIFIED IN THE BLDG CODE.
- VIBRATION ISOLATOR PADS SHALL BE PROVIDED BY CONTRACTOR BETWEEN UNITS & STAND.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT FASTENING AS SHOWN HEREIN WILL NOT VOID THE EQUIPMENT MANUFACTURER'S WARRANTY, ESPECIALLY WHERE UNITS ARE INSTALLED WITH OVERHANG PAST RAIL (SEE TIE-DOWN DETAILS).
- ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 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.
- ANY STEEL IN CONTACT WITH ALUMINUM SHALL BE PAINTED OR PLATED AS PRESCRIBED IN THE ABOVE-NOTED BUILDING CODE.



PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 18-0828.09 Expiration Date 05/15/2024

By Miami Dade Product Control



NOTE: THIS ELEMENT ONLY APPLIES WHEN THE UNIT TO INSTALL IS SMALLER THAN UNITS AROUND.

SEAL MILTON CUBAS

P.E. # 51902

MILTON CUBAS, P. E., INC.
 CONSULTING ENGINEERS P.E. # 51902
 C.A. # 27267 S.I. # 6999901
 1302 NE 25 ST
 NORTH MIAMI, FLORIDA 33161
 PHONE: (305) 881-4174 FAX (305) 881-4175
 E-MAIL: miltoncubas@msn.com
 Web site: www.miltoncubaspe.com



FEBRUARY 19 2018
 MILTON CUBAS, P.E., INC.
 FL. P.E. # 51902 C.A. # 27267

DATE	DESCRIPTION	BY

ALUMINUM STANDS FOR ROOFTOP EQUIPMENT (ROUND POSTS)
 MIAMI-DADE NOA

F & L ALUMINUM PARTS, Inc
 1720 NW 22 CT, UNIT 3
 POMPANO BEACH, FL. 33069

DRAWING NUMBER

FNL.13001

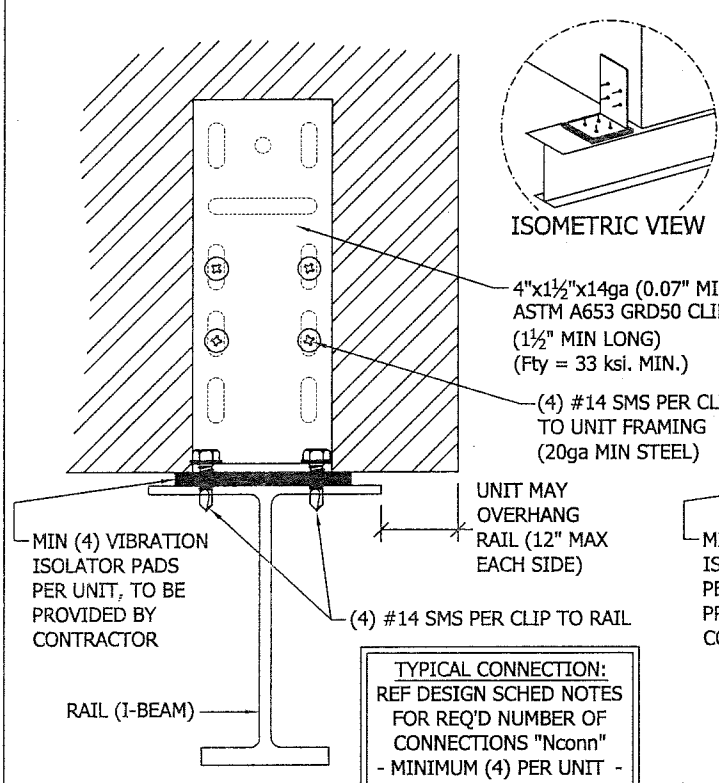
SHEET

1 OF 3

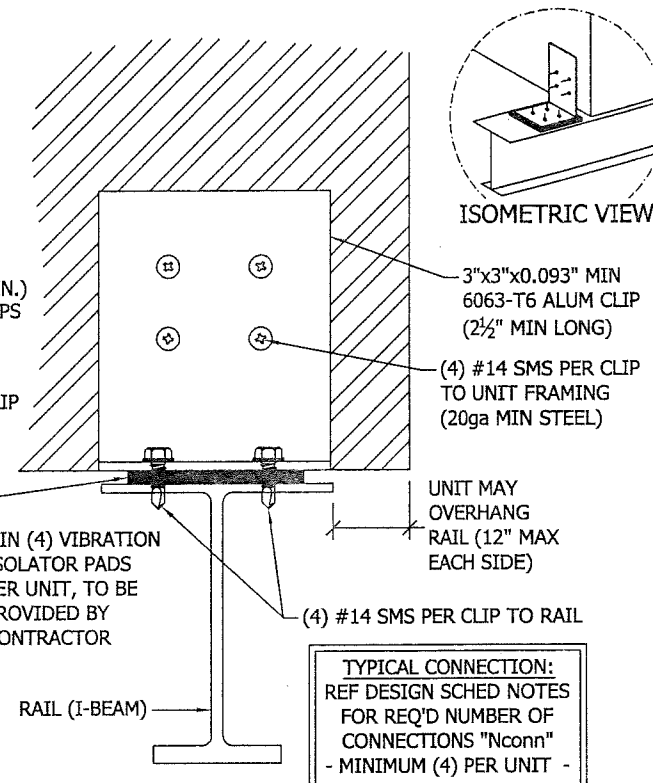
DESIGN SCHEDULE

TOTAL FRONT AREA	MAX UNIT HEIGHT	MAX STAND HEIGHT	2 FRAMES		3 FRAMES		4 FRAMES		5 FRAMES		6 FRAMES		7 FRAMES		8 FRAMES		9 FRAMES		10 FRAMES		MAX TOP AREA		
			LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT		LATERAL	UPLIFT
			(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)		(psf)	(psf)
4 ft²	24"	18"	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	8.92 FT²
		24"	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
6 ft²	28"	18"	246	194	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	11.15 FT²
		24"	208	164	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	170	134	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
8 ft²	32"	18"	192	151	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	13.38 FT²
		24"	157	124	235	185	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	128	101	192	152	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
10 ft²	36"	18"	160	126	242	191	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	14.86 FT²
		24"	125	99	188	148	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	103	81	154	121	205	162	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
12 ft²	36"	18"	133	105	202	159	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	17.83 FT²
		24"	104	82	157	124	209	165	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	85	67	128	101	171	135	214	169	250	197	250	197	250	197	250	197	250	197	250	197	
16 ft²	36"	18"	100	79	151	119	192	152	231	182	250	197	250	197	250	197	250	197	250	197	250	197	23.78 FT²
		24"	78	62	117	93	157	124	196	154	235	185	250	197	250	197	250	197	250	197	250	197	
		30"	64	51	96	76	128	101	160	126	192	152	224	177	250	197	250	197	250	197	250	197	
20 ft²	36"	18"	80	63	121	96	161	127	202	159	242	191	250	197	250	197	250	197	250	197	250	197	29.72 FT²
		24"	63	49	94	74	125	99	157	124	188	148	219	173	250	197	250	197	250	197	250	197	
		30"	51	40	77	61	103	81	128	101	154	121	179	142	205	162	231	182	250	197	250	197	
25 ft²	42"	18"	64	51	96	76	129	102	159	125	181	143	204	161	227	179	249	197	250	197	250	197	31.58 FT²
		24"	50	39	75	59	100	79	125	99	150	118	175	138	200	158	225	177	250	197	250	197	
		30"	41	32	61	48	82	65	102	81	123	97	143	113	164	129	184	145	204	161	250	197	
30 ft²	48"	18"	54	42	81	64	104	82	122	96	139	110	157	124	174	137	191	151	209	165	250	197	33.44 FT²
		24"	42	33	63	49	83	66	104	82	125	99	146	115	167	132	188	148	209	165	250	197	
		30"	34	27	51	40	68	54	85	67	103	81	120	94	137	108	154	121	171	135	250	197	
40 ft²	48"	18"	40	32	60	48	81	64	95	75	108	85	122	96	135	107	149	117	162	128	250	197	35.67 FT²
		24"	31	25	47	37	63	49	78	62	94	74	110	87	125	99	141	111	157	124	250	197	
		30"	26	20	38	30	51	40	64	51	77	61	90	71	103	81	115	91	128	101	250	197	
50 ft²	60"	18"	32	25	45	36	54	43	63	50	72	57	81	64	90	71	100	79	109	86	250	197	37.90 FT²
		24"	25	20	38	30	50	40	63	49	72	57	81	64	90	71	100	79	109	86	250	197	
		30"	21	16	31	24	41	32	51	40	62	49	72	57	82	65	92	73	103	81	250	197	

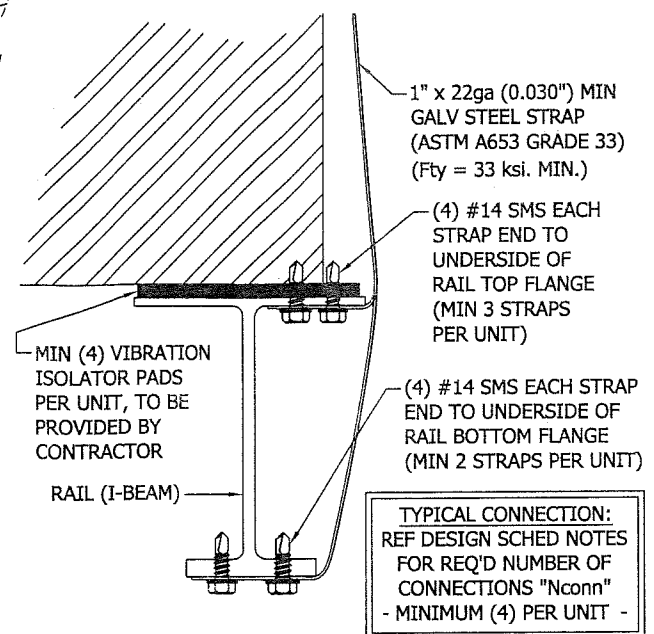
TOTAL FRONT AREA	MAX UNIT HEIGHT	MAX STAND HEIGHT	2 FRAMES		3 FRAMES		4 FRAMES		5 FRAMES		6 FRAMES		7 FRAMES		8 FRAMES		9 FRAMES		10 FRAMES		MAX TOP AREA		
			LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT	LATERAL	UPLIFT			
			(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)	(psf)		(psf)	
4 ft²	24"	18"	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	8.92 FT²
		24"	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
6 ft²	28"	18"	246	194	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	11.15 FT²
		24"	246	194	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	214	169	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
8 ft²	32"	18"	192	151	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	13.38 FT²
		24"	192	151	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	161	127	242	191	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
10 ft²	36"	18"	160	126	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	14.86 FT²
		24"	158	125	237	187	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	129	102	194	153	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
12 ft²	36"	18"	133	105	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	17.83 FT²
		24"	131	104	197	156	250	197	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	108	85	161	127	215	170	250	197	250	197	250	197	250	197	250	197	250	197	250	197	
16 ft²	36"	18"	100	79	189	149	236	186	250	197	250	197	250	197	250	197	250	197	250	197	250	197	23.78 FT²
		24"	99	78	148	117	197	156	246	195	250	197	250	197	250	197	250	197	250	197	250	197	
		30"	81	64	121	96	161	127	202	159	242	191	250	197	250	197	250	197	250	197	250	197	
20 ft²	36"	18"	80	63	152	120	203	160	250	197	250	197	250	197	250	197	250	197	250	197	250	197	29.72 FT²
		24"	79	62	118	93	158	125	197	156	237	187	250	197	250	197	250	197	250	197	250	197	
		30"	65	51	97	76	129	102	161	127	194	153	226	178	250	197	250	197	250	197	250	197	
25 ft²	42"	18"	67	53	121	96	162	128	198	156	226	179	250	197	250	197	250	197					



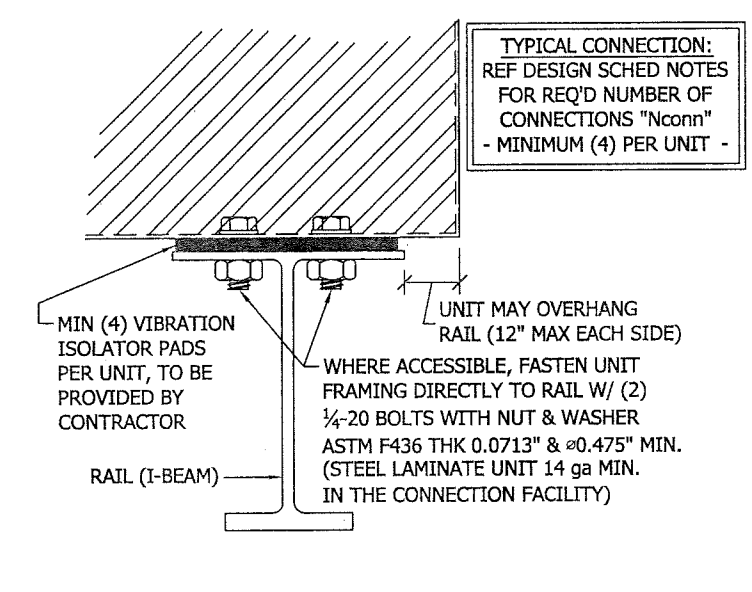
4 CLIPPED UNIT CONNECTION
3 SCALE: N.T.S. VERT SECTION



5 CLIPPED UNIT CONNECTION
3 SCALE: N.T.S. VERT SECTION



6 STRAPPED UNIT CONNECTION
3 SCALE: N.T.S. VERT SECTION



7 DIRECT UNIT CONNECTION
3 SCALE: N.T.S. VERT SECTION

ANCHOR SCHEDULE:

- TO CONCRETE (MIN 2,000 PSI)
 - A. 3/8" POWERS FASTENING INNOVATIONS WEDGE-BOLT+ 3 1/2" MIN EMBED 4 1/2" MIN EDGE DISTANCE
- TO WOOD HOST STRUCTURE
 - B. 3/8" LAG SCREW 3 1/2" MIN THREAD PENETRATION
- TO STEEL (MIN 1/4" THICK)
 - C. 3/8"-16 SELF-THREADING METAL SCREWS (SAE GRADE 5) WITH 1" DIAM WASHER STEEL SUBSTRATE MIN. Fu = 58 ksi. Fy = 36 ksi.

ANCHOR NOTES:

1. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS, & LOCATED PER BASEPLATE COMPONENT DETAIL(S).
2. ENSURE MINIMUM EMBEDMENT, EDGE DISTANCE, & SPACING FOR ALL ANCHORS ARE IN ACCORDANCE WITH ANCHOR SCHEDULE.
3. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES SHEATHING, UNDERLAYMENT, INSULATION, AND OTHER ROOFING MATERIALS.
4. MINIMUM 3/4" EDGE DISTANCE IS CONSIDERED IN DESIGN FOR ALL ANCHORS TO WOOD HOST STRUCTURE (i.e. ANCHOR SHALL BE LOCATED IN CENTER OF TRUSS/RAFTER WHERE FASTENED TO NARROW FACE OF NOMINAL 2x LUMBER).
5. WOOD HOST STRUCTURE SHALL BE "SOUTHERN PINE" WITH G=0.55 OR GREATER SPECIFIC GRAVITY (≈ DENSITY).
6. WHERE HOST STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD (U.N.O.).
7. SELF-TAPPING OR SELF-THREADING METAL SCREWS SHALL BE INSTALLED WITH FULL THREAD ENGAGEMENT INTO METAL HOST STRUCTURE AND MAY HAVE A FLAT HEAD, PAN HEAD, TRUSS HEAD, OR OTHER HEAD STYLES.
8. FASTENERS THAT INCORPORATE MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE ANY HEAD STYLE, UNLESS INDICATED OTHERWISE BY MFR.

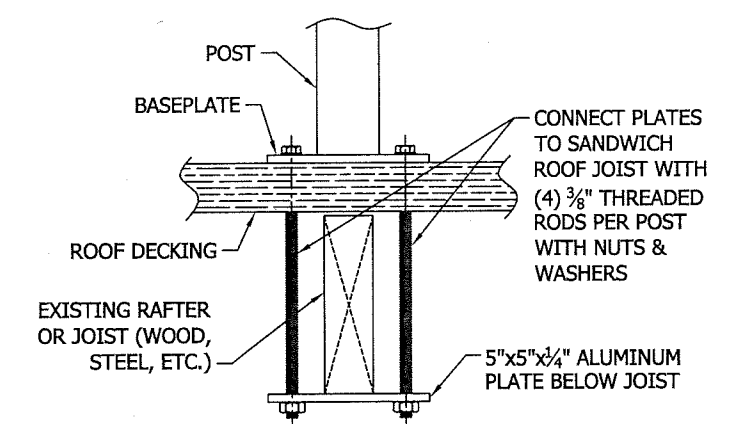
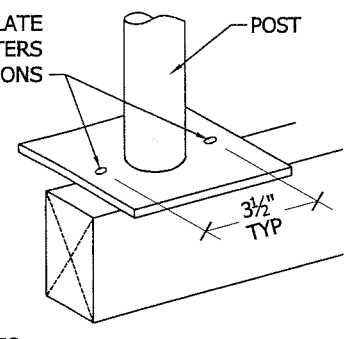
ALTERNATE: (2) ANCHORS PER BASEPLATE FOR INSTALLATION TO WOOD RAFTERS - REF ANCHOR SCHED FOR OPTIONS

THIS INSTALLATION OPTION SHALL BE LIMITED TO THE FOLLOWING:

- 12 SQ FT MAX TOTAL AREA
- (3) FRAMES MIN
- 24" MAX STAND HT
- MAX ALLOWABLE DESIGN PRESSURES:
 - .. "STANDARD" SYSTEM : 106.4 PSF LATERAL / 51.5 PSF UPLIFT
 - .. "HEAVY" SYSTEM : 108.0 PSF LATERAL / 52.2 PSF UPLIFT

8 ALT: DIRECT RAFTER/JOIST BASEPLATE ANCHORAGE

3 SCALE: N.T.S. ISOMETRIC



9 ALT: SUB-RAFTER/SUB-JOIST BASEPLATE ANCHORAGE

3 SCALE: N.T.S. VERT SECTION

PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 18-0828.09 Expiration Date 05/15/2024

By *CS* Miami Dade Product Control

SEAL MILTON CUBAS
P.E. # 51902

MILTON CUBAS, P. E., INC.
CONSULTING ENGINEERS P.E. # 51902
C.A. # 27267 S.I. # 6999901
1302 NE 125 ST
NORTH MIAMI, FLORIDA 33161
PHONE: (305) 891-4174 FAX: (305) 891-4175
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Web site: www.miltoncubaspe.com

FEBRUARY 19 2018
MILTON CUBAS, P.E., INC.
FL P.E. # 51902 C.A. # 27267

DATE	DESCRIPTION	BY

ALUMINUM STANDS FOR ROOFTOP EQUIPMENT (ROUND POSTS)
MIAMI-DADE NOA

F & L ALUMINUM PARTS, Inc
1720 NW 22 CT, UNIT 3
POMPANO BEACH, FL. 33069

DRAWING NUMBER FNL.13001

SHEET 3 OF 3