

C:\Users\eric\Engineering Express\Production - Documents\Projects\20-26643 - MPD - HD Wall Bracket\WPL\FBC 2020\20-26643a Wall Mounted AC Mounts (2020 FBC).dwg 08/21/2020 - 12:46pm eric

VISIT ECALC.IO/26643
FOR ENGINEER CERTIFIED ORIGINALS
& MORE INFORMATION ABOUT THIS DOCUMENT
OR SCAN THE QR CODE TO THE RIGHT >
VISIT ENGINEERINGEXPRESS.COM/STORE
FOR ADDITIONAL PLANS, REPORTS & RESOURCES

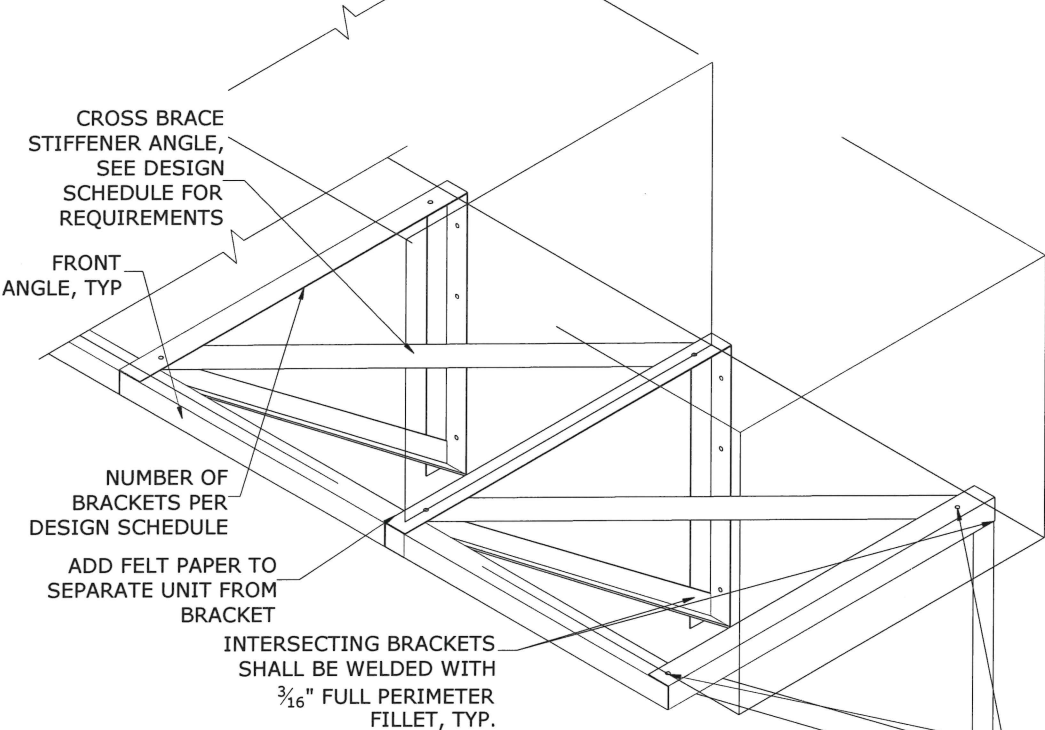


MIAMI TECH, INC.

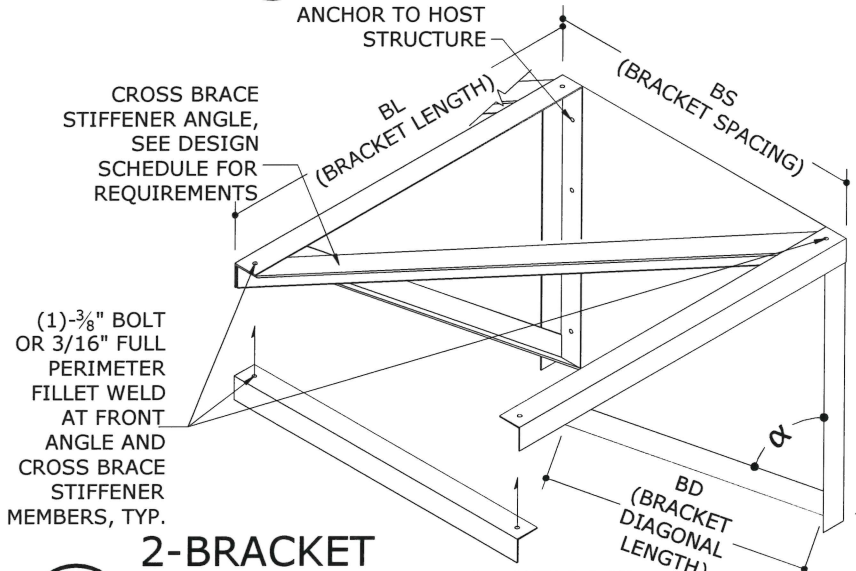
ALUMINUM WALL BRACKET SUPPORTS

3611 NW 74TH STREET, MIAMI, FL 33147

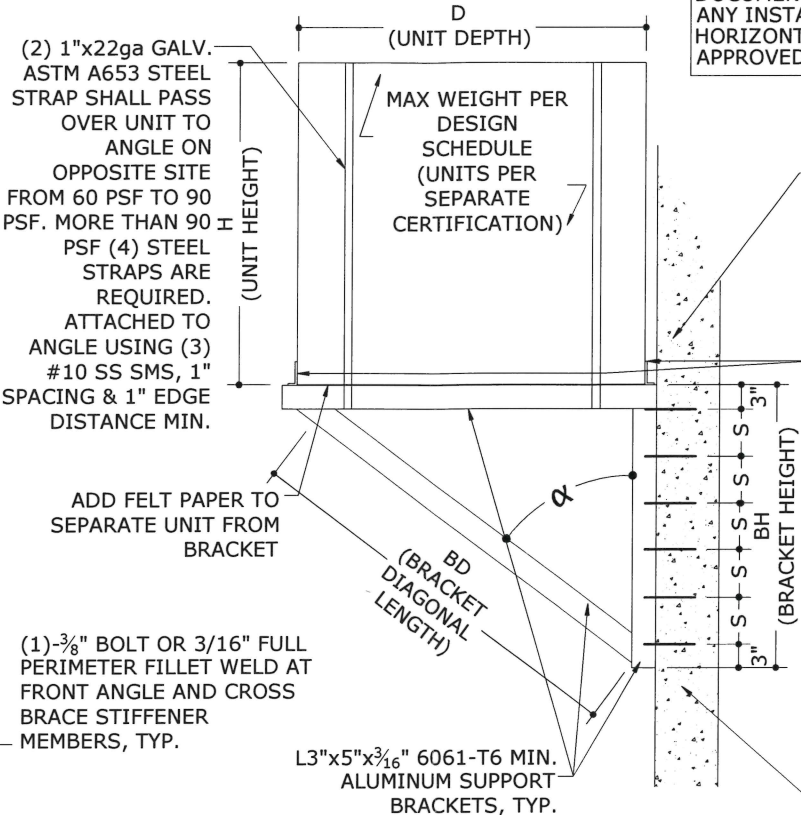
NOTE:
WALL BRACKET SUPPORTS AS ILLUSTRATED
HEREIN ARE INTENDED FOR ATTACHMENT
TO VERTICAL SURFACES ONLY. ROOF-TOP
INSTALLATIONS AND ZONE 5
INSTALLATIONS MAY BE APPROVED BY THIS
DOCUMENT IF THESE CONDITIONS ARE MET.
ANY INSTALLATIONS TO ROOF-TOP
HORIZONTAL SURFACES ARE NOT
APPROVED BY THIS DOCUMENT



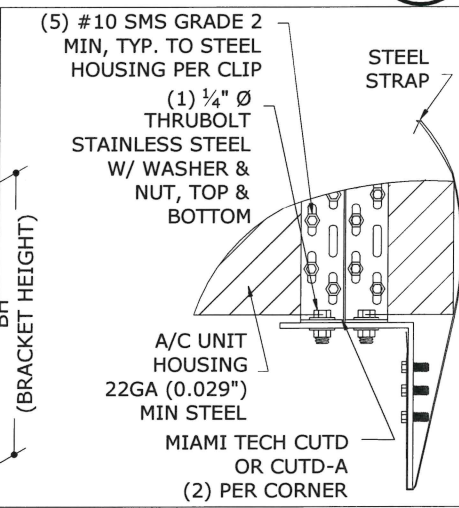
1
1 N.T.S. ISOMETRIC VIEW



3
1 N.T.S. ISOMETRIC VIEW



2
1 N.T.S. SECTION VIEW



4
1 N.T.S. SECTION VIEW

ANCHOR SCHEDULE:

SUBSTRATE	ANCHOR
CONCRETE: (5 1/4" THICK MIN, 3000 PSI MIN.)	3/8"Ø CARBON STEEL POWERS WEDGE BOLTS WITH 3/8"Ø SAE WASHER, 3 1/2" FULL EMBED TO NON-CRACKED CONCRETE, 4.5" MIN. EDGE DISTANCE, SPACING AS ILLUSTRATED IN ELEVATION/SECTION.
GROUT FILLED CMU: (SHALL CONFORM TO ASTM C90)	3/8"Ø CARBON STEEL POWERS WEDGE BOLTS WITH 3/8"Ø SAE WASHER, 3 1/2" FULL EMBED TO GROUT FILLED BLOCK, 12" MIN. EDGE DISTANCE, SPACING AS ILLUSTRATED IN ELEVATION/SECTION.
WOOD: (G=0.55 MIN.) SEE NOTE 5	1/2"Ø CARBON STEEL WOOD LAG SCREW W/ 1/2"Ø SAE WASHER, 2" MIN. THREAD PENETRATION TO WOOD HOST, 3/4" MIN. EDGE DISTANCE, SPACING AS ILLUSTRATED IN SECTION.

1. EMBEDMENT AND EDGE DISTANCE EXCLUDES FINISHES, IF APPLICABLE.
2. ENSURE MINIMUM EDGE DISTANCE AS NOTED IN ANCHOR SCHEDULE.
3. INSTALL ALL ANCHORS PER MANUFACTURER'S SPECIFICATIONS.
4. PRE-DRILL WOOD LAGS TO AVOID SPLITTING OF WOOD MEMBERS.
5. FOR DESIGN PRESSURES **MORE THAN 90 PSF** A SITE SPECIFIC ATTACHMENT **IS REQUIRED** FOR WOOD SUBSTRATES.

DESIGN SCHEDULE:

CONFIGURATION TYPE	BRACKET DIMENSIONS					MAX UNIT DIMENSIONS		ANCHORS		MAXIMUM TOTAL UNIT WEIGHT				UTILIZE STIFFENERS FOR INSTALLATIONS WITH THE FOLLOWING NUMBER OF BRACKETS
	BL	BS	BH	BD	α	D	H	QTY. PER BRACKET LEG	S	(2)	(3)	(4)	(5)	
AWB143036-WLR24	30 "	24 "	36 "	±47 "	±40°	30 "	30 "	(6)	6 "	550 LB	1100 LB	1650 LB	2200 LB	2 BRACKETS ONLY
AWB143636-WLR30	36 "	30 "	36 "	±50 "	±45°	36 "	38 "	(6)	6 "	550 LB	1100 LB	1650 LB	2200 LB	2 BRACKETS ONLY
AWB144836-WLR36	48 "	36 "	36 "	±60 "	±53°	45 "	45 "	(6)	6 "	550 LB	1100 LB	1650 LB	2200 LB	2 & 3 BRACKETS

MAXIMUM ALLOWABLE DESIGN PRESSURES:

+/- 170 PSF

DESIGN NOTES:

DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED SEPARATELY ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE USING ASD METHODOLOGY. SITE-SPECIFIC PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7-16 AND CHAPTER 16 OF THE FLORIDA BUILDING CODE SEVENTH EDITION (2020) SHALL BE LESS THAN OR EQUAL TO THE LATERAL AND UPLIFT DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.

GENERAL NOTES:

1. THIS SPECIFICATION HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 6TH EDITION FLORIDA BUILDING CODE (2017) AND 7TH EDITION FLORIDA BUILDING CODE (2020) FOR USE WITHIN AND OUTSIDE THE HVHZ. DESIGN CRITERIA BEYOND AS STATED HEREIN MAY REQUIRE ADDITIONAL SITE-SPECIFIC SEALED ENGINEERING.
2. THE ARCHITECT/ENGINEER OF RECORD FOR THE PROJECT SUPERSTRUCTURE WITH WHICH THIS DESIGN IS USED SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR.
3. MAXIMUM DIMENSIONS AND WEIGHT OF A/C UNIT SHALL CONFORM TO SPECIFICATIONS STATED HEREIN.
4. SEPARATE 'SITE-SPECIFIC' SEALED ENGINEERING SHALL BE REQUIRED IN ORDER TO DEVIATE FROM LOADS, OR MAXIMUM MEMBER SPANS CONTAINED HEREIN.
5. 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.
6. ALL FASTENERS TO BE 3/8"Ø OR GREATER SAE GRADE 5 UNLESS NOTED OTHERWISE. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.
7. ALL ALUMINUM EXTRUSIONS SHALL BE 6061-T6 OR 6005-T5 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE.
8. ALUMINUM WELDING SHALL BE PERFORMED IN ACCORDANCE WITH FBC SECTION 2003.8.1.4 WITH WELD FILLER ALLOYS MEETING ANSI/AWS A5.10 STANDARDS TO ACHIEVE ULTIMATE DESIGN STRENGTH IN ACCORDANCE WITH THE ALUMINUM DESIGN MANUAL, TABLE A.3.6 ALL ALUMINUM CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE TOLERANCES, QUALITY AND METHODS OF CONSTRUCTION AS SET FORTH IN FBC SECTION 2003.2 AND THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE-ALUMINUM. MINIMUM WELD IS 3/16" THROAT FULL PERIMETER FILLET WELD UNLESS OTHERWISE NOTED.
9. CONCRETE ANCHORS NOTED HEREIN SHALL BE EMBEDDED TO UN-CRACKED CONCRETE ONLY. INSTALL ALL CONCRETE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
10. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
11. ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS. ALL MECHANICAL SPECIFICATIONS (CLEAR SPACE, TONNAGE, ETC) SHALL BE AS PER MANUFACTURER RECOMMENDATIONS AND ARE THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.
12. ENGINEER SEAL AFFIXED HERE TO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
13. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
14. ALTERATIONS, ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

FRANK BENNARDO PE
PE# 0046549 CA# 9885

08/21/2020

CERTIFYING ENGINEER IS THE NAME LISTED ON THE SEAL

VALID FOR 1 PERMIT ONLY U.N.O.

NOTICE: IF THIS SHEET DOES NOT CONTAIN AN ORIGINAL SIGNATURE & ENGINEER SEAL:

IF THERE IS A DIGITAL SIGNATURE ON SHEET 1, THIS SHEET IS PART OF A DIGITALLY SIGNED FILE, SHALL REMAIN IN DIGITAL FORMAT, & **PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED.** IF THERE IS NO DIGITAL SIGNATURE ON SHEET 1 OR THIS SHEET DOES NOT CONTAIN AN ENGINEER'S ORIGINAL SIGNATURE & SEAL, THIS SHEET IS A COPY/DRAFT.

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

MIAMI TECH, INC.
3611 NW 74TH ST
MIAMI, FL
(305) 693-7054
ALUMINUM WALL STAND FOR A/C EQUIPMENT
MASTER PLAN SHEET
FLORIDA BUILDING CODE SEVENTH EDITION (2020)

REMARKS	DRWN	CHKD	DATE
REV FOR 2020 FBC	TT	FB	08/11/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS. AND SHALL BE RE-RETURNED TO THE COMPANY WITHOUT ANY DELAY. ANY REPRODUCTION, COPIES, OR ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-26643

SCALE: NTS UNLESS NOTED

1 OF 1