MIAMI TECH, INC.

WALL BRACKET AC STAND
VALID FOR USE INSIDE AND OUTSIDE THE HVHZ ZONE (SEE LIMITATIONS HEREIN)

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. A DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR CERTIFYING THE APPLICATION OF THIS INFORMATION TO ANY SITE-SPECIFIC LOCATION.

ATTENTION:SCANNED COPIES ARE NOT VALID FOR PERMITTING PURPOSES

MAXIMUM ALLOWABLE
DESIGN PRESSURES (ASD):

+/- 90 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 7-22 AND CHAPTER 16 OF FLORIDA BUILDING CODE EIGHTH EDITION (2023) SHALL BE LESS THAN OR EQUAL TO THE LATERAL AND UPLIFT DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.

TERMINOLOGY:

THE FOLLOWING ABBREVIATIONS MAY APPEAR IN THIS APPROVAL:

"ADDTL." FOR "ADDITIONAL", "AHJ" FOR "AUTHORITY HAVING JURISDICTION", "ALUM" FOR "ALUMINUM, "ASD" FOR "ALLOWABLE STRESS DESIGN", "BO" FOR "BUILD-OUT", "CS" FOR "CARBON STEEL", "EA." FOR "EACH", "E.D."/"EDGE"/"EDGE DIST." FOR "EDGE DISTANCE", "ELEV" FOR "ELEVATION", "EMBED" FOR "EMBEDMENT", "EQ"/"EQUIV." FOR "EQUIVALENT", "EXT" FOR "EXTERIOR", "FBC" FOR "FLORIDA BUILDING CODE", "ft" OR " ' " FOR "FEET", "G" FOR "SPECIFIC GRAVITY", "GA" FOR "GAUGE", "GALV" FOR "GALVANIZED", "GFB" FOR "GROUT-FILLED BLOCK", "GR" FOR "GRADE", "HOLLOW" FOR "HOLLOW BLOCK", "HORIZ" FOR "HORIZONTAL", "HVHZ" FOR "HIGH-VELOCITY HURRICANE ZONE", "in" OR " '' " FOR "INCHES", "INT" FOR "INTERIOR", "KSI" FOR "1,000 lb / in^2", "L" FOR "LENGTH", "LB" FOR "POUND", "MAX" FOR "MAXIMUM, "MIN" FOR "MINIMUM", "N.T.S." FOR "NOT TO SCALE", "O.C." FOR "ON-CENTER", "P.E." FOR "PROFESSIONAL ENGINEER", "PERP" FOR "PERPENDICULAR", "PSF" FOR "POUNDS PER SQUARE FOOT (lb/ft^2)", "PSI" FOR "POUNDS PER SQUARE INCH (lb/in^2)", "QTY" FOR "QUANTITY", "REF." FOR "REFERENCE", "SCHED." FOR "SCHEDULE", "SDS" FOR "SELF-DRILLING SCREWS", "SMS" FOR "SHEET METAL SCREWS", "SPECS" FOR "SPECIFICATIONS", "SS" FOR "STAINLESS STEEL", "SUB" FOR "SUBMITTAL", "TAS" FOR "TESTING APPLICATION STANDARD", "TYP." FOR "TYPICAL", "ULT" FOR "ULTIMATE LOADS", "U.N.O." FOR "UNLESS NOTED OTHERWISE", "UTS" OR "Fu" FOR "ULTIMATE TENSILE STRENGTH/STRESS", "VERT" FOR "VERTICAL", "WLL" FOR "WORKING LOAD LIMIT", "W/" FOR "WITH", "W/O" FOR "WITHOUT", "YS" FOR "YIELD STRENGTH", "#" FOR "NUMBER", "&" FOR "AND", AND "Ø" FOR "DIAMETER".

CONTACT ENGINEERING EXPRESS FOR ADDITIONAL ABBREVIATION/TERMINOLOGY CLARIFICATIONS.

ATTENTION:SCANNED COPIES ARE NOT VALID FOR PERMITTING PURPOSES. ORIGINAL SIGNATURE AND RAISED SEAL OR DIGITAL SEAL REQUIRED TO BE VALID PER CODE

GENERAL NOTES:

1. THIS SYSTEM HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 8TH EDITION (2023). ALSO APPLICABLE FOR THE IBC/IRC (2021). DESIGN SHALL UTILIZE ASD DESIGN METHOD USING ASCE 7-22 CODES FOR SITE SPECIFIC APPLICATIONS AS APPLICABLE.
2. APPLICABLE FOR USE WITHIN AND OUTSIDE THE HVHZ. DESIGN CRITERIA BEYOND AS STATED HEREIN MAY REQUIRE ADDITIONAL SITE-SPECIFIC SEALED ENGINEERING.
3. 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.
4. MAXIMUM DIMENSIONS AND WEIGHT OF A/C UNIT SHALL CONFORM TO SPECIFICATIONS STATED HEREIN.
5. SEPARATE 'SITE-SPECIFIC' SEALED ENGINEERING SHALL BE REQUIRED IN ORDER TO DEVIATE FROM LOADS, OR MAXIMUM MEMBER SPANS CONTAINED HEREIN.
6. 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.
7. 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.
8. ALL STEEL MEMBERS SHALL HAVE TENSILE STRENGTH OF 90 KSI MIN.
9. ALL ALUMINUM EXTRUSIONS/ MEMBERS SHALL BE 6061-T6 OR 6005-T5 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE.

GENERAL NOTES (CONTINUED):

10. 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. MINIMUM WELD IS 3/16" THROAT FULL PERIMETER FILLET WELD UNLESS OTHERWISE NOTED.
11. CONCRETE ANCHORS NOTED HEREIN SHALL BE EMBEDDED TO UN-CRACKED CONCRETE ONLY. INSTALL ALL CONCRETE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
12. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
13. 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.
14. 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.
15. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
16. ALTERATIONS, ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

PAGE INDEX:

SHEET INDEX

VISIT ECALC.IO/66578
FOR SITE-SPECIFIC DEVIATIONS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THIS QR CODE
VISIT ENGINEERINGEXPRESS.COM/STORE FOR ADDITIONAL PLANS, REPORTS & RESOURCES

Frank Bennardo PE
FL PE0046549 COA #9885

DECEMBER 13, 2023

FL

DIGITAL SEAL NOTICE:
IF THIS DOCUMENT IS DIGITALLY SIGNED, THIS SHEET IS PART OF A DIGITALLY SIGNED FILE. IT SHALL REMAIN IN DIGITAL FORMAT, SHALL BE VERIFIED BY ELECTRONIC MEANS, & PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED.
PRINTED DOCUMENT NOTICE:
IF THIS DOCUMENT IS PRINTED & DOES NOTCONTAIN AN ENGINEER'S ORIGINAL SIGNATURE & SEAL, THIS DOCUMENT IS VOID & NOT VALID FOR USE. PHOTOCOPIES ARE NOT PERMITTED FOR USE.
VALID FOR 1 PERMIT ONLY U.N.O.

ENGINEERING EXPRESS®
POSTAL ADDRESS:
2234 NORTH FEDERAL HWY #7664
BOCA RATON, FL 33431
ENGINEERINGEXPRESS.COM

MIAMI TECH, INC.
3611 NW 74TH ST
MIAMI, FL 33417
(305) 693-7054

WALL BRACKET AC STAND
MASTE PLAN SHEET
FBC 8TH ED (2023) | IBC (2021)

REMARKS	DRWN	CHKD	DATE
PREV. VERSION (20-26638)	CCB	FLB	11/19/21
2023 FBC UPDATE	MRT	RWN	12/13/23
-	-	-	-
-	-	-	-
-	-	-	-

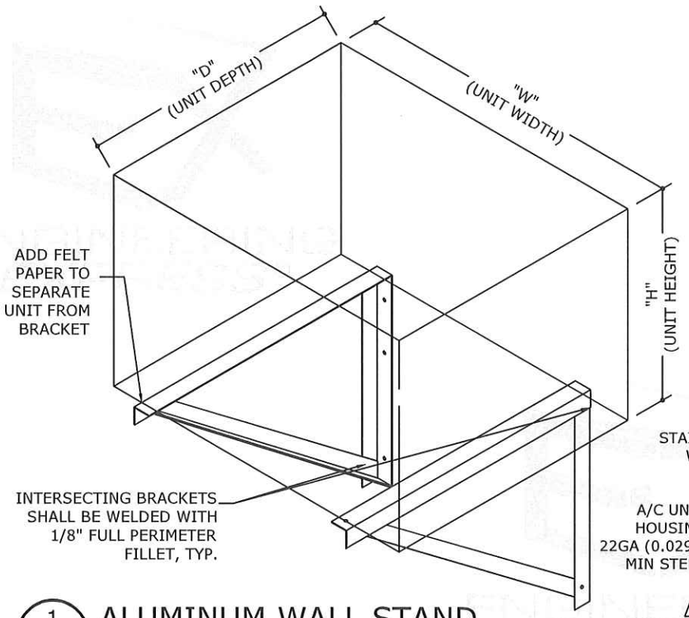
23-66578

SCALE: NTS UNLESS NOTED

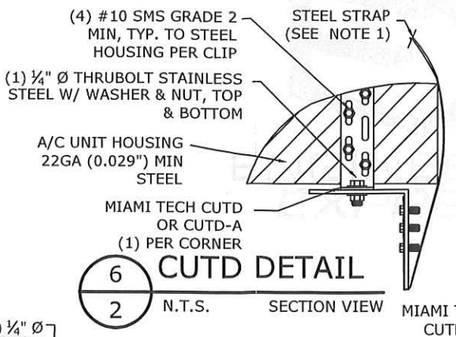
1 OF 2

ALUMINUM WALL BRACKET SPECIFICATIONS

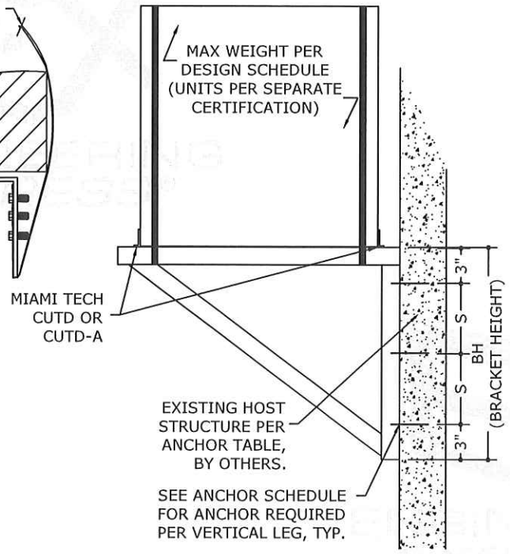
ATTENTION:SCANNED COPIES ARE NOT VALID FOR PERMITTING PURPOSES



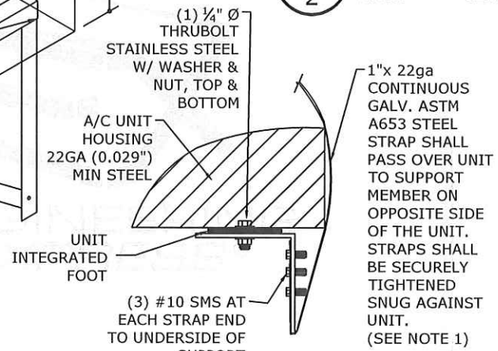
1/2 ALUMINUM WALL STAND — N.T.S. — ISOMETRIC VIEW



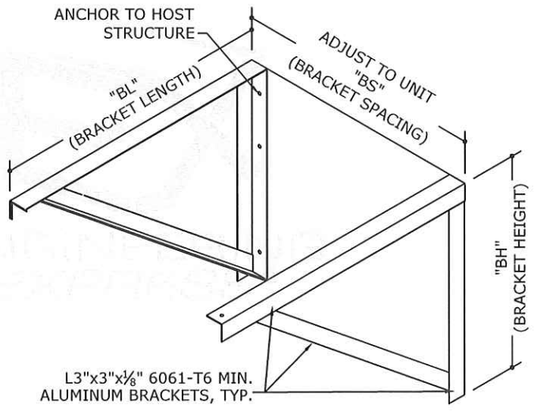
6/2 CUTD DETAIL — N.T.S. — SECTION VIEW



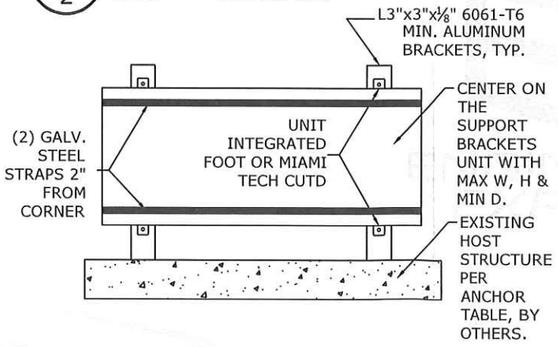
2/2 ALUMINUM WALL STAND — N.T.S. — SECTION VIEW



5/2 STRAP DETAIL — N.T.S. — SECTION VIEW



3/2 ALUMINUM WALL STAND — N.T.S. — ISOMETRIC VIEW



4/2 ALUMINUM WALL STAND — N.T.S. — PLAN VIEW

DESIGN SCHEDULE:

CONFIGURATION TYPE	BRACKET DIMENSIONS			MAX UNIT DIMENSIONS			MIN DIM	ANCHORS		MAXIMUM TOTAL UNIT WEIGHT
	BL	BS	BH	W	D	H	D	QTY. PER BRACKET LEG	S	
AWB2418	24 "	ADJUST TO UNIT	18 "	30 "	20 "	30 "	10 "	(3)	6 "	350 LB
AWB3630	36 "		30 "	30 "	30 "	35 "	15 "	(3)	12 "	350 LB
AWB4836	48 "		36 "	36 "	36 "	40 "	28 "	(3)	15 "	400 LB

NOTE:

WALL BRACKET SUPPORTS AS ILLUSTRATED HEREIN ARE NOT INTENDED FOR ROOF-TOP MOUNTING CONDITIONS. THIS DESIGN SHALL NOT BE USED AT PARAPETS, ANY PART OF THE BUILDING THAT EXCEEDS THE FINISHED ROOF ELEVATION, OR ANY WALL ZONE WITHIN 10% OF THE SHORTEST BUILDING DIMENSION PER ASCE 7-22.

ANCHOR SCHEDULE:

SUBSTRATE	ANCHOR
CONCRETE: (5" THICK MIN, 3000 PSI MIN.)	⅜"Ø DEWALT SCREW-BOLT+ WITH STD SAE WASHER, 2½" FULL EMBED TO NON-CRACKED CONCRETE, 4" MIN. EDGE DISTANCE, SPACING AS ILLUSTRATED IN ELEVATION/SECTION.
GROUT FILLED CMU: (SHALL CONFORM TO ASTM C90)	⅜"Ø DEWALT SCREW-BOLT+ WITH STD SAE WASHER, 2½" FULL EMBED TO GROUT FILLED BLOCK, 12" MIN. EDGE DISTANCE, SPACING AS ILLUSTRATED IN ELEVATION/SECTION.
WOOD: (G=0.55 MIN.)	½"Ø CARBON STEEL WOOD LAG SCREW W/ STD SAE WASHER, 2⅜" MIN. THREAD PENETRATION TO WOOD HOST, ¾" MIN. EDGE DISTANCE, SPACING AS ILLUSTRATED IN SECTION.
STEEL: (GR. 33, ⅛" THICK MIN.)	5/16"Ø STAINLESS STEEL SELF DRILLING SCREW W/ STD SAE WASHER. ¾" EDGE DISTANCE MIN., 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.

ATTENTION:SCANNED COPIES ARE NOT VALID FOR PERMITTING PURPOSES. ORIGINAL SIGNATURE AND RAISED SEAL OR DIGITAL SEAL REQUIRED TO BE VALID PER CODE

Frank Bennardo PE
FL PE0046549 COA #9885
DECEMBER 13, 2023
FL

ENGINEERING EXPRESS®
POSTAL ADDRESS:
2234 NORTH FEDERAL HWY #7664
BOCA RATON, FL 33431
ENGINEERINGEXPRESS.COM

MIAMI TECH, INC.
3611 NW 74TH ST
MIAMI, FL 33417
(305) 693-7054

WALL BRACKET AC STAND
MASTE PLAN SHEET
FBC 8TH ED (2023) | IBC (2021)

REMARKS	DRWN	CHKD	DATE
PREV. VERSION (20-26638)	CCB	FLB	11/19/21
2023 FBC UPDATE	MRT	RWN	12/13/23
-	-	-	-
-	-	-	-
-	-	-	-

23-66578

SCALE: NTS UNLESS NOTED

2 OF 2