

THE METAL SHOP
2541 W. Dunnellon Road
Dunnellon, FL 34433

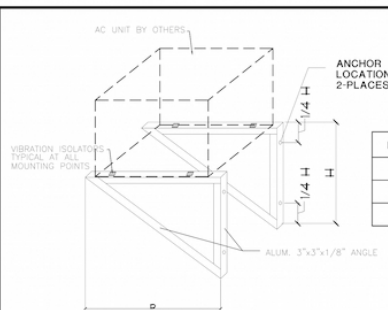
Fax: 352-522-0007

13. VIBRATION ISOLATOR PADS SHALL BE PROVIDED BY THE A/C CONTRACTOR SO AS NOT TO CAUSE VIBRATION TO EXISTING SUB-STRUCTURE



DATE: AUG 11, 2015

[illegible]



WALL BRACE SIZE CHART			
PART No.	H DIM	D DIM	
7-840	18"	24"	
7-845	30"	36"	
7-850	36"	48"	

WALL BRACE REACTIONS TABLE					
WALL MATERIAL	ALLOWABLE BUILDING HEIGHT AT 180 MPH	MAXIMUM ALLOWABLE WEIGHT PER UNIT	UPLIFT	LATERAL	COMP. BENDING MOMENT
MASONRY BLK	30'	400 LBS	485*	903*	605*
CONCRETE 2000 psi MIN.	30'	425 LBS	485*	903*	642*
STEEL STUD	30'	350 LBS	485*	903*	495*
WOOD STUD	30'	350 LBS	485*	903*	495*
MAXIMUM DESIGN WIND PRESSURE					
WALL BRACE ATTACHED TO - MASONRY, CONCRETE STRUCTURE			MAX WIND PRESSURE 90 PSF		
STEEL STUD OR WOOD HOST STRUCTURE			MAX WIND PRESSURE 79.0 PSF		

DESIGN WIND PRESSURE CALCULATED PER CHAPTER 26 OF ASCE 7-2010 FOR 180 MPH, CATEGORY II, EXPOSURE C & D. CONTACT THE METAL SHOP FOR SITE SPECIFIC ENGINEERING FOR MOUNTING ABOVE 30'.

WALL BRACE FASTENERS:

STEEL
use Min. (2) 5/16"x 1 1/4" TEC Screw with self locking washer, install additional blocking and/or studs as required to support wall brace. Architect/Engineer of Record required for design of metal stud wall framing to support equipment loads from wall brace.

WOOD STUD

Use Min. (2) 1/2"x 3 3/4" Hex Head Lag screw w/ SS washer, 2 3/4" min. embed into stud. Install additional blocking and additional studs as required to support wall brace. Architect/Engineer of Record required for design of wood frame structure to support equipment loads from wall brace.

INSTALLATION INSTRUCTIONS:

- Layout all parts as shown prior to assembly.
- Make sure at least 1 1/2" of condenser housing is resting on each wall stand.
- Mount equipment wall stands to host structure per anchor schedule. (Anchor hardware is not supplied with wall braces)
- Add vibration pads at condenser mounting points as specified by condenser manufacturer.
- Attach side of condensing unit to 1" wide G-90 Hot dipped galvanized - 16 Gauge metal hurricane strap with (2) #14x3/4" SS TEK screws. Attach opposite end of anchor strap to wall braces with minimum 1-#14x3/4" SS bolt. Hurricane anchors shall be installed taught, with no slack. Maximum spacing between TEK screws is 12".

CONCRETE

Min. (2) 1/2" dia x 3 3/4" SS Hilti Kwik Bolt or Equivalent with 2 3/4" minimum embedment into 2500 psi concrete.

MASONRY

Min. (2) 1/2" dia x 3 3/4" SS Hilti Kwik Bolt or Equivalent with 2 3/4" minimum embedment into solid filled cells

use 5/8"x10" Galv. or SS hex bolt where thru CMW where no filled cells.

Aluminum Wall Braces

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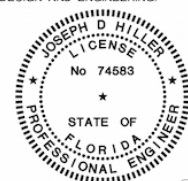
www.metalshop.org

Phone: 888-441-2492

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NOTES:

- ALL WALL BRACES SHALL BE FROM 6063-T5 ALUMINUM 0.125"x3"x3" angle. MIG WELD ALL JOINTS AND SEAMS.
- YIELD STRENGTH OF STANDS SHALL BE 21 KSI AND CONFORM TO ASME AND ADM STANDARDS.
- WALL BRACES SHALL BE ANCHORED TO WALL TO RESIST WIND LOADS OF 186 MPH AS PER ASCE 7-2010.
- ALL BOLTS SHALL BE STAINLESS STEEL A-304 OR EQUIVALENT, UNLESS OTHERWISE SPECIFIED. ANCHOR STRAP FOR A/C UNIT NOT INCLUDED.
- HURRICANE STRAPS SHALL BE 16 GA. G-90 HOT DIPPED GALVANIZED. METAL SHOP p/n 770 OR 771 RECOMMENDED.
- BOLTS SHALL HAVE A MINIMUM EDGE DISTANCE OF 1" IN ALUMINUM ANGLE BRACKET.
- WIND LOAD CALCULATIONS BASED ON THE TYPICAL SURFACE AREA OF A/C CONDENSOR OR HEAT PUMP UNITS.
- WELL FILLER SHALL MEET AWS STANDARDS FOR ALUMINUM AND SHALL HAVE A TENSILE STRENGTH OF 40 KSI.
- ALL GALVANIZED OR PLAIN STEEL IN CONTACT WITH ALUMINUM SHALL HAVE PLASTIC OR RUBBER WASHERS, SPACERS, OR BUSHINGS TO PREVENT GALVANIC CORROSION OF DISSIMILAR METALS.
- THE DESIGN OF THE WALL BRACES AS INDICATED, ANY DEVIATION INVALIDATES DESIGN AND ENGINEERING.



SIGNATURE: Joseph D. Hiller

DATE: AUG 11, 2015

REVISIONS

NO.	DATE	DESCRIPTION
1	8/4/2015	AS NOTED
2	8/11/2015	REVISED

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