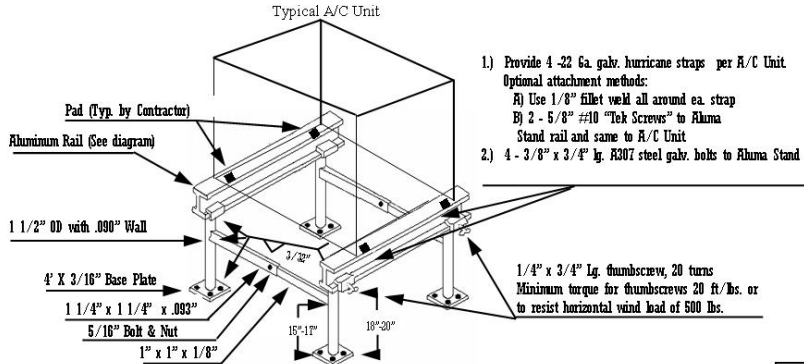


# ADJUSTABLE CONDENSING UNIT BASE "ALUMA STAND" Exposure "C"



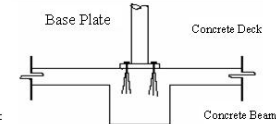
**Complies With ASCE 7-98**

## DESIGN WIND PRESSURE

	Maximum Wind Pressure
A/C Stand on Concrete Roof or Steel Joist Structure	<b>67.8 psf</b>
A/C Stand on Wood Deck Roof	<b>59.0 psf</b>

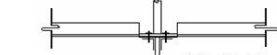
## Typical Connection to Std. Weight Concrete

FASTENERS:  
4 - 1/4" Hilti "KWIK Bolt II"  
w/ 2" Min. Embedment  
OR  
4 - 1/4" Dia. Rawl Muston/Head Spikes w/ 1 1/4" Min. Embedment



## Typical Connection to Steel Joist

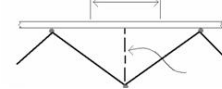
Cut away metal deck plate to bear directly on joist top chord



OPTIONAL:  
Four (4) #14 Self Tapping Tek Screws

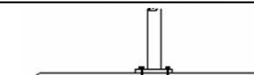
4 - HILTI Model WED522P10 x 3/4" Lg. Power Driven Fasteners (typ. ea. baseplate)

## Joist Stiffener Requirements



Add web member when A/C stand support is not on panel points

## Typical Connection to Wood Beam/Truss



OPTIONAL  
2 - 3/8" lag screws w/ 3 1/2" Min. Embedment into Beam/Truss (typ. Ea. Base Plate)

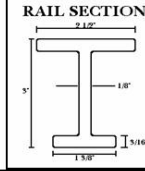
PRIMARY  
4 - 3/8" lag screws w/ 2 1/2" Min. Embedment into Beam/Truss (typ. Ea. Base Plate)

## A/C STAND REACTIONS TABLE

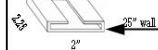
ROOF MATERIAL	ALLOWABLE ELEVATION @ 146 MPH	ALLOWABLE ELEVATION @ 150 MPH	ALLOWABLE WGT/UNIT	UPLIFT	LATERAL	COMPRESSION	BENDING MOMENT
Concrete Deck Steel Joist	85'	65'	300 lbs	175#	150#	474#	125.0 ft.lb
Wood Deck	45'	33'	300 lbs	175#	150#	474#	144.0 ft.lb

### Notes:

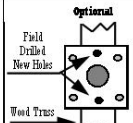
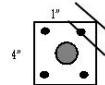
- 1 Frames 6061-T6/6005-T5 Aluminum Alloy (an exterior exposure alloy), all joints welded, other than shown
- 2 Yield strength shall be 35 ksi and conform to the American Aluminum Association standards
- 3 Weld filler shall be aluminum alloy 4043 with a tensile strength of 15 ksi
- 4 Frame withstands wind loads as per 2001 Florida Building Code & ASCE 7-98
- 5 It is the responsibility of the installing contractor to provide adequate anchorage as shown on this plan, and to provide corrosion resistant isolation pads at the bottom of the base plates when bearing on concrete and steel structures
- 6 Expansion bolts & lags screws shall have a minimum spacing of 2.5" & a minimum edge distance of 1" for lags and 3" for expansion bolts
- 7 Vibration isolator pads shall be provided by the A/C Contractor so as not to cause vibration to existing sub-structure
- 8 Calculations are based on the surface of the A/C unit. This is determined by multiplying the unit width by the unit height, with the result being the surface square footage. The maximum sizes allowed for the Aluma Stand are denoted in the table depicted on page 2.



## CLAMP DETAIL



## BASE PLATE DETAIL



Bromley-Cook Engineering  
Structural Engineering Services  
William Cook, P.E. #43904  
2004 N.E. 49th St.  
Ft. Lauderdale, FL 33308

1309 SW 1st Way  
Deerfield Beach, FL 33441  
(954) 480-9819

Precision  
Aluminum  
Products, Inc

Drawn By:  
CNP

Revision  
Dates  
7/30/96  
11/25/97  
12/4/01  
2/27/02  
6/15/02

Side  
1 of 2