



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

www.miamidade.gov

NOTICE OF ACCEPTANCE (NOA)

F & L Aluminum Parts, Inc.
1710 N.W. 22nd Court, Unit #7
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 by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Aluminum Roof Mounted Stand Frame Support for Air Conditioning Units

APPROVAL DOCUMENT: Drawing No. S-1, titled " Air Conditioning Stands Florida ", sheets 1 through 3 of 3, prepared by Milton Cubas, P.E., Inc., dated May 12, 2009, signed and sealed by Milton Cubas, P.E., on December 02, 2009, 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 Division.

MISSILE IMPACT RATING: None

LABELING: Each stand frame shall bear a permanent label with the manufacturer's name or logo, city, state and the 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 # 06-0922.03** and consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
12/30/2009

NOA No. 09-0709.04
Expiration Date: 12/28/2011
Approval Date: 12/30/2009
Page 1

F & L Aluminum Parts, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0922.03

A. DRAWINGS

1. *Drawing No. 06-501, titled " Air Conditioning Stands ", sheets 1 through 3 of 3, prepared by Thornton Tomasetti, dated September 13, 2006, signed and sealed by John W. Knezevich, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *Calculation titled " Air Conditioning Stands Calculations ", dated September 15, 2006, sheets 1 through 160 of 160, signed and sealed by J. W. Knezevich, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. S-1, titled " Air Conditioning Stands Florida ", sheets 1 through 3 of 3, prepared by Milton Cubas, P.E., Inc., dated May 12, 2009, signed and sealed by Milton Cubas, P.E., on December 02, 2009.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *Calculation titled " Air Conditioning Stands ", dated May 13, 2009, sheets 1 through 206 of 206, signed and sealed by Milton Cubas, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

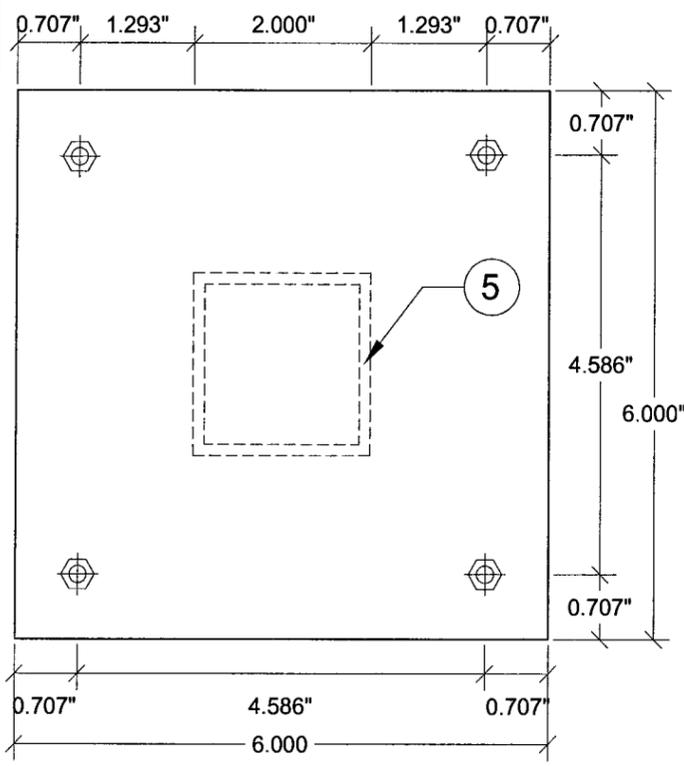


**Helmy A. Makar, P. E., M.S.
Senior Product Control Examiner**

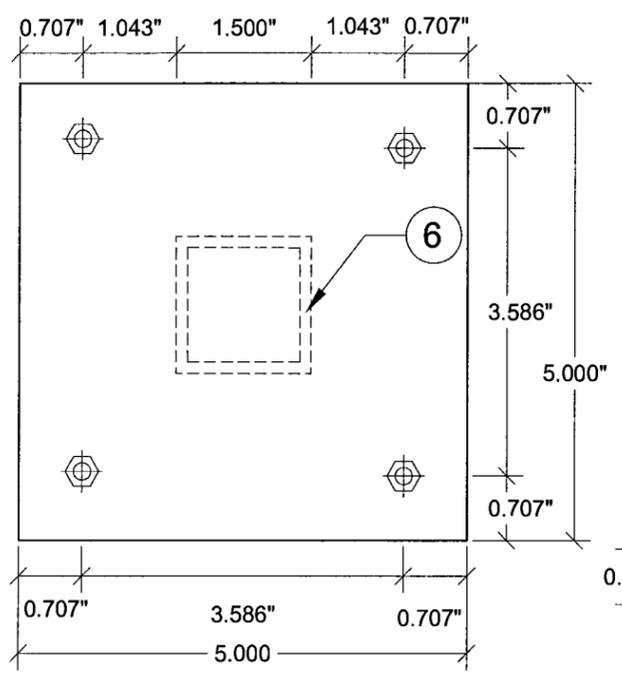
NOA No. 09-0709.04

Expiration Date: 12/28/2011

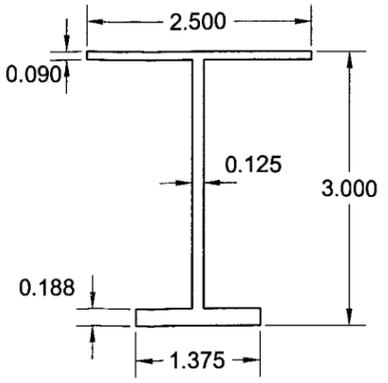
Approval Date: 12/30/2009



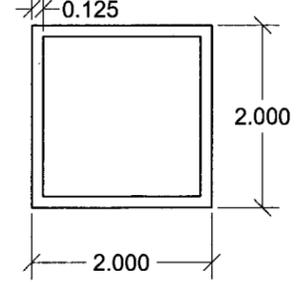
1 (ALUMINUM ALLOY 6061-T6)
2" COLUMN BASE PLATE
SCALE: 1:2



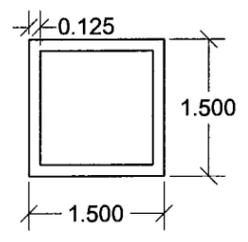
2 (ALUMINUM ALLOY 6061-T6)
1 1/2" COLUMN BASE PLATE
SCALE: 1:2



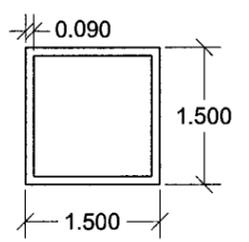
3 (ALUM. ALLOY 6061-T6)
RAIL (I-BEAM)
SCALE: 1:2



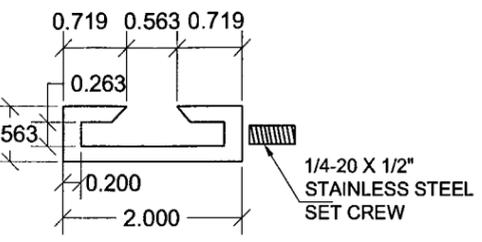
5 (ALUM. ALLOY 6061-T6)
2" COLUMN
SCALE: 1:2



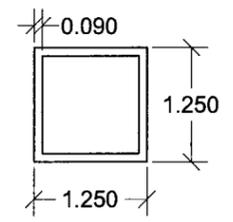
6 (ALUM. ALLOY 6061-T6)
1 1/2" COLUMN
SCALE: 1:2



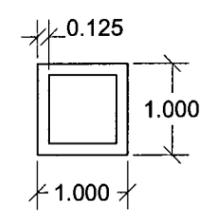
7 (ALUM. ALLOY 6061-T6)
BEAM TUBE
SCALE: 1:2



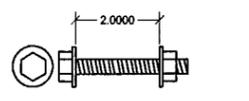
4 (ALUM. ALLOY 6061-T6)
RAIL BASE
SCALE: 1:2



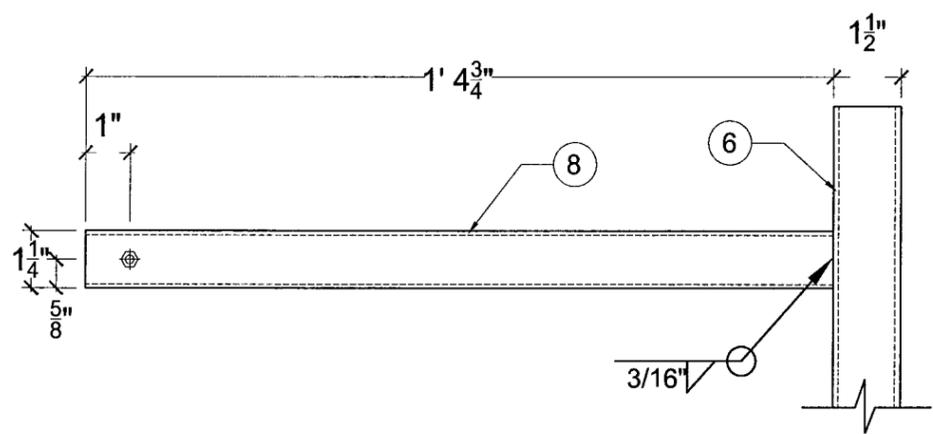
8 (ALUM. ALLOY 6061-T6)
BEAM TUBE
SCALE: 1:2



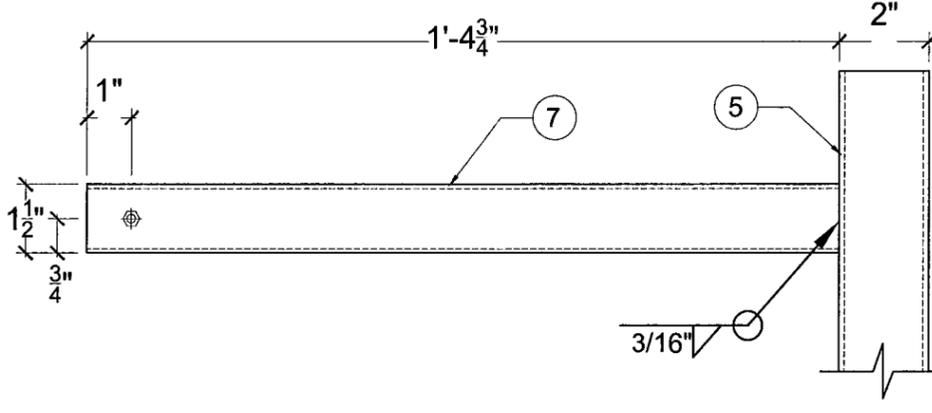
9 (ALUM. ALLOY 6061-T6)
BEAM TUBE
SCALE: 1:2



10 1/4-20 STAINLESS STEEL THRU BOLT WITH NUT
SCALE: 1:4



A 1 1/2" COLUMN FRAME
SCALE: 3"=1'-0"



B 2" COLUMN FRAME
SCALE: 3"=1'-0"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0709.04
Expiration Date 12/28/2011
By *Heather A. McArthur*
Miami Dade Product Control
Division

GENERAL NOTES:

1. THESE A/C STANDS ARE DESIGNED IN ACCORDANCE WITH HIGH VELOCITY HURRICANE ZONE PROVISIONS OF THE FLORIDA BUILDING CODE 2007, WITH 2009 SUPPLEMENTS.
2. A 33% INCREASE IN ALLOWABLE STRESS HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT.
3. WIND LOADS SHALL BE DETERMINED BY AN ARCHITECT OR PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS USING ASCE 7-05, USE TABLE 6-10 WITH A DIRECTIONALITY FACTOR OF 0.85 AND CF FACTOR OF 1.30.
4. THE SYSTEM IS DESIGNED FOR A MAXIMUM WIND LOAD OF 63.37 PSF.
5. THE MAXIMUM SIZE OF A/C UNIT IS SHOWN IN THE A/C STAND SCHEDULE. MAXIMUM WEIGHT OF A/C UNITS IS 300 LBS.
6. STANDS SHALL BE INSTALLED WITH A MINIMUM CLEAR HEIGHT IN ACCORDANCE WITH F.B.C. 2007 CHAPTER 15, SECTION 1522 AND TABLE 1522.3.
7. ALUMINUM DESIGN IS IN ACCORDANCE WITH THE F.B.C. 2007 CHAPTER 20 AND THE ALUMINUM ASSOCIATION SPECIFICATIONS FOR ALUMINUM STRUCTURES.
8. ALUMINUM ALLOYS SHALL BE AS NOTED ON DRAWINGS. ALL WELDING SHALL BE PERFORMED WITH 5356 FILLER ALLOY, U.O.N.
9. A/C CONTRACTOR SHALL PROVIDE VIBRATION ISOLATOR PADS BETWEEN A/C UNIT AND STAND.
10. A FLORIDA REGISTERED ENGINEER SHALL VERIFY CAPACITY OF EXISTING STRUCTURE TO SUPPORT A/C STAND LOADS SHOWN IN FRAME SCHEDULE.
11. WHERE ALTERNATE CONNECTIONS OF A/C UNIT TO FRAME ARE REQUIRED CONNECTIONS SHALL BE DESIGNED FOR THE ACTUAL WIND LOADS WITH CONSIDERATION OF UPLIFT, OVERTURNING & SLIDING. CONNECTIONS TO RAIL SHALL NOT INDUCE TORSIONAL FORCES.
12. CONTRACTOR SHALL VERIFY CONNECTION OF A/C UNIT TO FRAME DOES NOT VOID MANUFACTURER'S WARRANTY.

REVISIONS	
NO.	DATE

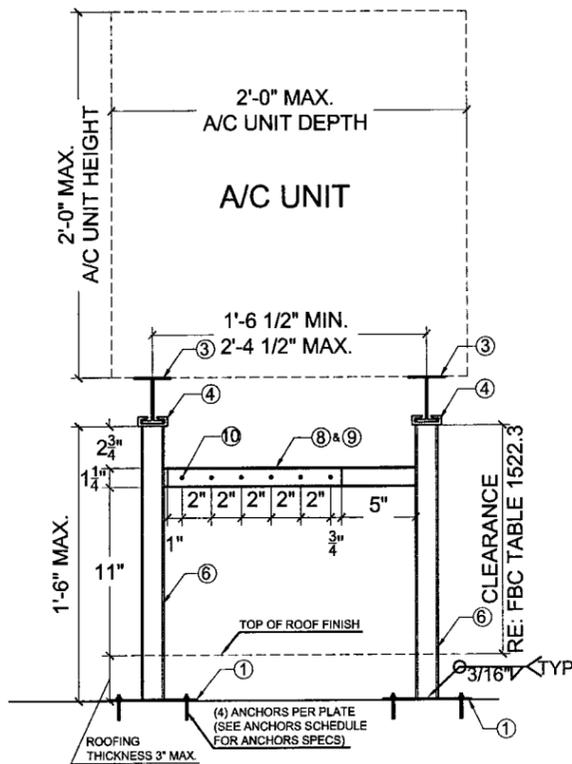
MILTON CUBAS, P. E., INC.
CONSULTING ENGINEERS P.E. # 51902
C.A. # 27267 S.I. # 6999901
1302 NE 125TH ST NORTH MIAMI, FL. 33161
PHONE: (305) 891-4174 FAX (305) 891-4175
E MAIL: miltoncubas@msn.com
www.miltoncubaspe.com



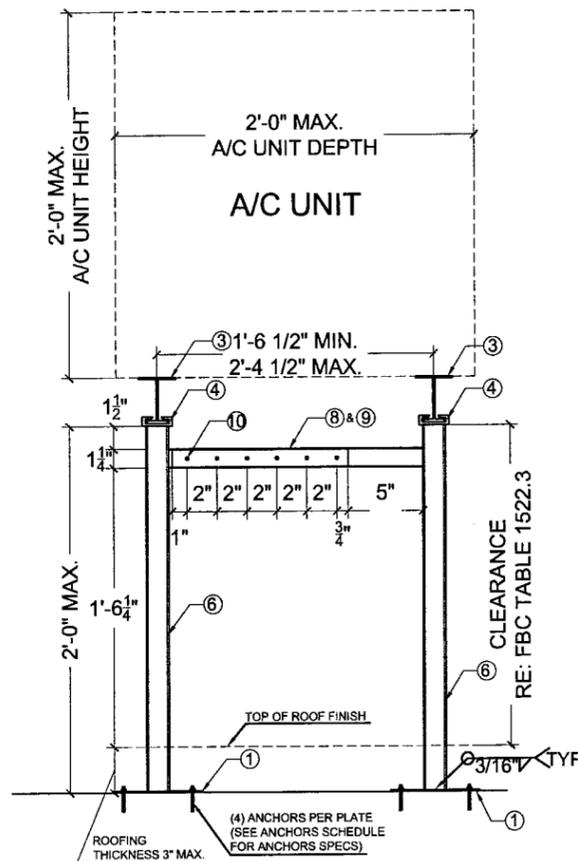
AIR CONDITIONING STANDS
FLORIDA

NOTES AND DETAILS
F & L ALUMINUM PARTS, INC.
1710 NW 22nd CT. UNIT 7
POMPANO BEACH, FL. 33069
TEL: (954) 975-8535 FAX: (954) 975 8715

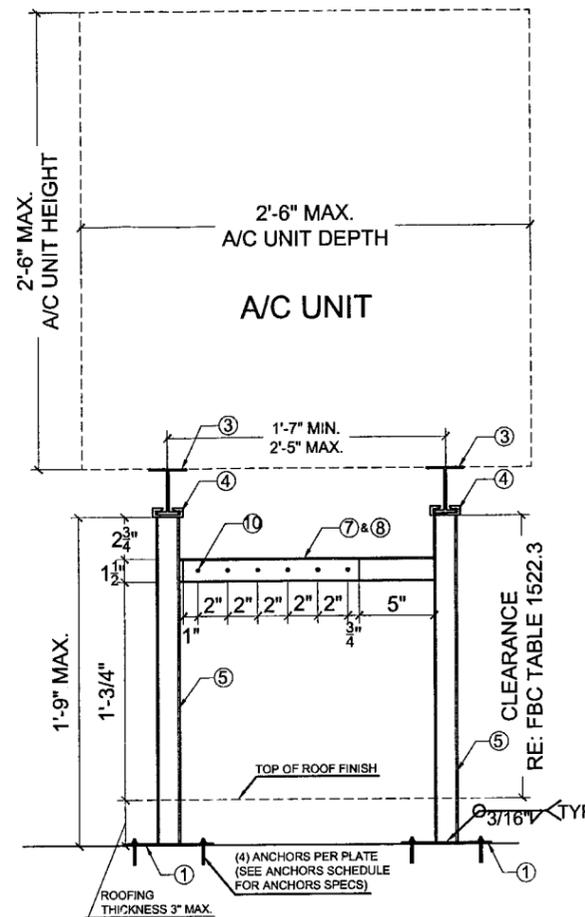
DATE 05-12-09	CHECKED
SCALE AS SHOWN	
DESIGNED A.G.	
DRAWN J.L.	
DRAWING NO. S-1	
SHEET 1 OF 3	



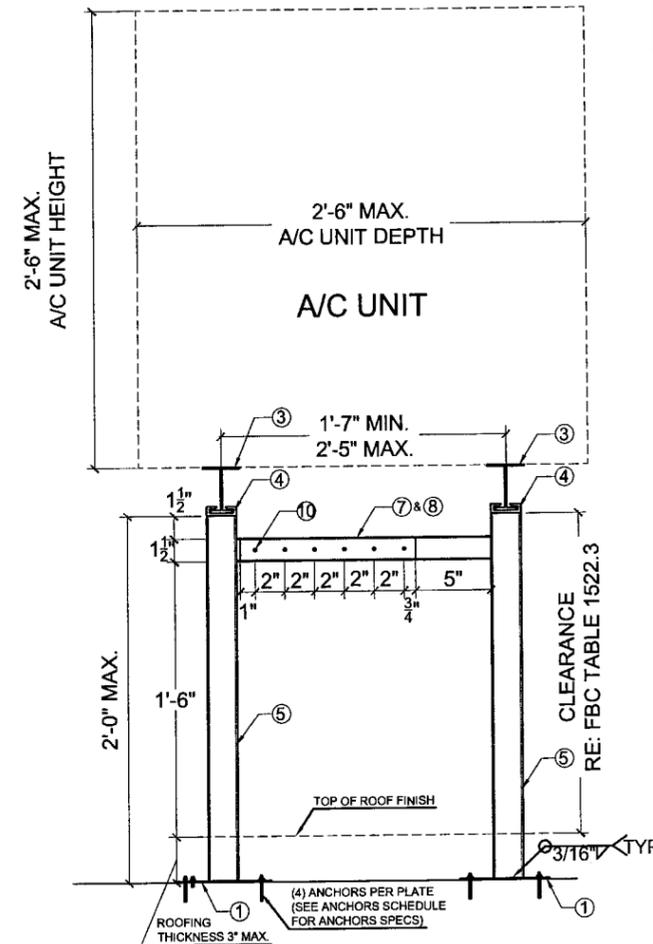
C ASSEMBLY ELEVATION (END VIEW) 1
SCALE: 1"=1'-0"



D ASSEMBLY ELEVATION (END VIEW) 2
SCALE: 1"=1'-0"



E ASSEMBLY ELEVATION (END VIEW) 3
SCALE: 1"=1'-0"



F ASSEMBLY ELEVATION (END VIEW) 4
SCALE: 1"=1'-0"

ANCHOR SCHEDULE	
EXISTING STRUCTURE	ANCHOR TYPE
CONCRETE	(4) 1/4" Ø S.S. HILTI KWIK BOLT 3 WITH 3" EMBEDMENT. AND 3-1/2" MIN. EDGE DISTANCE (3,000 PSI CONCRETE)
	(4) HILTI 1/4-20 KWIK-FLEX SELF DRILLING SELF-TAPPING SCREWS. MINIMUM STEEL THICKNESS= 1/8"
STEEL	(4) 3/8" Ø STAINLESS STEEL LAG SCREWS WITH 2-1/2" MIN. EMBEDMENT IN WOOD FRAMING BEYOND PLYWOOD AND 1" MIN. EDGE DISTANCE

NOTE:
33% INCREASE IN ALLOWABLE LOADS HAVE NOT BEEN USED IN THE DESIGN OF THE ANCHORS FOR THIS PRODUCT APPROVAL.

MAXIMUM SUPPORT REACTIONS (UNFACTORED LOADS)						
	COLUMN FRAME		T(#)	C(#)	V(#)	M (FT-#)
	COLUMN TUBE	h (IN)				
ROOF ELEV. 85 FT Wp= 63.37 PSF	2" X 2" X 1/8"	24	493	793	198	306
	2" X 2" X 1/8"	21	463	763	198	273
ROOF ELEV. 45 FT Wp= 55.94 PSF	1 1/2" X 1 1/2" X 1/8"	24	273	573	127	168
	1 1/2" X 1 1/2" X 1/8"	21	204	504	127	150
ROOF ELEV. 45 FT Wp= 55.94 PSF	1 1/2" X 1 1/2" X 1/8"	18	184	484	127	143
	2" X 2" X 1/8"	24	418	717	175	270
ROOF ELEV. 45 FT Wp= 55.94 PSF	2" X 2" X 1/8"	21	391	691	175	241
	1 1/2" X 1 1/2" X 1/8"	24	180	480	112	148
ROOF ELEV. 45 FT Wp= 55.94 PSF	1 1/2" X 1 1/2" X 1/8"	21	163	463	112	133
	1 1/2" X 1 1/2" X 1/8"	18	145	445	112	127

Wp= DESIGN WIND PRESSURE

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No. 09-0709.04
Expiration Date 12/28/2011
By: *[Signature]*
Milton Cubas, P.E.
Division

REVISIONS	
NO.	DATE

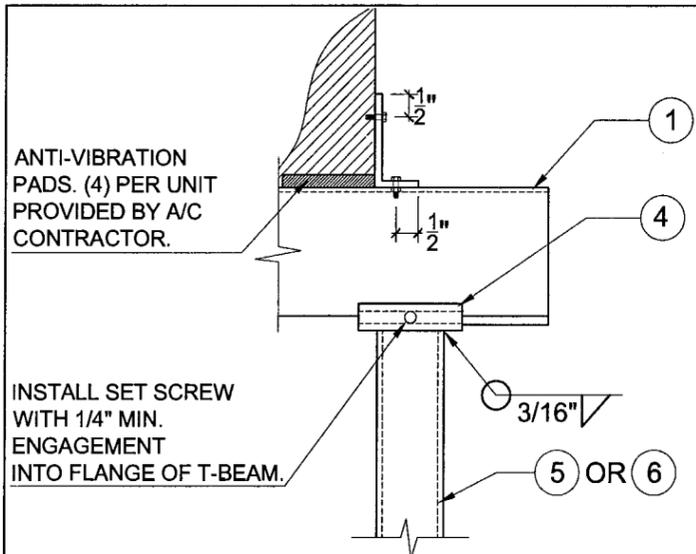
MILTON CUBAS, P. E., INC.
CONSULTING ENGINEERS P.E. # 51902
C.A. # 27267 S.I. # 6999901
1302 NE 125TH ST NORTH MIAMI, FL. 33161
PHONE: (305) 891-4174 FAX (305) 891-4175
E MAIL: miltoncubas@msn.com
www.miltoncubaspe.com



AIR CONDITIONING STAND
FLORIDA

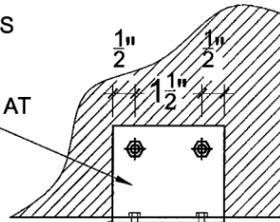
SECTION AND TABLES
F & L ALUMINUM PARTS, INC.
1710 NW 22nd CT. UNIT 7
POMPANO BEACH, FL. 33069
TEL: (954) 975-8535 FAX: (954) 975 8715

DATE 05-12-09	CHECKED
SCALE AS SHOWN	
DESIGNED A.G.	
DRAWN J.L.	
DRAWING NO. S-2	
SHEET 2 OF 3	

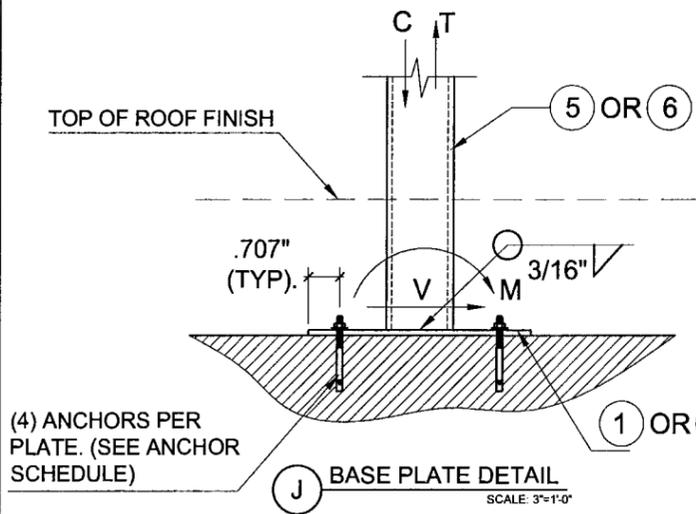


G A/C UNIT I-BEAM CONNECTION
SCALE: 3"=1'-0"

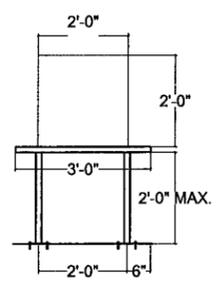
2" X 1" X 0.125" X 0 - 2 1/2" ALUMINUM ALLOY 6063-T6 ANGLE WITH (2) # 14 S.S. TEK SCREWS AND (2) 1/4" Ø STAINLESS STEEL 300 SERIES THRU BOLTS TO EACH LEG. FASTEN TO A/C HOUSING FRAME, MIN. (4) PER UNIT (1) AT EACH CORNER.



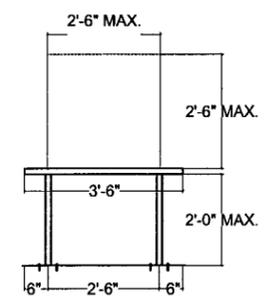
H A/C UNIT TO I-BEAM CONNECTION
SCALE: 3"=1'-0"



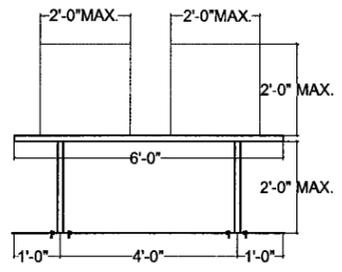
J BASE PLATE DETAIL
SCALE: 3"=1'-0"



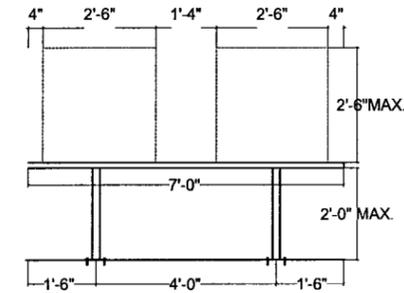
K 1 1/2" COLUMN - ONE UNIT SYSTEM
SCALE: 1/4" = 1'-0"



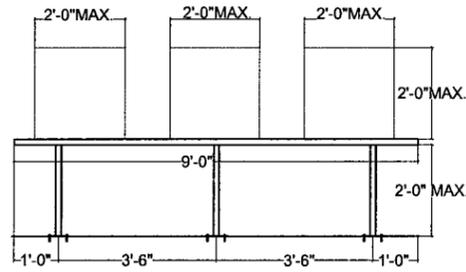
P 2" COLUMN - ONE UNIT SYSTEM
SCALE: 1/4" = 1'-0"



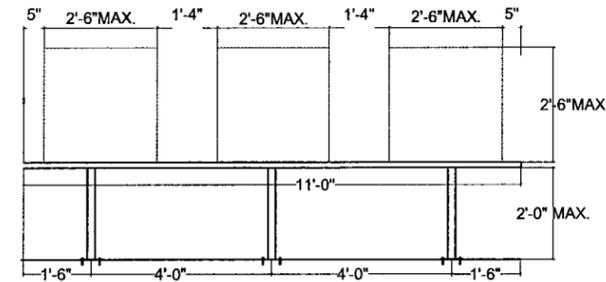
L 1 1/2" COLUMN - TWO UNIT SYSTEM
SCALE: 1/4" = 1'-0"



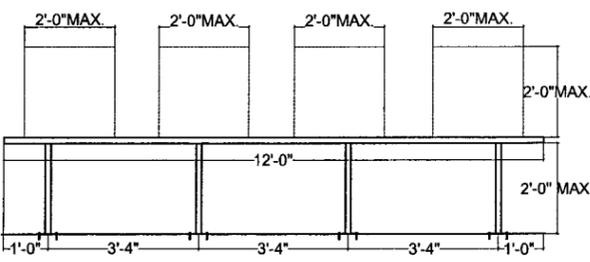
Q 2" COLUMN - TWO UNIT SYSTEM
SCALE: 1/4" = 1'-0"



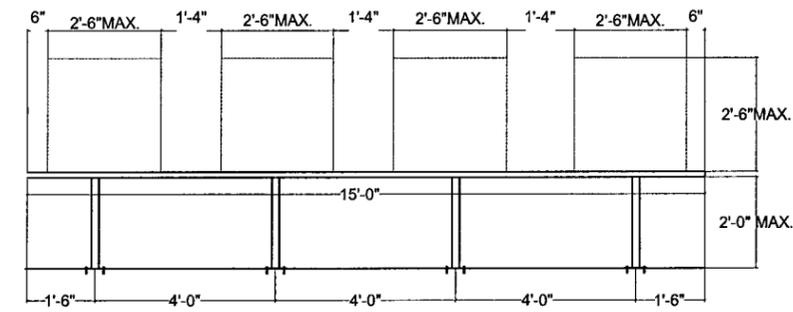
M 1 1/2" COLUMN - THREE UNIT SYSTEM
SCALE: 1/4" = 1'-0"



R 2" COLUMN - THREE UNIT SYSTEM
SCALE: 1/4" = 1'-0"



N 1 1/2" COLUMN - FOUR UNIT SYSTEM
SCALE: 1/4" = 1'-0"



S 2" COLUMN - FOUR UNIT SYSTEM
SCALE: 1/4" = 1'-0"

STAND ASSEMBLY NOTES:

1. FOR ASSEMBLIES K, L, M, & N, A/C UNITS SHALL HAVE A MAXIMUM PROJECTED AREA OF 4.0 FT² (24" X 24") EACH.
2. FOR ASSEMBLIES P, Q, R, & S A/C UNITS SHALL HAVE A MAXIMUM PROJECTED AREA OF 6.25 FT² (30" X 30") EACH.
3. UNITS SHALL BE EQUALLY SPACED AS SHOWN ± 2".
4. PROVIDE 3" MIN. ±2" FROM END BEAM TO EDGE OF UNIT UNLESS OTHERWISE NOTED.

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No 09-0709.04
Expiration Date 12/28/2011
By *Heather A. Miller*
Miami Dade Product Control Division

12-02-9

REVISIONS	
NO.	DATE

MILTON CUBAS, P. E., INC.
CONSULTING ENGINEERS P.E. # 51902
C.A. # 27267 S.I. # 6999901
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AIR CONDITIONING STAND
FLORIDA

SECTIONS & DETAILS
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1710 NW 22nd CT. UNIT 7
POMPANO BEACH, FL. 33069
TEL: (954) 975-8535 FAX: (954) 975-8715

DATE	05-12-09
SCALE	AS SHOWN
DESIGNED	A.G.
DRAWN	J.L.
DRAWING NO.	S-3
SHEET	3 OF 3