



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

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov

York / Johnson Controls, Inc.
 15901 S.W. 29th Street, Suite 801
 Miramar, Florida 33027

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: Solution XT Rooftop Air Handling Unit

APPROVAL DOCUMENT: Drawing No. 06-07 , titled “ Solution XT Rooftop Air Handling Unit ”, sheets 1 through 17 of 17, prepared by Al-Farooq Corporation, dated 08/03/2006, last revision #A dated 07/06/2007, signed and sealed by Humayoun Farooq, P.E. on 11/05/2007, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and revision date by Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit 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 #04-0816.03 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

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



Helmy A. Makar
 11/29/2007

NOA No. 07-0130.03
 Expiration Date: 12/09/2009
 Approval Date: 11/29/2007
 Page 1

York / Johnson Controls, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #04-0816.03

A. DRAWINGS

1. *Drawing No. MT , titled “ Solution XT Rooftop AHU Assembly ”, sheets 1 through 19 of 19, prepared by Mechanical Engineering Solutions, Inc., signed and sealed by Mark E. Awmiller, P.E. on November 18, 2004*

B. TESTS

1. *Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of Solution XT Air Handling Unit, prepared by Architectural Testing, Test Report No. 47804.01-122-18, dated July 12, 2004, signed and sealed by Steven M. Urich, P.E.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *Die Drawings.*

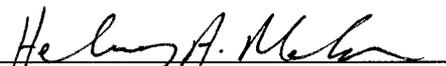
F. STATEMENTS

1. *Statement letter of conformance, dated August 6, 2004, signed and sealed by Mark E. Awmiller, P.E.*
2. *Statement letter of no financial interest, dated August 6, 2004, signed and sealed by Mark E. Awmiller, P.E.*

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 06-07 , titled “ Solution XT Rooftop Air Handling Unit ”, sheets 1 through 17 of 17, prepared by Al-Farooq Corporation, dated 08/03/2006, last revision #A dated 07/06/2007, signed and sealed by Humayoun Farooq, P.E. on 11/05/2007.*



Helmy A. Makar, P.E., M.S.

Product Control Examiner

NOA No. 07-0130.03

Expiration Date: 12/09/2009

Approval Date: 11/29/2007

York / Johnson Controls, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

1. *Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of Solution XT Air Handling Unit, prepared by Architectural Testing, Test Report No. 54612.01-122-18, dated September 20, 2005, signed and sealed by Steven M. Urich, P.E.*

C. CALCULATIONS

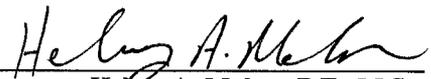
1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *Die Drawings.*

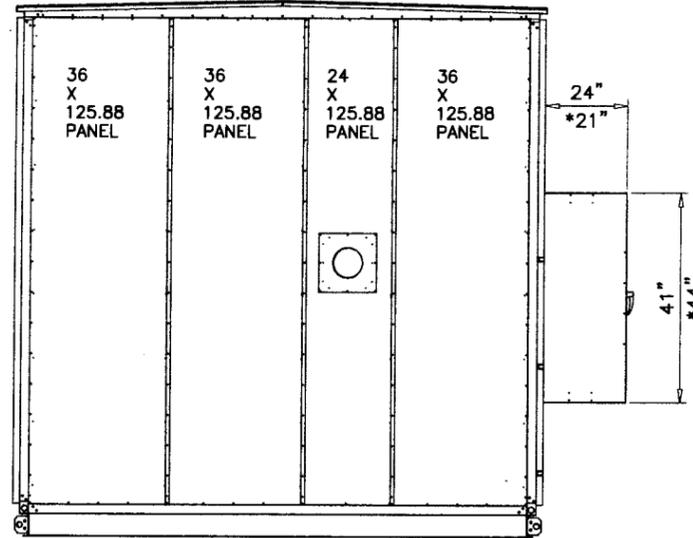


Henry A. Makar, P.E., M.S.
Product Control Examiner
NOA No. 07-0130.03
Expiration Date: 12/09/2009
Approval Date: 11/29/2007

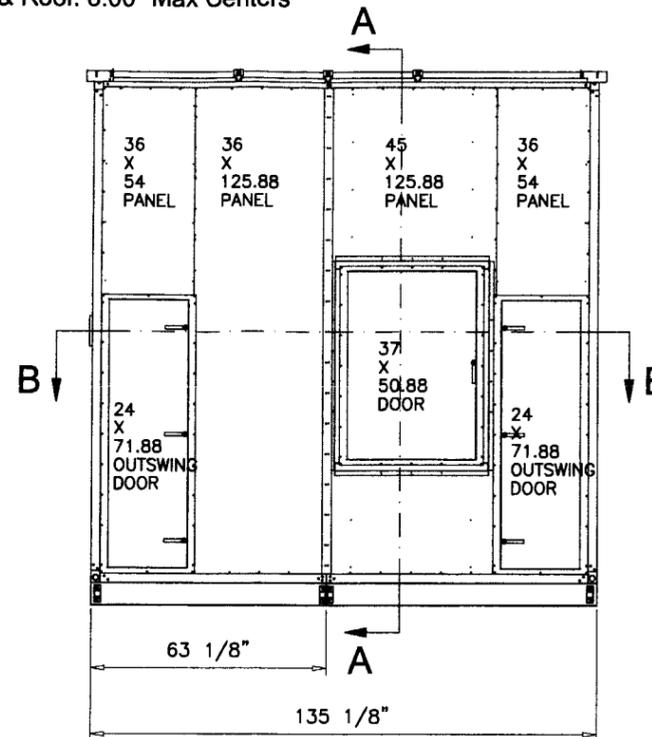
Panels:
Sides & Ends: 16 Ga Outer & Liner
Floor & Roof: 18 Ga Outer & Liner

Fasteners:
Sides Walls: 4.00" Max Centers
Floor & Roof: 8.00" Max Centers

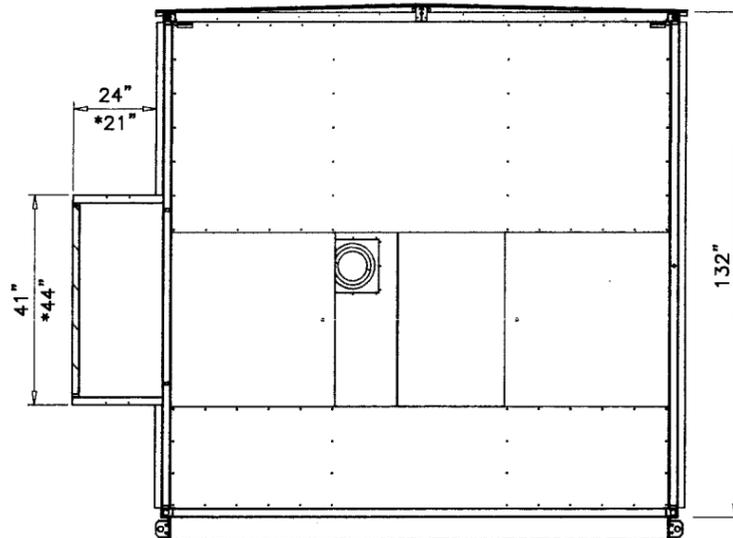
Inside Supports:
Sides: 4 vertical 16 GA Hat Channel per side 086-02108-358
Ends: 3 vertical 12 GA Hat Channel per end 086-02108-869



SIDE ELEV.



FRONT ELEV.

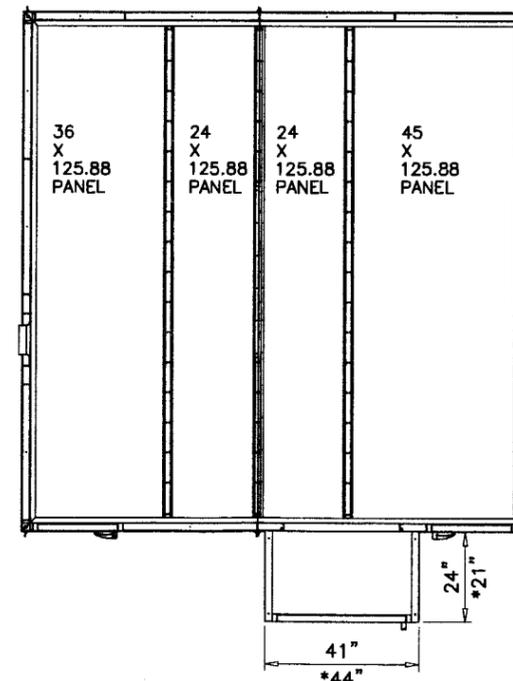


SECTION A-A

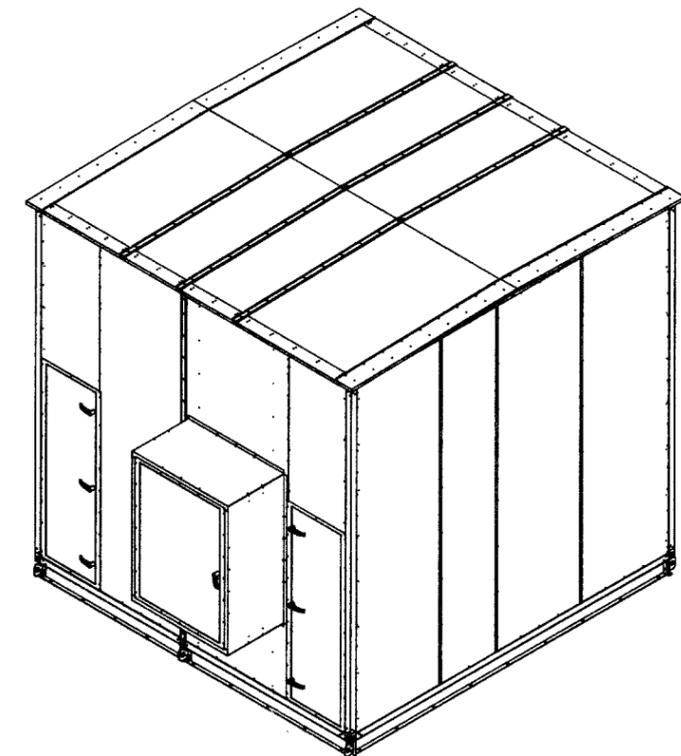
GENERAL NOTES

1. THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2004 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
2. STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION A-36 AND STEEL SHEET SHALL CONFORM TO ASTM DESIGNATION A-653, GALVANIZED WITH A COATING DESIGNATION OF G90. MIN. Fy = 48,380 PSI.
3. ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
4. ELECTRICAL AND MECHANICAL DETAILS ARE NOT PART OF THIS APPROVAL.
5. POLYURETHANE SHALL BE RIGID FOAM MIN. DENSITY #2 C.F.
6. MAX. FLAME SPREAD RATING = 5 AS PER ASTM E-84. SMOKE DEVELOPED INDEX = 205. SPONTANEOUS-IGNITION TEMPERATURE = 869°F.
7. ALL STEEL TO BE SHOP PRIMED BEFORE ASSEMBLY.
8. DISSIMILAR MATERIALS IN CONTACT WITH EACH OTHER SHALL BE PROTECTED IN ACCORDANCE WITH S.F.B.C. CHAPTER 30, SECTION 3004.4.
9. MIN. SOIL BEARING CAPACITY = 2500 PSF.
10. A LOAD DURATION INCREASE IN ALLOWABLE STRESS IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
11. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2004 FLORIDA BLDG. CODE SECTION 2003.8.4.
- *12. ALTERNATIVE CONSTRUCTED MOTOR CONTROL ENCLOSURE SEE SHEET 17 FOR DETAILS.

ALLOWABLE DESIGN LOAD		
COMPONENT	POSITIVE	NEGATIVE
WALL/FLOOR	65 PSF	65 PSF
ROOF	48.7 PSF	48.7 PSF



SECTION B-B
PLAN VIEW



Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

NOV 05 2007

PRODUCT REVISED
as complying with the Florida
Building Code
Approved by 07-0130-03
Inspector Date 12/09/2009
By: Helmy A. M...
Project Engineer

ROOF PANELS AND FLOOR PANELS
ARE SAME LENGTH IN NOA.

af c

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
COOLER\06-07YC

SOLUTION XT ROOFTOP AIR HANDLING UNIT

YORK/JOHNSON CONTROLS INC.
15901 S.W. 29TH STREET, SUITE 801
MIRAMAR, FL. 33027
TEL. (954) 389-9675 FAX. (954) 389-9687

revisions:	no.	date	by	description
	A	07.06.07		REV. PER BCCO COMMENTS

date: 08-03-06
scale: 1/4"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
06-07

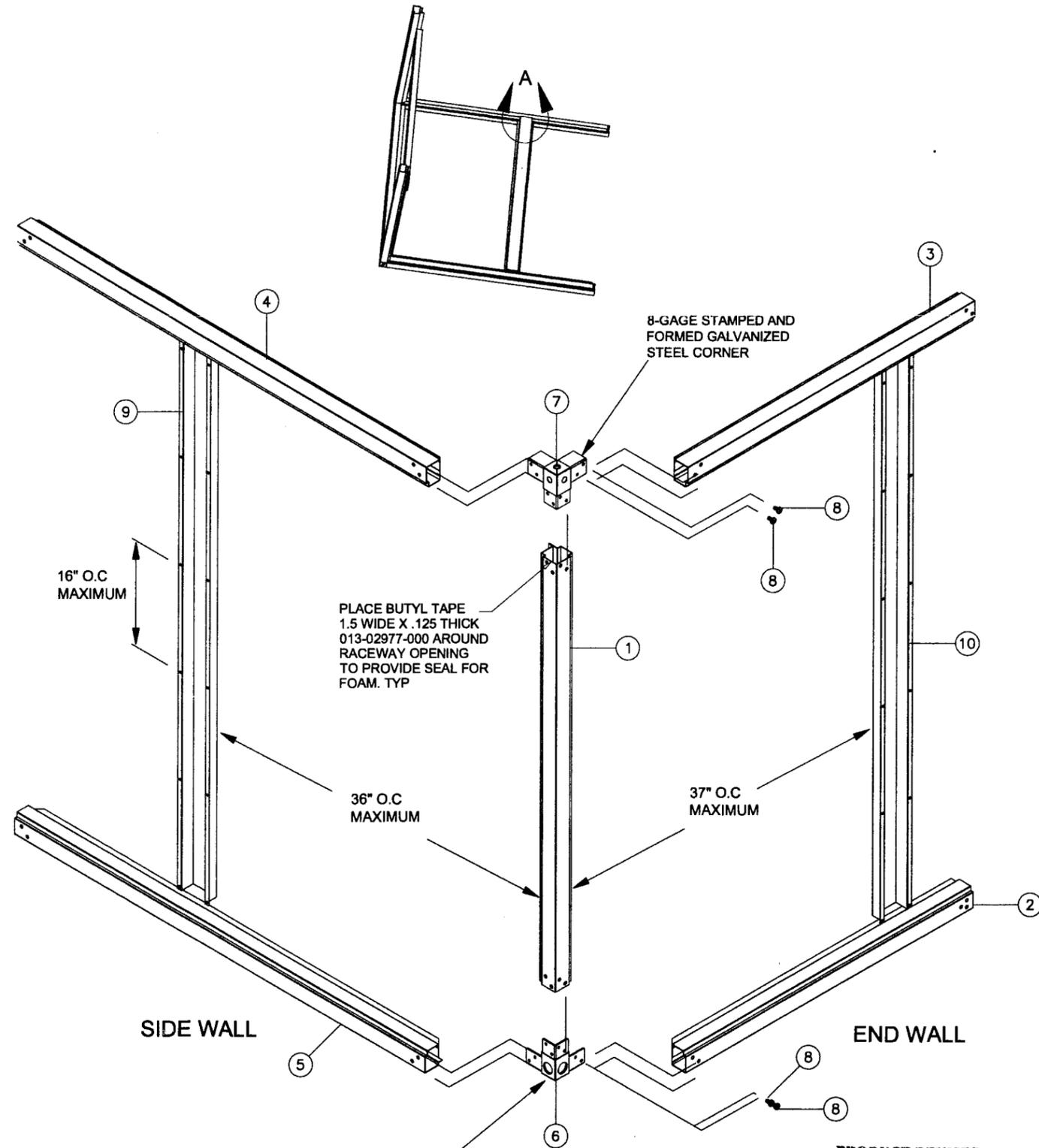
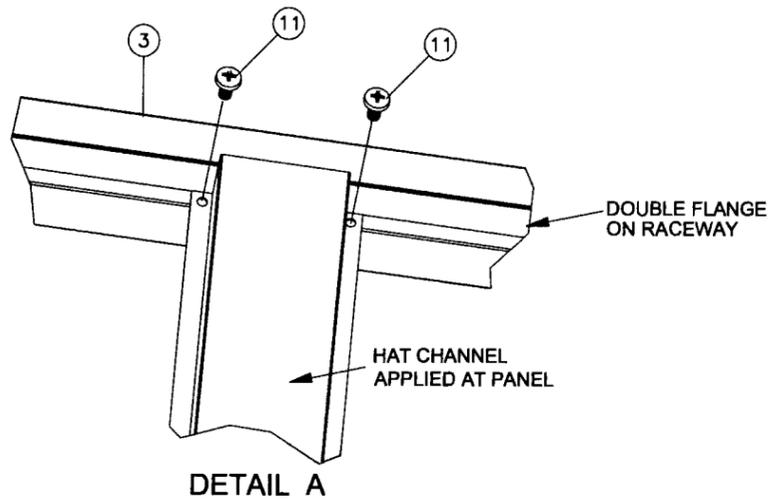
sheet 1 of 17

1. THE AIR HANDLING UNIT ASSEMBLY HAS BEEN TESTED AND ANALYZED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN LOADS" TABLE FOR THE MAXIMUM SIZED PANEL DIMENSIONS AND FRAMING DISTANCE SPACING INDICATED ON THE DRAWINGS.
2. THE DETAILS AND SPECIFICATIONS SHOWN ON ALL SHEETS INDICATED REPRESENT THE PRODUCTS AND MATERIALS TESTED AND PROPOSED FOR WATER, AIR, IMPACT, CYCLIC, AND UNIFORM STATIC AIR PRESSURE TESTING IN ACCORDANCE WITH FLORIDA BUILDING CODE PROTOCOLS TAS 201, TAS 202, AND TAS 203 FOR LARGE MISSILE IMPACT. ADDITIONALLY THE PRODUCT WAS TESTED IN ACCORDANCE WITH ASTM E72 FOR COMPONENT SYSTEM RACKING AND ASTM E8 FOR TENSION TESTING OF THE MATERIAL COMPONENTS.
3. ATTACHMENT TO THE ROOF AND THE ROOF CURB TO PREVENT SLIDING AND OVERTURNING OF THE AIR HANDLING UNIT IS NOT PART OF THE SCOPE OF THIS PRODUCT APPROVAL. THESE ELEMENTS SHALL BE REVIEWED BY THE CORRESPONDING BUILDING DEPARTMENT.
4. IT SHALL BE THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY STRUCTURAL INTEGRITY OF THE ROOF/BUILDING STRUCTURE TO SUPPORT ALL LOADS (WIND AND STATIC) SUPERIMPOSED ON THE STRUCTURE BY THE AIR HANDLING UNIT.
5. INTERIOR MOUNTED MECHANICAL EQUIPMENT IS NOT PART OF THIS PRODUCT APPROVAL AND SHALL BE DESIGNED AND INSTALLED BY YORK/JOHNSON CONTROLS IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS. INTERNAL SUPPORT OF THESE INTERIOR COMPONENTS IS ALSO OUTSIDE THE SCOPE OF THIS PRODUCT APPROVAL.
6. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS AND SHALL NOT VARY UNLESS SPECIFICALLY STATED ON THE DRAWINGS.
7. ALL METAL THICKNESSES FOR PANELS, STRUCTURAL SUPPORT ELEMENTS AND OTHER COMPONENTS SHALL BE THE MINIMUM SPECIFIED GAGES (SEE SHEET 3 OF 19 FOR METAL GAGE DIMENSIONAL INFORMATION) OR DIMENSIONS INDICATED ON THE DRAWINGS.
8. ALL SHEET STEEL COMPONENTS SHALL BE MINIMUM 44 KSI SHEET STEEL AT THE SPECIFIED THICKNESS THAT CONFORMS TO ASTM A653, WITH G90U GALVANIZED FINISH.

Corner Assembly Instructions:

- 1) Attach DOA Raceway (2) with corner connector (6) using hardware (8) - 2 Screws
- 2) Attach End Raceway (5) with corner connector (6) using hardware (8) - 2 Screws
- 3) Attach Vertical Raceway (1) to corner connector (6) using hardware (8) - 4 Screws
- 4) Attach Corner connector (7) to vertical raceway (1) using hardware (8) - 4 Screws
- 5) Attach DOA Raceway (3) to corner connector (7) using hardware (8) - 2 Screws
- 6) Attach End Raceway (4) to corner connector (7) using hardware (8) - 2 Screws
- 7) Attach Side Hat Channel (9) to Upper and Lower Raceway (4) & (5) Using Hardware (11) - 4 Screws
- 8) Attach Front Hat Channel (10) to Upper and Lower Raceway (2) & (3) Using Hardware (11) - 4 Screws

Three other corners are attached in the same manner.



Parts List		
ITEM	QTY	DESCRIPTION
1	1	Vertical Raceway
2	1	FIA Bottom Raceway
3	1	FIA Top Raceway
4	1	End Top Raceway
5	1	End Bottom Raceway
6	1	Bottom Corner Assembly
7	1	Top Corner Assembly
8	6	Screw, hex socket button head 3/8-16 x 3/4" zinc plated
9	2	Side Wall Hat Channel
10	2	End Wall Hat Channel
11	2	Screw, panhead, 1/4-14x1" zinc plated

CORNER ASSEMBLY & INTERNAL FRAMING

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

NOV 05 2007

PRODUCT REVISED

as complying with the Florida Building Code

Acceptance No. 07-0130.03

Expiration Date 12/09/2009

By: *Heung A. Mohr*
Miami Dept. Product Control
Division

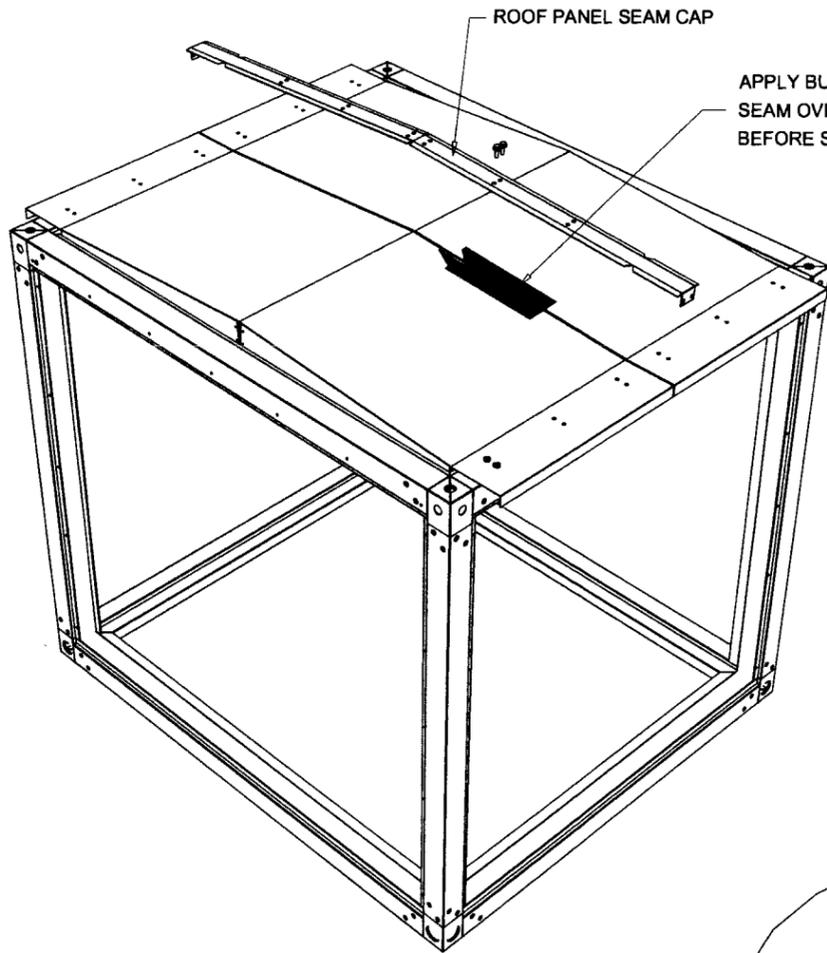
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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
COOLER/06-07YIC

SOLUTION XT ROOFTOP AIR HANDLING UNIT
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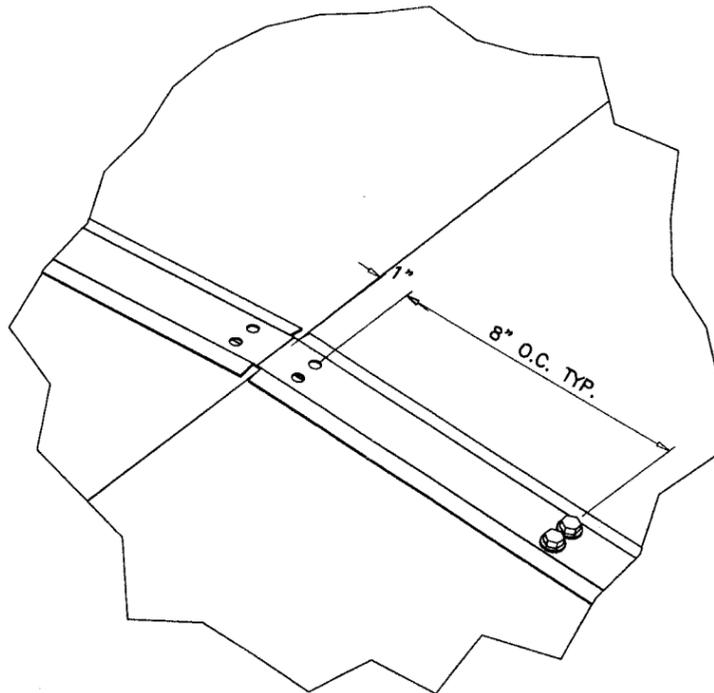
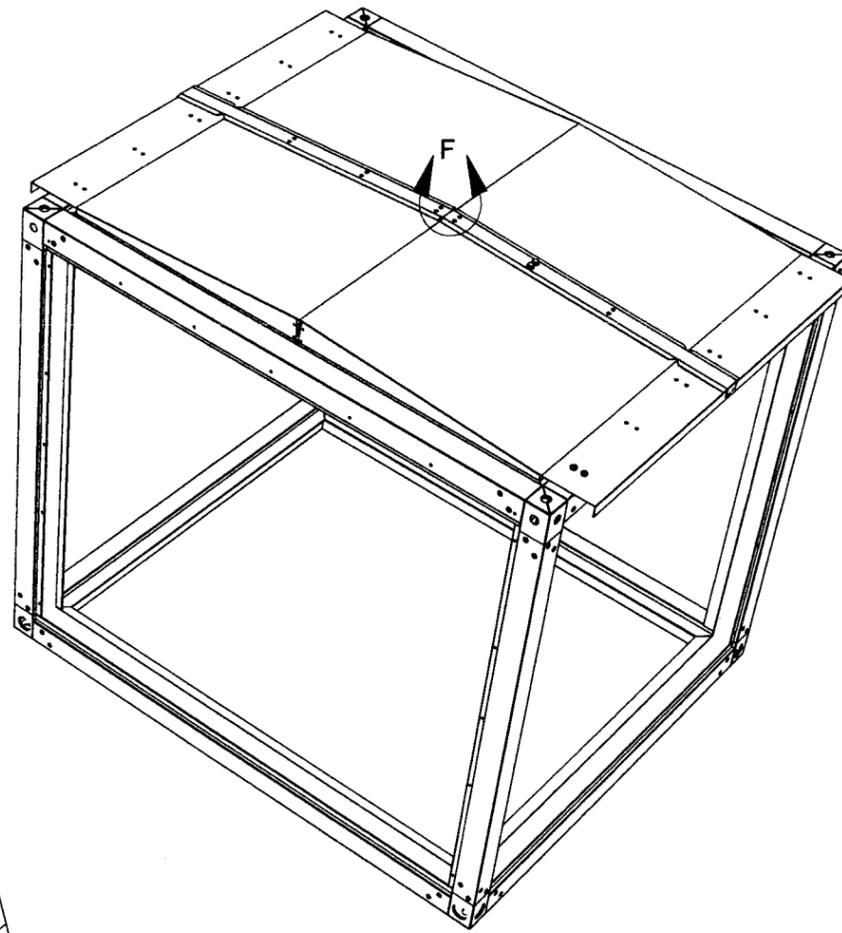
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drawing no.
06-07
sheet 2 of 17



APPLY BUTYL TAPE ALONG SEAM OVERLAPPING THE ROOF PANELS BEFORE SEAM CAP IS SECURED.



AFTER BUTYL TAPE IS APPLIED AS SHOWN ABOVE SECURE SEAM CAP AS SHOWN IN DETAIL F WITH SCREW, TEK, EPDM, PLTD, 0.25-14 X 1". ALONG TOP AND INTO SIDE AS WELL.

DETAIL F

ROOF SEAM CAP ASSEMBLY OPTION #1

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

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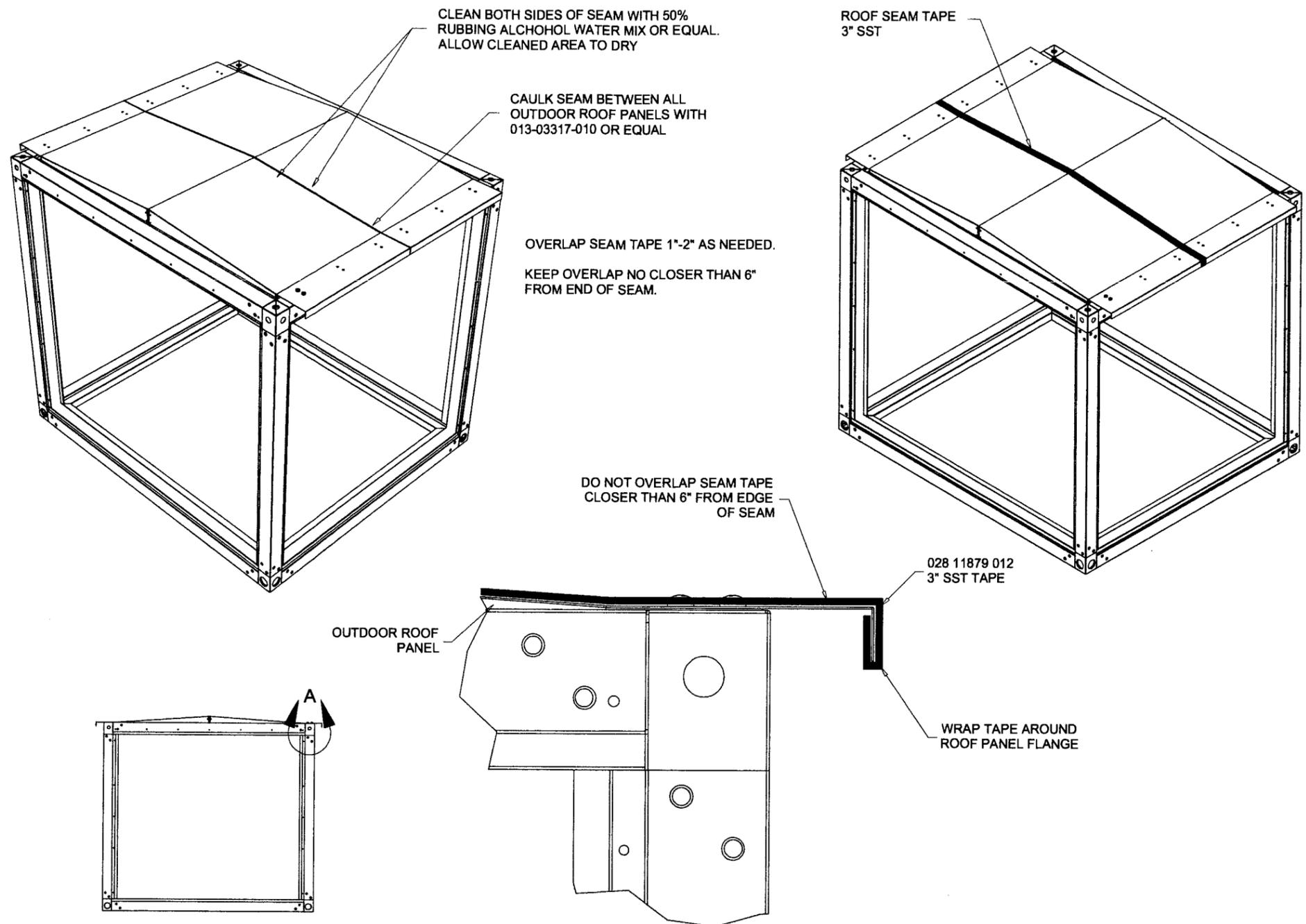
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 07-0130.03
Expiration Date 12/09/2009
By *Helmy A. Helmy*
Miami Hills Product Control
Division

STANDARD METAL THICKNESS		
METAL GAGE	MIN. THICKNESS (IN.)	YIELD STRENGTH MINIMUM (KSI)
8	0.157	33.0
10	0.126	33.0
12	0.097	33.0
14	0.070	45.0
16	0.056	45.0
18	0.045	45.0
20	0.034	45.0

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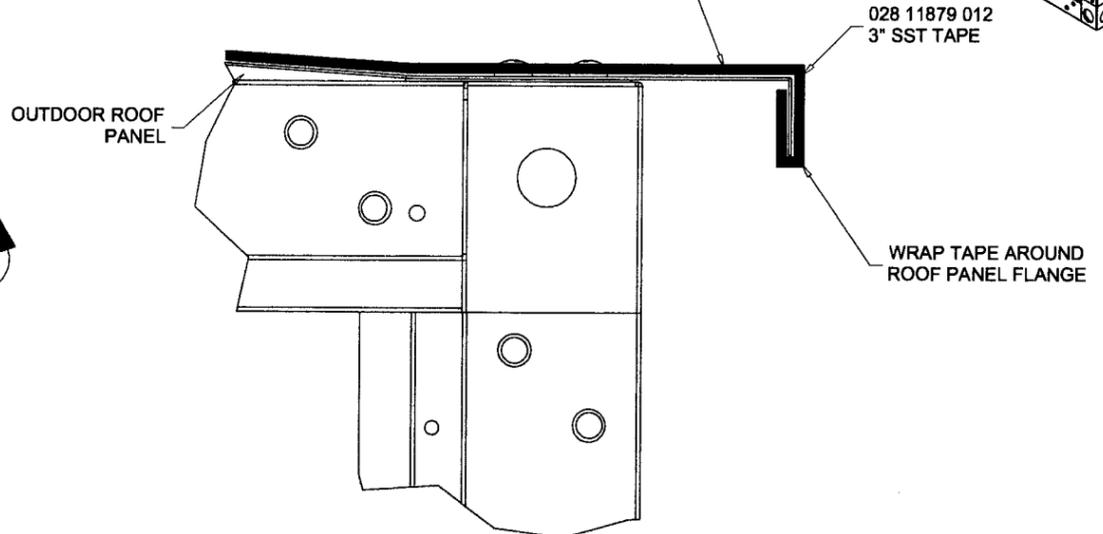
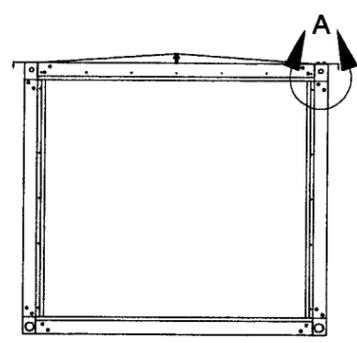
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revisions:	no.	date	by	description
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chk. by:				
drawing no.	06-07			
sheet	3 of 17			



OVERLAP SEAM TAPE 1"-2" AS NEEDED.
KEEP OVERLAP NO CLOSER THAN 6" FROM END OF SEAM.

DO NOT OVERLAP SEAM TAPE CLOSER THAN 6" FROM EDGE OF SEAM



DETAIL A

ROOF SEAM TAPE ASSEMBLY OPTION #2

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

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PRODUCT REVISED
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Acceptance No 07-0130-03
Expiration Date 12/09/2009
By *Helmy A. Helmy*
Miami Dade Product Control Division

STANDARD METAL THICKNESS		
METAL GAGE	MIN. THICKNESS (IN.)	YIELD STRENGTH MINIMUM (KSI)
8	0.157	33.0
10	0.126	33.0
12	0.097	33.0
14	0.070	45.0
16	0.056	45.0
18	0.045	45.0
20	0.034	45.0

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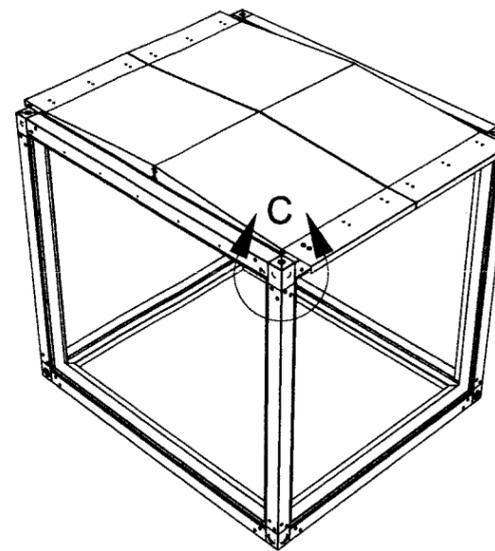
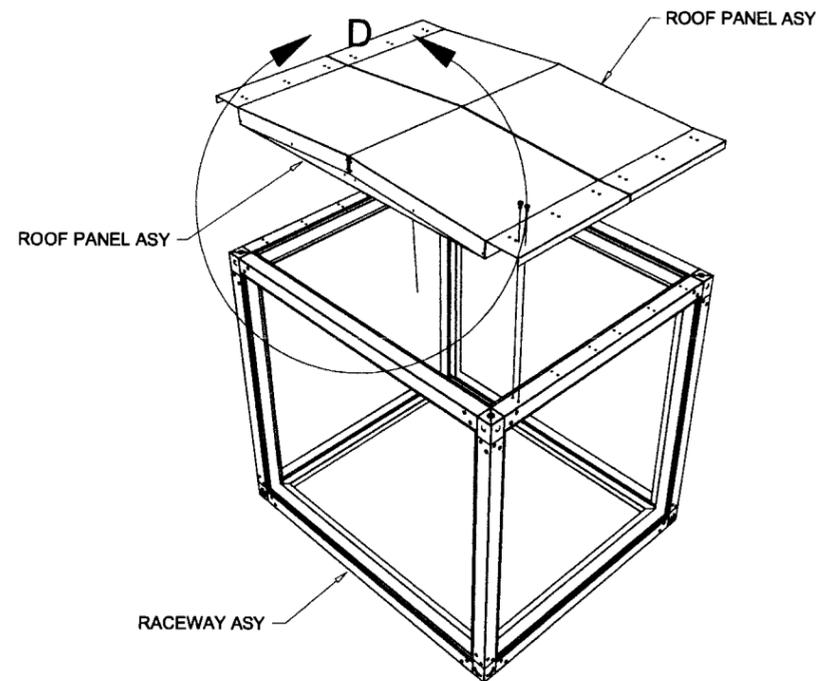
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date: 08-03-06
 scale: -
 dr. by: HAMID
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06-07

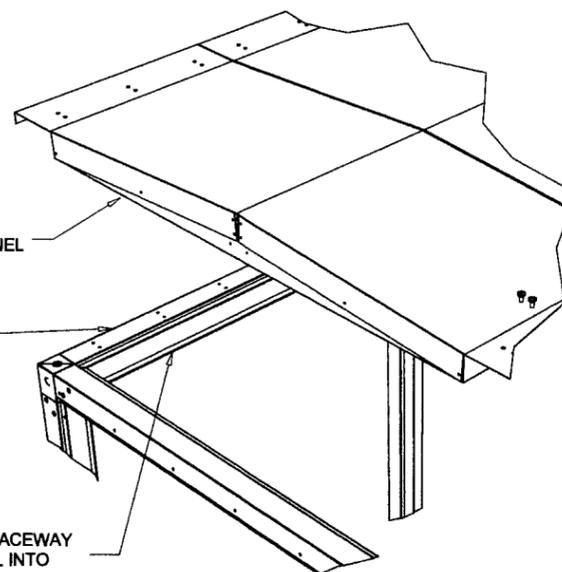
sheet 4 of 17



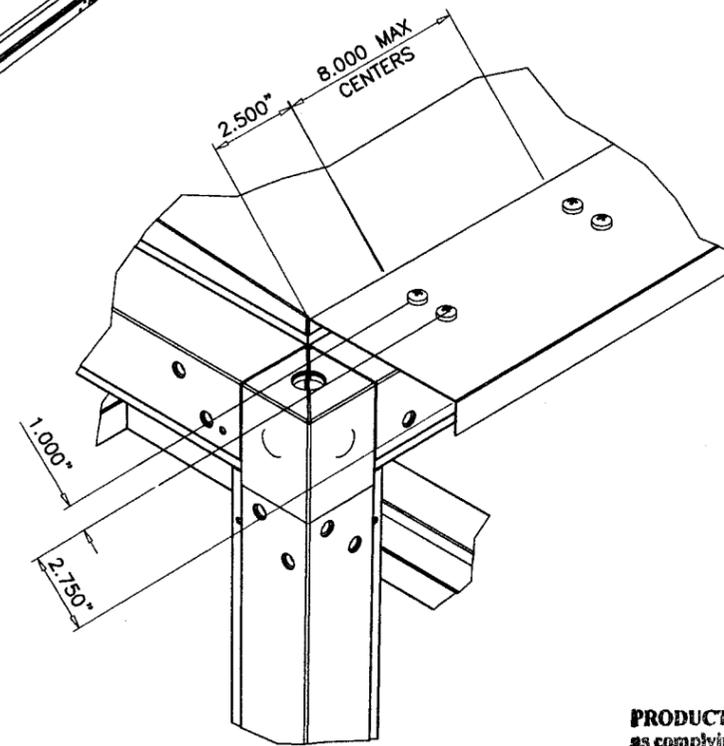
APPLY NEOPRENE 028-11867-000 TO BOTH SIDES OF ROOF PANEL ASY BEFORE PLACING ROOF PANEL IN RACEWAY ASY.

APPLY BUTYL TAPE 013-02977-000 TO RACEWAY FLANGE BEFORE PLACING ROOF PANEL INTO RACEWAY ASY.

APPLY BUTYL TAPE 013-02976-000 TO RACEWAY FLANGE BEFORE PLACING ROOF PANEL INTO RACEWAY ASY.



DETAIL D



DETAIL C

AFTER APPLYING NEOPRENE AND BUTYL TAPE AS SHOWN IN DETAIL D, PLACE ROOF PANEL INTO RACEWAY ASY AND SECURE AS SHOWN IN DETAIL C USING SCREW TAP TY A PH 14-10 1/4 X 3/4 PAN HEAD PHILLIPS (#1), TYPE A, ZINC PLATED

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 07-0130.03
 Expiration Date 12/09/2009
 By *Heung A. Nelson*
 Miami State Product Control
 Division

Engr. DR. HUMAYGUN FAROOQ
 STRUCTURES
 FLA. PE # 16557
 C.A.N. 3538

NOV 05 2007

**ROOF PANEL
 ASSEMBLY**

afc
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL (305) 264-8100 FAX (305) 262-6978

COOLER\06-07MIC

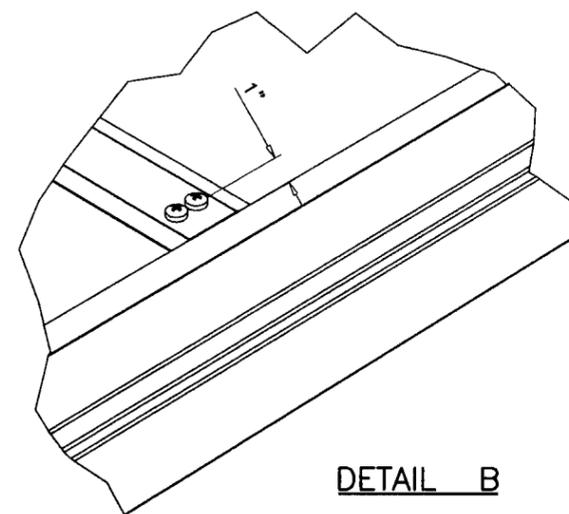
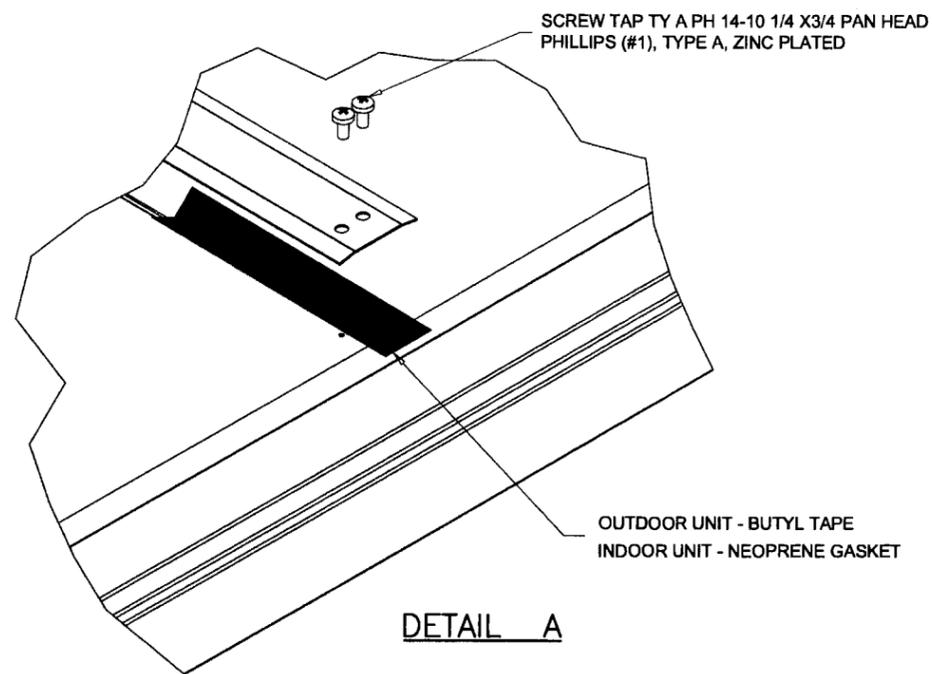
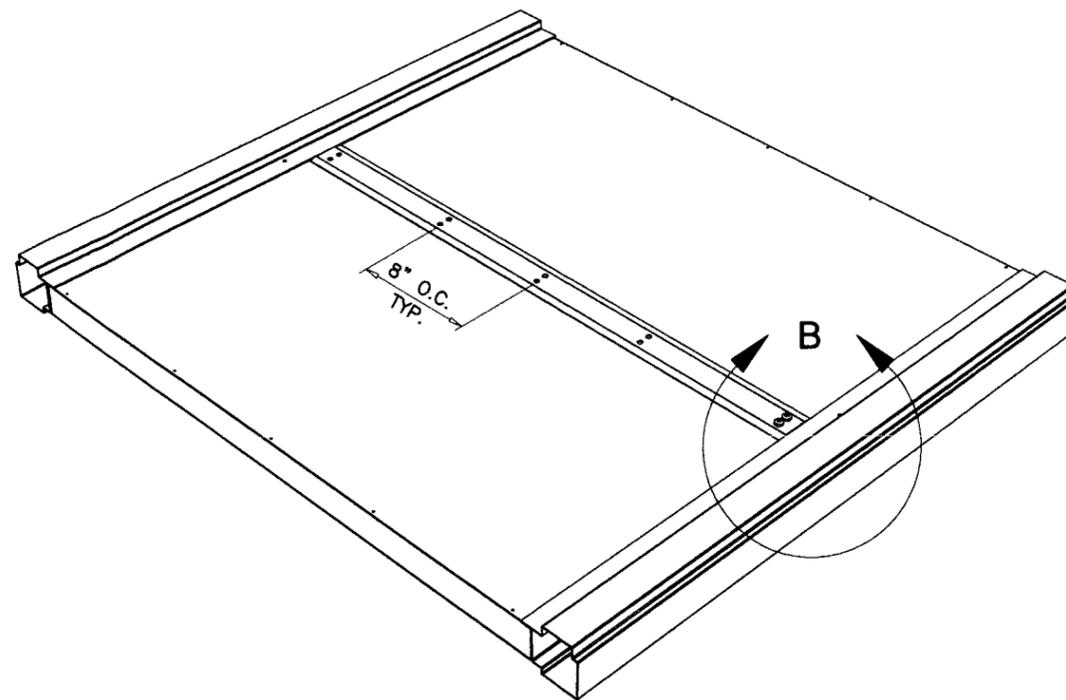
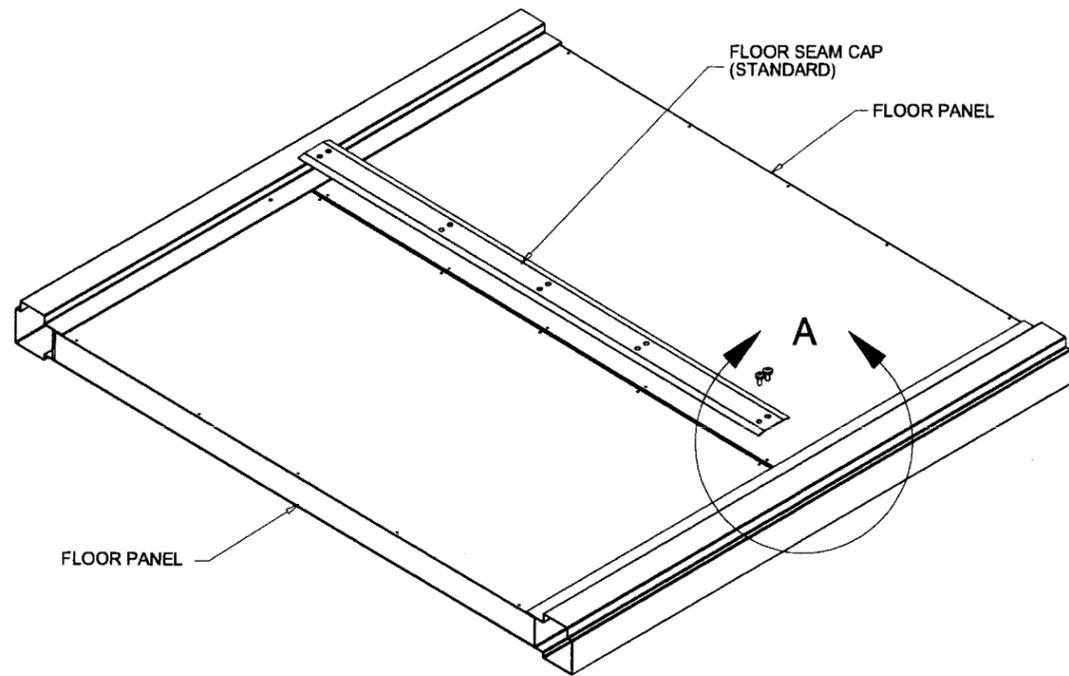
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no.	date	description	MANUF. NAME	REV.
A	07.06.07			

date: 08-03-06
 scale: 1/4"=1'-0"
 dr. by: HAMID
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drawing no.
06-07

sheet 5 of 17



**STANDARD FLOOR PANEL SEAM CAP ASY
 APPLY GASKET / BUTYL TAPE ALONG FLOOR PANEL
 SEAM BEFORE SECURING FLOOR PANEL SEAM CAP
 WITH SCREWS LISTED IN DETAIL A.**

PRODUCT REVISED
 as complying with the Florida
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 By Heung A. Makin
 Miami Trade Product Control
 Division

Engr: DR. HUMAYOUN FAROOQ
 STRUCTURES
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FLOOR SEAM CAP
 MOUNTING DETAIL
 OPTION #1

NOV 05 2007

afc

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 TEL. (305) 264-8100 FAX. (305) 262-6978

COOLER\06-07\1C

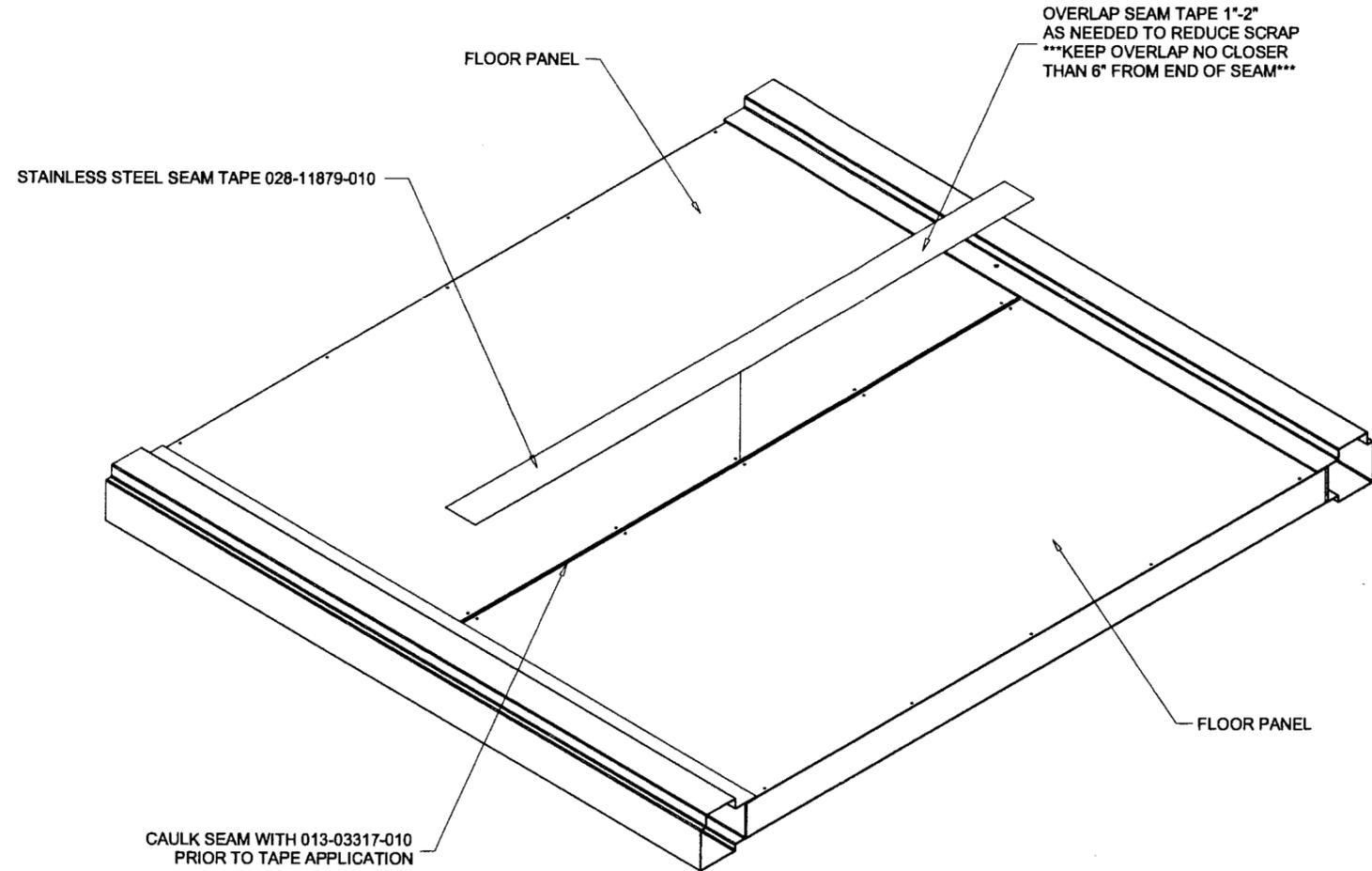
SOLUTION XT ROOFTOP AIR HANDLING UNIT
YORK/JOHNSON CONTROLS INC.
 15901 S.W. 29TH STREET, SUITE 801
 MIRAMAR, FL. 33027
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no.	date	description	by
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 dr. by: HAMID
 chk. by:

drawing no.
06-07

sheet 6 of 17



OVERLAP SEAM TAPE 1"-2"
 AS NEEDED TO REDUCE SCRAP
 ***KEEP OVERLAP NO CLOSER
 THAN 6" FROM END OF SEAM***

CAULK SEAM WITH 013-03317-010
 PRIOR TO TAPE APPLICATION

STANDARD FLOOR PANEL SEAM TAPE APPLICATION
 THIS APPLIES FOR BOTH XT1 & XTO UNITS.
 CLEAN BOTH SIDES OF SEAM WITH 50% RUBBING
 ALCOHOL WATER MIX OR EQUAL. ALLOW TO DRY.
 CAULK ALONG FLOOR PANEL SEAM.
 APPLY SEAM TAPE EVENLY ALONG ENTIRE FLOOR
 PANEL SEAM.

**FLOOR SEAM TAPE
 ASSEMBLY
 OPTION #2**

Engr: DR. HUMAYOUN FAROOQ
 STRUCTURES
 FLA. PE # 16557
 C.A.N. 3538
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 Miami Design Product Control
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 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
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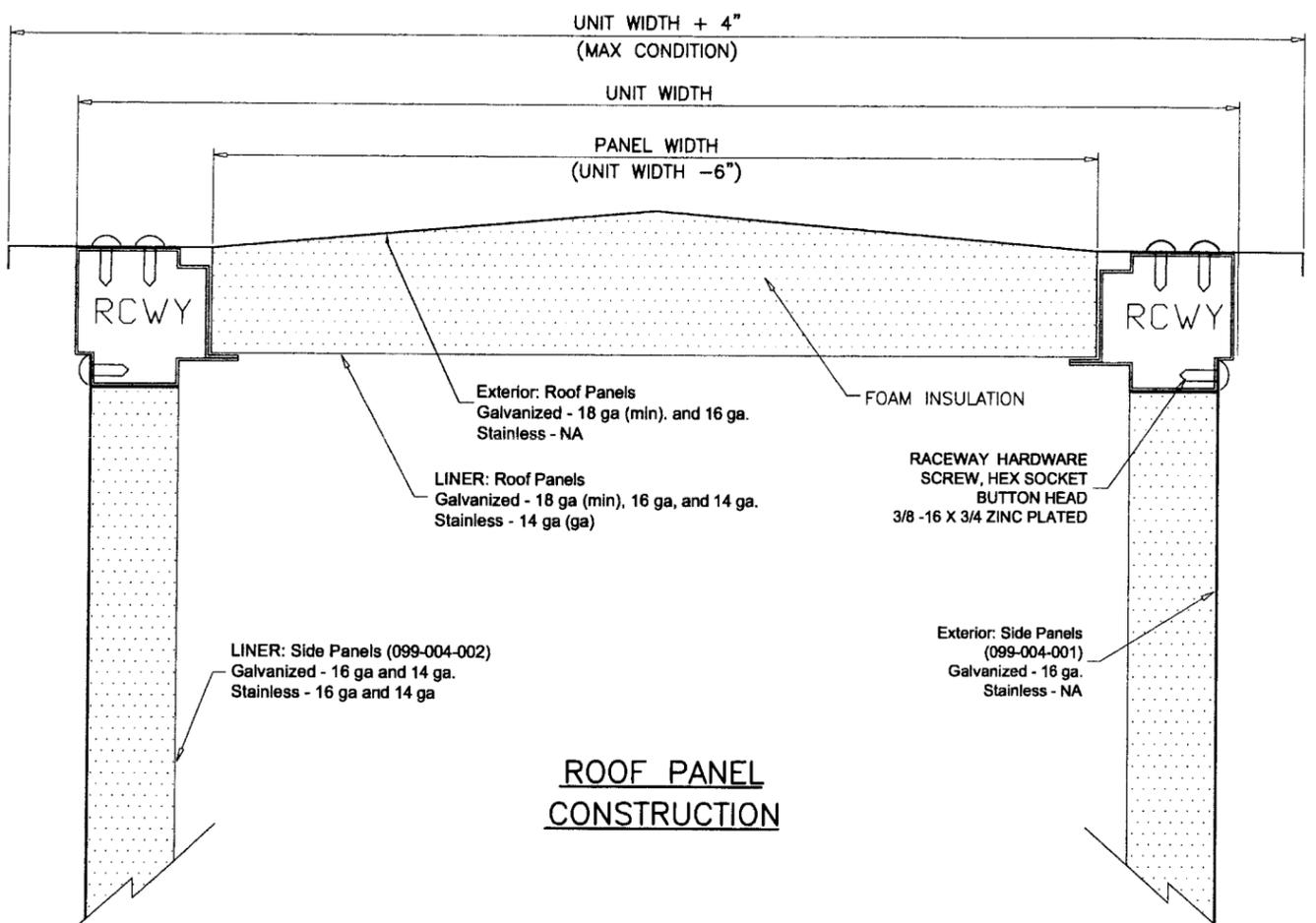
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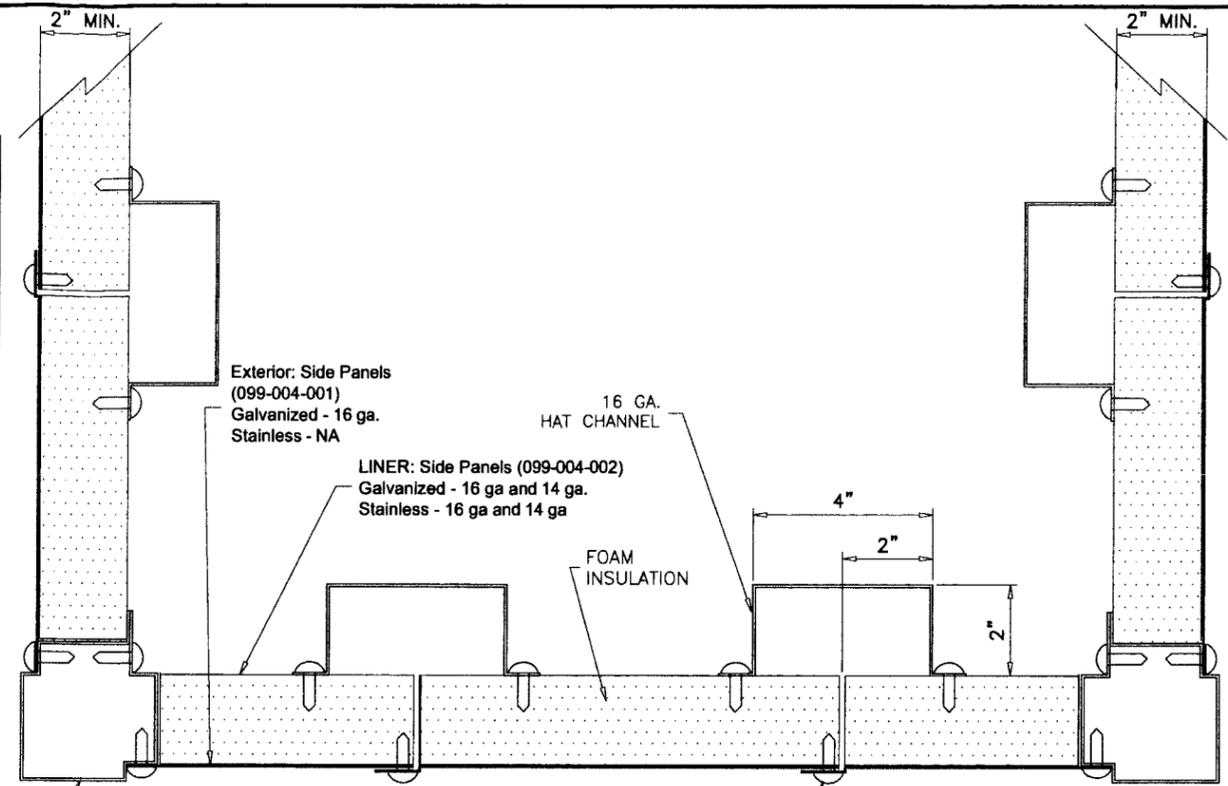
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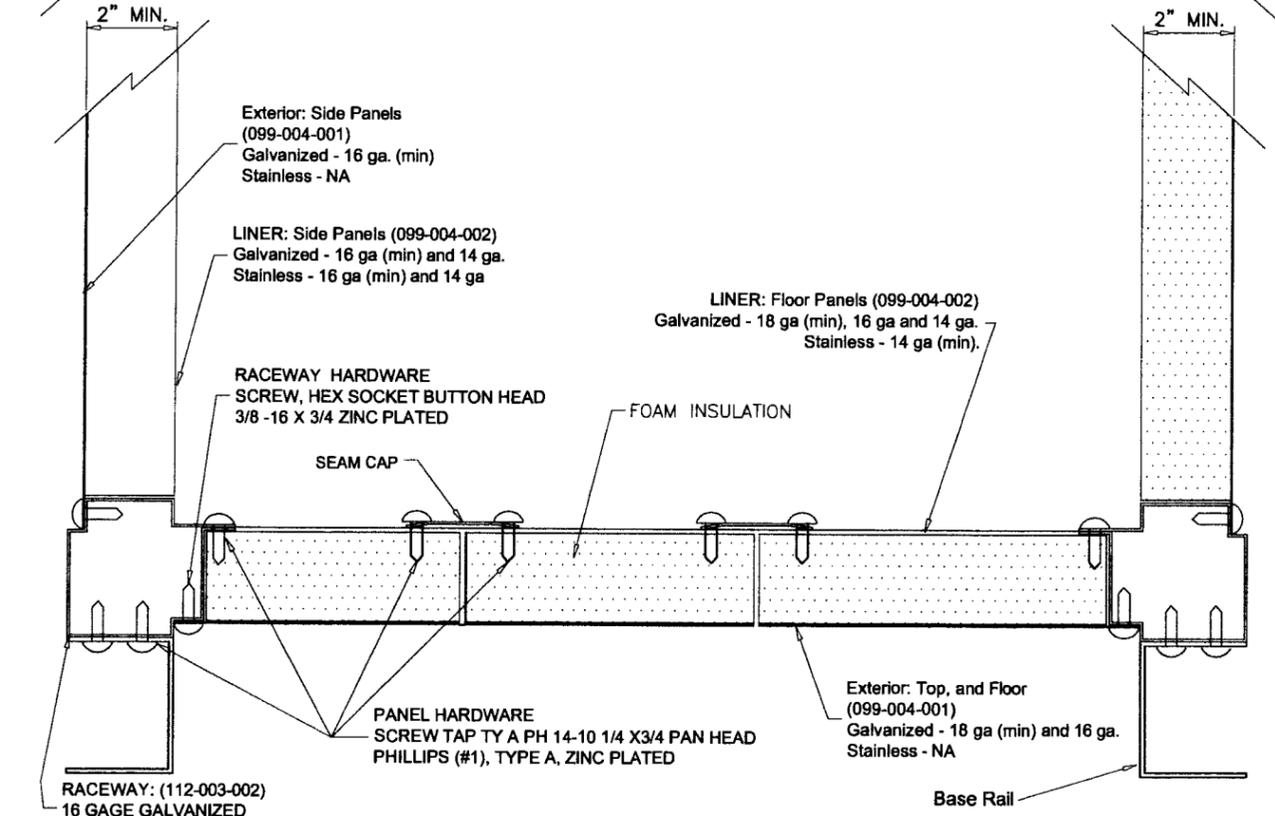
sheet 7 of 17



ROOF PANEL CONSTRUCTION



WALL PANEL CROSS SECTION



FLOOR PANEL CONSTRUCTION

Notes:

1. Roof panels, floor panels, and wall panels are 2.00" thick double wall construction. Exterior roof and floor panel construction of 18 gage (min) galvanized steel and 16 gage (min) for wall panels. The interior liner shall be constructed of 18 gage (min) for roof and floor panels and 16 gage (min) for walls.
2. Access doors are 2.00" thick, double-wall construction, of galvanized sheet steel. The interior and exterior liner construction shall consist of 20 gage sheet steel. Additionally, an 18 gage exterior panel shall be secured to the access door with #14 x 3/4" self-tapping sheet metal screws.
3. Insulation is spray injected closed-cell foam.

Engr: DR. HUMAYOUN FAROOQ
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Miami Dept. Product Control
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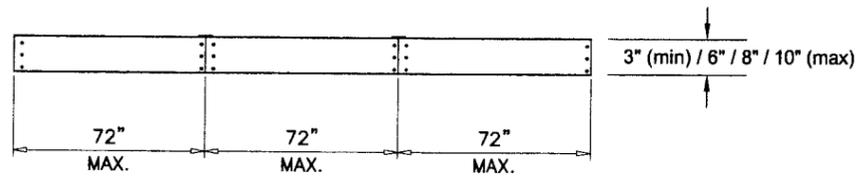
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ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
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YORK/JOHNSON CONTROLS INC.
15901 S.W. 29TH STREET, SUITE 801
MIRAMAR, FL. 33027
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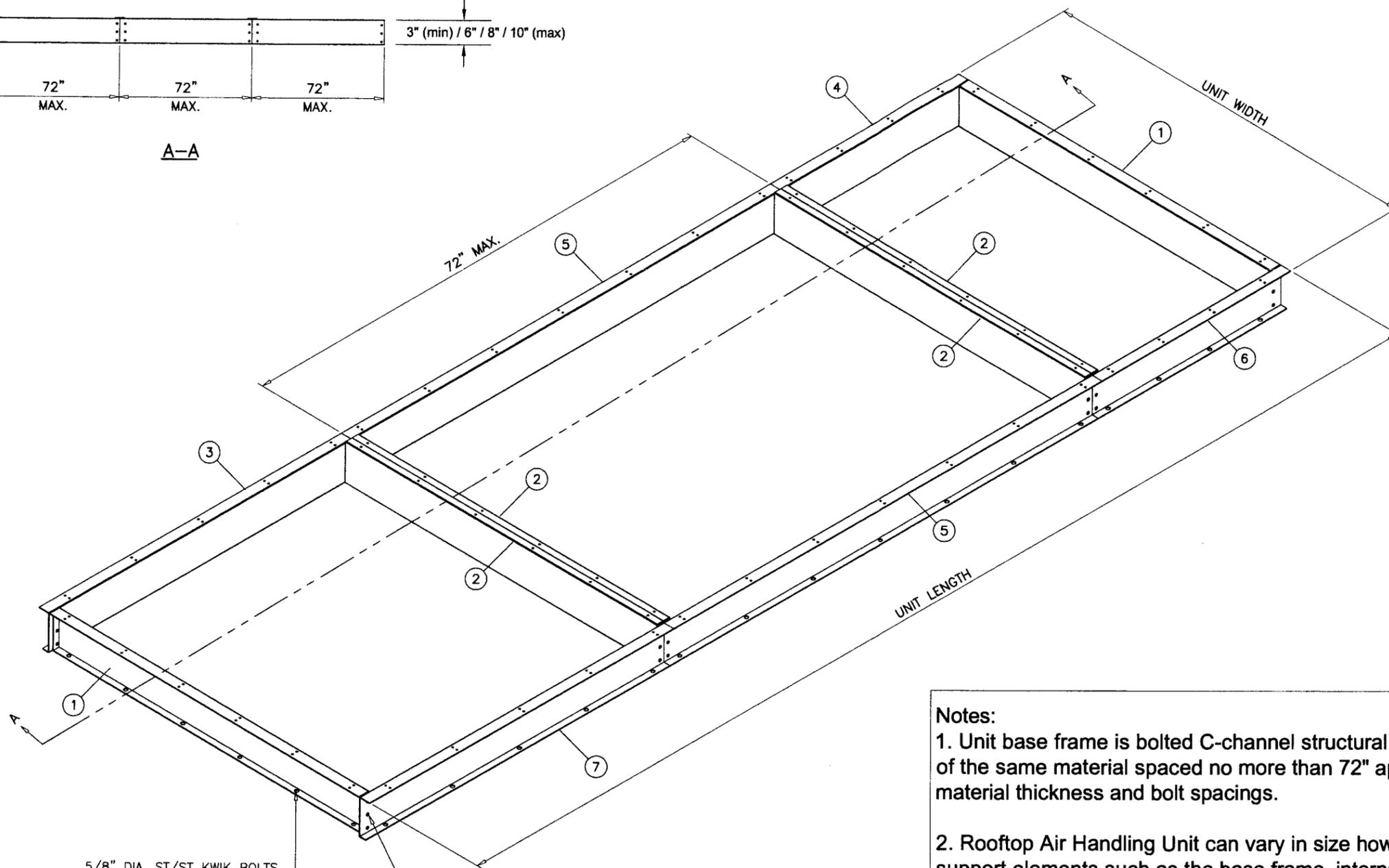
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	A	07.06.07		MANUF. NAME REV.

date:	08-03-06
scale:	1/4" = 1"
dr. by:	HAMID
chk. by:	

drawing no.
06-07
sheet 8 of 17



A-A



5/8" DIA. ST/ST KWIK BOLTS INTO 3000 PSI MIN. CONCRETE 4" MIN. CONC. EMBED OR 5/8" DIA. THRU BOLTS W/ WASHER & NUT INTO 1/8" MIN. THK. STEEL AT 4" FROM ENDS & 16" O.C. MAX.

SCREW, HEX HEAD, 1/2-13UNC-2A X 1.75
(2) 3" & 6" BASERAIL HEIGHTS
(3) 8" & 10" BASERAIL HEIGHTS

NOTE:
VERIFY CABLE LOCATION BEFORE DRILLING IF ROOF IS POST TENSION CONCRETE SLAB.

Parts List		
ITEM	QTY	DESCRIPTION
1	2	BASERAIL END XTI GALV
2	4	BASERAIL INT XTI GALV
3	1	BASERAIL DOA FIA GALV
4	1	BASERAIL DOA LIA GALV
5	2	BASERAIL DOA MIA GALV
6	1	BASERAIL DOA FIA GALV
7	1	BASERAIL DOA LIA GALV

Notes:

1. Unit base frame is bolted C-channel structural steel with c-channel cross supports of the same material spaced no more than 72" apart. Refer to sheet 10 for material thickness and bolt spacings.

2. Rooftop Air Handling Unit can vary in size however, spacing of the structural support elements such as the base frame, internal hat channels, raceways, roof/floor/wall panels, hardware spacing, hardware sizes, shall not exceed the dimensions or material gages indicated.

3. It shall be the responsibility of the permit holder to verify the structural integrity of the existing structure to support the loads superimposed by the Rooftop Air Handling Unit.

Engr: DR. HUMAYOON FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

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Miami Code Enforcement
Division

SOLUTION XT
BASERAIL ASSEMBLY

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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
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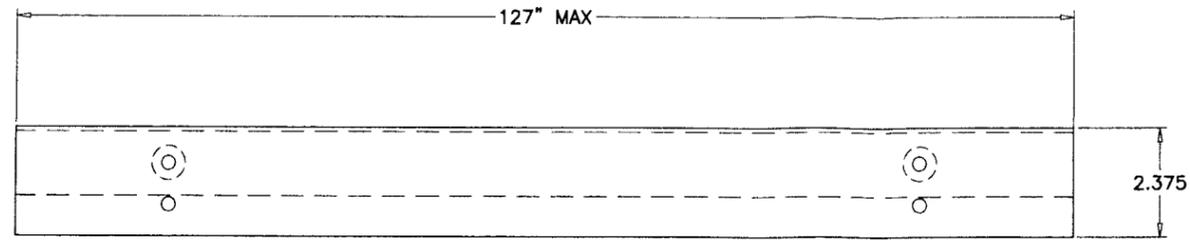
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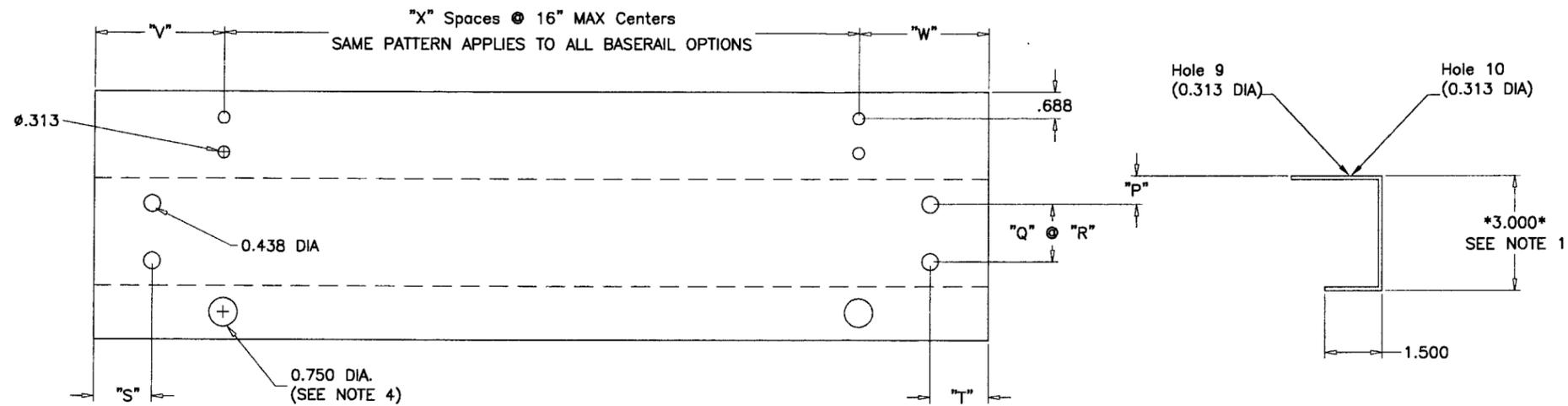
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scale: 1/4"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
06-07

sheet 9 of 17



FORMED TOP VIEW



FLAT VIEW

FORMED SIDE VIEW

5/8" DIA. HOLES USED WITH 1/4" SCREWS TO ATTACH BASERAIL TO UNIT RACEWAY.
3/4" DIA. HOLES USED WITH 5/8" BOLTS TO ATTACH BASERAIL TO DUNAGE STEEL OR CONC. SLAB.
SEE SHEET 11 FOR BASERAIL USED FOR ROOF CURB.

- NOTES:
- 1) BASERAIL OPTION HEIGHTS 3",6",8",10"
 - 2) HOLE SPACING BETWEEN FIRST AND LAST WILL VARY UPON BASERAIL LENGTH BUT CENTERS WILL NOT EXCEED 16" AS INDICATED BY "X" SPACES.
 - 3) BASERAIL GAGES AS FOLLOWS - 3" = 12 GAGE GALV
 6" = 10 GAGE GALV
 8" = 10 GAGE GALV
 10" = 8 GAGE GALV
 - 4) 0.75" DIA. BASERAIL BOLT HOLE SHALL BE USE FOR ATTACHMENT TO THE ROOF TO PREVENT SLIDING AND OVERTURNING OF THE AIR HANDLING UNIT.

Baserail Height	"P"	"Q" SPACES	"R"	BASERAIL LOCATION	"S"	"T"	"V"	"W"
3	.875	1	1.250	LIA	.941	1.781	3.153	5.403
6	1.657	1	2.687	MIA	.941	.941	3.153	3.153
8	1.657	2	2.687	FIA	1.781	.941	5.403	3.153
10	1.657	2	2.687	FULL	1.781	1.781	5.403	5.403

BASERAIL DIMENSIONS

Engr: DR. HUMAYOON FAROOQ
 STRUCTURES
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 Miami Code Control
 Division

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 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
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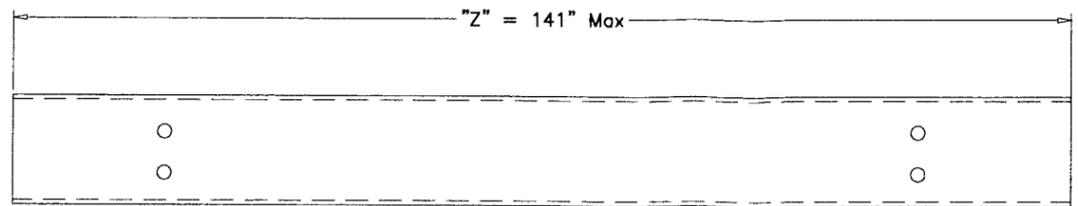
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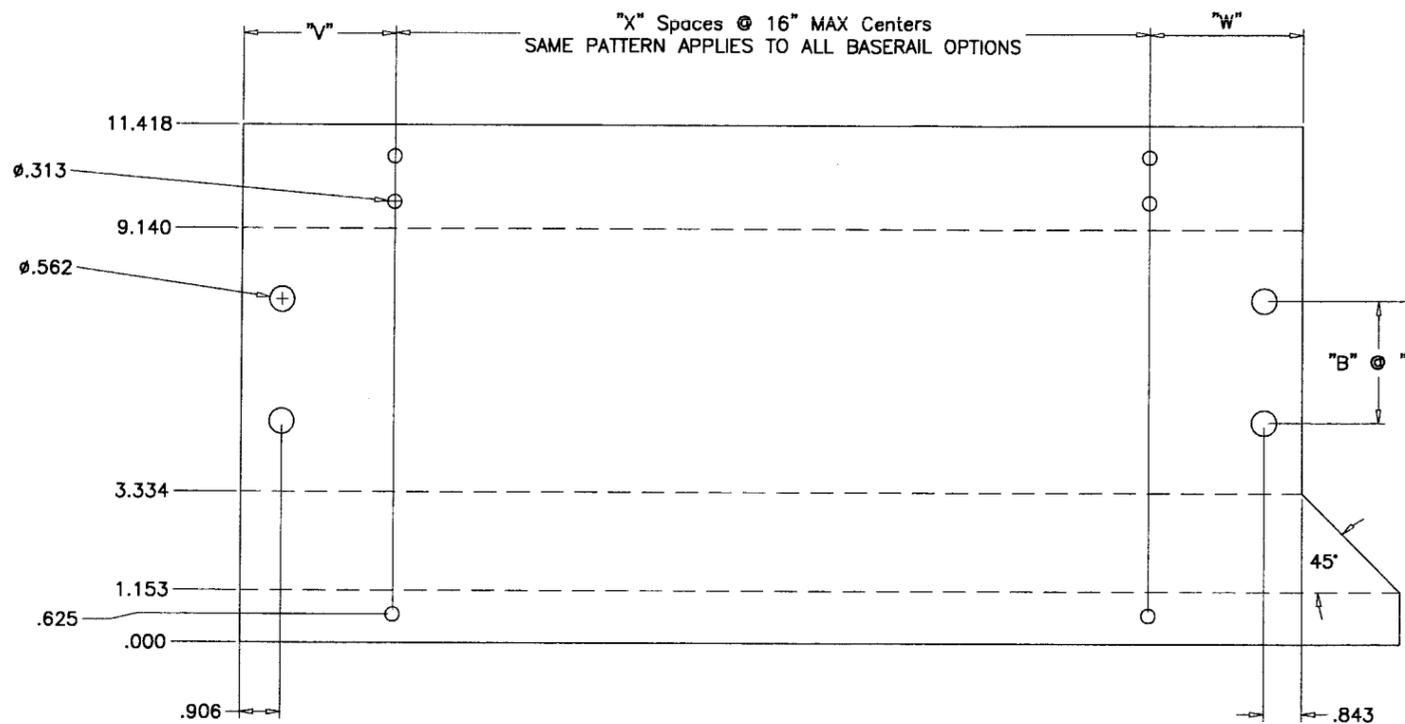
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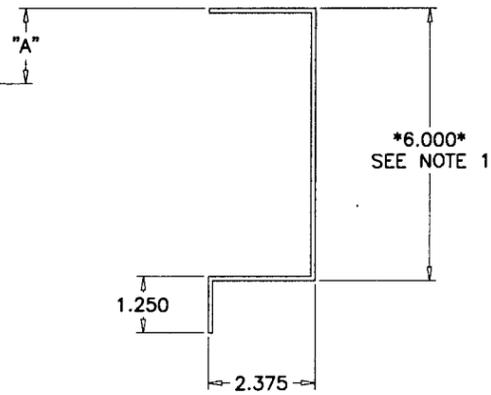
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 sheet 10 of 17



FORMED TOP VIEW



FLAT VIEW



FORMED SIDE VIEW

CALCULATION CHART AND DATA			
VERTICAL HOLE DATA			
BASERAIL HEIGHT	"A"	"B" SPACES	"C"
6"	1.657	1	2.687
8"	1.657	2	2.687
10"	1.657	2	2.687

NOTES:

- 1) BASERAIL OPTION HEIGHTS 6",8",10"
- 2) HOLE SPACING BETWEEN FIRST AND LAST WILL VARY UPON BASERAIL LENGTH BUT CENTERS WILL NOT EXCEED 16" AS INDICATED BY "X" SPACES.
- 3) BASERAIL GAGES AS FOLLOWS - 6" = 10 GAGE GALV
8" = 10 GAGE GALV
10" = 8 GAGE GALV
- 4) 0.75" DIA. BASERAIL BOLT HOLE SHALL BE USE FOR ATTACHMENT TO THE ROOF TO PREVENT SLIDING AND OVERTURNING OF THE AIR HANDLING UNIT.

Baserail Location	"V"	"W"	"Z"	"X"
FIA "C"	3.153	3.028	=SUM OF SECTION LENGTHS + 3.063 (<=141")	=ROUNDUP((Z-V-W)/16")

BASERAIL DIMENSIONS
FOR USE W/ ROOF CURB

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STRUCTURES
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C.A.N. 3538

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Professional Engineer
Division

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ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

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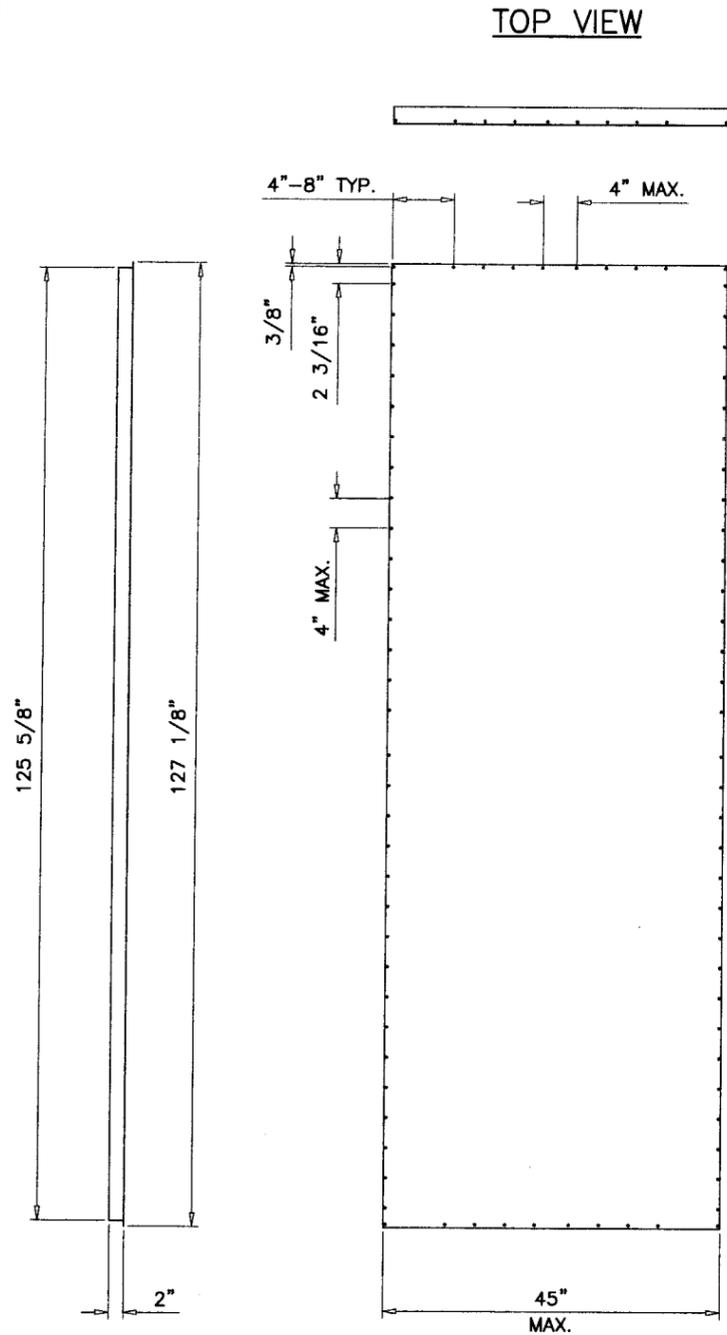
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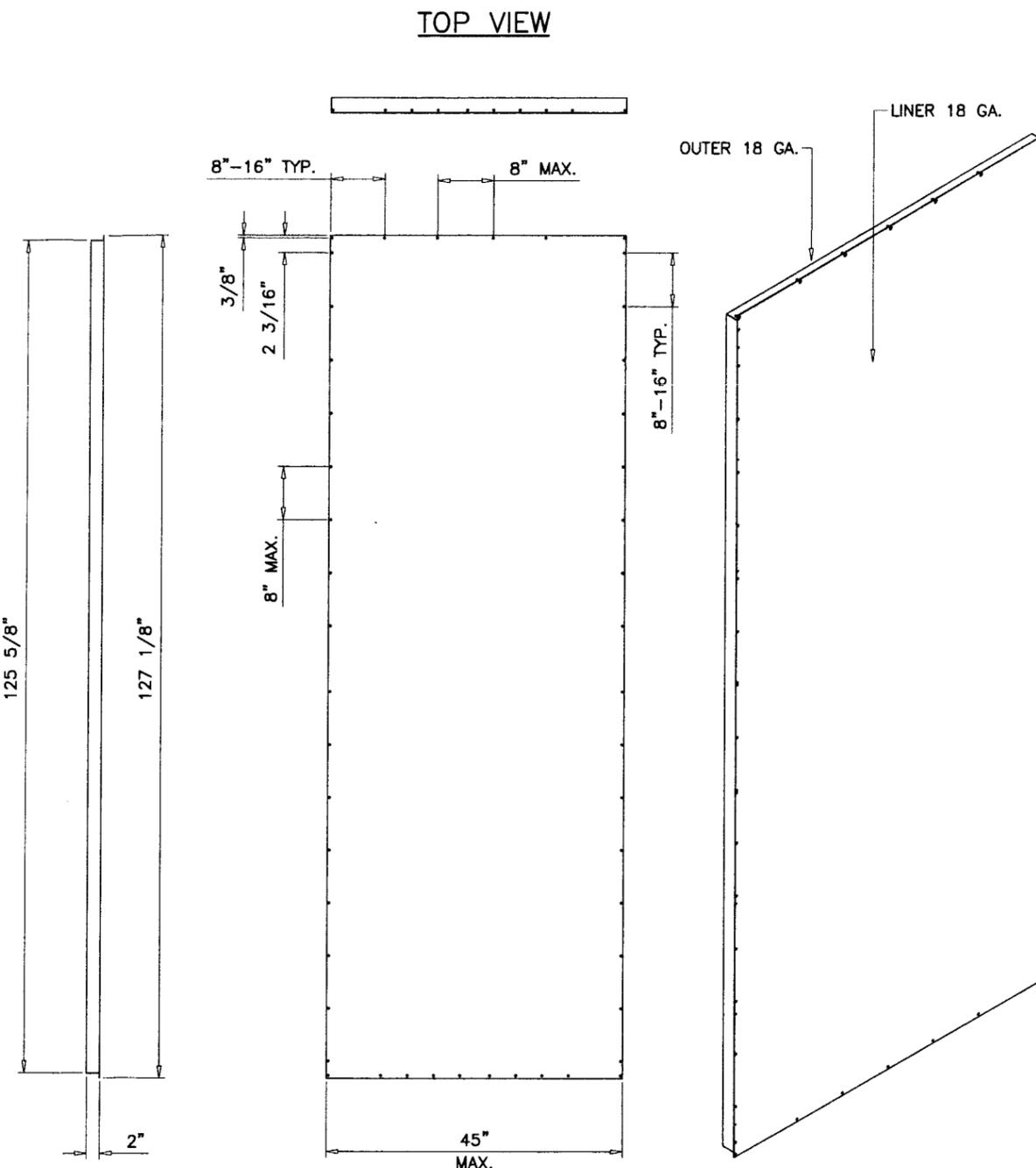
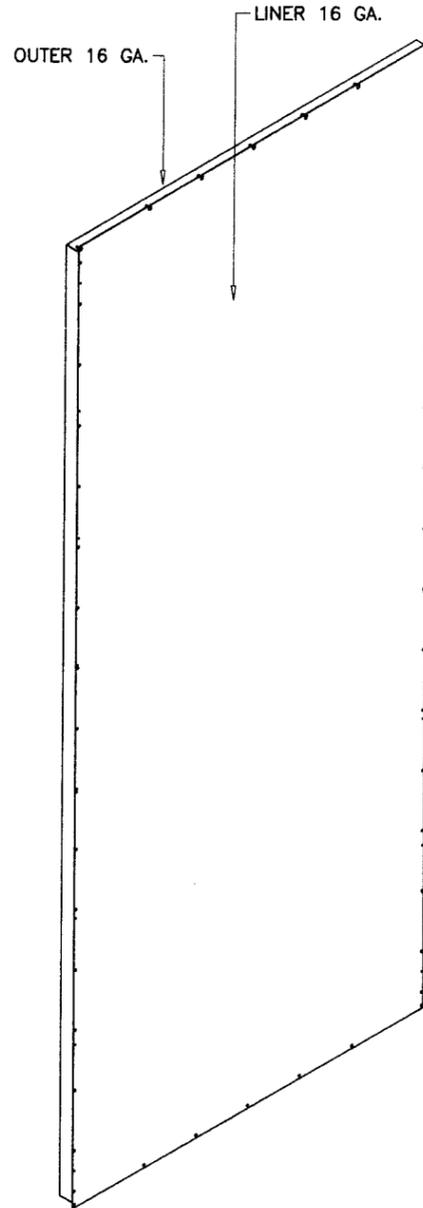


SIDE VIEW

FRONT VIEW

ISOMETRIC VIEW

SOLUTION XT-45W
WALL PANEL ASSY.



SIDE VIEW

FRONT VIEW

ISOMETRIC VIEW

SOLUTION XT-45W
FLR/ROOF PANEL ASSY.

NOTE: SCREW SPACING AND LOCATIONS ARE INDICATED. REFER TO OTHER DRAWINGS FOR SCREW SIZES

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By: *Helmy A. M. M.*
Miami Dade Product Control
Division

afc
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
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MIRAMAR, FL. 33027
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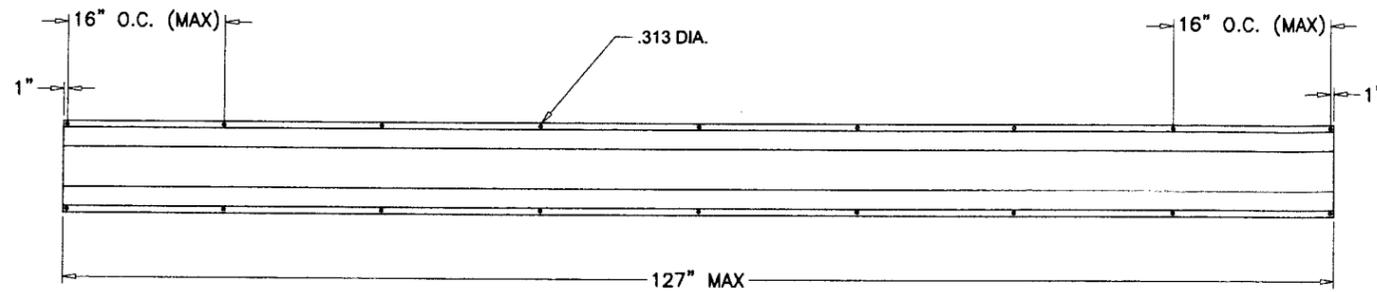
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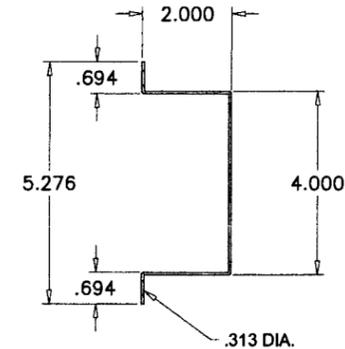
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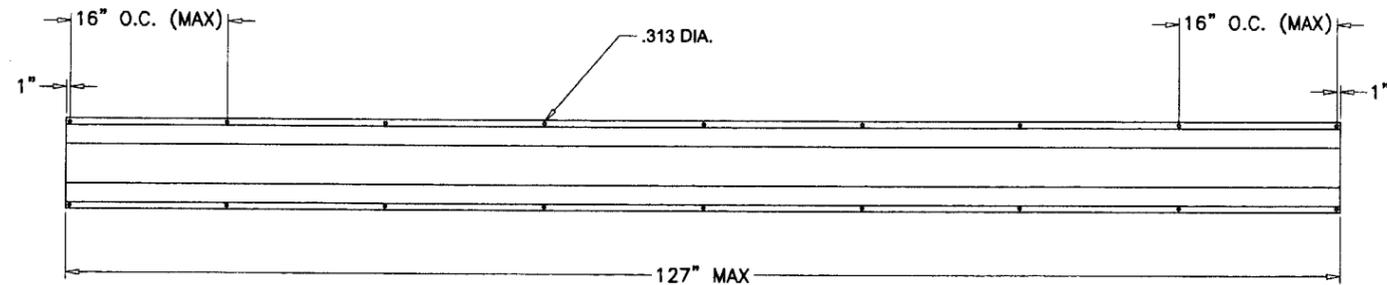
FLAT VIEW



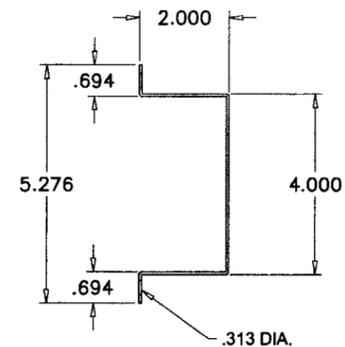
FORMED SIDE VIEW

- NOTES:
1. Internal steel hat channel supports shall be 16 gage minimum thickness galvanized steel.
 2. The maximum spacing for the internal supports shall be 36" O.C. and maximum length shall not exceed 127".
 3. Hat channels shall be installed to unit #14 x 1" self-tapping panhead screws.

SIDE WALL SUPPORTS
SOLUTION XT-HAT CHANNEL



FLAT VIEW



FORMED SIDE VIEW

- NOTES:
1. Internal steel hat channel supports shall be 12 gage minimum thickness galvanized steel.
 2. The maximum spacing for the internal supports shall be 37" O.C. and maximum length shall not exceed 127".
 3. Hat channels shall be installed to unit #14 x 1" self-tapping panhead screws.

END WALL SUPPORTS
SOLUTION XT-HAT CHANNEL

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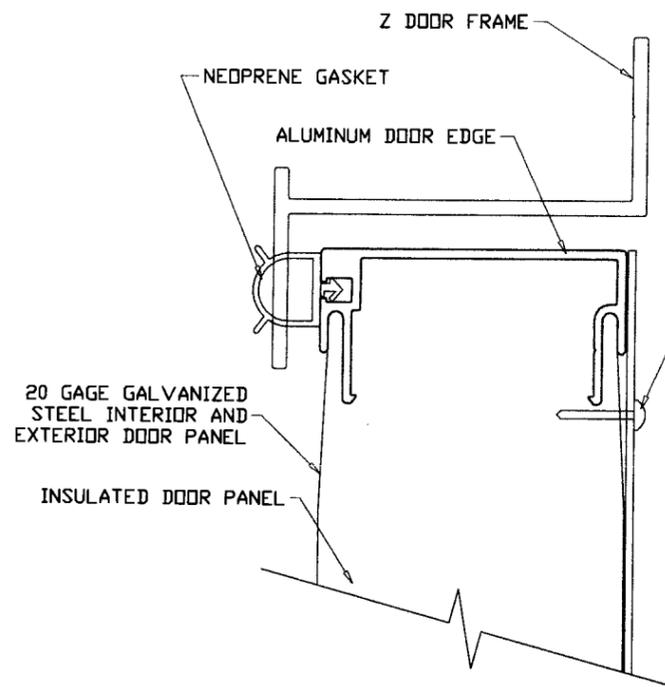
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 Miami Dade Product Control
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 MIRAMAR, FL. 33027
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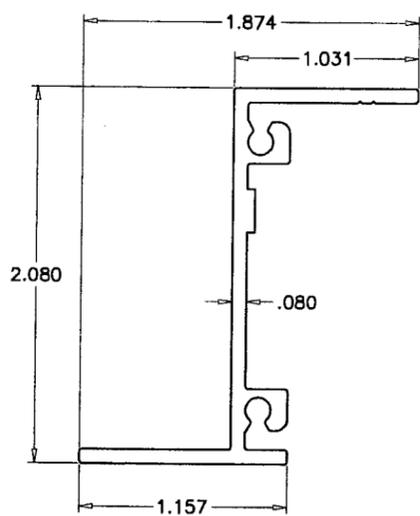
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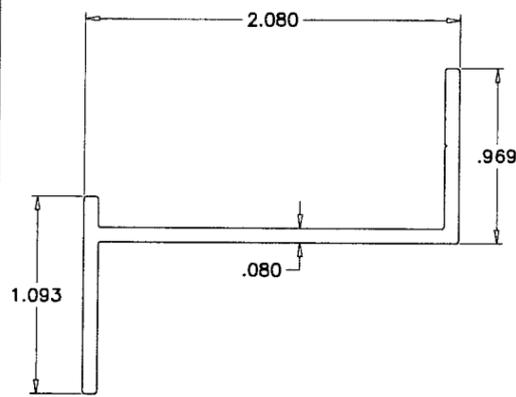
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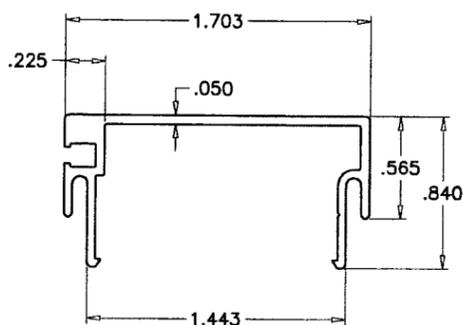
ENLARGED DOOR EDGE DETAIL



NON THERMAL VERTICAL Z FRAME



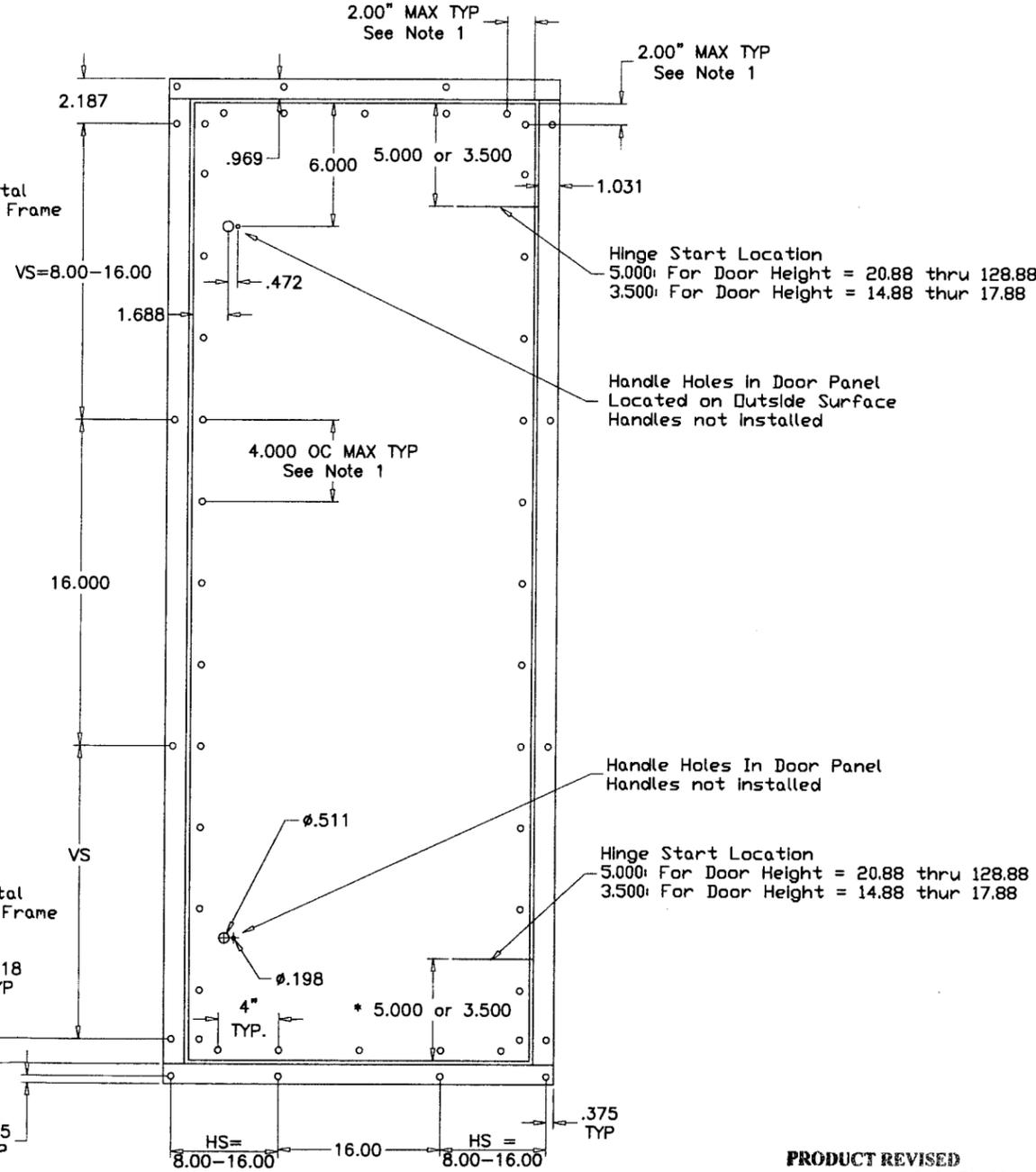
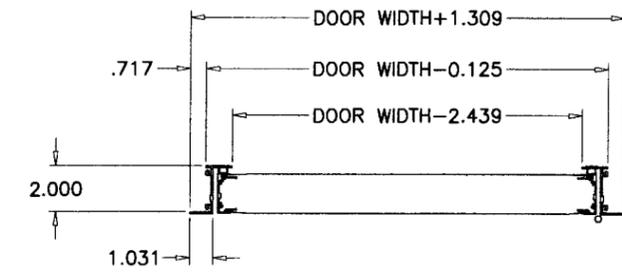
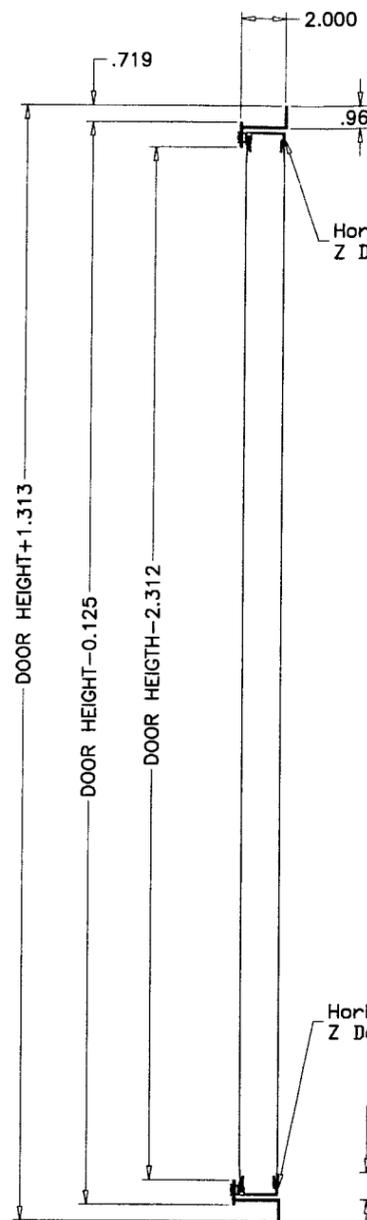
NON THERMAL HORIZONTAL Z FRAME



NON THERMAL DOOR PANEL EDGE EXTRUSION

NOTES:
 UNIT DOOR HEIGHT = UNIT HEIGHT - 6.125
 PIPE CHASE DOOR HEIGHT = UNIT HEIGHT - 3.125

NOTE:
 1. Access doors are 2.00" thick, double-wall construction of galvanized sheet steel. The interior and exterior liner construction shall consist of 20 gage sheet steel. Additionally, an 18 gage steel exterior panel shall be secured to the access door with #14 x 3/4" self-tapping sheet metal screws spaced 2" from the edge and at 4" O.C.



SOLUTION XT
 ACCESS DOOR
 OPTION #1

Engr: DR. HUMAYOUN FAROOQ
 STRUCTURES
 FLA. PE # 16557
 C.A.N. 3538

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 By *Helmy A. Helmy*
 Miami Data Product Control
 Division

afc
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
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 MIRAMAR, FL. 33027
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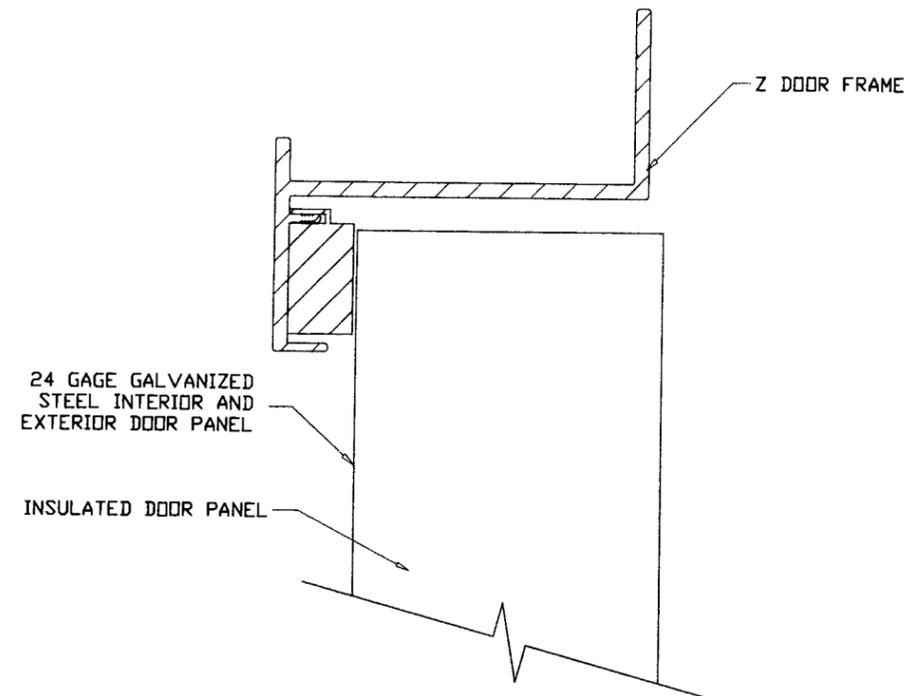
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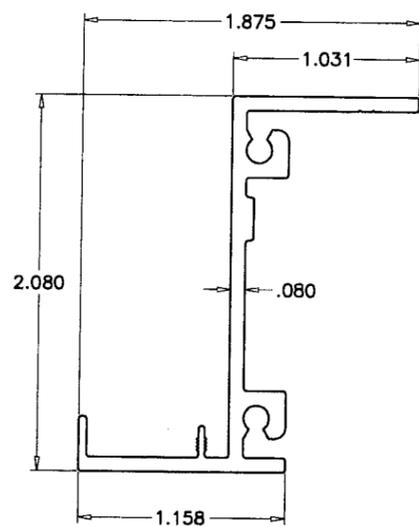
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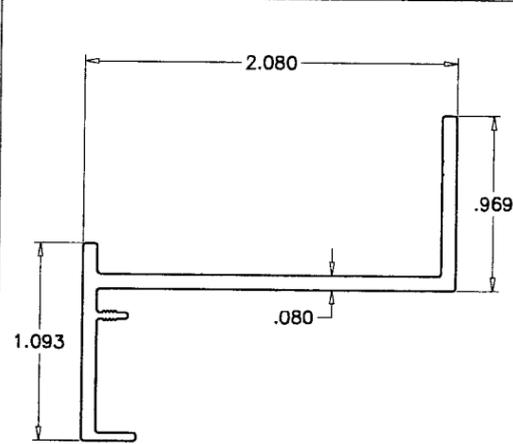
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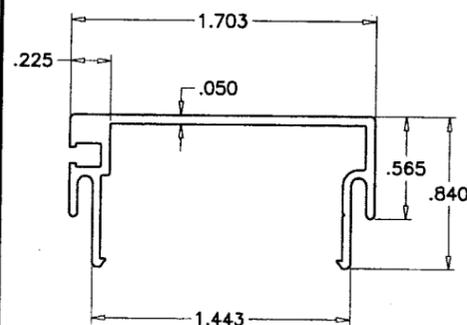
ENLARGED DOOR EDGE DETAIL



NON THERMAL VERTICAL Z FRAME



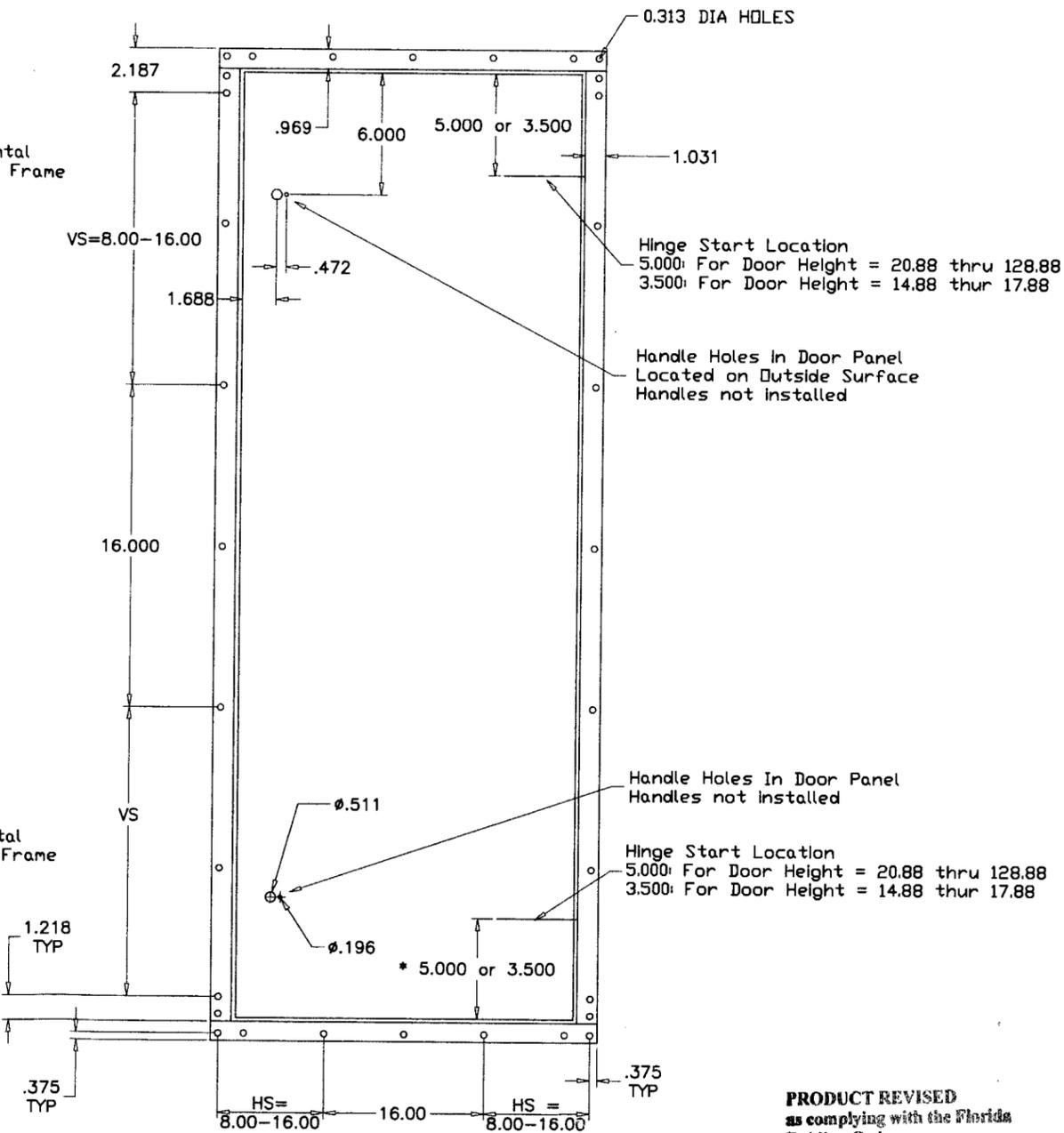
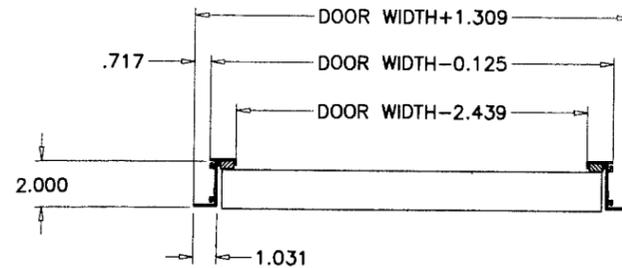
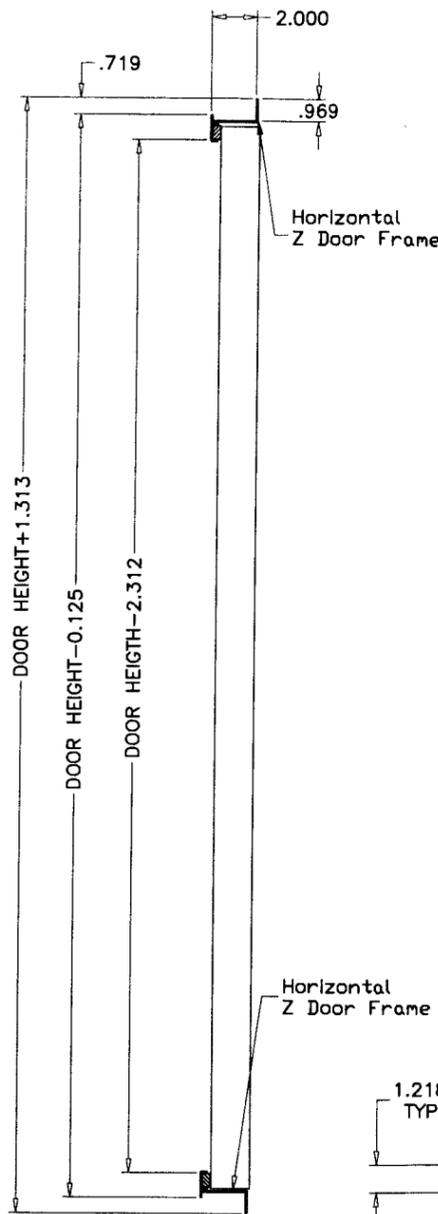
NON THERMAL HORIZONTAL Z FRAME



NON THERMAL DOOR PANEL EDGE EXTRUSION

NOTES:
 UNIT DOOR HEIGHT = UNIT HEIGHT - 6.125
 PIPE CHASE DOOR HEIGHT = UNIT HEIGHT - 3.125

NOTE:
 1. Access doors are 2.00" thick, double-wall construction of galvanized sheet steel. The interior and exterior liner construction shall consist of 24 gage sheet steel.
 2. View area not available on Doors used for NOA constructed units.
 3. Door must show no water leakage at 6.0" W.C and no air leakage at negative 8.0" W.C



SOLUTION XT
 ACCESS DOOR
 OPTION #2

Engr: DR. HUMAYOUN FAROOQ
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 Building Code
 Acceptance No. 07-0130.03
 Expiration Date 12/09/2009
 By: *Heba A. M. M.*
 Miami Dade Control Control
 Division

af c

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 COOLER\06-07YIC

SOLUTION XT ROOFTOP AIR HANDLING UNIT

YORK/JOHNSON CONTROLS INC.
 15901 S.W. 29TH STREET, SUITE 801
 MIRAMAR, FL. 33027
 TEL. (954) 389-9675 FAX. (954) 389-9687

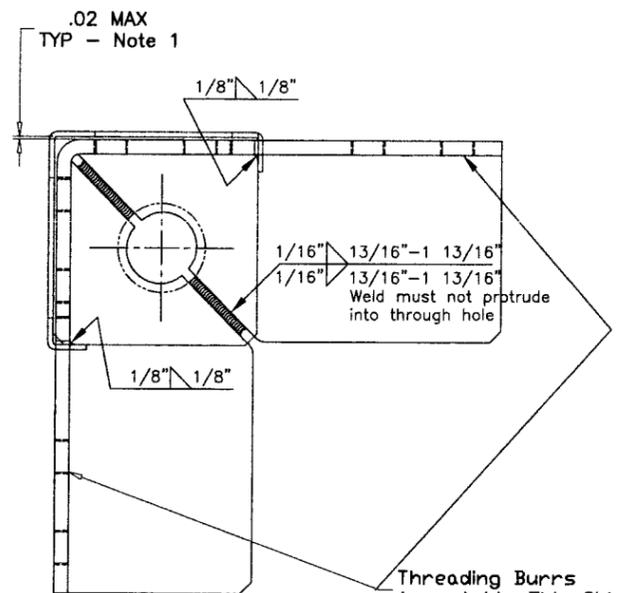
no	date	description
A	07.06.07	MANUF. NAME REV.

revisions:

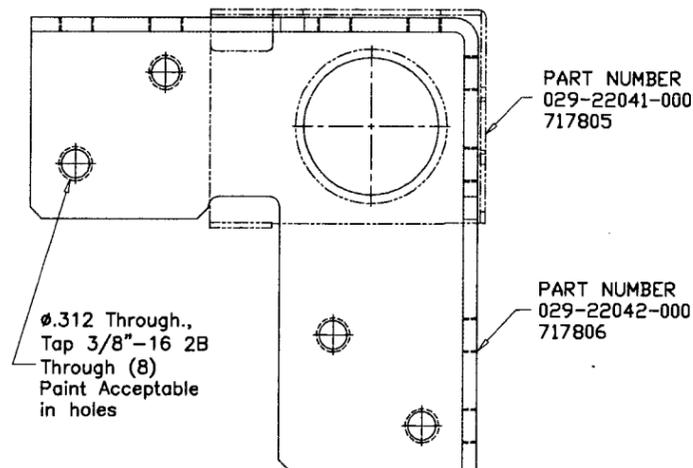
date: 08-03-06
 scale: 1/8" = 1"
 dr. by: HAMID
 chk. by:

drawing no.
06-07

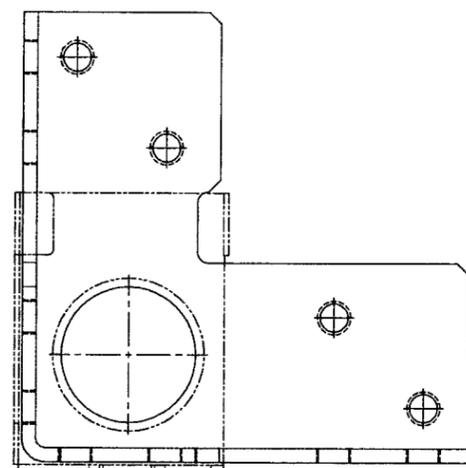
sheet 15 of 17



TOP VIEW



EXTERIOR SIDE VIEW



INTERIOR SIDE VIEW

CORNER CONNECTOR

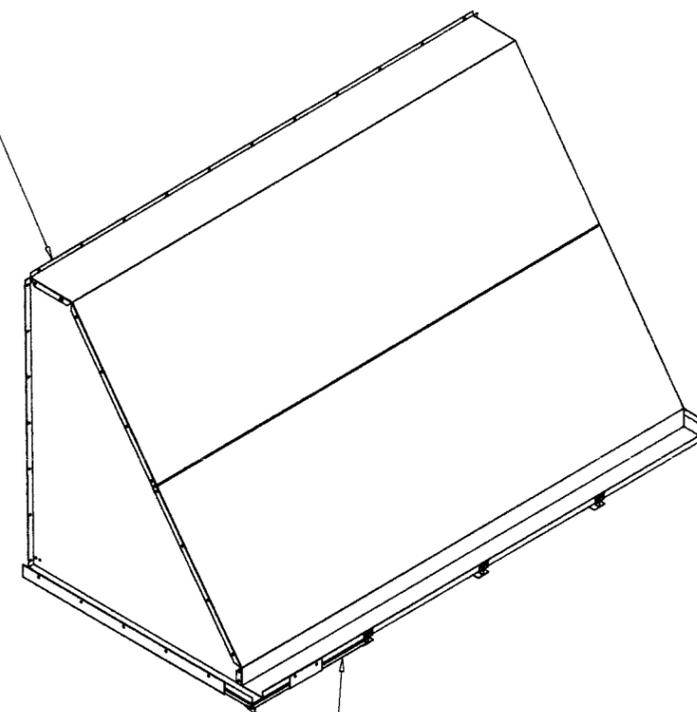
DETAIL

1/2" = 1"

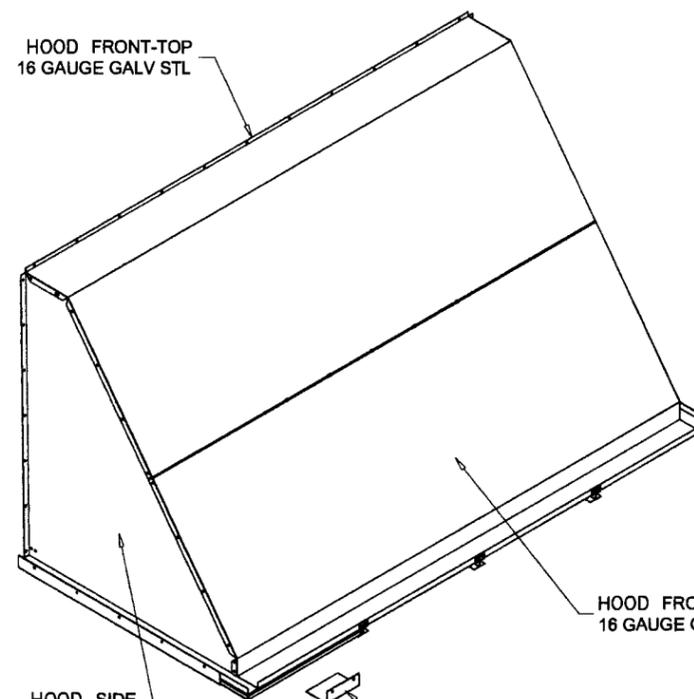
Notes:

- 1) Gap can not accept 1/2" wide feeler stock.
- 2) Finish - Anodized Silver Powder Coat Paint.
- 3) Sub-component dimensions are prior to paint.
- 4) 8 gage stamped and formed galvanized steel corner

PLACE BUTYL TAPE
0.75" W X 0.19" THK
ALONG BACK OF
HOOD FLANGE & SCURE
TO UNIT WITH
0.25-14X0.75LG TYPE A SCREWS



FILTER BIRD SCREEN
& EXPANDED METAL
MOISTURE ELIMINATOR



HOOD SIDE
16 GAUGE GALV STL

HOOD FRONT-BOTTOM
16 GAUGE GALV STL

HOOD FRONT ANGLE

**OUTDOOR AIR
HOOD ASSEMBLY**

1/2" = 1'-0"

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

NOV 05 2007

PRODUCT REVISED
as complying with the Florida
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Acceptance No. 07-0130-03
Expiration Date 12/09/2009
By *Helmy A. Helmy*
Miami Design Product Control
Division

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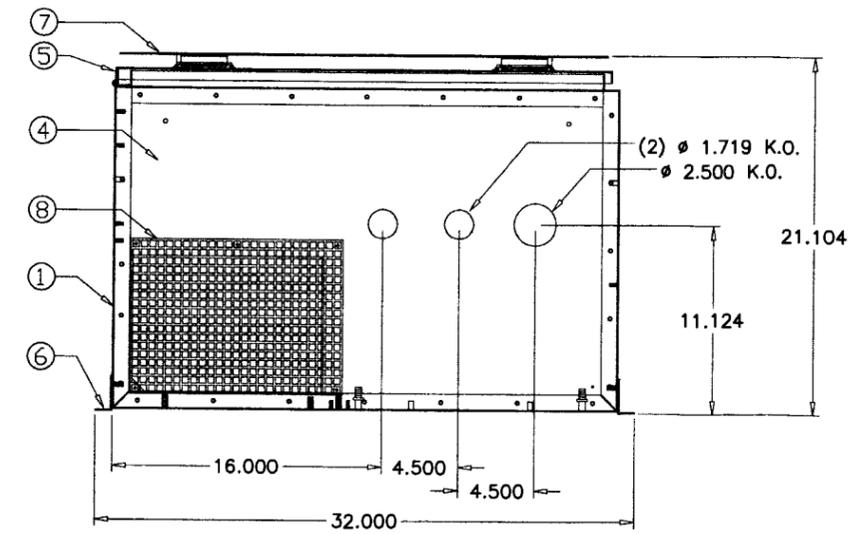
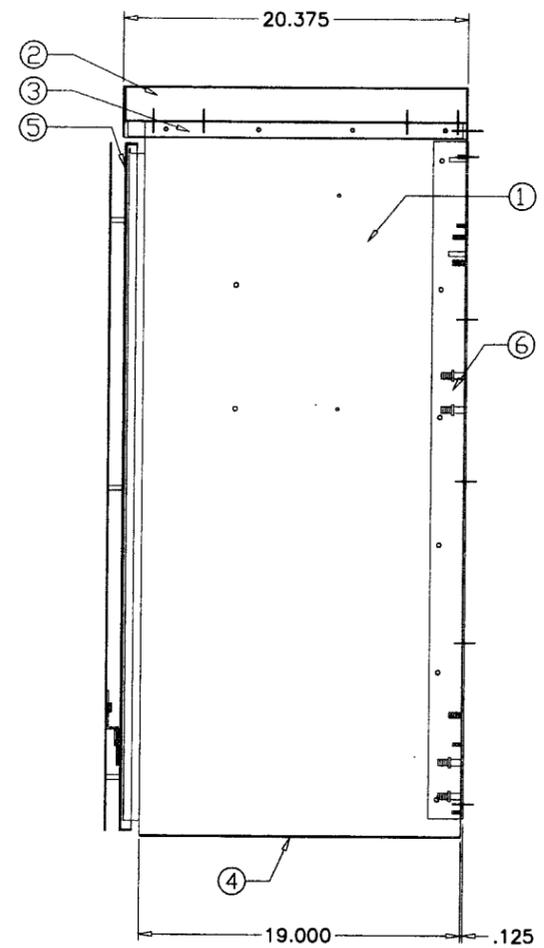
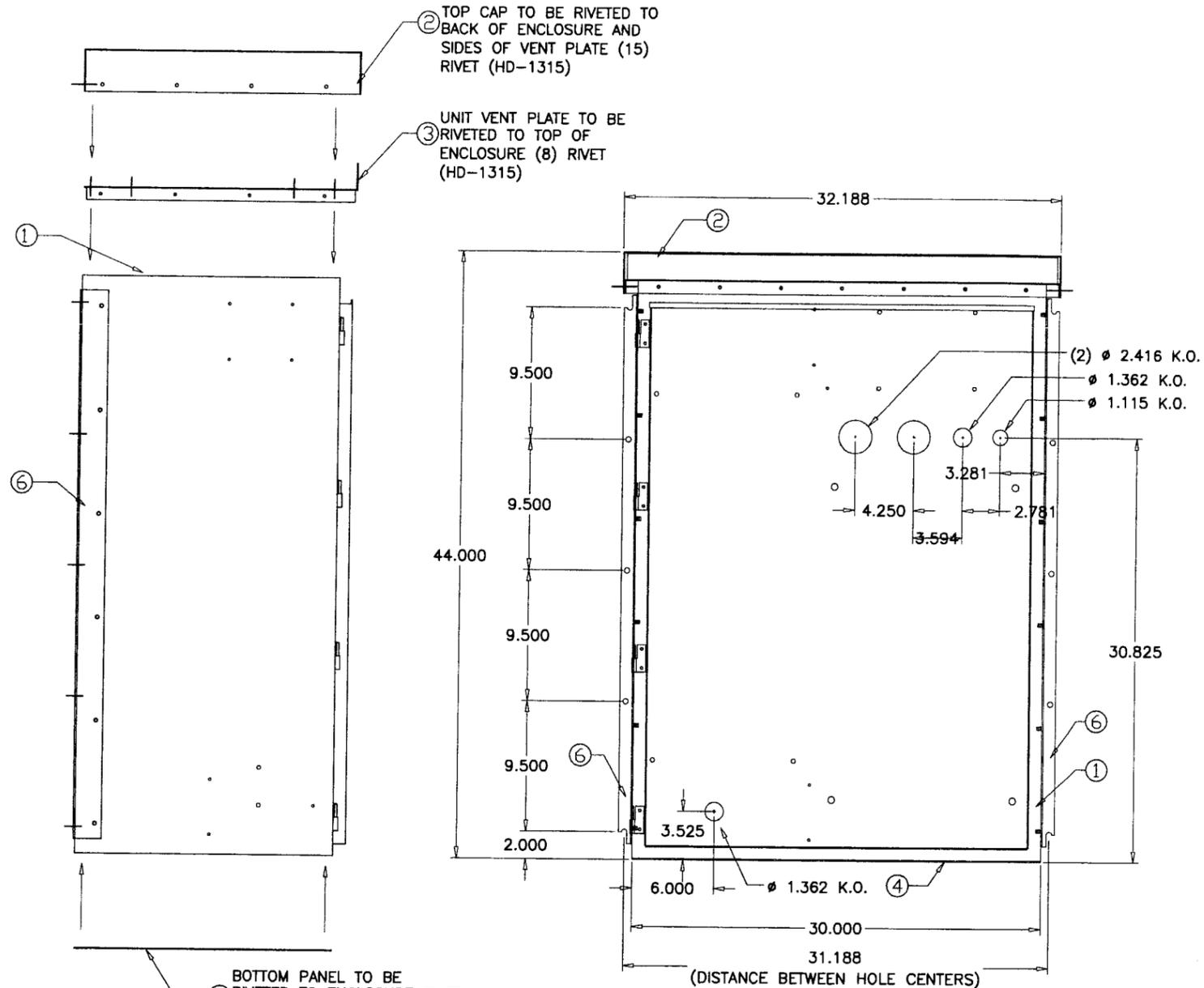
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no	date	no	description	MANUF.	NAME REV.
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date: 08-03-06	scale: -	dr. by: HAMID	chk. by:
drawing no. 06-07			
sheet 16 of 17			

COOLER\06-071C

PARTS LIST			
ITEM	DRAWING NO.	ITEM DESCRIPTION	QTY.
1	207931	ENCLOSURE ASSEMBLY	1
2	207935	ENCLOSURE TOP CAP	1
3	207936	UNIT VENT PLATE	1
4	207937	BASE PANEL	1
5	207938	ENCLOSURE DOOR	1
6	207942	MOUNTING RAIL	2
7	207943	SUN SHIELD (DOOR)	1
8	207827	GRILLE	1



**VENTED NEMA 3R
ENCLOSURE ASSEMBLY**

Engr. DR. HUMAYOUN FAROOQ
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By: *Heinrich A. Hamid*
Miami Dade Transit Control
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sheet 17 of 17