



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)

Greenheck Fan Corporation
P.O. Box 410
Schofield, WI 54476-0410

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 Florida Building Code including the High Velocity Hurricane Zone.

DESCRIPTION: Aluminum Louver Model ESS-501D.

APPROVAL DOCUMENT: Drawing No. A1, A2, D1, D2 & D3, titled "ELEVATIONS & DETAILS ESS-501D METRO DADE LOUVERS" dated 11/09/98 with last revision #12 on 03/16/07, prepared by Greenheck, signed and sealed by L. D. Rice P.E., bearing the Miami-Dade County Product Control Approval stamp with the NOA number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved or MDCPCA", 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 is a Private Label; it revises NOA # 05-0912.13 and consists of this page 1, evidence page E-1 as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



NOA No: 07-0404.04
Expiration Date: July 06, 2008
Approval Date: May 17, 2007
Page 1

Greenheck Fan Corporation.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS.

1. Drawing prepared by Greenheck titled "ELEVATIONS & DETAILS ESS-501D Metro Dade Louvers," Drawing No. A1, A2, D1, D2 & D3 dated 11/09/98 with last revision #11 on 03/16/07. signed and sealed by L. D. Rice, PE.

B. TESTS.

1. Test report on Large Missile Impact Test per PA 201, Cyclic Wind Pressure Test per PA 203 and Uniform Static Air Pressure Test per PA 202 of "K/CB605 Louvers for the American Airline Arena", prepared by Architectural Testing, Inc., report No. 01-34323.01, dated 04/15/99, signed and sealed by A. N. Reeves, PE

C. CALCULATIONS.

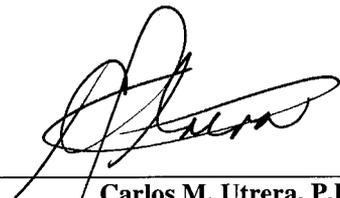
1. Structural Load Calculations for American Airlines Arena with documentation prepared by Airolite Architectural Louvers, Grilles & Sun Controls sheet 1 through 25 of 25, signed and sealed by J. F. Bir, PE on 05/11/99

D. QUALITY ASSURANCE.

1. Building Code Compliance Office

E. STATEMENTS

1. Code compliance letter issued by D. G. Farabaugh, PE on 05/08/00, signed and sealed by D. G. Farabaugh on 05/08/00, PE.
2. No change letter issued by The Airolite Co. on 05/29/03 and signed by Randal Geedey.
3. Assets Purchase Agreement between The Airolite Company, Louv-Aire Inc. and The Airolite Company LLC dated 06/30/04, signed by R. A. Greenheck and Leight Murray.
4. Private Label Agreement between The Airolite Company LLC and Greenheck Fan Corporation signed by R. Greenheck and P. Neitzel and notarized by K.K. Steffek.
5. Revision Request Letter issued by Greenheck Fan Corporation on 03/27/07, signed by Michael L. Watz, Jr., P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 07-0404.04
Expiration Date: July 06, 2008
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GENERAL NOTES:

- 1) MAXIMUM UNSUPPORTED BLADE LENGTH SHALL NOT EXCEED 72" WITH OUT STIFFENER AND 144" WITH STIFFENER.
- 2) THE MAXIMUM DESIGN PRESSURE RATING IS ±110PSF
- 3) THIS SYSTEM HAS NOT BEEN TESTED FOR WATER INFILTRATION RESISTANCE AND IS NOT A WATER RESISTANT SYSTEM.
- 4) THE LOUVERS, FRAMES, HARDWARE/FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS AND MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THESE DRAWINGS.
- 5) THESE LOUVER ARE TO BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVERS IS DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, AND THE ROOM WILL HOUSE WATER RESISTANT/WATER PROOF EQUIPMENT, COMPONENTS, OR SUPPLIES.

BLADES SHALL BE JOINED TO EACH JAMB FRAME AND VERTICAL STIFFENING MEMBER WITH TWO FILLET WELDS EACH 1" (25.4mm) LONG PRODUCED WITH THE PULSED GAS METAL ARC WELDING PROCESS (GMAW/MIG) WITH A MINIMUM 0.125" (3.18mm) THROAT. FRAMES SHALL BE JOINED AT EACH CORNER WITH FULL-LENGTH GMAW FILLET WELDS WITH A MINIMUM 0.125" (3.18mm) THROAT. MANUFACTURER SHALL SUBMIT THEORETICAL CALCULATIONS PREPARED BY A PROFESSIONAL ENGINEER SPECIALIZING IN THE APPLICATION OF WELDING TECHNOLOGY DEMONSTRATING THAT EACH WELD WILL WITHSTAND A MINIMUM 526 POUNDS OF FORCE IN SHEAR.

LOUVERS SHALL BE FACTORY PRIMED AND FINISHED-AFTER-ASSEMBLY WITH A KYNAR 500 (PVF₂) RESIN COATING IN A COLOR SELECTED FROM THE MANUFACTURERS STANDARD COLOR CHART.

FASTENER INDEX

- F1-#10 x 5/8" long stainless steel indented hex head thread cutting screw, natural mill.
- F8-1/4"-2 1/4" Hilti stainless steel sleeve anchor, 1 1/8" min embed depth.
- F9-1/4"-20 x 3/4" stainless steel thread cutting screw.
- F10-1/4"-20 x 1" lg stainless steel indented hex head thread cutting screw.
- F11-1/4"-20 x 1" lg 410 stainless steel indented hex head thread cutting screw.

CLIP INDEX

- C1-1 1/4" x 1 1/2" x 1 1/2" long 0.125 aluminum clip angle, alloy 6105-T5, natural mill.
- C2-1 1/4" x 1 1/2" continuous 0.125 aluminum angle, alloy 6105-T6, natural mill.
- C12-4" x 6" x 5" long 5/16" steel clip angle, primecoat, shipped loose.
- C13-4" x 6" x 12" long 5/16" steel clip angle, primecoat, shipped loose.
- C16-2" x 2" continuous 8 ga aluminum angle, alloy 6061-T5, natural mill.
- C17-1 1/4" x 1 1/2" continuous 8 ga aluminum angle, alloy 6105-T5, natural mill.

FINISH SCHEDULE

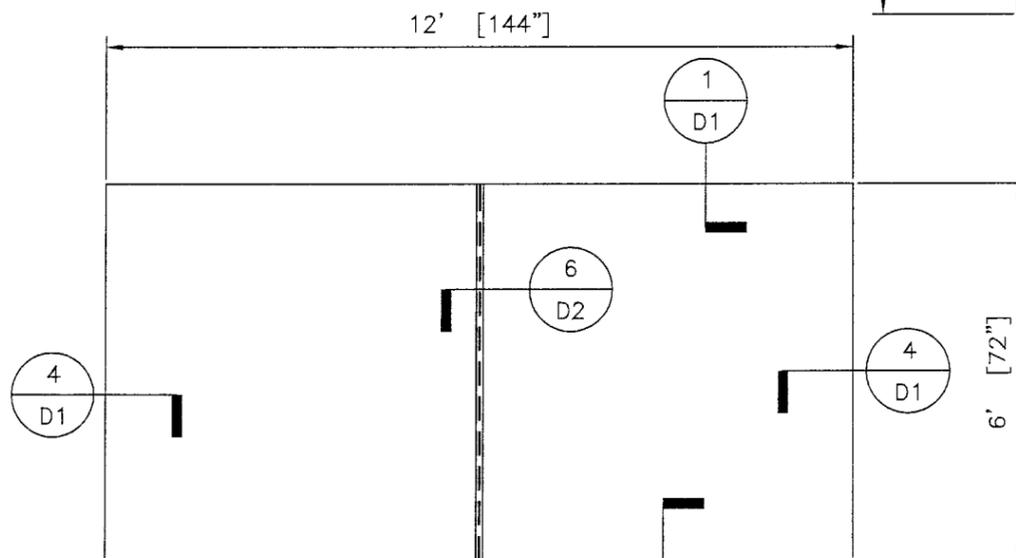
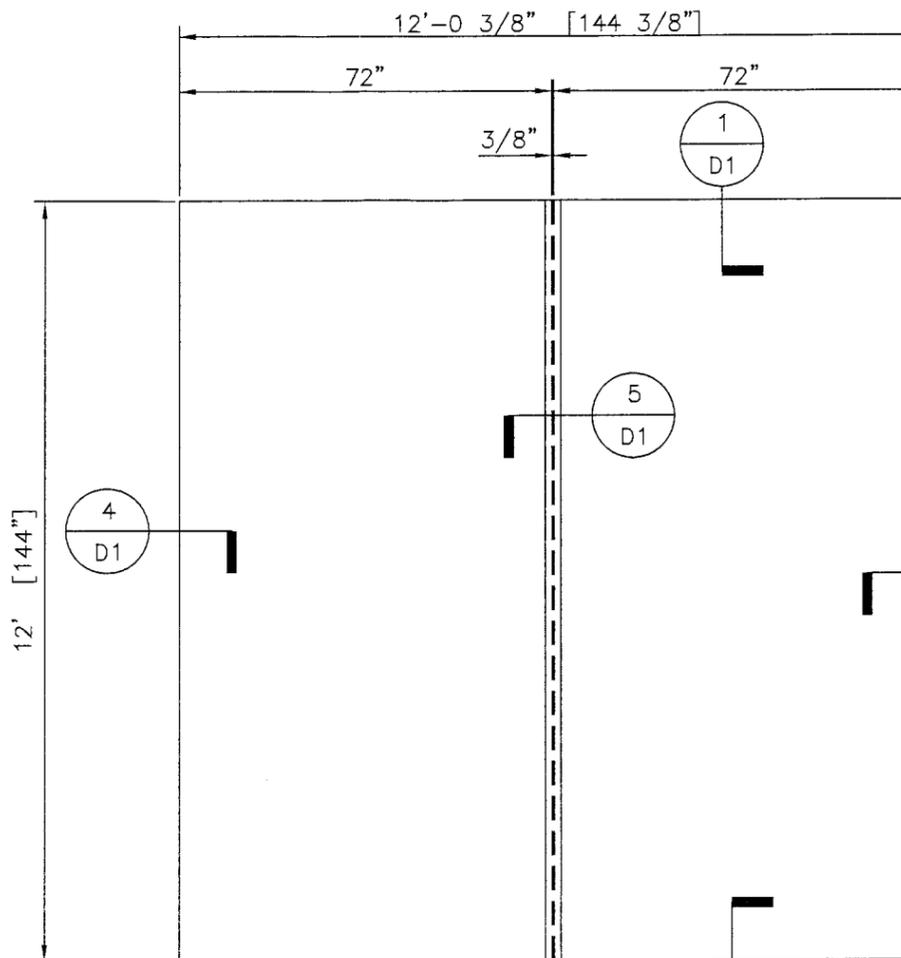
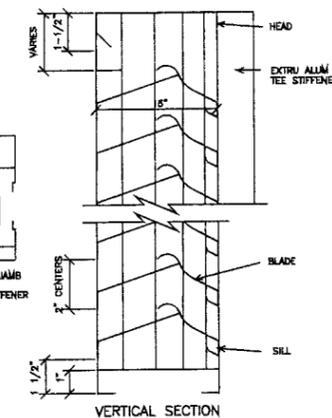
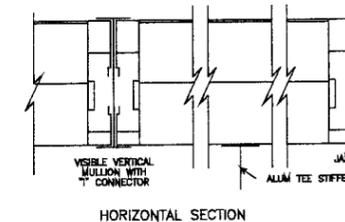
△ KYNAR 500 (SPECIFY COLOR)

MISCELLANEOUS INDEX

- M4-Shims as required, not by Greenheck.
- M10-2" x .087# extruded aluminum 1" beam, alloy 6061-T6, PART# 125430

MATERIALS
LOUVER TYPE
ESS-501D
SIGHTPROOF BLADE LOUVER

MATERIAL: EXTRUDED ALUMINUM (ALLOY 6105-T6)
BLADE: 0.081" (2.06mm)
FRAME: 0.081" (2.06mm)
LOUVER DEPTH: 6" (127.0mm)
BLADE ANGLE: 1°



1 LOUVER ELEV.
ITEM SHORT LOUVER LAYOUT

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 07-0404.04
Expiration Date 07/06/2008
By [Signature]
Metro Trade Product Control
Division

This Certification is limited to the structural design of structural components of this louver system. It does NOT include responsibility for:

- Design of air and water infiltration prevention.
- The manufacture, assembly, or installation of the system.
- Quantities of materials or dimensional accuracy of drawings

REVISION OR ISSUE	DESCRIPTION	DATE	BY
12	REVISED DETAIL REFERENCE LOCATION	03/16/07	CWC
11	ADDED DETAILS FOR STUD & TUBE ATTACHMENTS	09/26/06	DMH
10	ADDED VERTICAL LOUVER ELEVATION & DETAILS	03/30/06	DJY
9	ENLARGED PD TEXT & REMOVED PROP. BLOCK	10/13/05	AK
8	ADDED NEW LOGO	8/4/05	BRS
7	ADDED NOTE 5	5/19/05	JDM
6	ADDED REQUESTED NOTES	6-22-00	BDM
5	ADDED REQUESTED NOTES	4-14-00	BDM
4	CLARIFIED DRAWING	04/13/99	JLC
3	CLARIFIED DRAWING	04/07/99	JLC
2	CLARIFIED DRAWING	03/25/99	JLC
1	CLARIFIED DRAWING	02/11/99	JLC



DRAWING TITLE:	ELEVATIONS ESS-501D METRO DADE LOUVERS		
PROJECT:			
LOCATION:			
ARCHITECT:			
CUSTOMER:			
CUSTOMER PO#:			
SALES REP:			
DATE:	11/19/98	SPEC. SECTION:	ORDER NO.
B-SIZE SCALE:	NONE	DWN BY:	JLC
D-SIZE SCALE:	NONE	CHK'D BY:	
			DRAWING NO. A1
			1 OF 5

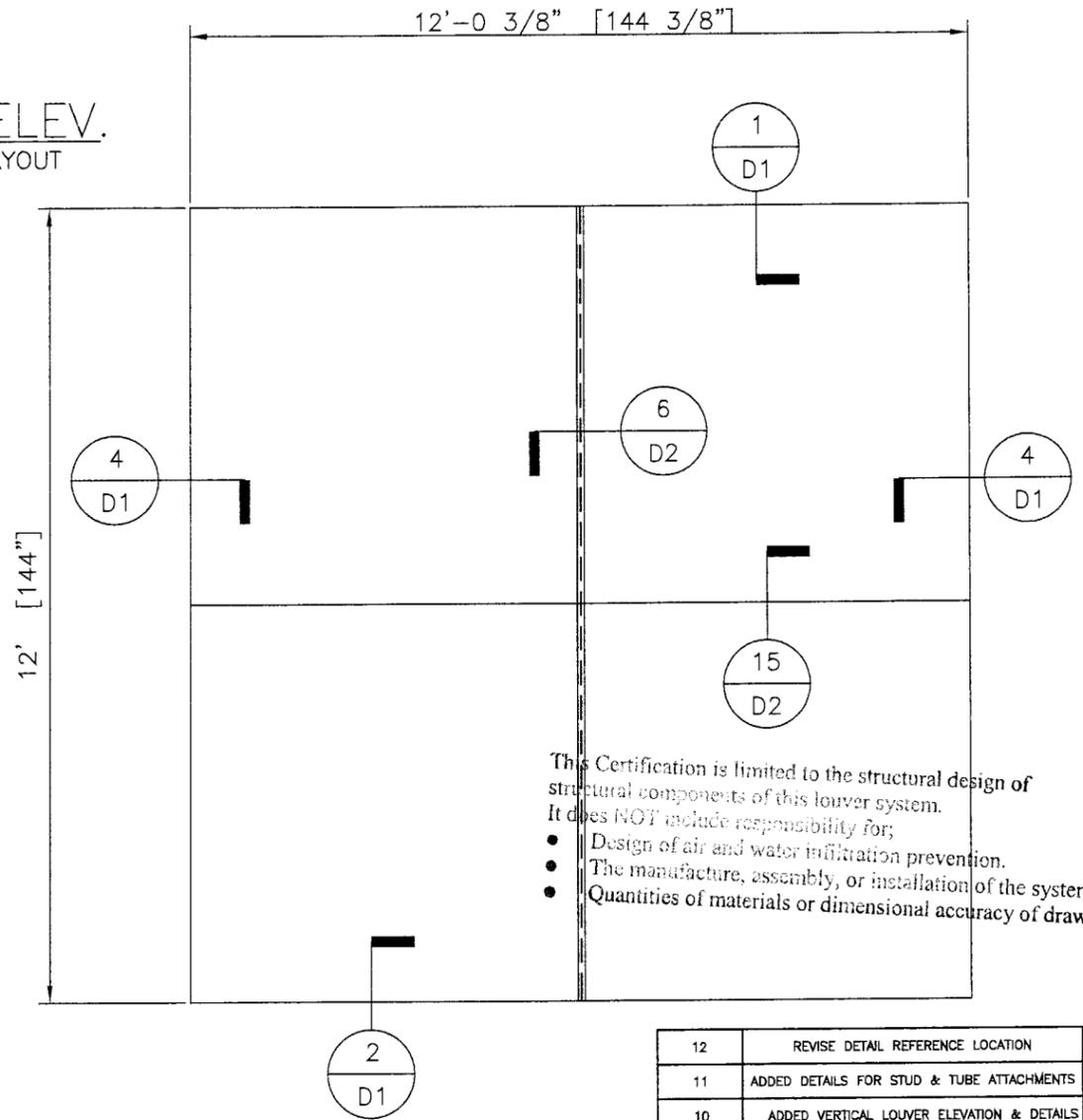
L. DAVID RICE

MAR 23 2007

ABBREVIATIONS

- LW.....LOUVER WIDTH
- LH.....LOUVER HEIGHT
- GW.....GRILLE WIDTH
- GH.....GRILLE HEIGHT
- SW.....SECTION WIDTH
- SH.....SECTION HEIGHT
- E.....ELEVATION
- CL.....COLUMN LINE
- RO.....ROUGH OPENING

5 LOUVER ELEV.
ITEM SHORT LOUVER LAYOUT



This Certification is limited to the structural design of structural components of this louver system. It does NOT include responsibility for;

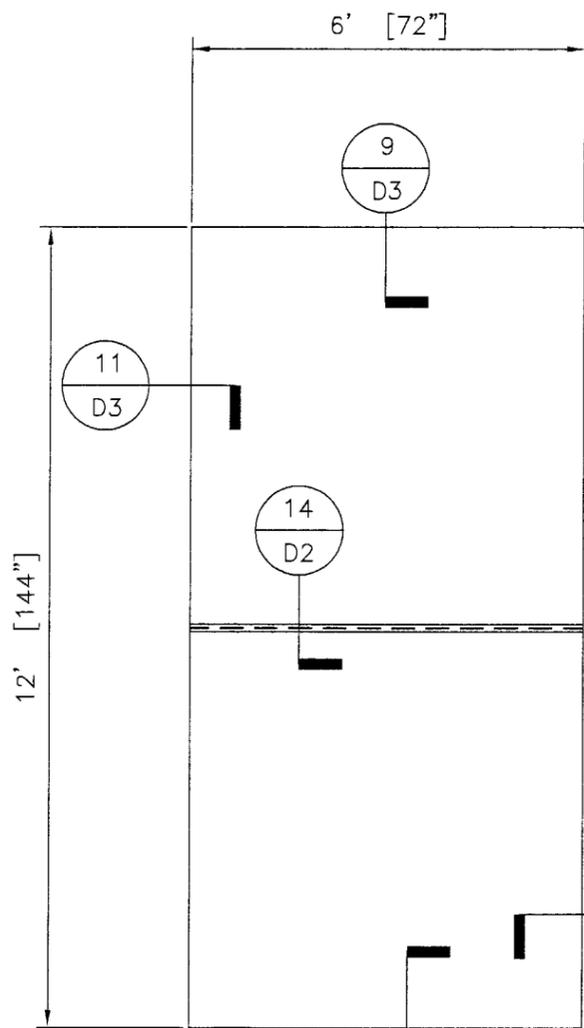
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Expiration Date 07/26/2008
By *[Signature]*
Miami/Dade Product Control Division

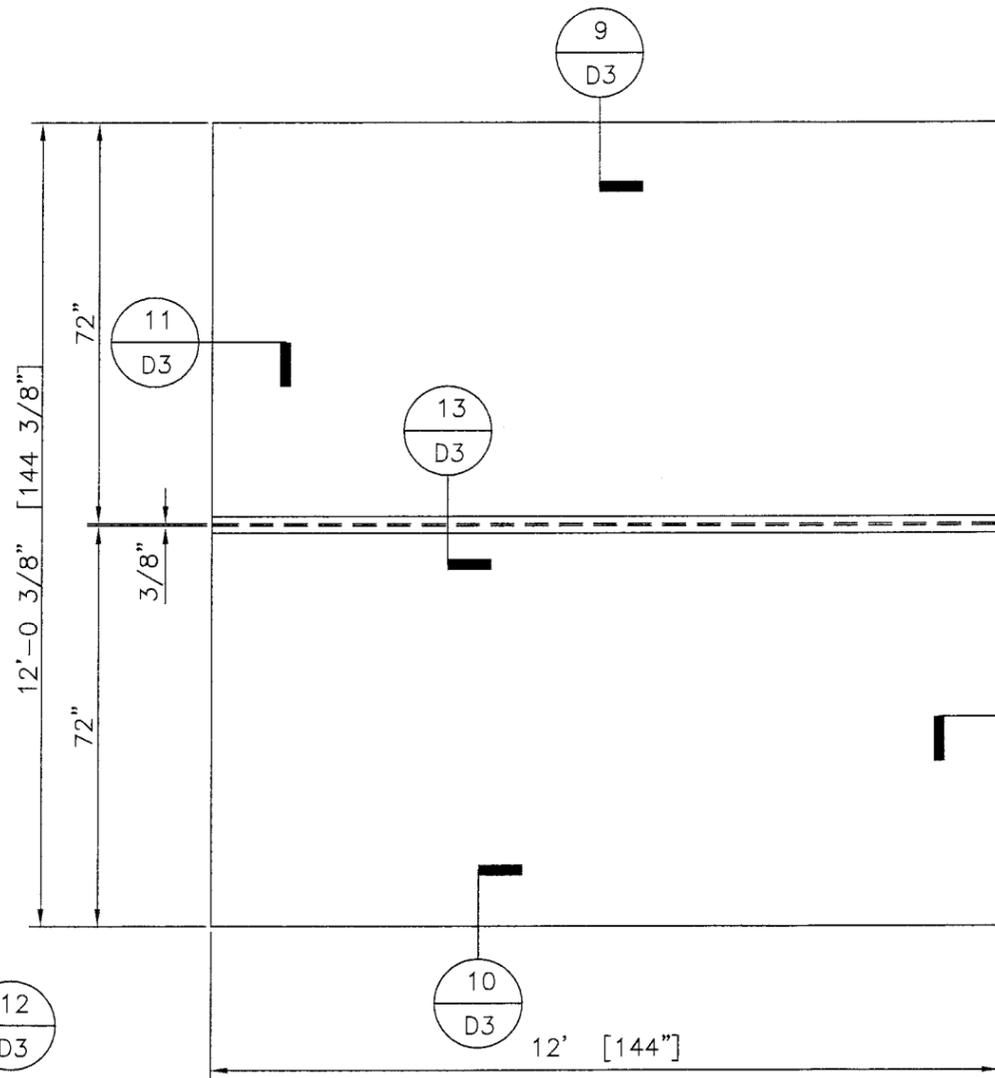
REVISION OR ISSUE	DESCRIPTION	DATE	BY
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1	CLARIFIED DRAWING	02/11/99	JLC



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PROJECT:	
LOCATION:	
ARCHITECT:	
CUSTOMER:	
CUSTOMER PO#:	
SALES REP:	
DATE: 11/09/98	SPEC. SECTION:
B-SIZE SCALE: NONE	DWN BY: JLC
D-SIZE SCALE: NONE	CHK'D BY:
ORDER NO.	DRAWING NO. A2
	2 OF 5



3 LOUVER ELEV.
ITEM TALL LOUVER LAYOUT VERTICAL BLADES

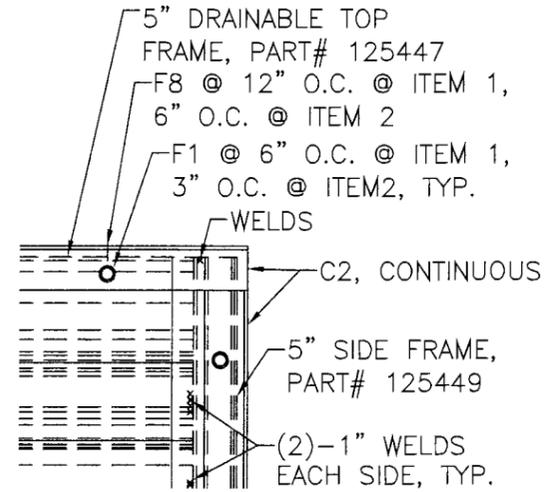


4 LOUVER ELEV.
ITEM SHORT LOUVER LAYOUT VERTICAL BLADES

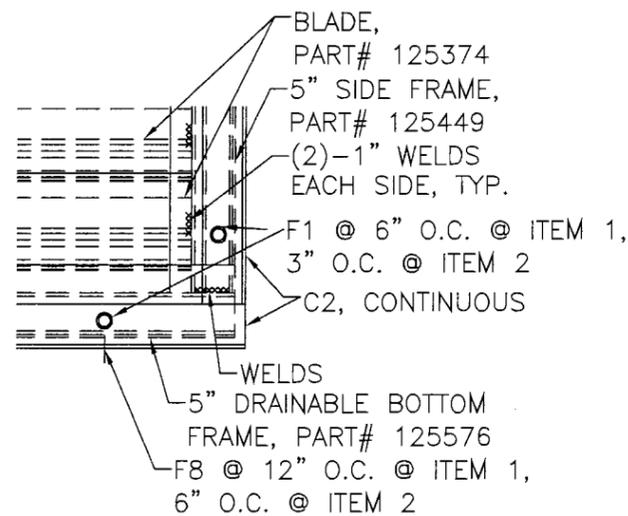
ABBREVIATIONS
LW.....LOUVER WIDTH
LH.....LOUVER HEIGHT
OW.....ORILLE WIDTH
OH.....ORILLE HEIGHT
SW.....SECTION WIDTH
SH.....SECTION HEIGHT
EL.....ELEVATION
CL.....COLUMN LINE
RO.....ROUGH OPENING

L. DAVID RICE

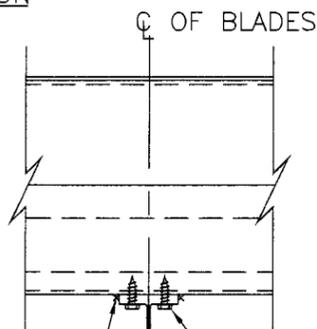
MAR 23 2007



INTERIOR HEAD & JAMB CONNECTION

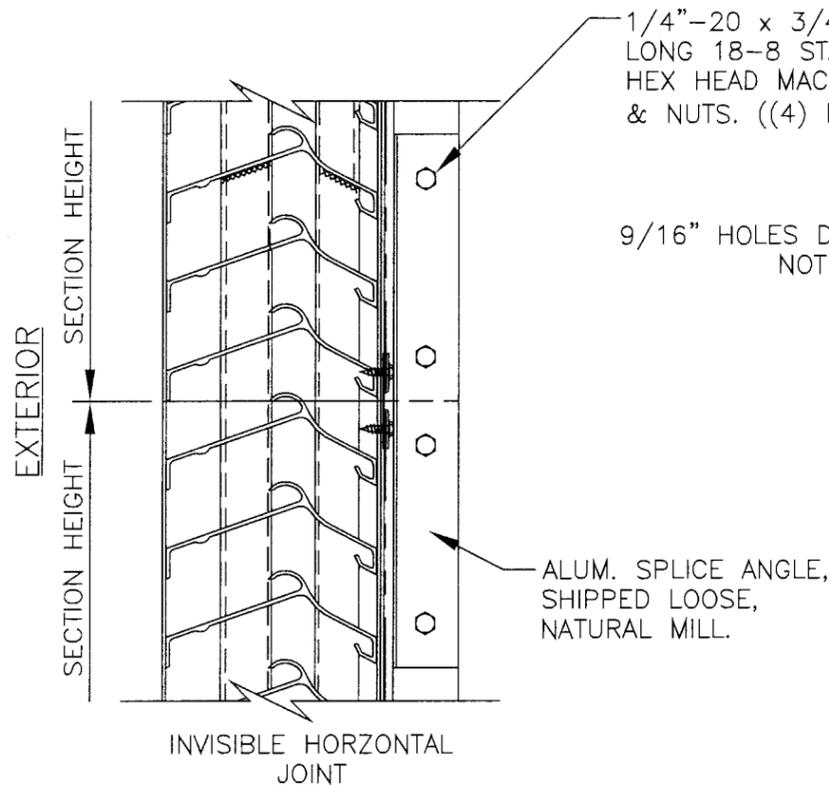


INTERIOR SILL & JAMB CONNECTION

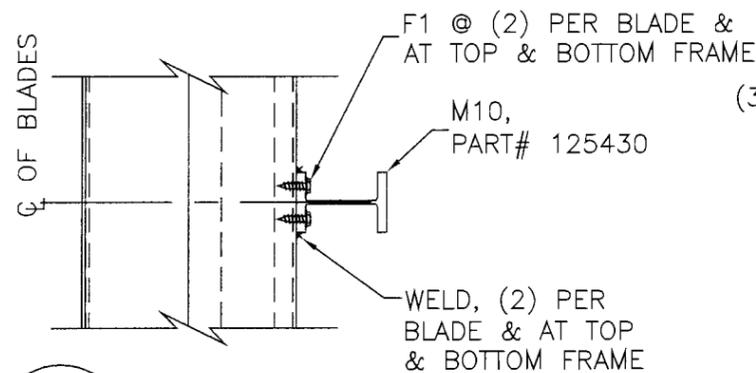


WELD, (2) PER BLADE & AT TOP & BOTTOM FRAME
F1 @ (2) PER BLADE & AT TOP & BOTTOM FRAME
M10, PART# 125430

6 TEE STIFFENER
A2 HORIZONTAL



15 HORIZONTAL JOINT
A2

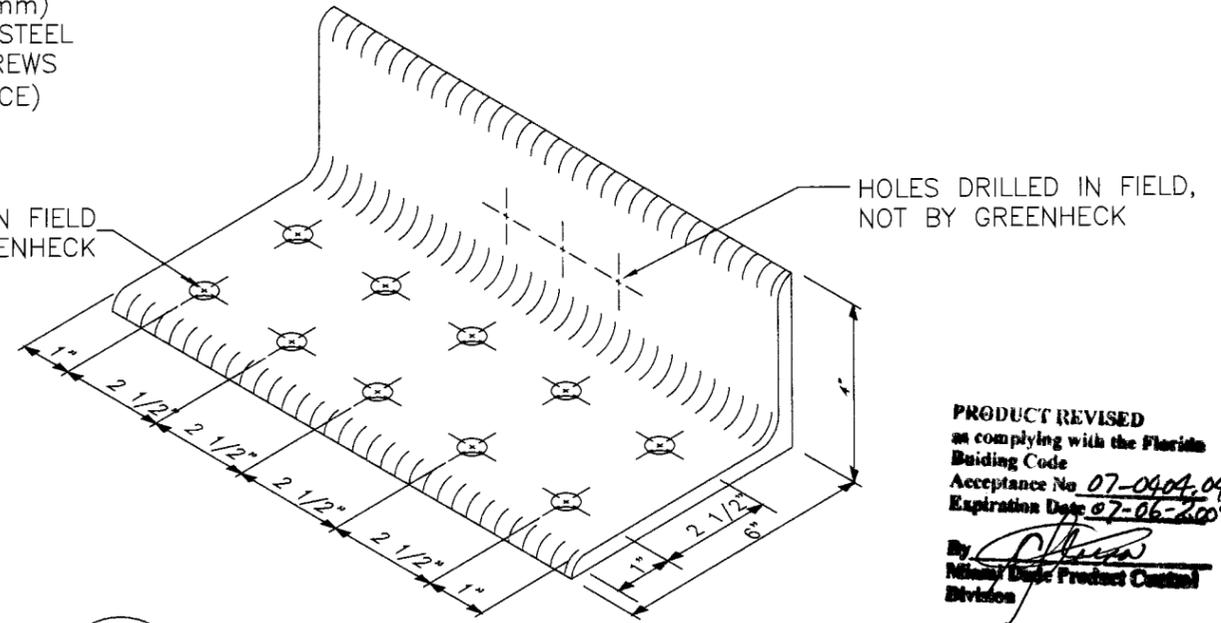


14 TEE STIFFENER
A2 VERTICAL

1/4"-20 x 3/4" (19.1mm) LONG 18-8 STAINLESS STEEL HEX HEAD MACHINE SCREWS & NUTS. ((4) PER SPLICE)

9/16" HOLES DRILLED IN FIELD NOT BY GREENHECK

ALUM. SPLICE ANGLE, SHIPPED LOOSE, NATURAL MILL.

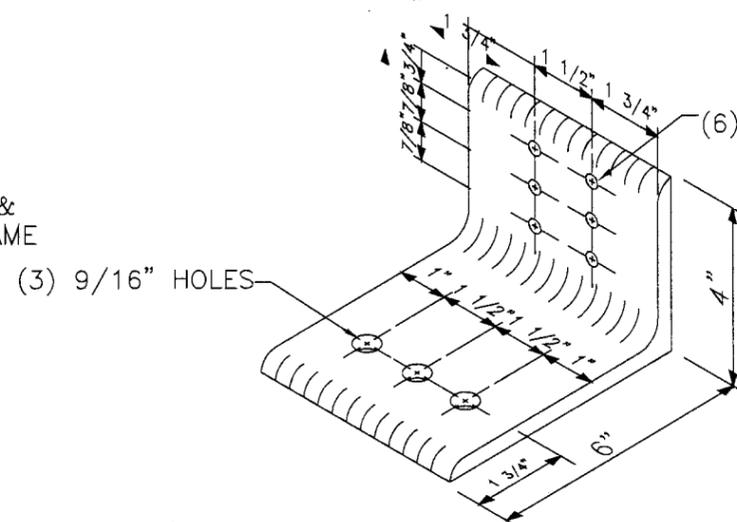


7 C13-ISOMETRIC
D1 4" x 6" x 12" LG. 5/16" STEEL. ANGLE
PRIME COAT, SHIPPED LOOSE
PART# 600758

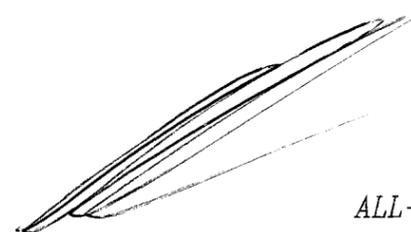
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By *[Signature]*
Miami Dade Product Control Division



8 C12-ISOMETRIC
D1 4" x 6" x 5" LG. 5/16" STEEL. ANGLE
PRIME COAT, SHIPPED LOOSE
PART# 600757



ALL-WELDED ASSEMBLY

ABBREVIATIONS

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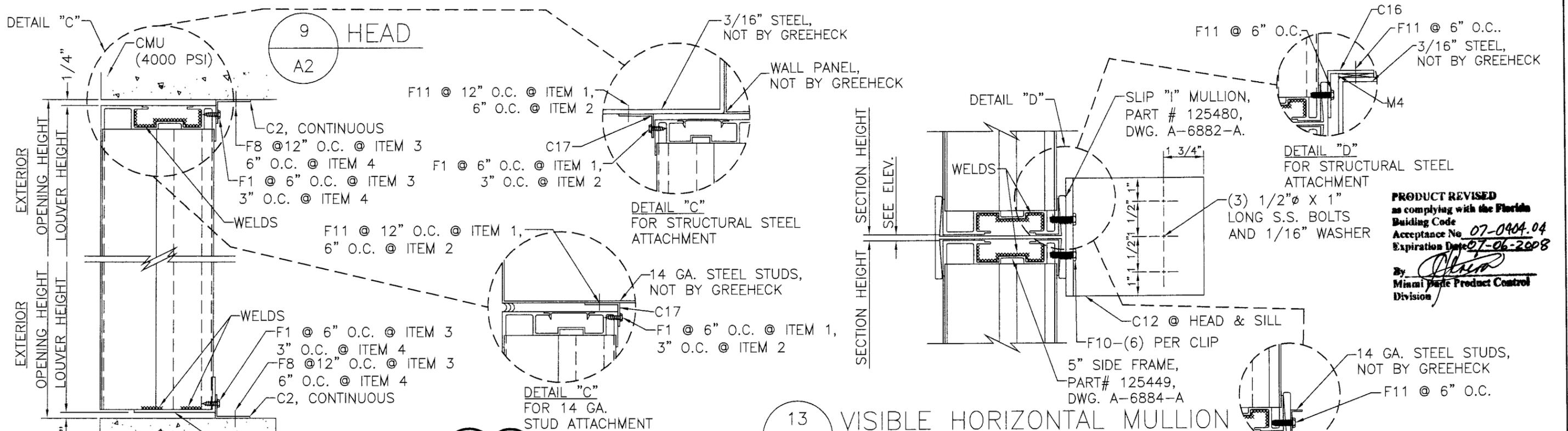


DRAWING TITLE: DWG DETAILS ESS-5010 METRO DADE LOUVERS	
PROJECT:	
LOCATION:	
ARCHITECT:	
CUSTOMER:	
CUSTOMER PO#:	
DATE: 11/09/98	SPEC. SECTION:
B-SIZE SCALE: NONE	DWN BY: JLC
D-SIZE SCALE: NONE	CHK'D BY:

L. DAVID RICE

MAR 23 2007

ORDER NO. DRAWING NO. D2 4 OF 5

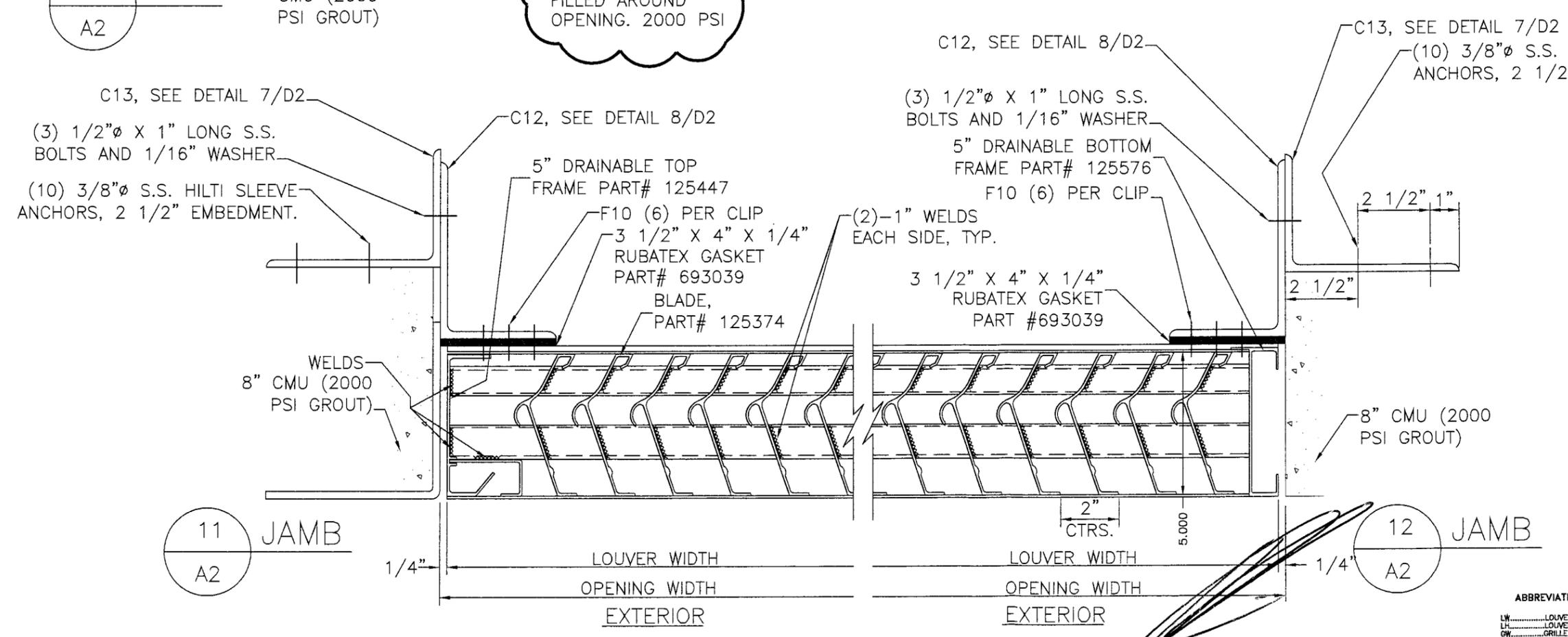


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NOTE:
BLOCK IS GROUT FILLED AROUND OPENING. 2000 PSI

13 VISIBLE HORIZONTAL MULLION
A2



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CUSTOMER:			
CUSTOMER PO#:			
SALES REP:			
DATE: 11/19/98	SPEC. SECTION:		
B-SIZE SCALE: NONE	DWN BY: JLC		D3
D-SIZE SCALE: NONE	CHK'D BY:		5 OF 5

ABBREVIATIONS
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 OW.....ORILE WIDTH
 CH.....ORILE HEIGHT
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L. DAVID RICE MAR 23 2007