



**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)

**American Warming & Ventilating, Inc.
7301 International Drive
Holland, Ohio 43528**

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 Louvered Enclosure.

APPROVAL DOCUMENT: Drawing No. 31604-6, titled "LE-32 Test Louver Arch. & Non-Arch Louver." dated 06/16/00 with last revision on 10/15/03, prepared by American Warming and Ventilating, signed and sealed by W. W. Schaefer P.E., bearing the Miami-Dade County Product Control Revision stamp with the NOA number and expiration date by the Miami-Dade County Product Control Division.

INSTALLATION: This louver is to be installed in a location where the room behind the louver is designed to drain water penetrating the room and the room will house water resistant equipment, components, supplies, etc.

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", 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 # 03-0430.03 and consists of this page, evidence page as well as approval document mentioned above.

The submitted documentation was reviewed by **Candido F. Font PE.**

[Signature]
01/29/04



**NOA No: 03-1027.01
Expiration Date: July 27, 2008
Approval Date: January 29, 2004
Page 1**

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

A. DRAWINGS.

1. Drawing prepared by American Warming & Ventilating titled "LE-32 Test Louver Arch. & non-Arch. Louver," Drawing No. 31604-6, dated 06/16/00 with last revision on 10/15/03. signed and sealed by W. W. Schaefer, PE.

B. TESTS.

1. Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of "AWV LE-22 Arch. & Non-Arch Fixed Louver", prepared by Hurricane Test Laboratory, Inc., report No. 0198-0515-99, dated 05/25/99 to 07/12/99, signed and sealed by V. J. Abraham, PE

C. CALCULATIONS.

1. Allowable Load Calculations, dated 11/10/99, pages 1 to 3 of 3, prepared by W. W. Schaefer Engineering & Consulting, PA, signed and sealed by W. W. Schaefer. PE.
2. Allowable Load Calculations, dated 04/14/00, pages 1 to 6 of 6, prepared by W. W. Schaefer Engineering & Consulting, PA signed and sealed by W. W. Schaefer. PE.

D. MATERIAL CERTIFICATIONS.

1. Tensile Test report on 6 inch louver, prepared by Q. C. Metallurgical, Inc., No. 9LM-2586, dated 12/27/99, signed and sealed by F. Grate PE.

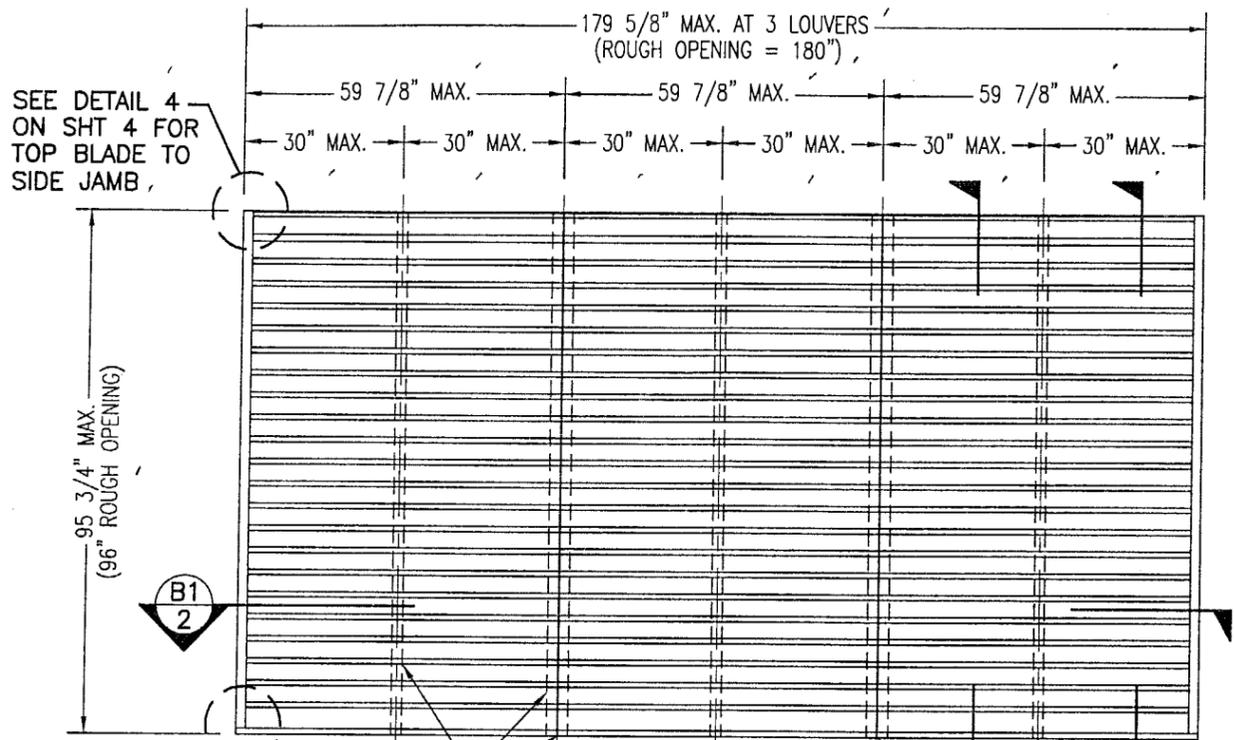
E. STATEMENTS

1. Test compliance letter issued by Hurricane Test Laboratory, Inc. on 12/08/99, signed and sealed by V. J. Abraham, PE.
2. Code compliance letter issued by W. W. Schaefer Engineering & Consulting, PA. On 11/15/99, signed and sealed by W. W. Schaefer, PE.
3. No financial interest letter issued by 11/15/99, signed and sealed by W. W. Schaefer, PE.
4. No change letter issued by American Warming and Ventilating on 04/24/03 and signed by R. Lichtenwald.

F. QUALITY ASSURANCE

1. Building Code Compliance Division.


Candido F. Font PE.
Sr. Product Control Examiner
NOA No 03-1027.01
Expiration Date: July 27, 2008
Approval: Date: January 29, 2004



SEE DETAIL 4 ON SHT 4 FOR TOP BLADE TO SIDE JAMB.

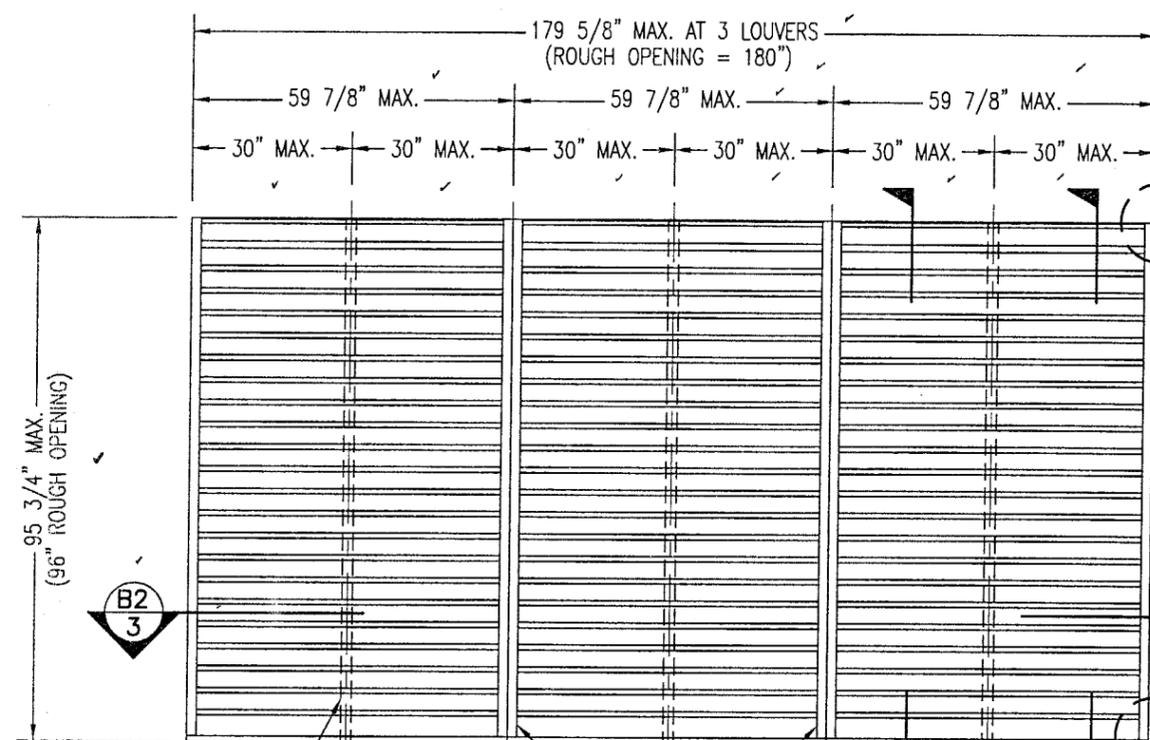
SEE CORNER DETAIL ON THIS SHEET.

HIDDEN LINES ARE FOR SUPPORT ANGLES AT BACK SIDE OF LOUVERS.

EXTERIOR ELEVATION ARCHITECTURAL 6" LOUVER

SCALE: 3/8"=1'-0"

NOTE: THIS LOUVER SYSTEM MAY CONSIST OF AN UNLIMITED NUMBER OF SECTIONS PROVIDING EACH SECTION DOES NOT EXCEED 59 7/8" X 95 3/4" IN SIZE.



SEE DETAIL 4 ON SHT 4 FOR TOP BLADE TO SIDE JAMB.

SEE CORNER DETAIL ON THIS SHEET.

HIDDEN LINES ARE FOR SUPPORT ANGLES AT BACK SIDE OF LOUVERS.

EXTERIOR ELEVATION NON-ARCHITECTURAL 6" LOUVER

SCALE: 3/8"=1'-0"

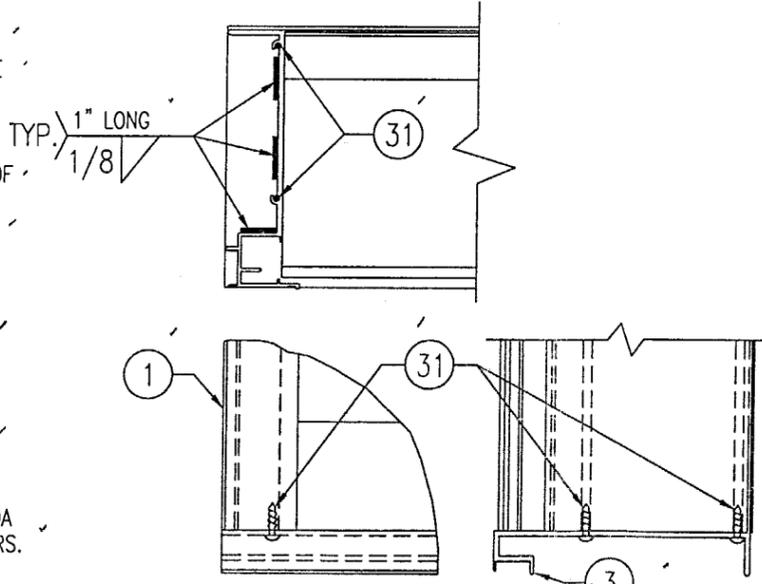
NOTE: THIS LOUVER SYSTEM MAY CONSIST OF AN UNLIMITED NUMBER OF SECTIONS PROVIDING EACH SECTION DOES NOT EXCEED 59 7/8" X 95 3/4" IN SIZE.

MAX. ALLOWABLE DESIGN WIND PRESSURE	
POSITIVE	NEGATIVE
150 PSF	150 PSF

NOTE: SEE LOAD TABLE ON SHEET 7 FOR VARIATIONS OF PRESSURES WITH RESPECT TO PANEL WIDTH & CLIP SPACING.

GENERAL NOTES:

1. MAXIMUM ALLOWABLE INDIVIDUAL PANEL SIZE = 59 7/8" X 95 3/4"
2. MAXIMUM ASSEMBLY SIZE = UNLIMITED WIDTH, UP TO 95 3/4" HEIGHT.
3. ASSEMBLIES/SECTIONS MAY BE STACKED VERTICALLY PROVIDING A STRUCTURAL SUPPORT IS DESIGNED AND INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER ASSEMBLY.
4. MAXIMUM UNSUPPORTED BLADE LENGTH SHALL NOT EXCEED 30".
5. ALL FASTENERS SHALL BE PLATED STEEL OR 304 STAINLESS STEEL.
6. SEPARATION OF DISSIMILAR MATERIALS MUST BE MAINTAINED PER APPLICABLE SECTIONS OF THE FLORIDA BUILDING CODE (FBC).
7. APPROVED TYPES OF OPENINGS: 3000 PSI CONCRETE/MASONRY, WOOD OR STEEL. SEE SHEETS 4 & 5 FOR ANCHORING DETAILS.
8. THESE LOUVER SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE LOAD TABLE ON SHEET 7.
9. THIS SYSTEM HAS NOT BEEN TESTED FOR WATER INFILTRATION RESISTANCE AND IS NOT A WATER RESISTANT SYSTEM.
10. BUCKING, OPENINGS & BUCKING FASTENERS MUST BE DESIGNED & INSTALLED TO WITHSTAND WIND LOADS AS DETERMINED FOR EACH APPLICATION.
11. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THESE DRAWINGS.
12. THE DETAILS & SPECIFICATIONS HERE-IN REPRESENT THE PRODUCTS PROPOSED FOR IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH FLORIDA STATE CODE PROTOCOLS TAS-201, 202 & 203 FOR BOTH IMPACT & NON-IMPACT LOUVERS.
13. THESE LOUVER SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC) FOR HVHZ AREAS.
14. THIS PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH FLORIDA STATE CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT, STRUCTURAL & CYCLIC TESTING.

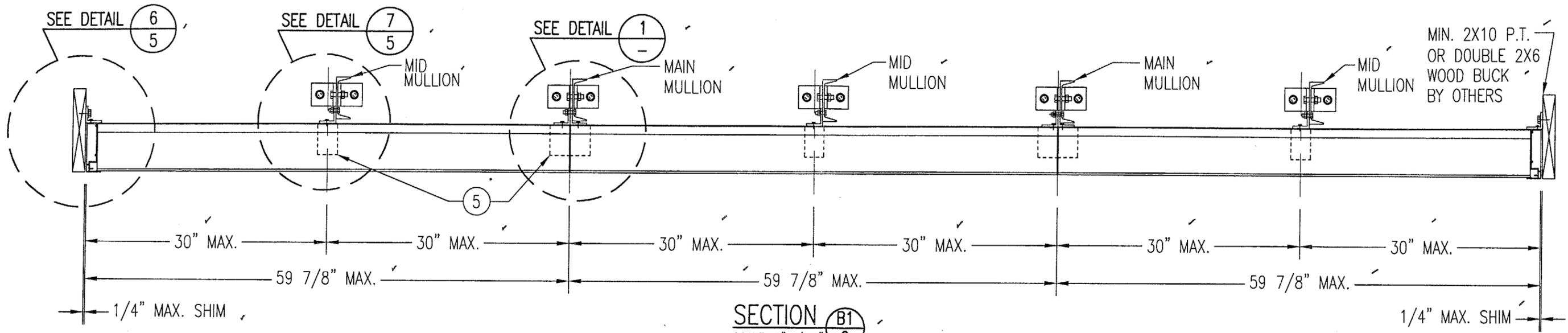


SILL CORNER DETAIL

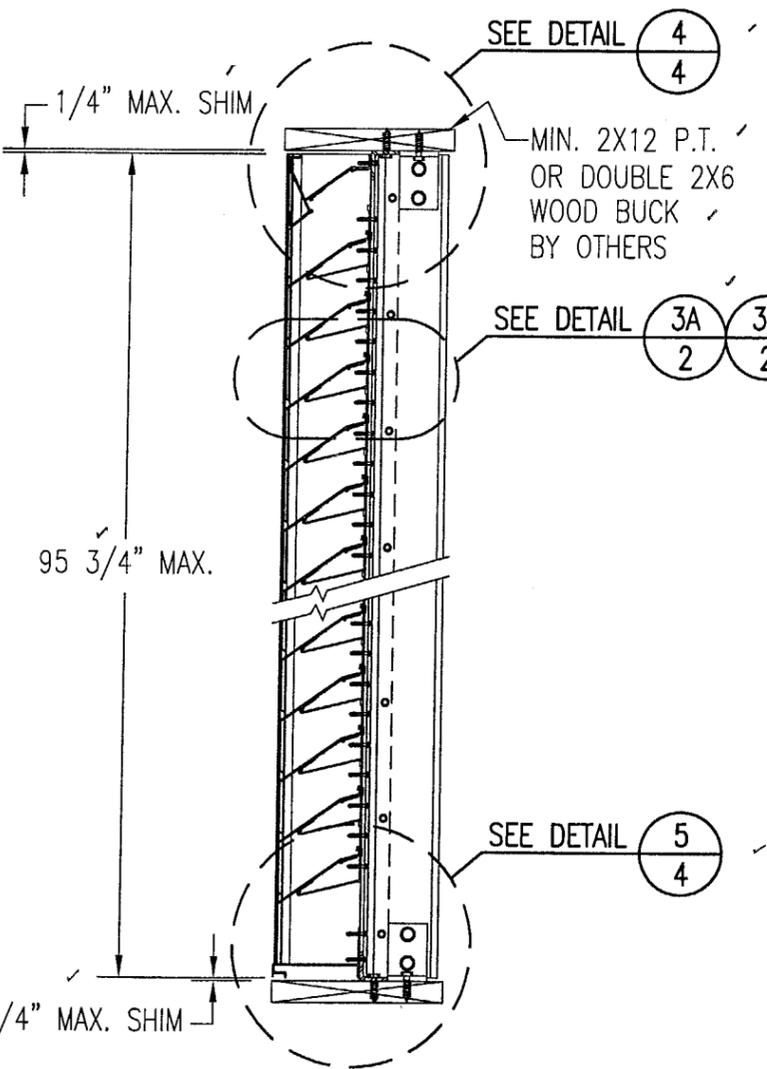
PRODUCT REVISED as complying with the Florida Building Code. Approved for 03-1027.01. Original Date: 07/27/08. By: [Signature] Florida State Product Control Division.

OCT 15 2003
 WARREN W. SCHAEFER, P.E.
 STRUCTURAL ENGINEER
 P.E. No. 44135
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
 STRUCTURAL CONSULTING ENGINEERS
 600 SANDTREE DRIVE, SUITE 203B
 PALM BEACH GARDENS, FL 33403
 PHONE: 561-775-4902

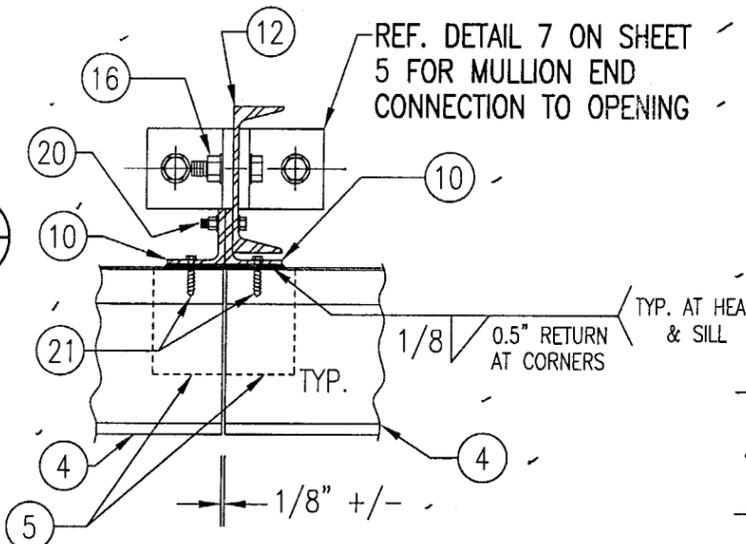
A	UPDATED NOTES 6, 12, 13 & 14	10/15/03	KPS		
	REVISION	DATE	DRN	CK	APPD
awv american warming and ventilating A MESTEK COMPANY 7301 INTERNATIONAL DRIVE HOLLAND, OHIO PHONE 419-865-5000; FAX 419-865-1375					
LE-32 TEST LOUVER ARCH. & NON-ARCH. LOUVER ELEVATIONS & NOTES					
CKD.BY	W.W.S.	APPD.BY	W.W.S.	SHEET: 1 of 7	
DRN.BY	W.W.S.	DWG. NO.			
DATE	06-16-00	31604-6		REV.	A



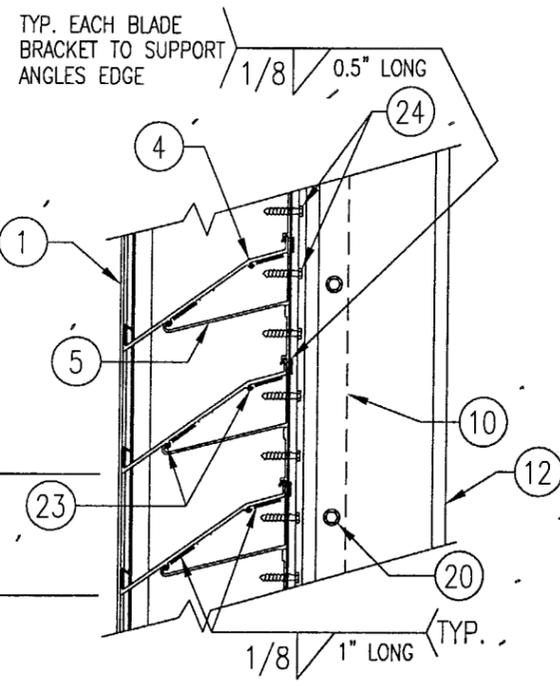
SECTION B1
SCALE: 1"=1'-0"
ARCHITECTURAL LOUVER



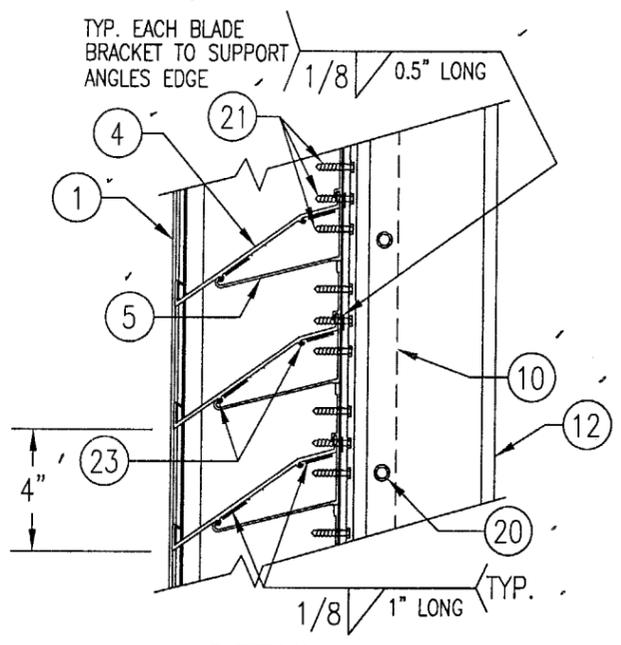
SECTION A1
SCALE: 1"=1'-0"
ARCHITECTURAL LOUVER



DETAIL 1
SCALE: 2"=1'-0"
ARCHITECTURAL LOUVER



DETAIL 3A
SCALE: 2"=1'-0"
TYP. AT ALL MID SPAN MULLIONS



DETAIL 3B
SCALE: 2"=1'-0"
TYP. AT ALL MAIN ARCHITECTURAL MULLIONS

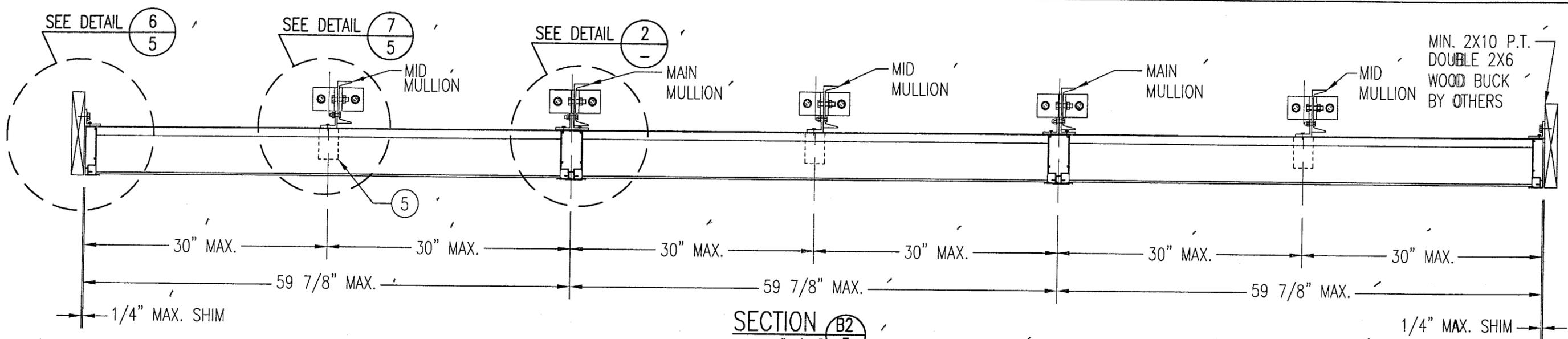
PRODUCT REVISED
in compliance with the Florida
Building Code
Approved by 03-102701
07/27/08
By
Miami-Rain Product Control
Division

OCT 15 2003

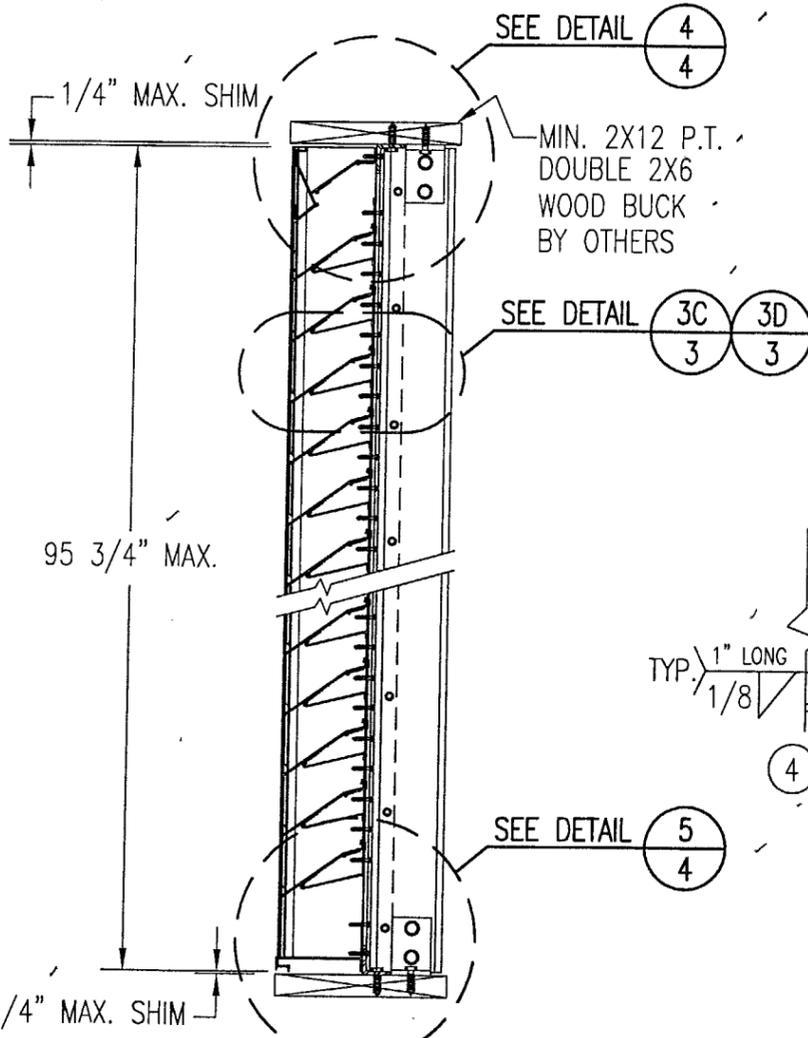
WARREN W. SCHAEFER, P.E.
STRUCTURAL ENGINEER
P.E. No. 44135

W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A.
STRUCTURAL CONSULTING ENGINEERS
600 SANDTREE DRIVE; SUITE 203B
PALM BEACH GARDENS, FL 33403
PHONE: 561-775-4902

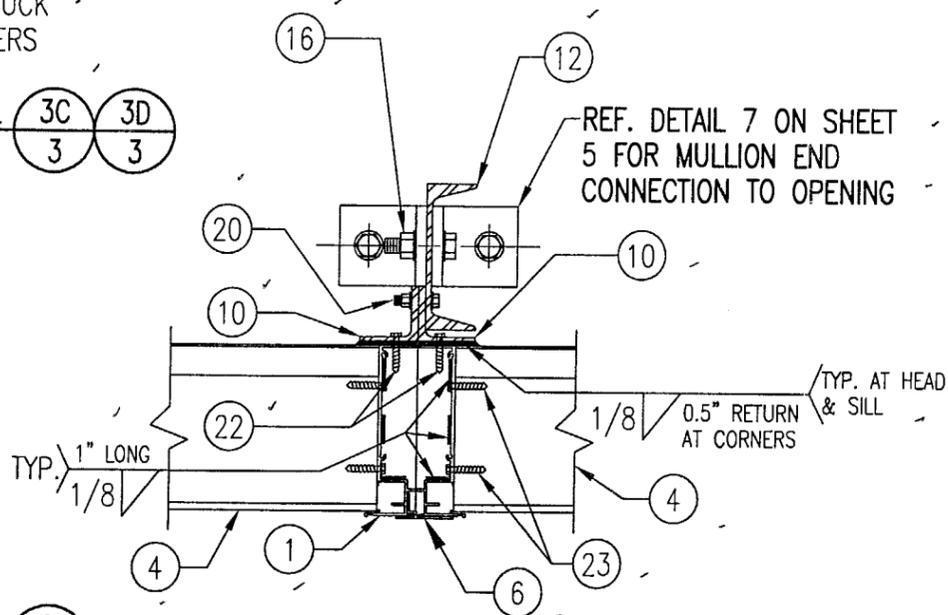
REVISION	DATE	DRN	CK	APPD
awv american warming and ventilating A MESTEK COMPANY 7301 INTERNATIONAL DRIVE HOLLAND, OHIO PHONE 419-865-5000; FAX 419-865-1375				
LE-32 TEST LOUVER ARCHITECTURAL LOUVER SECTIONS & DETAILS				
CKD. BY	APPD. BY W.W.S.	SHEET: 2 of 7		
DRN. BY W.W.S.	DWG. NO.	REV.		
DATE 06-16-00	31604-6	A		



SECTION B2
SCALE: 1"=1'-0"
NON-ARCHITECTURAL LOUVER

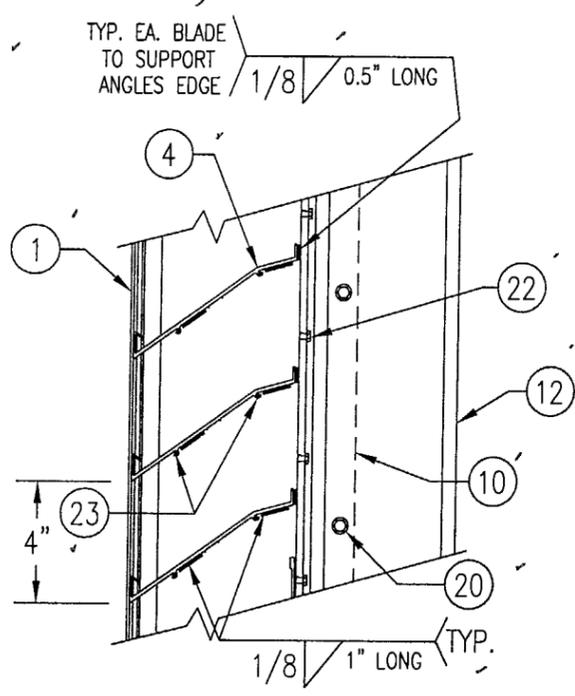


SECTION A2
SCALE: 1"=1'-0"
NON-ARCHITECTURAL LOUVER



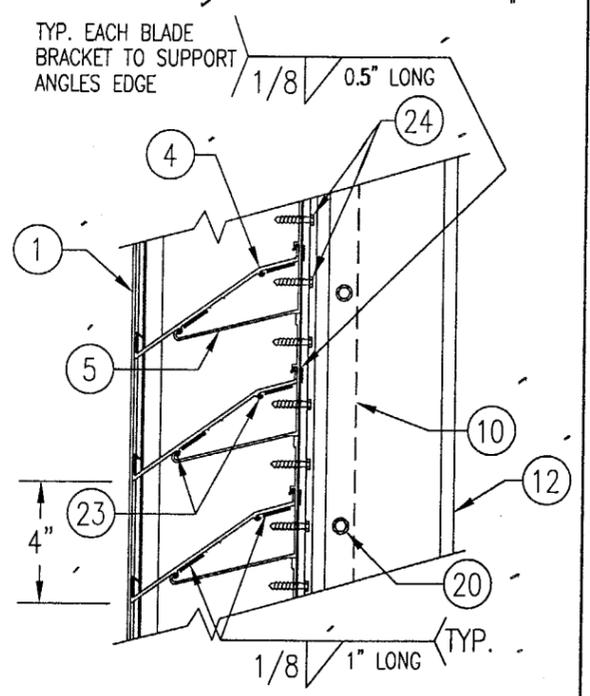
DETAIL 2
SCALE: 2"=1'-0"
NON-ARCHITECTURAL LOUVER

NON-ARCHITECTURAL LOUVER
NOTE: SIDE JAMBS ARE ADDITIONALLY FASTENED TO THE SILL WITH 2 NO. 8 X 3/4" SMS THROUGH SILL & INTO JAMB SPLINES.



DETAIL 3C
SCALE: 2"=1'-0"
NON-ARCHITECTURAL MULLIONS

TYP. AT ALL MAIN NON-ARCHITECTURAL MULLIONS



DETAIL 3D
SCALE: 2"=1'-0"
NON-ARCHITECTURAL MULLIONS

TYP. AT ALL MID SPAN MULLIONS

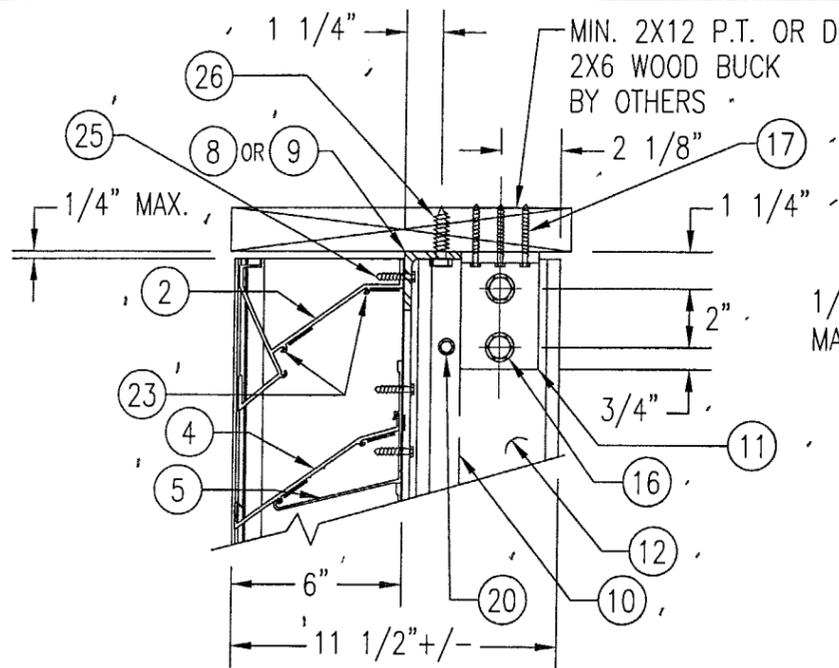
PRODUCT REVISED
as complying with the Florida Building Code
Approved: 03-1027.01
8/27/08
By: [Signature]
National Product Control Division

OCT 15 2003

WARREN W. SCHAEFER, P.E.
STRUCTURAL ENGINEER
P.E. No. 44135

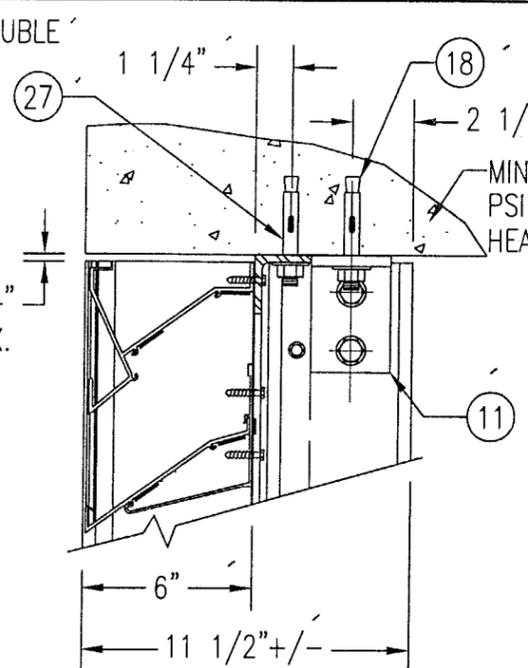
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
STRUCTURAL CONSULTING ENGINEERS
600 SANDTREE DRIVE, SUITE 203B
PALM BEACH GARDENS, FL 33403
PHONE: 561-775-4902

REVISION	DATE	DRN	CK	APPD
awv american warming and ventilating A MESTEK COMPANY 7301 INTERNATIONAL DRIVE HOLLAND, OHIO PHONE 419-865-5000; FAX 419-865-1375 LE-32 TEST LOUVER NON-ARCHITECTURAL LOUVER SECTIONS & DETAILS				
CKD.BY	APPD.BY W.W.S.	SHEET: 3 of 7		
DRN.BY W.W.S.	DWG. NO.	REV.		
DATE 06-16-00	31604-6	A		



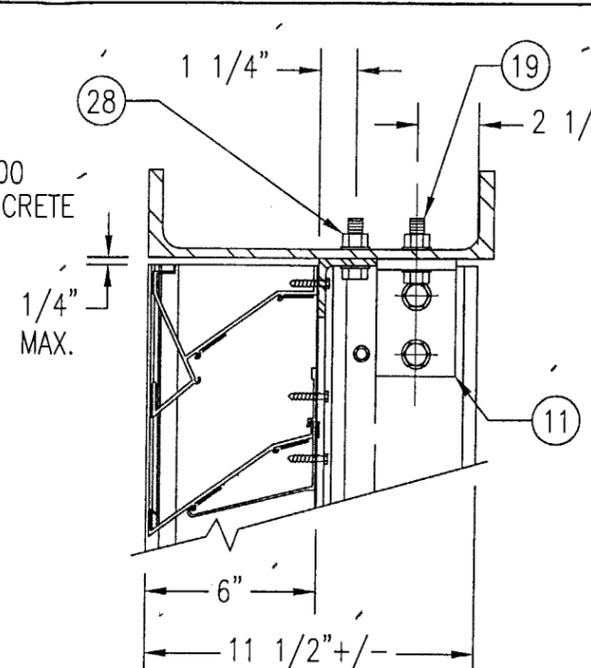
WOOD FRAMED OPENING

SEE "DETAIL 3A & 3B" FOR LOUVER BLADE DETAILS



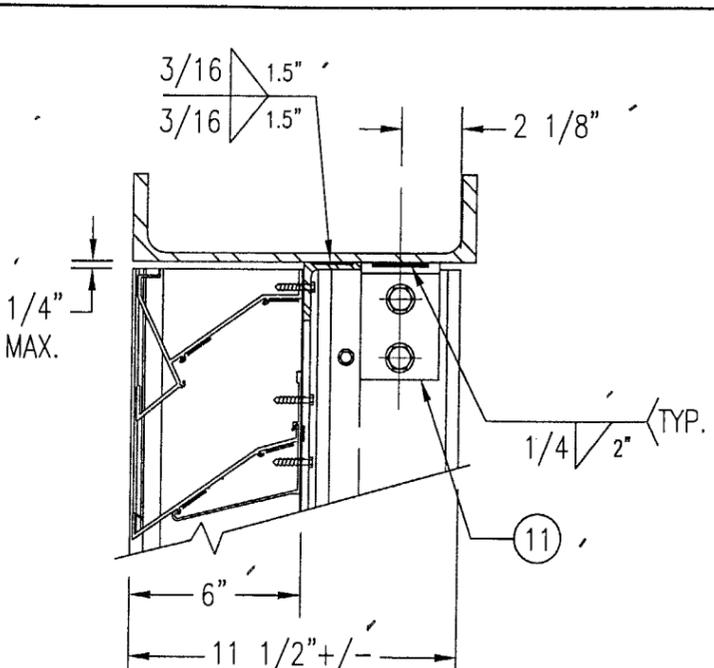
CONCRETE HEAD

SEE "WOOD OPENING" FOR DETAIL NOT SHOWN (MASONRY ACCEPTABLE AT SIDES ONLY AND MAY NOT BE USED AT HEAD OR SILL)



STEEL FRAME OPENING (BOLTED)

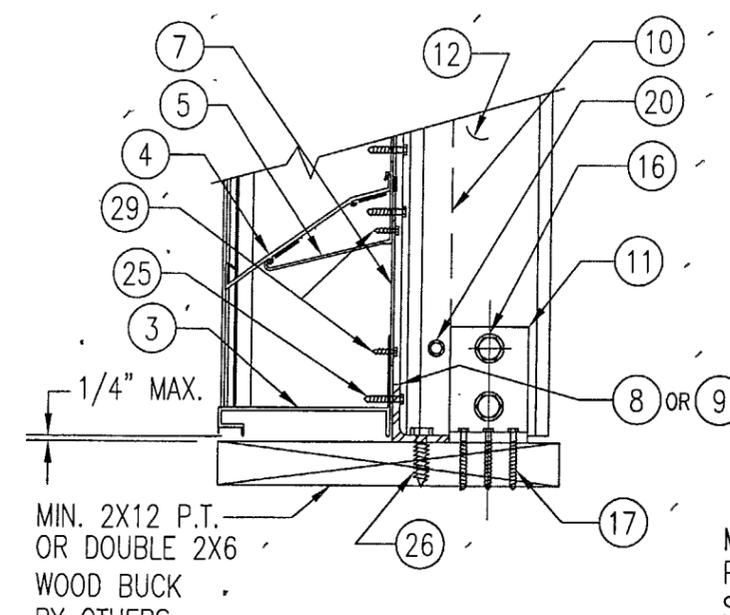
SEE "WOOD OPENING" FOR DETAIL NOT SHOWN



STEEL FRAME OPENING (WELDED)

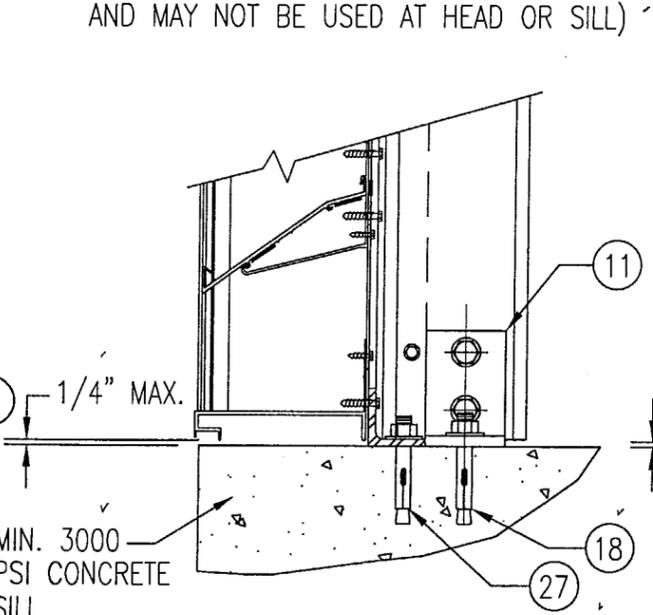
SEE "WOOD OPENING" FOR DETAIL NOT SHOWN

DETAIL 4
SCALE: 2"=1'-0"



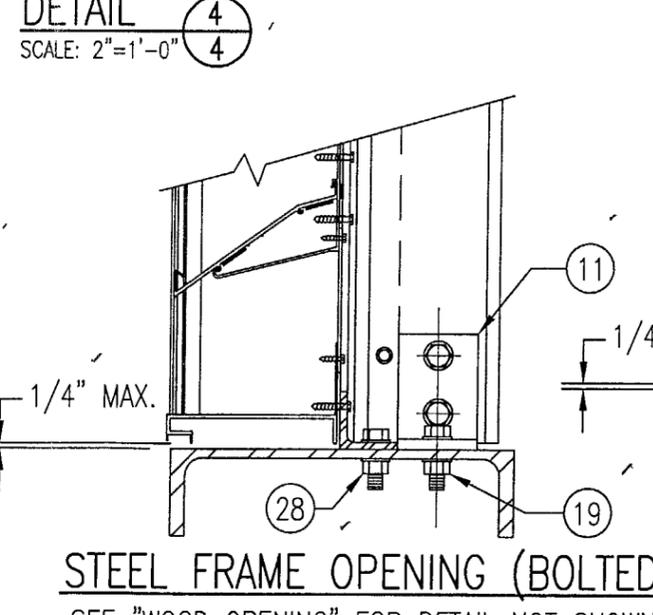
WOOD FRAMED OPENING

SEE "DETAIL 3A & 3B" FOR LOUVER BLADE DETAILS



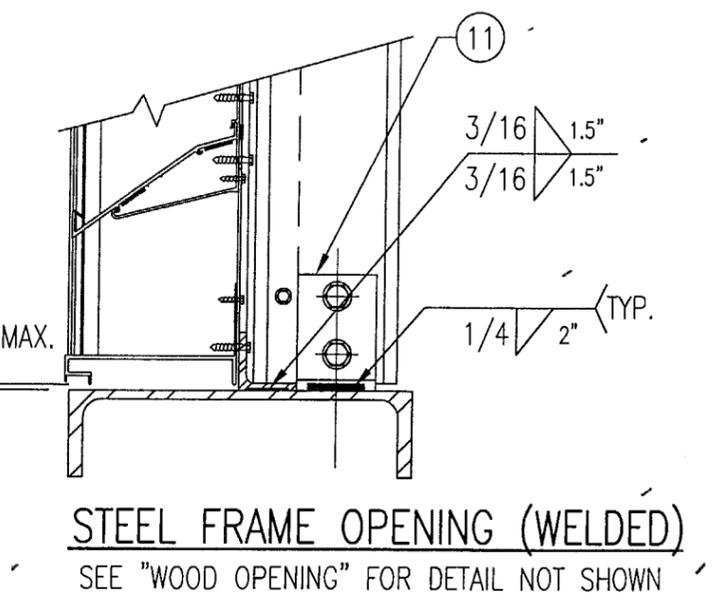
CONCRETE SILL

SEE "WOOD OPENING" FOR DETAIL NOT SHOWN (MASONRY ACCEPTABLE AT SIDES ONLY AND MAY NOT BE USED AT HEAD OR SILL)



STEEL FRAME OPENING (BOLTED)

SEE "WOOD OPENING" FOR DETAIL NOT SHOWN



STEEL FRAME OPENING (WELDED)

SEE "WOOD OPENING" FOR DETAIL NOT SHOWN

DETAIL 5
SCALE: 2"=1'-0"

MASONRY MAY ONLY BE USED AT SIDES OF LOUVER PANELS & MAY NOT BE USED AT THE HEAD OR SILL.

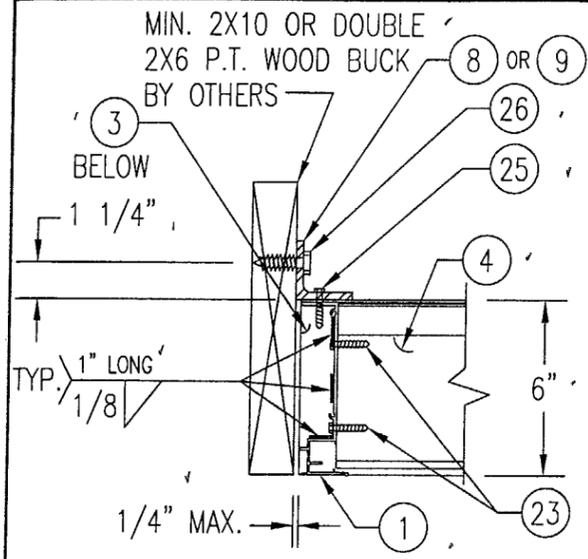
PRODUCT REVIEW
in compliance with the Florida Building Code
Approved Date: 03-10-27-01
07/27/08
Miami Dade Product Control Division

OCT 15 2003

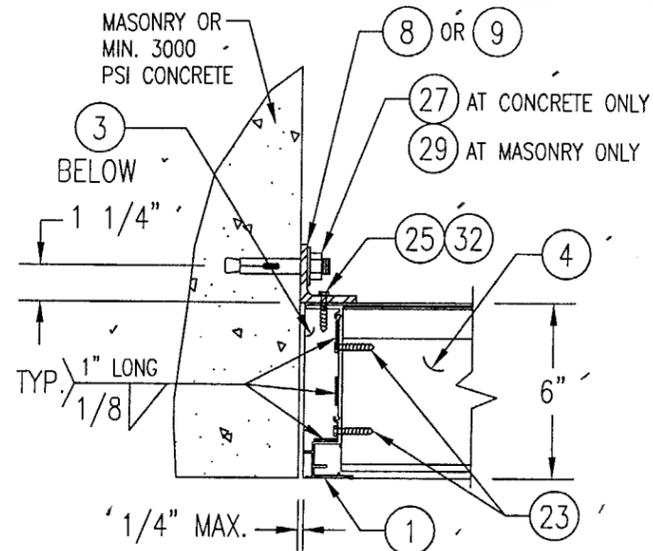
WARREN W. SCHAEFER, P.E.
STRUCTURAL ENGINEER
P.E. No. 44135

W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
STRUCTURAL CONSULTING ENGINEERS
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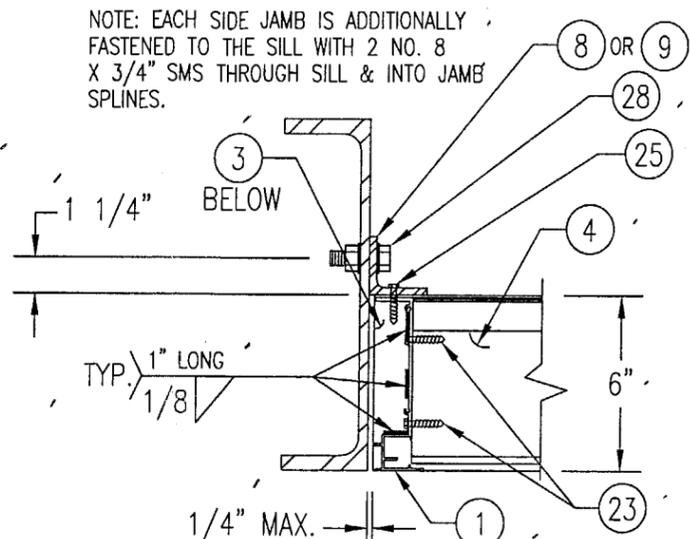
REVISION	DATE	DRN	CK	APPD
dwv american warming and ventilating A MESTEK COMPANY 7301 INTERNATIONAL DRIVE HOLLAND, OHIO PHONE 419-865-5000; FAX 419-865-1375 LE-32 TEST LOUVER ARCH. & NON-ARCH. LOUVER DETAILS				
CKD.BY	APPD.BY	W.W.S.	SHEET: 4 of 7	
DRN.BY	W.W.S.	DWG. NO.	REV.	
DATE	06-16-00	31604-6	A	



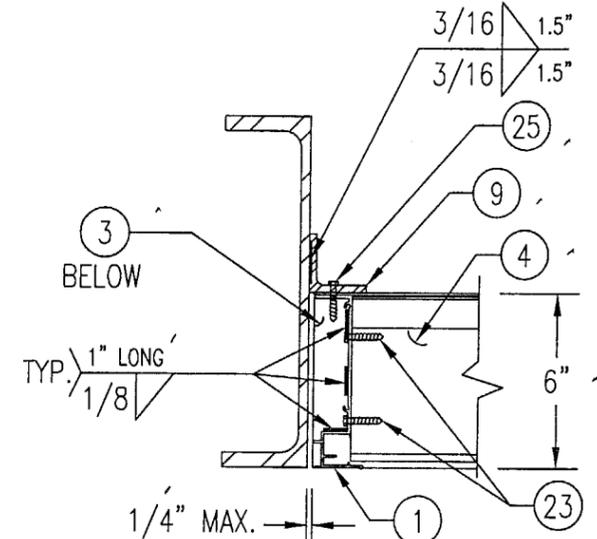
WOOD FRAMED OPENING



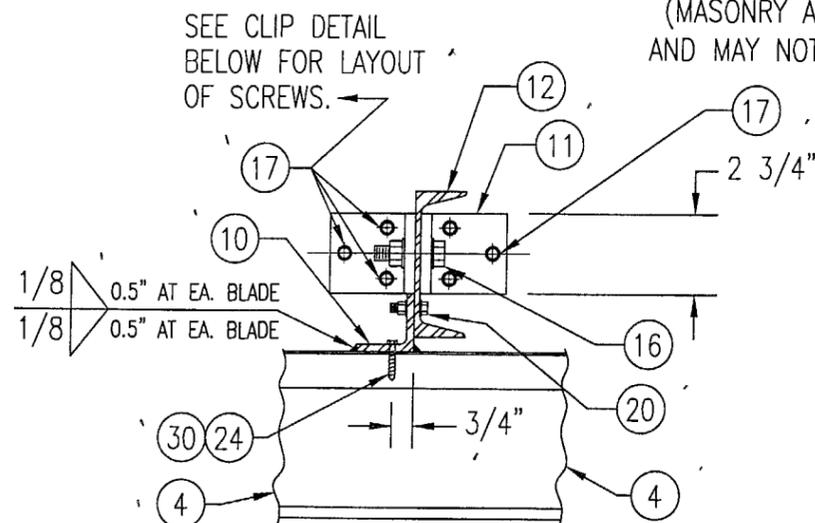
CONCRETE/MASONRY OPENING



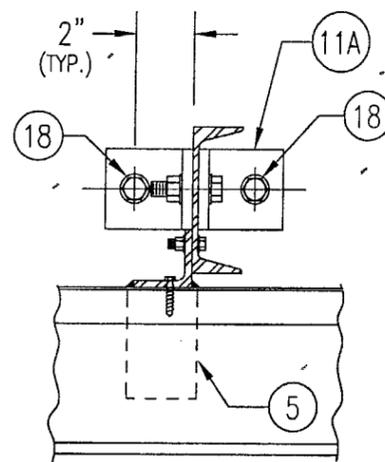
STEEL FRAME OPENING (BOLTED)



STEEL FRAME OPENING (WELDED)



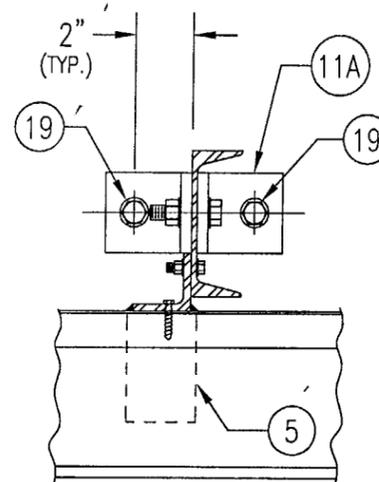
WOOD FRAMED OPENING



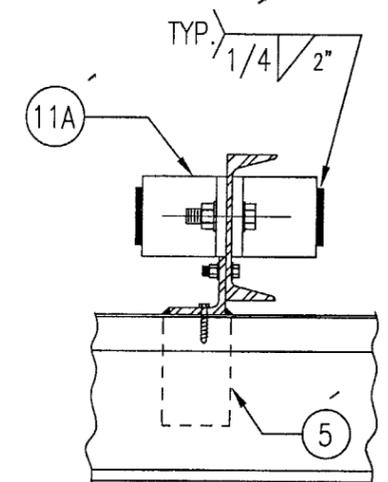
CONCRETE HEAD & SILL

SEE "WOOD OPENING" FOR DETAIL NOT SHOWN (MASONRY ACCEPTABLE AT SIDES ONLY AND MAY NOT BE USED AT HEAD OR SILL)

DETAIL 7/5
SCALE: 2"=1'-0"

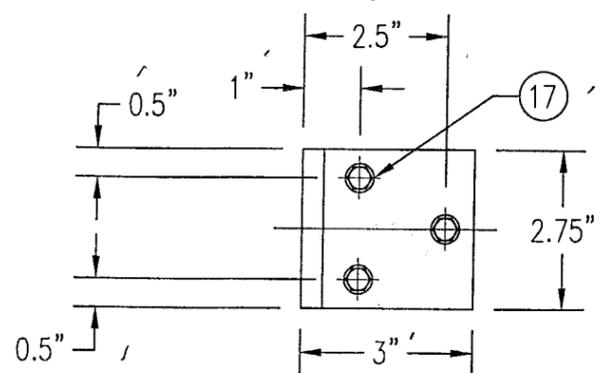


STEEL FRAME OPENING (BOLTED)



STEEL FRAME OPENING (WELDED)

SEE "WOOD OPENING" FOR DETAIL NOT SHOWN, SEE "WOOD OPENING" FOR DETAIL NOT SHOWN



MULLION CLIP DETAIL @ WOOD INSTALLATION

MASONRY MAY ONLY BE USED AT SIDES OF LOUVER PANELS & MAY NOT BE USED AT THE HEAD OR SILL.

PRODUCT REVIEWED
03-10-27-01
07/27/08
By: [Signature]
Division

OCT 15 2003

WARREN W. SCHAEFER, P.E.
STRUCTURAL ENGINEER
P.E. No. 44135

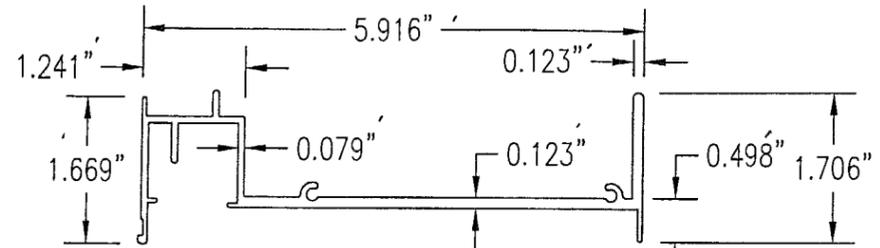
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
STRUCTURAL CONSULTING ENGINEERS
600 SANDTREE DRIVE, SUITE 203B
PALM BEACH GARDENS, FL 33403
PHONE: 561-775-4902

REVISION	DATE	DRN	CK	APPD

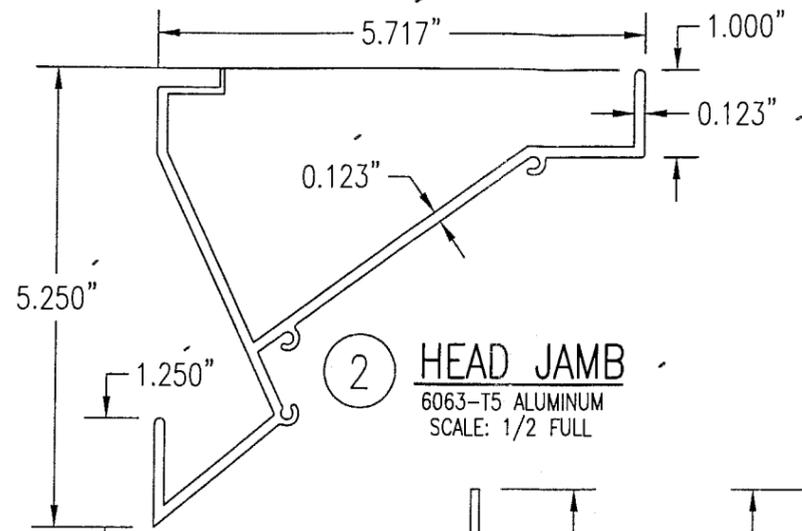
AWV american warming and ventilating
A MESTEK COMPANY
7301 INTERNATIONAL DRIVE HOLLAND, OHIO
PHONE 419-865-5000; FAX 419-865-1375

LE-32 TEST LOUVER
ARCH. & NON-ARCH. LOUVER
DETAILS

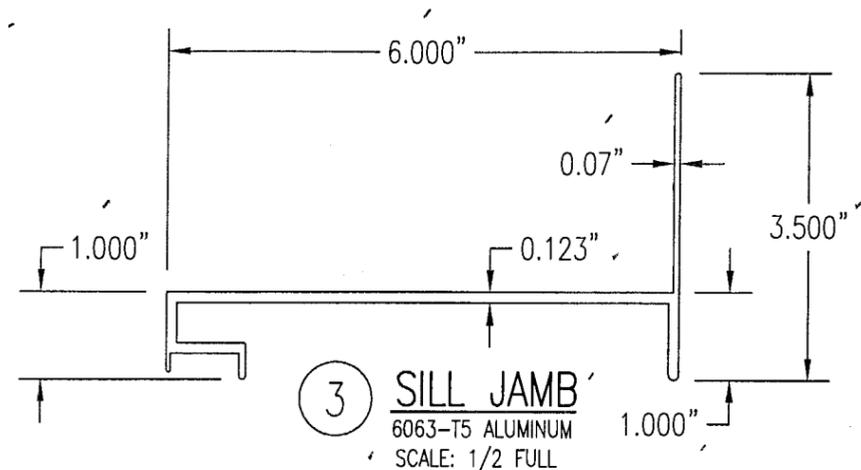
CKD.BY	APPD.BY W.W.S.	SHEET: 5 of 7
DRN.BY W.W.S.	DWG. NO.	REV.
DATE 06-16-00	31604-6	A



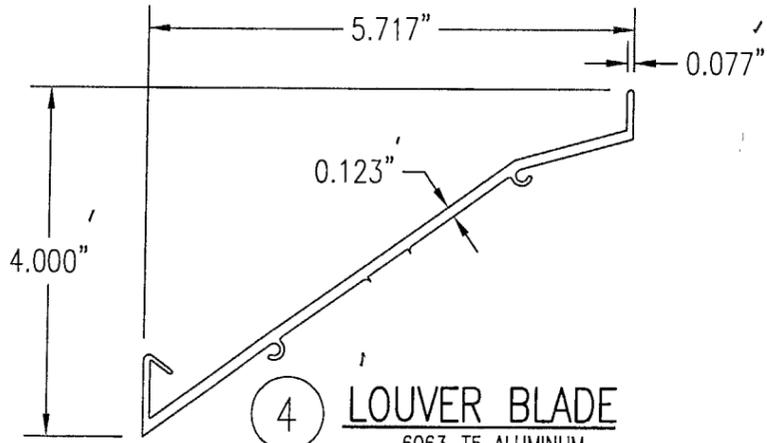
1 **JAMB EXTRUSION**
6063-T5 ALUMINUM
SCALE: 1/2 FULL



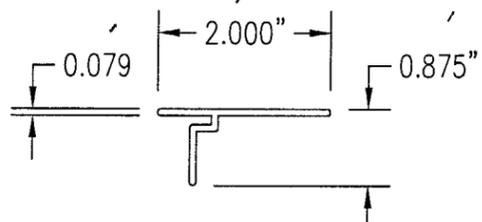
2 **HEAD JAMB**
6063-T5 ALUMINUM
SCALE: 1/2 FULL



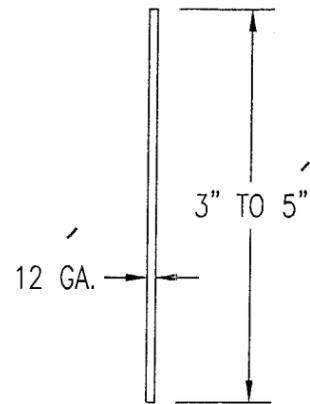
3 **SILL JAMB**
6063-T5 ALUMINUM
SCALE: 1/2 FULL



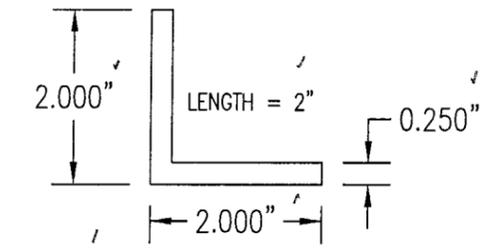
4 **LOUVER BLADE**
6063-T5 ALUMINUM
SCALE: 1/2 FULL



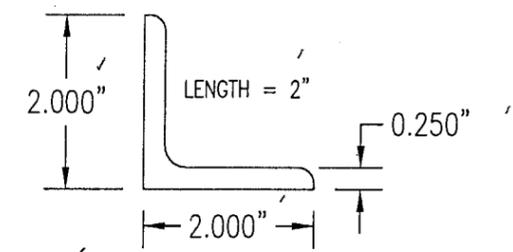
6 **MULLION CAP**
6063-T5 ALUMINUM
SCALE: 1/2 FULL



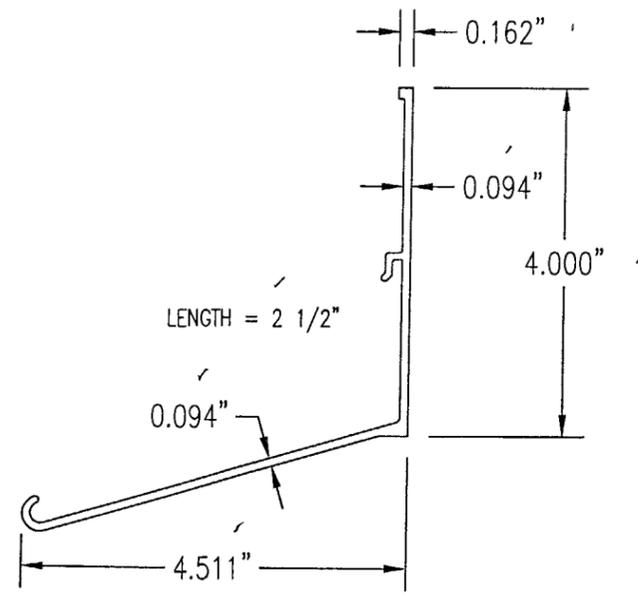
7 **SILL PLATE**
3003/5005 ALUMINUM
SCALE: 1/2 FULL



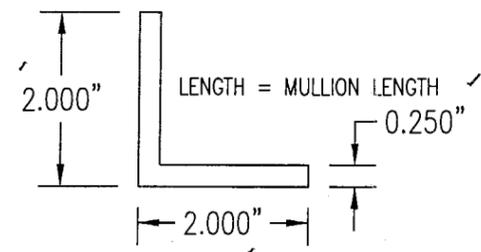
8 **CONNECTION ANGLE**
6063-T5 ALUMINUM
SCALE: 1/2 FULL



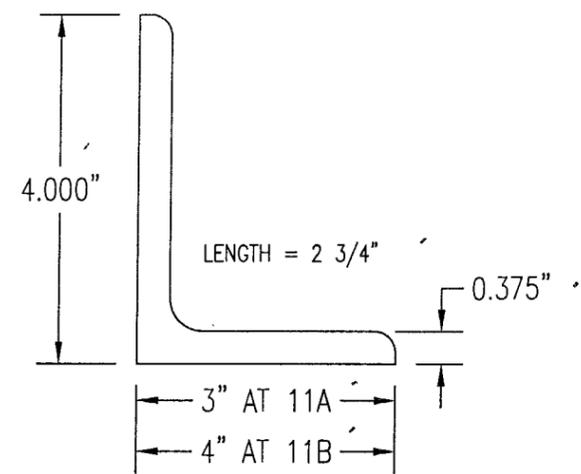
9 **CONNECTION ANGLE**
A36 STEEL
SCALE: 1/2 FULL



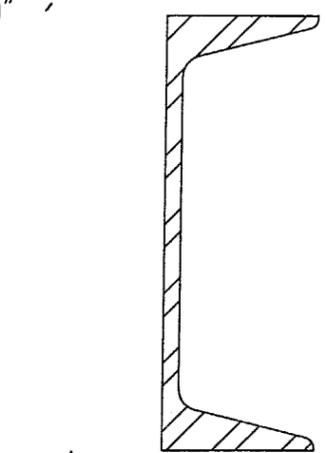
5 **BLADE SUPPORT BRACKET**
6063-T5 ALUMINUM
SCALE: 1/2 FULL



10 **MULLION ANGLE**
6063-T5 ALUMINUM
SCALE: 1/2 FULL



11A 11B **MULLION END CONNECTION ANGLE**
A36 STEEL
SCALE: 1/2 FULL



12 **C5X6.7 MULLION**
A36 STEEL
SCALE: 1/2 FULL

PRODUCT REVISED
in accordance with the Florida
Building Code
03-1027.01
01/27/08
Division Product Control

OCT 15 2003
WARREN W. SCHAEFER, P.E.
STRUCTURAL ENGINEER
P.E. No. 44135
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
STRUCTURAL CONSULTING ENGINEERS
600 SANDTREE DRIVE, SUITE 203B
PALM BEACH GARDENS, FL 33403
PHONE: 561-775-4902

REVISION	DATE	DRN	CK	APPD

awv american warming and ventilating
A MESTEK COMPANY
7301 INTERNATIONAL DRIVE HOLLAND, OHIO
PHONE 419-865-5000; FAX 419-865-1375

LE-32 TEST LOUVER
ARCH. & NON-ARCH. LOUVER
PARTS & EXTRUSIONS

CKD. BY	APPD. BY W.W.S.	SHEET: 6 of 7
DRN. BY W.W.S.	DWG. NO.	REV.
DATE 06-16-00	31604-6	A

ALLOWABLE WIND PRESSURE VS. JAMB CLIP SPACING AND PANEL WIDTH

PANEL WIDTH (INCHES)	CLIP SPACING (INCHES)	ALLOWABLE PRESSURE WITH MID SPAN MULLION (PSF)	ALLOWABLE PRESSURE WITHOUT MID SPAN MULLION (PSF)
16	8	150	150
	12	150	150
	16	150	140
	20	150	105
	24	150	70
20	8	150	150
	12	150	140
	16	150	112
	20	150	84
	24	150	56
24	8	150	140
	12	150	117
	16	150	93
	20	150	70
	24	125	47
28	8	150	82
	12	150	68
	16	150	54
	20	150	41
	24	107	27
30	8	150	62
	12	150	52
	16	150	41
	20	140	31
	24	93	-
36	8	150	-
	12	150	-
	16	150	-
	20	125	-
	24	83	-
42	8	150	-
	12	150	-
	16	142	-
	20	107	-
	24	71	-
48	8	150	-
	12	150	-
	16	125	-
	20	93	-
	24	62	-
54	8	150	-
	12	138	-
	16	111	-
	20	83	-
	24	55	-
60	8	150	-
	12	125	-
	16	100	-
	20	75	-
	24	50	-

MATERIAL LIST

NO.	DESCRIPTION	NOTES/SPECIFICATIONS
PARTS/EXTRUSIONS		
1	SIDE JAMB FRAME/MULLION	6063-T5 ALUMINUM
2	HEAD FRAME	6063-T5 ALUMINUM
3	SILL FRAME	6063-T5 ALUMINUM
4	LOUVER BLADE	6063-T5 ALUMINUM
5	BLADE SUPPORT BRACKET (2 1/2" LONG)	6063-T5 ALUMINUM
6	MULLION CAP	6063-T5 ALUMINUM; FULL LENGTH OF MULLION JAMBS
7	SILL PLATE	3003/5005 ALUMINUM; FULL LENGTH OF PANEL SILL
8	L2X2X1/4 JAMB CONNECTION ANGLE 2" LONG	6063-T5 ALUMINUM; WITHIN 4" OF JAMB ENDS & SPACED PER LOAD TABLE ON SHT. 2
9	L2X2X1/4 OPTIONAL JAMB CONNECTION ANGLE 2" LONG	A36 STEEL; WITHIN 4" OF JAMB ENDS & SPACED PER LOAD TABLE ON SHT. 2
10	L2X2X1/4 CONTINUOUS MULLION CONNECTION ANGLE	6063-T5 ALUMINUM; FULL LENGTH OF CHANNEL MULLION
11	L4X3X3/8 MULLION END CONNECTION ANGLE 2 3/4" LONG	A36 STEEL; 2 PER MULLION END
12	C5X6.7 MULLION	A36 STEEL; FULL HEIGHT OF PANELS
13	OPEN	
14	OPEN	
15	OPEN	
FASTENERS		
16	1/2" X 2" A307 HEX HEAD PLATED STEEL OR S/STL BOLT	WITH FLAT WASHERS, LOCK WASHER & NUT; 2 PER MULLION END
17	NO. 14 S.S. SMS SCREWS	3 PER MULLION END CLIP WITH MIN. 1 1/2" WOOD EMBED
18	5/8" X 2 1/4" SLEEVE ANCHOR WITH FLAT WASHER	USA KINGPIN ANCHOR; 1 PER CHANNEL END CONNECTION ANGLE INTO CONCRETE ONLY
19	1/2" X 2" A307 HEX HEAD PLATED STEEL OR S/STL BOLT	WITH FLAT WASHERS, LOCK WASHER & NUT; 1 PER CHANNEL END CONNECTION ANGLE INTO STEEL FRAME
20	5/16-18 UNC X 1 1/2" HEX HEAD STEEL OR S/STL BOLT	WITH FLAT WASHER, LOCK WASHER & NUT; WITHIN 4" OF MULLION ENDS & MAX. 8" O.C.
21	NO. 14 X 1 1/4" HILTI TEK SCREW	3 AT EACH LOUVER BLADE SUPPORT BRACKET AT ARCHITECTURAL MAIN MULLIONS
22	NO. 14 X 1 1/4" HILTI TEK SCREW	WITHIN 1 1/4" OF MULLION ENDS & MAX. 4" O.C. INTO FRAME
23	NO. 8 X 3/4" SMS	2 PER EACH LOUVER BLADE END THROUGH JAMB & INTO BLADE SPLINES
24	NO. 14 X 1 1/4" HILTI TEK SCREW	2 AT EACH LOUVER BLADE SUPPORT BRACKET AT ALL MIDSPAN MULLIONS
25	NO. 14 X 1 1/4" HILTI TEK SCREW	2 PER EACH HEAD, SILL & SIDE JAMB CONNECTION ANGLE
26	1/2" X 2" LAG SCREW WITH FLAT WASHER	1 PER EACH HEAD, SILL & SIDE JAMB CONNECTION ANGLE INTO WOOD FRAME
27	5/8" X 2 1/4" SLEEVE ANCHOR WITH FLAT WASHER	USA KINGPIN ANCHOR; 1 PER EACH HEAD, SILL & SIDE JAMB CONNECTION ANGLE INTO CONCRETE ONLY
28	1/2" X 2" HEX HEAD A307 PLATED STEEL OR S/STL BOLT	WITH FLAT WASHERS, LOCK WASHER & NUT; 1 PER EA. JAMB CONNECTION ANGLE INTO STEEL FRAME
29	NO. 8 X 3/4" SMS	2 SCREWS WITHIN 4" OF SILL PLATE ENDS & MAX. 12" O.C. (SILL PLATE TO SILL JAMB AND FIRST LOUVER BLADE)
30	NO. 14 X 1 1/4" HILTI TEK SCREW	1 AT EACH MULLION ANGLE INTO HEAD & SILL JAMB
31	NO. 8 X 3/4" SMS SCREWS	2 PER FRAME SILL CORNER THROUGH SILL & INTO JAMB SPLINES
32	3/8" X 1 7/8" SLEEVE ANCHOR WITH FLAT WASHER	RED HEAD DYNABOLT WITH MIN. 1 1/2" BLOCK/CONCRETE EMBED (1 PER FRAME SUPPORT CLIP)

PRESSURE TABLE NOTES:

1. WHEN THE PANEL WIDTH IS 30" OR LESS, NO MID SPAN MULLION IS REQUIRED PROVIDING COMPLIANCE WITH THE TABLE.
2. ALL PRESSURES IN THIS TABLE ARE FOR BOTH POSITIVE & NEGATIVE WIND PRESSURE.

PRODUCT REVISED
 Approved by the Florida
 Building Code
 Authority on
 03/02/09
 05/27/08
 W. W. Schaefer Engineering
 Division

OCT 15 2003

WARREN W. SCHAEFER, P.E.
 STRUCTURAL ENGINEER
 P.E. No. 44135

W. W. SCHAEFER ENGINEERING
 & CONSULTING, P.A.
 STRUCTURAL CONSULTING ENGINEERS
 600 SANDTREE DRIVE, SUITE 203B
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LE-32 TEST LOUVER ARCH. & NON-ARCH. LOUVER MATERIAL LIST & LOAD TABLE				
CKD.BY	APPD.BY	W.W.S.	SHEET: 7 of 7	
DRN.BY	W.W.S.	DWG. NO.	31604-6	REV. A
DATE	06-16-00			