



**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
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: 6" Louver System Model LE32.

APPROVAL DOCUMENT: Drawing No.1217, titled "LE-32 Louver System" dated 04/03/03 with no revisions, prepared by W.W. Schaefer Engineering & Consulting, PA, signed and sealed by W. W. Schaefer 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", 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 # 03-1001.01 consists of this page, evidence page as well as approval document mentioned above. The submitted documentation was reviewed by **Candido F. Font PE.**

[Handwritten signature]
04/22/04



**NOA No: 03-1001.01
Expiration Date: April 22, 2009
Approval Date: April 22, 2004
Page 1**

American Warming & Ventilating.

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

A. DRAWINGS.

1. Drawing prepared by W. W. Schaefer Engineering & Consulting, P.A. titled "LE-32 Louver System" Drawing No. 1217, dated 04/03/03 with no revision signed and sealed by W. W. Schaefer, PE.

B. TESTS.

	Test Report	Test Standard	Test Date	Test Witness
1.	HTL 0198-0508-03	TAS 201, 202 & 203	05/15-19/03	V. J. Abraham PE.
2.	HTL 0198-0618-03	TAS 201, 202 & 203	06/06-25/03	V. J. Abraham PE.
3.	HTL 0198-0804-03	TAS 201, 202 & 203	08/06-08/03	V. J. Abraham PE.
4.	HTL 0198-0508-03	TAS 201, 202 & 203	05/08-13/03	V. J. Abraham PE.
5.	HTL 0198-0804-03	TAS 201, 202 & 203	08/08-11/03	V. J. Abraham PE.
6.	HTL 0198-0324-03	TAS 201, 202 & 203	03/24-26/03	V. J. Abraham PE.
7.	HTL 0198-0324-03	TAS 201, 202 & 203	03/24-04/16	V. J. Abraham PE.
8.	HTL 0198-0324-03	TAS 201, 202 & 203	03/24-24/03	V. J. Abraham PE.
9.	HTL 0198-0324-03	TAS 201, 202 & 203	03/25-04/21	V. J. Abraham PE.
10.	HTL 0198-0128-03	TAS 201, 202 & 203	02/10-04/21	V. J. Abraham PE.
11.	HTL 0198-0508-03	TAS 202	05/13-13/03	V. J. Abraham PE.
12.	HTL 0198-0324-03	TAS 202	03/27-27/03	V. J. Abraham PE.
13.	HTL 0198-0324-03	TAS 201 & 203	03/24-04/21	V. J. Abraham PE.
14.	AT 01-45720.01	TAS 100(A)-95	06/16/03	J. A. Reed PE.

C. CALCULATIONS.

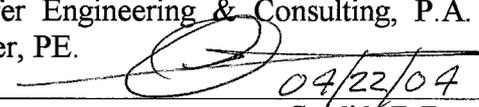
1. Allowable Load Calculations, dated 09/04/03, pages 1 to 11 of 11, prepared by W. W. Schaefer Engineering & Consulting, PA, signed and sealed by W. W. Schaefer, PE.
2. Allowable Load Calculations, dated 03/04/04, pages 1 of 6, prepared by W. W. Schaefer Engineering & Consulting, PA signed and sealed by W. W. Schaefer, PE.

D. QUALITY ASSURANCE

1. Miami-Dade Product Control Division.

E. STATEMENTS

1. Code compliance letter issued by W. W. Schaefer Engineering & Consulting, PA. on 09/22/03, signed and sealed by W. W. Schaefer, PE.
2. Test compliance letter issued by Hurricane Test Laboratory, Inc on 09/09/03, signed and sealed by V. J. Abraham, PE.
3. No interest letter issued by W. W. Schaefer Engineering & Consulting, P.A. on 09/22/03, signed and sealed by W. W. Schaefer, PE.


Candido F. Font PE.
Sr. Product Control Examiner
NOA No 03-1001.01
Expiration Date: April 22, 2009
Approval: Date: April 22, 2004

FASTENER SCHEDULE

ANCHOR TYPE	(5) SUBSTRATE	MINIMUM EMBEDMENT	MINIMUM EDGE DIST.
(3) NO. 10 S.S. SCREW	WOOD	1 3/8"	3/4"
NO. 10-24 TEK SCREW	METAL STUD OR STEEL	FULL	3/4"
(1) 1/4" CONCRETE SCREW	C90 CONCR. BLOCK	1 1/4"	2 1/2"
(1) 1/4" CONCRETE SCREW	CONCRETE	1 1/4"	2"
(2) 1/4" BOLT	STEEL OR METAL STUD	FULL	3/4"
(4) 3/8" SLEEVE ANCHOR	CONCRETE	2 1/2"	2"
(2) 3/8" BOLT	STEEL	FULL	3/4"

- (1) CONCRETE SCREWS SHALL BE ITW RAMSET/RED HEAD OR ELCO TAPCONS OR HILTI KWIK-CON II. (HARDENED STEEL OR S.S. PER AISI 1021 & 410)
- (2) BOLT SHALL BE MIN. A307 GALVANIZED OR 304 S.S. (Fv = 10,000 PSI MIN.)
- (3) WOOD SCREWS SHALL HAVE MIN. YIELD STRENGTH OF Fyb = 80,000 PSI
- (4) SLEEVE ANCHORS MAY BE GALVANIZED OR S.S. RAMSET RED HEAD DYNABOLTS OR POWERS RAWL POWER BOLT.
- (5) SEE GENERAL NOTES FOR SUBSTRATE REQUIREMENTS.

CORNER & BLADE END CONSTRUCTION

BLADE TO JAMB: BLADE END BUTTS TO JAMB, IS WELDED WITH ONE 1/8" X 5" WELD AND SCREWED TO JAMB WITH WITH 2 NO. 8 X 3/4" S.S. SMS SCREWS THROUGH JAMB AND INTO BLADE SCREW SPLINES.

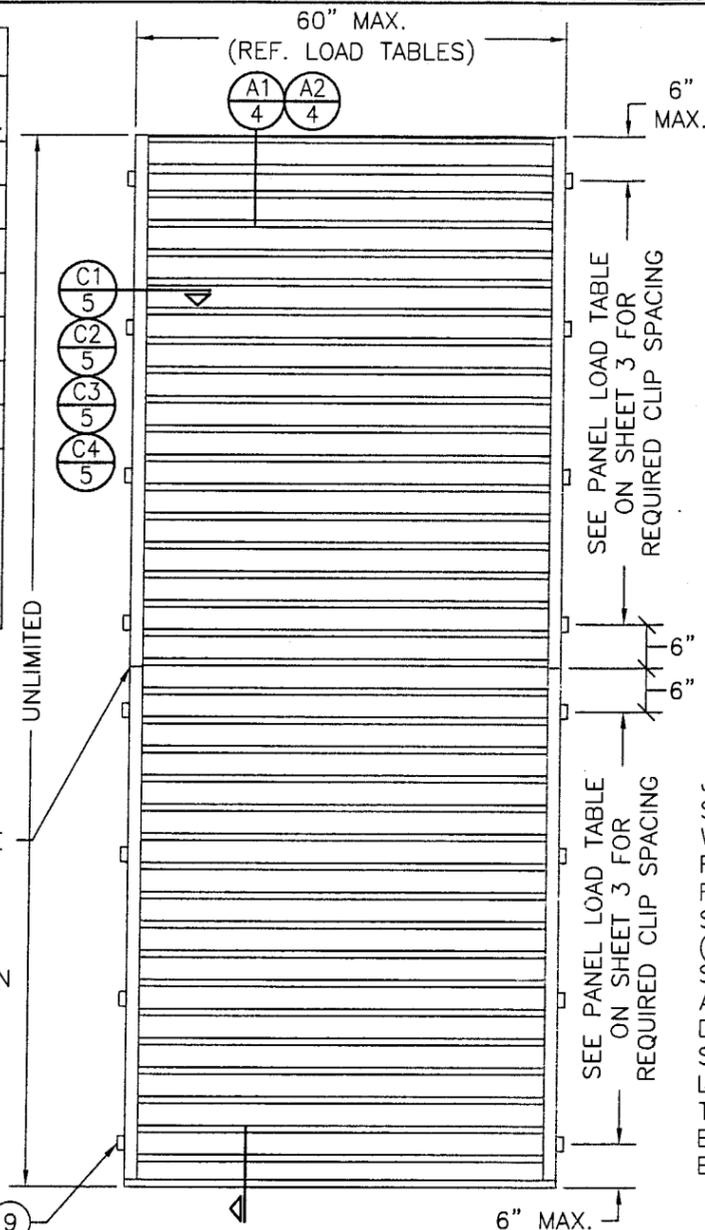
HEAD TO JAMB: HEAD FRAME IS SQUARE CUT, BUTTED AND JOINED TO JAMB WITH ONE 1/8" X 5" WELD AND 2 NO. 8 X 3/4" S.S. SMS SCREWS THROUGH JAMB AND INTO HEADER SCREW SPLINES.

SILL TO JAMB: SIDE JAMB BUTTS TO SILL AND IS JOINED TO SILL WITH THREE(3) 1/8" X 1" WELDS AND 2 NO. 8 X 3/4" S.S. SMS SCREWS THROUGH SILL AND INTO JAMB SCREW SPLINES.

JAMB SPLICE WHEN REQUIRED FOR STACKING (SEE SECTION A1/4 FOR DETAIL). SPLICE LOCATION TO BE BETWEEN BLADES.

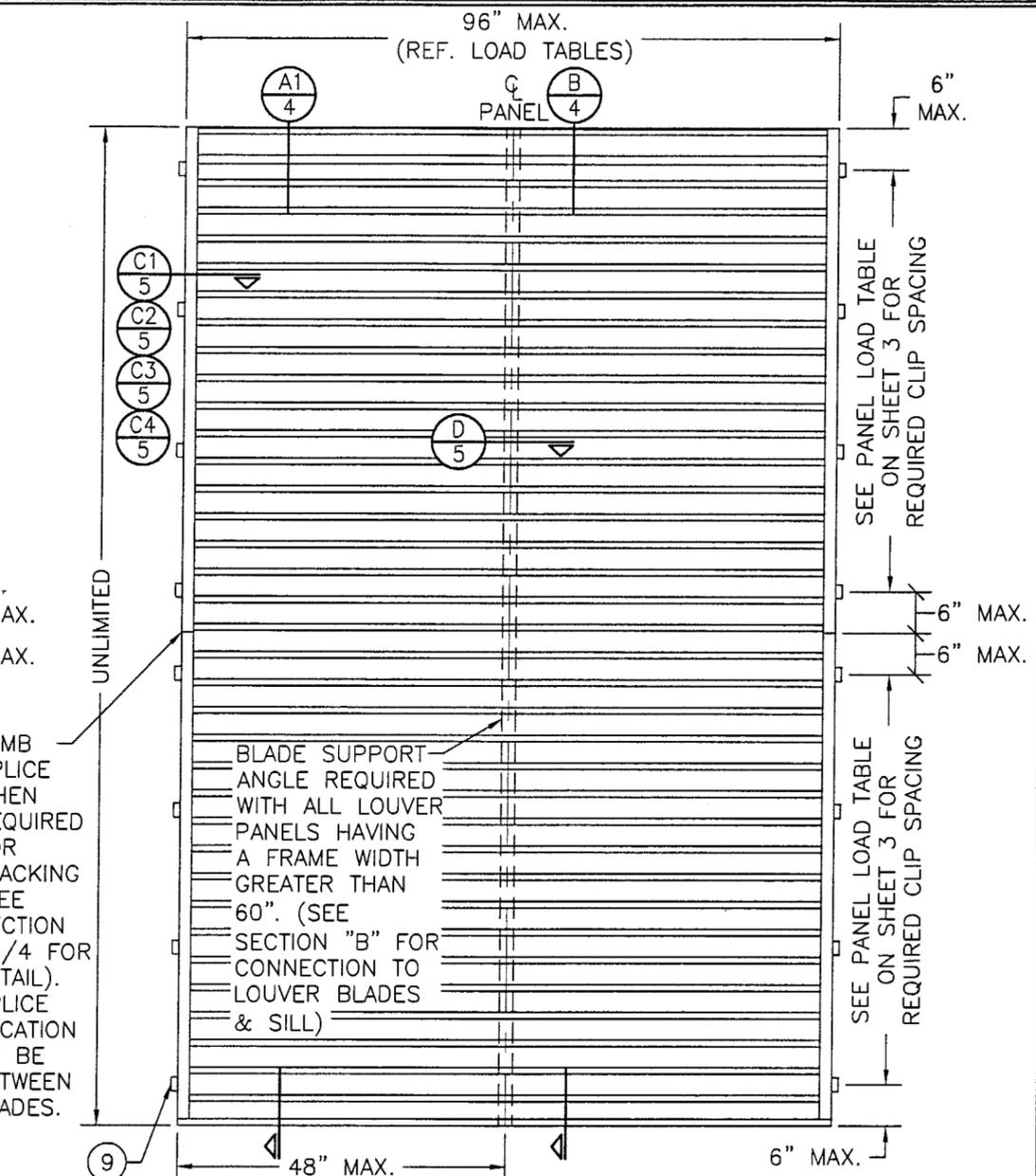
GENERAL NOTES:

1. 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 LOUVERS.
2. THESE LOUVER SYSTEMS HAVE BEEN DESIGNED & TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC) AND PROTOCOLS TAS-100, 201, 202 & 203 FOR HIGH VELOCITY HURRICANE ZONE (HVHZ) AREAS.
3. EACH LOUVER ASSEMBLY SHALL BE PERMANENTLY LABELED AS FOLLOWS: AMERICAN WARMING AND VENTILATING HOLLAND, OH MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED
4. ALL CONCRETE SUBSTRATE SHALL BE MIN. 3000 PSI.
5. ALL WOOD SUBSTRATE SHALL BE MIN. G = 0.55 DENSITY.
6. ALL METAL STUD SUBSTRATE SHALL BE MIN. 16 GA. Fy = 33 ksi.
7. ALL STRUCTURAL STEEL SUBSTRATE SHALL BE MIN. 12 GA. Fy = 36 ksi.
8. PANEL WIDTHS & HEIGHTS ARE LIMITED AS SHOWN IN ELEVATIONS.
9. MULLED PANELS MAY BE HORIZONTALLY INSTALLED TO AN UNLIMITED NUMBER. VERTICAL STACKING OF MULLED PANELS MAY OCCUR PROVIDING A STRUCTURAL SUPPORT IS DESIGNED & INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER ASSEMBLY (SINGLE PANELS MAY RUN TO UNLIMITED HEIGHT PER ELEVATION IF NO MULLION EXISTS).
10. SEPARATION OF DISSIMILAR MATERIALS MUST BE MAINTAINED PER ALL APPLICABLE CODES & SECTION 2003.8.4 OF FBC 2001.
11. THIS SYSTEM HAS BEEN TESTED FOR WATER INFILTRATION RESISTANCE AND IS A WATER RESISTANT SYSTEM WHEN THE DAMPER BLADE IS ATTACHED TO THE LOUVER BLADES AS SHOWN IN SECTION "A2/4".
12. UNLESS THE DAMPER BLADE IS ATTACHED TO THE LOUVER BLADES, THE LOUVER IS TO BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, AND THE ROOM WILL HOUSE WATER RESISTANT/WATER PROOF EQUIPMENT, COMPONENTS OR SUPPLIES.
13. INCREASE OF STRESSES AND ALLOWABLE LOADS BY 33% ARE USED TO PREPARE THESE DRAWINGS.
14. ALL DETAILS OF SHEETS 8 THRU 11 MUST COMPLY WITH THE LOUVER DETAILS SHOWN ON SHEETS 1 THRU 7. ANY DISCREPANCY IS CONTROLLED BY THE DETAILS ON SHEETS 1 THRU 7.



**EXTERIOR ELEVATION
SINGLE LOUVER PANEL WITHOUT
BLADE SUPPORT ANGLE**

NOTE: LOUVER PANELS MAY BE STACKED/SPLICED VERTICALLY OR THE LOUVER PANEL MAY RUN VERTICALLY TO INFINITE HEIGHT PROVIDING OPENING IS PROPERLY DESIGNED BY OTHERS TO SUPPORT THE LOUVER PANELS.



**EXTERIOR ELEVATION
SINGLE LOUVER PANEL WITH
BLADE SUPPORT ANGLE**

NOTE: LOUVER PANELS MAY BE STACKED/SPLICED VERTICALLY OR THE LOUVER PANEL MAY RUN VERTICALLY TO INFINITE HEIGHT PROVIDING OPENING IS PROPERLY DESIGNED BY OTHERS TO SUPPORT THE LOUVER PANELS. BLADE SUPPORT ANGLE IS CONTINUOUS FROM HEAD TO SILL AND SPLICING OF THIS ANGLE IS NOT PART OF THIS APPROVAL.

ALLOWABLE PRESSURES

PRESSURES VARY WITH PANEL SIZE, CLIP SPACING & MULLION CONDITIONS & SHALL BE CONTROLLED BY THE LESSER OF THE ALLOWABLE PRESSURE FOR EACH OF THOSE APPLICABLE CONDITIONS. SEE LOAD TABLES ON SHEET 3 FOR ALLOWABLE PRESSURES.

Approved as complying with the Florida Building Code
Date: 4/22/04
NOAH 03-1001.01
Miami Dade Product Control
Division
By: [Signature]

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=24	DATE: 04/03/03
DATE	
BY	
REVISION DESCRIPTION	
NO.	
LE-32 LOUVER SYSTEM MANUFACTURER AMERICAN WARMING & VENTILATING 7301 INTERNATIONAL DRIVE HOLLAND, OHIO 43528 419-865-5000	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION MAR 04 2004 [Signature] WARREN W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING NO. 1217 SHEET NO. 1 OF 11

MULLION LOAD TABLE (SEE INSTRUCTIONS BELOW)

MULLION SPAN (IN.)	LOAD WIDTH (IN.)	(1) ALLOWABLE (2) PRESSURE (PSF)	MULLION SPAN (IN.)	LOAD WIDTH (IN.)	(1) ALLOWABLE (2) PRESSURE (PSF)	MULLION SPAN (IN.)	LOAD WIDTH (IN.)	(1) ALLOWABLE (2) PRESSURE (PSF)	MULLION SPAN (IN.)	LOAD WIDTH (IN.)	(1) ALLOWABLE (2) PRESSURE (PSF)			
18"	96"	75.0	60"	96"	65.7	84"	96"	47.0	120"	96"	32.9			
	96"	75.0		90"	70.1		90"	50.1		90"	35.1			
24"	90"	80.0		84"	75.1		84"	53.7		84"	37.6			
	84"	85.0		78"	80.9		78"	57.8		78"	40.4			
30"	96"	75.0		72"	87.6		72"	62.6		72"	43.8			
	90"	80.0		66"	95.6		66"	68.3		66"	47.8			
	84"	85.0		60"	105.2		60"	75.1		60"	52.6			
	78"	92.3		54"	116.9		54"	83.5		54"	58.4			
	72"	100.0		48"	131.5		48"	93.9		48"	65.7			
36"	66"	109.1		42"	150.2		42"	107.3		42"	75.1			
	96"	109.6		36"	175.3		36"	125.2		36"	87.6			
	90"	116.9		30"	180.0		30"	150.2		30"	105.2			
	84"	125.2	66"	96"	59.8	96"	24"	180.0	132"	96"	175.3			
	78"	134.8		90"	63.7		90"	43.8		90"	29.0			
	72"	146.1		84"	68.3		84"	47.0		84"	31.1			
	66"	159.3		78"	73.5		78"	50.6		78"	33.5			
	60"	175.3		72"	79.7		72"	54.8		72"	36.3			
	54"	180.0		66"	86.9		66"	59.8		66"	39.6			
	42"	96"		93.9	60"		95.6	60"		65.7	60"	43.6	144"	96"
90"		100.2		54"	106.2		54"	73.0		54"	48.4	90"		29.0
84"		107.3		48"	119.5		48"	82.2		48"	54.4	84"		31.1
78"		115.6		42"	136.6		42"	93.9		42"	62.2	78"		33.5
72"		125.2		36"	159.3		36"	109.6		36"	72.6	72"		36.3
66"		136.6		30"	180.0		30"	131.5		30"	87.1	66"		39.6
60"		150.2	72"	96"	54.8	108"	24"	164.3	144"	60"	43.6			
54"		166.9		90"	58.4		90"	41.7		90"	108.9	60"		43.6
48"		180.0		84"	62.6		84"	44.9		84"	118.9	60"		43.6
48"		96"		82.2	78"		67.4	78"		36.5	78"	145.2		144"
	90"	87.6		72"	73.0		72"	39.0		72"	145.2	72"	28.0	
	84"	93.9		66"	79.7		66"	41.7		66"	145.2	66"	30.5	
	78"	101.1		60"	87.6		60"	44.9		60"	145.2	60"	33.5	
	72"	109.6		54"	97.4		54"	48.7		54"	145.2	54"	37.3	
	66"	119.5		48"	109.6		48"	53.1		48"	145.2	48"	41.9	
	60"	131.5		42"	125.2		42"	58.4		42"	145.2	42"	47.9	
	54"	146.1		36"	146.1		36"	64.9		36"	145.2	36"	55.9	
	48"	164.3		30"	175.3		30"	73.0		30"	145.2	30"	67.1	
	42"	180.0	24"	180.0	24"	83.5	24"	145.2	24"	83.9				
				18"	180.0	18"	145.2	18"	111.8					

MULLION LOAD TABLE INSTRUCTIONS:

1. DETERMINE REQUIRED DESIGN PRESSURE OF THE LOUVER ASSEMBLY.
2. DETERMINE THE REQUIRED MULLION SPAN OF THE LOUVER ASSEMBLY.
3. DETERMINE THE PANEL WIDTH "A" & "B" AND THE MULLION LOAD WIDTH.
4. GO TO THE MULLION LOAD TABLE AND CHECK THE ALLOWABLE PRESSURE FOR THE RESPECTIVE MULLION SPAN/LOAD WIDTH.
5. GO TO THE PANEL LOAD TABLE AND CHECK THE ALLOWABLE PRESSURE FOR EACH PANEL WIDTH.
6. IF ALL THE ALLOWABLE PRESSURES OF INSTRUCTIONS 4 & 5 ARE GREATER THAN THE REQUIRED DESIGN PRESSURE, THE ASSEMBLY IS ACCEPTABLE.
7. IF ANY ALLOWABLE PRESSURE OF INSTRUCTIONS 4 & 5 IS LESS THAN THE REQUIRED DESIGN PRESSURE, THE ASSEMBLY IS NOT ACCEPTABLE UNLESS THE ASSEMBLY SIZE OR PRESSURE IS REDUCED AND INSTRUCTIONS FROM 1 TO 7 ARE FOLLOWED AGAIN.

PANEL LOAD TABLE

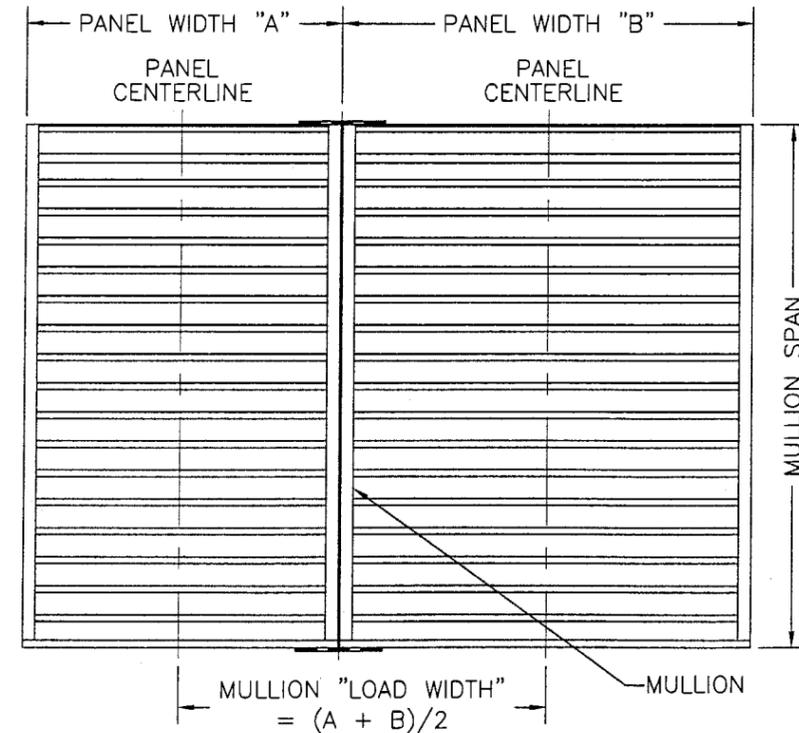
PANEL WIDTH (IN.)	(3) CLIP SPACING (IN.)	(1) ALLOWABLE (2) PRESSURE (PSF)	PANEL WIDTH (IN.)	(3) CLIP SPACING (IN.)	(1) ALLOWABLE (2) PRESSURE (PSF)
36"	14"	180.0	72"	14"	100.0
	22"	127.3		22"	63.6
42"	14"	154.3	78"	14"	92.3
	22"	109.1		22"	58.7
48"	14"	120.0	84"	14"	85.0
	22"	95.5		22"	54.5
54"	14"	106.7	90"	14"	80.0
	22"	84.8		22"	50.9
60"	14"	90.0	96"	14"	75.0
	22"	76.4		22"	47.7
66"	14"	109.1			
	22"	69.4			

NOTE: ALL SHAPED LOUVER PANELS ARE RESTRICTED TO A FRAME CLIP SPACING OF 14" O.C. 22" CLIP SPACING IS ONLY ALLOWED ON RECTANGULAR & SQUARE SHAPE LOUVERS.

LOAD TABLE NOTES

(APPLICABLE TO MULLION & PANEL LOAD TABLES):

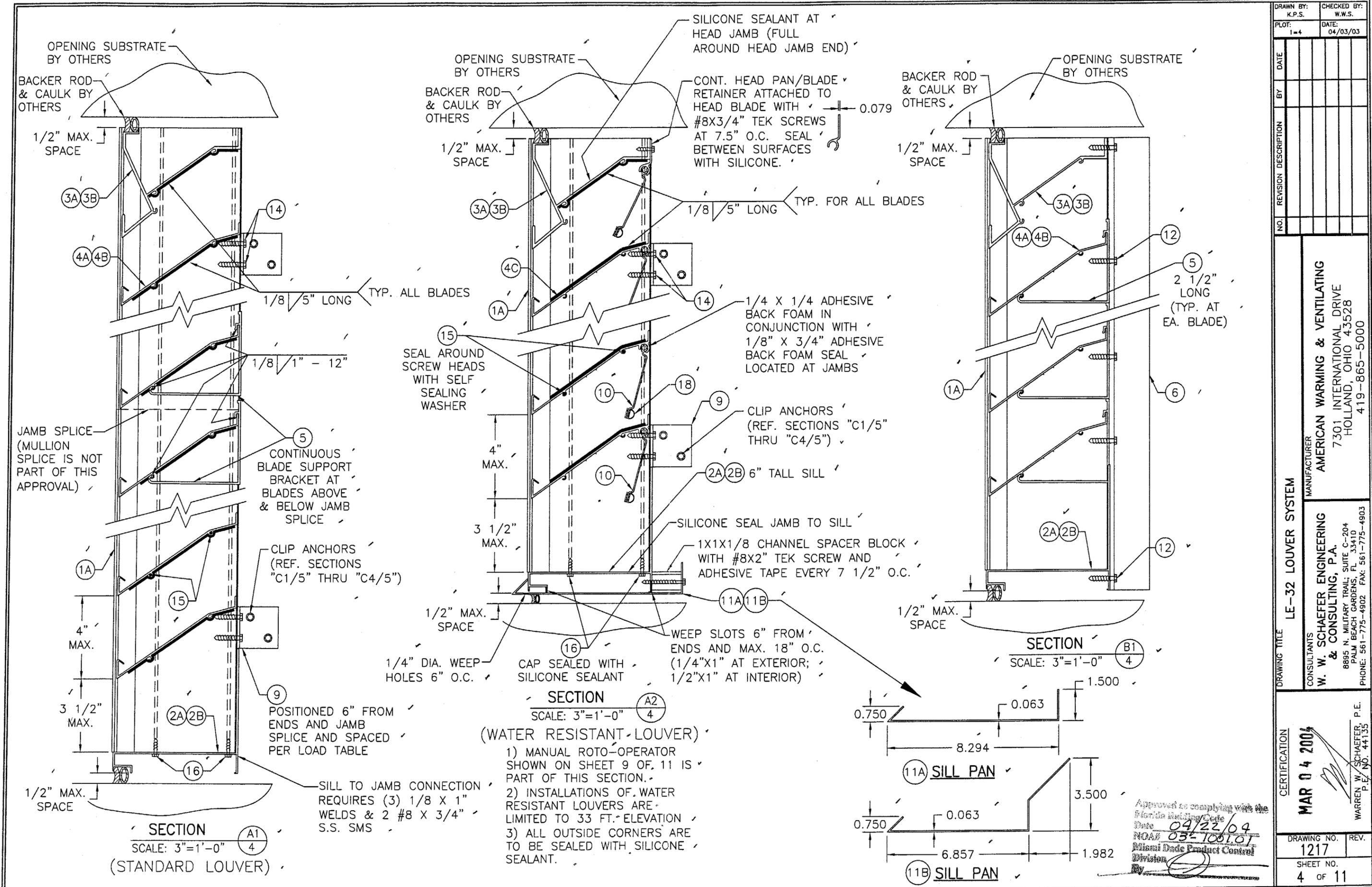
- 1) ALLOWABLE PRESSURE IS BOTH POSITIVE & NEGATIVE.
- 2) THE LESSER LOAD FROM THE MULLION LOAD TABLE & THE PANEL LOAD TABLE SHALL CONTROL AS THE ALLOWABLE FOR THE ENTIRE MULLED UNIT.



LOUVER ASSEMBLY

Approved as complying with the Florida Building Code
 Date: 04/22/04
 NOAH 03-1001.01
 Miami Dade Product Control Division

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=24	DATE: 04/03/03
NO.	DATE
BY	DESCRIPTION
REVISION	DESCRIPTION
MANUFACTURER AMERICAN WARMING & VENTILATING 7301 INTERNATIONAL DRIVE HOLLAND, OHIO 43528 419-865-5000	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
DRAWING TITLE LE-32 LOUVER SYSTEM	
CERTIFICATION MAR 04 2004 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1217	REV.
SHEET NO. 3	OF 11



DRAWN BY:	K.P.S.	CHECKED BY:	W.W.S.
PLOT:	1=4	DATE:	04/03/03
DATE			
BY			
REVISION DESCRIPTION			
NO.			

DRAWING TITLE
LE-32 LOUVER SYSTEM

MANUFACTURER
AMERICAN WARMING & VENTILATING

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
8895 N. MILITARY TRAIL, SUITE C-204
PALM BEACH GARDENS, FL 33410
PHONE: 561-775-4902 FAX: 561-775-4903

7301 INTERNATIONAL DRIVE
HOLLAND, OHIO 43528
419-865-5000

CERTIFICATION
MAR 04 2004

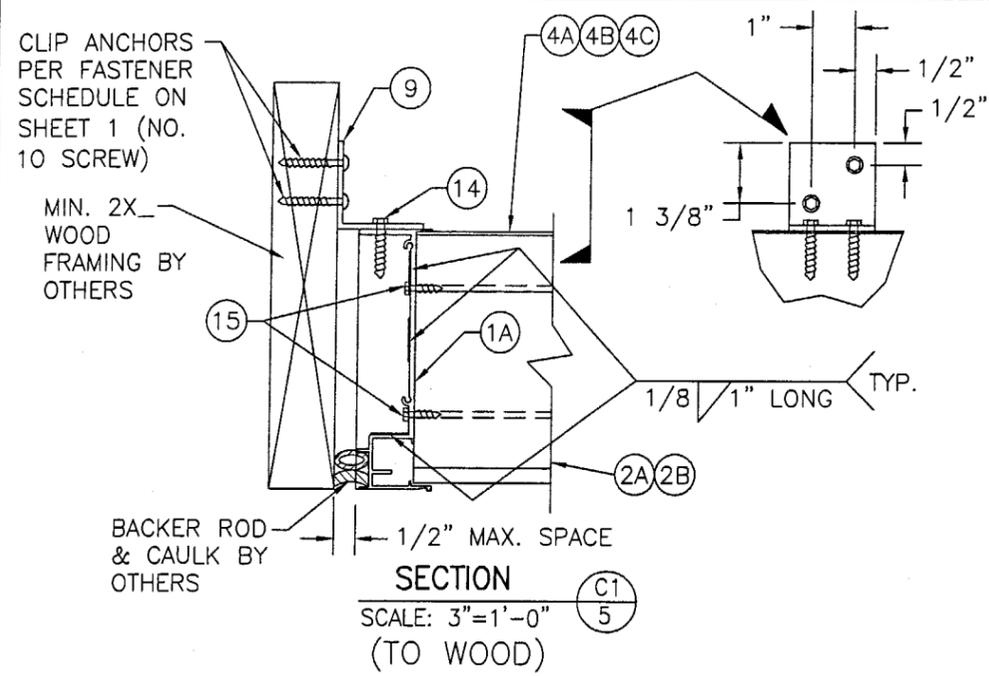
Approved as complying with the Florida Building Code
Date: 04/22/04
NOAH 03-106107
Miami Dade Product Control Division

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

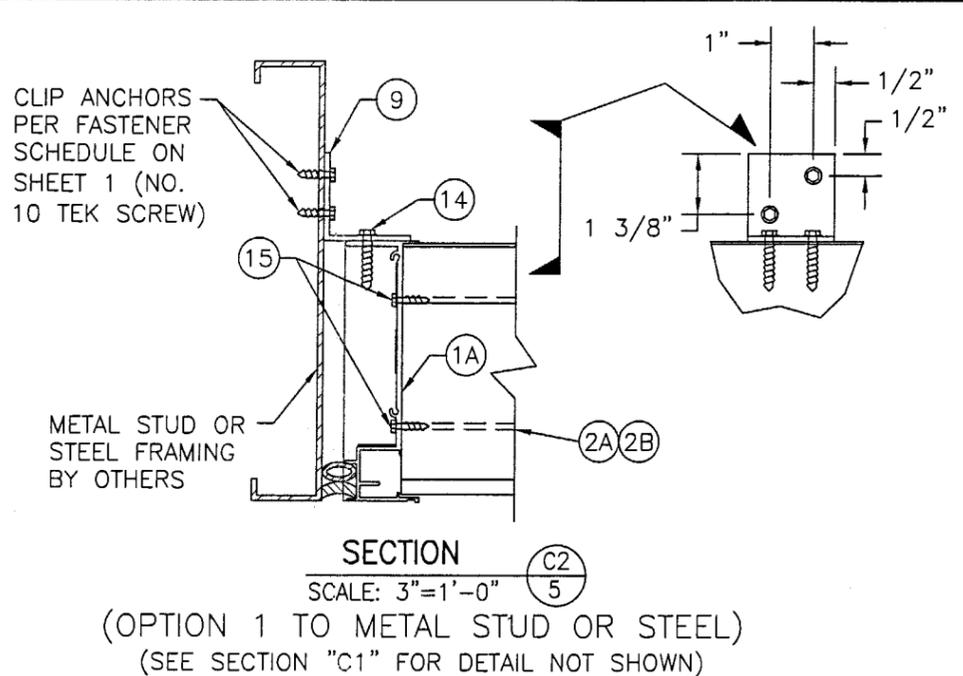
DRAWING NO.
1217

REV.

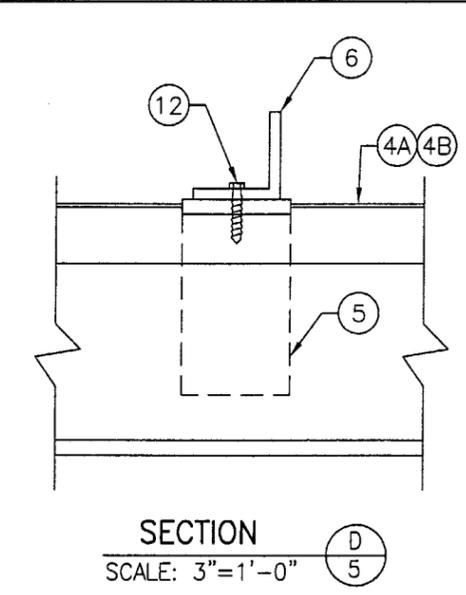
SHEET NO.
4 OF 11



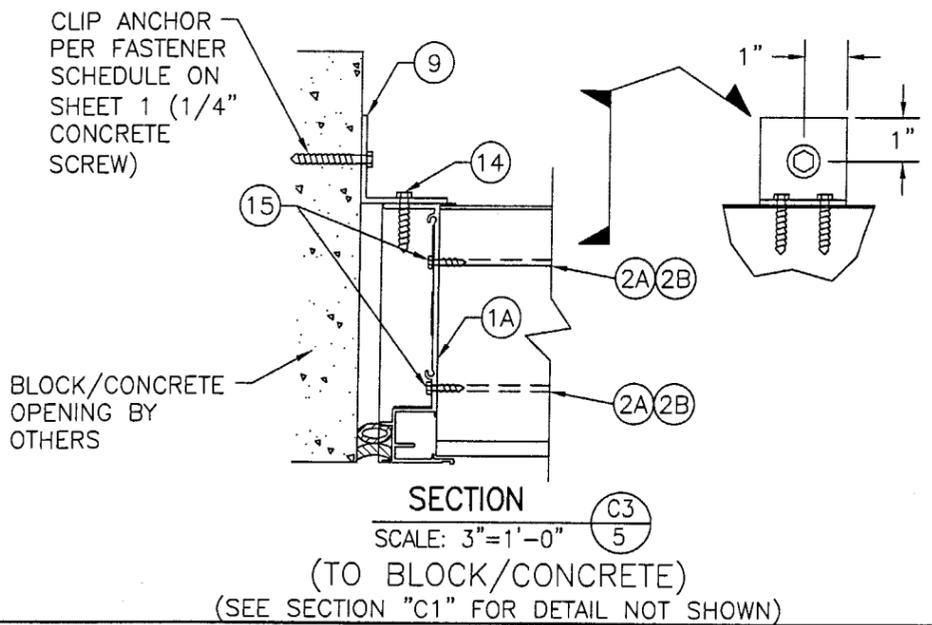
SECTION C1
SCALE: 3"=1'-0"
(TO WOOD)



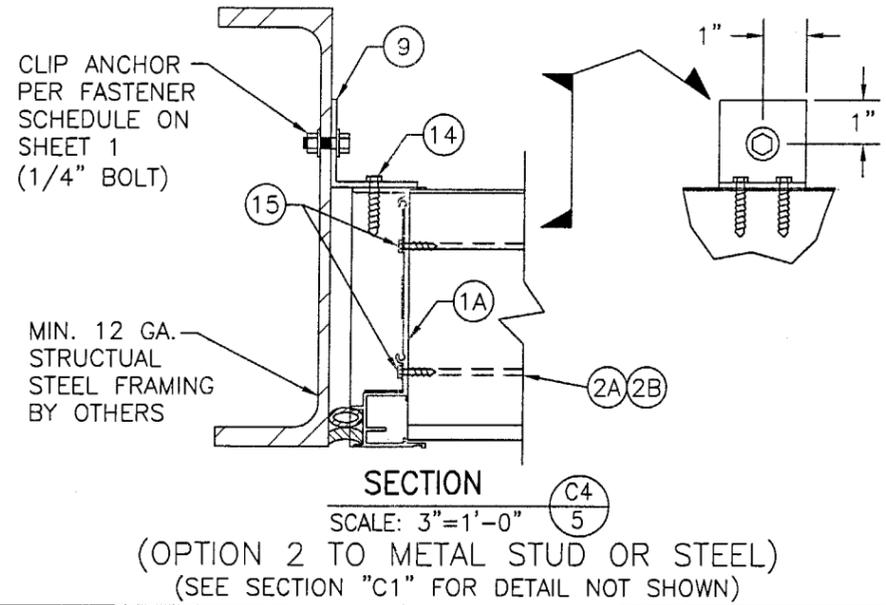
SECTION C2
SCALE: 3"=1'-0"
(OPTION 1 TO METAL STUD OR STEEL)
(SEE SECTION "C1" FOR DETAIL NOT SHOWN)



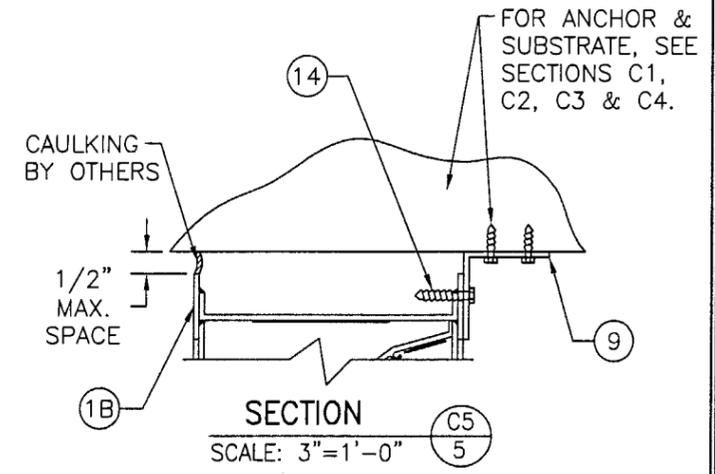
SECTION D
SCALE: 3"=1'-0"



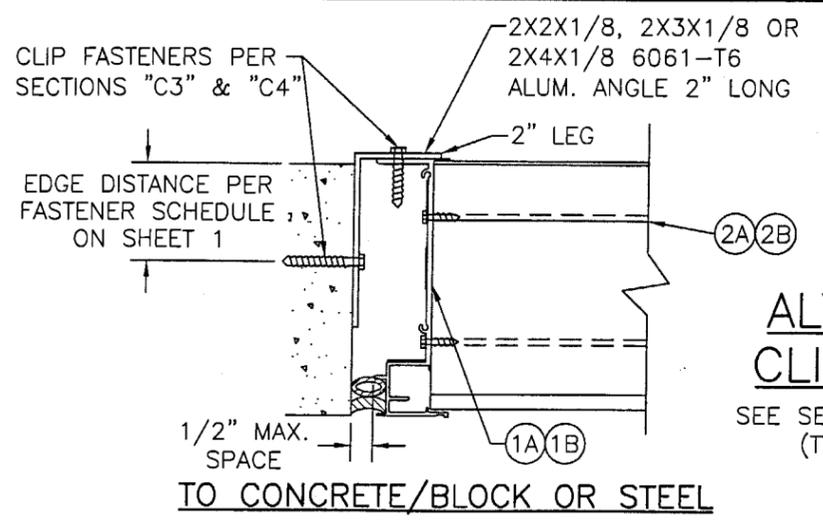
SECTION C3
SCALE: 3"=1'-0"
(TO BLOCK/CONCRETE)
(SEE SECTION "C1" FOR DETAIL NOT SHOWN)



SECTION C4
SCALE: 3"=1'-0"
(OPTION 2 TO METAL STUD OR STEEL)
(SEE SECTION "C1" FOR DETAIL NOT SHOWN)



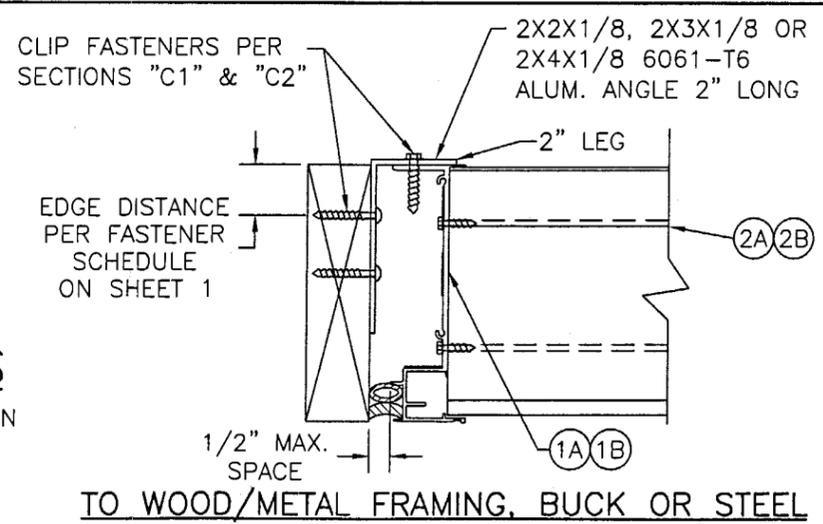
SECTION C5
SCALE: 3"=1'-0"



TO CONCRETE/BLOCK OR STEEL

ALTERNATE PANEL CLIP CONNECTIONS

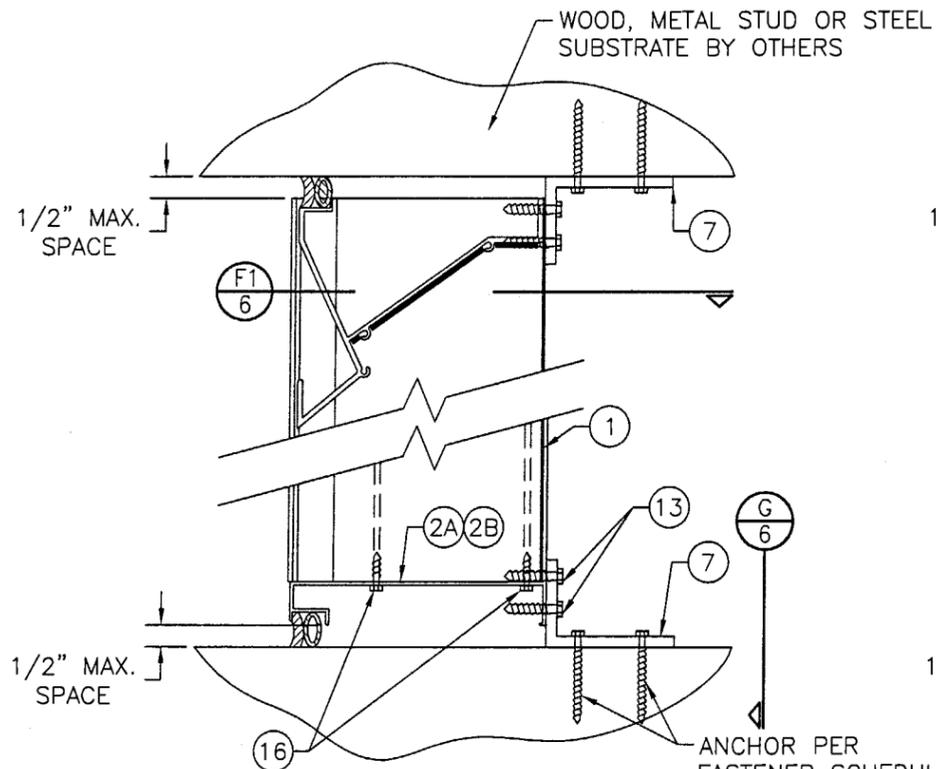
SEE SECTIONS FOR DETAIL NOT SHOWN
(TYP. BOTH SIDES OF OPENING)



TO WOOD/METAL FRAMING, BUCK OR STEEL

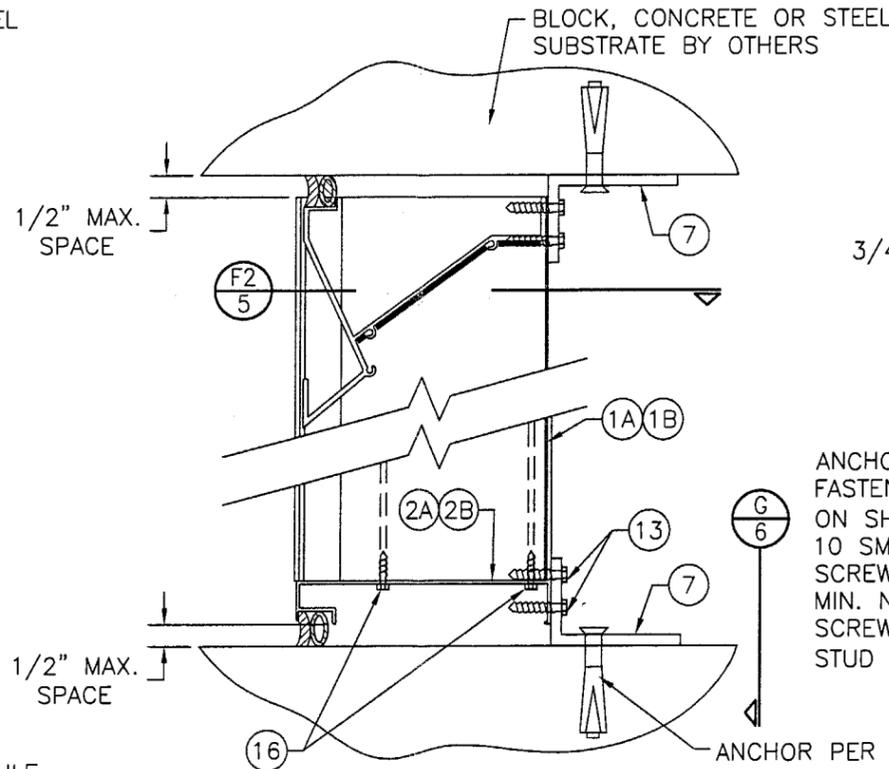
Approved as complying with the Florida Building Code
Date 09/22/04
NOAH 03-1001.01
Miami Dade Product Control
By [Signature]

DRAWN BY: K.P.S.		CHECKED BY: W.W.S.	
PLOT: 1-4		DATE: 04/03/03	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE: LE-32 LOUVER SYSTEM			
MANUFACTURER: AMERICAN WARMING & VENTILATING			
7301 INTERNATIONAL DRIVE			
HOLLAND, OHIO 43528			
419-865-5000			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.			
8895 N. MILITARY TRAIL, SUITE C-204			
PALM BEACH GARDENS, FL 33410			
PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION: MAR 04 2004			
WARREN W. SCHAEFER, P.E.			
P.E. NO. 44135			
DRAWING NO.	REV.		
1217			
SHEET NO.			
5 OF 11			



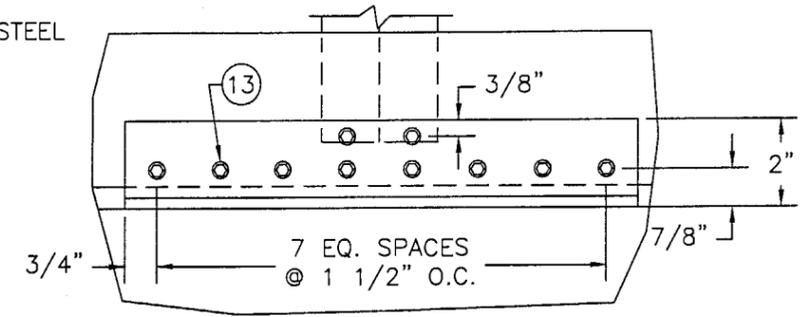
SECTION E1
SCALE: 3"=1'-0"
(INTO WOOD, METAL STUD OR STEEL OPENING)

ANCHOR PER FASTENER SCHEDULE ON SHEET 1 (NO. 10 SMS OR WOOD SCREW INTO WOOD; MIN. NO. 10 TEK SCREW INTO METAL STUD OR STEEL)



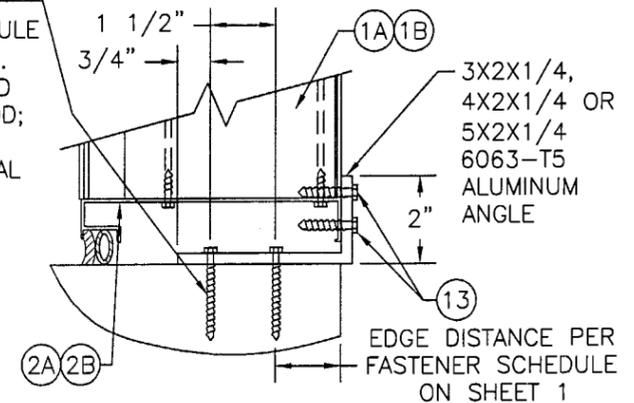
SECTION E2
SCALE: 3"=1'-0"
(INTO BLOCK/CONCRETE OR STRUCTURAL STEEL OPENING)

ANCHOR PER FASTENER SCHEDULE ON SHEET 1 (3/8" SLEEVE/WEDGE ANCHOR INTO CONCRETE; 3/8" BOLT INTO STEEL)



VIEW G
SCALE: 3"=1'-0"
(SEE SECTIONS "E1" & "E2" FOR ANCHORS TO OPENING)

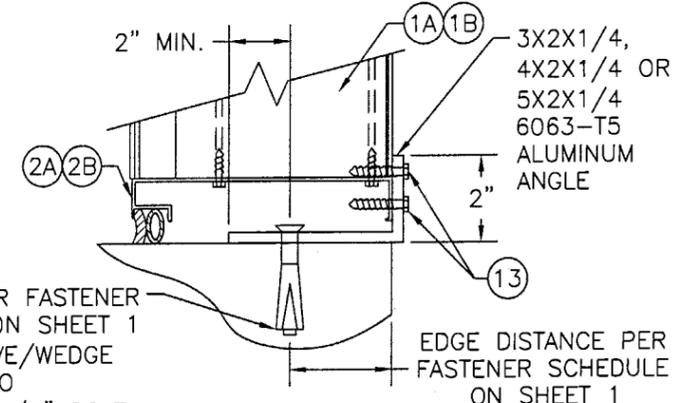
ANCHOR PER FASTENER SCHEDULE ON SHEET 1 (NO. 10 SMS OR WOOD SCREW INTO WOOD; MIN. NO. 10 TEK SCREW INTO METAL STUD OR STEEL)



OPTIONAL SECTION E1
SCALE: 3"=1'-0"
SILL SHOWN; HEAD SIMILAR

3X2X1/4, 4X2X1/4 OR 5X2X1/4 6063-T5 ALUMINUM ANGLE

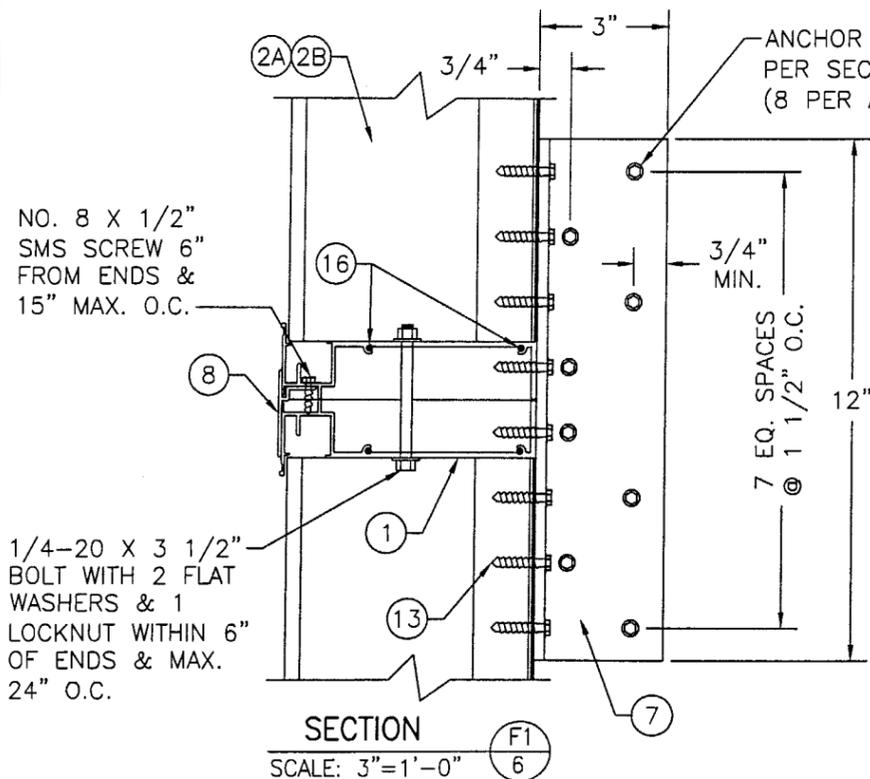
EDGE DISTANCE PER FASTENER SCHEDULE ON SHEET 1



OPTIONAL SECTION E2
SCALE: 3"=1'-0"
SILL SHOWN; HEAD SIMILAR

ANCHOR PER FASTENER SCHEDULE ON SHEET 1 (3/8" SLEEVE/WEDGE ANCHOR INTO CONCRETE; 3/8" BOLT INTO STEEL)

EDGE DISTANCE PER FASTENER SCHEDULE ON SHEET 1

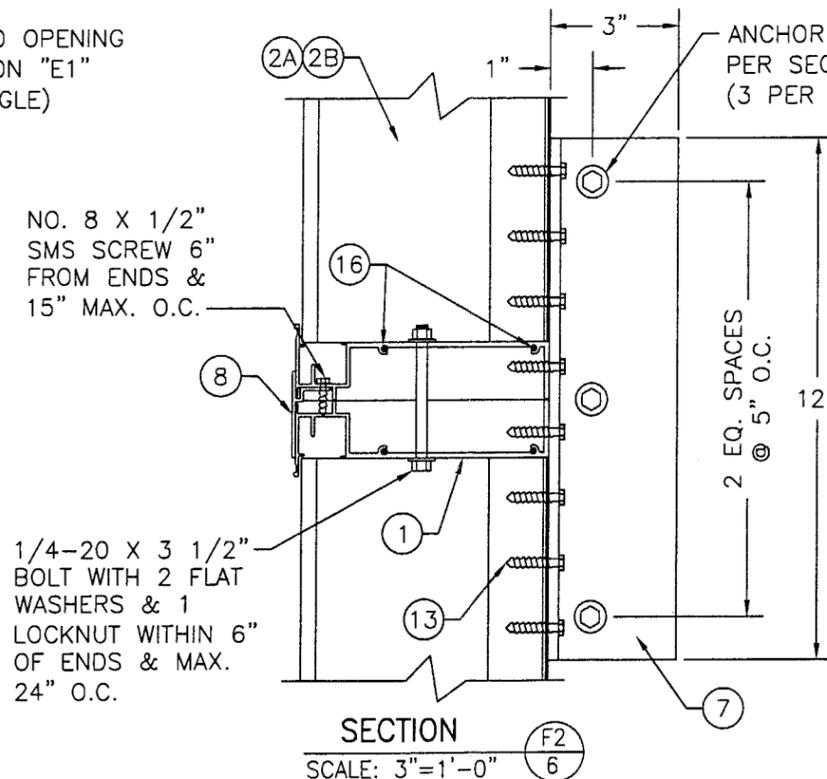


SECTION F1
SCALE: 3"=1'-0"

NO. 8 X 1/2" SMS SCREW 6" FROM ENDS & 15" MAX. O.C.

1/4-20 X 3 1/2" BOLT WITH 2 FLAT WASHERS & 1 LOCKNUT WITHIN 6" OF ENDS & MAX. 24" O.C.

3/4" MIN.
7 EQ. SPACES @ 1 1/2" O.C.
12"



SECTION F2
SCALE: 3"=1'-0"

NO. 8 X 1/2" SMS SCREW 6" FROM ENDS & 15" MAX. O.C.

1/4-20 X 3 1/2" BOLT WITH 2 FLAT WASHERS & 1 LOCKNUT WITHIN 6" OF ENDS & MAX. 24" O.C.

3" MIN.
2 EQ. SPACES @ 5" O.C.
12"

ANCHOR TO OPENING PER SECTION "E2" (3 PER ANGLE)

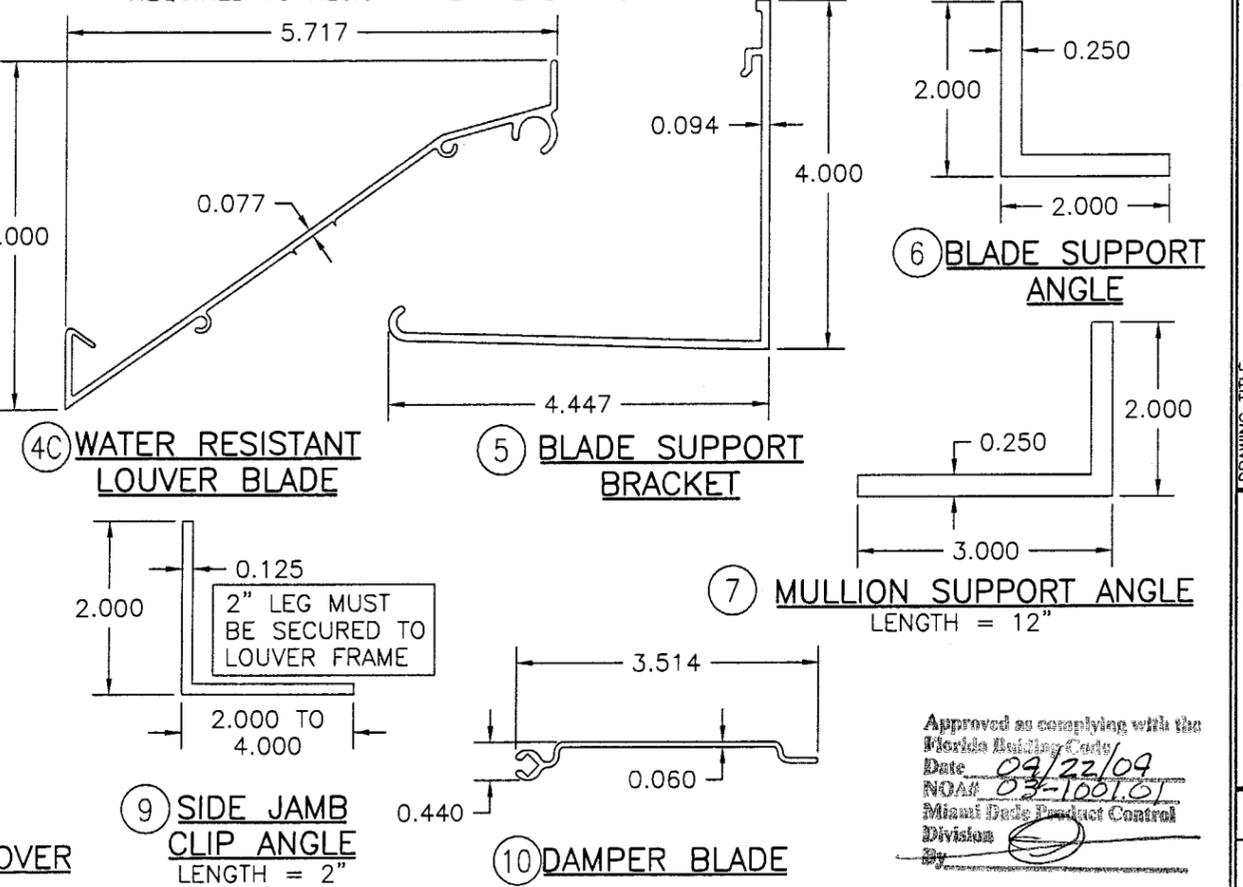
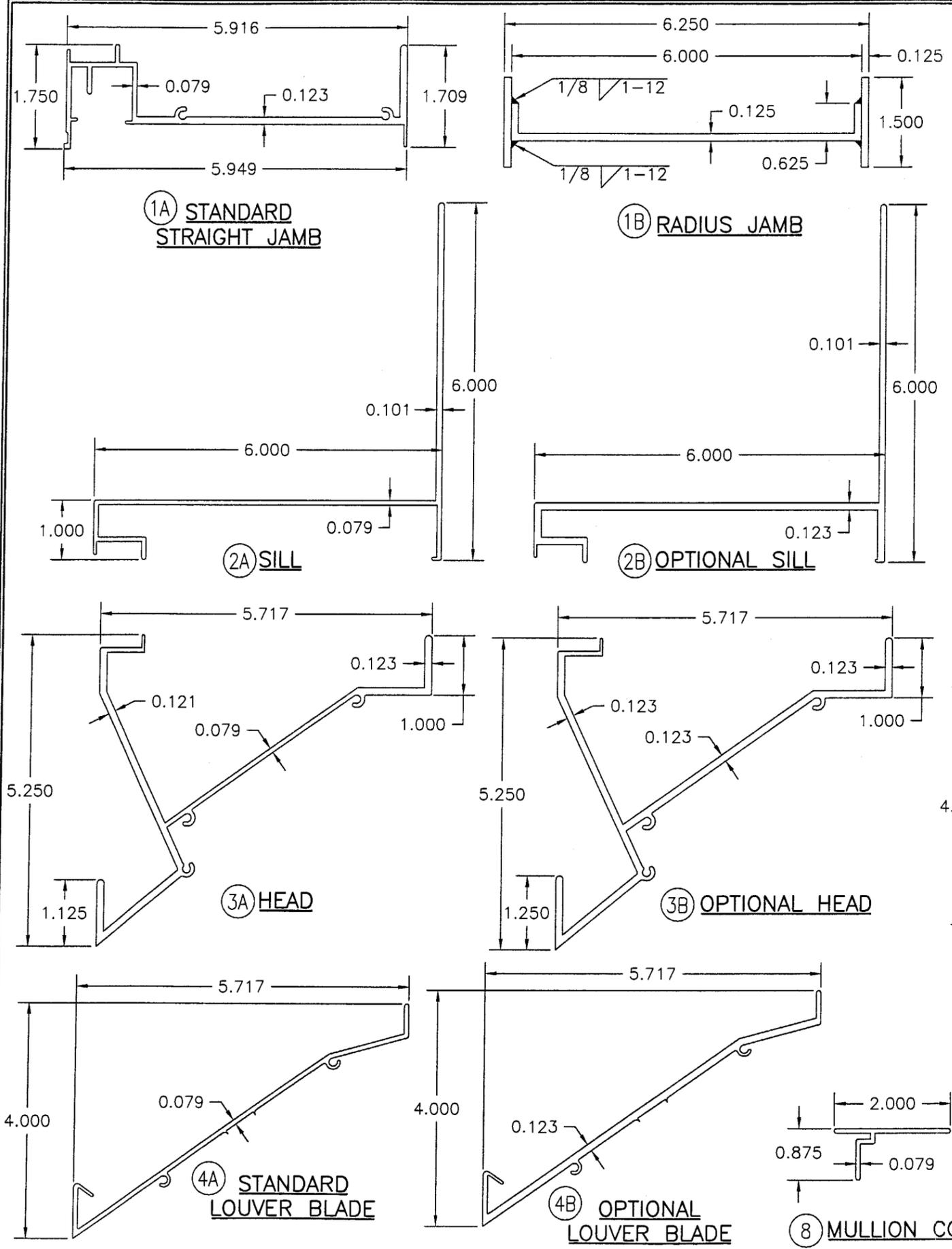
ANCHOR TO OPENING PER SECTION "E1" (8 PER ANGLE)

Approved by: _____
Date: 03/22/04
NO. 03-1001.01
Without Under Product Control

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=4	DATE: 04/03/03
NO.	REVISION DESCRIPTION
BY	DATE
DRAWING TITLE LE-32 LOUVER SYSTEM	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	MANUFACTURER AMERICAN WARMING & VENTILATING
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	7301 INTERNATIONAL DRIVE HOLLAND, OHIO 43528 419-865-5000
CERTIFICATION MAR 04 2004	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1217	REV.
SHEET NO. 6	OF 11

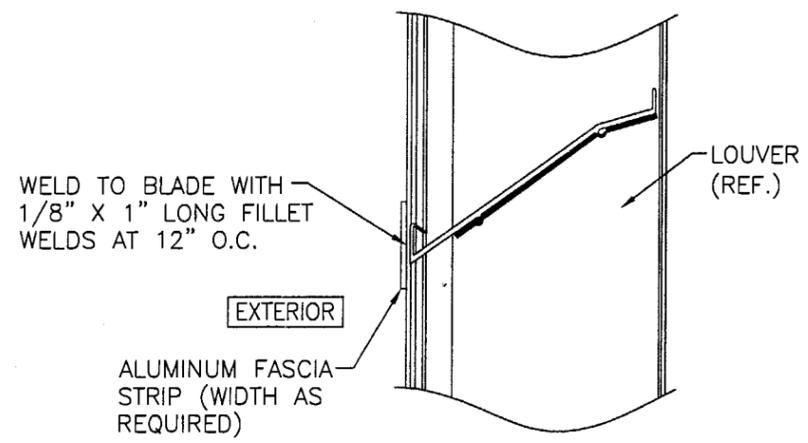
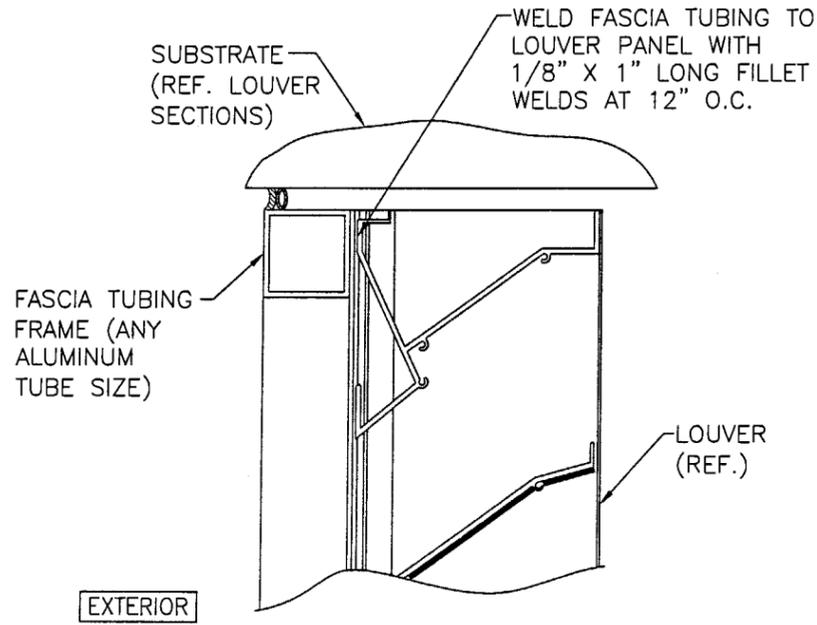
ITEM #	PART #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS			
1A	-	STANDARD STRAIGHT JAMB	6063-T6 ALUMINUM
1B	-	RADIUS JAMB	5052-H32 ALUMINUM
2A	-	SILL	6063-T5 ALUMINUM
2B	-	OPTIONAL SILL	6063-T5 ALUMINUM
3A	-	HEAD	6063-T5 ALUMINUM
3B	-	OPTIONAL HEAD	6063-T5 ALUMINUM
4A	-	STANDARD LOUVER BLADE	6063-T5 ALUMINUM
4B	-	OPTIONAL LOUVER BLADE	6063-T5 ALUMINUM
4C	-	(1) WATER RESISTANT LOUVER BLADE	6063-T5 ALUMINUM
5	-	BLADE SUPPORT BRACKET	6063-T5 ALUMINUM
6	-	BLADE SUPPORT ANGLE	6063-T5 ALUMINUM
7	-	MULLION END SUPPORT ANGLE	6061-T6 ALUMINUM
8	-	MULLION COVER	6063-T6 ALUMINUM
9	-	SIDE JAMB CLIP ANGLE	6061-T6 ALUMINUM
10	-	DAMPER BLADE	6063-T5 ALUMINUM (USED WITH PART 4B)
11A	-	STANDARD SILL PAN	16 GA. 5052-H32 ALUMINUM
11B	-	OPTIONAL SILL PAN	16 GA. 5052-H32 ALUMINUM
FASTENERS			
12	-	1/4-14 X 1 1/4" HILTI TEK SCREW OR	1 THROUGH SUPPORT ANGLE AT EACH SUPPORT BRACKET AND AT HEAD & SILL
13	-	1/4-14 X 1 1/4" HILTI TEK SCREW	10 PER MULLION SUPPORT ANGLE INTO FRAME
14	-	1/4-14 X 1 1/4" HILTI TEK SCREW	2 PER EACH CLIP ANGLE INTO JAMB
15	-	NO. 8 X 3/4" S.S. SMS	2 THROUGH JAMB INTO EACH LOUVER BLADE
16	-	NO. 8 X 3/4" S.S. SMS	2 THROUGH SILL INTO EACH SIDE & MULLION JAMB
SEALS & SEALANTS			
18	-	BULB SEAL	MCL 743091

(1) PARTS 4C & 10 SHALL BE USED IN PLACE OF PART 4A OR 4B WHEN LOUVER IS REQUIRED TO RESIST WATER PENETRATION.

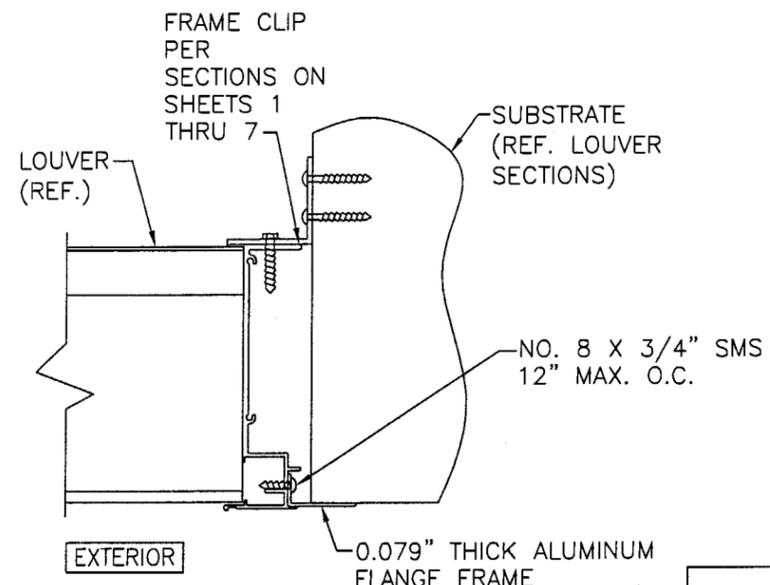
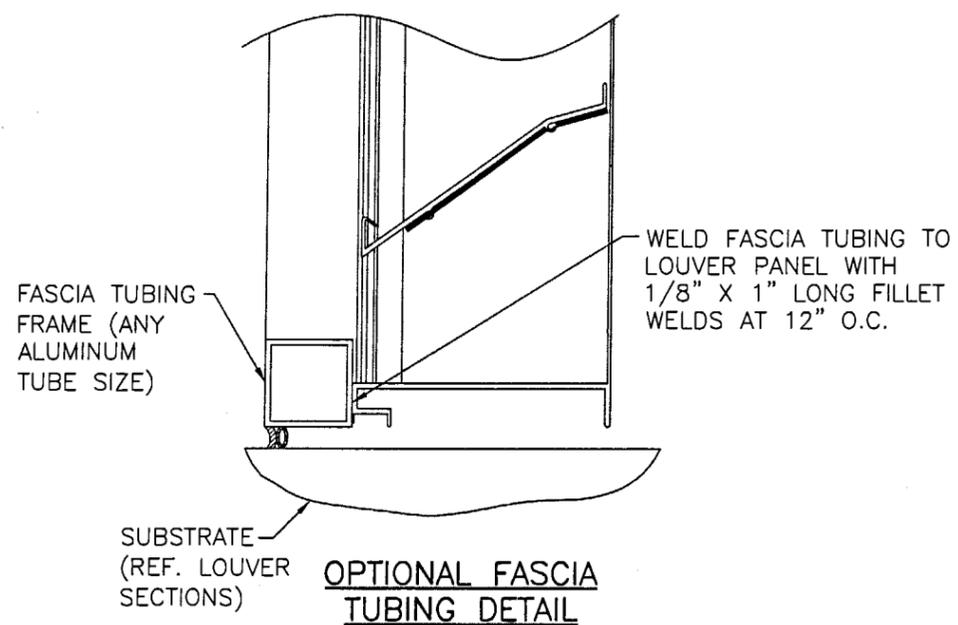


Approved as complying with the Florida Building Code
 Date: 03/22/09
 NOA#: 03-1001.01
 Miami Code Product Control
 Division: [Signature]

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 04/03/03
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE LE-32 LOUVER SYSTEM	
MANUFACTURER AMERICAN WARMING & VENTILATING	
7301 INTERNATIONAL DRIVE HOLLAND, OHIO 43528 419-865-5000	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION MAR 04 2004	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1217	REV.
SHEET NO. 7 OF 11	



OPTIONAL FASCIA STRIP DETAIL

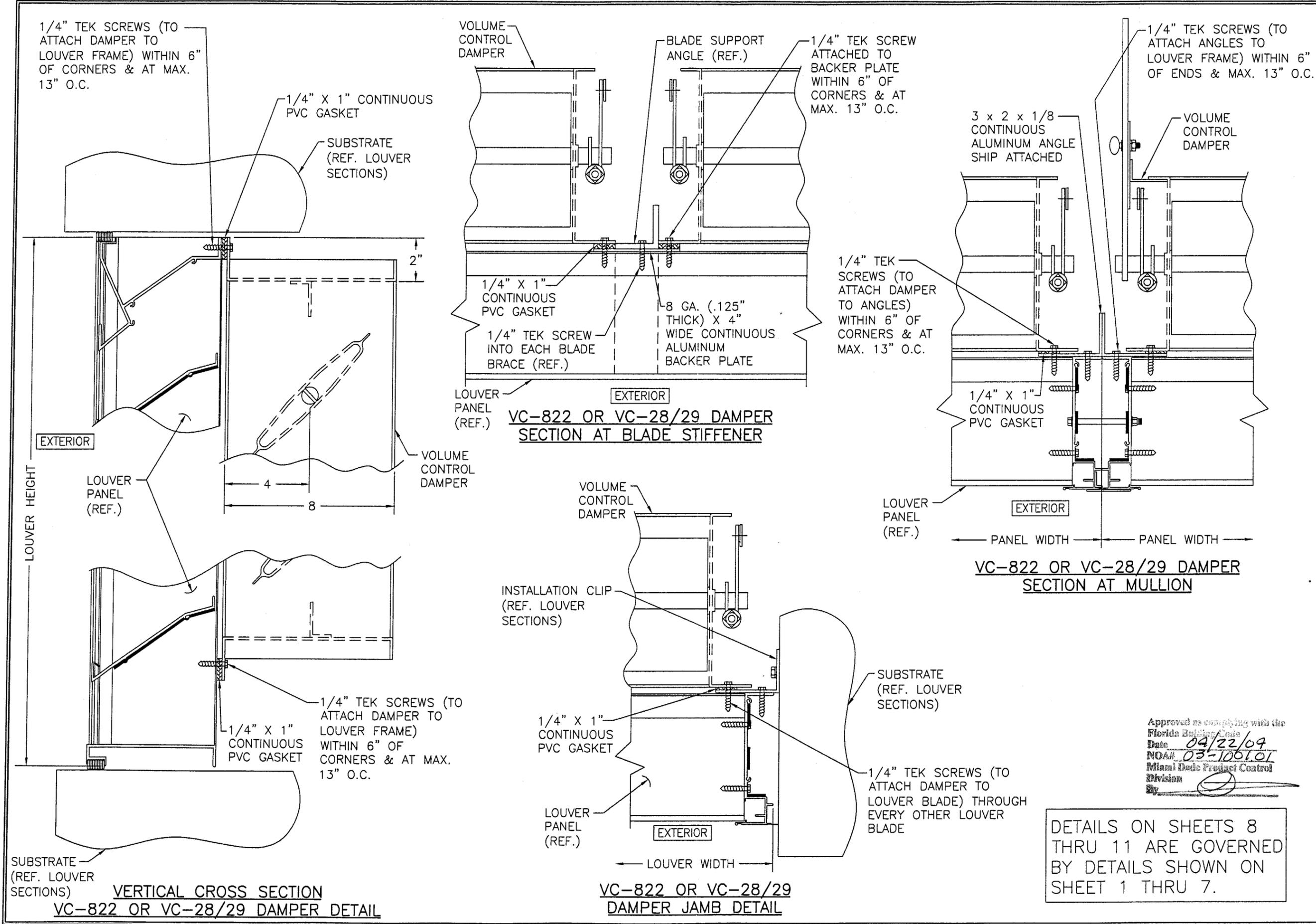


OPTIONAL FLANGE FRAME DETAIL

Approved as complying with the Florida Building Code
 Date 04/22/04
 NOAH 03-1001.01
 Miami Dade Product Control Division

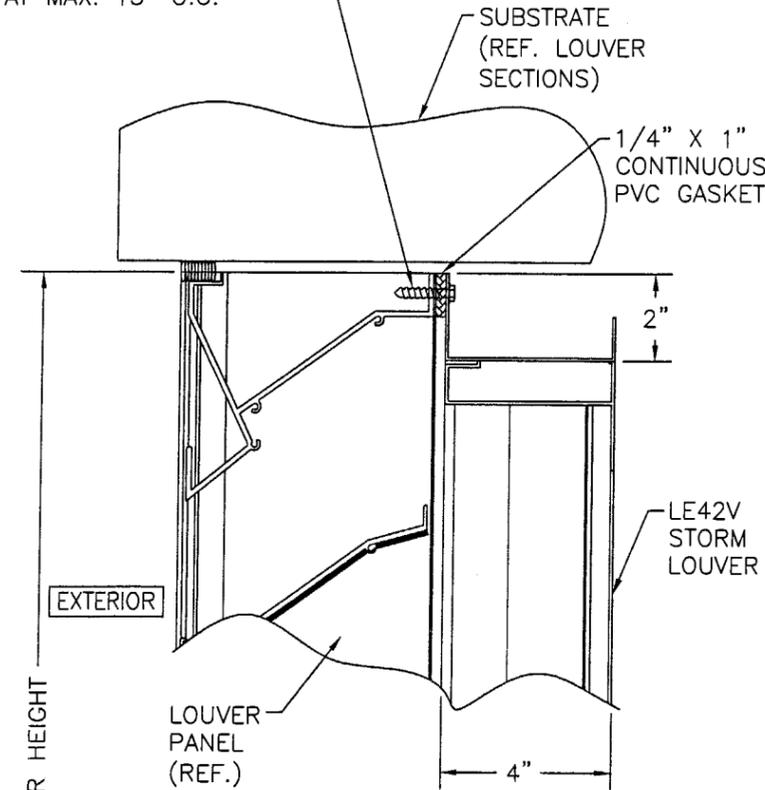
DETAILS ON SHEETS 8 THRU 11 ARE GOVERNED BY DETAILS SHOWN ON SHEET 1 THRU 7.

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=4	DATE: 04/03/03
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE LE-32 LOUVER SYSTEM	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	MANUFACTURER AMERICAN WARMING & VENTILATING 7301 INTERNATIONAL DRIVE HOLLAND, OHIO 43528 419-865-5000
CERTIFICATION MAR 04 2004 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1217	REV.
SHEET NO. 8	OF 11



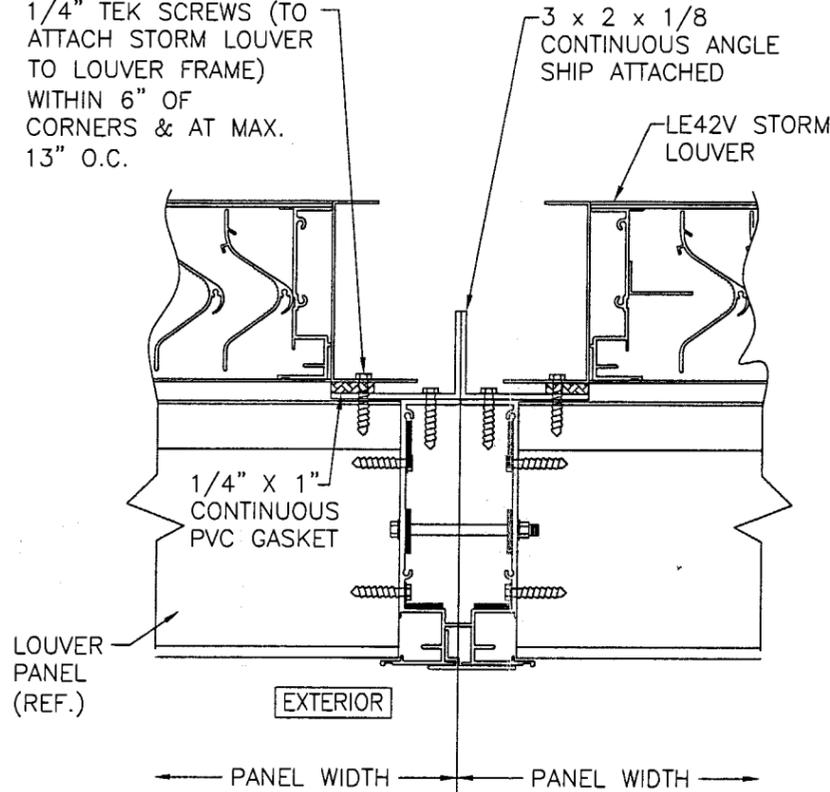
DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=4	DATE: 04/03/03
NO.	REVISION DESCRIPTION
DATE	BY
DRAWING TITLE LE-32 LOUVER SYSTEM	
MANUFACTURER AMERICAN WARMING & VENTILATING	
7301 INTERNATIONAL DRIVE HOLLAND, OHIO 43528 419-865-5000	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION MAR 04 2004	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1217	REV.
SHEET NO. 9 OF 11	

1/4" TEK SCREWS (TO ATTACH STORM LOUVER TO LOUVER FRAME) WITHIN 6" OF CORNERS & AT MAX. 13" O.C.



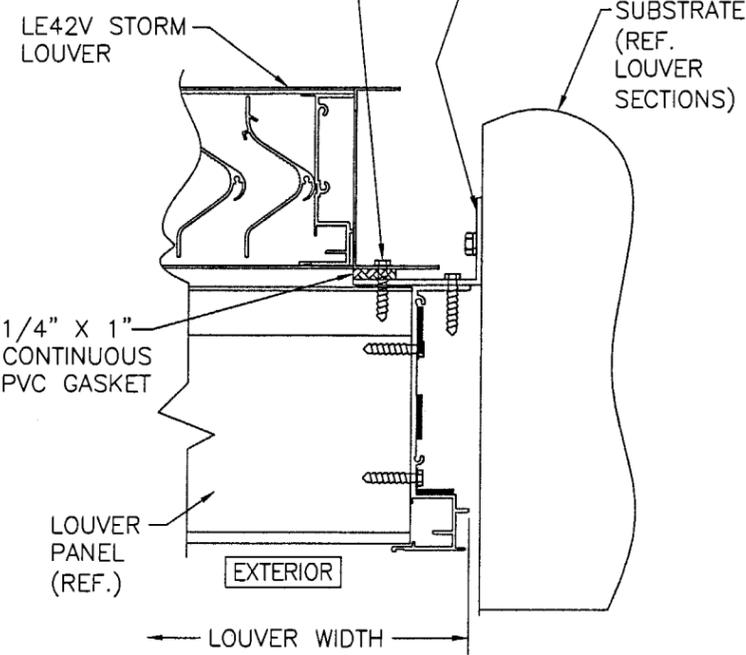
**VERTICAL CROSS SECTION
LE42V STORM LOUVER DETAIL**

1/4" TEK SCREWS (TO ATTACH STORM LOUVER TO LOUVER FRAME) WITHIN 6" OF CORNERS & AT MAX. 13" O.C.



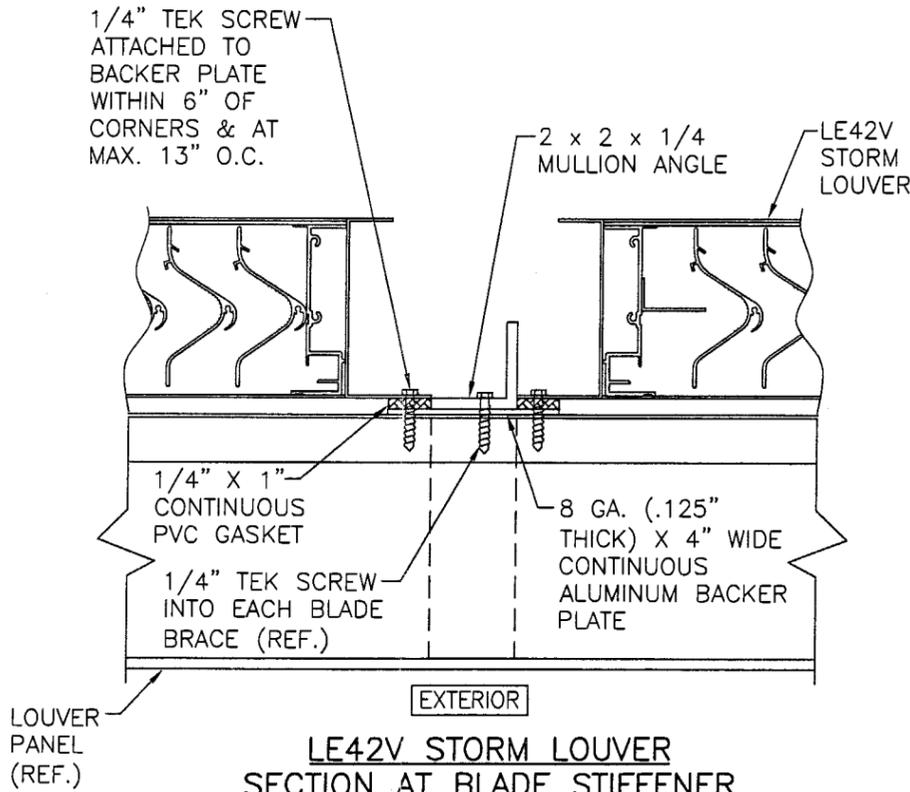
**LE42V STORM LOUVER
SECTION AT MULLION**

1/4" TEK SCREWS (TO ATTACH STORM LOUVER TO LOUVER BLADE) THROUGH EVERY OTHER LOUVER BLADE



**LE42V STORM LOUVER
JAMB DETAIL**

1/4" TEK SCREW ATTACHED TO BACKER PLATE WITHIN 6" OF CORNERS & AT MAX. 13" O.C.



**LE42V STORM LOUVER
SECTION AT BLADE STIFFENER**

Approved as complying with the Florida Building Code
Date 09/22/04
NOA# 03-1001.01
Miami Dade Product Control Division
By [Signature]

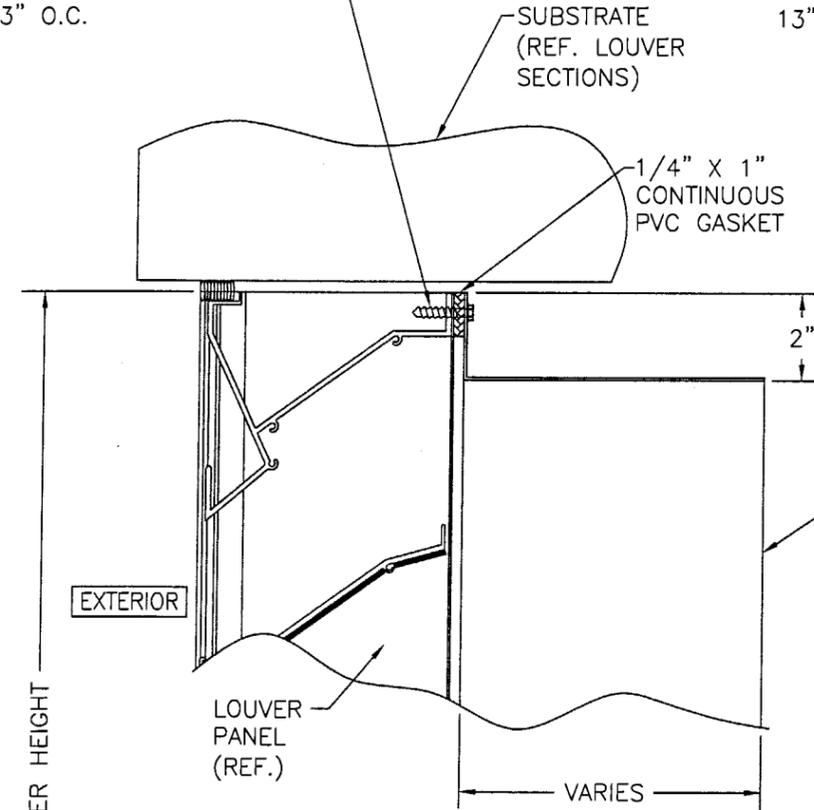
DETAILS ON SHEETS 8 THRU 11 ARE GOVERNED BY DETAILS SHOWN ON SHEET 1 THRU 7.

DRAWN BY: K.P.S.		CHECKED BY: W.W.S.	
PLOT: 1=4		DATE: 04/03/03	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE: LE-32 LOUVER SYSTEM			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		MANUFACTURER: AMERICAN WARMING & VENTILATING	
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903		7301 INTERNATIONAL DRIVE HOLLAND, OHIO 43528 419-865-5000	
CERTIFICATION: MAR 04 2004		By [Signature]	
DRAWING NO. 1217		REV.	
SHEET NO. 10		OF 11	

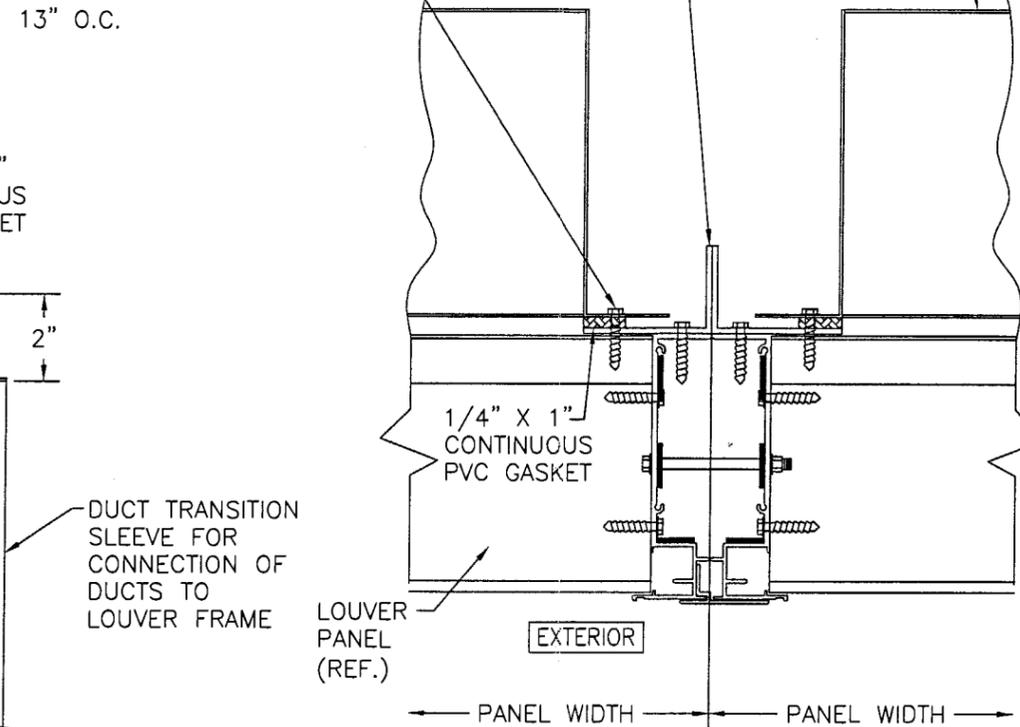
1/4" TEK SCREWS (TO ATTACH TRANSITION SLEEVE TO LOUVER FRAME) WITHIN 6" OF CORNERS & AT MAX. 13" O.C.

1/4" TEK SCREWS (TO ATTACH TRANSITION SLEEVE TO LOUVER FRAME) WITHIN 6" OF CORNERS & AT MAX. 13" O.C.

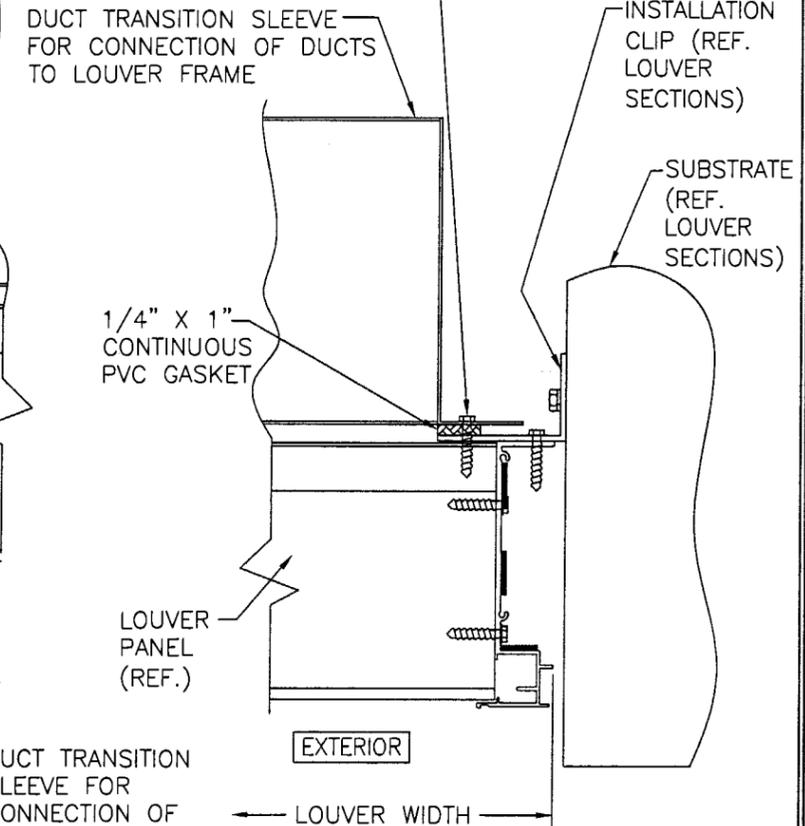
1/4" TEK SCREWS (TO ATTACH TRANSITION SLEEVE TO LOUVER BLADE) THROUGH EVERY OTHER LOUVER BLADE



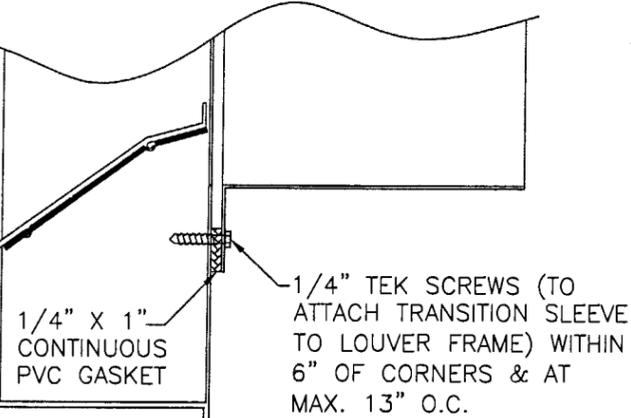
**VERTICAL CROSS SECTION
DUCT TRANSITION SLEEVE DETAIL**



**DUCT TRANSITION SLEEVE
SECTION AT MULLION**

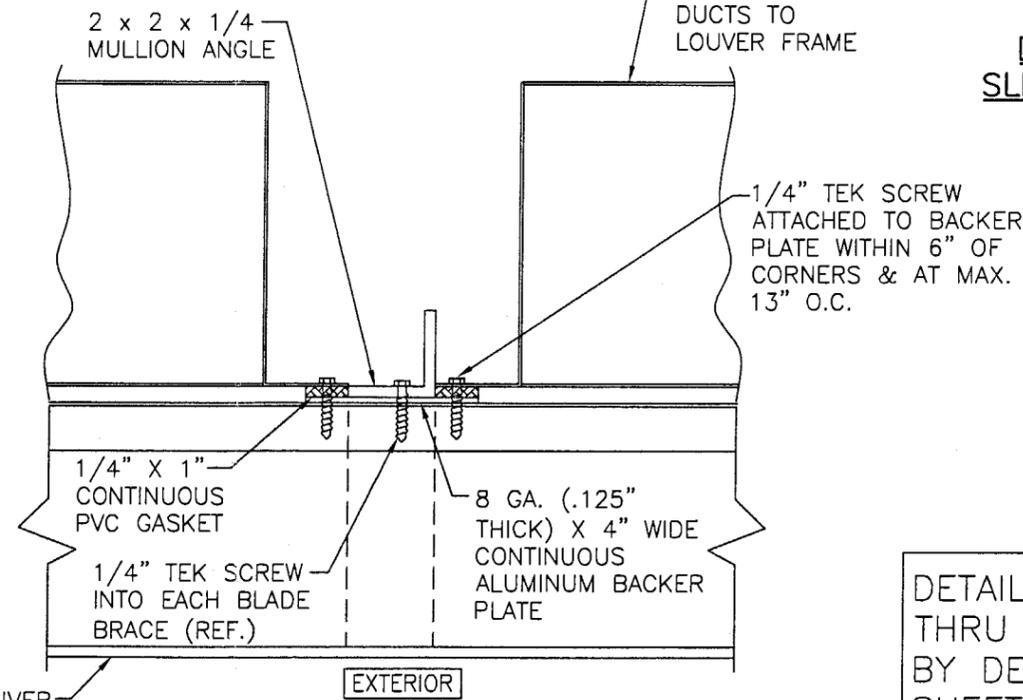


**DUCT TRANSITION
SLEEVE JAMB DETAIL**



1/4" TEK SCREWS (TO ATTACH TRANSITION SLEEVE TO LOUVER FRAME) WITHIN 6" OF CORNERS & AT MAX. 13" O.C.

SUBSTRATE (REF. LOUVER SECTIONS)



**DUCT TRANSITION SLEEVE
SECTION AT BLADE STIFFENER**

Approved as complying with the Florida Building Code
Date 09/22/04
NOAH 03-1001.01
Miami Dade Product Control Division
By

DETAILS ON SHEETS 8 THRU 11 ARE GOVERNED BY DETAILS SHOWN ON SHEET 1 THRU 7.

DRAWN BY: K.P.S.		CHECKED BY: W.W.S.	
PLOT: 1=4		DATE: 04/03/03	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE: LE-32 LOUVER SYSTEM			
MANUFACTURER: AMERICAN WARMING & VENTILATING			
7301 INTERNATIONAL DRIVE HOLLAND, OHIO 43528 419-865-5000			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.			
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION: MAR 04 2004			
WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1217		REV.	
SHEET NO. 11		OF 11	