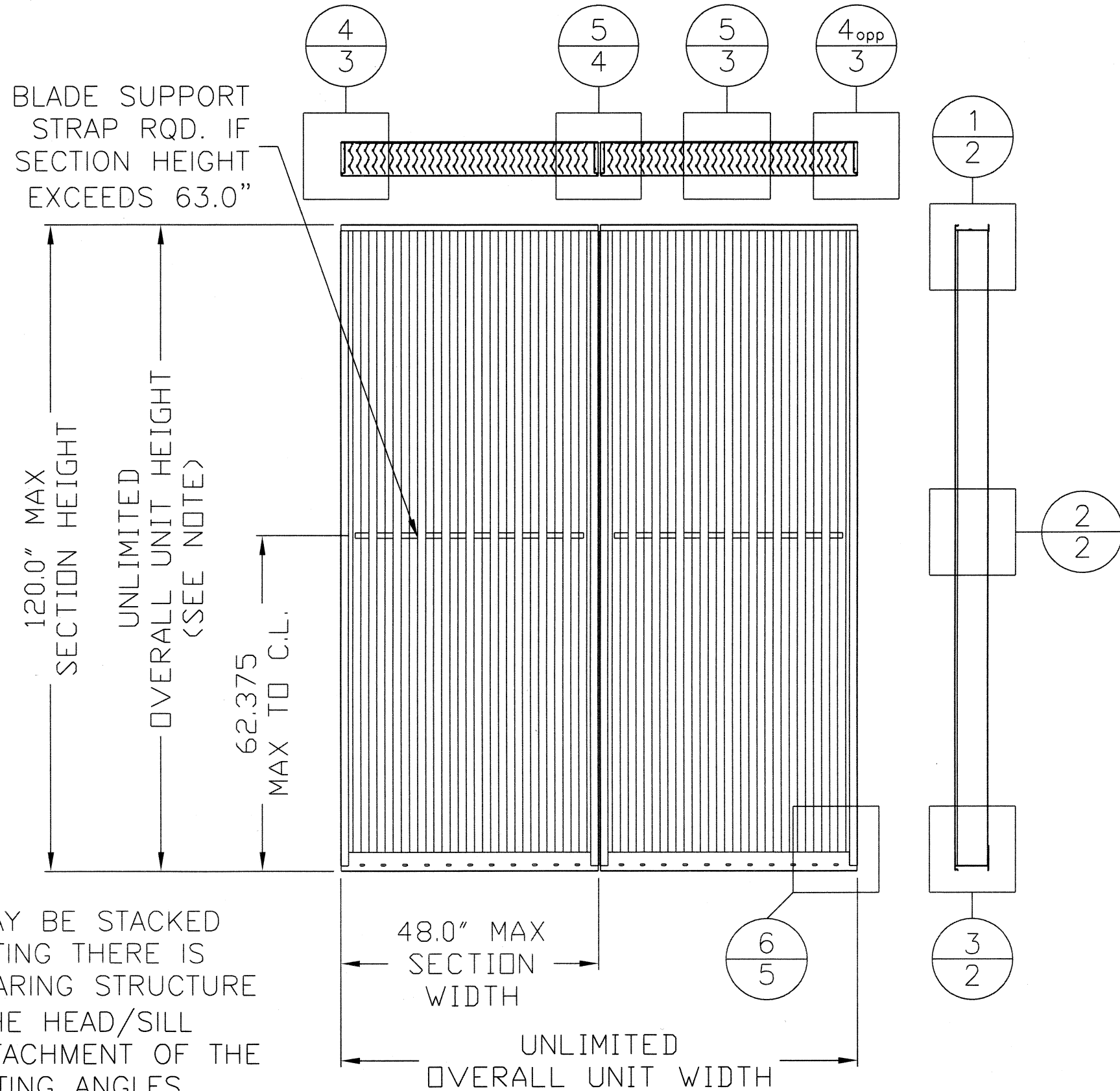


DETAIL CALLOUT (TYPICAL)

DETAIL #
PAGE #

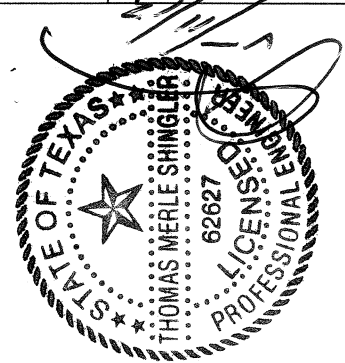
LOUVER ELEV.



NOTE: SECTIONS MAY BE STACKED VERTICALLY PERMITTING THERE IS SUITABLE LOAD-BEARING STRUCTURE (BY OTHERS) AT THE HEAD/SILL LOCATIONS FOR ATTACHMENT OF THE CONTINUOUS MOUNTING ANGLES.

DRAWN BY	MES	DATE	12/6/11
SCALE	1:24	SHEET NO.	1 OF 9
CAD DRAWING NO.		EVH-660D	

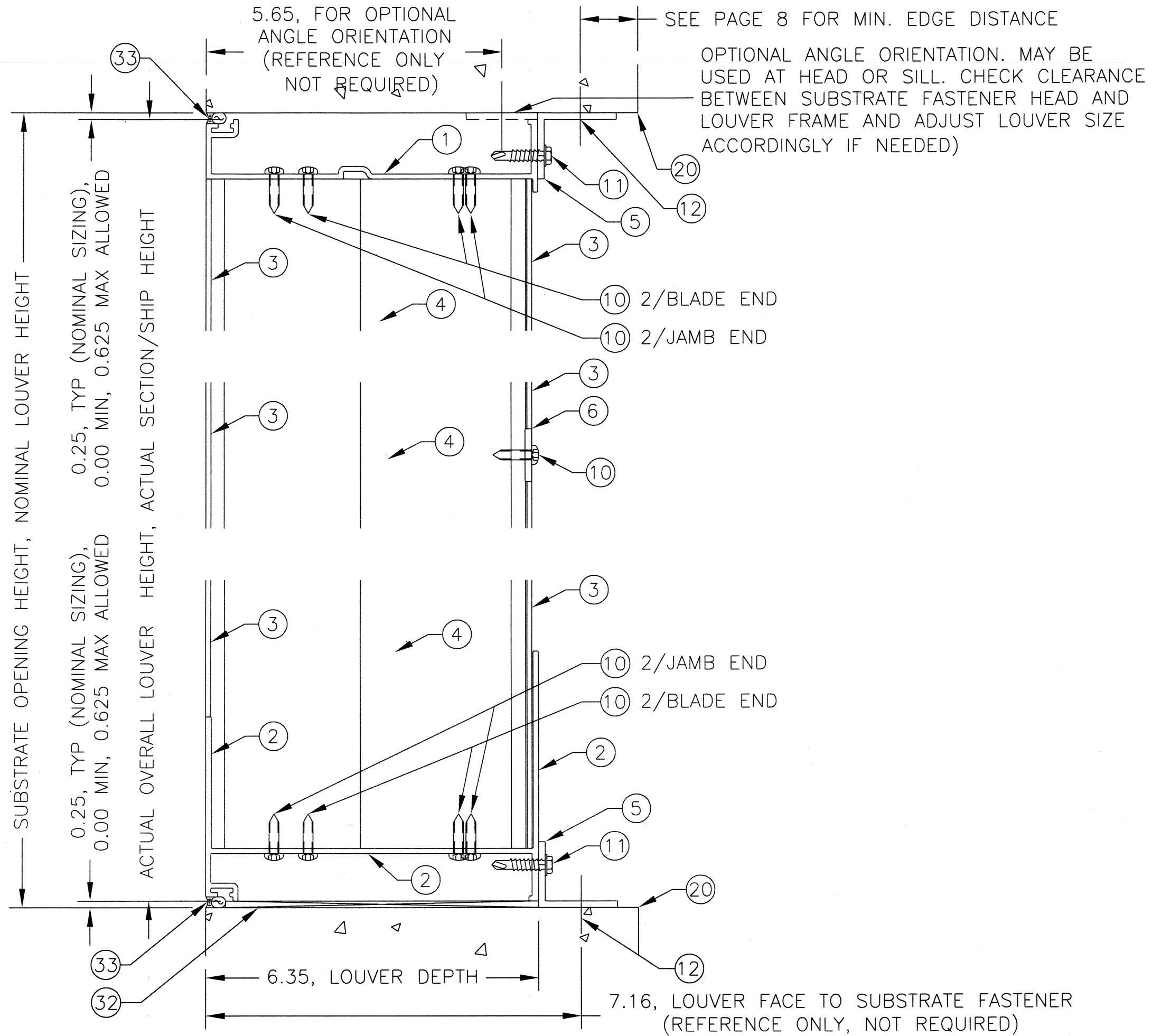
	P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410	EVH-660D ELEVATION
	TITLE	



1
2
HEAD DETAIL
SCALE: 1:2

2
2
SUPPORT DETAIL
SCALE: 1:2

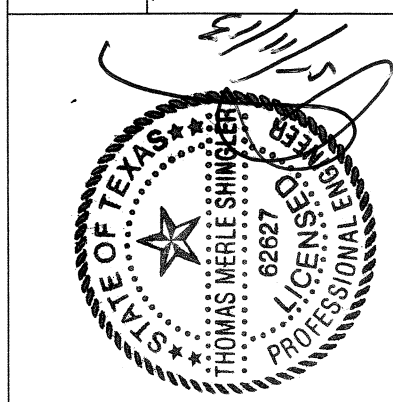
3
2
SILL DETAIL
SCALE: 1:2



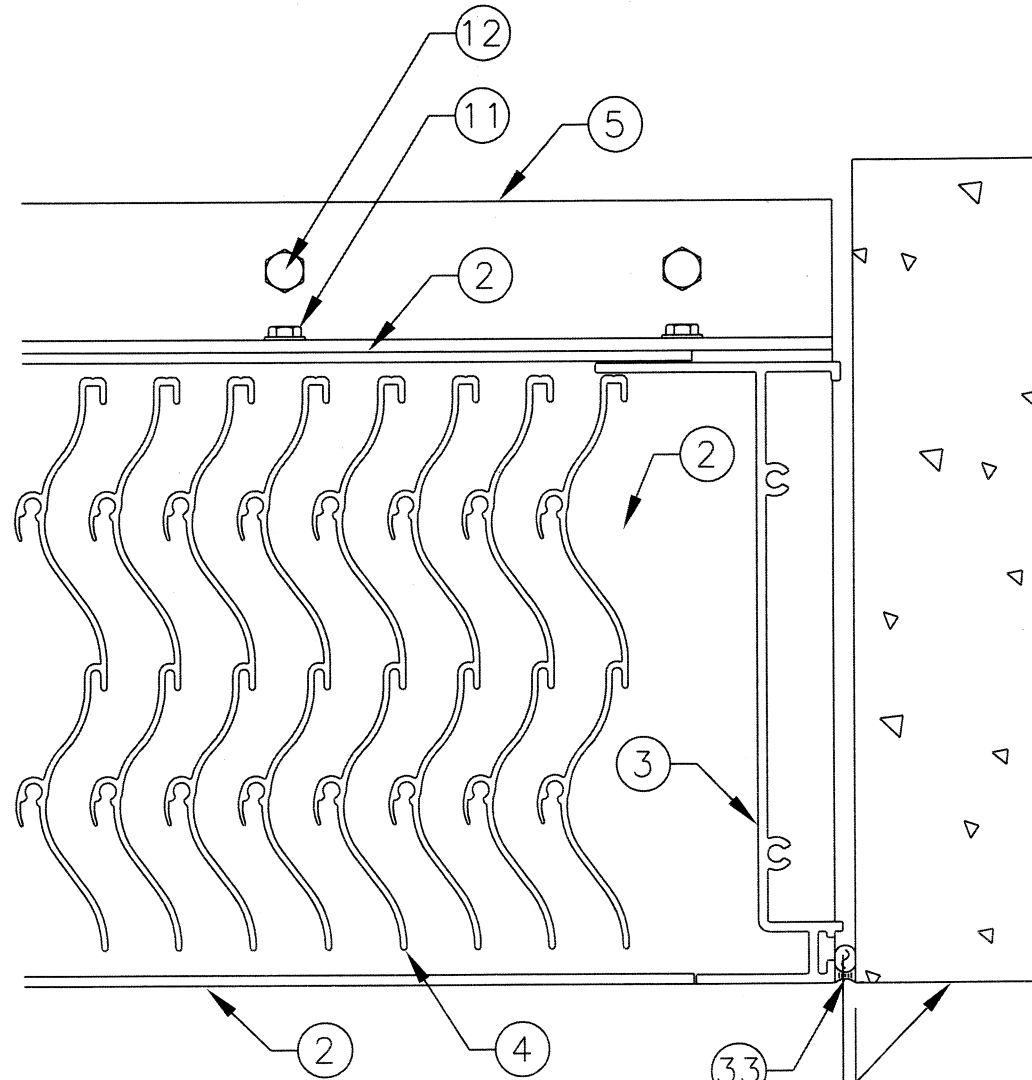
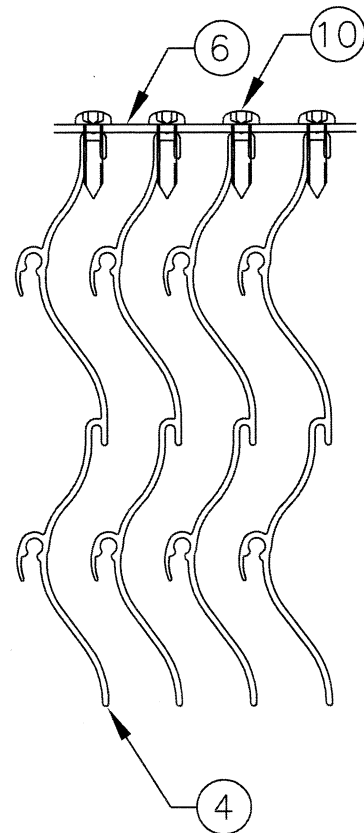
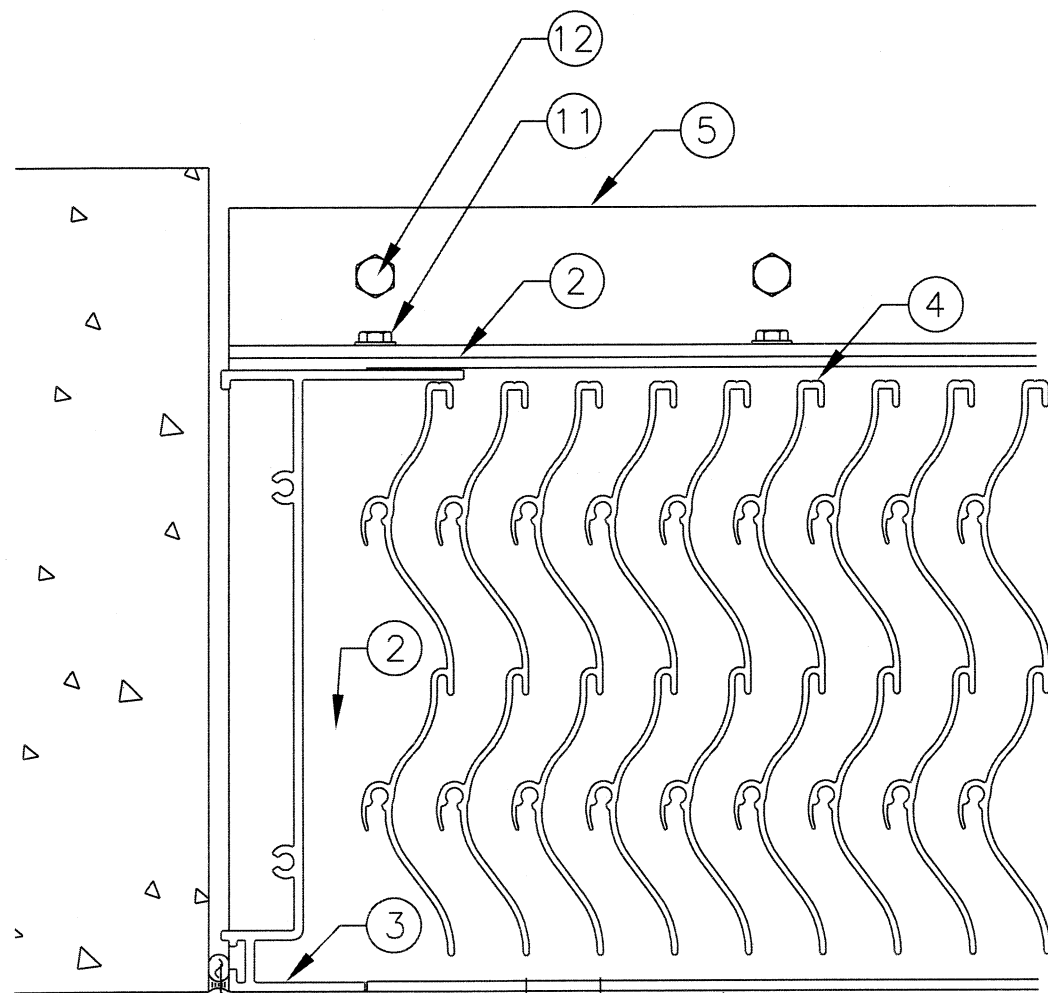
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SCALE: 1:2
DATE: 12/6/11

SHEET NO.: 2 OF 9
CAD DRAWING NO.: EVH-660D



TITLE: EVH-660D
HEAD, SILL, & SUPPORT DETAILS



.75 BLADE SPACING, TYP

ACTUAL LOUVER WIDTH, ACTUAL SECTION/SHIP WIDTH

0.25, TYP (NOMINAL SIZING),
0.00 MIN, UNLIMITED MAX ALLOWED

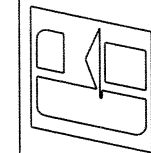
0.25, TYP (NOMINAL SIZING),
0.00 MIN, UNLIMITED MAX ALLOWED

SUBSTRATE OPENING WIDTH, NOMINAL LOUVER WIDTH

4
3 JAMB DETAIL
SCALE: 1:2

5
3 SUPPORT DETAIL
SCALE: 1:2

4opp
3 JAMB DETAIL OPPOSITE
SCALE: 1:2



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WISCONSIN 54476-0410

TITLE

EVH-660D

JAMB & SUPPORT DETAILS

DRAWN BY MES DATE 12/6/11

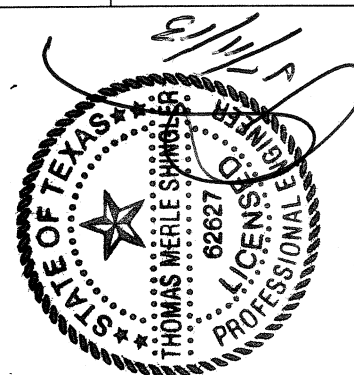
SCALE 1:2

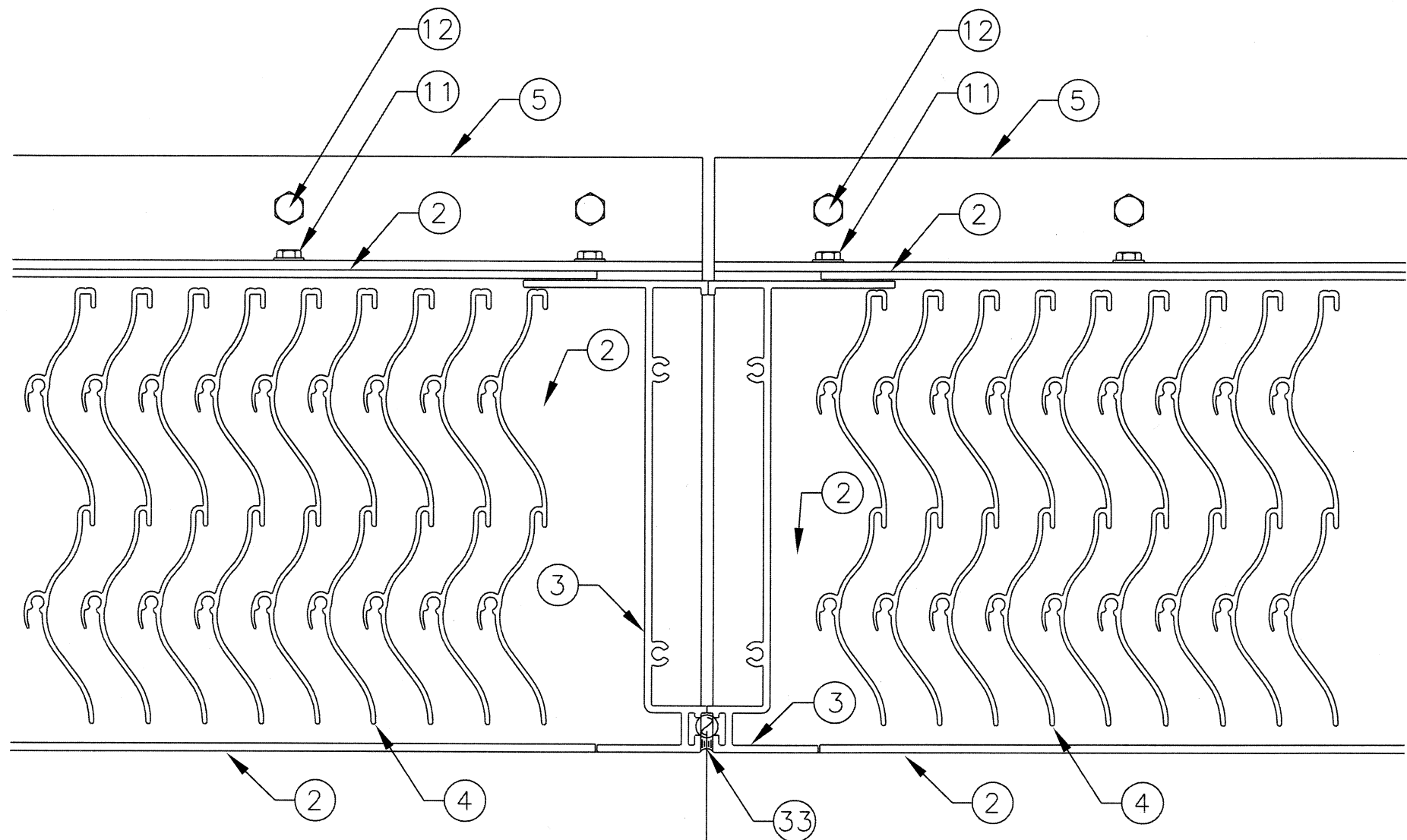
SHEET NO.

3 OF 9

CAD DRAWING NO.

EVH-660D





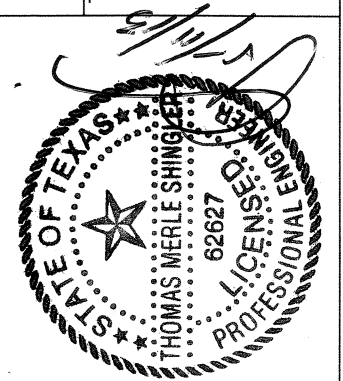
← ACTUAL LOUVER WIDTH → ← ACTUAL LOUVER WIDTH →
 ← ACTUAL SECTION/SHIP WIDTH → ← ACTUAL SECTION/SHIP WIDTH →
 ← SUBSTRATE OPENING WIDTH, NOMINAL LOUVER WIDTH →

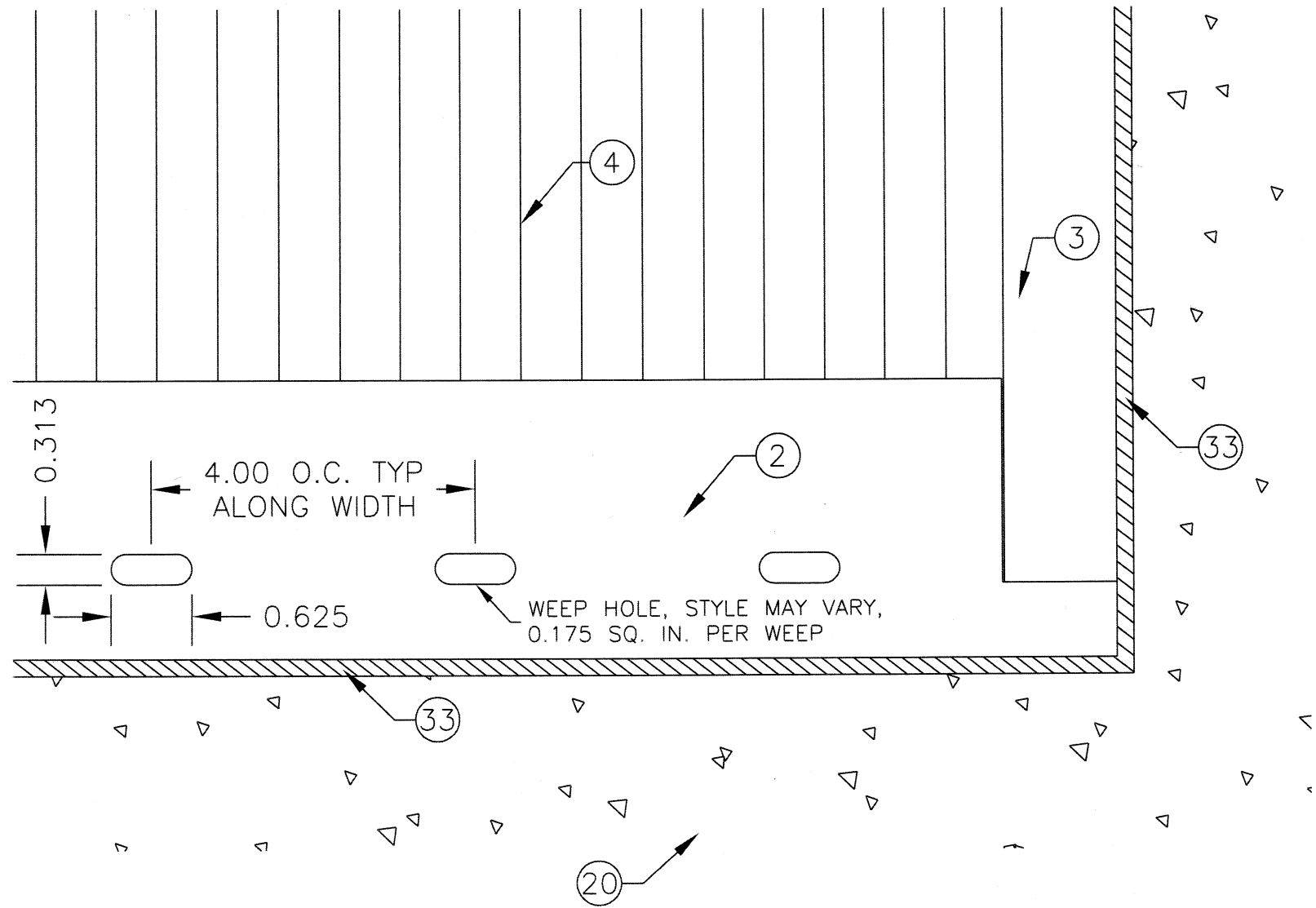
.00, TYP (NOMINAL SIZING), UNLIMITED MAX ALLOWED

5 MULLION DETAIL
4 SCALE: 1:2

DRAWN BY MES	DATE 12/6/11	SCALE 1:2	SHEET NO. 4 OF 9
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410		CAD DRAWING NO. EVH-660D	

TITLE
 EVH-660D
 MULLION DETAIL





VIEW OF EXTERIOR FACE OF LOUVER,
LOWER RIGHT CORNER

6
5

WEEP DETAIL
SCALE: 1:2

DRAWN BY MES	DATE 12/6/11
SCALE 1:2	
SHEET NO. 5 OF 9	
CAD DRAWING NO. EVH-660D	

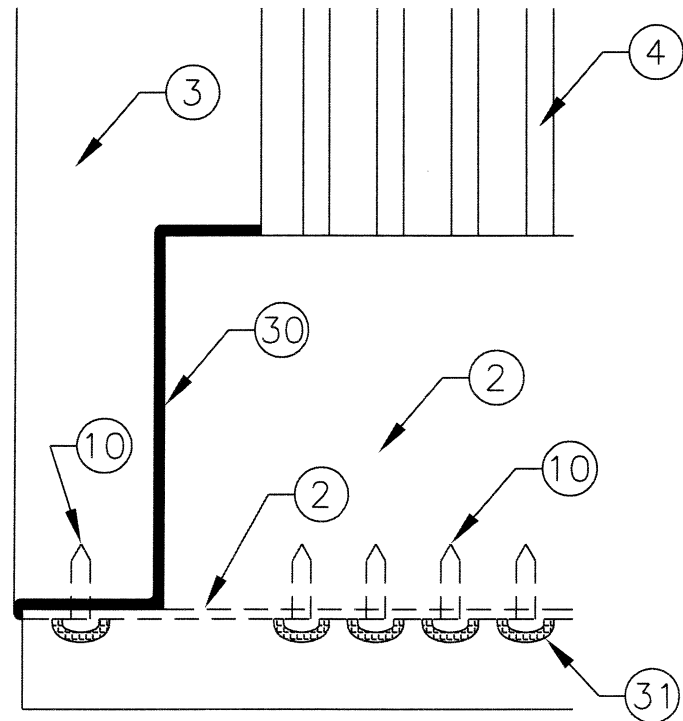
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EVH-660D

WEEP HOLE DETAIL



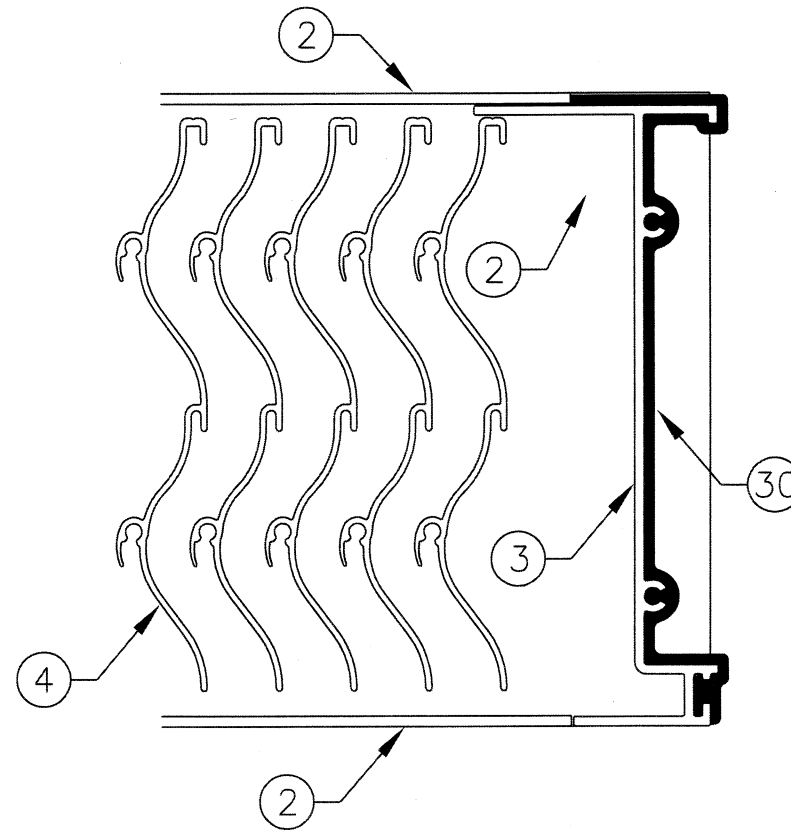
DARKENED AREAS INDICATE AREAS SEALED BY FACTORY, TYP AT BOTH SILL ENDS AND ALL BLADE-SILL AND JAMB-SILL FASTENERS. SCREWS ALLOWED TO USE A GASKET FOR SEALING VS A "WET" APPLIED SEAL OVER THE TOP OF THE SCREW.



VIEW OF INTERIOR FACE OF LOUVER, LOWER LEFT CORNER

7
6 SEALING DETAIL 1
SCALE: 1:2

DARKENED AREAS INDICATE AREAS SEALED BY FACTORY, TYP AT BOTH SILL ENDS.



SECTIONAL VIEW, LOOKING AT SILL

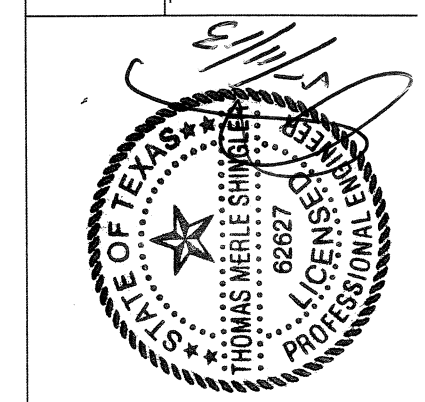
8
6 SEALING DETAIL 2
SCALE: 1:2

DRAWN BY MES	DATE 12/6/11
SCALE 1:2	
SHEET NO. 6 OF 9	
CAD DRAWING NO. EVH-660D	

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WISCONSIN 54476-0410

EVH-660D

SEALING DETAILS



3/8" POWERS WEDGE BOLT FASTENER TABLE

FASTENER NUMBER	12A					
DESCRIPTION	3/8" POWERS WEDGE BOLT					
SUBSTRATE	NORMAL WEIGHT CONCRETE			CMU (1.5 KSI GROUT FILLED)		
	2.5 KSI			6" WIDE, GRADE N, TYPE II, LIGHT/MEDIUM/NORMAL WEIGHT CMU CONFORMING TO ASTM C90		
EDGE DISTANCE (MIN)	2 IN.	3 IN.	4-1/2 IN.	1-1/2 IN.	2 IN.	
PENETRATION (MIN)	2-1/8 IN.			2-1/2 IN.		
LOUVER HEIGHT (IN.)	SPACING (IN.)			SPACING (IN.)		
>108 & ≤120	4	6	8	NOT ALLOWED	NOT ALLOWED	
>96 & ≤108	6	8	10	NOT ALLOWED	NOT ALLOWED	
>84 & ≤96	6	8	10	NOT ALLOWED	NOT ALLOWED	
>72 & ≤84	6	10	12	NOT ALLOWED	NOT ALLOWED	
>60 & ≤72	8	12	14	NOT ALLOWED	6	
>48 & ≤60	10	14	18	NOT ALLOWED	6	
>36 & ≤48	12	18	20	NOT ALLOWED	8	
>24 & ≤36	18	20	20	6	10	
>12 & ≤24	20	20	20	8	14	
>0 & ≤12	20	20	20	12	20	

1/4" TAPCON SCREW FASTENER TABLE

FASTENER NUMBER	12B			
DESCRIPTION	1/4" TAPCON			
SUBSTRATE	CONCRETE OR CMU (GROUT FILLED)			
MINIMUM	3.192 KSI CONCRETE OR 3.192 KSI GROUT			
EDGE DISTANCE (MIN)	1 IN.	1-1/2 IN.	2-1/2 IN.	
PENETRATION (MIN)	1-3/4 IN.			
LOUVER HEIGHT (IN.)	SPACING (IN.)			
>108 & ≤120	2	2	4	
>96 & ≤108	2	4	4	
>84 & ≤96	2	4	6	
>72 & ≤84	2	4	6	
>60 & ≤72	4	6	8	
>48 & ≤60	4	6	10	
>36 & ≤48	6	8	12	
>24 & ≤36	8	12	16	
>12 & ≤24	12	18	20	
>0 & ≤12	20	20	20	

LAG SCREW, SCREW, & BOLT W/NUT FASTENER TABLE

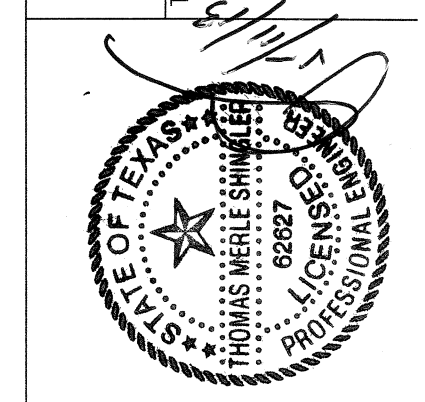
FASTENER NUMBER	12C	12D	12E	
DESCRIPTION	3/8" LAG SCREW	1/4" LAG SCREW	1/4"-20 SCREW OR BOLT W/NUT	
SUBSTRATE	WOOD		STEEL	
MINIMUM	G=.42		A36 STEEL OR Fy>=36 KSI	
EDGE DISTANCE (MIN)	1-1/2 IN.		1/2 IN.	
PENETRATION (MIN)	2-3/4 IN.		16GA (0.06 IN.)	3/16 IN.
LOUVER HEIGHT (IN.)	SPACING (IN.)		SPACING (IN.)	
>108 & ≤120	6	4	6	8
>96 & ≤108	6	4	6	10
>84 & ≤96	6	4	8	12
>72 & ≤84	8	6	8	12
>60 & ≤72	10	6	10	16
>48 & ≤60	12	8	12	18
>36 & ≤48	14	10	16	20
>24 & ≤36	20	14	20	20
>12 & ≤24	20	20	20	20
>0 & ≤12	20	20	20	20

CONTINUOUS ANGLE TO LOUVER FRAME SCREW (FASTENER # 11)

LOUVER HEIGHT (IN.)	SPACING (IN.)
>108 & ≤120	2
>96 & ≤108	2
>84 & ≤96	2
>72 & ≤84	4
>60 & ≤72	4
>48 & ≤60	4
>36 & ≤48	6
>24 & ≤36	8
>12 & ≤24	14
>0 & ≤12	20

DATE 12/6/11
 DRAWN BY MES
 SCALE NTS
 SHEET NO. 8 OF 9
 CAD DRAWING NO. EVH-660D

GREENHECK
 P.O. BOX 410 SCHOFIELD,
 WISCONSIN 54476-0410
 EVH-660D
 FASTENER TABLES



ITEM	DESCRIPTION	MATERIAL	NOTES
1	LOUVER HEAD	ALUM	
2	LOUVER SILL	ALUM	
3	LOUVER JAMB	ALUM	
4	LOUVER BLADE	ALUM	3/4" SPACING
5	CONTINUOUS MOUNTING ANGLE	ALUM	AT HEAD AND SILL ONLY
6	BLADE SUPPORT STRAP, FOR HEIGHTS > 60.875" ONLY	ALUM	NOT ATTACHED TO JAMBS
10	#10-24 x 3/4" MIN SCREW	STEEL* /SS	
11	1/4-20 x 1" MIN SCREW	STEEL* /SS	
12A	3/8" POWERS WEDGE BOLT	STEEL* /SS	SEE FASTENER TABLE PAGE
12B	1/4" TAPCON SCREW	STEEL* /SS	SEE FASTENER TABLE PAGE
12C	3/8" LAG SCREW	STEEL* /SS	SEE FASTENER TABLE PAGE
12D	1/4" LAG SCREW	STEEL* /SS	SEE FASTENER TABLE PAGE
12E	1/4-20 SCREW OR 1/4-20 BOLT W/NUT	STEEL* /SS	SEE FASTENER TABLE PAGE
20A	CONCRETE, 2.5 KSI MIN	CONCRETE	NOT BY MANUFACTURER
20B	CMU, 1.5 KSI MIN GROUT FILLED	CONCRETE	NOT BY MANUFACTURER
20C	STRUCTURAL STEEL, 3/16" MIN	STEEL	NOT BY MANUFACTURER
20D	STEEL STUD, 16GA MIN	STEEL	NOT BY MANUFACTURER
20E	WOOD SUBSTRATE, G=0.42 MIN DENSITY	WOOD	NOT BY MANUFACTURER
30	SEALANT, FACTORY APPLIED	VARIES	FACTORY APPLIED
31	SEALED SCREW HEAD, FACTORY APPLIED	VARIES	FACTORY APPLIED
32	SHIMS, OPTIONAL, AS REQUIRED, INCOMPRESSIBLE	VARIES	NOT BY MANUFACTURER
33	SEALANT AND BACKER ROD	VARIES	NOT BY MANUFACTURER

(STEEL/STAINLESS-STEEL/ALUMINUM PARTS MAY BE MADE OUT OF ALTERNATE ALLOY THAT HAS EQUAL OR GREATER YIELD STRENGTH)

* STEEL MUST HAVE CORROSION RESISTANT COATING.

GENERAL NOTES:

- IT SHALL BE THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE TO SUPPORT THE LOADS IMPOSED BY THE PENTHOUSE ASSEMBLY.
- THIS LOUVER HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PROTOCOLS [AND QUALIFIED IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE (FBC) AND TEST PROTOCOLS/STANDARDS]:
TAS-201 (LARGE MISSILE IMPACT)
TAS-202 (UNIFORM STATIC PRESSURE)
TAS-203 (CYCLIC FATIGUE)
TAS-100(A) (WIND-DRIVEN RAIN)
AMCA STANDARD 550 (WIND-DRIVEN RAIN)
- THIS LOUVER HAS BEEN DESIGNED, TESTED, AND APPROVED TO WITHSTAND DESIGN PRESSURES OF UP TO AND INCLUDING +/-150 PSF.
- THE LOUVER MAY BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS NOT DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM OR THE ROOM WILL HOUSE NON-WATER RESISTANT OR WATER PROOF EQUIPMENT, COMPONENTS, OR SUPPLIES.
- THE MAXIMUM SINGLE SECTION SIZE IS 48" WIDE BY 120" HIGH. THE MAXIMUM OVERALL/ASSEMBLED SIZE IS UNLIMITED WIDE (BY USE OF MULTIPLE SECTIONS OF 48" WIDE OR LESS) BY 120" HIGH. SECTIONS/ASSEMBLIES MAY BE STACKED VERTICALLY PROVIDED THERE IS SUITABLE STRUCTURAL SUPPORT (DESIGNED AND INSTALLED BY OTHERS) TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER HEAD AND/OR SILL TO THE SUBSTRATE.
- A HORIZONTAL BLADE SUPPORT STRAP IS REQUIRED IF SECTION HEIGHT IS GREATER THAN 63".
- ALL WOOD SUBSTRATE SHALL BE G = 0.42 DENSITY OR BETTER.
- ALL STEEL STUD SUBSTRATE SHALL BE MIN. 16 GA. FY = 36 KSI.
- ALL STRUCTURAL STEEL SUBSTRATE SHALL BE MIN. 3/16" THICK FY = 36 KSI.
- ALL CONCRETE SUBSTRATE SHALL BE MIN. 2,500 PSI.
- CONCRETE MASONRY SHALL BE MINIMUM OF: 6" WIDE, GRADE N, TYPE II, LIGHT/MEDIUM/NORMAL WEIGHT CMU CONFORMING TO ASTM C90, AND MIN. 1,500 PSI GROUT-FILLED.
- LOUVER CONSTRUCTION: HEAD, SILL, JAMBS, AND BLADES ARE SQUARE CUT AT BOTH ENDS. BLADE SPACING IS 3/4" MAX. BLADES ARE SECURED TO THE HEAD/SILL WITH (2) SCREWS PER BLADE END. EACH JAMB IS SECURED TO THE SILL AND HEAD WITH (2) SCREWS PER JAMB END.
- THE LOUVER MANUFACTURER DOES NOT DETERMINE THE STRUCTURAL INTEGRITY OF THE SUBSTRATE STRUCTURE.
- INSTALLER TO PROVIDE SEPARATION OF DISSIMILAR MATERIALS AS REQUIRED. SEE FL BLDG CODE SECTION 2003.8.4 FOR DETAILS.

DRAWN BY	MES	DATE	12/6/11
SCALE	NTS	SHEET NO.	9 OF 9
TITLE		EVH-660D	
CAD DRAWING NO.		EVH-660D	

GREENHECK
P.O. BOX 410 SCHOFIELD,
WISCONSIN 54476-0410

EVH-660D

DESCRIPTIONS & GENERAL NOTES

