C. K. SCREENS

310 West Reading Way
Winter Park, FL 32789

"WEATHER-GUARD"
SECURITY / STORM PANEL

"IMPACT"

EVALUATED FOR USE IN THE STATE OF TEXAS

The CK Screens Shutter described herein complies with the 2006 International Residential Code (IRC), Sections R301 & R613 and the 2006 International Building Code (IBC), Sections 1405.12, 1609 and 1714.5 (including Texas revisions) subject to the following conditions:

1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. This system has been tested and evaluated as a large missile impact protective system for installation in the Seaward, Inland I and Inland II areas. This product meets missile level "E" and includes Wind Zone 4 as defined in ASTM E 1996.
3. Allowable design pressure requirements must be equal to or less than the design pressure rating shown in the design pressure chart, sheet 1 of this drawing.
4. Conditions not covered by this drawing are subject to further engineering analysis.

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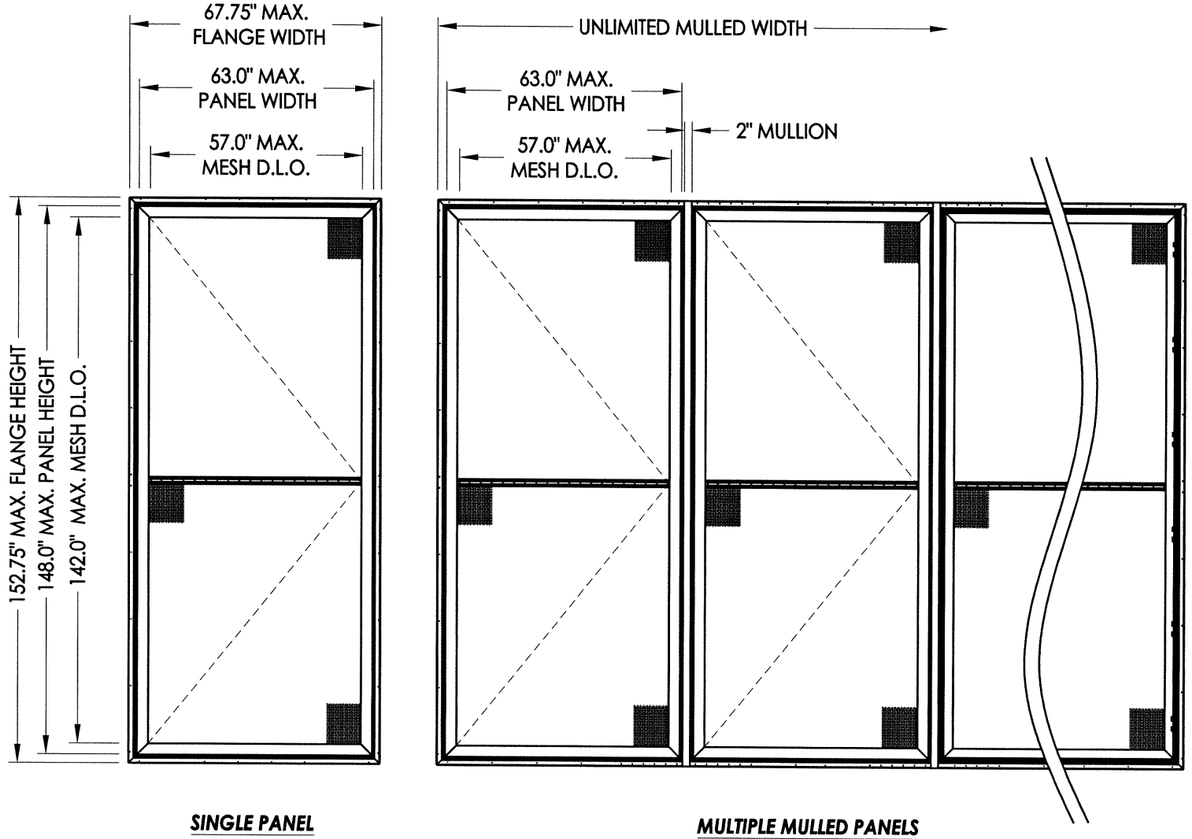
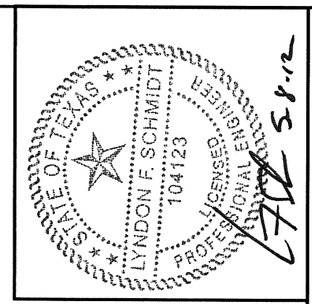
8	Single panel frame anchoring
9	Multiple mulled panel frame anchoring
10	Single panel frame anchoring
11	Multiple mulled panel frame anchoring
12	Bill of materials and components



SINGLE PANEL ***MULTIPLE MULLED PANELS***

ORIENTATION	*MAX OVERALL FLANGE DIMENSION*	*MAX OVERALL PANEL DIMENSION*	*MAX MESH D.L.O. DIMENSION*	*DESIGN PRESSURE (PSF)*	
				POSITIVE	*NEGATIVE*
VERTICAL	**67.75" X 152.75"**	**63.0" X 148.0"**	**57.0" X 142.0"**	**+62.0**	**-70.0**
HORIZONTAL	**152.75" X 67.75"**	**148.0" X 63.0"**	**142.0" X 57.0"**	**+62.0**	**-62.0**

See sheet 3 for Horizontal Orientation Elevations



Documents Prepared By: Lyndon F. Schmidt, P.E.
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RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197

TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: *WEATHER-GUARD*

PART OR ASSEMBLY: *TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES*

NO.	DATE	REVISIONS	BY

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 1 OF 12

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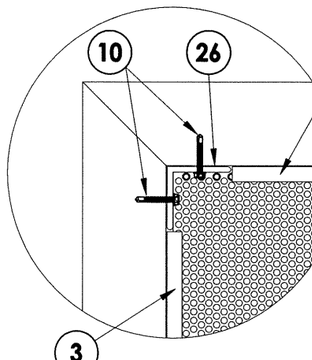
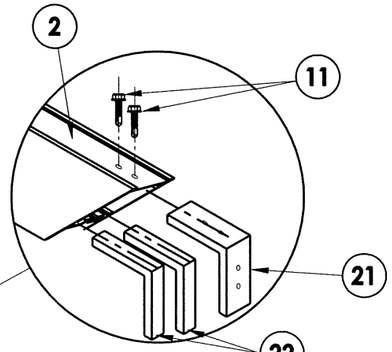
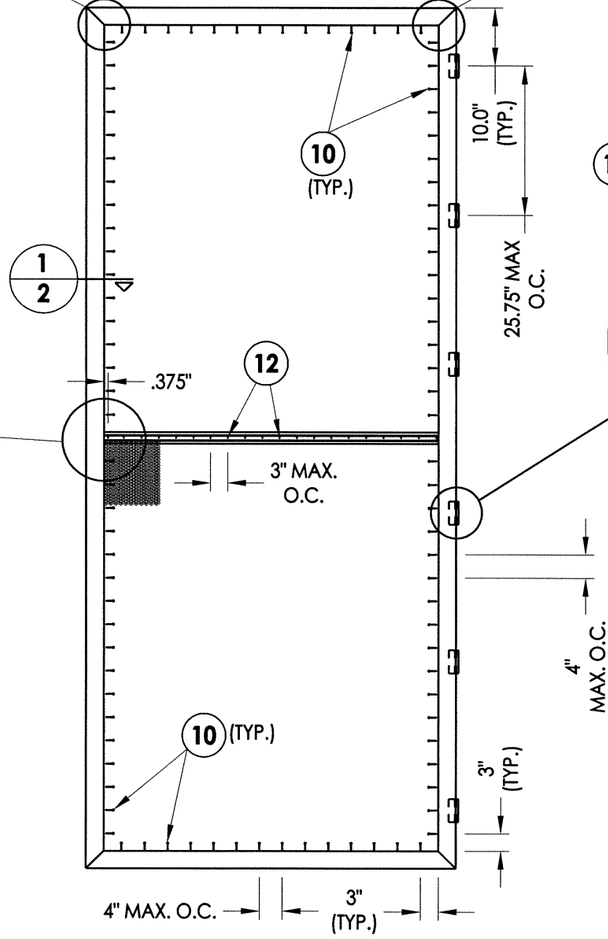


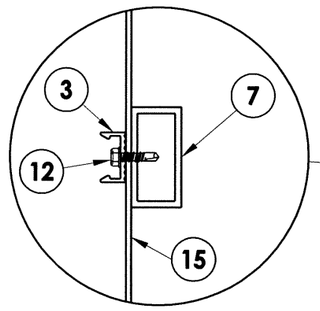
SCREEN CORNER DETAIL
Lock side only



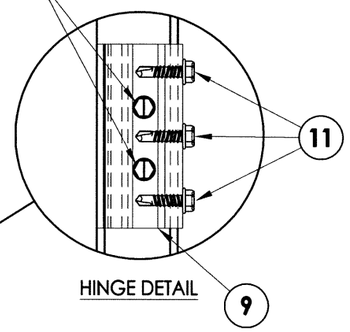
FRAME CORNER DETAIL



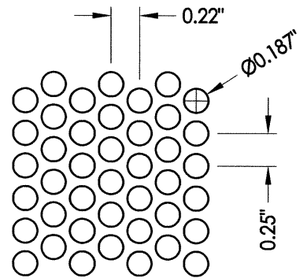
SCREEN PANEL



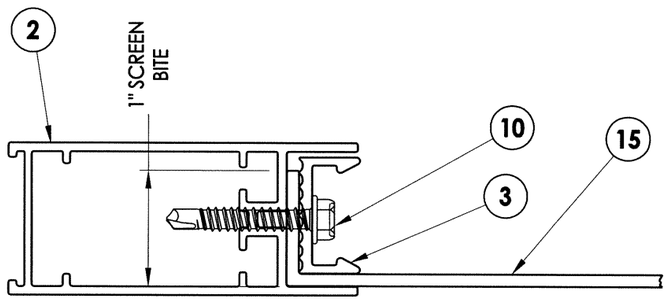
HORIZONTAL SUPPORT BAR DETAIL
Horizontal bar required at centerline
for all panel heights > 75"



HINGE DETAIL



15 *PERFORATED PLATE*
14 GA. Stainless Steel (304)
.071" min. thickness
open area: 51%



1/2 *HORIZONTAL CROSS SECTION*

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED
PROFESSIONAL ENGINEER

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: PANEL DETAILS

NO.	DATE	BY
REVISIONS		

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 2 OF 12

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SINGLE PANEL
Vertical Orientation

MULTIPLE PANELS
Vertical Orientation

SINGLE PANEL
Horizontal Orientation

MULTIPLE PANELS
Horizontal Orientation

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED
PROFESSIONAL ENGINEER

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: ELEVATIONS

NO.	DATE	REVISIONS	BY

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 3 OF 12

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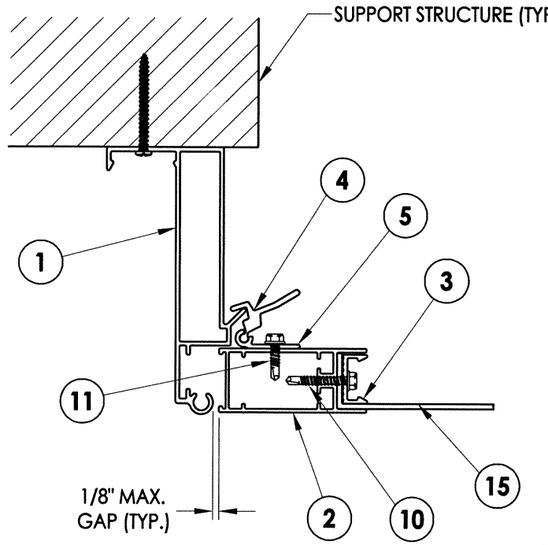
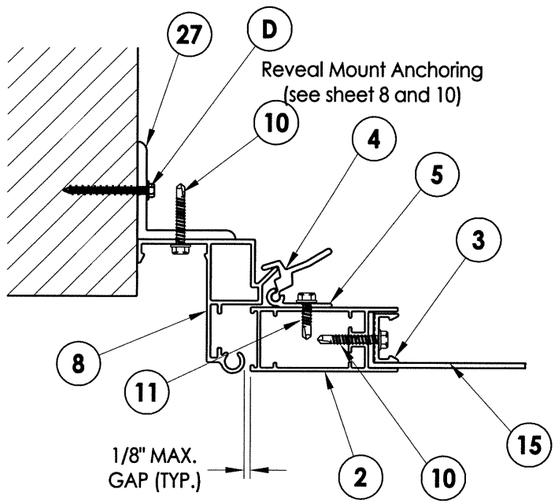
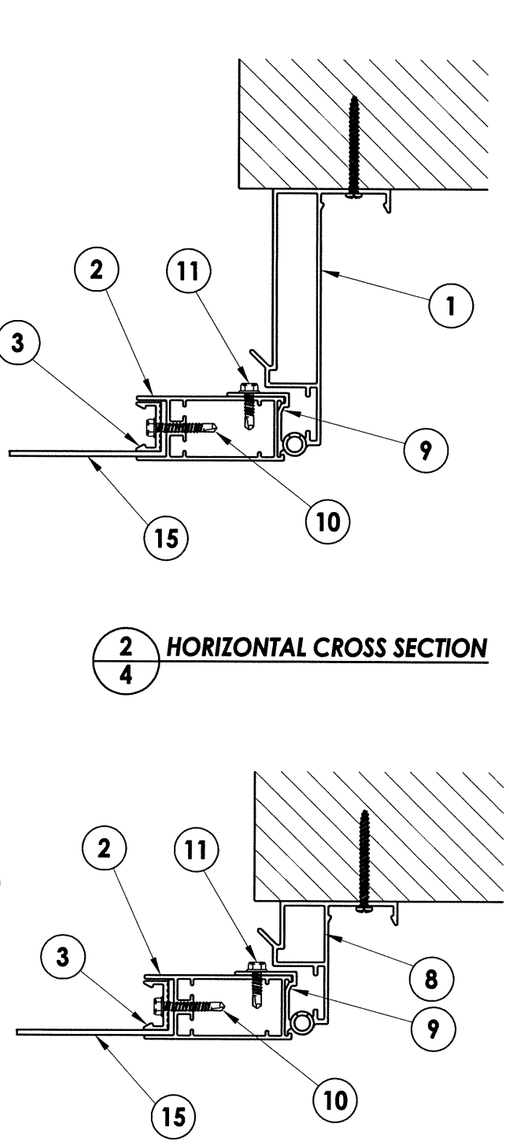


1/4 **HORIZONTAL CROSS SECTION**

2/4 **HORIZONTAL CROSS SECTION**



3/4 **HORIZONTAL CROSS SECTION**
Shown w/ Reveal mount



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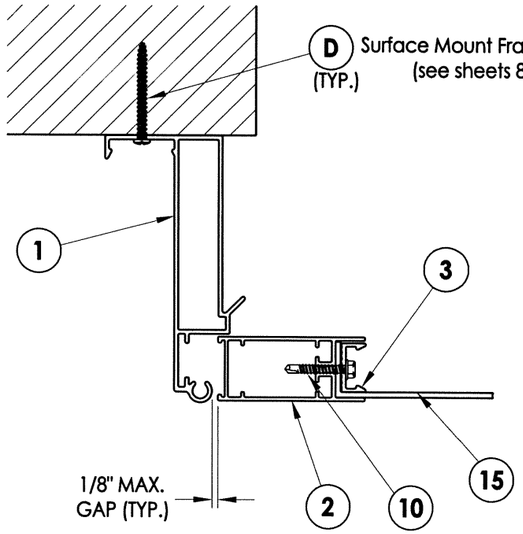

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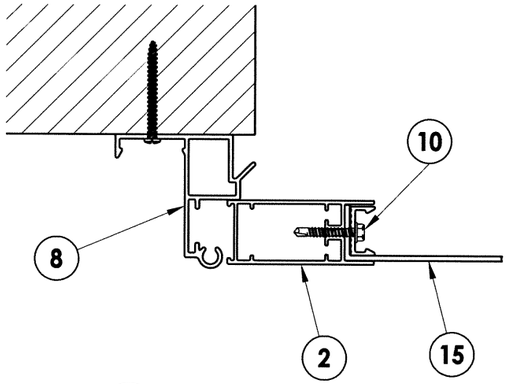

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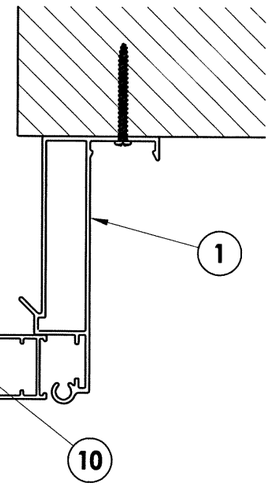

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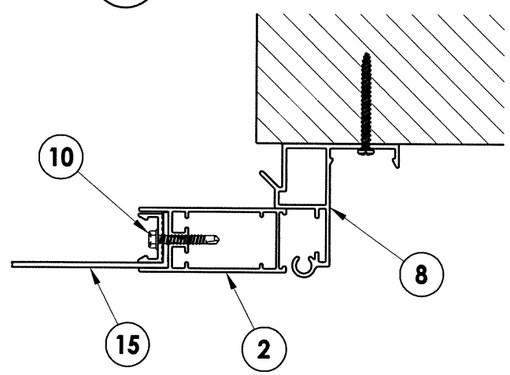

8/4 **HORIZONTAL CROSS SECTION**

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CERTIFICATE OF REGISTRATION # F-11852

STATE OF TEXAS · LYNDON F. SCHMIDT · 104123 · LICENSED PROFESSIONAL ENGINEER

PRODUCT: *WEATHER-GUARD*

PART OR ASSEMBLY: *HORIZONTAL CROSS SECTIONS*

NO.	DATE	BY
REVISIONS		

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 4 OF 12

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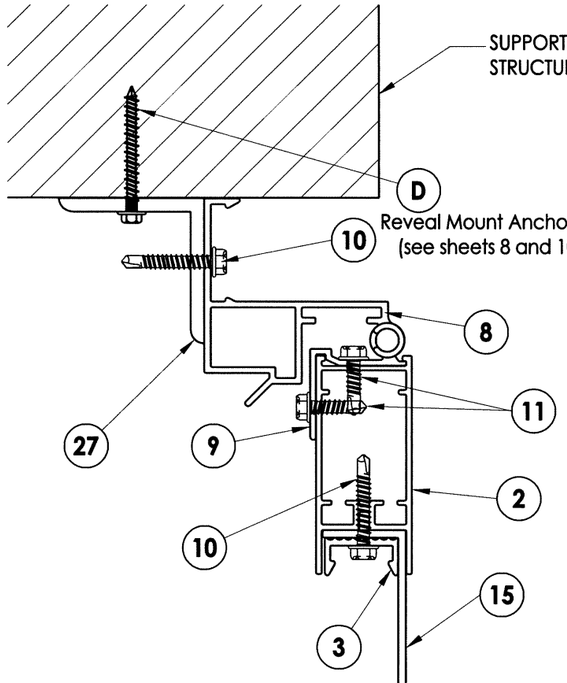
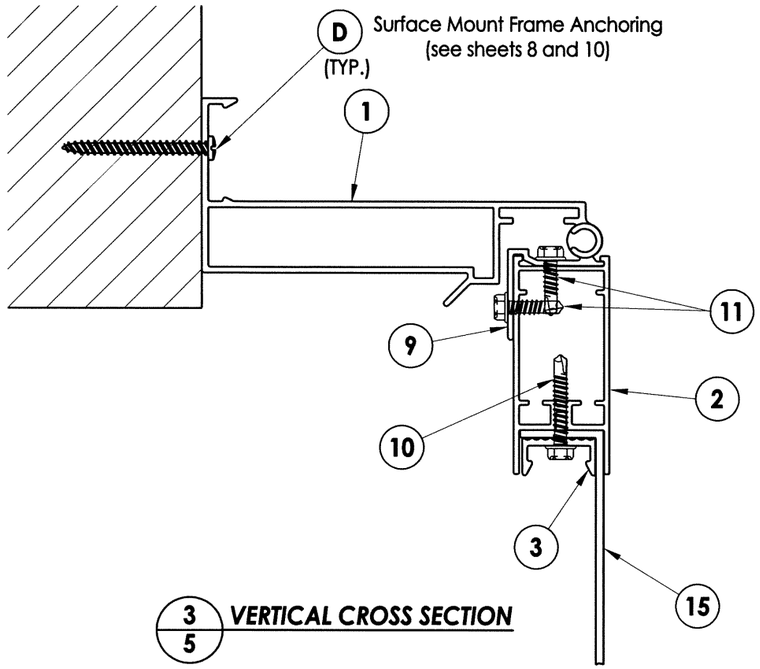


1/5 **VERTICAL CROSS SECTION**
Shown w/ Reveal mount



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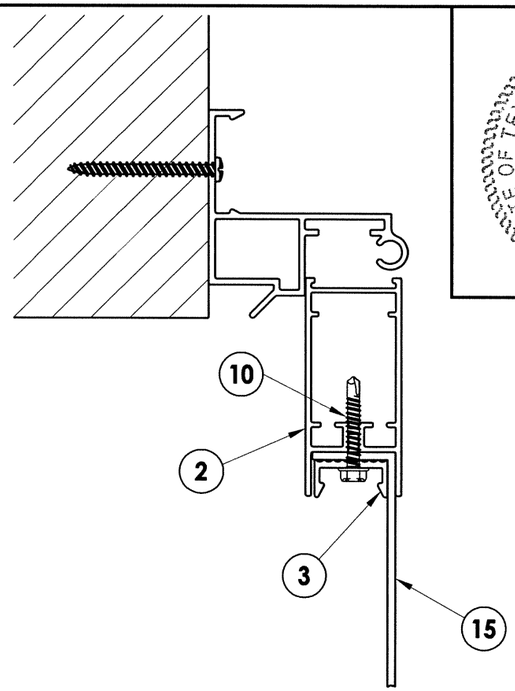

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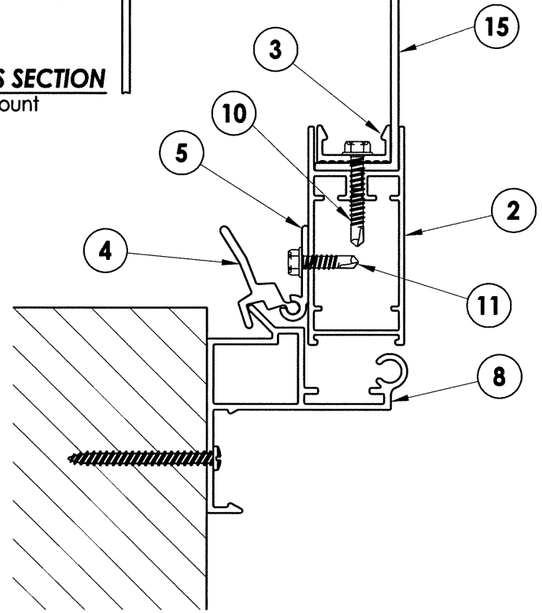

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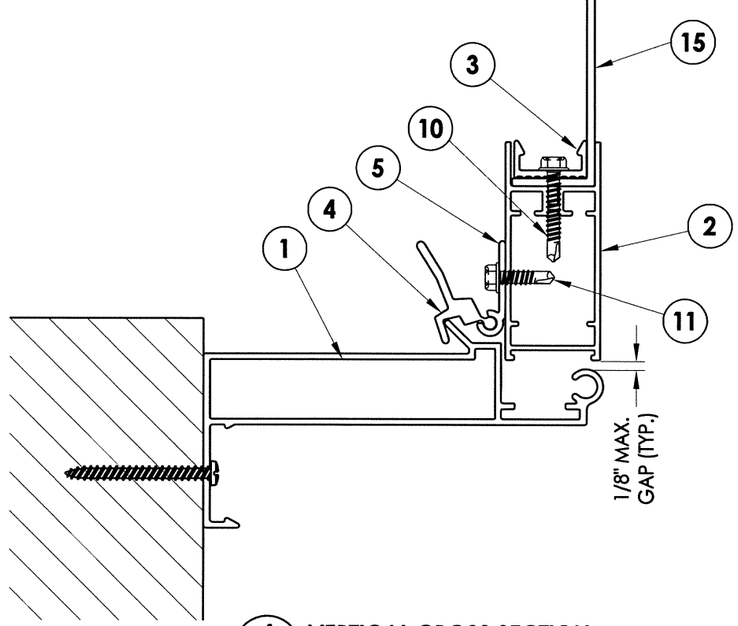

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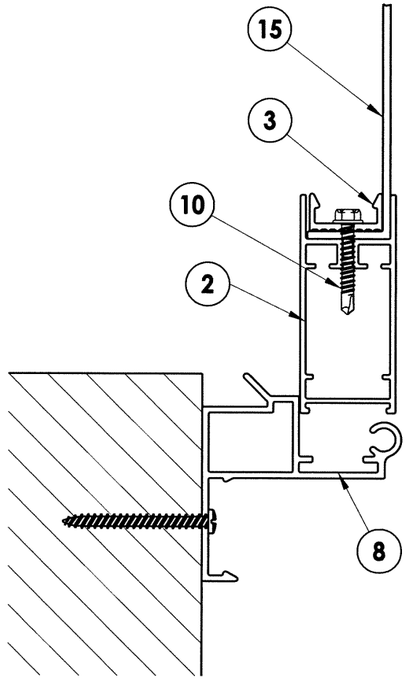

6/5 **VERTICAL CROSS SECTION**

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Phone No.: 813.659.9197

TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

STATE OF TEXAS — LYNDON F. SCHMIDT 104123 — REGISTERED PROFESSIONAL ENGINEER

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 5 OF 12

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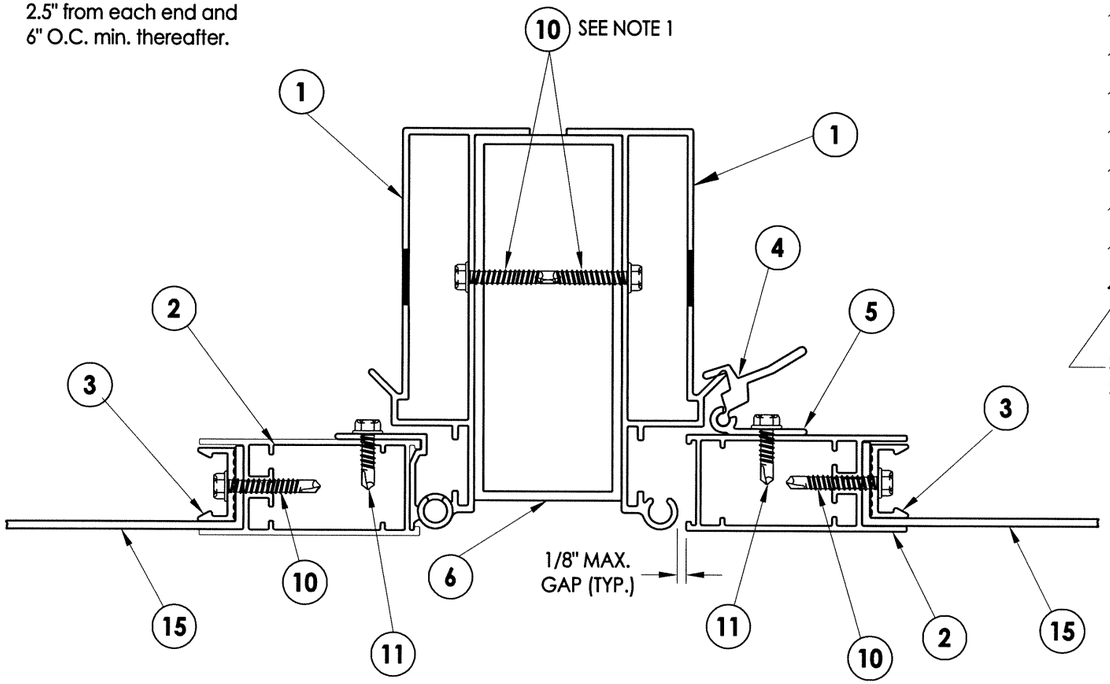
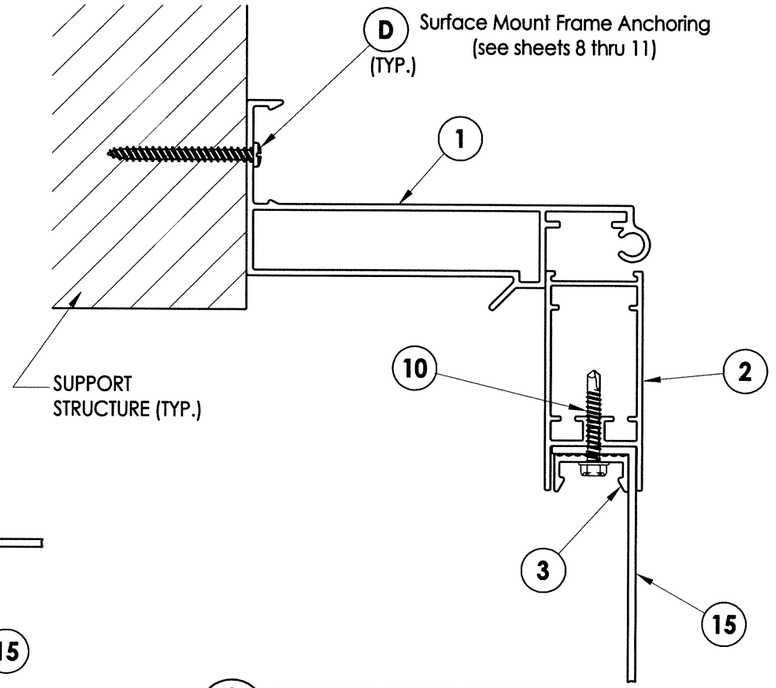
Note:
1. Install mullion screws (item 10) 2.5" from each end and 6" O.C. min. thereafter.



1/6 **HORIZONTAL CROSS SECTION**



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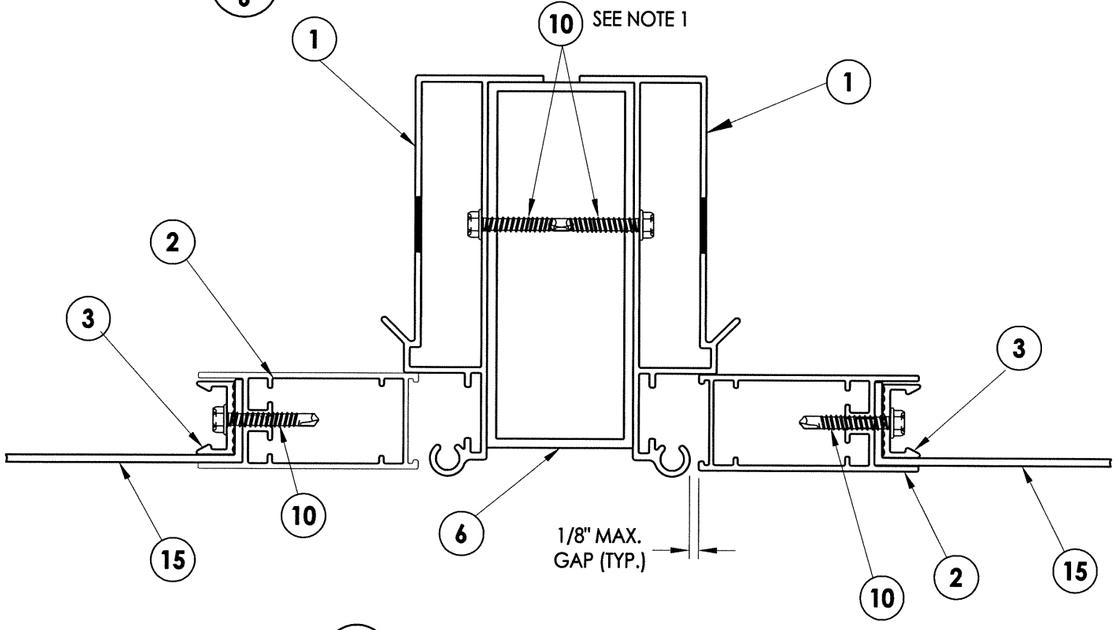

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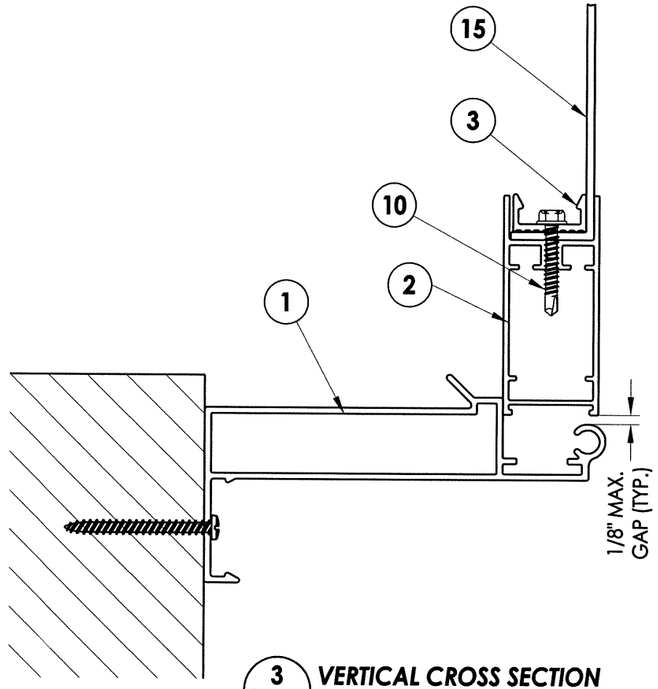

3/6 **VERTICAL CROSS SECTION**

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED PROFESSIONAL ENGINEER
5-9-12

Documents Prepared By: Lyndon F. Schmidt, P.E.
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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 6 OF 12

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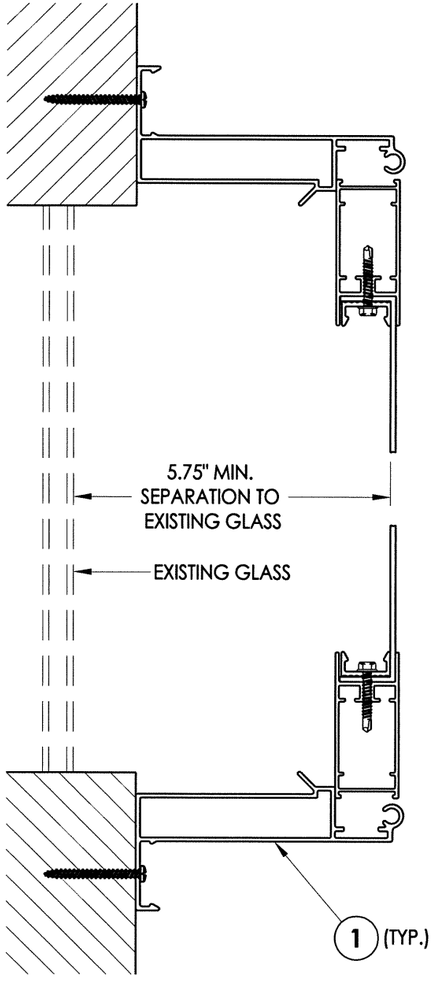
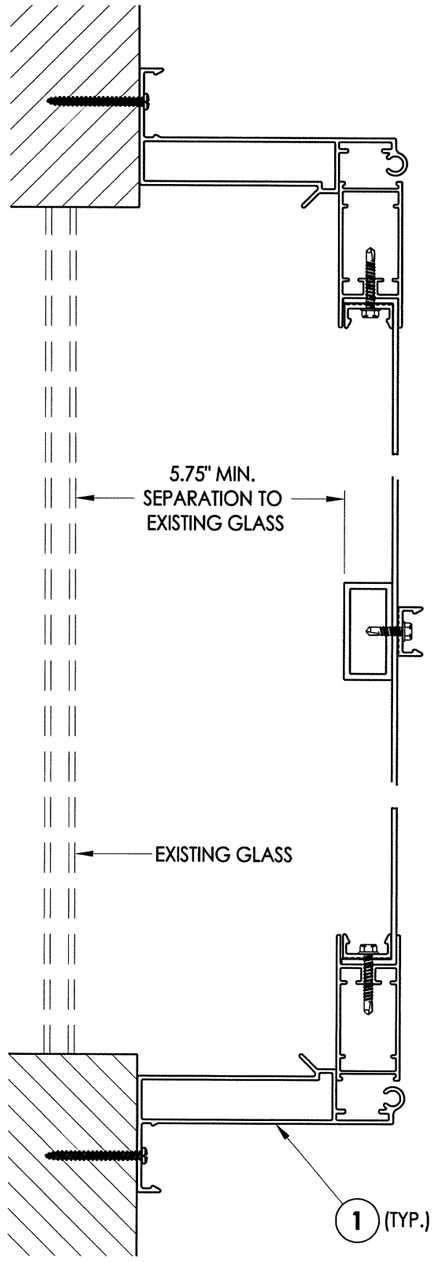
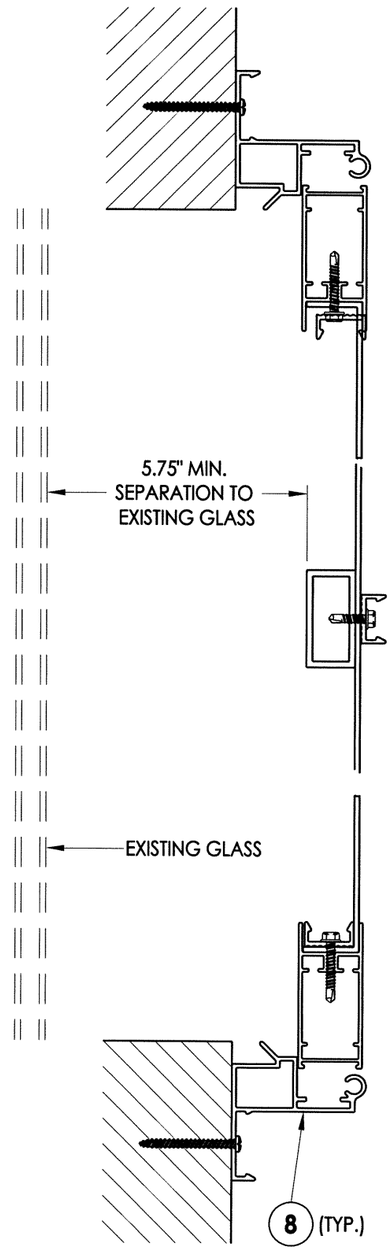
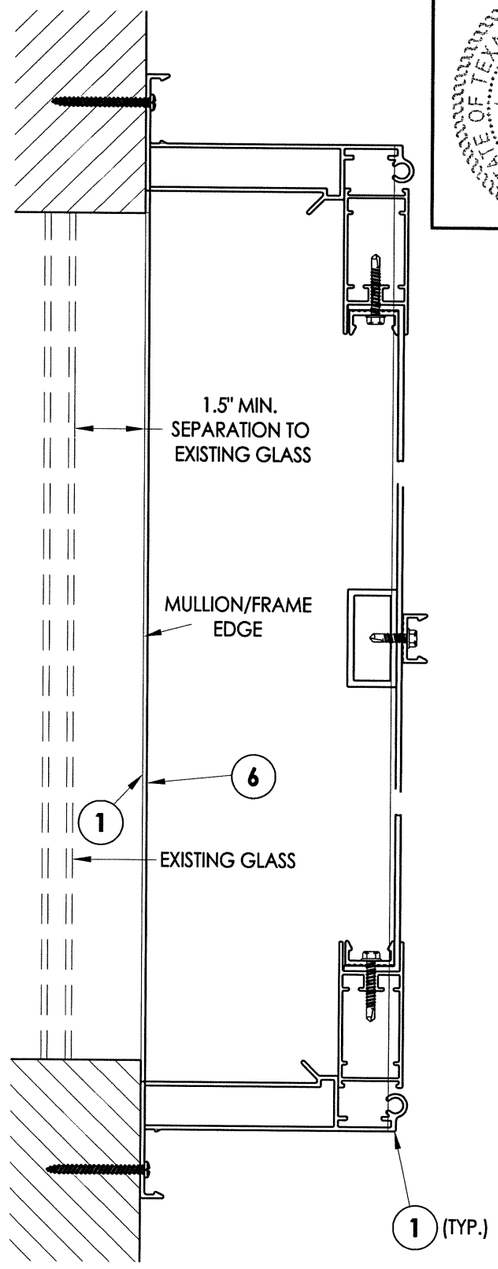


SINGLE PANEL GLASS SEPARATION w/o SUPPORT BAR
Vertical orientation shown (max. panel height = 75")
Horizontal orientation similar (max. panel length = 75")





SINGLE PANEL GLASS SEPARATION w/ SUPPORT BAR
Vertical orientation shown
Horizontal orientation similar



MULTIPLE MULLED PANELS GLASS SEPARATION
Vertical orientation only

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TEXAS P.E. #104123

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Phone No.: 813.659.9197

TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: GLASS SEPARATION VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 7 OF 12

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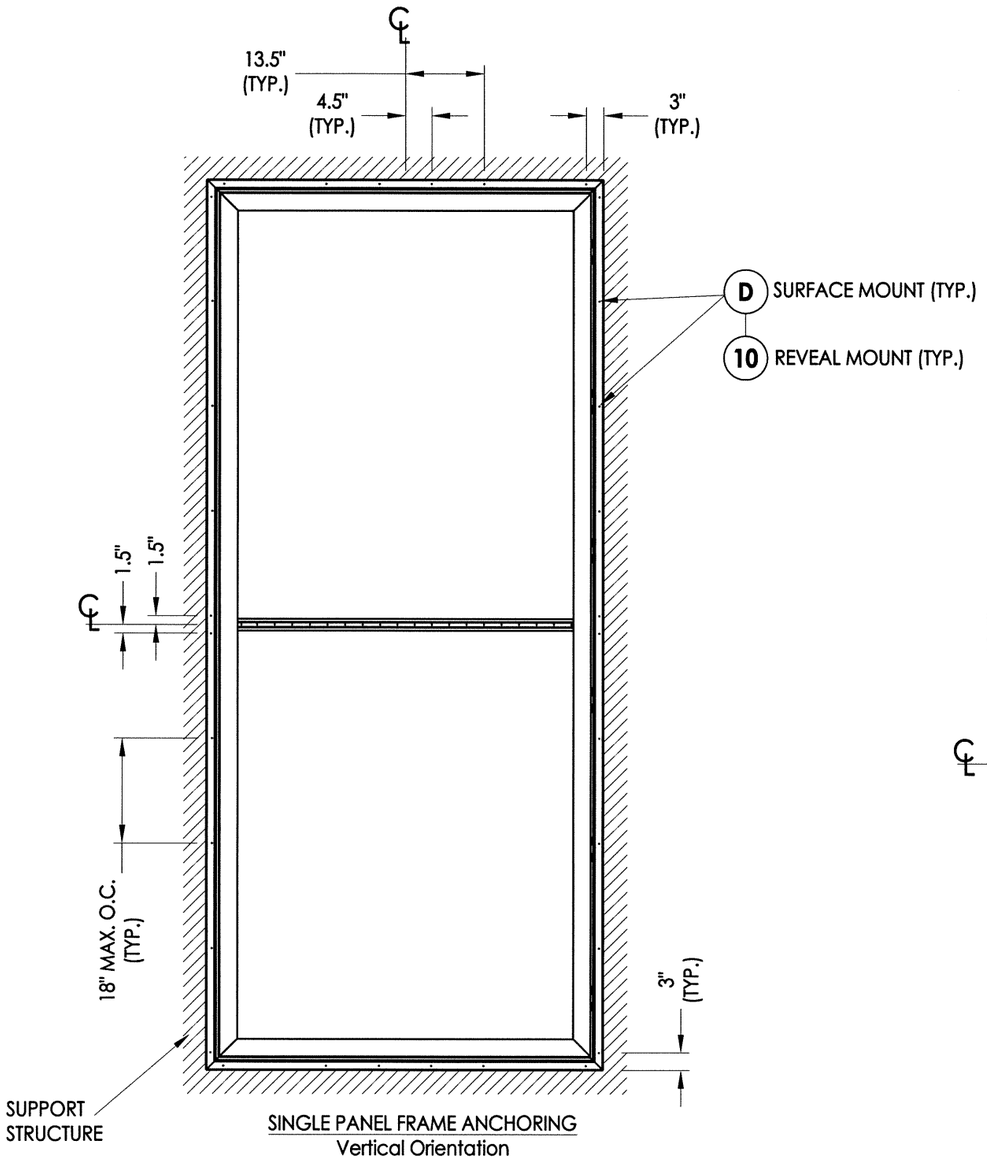
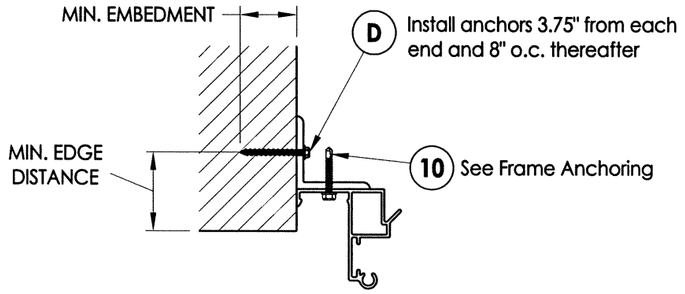
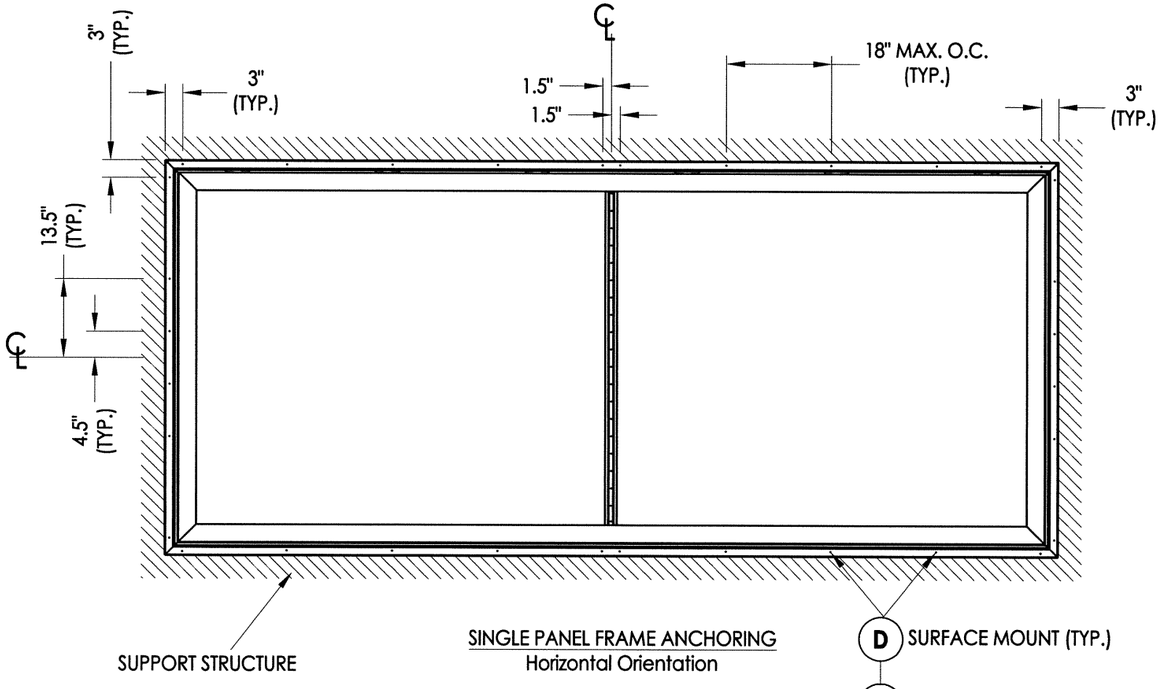


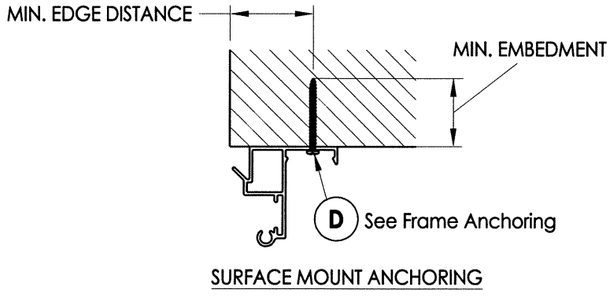
SINGLE PANEL FRAME ANCHORING
Vertical Orientation



REVEAL MOUNT ANCHORING



SINGLE PANEL FRAME ANCHORING
Horizontal Orientation



SURFACE MOUNT ANCHORING

WOOD FRAMING - APPROVED ANCHOR SCHEDULE

(D) ANCHOR	SUPPORT STRUCTURE & INSTALLATION LIMITATIONS	MANUFACTURER
#12 SHEET METAL SCREW	WOOD FRAMING MAIN MEMBER (G ≥ 0.42 MIN.) EMBEDMENT = 1.75" MIN., EDGE DISTANCE = 0.75" MIN.	N/A

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED PROFESSIONAL ENGINEER

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: SINGLE PANEL FRAME ANCHORING

NO.	DATE	BY	REVISIONS

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 8 OF 12

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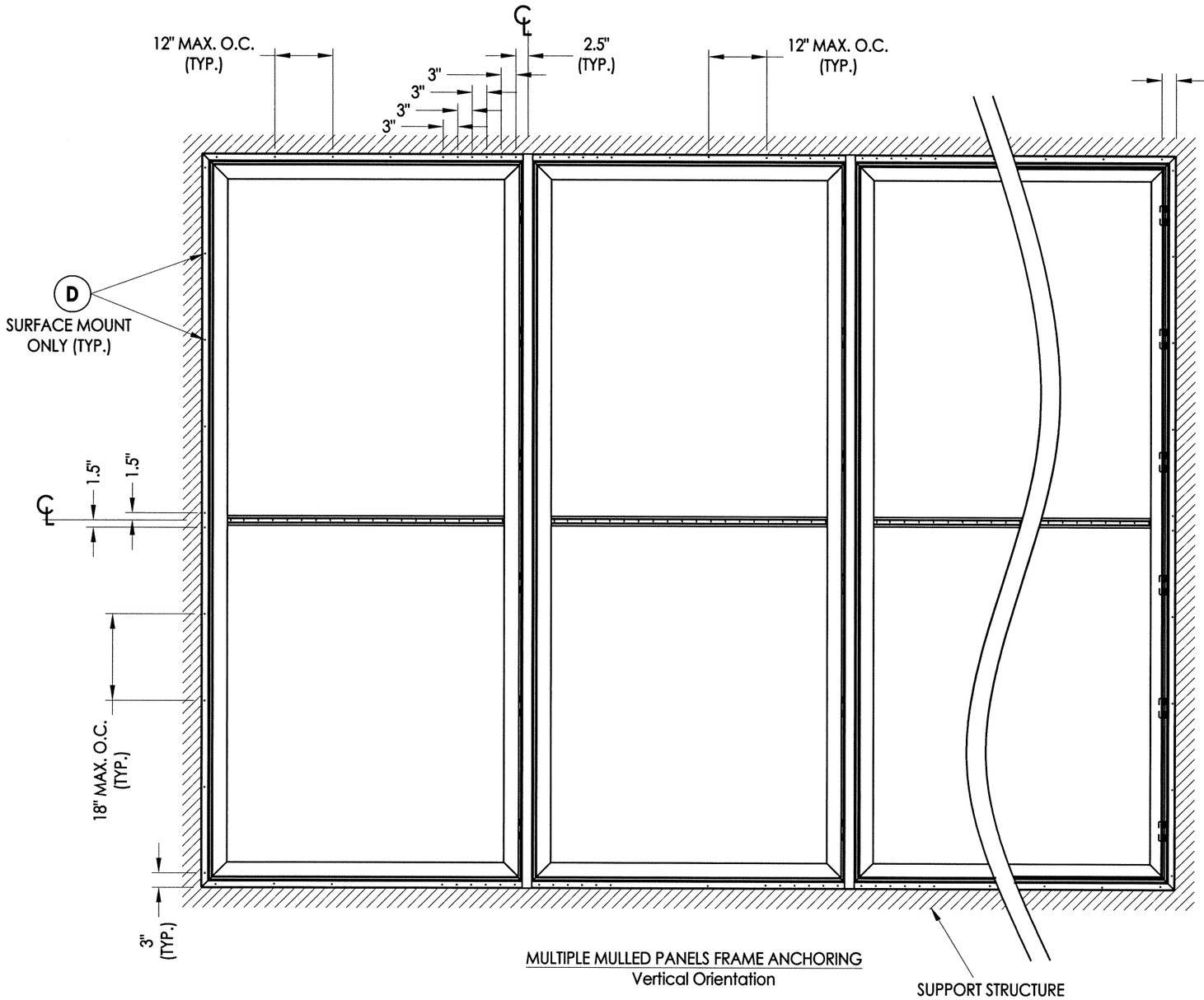
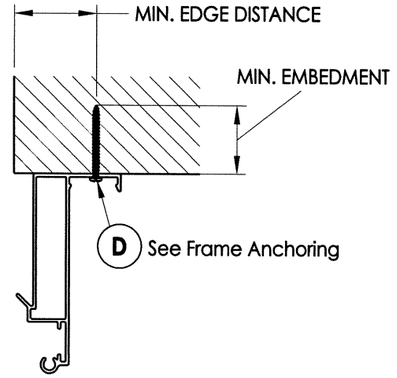
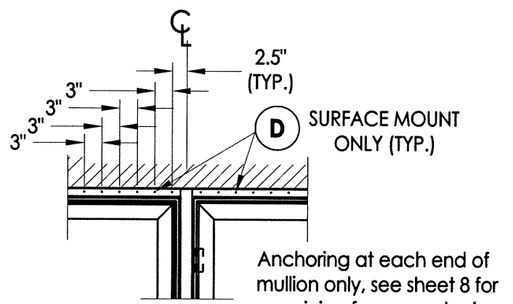


MULTIPLE MULLED PANELS FRAME ANCHORING
Vertical Orientation



SURFACE MOUNT ANCHORING



MULTIPLE MULLED PANELS FRAME ANCHORING
Horizontal Orientation

WOOD FRAMING - APPROVED ANCHOR SCHEDULE

(D) ANCHOR	SUPPORT STRUCTURE & INSTALLATION LIMITATIONS	MANUFACTURER
#12 SHEET METAL SCREW	WOOD FRAMING MAIN MEMBER (G ≥ 0.42 MIN.) EMBEDMENT = 1.75" MIN., EDGE DISTANCE = 0.75" MIN.	N/A

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED PROFESSIONAL ENGINEER
9.8.12

Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197

TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: MULTIPLE MULLED PANELS FRAME ANCHORING

NO.	DATE	BY

REVISIONS

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 9 OF 12

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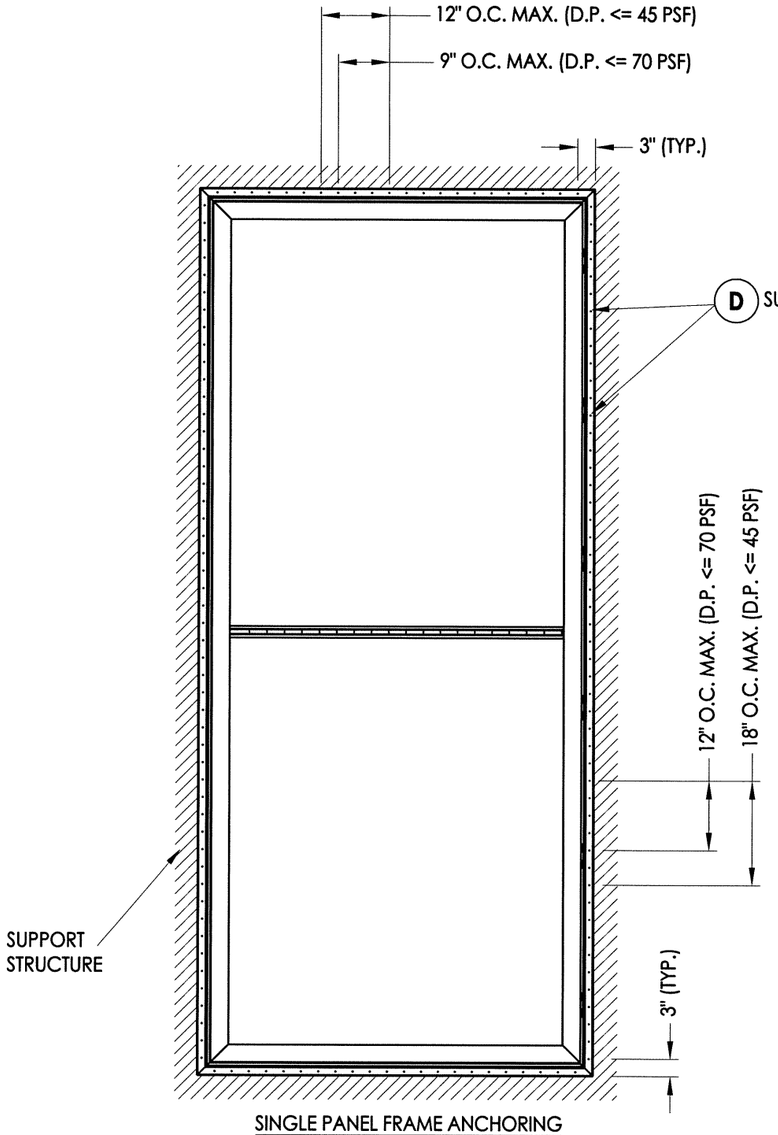
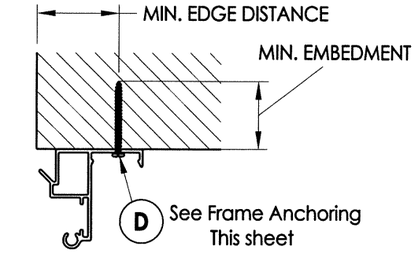
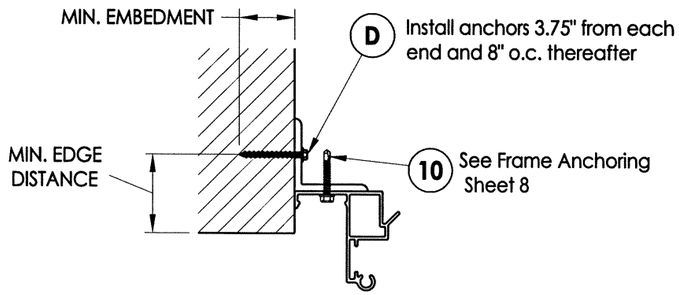


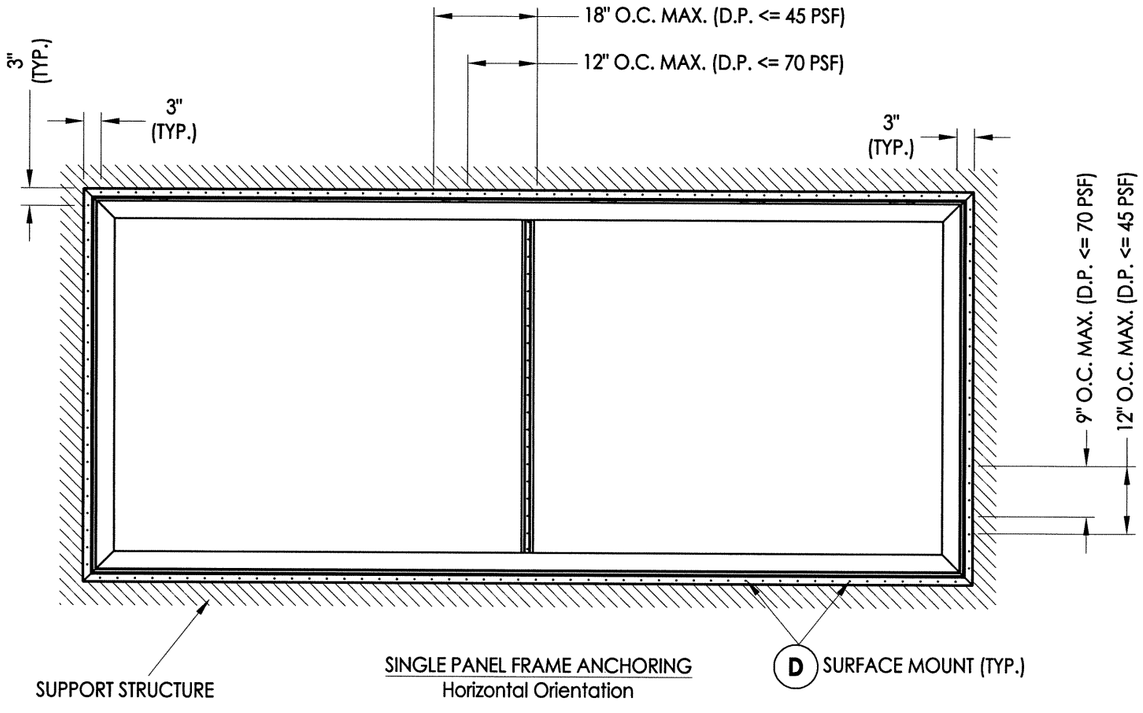
SINGLE PANEL FRAME ANCHORING
Vertical Orientation



SURFACE MOUNT ANCHORING



REVEAL MOUNT ANCHORING



SINGLE PANEL FRAME ANCHORING
Horizontal Orientation

MASONRY - APPROVED ANCHOR SCHEDULE

D ANCHOR	SUPPORT STRUCTURE & INSTALLATION LIMITATIONS	MANUFACTURER
1/4" CONCRETE ANCHOR	CONCRETE = 3,192 PSI MIN. (CONFORMING TO ACI 301) OR HOLLOW BLOCK (CONFORMING TO ASTM C90) EMBEDMENT = 1.25" MIN., EDGE DISTANCE = 2.5" MIN., CL = 3.0" MIN.	ITW BUILDEX

STATE OF TEXAS
LYNDON F. SCHMIDT
104123
LICENSED PROFESSIONAL ENGINEER

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: SINGLE PANEL FRAME ANCHORING

NO.	DATE	REVISIONS	BY

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 10 OF 12

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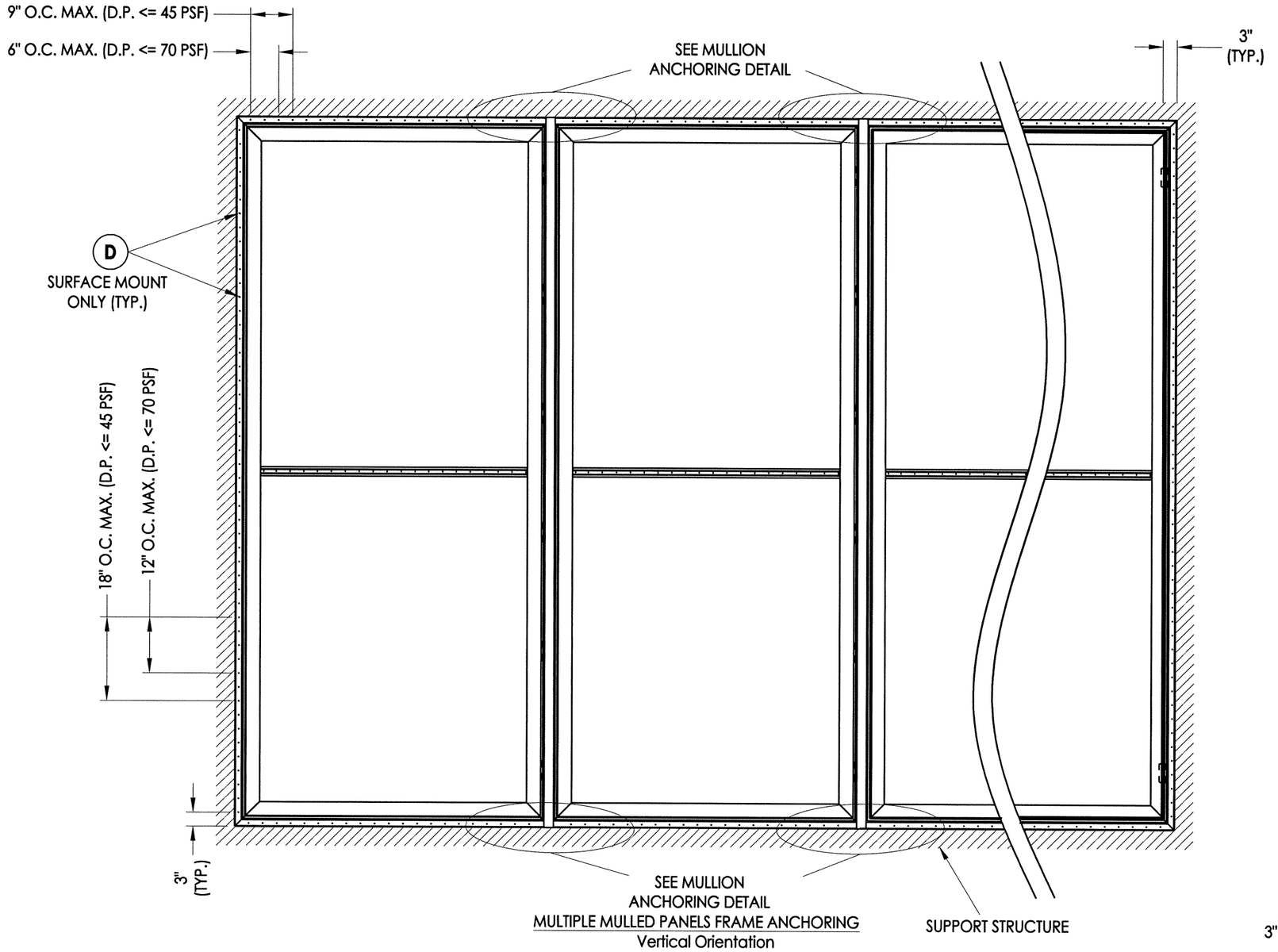
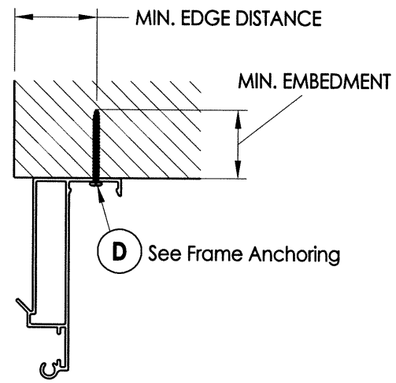
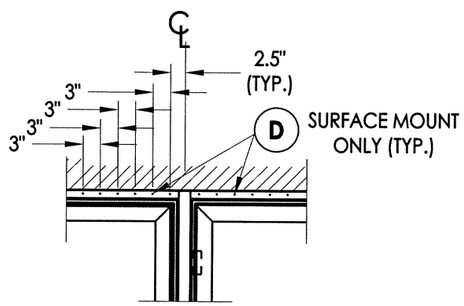


MULTIPLE MULLED PANELS FRAME ANCHORING
Vertical Orientation



SURFACE MOUNT ANCHORING



MULLION ANCHORING DETAIL
Vertical and horizontal orientation
(See sheet 10 for remaining anchoring for horizontal orientation)

MASONRY - APPROVED ANCHOR SCHEDULE

(D) ANCHOR	SUPPORT STRUCTURE & INSTALLATION LIMITATIONS	MANUFACTURER
1/4" CONCRETE ANCHOR	CONCRETE = 3,192 PSI MIN. (CONFORMING TO ACI 301) OR HOLLOW BLOCK (CONFORMING TO ASTM C90) EMBEDMENT = 1.25" MIN., EDGE DISTANCE = 2.5" MIN., CL = 3.0" MIN.	ITW BUILDEX

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: MULTIPLE MULLED PANELS FRAME ANCHORING

NO.	DATE	BY
REVISIONS		

DATE: 2/23/11
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DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 11 OF 12

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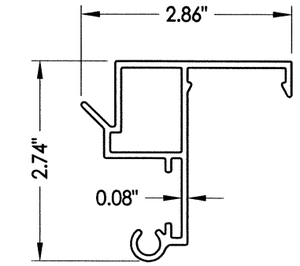
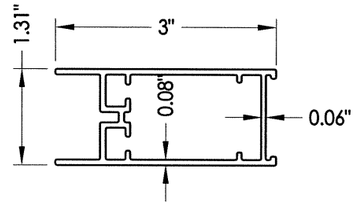
BILL OF MATERIALS

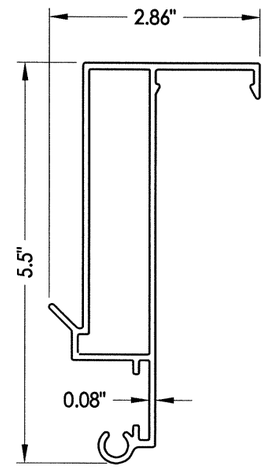
ITEM #	DESCRIPTION	MATERIAL
D	SEE SHEET 8 FOR ANCHORING	-
1	SUBFRAME (5.5)	6063-T6 ALUM
2	MAIN FRAME	6063-T6 ALUM
3	SCREEN CHANNEL	6063-T6 ALUM
4	LATCH	6063-T6 ALUM
5	LATCH HINGE	6063-T6 ALUM
6	MULLION	6063-T6 ALUM
7	SUPPORT BAR	6063-T6 ALUM
8	SUBFRAME (2.75")	6063-T6 ALUM
9	HINGE	6063-T6 ALUM
10	#12 X 1-1/4" HWH SELF TAPPING AND DRILLING SMS	STEEL
11	#10 X 3/4" HWH SELF TAPPING AND DRILLING SMS	STEEL
12	#12 X 3/4" HWH SELF TAPPING AND DRILLING SMS	STEEL
15	PERFORATED PLATE (14GA. STAINLESS STEEL)	304 SS
21	CORNER KEY	6063-T6 ALUM
22	CORNER KEY	6063-T6 ALUM
23	CORNER KEY	6063-T6 ALUM
25	3/16" I P ALUM POP RIVET (ARROW)	ALUM
26	CORNER REINFORCEMENT	6063-T6 ALUM
27	2" X 2" X 3/16" ANGLE	6063-T6 ALUM



8 SUBFRAME

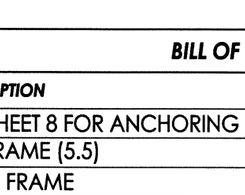


2 MAIN FRAME

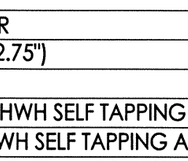


1 SUBFRAME

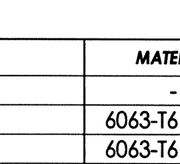
6 MULLION



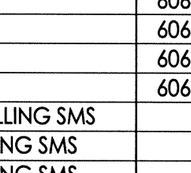
7 SUPPORT BAR



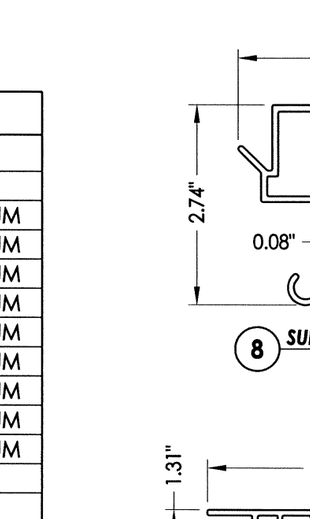
3 SCREEN CHANNEL



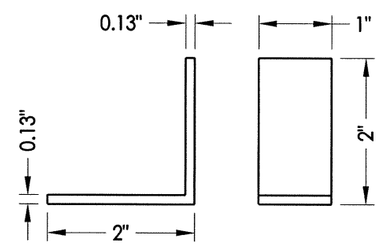
4 LATCH



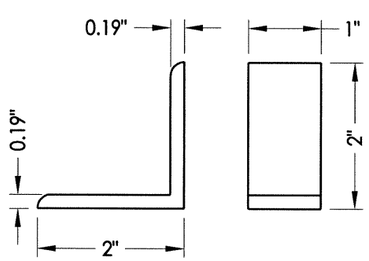
5 LATCH HINGE



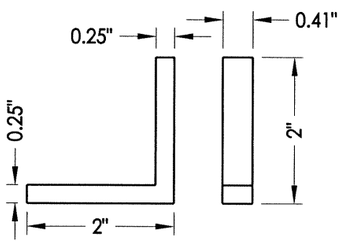
9 HINGE



23 CORNER KEY



26 CORNER REINFORCEMENT



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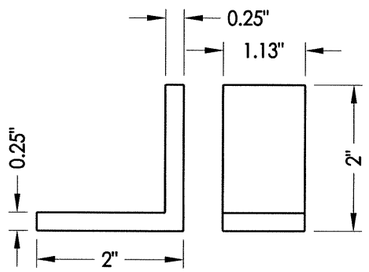

21 CORNER KEY

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

STATE OF TEXAS · LYNDON F. SCHMIDT · 104123 · LICENSED PROFESSIONAL ENGINEER

PRODUCT: WEATHER-GUARD

PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS

NO.	DATE	BY
	REVISIONS	

DATE: 2/23/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4126
SHEET 12 OF 12

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