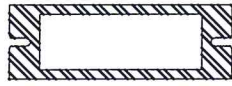


WINCORE™

WINDOWS & DOORS

250 Staunton Turnpike, Parkersburg, WV 26104

TMP-2603 EXTRUDED ALUMINUM HORIZONTAL CLIPPED MULLION



EVALUATED FOR USE IN THE STATE OF TEXAS

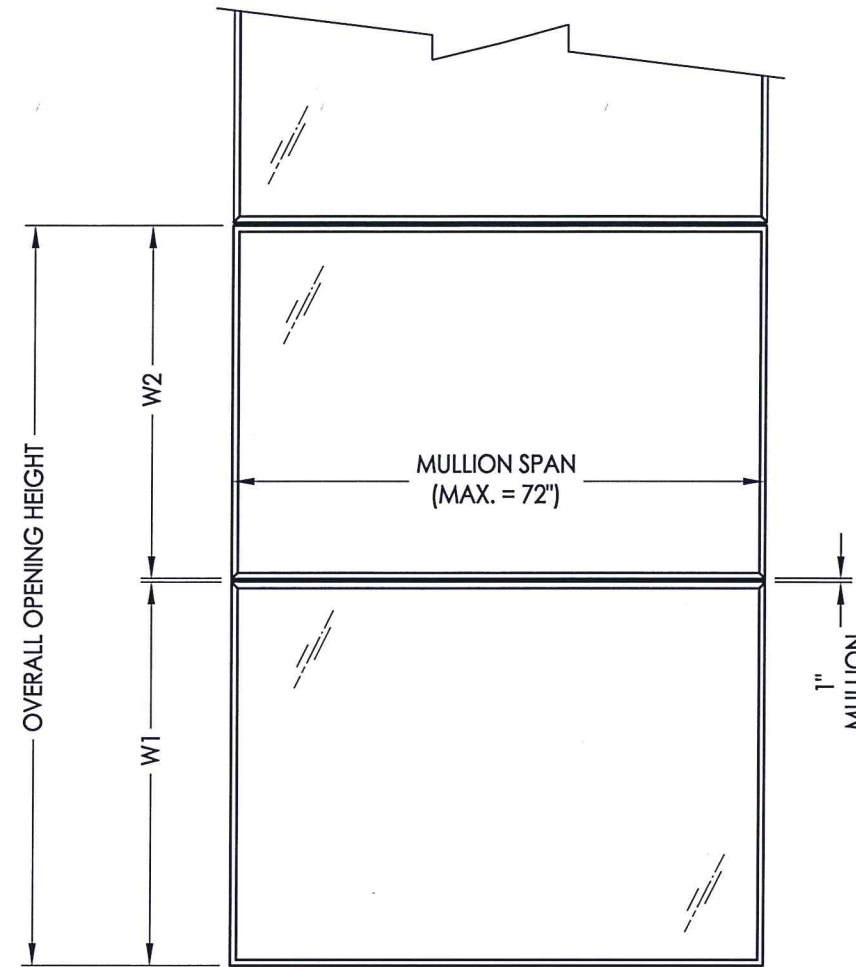
The Wincore Structural Mullion described herein complies with the 2018 International Residential Code (IRC), Section R609.8 and the 2018 International Building Code (IBC), subject to the following conditions:

1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond roof covering.
2. When used in areas requiring wind-borne debris protection (Seaward and Inland I areas), this product complies with Section R301.2.1.2 of the IRC and Section 1609.2 of the IBC and does not require impact protection. This product meets missile level "D" and includes Wind Zone 3 as defined in ASTM E 1996.
3. Separate product approvals for each glazing product used with these mullions must be submitted along with this mullion product approval. The design pressure rating of the assembly shall be the lesser of the load capacity of the mullion as specified using this approval or the design pressure rating of the individual glazing products used.
4. Anchoring of each glazing product to the mullion shall be as shown in this drawing or as shown in each individual glazing product approval, whichever is more stringent.
5. Any conditions not covered in this evaluation are subject to separate engineering evaluation.
6. Mullion assemblies may be either factory assembled or site assembled.

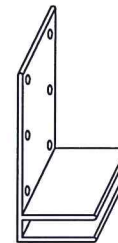
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SHEET #	DESCRIPTION
1	Typical elevations & general notes
2	Mullion design pressure table & cross sections
3	Wood/Steel Stud Anchor Bracket details & cross sections
4	Masonry or Wood/Steel Stud Anchor Bracket details & cross sections

TDI MU-27



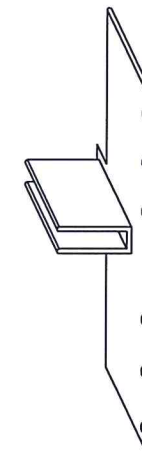
HORIZONTAL MULLED WINDOW UNITS ADJOINING WINDOW UNITS CAN BE EQUAL OR UNEQUAL WIDTHS



Wood/Steel Stud Anchor Bracket



Masonry or Wood/Steel Stud Anchor Bracket



Masonry or Wood/Steel Stud Offset Anchor Bracket



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

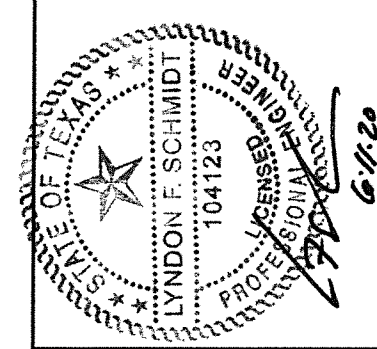
PRODUCT: ALUMINUM CLIPPED MULLION

PART OR ASSEMBLY: TYPICAL ELEVATIONS & GENERAL NOTES

NO.	DATE	REVISIONS
2	6/11/20	UPDATE TO 2018 IRC/IBC
1	5/04/16	MODIFY ANCHOR CLIP

DATE: 11/25/14
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4388
SHEET 1 OF 4

CLIPPED MULLION		TMP-2603 EXTRUDED ALUMINUM HORIZONTAL CLIPPED MULLION LOAD TABLE (PSF)																							
		OVERALL OPENING HEIGHT																							
MAXIMUM MULLION LENGTH	72"	75.0	75.0	75.0	75.0	75.0	75.0	75.0	72.0	69.5	67.5	65.5	63.5	61.5	60.0	59.0	57.5	56.5	55.5	55.0	54.5	54.0	53.5	53.5	53.5
	70"	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	72.0	70.5	69.5	68.0	66.5	65.0	64.0	63.0	62.0	61.5	61.0	60.5	60.0	60.0	60.0
	68"	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	74.5	73.0	71.5	70.0	69.5	69.0	68.5	68.0	67.5	67.0	67.0
	66"	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
	64"	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
	62"	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
	60"	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
	58"	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0



Documents Prepared By: Lyndon F. Schmidt, P.E.
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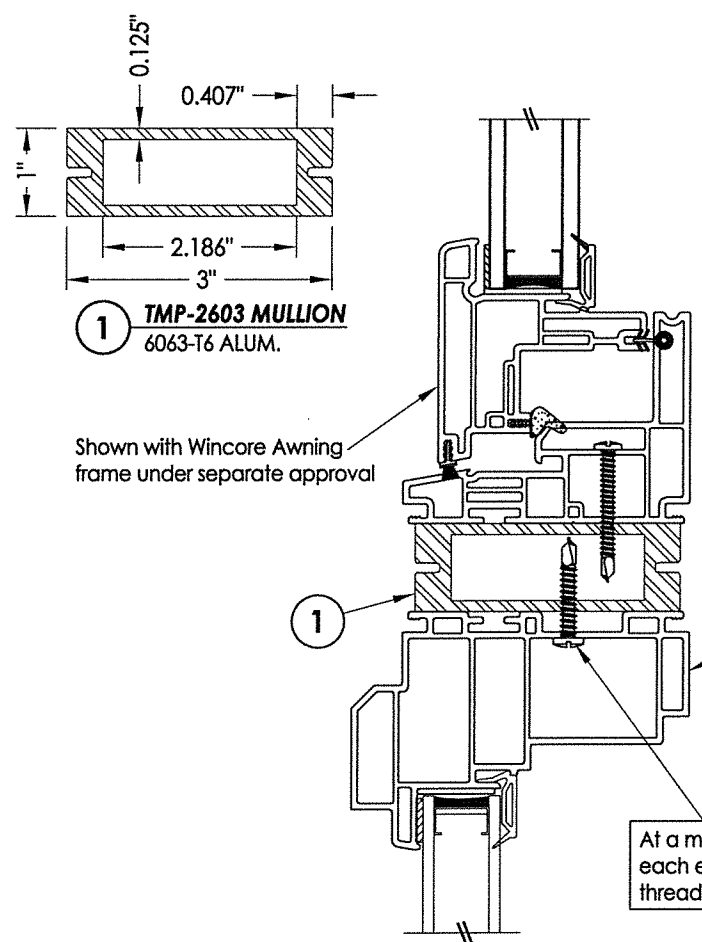
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33585
Phone No.: 813.659.9197

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

DESIGN PRESSURE TABLE NOTES:

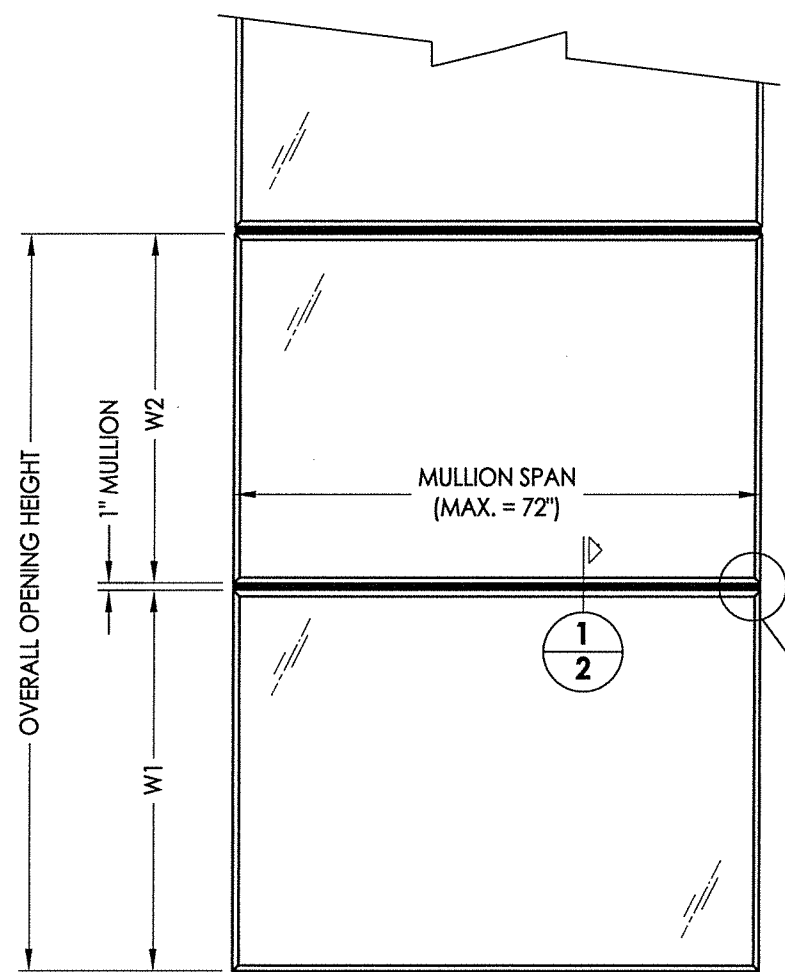
- Determine the Overall Opening Height for the two windows to be mullied together. If multiple units are to be mullied together, use the maximum Overall Opening Height for the two tallest adjacent windows.
- Enter the table at the intersection of the Mullion Length and the Overall Opening Height to determine the maximum approved Design Pressure.

OVERALL OPENING HEIGHT = W1 + W2 + 1 (inch)



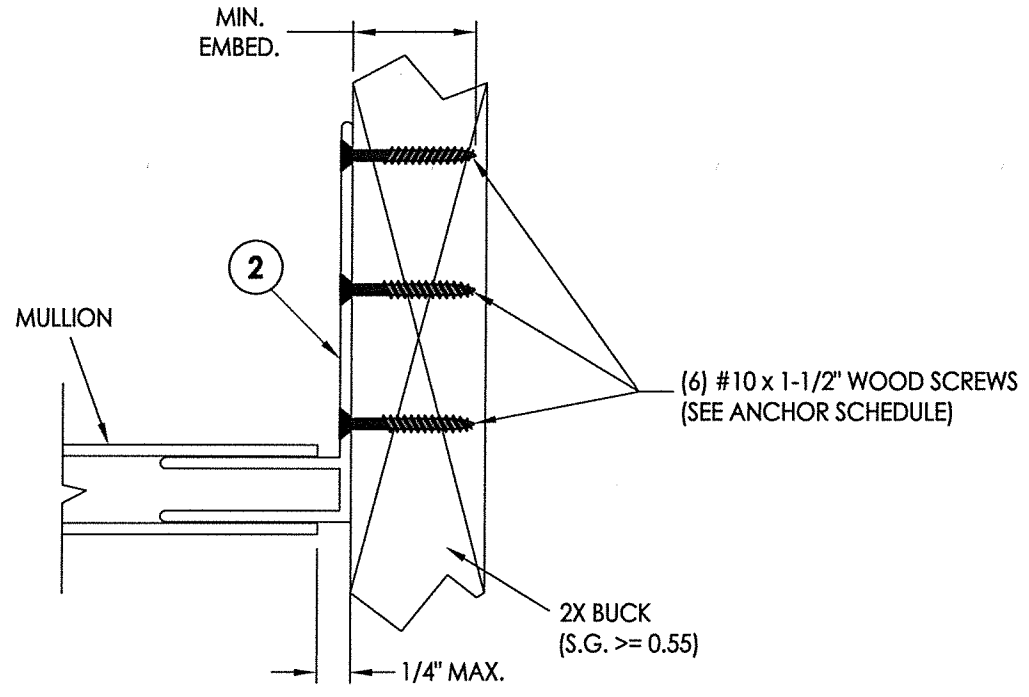
- APPROVED WINDOW UNIT TYPES**
- Fixed/Picture Windows
 - Casement Windows
 - Awning Windows
 - Horizontal Slider Windows
 - Single Hung Windows
 - Double Hung Windows

At a minimum, install #10-16 Self-Drilling SMS located 4" from each end of mullion and 8" o.c. max. thereafter. At least 3 threads must protrude completely through the mullion face.

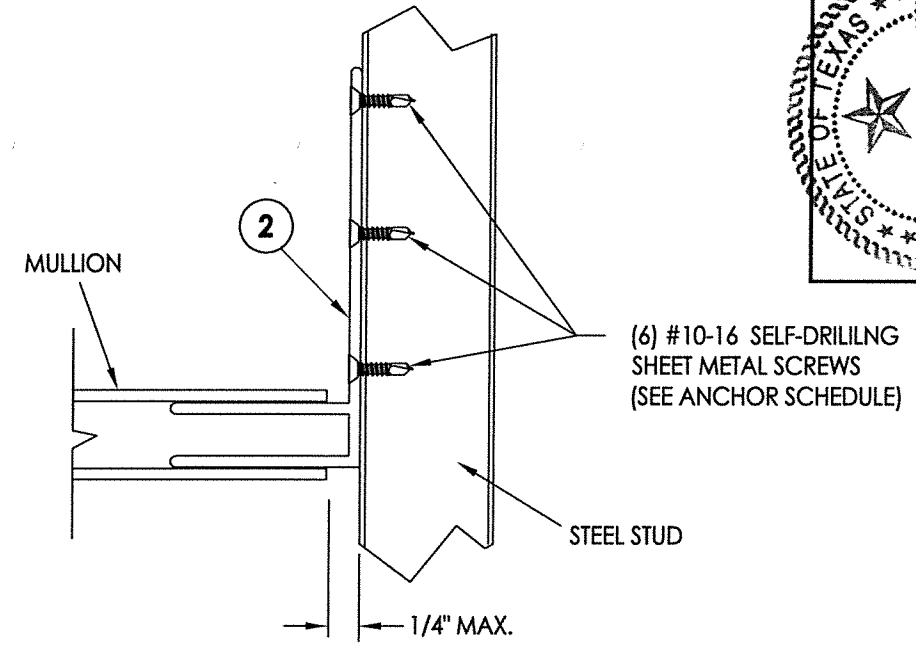


1 FRAME TO MULLION CONNECTION

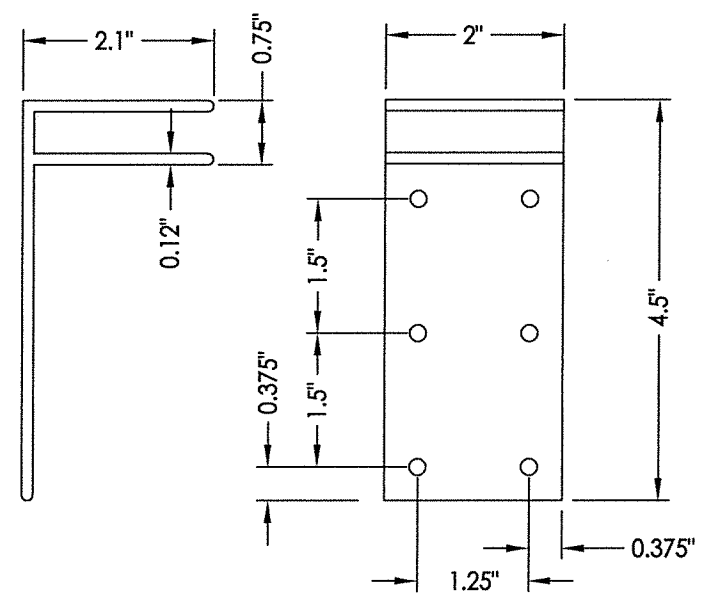
PRODUCT:	ALUMINUM CLIPPED MULLION	
PART OR ASSEMBLY:	MULLION DESIGN PRESSURE TABLE & CROSS SECTIONS	
NO.	DATE	BY
2	6/11/20	UPDATE TO 2018 IBC/IRC
1	5/04/16	MODIFY ANCHOR CLIP
REVISIONS		
DATE:	11/25/14	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4388	
SHEET	2	OF 4



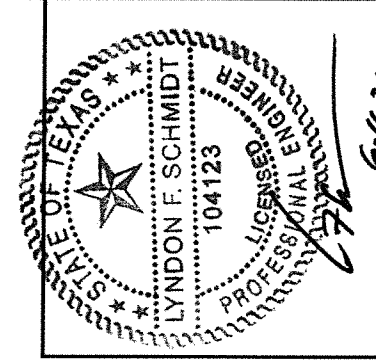
1 ANCHOR BRACKET DETAIL
3 Anchor to 2x Buck



2 ANCHOR BRACKET DETAIL
3 Anchor to Steel Stud



2 WOOD/STEEL STUD ANCHOR BRACKET
 6063-T6 ALUM.



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

PRODUCT:
 ALUMINUM CLIPPED MULLION

PART OR ASSEMBLY:
 ANCHOR BRACKET DETAILS &
 CROSS SECTIONS

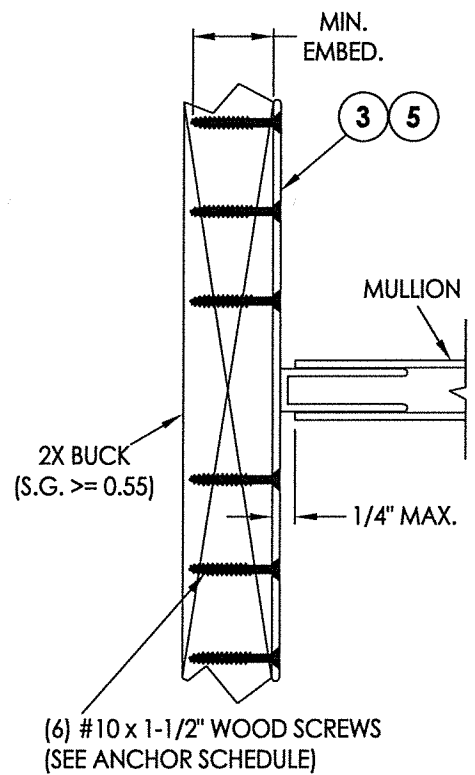
NO.	DATE	REVISIONS
2	6/11/20	UPDATE TO 2018 IBC/IRC
1	5/04/16	MODIFY ANCHOR CLIP
		BY

DATE: 11/25/14
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4388
 SHEET 3 OF 4

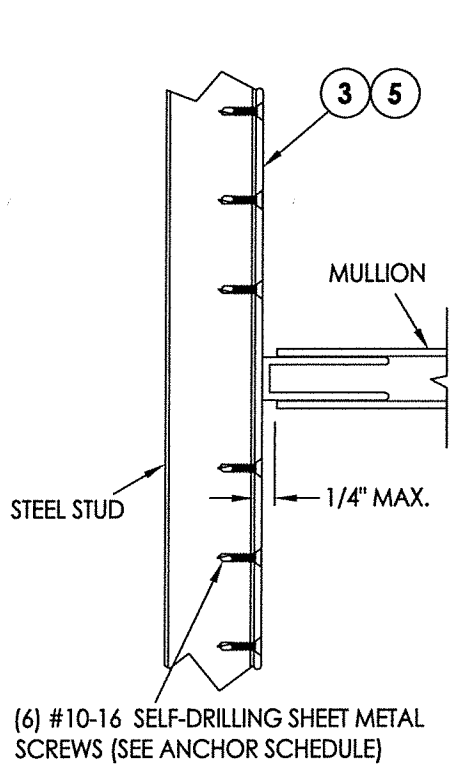
- Notes:
1. Refer to individual window product approval for fabrication and installation requirements, including glazing details, frame reinforcement and anchor specifications.
 2. Mullion bracket anchoring details shown may be used at either end of mullion.

MULLION ANCHOR BRACKET ANCHOR SCHEDULE				
ANCHOR	SUBSTRATE	EMBEDMENT (MIN.)	EDGE DISTANCE (MIN.)	CENTER-TO-CENTER SPACING (MIN.)
#10 PFH WOOD SCREW 	WOOD	1-3/8"	1"	1-1/4"
#10-16 SELF-DRILLING SHEET METAL SCREW 	STEEL	A MIN. OF 3 THREADS SHALL PROTRUDE COMPLETELY THROUGH THE STEEL SUBSTRATE	1"	1-1/4"

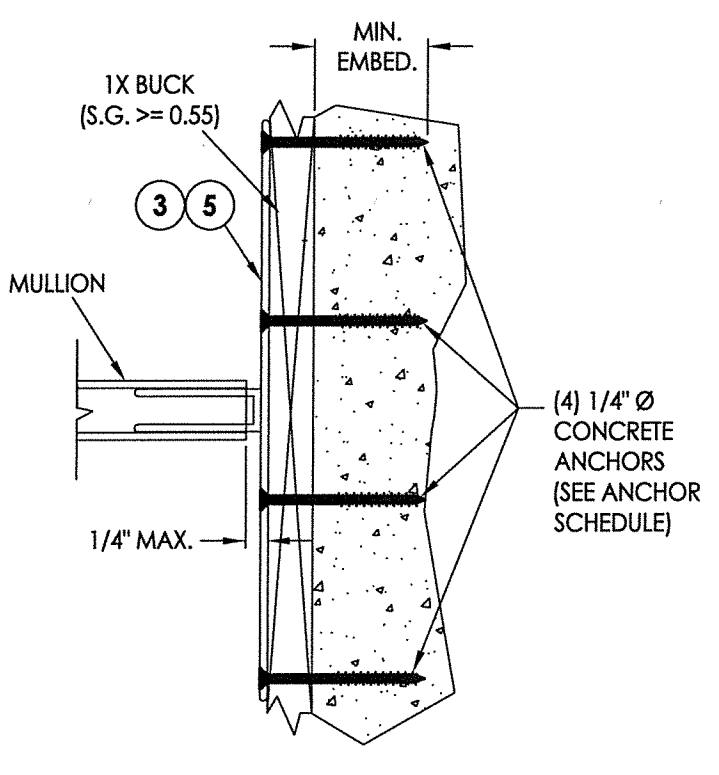
WOOD FRAMING (S.G. >= 0.42)
 STEEL CONFORMING TO ASTM A653, 16 GA., 0.060" MIN. THICKNESS (Fy = 33,000 PSI, Fu = 45,000 PSI)
 SHEET METAL SCREWS (SAE GRADE 5 MIN.): HILTI KWIK-FLEX or ELCO DRIL-FLEX



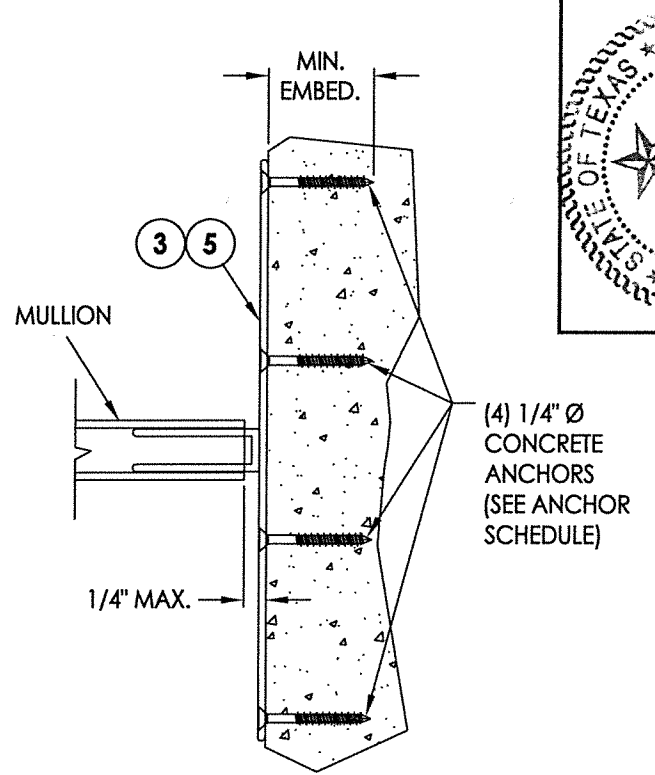
1 ANCHOR BRACKET DETAIL
Anchor to 2x Buck



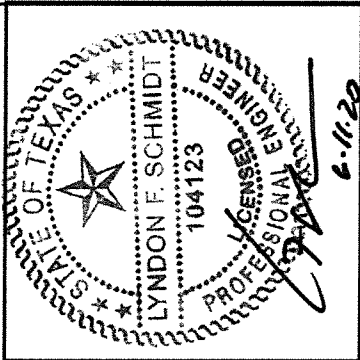
2 ANCHOR BRACKET DETAIL
Anchor to Steel Stud



3 ANCHOR BRACKET DETAIL
Anchor to Masonry thru 1x Buck



4 ANCHOR BRACKET DETAIL
Anchor Direct to Masonry

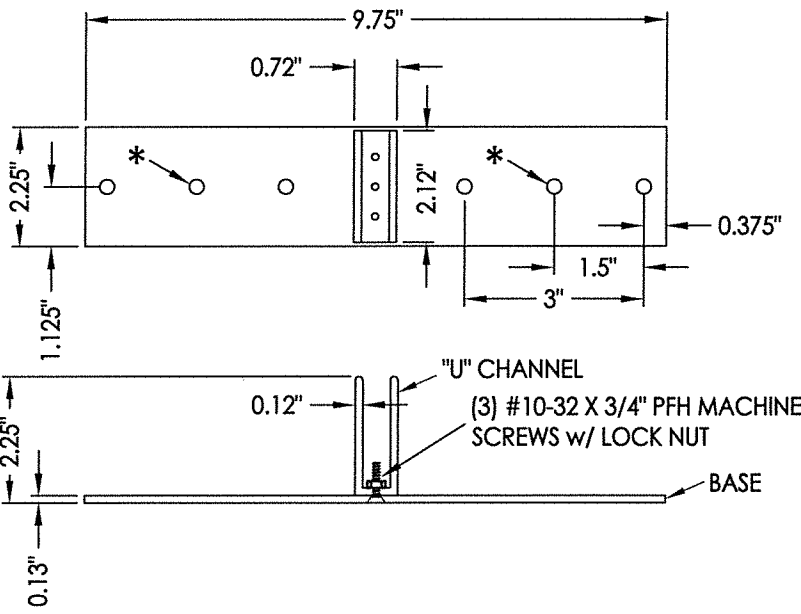


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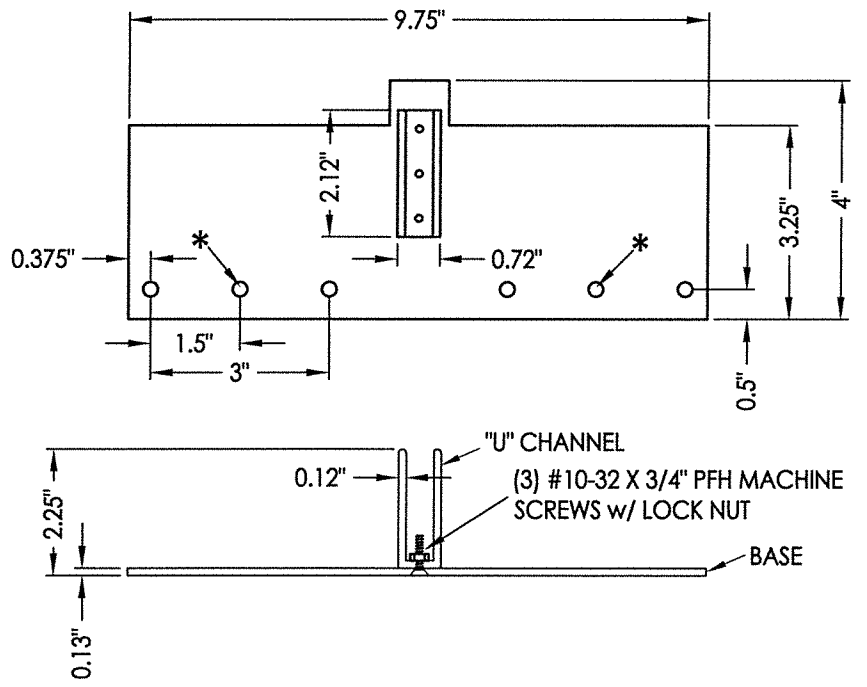
- Notes:
- Refer to individual window product approval for fabrication and installation requirements, including glazing details, frame reinforcement and anchor specifications.
 - Mullion bracket anchoring details shown may be used at either end of mullion.

MULLION ANCHOR BRACKET ANCHOR SCHEDULE				
ANCHOR	SUBSTRATE	EMBEDMENT (MIN.)	EDGE DISTANCE (MIN.)	CENTER-TO-CENTER SPACING (MIN.)
#10 PFH WOOD SCREW	WOOD	1-3/8"	1"	1-1/4"
#10-16 SELF-DRILLING SHEET METAL SCREW	STEEL	A MIN. OF 3 THREADS SHALL PROTRUDE COMPLETELY THROUGH THE STEEL SUBSTRATE	1"	1-1/4"
1/4" Ø PFH HILTI KWIK-CON II+	HOLLOW BLOCK	1-1/4"	2-1/2"	3"
	CONCRETE	1-1/4"	2-1/2"	3"

WOOD FRAMING (S.G. >= 0.55)
STEEL CONFORMING TO ASTM A653, 16 GA., 0.060" MIN. THICKNESS (Fy = 33,000 PSI, Fu = 45,000 PSI)
SHEET METAL SCREWS (SAE GRADE 5 MIN.): HILTI KWIK-FLEX or ELCO DRIL-FLEX
CONCRETE CONFORMING TO ACI 301 (3,000 PSI MIN.) OR HOLLOW BLOCK CONFORMING TO ASTM C90



3 MASONRY OR WOOD/STEEL STUD ANCHOR BRACKET
BASE (6061-T6 ALUM.)
"U" CHANNEL (6063-T6 ALUM.)



5 MASONRY OR WOOD/STEEL STUD OFFSET ANCHOR BRACKET
BASE (6061-T6 ALUM.)
"U" CHANNEL (6063-T6 ALUM.)

*Holes indicated to be used for wood/steel stud installations only. Do not use for concrete screws.

PRODUCT:	ALUMINUM CLIPPED MULLION
PART OR ASSEMBLY:	ANCHOR BRACKET DETAILS & CROSS SECTIONS
DATE:	11/25/14
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4388
SHEET	4 OF 4