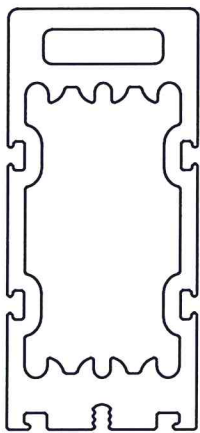




4175
Extruded Aluminum
Vertical Clipped Structural Mullion

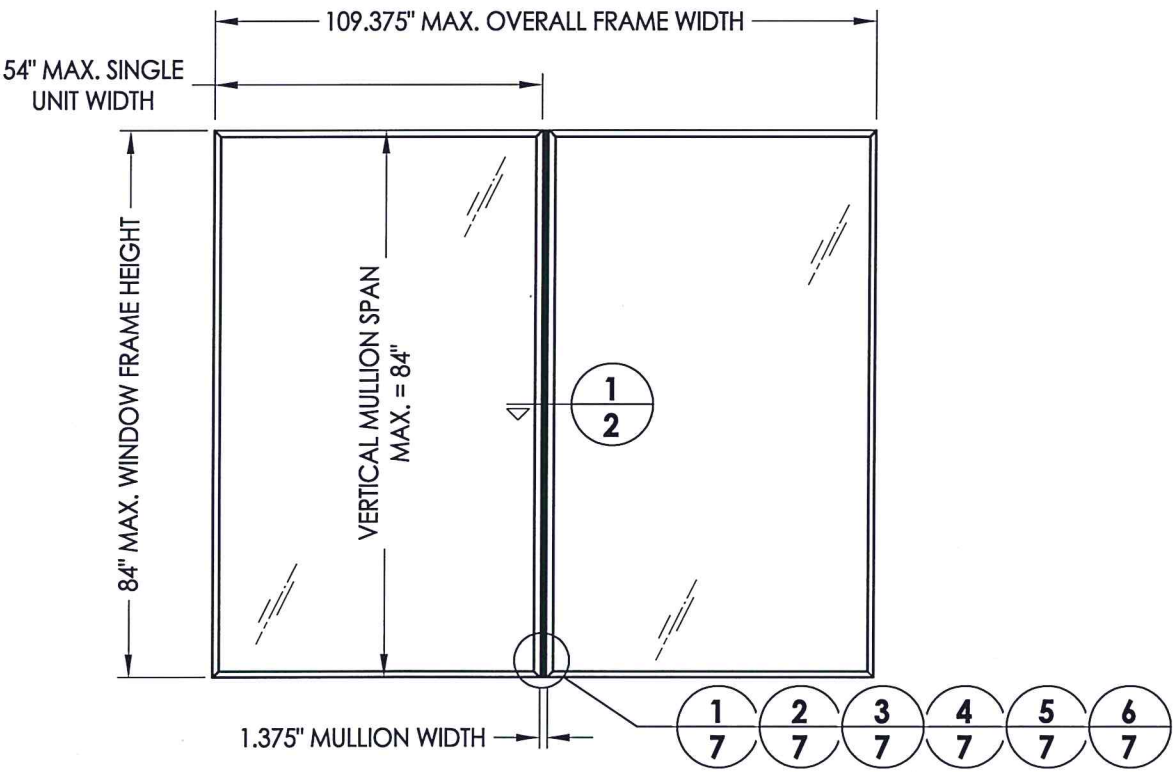


4175 Mullion

GENERAL NOTES

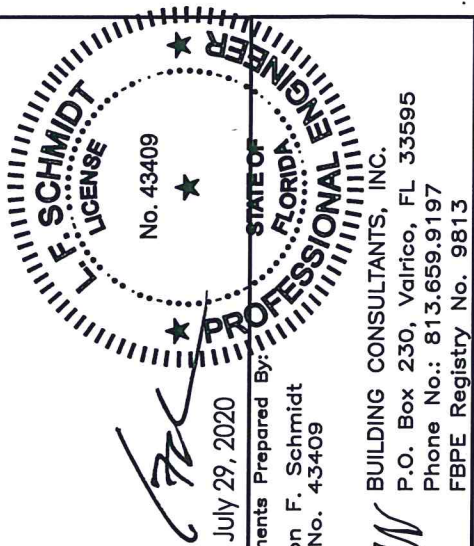
- 1. This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements, including the "High Velocity Hurricane Zone".
- 2. When used in the "HVHZ", this product (if mulled together with "HVHZ" impact rated windows), complies with Section 1626 of the FBC and does not require an impact resistant covering.
- 3. Wood bucks by others, must be anchored properly to transfer loads to the structure and be reviewed by the Building Official.
- 4. 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.
- 5. 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.
- 6. Mullion anchor embedment to base material shall be beyond wall dressing or stucco.
- 7. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
- 8. Any conditions not covered in this evaluation are subject to separate engineering evaluation.
- 9. Aluminum components, including fasteners, shall meet the requirements of FBC Section 2003.

TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical elevations & general notes
2	Component details & cross sections
3	Design pressure tables (concrete installation)
4	Design pressure tables (concrete installation)
5	Design pressure tables (wood installation)
6	Design pressure tables (wood installation)
7	Anchor bracket details
8	Buck anchoring



MULLED WINDOW UNITS
(Twin unit shown, multiples also allowed)

See Sheets 3, 4, 5 & 6 for Design Pressure Ratings



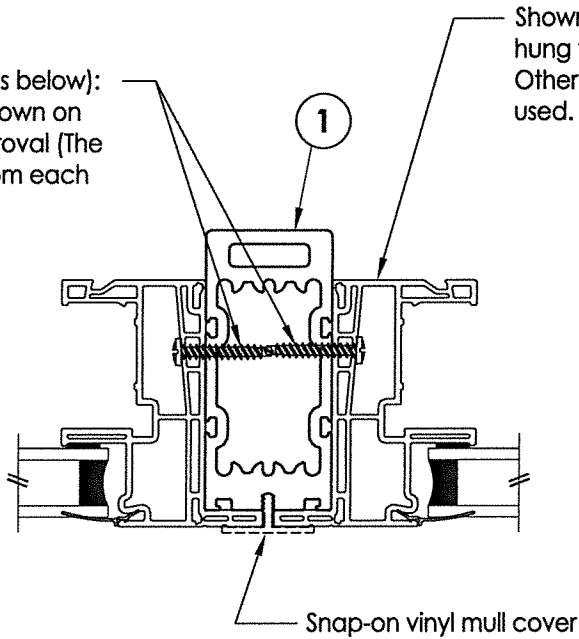
July 29, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

RW
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

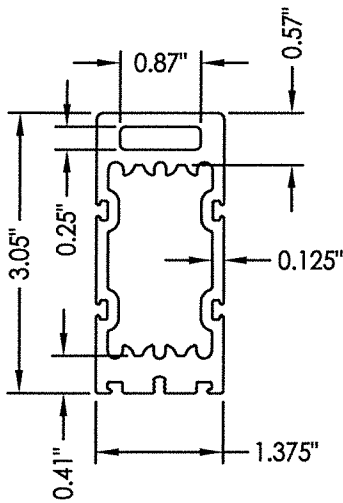
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PART OR ASSEMBLY:		TYPICAL ELEVATIONS & GENERAL NOTES	
REVISIONS			
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1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	JK
NO.		DATE	BY
DATE:		12/3/15	
SCALE:		N.T.S.	
DWG. BY:		JK	
CHK. BY:		LFS	
DRAWING NO.:		FL-15417.7	
SHEET		1 OF 8	

R:\Clients\Doers PERMANENTVA - Florida Product Approvals\FL-15417 Windows - Mullions\C - Drawings\FL 15417 (2020) R7\FL-15417.7-9.dwg, 2-4

#8 X 1" PH Self-Drilling SMS (See notes below):
Use the frame anchor spacing as shown on
the individual window product approval (The
min. required screw spacing is: 3" from each
end and 24" max. o.c. throughout).



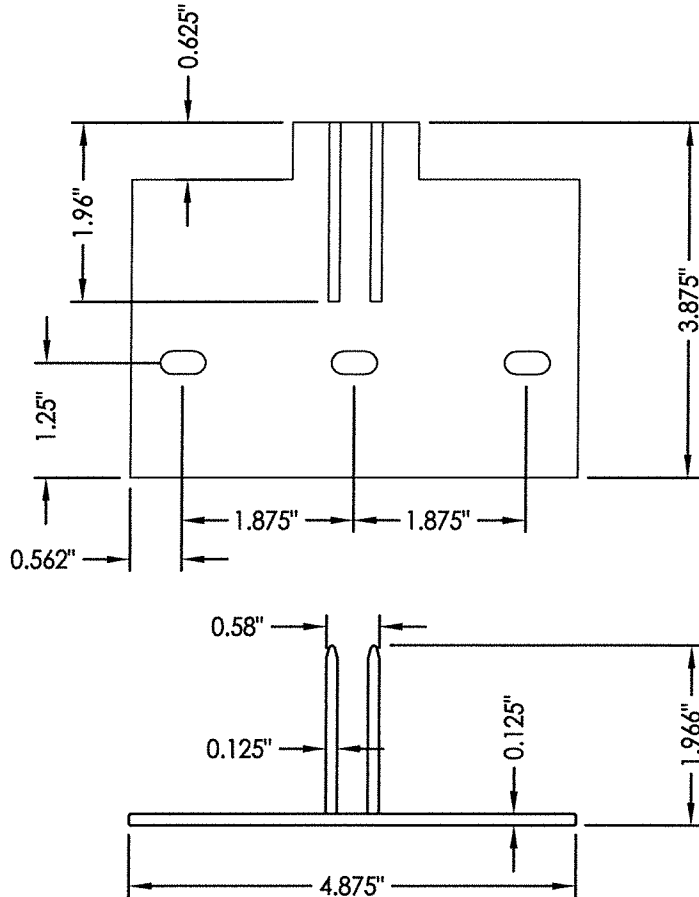
1 HORIZONTAL CROSS SECTION
2 4175 Mullion to Window Connection



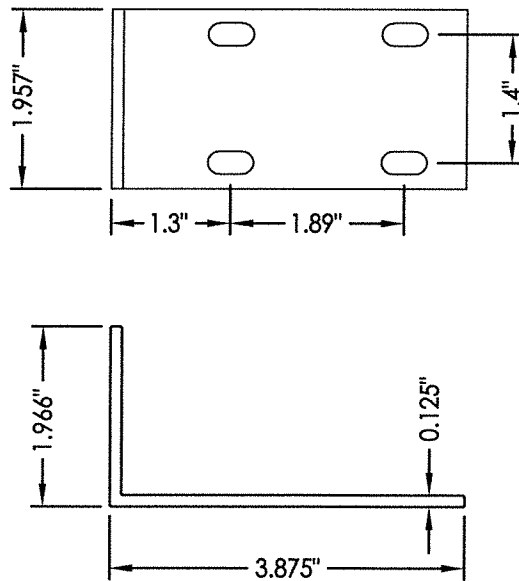
1 MULLION (4175)
6063-T6 ALUM

Notes:

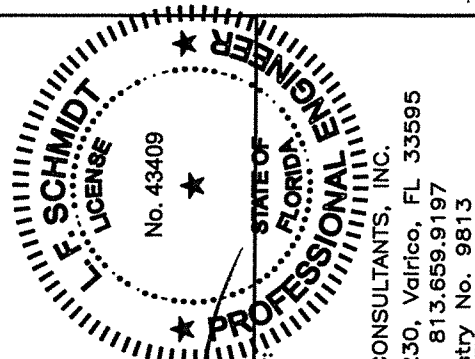
1. Refer to individual window product approval for fabrication and installation requirements, including glazing details, frame reinforcement and anchoring specifications.
2. Sheet metal screws (self-drilling) shall have a minimum of 3 threads protrude completely through the mullion frame. Maintain a min. 1/2" edge distance.



5 MULLION ANCHOR BRACKET (3419)
6063-T6 ALUM



6 MULLION ANCHOR BRACKET (3418)
6063-T6 ALUM



July 29, 2020

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FBPE Registry No. 9813

PRODUCT:		CLIPPED MULLION	
PART OR ASSEMBLY:		COMPONENT DETAILS & CROSS SECTIONS	
REVISIONS			
NO.	DATE	DESCRIPTION	BY
2	7/29/20	UPDATE TO 7TH ED (2020) FBC	LFS
1	9/26/17	UPDATE TO 6TH ED. (2017) FBC	JK
DATE: 12/3/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-15417.7			
SHEET 2 OF 8			

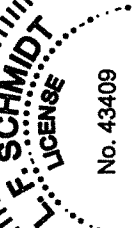
Diagram showing the heating element assembly. Callout 1 points to the heating element, and callout 5 points to the electrical connection terminal.

(3) Concrete Anchors required

4175 MULLION		DESIGN PRESSURE (PSF)						
		MAX. OVERALL FRAME WIDTH						
		48"	62"	74"	86"	98"	104"	109.375"
MAX. MULLION SPAN	84"	45	36	32	28	26	25	25
	80"	47	38	34	30	28	27	26
	76"	50	41	36	33	30	30	29
	72"	53	44	39	35	33	32	31
	69"	56	46	41	38	35	34	34
	66"	59	49	44	40	38	37	36
	63"	63	52	47	43	41	40	39
	60"	67	56	50	46	44	43	43
	54"	77	65	59	55	53	53	53
	48"	80	77	71	68	67	67	67

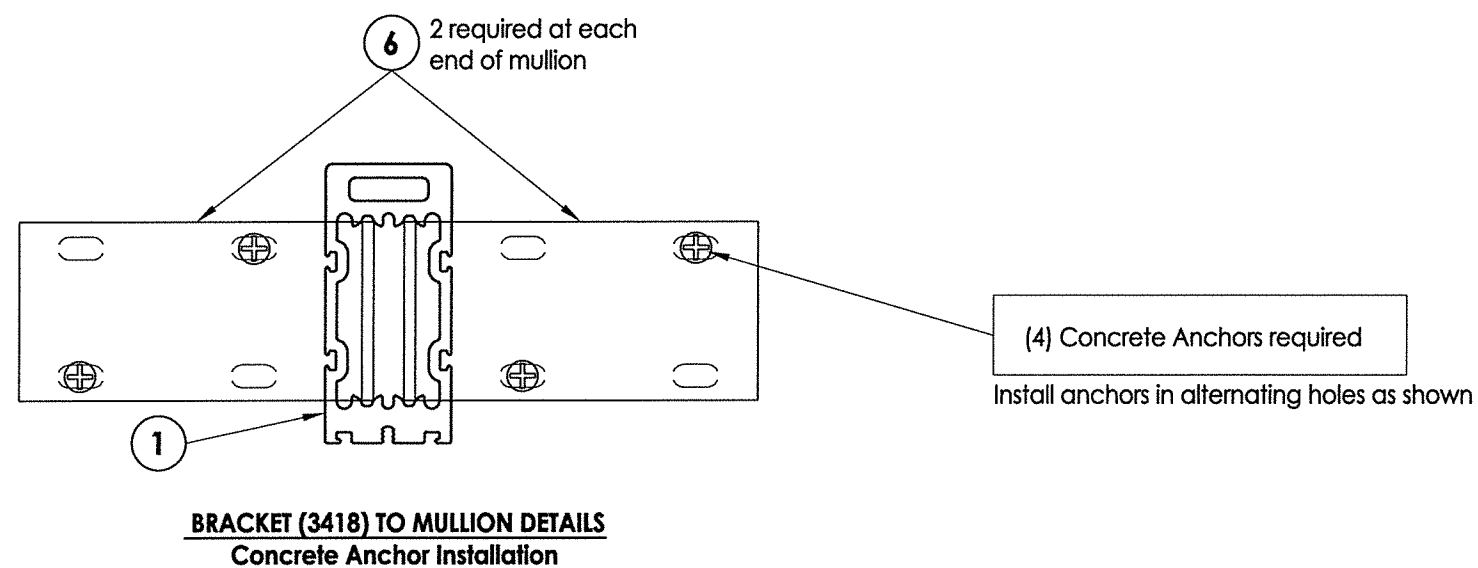
1. Design pressure tables are applicable only for the anchor bracket and anchors specified on this sheet. Refer to Sheet 7 for cross section details.

DATE: 12/3/15		PRODUCT:		CLIPPED MULLION
SCALE: N.T.S.				
DWG. BY: JK				
CHK. BY: LFS				
DRAWING NO.: FL-15417.7				
SHEET 3 OF 8		PART OR ASSEMBLY:		DESIGN PRESSURE TABLES (CONCRETE INSTALLATION)
		LFS		
		UPDATE TO 7TH ED. (2020) FBC		
		UPDATE TO 6TH ED. (2017) FBC		
		JK		
		NO. DATE		BY


July 29, 2020
Documents Prepared By:
Lyndon F. Schmidt
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P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

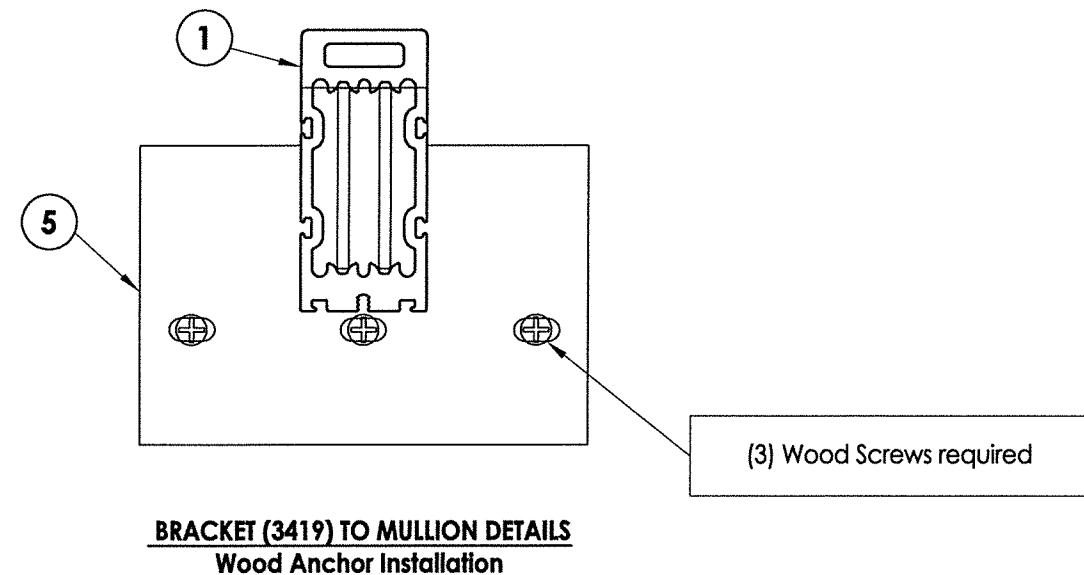
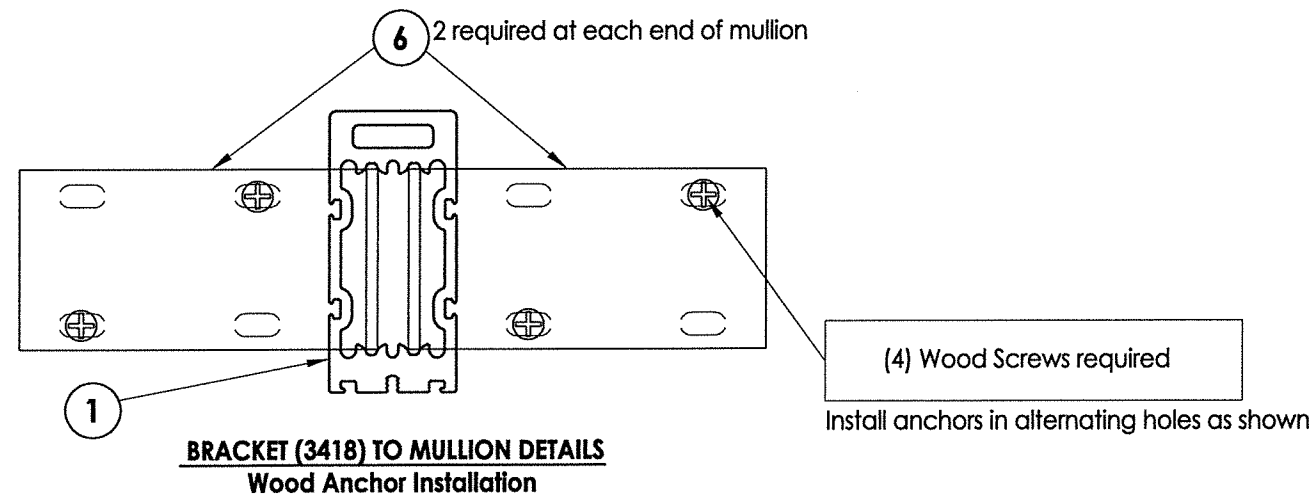
4175 MULLION		DESIGN PRESSURE (PSF)						
		MAX. OVERALL FRAME WIDTH						
		48"	62"	74"	86"	98"	104"	109.375"
MAX. MULLION SPAN	84"	71	58	51	46	41	38	36
	80"	76	62	54	49	45	44	42
	76"	80	66	58	53	49	47	46
	72"	80	71	62	57	53	52	50
	69"	80	74	66	60	57	55	54
	66"	80	79	70	65	61	59	58
	63"	80	80	75	69	65	64	63
	60"	80	80	80	75	71	70	69
	54"	80	80	80	80	80	80	80
	48"	80	80	80	80	80	80	80



1. Design pressure tables are applicable only for the anchor bracket and anchors specified on this sheet. Refer to Sheet 7 for cross section details.

		Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		July 29, 2020	
		PRODUCT:			
		CLIPPED MULLION			
		PART OR ASSEMBLY:			
		DESIGN PRESSURE TABLES (CONCRETE INSTALLATION)			
				LFS	
				JK	
				BY	
				REVISIONS	
DATE: 12/3/15					
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.: FL-15417.7					
SHEET 4 OF 8					

4175 MULLION		DESIGN PRESSURE (PSF)						
		MAX. OVERALL FRAME WIDTH						
		48"	62"	74"	86"	98"	104"	109.375"
MAX. MULLION SPAN	84"	71	58	51	46	41	38	36
	80"	76	62	54	49	45	44	42
	76"	80	66	58	53	49	47	46
	72"	80	71	62	57	53	52	50
	69"	80	74	66	60	57	55	54
	66"	80	79	70	65	61	59	58
	63"	80	80	75	69	65	64	63
	60"	80	80	80	75	71	70	69
	54"	80	80	80	80	80	80	80
	48"	80	80	80	80	80	80	80



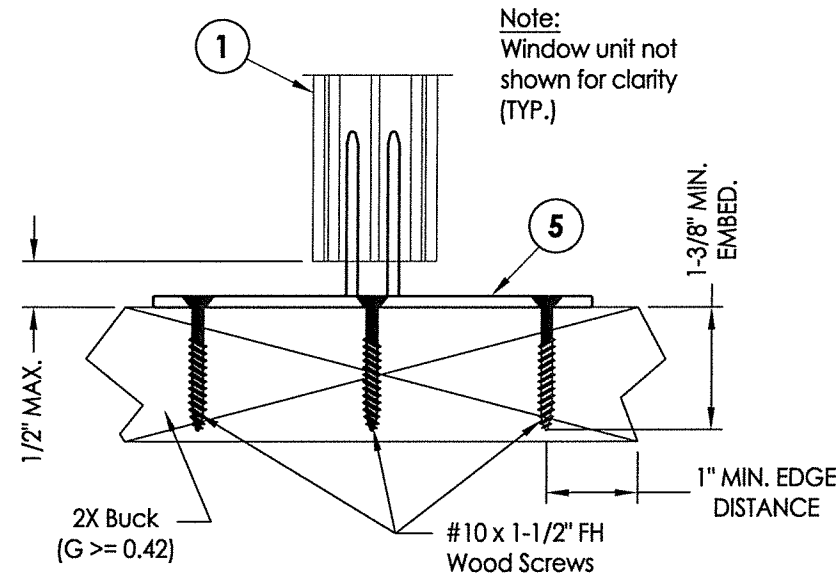
1. Design pressure tables are applicable only for the anchor bracket and anchors specified on this sheet. Refer to Sheet 7 for cross section details.

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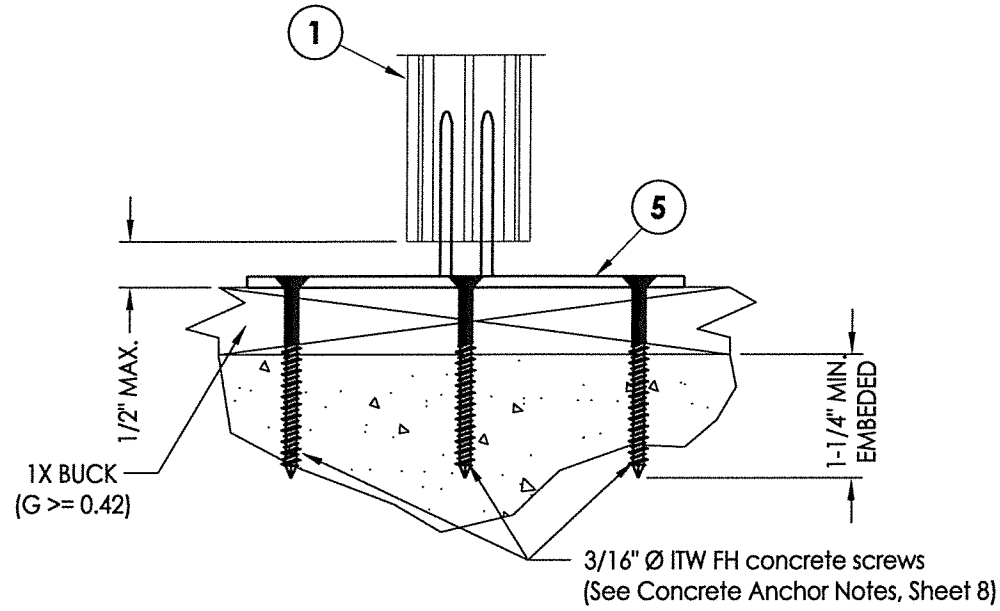
4175 MULLION		DESIGN PRESSURE (PSF)						
		MAX. OVERALL FRAME WIDTH						
		48"	62"	74"	86"	98"	104"	109.375"
MAX. MULLION SPAN	84"	80	63	54	47	41	38	36
	80"	80	74	63	54	48	44	42
	76"	80	80	74	63	55	52	49
	72"	80	80	80	74	65	61	58
	69"	80	80	80	80	74	70	66
	66"	80	80	80	80	80	80	76
	63"	80	80	80	80	80	80	80
	60"	80	80	80	80	80	80	80
	54"	80	80	80	80	80	80	80
	48"	80	80	80	80	80	80	80



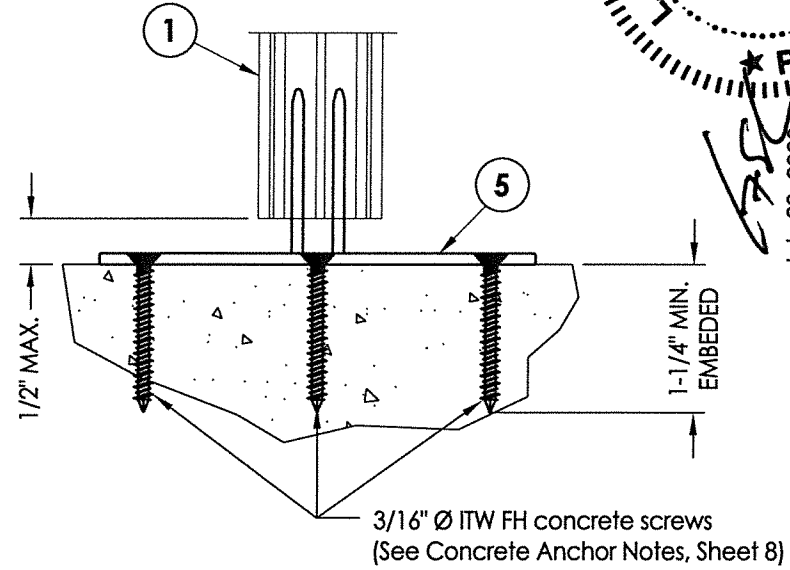
- |  | | <p>FLORIDA PROFESSIONAL ENGINEER</p> <p>No. 43409</p> | |
|--|---------|--|-----|
| <p style="font-size: 2em; font-weight: bold; transform: rotate(-45deg); position: absolute; left: 50%; top: 50%;">R.W.</p> | | <p>BUILDING CONSULTANTS, INC.</p> <p>P.O. Box 230, Valrico, FL 33595</p> <p>Phone No.: 813.659.9197</p> <p>FBPE Registry No. 9813</p> | |
| <p>July 29, 2020</p> | | <p>Documents Prepared By:</p> <p>Lyndon F. Schmidt</p> <p>P.E. No. 43409</p> | |
| <p>PRODUCT:</p> | | <p>CLIPPED MULLION</p> | |
| <p>PART OR ASSEMBLY:</p> | | <p>DESIGN PRESSURE TABLES
(WOOD INSTALLATION)</p> | |
| NO. | DATE | REVISIONS | |
| 2 | 7/29/20 | UPDATE TO 7TH ED. (2020) FBC | LFS |
| 1 | 9/26/17 | UPDATE TO 6TH ED. (2017) FBC | JK |
| | | | BY |
| <p>DRAWING NO.:</p> <p style="font-size: 1.2em;">FL-15417.7</p> | | | |
| <p>SHEET 6 OF 8</p> | | | |



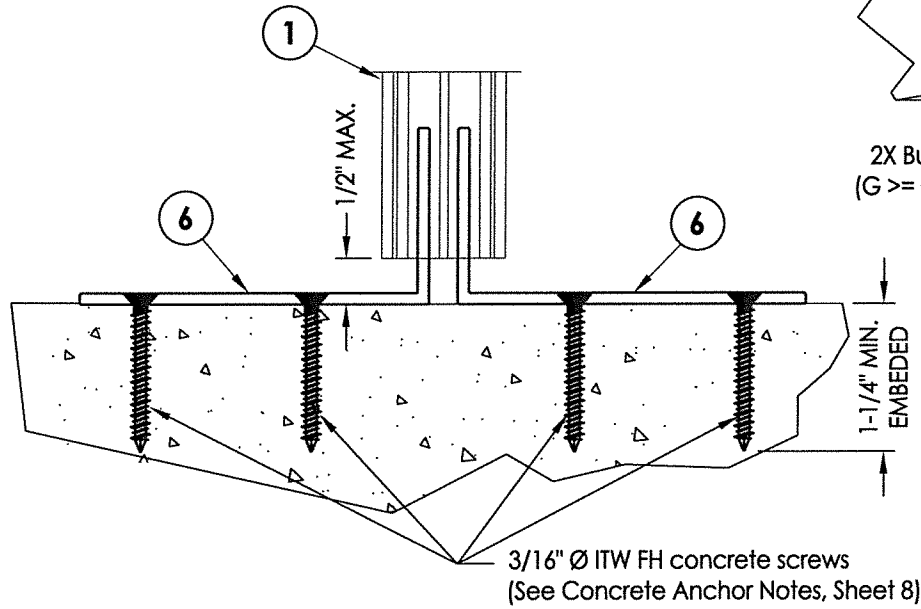
1 WOOD ANCHOR BRACKET DETAIL
7 Anchor to 2x Buck



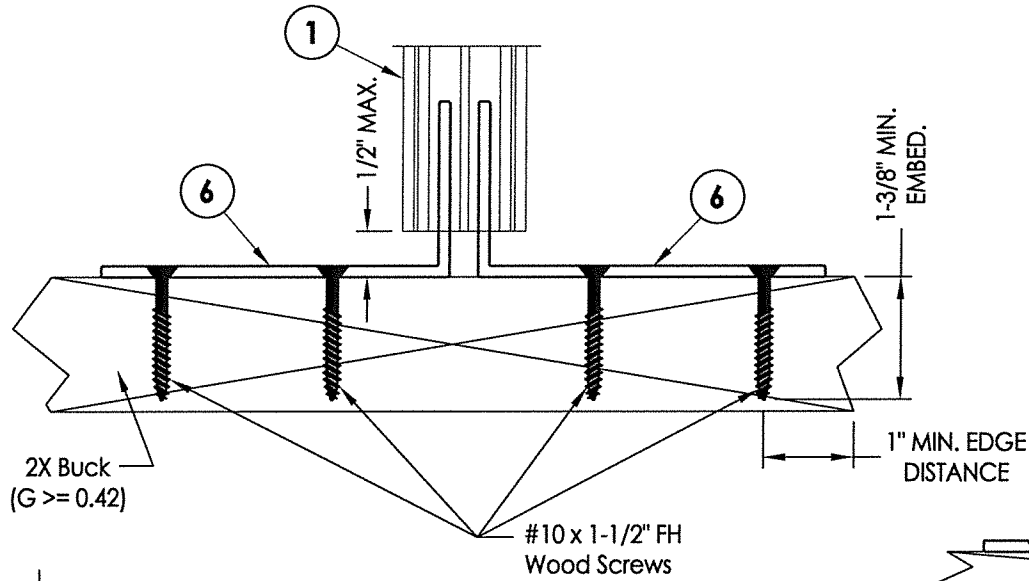
2 CONCRETE ANCHOR BRACKET DETAIL
7 Anchor to Masonry thru 1x Buck



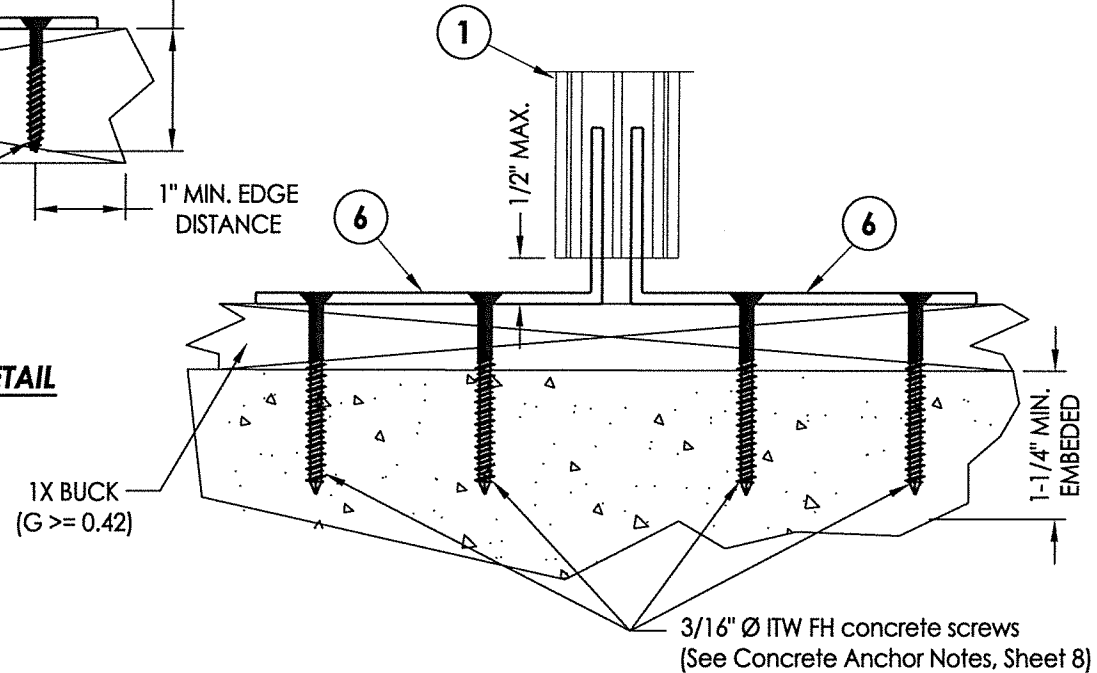
3 CONCRETE ANCHOR BRACKET DETAIL
7 Anchor Direct to Masonry



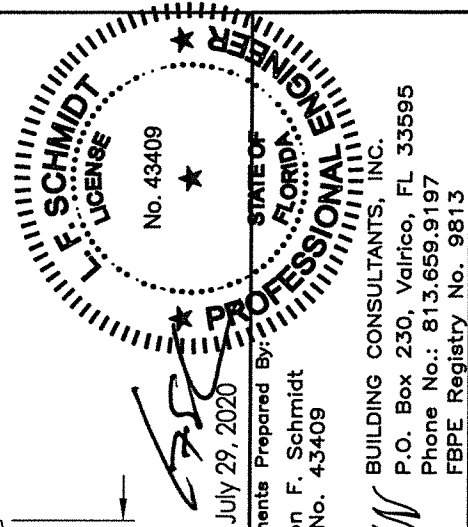
4 CONCRETE ANCHOR BRACKET DETAIL
7 Anchor Direct to Masonry



5 WOOD ANCHOR BRACKET DETAIL
7 Anchor to 2x Buck



6 CONCRETE ANCHOR BRACKET DETAIL
7 Anchor to Masonry thru 1x Buck



Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

PRODUCT:		CLIPPED MULLION	
PART OR ASSEMBLY:		ANCHOR BRACKET DETAILS	
DATE		REVISIONS	
NO.		DATE	
BY		DATE	
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