



6580/4175 Extruded Aluminum Horizontal & Vertical Clipped Structural Mullions

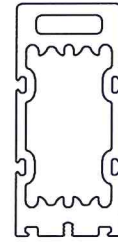
GENERAL NOTES

1. This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements, excluding the "High Velocity Hurricane Zone".
2. When used in areas requiring wind borne debris protection, this product (if mullied together with impact rated windows) does not require protection from an impact resistant covering when used in Wind Zones 1, 2 and 3 as defined by ASTM E 1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
3. In Wind Zone 4 as defined by ASTM E 1996, this product must be protected with an impact resistant covering complying with FBC Sections 1609.1.2 & R301.2.1.2.
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. Any conditions not covered in this evaluation are subject to separate engineering evaluation.
8. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.

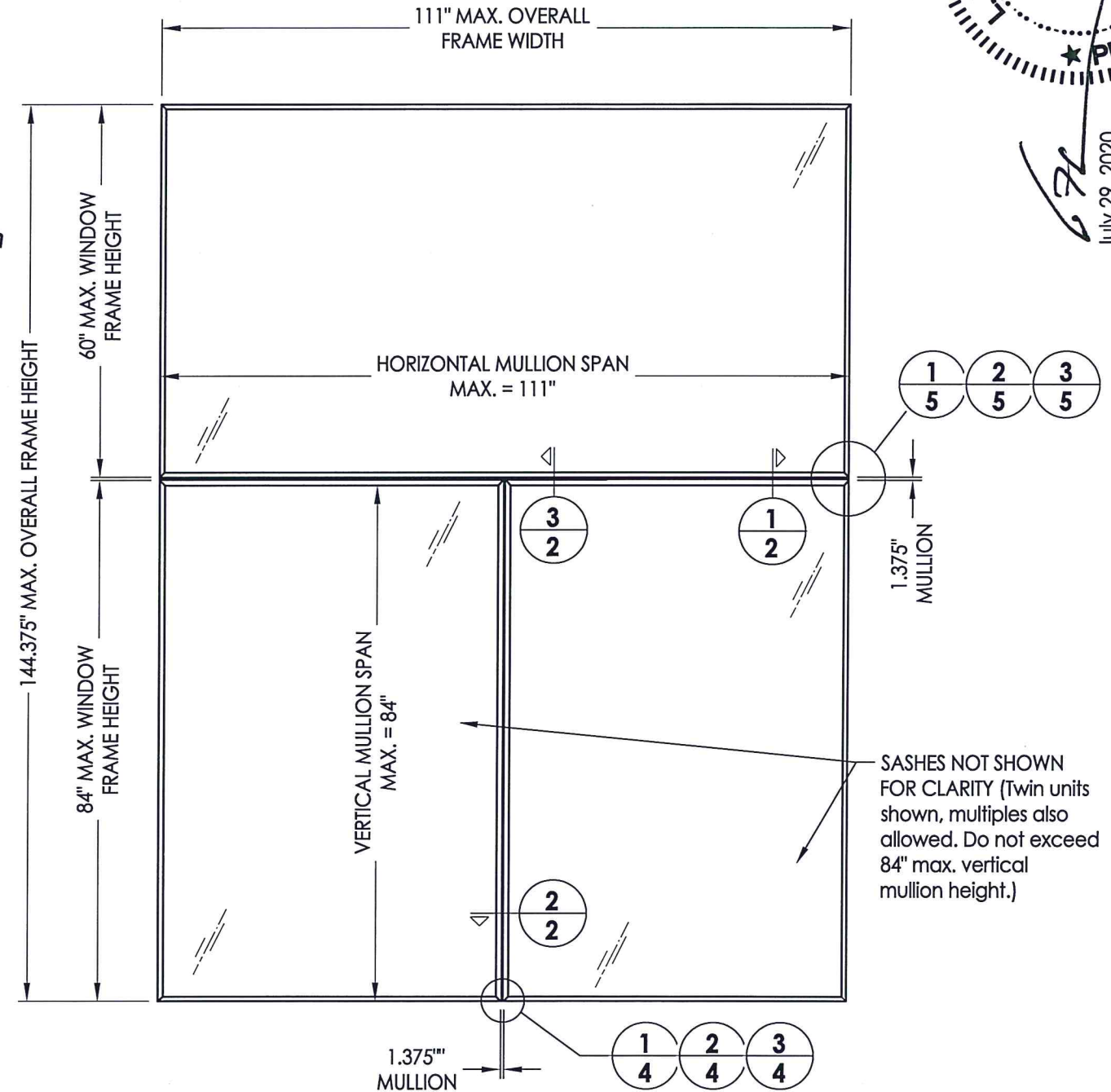
TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical elevations & general notes
2	Component details & cross sections
3	Design pressure table
4	Anchor bracket details (Vertical Mullion)
5	Anchor bracket details (Horizontal Mullion)
6	Buck anchoring



6580 Horizontal Mullion

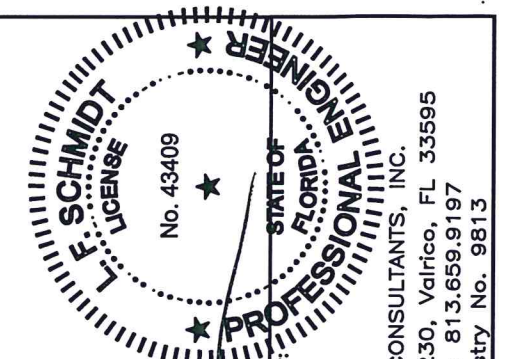


4175 Vertical Mullion



MULLED TRANSOM OVER TWIN WINDOW UNITS

See Sheets 3 for Design Pressure Ratings

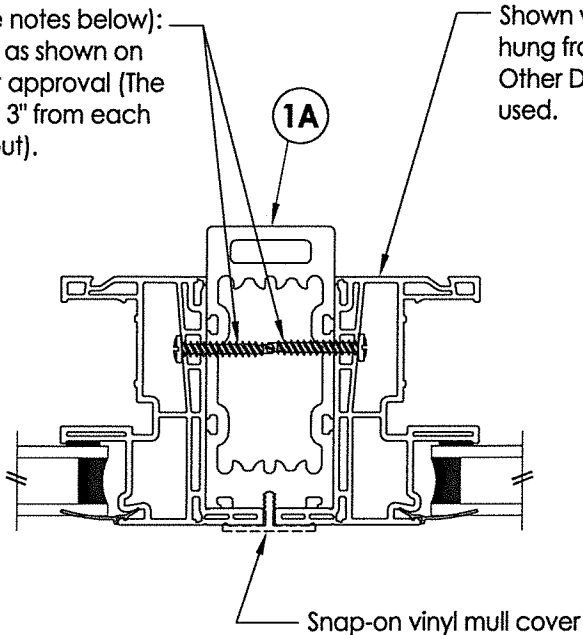


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July 29, 2020
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PRODUCT:		CLIPPED MULLION	
PART OR ASSEMBLY:		TYPICAL ELEVATIONS & GENERAL NOTES	
NO.		DATE	REVISIONS
1	7/29/20	UPDATE TO 7TH ED (2020) FBC	LFS
DATE:		10/24/19	
SCALE:		N.T.S.	
DWG. BY:		RW	
CHK. BY:		LFS	
DRAWING NO.:		FL-15417.12	
SHEET		1	OF 6

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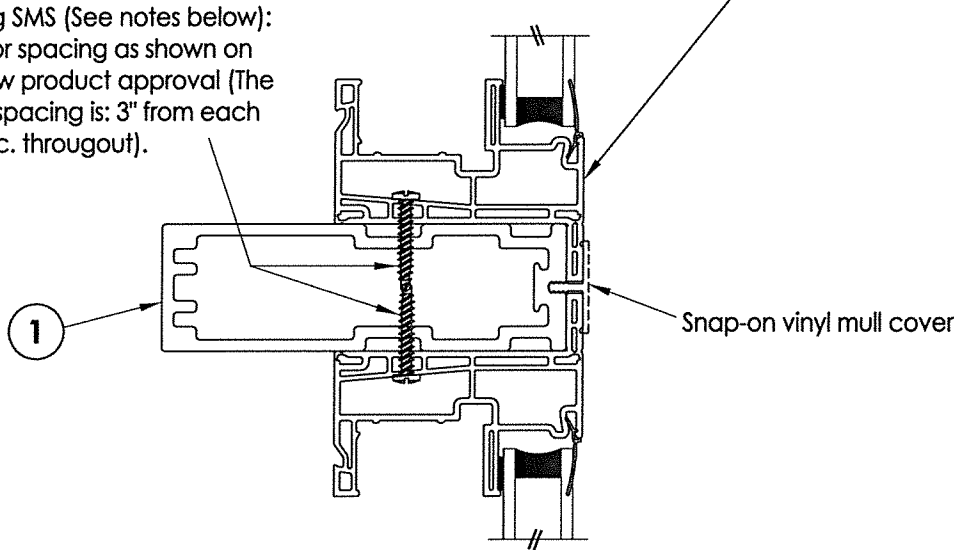
#8 X 1" PH Self-Drilling SMS (See notes below):
Use the frame anchor spacing as shown on
the individual window product approval (The
min. required screw spacing is: 3" from each
end and 24" max. o.c. throughout).



1
2 **VERTICAL CROSS SECTION**
4175 Mullion to Window Connection

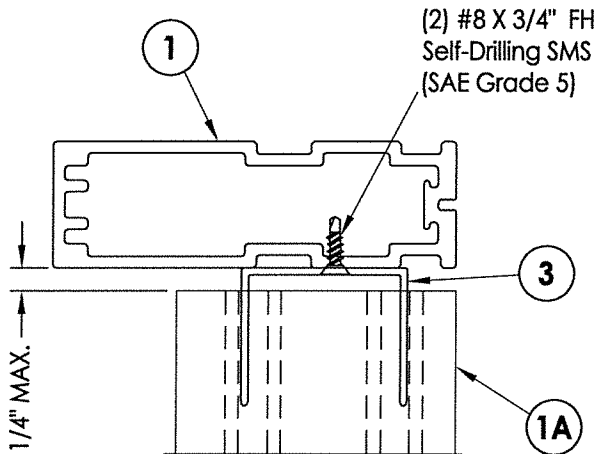
Shown with Doers Series 4000 single
hung frame under separate approval.
Other Doers approved frames may be
used.

#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).

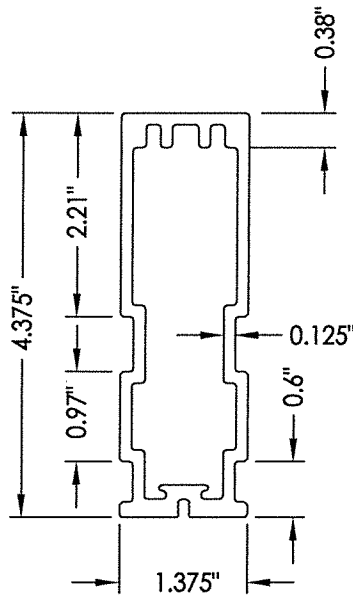


2
2 **HORIZONTAL CROSS SECTION**
6580 Mullion to Window Connection

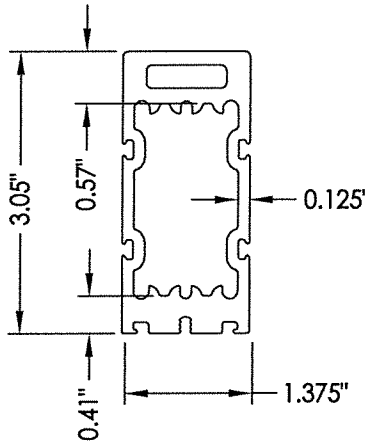
Shown with Doers Series 4000 single
hung frame under separate approval.
Other Doers approved frames may be
used.



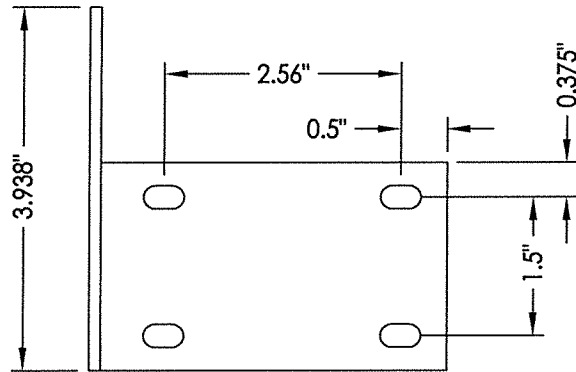
3
2 **VERTICAL CROSS SECTION**
6580/4175 Mullion-to-mullion connection detail



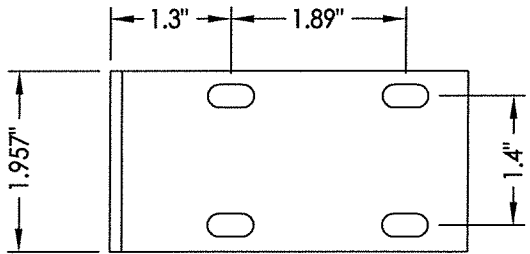
1 **MULLION (6580)**
6063-T6 ALUM



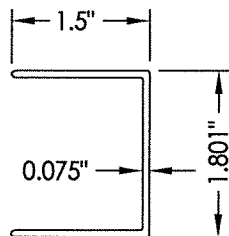
1A **MULLION (4175)**
6063-T6 ALUM



2 **MULLION ANCHOR BRACKET (F-6150)**
6063-T6 ALUM

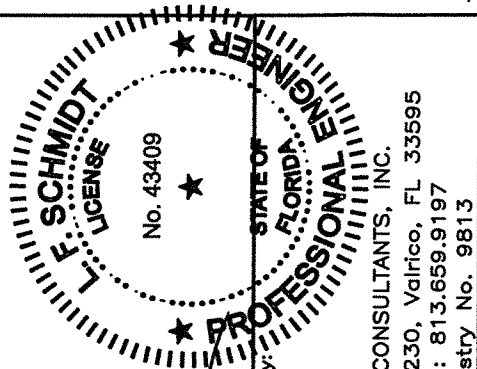


2A **MULLION ANCHOR BRACKET (3418)**
6063-T6 ALUM



3 **MULLION-TO-MULLION CLIP (3314)**
6063-T6 ALUM (1.105" wide)

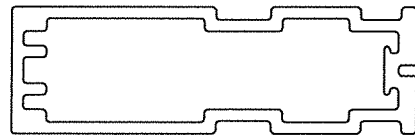
- Notes:
- Refer to individual window product approval for fabrication and installation requirements, including glazing details, frame reinforcement and anchoring specifications.
 - Sheet metal screws (self-drilling) shall have a minimum of 3 threads protrude completely through the mullion frame. Maintain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



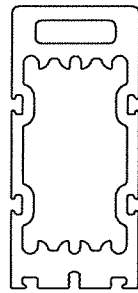
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PRODUCT:		PART OR ASSEMBLY:	
CLIPPED MULLION		COMPONENT DETAILS & CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
1	7/29/20	LFS	UPDATE TO 7TH ED (2020) FBC
DATE: 10/24/19			
SCALE: N.T.S.			
DWG. BY: RW			
CHK. BY: LFS			
DRAWING NO.: FL-15417.12			
SHEET 2 OF 6			

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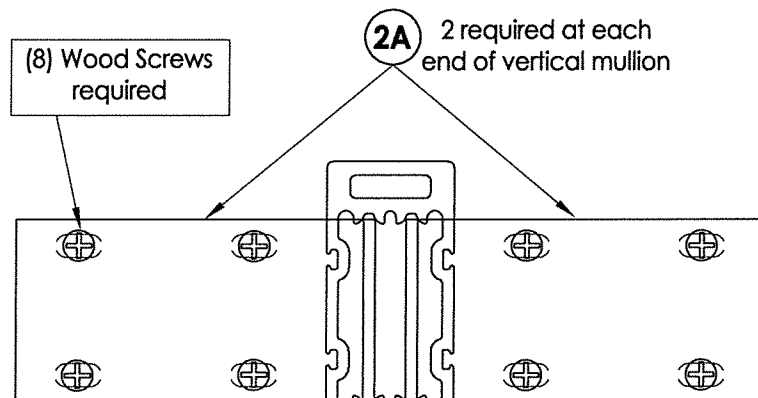
6580
HORIZONTAL MULLION



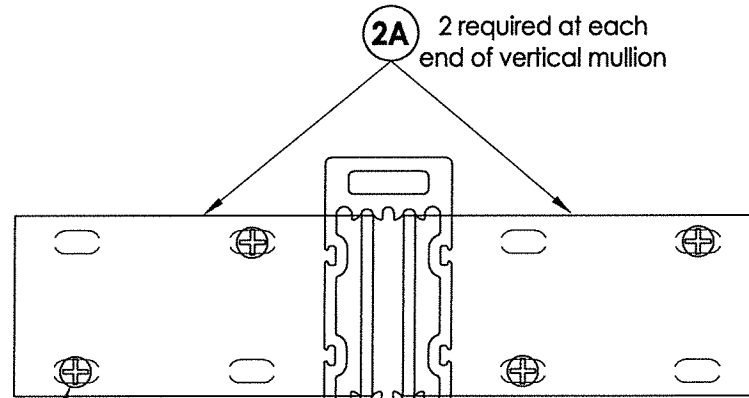
4175
VERTICAL MULLION

6580 MULLION		DESIGN PRESSURE (PSF)							
		MAX. OVERALL FRAME HEIGHT							
		78"	84"	92"	100"	108"	116"	124"	144.375"
MAX. HORIZONTAL MULLION SPAN	111"	26	24	22	20	19	18	16	N/A
	104"	32	30	27	25	23	21	20	17
	96"	41	38	35	32	29	27	26	22
	90"	50	46	42	39	36	33	31	27
	84"	54	50	46	42	39	36	34	29
	78"	58	54	49	45	42	39	36	31
	72"	63	58	53	49	45	42	39	34
	64"	71	66	60	55	51	47	44	38
	56"	80	75	69	63	58	54	51	43

N/A = NOT APPLICABLE

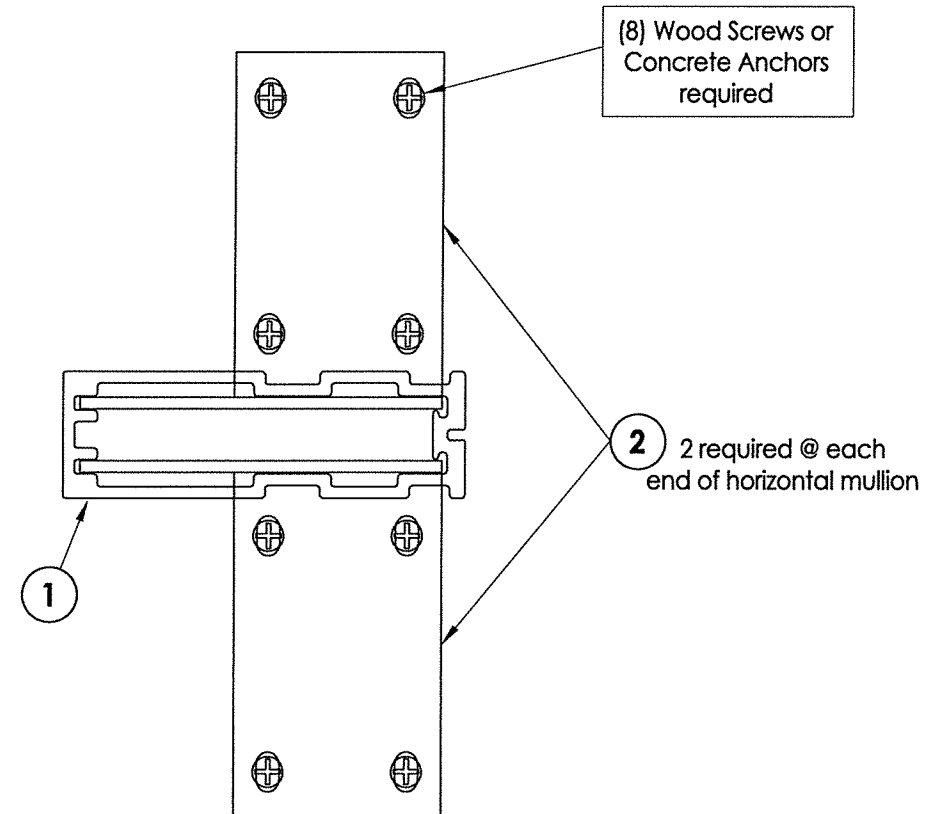


1A
BRACKET (3418) TO MULLION DETAILS
(WOOD SCREWS)



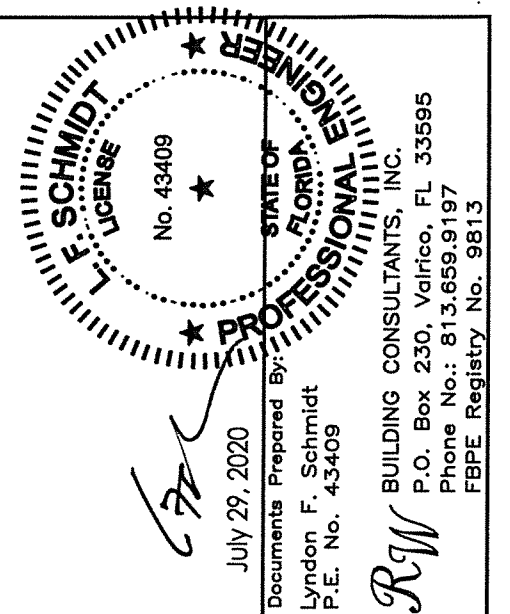
1A
BRACKET (3418) TO MULLION DETAILS
(CONCRETE ANCHORS)

(4) Concrete Anchors
required
Install anchors in alternating holes as shown



1
BRACKET (F-6150) TO MULLION DETAILS
(WOOD SCREWS OR CONCRETE ANCHORS)

- Notes:
- Design pressure table is applicable only for the anchor bracket and anchors specified on this sheet. Refer to Sheets 4 & 5 for cross section details.

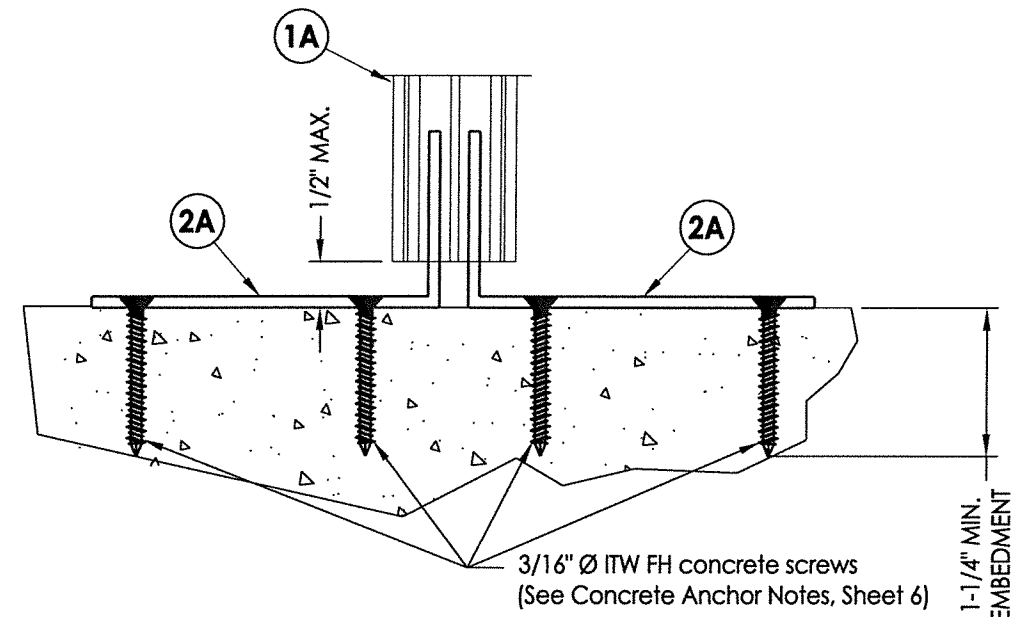


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PRODUCT:		CLIPPED MULLION		PART OR ASSEMBLY:		DESIGN PRESSURE TABLES	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
1	7/29/20						
DATE: 10/24/19		SCALE: N.T.S.		DWG. BY: RW		CHK. BY: LFS	
DRAWING NO.: FL-15417.12		SHEET 3 OF 6		REVISIONS		REVISIONS	



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June 29, 2020

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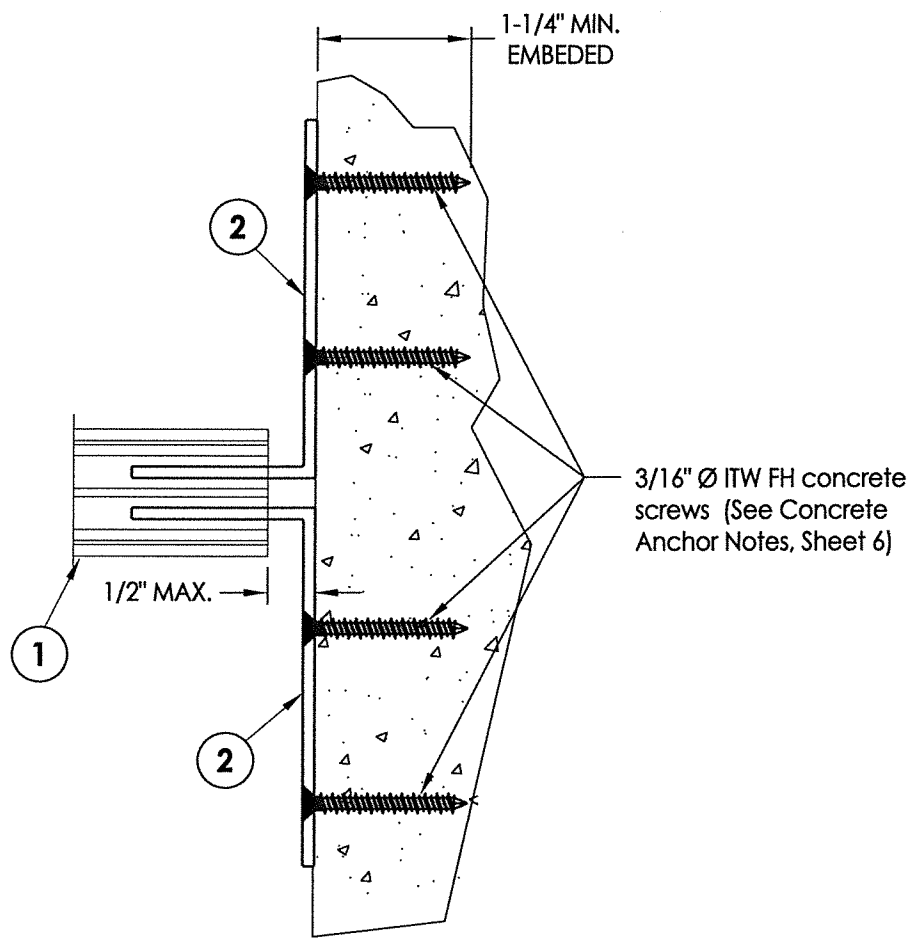
RW

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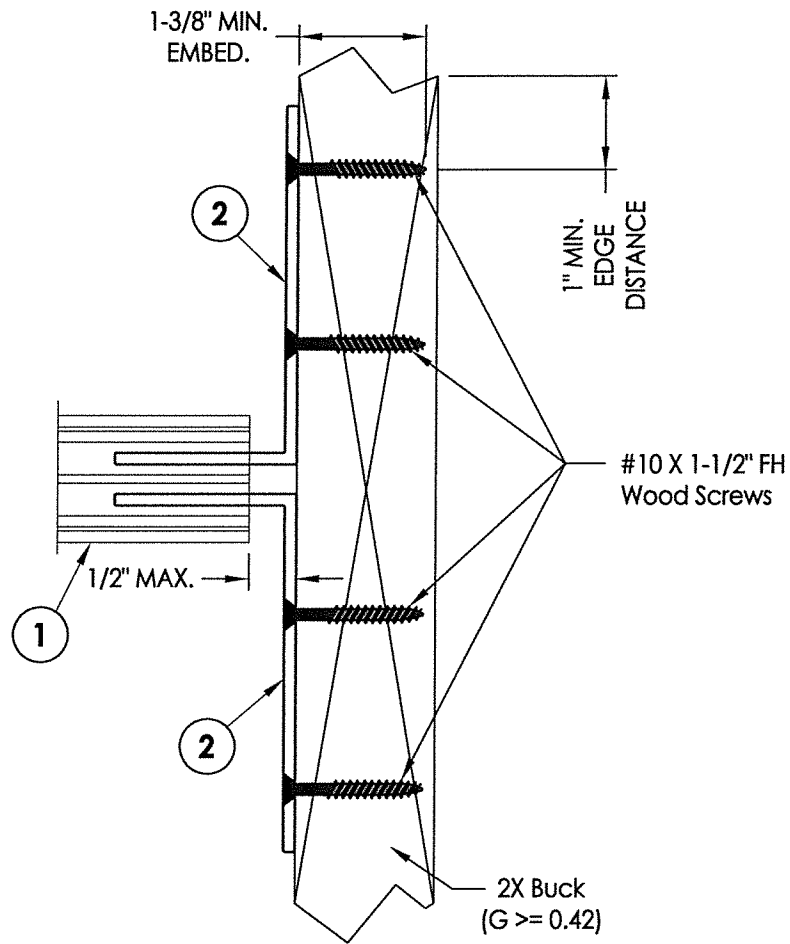
DATE: 10/24/19		PRODUCT:		CLIPPED MULLION
SCALE: N.T.S.				
DWG. BY: RW				
CHK. BY: LFS				
DRAWING NO.: FL-15417.12				
SHEET 4 OF 6		PART OR ASSEMBLY:		ANCHOR BRACKET DETAILS (VERTICAL MULLION)
		UPDATE TO 7TH ED (2020)		LFS
NO. 1		DATE		BY
REVISIONS				

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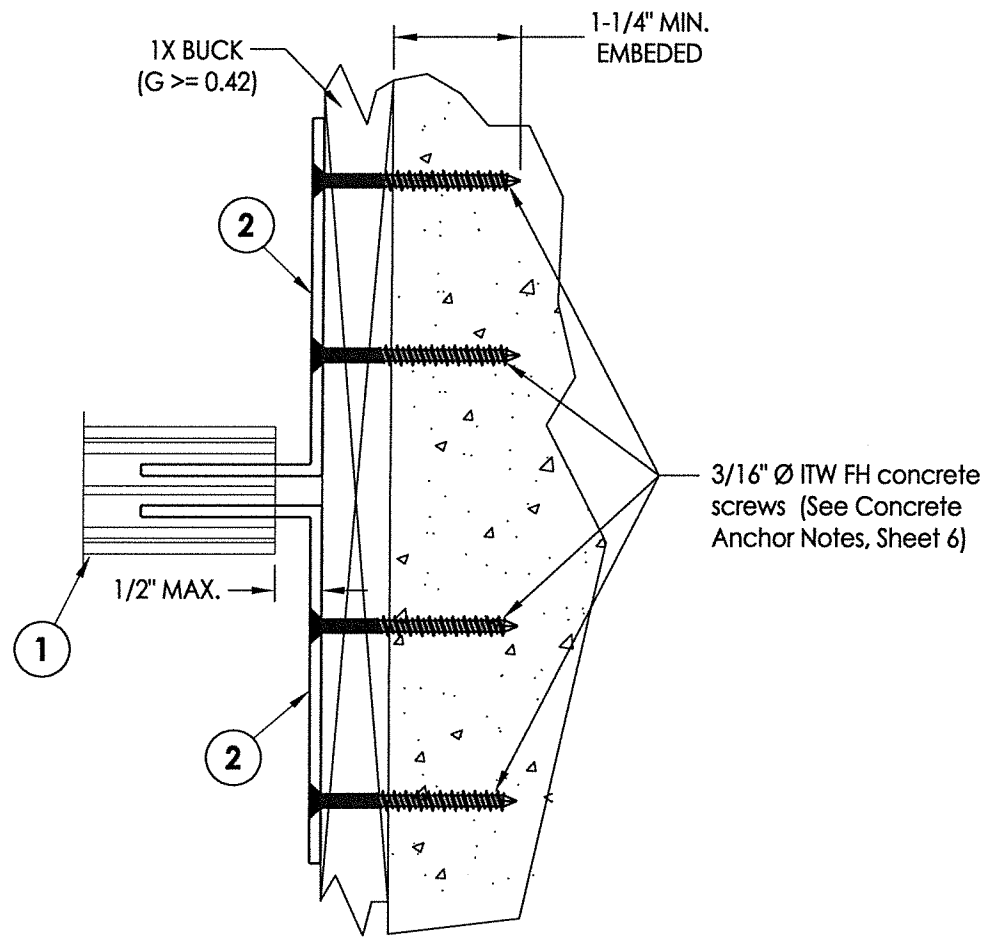
Note:
1. Window units not shown for clarity (TYP.)



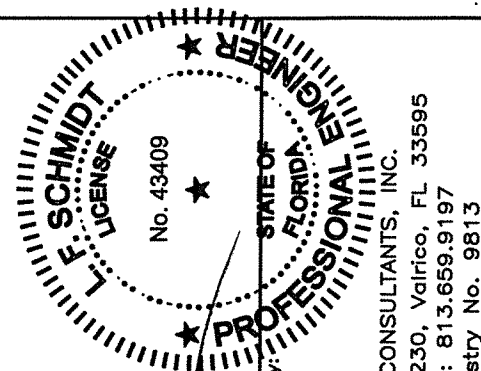
2 CONCRETE ANCHOR BRACKET DETAIL
5 Anchor Direct to Masonry



1 WOOD ANCHOR BRACKET DETAIL
5 Anchor to 2x Buck



3 CONCRETE ANCHOR BRACKET DETAIL
5 Anchor to 2x Buck



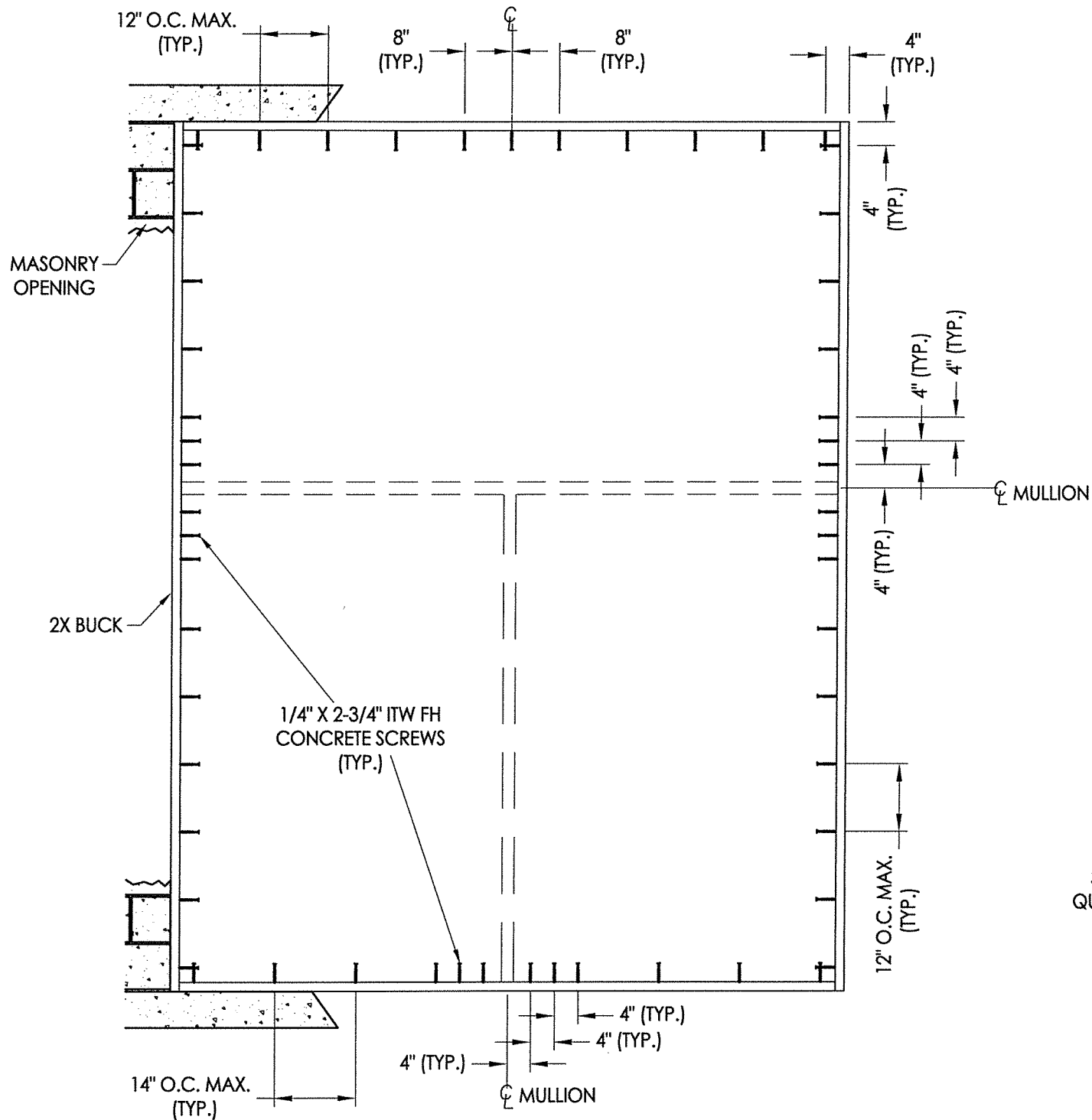
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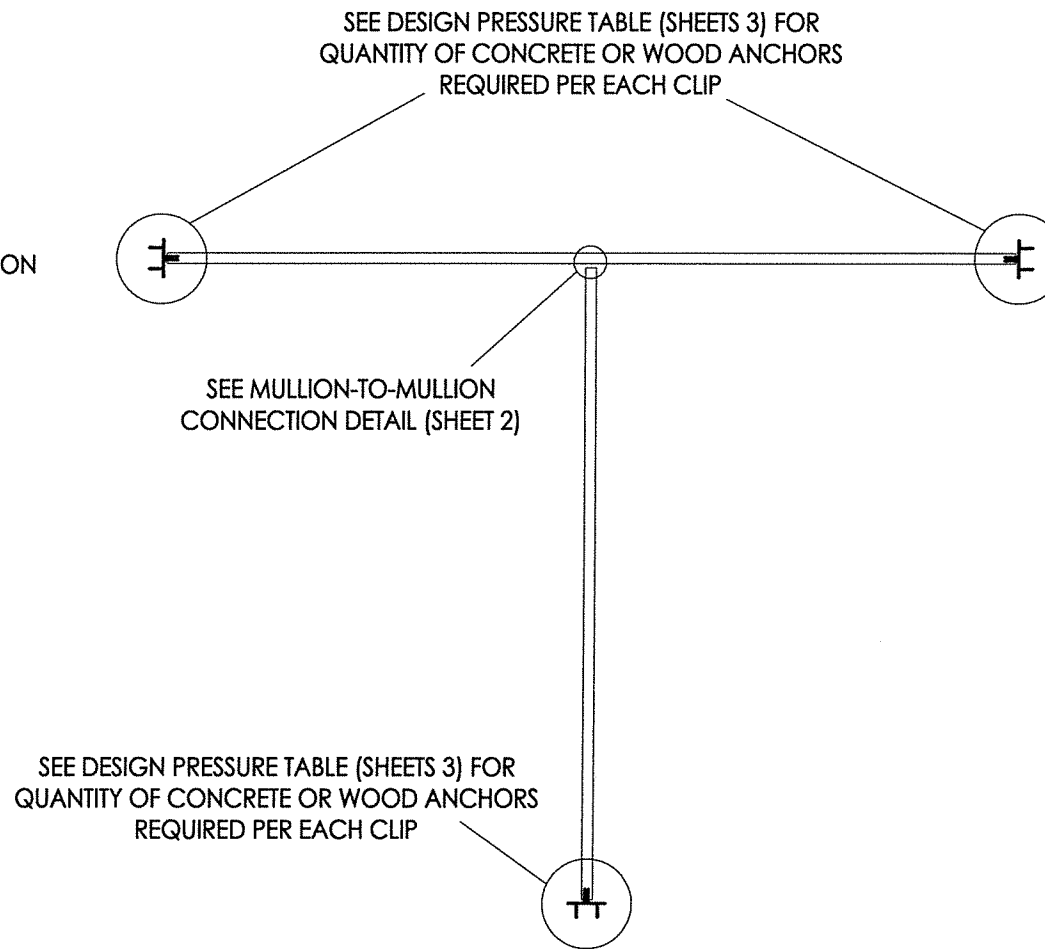
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PRODUCT:		CLIPPED MULLION	
PART OR ASSEMBLY:		ANCHOR BRACKET DETAILS (HORIZONTAL MULLION)	
NO.	DATE	LFS	BY
1	7/29/20	UPDATE TO 7TH ED (2020)	FBC
REVISIONS			
DATE: 10/24/19			
SCALE: N.T.S.			
DWG. BY: RW			
CHK. BY: LFS			
DRAWING NO.: FL-15417.12			
SHEET 5 OF 6			

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2X BUCK ANCHORING



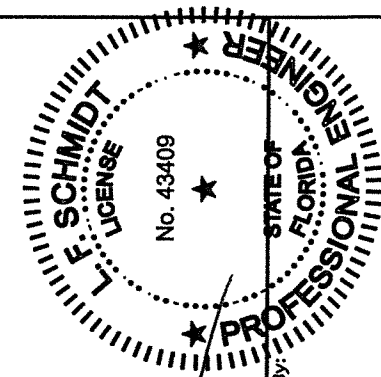
MULLION ANCHORING

CONCRETE ANCHOR NOTES:

1. Substitution of equal concrete anchors from a different supplier may have different edge distance and center distance requirements.
2. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints. If concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimensions are not exceeded.
3. Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	3/16"	1-1/4"	2"	1-1/2"
ITW TAPCON®	1/4"	1-1/4"	2-1/2"	4"

4. Concrete shall be 3,000 PSI conforming to ACI 301 or hollow block conforming to ASTM C90.



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PRODUCT:

CLIPPED MULLION

PART OR ASSEMBLY:

BUCK ANCHORING

REVISIONS

DATE: 10/24/19

SCALE: N.T.S.

DWG. BY: RW

CHK. BY: LFS

DRAWING NO.:

FL-15417.12

SHEET 6 OF 6