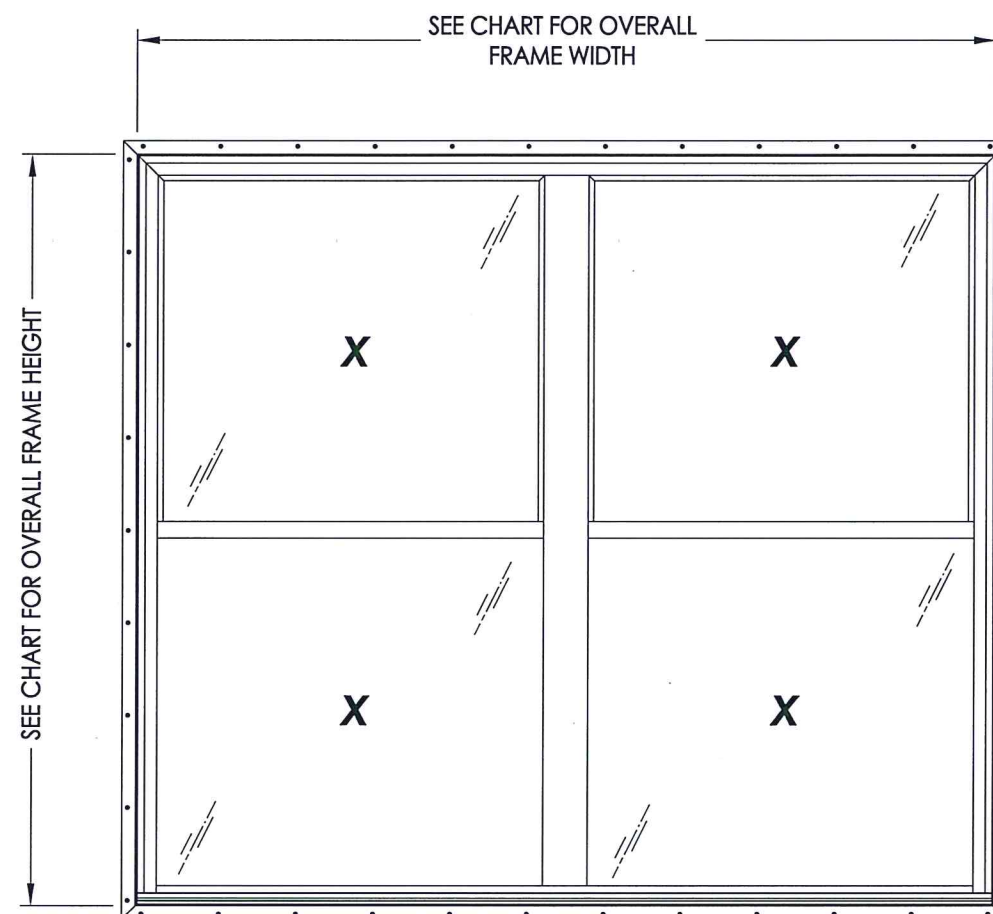




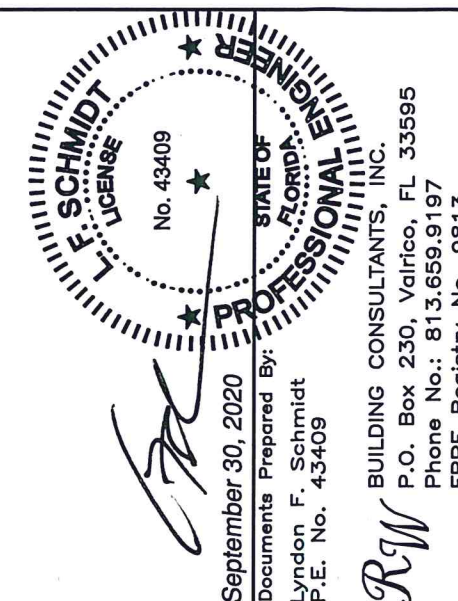
SERIES 1900 MODEL 1921
TWIN DOUBLE HUNG WINDOW
w/ NAILING FIN
"NON-IMPACT"

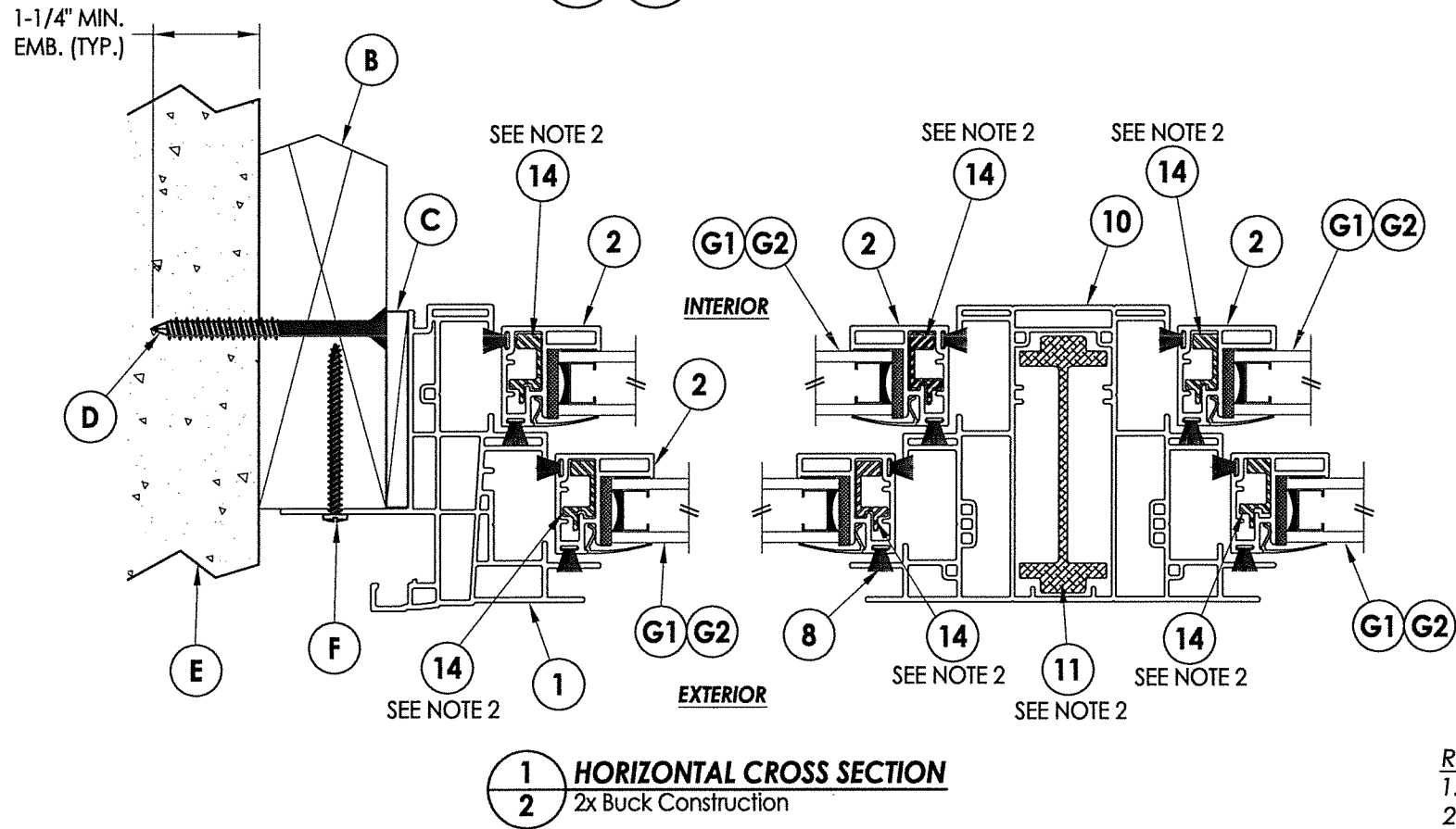
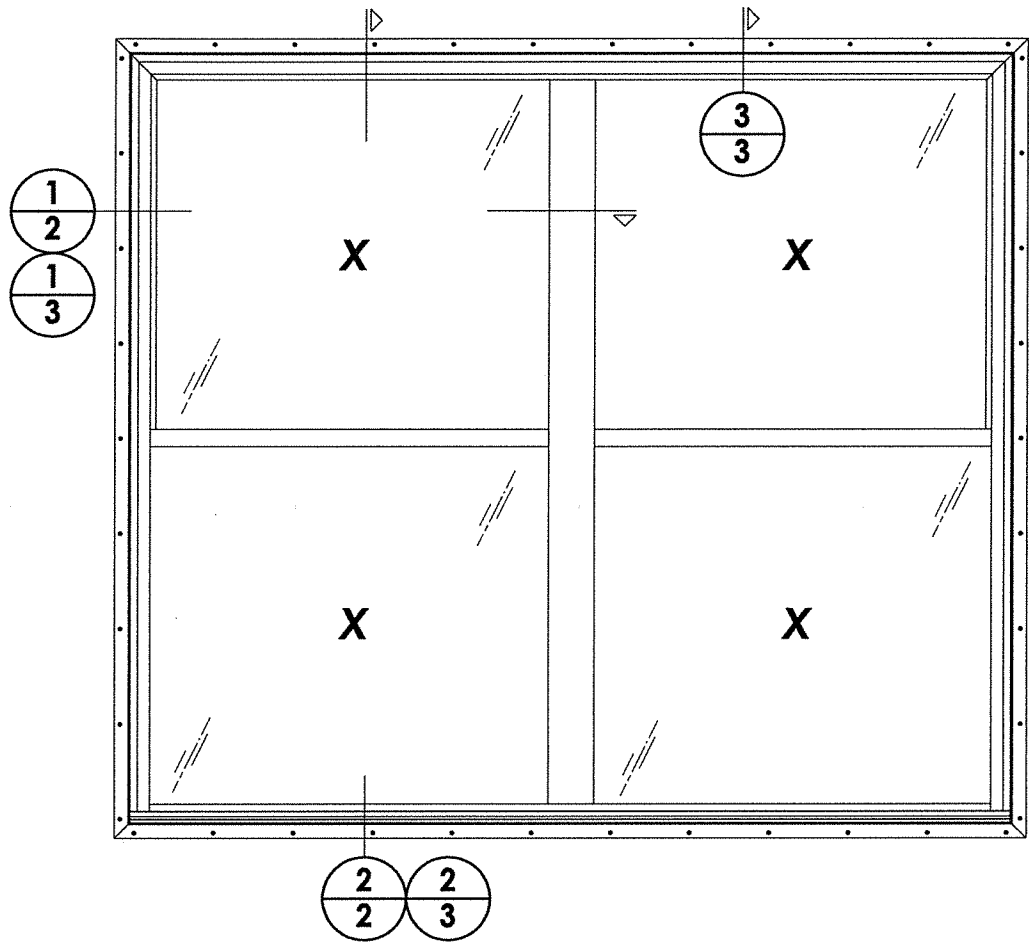
1. This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ). See the Certification Agency Certificate for sizes, specifications and ratings.
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. When used in areas requiring wind borne debris protection this product must be protected with an impact resistant covering that complies with FBC Sections 1609.1.2 & R301.2.1.2.
4. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.

TABLE OF CONTENTS	
SHEET#	DESCRIPTION
1	Typical elevations, design pressures and general notes
2	Vertical & horizontal cross sections
3	Vertical & horizontal cross sections
4	Buck anchoring
5	Frame anchoring
6	Bill of materials, glazing detail & components

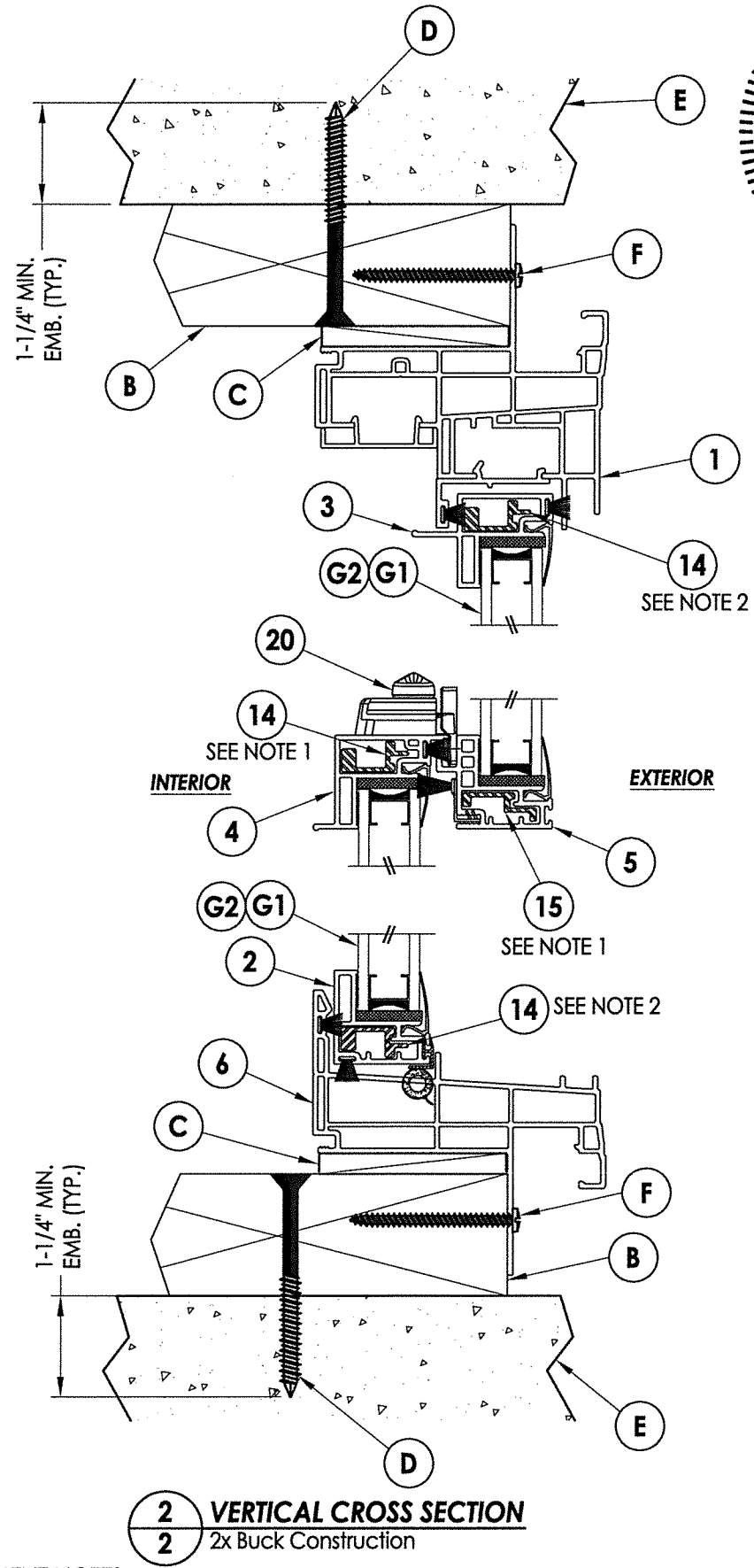


OVERALL FIN DIMENSION	OVERALL FRAME DIMENSION	TOP SASH OVERALL D.L.O. DIMENSION	BOTTOM SASH OVERALL D.L.O. DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
					POSITIVE	NEGATIVE
91.0" x 78.0"	88.0" x 75.0"	38.125" x 34.25"	39.375" x 34.25"	G2	+20.0	-20.0
99.0" x 87.0"	96.0" x 84.0"	42.125" x 38.75"	43.375" x 38.75"	G1	+20.0	-20.0

[illegible]

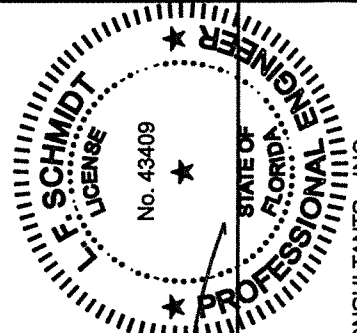


1 HORIZONTAL CROSS SECTION
2 2x Buck Construction



2 VERTICAL CROSS SECTION
2 2x Buck Construction

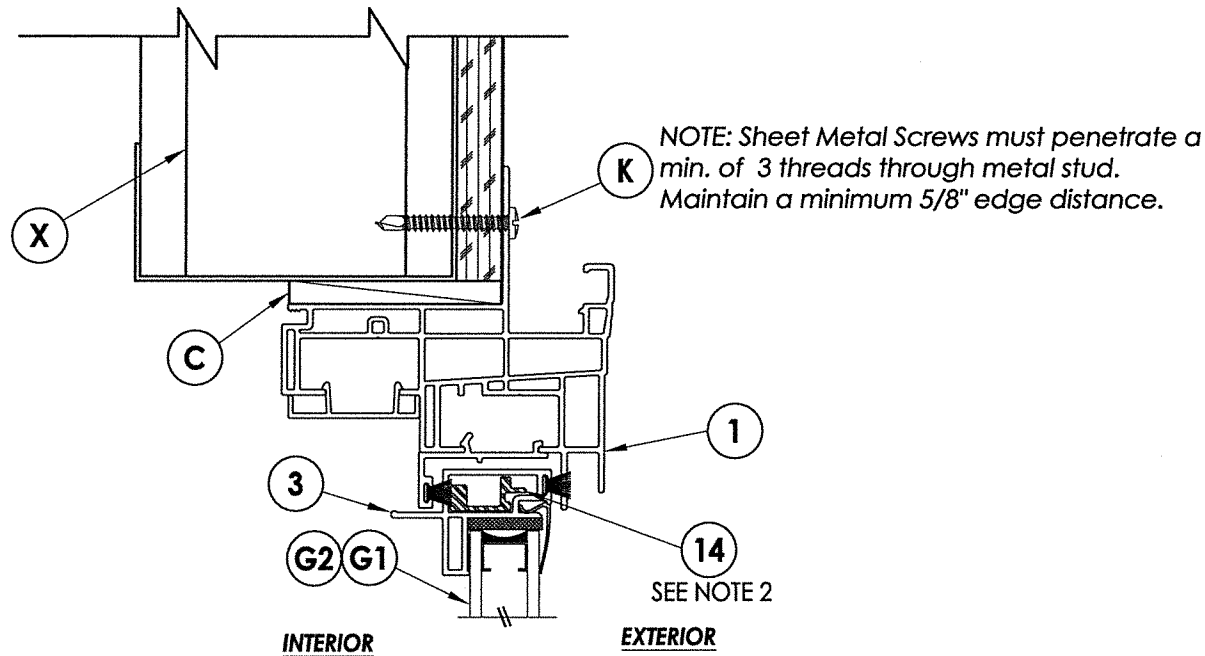
- REINFORCEMENT NOTES:**
1. LOCK & MEETING RAIL REINFORCEMENTS ARE REQUIRED FOR ALL WINDOW FRAME SIZES.
 2. SASH STILE, INTEGRAL MULLION & BOTTOM RAIL REINFORCEMENTS ARE REQUIRED FOR ALL WINDOW FRAME SIZES WHERE THE WIDTH > 88" OR THE HEIGHT > 75".



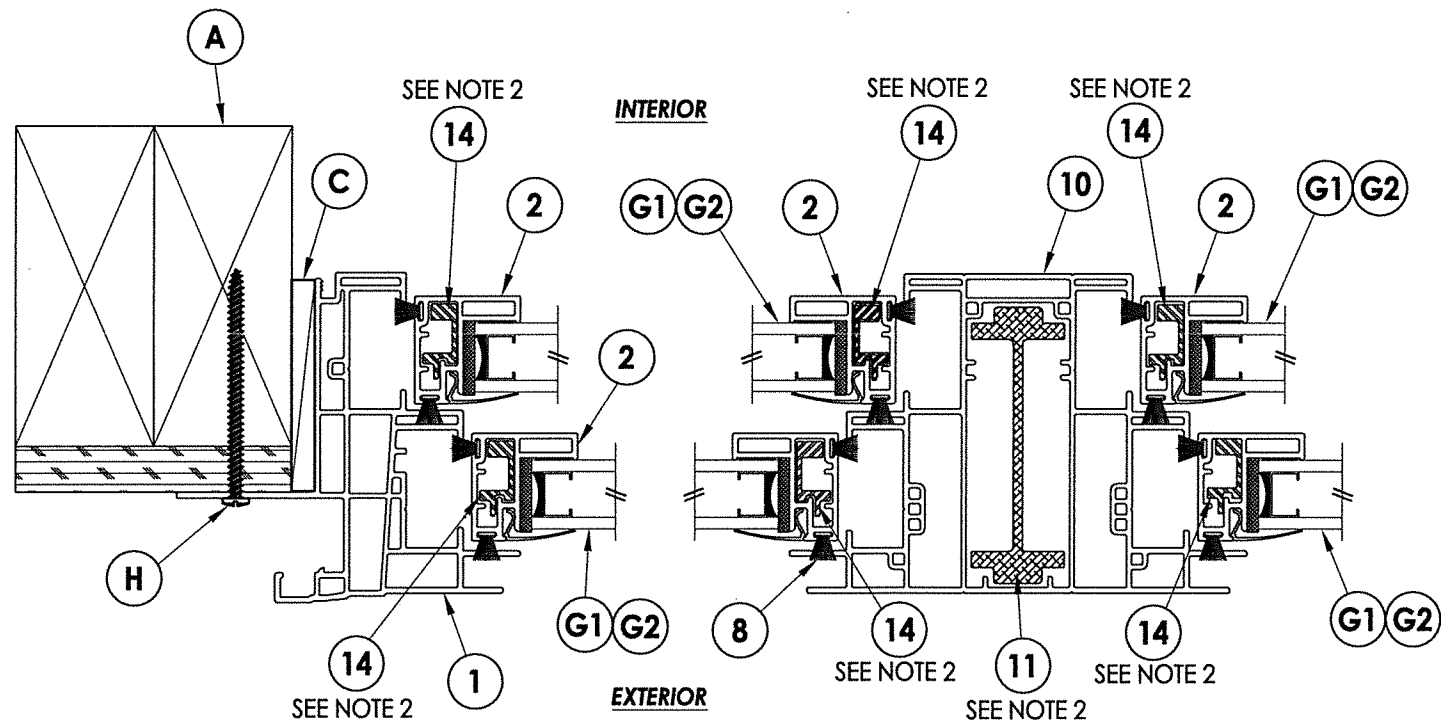
September 30, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		DOUBLE HUNG WINDOW	
PART OR ASSEMBLY:		VERTICAL & HORIZONTAL CROSS SECTIONS	
NO.	DATE	REVISIONS	
1	9/30/20	UPDATE TO 7TH ED. (2020) FBC	LFS
			BY
DATE: 6/05/18		SCALE: N.T.S.	
DWG. BY: JK		CHK. BY: LFS	
DRAWING NO.: FL-27170.3		SHEET 2 OF 6	

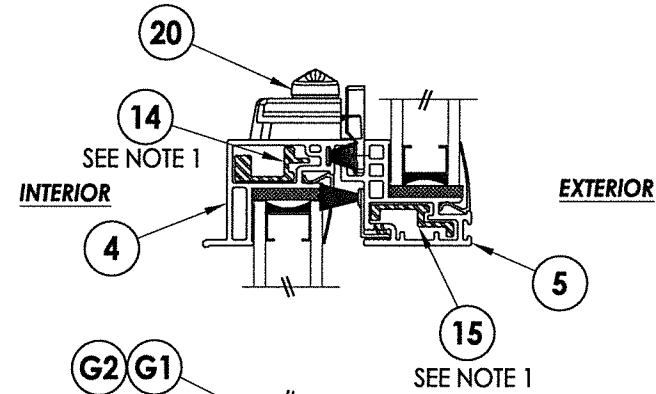
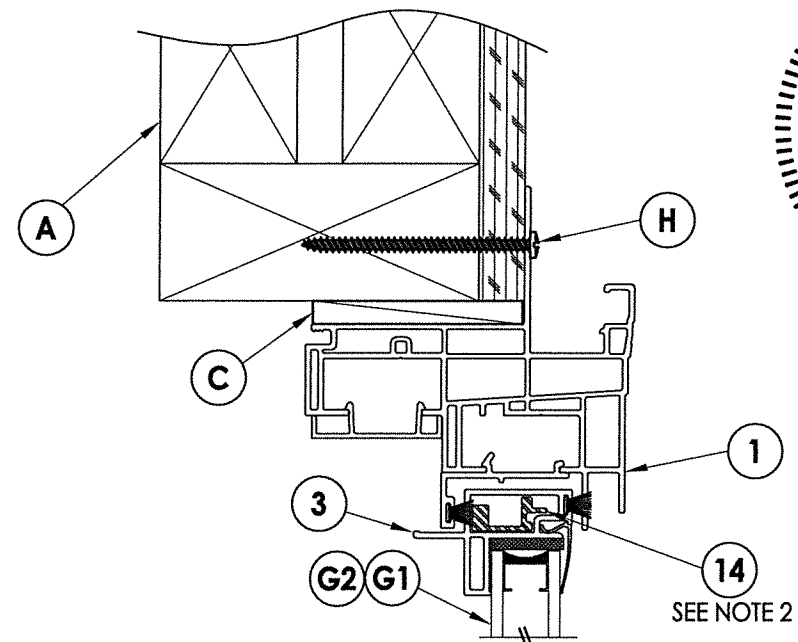
R:\Clients\Associated PERMANENT A - Florida Product Approvals\FL-27170 Windows - Double Hung (CM)\C - Drawings\FL-27170 (2020)\FL-27170.3-4.dwg, 3-3



3 **VERTICAL CROSS SECTION**
3 Steel Stud Construction



1 **HORIZONTAL CROSS SECTION**
3 Stud Construction



2 **VERTICAL CROSS SECTION**
3 Stud Construction

- REINFORCEMENT NOTES:**
1. LOCK & MEETING RAIL REINFORCEMENTS ARE REQUIRED FOR ALL WINDOW FRAME SIZES.
 2. SASH STILE, INTEGRAL MULLION & BOTTOM RAIL REINFORCEMENTS ARE REQUIRED FOR ALL WINDOW FRAME SIZES WHERE THE WIDTH > 88" OR THE HEIGHT > 75".

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FLORIDA
REGISTERED PROFESSIONAL ENGINEER
No. 43409

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FBPE Registry No. 9813

PRODUCT:		DOUBLE HUNG WINDOW	
PART OR ASSEMBLY:		VERTICAL & HORIZONTAL CROSS SECTIONS	
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			BY
DATE: 6/05/18			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-27170.3			
SHEET 3 OF 6			



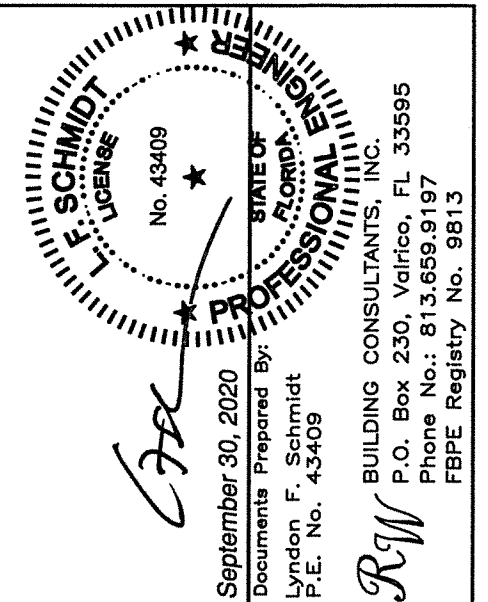
CONCRETE ANCHOR NOTES:

1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. 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" dimension 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®	1/4"	1-1/4"	2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	1"	4"

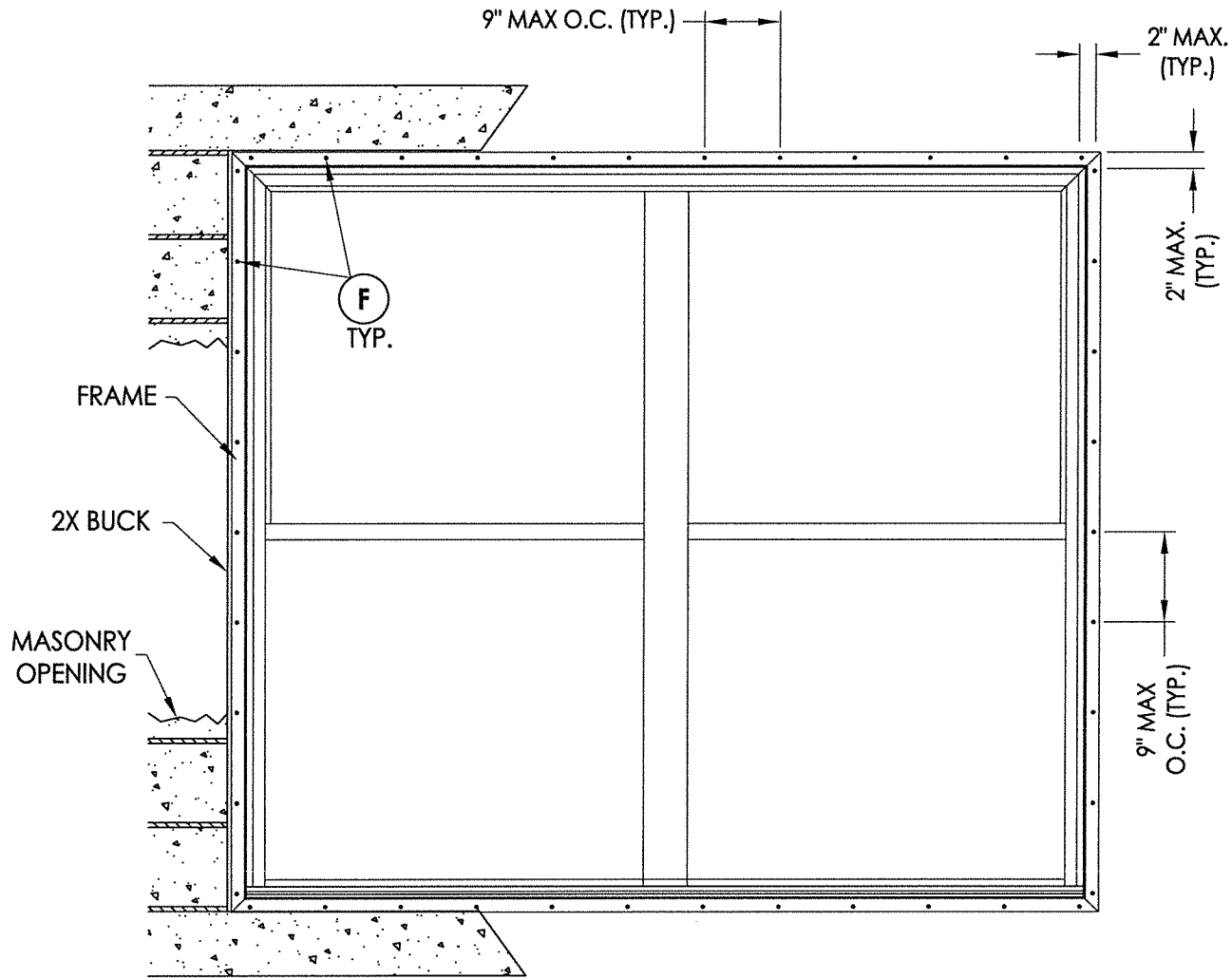
WOOD SCREW INSTALLATION NOTES:

1. Maintain a minimum 3/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



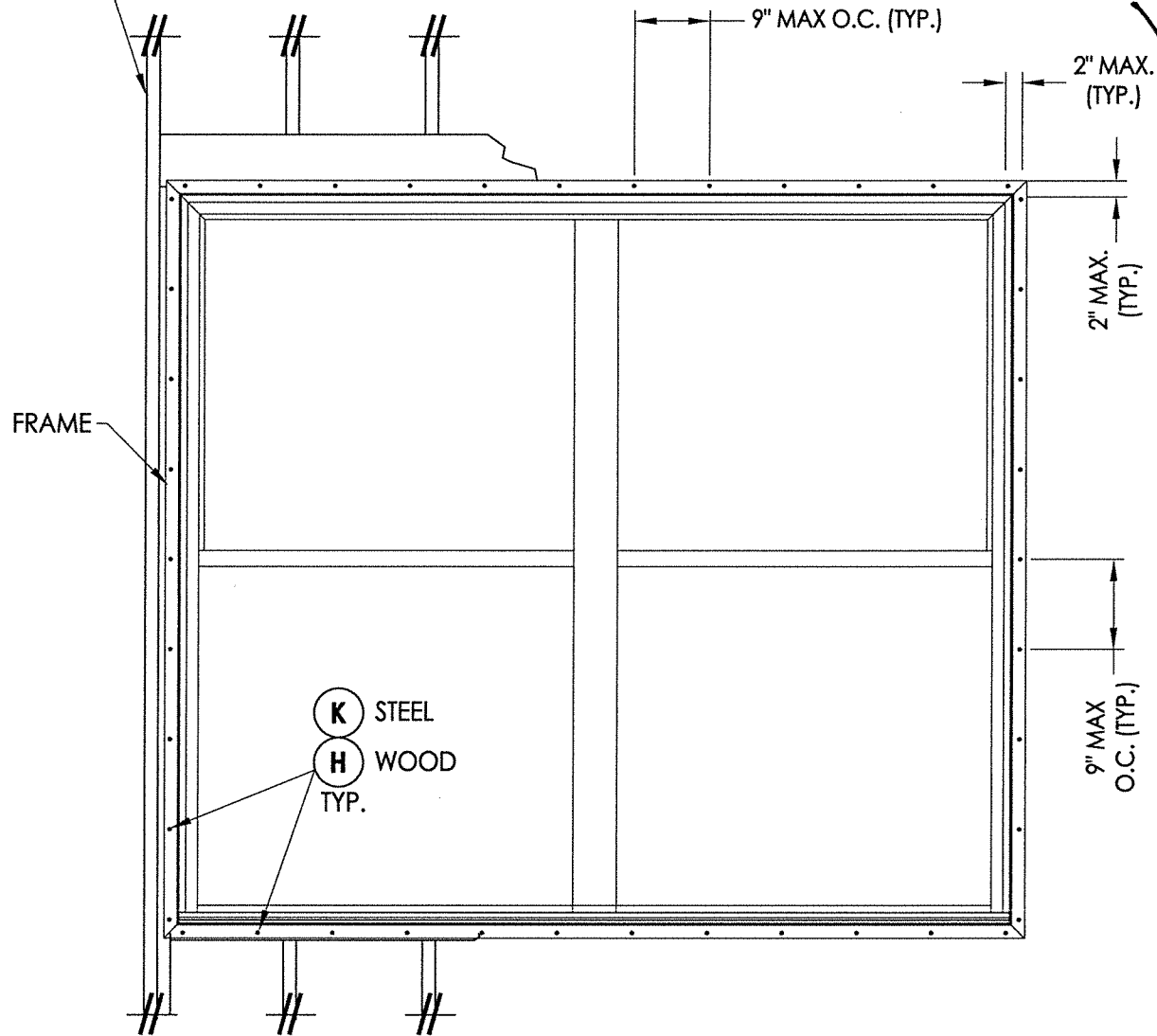
DATE: 6/05/18		PRODUCT: DOUBLE HUNG WINDOW															
SCALE: N.T.S.		PART OR ASSEMBLY: BUCK ANCHORING															
DWG. BY: JK		<table><tr><td colspan="2">REVISIONS</td></tr><tr><td>NO.</td><td>DATE</td></tr><tr><td>1</td><td>9/30/20</td></tr><tr><td></td><td>UPDATE TO 7TH ED. (2020)</td></tr><tr><td></td><td>FBC</td></tr><tr><td></td><td>LFS</td></tr><tr><td></td><td>BY</td></tr></table>		REVISIONS		NO.	DATE	1	9/30/20		UPDATE TO 7TH ED. (2020)		FBC		LFS		BY
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CHK. BY: LFS																	
DRAWING NO.: FL-27170.3																	
SHEET 4 OF 6																	

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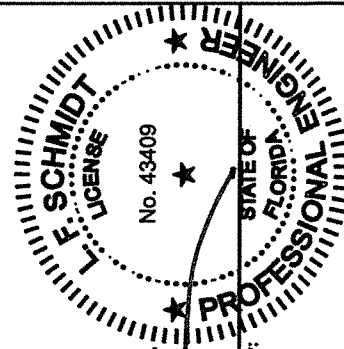


FRAME ANCHORING
Masonry 2X Buck Construction

2X WOOD OR STEEL STUD FRAMING TO BE DESIGNED BY THE
ENGINEER OR ARCHITECT OF RECORD.



FRAME ANCHORING
Stud Construction



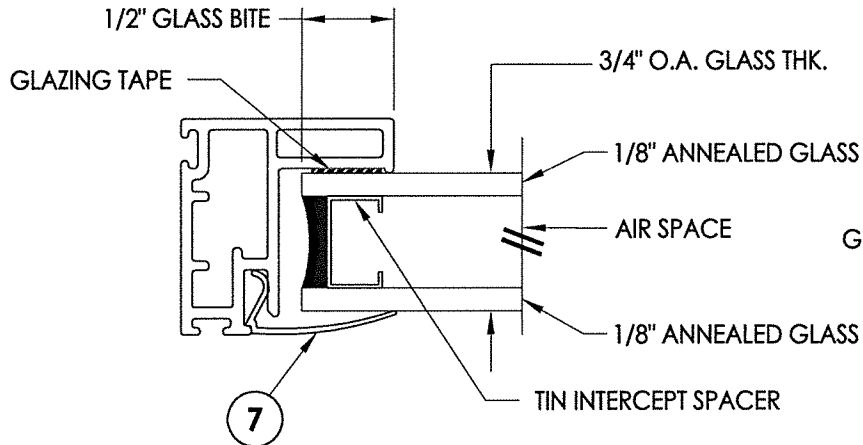
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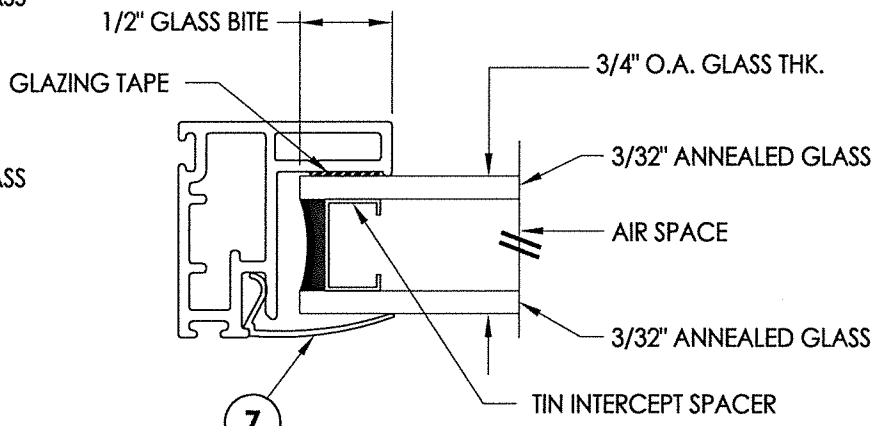
PRODUCT:		DOUBLE HUNG WINDOW	
PART OR ASSEMBLY:		FRAME ANCHORING	
NO.	DATE	UPDATE TO 7TH ED. (2020)	LFS
			BY
1	9/30/20	FBC	
REVISIONS			
DATE: 6/05/18			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-27170.3			
SHEET 5 OF 6			

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING (SG >= 0.42)	WOOD
B	2X BUCK (SG >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	#8 X 2" PPH SMS (1-3/4" MIN. EMBEDMENT)	STEEL
H	#8 X 2-1/2" PPH SMS (1-3/4" MIN. EMBEDMENT)	STEEL
K	#10 PPH SELF-DRILLING SMS	STEEL
X	STEEL STUD Min. Thk .033" (ASTM A653 GRADE 33 Fy=33 Ksi Min, Fu=45 Ksi Min)	STEEL
1	EXTRUDED VINYL FRAME HEAD & JAMB*	RIGID PVC
2	EXTRUDED VINYL SASH STILE/RAIL*	RIGID PVC
3	EXTRUDED VINYL TOP RAIL*	RIGID PVC
4	EXTRUDED VINYL LOCK RAIL*	RIGID PVC
5	EXTRUDED VINYL MEETING RAIL*	RIGID PVC
6	EXTRUDED VINYL SILL*	RIGID PVC
7	EXTRUDED VINYL GLAZING BEAD*	RIGID PVC
8	WEATHERSTRIP (FIN PILE)	-
10	INTEGRAL MULLION*	RIGID PVC
11	MULLION REINFORCEMENT (S-048)(6063-T6)	ALUM
14	SASH / STILE & RAIL REINFORCEMENT (S-047)(6063-T5)	ALUM
15	MEETING RAIL REINFORCEMENT (S-050)(6061-T6)	ALUM
20	CAM LOCK	-

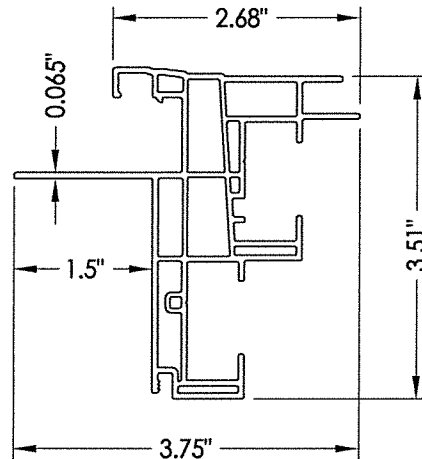
*THE APPROVED WHITE RIGID PVC EXTERIOR EXTRUSIONS FOR WINDOWS ARE TO BE PRODUCED BY EXTRUDERS LICENSEES IN "AAMA CERTIFICATION PROGRAMS FOR RIGID PVC EXTRUSIONS."



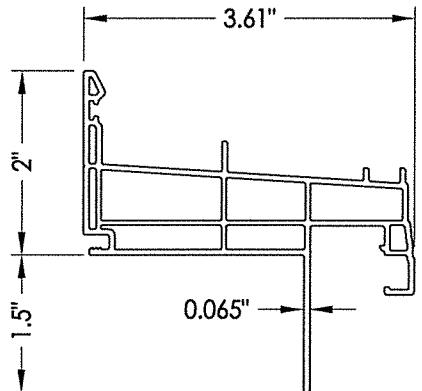
G1 GLAZING DETAIL



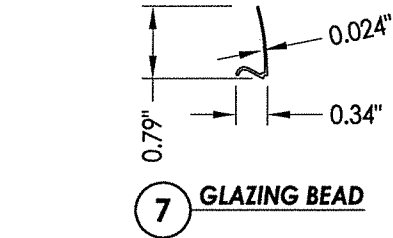
G2 GLAZING DETAIL



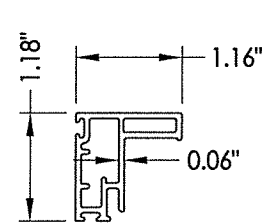
1 FRAME HEAD & JAMB



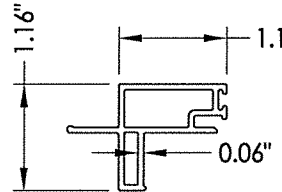
6 SILL



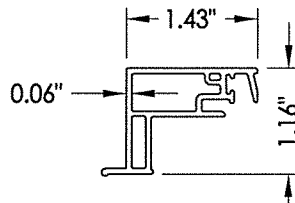
7 GLAZING BEAD



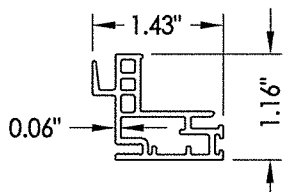
2 SASH STILE/RAIL



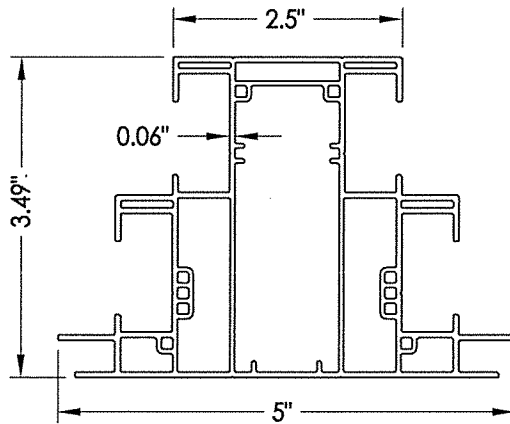
3 TOP RAIL



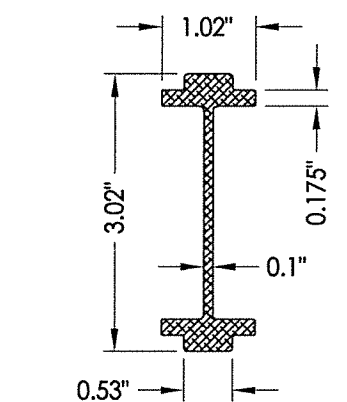
4 LOCK RAIL



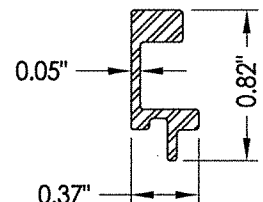
5 MEETING RAIL



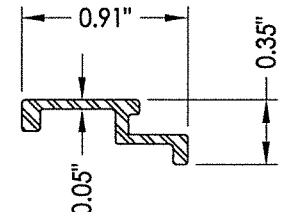
10 INTEGRAL MULLION



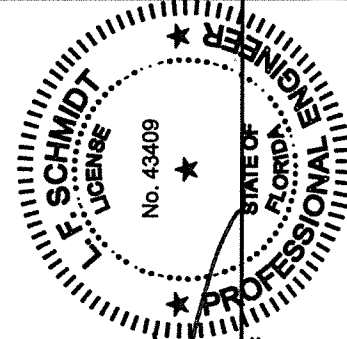
11 MULLION REINFORCEMENT



14 SASH/STILE & RAIL REINFORCEMENT



15 MEETING RAIL REINFORCEMENT



September 30, 2020
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PRODUCT:		DOUBLE HUNG WINDOW	
PART OR ASSEMBLY:		BILL OF MATERIALS, GLAZING DETAILS & COMPONENTS	
DATE:		6/05/18	
SCALE:		N.T.S.	
DWG. BY:		JK	
CHK. BY:		LFS	
DRAWING NO.:		FL-27170.3	
SHEET		6 OF 6	