

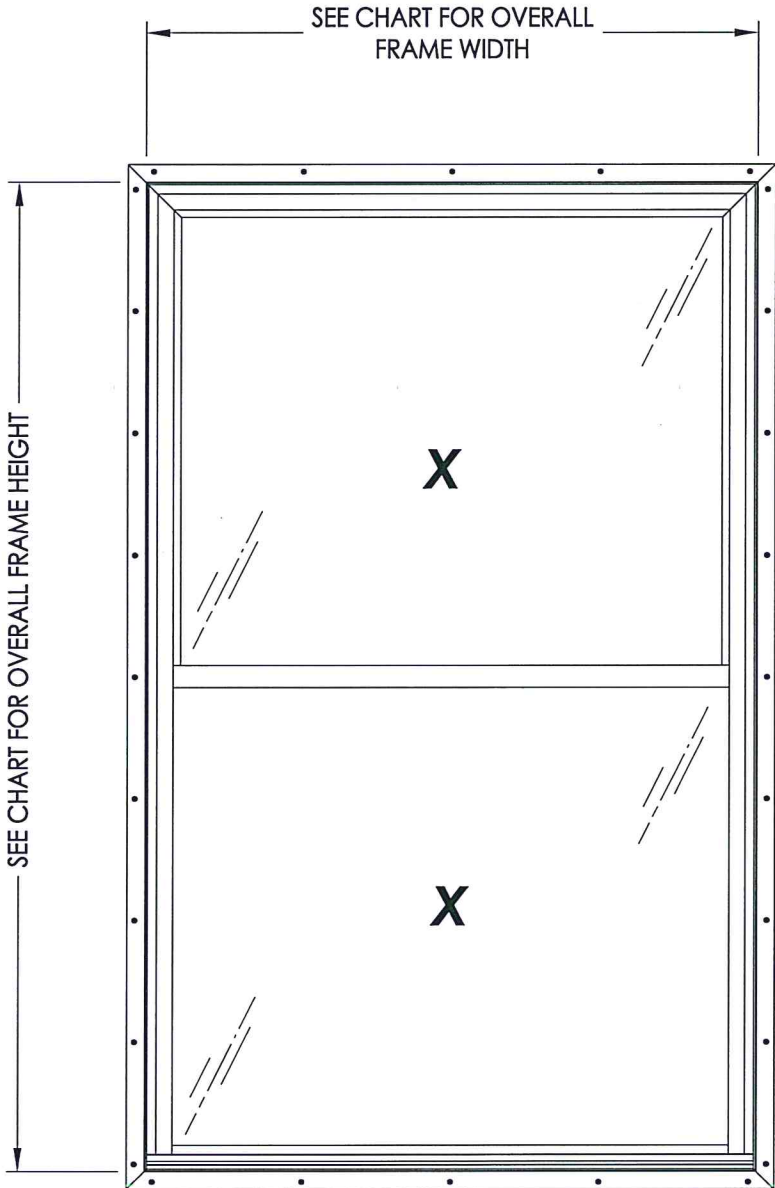
R:\Clients\Associated PERMANENT\A - Florida Product Approvals\FL-27170 Windows - Double Hung (CM)\C - Drawings\FL-27170 (2020)\FL-27170.1.dwg, FL-27170.1

SERIES 1900 MODEL 1901
DOUBLE HUNG WINDOW
w/ NAILING FIN
"NON-IMPACT"

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" (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 and frame anchoring
5	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
47.0" x 78.0"	44.0" x 75.0"	38.25" x 34.25"	39.5" x 34.25"	G2	+20.0	-20.0
55.0" x 79.0"	52.0" x 76.0"	46.25" x 34.75"	47.5" x 34.75"	G1	+20.0	-20.0
51.0" x 87.0"	48.0" x 84.0"	42.25" x 38.75"	43.5" x 38.75"		+20.0	-20.0

FLORIDA

SCHMIDT

ENGINEER

PROFESSIONAL

ENGINEER

FLORIDA

SCHMIDT

ENGINEER

No. 43409

★

September 30, 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

PRODUCT:

DOUBLE HUNG WINDOW

PART OR ASSEMBLY:

TYPICAL ELEVATION, DESIGN
PRESSURE AND GENERAL NOTES

DATE

9/30/20

UPDATE TO 7TH ED. (2020)

FBC

NO.

1

BY

LFS

REVISIONS

DATE:

6/05/18

SCALE:

N.T.S.

DWG. BY:

JK

CHK. BY:

LFS

DRAWING NO.:

FL-27170.1

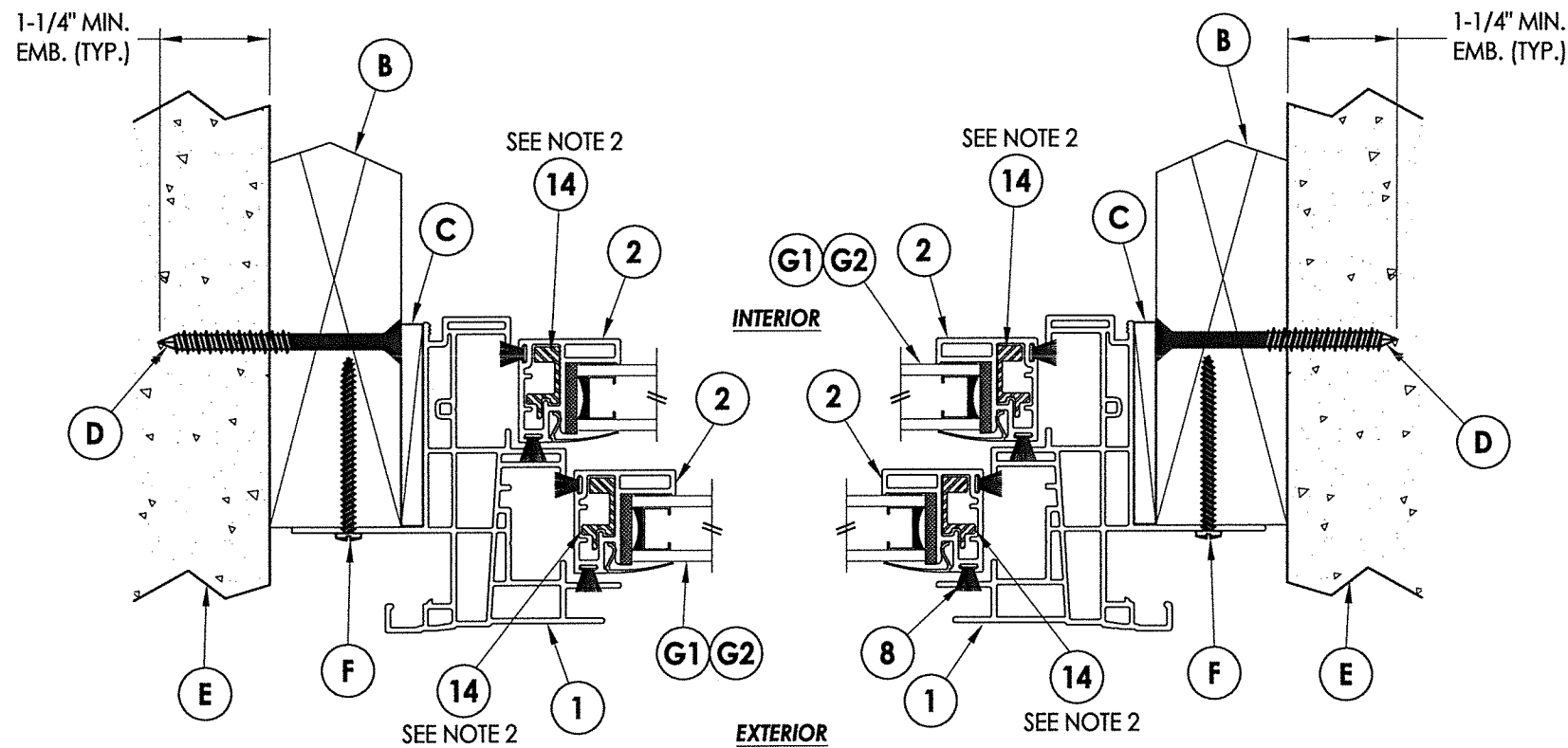
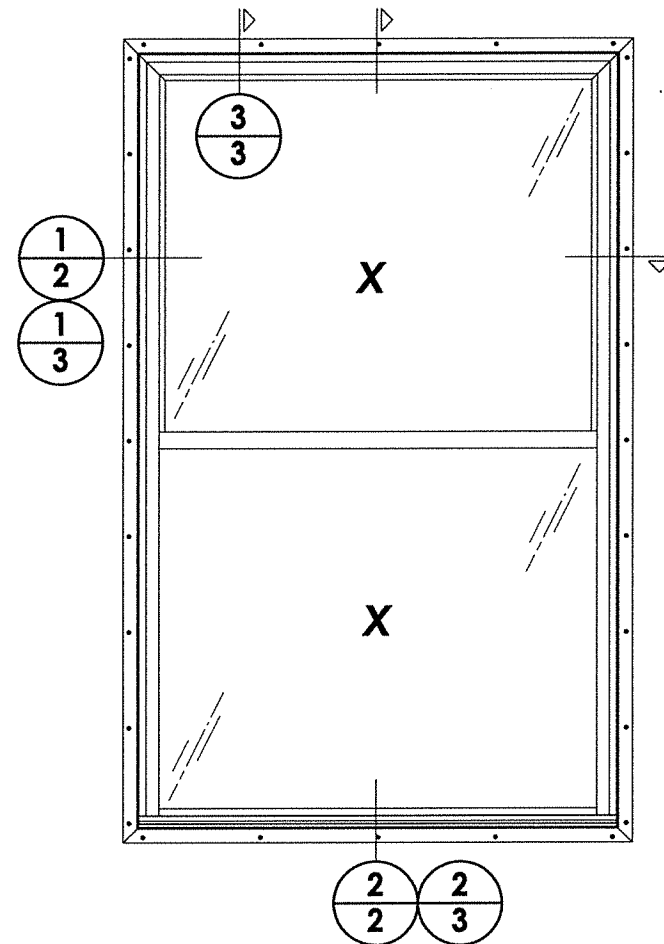
SHEET

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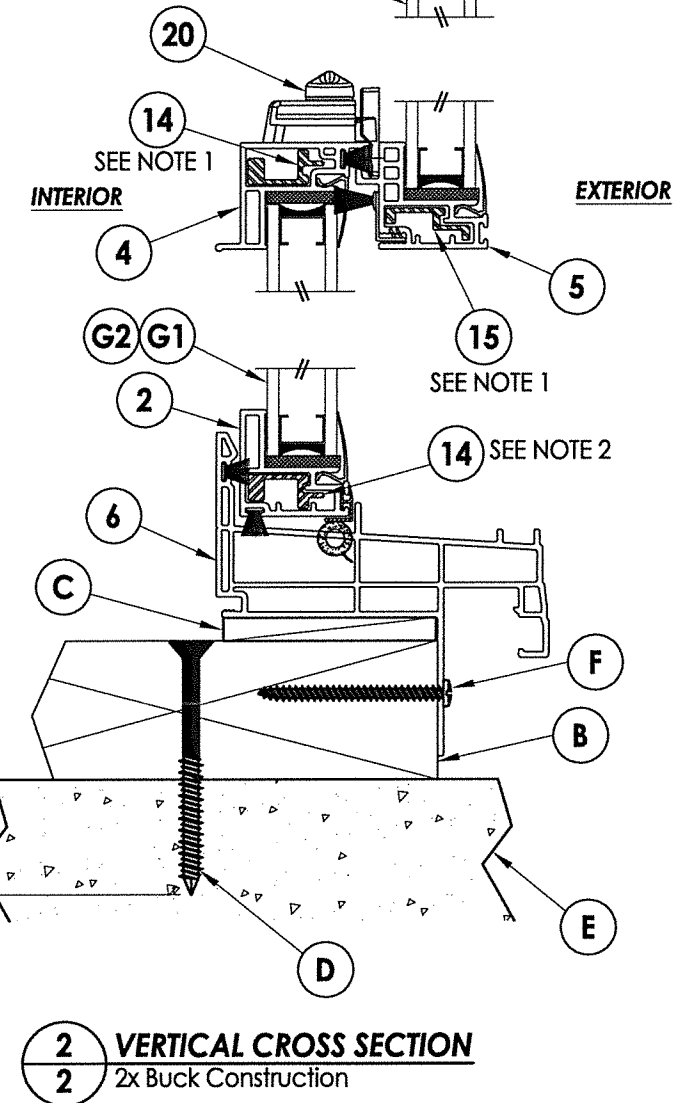
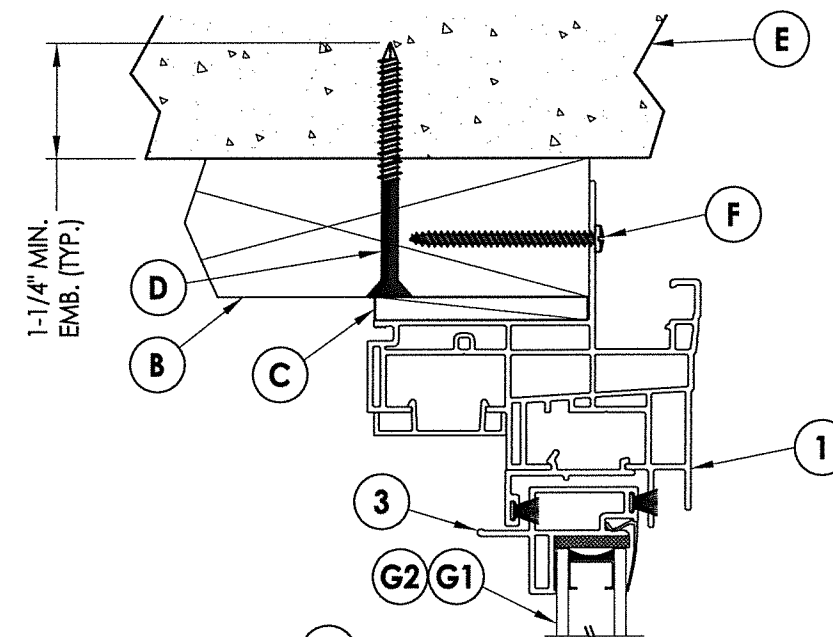
OF

5

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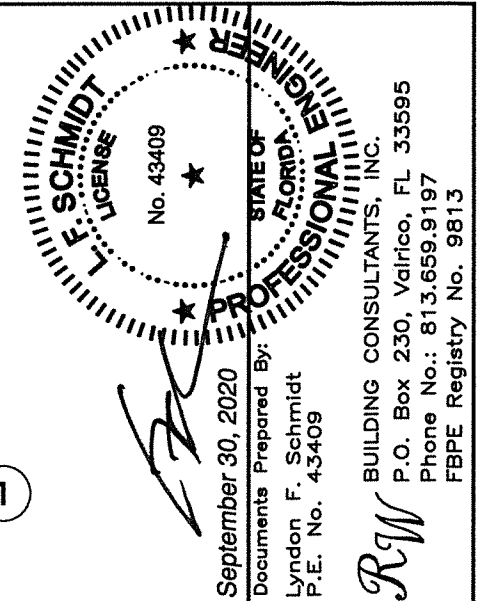


1 HORIZONTAL CROSS SECTION

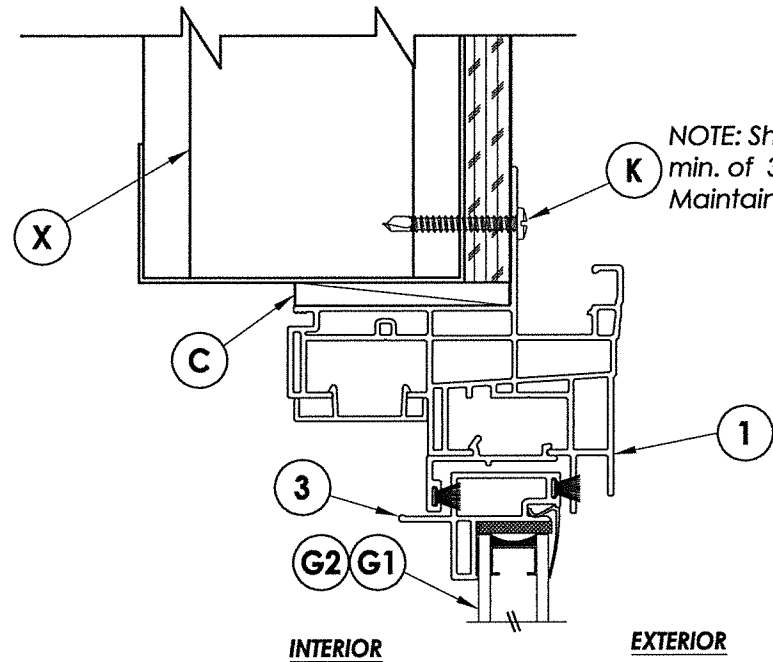


2 VERTICAL CROSS SECTION
2x Buck Construction

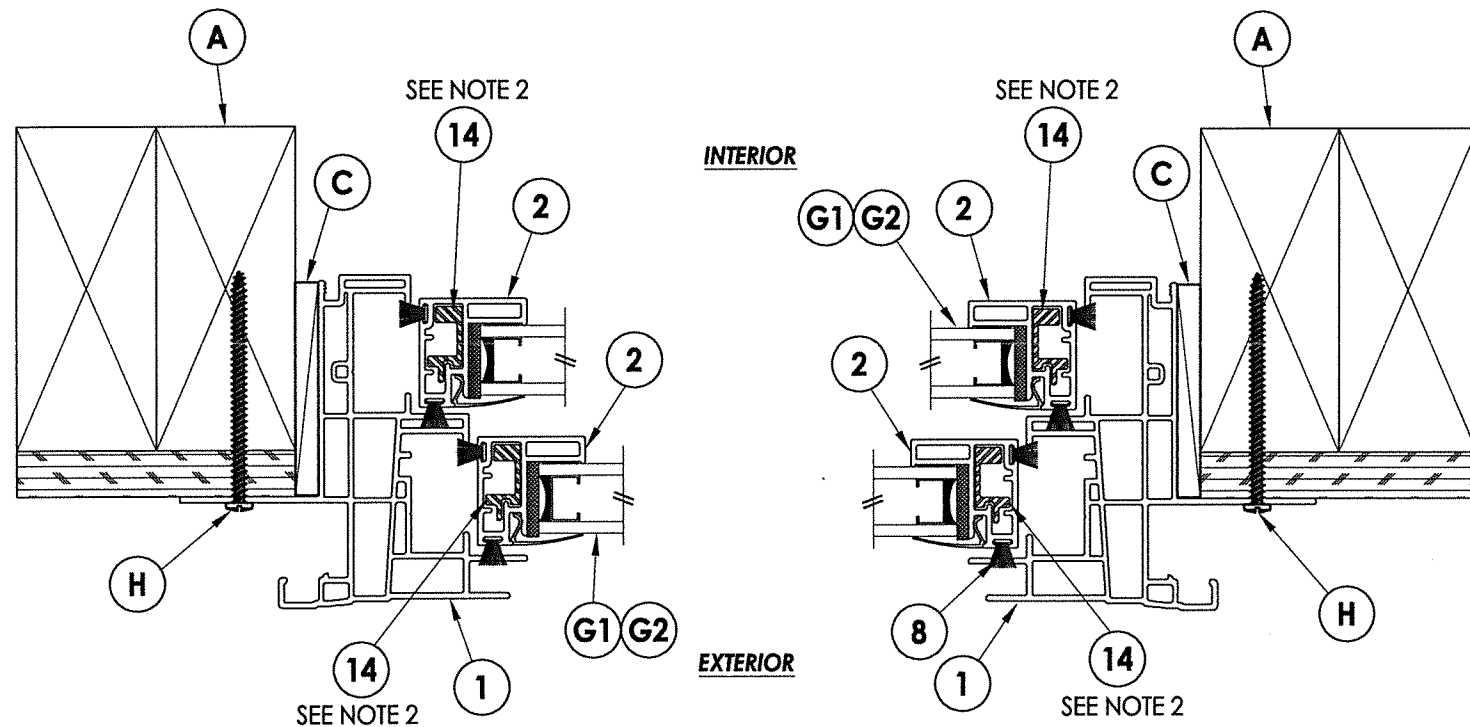
1. LOCK & MEETING RAIL REINFORCEMENTS ARE REQUIRED FOR ALL WINDOW FRAME SIZES.
2. SASH STILE & BOTTOM RAIL REINFORCEMENTS ARE REQUIRED FOR ALL WINDOW FRAME SIZES WHERE THE WIDTH > 44" OR THE HEIGHT > 75".



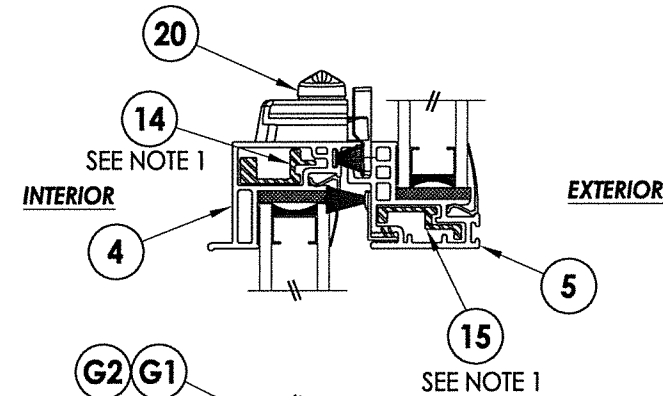
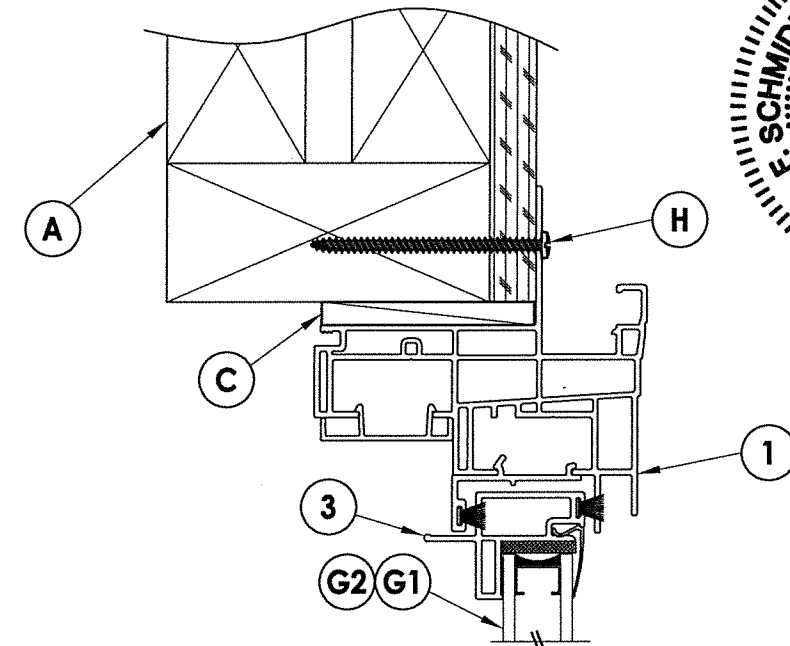
DATE: 6/05/18		PRODUCT:	
SCALE: N.T.S.		DOUBLE HUNG WINDOW	
DWG. BY: JK		PART OR ASSEMBLY: VERTICAL & HORIZONTAL CROSS SECTIONS	
CHK. BY: LFS			
DRAWING NO.: FL-27170.1			
SHEET 2 OF 5		REVISIONS	
NO.		DATE	
1		9/30/20	
UPDATE TO 7TH ED. (2020)		FBC	
LFS		BY	



3 VERTICAL CROSS SECTION
Steel Stud Construction



1 HORIZONTAL CROSS SECTION
Stud Construction



2 VERTICAL CROSS SECTION
Stud Construction

- REINFORCEMENT NOTES:**
1. LOCK & MEETING RAIL REINFORCEMENTS ARE REQUIRED FOR ALL WINDOW FRAME SIZES.
 2. SASH STILE & BOTTOM RAIL REINFORCEMENTS ARE REQUIRED FOR ALL WINDOW FRAME SIZES WHERE THE WIDTH > 44" OR THE HEIGHT > 75".

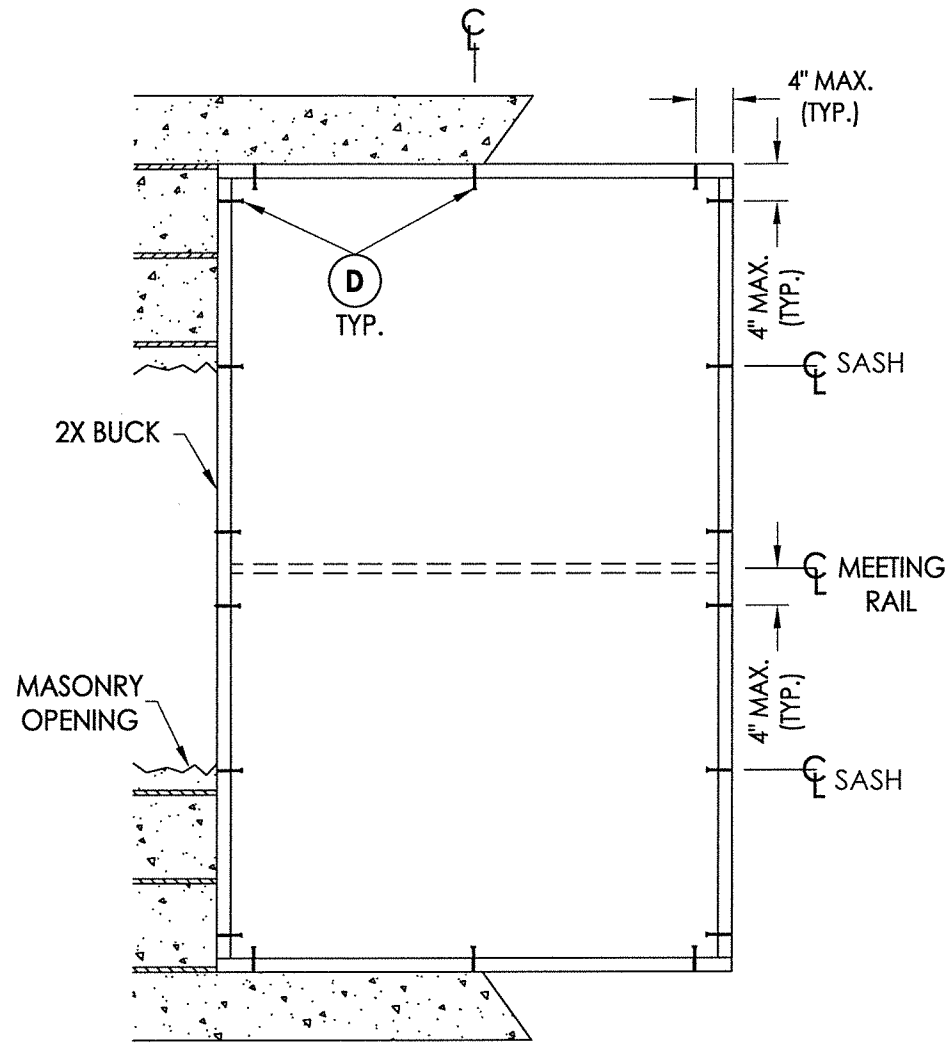
E. SCHMIDT
LICENSE
No. 43409
STATE OF FLORIDA
PROFESSIONAL ENGINEER

September 30, 2020
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

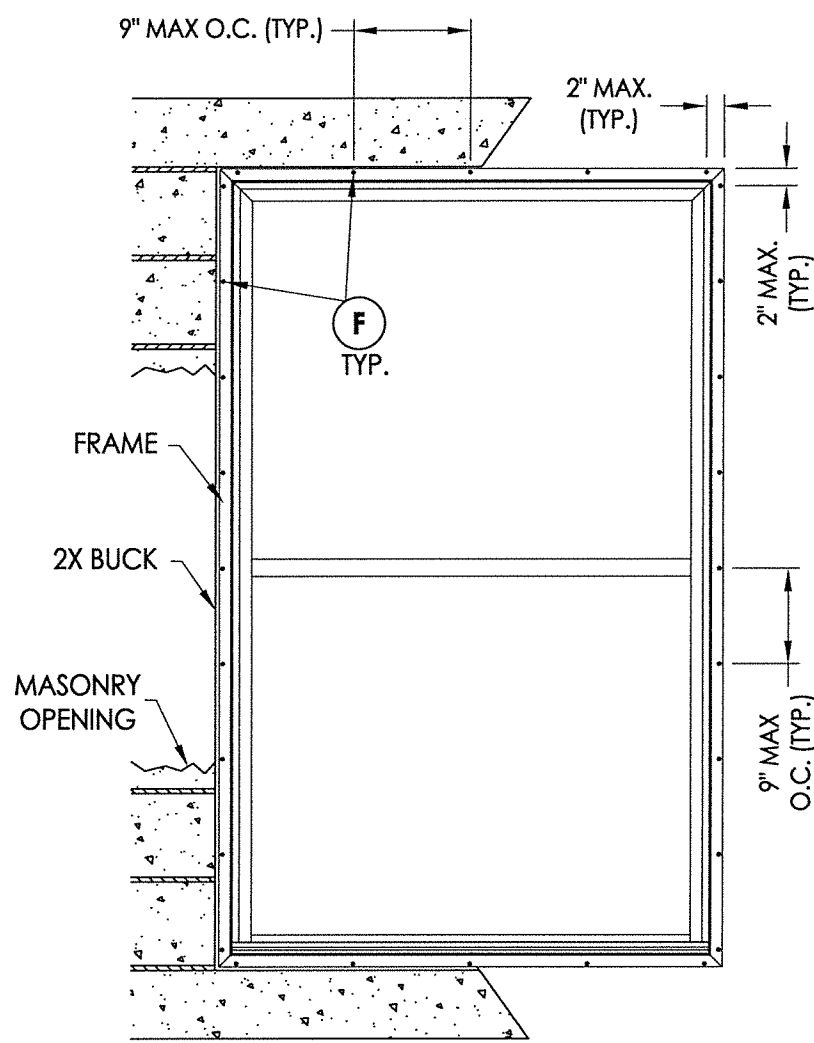
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Vairico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:		DOUBLE HUNG WINDOW	
PART OR ASSEMBLY:		VERTICAL & HORIZONTAL CROSS SECTIONS	
NO.	DATE	REVISIONS	BY
			LFS
1	9/30/20	UPDATE TO 7TH ED. (2020) FBC	
DATE: 6/05/18			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-27170.1			
SHEET 3 OF 5			

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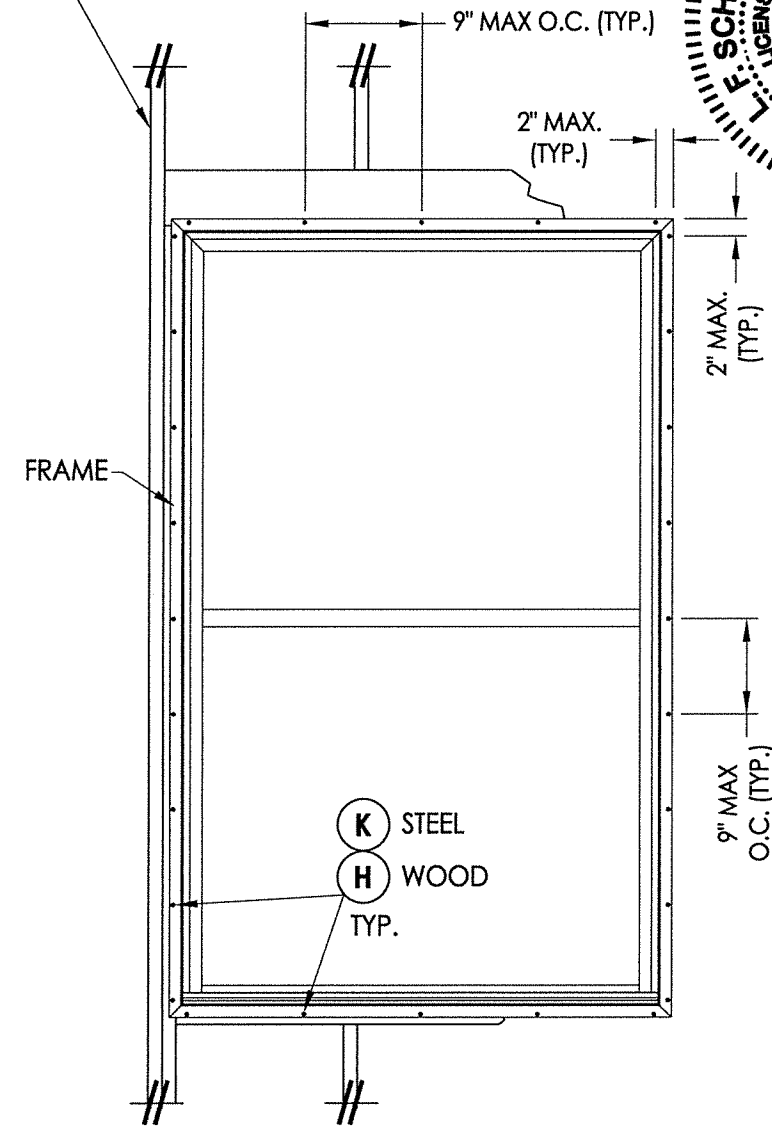


BUCK ANCHORING



FRAME ANCHORING
Masonry 2X Buck Construction

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



FRAME ANCHORING
Stud Construction

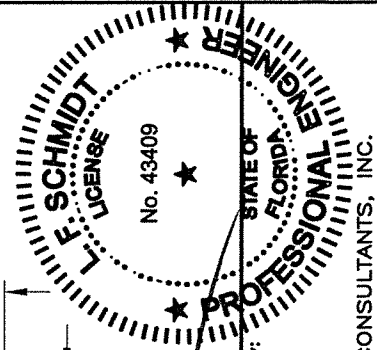
CONCRETE ANCHOR NOTES:

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.



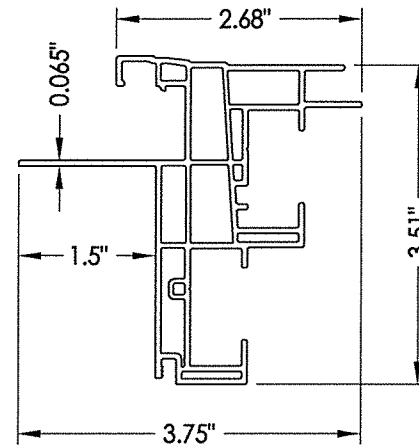
September 30, 2020
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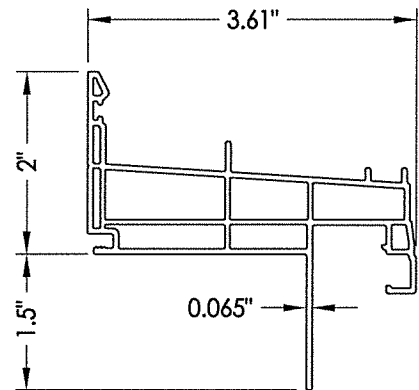
PRODUCT:		DOUBLE HUNG WINDOW	
PART OR ASSEMBLY:		BUCK AND FRAME ANCHORING	
		</	

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)	-
14	SASH / STILE & RAIL REINFORCEMENT (S-047)(6063-T5)	ALUM
15	MEETING RAIL REINFORCEMENT (S-050)(6061-T6)	ALUM
20	CAM LOCK	-

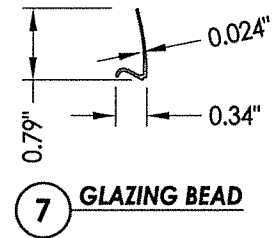
*THE APPROVED WHITE RIGID PVC EXTERIOR EXTRUSIONS FOR WINDOWS ARE TO BE PRODUCED BY EXTRUDERS LICENSEES IN "AAMA CERTIFICATION PROGRAMS FOR RIGID PVC EXTRUSIONS."



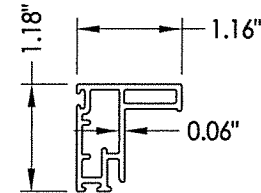
1 FRAME HEAD & JAMB



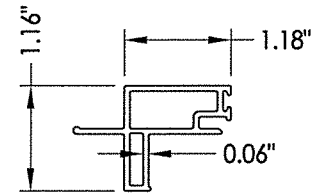
6 SILL



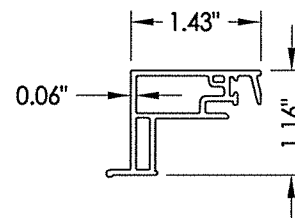
7 GLAZING BEAD



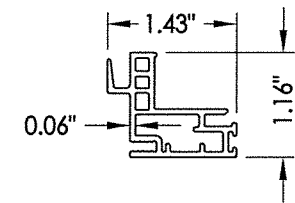
2 SASH STILE/RAIL



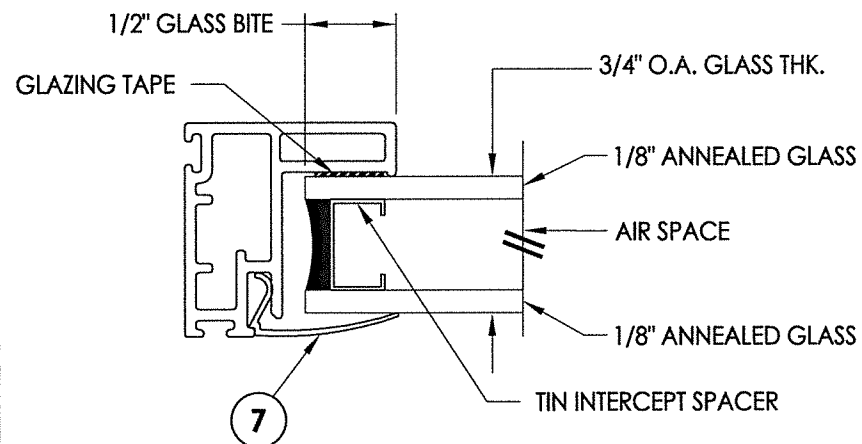
3 TOP RAIL



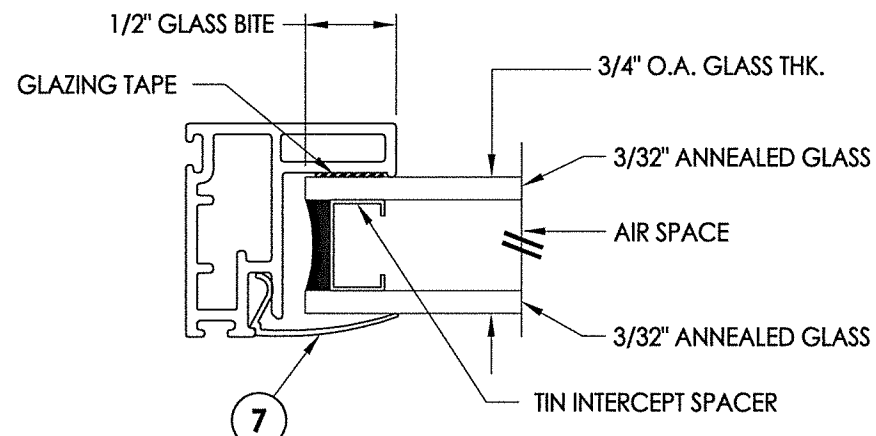
4 LOCK RAIL



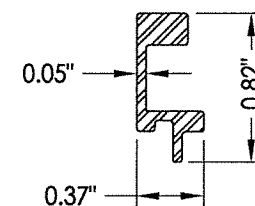
5 MEETING RAIL



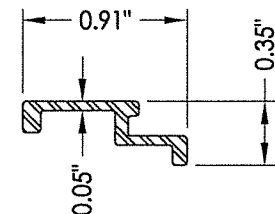
G1 GLAZING DETAIL



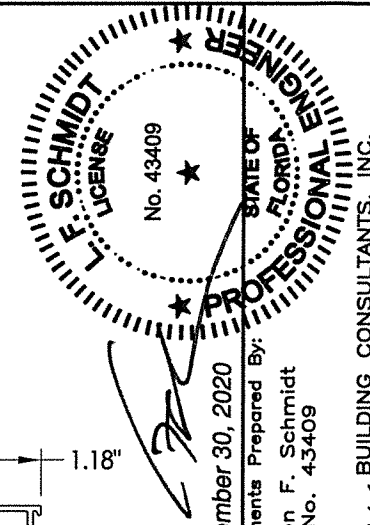
62 GLAZING DETAIL



14 SASH/STILE & RAIL REINFORCEMENT



15 MEETING RAIL REINFORCEMENT



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FBPE Registry No. 9813

PRODUCT: DOUBLE HUNG WINDOW

PART OR ASSEMBLY: BILL OF MATERIALS, GLAZING DETAILS & COMPONENTS

[illegible]

DATE: 6/05/18

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:
FL-27170.1

SHEET 5 OF 5