



Department of Doing
Planning Division
PO Box 490, Station 11
Gainesville, FL 32602-0490

306 N.E. 6th Avenue
P: (352) 334-5022
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TO: Historic Preservation Board

Item Number: 1

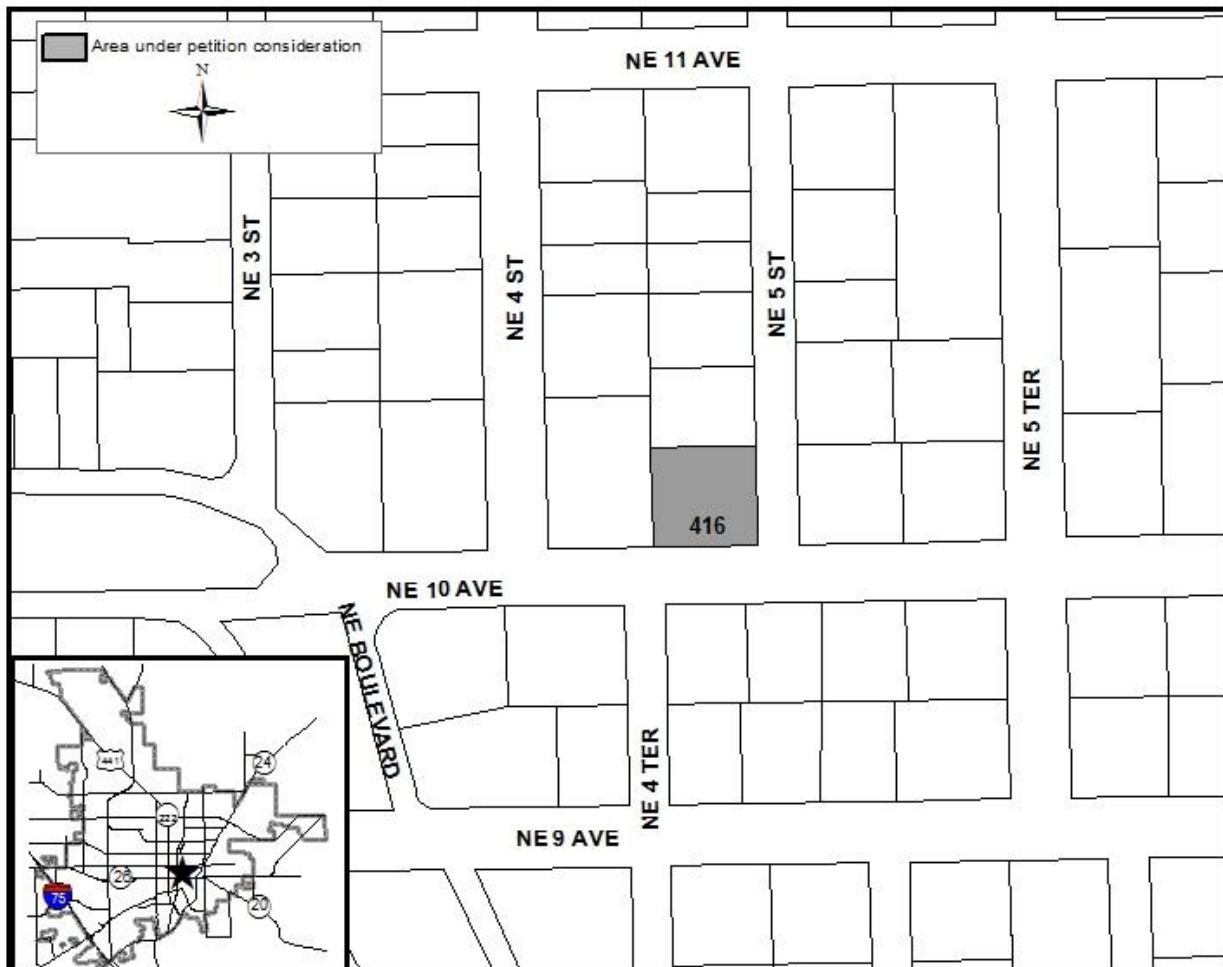
FROM: Department of Doing, Planning Staff

DATE: December 05, 2017

SUBJECT: Petition HP-17-64. Tyler Sterrett, owner. Application for Certificate of Appropriateness for window and garage door replacement. Located at 416 NE 10th Avenue. The property is contributing to the Northeast Residential Historic District.

Recommendation

Staff recommends approval of Petition HP-17-64.



Project Description

The existing house is a 1957 one-story masonry structure with hip roof. The lot (10318-000-000) is .24 acres in size and is zoned RSF-3, single-family residential. The existing windows are aluminum and jalousie, often ganged in twos or threes. The proposal is to replace the existing windows with vinyl and pvc fixed, casement and slider windows, to match the existing ganged configurations of the windows. The existing garage doors are metal and do not operate. The proposal is to replace with Haas 2410 segmented garage doors with windows.

Project Review

This review is based upon the Design Guidelines for Windows and Doors.

Windows:

When choosing replacements, the qualities of the original windows should be used as criteria. If these criteria are fulfilled, the new windows need not be exact replicas of the originals. The Standards further permit new windows to be constructed of non-historic materials such as aluminum and to have a tint of up to 10 percent. Of course, matching the original materials and visual qualities is always preferable. In general, changes to window openings should be avoided. The rhythm of window and door openings is an important part of the character of buildings. (p. 102)

Replacing jalousies and aluminum windows has become fairly standard due to the poor thermal performance of both elements. As the new windows aim to retain the ganged character of the existing windows, Staff finds the replacements appropriate.

Doors:

Replace missing or deteriorated doors with doors that match the original, or that are of compatible contemporary design. Staff does not find the existing garage doors to be a character-defining feature of the house. Staff finds the proposed doors a compatible contemporary design.

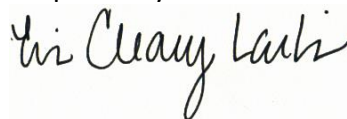
Staff Recommendation: approval of Petition HP-17-64.

Respectfully submitted,



Andrew Persons
Interim Principal Planner

Prepared by:



Cleary Larkin, AIA
Planner

List of Exhibits

Exhibit 1 Photos

Exhibit 2 Proposed Windows



NE 10th Avenue (south facade) (top) and NE 5th Street (east façade) (bottom)



NE 10th Avenue windows: (Top) three jalousies will be replaced with a center fixed window and flanking sliders. (Bottom) to be replaced with a center picture window with flanking casements.



(Top): West façade, not visible. Three jalousie windows to be replaced with one fixed window and two flanking slider window. (Bottom): Fifth Avenue Façade. Two three jalousie windows will be replaced with one center, fixed window and two flanking casements,



Rear facades of house. These windows are not visible from the street.
(Top): double jalousie windows to be replaced with one fixed and one slider window. Jalousie
sidelights by the door will be replaced with either a fixed or casement window.



Rear facades of house. These windows are not visible from the street.

(Top): Four jalousie windows to be replaced with one fixed windows and two flanking slider window. (Bottom): Bathroom window will require operation for ventilation, will be a slider.

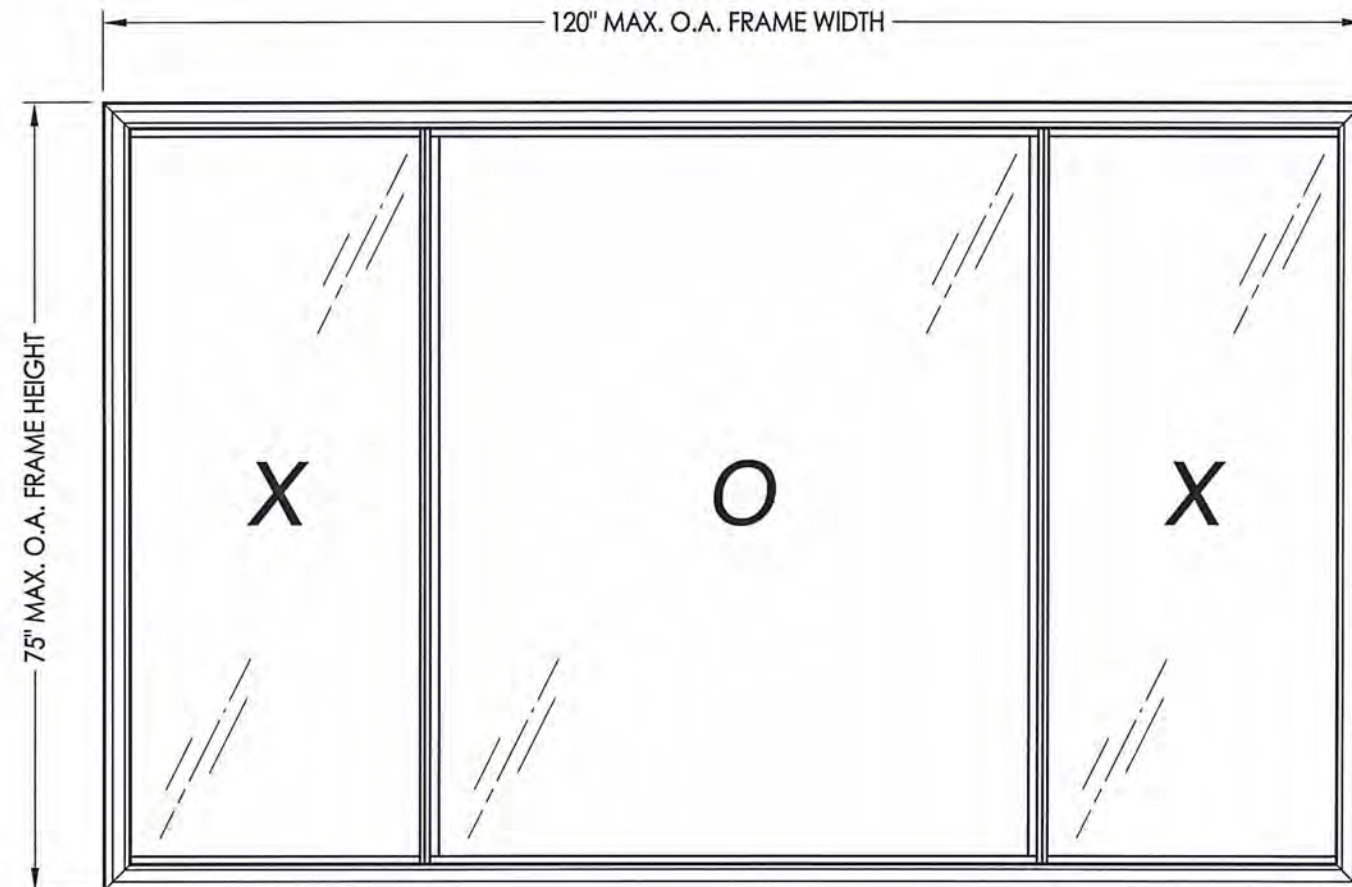


Garage door: existing (top) and proposed (bottom).

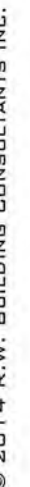


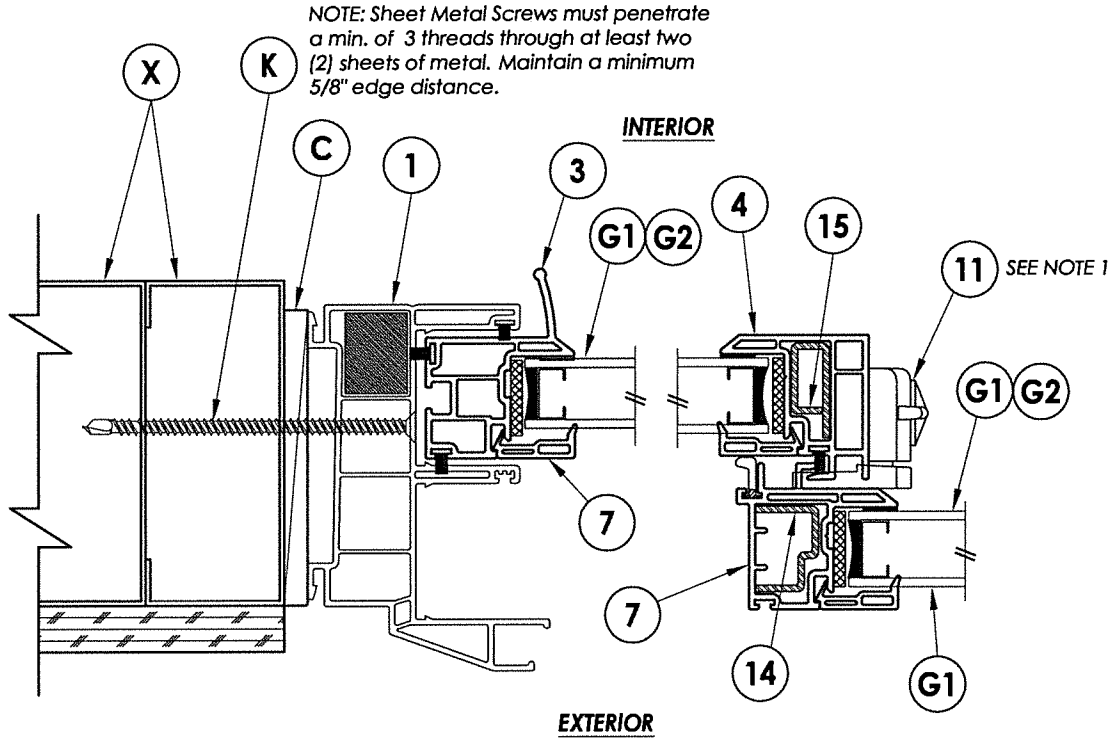
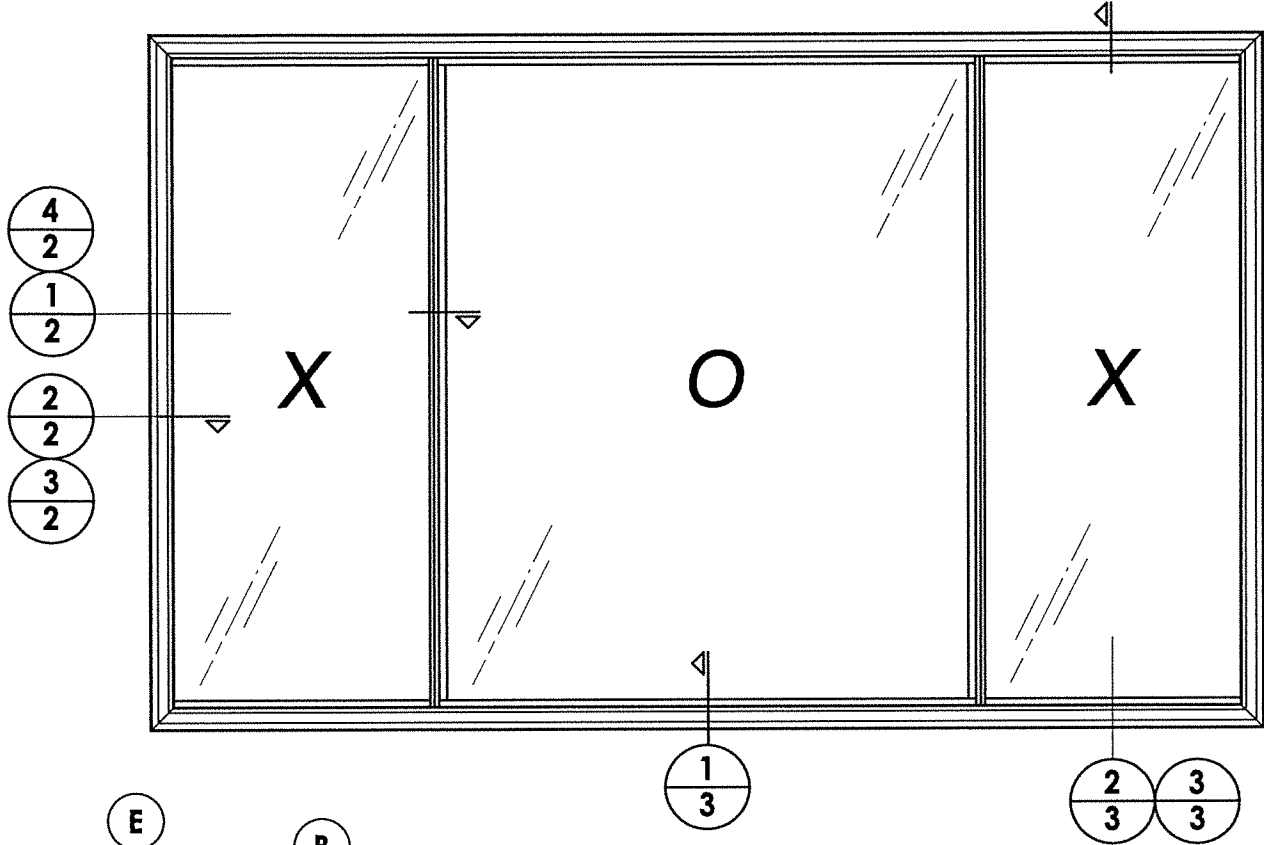
1. This product has been evaluated and is in compliance with the 5th Edition (2014) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. When used in areas requiring wind borne debris protection this product is required to be protected with an impact resistant covering that complies with Section 1609.1.2 of the FBC.
4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5. 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 & general notes
2	Horizontal cross sections
3	Vertical cross sections
4	Buck & frame anchoring
5	Bill of materials, glazing details and components

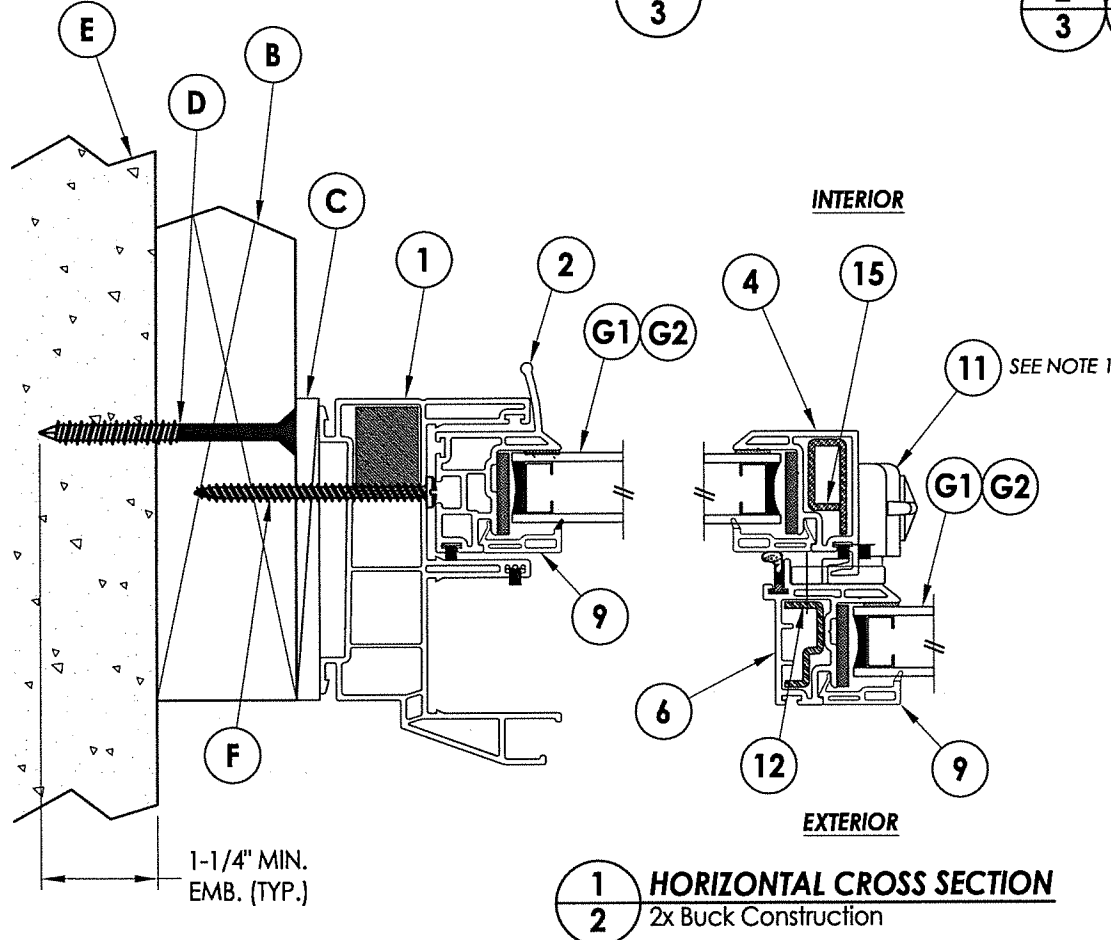


OVERALL FRAME DIMENSION	OVERALL MAX DAY LIGHT DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
			POS.	NEG.
108.0" x 56.0"	50.25" X 49.5"	G1	+25.0	-25.0
120.0" x 48.0"	56.25" X 41.5"	G1	+25.0	-25.0
96.0" x 60.0"	44.25" X 53.25"	G1	+25.0	-25.0
120.0" x 75.0"	56.25" X 68.25"	G2	+20.0	-20.0

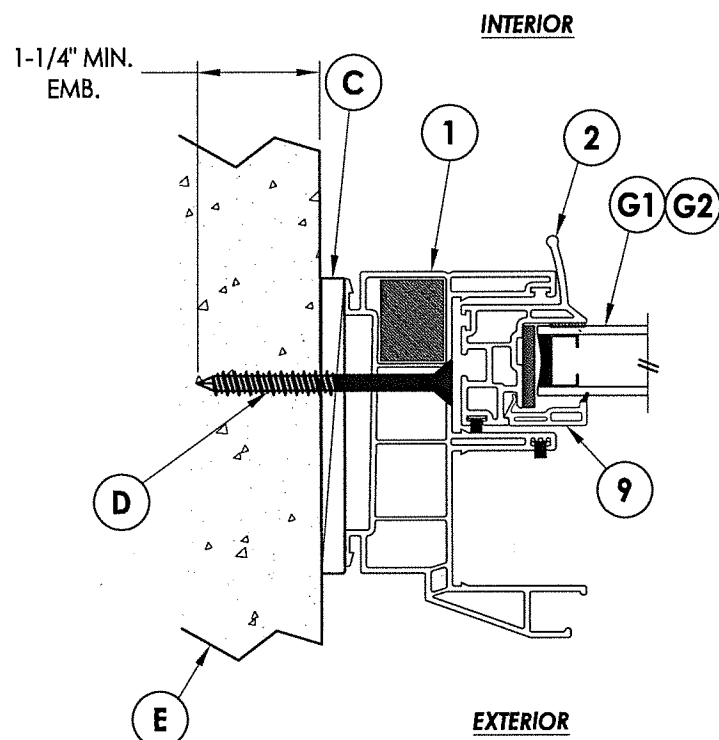




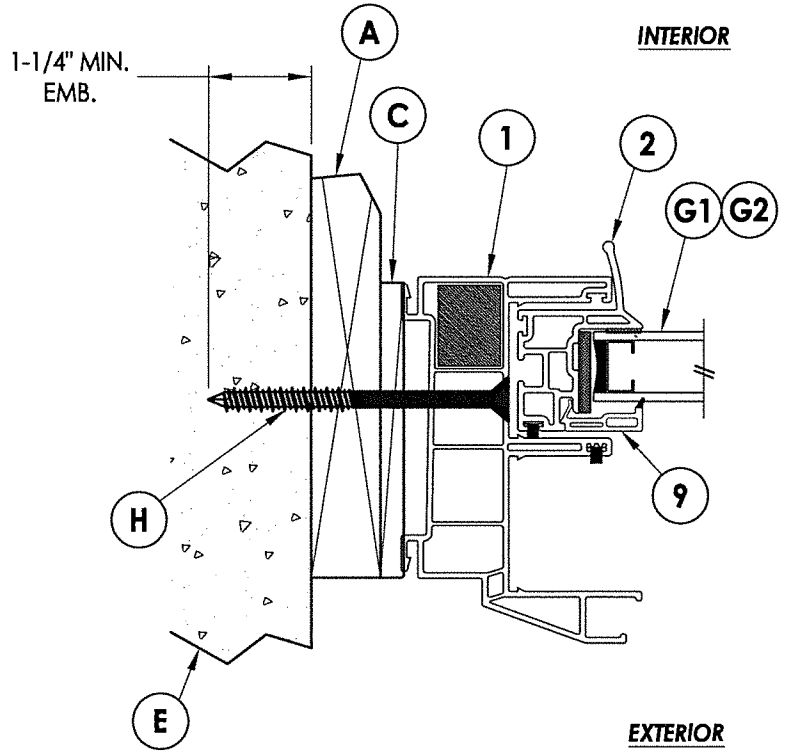
4 **HORIZONTAL CROSS SECTION**
Shown w/ Steel Stud Framing Option
Shown w/ MED Sash Stiles



1 **HORIZONTAL CROSS SECTION**
2x Buck Construction



2 **HORIZONTAL CROSS SECTION**
Shown w/ Direct to Masonry Option



3 **HORIZONTAL CROSS SECTION**
Shown w/ 1x sub-buck

NOTE:
1. Locks located 10" from the top and bottom of sash for a total of 2 per sash.
2. Secure the fixed sash to the head & sill with a plastic anchor clip and a #8 x 1-1/2" and a #8 x 2-1/2" PH SMS.

★

E. SCHMIDT

★

FLORIDA

★

ENGINEER

★

PROFESSIONAL

★

8-5-16

No. 43409

★

Documents Prepared By:

Lyndon F. Schmidt

P.E. No. 43409

STATE OF

FLORIDA

★

ENGINEER

★

PROFESSIONAL

★

RW

BUILDING CONSULTANTS, INC.

P.O. Box 230, Valrico, FL 33595

Phone No.: 813.659.9197

FBPE C.A. No. 9813

PRODUCT:

HORIZONTAL SLIDER

PART OR ASSEMBLY:

HORIZONTAL CROSS SECTIONS

DATE:

3/31/14

SCALE:

N.T.S.

DWG. BY:

JK

CHK. BY:

LFS

DRAWING NO.:

FL-11141.38

SHEET

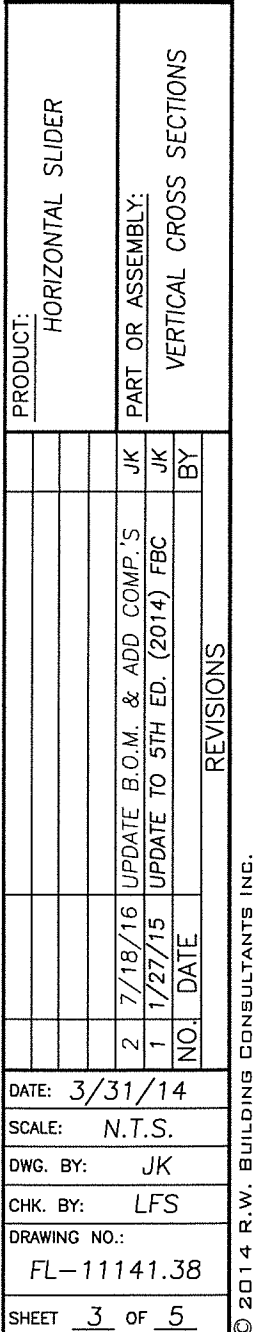
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OF

5

REVISIONS

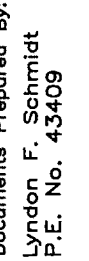
NO.	DATE	BY
2	7/18/16	JK
1	1/27/15	JK





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"
ELCO ULTRACON®	1/4"	1-1/4"	1"	4"



BUCK & FRAME ANCHORING

[illegible]

DATE:	3/31/14
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-11141.38
SHEET	4 OF 5

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

MODEL 3002 / 3A02 "ST"

Extruded Vinyl Horizontal

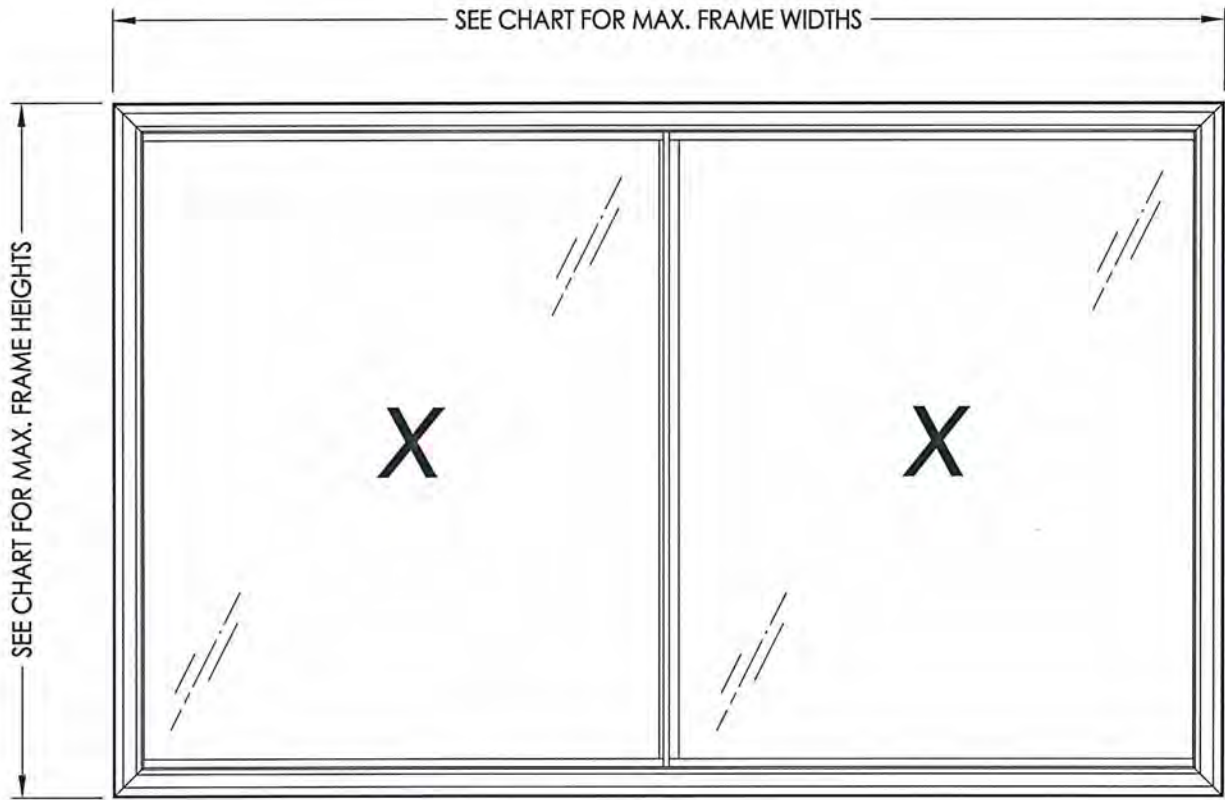
Sliding "Replacement" Window

"NON-IMPACT"

GENERAL NOTES

1. This product has been evaluated and is in compliance with the 5th Edition (2014) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
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3. When used in areas requiring wind borne debris protection this product is required to be protected with an impact resistant covering that complies with Section 1609.1.2 of the FBC.
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			POS.	NEG.
96.0" x 60.0"	44.5" x 53.5"	G1	+15.0	-15.0
84.0" x 72.0"	38.5" x 65.5"		+20.0	-20.0
72.0" x 56.0"	32.5" x 49.5"		+25.0	-25.0
72.0" x 48.0"	32.5" x 41.5"		+40.0	-40.0
63.0" x 44.0"	28.0" x 37.5"		+60.0	-65.0

STATE OF FLORIDA

REGISTERED PROFESSIONAL ENGINEER

L. F. SCHMIDT

LICENSE No. 43409

Documents Prepared By:

Lyndon F. Schmidt

P.E. No. 43409

DATE

8-3-16

PRODUCT:

HORIZONTAL SLIDER

PART OR ASSEMBLY:

TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

DATE

12/17/13

SCALE:

N.T.S.

DWG. BY:

JK

CHK. BY:

LFS

DRAWING NO.:

FL-11141.32

SHEET

1

OF

5

REVISIONS

NO.	DATE	DESCRIPTION
4	7/18/16	UPDATE B.O.M. & ADD COMP.'S
3	8/18/15	ADDED FRAME SIZE
2	1/27/15	UPDATE TO 5TH ED. (2014) FBC
1	4/15/14	ADDED FRAME SIZE

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BUILDING CONSULTANTS, INC.

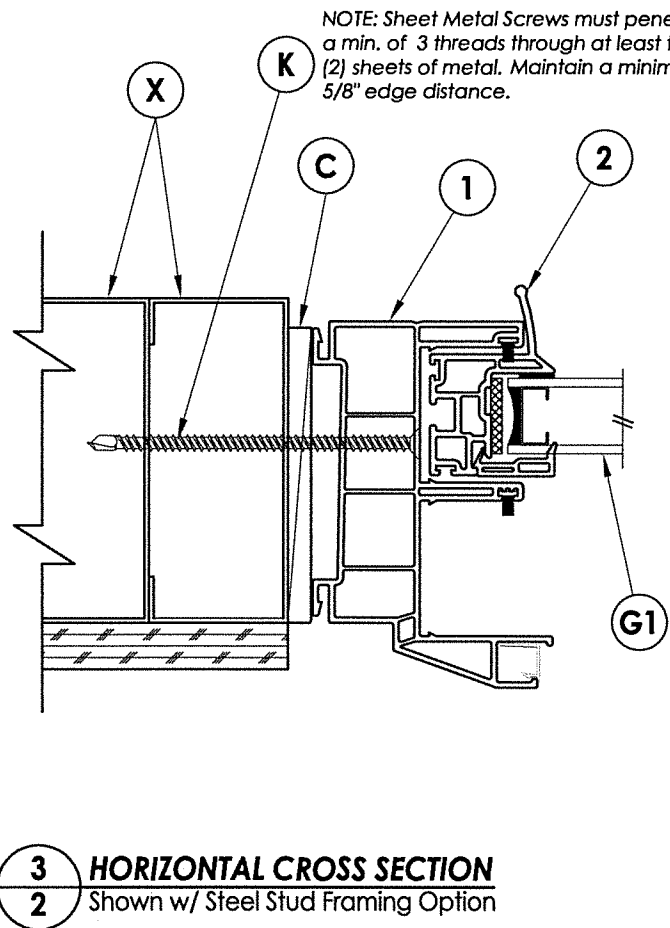
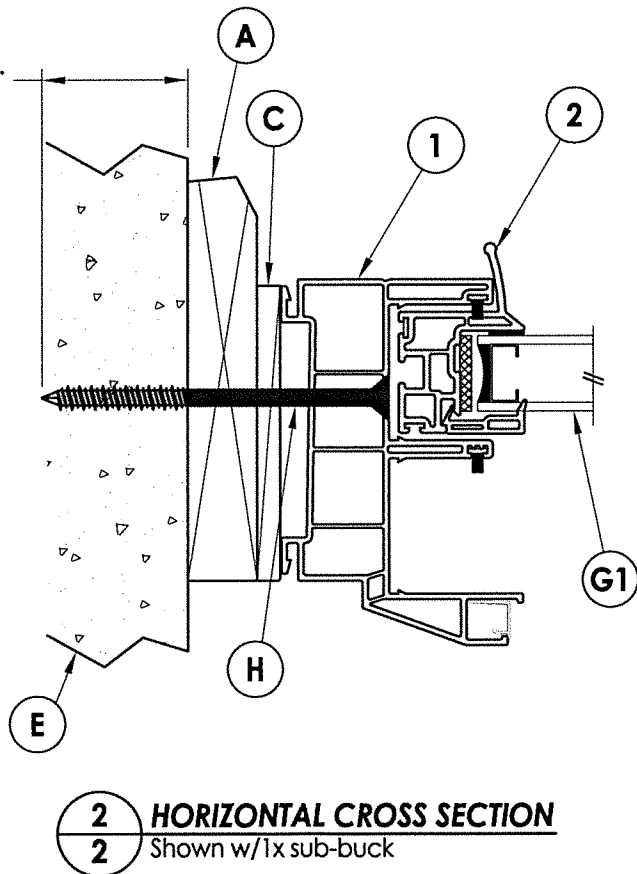
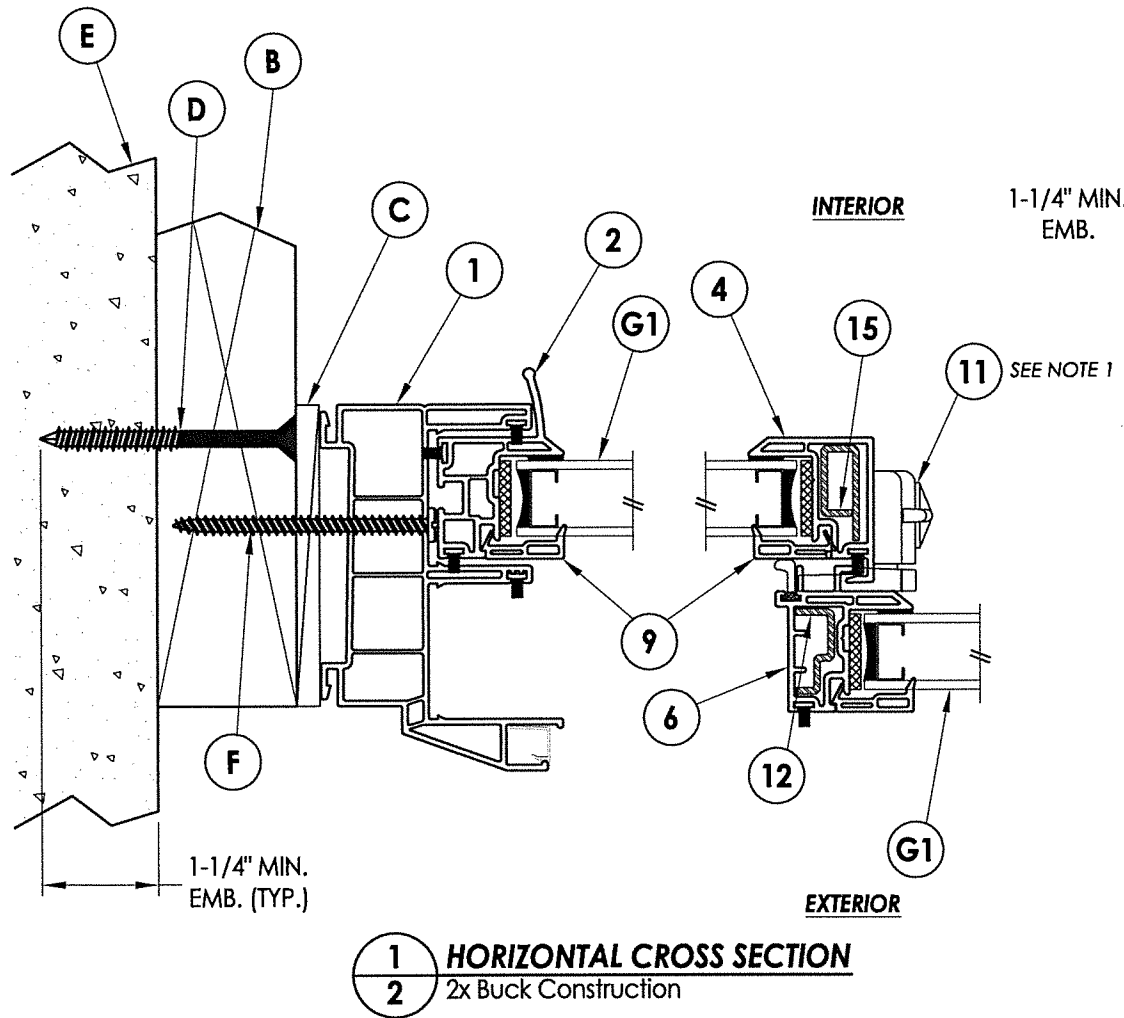
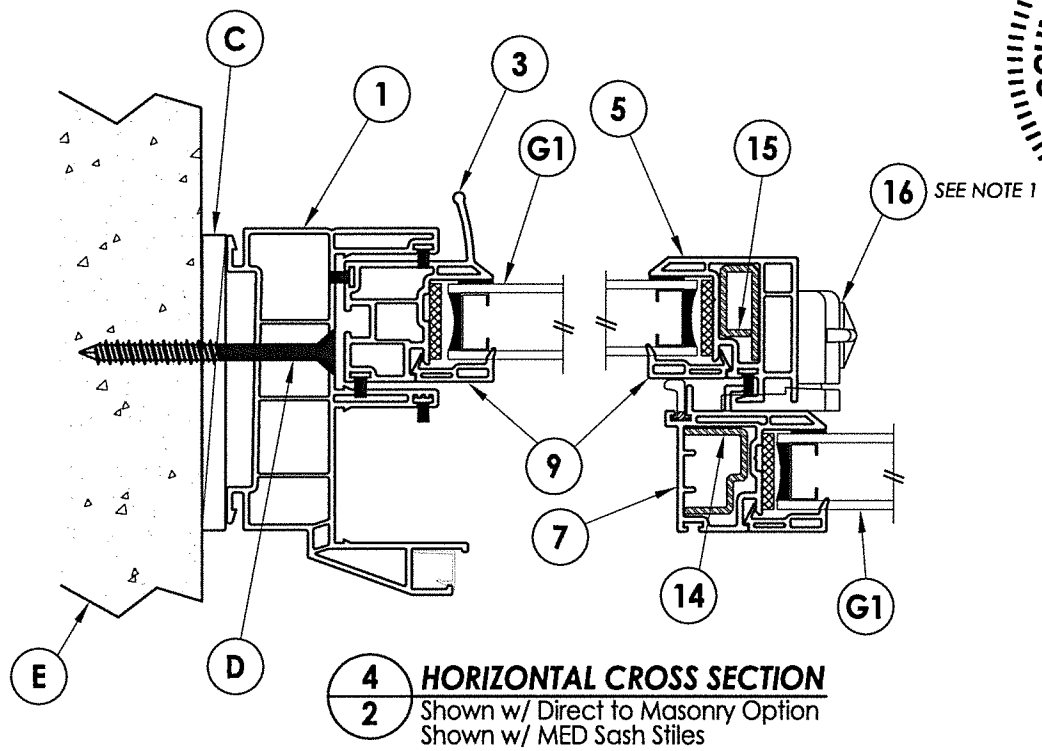
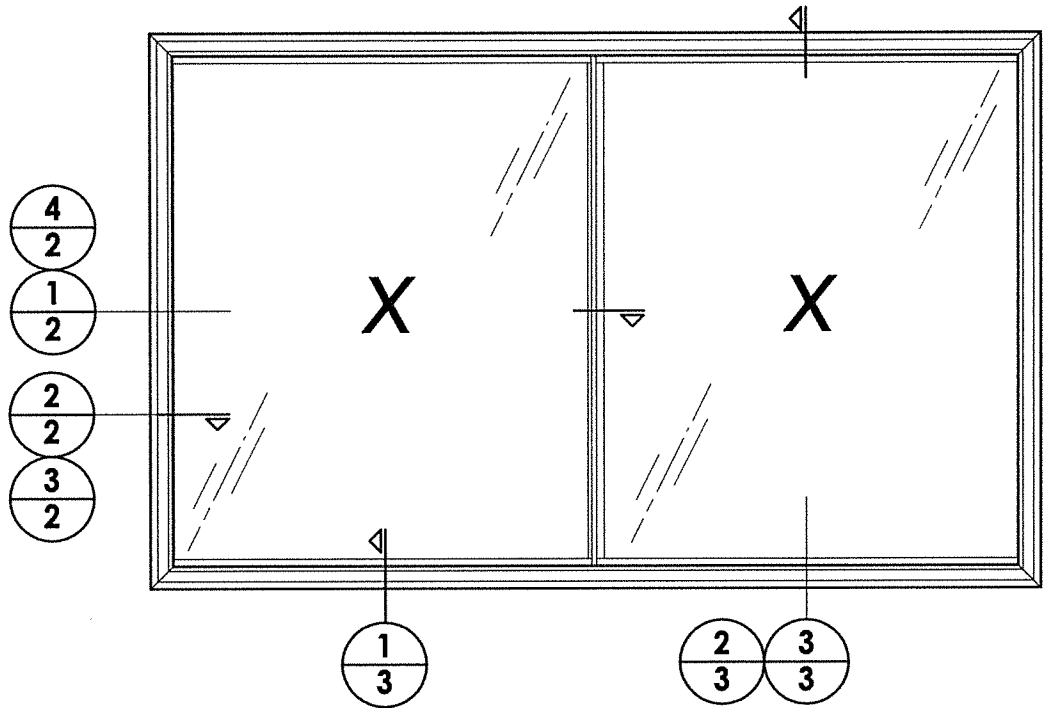
P.O. Box 230, Valrico, FL 33595

Phone No.: 813.659.9197

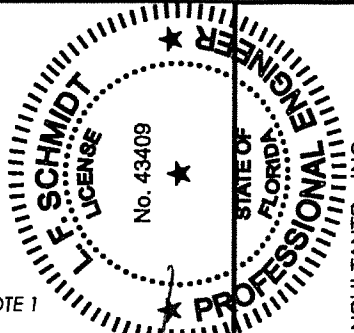
FBPE C.A. No. 9813

RW

8-3-16



NOTE:
1. Locks located 10" from the top and bottom of sash for a total of 2.



Documents Prepared By:
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FBPE C.A. No. 9813

PRODUCT: HORIZONTAL SLIDER

PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS
4	7/18/16	UPDATE B.O.M. & ADD COMP.'S
3	8/18/15	ADDED FRAME SIZE
2	1/27/15	UPDATE TO 5TH ED. (2014) FBC
1	4/15/14	ADDED FRAME SIZE
		BY

DATE: 12/17/13

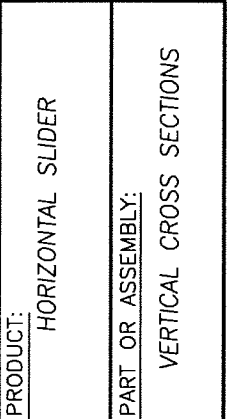
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CHK. BY: LFS

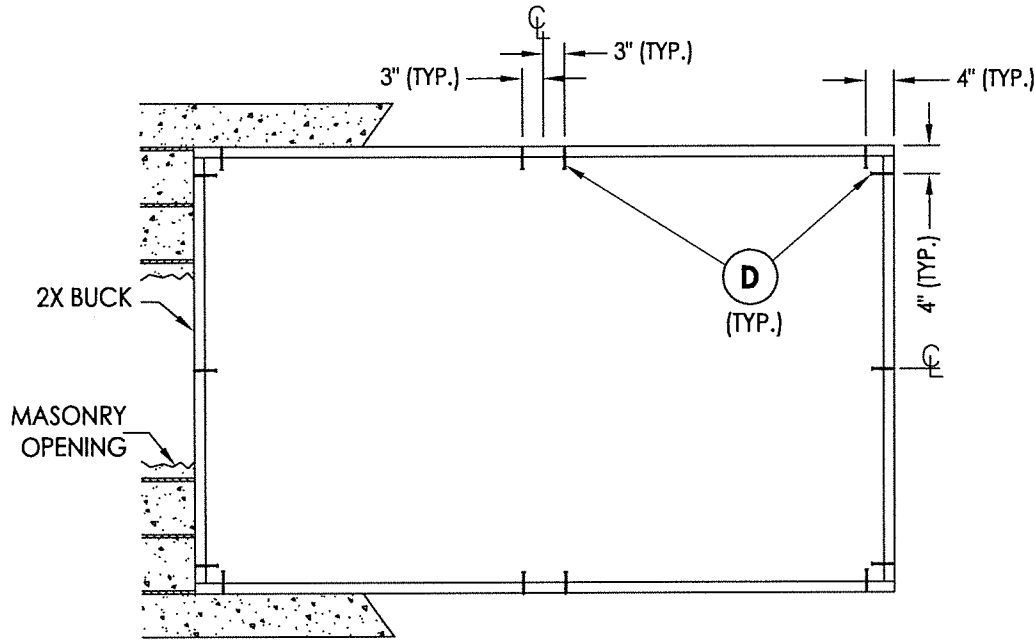
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SHEET 2 OF 5

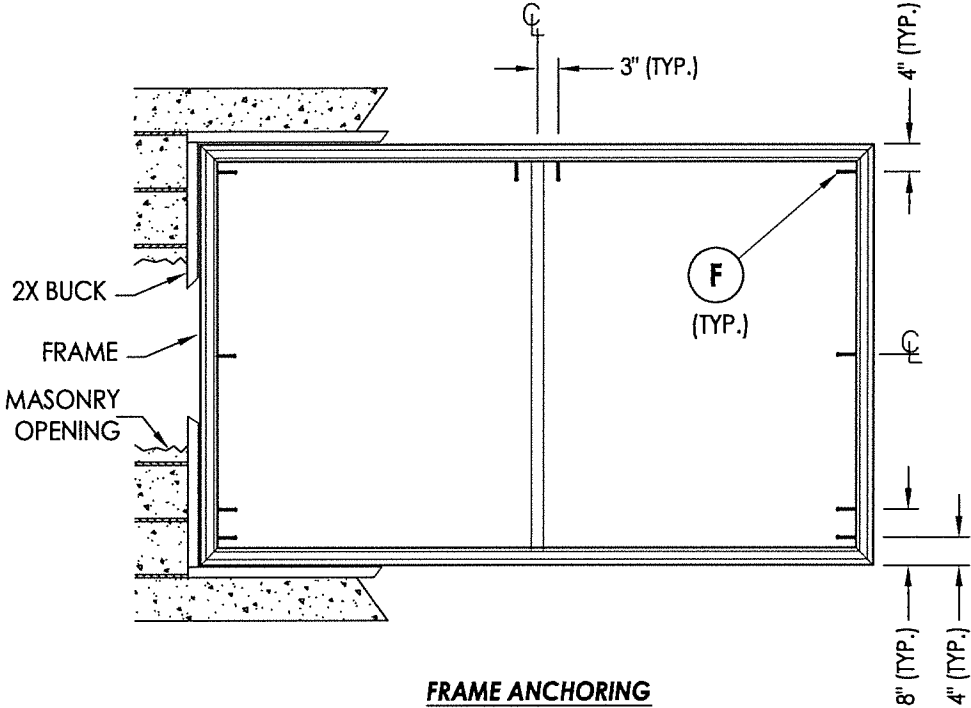
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DATE: 12/17/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-11141.32
SHEET <u>3</u> OF <u>5</u>

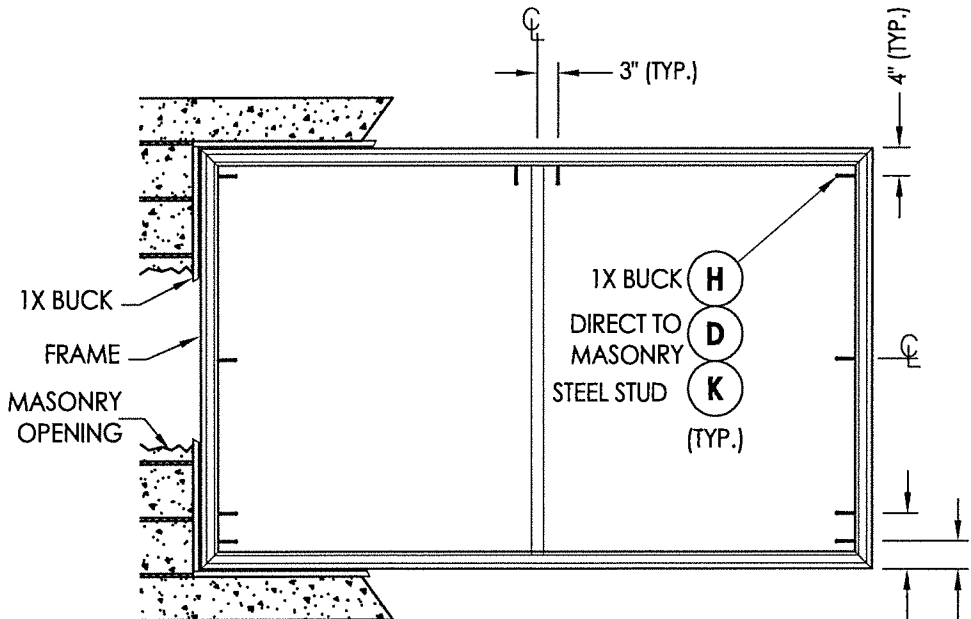
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BUCK ANCHORING



FRAME ANCHORING
2X BUCK



FRAME ANCHORING
1X BUCK, DIRECT TO MASONRY, STEEL STUD

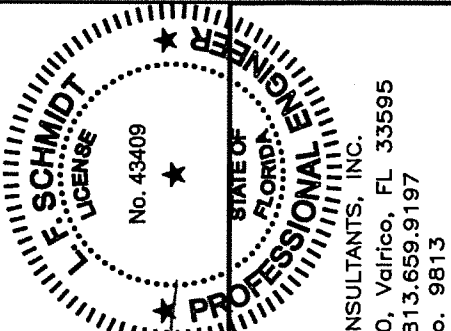
CONCRETE ANCHOR NOTES:

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ELCO ULTRACON®	1/4"	1-1/4"	1"	4"

WOOD SCREW INSTALLATION NOTES:

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

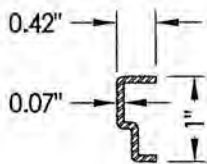


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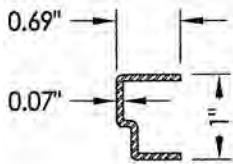
PRODUCT:		HORIZONTAL SLIDER	
PART OR ASSEMBLY:		BUCK & FRAME ANCHORING	
REVISIONS			
NO.	DATE	BY	
4	7/18/16	JK	UPDATE B.O.M. & ADD COMP.'S
3	8/18/15	LFS	ADDED FRAME SIZE
2	1/27/15	JK	UPDATE TO 5TH ED. (2014) FBC
1	4/15/14	LFS	ADDED FRAME SIZE
DATE: 12/17/13			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-11141.32			
SHEET 4 OF 5			

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK 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 ELCO OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	#8 X 2-3/4" PPH SMS (1-3/8" MIN. EMBEDMENT)	STEEL
H	1/4" x 3-3/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL
K	#10 PFH 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 *	RIGID PVC
2	EXTRUDED VINYL SASH PULL STILE (SM) *	RIGID PVC
3	EXTRUDED VINYL SASH PULL STILE (MED) *	RIGID PVC
4	EXTRUDED VINYL LOCK STILE (SM) *	RIGID PVC
5	EXTRUDED VINYL LOCK STILE (MED) *	RIGID PVC
6	EXTRUDED VINYL KEEPER STILE (SM) *	RIGID PVC
7	EXTRUDED VINYL KEEPER STILE (MED) *	RIGID PVC
8	EXTRUDED VINYL SILL TRACK *	RIGID PVC
9	EXTRUDED VINYL GLAZING BEAD *	RIGID PVC
10	EXTRUDED VINYL TOP AND BOTTOM RAIL (SM) *	RIGID PVC
11	EXTRUDED VINYL TOP AND BOTTOM RAIL (MED) *	RIGID PVC
12	SASH REINFORCEMENT (SM)	STEEL
14	SASH REINFORCEMENT (Med)	STEEL
15	SASH REINFORCEMENT	STEEL
16	LOCK	-
17	ANTI LIFT BLOCK*	RIGID PVC
18	SETTING BLOCK	-

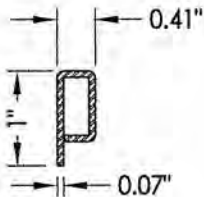
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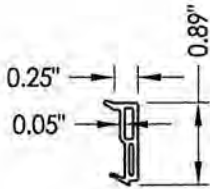
12 REINFORCEMENT SM



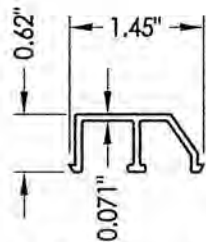
14 REINFORCEMENT MED



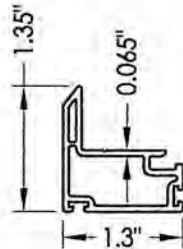
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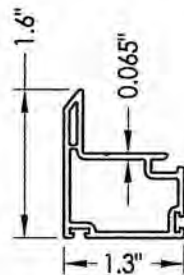
9 GLAZING BEAD



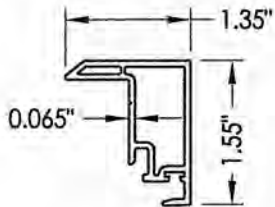
8 SILL TRACK



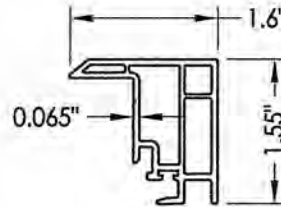
10 TOP AND BOTTOM RAIL SM



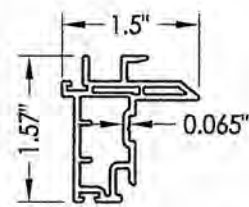
11 TOP & BOTTOM RAIL MED



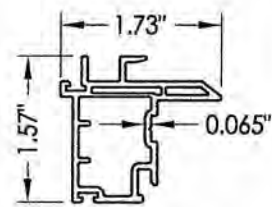
4 LOCK STILE SM



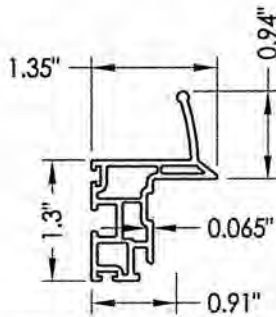
5 LOCK STILE MED



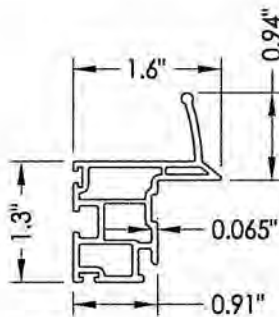
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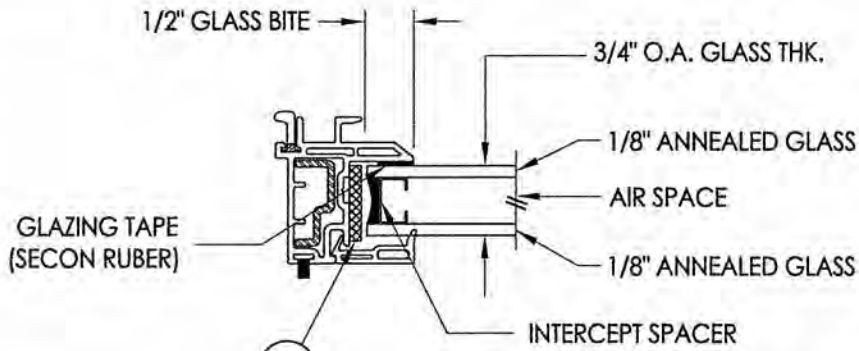
7 KEEPER STILE MED



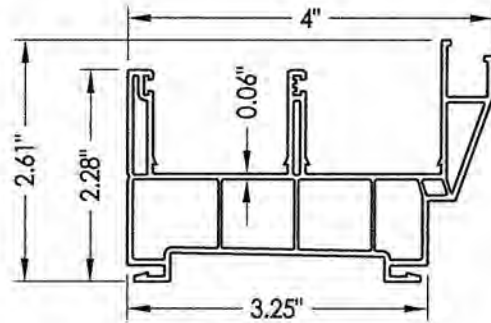
2 SASH PULL STILE SM



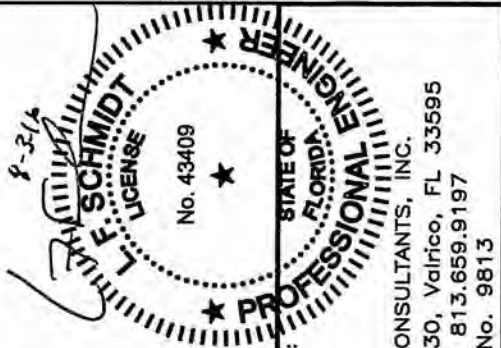
3 SASH PULL STILE MED



G1 GLAZING DETAIL



1 FRAME



Documents Prepared By:
Lyndon F. Schmidt
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Phone No.: 813.659.9197
FBPE C.A. No. 9813

PRODUCT:
HORIZONTAL SLIDER

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

	JK	LFS	JK	LFS	BY
4	7/18/16	UPDATE B.O.M. & ADD COMP'S			
3	8/18/15	ADDED FRAME SIZE			
2	1/27/15	UPDATE TO 5TH ED. (2014) FBC			
1	4/15/14	ADDED FRAME SIZE			
NO	DATE				

DATE: 12/17/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

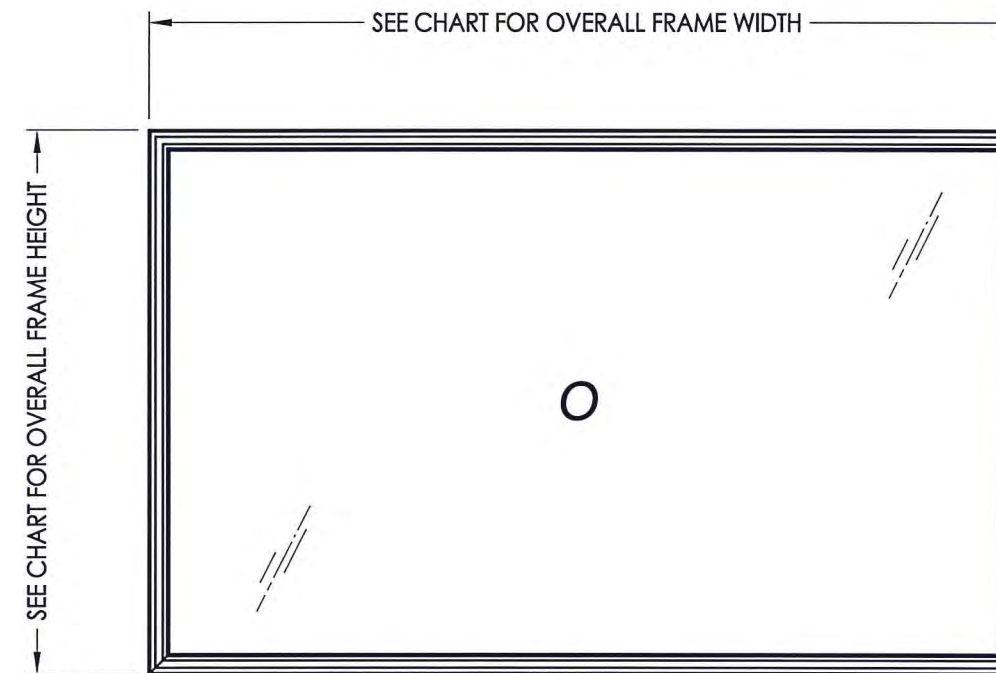
DRAWING NO.: FL-11141.32

SHEET 5 OF 5



1. This product has been evaluated and is in compliance with the 5th Edition (2014) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
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 is required to be protected with an impact resistant covering that complies with Section 1609.1.2 of the FBC.
4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5. 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 & general notes
2	Vertical & horizontal cross sections
3	Vertical & horizontal cross sections
4	Buck & frame anchoring
5	Bill of materials, glazing detail and components



OVERALL FRAME DIMENSION	OVERALL DAY LIGHT DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
			POS.	NEG.
96.0" X 75.0"	90.5" X 69.5"	G1	+35.0	-35.0
60.0" X 60.0"	54.5" X 54.5"	G2	+40.0	-40.0
72.0" X 48.0"	66.5" X 42.5"		+45.0	-45.0



[Signature]
7.27.16

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

STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

PRODUCT: FIXED WINDOW		PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES				REVISIONS	
		4/21/16	UPDATE FOR NEW TESTING	LFS			
		1/27/15	UPDATE TO 5TH ED. (2014) FBC	JK			
		11/08/11	UPDATE TO 2010 FBC	KV			
		8/09/10	REVISED GLAZING AND D.P. TABLE	JK			
		NO. DATE		BY			

DATE: 12/03/08

SCALE: N.T.S.

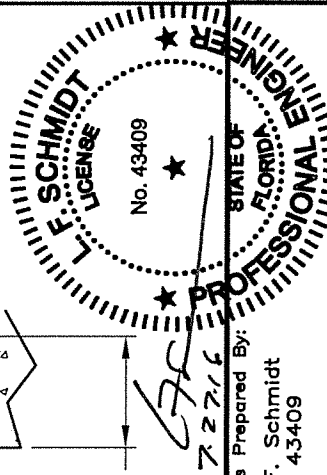
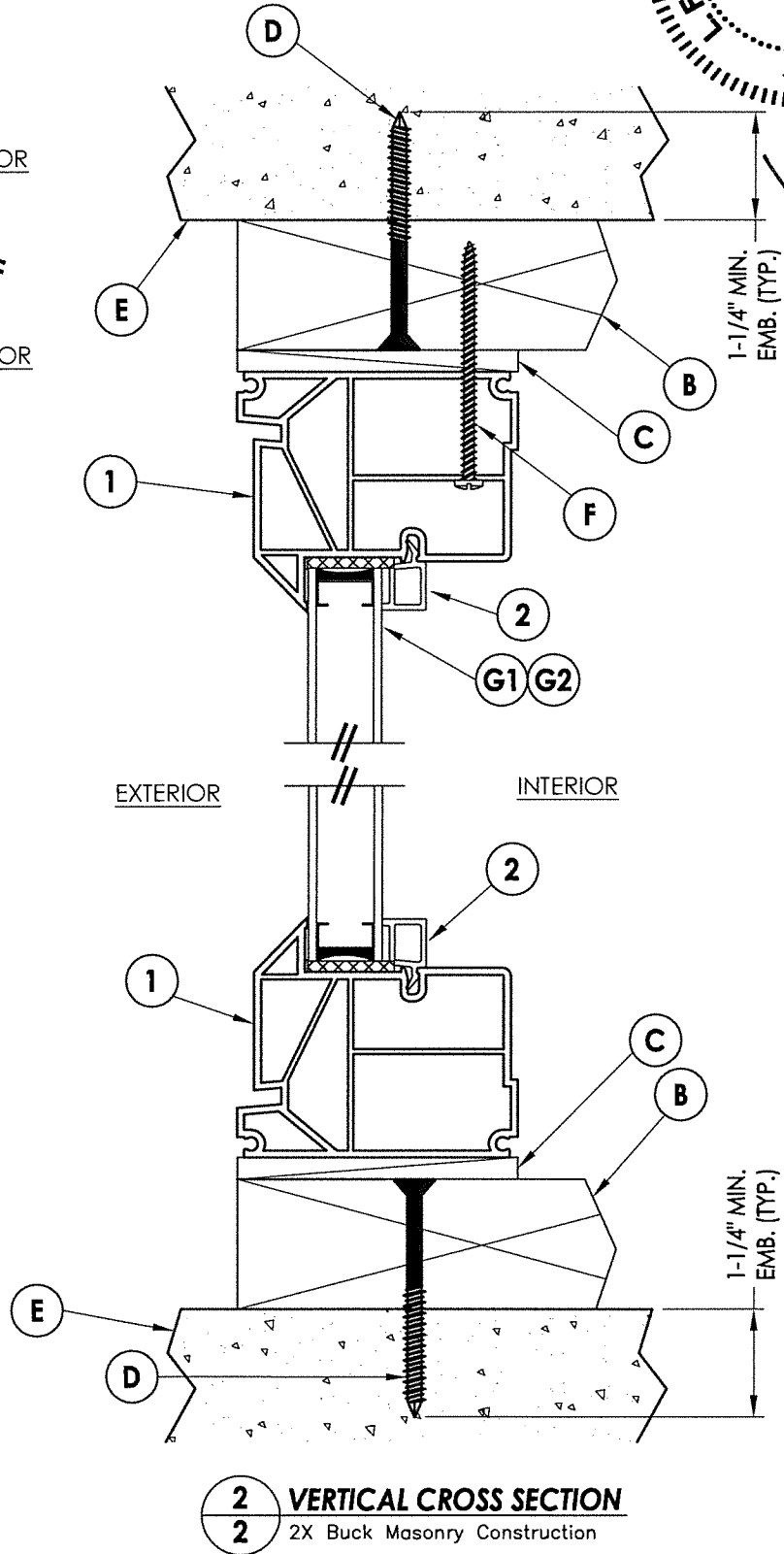
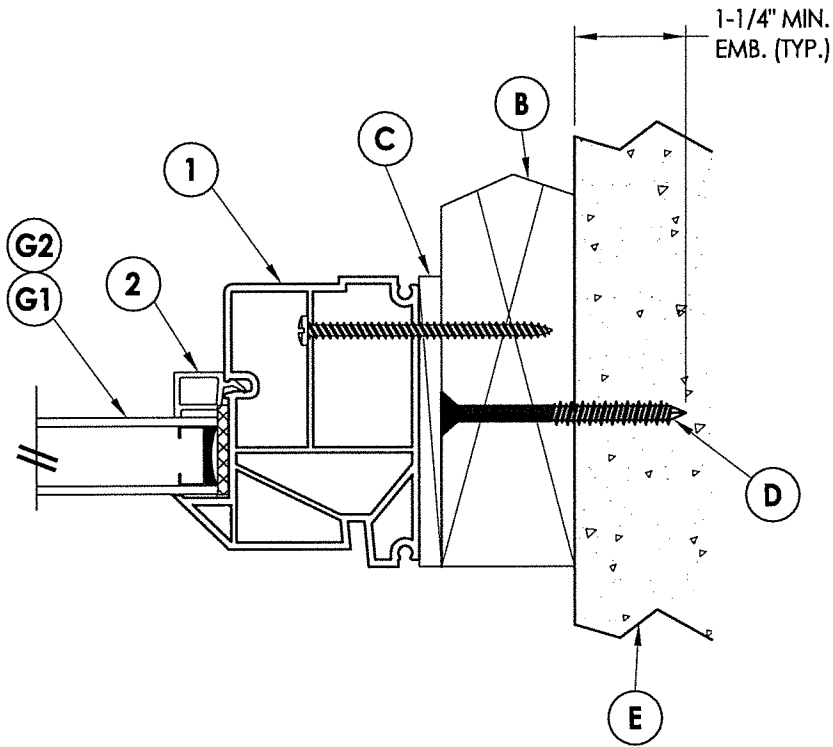
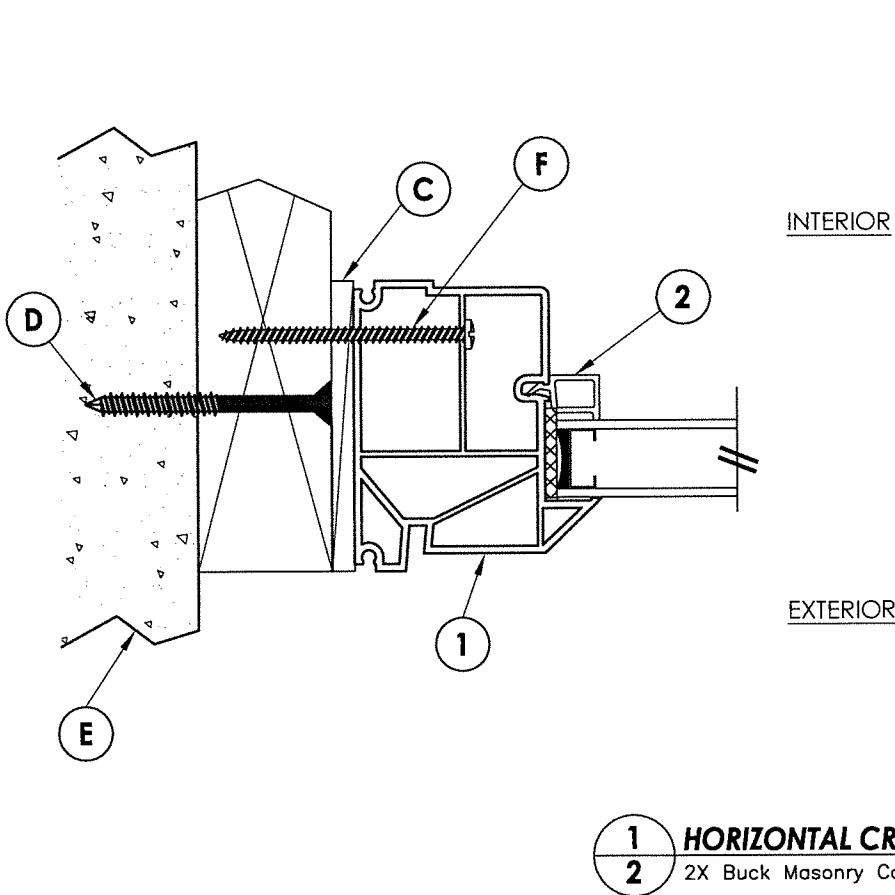
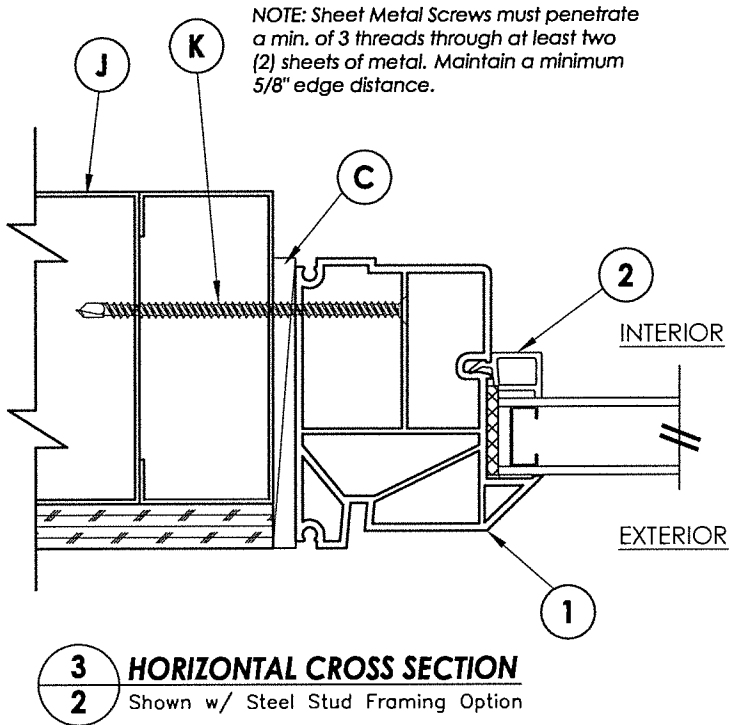
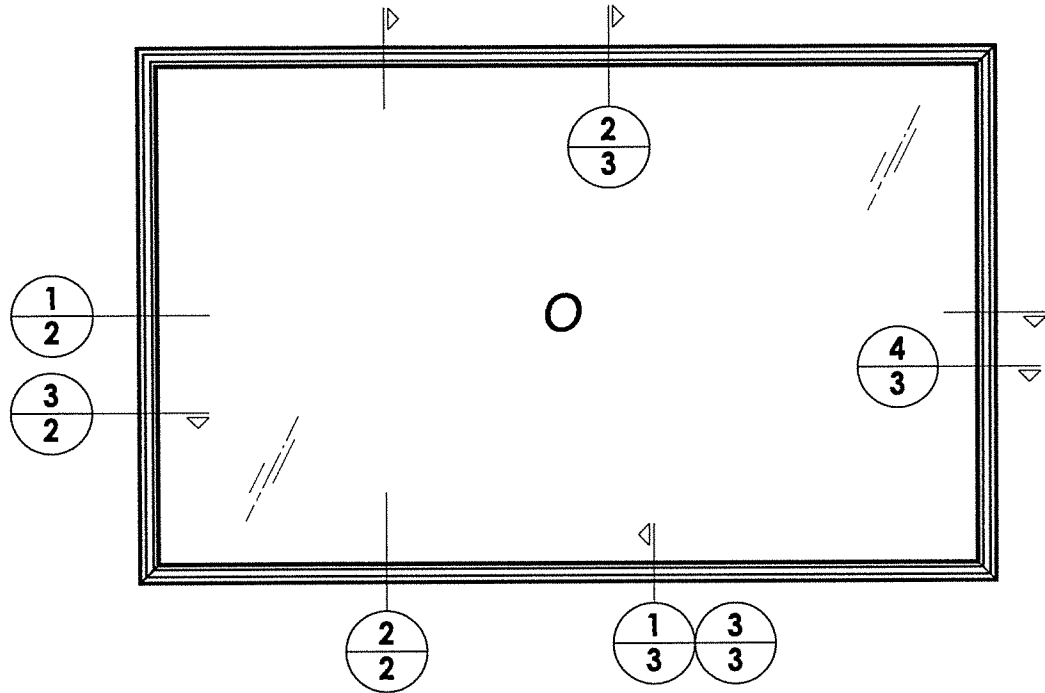
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:
FL-9909.10

SHEET 1 **OF** 5

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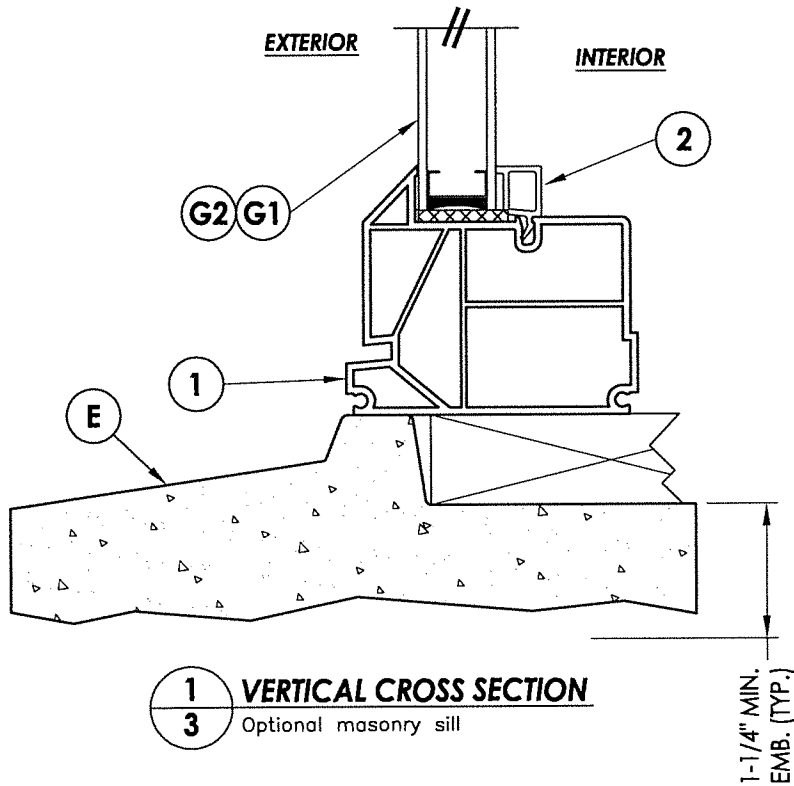


Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

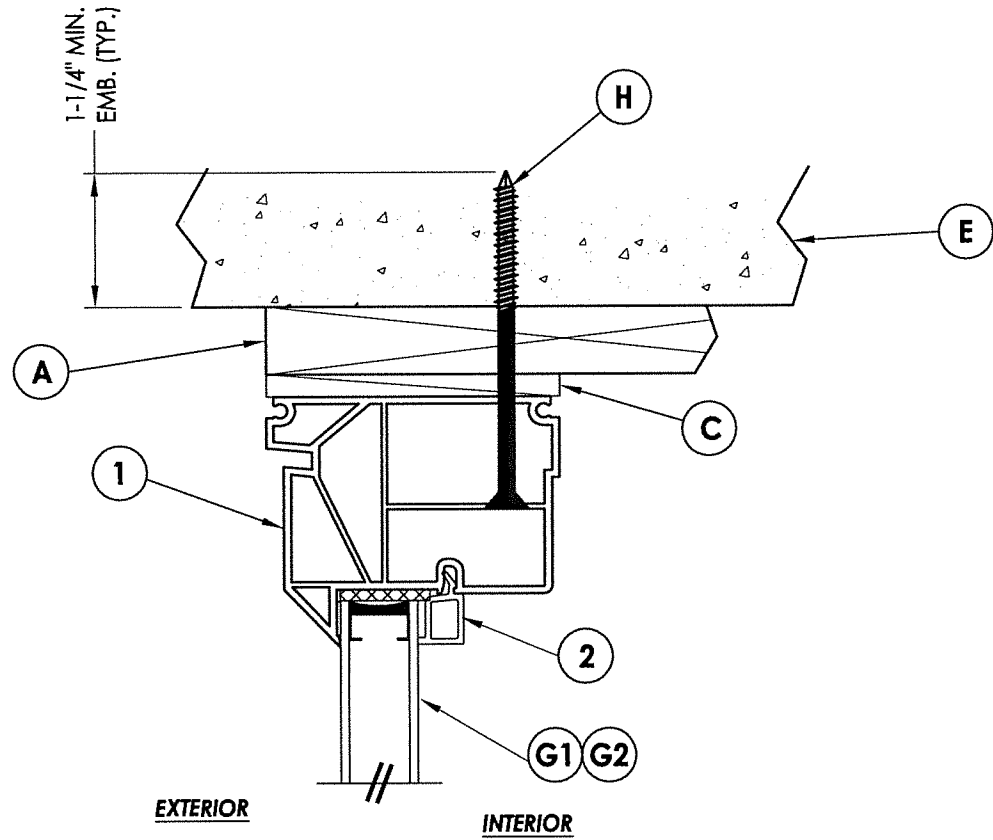
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE C.A. No. 9813

PRODUCT:		FIXED WINDOW	
PART OR ASSEMBLY:		VERTICAL & HORIZONTAL CROSS SECTIONS	
REVISIONS			
NO.	DATE	BY	
4	4/21/16	UPDATE FOR NEW TESTING	LFS
3	1/27/15	UPDATE TO 5TH ED. (2014) FBC	JK
2	11/08/11	UPDATE TO 2010 FBC	KV
1	8/09/10	REVISED GLAZING AND D.P. TABLE	JK

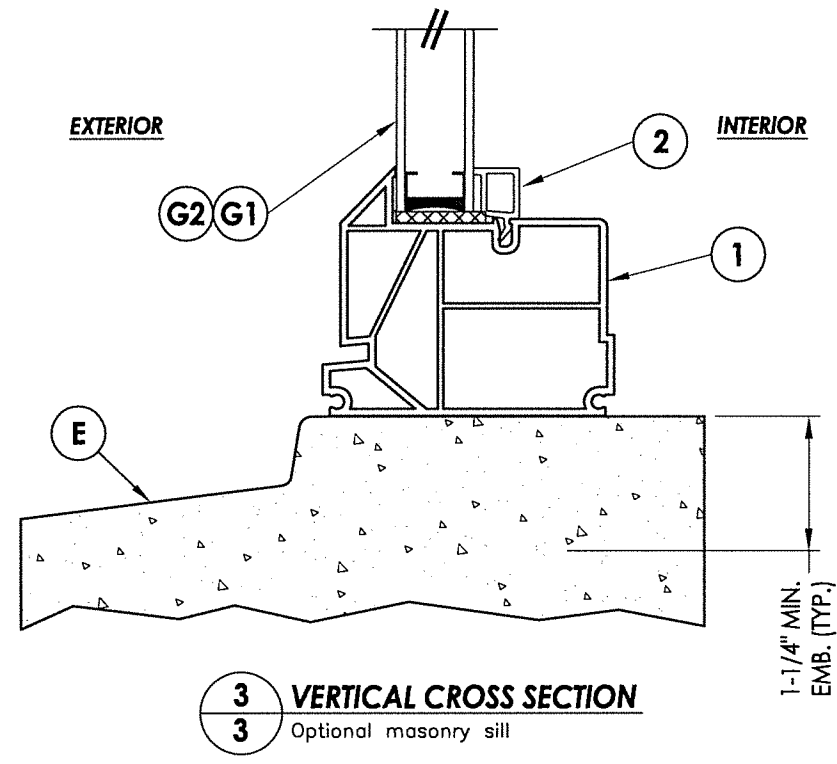
DATE: 12/03/08
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-9909.10
SHEET 2 OF 5



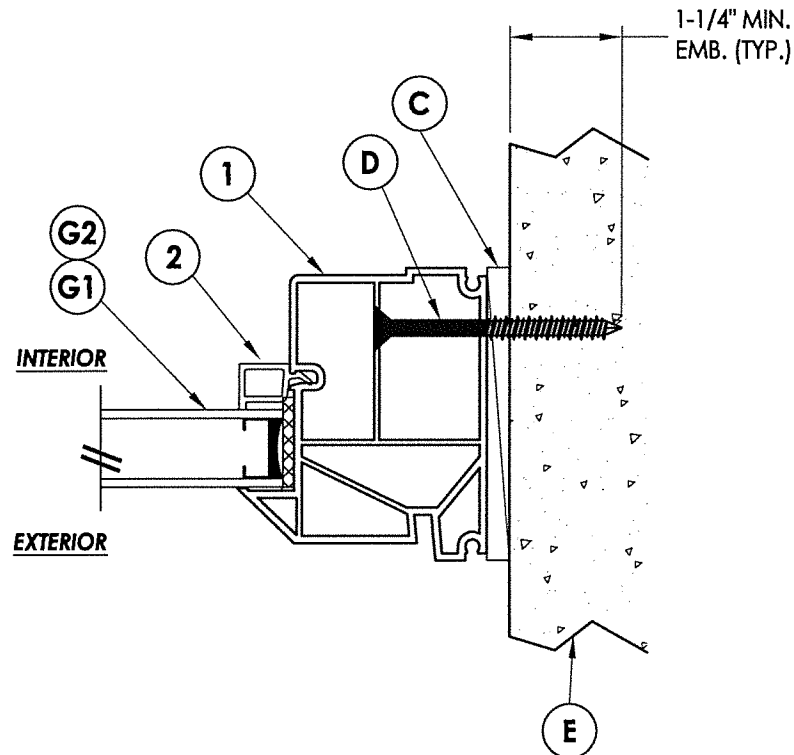
1 **VERTICAL CROSS SECTION**
3 Optional masonry sill



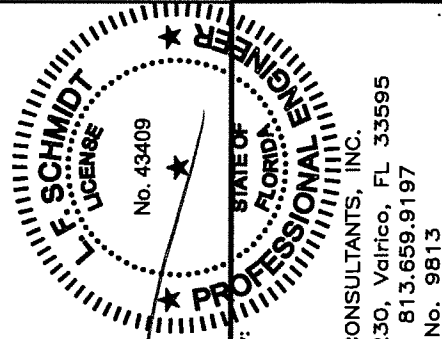
2 **VERTICAL CROSS SECTION**
3 Shown w/1X sub-buck



3 **VERTICAL CROSS SECTION**
3 Optional masonry sill



4 **HORIZONTAL CROSS SECTION**
3 Shown Direct to Masonry



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 C.A. No. 9813

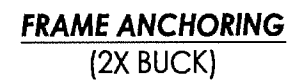
PRODUCT:		FIXED WINDOW	
PART OR ASSEMBLY:		VERTICAL & HORIZONTAL CROSS SECTIONS	

NO.	DATE	REVISIONS
4	4/21/16	UPDATE FOR NEW TESTING
3	1/27/15	UPDATE TO 5TH ED. (2014) FBC
2	11/08/11	UPDATE TO 2010 FBC
1	8/09/10	REVISED GLAZING AND D.P. TABLE

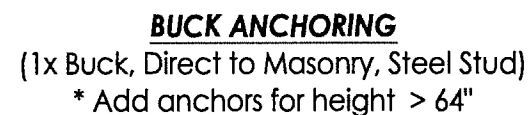
DATE:	12/03/08
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-9909.10
SHEET	3 OF 5



- * Add anchors for width > 58"
- ** Add anchors for height > 58"



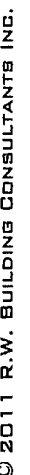
- * Add anchors for width > 60"
- ** Add anchors for height > 48"



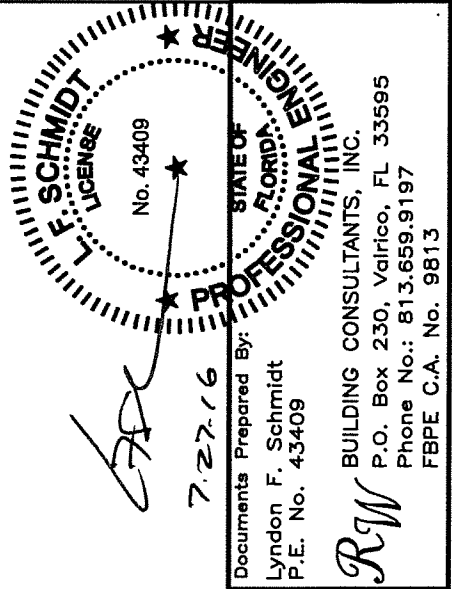
1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. 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"
ELCO ULTRA CON®	1/4"	1-1/4"	1"	4"

1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



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

[illegible]

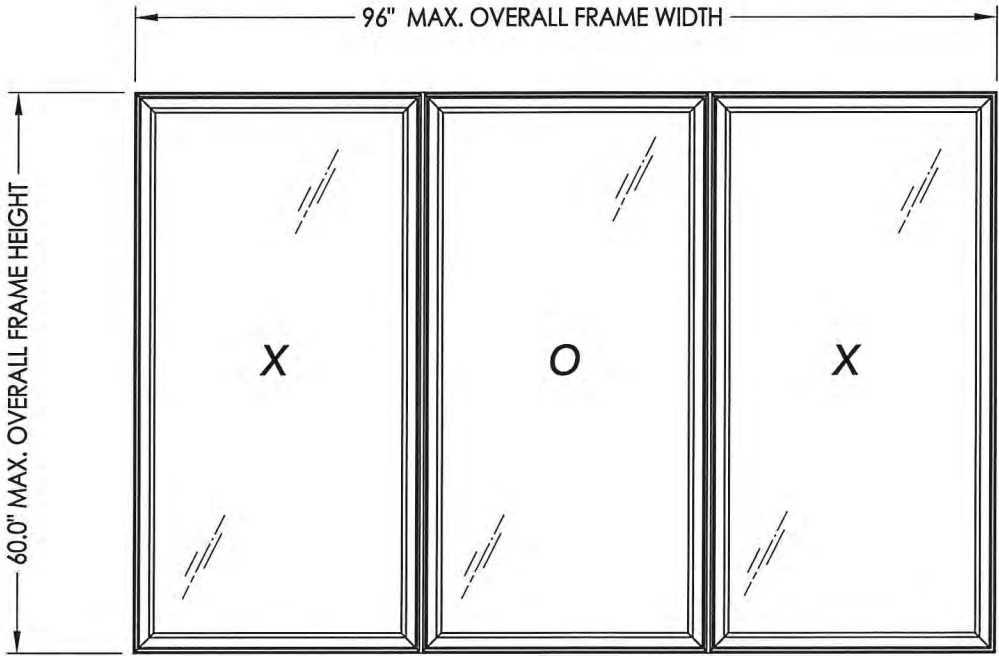
 **ASSOCIATED MATERIALS**
I N C O R P O R A T E D
3773 STATE ROAD
CUYAHOGA FALLS, OH 44223

SERIES 0979
PVC TRIPLE CASEMENT WINDOW
"NON-IMPACT"

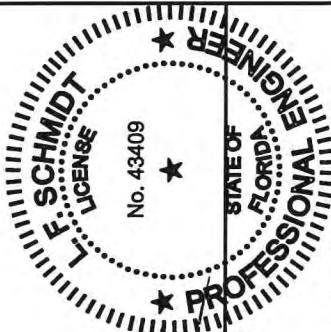
GENERAL NOTES

1. This product has been evaluated and is in compliance with the 5th Edition (2014) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
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 is required to be protected with an impact resistant covering that complies with Section 1609.1.2 of the FBC.
4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.

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SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Horizontal & vertical cross sections
3	Horizontal & vertical cross sections
4	Buck & frame anchoring
5	Bill of materials, glazing detail and components



OVERALL FRAME DIMENSION	OVERALL VENT DAY LIGHT DIMENSION	OVERALL FIXED DAY LIGHT DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POS.	NEG.
96.0" X 60.0"	26.75" X 54.38"	26.75" X 54.38"	G1	+40.0	-40.0
96.0" X 48.0"	26.75" X 42.38"	26.75" x 42.38"	G1	+45.0	-45.0



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

Lyndon F. Schmidt
4.21.15

PROFESSIONAL ENGINEER
STATE OF FLORIDA
No. 43409

PRODUCT: CASEMENT WINDOW

PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

DATE: 1/5/09
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-11907.7
SHEET 1 OF 5

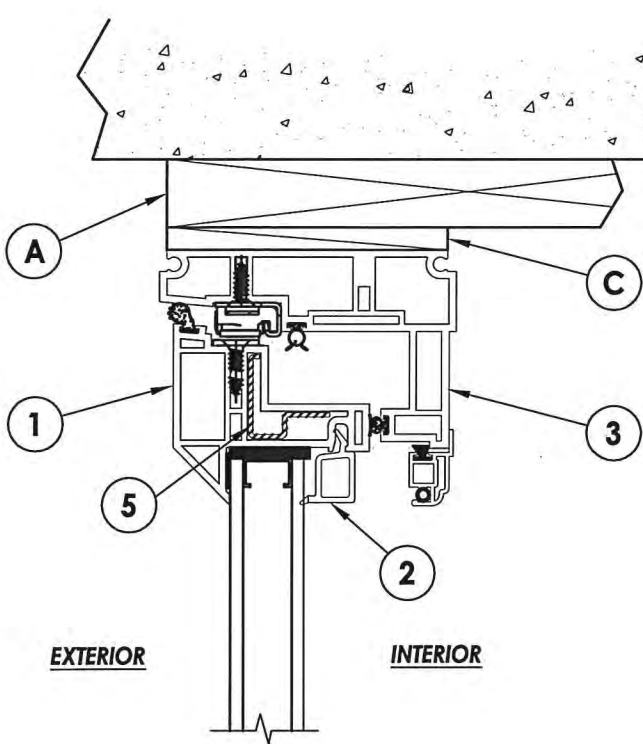
REVISIONS

NO.	DATE	BY	JK
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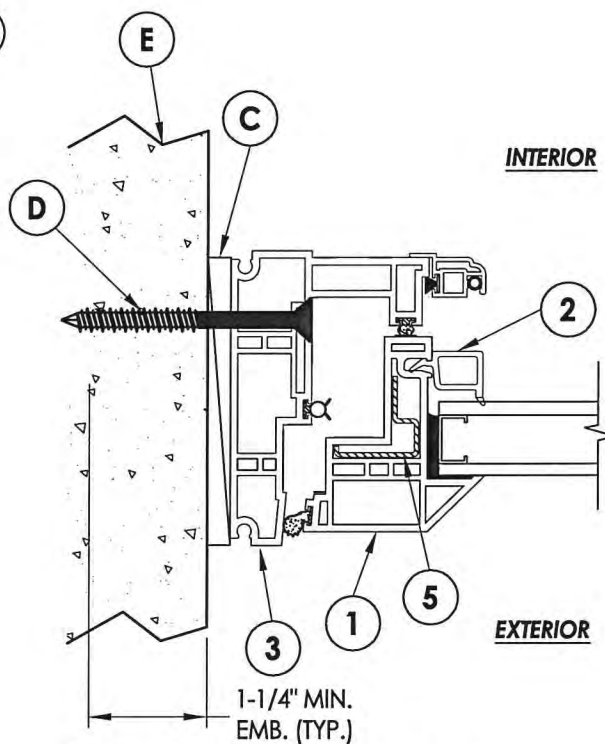
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE C.A. No. 9813

RW

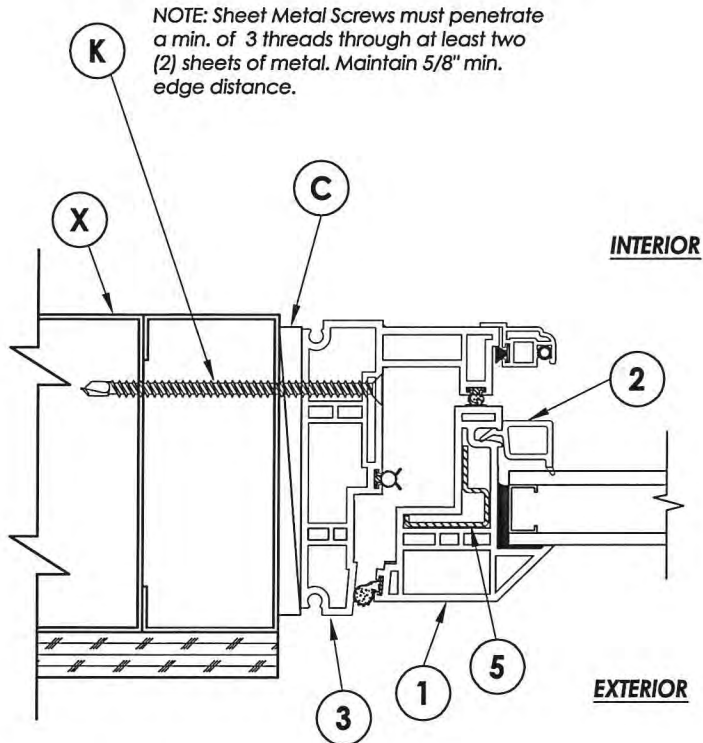
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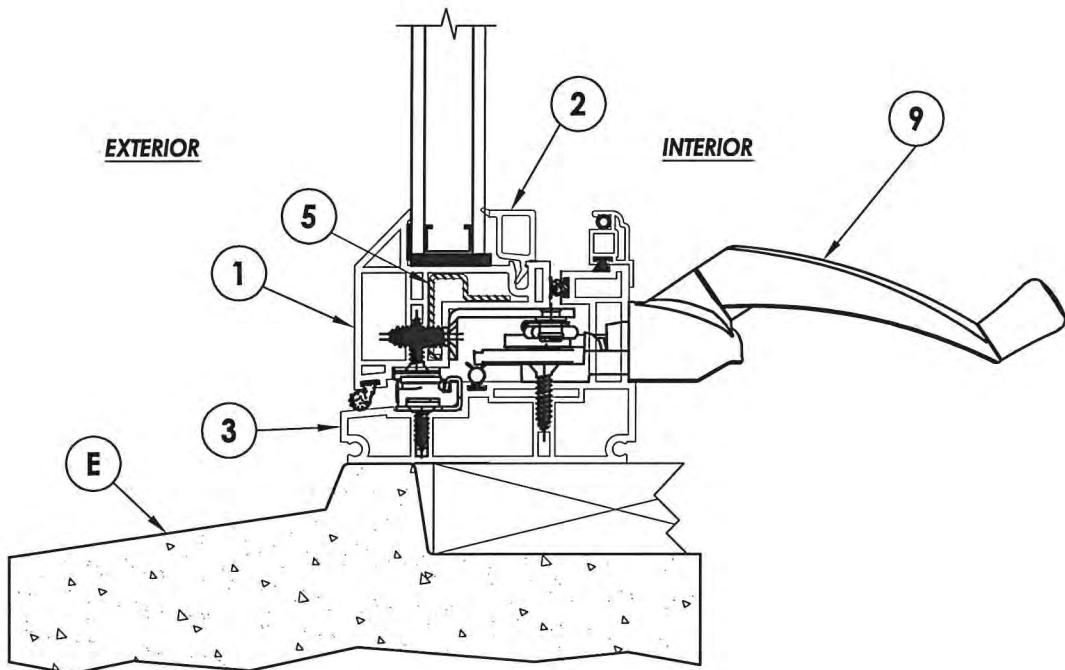
3 VERTICAL CROSS SECTION
Shown w/ 1x sub-buck option



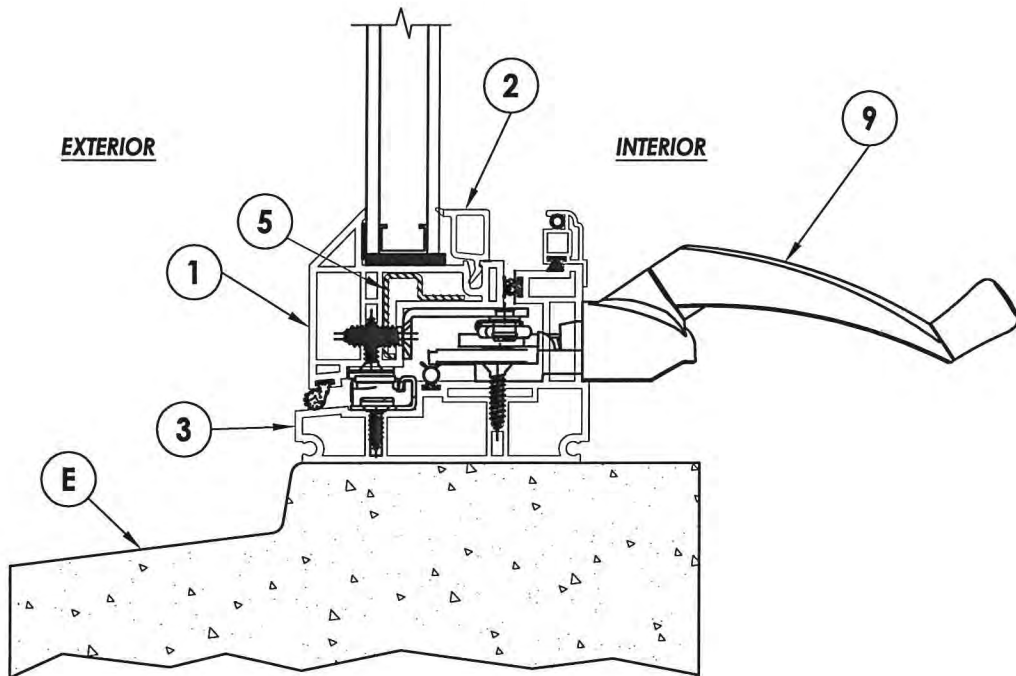
4 HORIZONTAL CROSS SECTION
Shown w/ Direct to Masonry option



5 HORIZONTAL CROSS SECTION
Shown w/ Steel Stud framing option



1 VERTICAL CROSS SECTION
Optional masonry sill



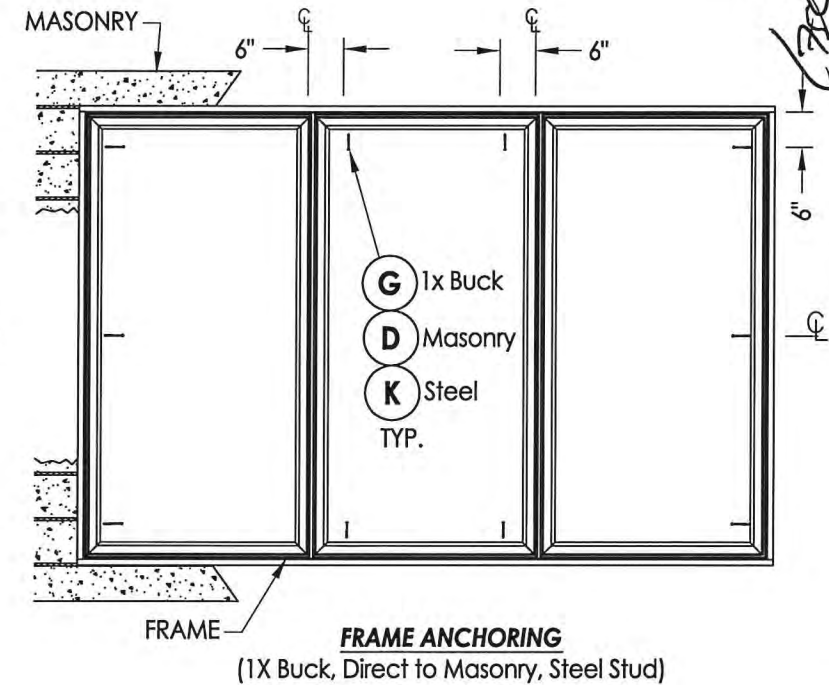
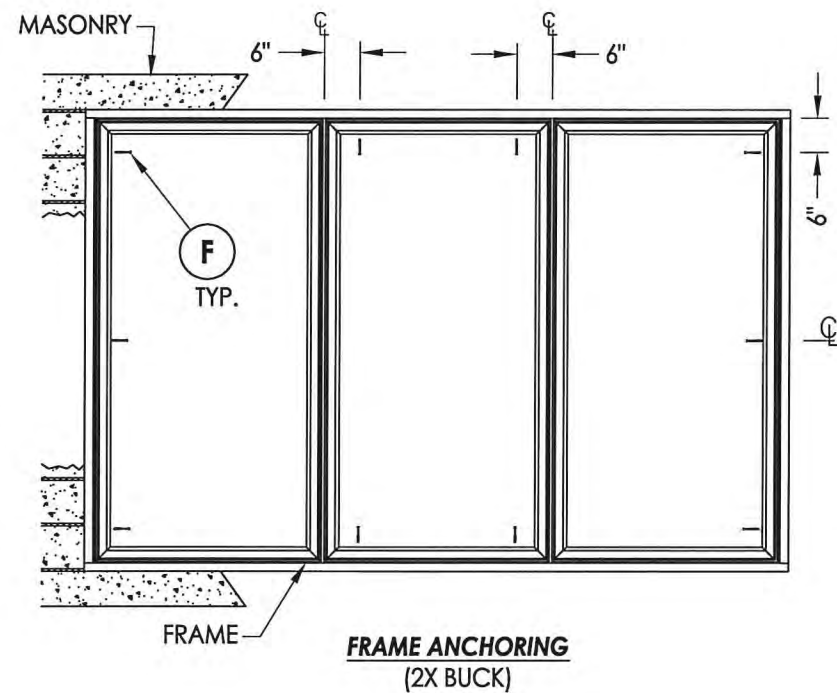
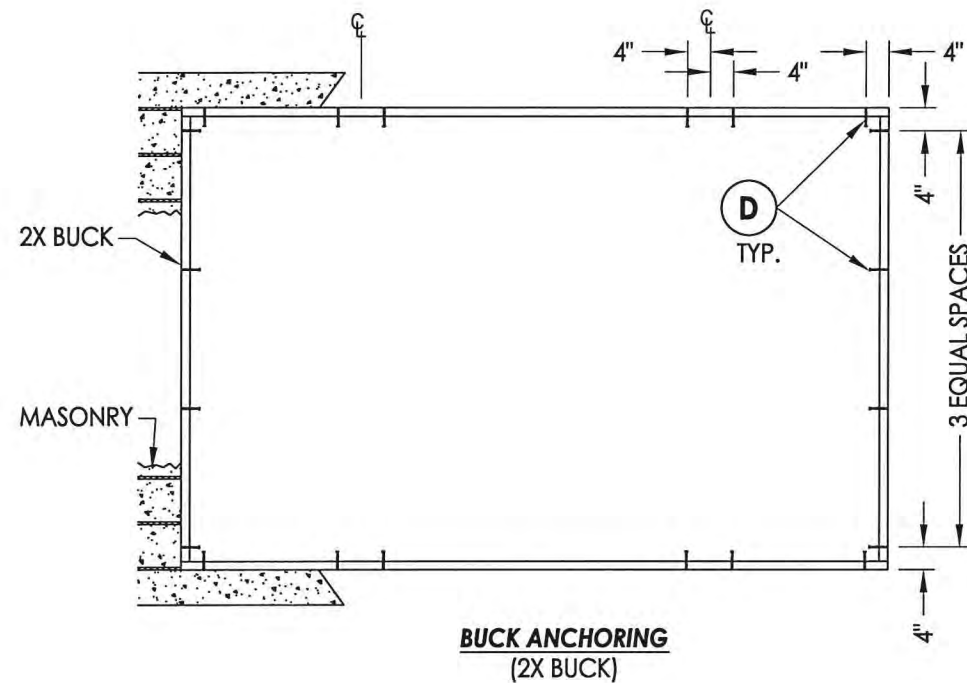
2 VERTICAL CROSS SECTION
Optional masonry sill



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 C.A. No. 9813

PRODUCT:		CASEMENT WINDOW	
PART OR ASSEMBLY:		HORIZONTAL & VERTICAL CROSS SECTIONS	
NO.	DATE	BY	JK
	1 4/15/15	DATE	BY
REVISIONS			
DATE: 1/5/09			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-11907.7			
SHEET 3 OF 5			

**CONCRETE ANCHOR NOTES:**

- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- 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.
- Concrete anchor table:

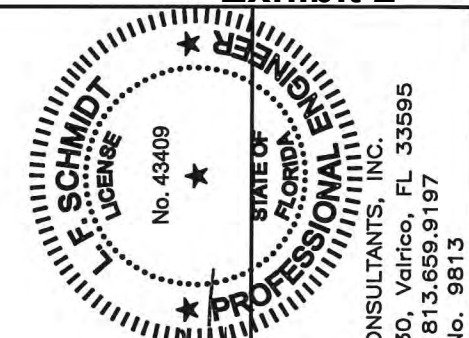
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"
	1/4"	1-1/4"	2"	4"
ELCO ULTRACON®	1/4"	1-1/4"	1"	4"

WOOD SCREW INSTALLATION NOTES:

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

FRAME ANCHORING NOTES (2x Buck Construction):

- Bar guides are secured w/ (1) item #F in the top screw location & (1) item #13 in the lower screw location, in each guide.
- Tie bar guides (4) are located 4", 26", 48" & 70" (Max. 22" O.C.) from the bottom of the frame. For 60" (or less) frame heights, only (3) bar guides are required.
- Snubbers are secured w/ (1) item #F in the top screw location & (1) item #12 in the lower screw location, in each snubber.
- Snubbers are located at 1/4 points and at mid-span from the bottom of the frame.
- For 1x Buck & Direct to Masonry Construction: Substitute a 3/16" ITW concrete screw (w/ 1-1/4" min. emb.) for item #F and items #12 & 13 as applicable.
- For Steel Stud Construction: Substitute a #10 self-drilling SMS for item #F and items #12 & 13 as applicable. Screws must penetrate a min. of 3 threads through at least two (2) sheets of metal. Maintain 5/8" min. edge distance.



Documents Prepared By:
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P.E. No. 43409

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

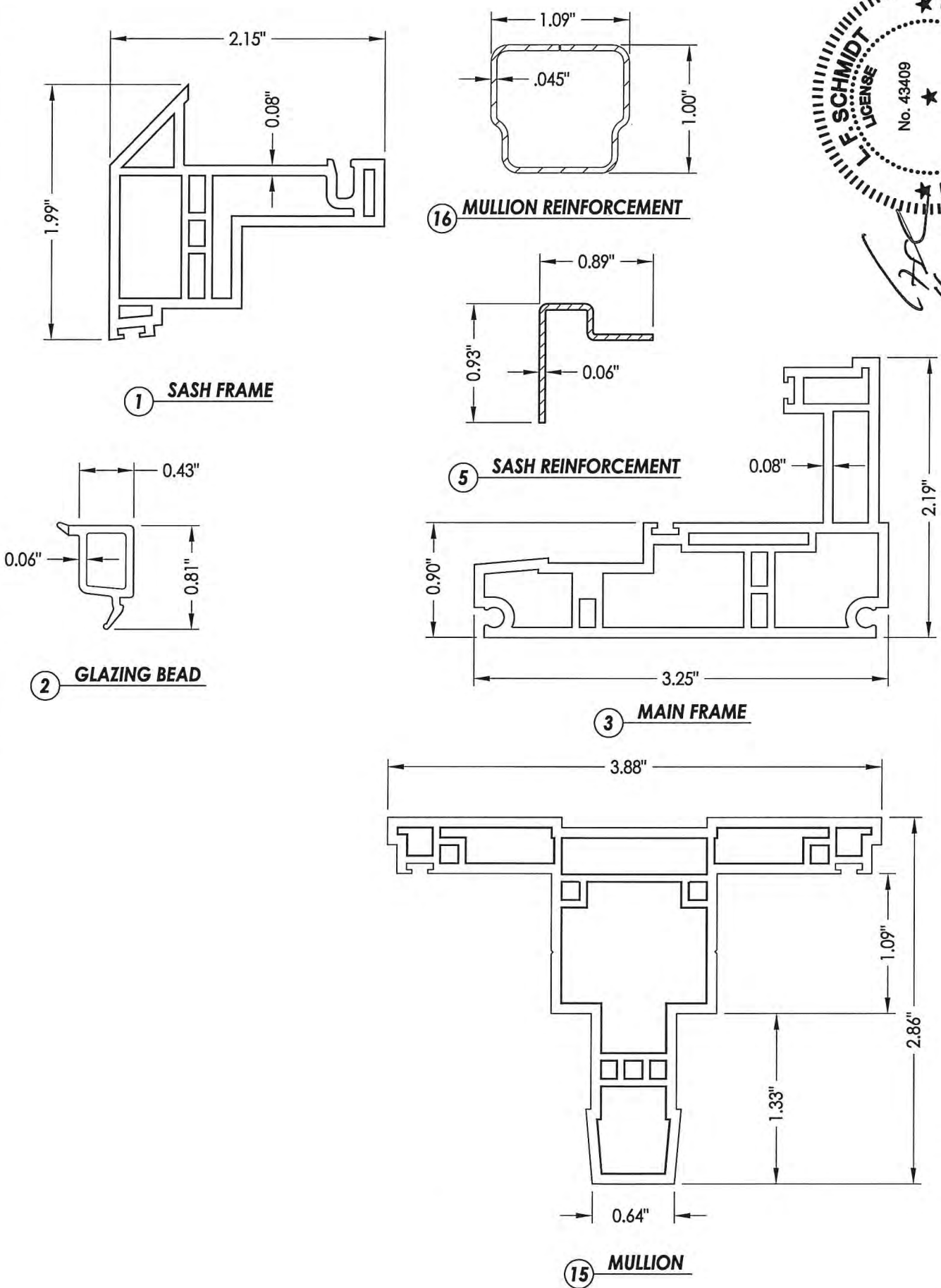
PRODUCT:
CASEMENT WINDOW

PART OR ASSEMBLY:
FRAME AND BUCK ANCHORING

NO.	DATE	REVISIONS
1	4/15/15	UPDATE TO 5TH ED. (2014) FBC
		JK
		BY

DATE: 1/5/09
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-11907.7
SHEET 4 OF 5

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





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 C.A. No. 9813

DATE:	1/5/09
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-11907.7
SHEET	5 OF 5

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

NO.	DATE	UPDATE TO 5TH ED. (2014) FBC	JK	BY
1	4/15/15			

REVISIONS				
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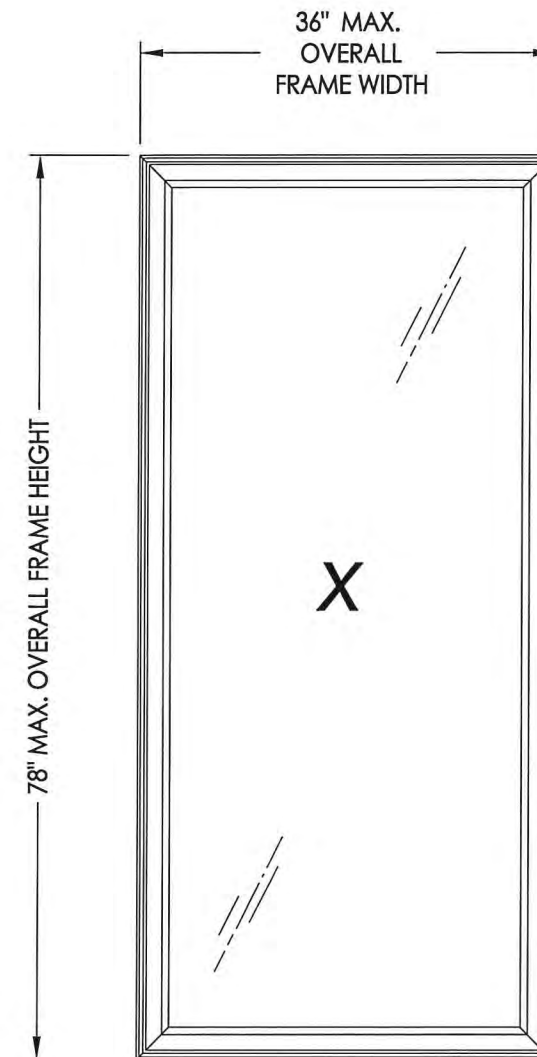


SERIES 0971
PVC VENT CASEMENT WINDOW
"NON-IMPACT"

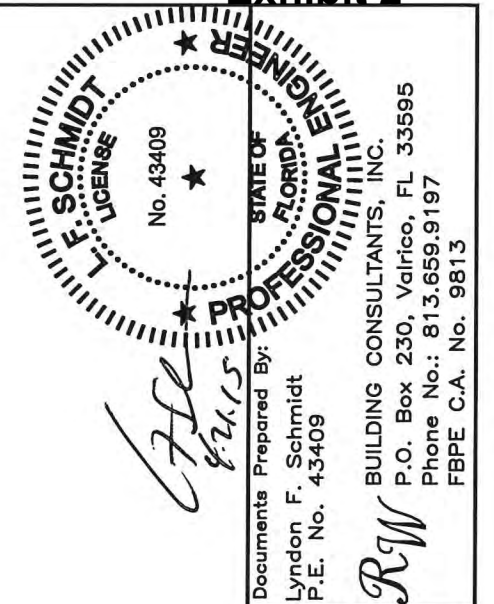
GENERAL NOTES

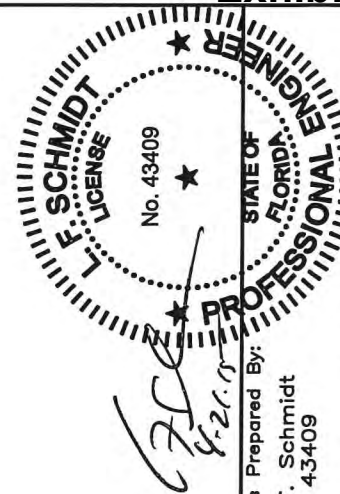
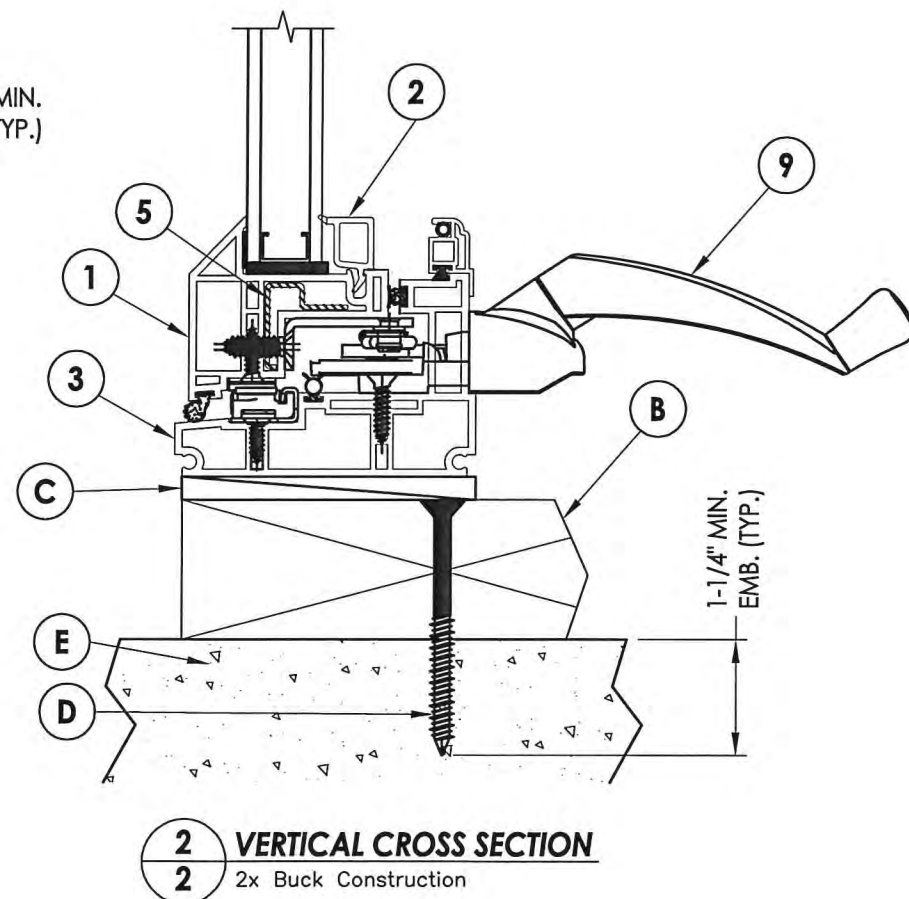
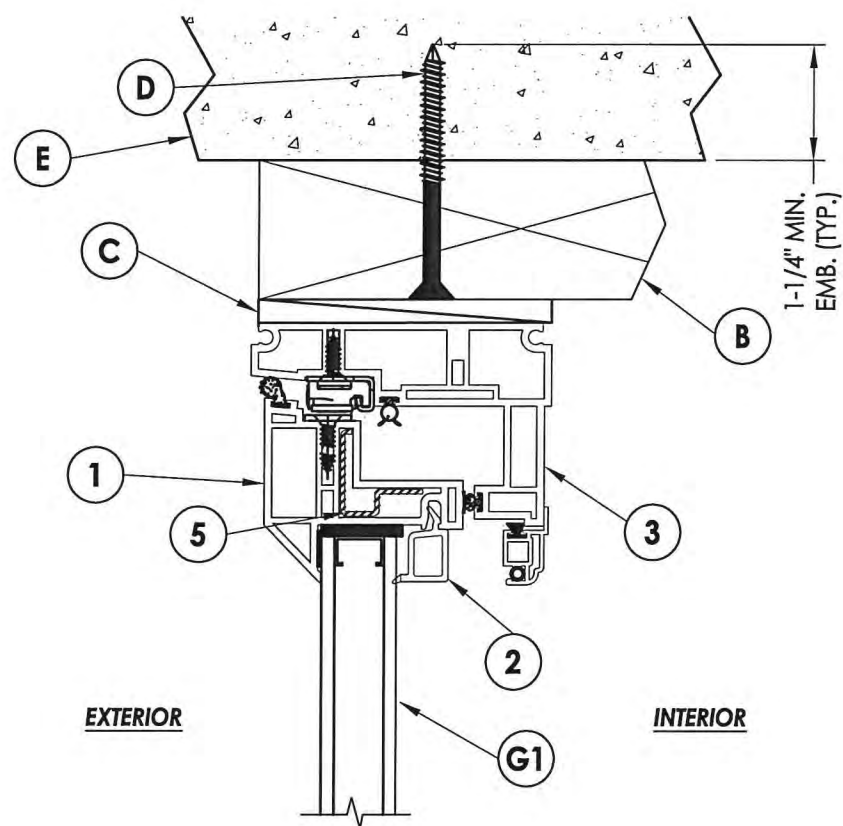
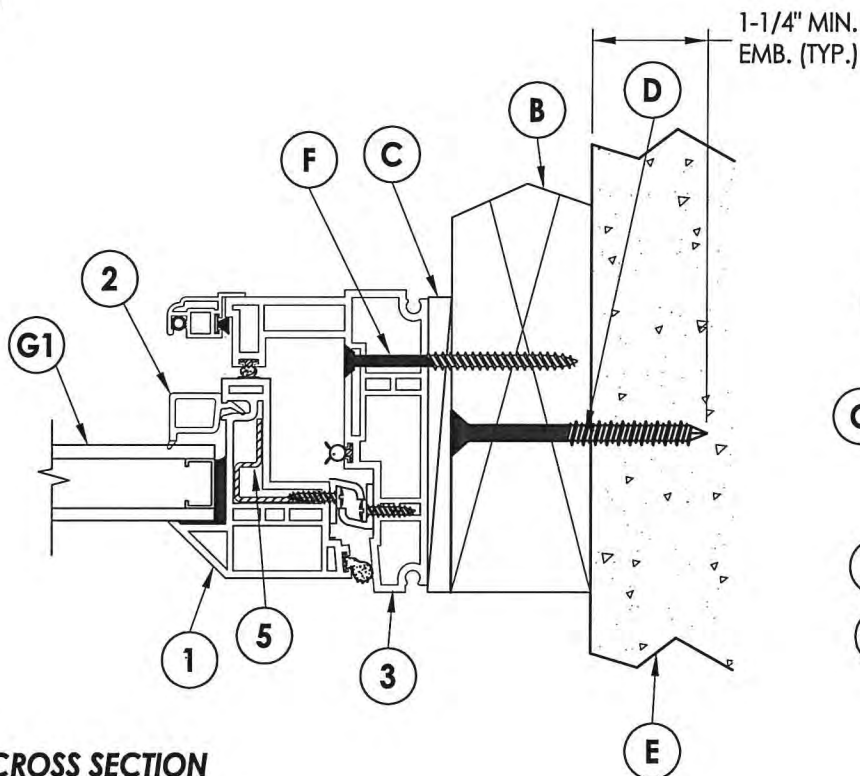
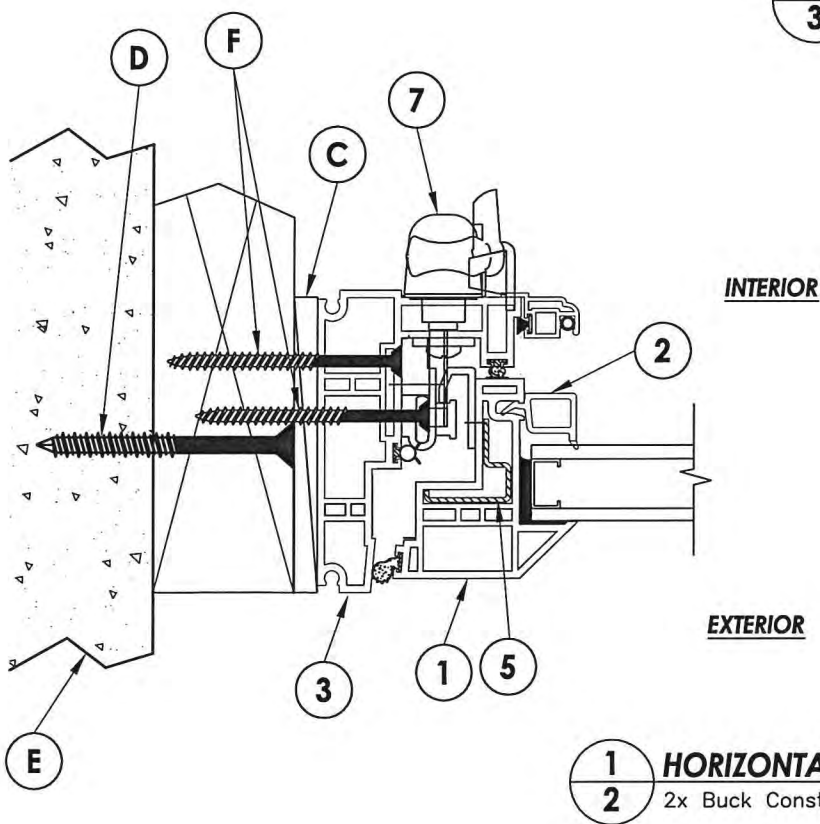
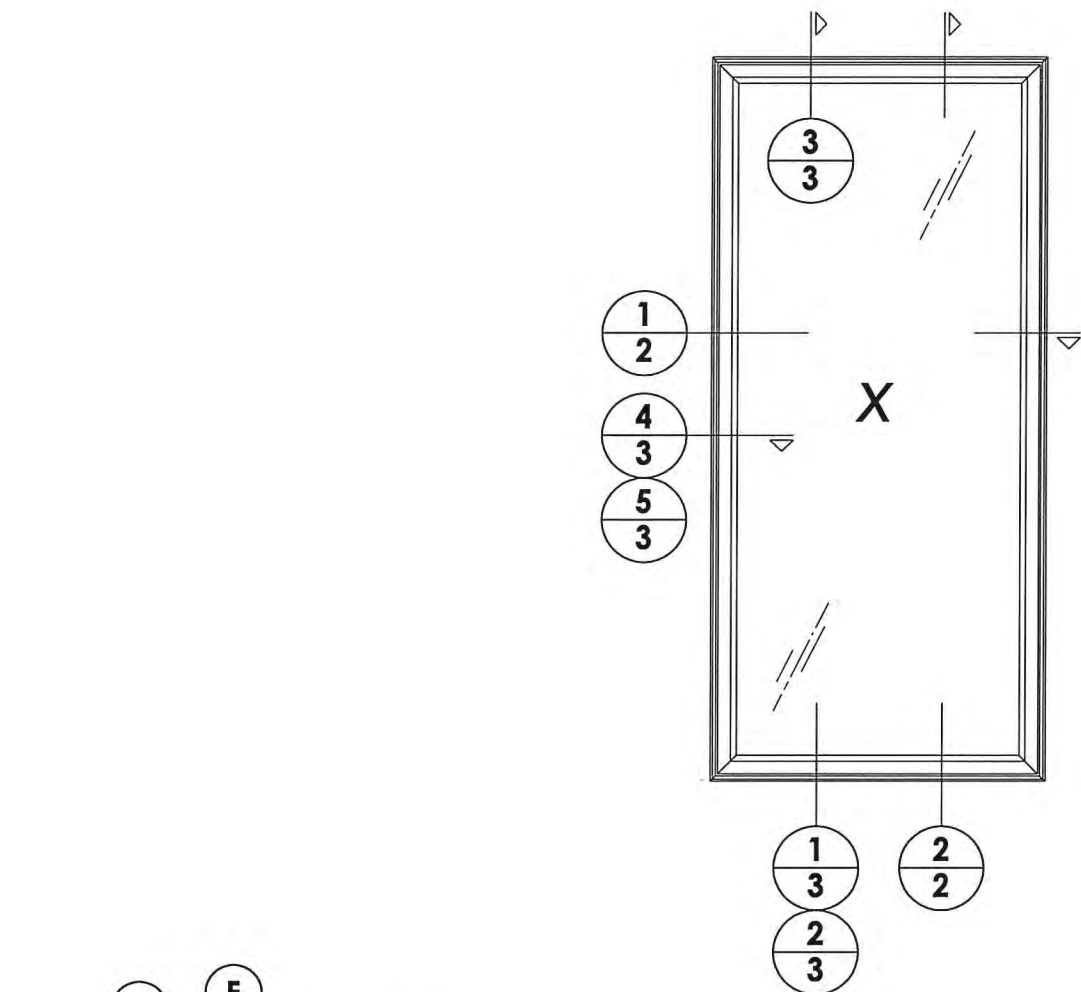
1. This product has been evaluated and is in compliance with the 5th Edition (2014) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
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SHEET #	DESCRIPTION
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2	Vertical & horizontal cross sections
3	Vertical & horizontal cross sections
4	Buck & frame anchoring
5	Bill of materials, glazing detail and components



OVERALL FRAME DIMENSION	OVERALL DAY LIGHT DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
			POS.	NEG.
36.0" x 78.0"	30.38" x 72.38"	G1	+40.0	-40.0
36.0" x 60.0"	30.38" x 54.38"	G1	+50.0	-50.0
24.0" x 48.0"	18.38" x 42.38"	G1	+70.0	-70.0

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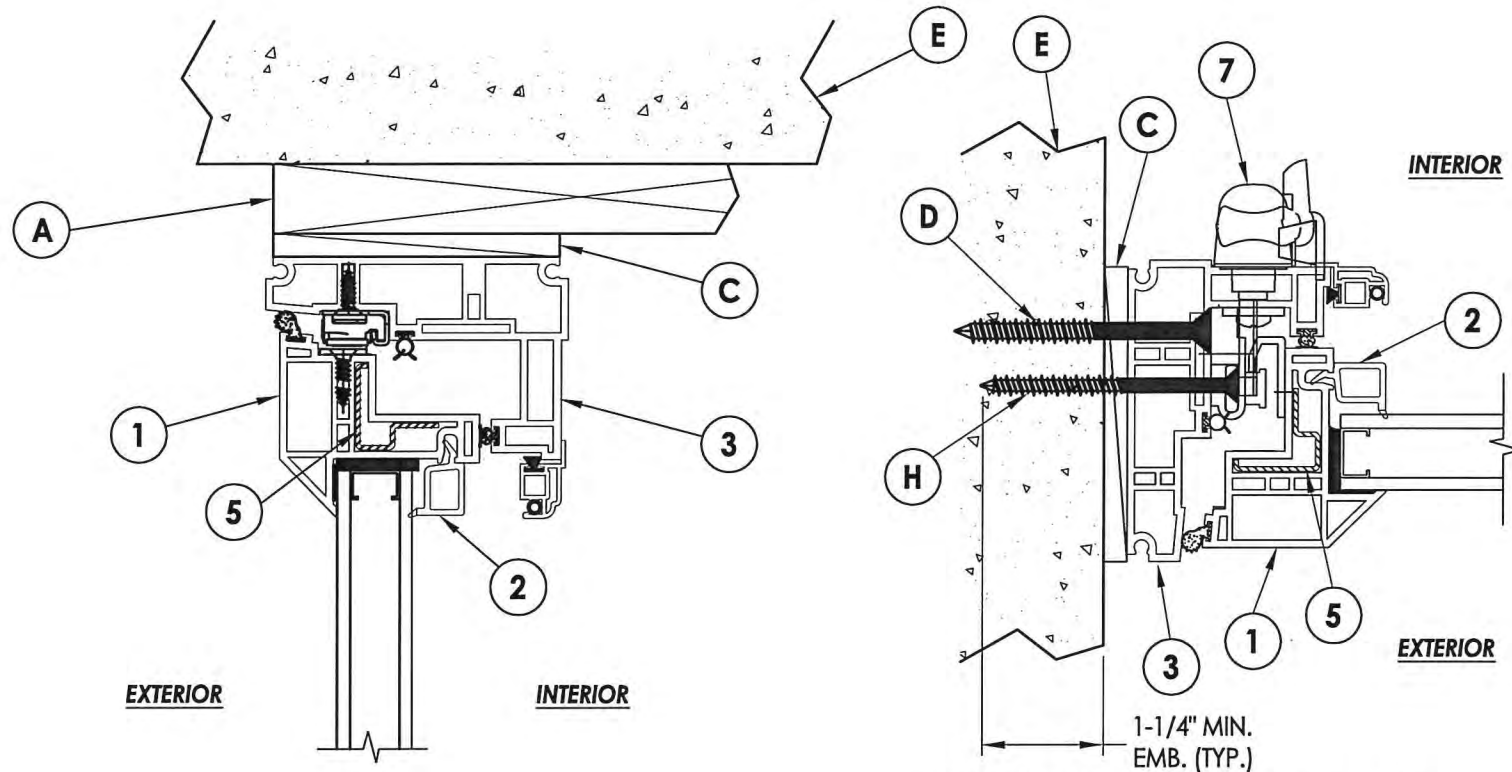


Documents Prepared By: Lyndon F. Schmidt
P.E. No. 43409

R^{qW} BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE C.A. No. 9813

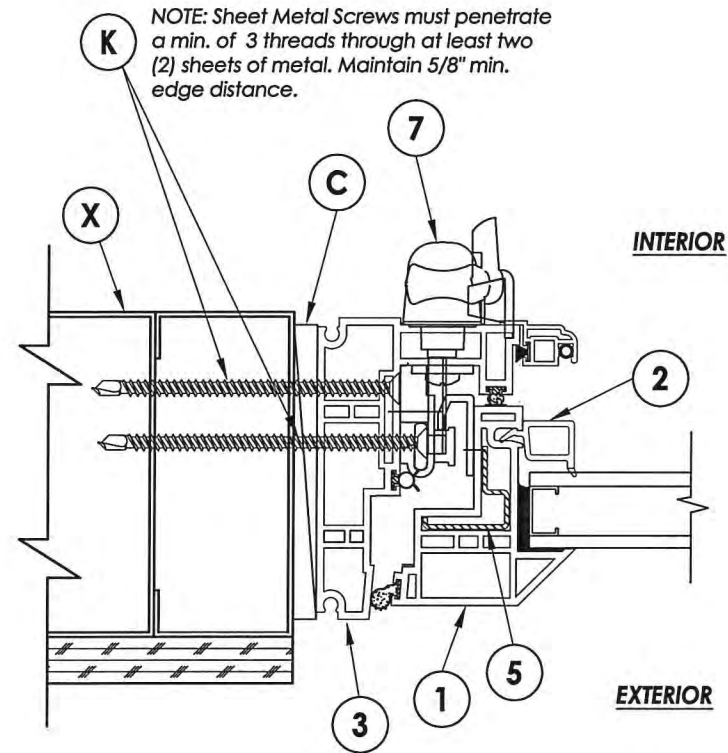
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DATE: 1/5/09		PRODUCT:		CASEMENT WINDOW
SCALE: N.T.S.				
DWG. BY: JK				
CHK. BY: LFS				
DRAWING NO.: FL-11907.4				
SHEET 2 OF 5		PART OR ASSEMBLY:		VERTICAL & HORIZONTAL CROSS SECTIONS
		JK		
		LFS		
		BY		
		REVISONS		

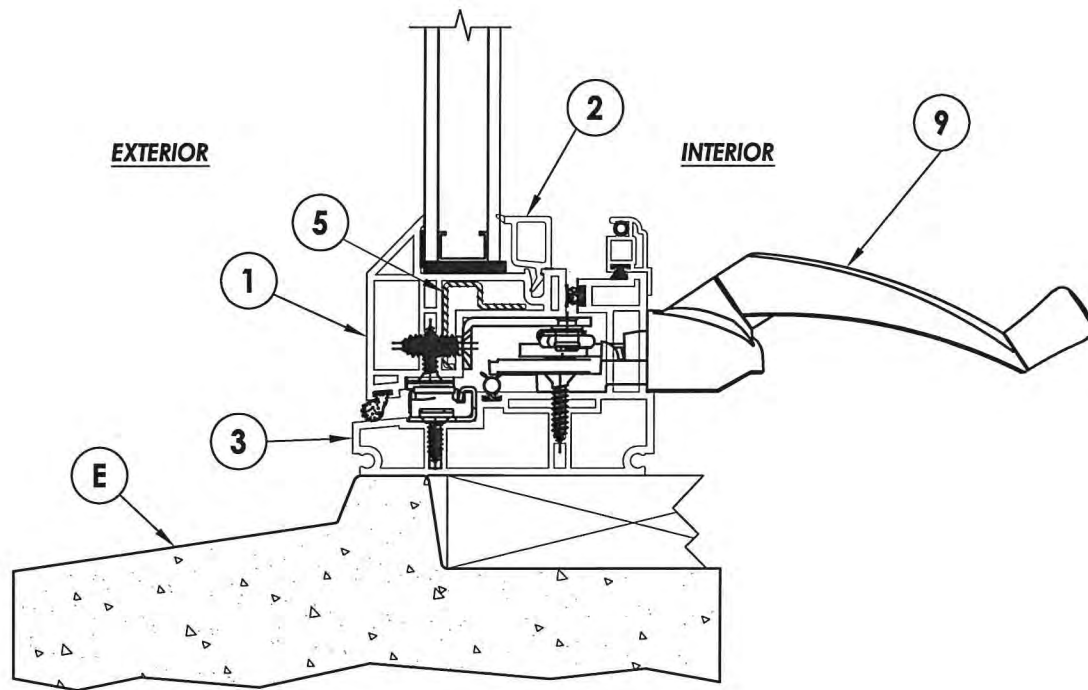


3 **VERTICAL CROSS SECTION**
3 Shown w/ 1x sub-buck option

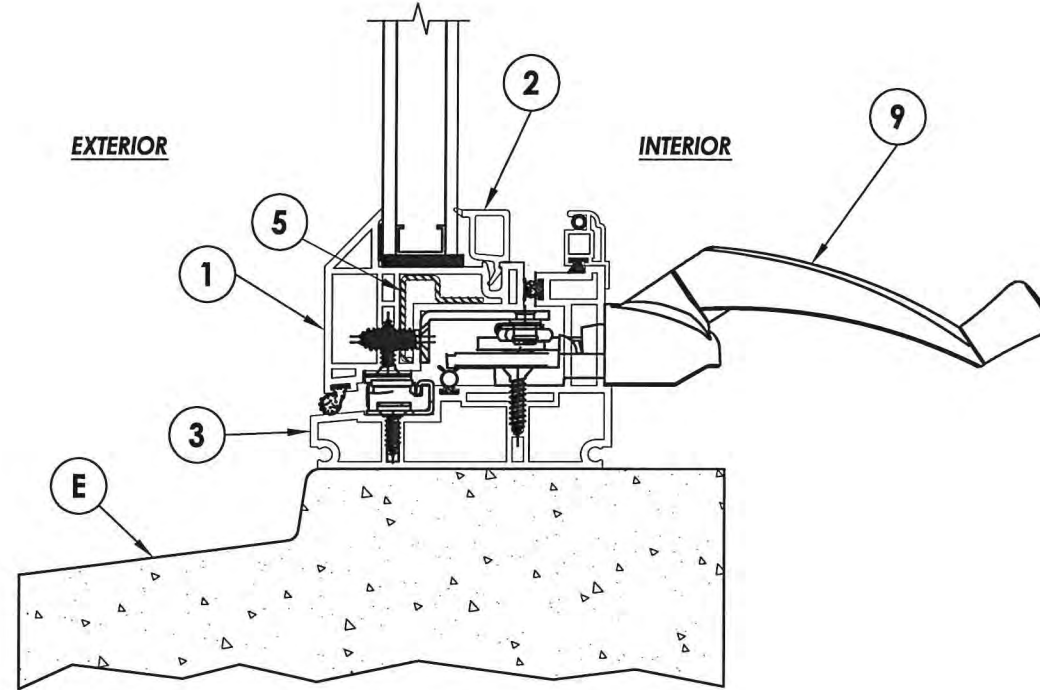
4 **HORIZONTAL CROSS SECTION**
3 Shown w/ Direct to Masonry option



5 **HORIZONTAL CROSS SECTION**
3 Shown w/ Steel Stud framing option



1 **VERTICAL CROSS SECTION**
3 Optional masonry sill



2 **VERTICAL CROSS SECTION**
3 Optional masonry sill

Exhibit 2

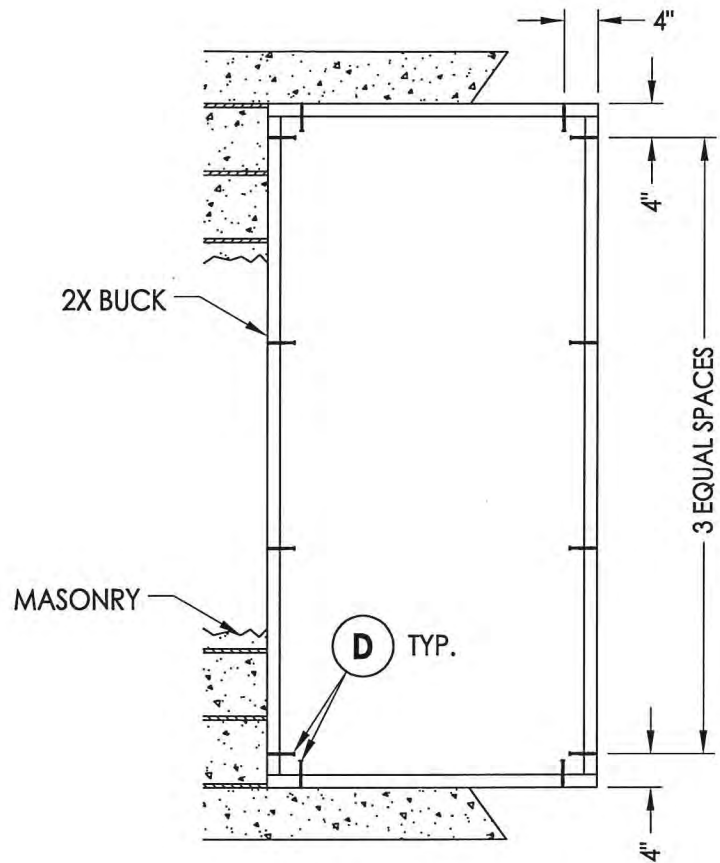
F. SCHMIDT
LICENSE
No. 43409
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

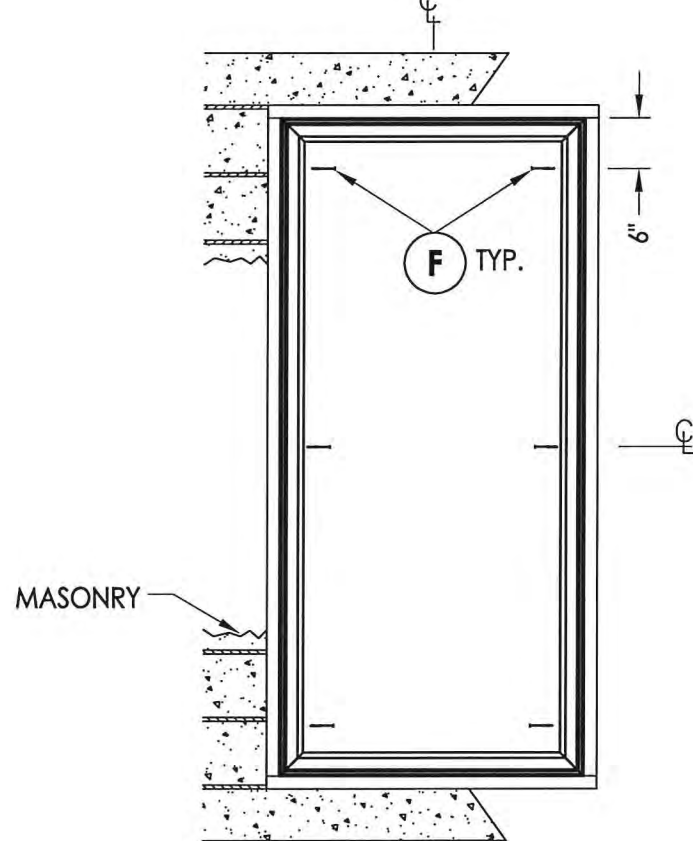
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE C.A. No. 9813

PRODUCT:		CASEMENT WINDOW	
PART OR ASSEMBLY:		VERTICAL & HORIZONTAL CROSS SECTIONS	
		JK	
		LFS	
		BY	
REVISIONS			
2	4/15/15	UPDATE TO 5TH ED. (2014) FBC	
1	06/02/11	UPDATED TO 2010 FBC	
NO.	DATE		
DATE: 1/5/09			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-11907.4			
SHEET 3 OF 5			

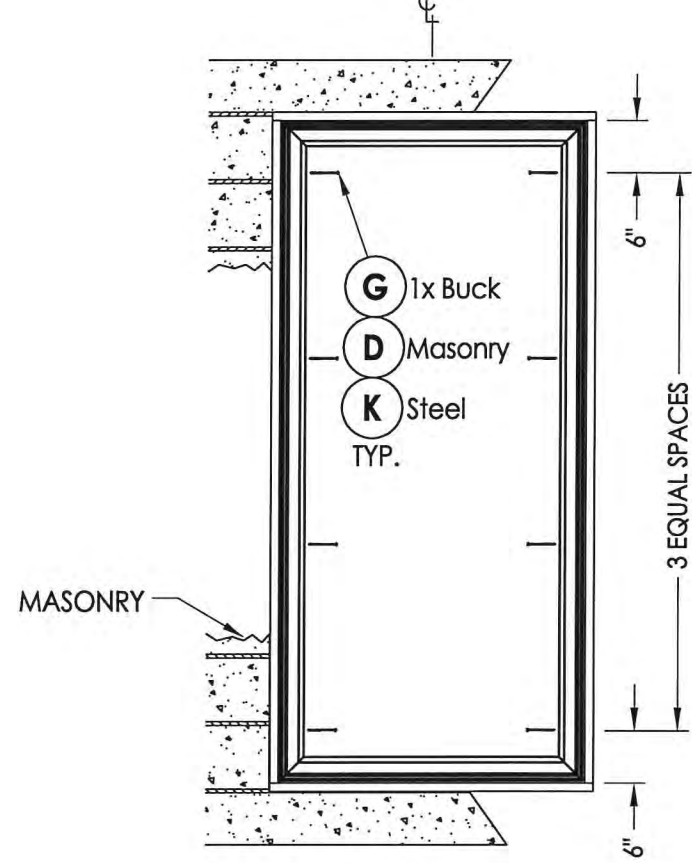
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BUCK ANCHORING
(2X BUCK)



FRAME ANCHORING
(2X BUCK)



FRAME ANCHORING
(1X Buck, Direct to Masonry, Steel Stud)

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:

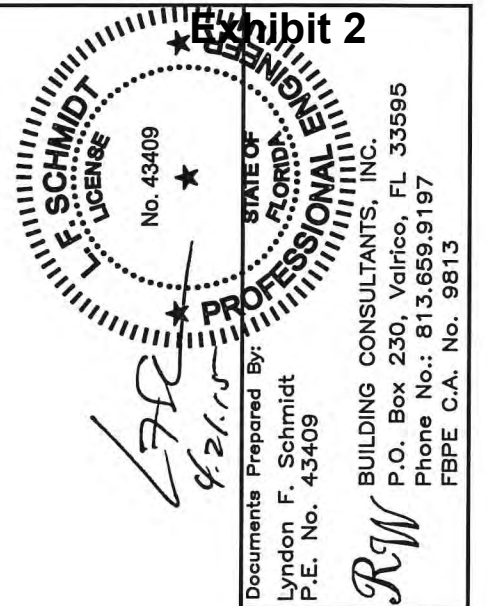
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"
	1/4"	1-1/4"	2"	4"
ELCO ULTRACON®	1/4"	1-1/4"	1"	4"

WOOD SCREW INSTALLATION NOTES:

1. Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

FRAME ANCHORING NOTES (2x Buck Construction):

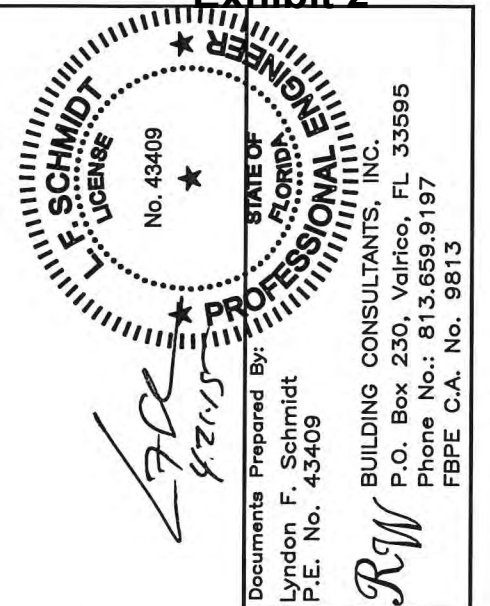
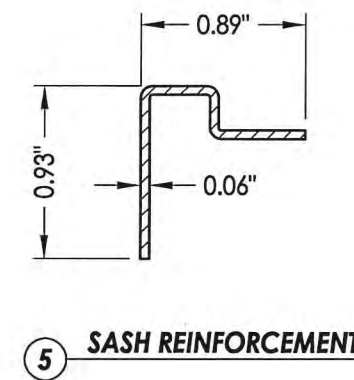
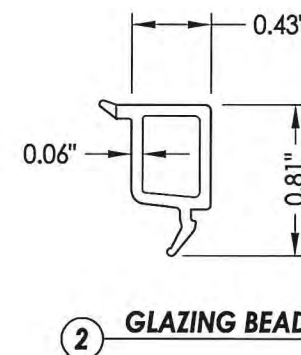
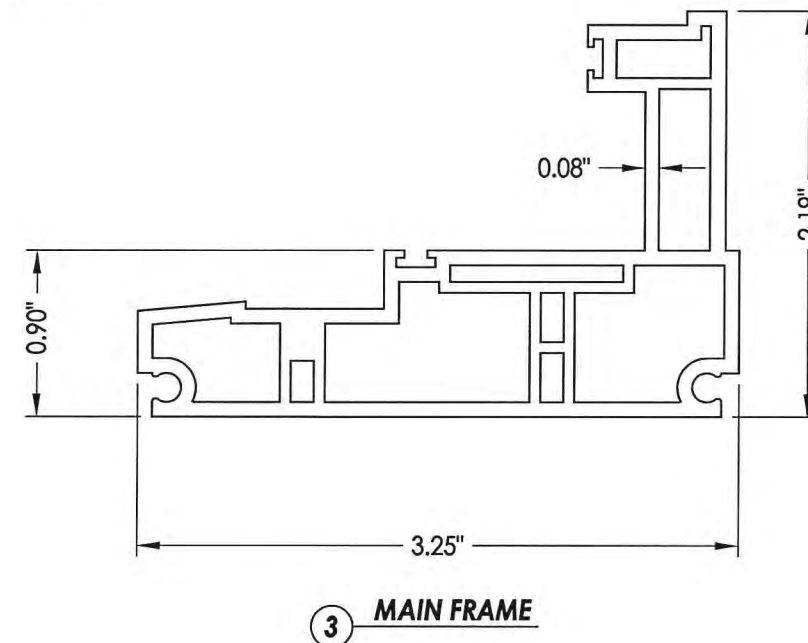
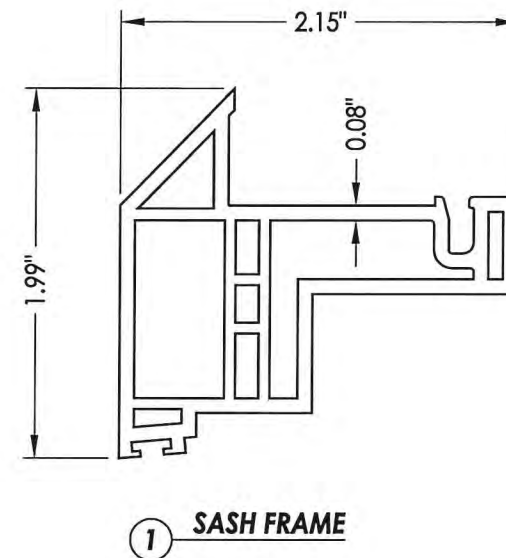
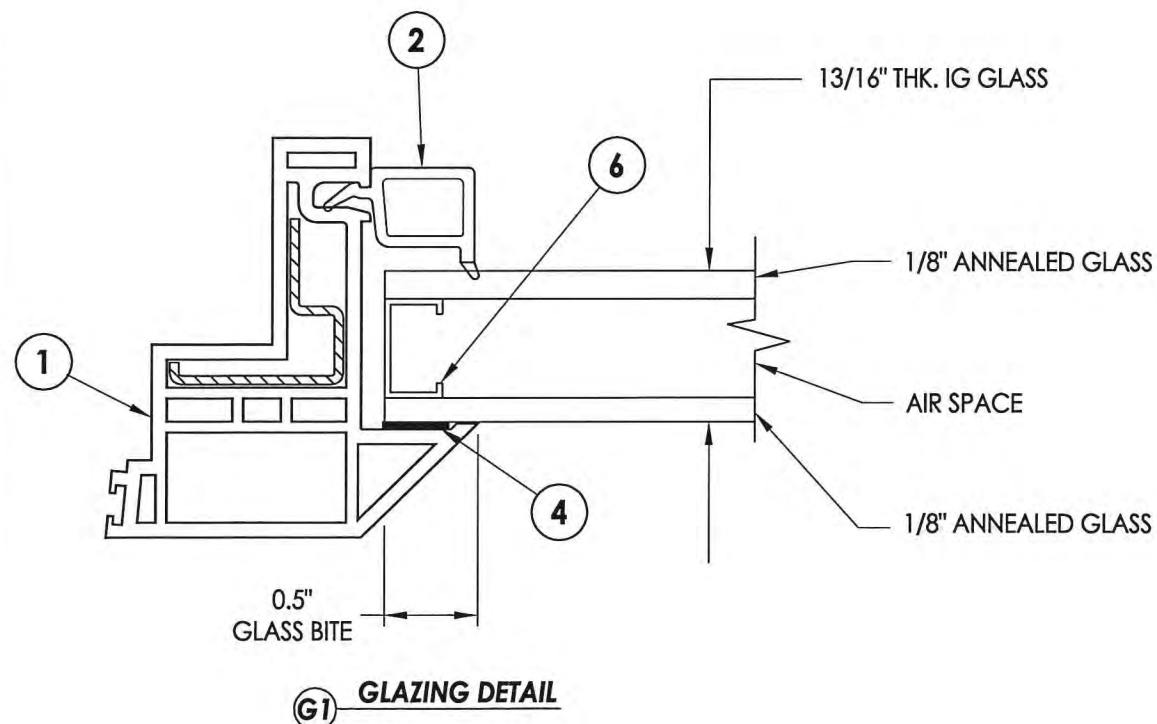
1. Bar guides are secured w/ (1) item #F in the top screw location & (1) item #13 in the lower screw location, in each guide.
2. Tie bar guides (4) are located 4", 26", 48" & 70" (Max. 22" O.C.) from the bottom of the frame. For 60" (or less) frame heights, only (3) bar guides are required.
3. Snubbers are secured w/ (1) item #F in the top screw location & (1) item #12 in the lower screw location, in each snubber.
4. Snubbers are located at 1/4 points and at mid-span from the bottom of the frame.
5. For 1x Buck & Direct to Masonry Construction: Substitute a 3/16" ITW concrete screw (w/ 1-1/4" min. emb.) for item #F and items #12 & 13 as applicable.
6. For Steel Stud Construction: Substitute a #10 self-drilling SMS for item #F and items #12 & 13 as applicable. Screws must penetrate a min. of 3 threads through at least two (2) sheets of metal. Maintain 5/8" min. edge distance.



DATE:	1/5/09		
SCALE:	N.T.S.		
DWG. BY:	JK		
CHK. BY:	LFS		
DRAWING NO.:	FL-11907.4		
SHEET	4	OF	5

BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
A	1X BUCK (G >= 0.55)	WOOD
B	2X BUCK (G >= 0.55)	WOOD
C	MAX. 1/4" SHIM SPACE	-
D	1/4" X 2-3/4" PFH ELCO 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 2-1/2" PFH SMS (1-1/4" MIN. EMBEDMENT)	STEEL
G	1/4" X 3-1/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL
H	3/16" X 2-3/4" PFH ITW CONCRETE SCREW	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 SASH FRAME * (60-5910) (VEKA)	RIGID PVC
2	GLAZING BEAD * (VEKA BV46)	RIGID PVC
3	EXTRUDED VINYL MAIN FRAME * (UQ017001)	RIGID PVC
4	HOT MELT BUTYL	SILICONE
5	SASH REINFORCEMENT (3205)	GALV. STEEL
6	STEEL INTERCEPT SPACER	ALUM.
7	LOCK HANDLE W/GASKET (24.33.32.002) (TRUTH)	-
8	TIE BAR (1190X.92) (TRUTH)	STEEL
9	OPERATOR HANDLE (11454) (TRUTH)	-
10	TIE BAR GUIDE (US-027000) (ASHLAND)	PVC
11	SNUBBER (ASHLAND) (US-311200)	STEEL
12	SNUBBER SCREW #8 x 1/2" PPH SMS	S.S.
13	TIE BAR GUIDE SCREW #8 x 1" PPH SCREW	S.S.
14	KEEPER	-

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

[illegible]