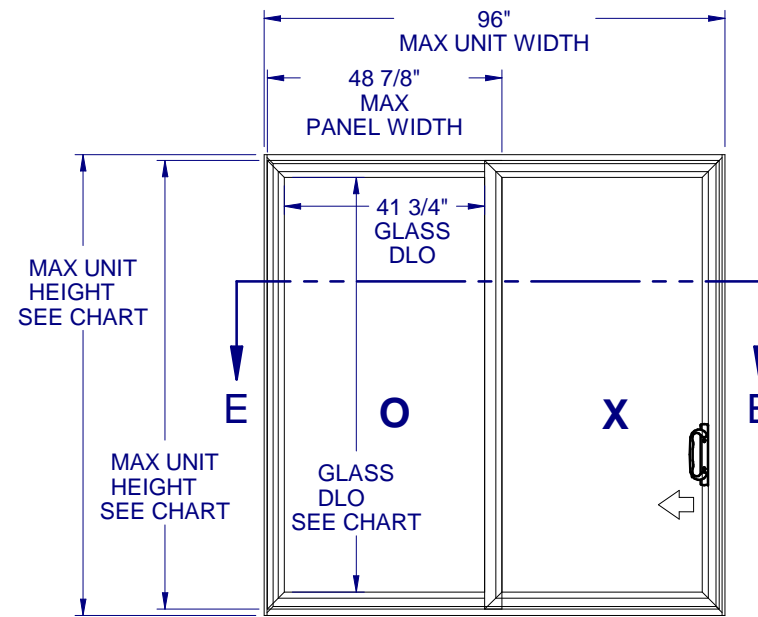
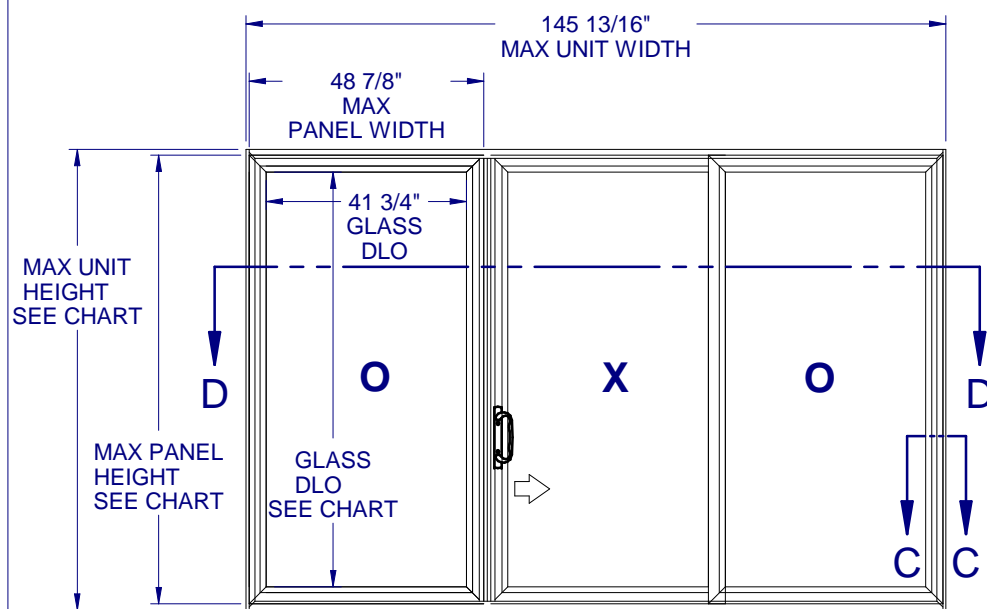
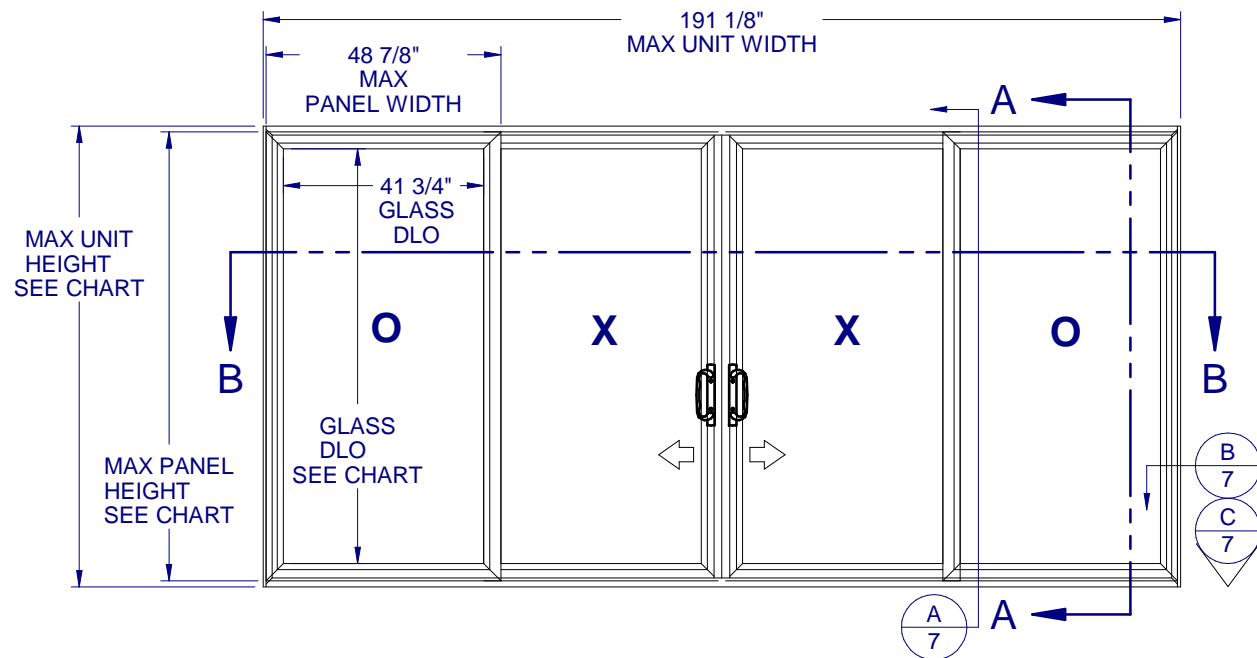


# SLIDING GLASS DOOR - IMPACT



## GENERAL NOTES:

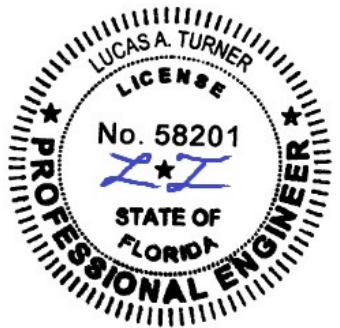
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE FLORIDA BUILDING CODE (FBC), CURRENT EDITION AND IS RATED FOR IMPACT USE IN WIND ZONE 4 AND HIGH VELOCITY HURRICANE ZONE (HVHZ) AREAS AS DEFINED IN ASTM E 1996 PER THE FBC.
2. GLAZING DETAIL: (SEE SHEET 2)
3. APPROVED CONFIGURATIONS: "OXXO", "OXO", "XO", "OX"
4. DESIGN PRESSURES:
  - NEGATIVE DESIGN LOADS BASED ON TESTED PRESSURE AND GLASS TABLES ASTM E-1300-04e01/09.
  - POSITIVE DESIGN LOADS BASED ON TESTED PRESSURE, WATER INFILTRATION TEST PRESSURE, AND GLASS TABLES ASTM E-1300-04e01/09.
5. ANCHORAGE: THE 33 1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. SEE SHEET 7 FOR INSTALLATION DETAIL WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
6. PRODUCTS APPROVED FOR IMPACT RESISTANCE. SHUTTERS ARE NOT REQUIRED.
7. FRAMES ARE PROCESSED AND SCREWED TOGETHER. VENTS FULLY WELDED.
8. SERIES / MODEL DESIGNATION: SGD-8900.
9. THE DESIGNATION X AND O STAND FOR THE FOLLOWING:  
X=OPERABLE SASH, O=FIXED SASH.
10. SECTION CALLOUTS APPLY TO ALL CONFIGURATIONS.
11. EXTERNAL WEEP SLOT = 1/4 x 1" LOCATED 4" FROM BOTH ENDS.



## 590 PVC SLIDING PATIO DOOR - IMPACT

PROPRIETARY AND CONFIDENTIAL  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF CUSTOM WINDOW SYSTEMS, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF CUSTOM WINDOW SYSTEMS, INC IS PROHIBITED.

FLORIDA APPROVAL NO.:  
33614



9/19/2023

LUCAS A. TURNER, P.E.  
 FL PE # 58201  
 Turner Engineering & Consulting, Inc.  
 2428 Old Natchez Trc Trl  
 Camden, TN 38320  
 PH. 941-380-1574

SHEET DESCRIPTION:  
 GENERAL NOTES AND ELEVATIONS

DRAWN BY:	DATE:
MCS	9/18/2023
DWG #:	REV.:
PEL-298	A
SCALE:	SHEET
1:40	1 OF 7

### TABLE OF CONTENTS

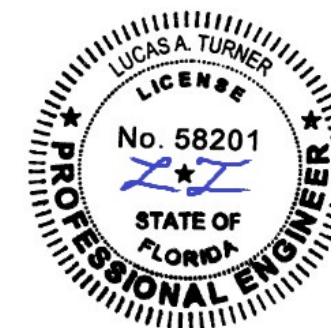
GENERAL NOTES & ELEVATIONS.....	1
GLAZING DETAILS.....	2
SECTION VIEWS OXXO.....	3
SECTION VIEWS OXO & XO/OX.....	4
BOM AND EXTRUSIONS.....	5
ANCHOR SCHEDULE & NOTES.....	6
INSTALLATION DETAILS.....	7

CONFIG.	MAX. UNIT SIZE	MAX. PANEL SIZE	DESIGN PRESSURE RATING	GLAZING TYPE (Sht.2)	IMPACT RATING
XO	96" x 96"	48-7/8" x 93-1/2" DLO 41-3/4" x 86-3/8"	+/-60 PSF	A, C & D	LARGE MISSILE IMPACT
OXO	145-13/16" x 96"			A	
OXXO	191-1/8" x 96"			A	
XO	96" x 80"	48-7/8" x 77-1/2" DLO 41-3/4" x 70-1/4"	+/-60 PSF	B, C & D	LARGE MISSILE IMPACT
OXO	145-13/16" x 80"			B	
OXXO	191-1/8" x 80"			B	

**590 PVC  
 SLIDING PATIO  
 DOOR - IMPACT**

PROPRIETARY AND CONFIDENTIAL  
 THE INFORMATION CONTAINED IN  
 THIS DRAWING IS THE SOLE  
 PROPERTY OF CUSTOM WINDOW  
 SYSTEMS, INC. ANY  
 REPRODUCTION IN PART OR AS A  
 WHOLE WITHOUT THE WRITTEN  
 PERMISSION OF CUSTOM WINDOW  
 SYSTEMS, INC IS PROHIBITED.

FLORIDA APPROVAL NO.:  
 33614



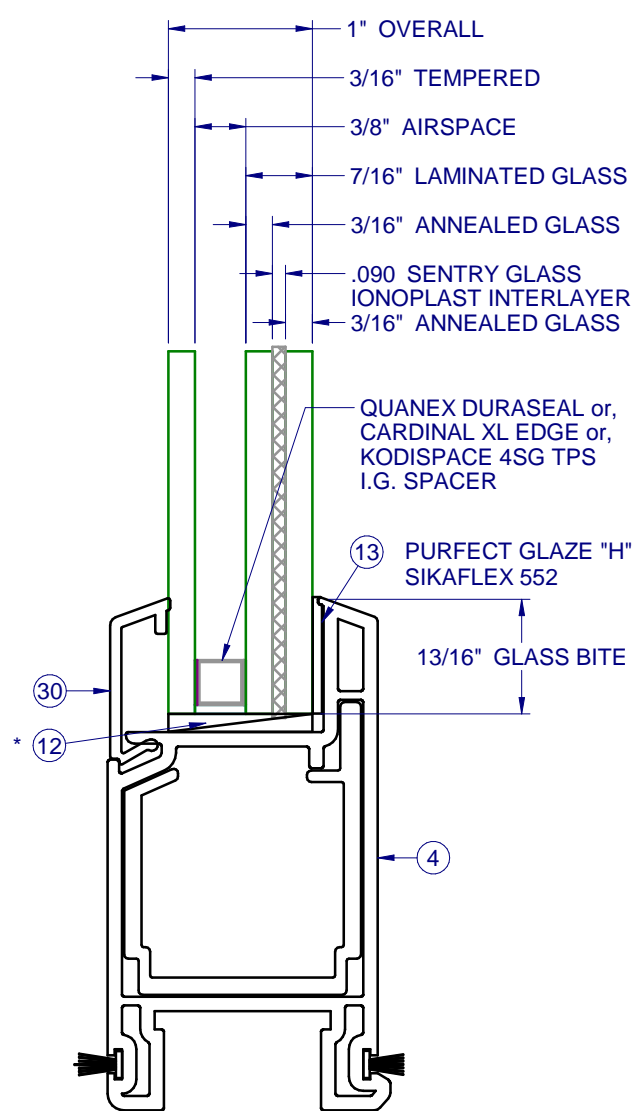
9/19/2023

LUCAS A. TURNER, P.E.  
 FL PE # 58201  
 Turner Engineering &  
 Consulting, Inc.  
 2428 Old Natchez Trc Trl  
 Camden, TN 38320  
 PH. 941-380-1574

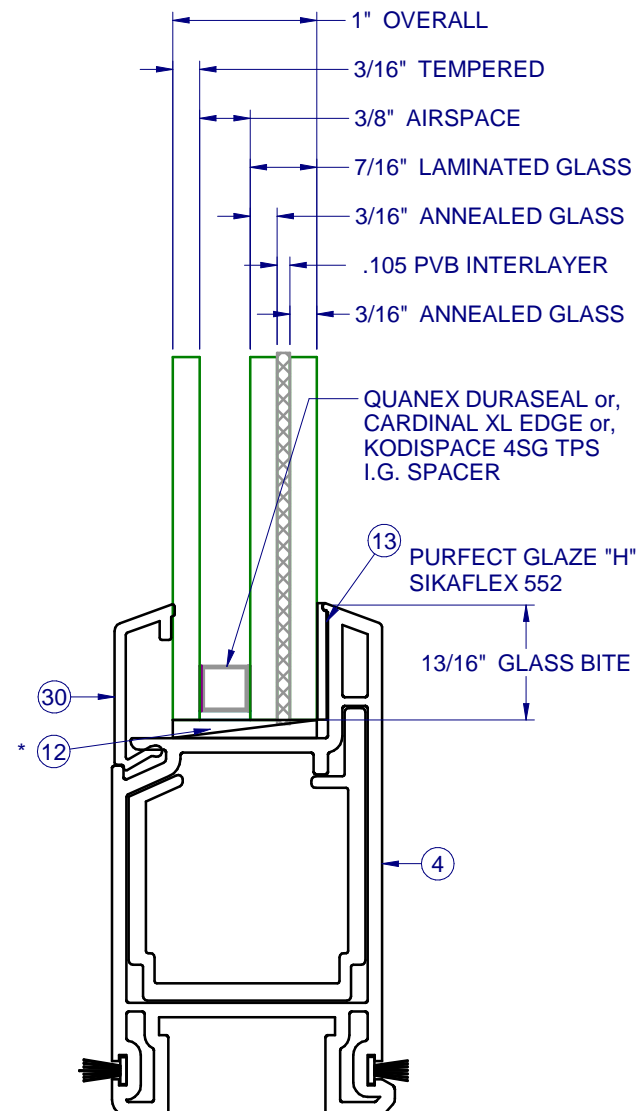
SHEET DESCRIPTION:

**GLAZING DETAILS**

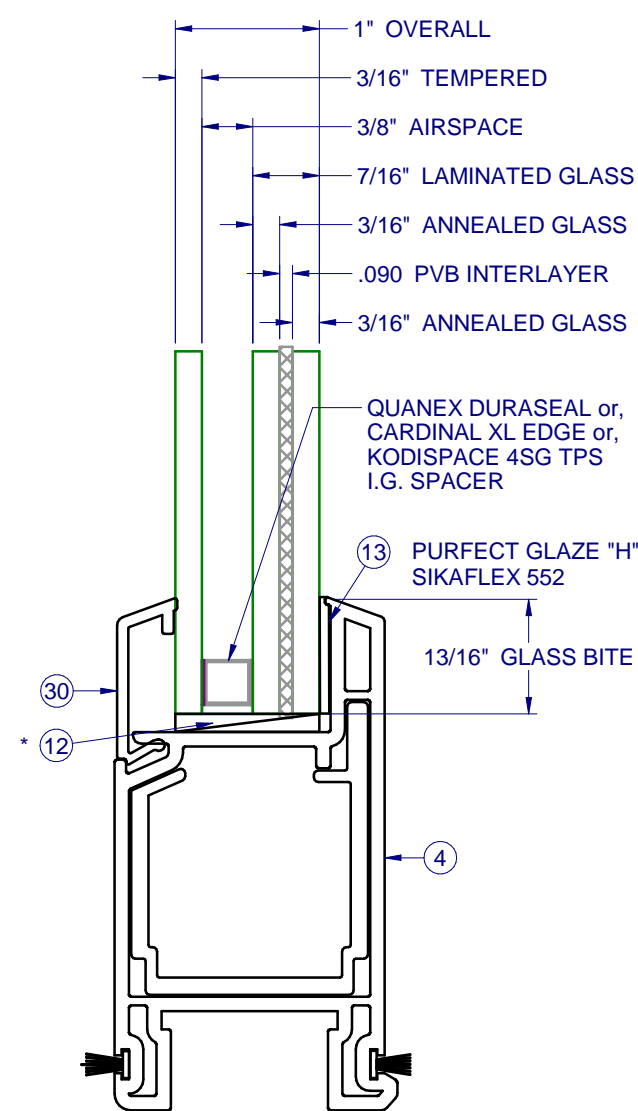
DRAWN BY: MCS	DATE: 9/18/2023
DWG #: PEL-298	REV.: A
SCALE: 1:1	SHEET 2 OF 7



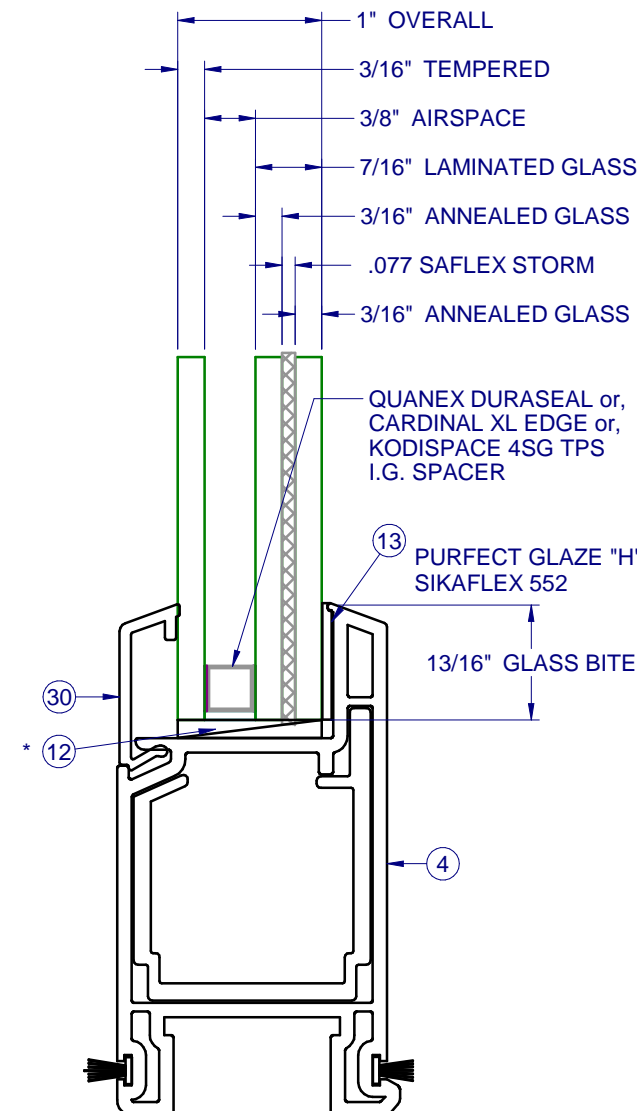
**GLASS TYPE A**



**GLASS TYPE B**



**GLASS TYPE C**



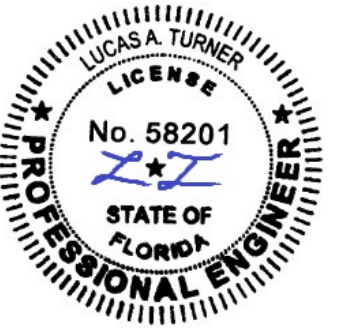
**GLASS TYPE D**

\* SETTING BLOCKS PER FBC 2411.3.3.1

**590 PVC  
 SLIDING PATIO  
 DOOR - IMPACT**

PROPRIETARY AND CONFIDENTIAL  
 THE INFORMATION CONTAINED IN  
 THIS DRAWING IS THE SOLE  
 PROPERTY OF CUSTOM WINDOW  
 SYSTEMS, INC. ANY  
 REPRODUCTION IN PART OR AS A  
 WHOLE WITHOUT THE WRITTEN  
 PERMISSION OF CUSTOM WINDOW  
 SYSTEMS, INC IS PROHIBITED.

FLORIDA APPROVAL NO.:  
 33614

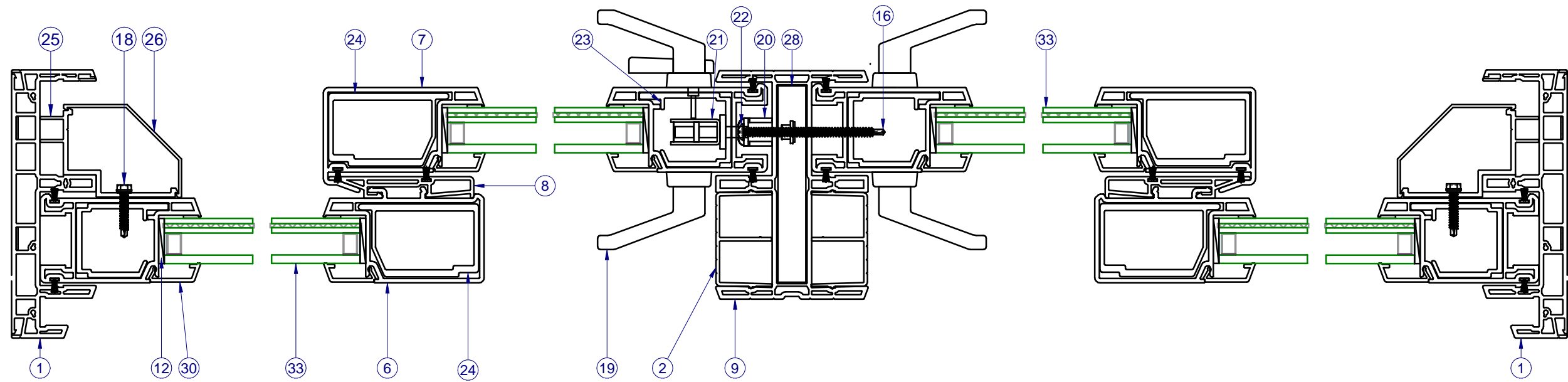


9/19/2023

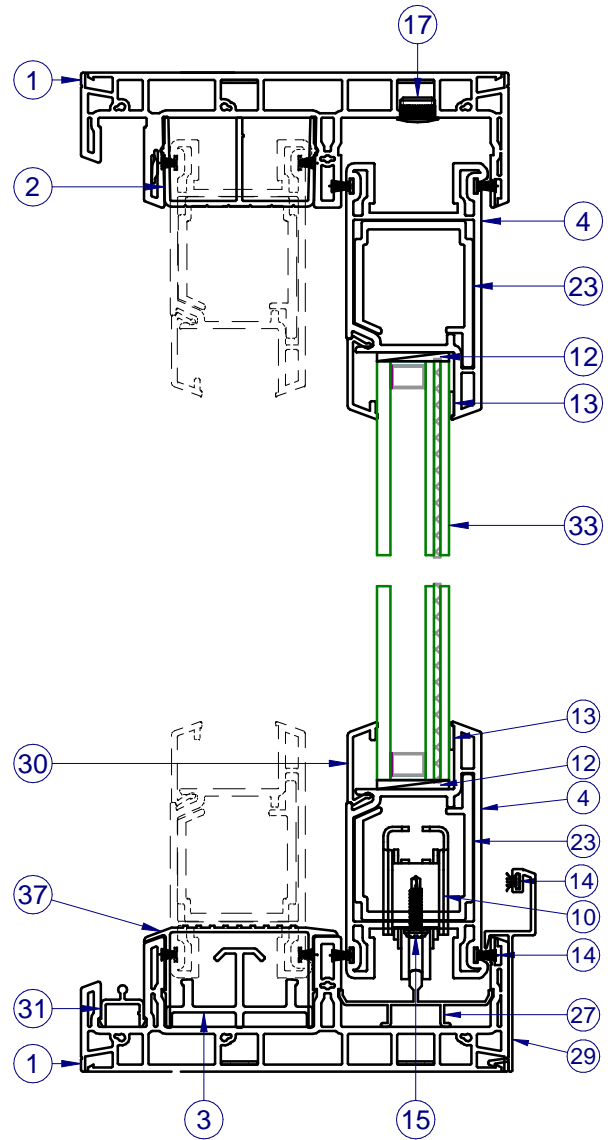
LUCAS A. TURNER, P.E.  
 FL PE # 58201  
 Turner Engineering &  
 Consulting, Inc.  
 2428 Old Natchez Trc Trl  
 Camden, TN 38320  
 PH. 941-380-1574

SHEET DESCRIPTION:  
**SECTION VIEWS - OXO  
 AND GLAZING DETAIL**

DRAWN BY: MCS	DATE: 9/18/2023
DWG #: PEL-298	REV.: A
SCALE: 1:2	SHEET 3 OF 7



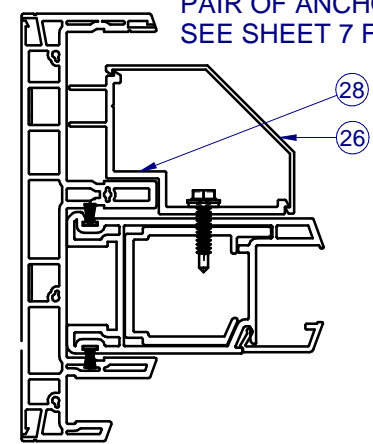
SECTION B-B



VERTICAL SECTION A-A

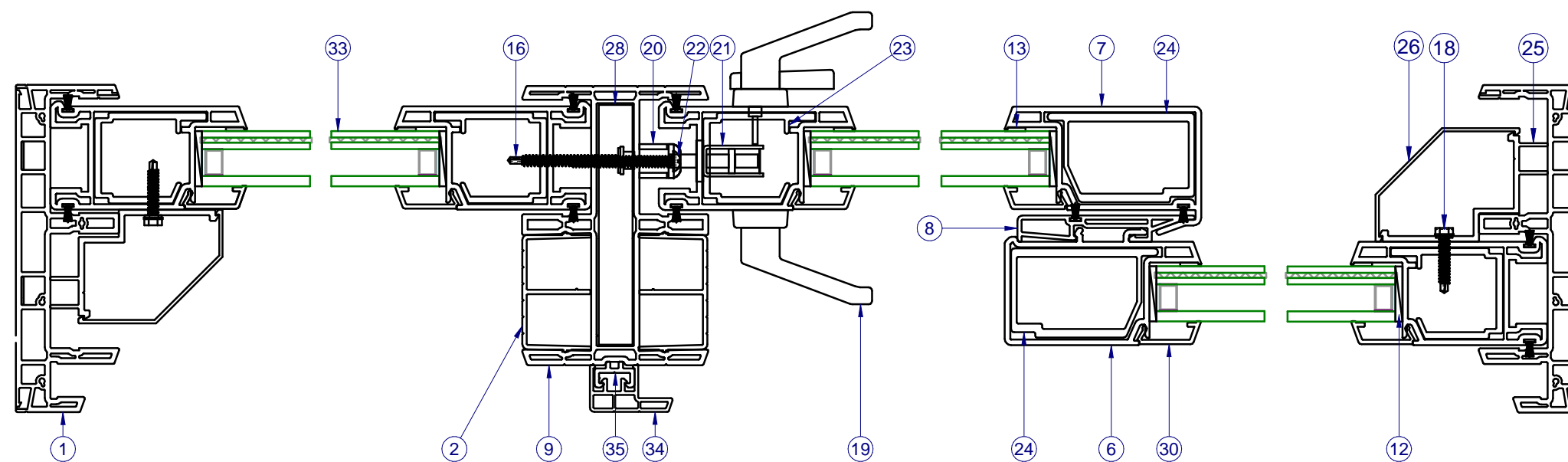
NOTE:  
 INSTALLATION WITH NO SILL RISER ALLOWED ONLY WHERE  
 WATER INFILTRATION RESISTANCE IS NOT REQUIRED.

PAIR OF ANCHORS AT EACH CLIP.  
 SEE SHEET 7 FOR SPACING

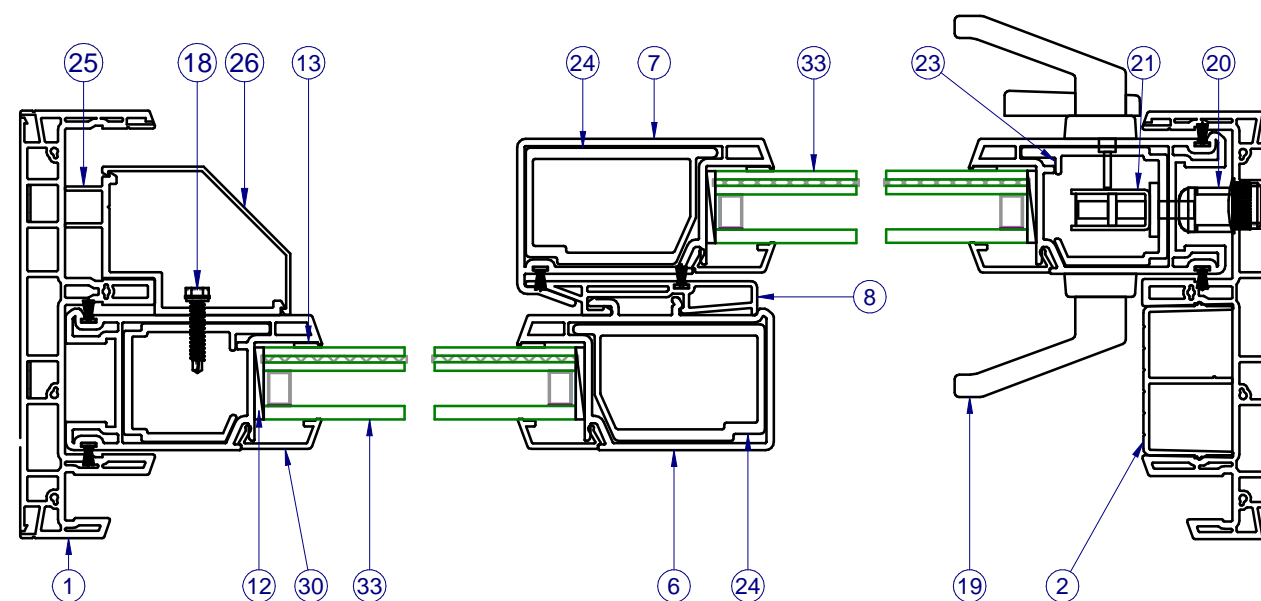


SECTION C-C  
 FIXED PANEL ATTACHMENT

**590 PVC  
 SLIDING PATIO  
 DOOR - IMPACT**



SECTION D-D

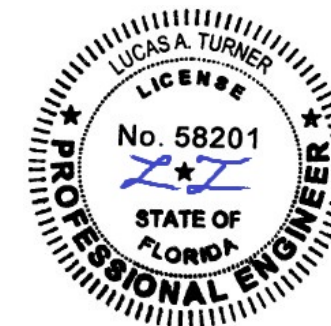


SECTION E-E

NOTES;  
 1. ITEMS NOT SHOWN FOR CLARITY: 10, 26-32  
 2. VERTICAL SECTION CAN BE SEEN ON SHEET 2.

PROPRIETARY AND CONFIDENTIAL  
 THE INFORMATION CONTAINED IN  
 THIS DRAWING IS THE SOLE  
 PROPERTY OF CUSTOM WINDOW  
 SYSTEMS, INC. ANY  
 REPRODUCTION IN PART OR AS A  
 WHOLE WITHOUT THE WRITTEN  
 PERMISSION OF CUSTOM WINDOW  
 SYSTEMS, INC IS PROHIBITED.

FLORIDA APPROVAL NO.:  
 33614



9/19/2023

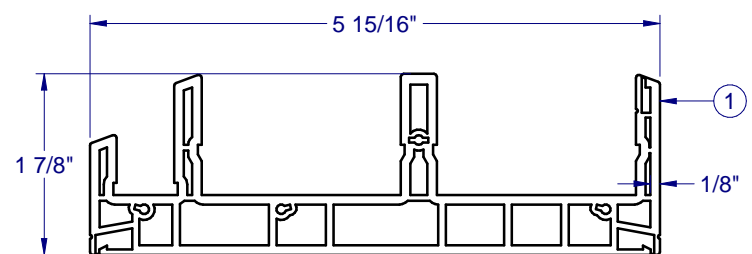
LUCAS A. TURNER, P.E.  
 FL PE # 58201  
 Turner Engineering &  
 Consulting, Inc.  
 2428 Old Natchez Trc Trl  
 Camden, TN 38320  
 PH. 941-380-1574

SHEET DESCRIPTION:  
 SECTION VIEWS - OXO  
 AND XO/OX

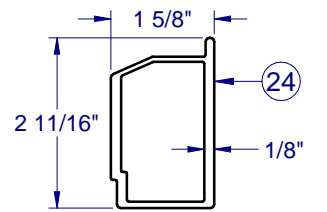
DRAWN BY: MCS	DATE: 9/18/2023
DWG #: PEL-298	REV.: A
SCALE: 1:2	SHEET 4 OF 7



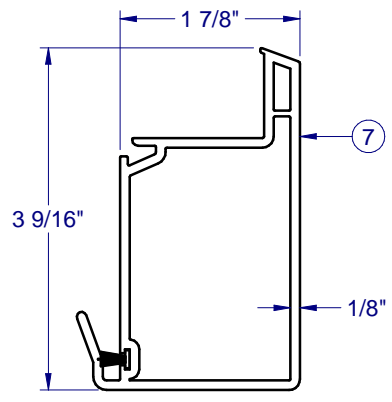
PARTS LIST			
ITEM	PART NO.	DESCRIPTION	MATERIAL
1	H-6042	FRAME, MAIN, SGD	PVC
2	S-6040	THRESHOLD/FILLER, SGD	PVC
3	S-1722	Fixed Panel Support	ALUM
4	H-6059	PANEL TOP/BOTTOM RAIL, SGD	PVC
5	H-6059	PANEL SIDE RAIL, SGD	PVC
6	H-6033	PANEL, INTERLOCK, FIXED	PVC
7	H-6060	PANEL, INTERLOCK, OPERABLE	PVC
8	H-6061	INTERLOCK, SNAP-ON	PVC
9	H-6043	ASTRAGAL, SGD,	PVC
10	P-3142	ROLLER, SGD, ADJUSTABLE, STAINLES	STEEL
11	P-3342	SEAM SEALER, SM-5504	
12	P-5531	Setting Block, .09 x 1 x 2	RUBBER
13		SIKAFLEX 552 OR PURFECT GLAZE "H"	
14	P-3429	WSTP., 0.270 X .187, BACK FINSEAL	
15	P-3539	#8 X 3/4" QUAD PHILIPS, TEK	ZINC
16	P-3557	#10 x 2, HEX-HEAD, TEK	ZINC
17	P-5588	CAP PLUG, 1/2" HOLE	NYLON
18	P-3767	#10 X 1" HEX WASHER HEAD, TEK	ZINC
19	P-5535	LOCK & HANDLE KIT, PVC, SGD	STEEL
20	P-3792	3/4" KEEPER	SS
21	P-3793	MORTISE LOCK	SS
22	P-4250	#10 x 2 1/2", PH PAN, SMS	STEEL
23	S-1775	REINFORCEMENT, ALUM., PANEL	ALUM
24	H-1993	REINFORCEMENT, ALUM., PANEL	ALUM
25	P-4295	FIXED PANEL CLIP	ALUM
26	S-1597	Fixed Panel Snap Cover	ALUM
27	S-1930	Sill Roller Track	ALUM
28	S-1726	REINFORCEMENT, ASTRAGAL, SGD	ALUM
29	S-1737	HIGHRISE SILL, ALUMINUM	ALUM
30	S-6037	GLAZING BEAD 1.00", SGD	PVC
31	S-6041	TRACK, SCREEN, SGD	PVC
33		GLASS (SEE SHEET 2)	
34	H-6044	SCREEN CHANNEL	PVC
35	S-6045	SCREEEN ADAPTOR	PVC
37	S-1764	SILL THRESHOLD COVER (8900)	ALUM
38	P-4366	WSTP., 1" X 1.1" X 0.7" DUST PLUG	
39	P-3302	WSTP., 0.330" X 0.187" BACK FIN	
40	P-4479	WEEP HOLE COVER	PVC



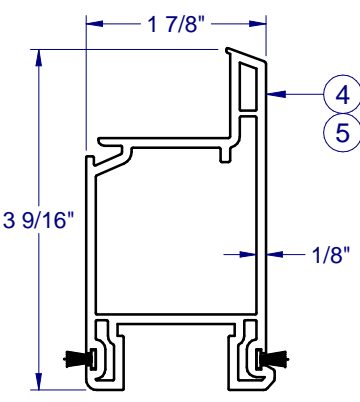
PVC OUTER FRAME - 6042



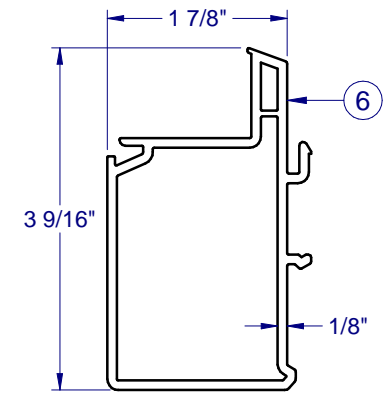
REINF. - 1993



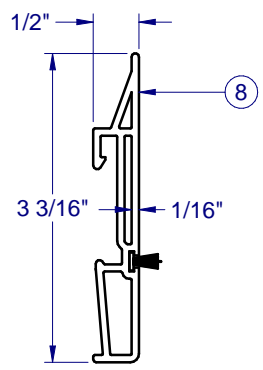
PVC PNL INTERLOCK - 6060



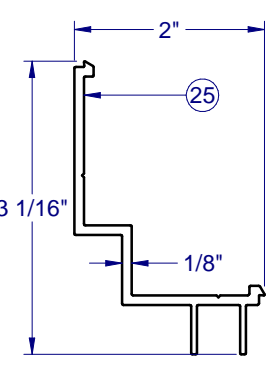
PVC PNL LOCKSTILE - 6059



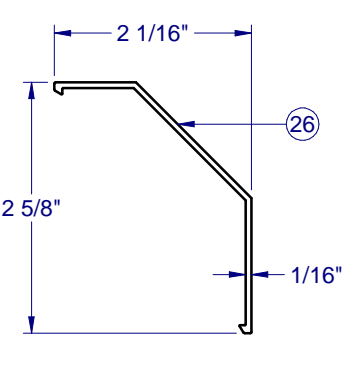
PVC PNL INTERLOCK - 6033



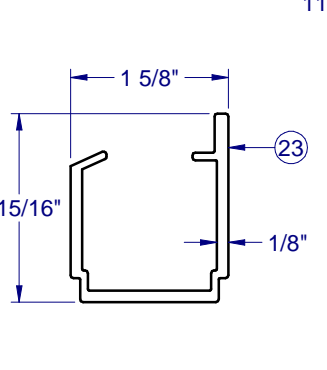
PVC INTERLOCK SNAP - 6061



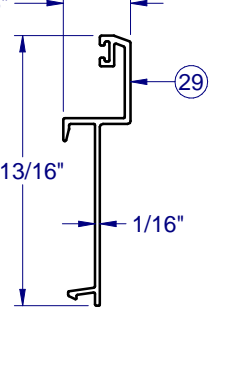
FIXED PNL CLIP - 4295



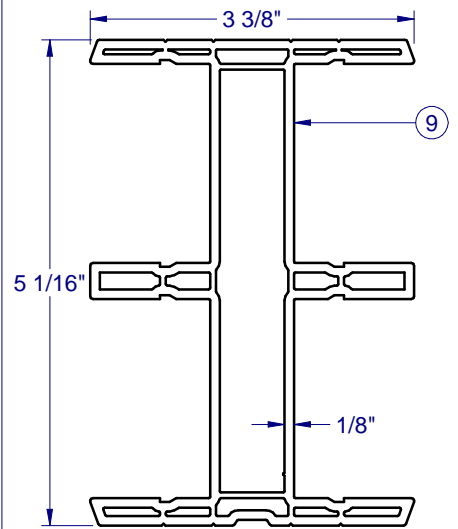
FIXED PNL COVER - 1597



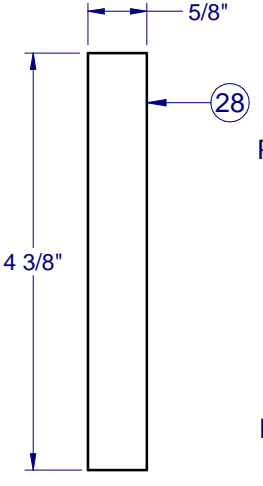
REINF. - 1775



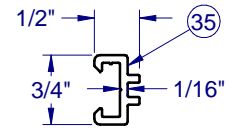
HIGHRISE - 1737



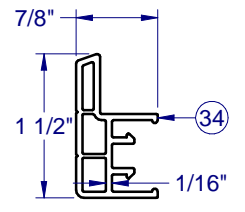
PVC ASTRAGAL - 6043



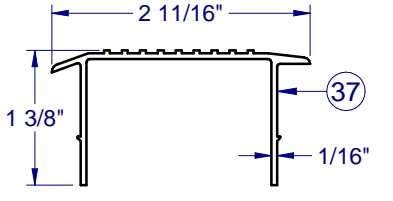
REINF. - 1726



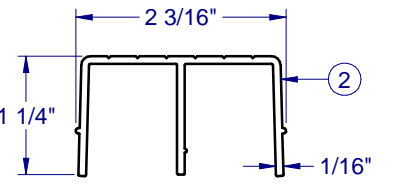
PVC SCREEN ADAPTOR - 6045



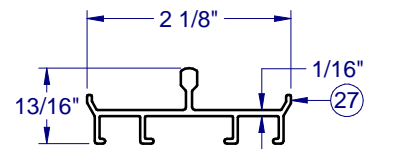
PVC SCREEN CHANNEL - 6044



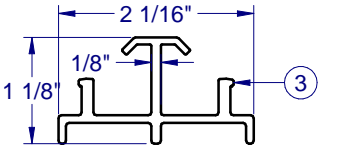
SILL THRESH COVER - 1764



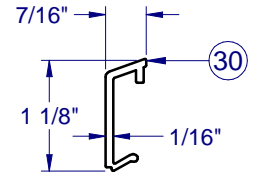
PVC TRACK FILLER - 6040



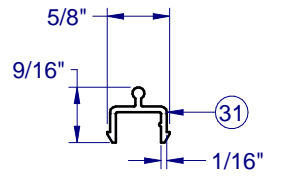
ROLLER TRACK - 1930



FIXED PNL SUPPORT - 1722



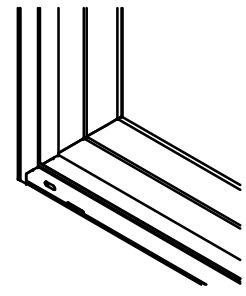
PVC GLAZING BEAD - 6037



PVC SCREEN TRACK - 6041

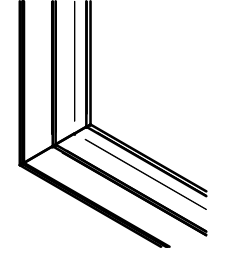
NOTE: ALL ALUMINUM EXTRUSIONS ARE 6063-T6 ALUMINUM UNLESS OTHERWISE SPECIFIED.

FRAME CONSTRUCTION



FRAME CORNERS SCREWED TOGETHER 1:10

VENT CONSTRUCTION



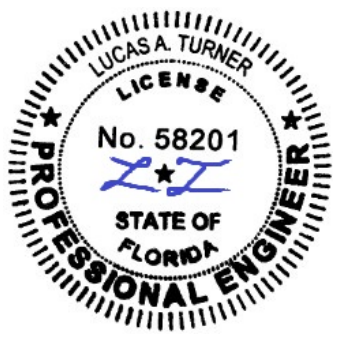
VENTS FULLY WELDED 1:10



590 PVC SLIDING PATIO DOOR - IMPACT

PROPRIETARY AND CONFIDENTIAL  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF CUSTOM WINDOW SYSTEMS, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF CUSTOM WINDOW SYSTEMS, INC IS PROHIBITED.

FLORIDA APPROVAL NO.: 33614



9/19/2023  
 LUCAS A. TURNER, P.E.  
 FL PE # 58201  
 Turner Engineering & Consulting, Inc.  
 2428 Old Natchez Trc Trl  
 Camden, TN 38320  
 PH. 941-380-1574

SHEET DESCRIPTION:

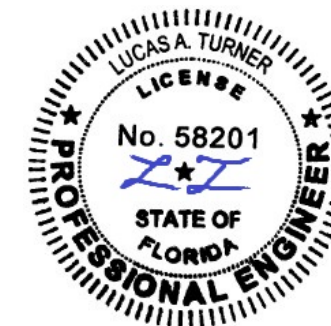
BOM AND EXTRUSIONS

DRAWN BY:	DATE:
MCS	9/18/2023
DWG #:	REV.:
PEL-298	A
SCALE:	SHEET
1:1	5 OF 7

**590 PVC  
 SLIDING PATIO  
 DOOR - IMPACT**

PROPRIETARY AND CONFIDENTIAL  
 THE INFORMATION CONTAINED IN  
 THIS DRAWING IS THE SOLE  
 PROPERTY OF CUSTOM WINDOW  
 SYSTEMS, INC. ANY  
 REPRODUCTION IN PART OR AS A  
 WHOLE WITHOUT THE WRITTEN  
 PERMISSION OF CUSTOM WINDOW  
 SYSTEMS, INC IS PROHIBITED.

FLORIDA APPROVAL NO.:  
 33614

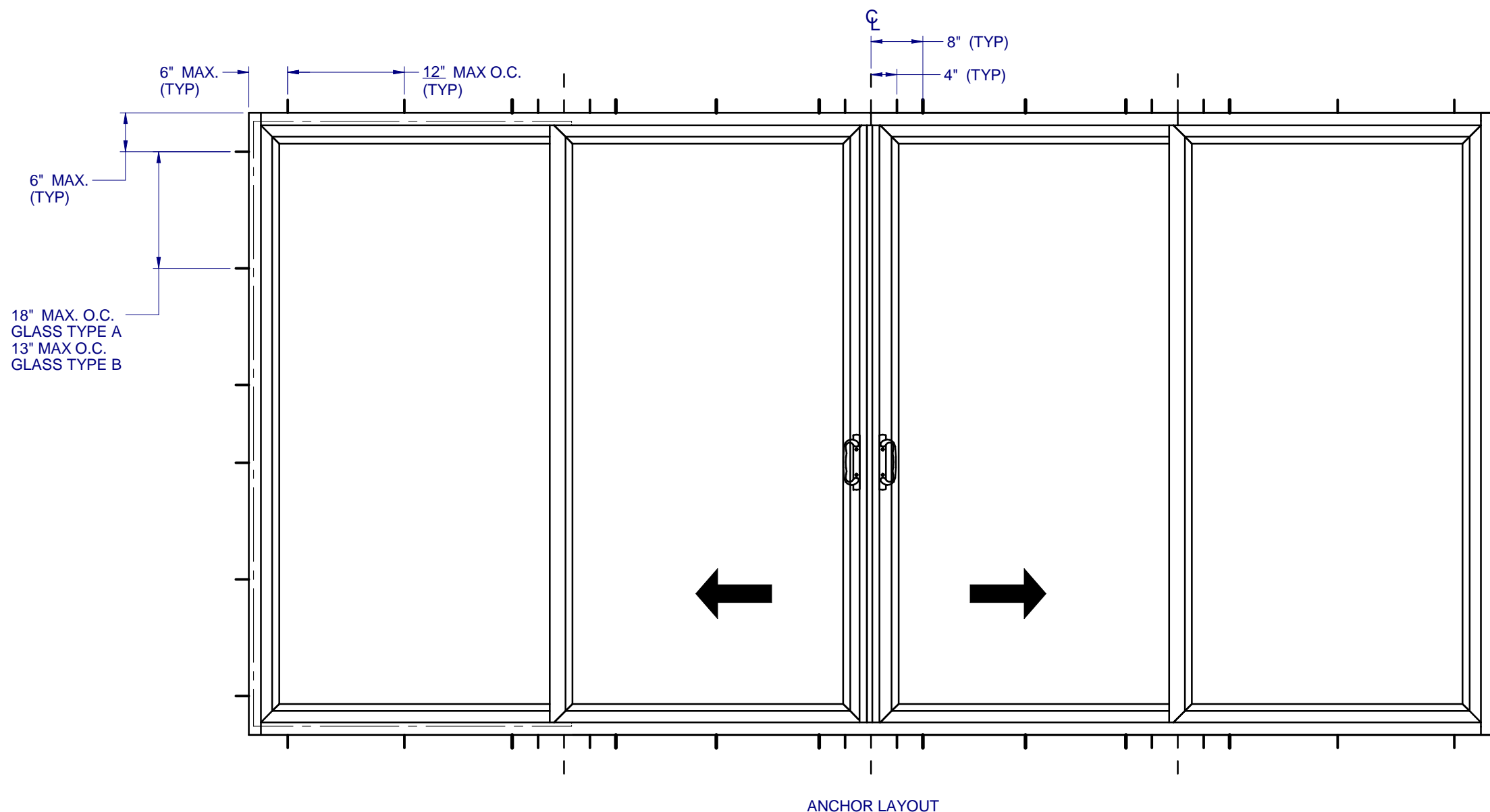


9/19/2023

LUCAS A. TURNER, P.E.  
 FL PE # 58201  
 Turner Engineering &  
 Consulting, Inc.  
 2428 Old Natchez Trc Trl  
 Camden, TN 38320  
 PH. 941-380-1574

SHEET DESCRIPTION:  
**ANCHOR SCHEDULE AND  
 NOTES**

DRAWN BY:	DATE:
MCS	9/18/2023
DWG #:	REV.:
PEL-298	A
SCALE:	SHEET
1:1	6 OF 7



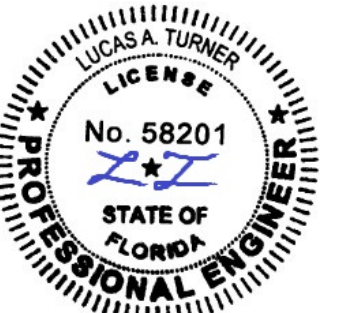
**NOTES:**

1. INSTALL TWO ANCHORS AT EACH LOCATION. SILL ANCHOR SPACING SAME AS HEAD.
2. SHIM AS REQ'D AT EACH INSTALLATION ANCHOR USING LOAD BEARING SHIMS. MAX. ALLOWABLE SHIM STACK TO BE 1/4". USE SHIMS WHERE SPACE GREATER THAN 1/16" IS PRESENT. LOAD BEARING SHIMS SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER. WOOD SHIMS ARE NOT ALLOWED.
3. ANCHOR TYPE, SIZE, SPACING AND EMBEDMENT SHALL BE AS SPECIFIED IN THESE DRAWINGS, SEE TABLE 1, SHEET 7.
4. ALL INSTALLATION ANCHORS MUST BE MADE OF OR PROTECTED WITH A CORROSION RESISTANT MATERIAL OR COATING. DISSIMILAR METALS OR MATERIALS IN CONTACT WITH PRESSURE TREATED WOOD MUST BE PROTECTED TO PREVENT REACTION.
5. INSTALLATION ANCHORS SHALL BE IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM SPECIFIED IN TABLE 1, SHEET 7.
6. ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL DRESSING OR STUCCO. FOR CONCRETE/CMU OPENINGS, EMBEDMENT SHALL BE BEYOND WOOD BUCKS, IF USED, INTO SUBSTRATE. INSTALLATIONS TO SOLID CONCRETE OR GROUT-FILLED CMU MAY INCLUDE BUT DO NOT REQUIRE 1X WOOD BUCKS BETWEEN THE PRODUCT AND SUBSTRATE. INSTALLATIONS TO HOLLOW CMU REQUIRE THE USE OF 1X BUCKS BETWEEN THE PRODUCT AND SUBSTRATE.
7. A MINIMUM CENTER-TO-CENTER SPACING SHALL BE MAINTAINED BETWEEN ALL FASTENERS: 2" FOR MASONRY, 1" FOR WOOD AND METAL.
8. WOOD OR MASONRY OPENINGS, BUCKS AND BUCK FASTENERS SHALL BE PROPERLY DESIGNED BY THE ARCHITECT OR ENGINEER OF RECORD AND INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE. SUBSTRATES SHALL MEET THE MINIMUM STRENGTH REQUIREMENTS AS SHOWN IN TABLE 1, SHEET 7. CONCRETE AND MASONRY SUBSTRATES MAY NOT BE CRACKED.
9. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS FOLLOWING THE CURRENT VERSION OF THE REFERENCE DOCUMENTS: FMA/AAMA 100(FIN WINDOWS), FMA/AAMA 200(FLANGE WINDOWS), FMA/WDMA 250(BOX WINDOWS), FMA/AAMA/WDMA 300(EXTERIOR DOORS).

**590 PVC  
 SLIDING PATIO  
 DOOR - IMPACT**

PROPRIETARY AND CONFIDENTIAL  
 THE INFORMATION CONTAINED IN  
 THIS DRAWING IS THE SOLE  
 PROPERTY OF CUSTOM WINDOW  
 SYSTEMS, INC. ANY  
 REPRODUCTION IN PART OR AS A  
 WHOLE WITHOUT THE WRITTEN  
 PERMISSION OF CUSTOM WINDOW  
 SYSTEMS, INC IS PROHIBITED.

FLORIDA APPROVAL NO.:  
 33614



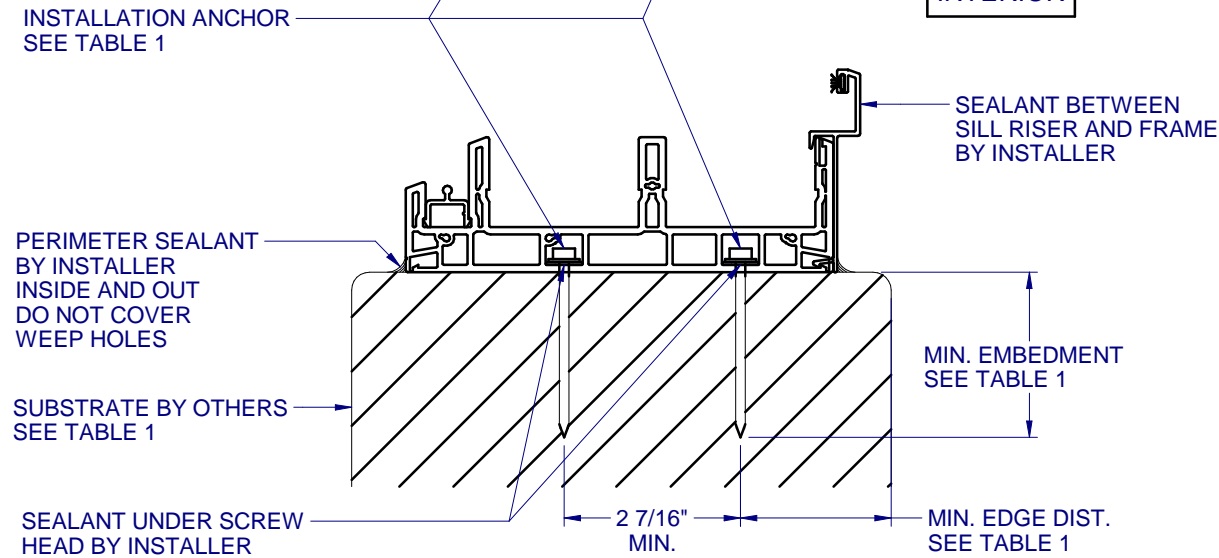
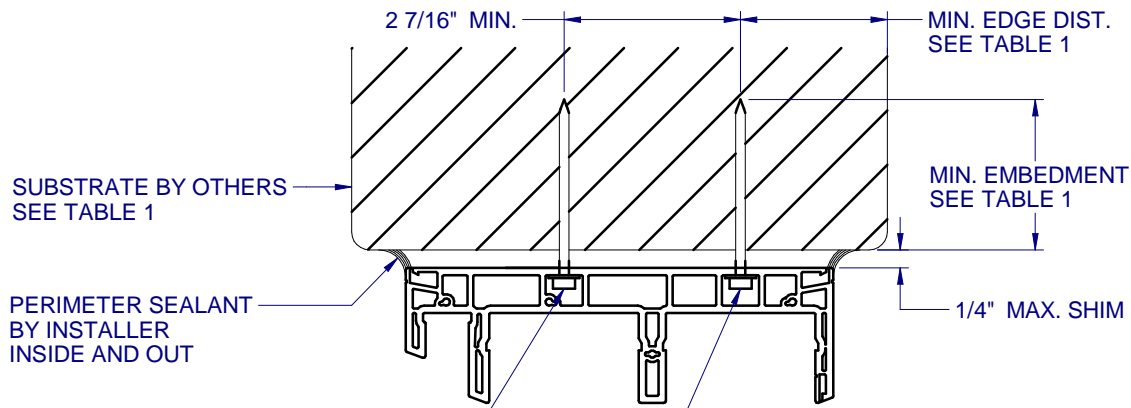
9/19/2023  
 LUCAS A. TURNER, P.E.  
 FL PE # 58201  
 Turner Engineering &  
 Consulting, Inc.  
 2428 Old Natchez Trc Trl  
 Camden, TN 38320  
 PH. 941-380-1574

SHEET DESCRIPTION:

**INSTALLATION NOTES**

DRAWN BY:	DATE:
MCS	9/18/2023
DWG #:	REV.:
PEL-298	A
SCALE:	SHEET
1:1	7 OF 7

**TYPICAL HEAD ANCHORAGE**



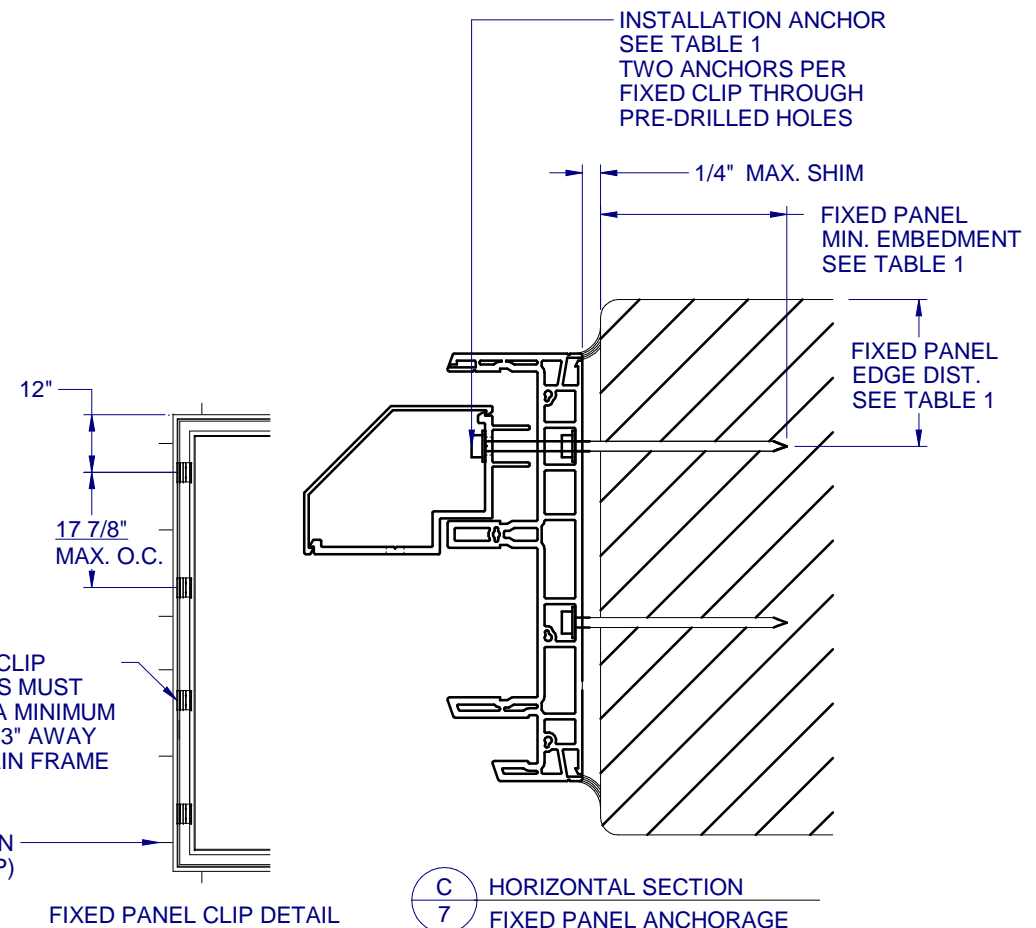
**A** VERTICAL SECTION  
 7 TYPICAL SILL ANCHORAGE

**B** HORIZONTAL SECTION  
 7 TYPICAL JAMB ANCHORAGE

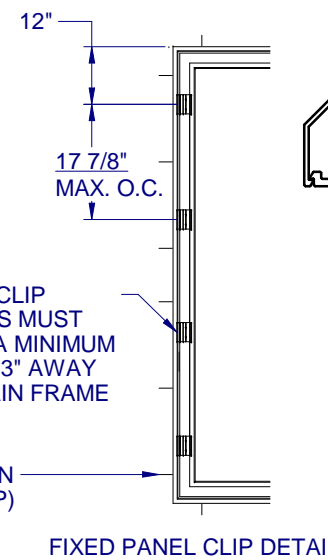
**TABLE 1: APPROVED INSTALLATION FASTENERS**

SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DIST.
CONCRETE (2.0 KSI MIN.)	3/16" ITW TAPCON	1"	3"
CONCRETE (3.05 KSI MIN.)	3/16" DEWALT ULTRACON+	1-3/4"	1"
HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)	3/16" ITW TAPCON	1"	3"
HOLLOW OR GROUT-FILLED CMU (ASTM C-90)	3/16" DEWALT ULTRACON+	1-1/4"	2-1/2"
2X MIN. SOUTHERN PINE (G=0.55)	3/16" ITW TAPCON	1-3/8"	1"
2X MIN. SOUTHERN PINE (G=0.55)	#10 WOOD SCREW	1-3/8"	1"
16 GAUGE (0.060") MIN. STEEL STUD (33 KSI YIELD MIN)	#10-16 HILTI KWIK-FLEX OR ITW TEKS SELF-DRILLING SCREW	FULL THREAD THRU 0.060"	7/16"
1/8" ALUM. (6063-T5 MIN.) OR 1/8" STEEL (33 KSI MIN.)	#10 GRADE 5 SELF-TAPPING / DRILLING SCREW	FULL THREAD THRU 0.125"	7/16"
FIXED PANEL CLIP ANCHORS INTO: CONCRETE (2.0 KSI MIN.) OR HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)	3/16" ITW TAPCON	1"	3"
FIXED PANEL CLIP ANCHORS INTO: CONCRETE (3.05 KSI MIN.) OR HOLLOW OR GROUT-FILLED CMU (ASTM C-90)	3/16" DEWALT ULTRACON+	1-1/4"	2-1/2"

NOTE: FIXED PANEL CLIP ANCHORS INTO WOOD OR METAL SHALL FOLLOW THE ANCHOR TYPE, MIN. EMBEDMENT AND MIN. EDGE DISTANCE LISTED IN TABLE 1.



**C** HORIZONTAL SECTION  
 7 FIXED PANEL ANCHORAGE



FIXED PANEL CLIP  
 CLIP ANCHORS MUST  
 BE LOCATED A MINIMUM  
 DISTANCE OF 3" AWAY  
 FROM ANY MAIN FRAME  
 ANCHOR.

INSTALLATION  
 ANCHOR (TYP)

FIXED PANEL CLIP DETAIL