SUN METALS

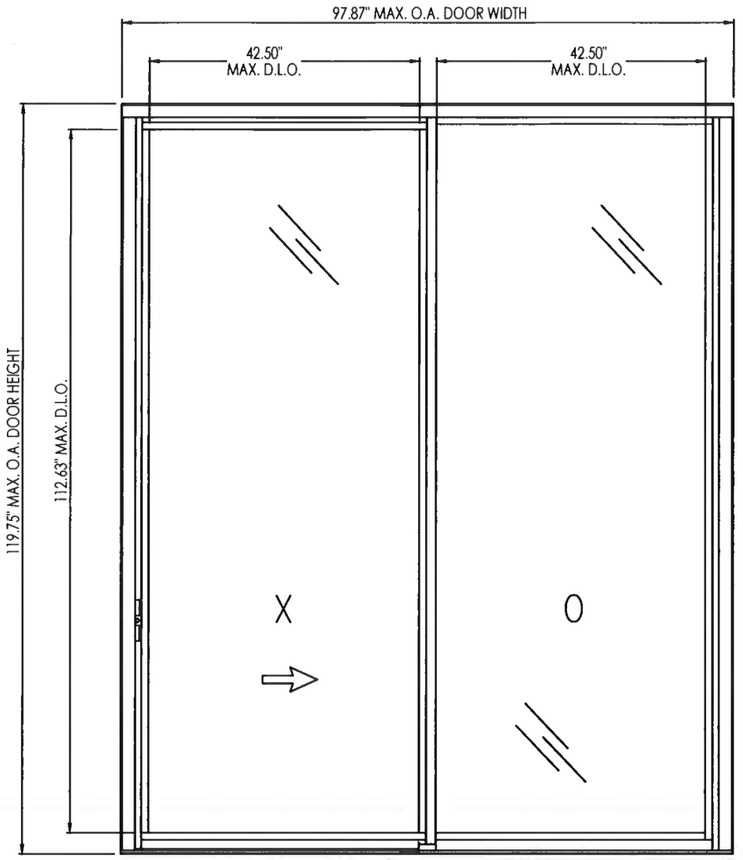
5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634

SUNDOR 5000
SLIDING GLASS DOOR

"SMALL MISSILE IMPACT"

GORDON D. THOMAS
LICENSE
No. 46718
STATE OF FLORIDA
PROFESSIONAL ENGINEER

6/11/25
FL46718



GENERAL NOTES:

1. This product has been evaluated and is in compliance with the 8th Edition (2023) 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 installed greater than 30 feet above grade in areas requiring wind borne debris protection this product complies with Section 1626.1.2 of the FBC and does not require an impact resistant covering. This product meets missile level "A" and includes Wind Zone 4 as defined in ASTM E 1996 and Section 1609.1.2.2 of the FBC.

4. When installed 30 feet or less above grade in areas requiring wind borne debris protection this product must be protected win an impact resistant covering that complies with Section 1609.1.2 of the FBC.

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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6	VERTICAL CROSS SECTIONS
7	ANCHORING - CONCRETE SUBSTRATE
8	ANCHORING - STEEL SUBSTRATE
9	COMPONENTS
10	BILL OF MATERIALS & COMPONENTS

O.A. FRAME DIMENSION	D.L.O. DIMENSION	REINFOCED	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
97.87" x 119.75"	42.50" x 112.63"	YES	G1, G2	115.0	-125.0
97.87" x 119.75"	42.50" x 112.63"	NO	G1, G2	70.0	75.0

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SUN METALS

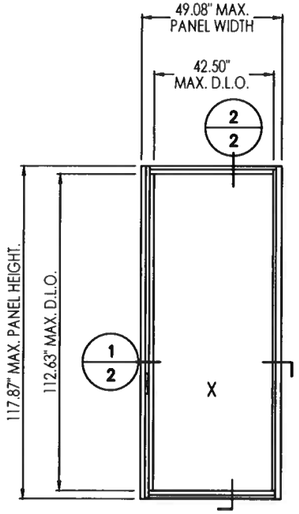
PRODUCT: SLIDING GLASS DOOR

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

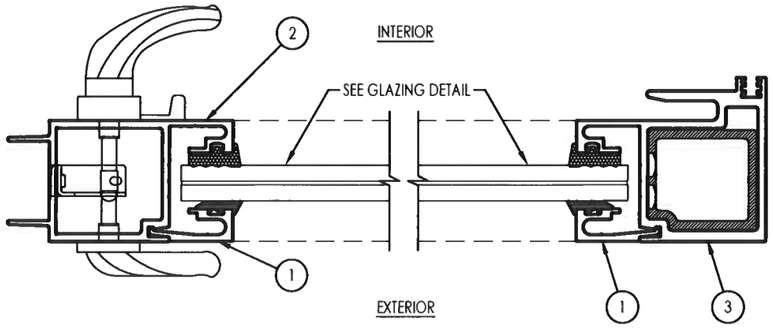
NO	DATE	DESCRIPTION	BY
6	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
5	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JGB
4	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
3	1/14/17	REV GLAZING PER ADDITIONAL TEST	ECV
2	2/26/16	CHANGE INT. .060 SSP TO .060 PVB	CO
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

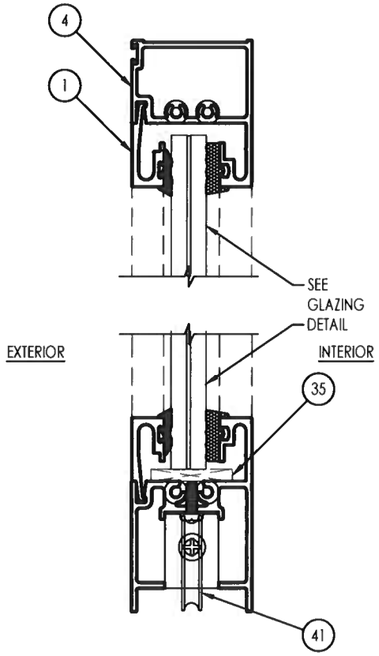
DATE: 02/26/16
SCALE: NTS
DWG. BY: CO
CHK BY: ECV
DRAWING NO.: FL-15903.18
SHEET: 1 OF 10



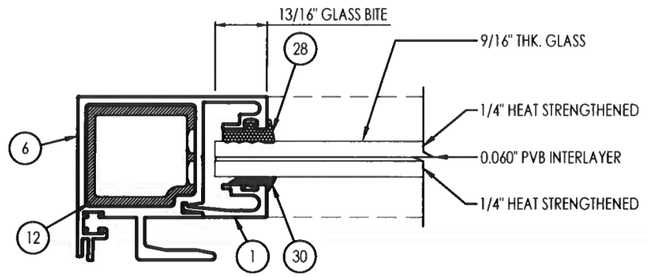
OPERABLE PANEL



1/2 HORIZONTAL CROSS SECTION

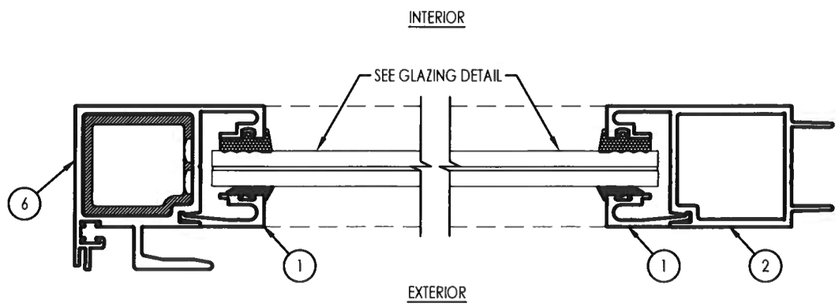


2/2 VERTICAL CROSS SECTION

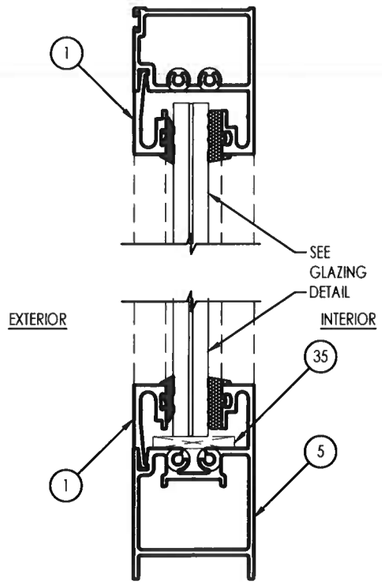


G2 GLAZING DETAIL (DRY GLAZED)
MONOLITHIC
9/16" LAMINATED GLASS

FIXED PANEL



3/2 HORIZONTAL CROSS SECTION



4/2 VERTICAL CROSS SECTION

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SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: DOOR PANEL DETAILS

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3	1/14/17	REV GLAZING PER ADDITIONAL TEST	ECV
2	2/26/16	CHANGE INT. .060 SGP TO .060 PVB	CO
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

DATE: 02/26/16

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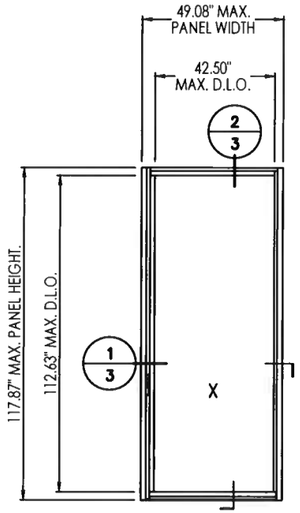
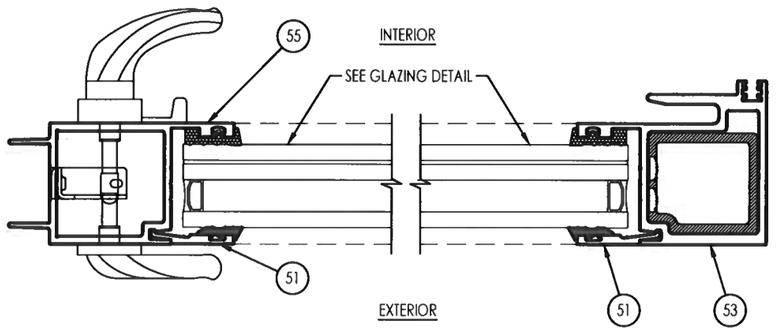
CHK BY: ECV

DRAWING NO.: FL-15903.18

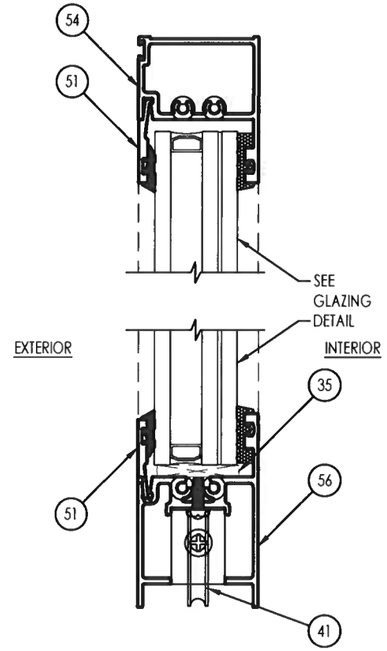
SHEET: 2 OF 10



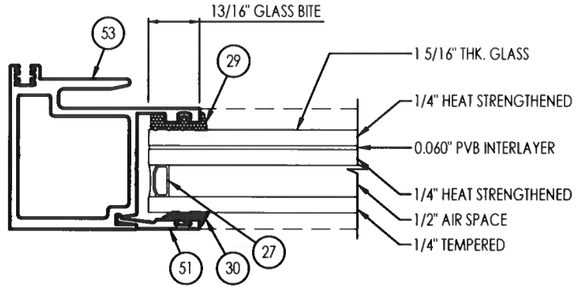
OPERABLE PANEL



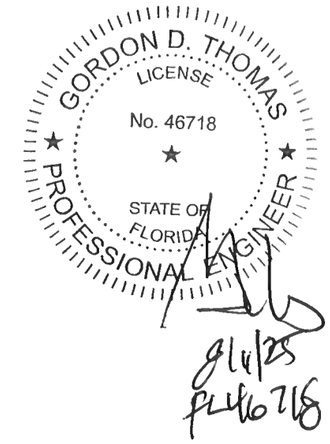
1/3 HORIZONTAL CROSS SECTION

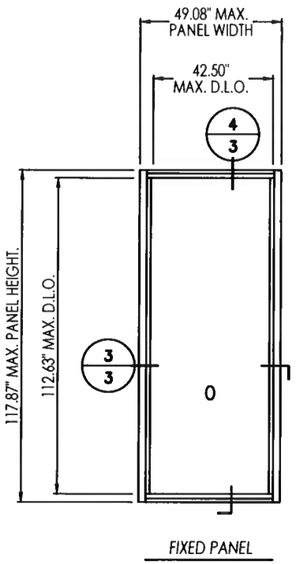


2/3 VERTICAL CROSS SECTION

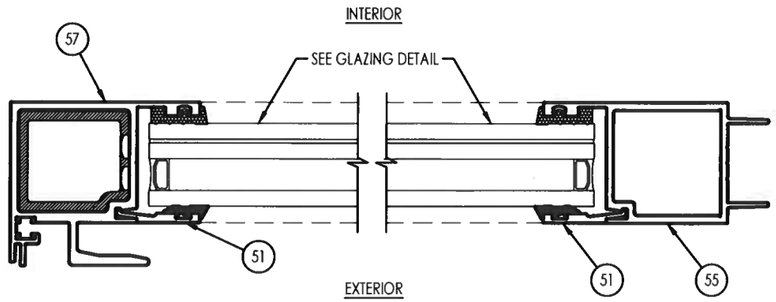


G1 GLAZING DETAIL (DRY GLAZED)
1 5/16" LAMINATED L.G. GLASS

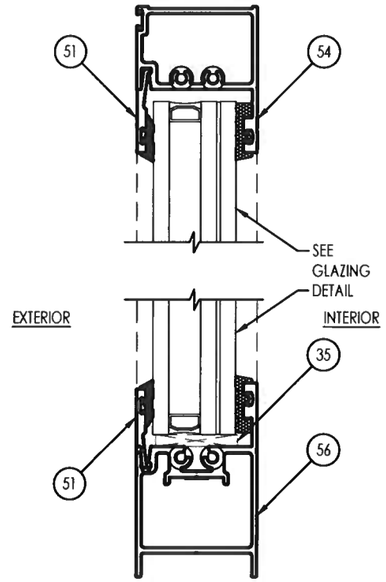




FIXED PANEL



3/3 HORIZONTAL CROSS SECTION



4/3 VERTICAL CROSS SECTION

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SUN METALS

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PART OR ASSEMBLY: DOOR PANEL DETAILS

NO	DATE	DESCRIPTION	BY
6	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
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4	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
2	2/26/16	CHANGE INT. .060 SGP TO .060 PVB	CO
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

DATE: 02/26/16

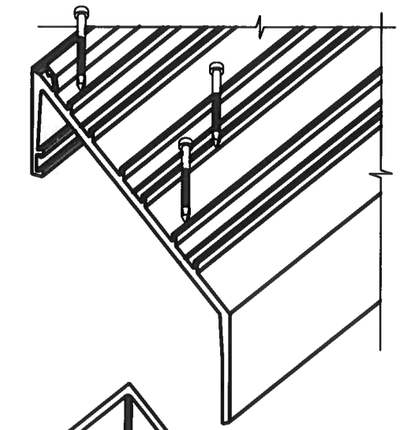
SCALE: NTS

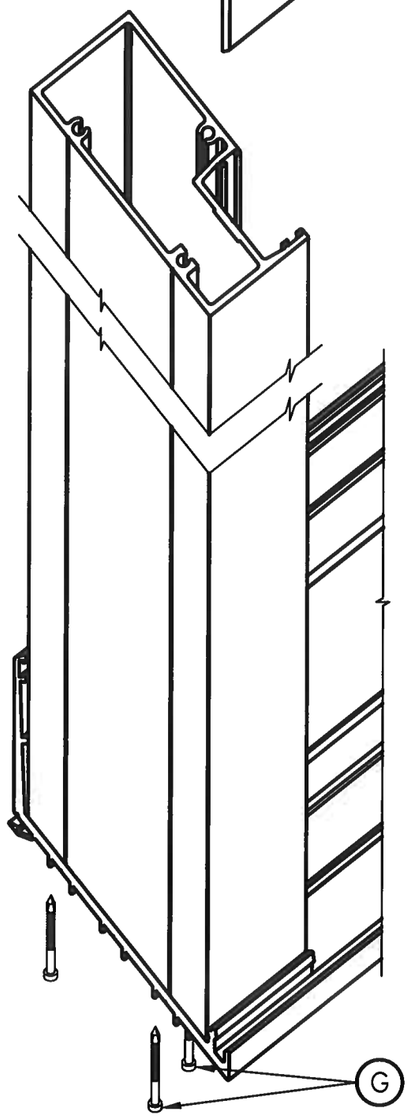
DWG. BY: CO

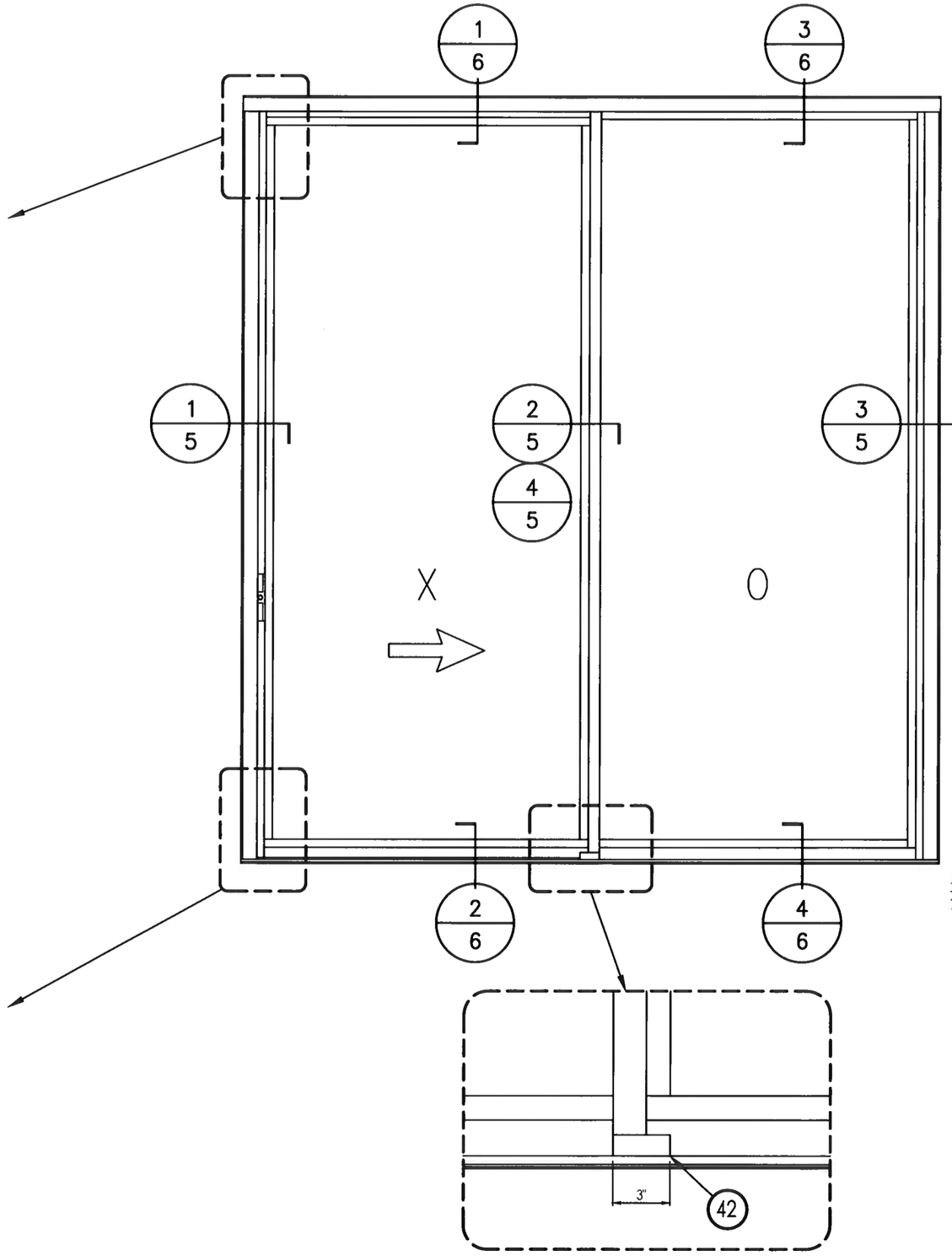
CHK BY: ECV

DRAWING NO.: FL-15903.18

SHEET: 3 OF 10







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PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: CORNER DETAILS

NO	DATE	DESCRIPTION	BY
6	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
5	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JGB
4	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
2	2/26/16	CHANGE INT. .060 SGP TO .060 PVB	CO
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

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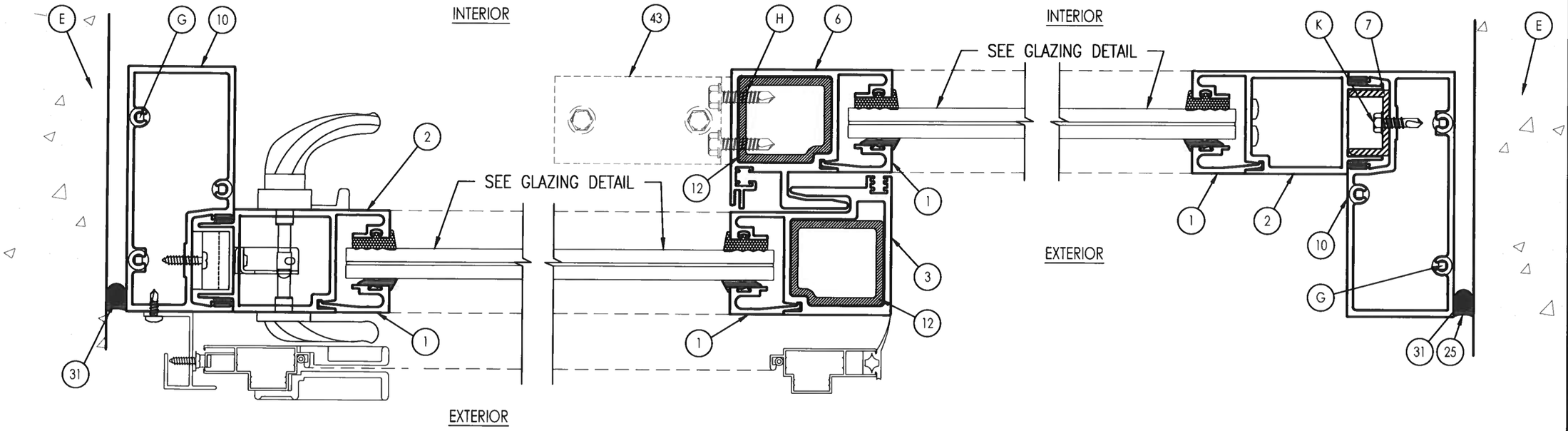
CHK BY: ECV

DRAWING NO.: FL-15903.18

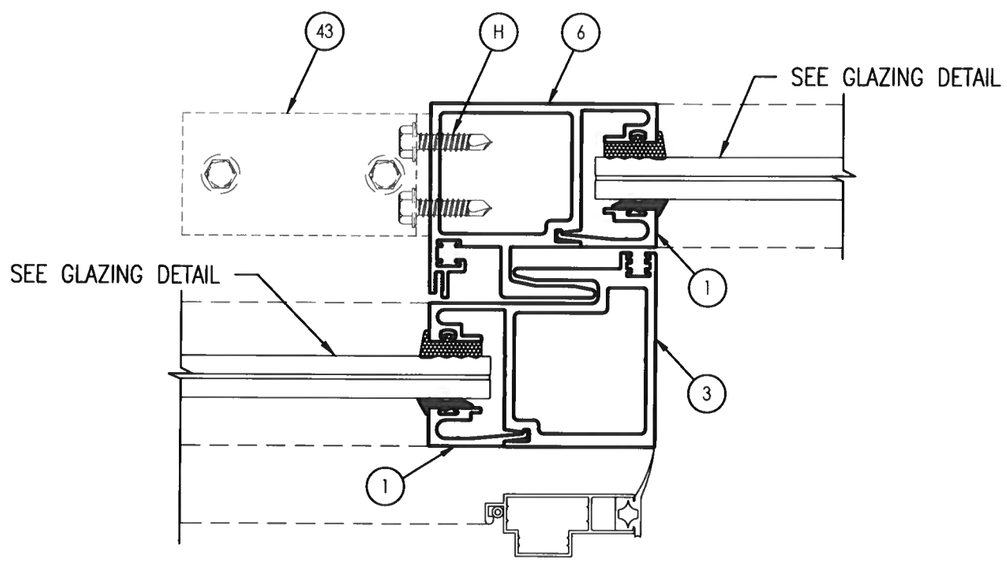
SHEET: 4 OF 10



1/5 HORIZONTAL CROSS SECTION

2/5 HORIZONTAL CROSS SECTION
With Reinforcement

3/5 HORIZONTAL CROSS SECTION



4/5 HORIZONTAL CROSS SECTION
Without Reinforcement

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SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO	DATE	DESCRIPTION	BY
6	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
5	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JCB
4	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
2	2/26/16	CHANGE INT. .060 SCP TO .060 PVB	CO
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

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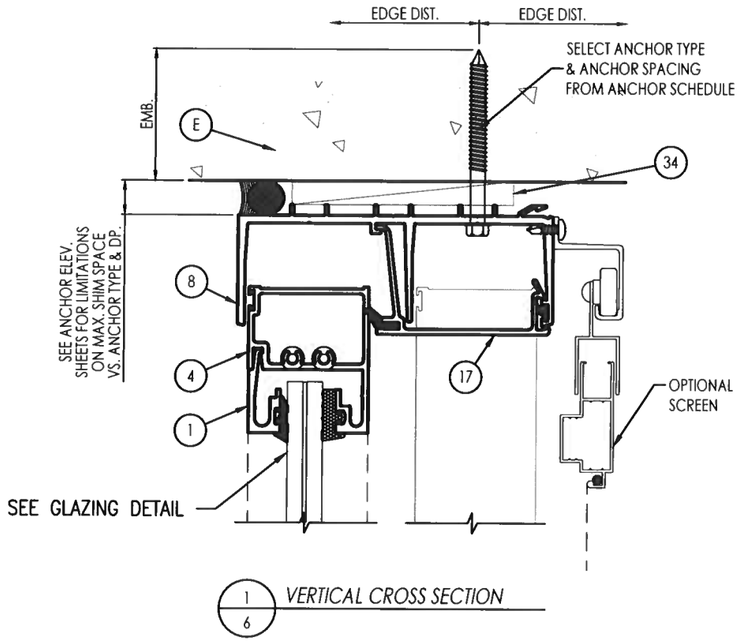
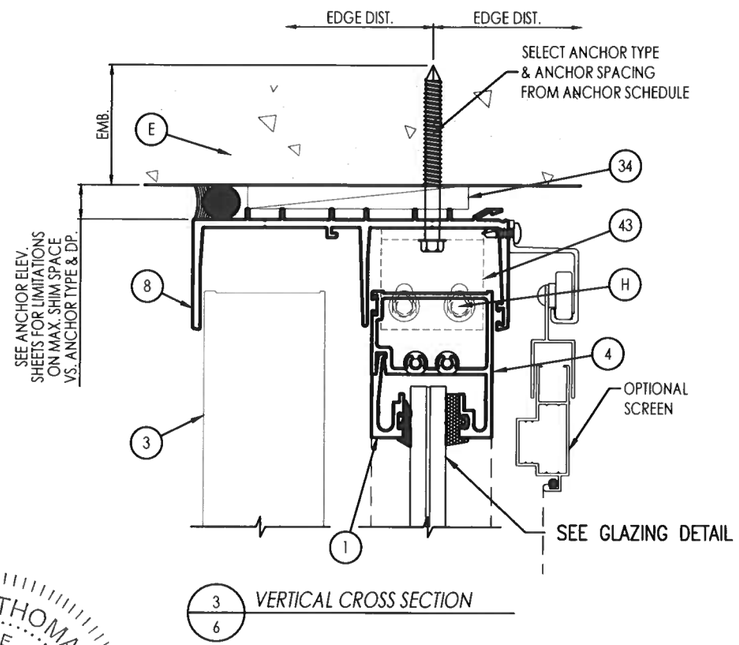
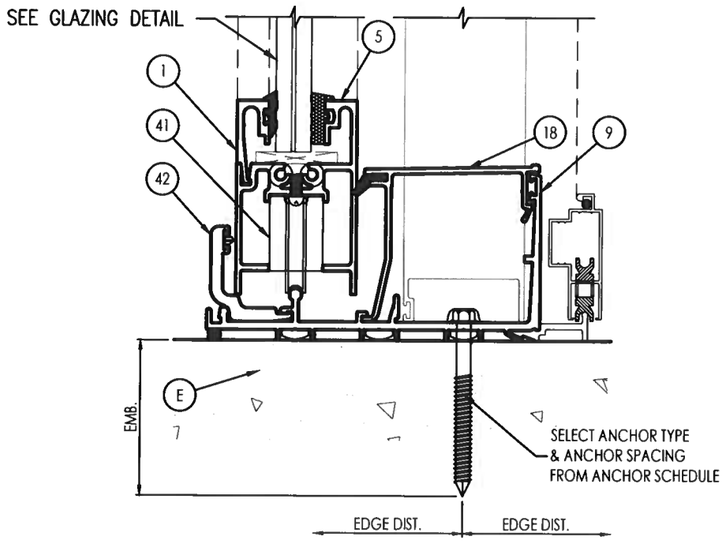
SHEET: 5 OF 10



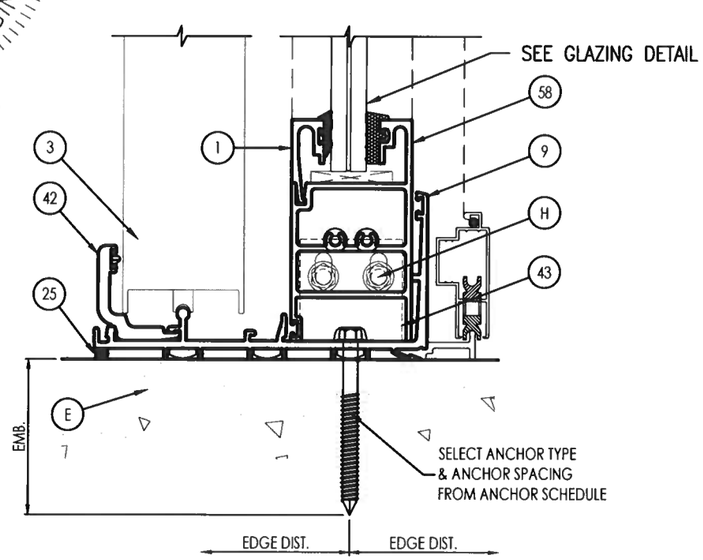
1/6 VERTICAL CROSS SECTION



3/6 VERTICAL CROSS SECTION



2/6 VERTICAL CROSS SECTION



4/6 VERTICAL CROSS SECTION

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SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO	DATE	DESCRIPTION	BY
6	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
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2	2/26/16	CHANGE INT. .060 SSP TO .060 PVB	CO
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

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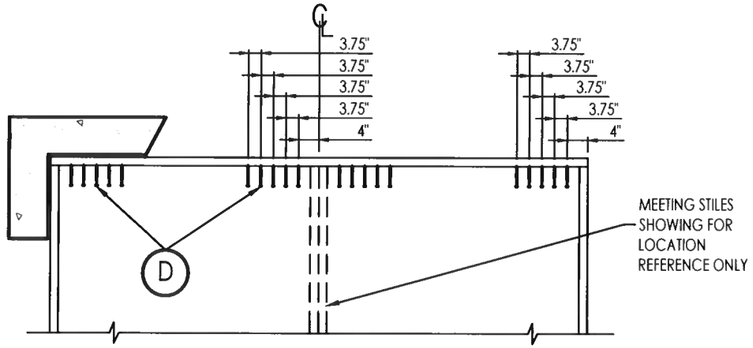
SHEET: 6 OF 10



FRAME ANCHORING @ HEAD
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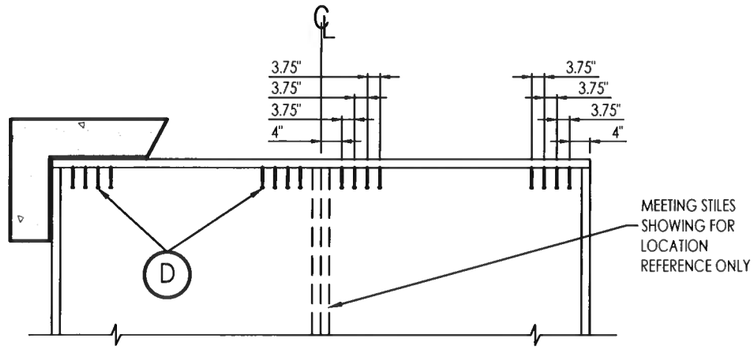
Max. shim space <= .625



FRAME ANCHORING @ HEAD
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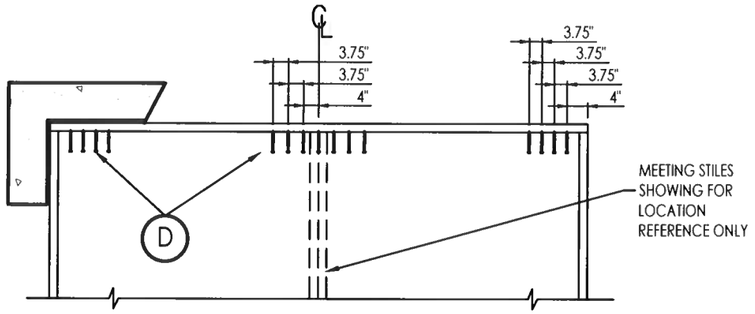
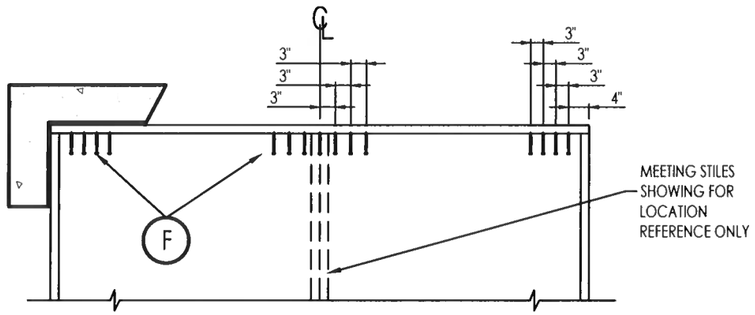
Max. shim space <= .25

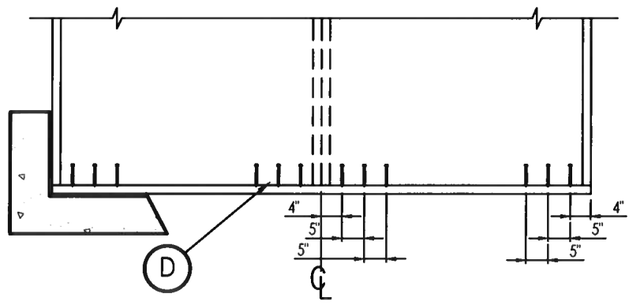


FRAME ANCHORING @ HEAD
DP <= 68 PSF
Max. shim space <= .41



FRAME ANCHORING @ HEAD
DP <= 125 PSF
Max. shim space <= .625

SUBSTRATE		ANCHOR SCHEDULE
CONCRETE	(D)	5/16" Ø HWH ITW Tapcon® XL concrete anchor with 1-3/4" min. embedment, 2-3/16" minimum edge distance and 3-3/4" minimum clearance to adjacent concrete anchors. Concrete is 3,000 PSI minimum conforming to ACI 301.
	(F)	3/8" Ø ITW Dynabolt Sleeve Anchor with 1-1/2" min. embedment, 2-1/2" minimum edge distance and 3" minimum clearance to adjacent concrete anchors. Concrete is 3,000 PSI minimum conforming to ACI 301.



FRAME ANCHORING @ SILL
DP <= 125 PSF
Max. shim space <= .17

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SUN METALS

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PART OR ASSEMBLY: ANCHORING CONCRETE SUBSTRATE

NO	DATE	DESCRIPTION	BY
		REVISIONS	
6	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
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4	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
2	2/26/16	CHANGE INT. .060 SCP TO .060 PVB	CO
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

DATE: 02/26/16

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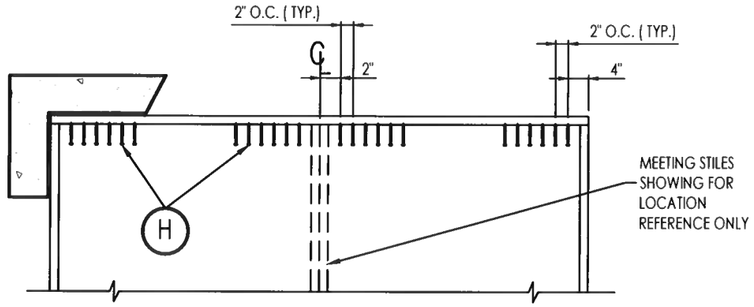
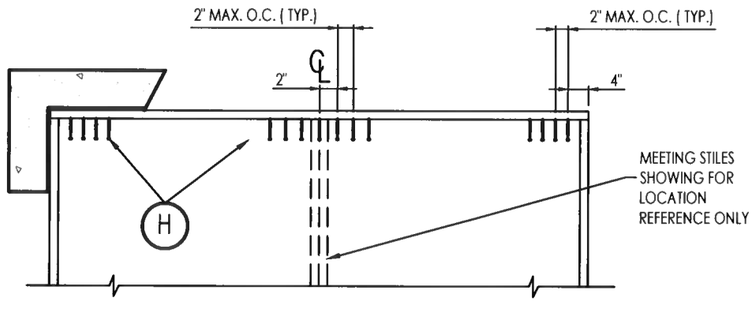
DRAWING NO.: FL-15903.18

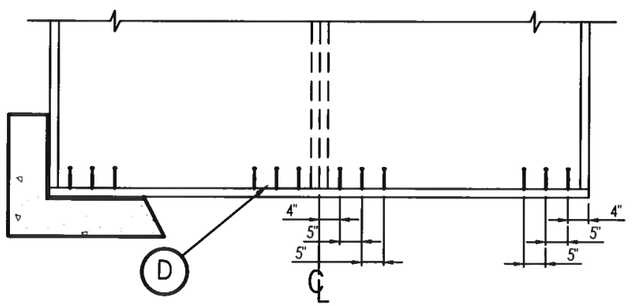
SHEET: 7 OF 10



FRAME ANCHORING @ HEAD
Steel substrate
DP <= 125 PSF
Max. shim space <= .625



FRAME ANCHORING @ HEAD
Steel substrate
DP <= 78 PSF
Max. shim space <= .625



FRAME ANCHORING @ SILL
Concrete substrate
DP <= 125 PSF
Max. shim space <= .17

SUBSTRATE		ANCHOR SCHEDULE
CONCRETE	(D)	5/16" Ø HWH ITW Tapcon® XL concrete anchor with 1-3/4" min. embedment, 2-3/16" minimum edge distance and 3-3/4" minimum clearance to adjacent concrete anchors. Concrete is 3,000 PSI minimum conforming to ACI 301.
STEEL	(H)	1/4-20 HWH Hilti KWIK-FLEX® self drilling screws. Steel with 0.125" minimum wall thickness conforming to ASTM A500 Grade B, Fy=46,999 PSI & Fu=58,000 PSI or ASTM A653, Fy=33,000 PSI, Fu= 45,000 PSI. Minimum embedment of 3 threads through steel substrate, with 1" min. edge distance and 1" min. CL to CL spacing.

GORDON D. THOMAS
LICENSE
No. 46718
STATE OF FLORIDA
PROFESSIONAL ENGINEER

7/11/25
FL46718

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

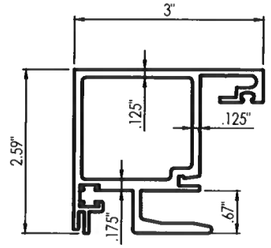
SUN METALS

PRODUCT: SLIDING GLASS DOOR

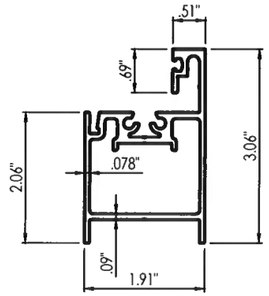
PART OR ASSEMBLY: ANCHORING STEEL SUBSTRATE

NO	DATE	DESCRIPTION	BY
REVISIONS			
6	7/14/25	UPDATE TO 8TH ED. (2023)	FBC
5	9/21/20	UPDATE TO 7TH ED. (2020)	FBC
4	8/9/19	UPDATE TO 6TH ED. (2017)	FBC
2	2/26/16	CHANGE INT. .060 SGP TO .060 PVB	CO
1	2/18/15	UPDATE TO 5TH ED. (2014)	FBC
			LFS
			ECV
			JCB
			ECV

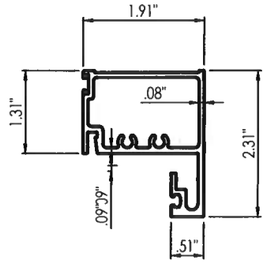
DATE: 02/26/16
SCALE: NTS
DWG. BY: CO
CHK BY: ECV
DRAWING NO.: FL-15903.18
SHEET: 8 OF 10



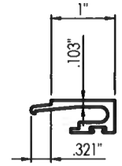
6 INTERLOCK STILE - FIXED PANEL
9/16" GLASS



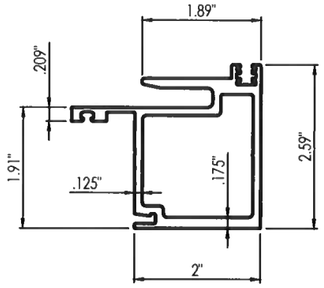
5 BOTTOM RAIL - MOVING PANEL
9/16" GLASS



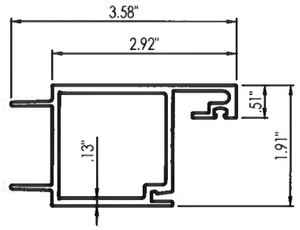
4 TOP RAIL
9/16" GLASS



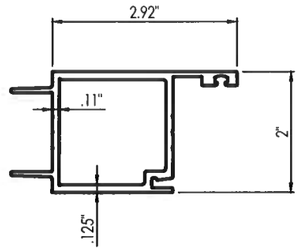
1 GLAZING BEAD
9/16" GLASS



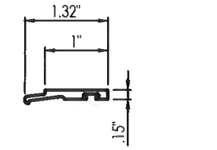
53 I.G. INTERLOCK STILE - MOVING PANEL
1-5/16" GLASS



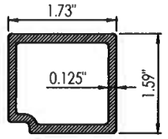
2 LEAD STILE
9/16" GLASS



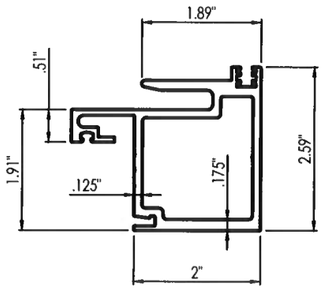
55 I.G. LEAD STILE
1- 5/16" GLASS



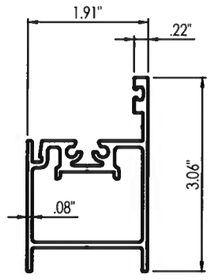
51 I.G. GLAZING BEAD
1- 5/16" GLASS



12 REINFORCEMENT

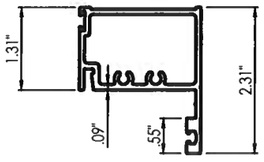


3 INTERLOCK STILE - MOVING PANEL
9/16" GLASS

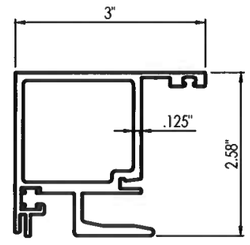


56 I.G. BOTTOM RAIL - MOVING PANEL
1-5/16" GLASS

GORDON D. THOMAS
LICENSE
No. 46718
STATE OF FLORIDA
PROFESSIONAL ENGINEER
9/11/25
FL46718



54 I.G. TOP RAIL
1- 5/16" GLASS



57 I.G. INTERLOCK STILE - FIXED PANEL
1-5/16" GLASS

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
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SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: COMPONENTS

NO	DATE	DESCRIPTION	BY
6	7/14/25	UPDATE TO 8TH ED. (2023)	ECV
5	9/21/20	UPDATE TO 7TH ED. (2020)	JCB
4	8/9/19	UPDATE TO 6TH ED. (2017)	ECV
2	2/26/16	CHANGE INT. .060 SGP TO .060 PVB	CO
1	2/18/15	UPDATE TO 5TH ED. (2014)	LFS

REVISIONS

DATE: 02/26/16

SCALE: NTS

DWG. BY: CO

CHK BY: ECV

DRAWING NO.: FL-15903.18

SHEET: 9 OF 10

BILL OF MATERIALS

ITEM #	DESCRIPTION	MATERIAL
D	5/16" x 2-3/4" HWH ITW TAPCON XL CONCRETE ANCHOR	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	3/8" x 2-1/2" ITW DYNABOLT SLEEVE ANCHOR	STEEL
G	#10 x 1-1/2" SQ-PH ASSEMBLY SCREW	STL. STEEL
H	1/4-20 HWH HILTI KWIK-FLEX SELF DRILLING SCREW	STEEL
K	#10 x 3/4" HH SELT TAP SCREW	STL. STEEL
1	GLAZING BEAD 6063-T6 (9/16")	ALUM
2	LEAD STILE 6063-T6 (9/16")	ALUM
3	INTERLOCK STILE - MOVING PANEL 6005-T5 (9/16")	ALUM
4	TOP RAIL 6063-T6 (9/16")	ALUM
5	BOTTOM RAIL - MOVING PANEL 6063-T6 (9/16")	ALUM
6	INTERLOCK STILE - FIXED PANEL 6005-T5 (9/16")	ALUM
7	FIXED PANEL RETAINING CLIP 6063-T6	ALUM
8	FRAME HEAD 6063-T6	ALUM
9	FRAME SILL 6063-T6	ALUM
10	FRAME JAMB 6063-T6	ALUM
12	REINFORCEMENT 6005-T5	ALUM
17	FRAME HEAD POCKET COVER 6063-T6	ALUM
18	FRAME SILL POCKET COVER 6063-T6	ALUM
25	WEATHERSEAL SEALANT (WS001) DOW 795	SILICONE
27	GLAZING SPACER	ALUM
28	GASKET, EPDM CLOSED CELL FOAM (9/16" STRUCTURAL GLAZING) (TREMCO)	EPDM
29	GASKET, EPDM CLOSED CELL FOAM (1-5/16" GLAZING) (TREMCO)	EPDM
30	WEDGE 70±5 EPDM (9/16" & 1-5/16" GLAZING) (TREMCO)	EPDM
31	BACKER ROD - CLOSED CELL EXTRUDED FOAM	POLYETHYLENE
34	SHIM	-
35	SETTING/ EDGE BLOCK	SILICONE
41	ROLLER ASSM.	STL. STEEL
42	REACTION CLIP 6005-T5	ALUM
43	TOE ANCHOR 6005-T5	ALUM
51	I.G. GLAZING BEAD 6063-T6	ALUM
53	I.G. INTERLOCK STILE - MOVING PANEL 6063-T6	ALUM
54	I.G. TOP RAIL 6063-T6	ALUM
55	I.G. LEAD STILE 6063-T6 (1-5/16")	ALUM
57	INTERLOCK STILE - FIXED PANEL (1-5/16")	ALUM
59	CAULK STOP, EPDM CLOSED CELL FOAM (9/16" STRUCTURAL GLAZING) (TREMCO)	EPDM
60	STRUCTURAL SILICONE DOW 995	SILICONE
61	WEDGE, 70±5 EPDM (9/16" GLAZING) (TREMCO)	EPDM

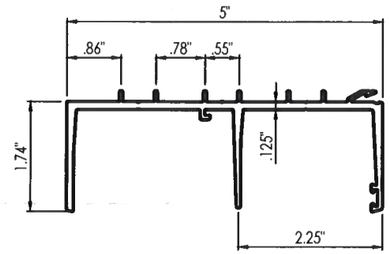
28 PRE-SET GASKET

30 WEDGE GASKET

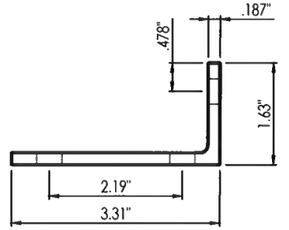
61 WEDGE

59 FOAM CAULK STOP

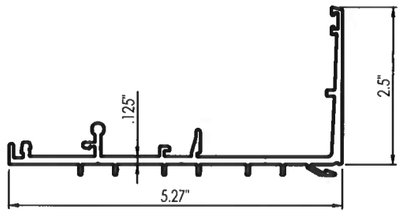
29 PRE-SET GASKET



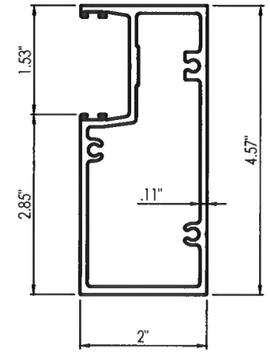
8 FRAME HEAD



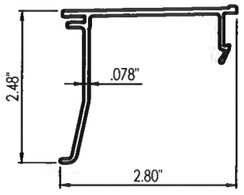
43 TOE ANCHOR



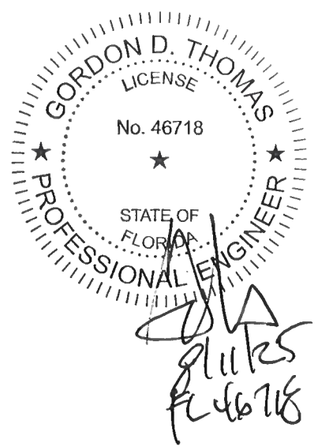
9 FRAME SILL

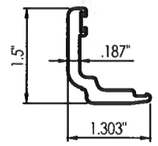


10 FRAME JAMB

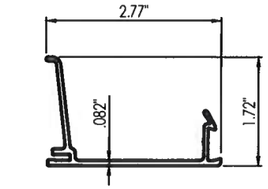


18 FRAME SILL POCKET COVER

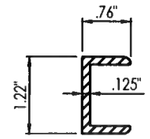




42 REACTION CLIP



17 FRAME HEAD POCKET COVER



7 FIXED PANEL RETAINING CLIP

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: COMPONENTS & BILL OF MATERIALS

NO	DATE	DESCRIPTION	BY
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SHEET: 10 OF 10