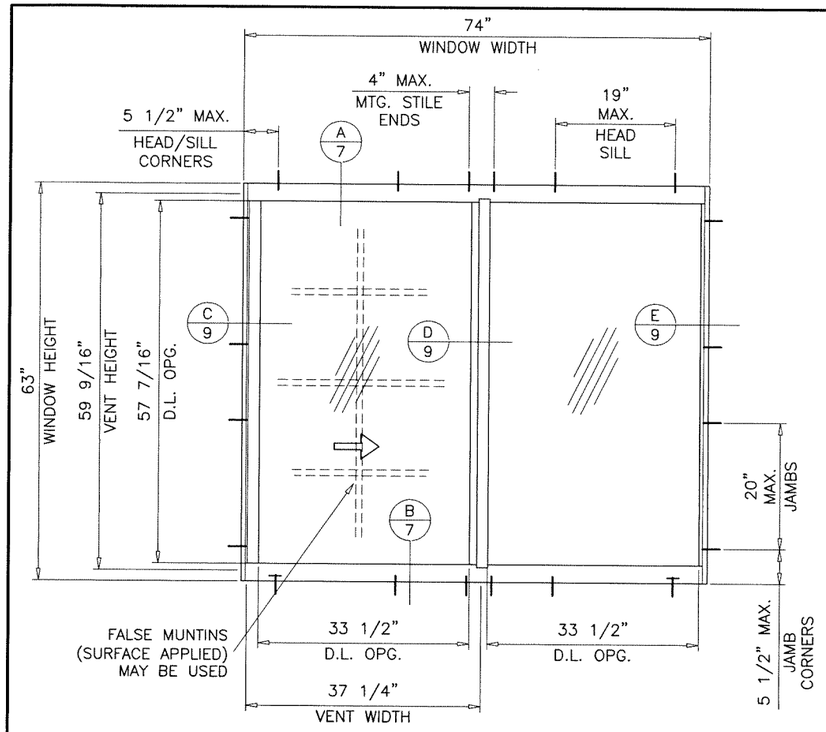
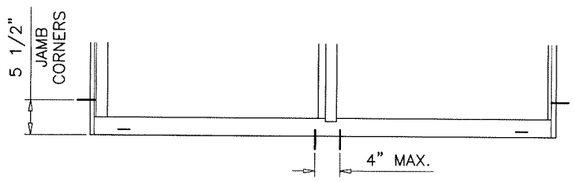


TYPICAL ELEVATION (TESTED UNIT)

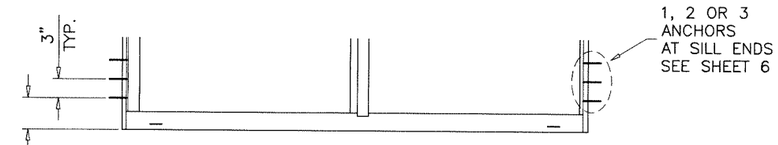
FRAME SILL TYPES '1' & '2'

ANCHORS REQD. AT SILL
SEE SHEET 3 FOR SILL TYPE '1' CAPACITY AND SHEET 7 FOR DETAIL
SEE SHEET 5 FOR SILL TYPE '2' CAPACITY AND SHEET 8 FOR DETAIL



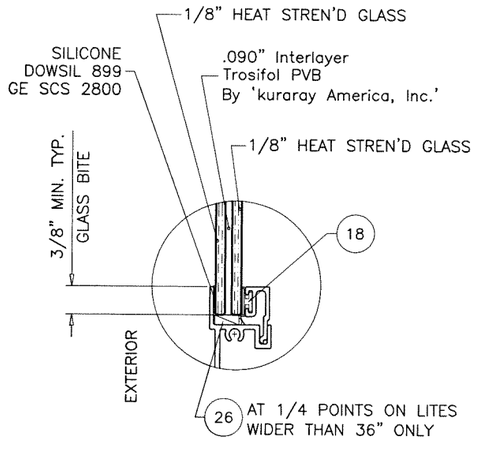
FRAME SILL TYPE '1' ONLY

ANCHORS REQD. AT MTG. STILE LOCATION ONLY
SEE SHEET 4 FOR SILL TYPE '1' CAPACITY AND SHEET 7 FOR DETAIL



FRAME SILL TYPE '1' & '3' ONLY

ANCHORS NOT REQD.
SEE SHEET 6 FOR SILL TYPE '1' CAPACITY AND SHEET 7 FOR DETAIL
SEE SHEET 6 FOR SILL TYPE '3' CAPACITY AND SHEET 8 FOR DETAIL



GLAZING DETAIL

5/16" OVERALL LAM. GLASS

SERIES-1650

ALUMINUM HORIZONTAL ROLLING WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEETS 3 THRU 6.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF H.R./H.R. OR HORIZONTAL ROLLING WITH OTHER WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING F.B.C. APPROVED MULLIONS IN BETWEEN.

LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2023 (8TH EDITION)/2026 (9TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE LOAD-BEARING, (HIGH DENSITY PLASTIC/COMPOSITE, METAL OR OTHER RIGID MATERIALS).

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2023/2026 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

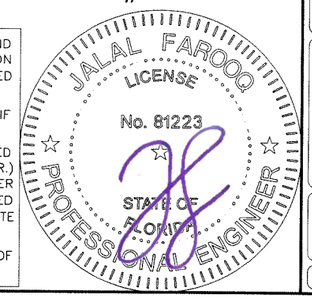
MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. LABELING TO COMPLY WITH SECTION 1709.9.2.

FASTENERS AND CONNECTORS (AS APPLICABLE) SHOWN IN THIS APPROVAL MAY NOT MEET CORROSION RESISTANCE REQUIREMENTS FOR COASTAL OR SALT WATER EXPOSURE ZONES. COMPLIANCE WITH THESE CONDITIONS TO BE CHECKED PER FBC 1711.

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

Sealed: 7/22/2026

FL #29240



A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

C- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.

D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 331173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

COMP-ANL\19-04F-SWM

SERIES-1650 ALUM HORIZ. ROLLING WDW. (L.M.I.)

Sunshine Windows Manufacturing, Inc.
1785 West 33rd Place
Hialeah, FL. 33012
Tel. (305) 364-9952 Fax. (305) 828-5118

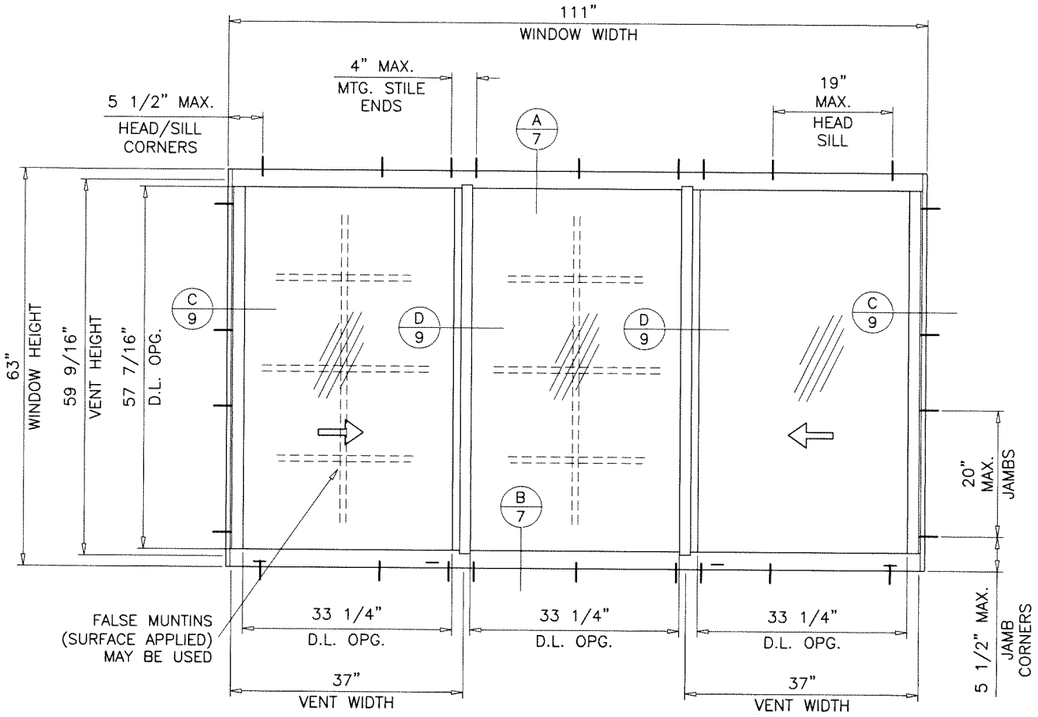
revisions:

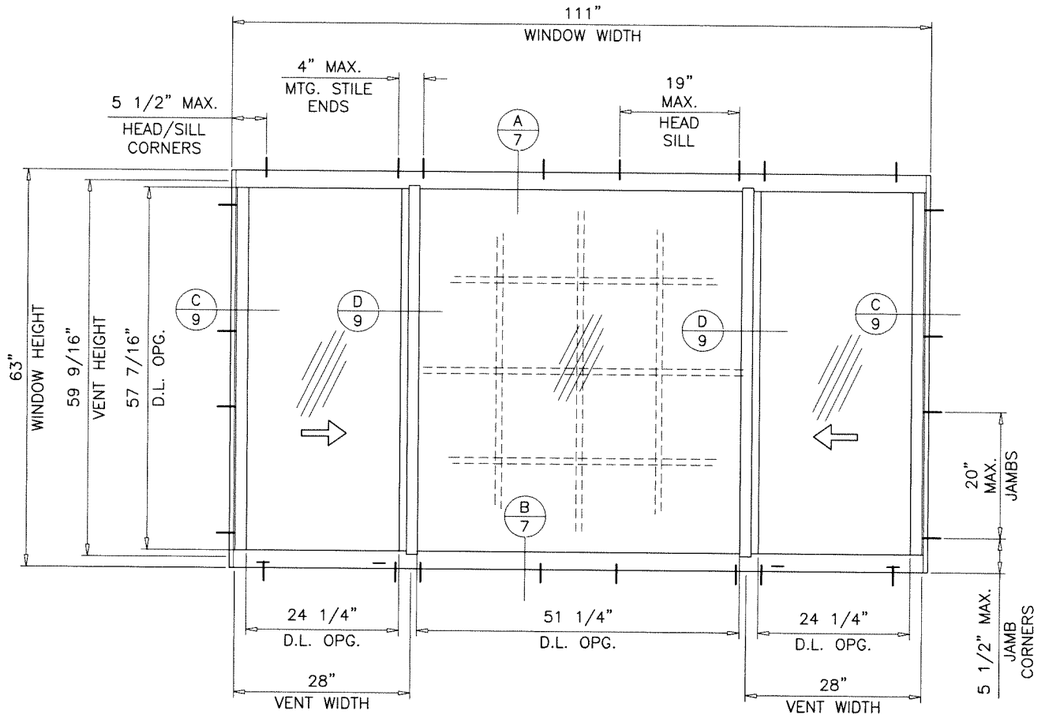
no	date	by	description
A	08.31.20		UPDATED TO 2020 FBC
B	07.22.22		SILL OPTION ADDED
C	07.21.23		UPDATED TO 2023 FBC
D	07.11.24		ALT. HEAD/SILL OPTION ADDED
E	07.21.26		UPDATED TO 2026 FBC

date: 01-04-19
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

drawing no. 19-04F

sheet 1 of 11





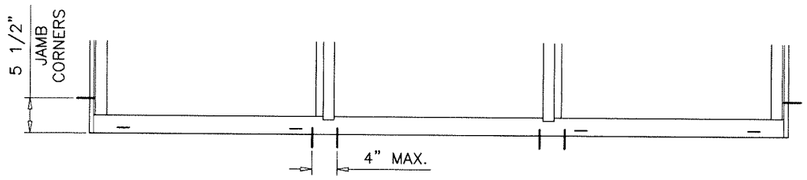
TYPICAL ELEVATION (TESTED UNIT)

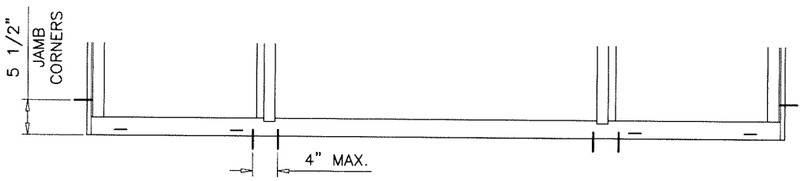
FRAME SILL TYPES '1' & '2'

ANCHORS REQD. AT SILL

SEE SHEET 3 FOR SILL TYPE '1' CAPACITY AND SHEET 7 FOR DETAIL

SEE SHEET 5 FOR SILL TYPE '2' CAPACITY AND SHEET 8 FOR DETAIL





FRAME SILL TYPE '1' ONLY

ANCHORS REQD. AT MTG. STILE LOCATION ONLY

SEE SHEET 4 FOR SILL TYPE '1' CAPACITY AND SHEET 7 FOR DETAIL

Sealed: 7/22/2026

JALAL FAROOQ LICENSE No. 81223 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL #29240

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revisions:

no	date	by	description

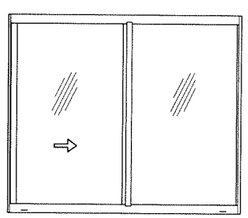
date: 01-04-19
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

drawing no. 19-04F

FRAME SILL TYPE '1'

DESIGN LOAD CAPACITY – PSF (XO OR OX SIZES)
SILL ANCHORS REQD.

WINDOW DIMS.		5/16" OVERALL LAM. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(–)
26–1/2"	26"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
26–1/2"	38–3/8"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
26–1/2"	50–5/8"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
26–1/2"	63"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
24"	24"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0
24"	36"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0
24"	48"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0
24"	60"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0



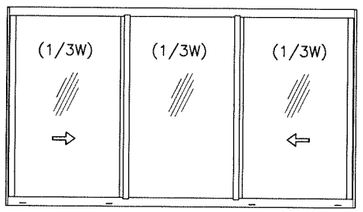
LEFT AND RIGHT VENTS TO BE OF EQUAL GLASS DLO WIDTHS

'XO OR OX'

FRAME SILL TYPE '1'

DESIGN LOAD CAPACITY – PSF (XOX SIZES)
SILL ANCHORS REQD.

WINDOW DIMS.		5/16" OVERALL LAM. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(–)
74"	26"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	38–3/8"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	50–5/8"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	63"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
72"	24"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	36"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	48"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	60"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0



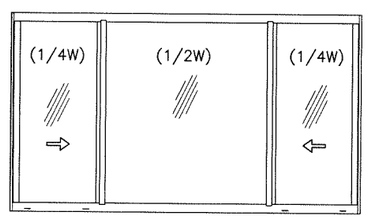
OPERATING VENTS TO BE 1/3 OF THE WINDOW WIDTH

'XOX'

FRAME SILL TYPE '1'

DESIGN LOAD CAPACITY – PSF (XOX SIZES)
SILL ANCHORS REQD.

WINDOW DIMS.		5/16" OVERALL LAM. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(–)
74"	26"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	38–3/8"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	50–5/8"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	63"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
72"	24"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	36"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	48"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	60"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0



OPERATING VENTS TO BE 1/4 OF THE WINDOW WIDTH

'XOX'

Sealed: 7/22/2026

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–16 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05–DEC–219

JALAL FAROOQ LICENSE No. 81223 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL #29240

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revisions:

no	date	by	description

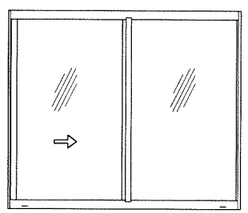
date: 01–04–19 scale: – dr. by: TARIQ chk. by:

drawing no. 19–04F

sheet 3 of 11

FRAME SILL TYPE '1'

DESIGN LOAD CAPACITY – PSF (XO OR OX SIZES) SILL ANCHORS AT MTG. STILE ONLY			
WINDOW DIMS.		5/16" OVERALL LAM. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(–)
26–1/2"	26"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
26–1/2"	38–3/8"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
26–1/2"	50–5/8"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
26–1/2"	63"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		64.0	64.0
24"	24"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0
24"	36"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0
24"	48"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0
24"	60"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	69.1

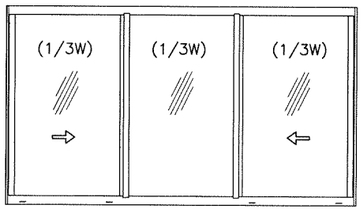


LEFT AND RIGHT VENTS TO BE OF EQUAL GLASS DLO WIDTHS

'XO OR OX'

FRAME SILL TYPE '1'

DESIGN LOAD CAPACITY – PSF (XOX SIZES) SILL ANCHORS AT MTG. STILE ONLY			
WINDOW DIMS.		5/16" OVERALL LAM. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(–)
74"	26"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	38–3/8"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	50–5/8"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	63"	65.0	70.0
106–1/4"		65.0	66.9
111"		64.0	64.0
72"	24"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	36"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	48"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	60"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	69.1

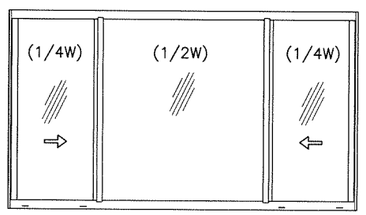


OPERATING VENTS TO BE 1/3 OF THE WINDOW WIDTH

'XOX'

FRAME SILL TYPE '1'

DESIGN LOAD CAPACITY – PSF (XOX SIZES) SILL ANCHORS AT MTG. STILE ONLY			
WINDOW DIMS.		5/16" OVERALL LAM. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(–)
74"	26"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	38–3/8"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	50–5/8"	65.0	70.0
106–1/4"		65.0	70.0
111"		65.0	70.0
74"	63"	65.0	70.0
106–1/4"		59.4	59.4
111"		56.9	56.9
72"	24"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	36"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	48"	65.0	70.0
84"		65.0	70.0
96"		65.0	70.0
108"		65.0	70.0
72"	60"	65.0	70.0
84"		65.0	70.0
96"		65.0	69.1
108"		61.4	61.4



OPERATING VENTS TO BE 1/4 OF THE WINDOW WIDTH

'XOX'

Sealed: 7/22/2026

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–16 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05–DEC–219

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COMP–ANL\19–04F–SWM

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revisions:

no	date	by	description

date: 01–04–19 | scale: – | dr. by: TARIQ | chk. by:

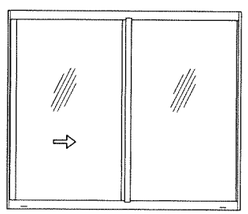
drawing no. 19–04F

sheet 4 of 11

FRAME SILL TYPE '2'

DESIGN LOAD CAPACITY – PSF (XO OR OX SIZES)
SILL ANCHORS REQD.

WINDOW DIMS.		5/16" OVERALL LAM. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(–)
26–1/2"	26"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
26–1/2"	38–3/8"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
26–1/2"	50–5/8"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
26–1/2"	63"	65.0	70.0
37"		65.0	70.0
53–1/8"		65.0	70.0
60"		65.0	70.0
74"		65.0	70.0
24"	24"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0
24"	36"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0
24"	48"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0
24"	60"	65.0	70.0
36"		65.0	70.0
48"		65.0	70.0
60"		65.0	70.0
72"		65.0	70.0



LEFT AND RIGHT VENTS TO BE OF EQUAL GLASS DLO WIDTHS

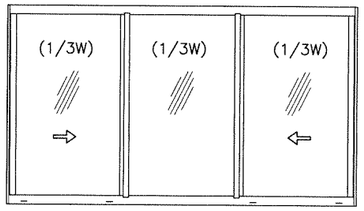
'XO OR OX'

ALL EXT.(+) LOADS SHOWN IN CHART ABOVE ARE FOR WINDOWS WITH APPLIED RISER AT FRAME SILL TYPE '2'.
FOR FRAME SILL WITHOUT RISER LIMIT EXT.(+) LOADS TO 53.3 PSF SEE DETAIL ON SHEET 8.

FRAME SILL TYPE '2'

DESIGN LOAD CAPACITY – PSF (XOX SIZES)
SILL ANCHORS REQD.

WINDOW DIMS.		5/16" OVERALL LAM. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(–)
74"	26"	60.0	60.0
74"	38–3/8"	60.0	60.0
74"	50–5/8"	60.0	60.0
74"	63"	60.0	60.0
72"	24"	60.0	60.0
84"		60.0	60.0
72"	36"	60.0	60.0
84"		60.0	60.0
72"	48"	60.0	60.0
84"		60.0	60.0
72"	60"	60.0	60.0
84"		60.0	60.0



OPERATING VENTS TO BE 1/3 OF THE WINDOW WIDTH

'XOX'

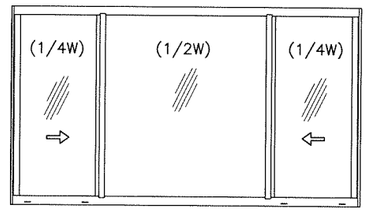
APPLIED RISER AT FRAME SILL TYPE '2' NOT REQUIRED

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–16 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05–DEC–219

FRAME SILL TYPE '2'

DESIGN LOAD CAPACITY – PSF (XOX SIZES)
SILL ANCHORS REQD.

WINDOW DIMS.		5/16" OVERALL LAM. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(–)
74"	26"	60.0	60.0
106–1/4"		60.0	60.0
111"		60.0	60.0
74"	38–3/8"	60.0	60.0
106–1/4"		60.0	60.0
111"		60.0	60.0
74"	50–5/8"	60.0	60.0
106–1/4"		60.0	60.0
111"		60.0	60.0
74"	63"	60.0	60.0
106–1/4"		56.8	56.8
111"		56.0	56.0
72"	24"	60.0	60.0
84"		60.0	60.0
96"		60.0	60.0
108"		60.0	60.0
72"	36"	60.0	60.0
84"		60.0	60.0
96"		60.0	60.0
108"		60.0	60.0
72"	48"	60.0	60.0
84"		60.0	60.0
96"		60.0	60.0
108"		60.0	60.0
72"	60"	60.0	60.0
84"		60.0	60.0
96"		60.0	60.0
108"		56.4	56.4



OPERATING VENTS TO BE 1/4 OF THE WINDOW WIDTH

'XOX'

Sealed: 7/22/2026

JALAL FAROOQ LICENSE No. 81223 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL #29240

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

COMP–ANL\19–04F–SWM

SERIES–1650 ALUM HORIZ. ROLLING WDW. (L.M.I.)

Sunshine Windows Manufacturing, Inc.
1785 West 33rd Place
Hialeah, FL. 33012
Tel. (305) 364–9952 Fax. (305) 828–5118

revisions:

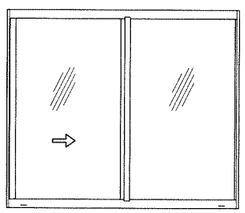
no.	date	by	description

date: 01–04–19 | scale: – | dr. by: TARIQ | chk. by:

drawing no. 19–04F

FRAME SILL TYPE '1'

DESIGN LOAD CAPACITY – PSF (XO OR OX SIZES) SILL ANCHORS NOT REQD.				
WINDOW DIMS.		5/16" OVERALL LAM. GLASS		NO. OF ANCHORS AT SILL ENDS
WIDTH	HEIGHT	EXT.(+)	INT.(–)	
26–1/2"	26"	65.0	70.0	1
37"		65.0	70.0	2
53–1/8"		65.0	70.0	2
60"		65.0	70.0	2
74"		65.0	69.1	3
26–1/2"	38–3/8"	65.0	70.0	1
37"		65.0	70.0	2
53–1/8"		65.0	70.0	2
60"		65.0	70.0	2
74"		58.5	58.5	3
26–1/2"	50–5/8"	65.0	70.0	1
37"		65.0	70.0	2
53–1/8"		65.0	70.0	2
60"		62.6	62.6	3
74"		50.8	50.8	3
26–1/2"	63"	65.0	70.0	2
37"		65.0	70.0	2
53–1/8"		62.4	62.4	3
60"		55.2	55.2	3
74"		44.6	44.6	3
24"	24"	65.0	70.0	1
36"		65.0	70.0	1
48"		65.0	70.0	2
60"		65.0	70.0	2
72"		65.0	70.0	2
24"	36"	65.0	70.0	1
36"		65.0	70.0	2
48"		65.0	70.0	2
60"		65.0	70.0	2
72"		61.9	61.9	3
24"	48"	65.0	70.0	1
36"		65.0	70.0	2
48"		65.0	70.0	2
60"		64.4	64.4	3
72"		53.7	53.7	3
24"	60"	65.0	70.0	1
36"		65.0	70.0	2
48"		65.0	70.0	2
60"		56.8	56.8	3
72"		47.4	47.4	3



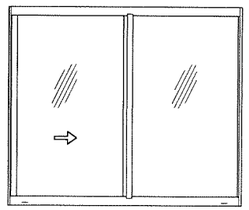
LEFT AND RIGHT VENTS TO BE OF EQUAL GLASS DLO WIDTHS

'XO OR OX'

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–16 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05–DEC–219

FRAME SILL TYPE '3'

DESIGN LOAD CAPACITY – PSF (XO OR OX SIZES) SILL ANCHORS NOT REQD.				
WINDOW DIMS.		5/16" OVERALL LAM. GLASS		NO. OF ANCHORS AT SILL ENDS
WIDTH	HEIGHT	EXT.(+)	INT.(–)	
26–1/2"	26"	50.0	60.0	1
37"		50.0	60.0	2
53–1/8"		50.0	60.0	2
60"		50.0	60.0	2
26–1/2"	38–3/8"	50.0	60.0	1
37"		50.0	60.0	2
53–1/8"		50.0	60.0	2
60"		50.0	60.0	2
26–1/2"	50–5/8"	50.0	60.0	1
37"		50.0	60.0	2
53–1/8"		50.0	60.0	2
60"		50.0	60.0	3
26–1/2"	63"	50.0	60.0	2
37"		50.0	60.0	2
53–1/8"		50.0	60.0	3
60"		50.0	54.9	3
24"	24"	50.0	60.0	1
36"		50.0	60.0	1
48"		50.0	60.0	2
60"		50.0	60.0	2
72"		50.0	60.0	2
24"	36"	50.0	60.0	1
36"		50.0	60.0	2
48"		50.0	60.0	2
60"		50.0	60.0	2
72"		50.0	55.6	3
24"	48"	50.0	60.0	1
36"		50.0	60.0	2
48"		50.0	60.0	2
60"		50.0	60.0	3
72"		41.7	41.7	3
24"	60"	50.0	60.0	1
36"		50.0	60.0	2
48"		50.0	60.0	2
60"		50.0	57.7	3
72"		33.4	33.4	3



LEFT AND RIGHT VENTS TO BE OF EQUAL GLASS DLO WIDTHS

'XO OR OX'

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FL #29240

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
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COMP–ANL\19–04F–SWM

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revisions:

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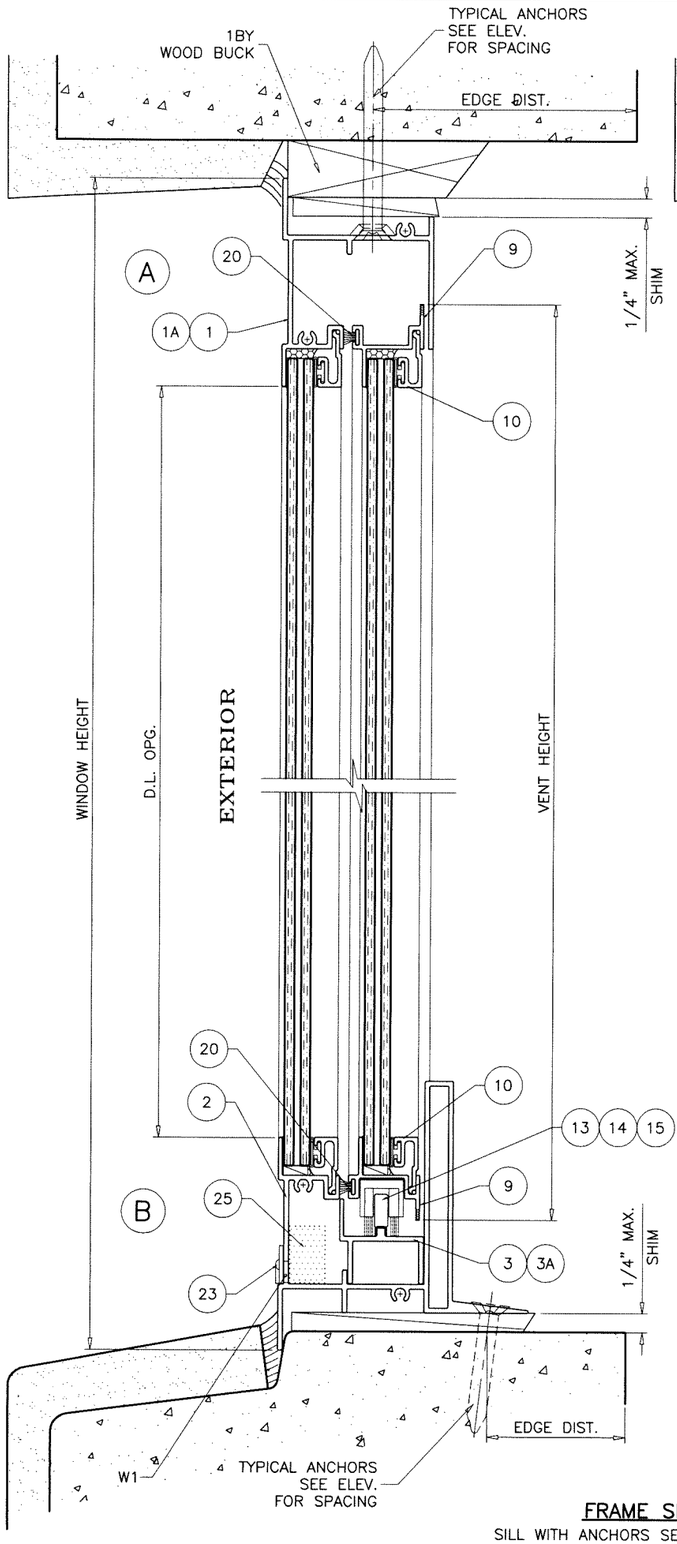
scale: –
dr. by: TARIQ
chk. by:

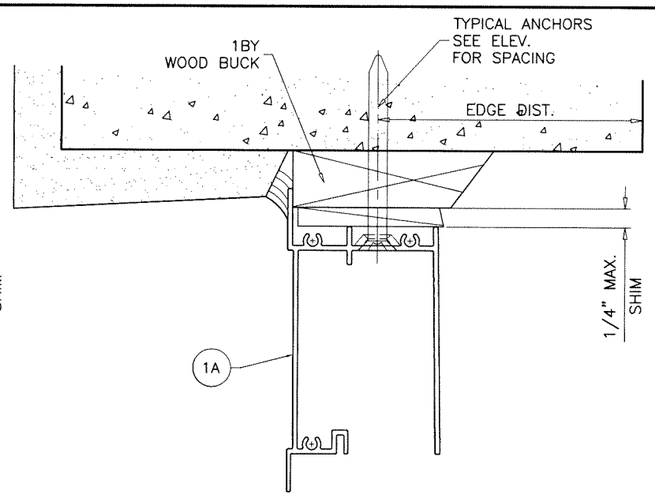
drawing no. 19–04F

sheet 6 of 11

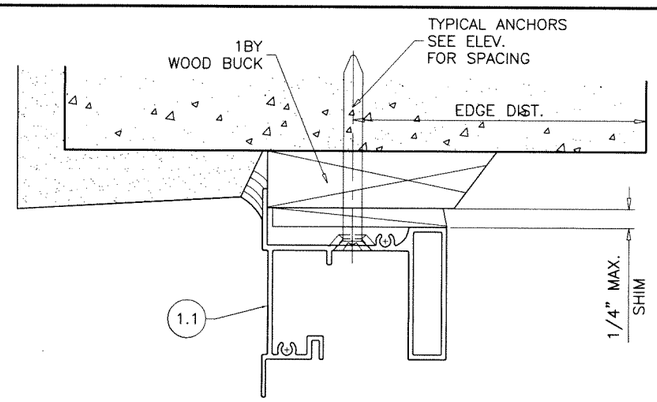


FRAME SILL TYPE '1'

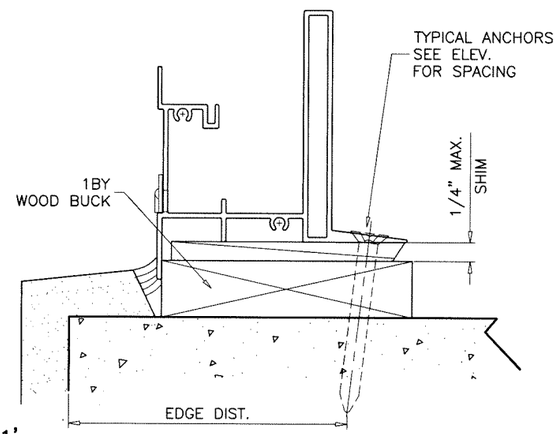
SILL WITH ANCHORS SEE SHEET 3 FOR CAPACITY
SILL WITH ANCHORS AT MTG. STILE LOCATION SEE SHEET 4 FOR CAPACITY
SILL WITHOUT ANCHORS SEE SHEET 6 FOR CAPACITY



ALT. FRAME HEAD



FRAME HEAD TYPE '3'



WEEPHOLES:

W1 = 1/2" X 2-1/2" WEEPHOLES WITH BAFFLE AT 4-1/2" FROM EACH END AND 36" O.C. MAX.

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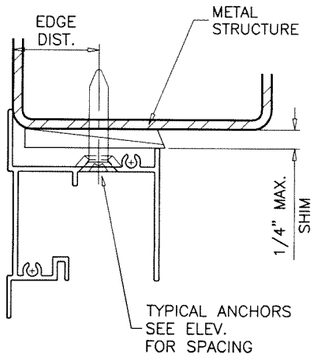
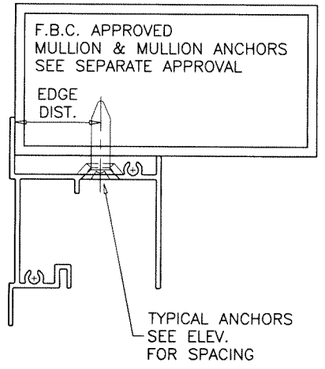
no	date	by	description

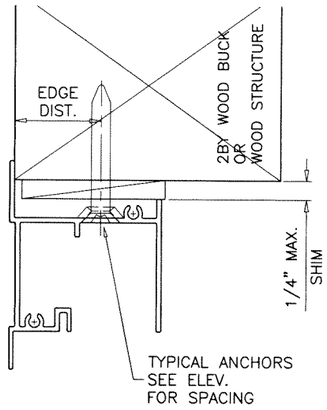
date: 01-04-19
scale: 1/2" = 1"
dr. by: TARIQ
chk. by:

drawing no. 19-04F

sheet 7 of 11







WOOD BUCKS AND METAL STRUCTURE NOT BY SUNSHINE WDWS. MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)

THRU 1BY BUCKS INTO CONC. OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

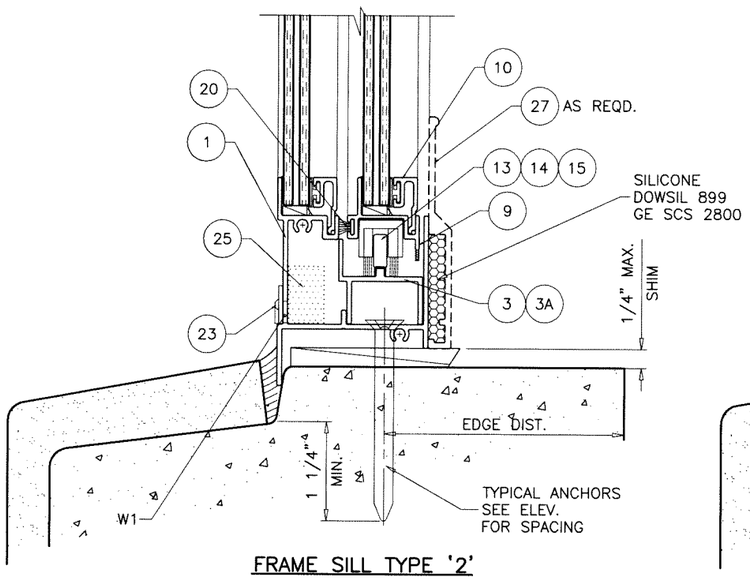
DIRECTLY INTO CONCRETE OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

1/4" DIA. TEKS OR SELF-DRILLING SCREWS (GRADE 5 CRS)
INTO F.B.C. APPROVED MULLIONS
OR
INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

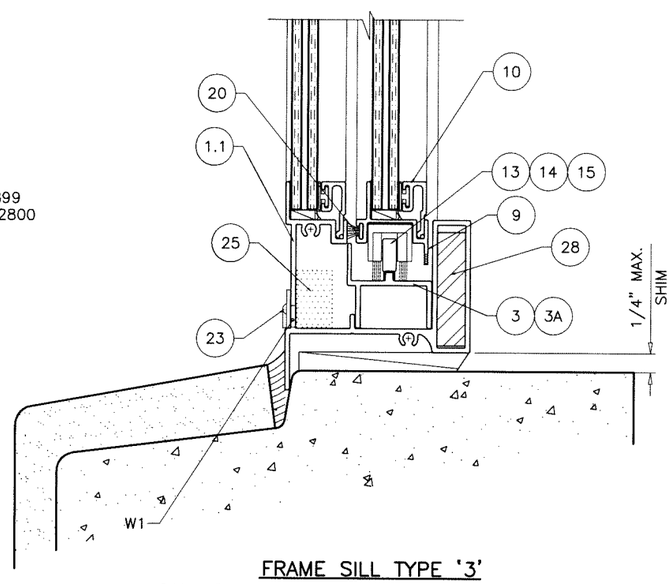
TYPICAL EDGE DISTANCE
INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

APPLIED RISER AT FRAME SILL TYPE '2'.
OPTIONAL AT XO OR OX WINDOWS ONLY
SEE CHART ON SHEET 5 FOR DESIGN LOAD LIMITATIONS WITH OR WITHOUT APPLIED RISER.
RISER NOT REQD. AT XOX WINDOWS.



FRAME SILL TYPE '2'
SILL WITH ANCHORS SEE SHEET 5 FOR CAPACITY



FRAME SILL TYPE '3'
SILL WITHOUT ANCHORS SEE SHEET 6 FOR CAPACITY

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FL #29240

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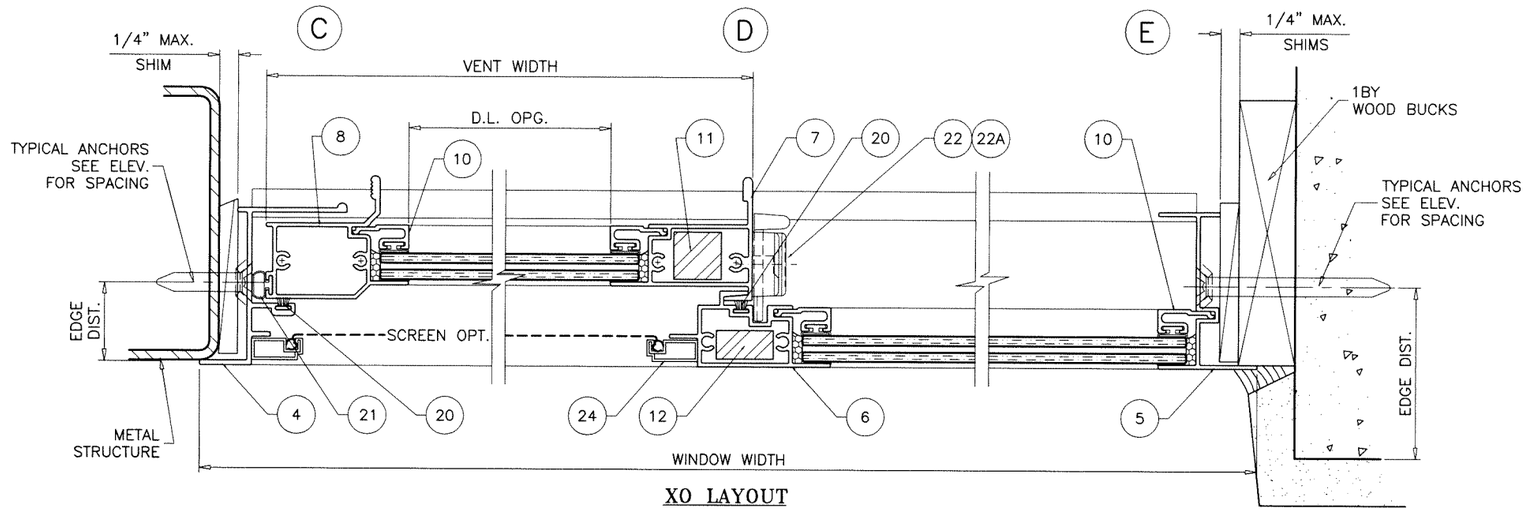
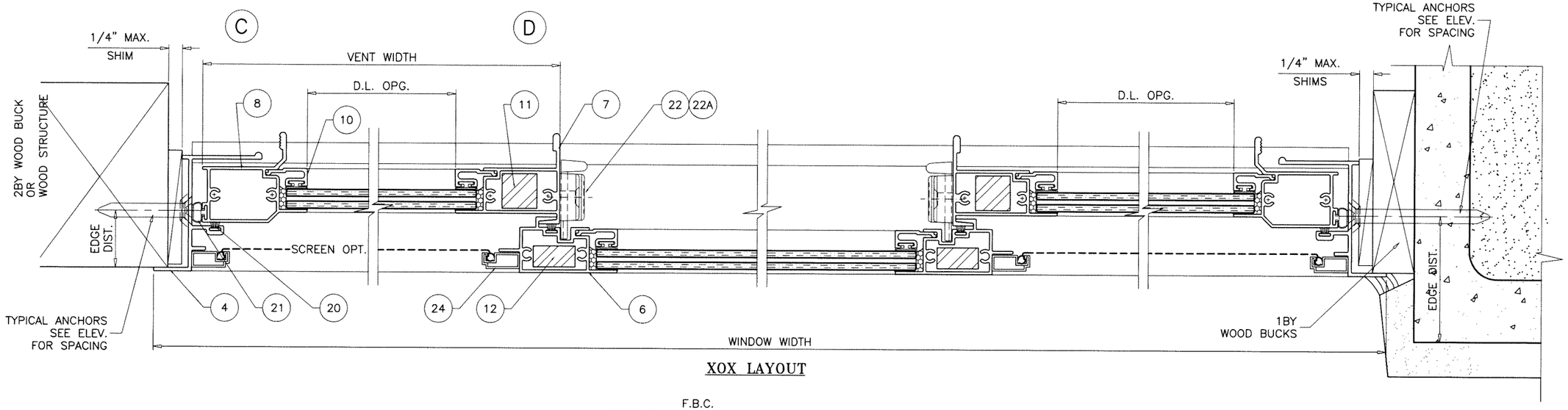
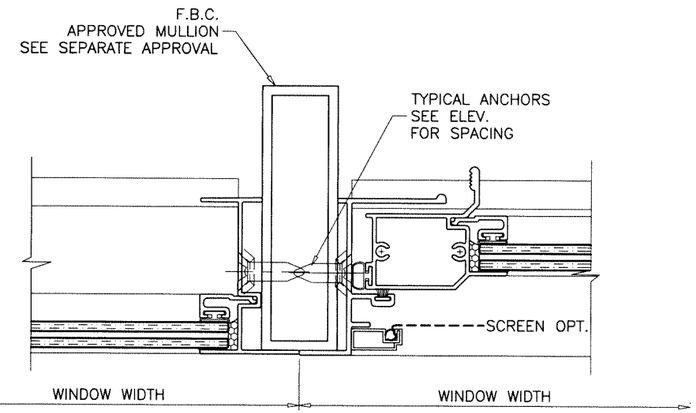


XO LAYOUT



XOX LAYOUT



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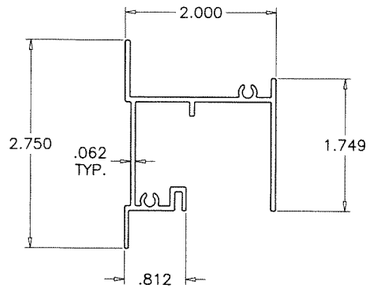
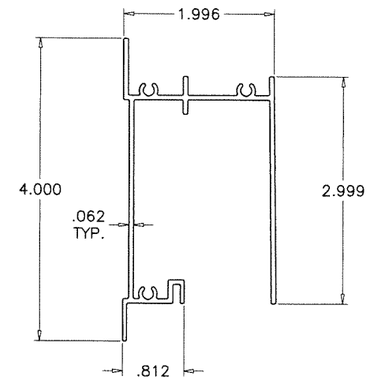
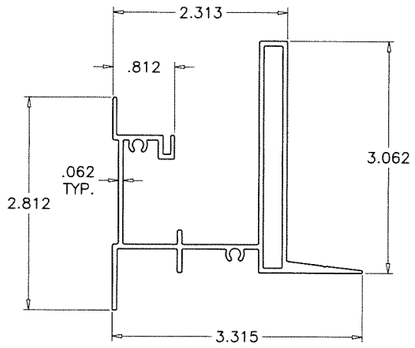
sheet 9 of 11



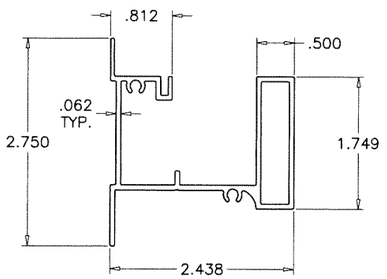
(1) FRAME HEAD/FRAME SILL TYPE '2'



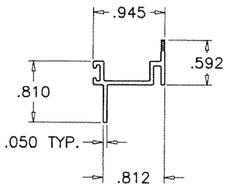
(1A) ALT. FRAME HEAD



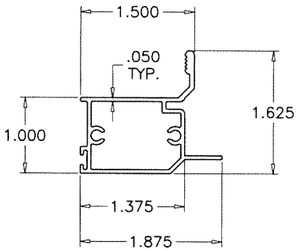
(2) FRAME SILL TYPE '1'



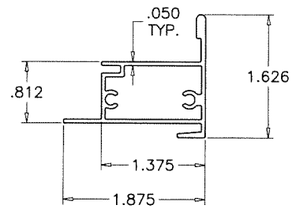
(1.1) FRAME HEAD/FRAME SILL TYPE '3'



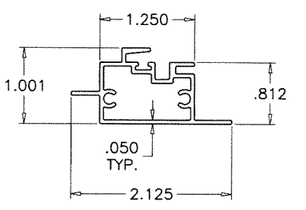
(9) VENT TOP/BOTTOM RAIL



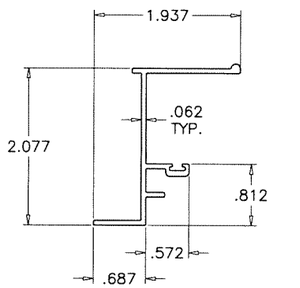
(8) JAMB STILE



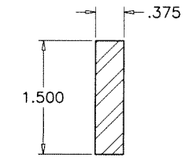
(7) MEETING RAIL



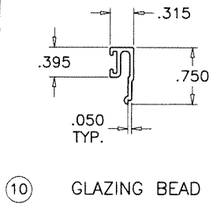
(6) FIXED MTG. RAIL



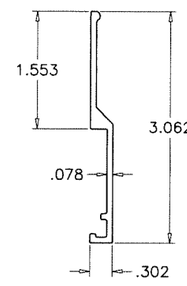
(4) MOV. FRAME JAMB



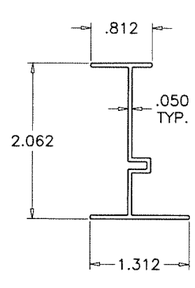
(28) FRAME SILL REINF.



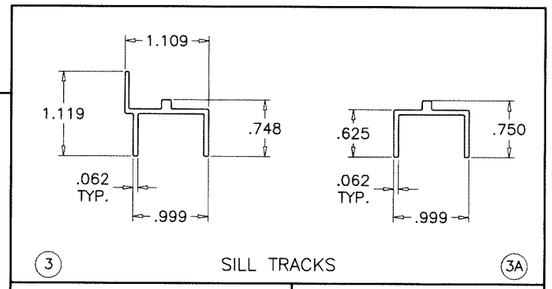
(10) GLAZING BEAD



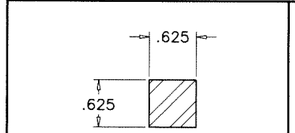
(27) SILL RISER



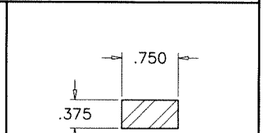
(5) FIXED FRAME JAMB



(3) SILL TRACKS (3A)



(11) MTG. RAIL REINF.



(12) FIX. RAIL REINF.

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	44287A	1	FRAME HEAD/FRAME SILL TYPE '2'	6063–T6	–
1.1	44287AM	1	FRAME HEAD/FRAME SILL TYPE '3'	6063–T6	–
1A	44287A–1	1	ALT. FRAME HEAD	6063–T6	–
2	HR–001	1	FRAME SILL TYPE '1'	6063–T6	–
3	050173	1	SILL TRACK INSERT	6063–T6	–
3A	SSW–021A	1	SILL TRACK INSERT	6063–T6	–
4	30778	AS REQD.	MOV. FRAME JAMB	6063–T6	–
5	30682C	AS REQD.	FIXED FRAME JAMB	6063–T6	–
6	40111A	1/ VENT	FIXED MTG. RAIL	6063–T6	–
7	30680A	1/ VENT	VENT INTERLOCK	6063–T6	–
8	30776A	1/ VENT	JAMB STILE	6063–T6	–
9	30681A	2/ VENT	TOP AND BOTTOM RAIL	6063–T6	–
10	30684B	AS REQD.	GLAZING BEAD	6063–T6	–
11	–	AS REQD.	MOV. RAIL REINF., FULL LENGTH	STEEL	–
12	–	AS REQD.	FIX. RAIL REINF., FULL LENGTH	STEEL	–
13	–	2/ VENT	ROLLER HOUSING & GUIDE	PLASTIC	–
14	WH 1403	2/ VENT	ROLLER	BRASS	–
15	AX 1337	2/ VENT	ROLLER PIN	ST. STEEL	–
16	#8 X 1"	AS REQD.	FRAME/VENT ASSEMBLY SCREWS	CRS	P.H. SMS
17	#8 X 2–1/2"	2/ VENT	FIX. RAIL SILL SCREWS (SILL END)	CRS	P.H. SMS
18	MPI P/N 83008	AS REQD.	GLAZING BEAD BULB	SANTOPRENE	MELTPOINT, DUROMETER 65±5
20	W33191NK000B	AS REQD.	FIN SEAL W'STRIPPING	POLYPROPYLENE	ULTRAFAB
21	MPI P/N 83002	AS REQD.	BULB SEAL W'STRIPPING	VINYL	MELTPOINT
22	SL208–BKR/WHR	2/ VENT	SWEEP LATCH, 12–1/2" FROM EACH END	ZINC	SULLIVAN & ASSOCIATES
22A	#8 X 3/4"	2/ LATCH	LATCH INST. SCREW	ST. STEEL	FH SMS
23	–	2/ WDW.	WEEP VALVE	–	–
24	–	1/ VENT	5/16" BOX SCREEN	–	OPTIONAL
25	SW–S10	1/ WEEP	OPEN CELL FOAM PAD	–	1–1/8" X 3–5/8" LONG
26	–	AS REQD.	SETTING BLOCKS AT 1/4 POINTS	EPDM	DUROMETER 80±5 SHORE A
27	SSW–998	AS REQD.	SILL RISER	6063–T6	–
28	–	AS REQD.	FRAME SILL REINF., FULL LENGTH	STEEL	–

SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH SCHNEE MOREHEAD SM–5504 JOINT SEALER.

Sealed: 7/22/2026

FL #29240

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

COMP–ANL\19–04F–SWM

SERIES–1650 ALUM HORIZ. ROLLING WDW. (L.M.I.)

Sunshine Windows Manufacturing, Inc.
1785 West 33rd Place
Hialeah, FL. 33012
Tel. (305) 364-9952 Fax. (305) 828-5118

revisions:

no	date	by	description

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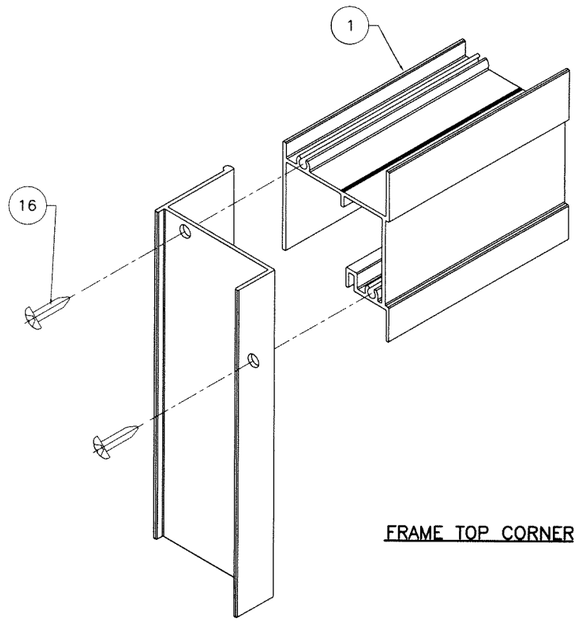
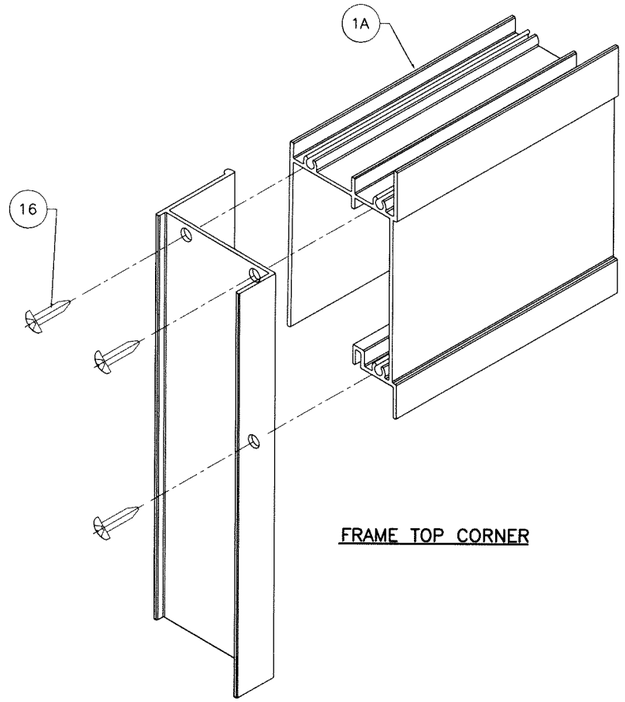
scale: 1/2" = 1"
dr. by: TARIQ
chk. by:

drawing no. 19–04F

sheet 10 of 11



FRAME TOP CORNER



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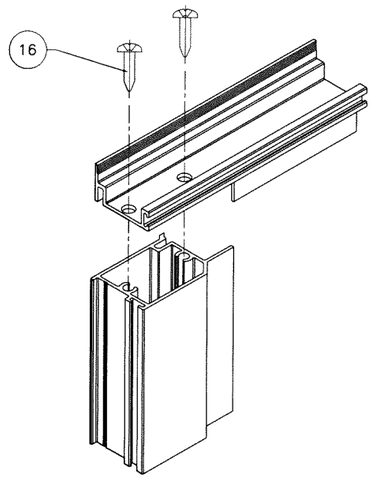

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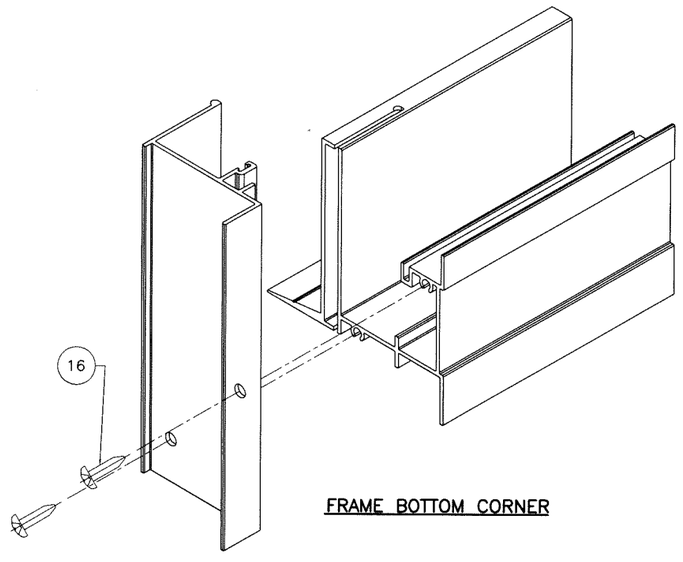

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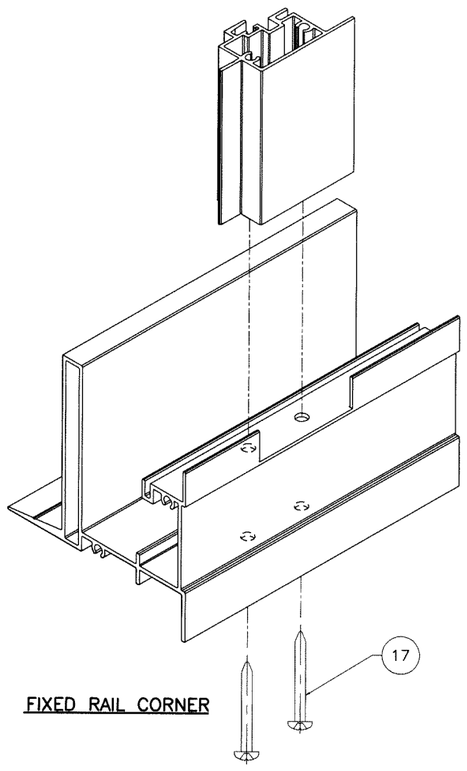
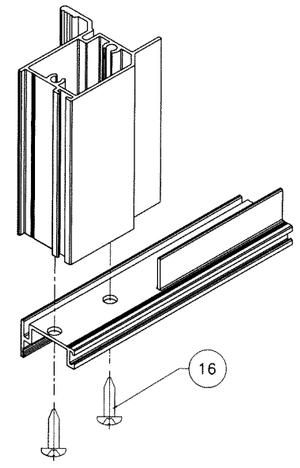


FIXED RAIL CORNER



VENT BOTTOM CORNER

Sealed: 7/22/2026

FL #29240

afc

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9360 SUNSET DRIVE, SUITE 220
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