

Series 3000 - Fixed Window Installation Manual



Series 3000 - Fixed Window Installation Manual

INSTALLATION NOTES:

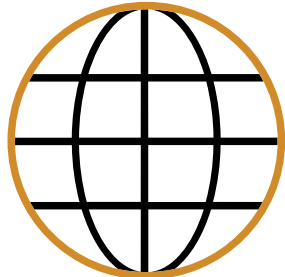
- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF $\pm 1/2$ INCH BASED ON QUANTITIES IN DP CHARTS NOT TO EXCEED THE DEPICTED LOCATION & SPACING IN THE ANCHOR LAYOUT DETAILS (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT
- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
- THROUGH FRAME:** FOR INSTALLATION INTO WOOD FRAMING USE $1/4$ " DIAMETER ELCO ULTRACONS OF SUFFICIENT LENGTH TO ACHIEVE $1 1/2$ " MINIMUM EMBEDMENT INTO WOOD SUBSTRATE.
- THROUGH FRAME:** FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE/MASONRY, OR DIRECTLY INTO CONCRETE/MASONRY, USE $1/4$ " DIAMETER ELCO ULTRACONS OF SUFFICIENT LENGTH TO ACHIEVE $1 1/4$ " MINIMUM EMBEDMENT.
- THROUGH FRAME:** FOR INSTALLATION INTO METAL STUD OR APPROVED MULLION USE #14 GR. 2 SELF TAPPING SCREWS OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND METAL FRAME SUBSTRATE.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
- INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 - WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55.
 - CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
 - GROUT-FILLED CMU- UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AND GROUT CONFORMS TO ASTM C 476, MINIMUM GROUT COMPRESSIVE STRENGTH OF 2000 PSI.
 - HOLLOW BLOCK CMU - UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.
 - STEEL - MINIMUM YIELD STRENGTH OF 36 KSI. MINIMUM 18 GA. WALL THICKNESS.
 - ALUMINUM - MINIMUM ALLOY 6063-T5. MINIMUM WALL THICKNESS OF 1/8" (0.125").

GENERAL NOTES:

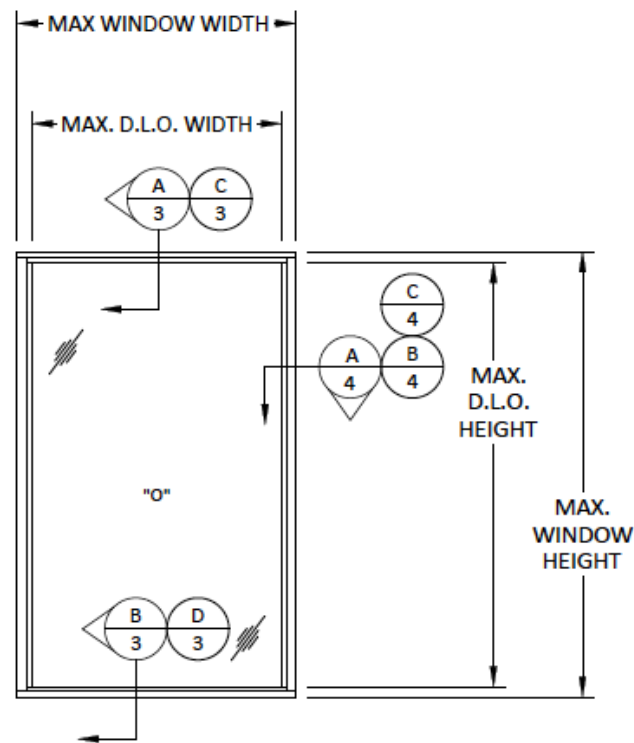
- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BUILDING CODE (FBC), INCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - TAS 201-94
 - TAS 202-94
 - TAS 203-94
- ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVHZ AREAS. IN HVHZ AREAS, ONE TIME PRODUCT APPROVAL TO BE OBTAINED FROM MIAMI-DADE RER OR AHJ.
- APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- WINDOW FRAME MATERIAL: ALUMINUM 6063-T5/T6
- GLASS MEETS THE REQUIREMENTS OF ASTM E 1300 GLASS CHARTS. SEE SHEET 5-6 FOR GLAZING DETAILS.

TABLE OF CONTENTS

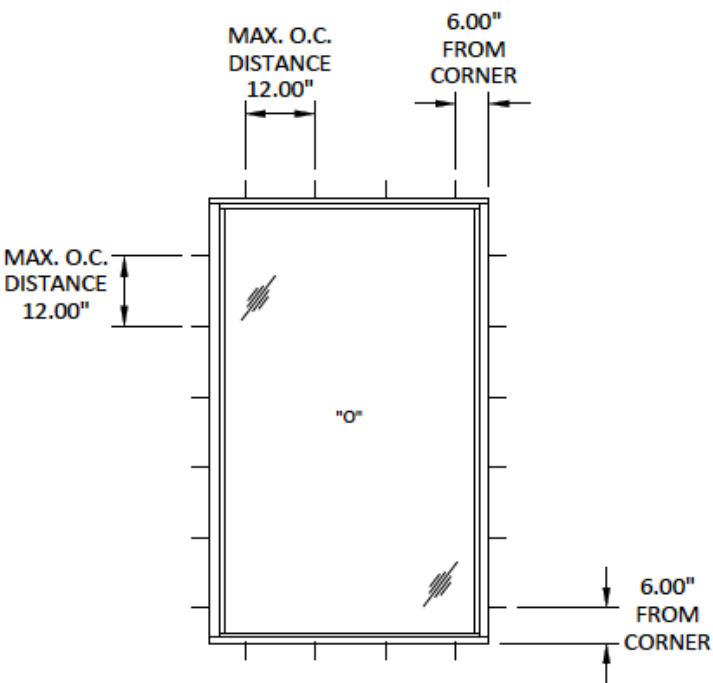
SHEET	SECTION DESCRIPTION
1	INSTALLATION & GENERAL NOTES
2	ELEVATION & ANCHOR LAYOUTS
3	VERTICAL SECTIONS
4	HORIZONTAL SECTIONS
5	DESIGN PRESSURE TABLES (SMI)
6	DESIGN PRESSURE TABLES (LMI)
7	COMPONENTS & BILL OF MATERIAL



Series 3000 - Fixed Window Installation Manual

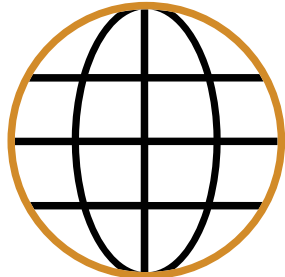


TYPICAL ELEVATION
FIXED WINDOW

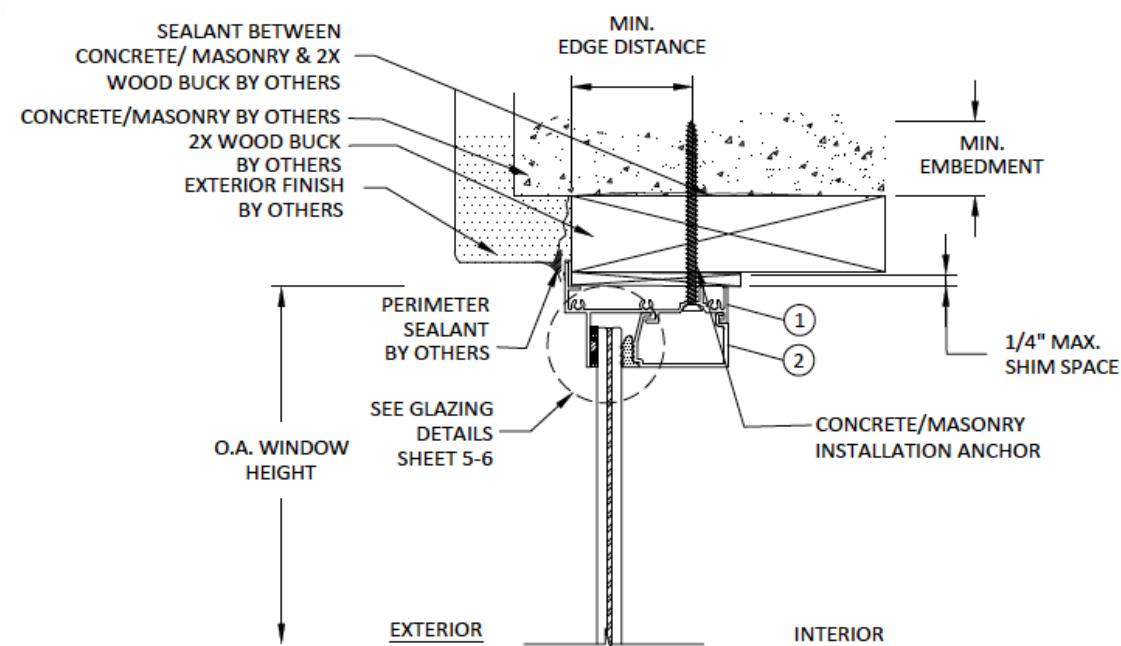


ANCHOR LAYOUT
FIXED WINDOW

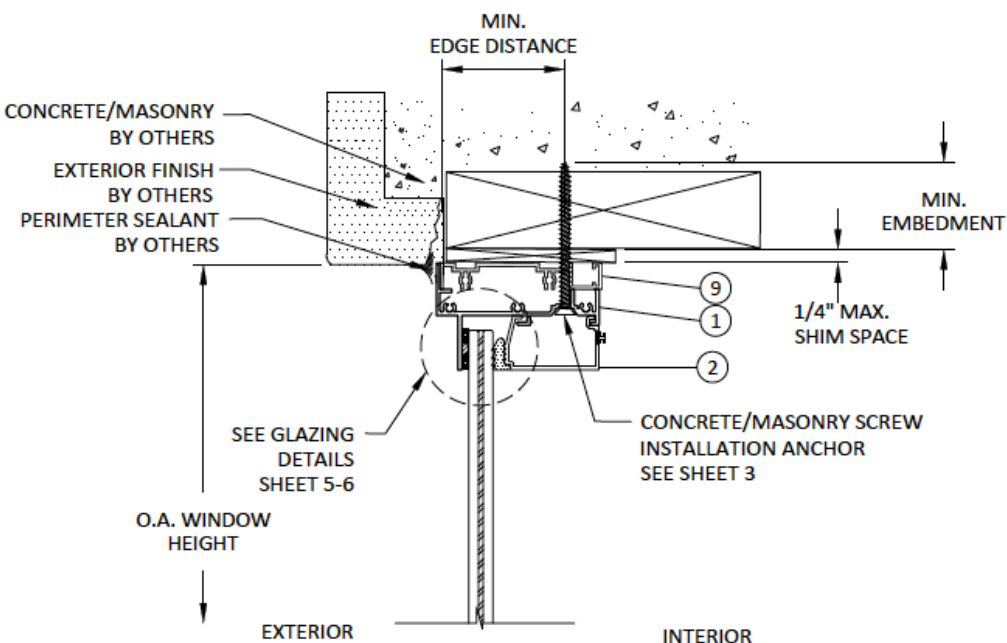
ANCHOR SCHEDULE				
ANCHOR DESCRIPTION	SUBSTRATE REQUIREMENTS	MIN. EMBEDMENT	MIN. EDGE DISTANCE	NOTES
1/4" Ø ULTRACON BY ELCO (F _u =155 KSI, F _y =177 KSI)	CONCRETE AT HEAD, SILL OR JAMBS F' _c =3000 PSI MIN. C-90 HOLLOW/FILLED BLOCK AT JAMBS F' _m =2000 PSI MIN.	1.25	2.25	MAY BE USED THROUGH OPTIONAL 1X BUCKS, BY OTHERS
1/4" Ø ULTRACON BY ELCO (F _u =155 KSI, F _y =177 KSI)	MIN. S.G.= 0.55 WOOD	1.5	1.0"	--
#14 SMS OR SELF-TAPPING HWH SCREWS (GRADE 2)	STEEL: 18 GA. MIN., F _y =36 KSI MIN. ALUM.: 1/8" MIN., 6063-T5 MIN.	3 THREADS PENETRATION PAST METAL STRUCTURE	0.75"	STEEL IN CONTACT WITH ALUM. TO BE PLATED OR PAINTED
#10 SMS OR SELF-TAPPING HWH SCREWS (GRADE 5)	INTO MIAMI-DADE APPROVED MULLIONS(MIN. THK= 0.090") (NO SHIM SPACE)			



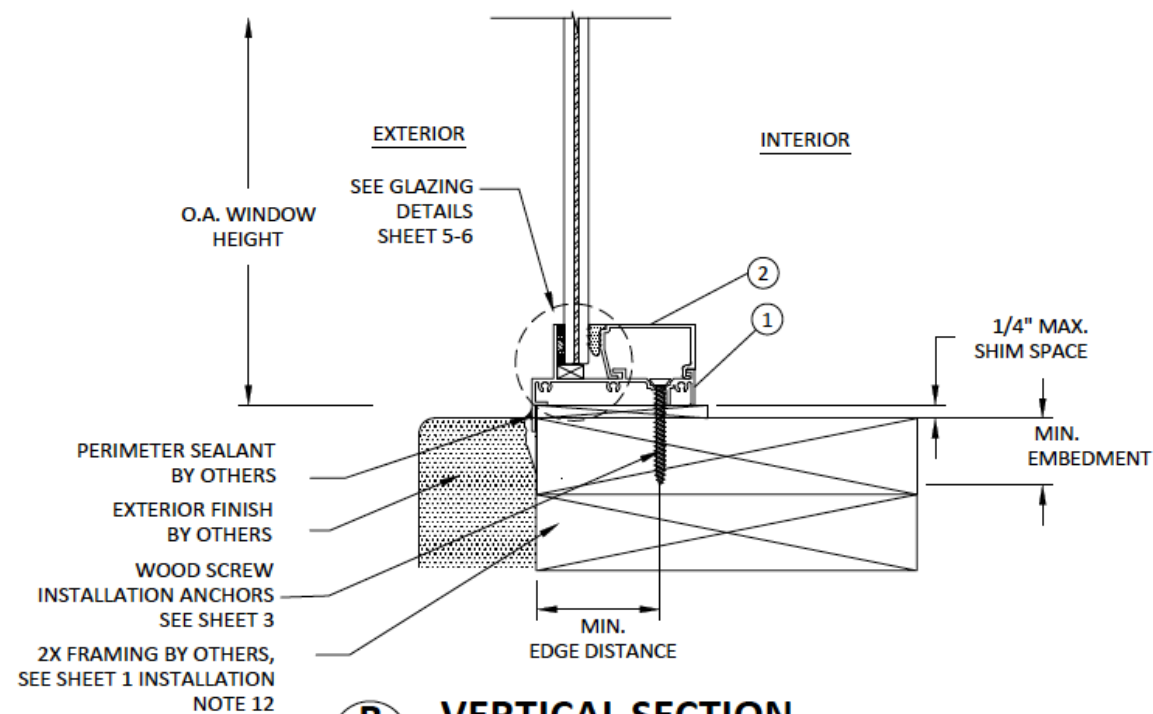
Series 3000 - Fixed Window Installation Manual



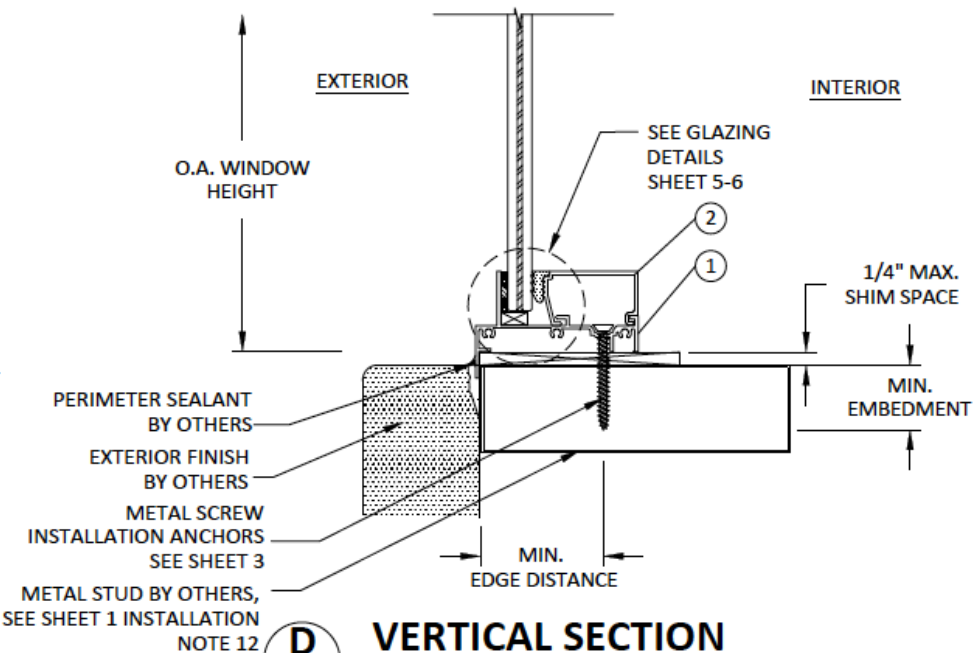
A
3 **VERTICAL SECTION**
HEAD-2X WOOD BUCK
THROUGH FRAME INSTALLATION



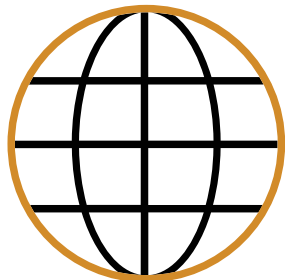
C
3 **VERTICAL SECTION**
HEAD-CONCRETE/ MASONRY
THROUGH FRAME INSTALLATION



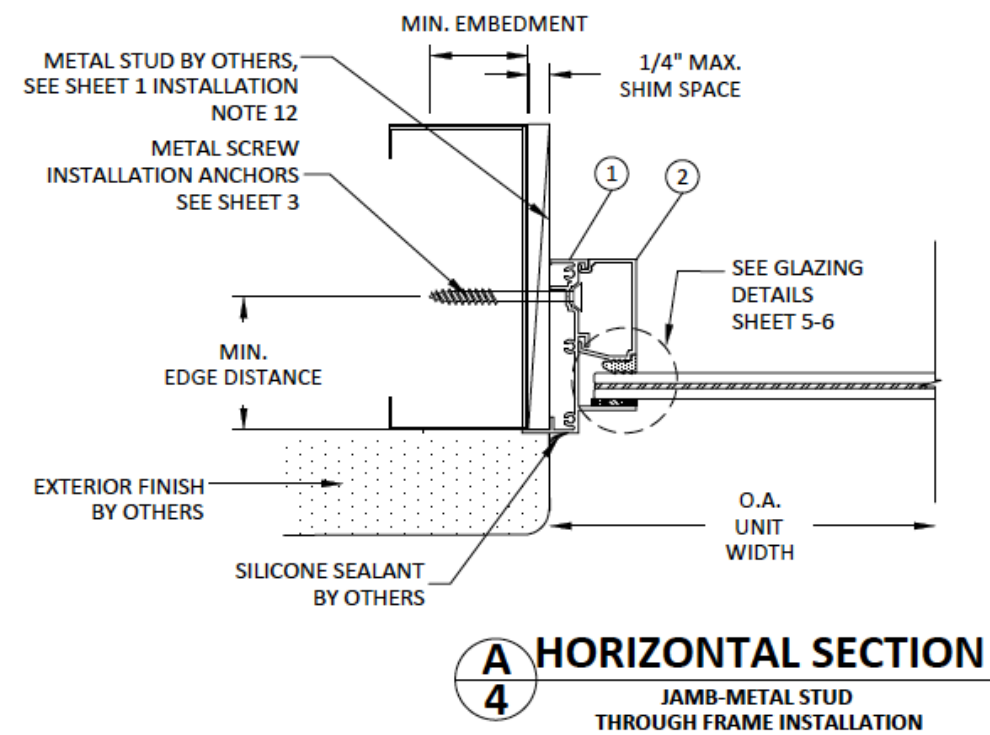
B
3 **VERTICAL SECTION**
SILL- 2X WOOD FRAMING
THROUGH FRAME INSTALLATION



D
3 **VERTICAL SECTION**
SILL - METAL SUBSTRATE
THROUGH FRAME INSTALLATION

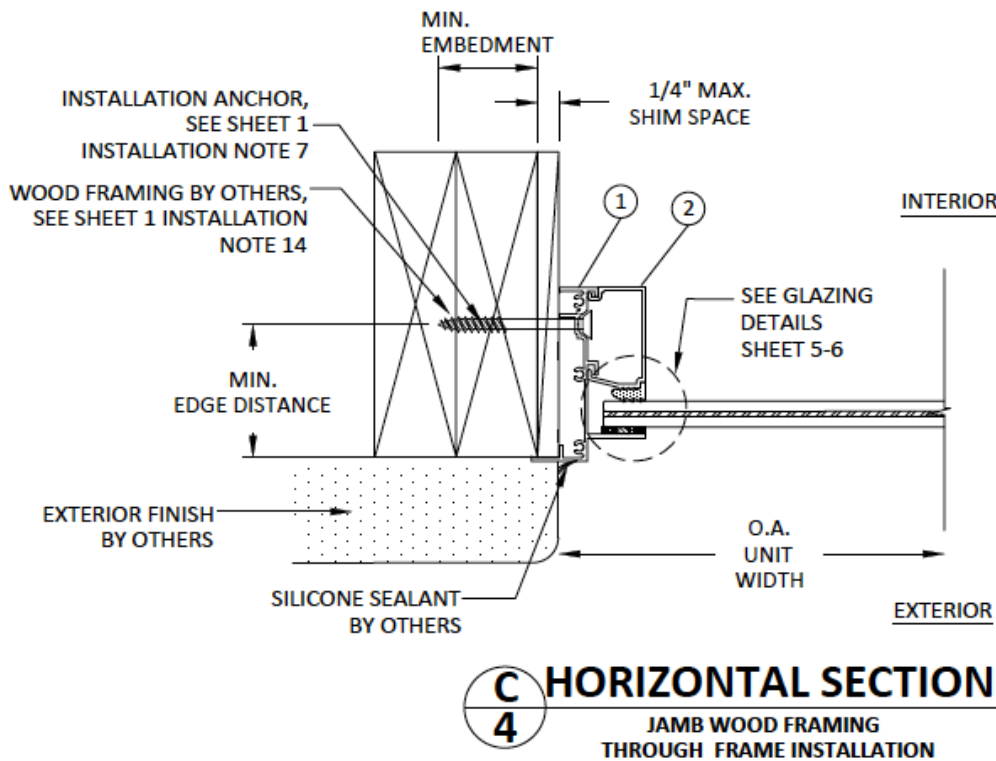
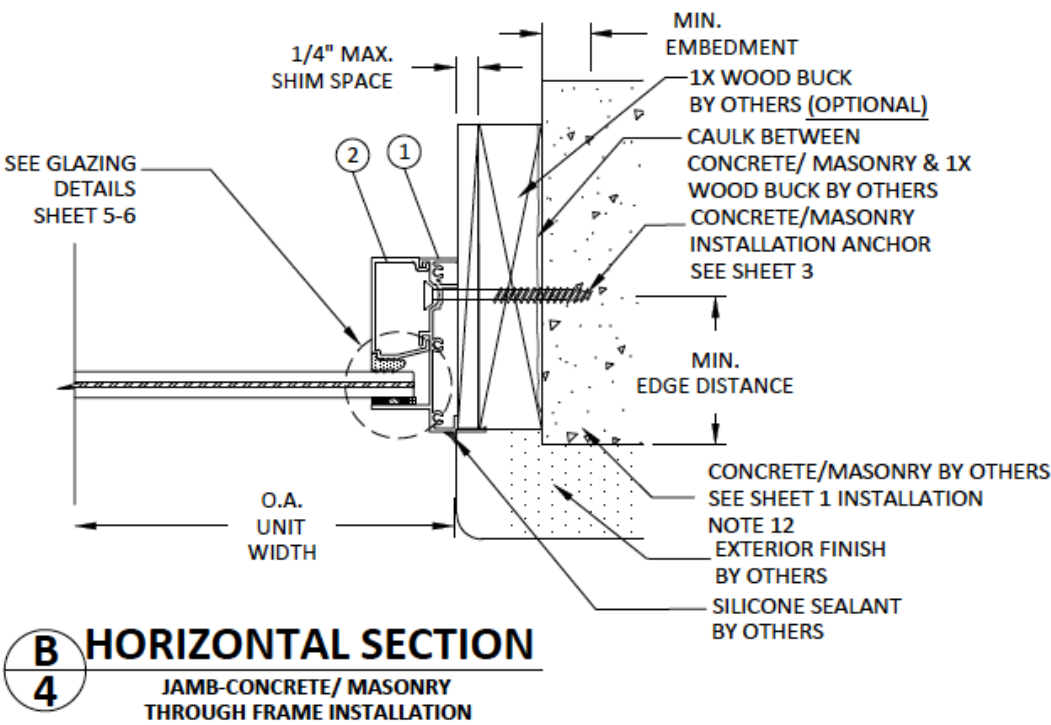


Series 3000 - Fixed Window Installation Manual



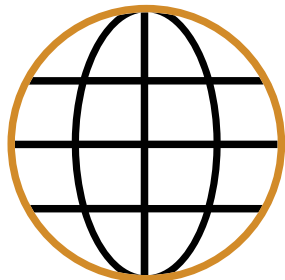
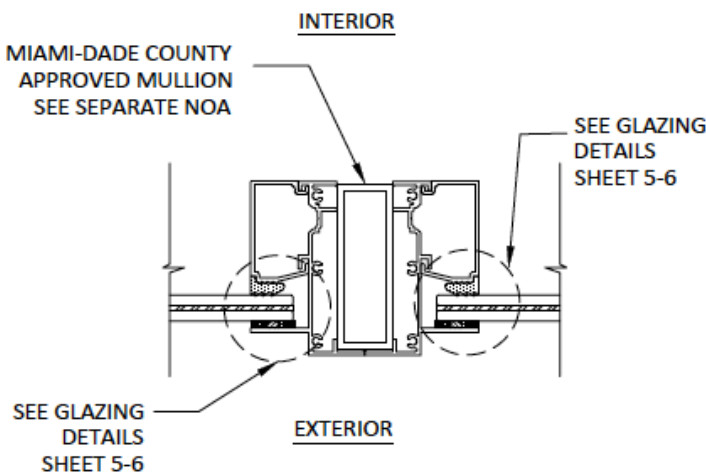
INTERIOR

EXTERIOR



INTERIOR

EXTERIOR



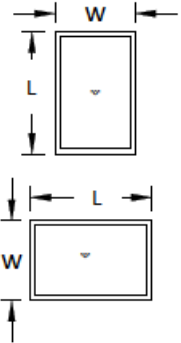
Series 3000 - Fixed Window Installation Manual

DESIGN LOAD CAPACITY (PSF) (SMI)							
L (in)	W (in)	SERIES 3062		SERIES 3072 (BUTACITE)		SERIES 3072 (SAFLEX)	
		POS	NEG	POS	NEG	POS	NEG
26.00	19	90.0	120.0	90	155	90	140
	24	90.0	120.0	90	155	90	140
	26	90.0	120.0	90	155	90	140
	32	90.0	120.0	90	155	90	140
	37	90.0	120.0	90	155	90	140
	40	90.0	120.0	90	155	90	140
	46	90.0	120.0	90	155	90	140
	53	90.0	120.0	90	155	90	140
	60	90.0	120.0	90	155	90	140
	75	90.0	120.0	90	155	90	140
38.75	19	90.0	120.0	90	155	90	140
	24	90.0	120.0	90	155	90	140
	26	90.0	120.0	90	155	90	140
	32	90.0	120.0	90	155	90	140
	37	90.0	120.0	90	155	90	140
	40	90.0	120.0	90	155	90	140
	46	90.0	120.0	90	155	90	140
	53	90.0	120.0	90	155	90	140
	60	90.0	120.0	90	155	90	140
	75	90.0	120.0	90	155	90	140
50.75	19	90.0	120.0	90	155	90	140
	24	90.0	120.0	90	155	90	140
	26	90.0	120.0	90	155	90	140
	32	90.0	120.0	90	155	90	140
	37	90.0	120.0	90	155	90	140
	40	90.0	120.0	90	155	90	140
	46	90.0	120.0	90	155	90	140
	53	90.0	120.0	90	155	90	140
	60	90.0	120.0	90	155	90	140
	75	70.0	76.4	90	140	90	140
63.00	19	90.0	120.0	90	155	90	140
	24	90.0	120.0	90	155	90	140
	26	90.0	120.0	90	155	90	140
	32	90.0	120.0	90	155	90	140
	37	90.0	120.0	90	155	90	140
	40	90.0	120.0	90	155	90	140
	46	90.0	120.0	90	155	90	140
	53	90.0	120.0	90	155	90	140
	60	70.0	76.4	90	140	90	140
	75	-	-	90	140	89	138

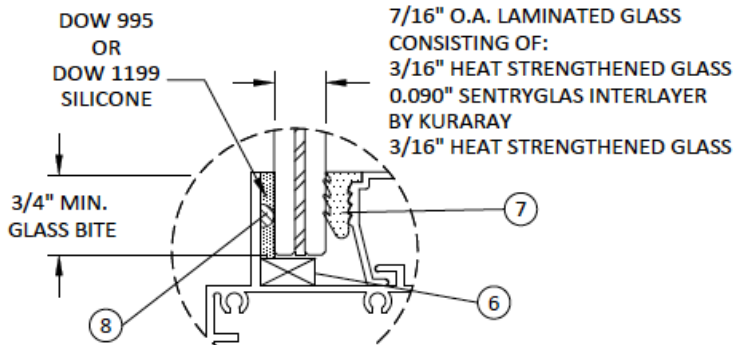
DESIGN LOAD CAPACITY (PSF)							
L (in)	W (in)	SERIES 3062		SERIES 3072 (BUTACITE)		SERIES 3072 (SAFLEX)	
		POS	NEG	POS	NEG	POS	NEG
76.00	19	90.0	120.0	90	155	90	140
	24	90.0	120.0	90	155	90	140
	26	90.0	120.0	90	155	90	140
	32	90.0	120.0	90	155	90	140
	37	90.0	114.0	90	155	90	140
	40	90.0	104.0	90	155	90	140
	46	70.0	76.4	90	155	90	140
	53	70.0	76.4	90	140	90	140
	60	-	-	90	140	89	139
	75	-	-	-	-	-	-
84.00	19	90.0	120.0	90	155	90	140
	24	90.0	120.0	90	155	90	140
	26	90.0	120.0	90	155	90	140
	32	90.0	120.0	90	155	90	140
	37	90.0	120.0	90	155	90	140
	40	70.0	76.4	90	155	90	140
	46	70.0	76.4	90	140	90	140
	53	70.0	75.0	90	140	89	139
	60	-	-	90	140	84	131
	75	-	-	-	-	-	-
96.00	19	90.0	120.0	90	155	90	140
	24	90.0	120.0	90	155	90	140
	26	90.0	120.0	90	155	90	140
	32	90.0	120.0	90	155	90	140
	37	70.0	76.4	90	140	90	140
	40	70.0	76.4	90	140	90	140
	46	70.0	76.0	90	140	90	140
	53	-	-	90	140	84	131
	60	-	-	-	-	-	-
	75	-	-	-	-	-	-

- GLAZING NOTES:
- GLASS TYPE AND THICKNESS SHALL COMPLY WITH ASTM E1300 REQUIREMENTS AS WELL AS APPLICABLE SAFETY GLAZING REQUIREMENTS PER THE FBC. THICKNESS, TEMPER, AND SAFETY GLAZING REQUIREMENTS SHALL BE REVIEWED ON A SITE SPECIFIC BASIS.
 - SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24.
 - SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER FBC CHAPTER 24.
 - D.L.O. AND DESIGN PRESSURES MAY NOT EXCEED MAX VALUES IN ELEVATIONS

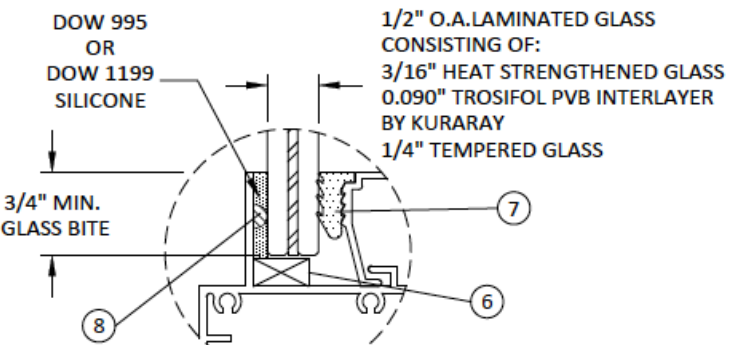
SIZES AND PRESSURES FOR
SMALL MISSILE IMPACT
GLASS CONFIGURATION



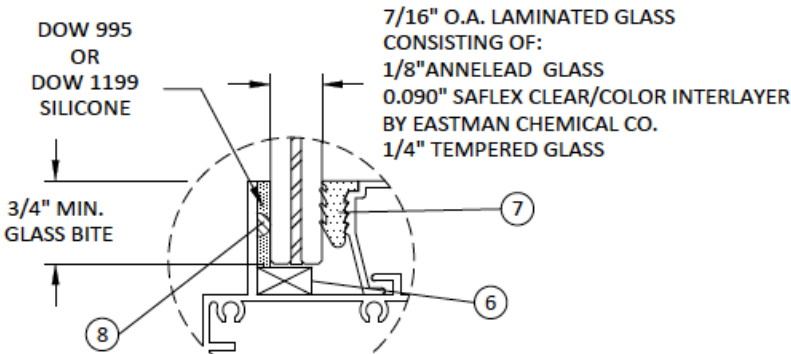
NOTE:
WINDOW WIDTH (W) AND HEIGHT
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ANCHOR SPACING SHALL NOT EXCEED THOSE
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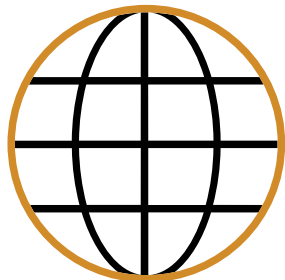
GLAZING DETAIL
SERIES 3062



GLAZING DETAIL
SERIES 3072
TROSIFOL



GLAZING DETAIL
SERIES 3072
SAFLEX

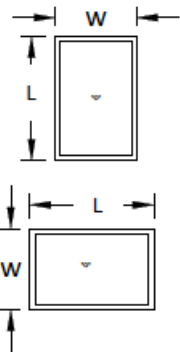


Series 3000 - Fixed Window Installation Manual

DESIGN LOAD CAPACITY (PSF)(LMI)					
L (in)	W (in)	SERIES 3040		SERIES 3062	
		POS	NEG	POS	NEG
26.00	19	62.0	62.0	90.0	120.0
	24	62.0	62.0	90.0	120.0
	26	62.0	62.0	90.0	120.0
	32	62.0	62.0	90.0	120.0
	37	62.0	62.0	90.0	120.0
	40	62.0	62.0	90.0	120.0
	46	62.0	62.0	90.0	120.0
	53	62.0	62.0	90.0	120.0
	60	62.0	62.0	90.0	120.0
	75	62.0	62.0	90.0	120.0
38.75	19	62.0	62.0	90.0	120.0
	24	62.0	62.0	90.0	120.0
	26	62.0	62.0	90.0	120.0
	32	62.0	62.0	90.0	120.0
	37	62.0	62.0	90.0	120.0
	40	59.2	59.2	90.0	120.0
	46	59.2	59.2	90.0	120.0
	53	59.2	59.2	90.0	120.0
	60	59.2	59.2	90.0	120.0
	75	-	-	90.0	120.0
50.75	19	62.0	62.0	90.0	120.0
	24	62.0	62.0	90.0	120.0
	26	62.0	62.0	90.0	120.0
	32	62.0	62.0	90.0	120.0
	37	62.0	62.0	90.0	120.0
	40	57.4	57.4	90.0	120.0
	46	49.9	49.9	90.0	120.0
	53	45.2	45.2	90.0	120.0
	60	-	-	90.0	120.0
	75	-	-	70.0	76.4
63.00	19	62.0	62.0	90.0	120.0
	24	62.0	62.0	90.0	120.0
	26	62.0	62.0	90.0	120.0
	32	62.0	62.0	90.0	120.0
	37	62.0	62.0	90.0	120.0
	40	57.4	57.4	90.0	120.0
	46	-	-	90.0	120.0
	53	-	-	90.0	120.0
	60	-	-	70.0	76.4
	75	-	-	-	-

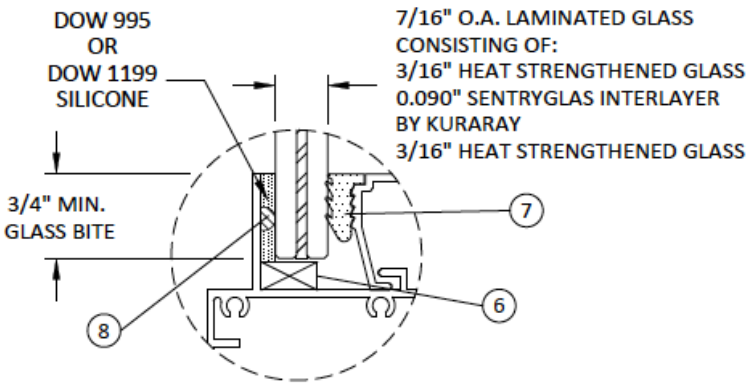
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76.00	19	62.0	62.0	90	120
	24	62.0	62.0	90	120
	26	62.0	62.0	90	120
	32	62.0	62.0	90	120
	37	62.0	62.0	90	114
	40	-	-	90	104
	46	-	-	70	76.4
	53	-	-	70	76.4
	60	-	-	-	-
	75	-	-	-	-
84.00	19	62.0	62.0	90	120
	24	62.0	62.0	90	120
	26	62.0	62.0	90	120
	32	62.0	62.0	90	120
	37	-	-	90	120
	40	-	-	70	76.4
	46	-	-	70	76.4
	53	-	-	70	75
	60	-	-	-	-
	75	-	-	-	-
96.00	19	62.0	62.0	90	120
	24	62.0	62.0	90	120
	26	62.0	62.0	90	120
	32	-	-	90	120
	37	-	-	70	76.4
	40	-	-	70	76.4
	46	-	-	70	76
	53	-	-	-	-
	60	-	-	-	-
	75	-	-	-	-

SIZES AND PRESSURES FOR
LARGE MISSILE IMPACT
GLASS CONFIGURATION

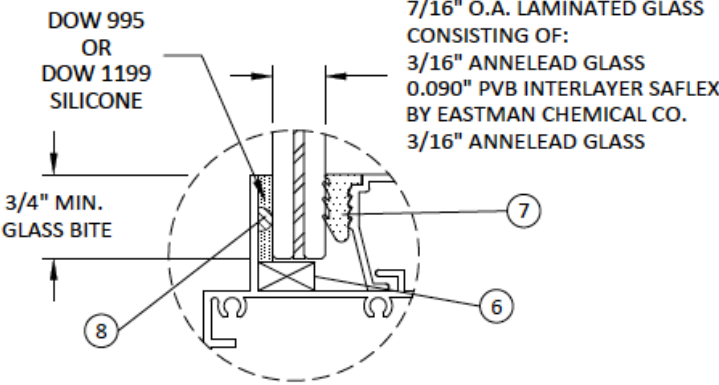


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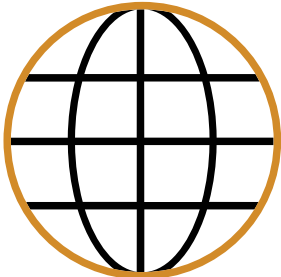
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GLAZING DETAIL
SERIES 3062



GLAZING DETAIL
SERIES 3040



Series 3000 - Fixed Window Installation Manual

BILL OF MATERIALS				
ITEM	PART No.	DESCRIPTION	MATERIAL	MANUF./SUPPLIER/REMARKS
1	021-024	FRAME HEAD	6063-T5	ARCH ALUM
2	021-020	GLAZING STOP	6063-T5	-
3	008-014	# 8 X 1 PHPH SMS	ST/ST	-
4	012-001	SEAM SEALER	ACRYLIC	SCHNEE MOREHEAD
5	012-003	DOW 995	SILICONE	DOW CORNING
6	015-008	1/ 2XL / 4XL / SETTING BLOCK	NEOPRENE	FRANK LOWE RUBBR
7	015-007	WEDGE GASKET	VINYL	MASTER TOOL
8	015-006	0.150 SPACER	VINYL	FRANK LOWE RUBBR
9	-	LEG ADAPTOR	6063-T5	ARCH ALUM

