

ES WINDOWS, INC.

SERIES 88 FIXED WINDOW

VINYL NON-IMPACT

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN EVALUATED TO COMPLY WITH THE CURRENT PROVISIONS OF THE FLORIDA BUILDING CODE (FBC) EXCLUDING THE HIGH VELOCITY HURRICANE ZONES (HVHZ) AND IS BASED ON TESTING CONDUCTED TO AAMA/WDMA/CSA 101/I.S.2/A440–17 DOCUMENTED IN TEST REPORT NO. PRI–2569T0002.
2. 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.
3. 1X BUCK OVER MASONRY AND/OR CONCRETE IS OPTIONAL. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF THE INSTALLATION METHODS DEVIATE FROM THESE APPROVED DETAILS THIS WOULD REQUIRE FURTHER INVESTIGATION BY A LICENSED OR REGISTERED DESIGN PROFESSIONAL.
5. ALL SETTING BLOCKS AND GASKET MATERIALS SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE. SETTING BLOCKS SHALL BE NEOPRENE WITH A 70 TO 90 SHORE A DUROMETER.
6. IN AREAS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST, USE OF AN IMPACT PROTECTIVE SYSTEM COMPLYING WITH THE FBC REQUIREMENTS FOR WINDBORNE DEBRIS REGIONS SHALL BE REQ'D.
7. MATERIALS:

FRAME: RIGID PVC / VINYL
8. GLAZING:

8.1. GLASS MEETS THE REQUIREMENTS OF ASTM E1300–16.

8.2. SEE GLAZING DETAILS ON SHEET 5 OF 5.

8.3. THE IGU WAS SET FROM THE INTERIOR, ONTO EPDM GLAZING GASKETS AND SECURED IN PLACE WITH VINYL GLAZING BEADS. THE INTERIOR EPDM CAP WAS SEALED WITH SILICONE SEALANT.

8.4. GLASS SHALL MEET SAFETY GLAZING REQUIREMENTS PER CURRENT EDITION OF THE FLORIDA BUILDING CODE.
9. PANEL OPERABILITY DESIGNATIONS:

9.1. WINDOW IS AN STATIONARY PANEL (O).

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SHEET NO.	DESCRIPTION
1	GENERAL AND INSTALLATION NOTES
2	ELEVATION AND ANCHOR LAYOUTS
3 & 4	ANCHOR DETAILS
5	BILL OF MATERIALS AND GLAZING DETAIL

ANCHOR NOTES:

1. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH A LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16” OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4”.
2. FOR ANCHORING THROUGH FRAME OR CLIP INTO MASONRY/CONCRETE USE 1/4” ITW ADVANCED THREADFORM TAPCONS, HEX HEAD (SHOWN), PAN HEAD OR FLAT HEAD WITH SUFFICIENT LENGTH TO ACHIEVE THE FOLLOWING. SEE NOTE 4 FOR ACCEPTABLE ALTERNATE ANCHOR TYPE FOR THROUGH FRAME INSTALLATION.

2.1. CONCRETE: 1–1/2” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1–1/2” MINIMUM EDGE DISTANCE.

2.2. CMU/MASONRY: 1” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2” MINIMUM EDGE DISTANCE.
3. FOR ANCHORING THROUGH FRAME OR CLIP INTO WOOD FRAMING OR 2X BUCK USE #14 WOOD SCREWS (ANSI B18.6.1) OR #14 TAPPING SCREWS (ANSI B18.6.4), PAN HEAD (SHOWN) OR FLAT HEAD WITH MINIMUM GRADE 2 STRENGTH AND WITH SUFFICIENT LENGTH TO ACHIEVE 1–1/2” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1” MINIMUM EDGE DISTANCE. SEE NOTE 4 FOR ACCEPTABLE ALTERNATE ANCHOR TYPE FOR THROUGH FRAME INSTALLATION.
4. FOR ANCHORING THROUGH FRAME INTO MASONRY, CONCRETE OR WOOD FRAMING OR 2X WOOD BUCK, THE WURTH AMO III SPACING ASSEMBLY SCREW 7.5mm DIA. TYPE 2 CYLINDER HEAD GALVANIZED STEEL WITH MINIMUM EMBEDMENT AND MINIMUM EDGE DISTANCE BELOW CAN BE USED AS SUBSTITUTES TO ANCHORS IN ITEM NO. 2 AND 3 ABOVE.

4.1. CONCRETE: 1–1/2” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2” MINIMUM EDGE DISTANCE.

4.2. CMU/MASONRY: 1” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2–1/2” MINIMUM EDGE DISTANCE.

4.3. WOOD SUBSTRATE: 2–3/8” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2–1/2” MINIMUM EDGE DISTANCE.

4.4. WURTH ANCHORS SUPPLIED BY MANUFACTURER WITH DOOR ASSEMBLY (ITEM NO. 11 IN BOM).
5. FOR ANCHORING INSTALLATION CLIP INTO STEEL STUD, USE #10 SELF–DRILLING SCREWS (ANSI B18.6.4) WITH MINIMUM GRADE 5 STRENGTH AND WITH SUFFICIENT LENGTH TO ACHIEVE MINIMUM 3 THREADS PAST INTERIOR OF STUD.
6. FOR ANCHORING THROUGH FRAME INTO STEEL STUD, USE #14 (1/4”) SELF–DRILLING SCREWS (ANSI B18.6.4) WITH MINIMUM GRADE 5 STRENGTH AND WITH SUFFICIENT LENGTH TO ACHIEVE MINIMUM 3 THREADS PAST INTERIOR OF STUD.
7. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:

7.1. WOOD – MINIMUM SPECIFIC GRAVITY OF 0.42 (NON–HVHZ).

7.2. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.

7.3. MASONRY – STRENGTH CONFORMANCE TO ASTM C–90 MEDIUM WEIGHT WITH COMPRESSIVE STRENGTH OF 1900 psi (DENSITY > 117 PCF).

7.4. STEEL STUD – MIN. 20 GA. 33 MIL., 0.0329 INCH Fy = 33 KSI MIN. AND Fu = 45 KSI MIN.

ES WINDOWS, INC.

3550 NW 49TH STREET

MIAMI, FLORIDA 33142

SERIES 88 FIXED WINDOW

GENERAL AND INSTALLATION NOTES

TITLE:

DRAWN BY: JRM

SCALE: N.T.S.

DATE: 07/12/24

DRAWING NO: SCS-0023

SHEET: 1 OF 5

REV:

DESCRIPTION

DATE

BY

ROBERT J. AMORUSO

FL. P.E. NO. 49752



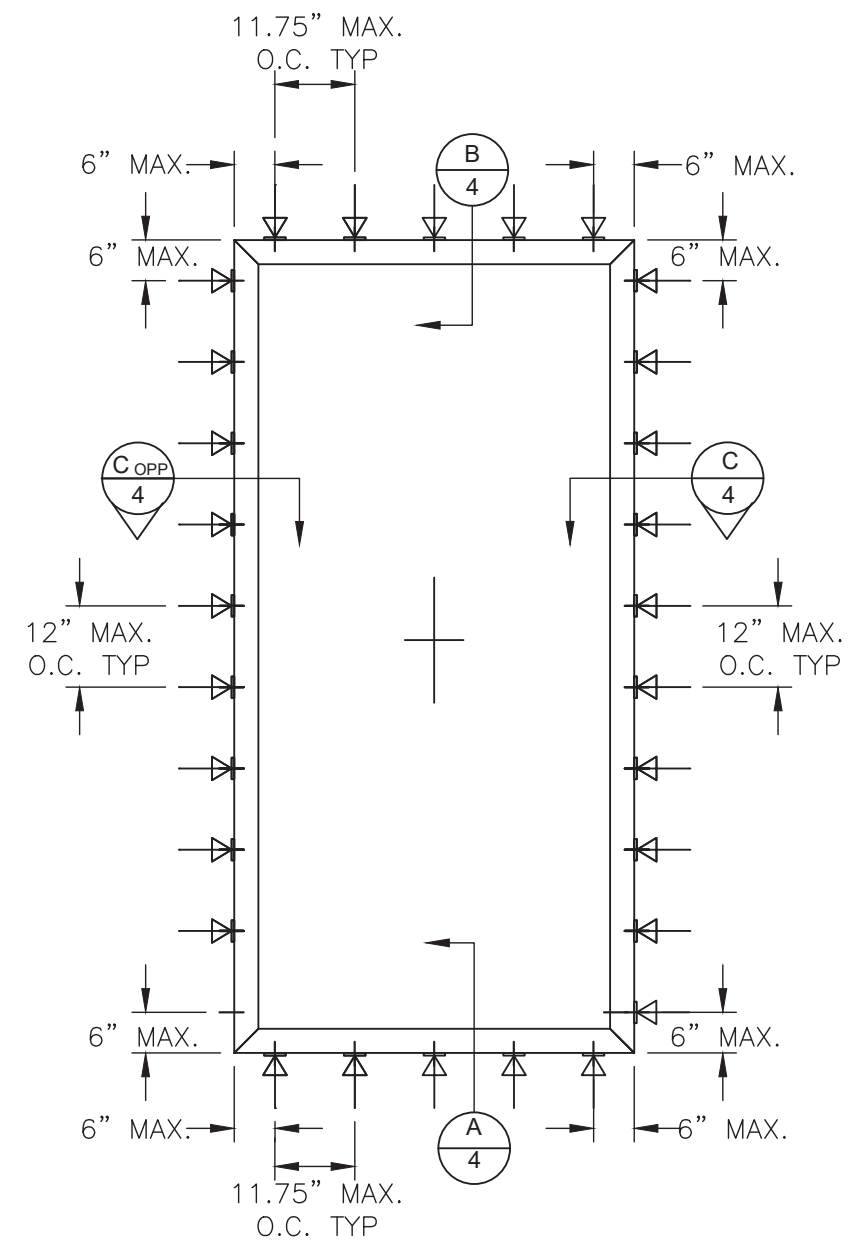
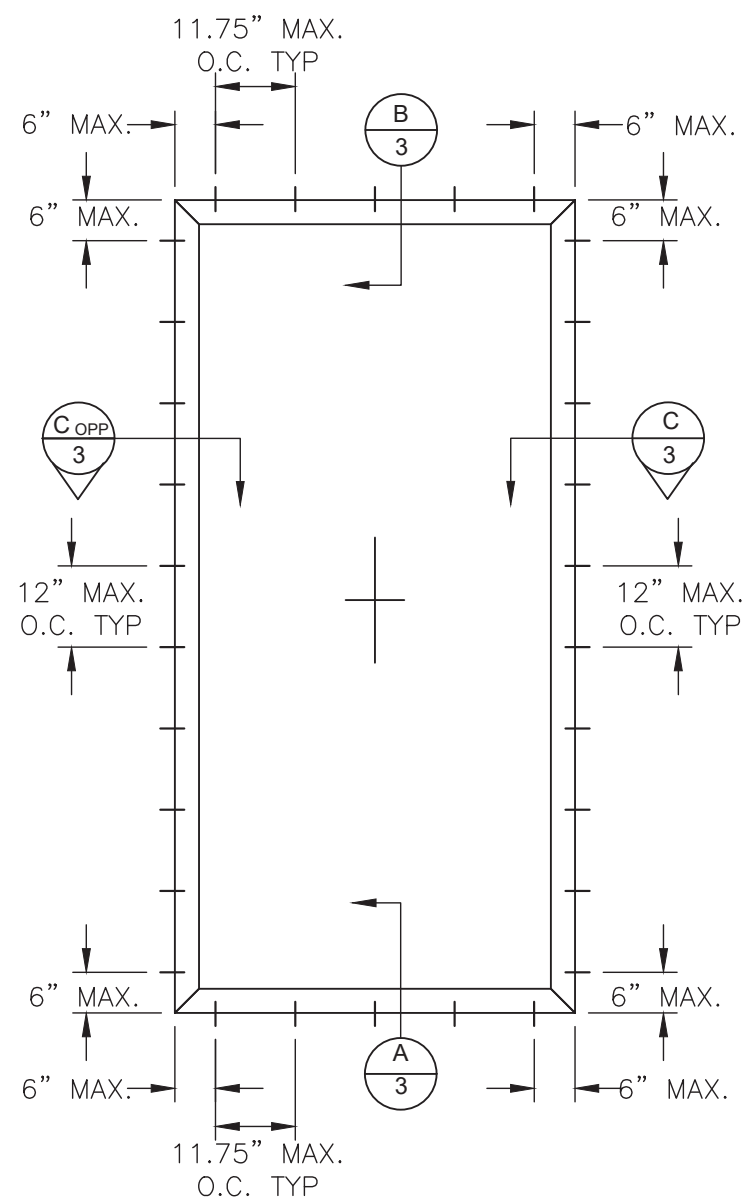
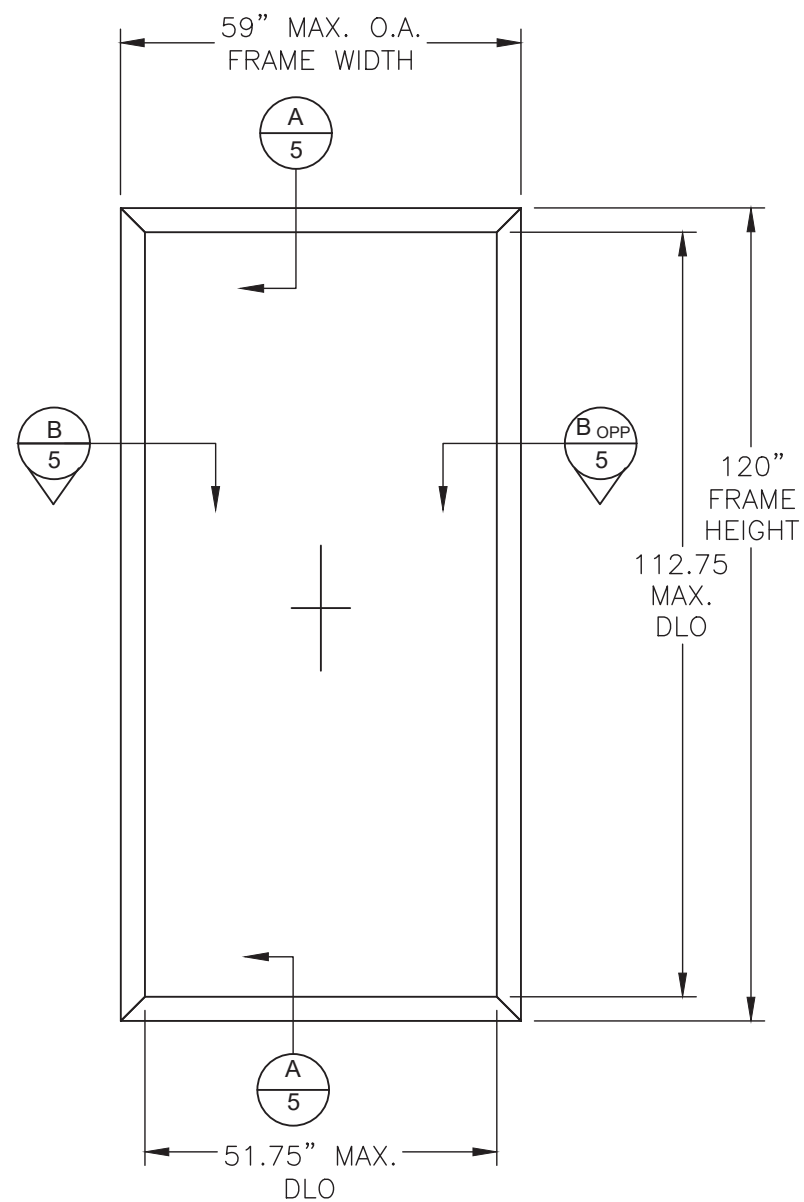
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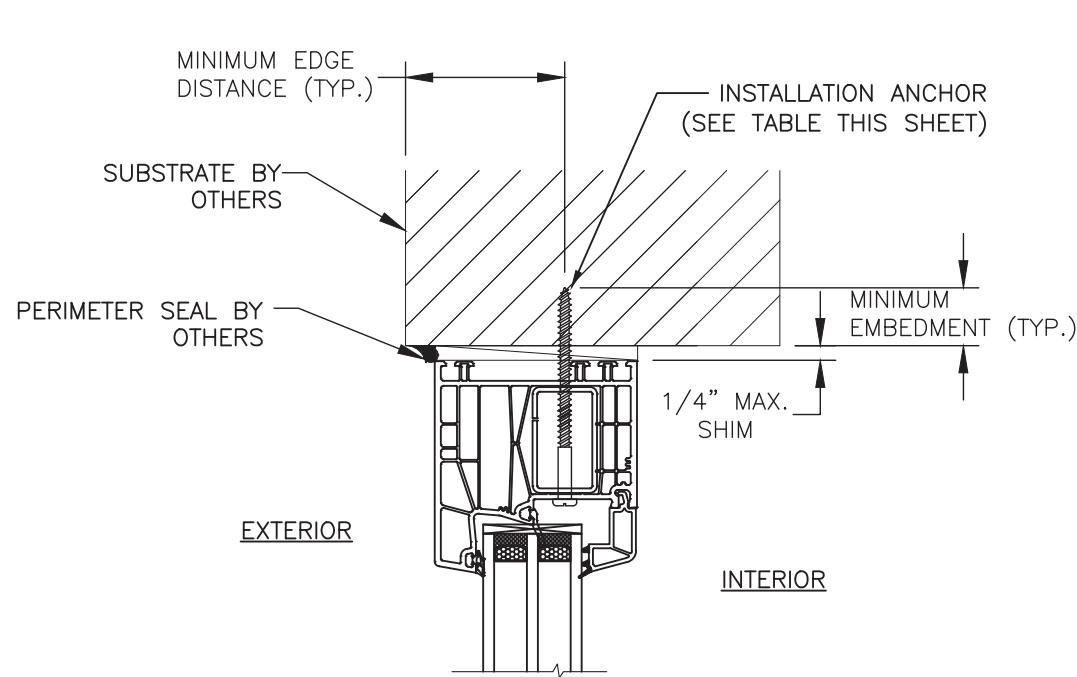
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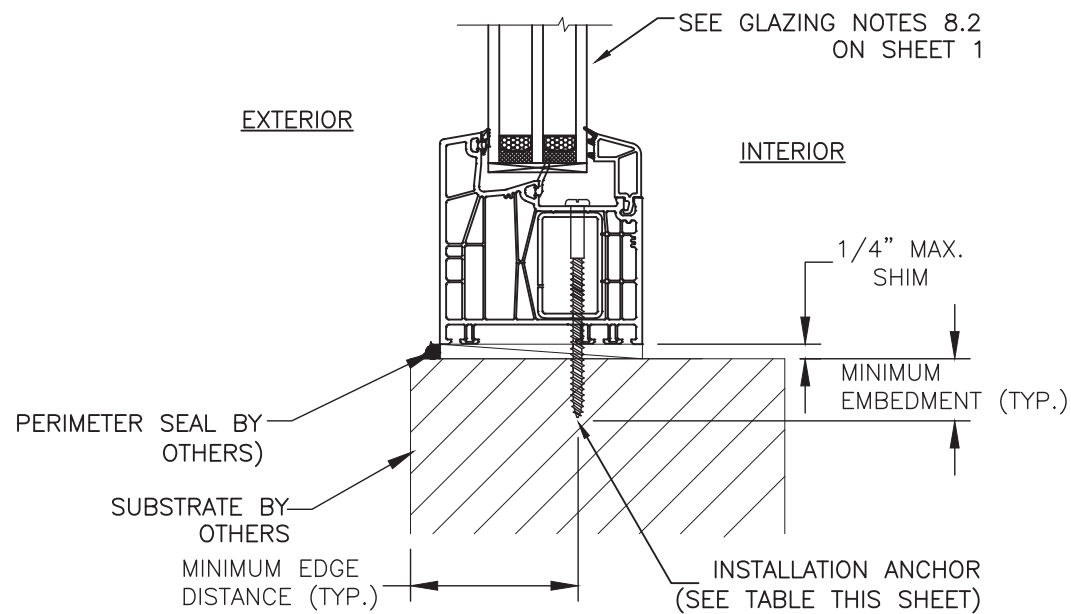


DESIGN PRESSURE RATING (PSF)			
MAX. OVERALL TESTED FRAME SIZE (IN)	MAX. DESIGN PRESSURE (PSF)	QUALIFIED CONFIGURATION	IMPACT RATING
59" X 120"	+/- 40.0 PSF	0	NONE
SEE GLAZING DETAIL 1 ON SHT. 5			

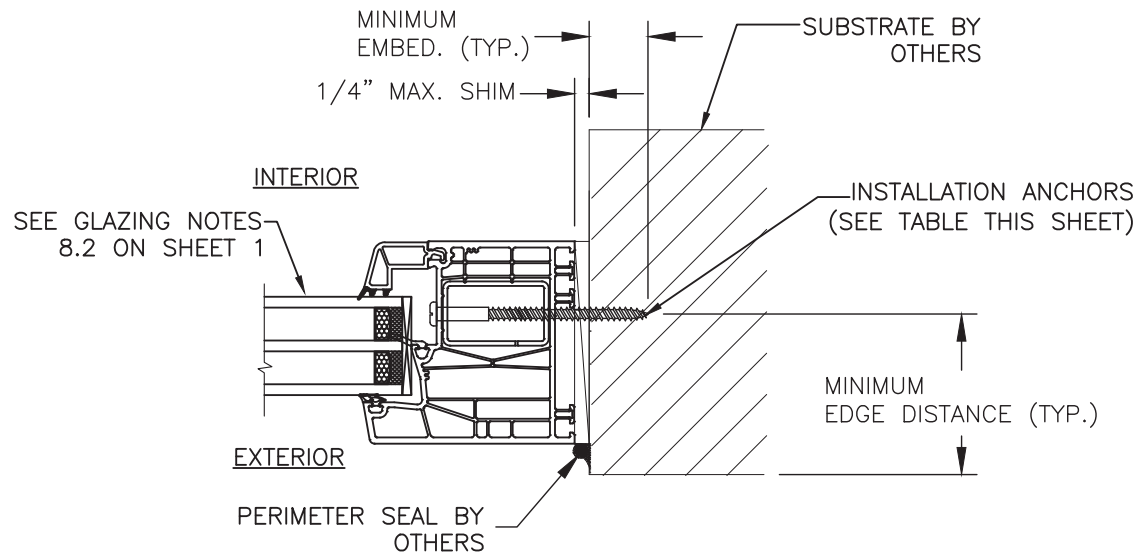
MAXIMUM SIZES (IN)	
FRAME	59" X 120"
D.L.O.	51.750" X 112.75



B
3 ANCHOR DETAIL
THROUGH FRAME
FRAME HEAD



A
3 ANCHOR DETAIL
THROUGH FRAME
FRAME SILL



C
3 ANCHOR DETAIL
THROUGH FRAME
FRAME JAMB

ANCHOR SCHEDULE							
ANCHORING METHOD	SUBSTRATE	SCREW HEAD TYPE (6)	SCREW SIZE	MANUFACTURER AND/OR SPECIFICATION (1)(2)(3)(4)(5)	EMBEDMENT (IN)	EDGE DISTANCE (IN)	ANCHOR CAPACITIES BASED ON THE FOLLOWING SUBSTRATE STRENGTHS
THROUGH FRAME	CONCRETE	HEX, PAN OR FLAT HEAD	1/4"	ITW TAPCONS	1-1/2"	1-1/2"	MIN. 2500 PSI CONCRETE
		CYLINDER HEAD	7.5MM CYLINDER HEAD SCREW	WURTH AMO III 7.5mm DIA TYPE 2 CYLINDER HEAD GALVANIZED STEEL SCREW.	1-1/2"	2"	
	MASONRY (BLOCK/CMU)	HEX, PAN OR FLAT HEAD	1/4"	ITW TAPCONS	1"	2"	ASTM C90 MED. WT. (DENSITY) > 117 PCF) MASONRY (CMU) MIN
		CYLINDER HEAD	7.5MM CYLINDER HEAD SCREW	WURTH AMO III 7.5mm DIA TYPE 2 CYLINDER HEAD GALVANIZED STEEL SCREW.	1"	2-1/2"	
	WOOD	PAN OR FLAT HEAD	NO. 14	ANSI B18.6.1 (WOOD SCREW)	1-1/2"	1"	WOOD WITH A MINIMUM SPECIFIC GRAVITY 0.42 (NON-HVHZ)
			NO. 14	ASME B18.6.4 (TAPPING SCREW)	1-1/2"	1"	
		CYLINDER HEAD	7.5MM CYLINDER HEAD SCREW	WURTH AMO III 7.5mm DIA TYPE 2 CYLINDER HEAD GALVANIZED STEEL SCREW.	2-3/8"	2-1/2"	
	STEEL STUD	HEX, PAN OR FLAT HEAD	1/4" (NO. 14)	ASME B18.6.4 (GRADE 5 SELF-DRILLING SCREW)	At least three full threads protrude into the interior of the steel stud.	3/8"	STEEL STUD, MIN. 20 GA. 33 MIL., 0.0329 INCH Fy = 33 KSI MIN. AND Fu = 45 KSI MIN.

NOTES:
(1) ITW (ADVANCED THREADFORM TECHNOLOGY) TAPCONS WILL BE USED FOR CONCRETE/MASONRY INSTALLATION. SEE NOTE 3.
(2) WOOD FRAME SUBSTRATE ANCHORS USE NO. 14 WOOD SCREWS (ANSI B18.6.1) OR NO. 14 TAPPING SCREWS (ANSI B16.8.4), GRADE 2 MIN. STRENGTH. SEE NOTE 4.
(3) ALTERNATE CONCRETE AND MASONRY (BLOCK/CMU) SUBSTRATE ANCHORS TO BE WURTH AMO III 7.5mm DIA TYPE 2 CYLINDER HEAD GALVANIZED STEEL SCREW.
(4) ALTERNATE WOOD FRAME SUBSTRATE ANCHORS TO BE WURTH AMO III 7.5mm DIA TYPE 2 CYLINDER HEAD GALVANIZED STEEL SCREW.
(5) METAL (STEEL) STUD SUBSTRATE ANCHORS USE 1/4" SELF-DRILLING SCREWS (ANSI B18.6.4), GRADE 5 MIN. STRENGTH.
(6) HEX OR PAN HEAD PREFERRED, FLAT HEAD ACCEPTABLE. CYLINDER HEAD REQUIRED FOR WURTH ANCHORS.

REV	DESCRIPTION	DATE	BY

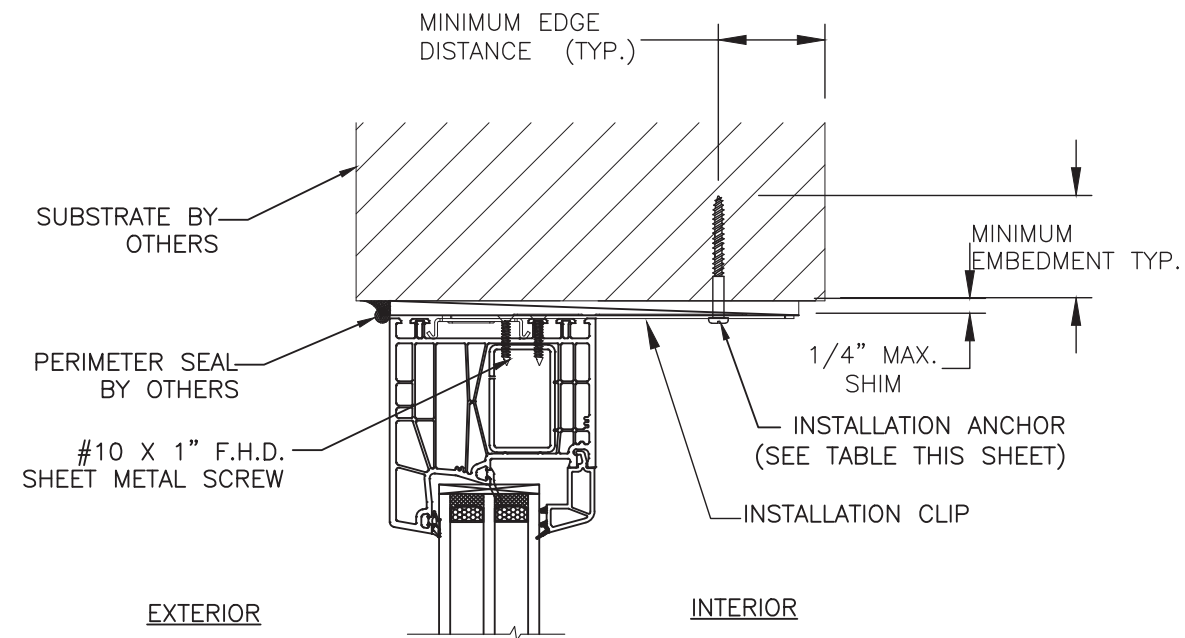
ES WINDOWS, INC. 3550 NW 49TH STREET MIAMI, FLORIDA 33142	TITLE: SERIES 88 FIXED WINDOW ANCHOR DETAILS-THROUGH FRAME	DRAWN BY: JRM	DATE: 07/12/24
		SCALE: N.T.S.	DRAWING NO: SCS-0023
		REV:	SHEET: 3 OF 5

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FL. P.E. NO. 49752

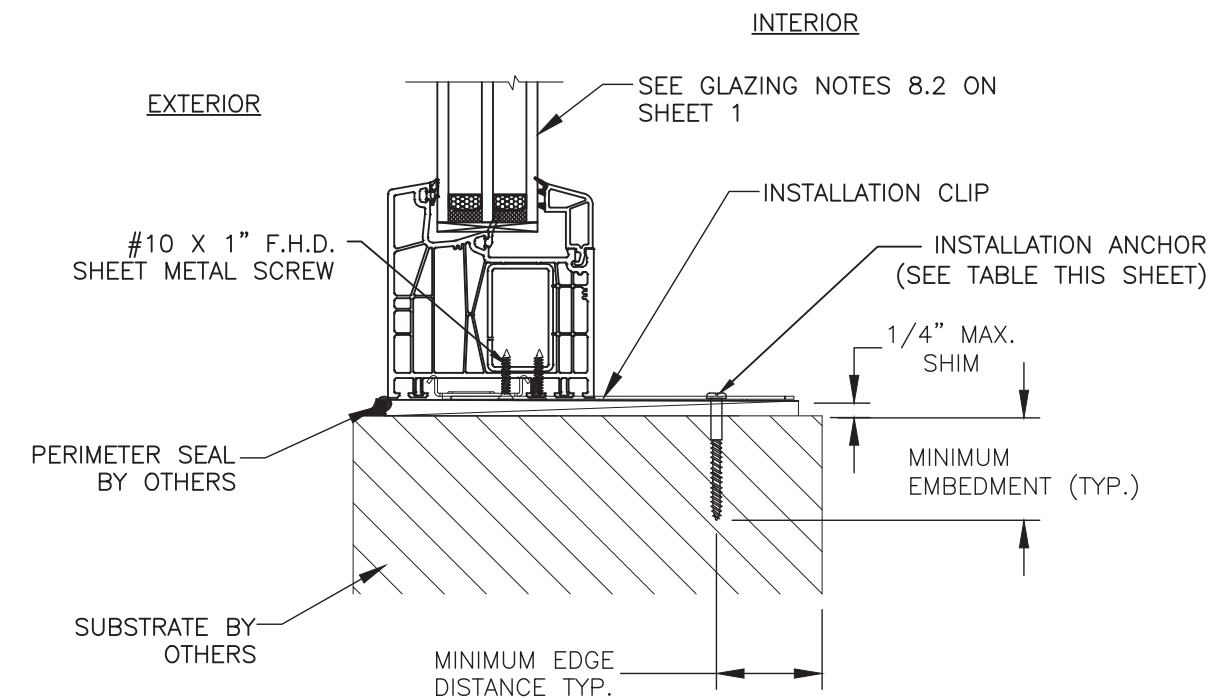


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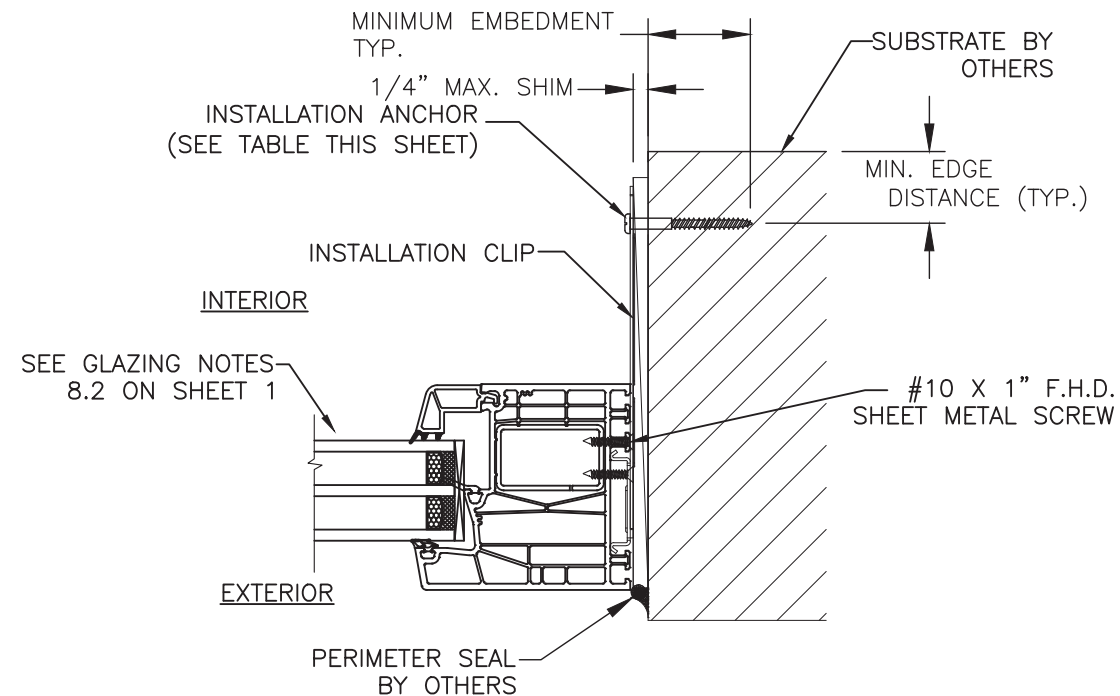
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B
4 ANCHOR DETAIL
INSTALLATION CLIP
FRAME HEAD



A
4 ANCHOR DETAIL
INSTALLATION CLIP
FRAME SILL



C
4 ANCHOR DETAIL
INSTALLATION CLIP
FRAME JAMB

ANCHOR SCHEDULE							
ANCHORING METHOD	SUBSTRATE	SCREW HEAD TYPE (4)	SCREW SIZE	MANUFACTURER AND/OR SPECIFICATION (1)(2)(3)	EMBEDMENT (IN)	EDGE DISTANCE (IN)	ANCHOR CAPACITIES BASED ON THE FOLLOWING SUBSTRATE STRENGTHS
THROUGH STRAP (INSTALLATION CLIP)	CONCRETE	HEX, PAN OR FLAT HEAD	1/4"	ITW TAPCONS	1-1/2"	1-1/2"	MIN. 2500 PSI CONCRETE
	MASONRY (BLOCK/CMU)	HEX, PAN OR FLAT HEAD	1/4"	ITW TAPCONS	1"	2"	ASTM C90 MED. WT. (DENSITY) > 117 PCF MASONRY (CMU) MIN
	WOOD	PAN OR FLAT HEAD	NO. 14	ANSI B18.6.1 (WOOD SCREW)	1-1/2"	1"	WOOD WITH A MINIMUM SPECIFIC GRAVITY 0.42 (NON-HVHZ)
			NO. 14	ASME B18.6.4 (TAPPING SCREW)	1-1/2"	1"	
	STEEL STUD	HEX, PAN OR FLAT HEAD	NO. 10	ASME B18.6.4 (GRADE 5 SELF-DRILLING SCREW)	At least three full threads protrude into the interior of the steel stud.	3/8"	STEEL STUD, MIN. 20 GA. 33 MIL., 0.0329 INCH Fy = 33 KSI MIN. AND Fu = 45 KSI MIN.

NOTES:
(1) ITW (ADVANCED THREADFORM TECHNOLOGY) TAPCONS WILL BE USED FOR CONCRETE/MASONRY INSTALLATION.
(2) WOOD FRAME SUBSTRATE ANCHORS USE NO. 14 WOOD SCREWS (ANSI B18.6.1) OR NO. 14 TAPPING SCREWS (ANSI B16.8.4), GRADE 2 MIN. STRENGTH.
(3) METAL (STEEL) STUD SUBSTRATE ANCHORS USE NO. 10 SELF-DRILLING SCREWS (ANSI B18.6.4), GRADE 5 MIN. STRENGTH.
(4) HEX OR PAN HEAD PREFERRED, FLAT HEAD ACCEPTABLE.

REV	DESCRIPTION	DATE	BY

ES WINDOWS, INC. 3550 NW 49TH STREET MIAMI, FLORIDA 33142 TITLE: SERIES 88 FIXED WINDOW ANCHOR DETAILS-ANCHOR CLIP	DRAWN BY: JRM	DATE: 07/12/24
	SCALE: N.T.S.	DRAWING NO: SCS-0023
	REV: -	SHEET: 4 OF 5

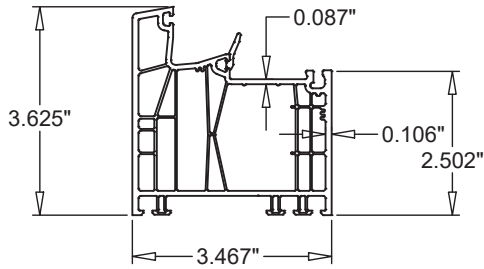
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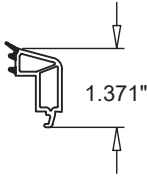
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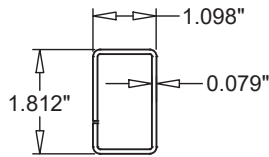
QTY.	PART NO.	DESCRIPTION	MANUFACTURER
1	88172	MAIN FRAME HEAD, JAMB & SILL UPVC	PROFINE
2	2640	35 MM GLAZING BEAD, UPVC	PROFINE
3	V-308	FRAME GALV. STL. REINFORCEMENT	PROFINE
4	-	DRAINAGE CAP, UPVC/VINYL	PROFINE
5	-----	GLAZING GASKET EPDM RUBBER	PURCHASE
6	S041	ANCHOR STRAP, 16 GA. GALVANIZED STEEL	PROFINE
7	577174	ANCHOR BENT STRAP, 16 GA. GALV. STEEL	SIMPSON
8	-----	#10 x 1" F.HD. S.M.S.	PURCHASE
9	-----	#14 PH WOOD SCREW	PURCHASE
10	-----	1/4" DIAM. I.T.W. MASONRY ANCHOR	PURCHASE
11	-----	7.5 MM DIAM. TYPE 2 CYL. HEAD ANCHOR	PURCHASE
12	-----	#10 SELF-DRILLING SCREW - STEEL STUD ANCHOR	PURCHASE
13	-----	1/4" (#14) SELF-DRILLING SCREW - STEEL STUD ANCHOR	PURCHASE



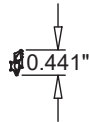
① MAIN FRAME HEAD/JAMB/SILL
EQUAL LEG UPVC / VINYL-88172



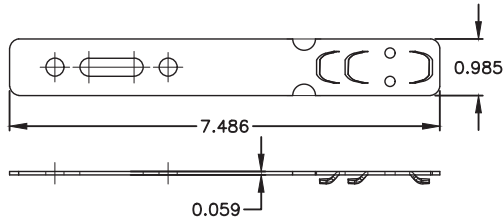
② 35 MM GLAZING BEAD
UPVC / VINYL-2640



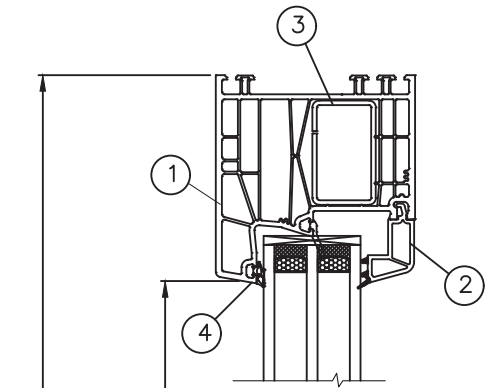
③ MAIN FRAME REINFORCEMENT
GALVANIZED STEEL-V308



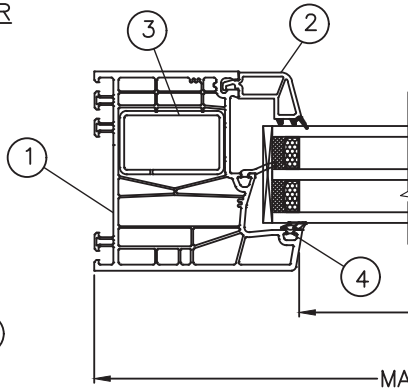
⑤ GLAZING GASKET
EPDM RUBBER



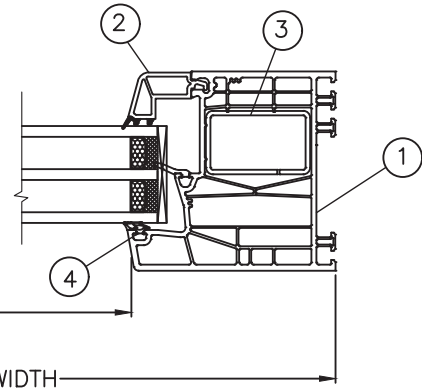
⑥ ANCHOR STRAP
GALVANIZED STEEL, 16 GA.



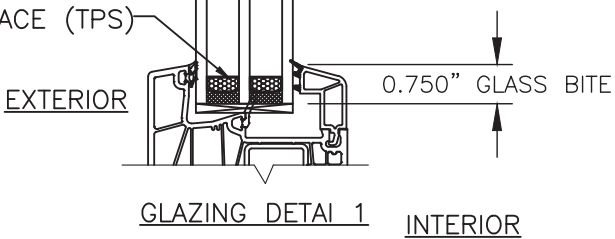
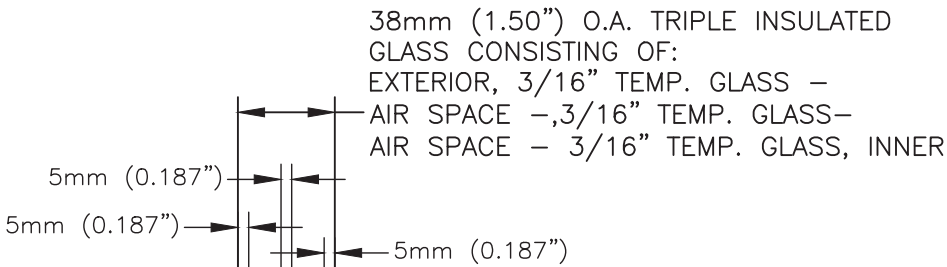
A
5
VERTICAL SECTION



B
5
HORIZONTAL SECTION
FRAME JAMB



B OPP
5
HORIZONTAL SECTION
FRAME JAMB



INSTALLATION NOTES:

- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH A LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".

REV	DESCRIPTION	DATE	BY

ES WINDOWS, INC. 3550 NW 49TH STREET MIAMI, FLORIDA 33142 SERIES 88 FIXED WINDOW BILL OF MATERIALS & GLAZING DETAIL	DRAWN BY:	JRM	DATE:	07/12/24
	SCALE:	N.T.S.	DRAWING NO.:	SCS-0023
	REV:	-	SHEET:	5 OF 5
	TITLE:			

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