

ES WINDOWS, INC.
SERIES 76 MD FIXED WINDOW
L.M. IMPACT ANCHORAGE DETAILS

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN EVALUATED TO COMPLY WITH THE CURRENT PROVISIONS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING THE HIGH VELOCITY HURRICANE ZONES (HVHZ) AND IS BASED ON TESTING CONDUCTED TO TAS 202, TAS 201 & TAS 203 TEST PROTOCOLS PER TEST REPORT NO. NCTL-210-4097-01.
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. GASKET MATERIALS SHALL BE EDPM WITH A MINIMUM 60 SHORE A DUROMETER.
6. IN HVHZ AND NON-HVHZ AREAS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST, USE OF AN IMPACT PROTECTIVE SYSTEM COMPLYING WITH THE FBC REQUIREMENTS FOR WINDBORNE DEBRIS REGIONS IS NOT REQUIRED FOR THE PRODUCT(S) HEREIN.
7. MATERIALS:

7.1 FRAME: RIGID VINYL-PVC

7.2 REINFORCEMENTS (FRAME): GALVANIZED STEEL
8. GLAZING:

8.1 GLASS MEETS THE REQUIREMENTS OF ASTM E1300-16.

8.2 SEE GLAZING DETAIL ON SHEET 5 OF 5.

8.3 GLASS SHALL MEET SAFETY GLAZING REQUIREMENTS PER CURRENT EDITION OF THE FLORIDA BUILDING CODE.

8.4 INTERLAYER: KURARAY AMERICA SENTRYGLAS PER CURRENT MIAMI DADE NOTICE OF ACCEPTANCE (N.O.A.)
9. PANEL OPERABILITY DESIGNATIONS:

9.1. (O) FIXED LIGHT IS STATIONARY.

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 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 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. 7 IN BOM).
5. FOR ANCHORING THROUGH FRAME INTO STEEL STUD, USE 1/4" (NO. 14) HEX HEAD (SHOWN), PAN HEAD OR FLAT HEAD 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. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:

6.1. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.42 (NON-HVHZ).

6.2. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.

6.3. 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.

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2	ANCHOR ELEVATION & LAYOUT
3-4	INSTALLATION DETAILS
5	B.O.M., CROSS SECTIONS & GLAZING DETAILS

ES WINDOWS, INC. 3550 NW 49TH STREET MIAMI, FL 33142		
SERIES 76 MD VINYL PICTURE WINDOW L.M. IMPACT GENERAL NOTES		
DRAWN: JRM	DWG NO. SCS-0024	REV 0
SCALE N.T.S.	DATE 07/12/2024	SHEET 1_OF_5

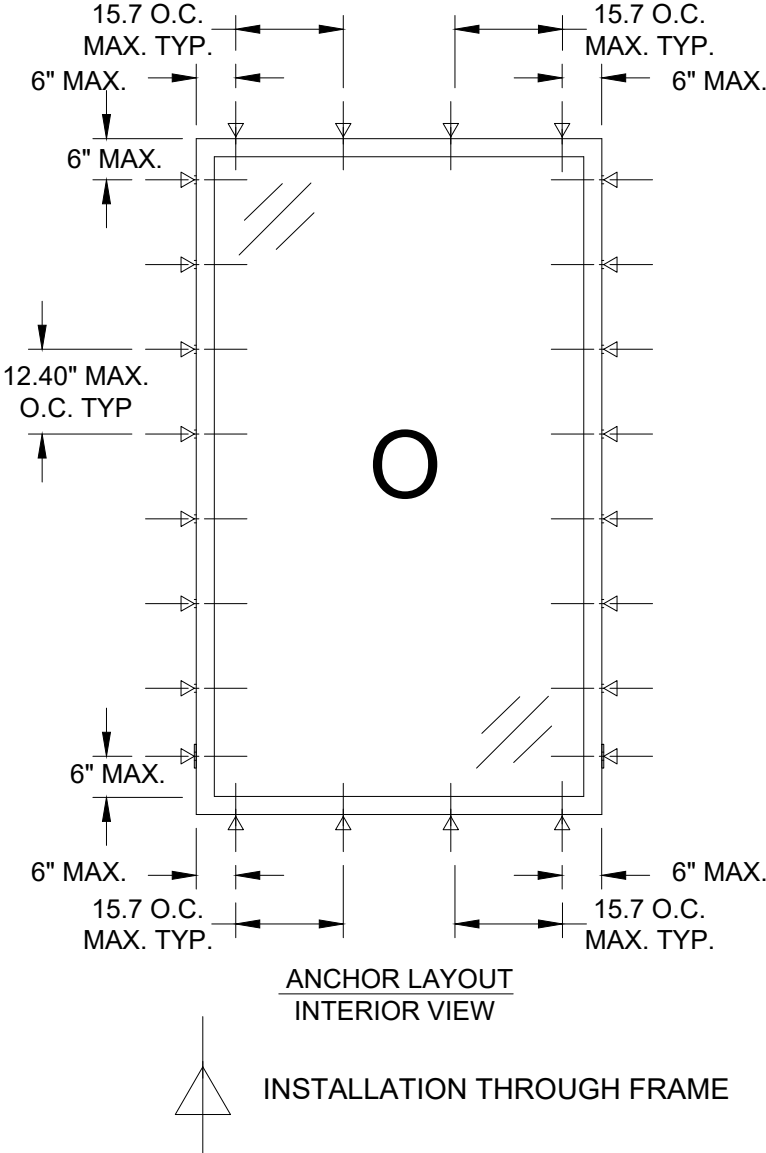
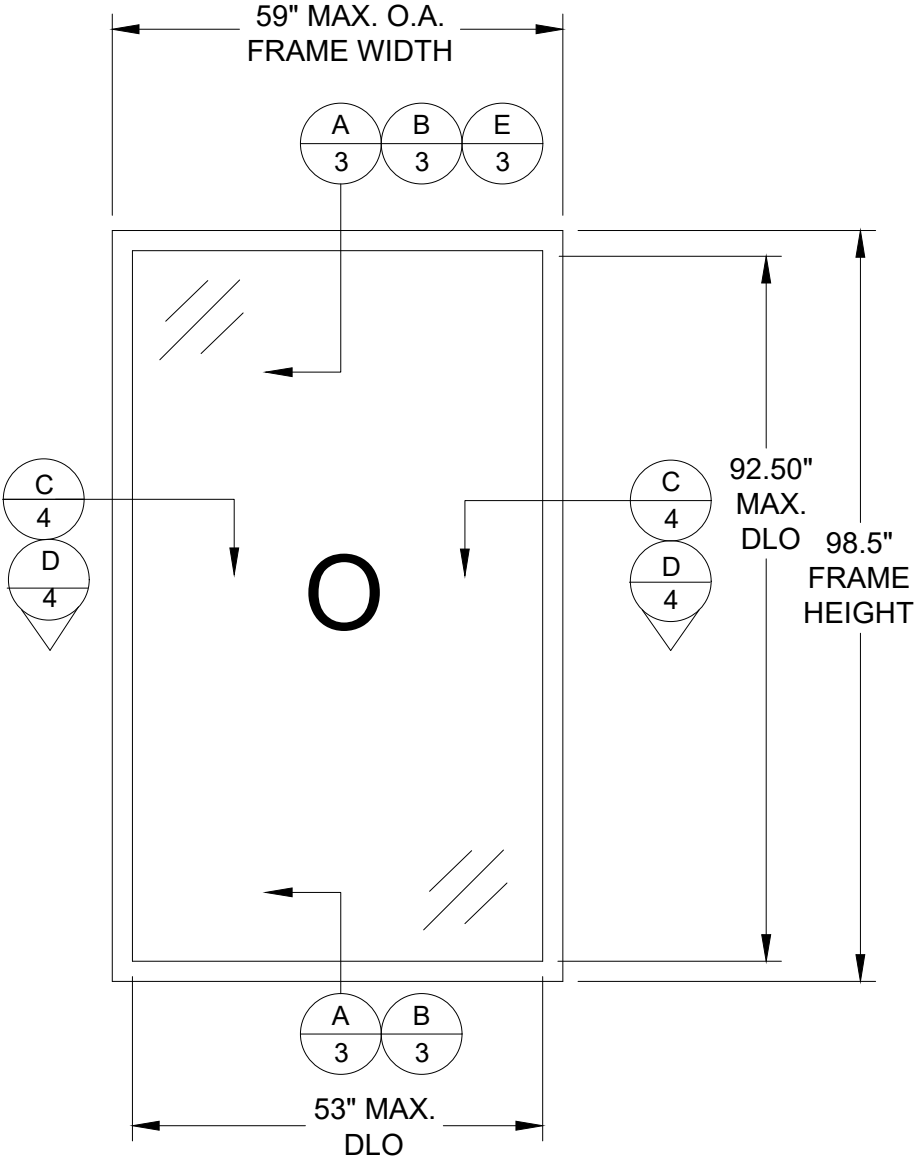
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**ANCHORAGE INSTALLATION REQUIREMENTS TO MEET
DESIGN PRESSURE OF +/-75 PSF**

DESIGN PRESSURE RATING (PSF)		
L.M. IMPACT RATING		
MAX. OVERALL TESTED FRAME SIZE (IN)	MAX. DESIGN PRESSURE (PSF)	QUALIFIED CONFIGURATION
59" X 98.5"	+/- 75.0	O
SEE GLAZING DETAIL ON SHT. 6		

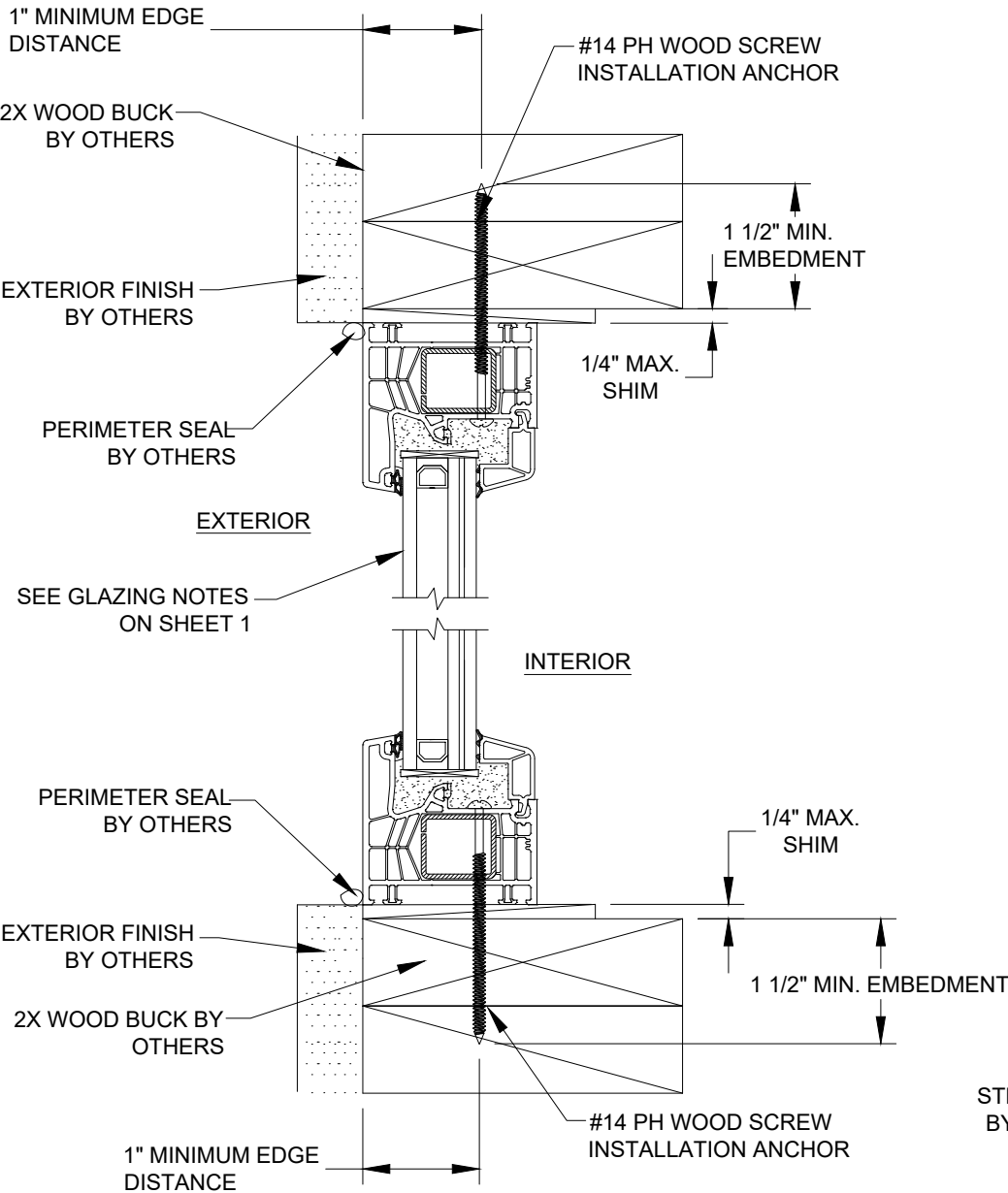
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SERIES 76 MD VINYL PICTURE WINDOW L.M. IMPACT ANCHOR ELEVATIONS AND LAYOUTS		
DRAWN: JRM	DWG NO. SCS-0024	REV 0
SCALE N.T.S.	DATE 07/12/2024	SHEET 2_OF_5

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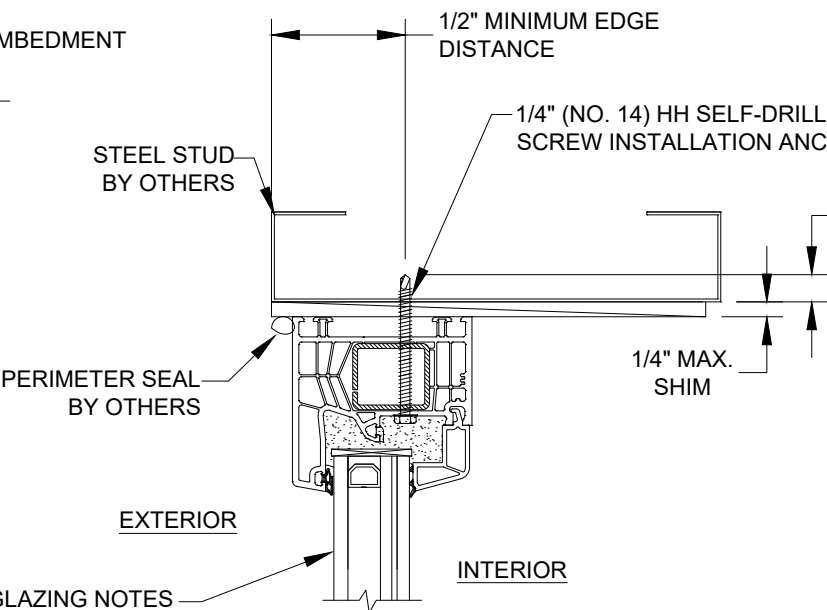
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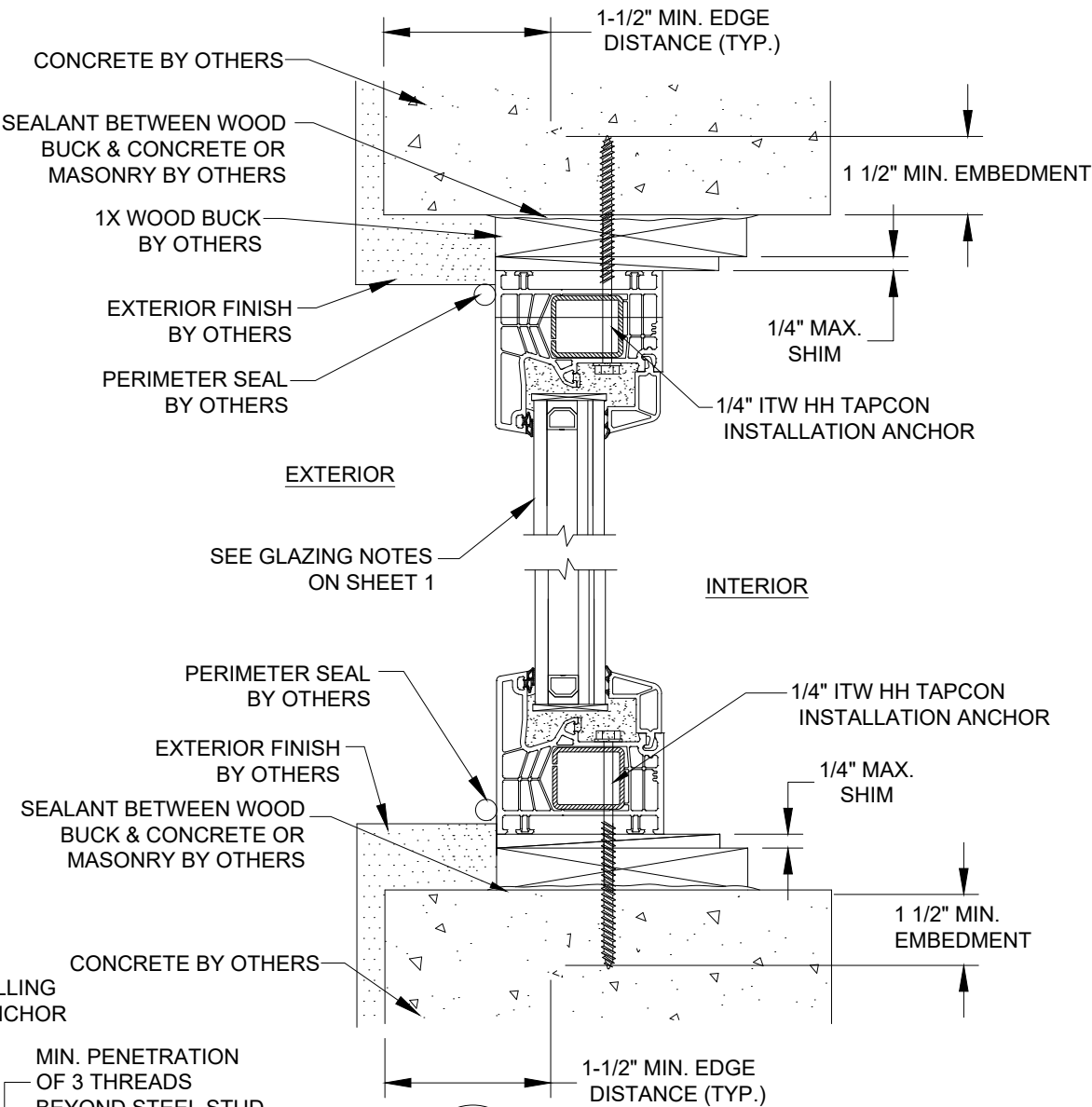
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A
3
VERTICAL SECTION
2 X WOOD SUBSTRATE
FRAME INSTALLATION



E
3
VERTICAL SECTION
STEEL STUD STRUCTURE
FRAME INSTALLATION
HEAD SHOWN, SILL & JAMBS SAME



B
3
VERTICAL SECTION
CONCRETE SUBSTRATE
FRAME INSTALLATION

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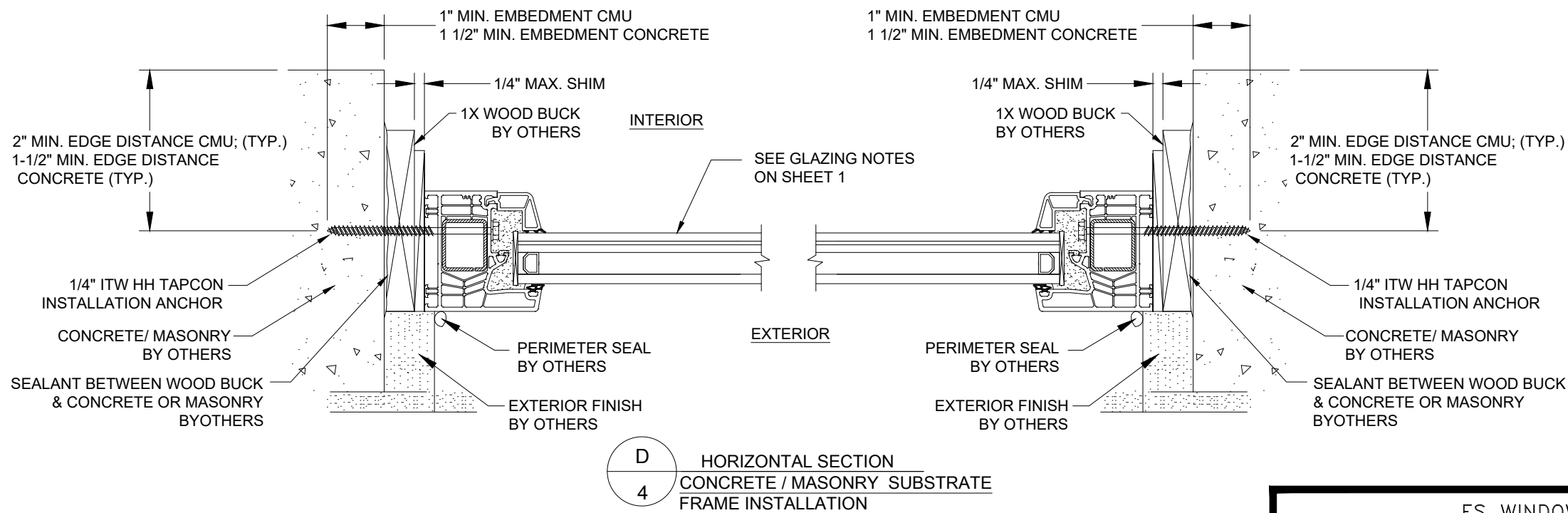
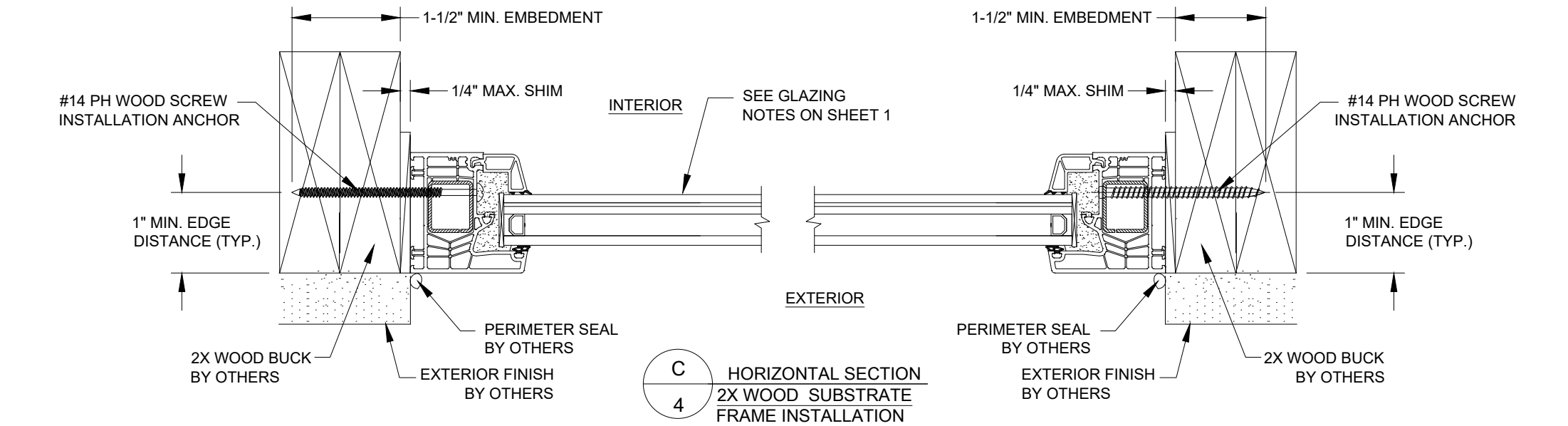
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ES WINDOWS, INC.
3550 NW 49TH STREET
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SERIES 76 MD VINYL PICTURE WINDOW
L.M. IMPACT
HORIZONTAL INSTALLATION DETAILS

DRAWN: JRM	DWG NO. SCS-0024	REV 0
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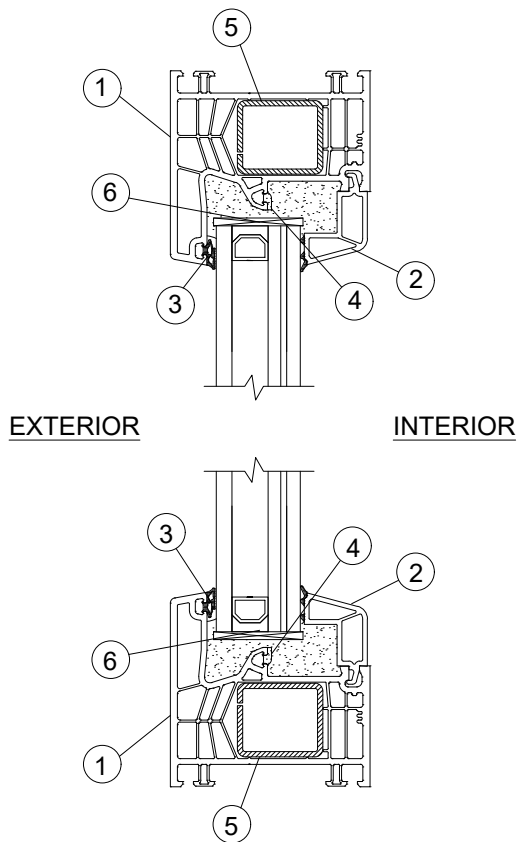
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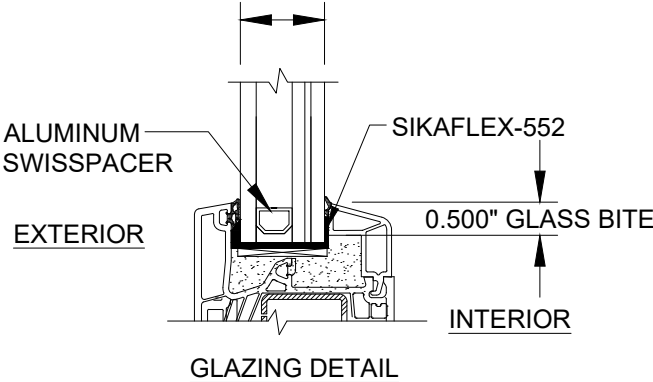
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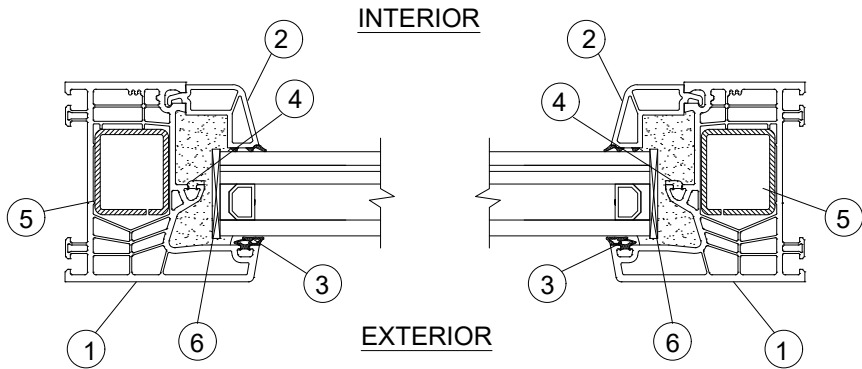
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1.20" O.A. INSULATED GLASS CONSISTING OF:
EXT. 1/4" TEMP. GLASS, 0.380" AIR-SPACER, LAMI:
3/16" H.S. GLASS, 0.090" KURARAY AMERICA SENTRYGLAS, 3/16" H.S. GLASS INT.



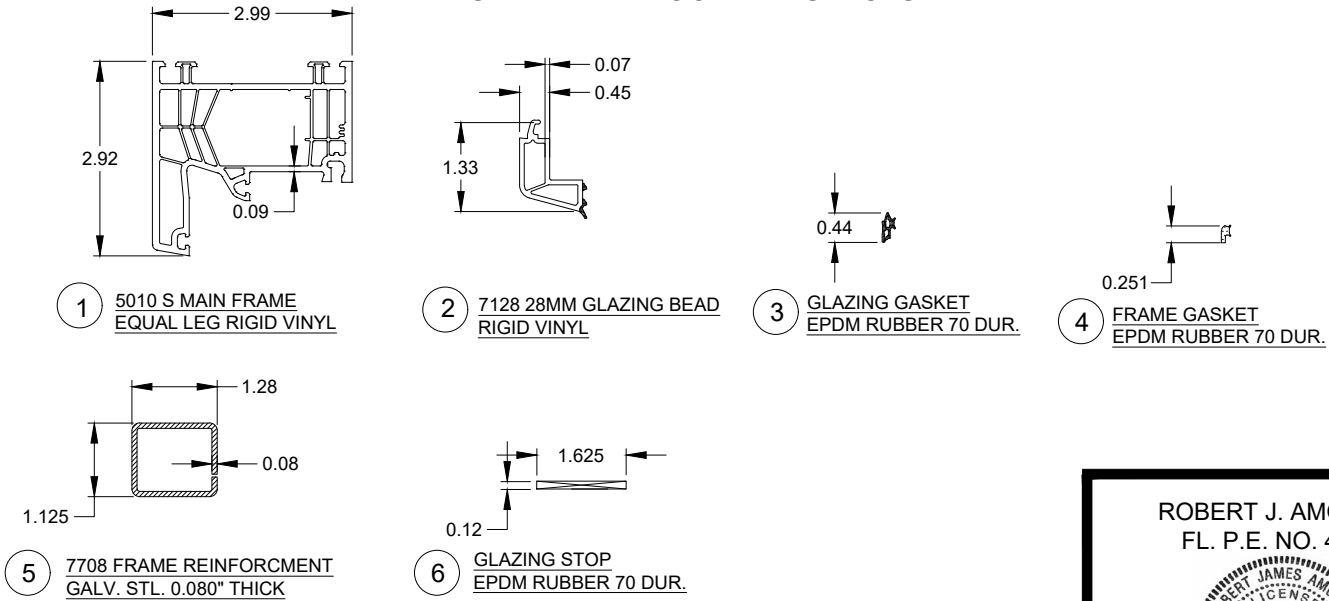
TYPICAL CROSS SECTION FOR PARTS
IDENTIFICATION EQUAL LEG FRAME



TYPICAL CROSS SECTION FOR PARTS
IDENTIFICATION EQUAL LEG

QTY.	PART NO.	DESCRIPTION	MANUFACTURER
1	76171	MAIN FRAME, RIGID VINYL	PROFINE
2	2638_1	1-1/8" I.G. LAMINATED GLAZING BEAD, RIGID VINYL	PROFINE
3	-----	GLAZING GASKET, EPDM RUBBER 70 DUR	PURCHASE
4	-----	FRAME GASKET, EPDM RUBBER 70 DUR	PURCHASE
5	PURCHASE	1.10" X 1.280" X 0.080" FRAME REINF., GALV. STEEL	PURCHASE
6	-----	GLAZING SPACER, RIGID VINYL	PROFINE
7	-----	AMO III 7.5MM DIA. CYLINDER HEAD SCREW, VARIABLE LENGTH BASED ON USAGE	WURTH *
8	PURCHASE	#14 PH OR FH WOOD SCREW	----
9	PURCHASE	1/4" DIAM. HH OR FH I.T.W. MASONRY ANCHOR	I.T.W.
10	PURCHASE	#14 (1/4") SELF-DRILLING SCREW	----
11	PURCHASE	GLAZING SEALANT, SIKA 552 & 205 PRIMER	SIKAFLEX

* SUPPLIED BY DOOR MANUFACTURER



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