

EFCO CORPORATION

600R ALUMINUM STOREFRONT FIXED WINDOW

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED, EVALUATED AND DESIGNED TO THE DESIGN PRESSURE(S) STATED HEREIN AS IN COMPLIANCE WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE.
2. TESTING WAS CONDUCTED TO THE FOLLOWING PERFORMANCE STANDARDS IN COMPLIANCE WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE.

2.1. ASTM E330-02

2.2. ASTM E283-04

2.3. ASTM E331-00

2.4. AAMA 501-05
3. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT NO. E3502.01-801-47 AND ASSOCIATED LABORATORY DRAWINGS BY ARCHITECTURAL TESTING, INC.
4. THIS PRODUCT EVALUATION DOCUMENT IS NOT FOR USE IN THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
5. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE / MASONRY, STEEL STUD AND 2X FRAMING SUBSTRATES AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT ACTING AS THE DESIGN PROFESSIONAL OF RECORD FOR THE PROJECT OF INSTALLATION.
6. 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 LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT ACTING AS THE DESIGN PROFESSIONAL OF RECORD FOR THE PROJECT OF INSTALLATION.
7. WHEN INSTALLED IN LOCATIONS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST,THIS PRODUCT DOES REQUIRE OPENING PROTECTION.
8. SITE CONDITIONS NOT COVERED IN THIS PRODUCT EVALUATION DOCUMENT ARE SUBJECT TO ADDITIONAL ENGINEERING ANALYSIS BY A LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
9. FRAME MATERIAL: ALUMINUM 6063-T6.
10. GLASS MEETS THE REQUIREMENTS OF ASTM E1300-09a.
11. THESE DRAWINGS CERTIFY THE WINDOW INSTALLATION ONLY. WATER PROOFING OF THE INSTALLED WINDOW IS NOT PART OF THIS INSTALLATION CERTIFICATION. THAT RESPONSIBILITY SHALL BE THAT OF THE MANUFACTURER AND/OR THE INSTALLER.

INSTALLATION NOTES:

1. PRODUCT ANCHORS SHALL BE AS DESIGNATED AND LOCATED AS SHOWN IN THIS PRODUCT EVALUATION DOCUMENT. ANCHOR EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER AND SIDING.
2. TYPE AND GRADE OF ANCHOR, AND/OR MANUFACTURER'S ANCHOR SPECIFICATIONS, INCLUDING MINIMUM NOMINAL SIZE, MINIMUM EMBEDMENT INTO SUBSTRATE AND MINIMUM EDGE DISTANCES SHALL BE AS SHOWN IN THE ANCHOR SCHEDULE ON THIS SHEET.
3. SEE SHEET 2 FOR SPECIFIC ANCHOR INSTALLATION DETAILS AND ANCHOR ELEVATION. SEE SHEET 3 FOR INSTALLATION SECTIONS.

3.1. CORNER ANCHORS SHALL BE PLACED AS SHOWN ON SHEET 2.

3.2. CLUSTERED ANCHORS ARE REQUIRED AT VERTICAL AND HORIZONTAL MULLION LOCATIONS. TOTAL QUANTITY OF ANCHORS AT A CLUSTER SHALL BE AS SHOWN IN THE ANCHOR QUANTITY TABLE ON THIS SHEET. ELEVATION ON SHEET 2 SHOWS CLUSTERED ANCHOR REQUIREMENTS FOR CONCRETE. OTHER SUBSTRATES SHALL BE PER ANCHOR QUANTITY TABLE ON THIS SHEET.

3.3. CLUSTERED ANCHOR QUANTITIES SHALL BE EQUALLY SPACED ON EACH SIDE OF THE MULLION (FOR EXAMPLE: 6 ANCHORS ARE PLACED 3 ON EACH SIDE OF THE MULLION AT THE SPACING SHOWN IN THE ANCHOR SCHEDULE.

3.4. SPACING OF ANCHORS AT CLUSTERED LOCATIONS SHALL BE PER ANCHOR SCHEDULE TABLE ON THIS SHEET.
4. MAXIMUM ALLOWABLE SHIM THICKNESS IS SHOWN IN SECTION VIEWS ON SHEET 3. SHIM(S) SHALL BE CONSTRUCTED OF WOOD COMPOSITE, HIGH DENSITY PLASTIC OR SIMILAR LOAD BEARING MATERIAL.
5. 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 BELOW.

5.1. WOOD BUCK OR FRAMING SUBSTRATES WITH SPECIFIC GRAVITY OF 0.42 (S-P-F) OR HIGHER.

5.2. CONCRETE WITH COMPRESSIVE STRENGTH EQUAL TO OR GREATER THAN 2500 PSI. ONE BY BUCKS IN ACCORDANCE WITH GENERAL NOTE 6 ARE ALLOWED.

5.3. MASONRY (CONCRETE BLOCK, CMU) MEETING ASTM C90, MEDIUM WEIGHT (DENSITY). ONE BY BUCKS IN ACCORDANCE WITH GENERAL NOTE 6 ARE ALLOWED. DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS OF MASONRY.

5.4. STEEL STUD INSTALLATION SHALL BE A MINIMUM OF 18 GAUGE 33 KSI YIELD STRENGTH STEEL.

ANCHOR SCHEDULE						
SUBSTRATE (SEE INSTALLATION NOTE 5)	TYPE	SIZE	HEAD TYPE	MIN. EMBEDMENT (IN)	MIN. EDGE DISTANCE (IN)	SPACING (IN)
CONCRETE	ITW ADVANCED THREADFORM TAPCON CONCRETE SCREW	1/4"	HEX OR PAN HEAD	1.5	1.5	4
				1.5	1.5	4
				1	2	4
WOOD	WOOD SCREW (ANSI B18.6.1)	NO. 14	PAN HEAD	1.5	1	1
	LAG SCREW (ANSI B18.2.1)	1/4"	HEX HEAD	1.5	1	1
STEEL STUD	TAPPING SCREW (ASME B18.6.4)	1/4"	PAN HEAD	FULL PENETRATION OF METAL FRAMING + 1/4" BEYOND DRILL POINT	0.375	0.625

ANCHOR QUANTITY		
SUBSTRATE (SEE INSTALLATION NOTE 5)	FRAME COMPONENT	ANCHOR QUANTITY AT CLUSTERED LOCATION
CONCRETE	HEAD/SILL/JAMBS	4
MASONRY (CMU - UNGROUTED)	JAMBS	10
MASONRY (CMU - GROUTED)	JAMBS	6
WOOD	HEAD/SILL	6
	JAMBS	8
STEEL STUD	HEAD/SILL	6
	JAMBS	6

PERFORMANCE RATING	
DESIGN PRESSURE (PSF)	IMPACT RATING
+/- 50.13	NONE

Robert J. Amoruso, P.E.
Florida P.E. No. 49752

ROBERT JAMES AMORUSO

LICENSE

No 49752

STATE OF FLORIDA

PROFESSIONAL ENGINEER

Digitally signed
by Robert J Amoruso
Date:
2020.12.16
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PTC PRODUCT DESIGN GROUP, LLC
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DRAWN BY: JBH

DATE: 04-03-15

APPROVED:

DATE:

SERIES: 600R

REVISIONS W/ DATES:

REPORT # E3502.01-801-47

SCALE:

TITLE: 600R IG INSTALLATION
DETAIL - TITLE PAGE

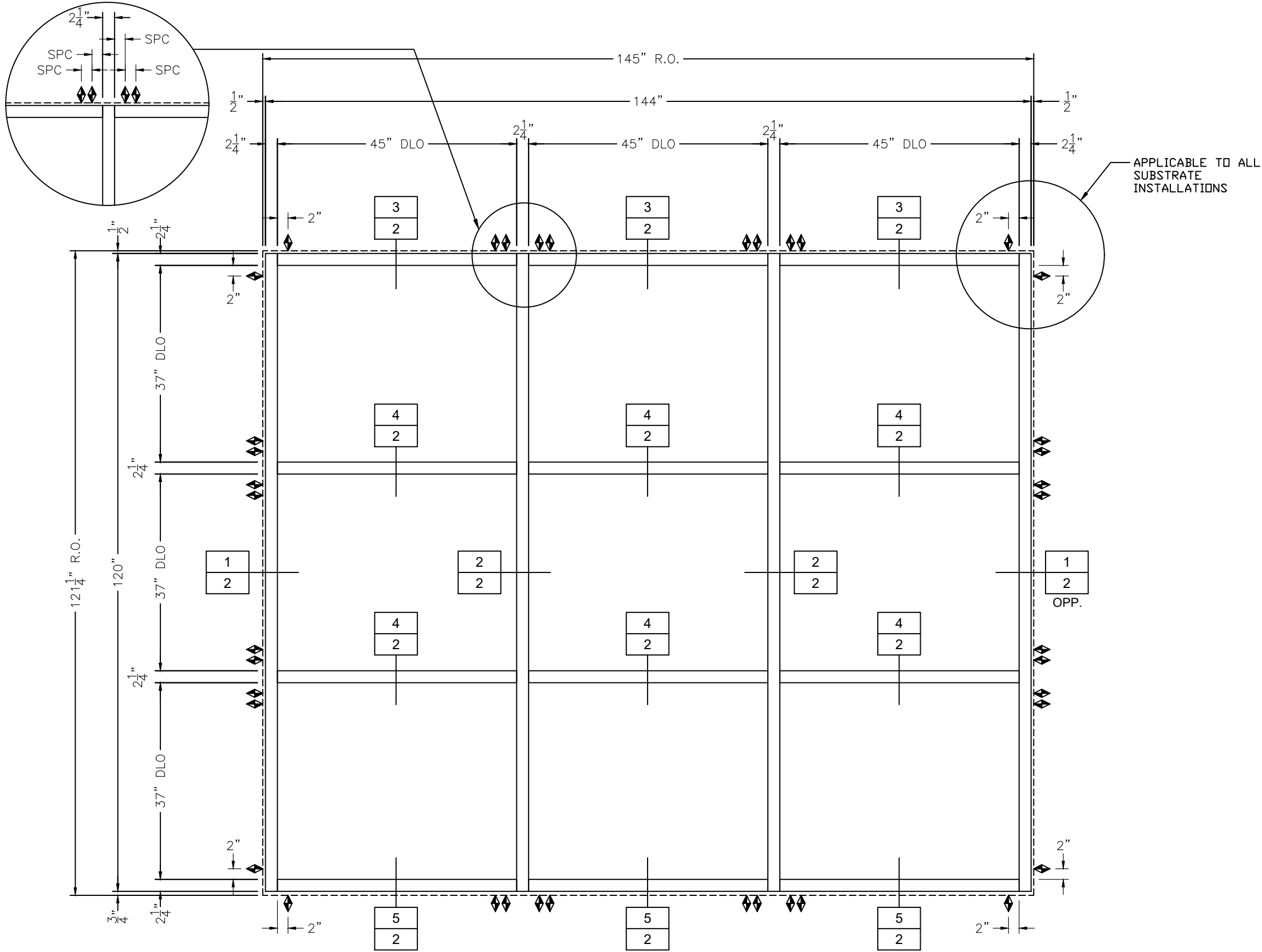
DWG NO. 1 of 3

REV. 0

CLUSTERED ANCHOR QUANTITIES FOR CONCRETE
SUBSTRATE SHOWN BELOW. ANCHOR SPACING
DENOTED BY "SPC" WHICH IS 4" FOR CONCRETE
SUBSTRATE. SEE ANCHOR QUANTITY TABLE ON SHEET
1 FOR CLUSTERED ANCHOR QUANTITIES IN VARIOUS
SUBSTRATES. SEE ANCHOR SCHEDULE ON SHEET 1
FOR SPACING (SPC).

ELEVATION

◆ DENOTES ANCHOR LOCATIONS



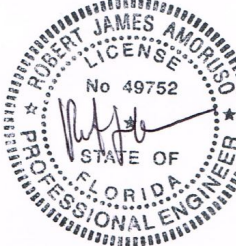
ITEM	# REQD	PART #	DESCRIPTION	MFG.
1	3	28N2	HEAD	EFCO
2	3	28N5	SILL	EFCO
3	6	28N4	HORIZONTAL	EFCO
4	2	28N8	JAMB	EFCO
5	16	28N0	COVER	EFCO
6	1	1D56	SILL STARTER	EFCO
7	9	28N1	GLAZING BEAD	EFCO
8	2	28N7	OPEN BACK COVER	EFCO
9	2	28P1	MULLION	EFCO
10	3	28P9	HEAD ANCHOR	EFCO
11	104	HH21	THERMAL ISOLATOR	INTEK
12	12	HN60	ANTI WALK BLOCK<DEEP POCKET>	EPG
13	48	SPL3	#12-14 X 1-1/4 SQ-PH-SMS ZP	PRD FAS
14	6	HN50	ANTI WALK BLOCK<SHALLOW POCKET>	EPG
15	AS REQD	WEC5	GLAZING GASKET - INTERIOR	TRLBRG
16	AS REQD	WER3	GLAZING GASKET - EXTERIOR	TRLBRG
17	2	FVA1	END DAM	EFCO
18	4	SPZ1	#8-15 X 3/4 PL-PH-SMS 18-8	PRD FAS
19	12	HWD1	WATER DEFLECTOR	ASHLAND
20	AS REQD	----	SEE ANCHOR SCHEDULE, SHEET 1	----
21	6	HN68	SETTING BLOCK @ SILL	CEN. RUB.
22	12	HNA4	SETTING BLOCK @ HORIZONTAL	EPG
23	12	MRF9	#10-24 X 3/8 PL-TH-SMS 18-8 F	PRD FAS
24	AS REQD	----	SILICONE SEALANT	----

INSULATED GLASS DESCRIPTION
TEMPERED GLASS REQUIRED FOR ALL SAFETY GLAZING APPLICATIONS AS REQUIRED BY THE FLORIDA BUILDING CODE

① 1" NOMINAL GLASS THICKNESS
1/4" ANNEALED - 1/2" AIR SPACE - 1/4" ANNEALED

② 1" NOMINAL GLASS THICKNESS
1/4" TEMPERED - 1/2" AIR SPACE - 1/4" TEMPERED

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



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by Robert J
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2020.12.16
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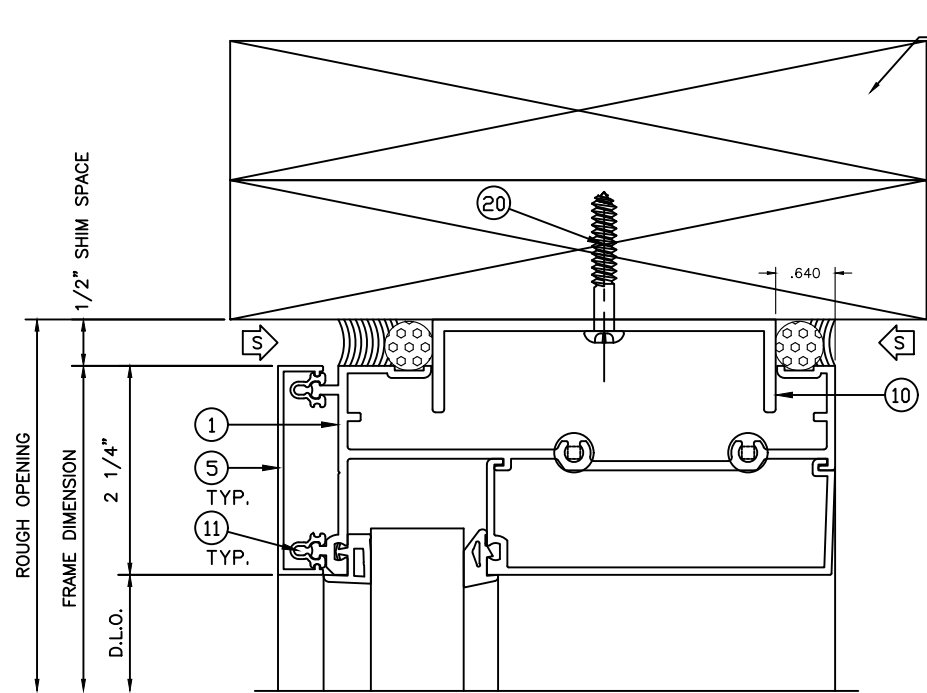


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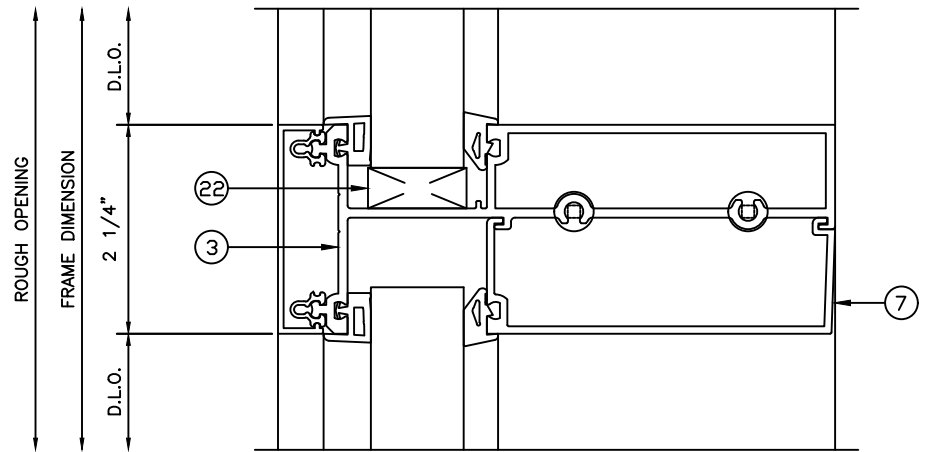
DRAWN BY: JBH	REVISIONS W/ DATES:		
DATE: 04-03-15	① Modified screw and anti-walk block quantities, fixed setting block part number. MRB 11-24-14		
APPROVED:			
DATE:			
SERIES: 600R	SCALE:		
TITLE: 600R IG INSTALLATION DETAIL - ELEVATION VIEW	DWG NO. 2 of 3	REV. 0	

CONCRETE ANCHORAGE SHOWN.
SEE ANCHOR QUANTITY TABLE ON
SHEET 1 FOR QUANTITY OF ANCHORS
REQUIRED AT EACH CLUSTERED
LOCATION FOR VARIOUS SUBSTATES.

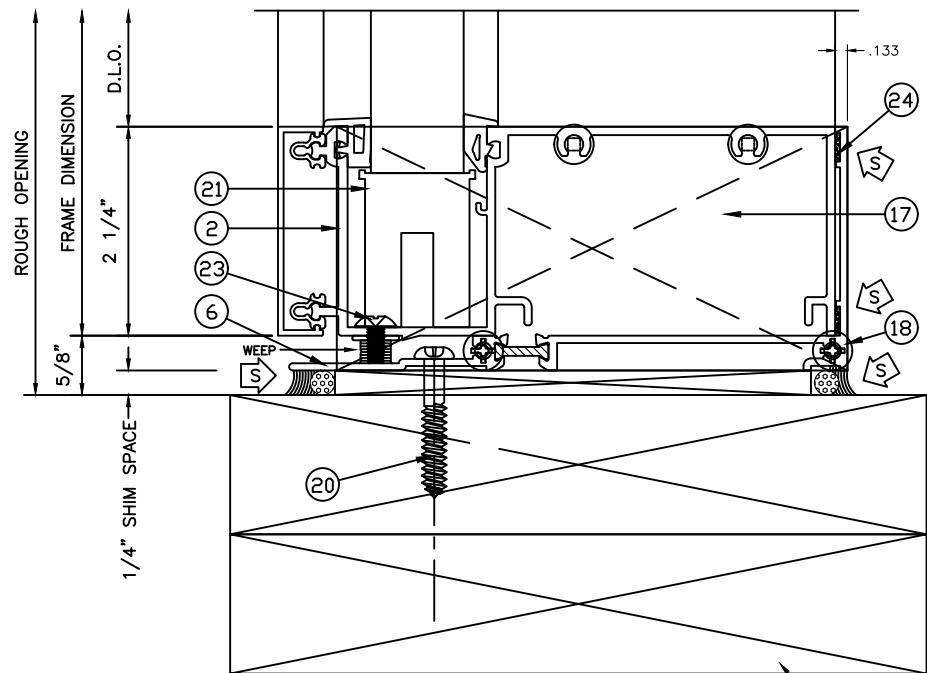
3 HEAD



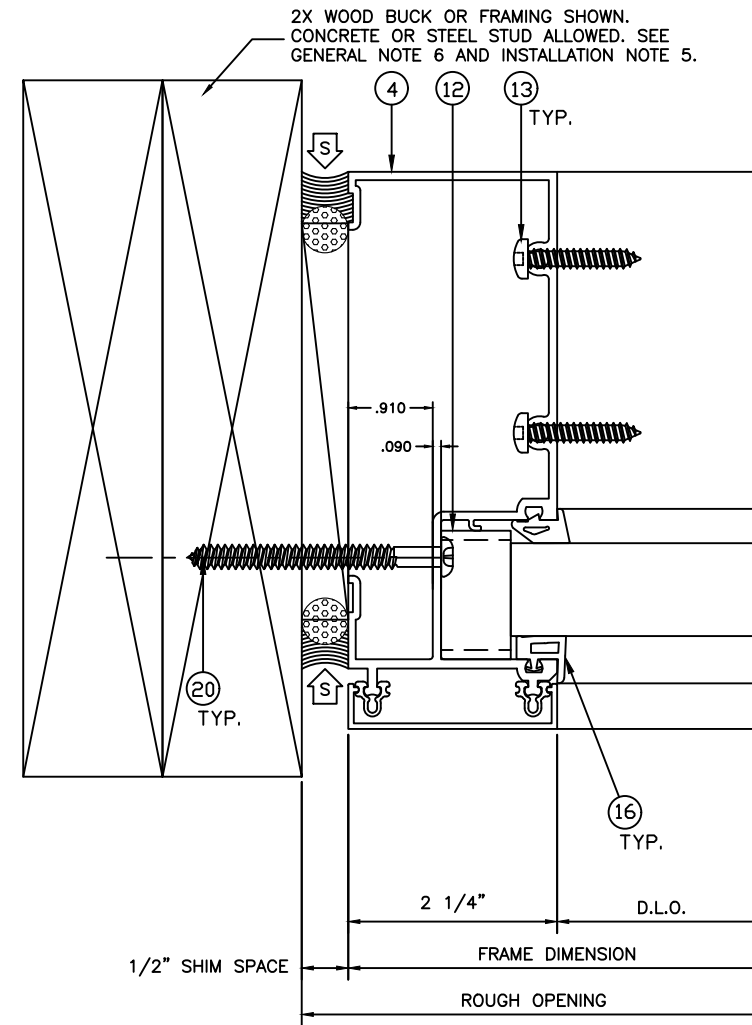
4 HORIZONTAL



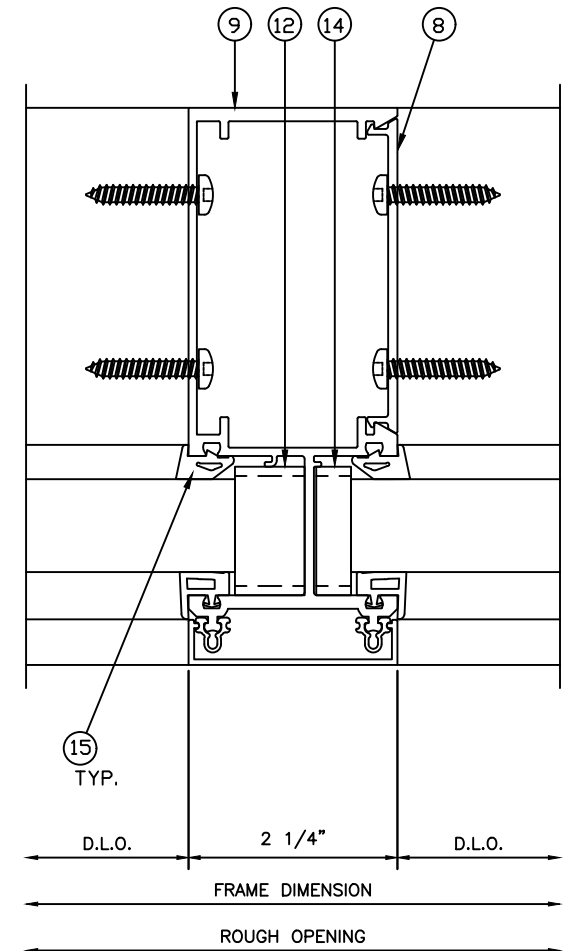
5 SILL



2X WOOD BUCK OR FRAMING SHOWN.
CONCRETE OR STEEL STUD ALLOWED. SEE
GENERAL NOTE 6 AND INSTALLATION NOTE 5.

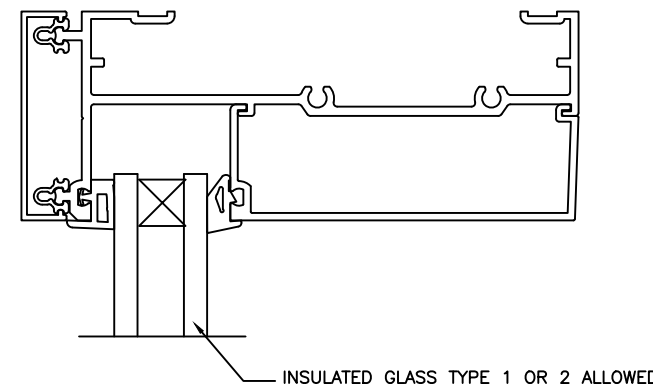


1 JAMB



2 VERTICAL

GLAZING DETAIL



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Digitally signed
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600R IG INSTALLATION DETAIL - SECTION VIEWS		3 of 3	0