# ECO GLASS LLC SERIES S-3630 FIXED WINDOW

### INSTALLATION ANCHORAGE DETAILS

#### **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/A440-08 DOCUMENTED IN TEST REPORT NO. AI-04010-A1 BY AIR-INS INC. (AN UL COMPANY).
- 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. 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 REQUIRED:
- 6. MATERIALS:
- 6.1. FRAME: RIGID VINYL
- 7. GLAZING:
- 7.1. INSULATING GLASS UNIT:
- 7.1.1. DETAIL A: 22.2 mm (0.87") O.A. COMPRISED OF 5MM (3/16") HS, AIR GAP 12.2MM (0.48")
- 7.1.2. OVERALL (O.A.) THICKNESS AND AIR GAP CAN VARY BASED ON SPACER USED AND WILL NOT AFFECT GLAZING STRENGTH. GLASS THICKNESS AND HEAT TREATMENT CANNOT VARY EXCEPT AS ALLOWED IN 7.2 AND 7.3 BELOW.
- 7.2. FOR PRODUCTS SMALLER THAN THE TESTED SPECIMEN, GLAZING IS PERMITTED TO BE THINNER AND/OR WEAKER THAN THAT SHOWN IN GENERAL NOTE 7.1 IN ACCORDANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440-08. SECTION 6.2.3.4.1.
- 7.3. HEAT STRENGTHENED GLASS USED IN TESTING. AS ALLOWED IN AAMA/WDMA/CSA 101/I.S.2/A440-08, SECTION 6.2.3.2, ANNEALED GLASS CAN BE USED IN PRODUCTION UNITS. TEST REPORT NO. AI-04010-A1 DOCUMENTS FRAME DEFLECTIONS LESS THAN L/175.
- 7.4. GLASS MEETS THE REQUIREMENTS OF ASTM E1300-12AE1.
- 8. PANEL OPERABILITY DESIGNATIONS:
- 8.1. O = FIXED
- 9. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DETAILED IN ACCORDANCE WITH THE FBC, RESIDENTIAL AND BUILDING VOLUMES AND WITH FMA/AAMA/WDMA PROTOCOLS. PERIMETER SEALANT BY OTHERS SHOWN IN THE SECTION VIEWS IS FOR ILLUSTRATION ONLY AND NOT PART OF THIS PRODUCT APPROVAL DOCUMENT.

	TABLE OF CONTENTS			
SHEET	SHEET DESCRIPTION			
1	INSTALLATION AND GENERAL NOTES			
2	EXTERIOR ELEVATION AND ANCHORAGE			
3	INSTALLATION DETAILS A & B			
4	VERTICAL SECTION A - THROUGH FRAME INSTALLATION			
5	VERTICAL SECTION A - CLIP INSTALLATION			
6	HORIZONTAL SECTION C - THROUGH FRAME INSTALLATION			
7	HORIZONTAL SECTION C - CLIP INSTALLATION			
8	BILL OF MATERIALS, CLIP & COMPONENT CROSS-SECTIONS			

#### **GEOMETRIC SHAPES**

AAMA/WDMA/CSA 101/I.S. 1/A440-2008
SECTION 4.4.2.5 MAXIMUM SIZE TESTED (MST)
"ANY GEOMETRIC SHAPE THAT FITS WITHIN THE RECTANGULAR
GATEWAY SIZE (OR LARGER TEST SIZE) FOR A PARTICULAR PRODUCT
TYPE SHALL BE PERMITTED TO BE QUALIFIED BY THE RECTANGULAR
SHAPE, PROVIDED THAT THE FRAME, SASH, LEAVES, PANELS,
HARDWARE, HARDWARE LOCATION, COMPONENTS, AND
CONSTRUCTION REMAIN THE SAME."

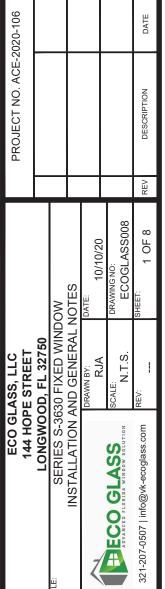
BASED ON THE ABOVE, ANY GEOMETRIC SHAPE WITH OVERALL DIMENSIONS EQUAL TO OR LESS THAN WIDTH X HEIGHT OF 59" X 71" IS ACCEPTABLE. FRAME HEAD, SILL, AND JAMBS ARE THE SAME PVC PROFILE. THEREFORE, WIDTH AND HEIGHT DIMENSIONS ARE INTERCHANGEABLE.

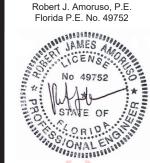
#### **INSTALLATION NOTES:**

- INSTALL ONE (1) ANCHOR AS INDICATED IN THE SECTION DETAILS ON SHEETS 5
  THROUGH 8 AT EACH LOCATION SHOWN IN THE ELEVATION ON SHEET 2.
- 1.1. LOCATION TOLERANCE IS +/- 1/2".
- 1.2. FOR WINDOWS SMALLER THAN THAT SHOWN IN SHEET 2 ELEVATION, ANCHOR QUANTITIES CAN BE REDUCED WHILE MAINTAINING THE ANCHOR SPACING AND EDGE DISTANCE SHOWN.
- 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".
- 3. INSTALLATION ANCHORAGE
- 3.1. SEE INSTALLATION ANCHOR SCHEDULE ON SHEET 3 FOR ANCHOR TYPE, EMBEDMENT AND EDGE DISTANCE REQUIREMENTS.
- 3.2. SEE ANCHOR REQUIREMENTS TABLE ON SHEET 3 FOR QUANTITY, EDGE DISTANCE AND ANCHOR SPACING REQUIREMENTS BASED ON WINDOW SIZE.
- 3.3. INSTALLATION ANCHORS SHALL BE CORROSION RESISTANT OR HAVE CORROSION RESISTANT COATING.
- 3.4. SEE INSTALLATION NOTE 4 FOR MINIMUM SUBSTRATE PROPERTIES.
- INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
- 4.1. WOOD MINIMUM SPECIFIC GRAVITY OF 0.42 (NON-HVHZ).
- 4.2. CONCRETE MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.
- 4.3. MASONRY STRENGTH CONFORMANCE TO ASTM C-90 MEDIUM WEIGHT WITH COMPRESSIVE STRENGTH OF 1900 psi (DENSITY > 117 PCF).
- 4.4. STEEL STUD STRENGTH CONFORMING TO MIN. Fu = 33 KSI AND Ft = 45 KSI. MINIMUM THICKNESS 20 GA.

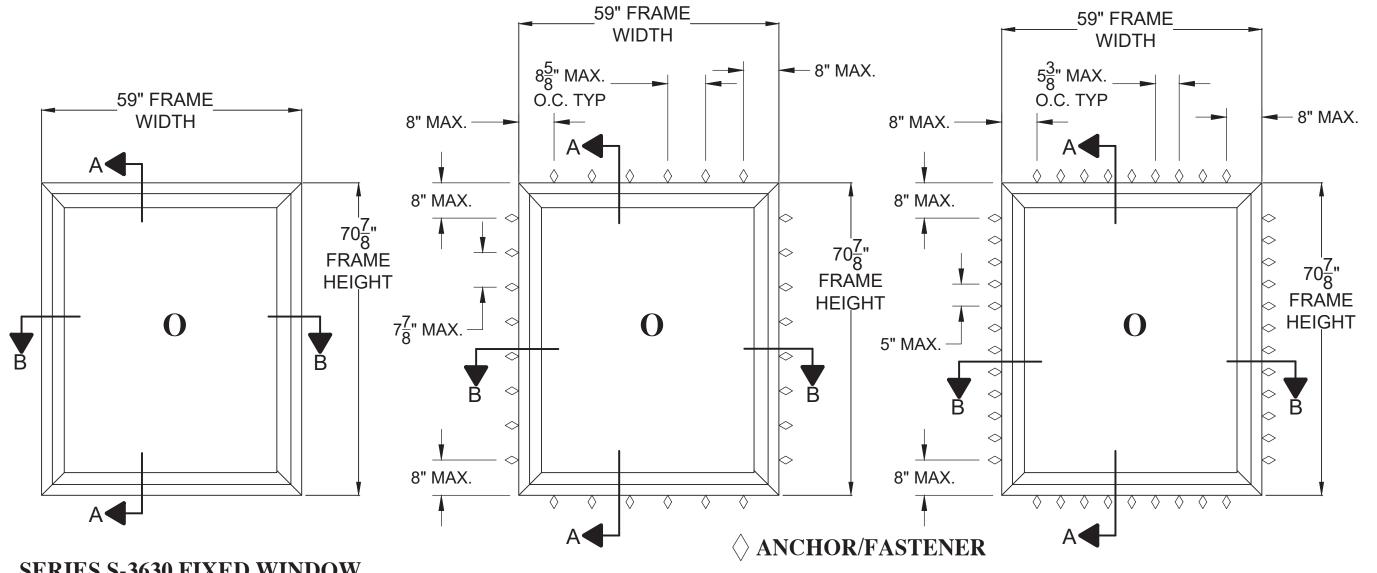
PERFORMANCE RATING						
MAXIMUM WINDOW SIZE (IN) (SEE <u>GEOMETRIC SHAPES</u> NOTE ON THIS SHEET)	GLAZING DETAIL (SEE NOTE 7.1)	DESIGN PRESSURE RATING (PSF)	IMPACT RATING			
59 x 71	А	100	NONE			

	INSTALLATION ANCHORAGE SCHEDULE				
1	SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBED. (IN)	MIN. EDGE DIST. (IN)	
	WOOD (SG = 0.42 MIN.)	NO. 10 PAN HEAD WOOD SCREW, GR. 2 STRENGTH	1 3/8	3/4	
	CONCRETE (2.5 KSI MIN.)	3/16" HH ITW TAPCON	1 1/2	1 1/8	
	MASONRY (ASTM C-90 MEDIUM WEIGHT WITH COMPRESSIVE STRENGTH OF 1900 psi (DENSITY > 117 PCF)	3/16" HH ITW TAPCON	1	2	
	STEEL STUD, 20 GA OR GREATER THICKNESS, MIN. Fu = 33 ksi AND Ft = 45 ksi	NO. 10 SELF-DRILLING SHEET METAL SCREW	FULL THICKNESS OF MEMBER PLUS 3 FULL THREAD LENGTHS PAST INTERIOR	1/2	





by Robert J Amoruso Date: 2020.10.12 09:39:45 -04'00'



## SERIES S-3630 FIXED WINDOW NOMINAL 59 X 71

EXTERIOR VIEW

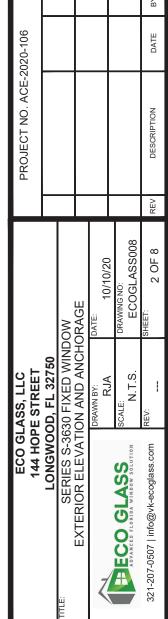
MAXIMUM SIZES		
FRAME	59" X 70-7/8" (Nominal 59 X 71)	
DLO	55.6" X 67.44"	

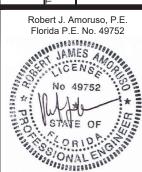
NOMINAL 59 X 71
CLIP INSTALLATION UP TO 100 PSF
DESIGN PRESSURE

EXTERIOR VIEW

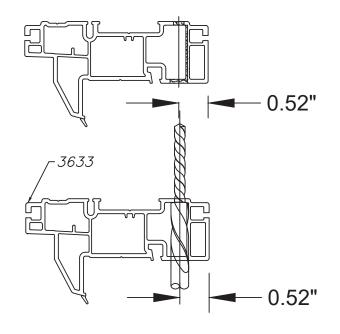
# NOMINAL 59 X 71 BLOCK/EQUAL LEG THROUGH FRAME UP TO 100 PSF DESIGN PRESSURE

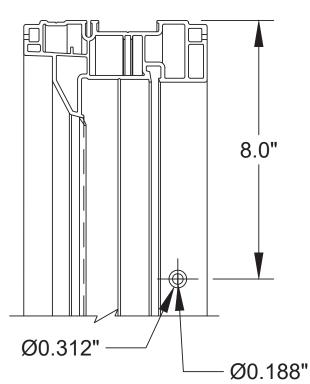
EXTERIOR VIEW



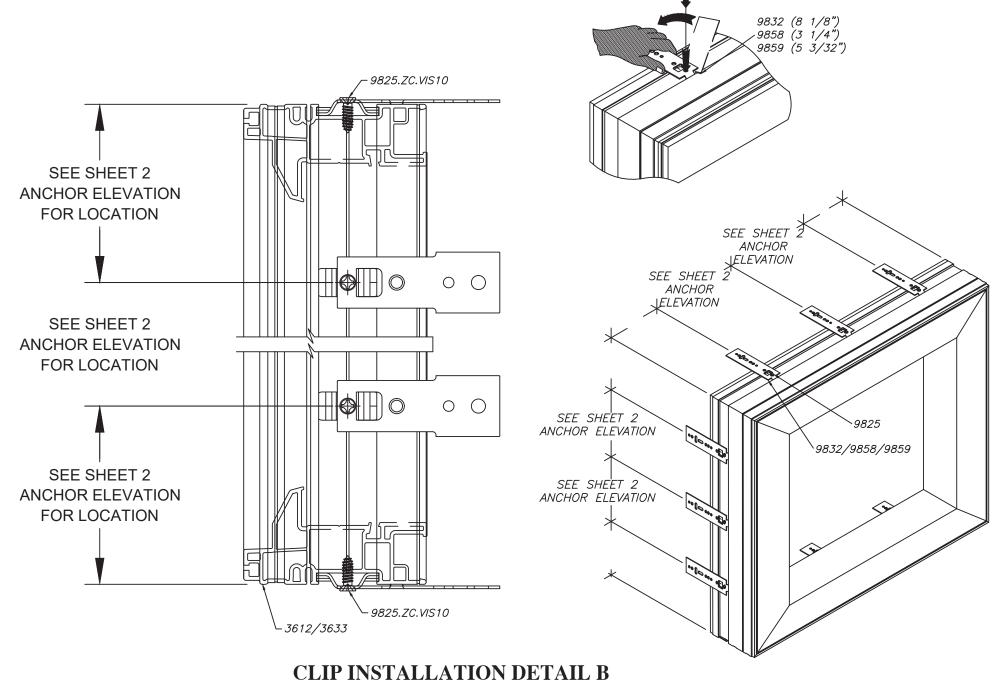


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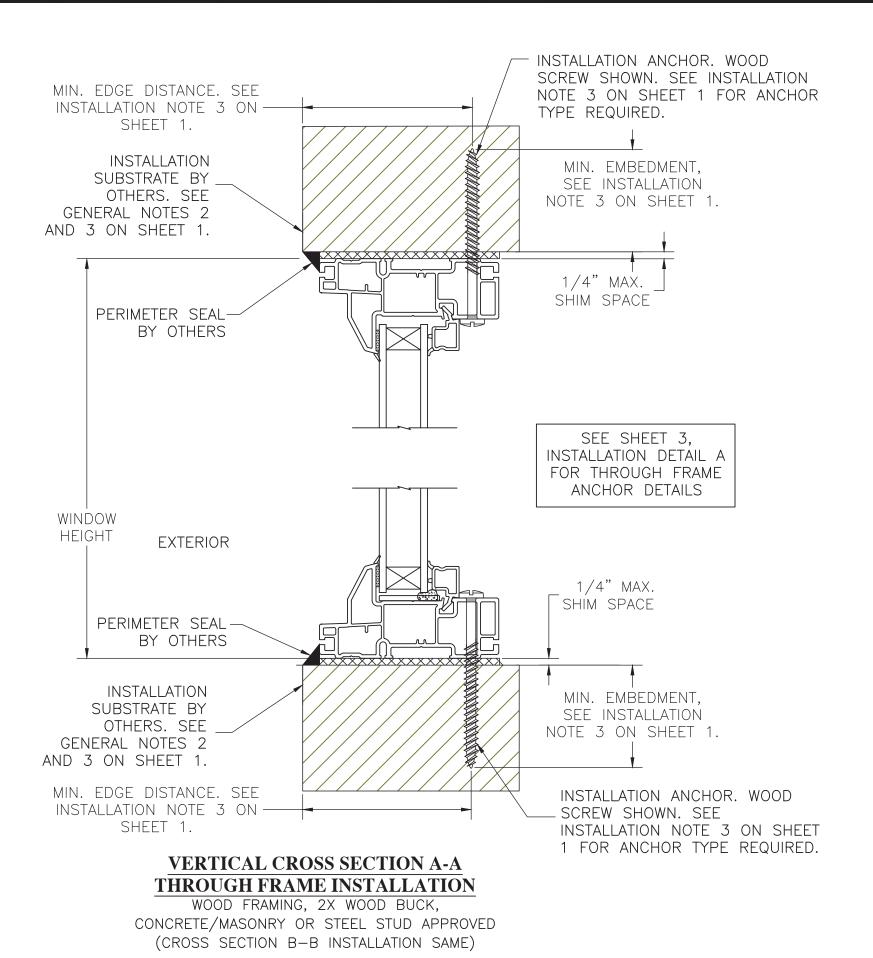


THROUGH-FRAME INSTALLATION DETAIL A



PROJECT NO. ACE-2020-106 ECO GLASS Robert J. Amoruso, P.E. Florida P.E. No. 49752

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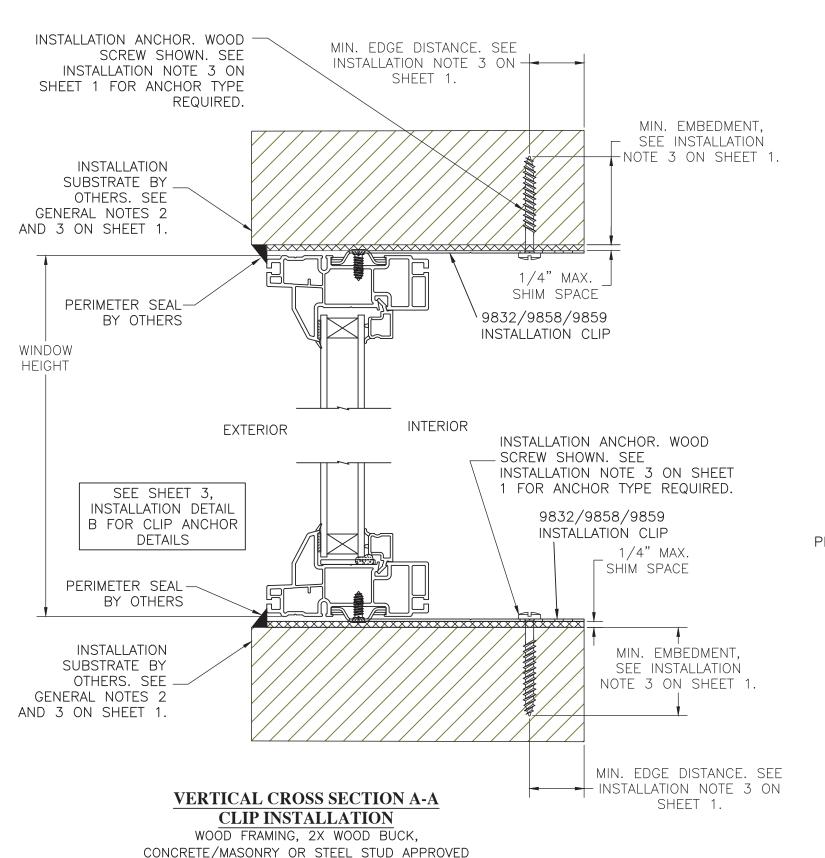
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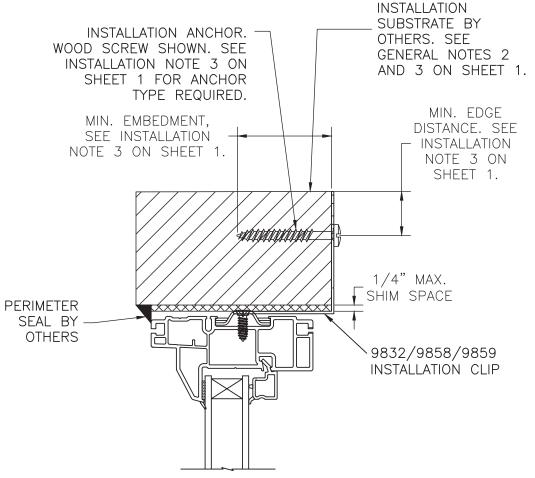
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(CROSS SECTION B-B INSTALLATION SAME)
(SEE NOTE 1 THIS SHEET)

NOTE 1: INSTALLATION CLIP MAY BE TRIMMED TO ACCOMMODATE INTERIOR FINISHING.

NOTE 2: INSTALLATION CLIP MAY BE BENT TO ACCOMODATE INTERIOR FINISHING.



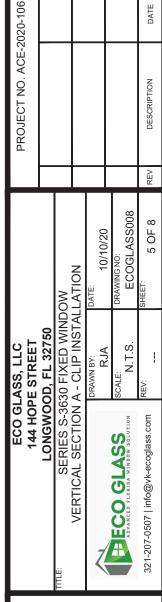
#### VERTICAL CROSS SECTION A-A ALTERNATE CLIP INSTALLATION (HEAD SHOWN, SILL SAME)

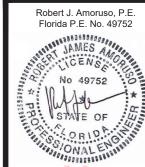
WOOD FRAMING, 2X WOOD BUCK OR STEEL STUD

APPROVED (CONCRETE/MASONRY NOT RECOMMENDED)

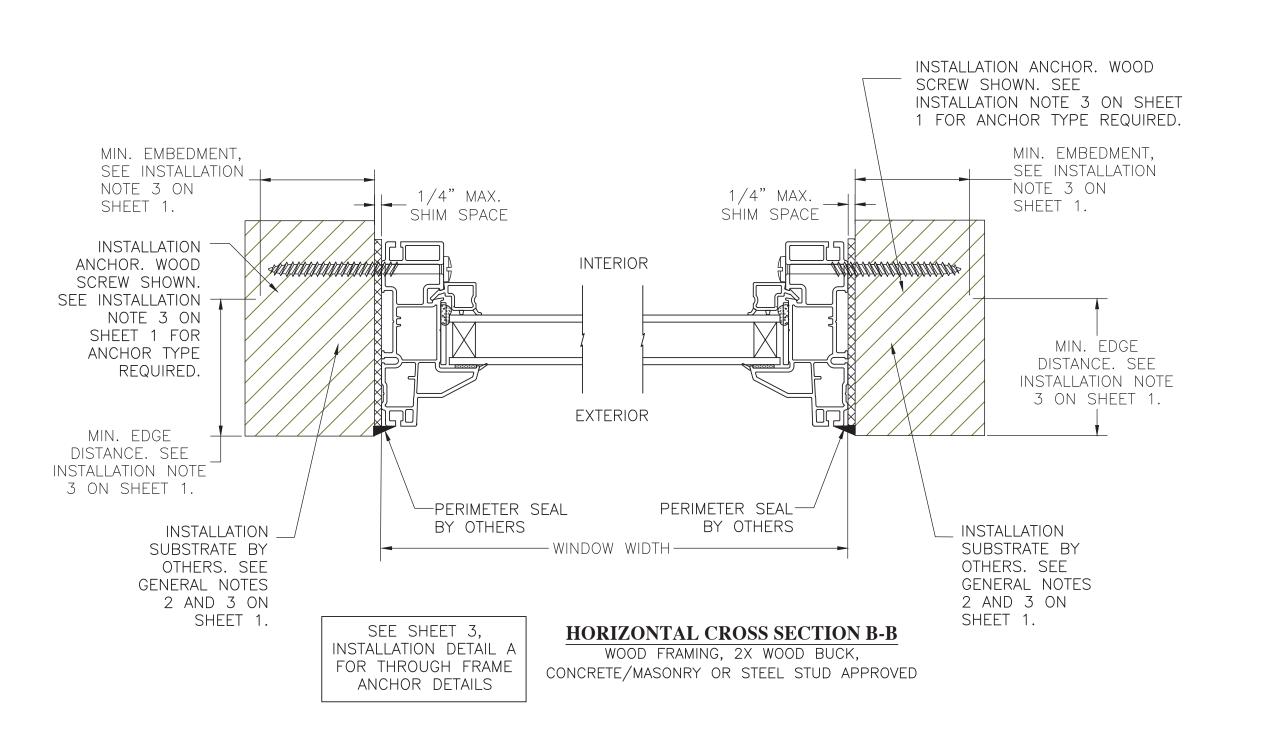
(CROSS SECTION B-B INSTALLATION SAME)

(SEE NOTE 1 & 2 THIS SHEET)





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PROJECT NO. ACE-2020-106 GLASS. ADVANCED FLO

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

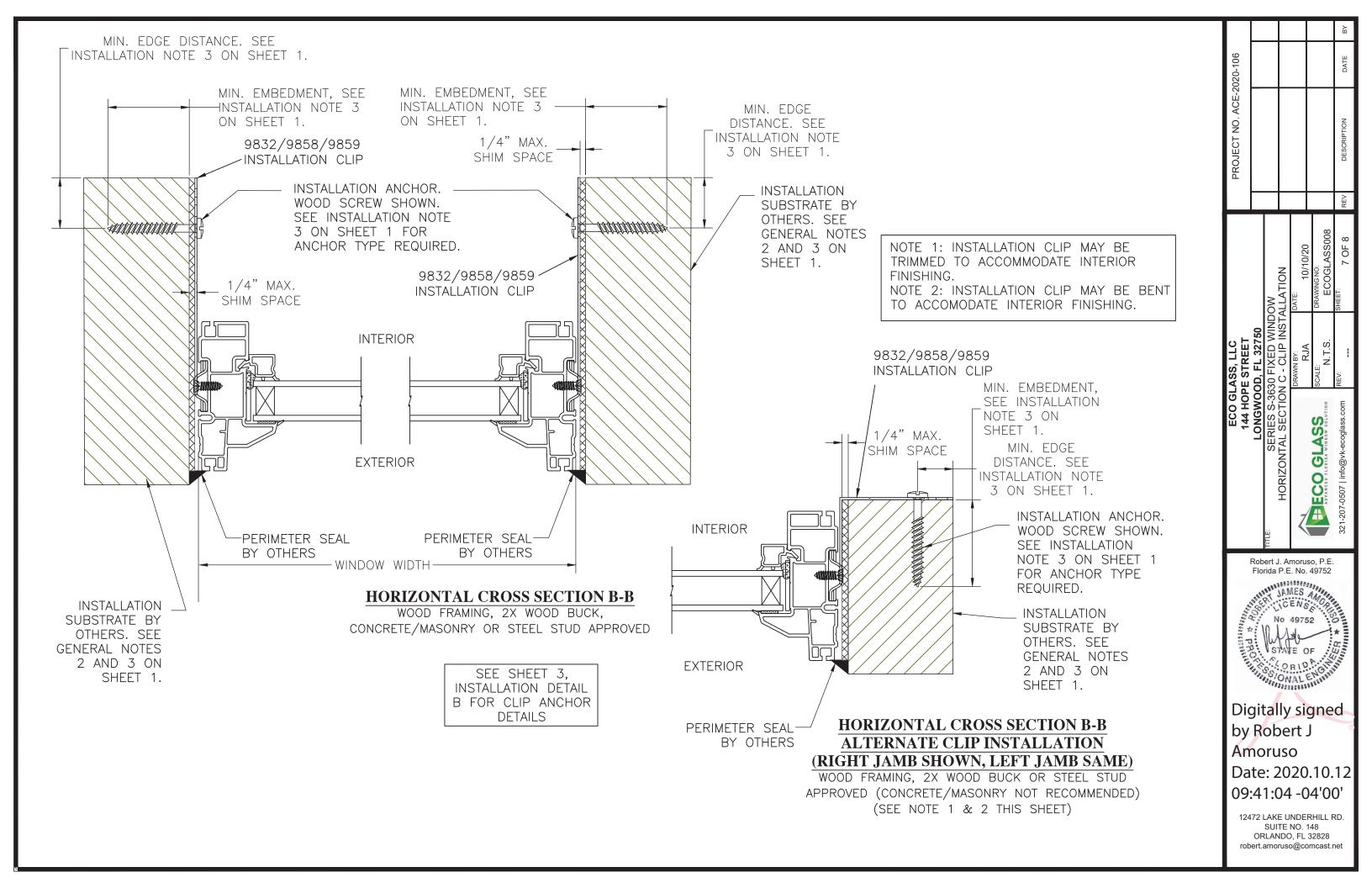
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No. 49752

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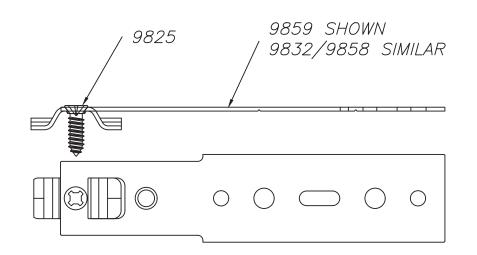
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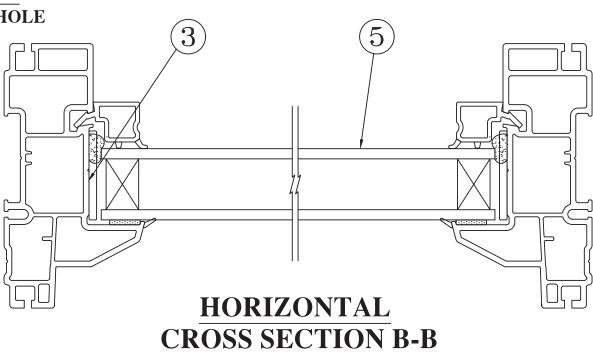


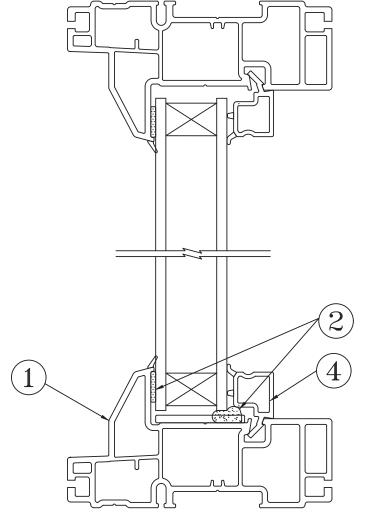
ltem	PART No.	Item Description	Source
1	3633	Main frame	P.H. Tech
2		Sealant	Various
3	8851	Setting block	P.H. Tech
	5776, 5777, 5800, 5807 5802, 5803, 5804 5805, 5815	Glazing bead	P.H. Tech
5		Glass	Various



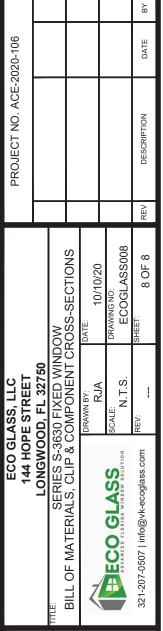
### INSTALLATION CLIP 9859 SHOWN 9832 & 9858 SIMILAR

(CLIP LENGTH AND FASTENER HOLE PATTERN VARIES)

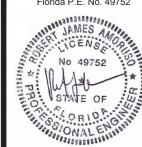




VERTICAL CROSS SECTION A-A



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



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