RENAISSANCE WINDOWS AND DOORS **SERIES 8500 VINYL SINGLE HUNG WINDOW** TWIN AND TRIPLE

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

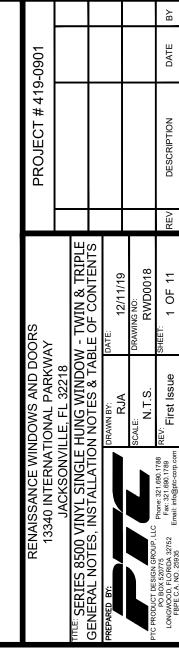
- 1. THIS PRODUCT HAS BEEN TESTED, EVALUATED AND DESIGNED TO THE CURRENT EDITION OF THE FLORIDA BUILDING CODE. TESTING 1. WAS CONDUCTED IN ACCORDANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440-08 AND 11.
- 2. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT NO. NCTL-210-4105-02A (WITH GATEWAY TESTING BASED ON NCTL-210-4105-02) AND NCTL-210-4105-04 AND ASSOCIATED LABORATORY DRAWINGS BY NATIONAL CERTIFIED TESTING LABORATORIES.
- 3. THIS PRODUCT EVALUATION DOCUMENT IS NOT FOR USE IN THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 4. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE / MASONRY AND 2X FRAMING 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.
- 5. 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.
- 6. WHEN INSTALLED IN LOCATIONS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST, THIS PRODUCT REQUIRES OPENING PROTECTION IN ACCORDANCE WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE USING AN APPROVED IMPACT PROTECTION DEVICE.
- 7. 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.
- 8. WINDOW FRAME MATERIAL: VINYL (PVC).
- 9. GLASS MEETS THE REQUIREMENTS OF ASTM E1300-09a.
- DESIGNATIONS "X" STANDS FOR OPERABLE LITE/SASH AND "O" STANDS FOR FIXED LITE.
- 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.

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| 4 | 97" x 72" WINDOW ELEVATION/THRU FRAME ANCHORING LAYOUT | | | | |
| 5 | 109" x 72" WINDOW ELEVATION/FIN ANCHORING LAYOUT | | | | |
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INSTALLATION NOTES:

- 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. SEE INSTALLATION ANCHOR SCHEDULE ON SHEET 2 FOR TYPE AND GRADE OF ANCHOR, AND/OR MANUFACTURER'S ANCHOR SPECIFICATIONS, INCLUDING MINIMUM NOMINAL SIZE. MINIMUM EMBEDMENT INTO SUBSTRATE AND MINIMUM EDGE
- 2.1. EDGE DISTANCES SHALL BE MEASURED FROM CENTERLINE OF ANCHOR TO EDGE OF STRUCTURAL SUBSTRATE EITHER TO THE INTERIOR OR EXTERIOR OF THE FENESTRATION PRODUCT.
- 2.2. MINIMUM EMBEDMENT SHALL BE BASED ON PENETRATION INTO MAIN WIND FORCE RESISTING SYSTEM SUBSTRATE.
- 3. SEE SHEETS 7 THROUGH 9 FOR SPECIFIC ANCHOR INSTALLATION DETAILS.
- 4. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
- 5. ANCHOR QUANTITIES AND SPACING / EMBEDMENT AND EDGE DISTANCE
- 5.1. THE NUMBER OF INSTALLATION ANCHORS IS BASED ON THE MAXIMUM END DISTANCE (ED) AND THE MAXIMUM ON CENTER (O.C.) SPACING PLACEMENT OF ANCHORS IN ACCORDANCE WITH ELEVATIONS ON SHEETS 3 THRU 6.
- 5.2. END DISTANCES AND O.C. SPACINGS LESS THAN THAT SHOWN IN THE ELEVATIONS ON SHEETS 3 THRU 6 ARE ACCEPTABLE.
- 5.3. FOR WINDOW SIZES SMALLER THAN THOSE SHOWN, ANCHOR QUANTITIES CAN BE REDUCED WHILE MAINTAINING EDGE DISTANCE AND O.C. SPACING REQUIREMENTS.
- ANCHOR QUANTITIES AND SPACINGS SHOWN ARE BASED ON THE LOWER OF ANCHOR SPACING USED IN TESTING OR REQUIRED BY LOADING AT DESIGN PRESSURE.
- 5.5. SEE EMBEDMENT AND EDGE DISTANCE DESCRIPTION ON SHEET 2.
- 6. MAXIMUM ALLOWABLE SHIM THICKNESS IS 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF WOOD COMPOSITE, HIGH DENSITY PLASTIC OR SIMILAR LOAD BEARING MATERIAL.
- 7. FOR CONCRETE BLOCK APPLICATIONS DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS.
- 8. 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 IN THE INSTALLATION ANCHOR SCHEDULE ON SHEET 2.

| PERFORMANCE RATING | | | | |
|---|---|---------------|------------------------|--|
| MAXIMUM WINDOW SIZE GLAZING DETAIL (SEE SHEET 11) DESIGN PRESSURE (PSF) | | IMPACT RATING | | |
| NOMINAL 97" x 72" (Twin Window) | А | +/- 35 | NONE. | |
| NOMINAL 109" x 72" (Triple Window) | А | +/- 40 | SEE GENERAL NOTE 6. | |



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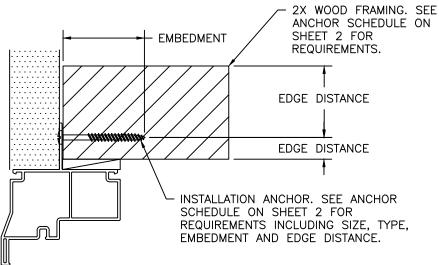
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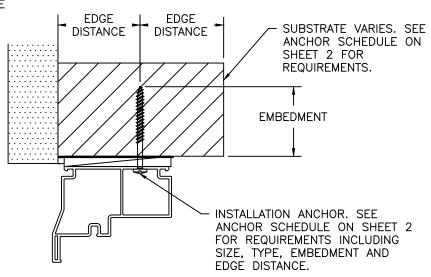
| INSTALLATION ANCHOR SCHEDULE | | | | | | | | | | |
|---|--------------------------------|-----------------------|---------------------|---------------------|--|---------------------------|----------------------------|---|---|------------------------|
| INSTALLATION TYPE | SECTION VIEW | FASTENER HEAD TYPE | FASTENER SIZE | SUBSTRATE | MANUFACTURER AND/OR SPECIFICATION | MIN. EMBEDMENT (IN) | MIN. EDGE DISTANCE (IN) | MIN. SPACING (IN) BETWEEN FRAME ANCHORS | ANCHOR CAPACITIES BASED ON | |
| THROUGH FRAME ANCHOR | SECTION A, B & C (SHEETS 9) | | 3/16" | CONCRETE | ITW TAPCONS (1) | 1 | 1-1/8 | 3 | MIN. 2500 PSI CONCRETE | |
| | | | | MASONRY (BLOCK/CMU) | ITW TAPCONS (1) | 1 | 2 | 3 | STRENGTH CONFORMANCE TO ASTM C-90, MEDIUM WEIGHT | |
| | | PAN HEAD | No. 10 | WOOD | ANSI B18.6.1 (WOOD SCREW) (2) GRADE 2 EQUIVALENT ASME B18.6.4 (TAPPING SCREW) (2) GRADE 2 EQUIVALENT | 1-3/8 | 3/4 | 2 1/2 | WOOD WITH A MINIMUM SPECIFIC GRAVITY OF 0.42. | |
| SNAP-ON FLANGE WITH THROUGH FRAME ANCHOR | SECTION A, B & C (SHEETS 8) | | | 2 (2 2 11 | CONCRETE | ITW TAPCONS (1) | 1 | 1-1/8 | 3 | MIN. 2500 PSI CONCRETE |
| | | HEX HEAD 3/16" | MASONRY (BLOCK/CMU) | ITW TAPCONS (1) | 1 | 2 | 3 | STRENGTH CONFORMANCE TO ASTM C-90, MEDIUM WEIGHT | | |
| | | PAN HEAD | No. 10 | WOOD | ANSI B18.6.1 (WOOD SCREW) (2) GRADE 2 EQUIVALENT ASME B18.6.4 (TAPPING SCREW) (2) GRADE 2 EQUIVALENT | 1-3/8 | 3/4 | 2 1/2 | WOOD WITH A MINIMUM SPECIFIC GRAVITY OF 0.42. | |
| NAILING FIN ANCHOR | SECTION A, B & C (SHEETS 7) | PAN HEAD | No. 8 | WOOD | ANSI B18.6.1 (WOOD SCREW) (3) GRADE 2 EQUIVALENT ASME B18.6.4 (TAPPING SCREW) (3) GRADE 2 EQUIVALENT | 1-5/8 | 1/4 | 1 | WOOD WITH A MINIMUM SPECIFIC GRAVITY OF 0.42. | |

NOTES:

- 1) WHEN ITW TAPCONS ARE USED FOR CONCRETE/MASONRY INSTALLATION, THEY SHALL BE THE ADVANCED THREADFORM TECHNOLOGY TYPE.
- 2) FOR WOOD SCREW INSTALLATION INTO WOOD SUBSTRATE; IF SPLITTING IS A CONCERN, DRILL 0.090" PILOT HOLE (DRILL SIZE 43). FOR TAPPING SCREW INSTALLATION INTO WOOD SUBSTRATE; IF SPLITTING IS A CONCERN, DRILL 0.121" PILOT HOLE (DRILL SIZE 31).
- 3) FOR WOOD OR TAPPING SCREW INSTALLATION INTO WOOD SUBSTRATE; IF SPLITTING IS A CONCERN, DRILL 0.082" PILOT HOLE (DRILL SIZE 45).

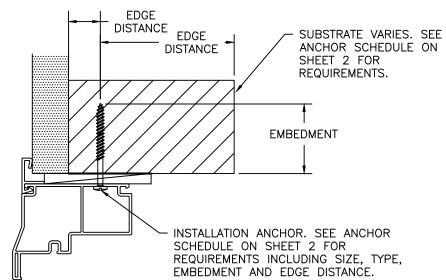


EMBEDMENT AND EDGE DISTANCE NAILING FIN FRAME INSTALLATION



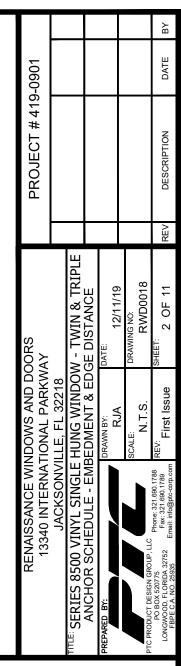
EMBEDMENT AND EDGE DISTANCE

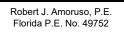
THROUGH-FRAME INSTALLATION



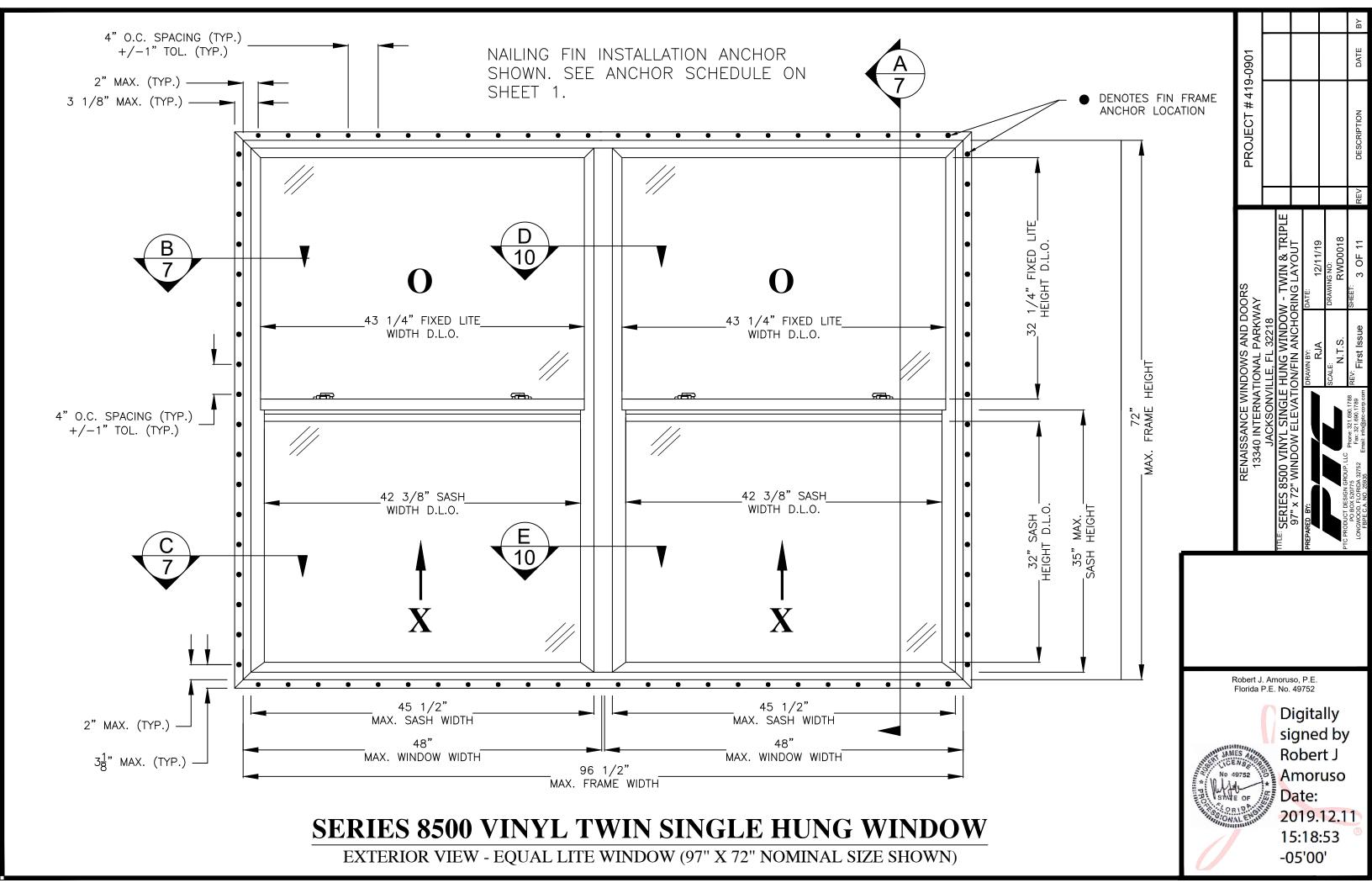
EMBEDMENT AND EDGE DISTANCE

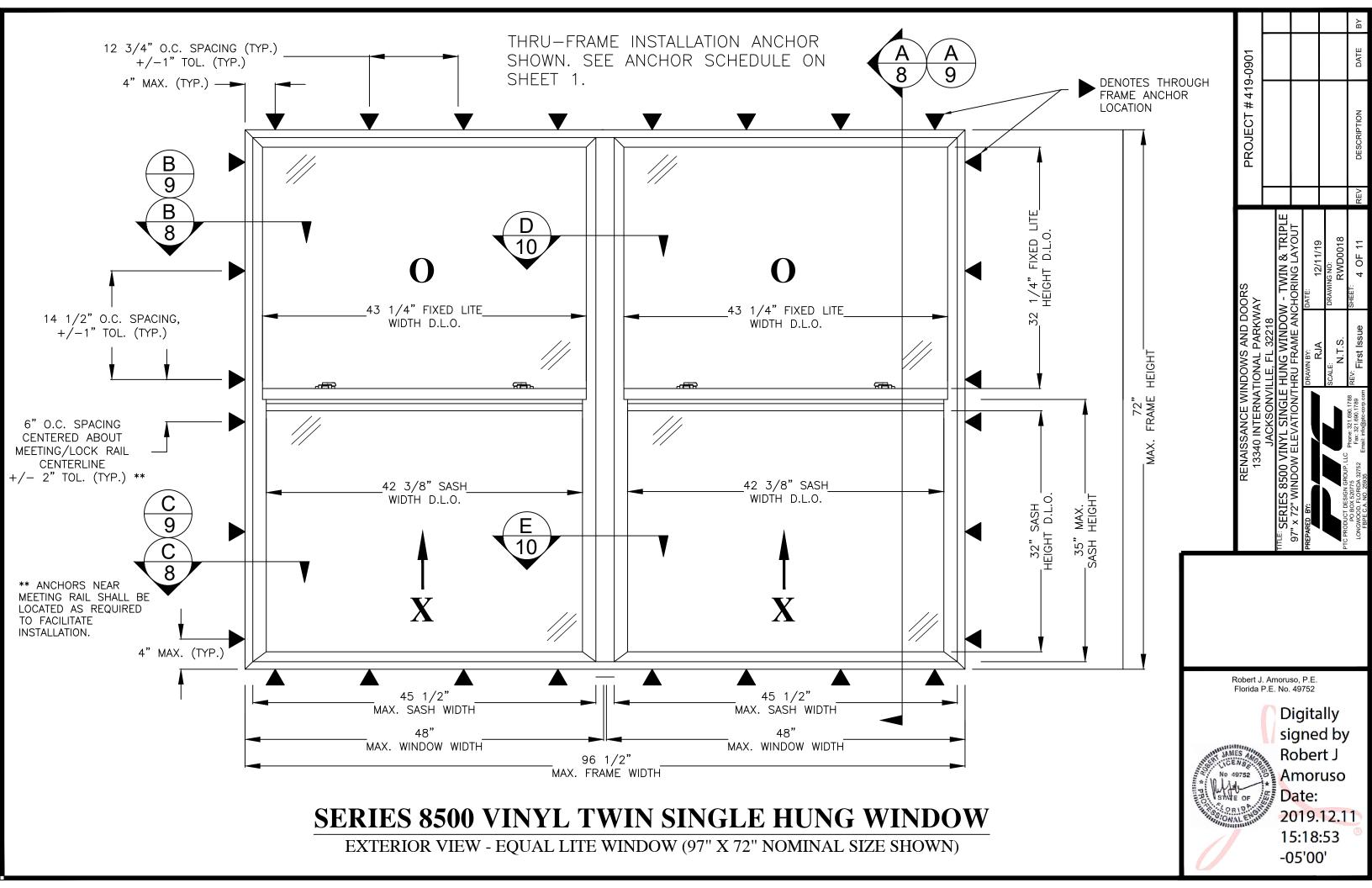
SNAP-ON FLANGE THROUGH-FRAME INSTALLATION

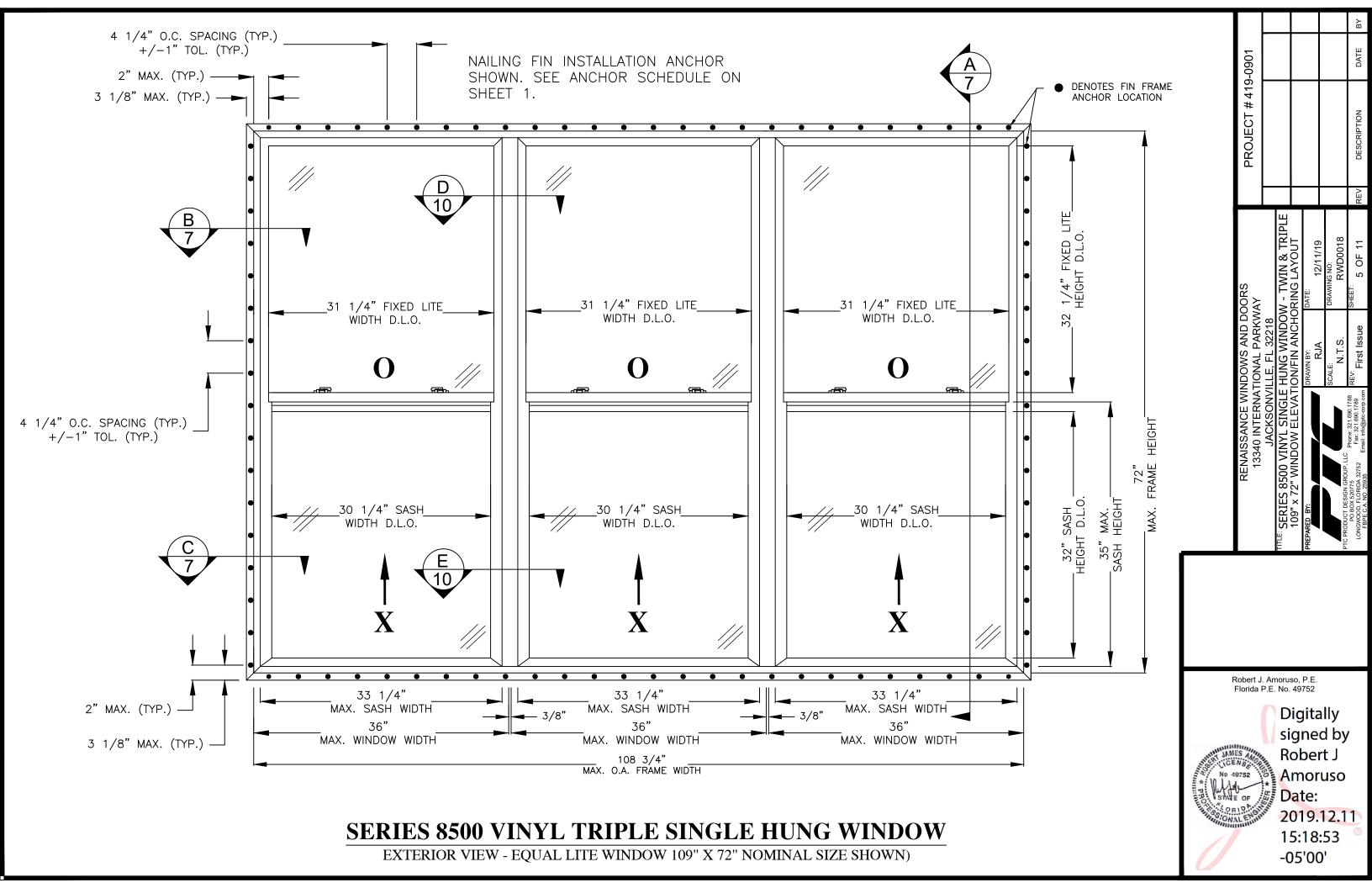


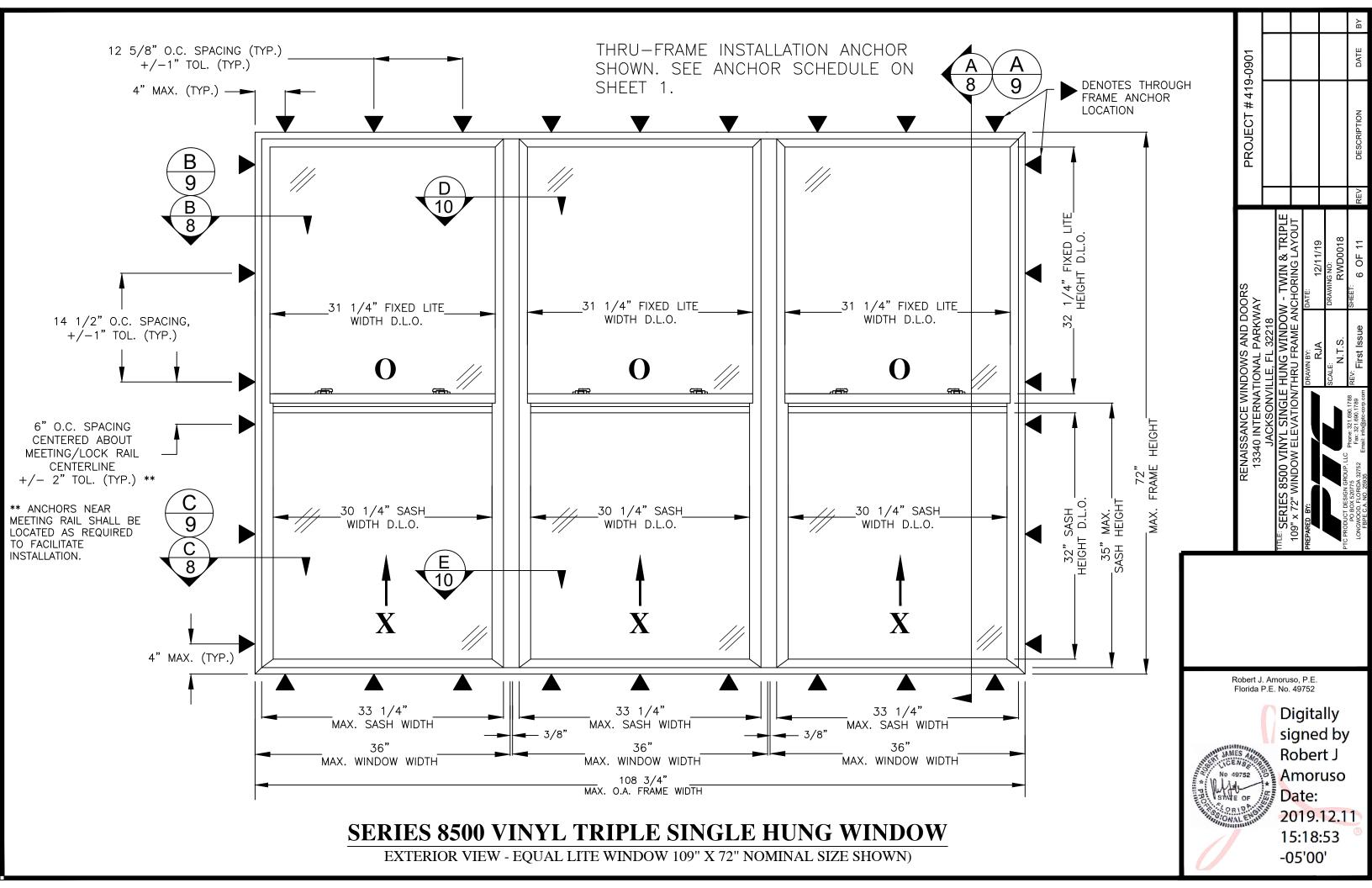


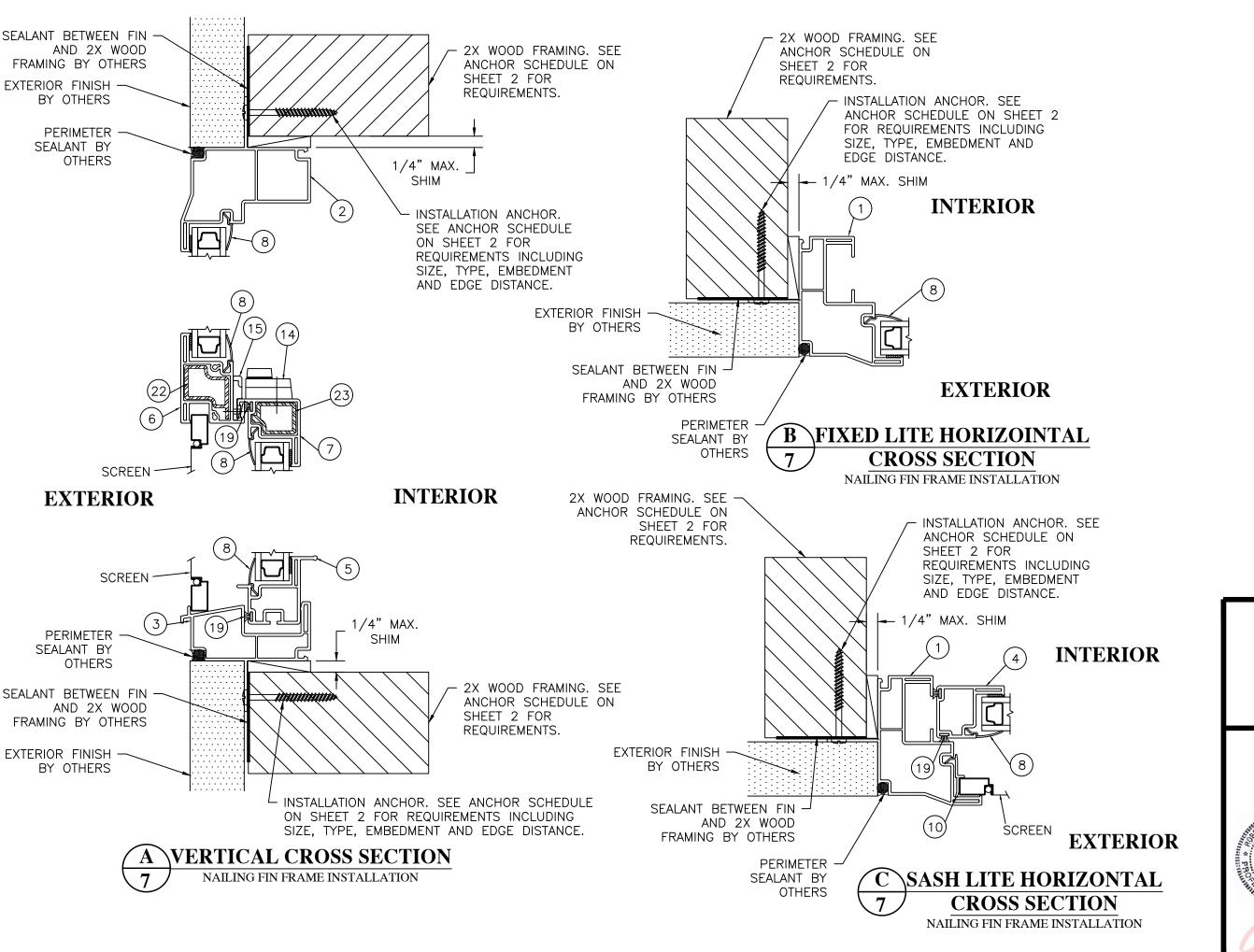


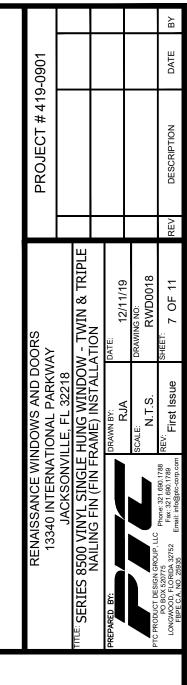




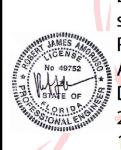








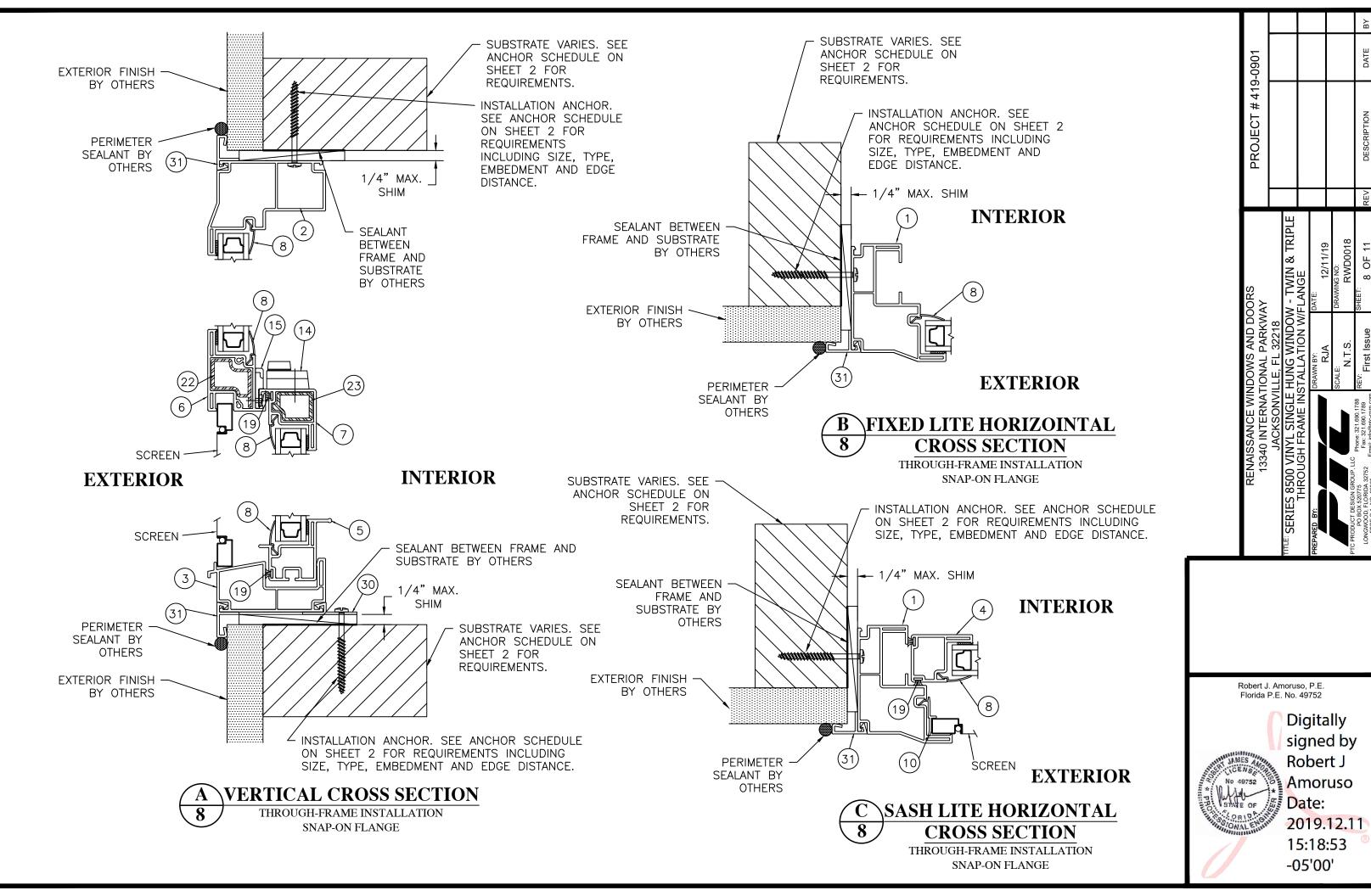
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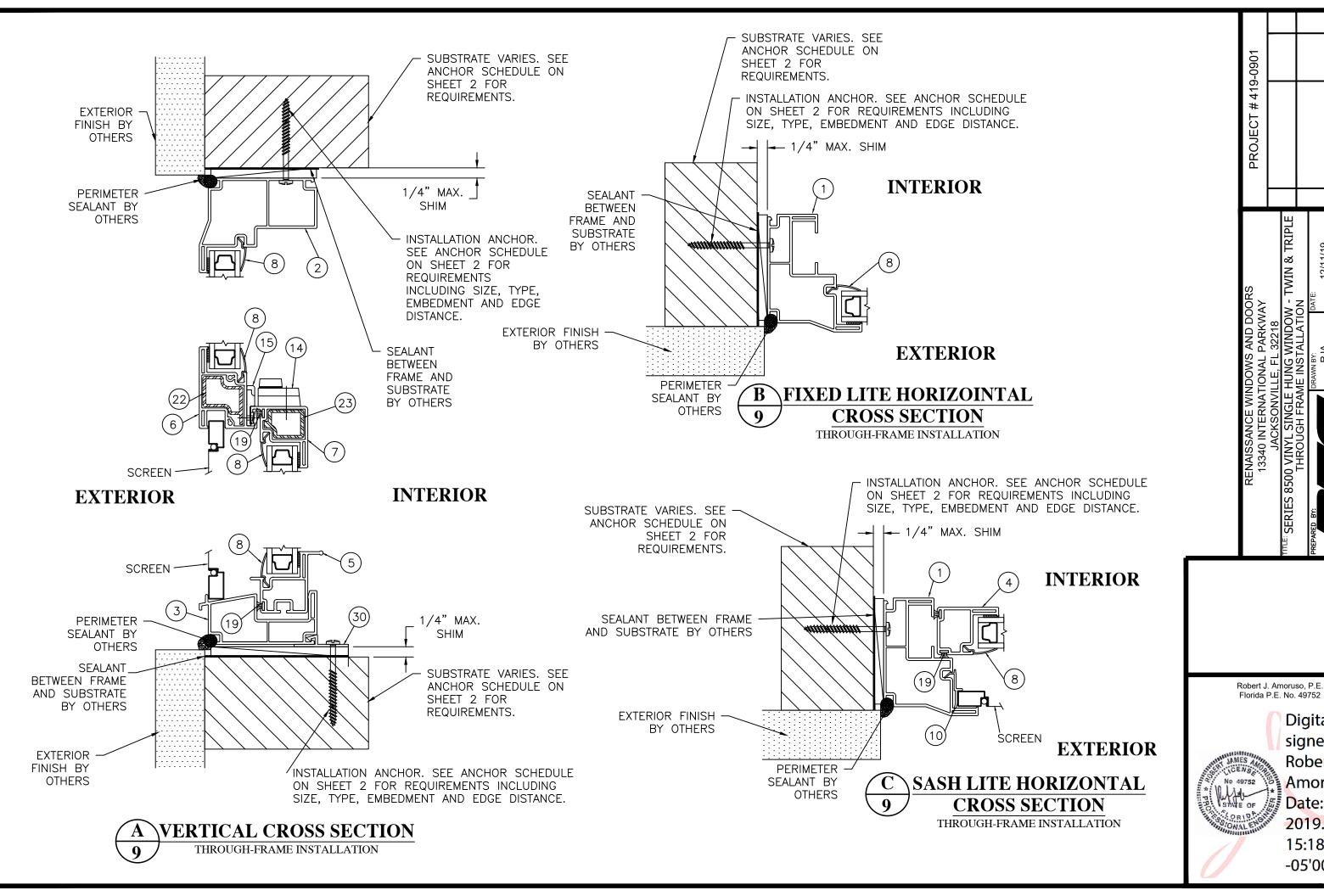


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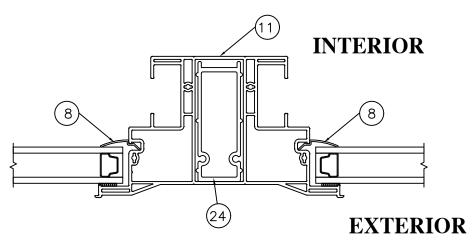
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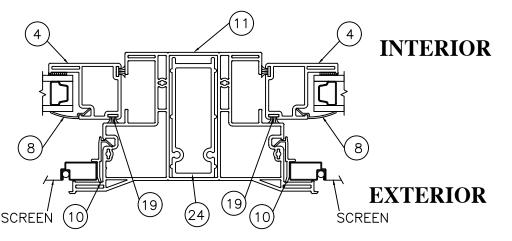
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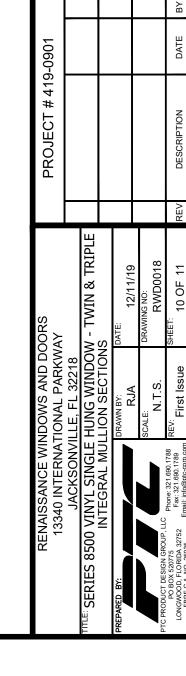
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FIXED LITE HORIZOINTAL CROSS SECTION
INTERMEDIATE JAMB - TSH T-BAR

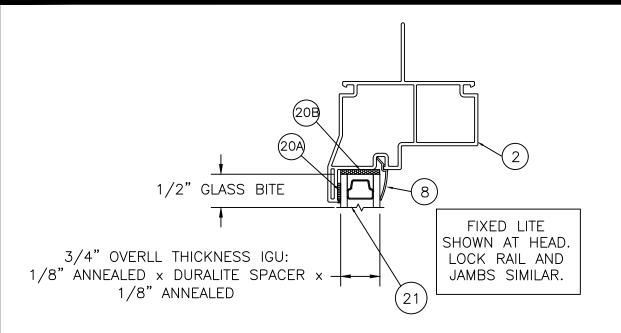




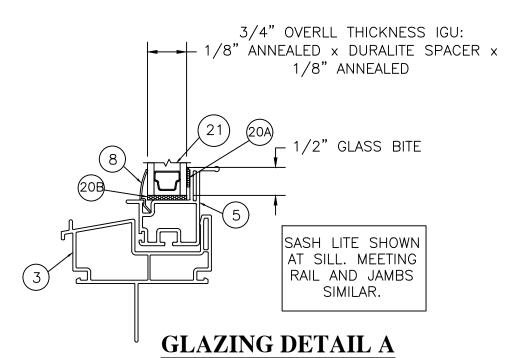


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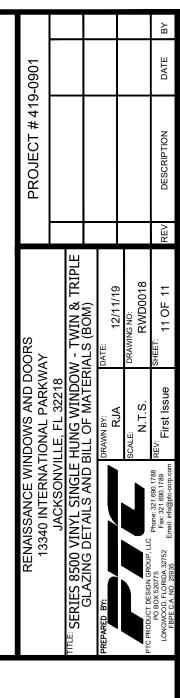
GLAZING DETAIL A



NOTES:

- 1. A MINIMUM OF TWO (2) NEOPRENE SETTING BLOCKS WITH 70 TO 90 SHORE A DUROMETER HARDNESS ARE REQUIRED AT BOTTOM (SILL) OF GLAZING LITES MORE THAN 3 FEET IN WIDTH.
- 2. AS-TESTED IGU SYSTEM SHOWN. SUBSTITUTIONS ARE ALLOWED IN ACCORDANCE WITH AAMA/WDMA/CSA 101/I.S. 2/A440-11, SECTIONS 10.2.3.2 AND 10.2.3.4. SEE SHEET 1 FOR DETAILS RELATED TO WINDOW SIZE / GLAZING DETAIL / DESIGN PRESSURE.

| BILL OF MATERIALS 8500 SERIES SH - TWIN AND TRIPLE | | | | | | | |
|--|------------------|----------------------------------|--------------------------|--|--|--|--|
| BOM NO. | PART NO. | DESCRIPTION | REMARKS | | | | |
| 1 | 7867 | JAMB | PVC | | | | |
| 2 | 7868 | HEAD | PVC | | | | |
| 3 | 7869 | SILL | PVC | | | | |
| 4 | 7863 | VENT STILE | PVC | | | | |
| 5 | 7866 | VENT RAIL - SILL | PVC | | | | |
| 6 | 7864 | FIXED INTERLOCK | PVC | | | | |
| 7 | 7865 | VENT INTERLOCK | PVC | | | | |
| 8 | 6177 | GLAZING BEAD | PVC | | | | |
| 9 | 6555 | SETTING BLOCK | NOT SHOWN | | | | |
| 10 | 7871 | SCREEN LOCK | PVC | | | | |
| 11 | 7988 | TSH T-BAR | PVC | | | | |
| | | HARDWARE | | | | | |
| 12 | 9208 | BASE | NOT SHOWN | | | | |
| 13 | 9202 | LEVER | NOT SHOWN | | | | |
| 14 | 9203 | CAM | | | | | |
| 15 | 9659 | KEEPER | | | | | |
| 16 | 677204 | CAM LOCK (OPTIONAL) | NOT SHOWN | | | | |
| 17 | 677133 | KEEPER (OPTIONAL) | NOT SHOWN | | | | |
| 18 | 110-5/MRBLCK | MEETING RAIL BLOCK | Apply 7864 to 7988 T-Bar | | | | |
| | | WEATHERSTRIPPNG | | | | | |
| 19 | | WEATHERSTRIP | .187 x .230 FIN PILE | | | | |
| | | GLAZING | | | | | |
| 20A | | FOAM TAPE BACK-BEDDING | | | | | |
| 20B | | SILICONE | | | | | |
| 21 | GLAZING DETAIL A | 3/4" OVERLL THIC | KNESS IGU | | | | |
| | | REINFORCEMENT | | | | | |
| 22 | RNFCHK | FIXED REINFORCEMENT | ALUMINUM 6063-T5 | | | | |
| 23 | RNFVNT | VENT REINFORCEMENT | ALUMINUM 6063-T5 | | | | |
| 24 | 8632.1 | TSH T-BAR REINFORCEMENT | ALUMINUM 6063-T5 | | | | |
| | BALA | ANCE AND TILT COMPONENTS | | | | | |
| 25 | 700 SERIES | BALANCE (CONSTANT FORCE) | NOT SHOWN | | | | |
| 26 | 728 | PIVOT LOCK SHOE (1.292" x .562") | NOT SHOWN | | | | |
| 27 | 275 | PIVOT BAR | NOT SHOWN | | | | |
| 28 | 9637 | ANCHOR | NOT SHOWN | | | | |
| 29 | 76800/76900 | TILT LATCH ASSEMBLY | NOT SHOWN | | | | |
| INSTALLATION COMPONENTS | | | | | | | |
| 30 | 6384 | SILL CLIP | PVC | | | | |
| 31 | 8864 | SNAP-ON FLANGE | PVC | | | | |



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