

# SIMPSON DOOR CO.

## HEMLOCK FIR I/S DOOR W/ & W/O SIDELITES & TRANSOM

### INSTALLATION ANCHORAGE DETAILS

PROJECT NO. 421-0102				

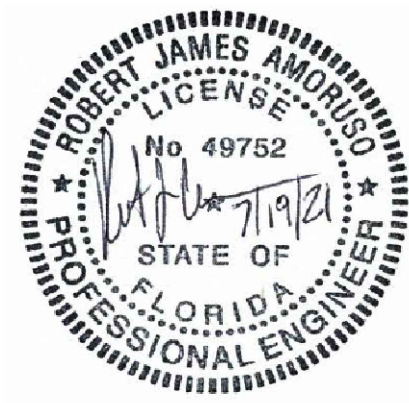
**SIMPSON DOOR COMPANY**  
**400 SIMPSON AVE.**  
**MCCLEARY, WA 98557**

**PREPARED BY:** RJA  
**SCALE:** N.T.S.  
**DATE:** 6/18/21  
**DRAWING NO.:** SIMP0020  
**SHEET:** 1 OF 11

**PTC Product Design Group, LLC**  
 PO Box 320775  
 Lenexa, KS 66157-0775  
 Phone: 321.690.1788  
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 Email: info@ptc-corp.com  
 FBPE C.A. NO. 25595

**TITLE: HEMLOCK FIR I/S DOOR W/ & W/O SIDELITES & TRANSOM**  
**GENERAL AND INSTALLATION NOTES**

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



**GENERAL NOTES:**

1. THIS PRODUCT IS DESIGNED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE - BUILDING (FBC) AND RESIDENTIAL (FRC) REQUIREMENTS EXCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) AT THE DESIGN PRESSURE(S) STATED HEREIN. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT #NCTL-210-4190-2 AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
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 STRUCTURE IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.
3. 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 ENGINEER OR ARCHITECT OF RECORD.
4. IN AREAS WHERE WIND-BORNE DEBRIS PROTECTION REQUIREMENTS EXIST, USE OF AN APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED.
5. DOOR FRAME OR COMPONENTS STRUCTURAL CORE MATERIAL: LAMINATED VENEER LUMBER (LVL) AND/OR FIR OR PINE FINGERJOINTED AND EDGE GLUED CORE MATERIAL. USE OF ALTERNATE WOOD VENEERS ON THE SAME STRUCTURAL CORE MATERIAL IS ACCEPTABLE FOR THIS PRODUCT. LVL MAY BE EITHER VERTICAL OR HORIZONTAL ORIENTATION.
6. GLASS MEETS THE REQUIREMENTS OF ASTM E1300-12AE1.

**INSTALLATION NOTES:**

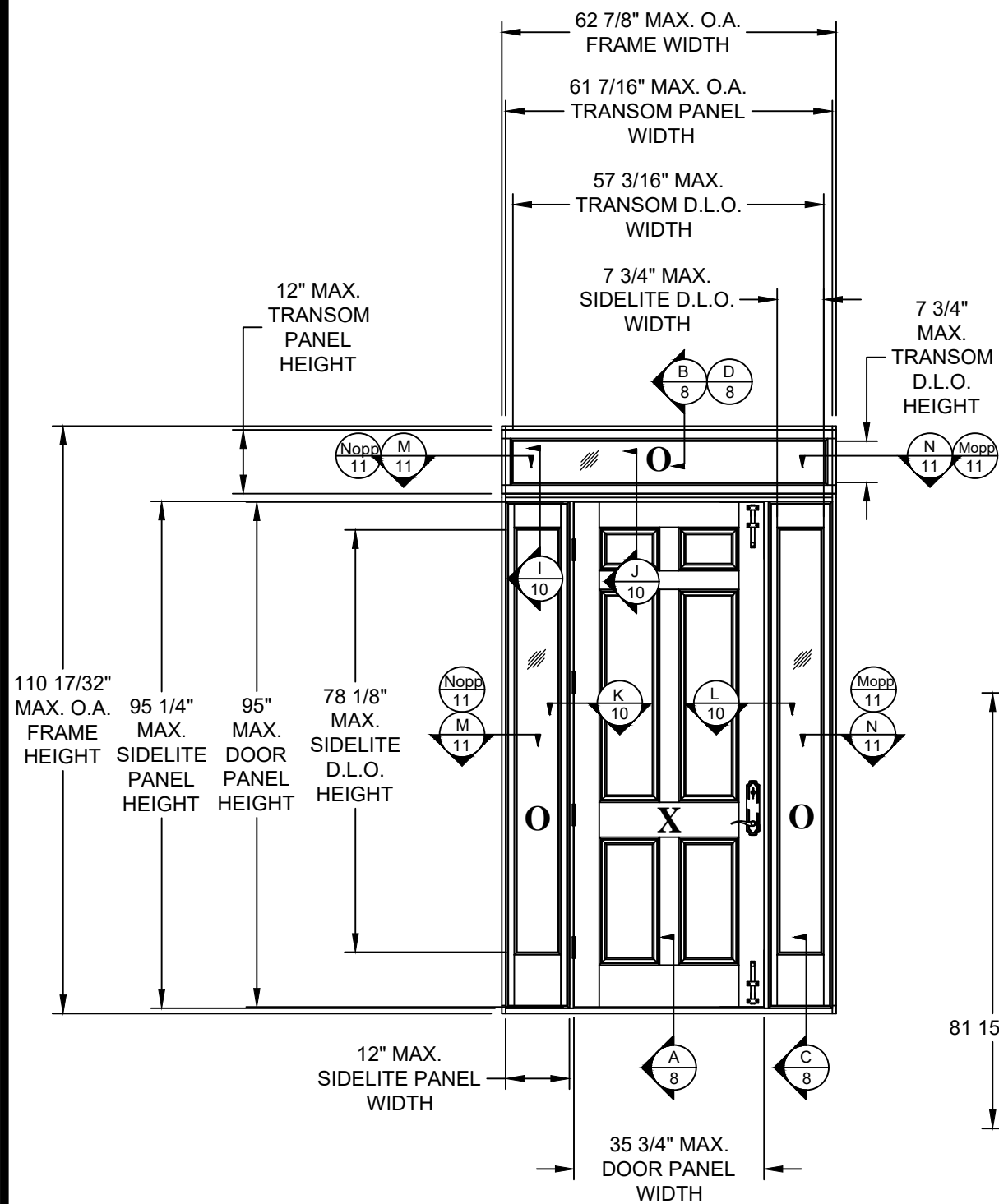
1. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED ARE THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION. ANCHORS ARE TO MATCH TYPE, SIZE, AND EMBEDMENT OF THOSE SHOWN HEREIN FOR RESPECTIVE SUBSTRATE.
3. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM SIZE IS 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
4. FOR INSTALLATION INTO WOOD FRAMING, USE #10 WOOD SCREWS OF SUFFICIENT LENGTH TO ACHIEVE 1 1/2 INCH MINIMUM EMBEDMENT. MINIMUM EDGE DISTANCE IS 3/4 INCHES.
5. FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE / MASONRY, OR DIRECTLY INTO CONCRETE / MASONRY, USE 1/4 INCH ITW TAPCONS (ADVANCED THREADFORM) OF SUFFICIENT LENGTH TO ACHIEVE 1 3/4 INCH MINIMUM EMBEDMENT INTO CONCRETE AND 1 INCH MINIMUM EMBEDMENT INTO MASONRY. MINIMUM EDGE DISTANCE IS 2-1/2 INCHES FOR CONCRETE AND MASONRY.
6. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES (INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER AND SIDING).

7. DESIGNATIONS "X" AND "O" STAND FOR THE FOLLOWING:  
 X: OPERABLE PANEL  
 O: FIXED PANEL
8. 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 AND JOINT SEALANT IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND IS NOT PART OF THIS PRODUCT APPROVAL DOCUMENT.

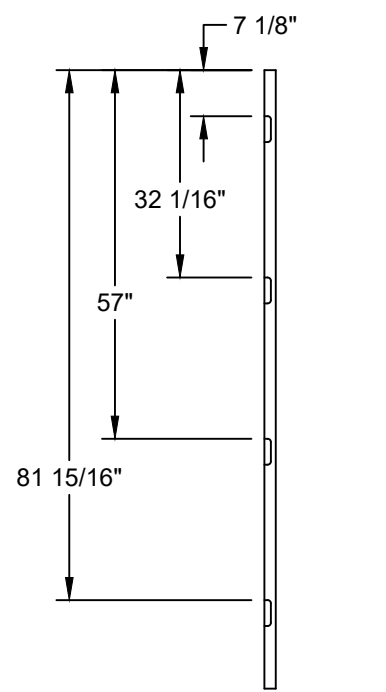
7. FOR CONCRETE BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
8. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
  - 8.1 WOOD - MINIMUM SPECIFIC GRAVITY OF 0.42 (NON-HVHZ).
  - 8.2 CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.
  - 8.3 MASONRY - STRENGTH CONFORMANCE TO ASTM C-90 MEDIUM WEIGHT WITH COMPRESSIVE STRENGTH OF 1900 psi (DENSITY > 117 PCF).

TABLE OF CONTENTS		
SHEET	REV.	SHEET DESCRIPTION
1	---	GENERAL AND INSTALLATION NOTES
2	---	ELEVATION AND ANCHOR LAYOUT
3	---	ELEVATION AND ANCHOR LAYOUT
4	---	ELEVATION AND ANCHOR LAYOUT
5	---	ELEVATION AND ANCHOR LAYOUT
6	---	ELEVATION AND ANCHOR LAYOUT
7	---	ELEVATION AND ANCHOR LAYOUT
8	---	VERTICAL SECTIONS
9	---	VERTICAL SECTIONS
10	---	VERTICAL & HORIZONTAL SECTIONS, GLAZING DETAIL
11	---	HORIZONTAL SECTIONS

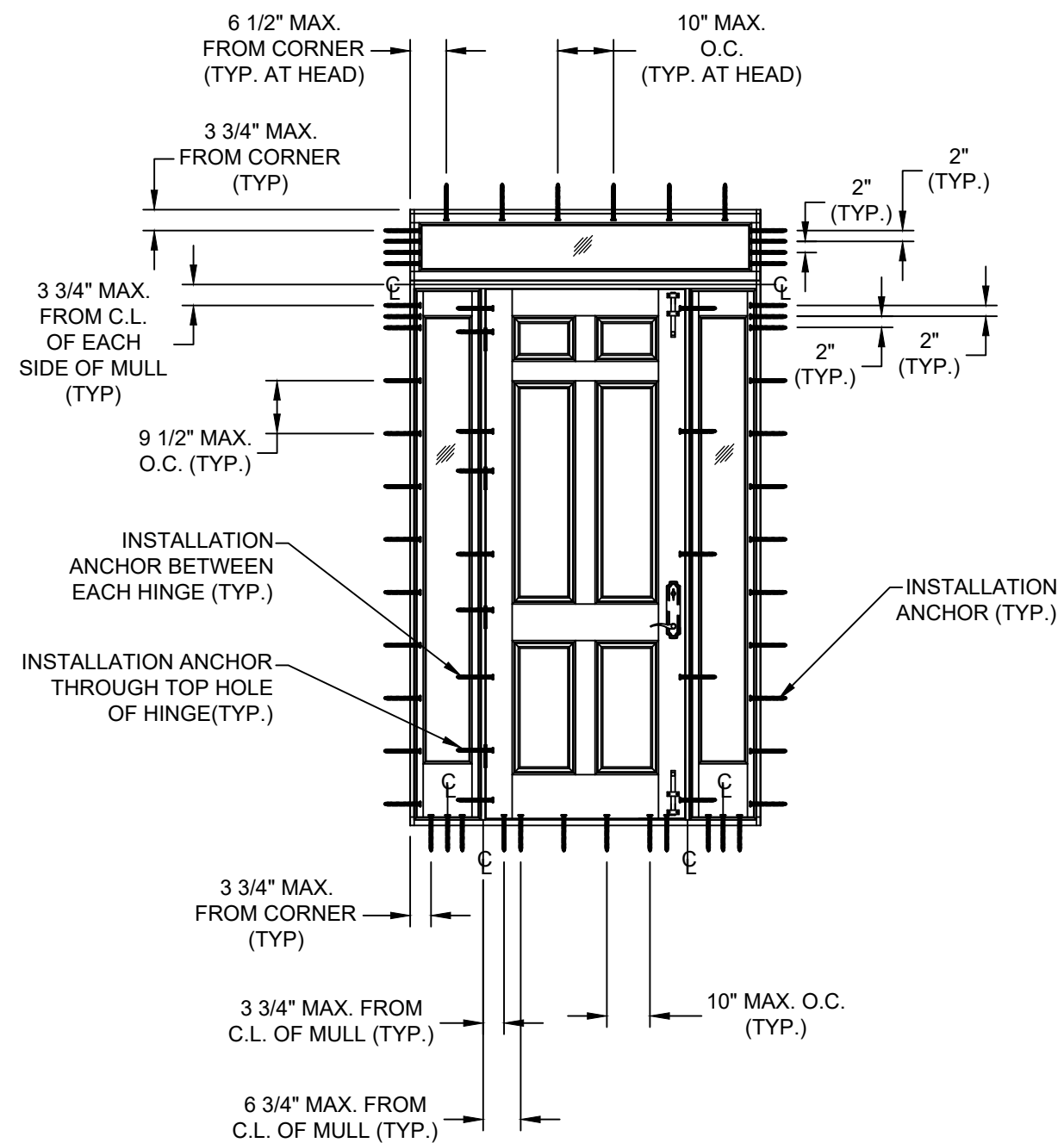
HARDWARE	DESIGN PRESSURE RATING (PSF)		IMPACT RATING
	WHERE WATER INFILTRATION REQUIREMENT IS NEEDED	WHERE WATER INFILTRATION REQUIREMENT IS NOT NEEDED	
SCHLAGE	±19.1	±75.0	NONE
W & F	N/A	±50.0	



**ELEVATION**  
INTERIOR VIEW



**HINGE DETAIL**  
SIDE VIEW OF DOOR PANEL



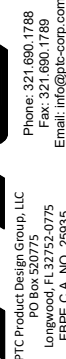
**ANCHOR LAYOUT**  
INTERIOR VIEW

PROJECT NO. 421-0102

SIMPSON DOOR COMPANY  
400 SIMPSON AVE.  
MCCLEARY, WA 98557

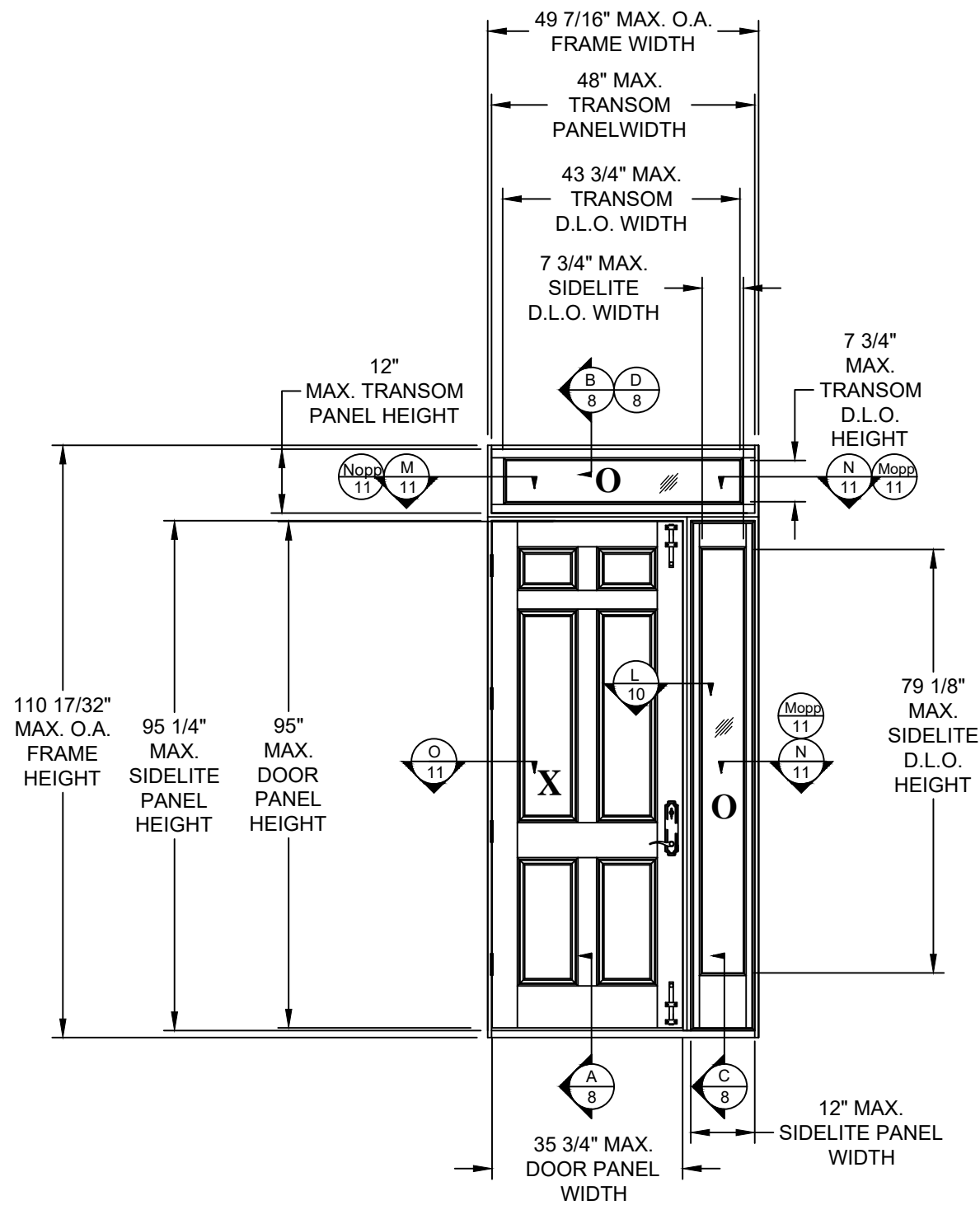
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ELEVATION AND ANCHOR LAYOUT

DATE:	6/18/21
DRAWING NO.:	SIMP0020
DRAWN BY:	RJA
SCALE:	N.T.S.
PREPARED BY:	---
REV:	---
SHEET:	2 OF 11

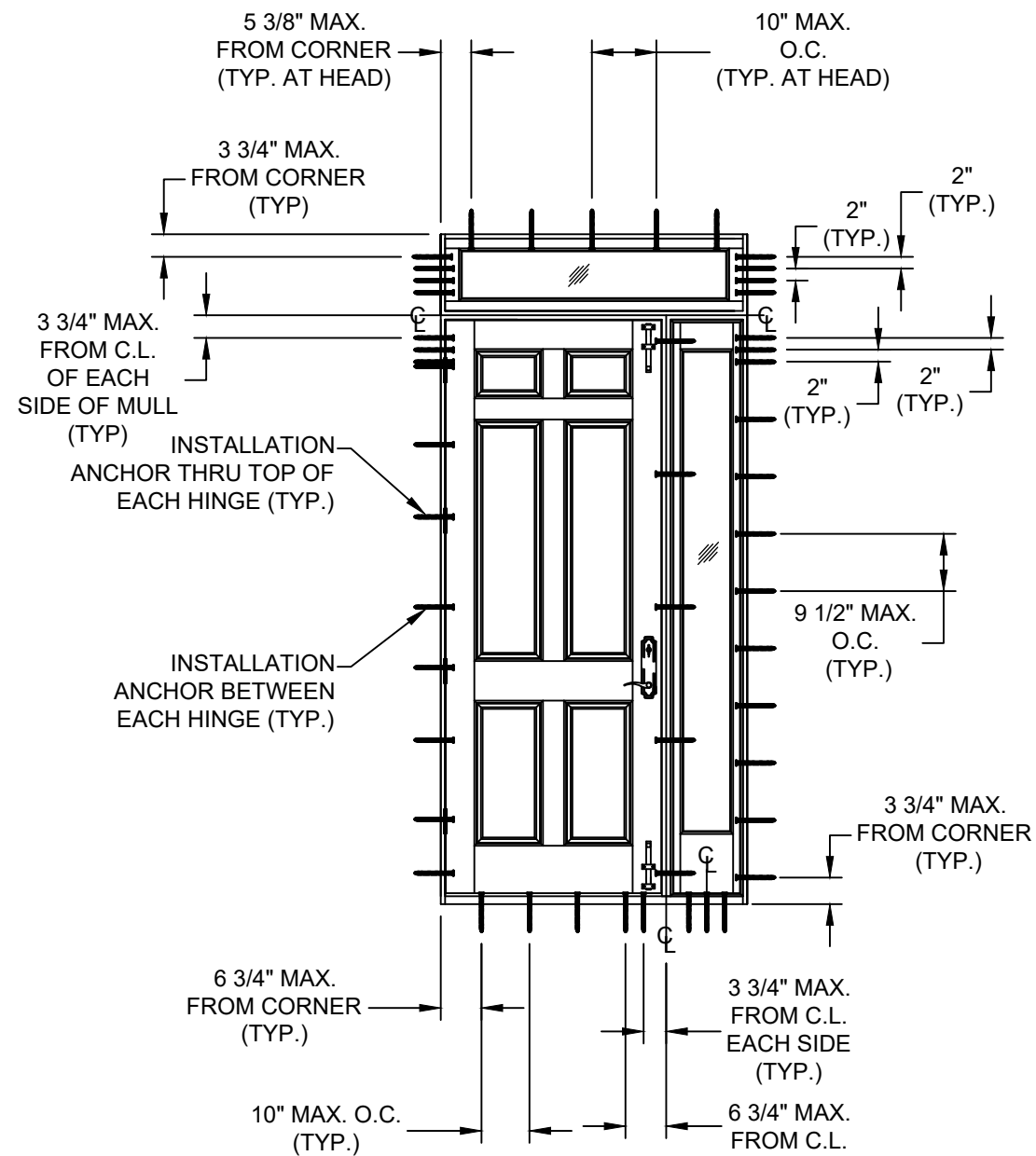


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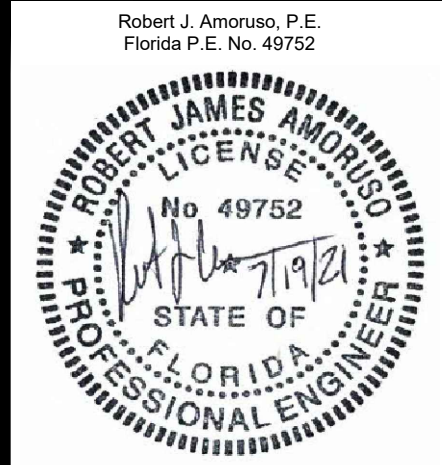
**ELEVATION**  
INTERIOR VIEW



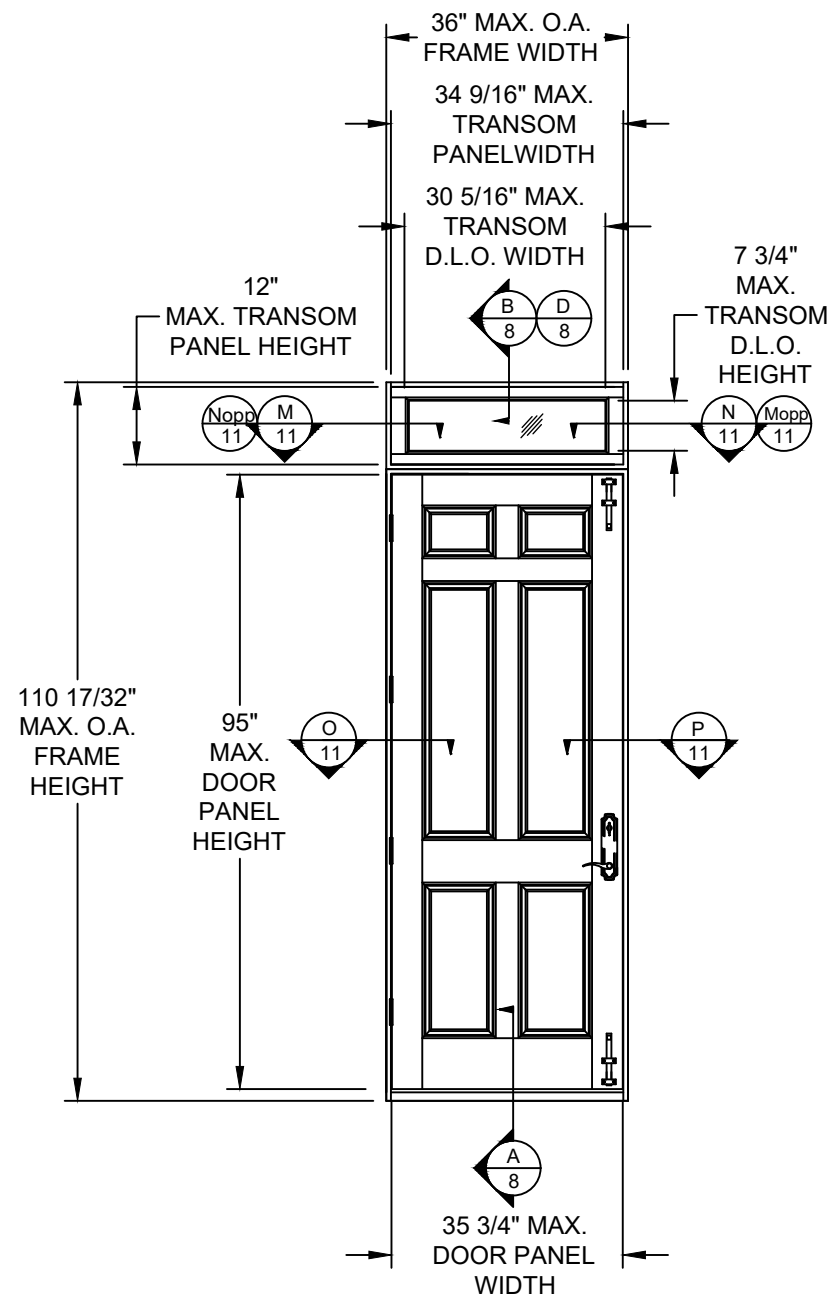
**ANCHOR LAYOUT**  
INTERIOR VIEW

PROJECT NO. 421-0102				

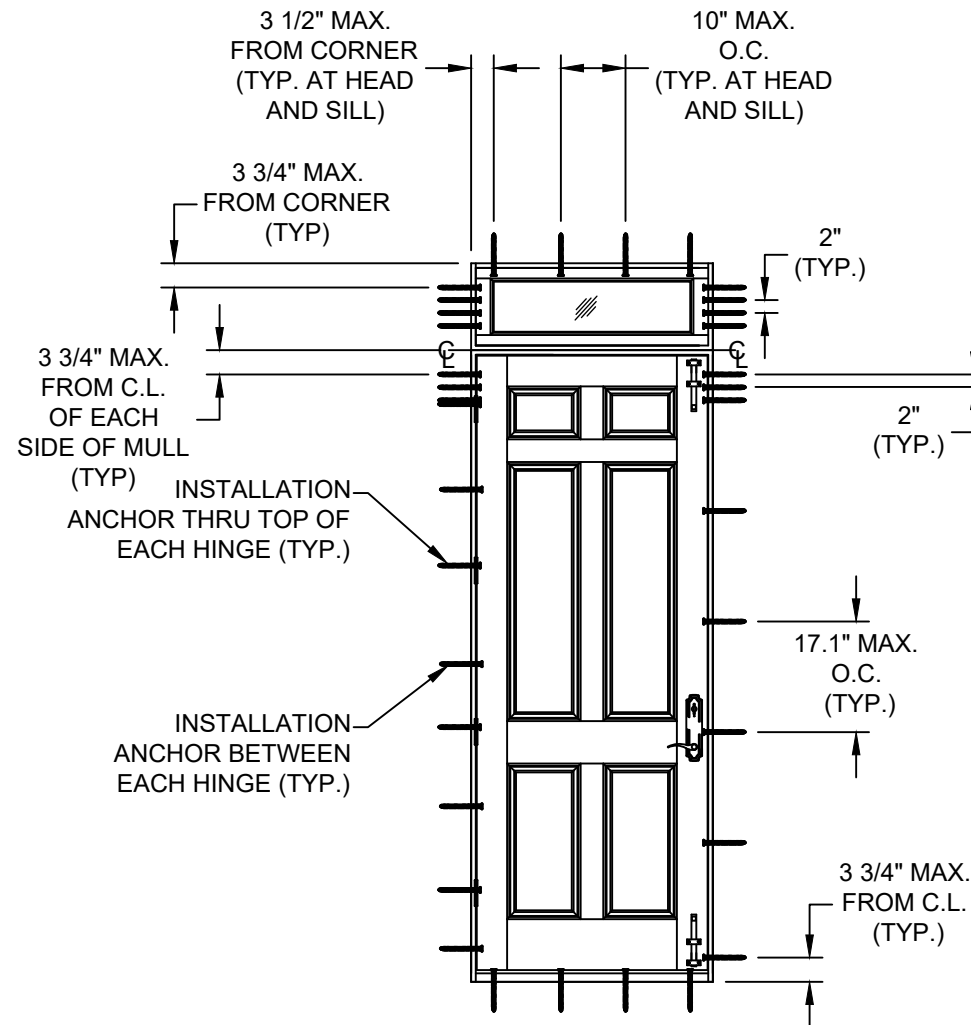
SIMPSON DOOR COMPANY 400 SIMPSON AVE. MCCLEARY, WA 98557		DATE: 6/18/21	DRAWING NO: SIMP0020	REV: 3 OF 11
TITLE: HEMLOCK FIR I/S DOOR W/ & W/O SIDELITES & TRANSOM ELEVATION AND ANCHOR LAYOUT		DRAWN BY: RJA	SCALE: N.T.S.	REV: ---
PREPARED BY:				
				
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**ELEVATION**  
INTERIOR VIEW



**ANCHOR LAYOUT**  
INTERIOR VIEW

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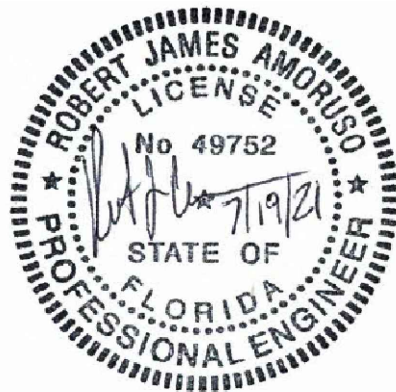
SIMPSON DOOR COMPANY  
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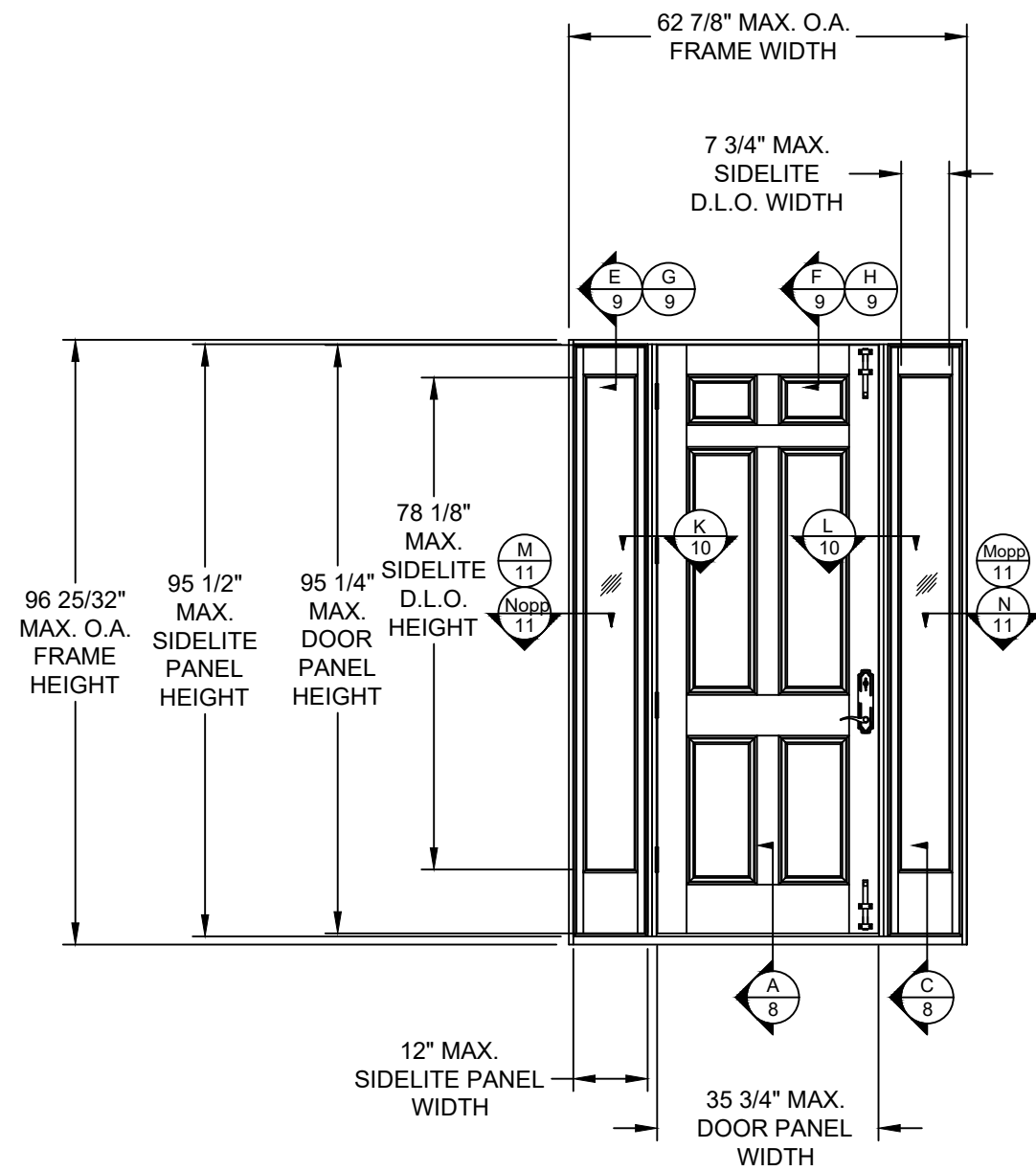
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ELEVATION AND ANCHOR LAYOUT

DATE:	6/18/21
DRAWING NO.:	SIMP0020
DRAWN BY:	RJA
SCALE:	N.T.S.
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SHEET:	4 OF 11

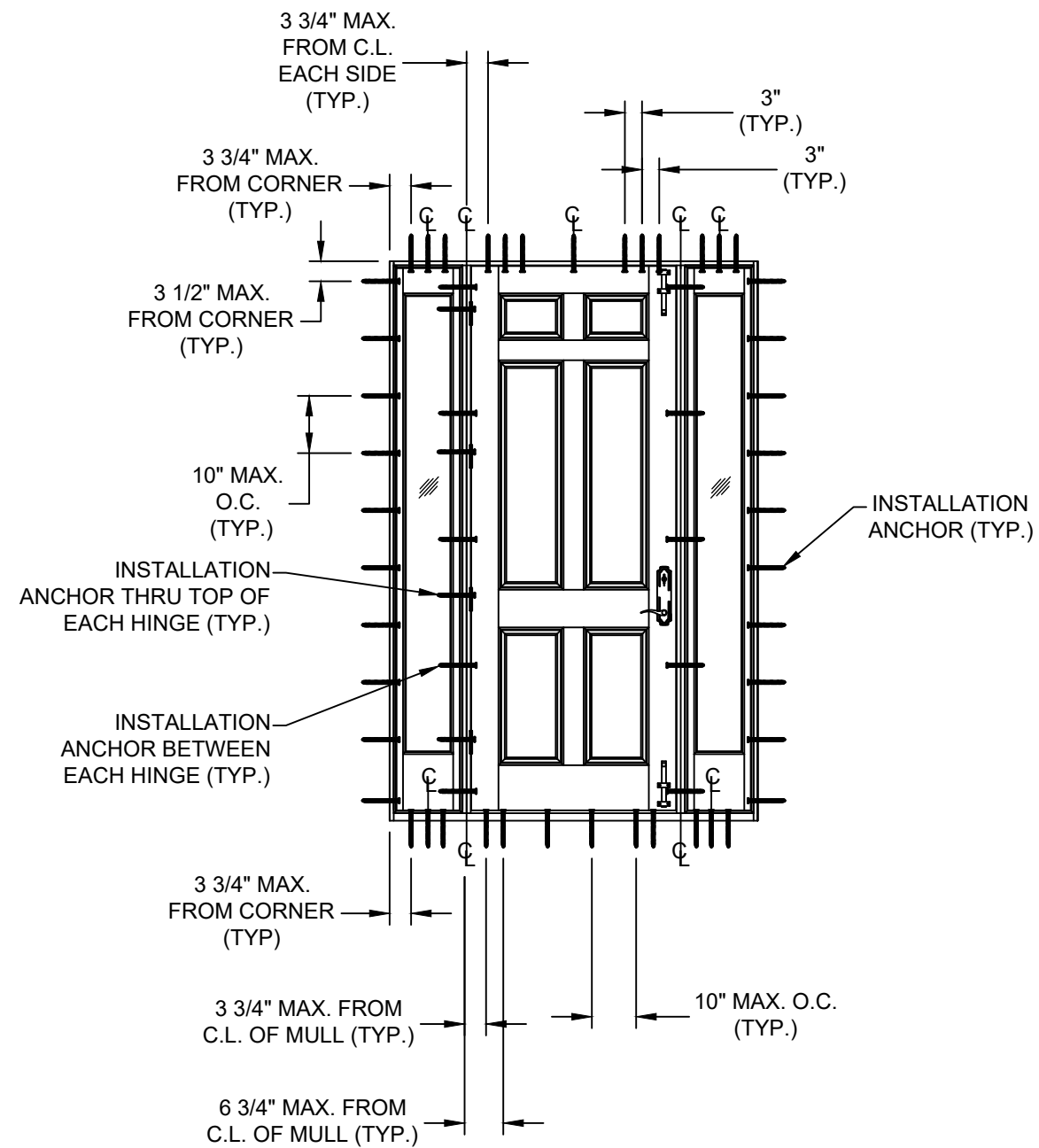
REV	DESCRIPTION	DATE	BY

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**ELEVATION**  
INTERIOR VIEW



**ANCHOR LAYOUT**  
EXTERIOR VIEW

PROJECT NO. 421-0102

REV	DESCRIPTION	DATE	BY

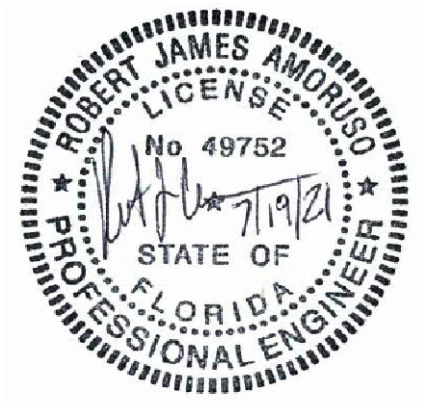
**SIMPSON DOOR COMPANY**  
400 SIMPSON AVE.  
MCCLEARY, WA 98557

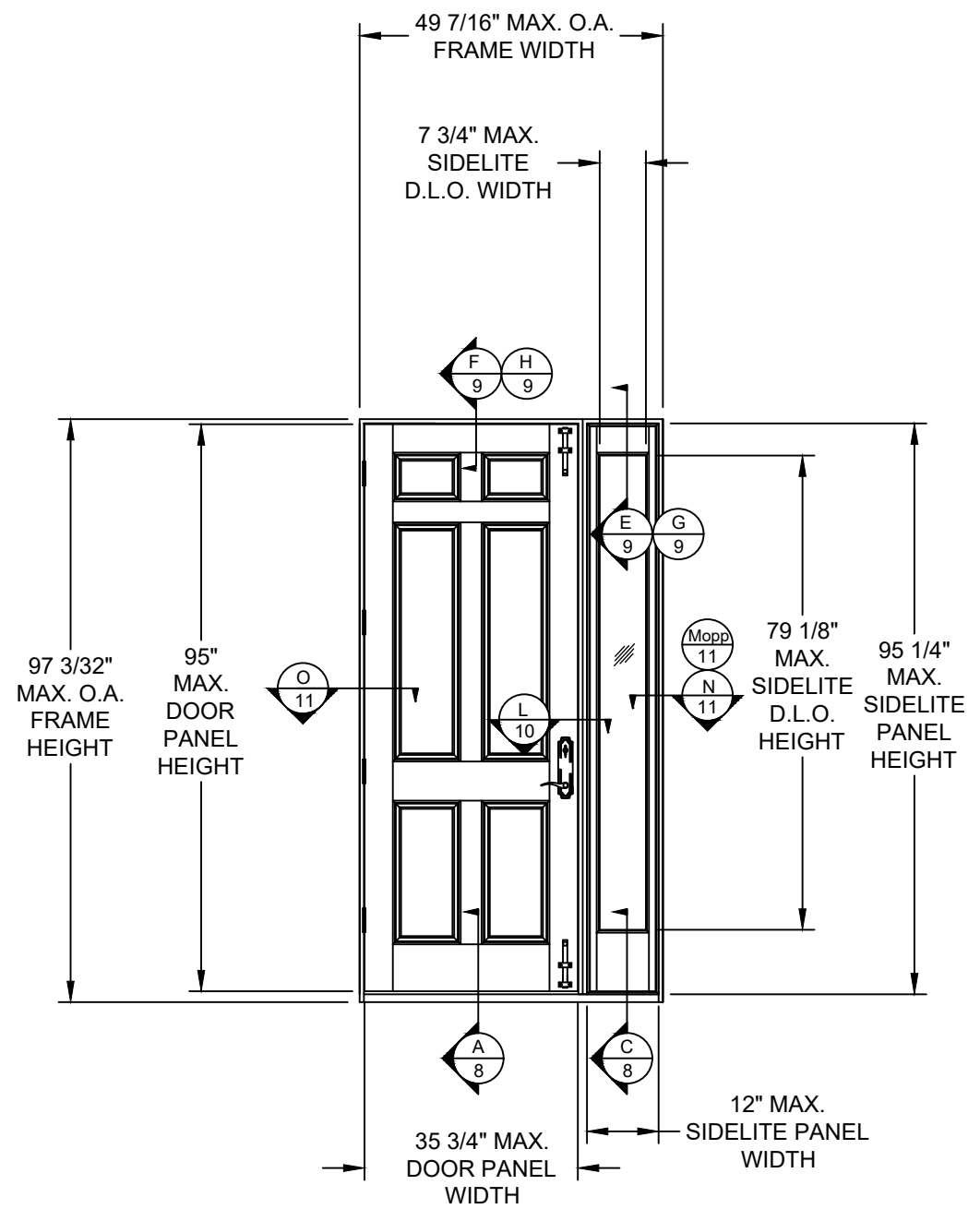
TITLE: HEMLOCK FIR I/S DOOR W/ & W/O SIDELITES & TRANSOM ELEVATION AND ANCHOR LAYOUT

PREPARED BY: RJA  
SCALE: N.T.S.  
DATE: 6/18/21  
DRAWING NO: SIMP0020  
SHEET: 5 OF 11

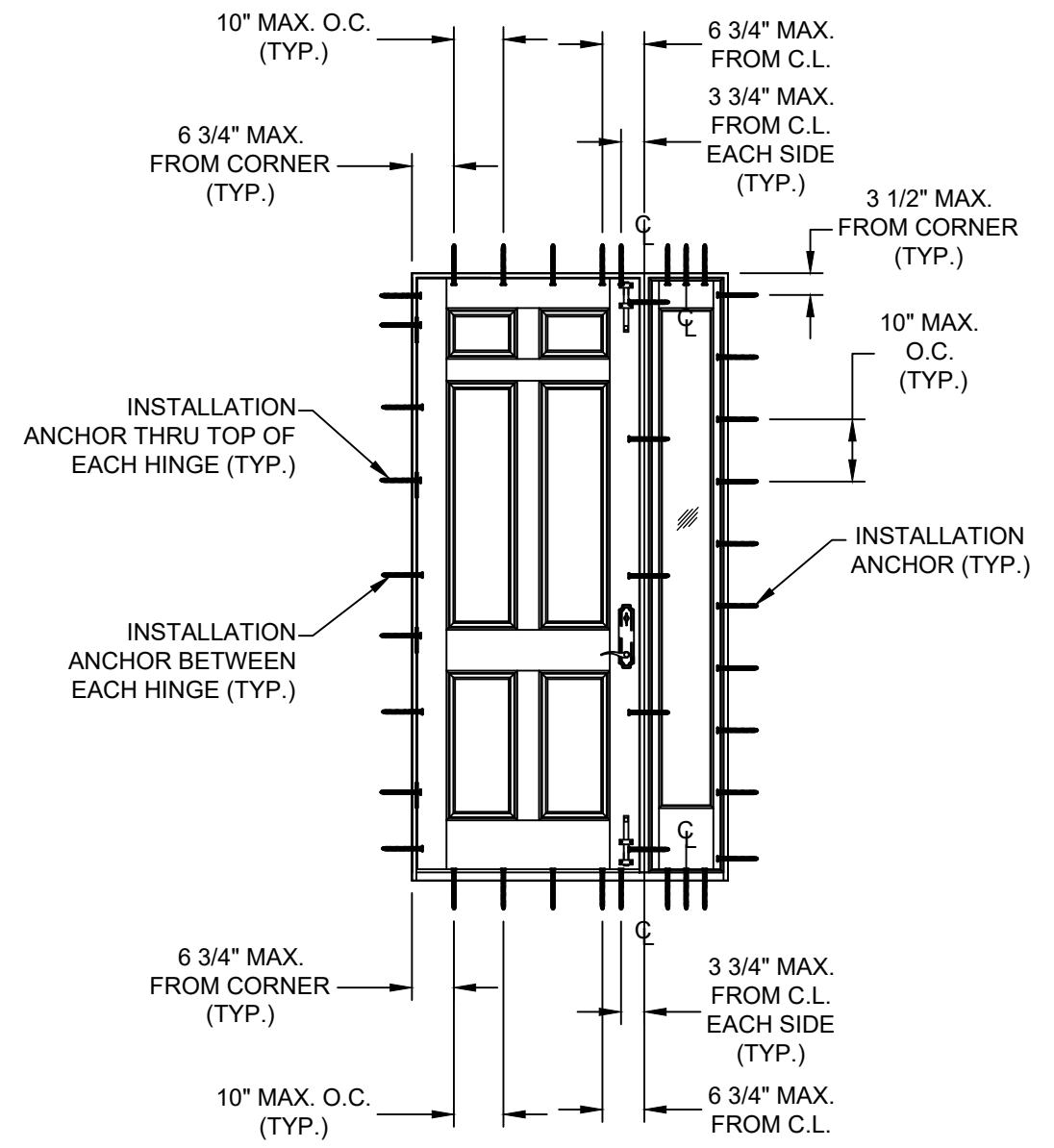
PTC Product Design Group, LLC  
PO Box 320775  
Lubbock, TX 79437-0775  
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**ELEVATION**  
INTERIOR VIEW



**ANCHOR LAYOUT**  
INTERIOR VIEW

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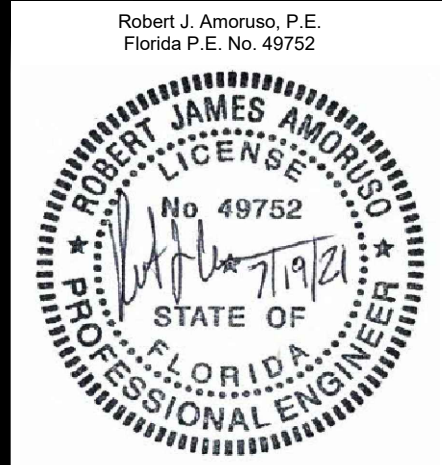
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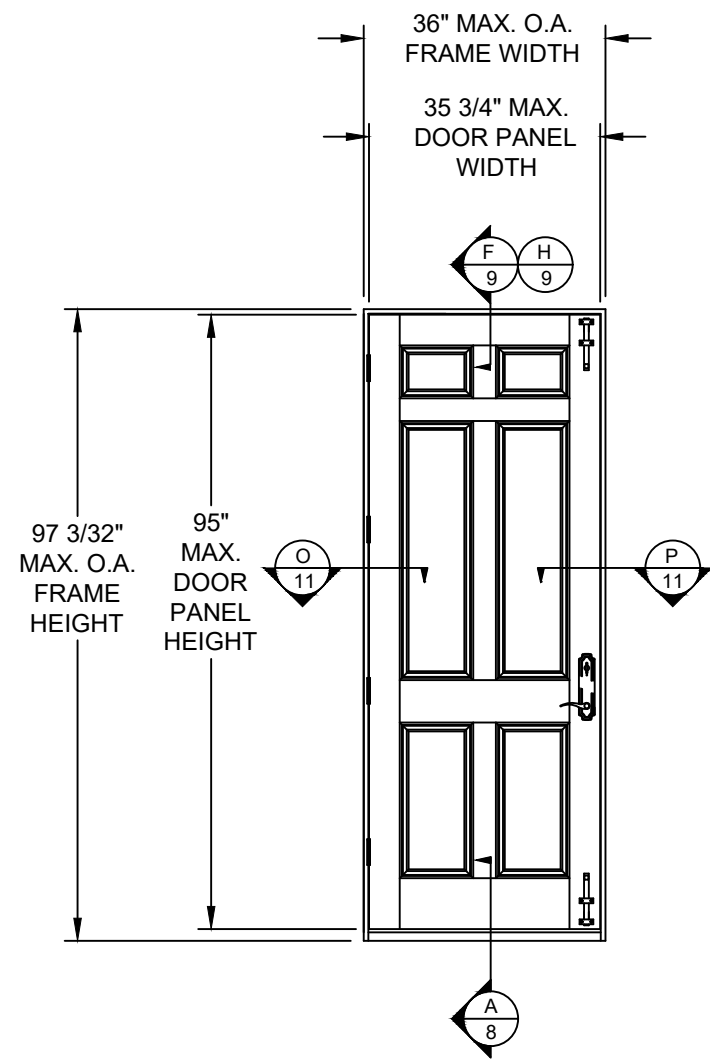
**SIMPSON DOOR COMPANY**  
400 SIMPSON AVE.  
MCCLEARY, WA 98557

TITLE: HEMLOCK FIR I/S DOOR W/ & W/O SIDELITES & TRANSOM ELEVATION AND ANCHOR LAYOUT

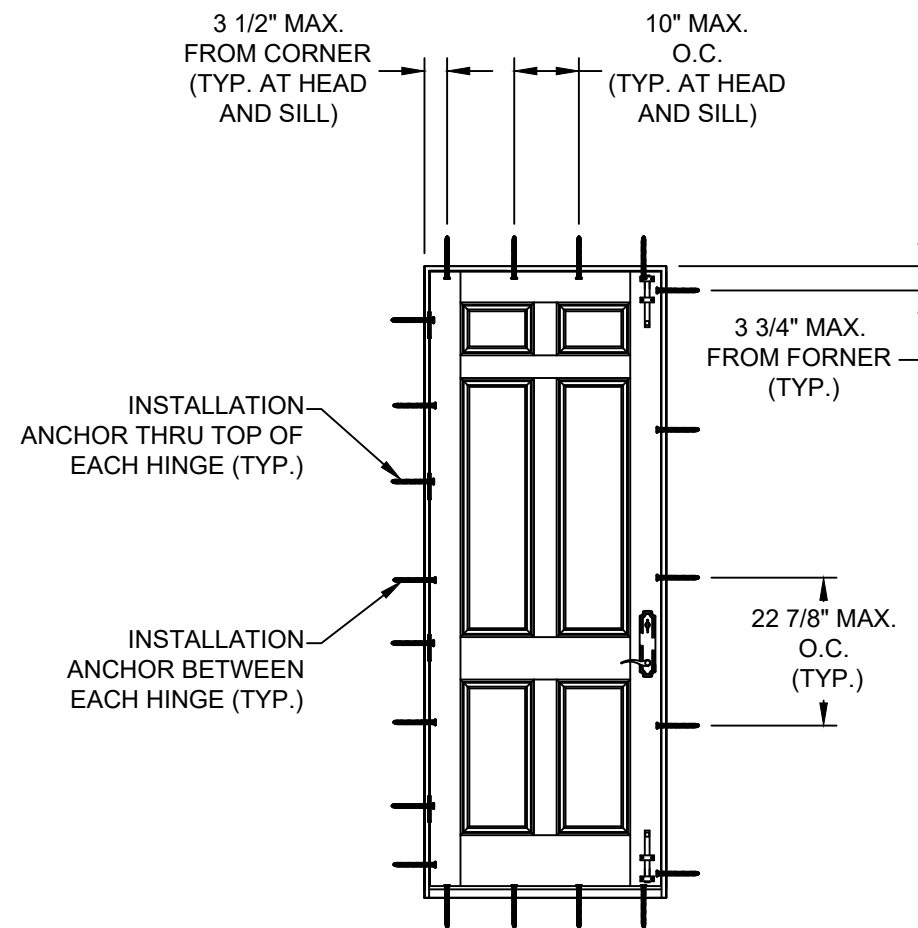
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SCALE: N.T.S.  
DATE: 6/18/21  
DRAWING NO: SIMP0020  
SHEET: 6 OF 11

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**ELEVATION**  
INTERIOR VIEW



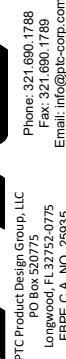
**ANCHOR LAYOUT**  
INTERIOR VIEW

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SIMPSON DOOR COMPANY  
400 SIMPSON AVE.  
MCCLEARY, WA 98557

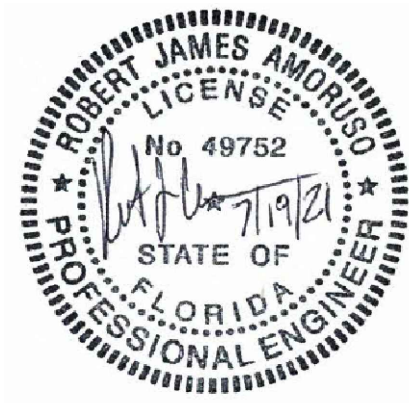
TITLE: HEMLOCK FIR I/S DOOR W/ & W/O SIDELITES & TRANSOM  
ELEVATION AND ANCHOR LAYOUT

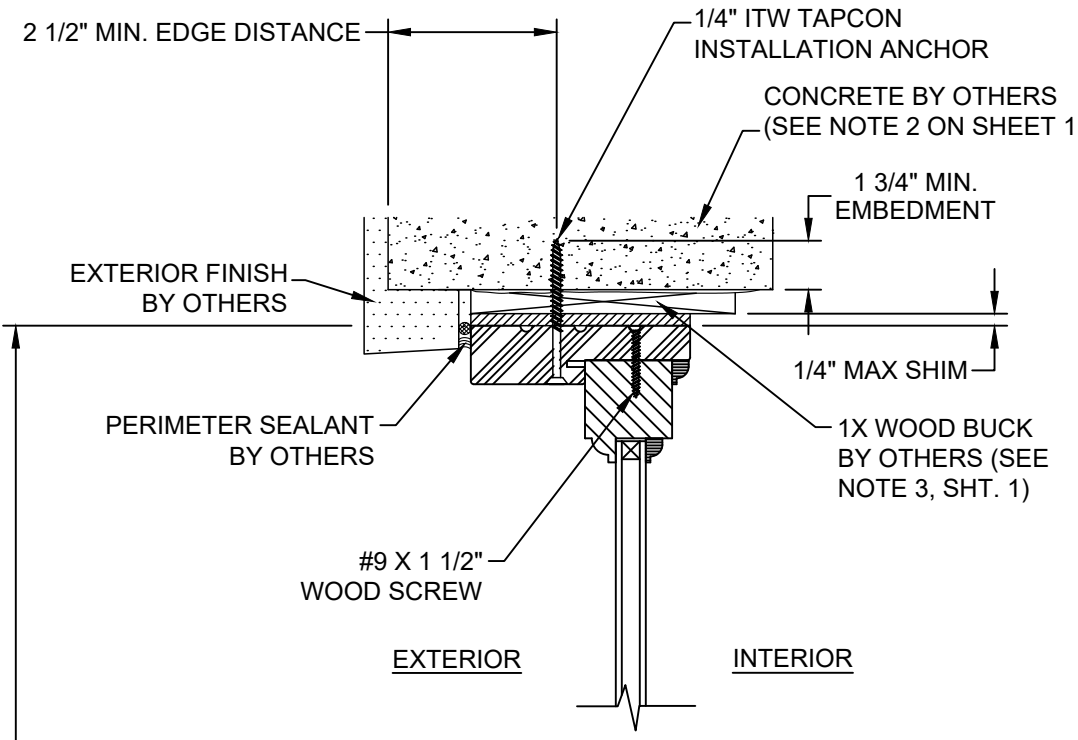
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DRAWING NO.:	SIMP0020
SHEET:	7 OF 11
PREPARED BY:	RJA
SCALE:	N.T.S.
REV:	---



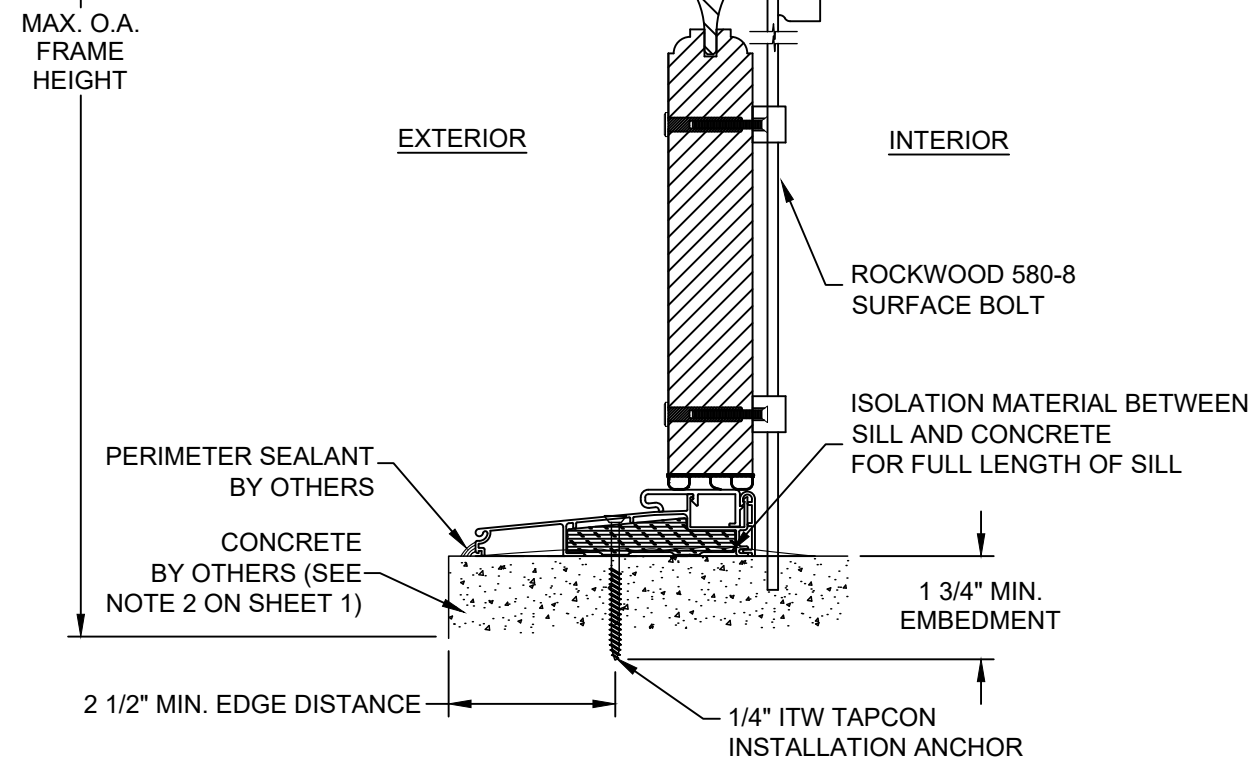
PTC Product Design Group, LLC  
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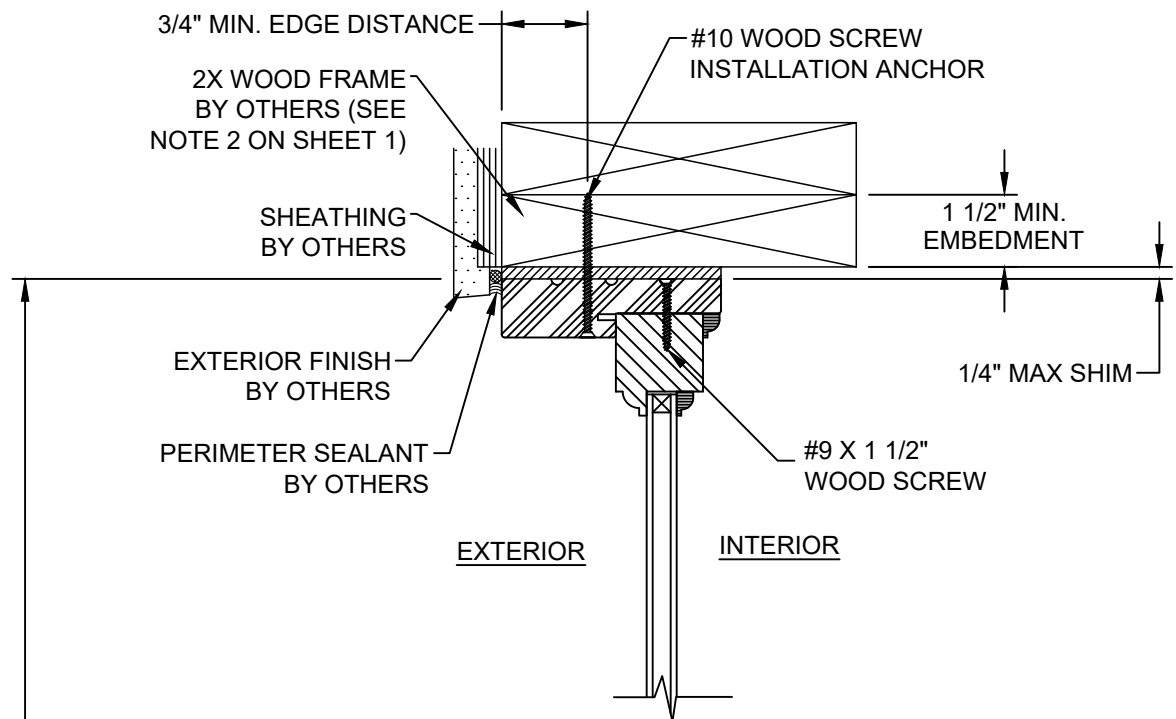




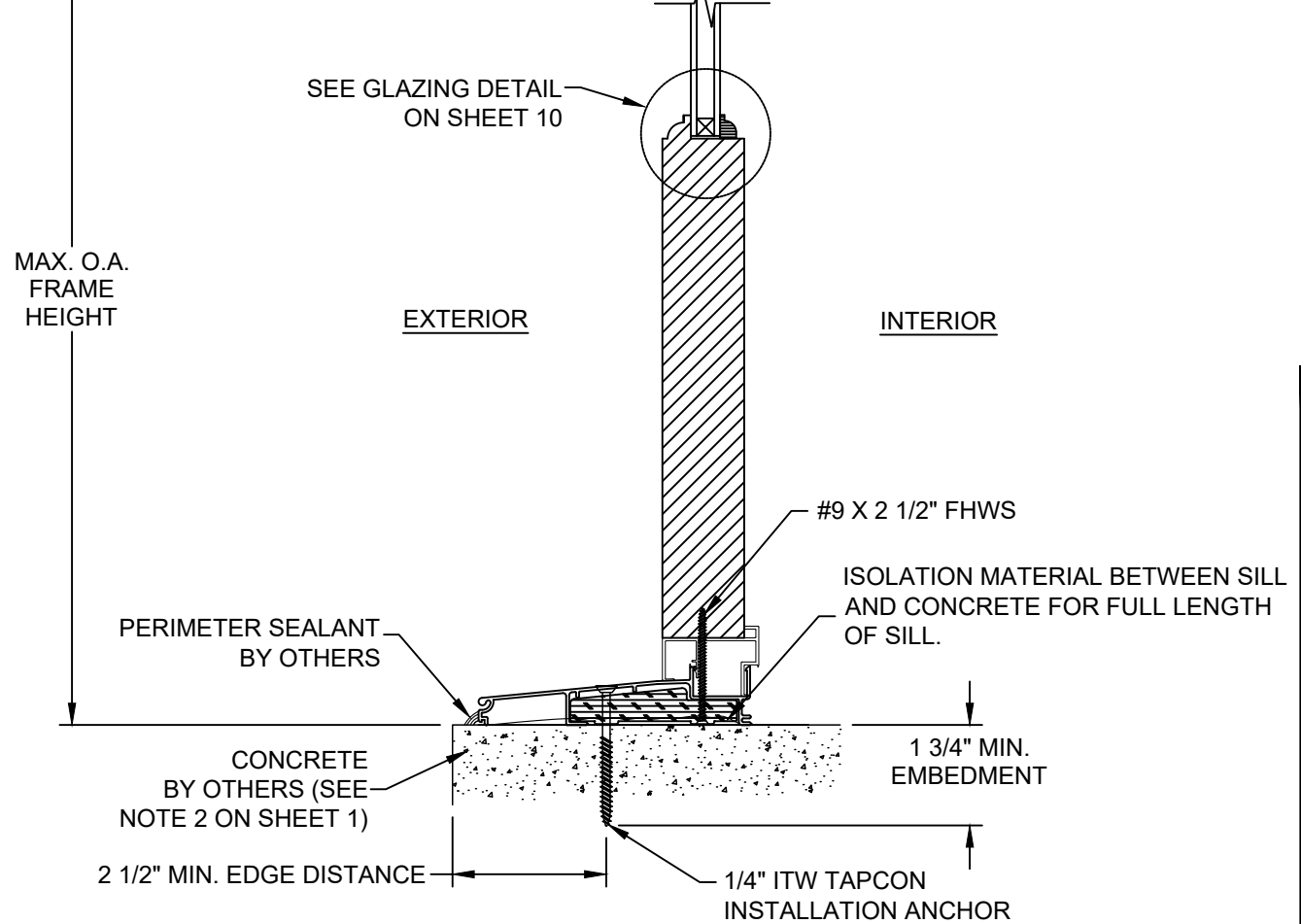
**B** VERTICAL SECTION  
CONCRETE SUBSTRATE  
TRANSOM AT HEAD



**A** VERTICAL SECTION  
CONCRETE SUBSTRATE  
DOOR PANEL AT SILL



**D** VERTICAL SECTION  
WOOD SUBSTRATE  
TRANSOM AT HEAD



**C** VERTICAL SECTION  
CONCRETE SUBSTRATE  
SIDELITE AT SILL

PROJECT NO. 421-0102

REV	DESCRIPTION	DATE	BY

SIMPSON DOOR COMPANY  
400 SIMPSON AVE.  
MCCLEARY, WA 98557

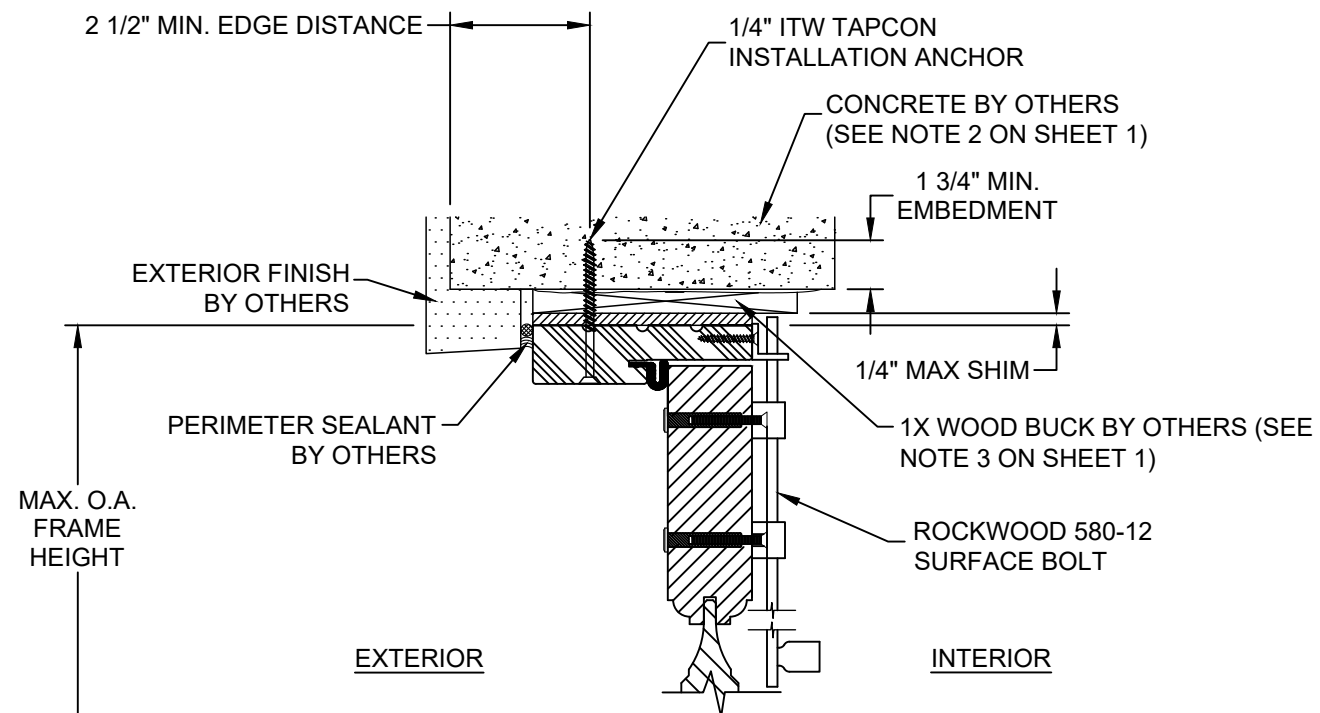
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VERTICAL SECTIONS

PREPARED BY: RJA  
SCALE: N.T.S.  
DATE: 6/18/21  
DRAWING NO: SIMP0020  
SHEET: 8 OF 11

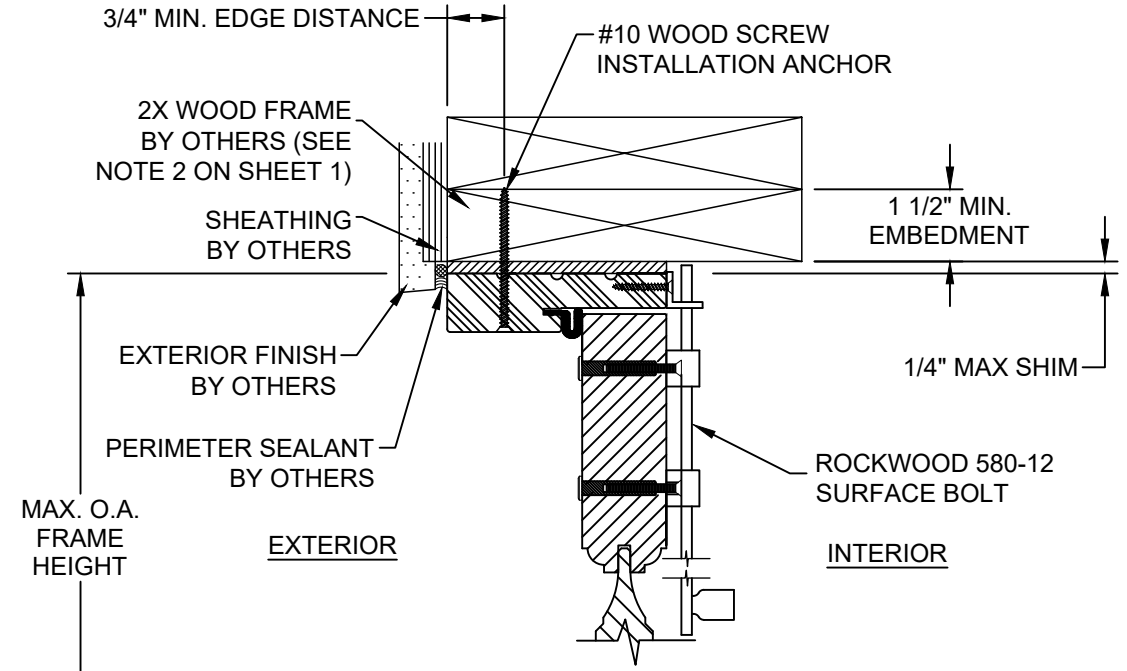
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Lombard, IL 60147-2075  
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Florida P.E. No. 49752

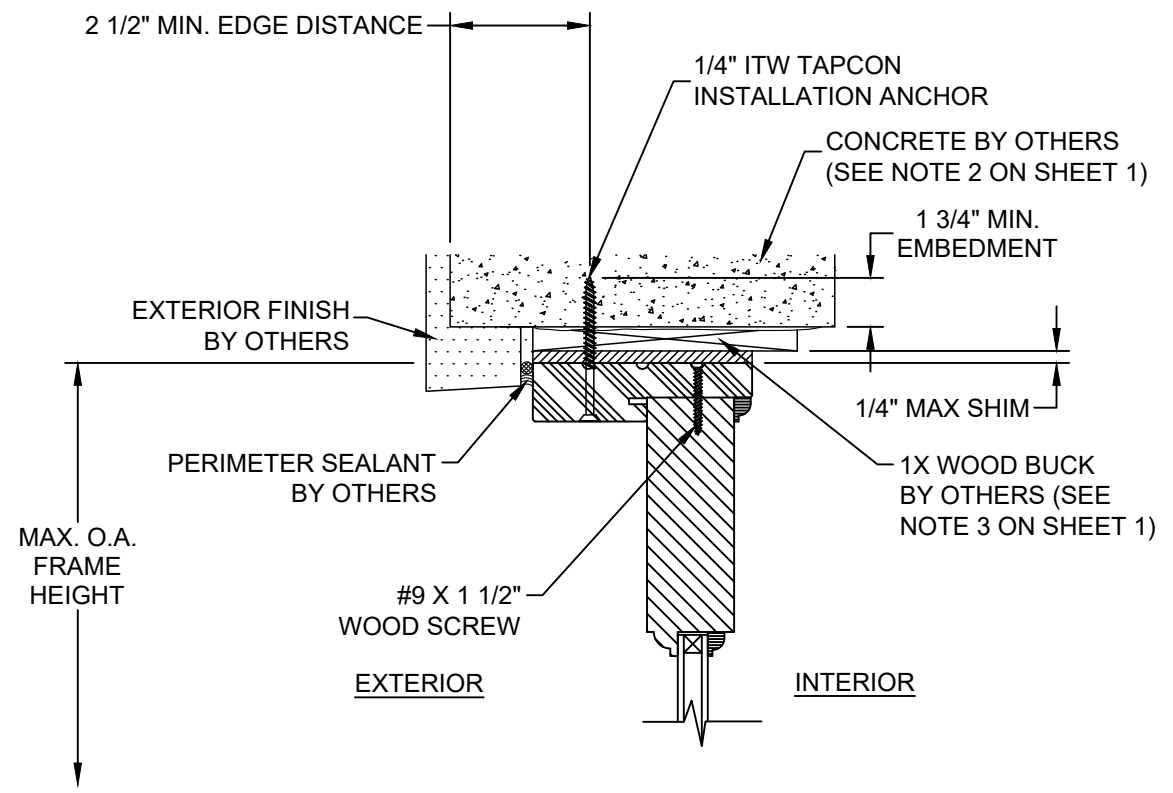




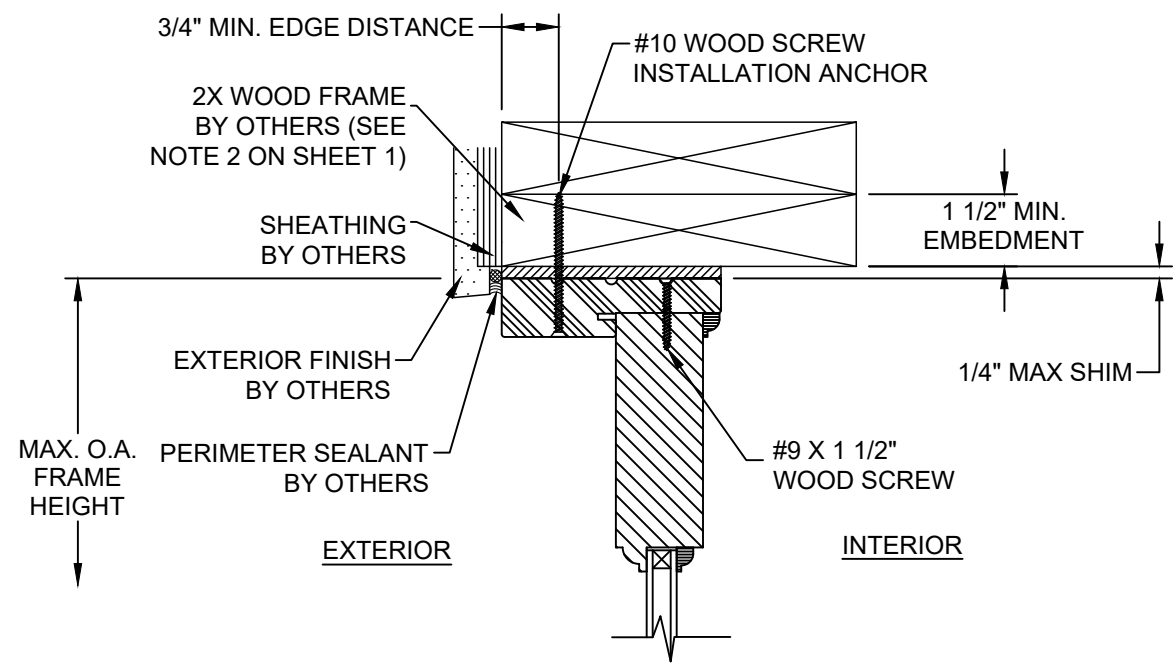
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CONCRETE SUBSTRATE  
DOOR PANEL AT HEAD



**H** VERTICAL SECTION  
WOOD SUBSTRATE  
DOOR PANEL AT HEAD



**E** VERTICAL SECTION  
CONCRETE SUBSTRATE  
SIDELITE PANEL AT HEAD



**G** VERTICAL SECTION  
WOOD SUBSTRATE  
SIDELITE PANEL AT HEAD

PROJECT NO. 421-0102										

SIMPSON DOOR COMPANY 400 SIMPSON AVE. MCCLEARY, WA 98557		DATE: 6/18/21		DRAWING NO: SIMP0020		SHEET: 9 OF 11	
TITLE: HEMLOCK FIR I/S DOOR W/ & W/O SIDELITES & TRANSOM VERTICAL SECTIONS		DRAWN BY: RJA		SCALE: N.T.S.		REV: ---	
PREPARED BY: PTC		DATE: 6/18/21		DRAWING NO: SIMP0020		SHEET: 9 OF 11	
PTC Product Design Group, LLC PO Box 320775 Lenexa, KS 66247-0775 FBPE CA NO. 25595		Phone: 321.690.1788 Fax: 321.690.1789 Email: info@ptc-corp.com					

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SHEET: 10 OF 11

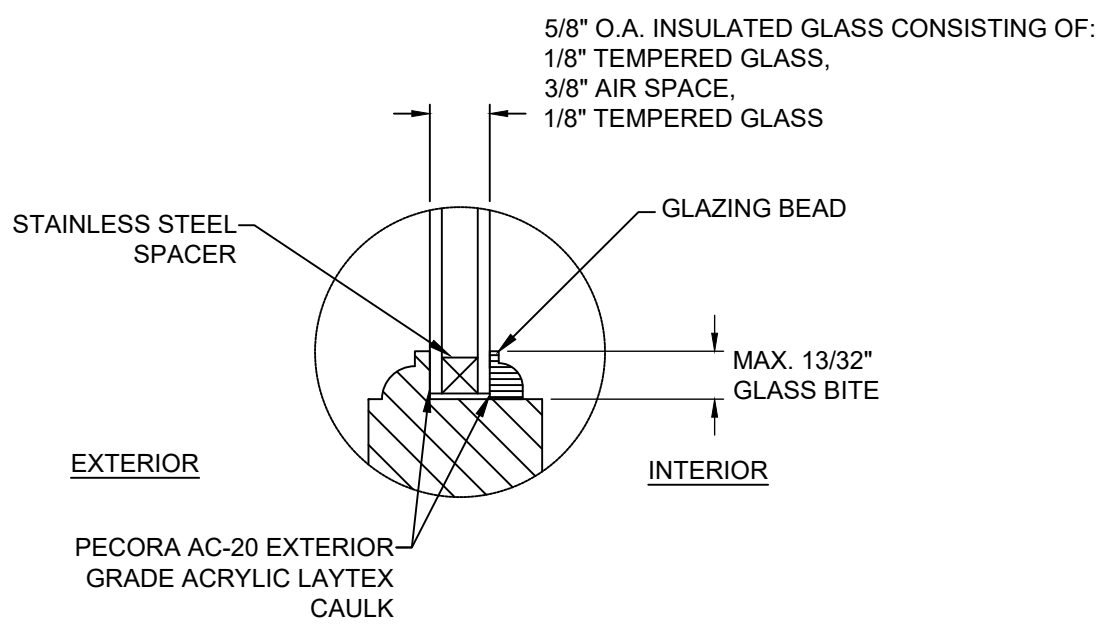
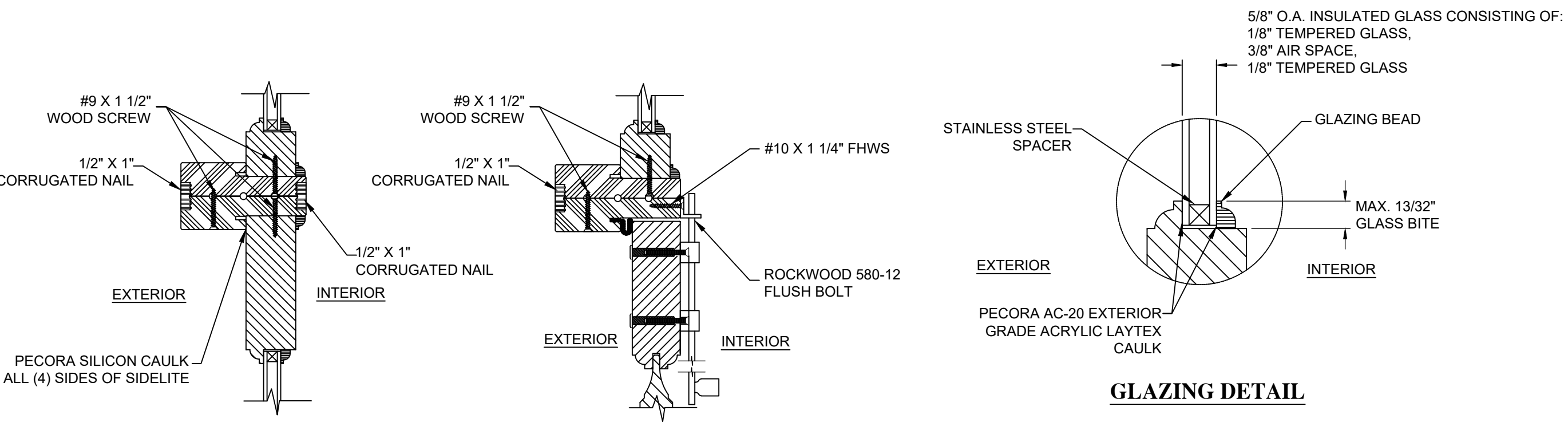
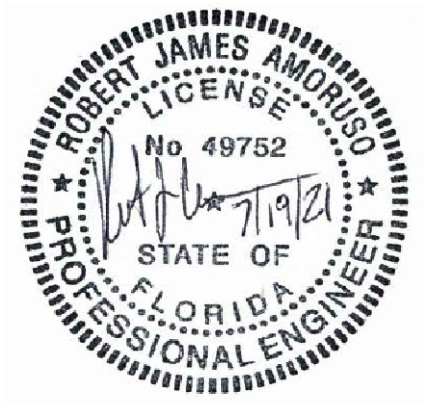
DRAWN BY: RJA  
SCALE: N.T.S.  
REV: ---

PREPARED BY:

PTC Product Design Group, LLC  
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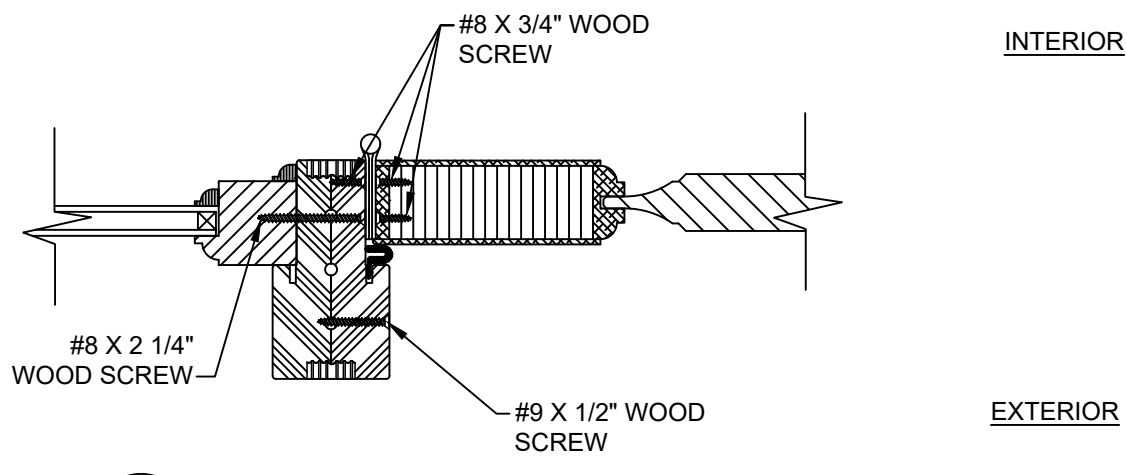
Robert J. Amoruso, P.E.  
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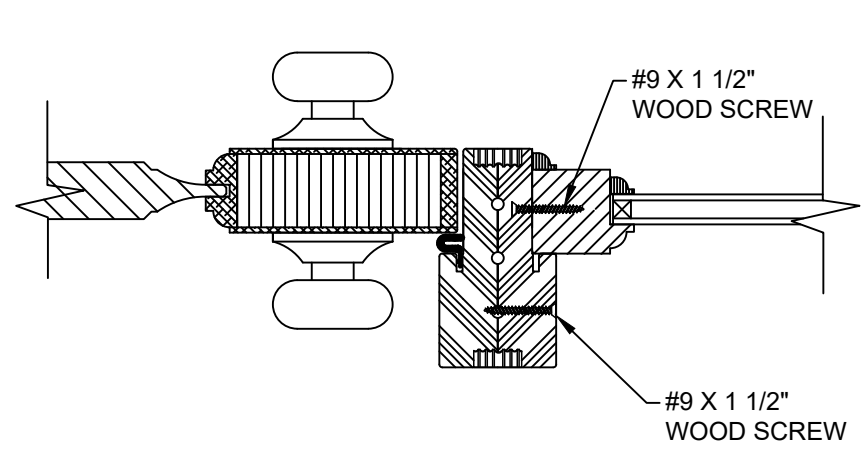
**GLAZING DETAIL**

**I VERTICAL SECTION**  
DOUBLE JAMB HORIZONTAL MULL  
AT SIDELITE PANEL

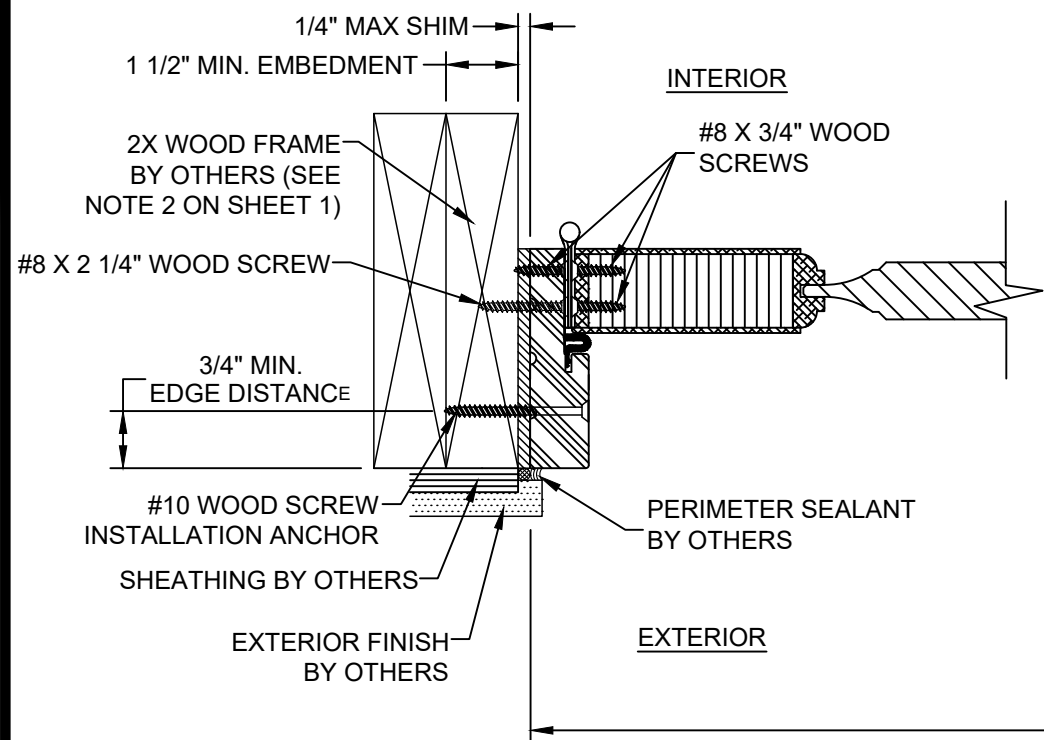
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DOUBLE JAMB HORIZONTAL MULL  
AT DOOR PANEL



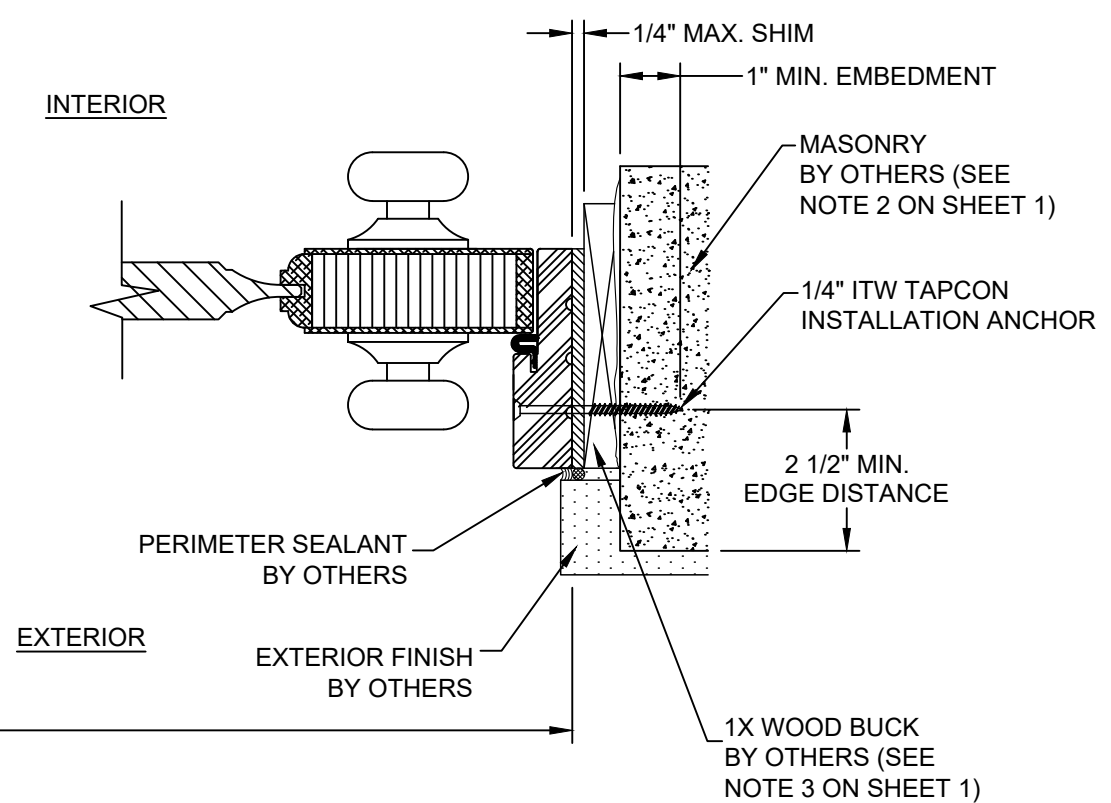
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HINGE STILE AT VERTICAL MULL



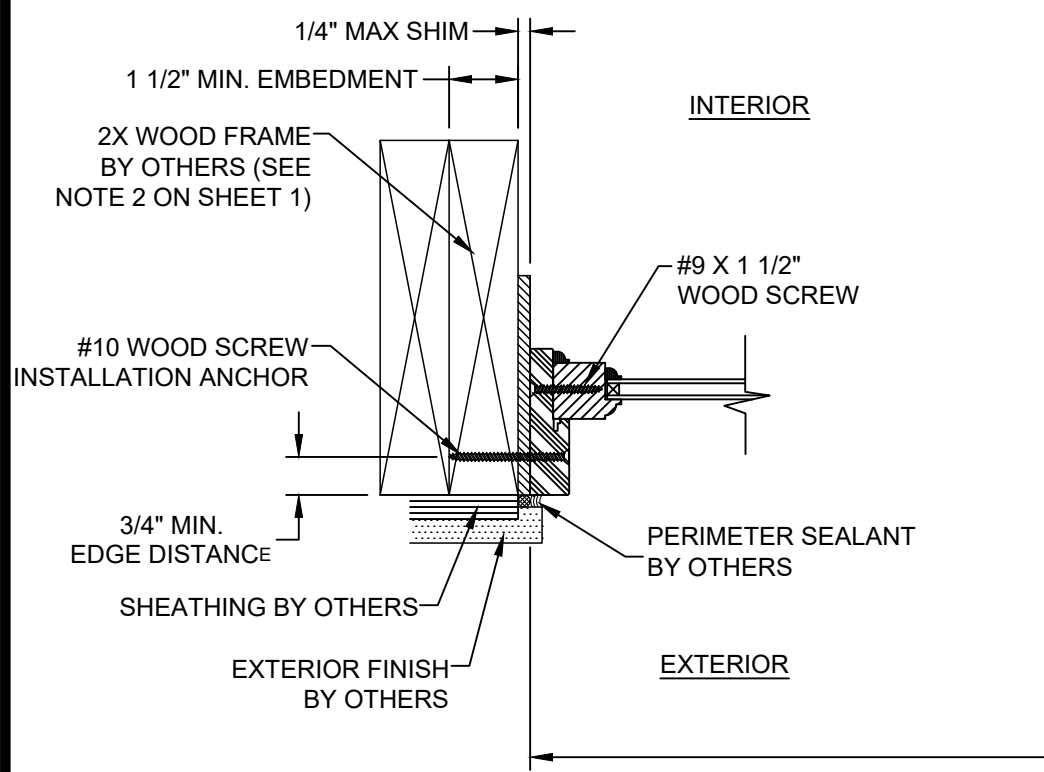
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LOCK STILE AT VERTICAL MULL



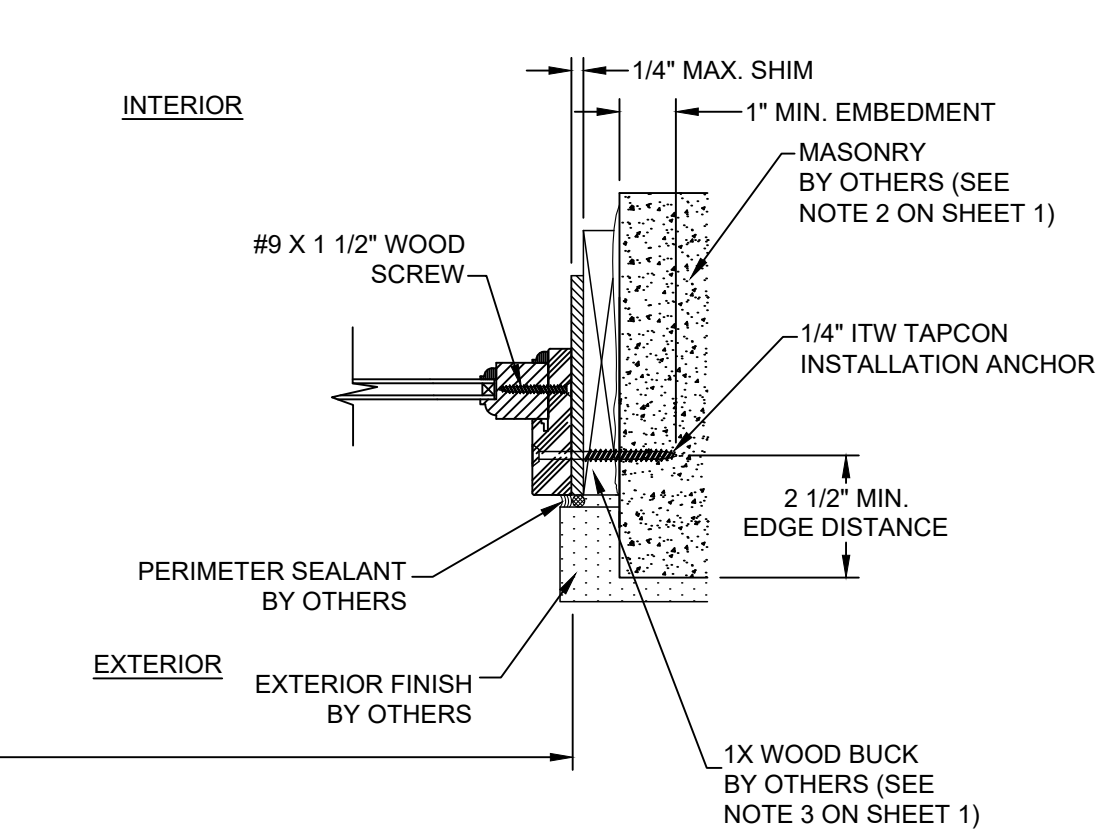
**O HORIZONTAL SECTION**  
WOOD SUBSTRATE  
DOOR PANEL AT HINGE STILE JAMB



**P HORIZONTAL SECTION**  
MASONRY SUBSTRATE  
DOOR PANEL AT LOCK STILE JAMB



**M HORIZONTAL SECTION**  
WOOD SUBSTRATE  
SIDELITE AND TRANSOM JAMBS



**N HORIZONTAL SECTION**  
MASONRY SUBSTRATE  
SIDELITE AND TRANSOM JAMBS

PROJECT NO. 421-0102

REV	DESCRIPTION	DATE	BY

**SIMPSON DOOR COMPANY**  
400 SIMPSON AVE.  
MCCLEARY, WA 98557

TITLE: HEMLOCK FIR I/S DOOR W/ & W/O SIDELITES & TRANSOM  
HORIZONTAL SECTIONS

DRAWN BY:	RJA
DATE:	6/18/21
SCALE:	N.T.S.
DRAWING NO.:	SIMP0020
SHEET:	11 OF 11

PREPARED BY: **PTC**  
PTC Product Design Group, LLC  
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