

**GENERAL NOTES:**

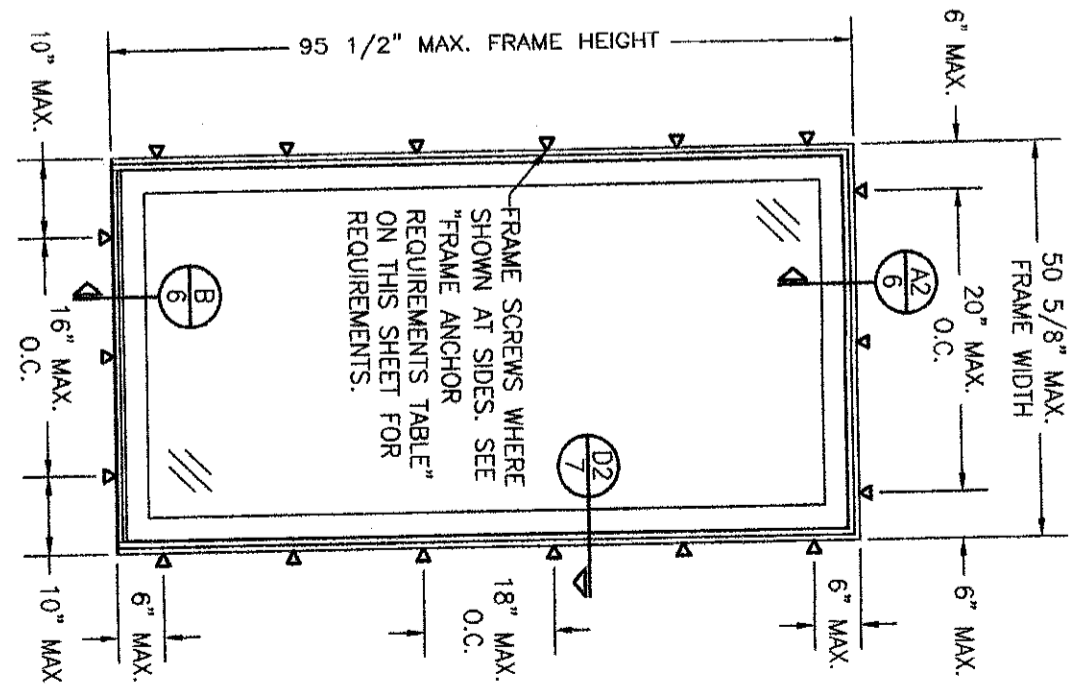
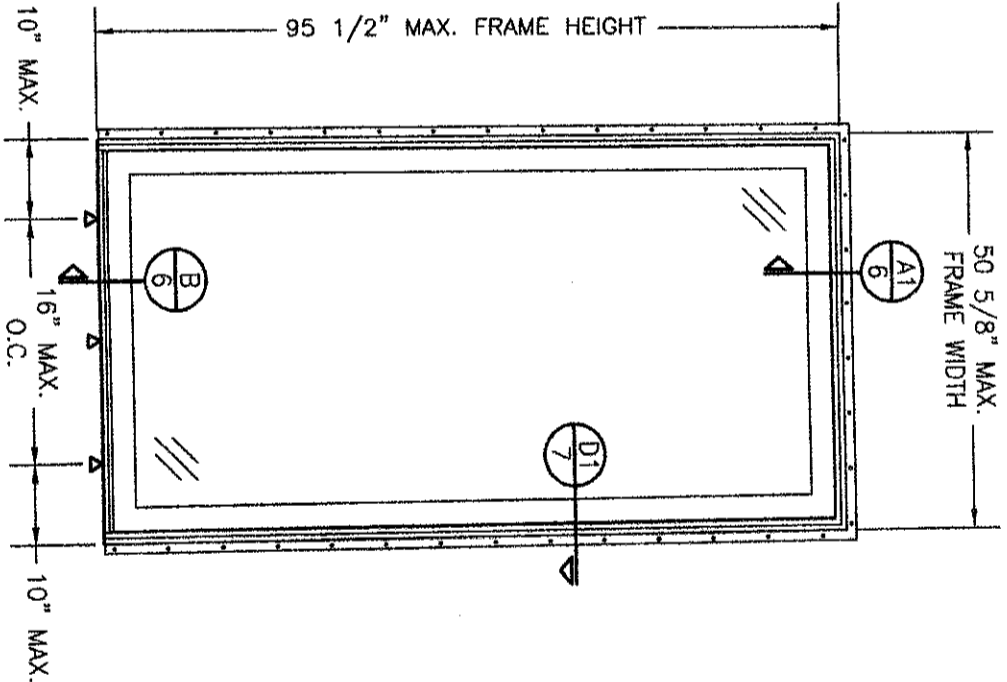
1. ALL FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. THESE NON-IMPACT RATED PRODUCT INSTALLATIONS & MILLION CONDITIONS ARE IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE (IBC).
4. ALL ANCHORS SECURING PRODUCT FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
5. TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN IS CERTIFIED & QUALITY ASSURED BY A NATIONALLY ACCREDITED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH CERTIFICATION/QA ENTITIES SPECIFICATIONS. PRODUCT ASSEMBLY IS NOT PART OF THIS DRAWING AND SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.
6. CERTIFICATION OF THESE PRODUCT INSTALLATIONS & MILLION CONDITIONS SHALL BE CONSIDERED VOID IF ANY OF THE FOLLOWING APPLY: 1) THEY ARE INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT.
- 2) IF THEY ARE INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH WINDOW/DOOR INSTALLATIONS.
- 3) IF CHANGES HAVE OCCURRED TO THE PRODUCT'S CERTIFICATION ENTITY'S CERTIFICATE THAT CAUSE THESE INSTALLATIONS TO BE INCORRECT OR INCONSISTENT WITH WHAT HAS BEEN TESTED.
7. THE LEAST DESIGN PRESSURE SPECIFIED EITHER IN THIS DRAWING OR IN THE PRODUCT'S CERTIFICATION SHALL CONTROL FOR THE INSTALLED PRODUCT.
8. THESE DRAWINGS CERTIFY THE PRODUCT INSTALLATION & MILLION CONDITIONS ONLY. WATER PROOFING OF THE INSTALLED PRODUCT IS NOT PART OF THIS INSTALLATION CERTIFICATION. THAT RESPONSIBILITY SHALL BE THAT OF THE MANUFACTURER &/OR INSTALLER.

INSTALLATION EVALUATION IS BASED ON APPLICABLE ANCHOR STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE BUILDING CODE VERSION CONSIDERED WITH THE EVALUATION WAS THAT IN FORCE AT THE TIME OF THE EVALUATION. IN THE EVENT OF CODE VERSION CHANGES/UPDATES OR IN THE EVENT THAT NEW OR ADDITIONAL TESTING IS COMPLETED ON THE REFERENCED PRODUCT, PRIOR TO STATING CODE COMPLIANCE, THE MANUFACTURER SHALL CONFIRM WITH THE INSTALLATION EVALUATION ENGINEER OF RECORD THAT THE INSTALLATIONS SPECIFIED HERE-IN ARE CURRENT WITH THE THEN CURRENT TESTING, CODE AND APPLICABLE STANDARDS.

**FRAME ANCHOR REQUIREMENTS TABLE**

OPENING TYPE (SUBSTRATE)	FRAME/SILL/RETAINER/NAIL FIN TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
<b>(1) FRAME, SILL &amp; SILL FIXED PANEL BRACKET SCREWS</b>			
(4) MIN. 2X WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 10 WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 10 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU	(2) 1/4" CONCRETE SCREW	1 1/4"	2"
MIN. 2500 PSI CONCRETE	(2) 1/4" CONCRETE SCREW	1 1/2"	2"
<b>PANEL RETAINER SCREWS</b>			
(4) MIN. 2X WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
2500 PSI CONCRETE	(2) 3/16" CONCRETE SCREW	1 1/2"	2"
<b>(3) NAILING FIN FASTENERS</b>			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 3/8"	1/2"
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	11 GA. ROOFING NAIL	1 5/8"	1/2"
MIN. 1/8" THK A36 STEEL	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"

- (1) FRAME SCREWS AT SIDES & HEAD SHALL BE PAN OR HEX HEAD SCREWS.
- (2) CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KWIK-CON II (C.S. OR S.S.).
- (3) WHEN SCREWS ARE USED WITH THE NAIL FIN, THEY MUST BE A WAFFLE HEAD SCREW OR HAVE A FLAT WASHER AT THE SCREW HEAD.
- (4) 2X BUCKS SHALL BE OF A MINIMUM DEPTH REQUIRED TO MEET ANCHOR EDGE DISTANCE REQUIREMENTS BUT NO LESS THAN 4 1/4".



CMU IS NOT APPLICABLE AT HEAD & SILL.

PRESSURES & CONDITIONS SHOWN IN THIS DRAWING ARE GOVERNED BY INSTALLATION & MILLION REQUIREMENTS ONLY. THE GOVERNING CONDITIONS ON ANY SPECIFIC PRODUCT SHALL BE THE LESSER OF THOSE SPECIFIED IN THE PRODUCT'S TDI APPROVAL OR THAT SHOWN IN THESE DRAWINGS.

**INSTALLATION NOTE:**  
WHEN NECESSARY, INSTALLATION METHODS MAY BE MIXED WITH ANY ONE DOOR SUCH THAT INDIVIDUAL SIDES OF THE DOOR MAY USE ONE OR THE OTHER ANCHOR METHOD (EXAMPLE: ONE SIDE MAY USE FRAME SCREWS METHOD WHILE THE OTHER SIDE & HEAD USE FIN)

**ANCHOR/SUBSTRATE EVALUATION NOTE:**  
ALL ANCHORS IN THEIR SPECIFIED SUBSTRATES HAVE BEEN ANALYZED IN ACCORDANCE WITH THEIR APPLICABLE STANDARD(S) AND ARE FOUND TO BE CAPABLE OF SUPPORTING ALL LOADS IMPOSED ON THEM UNDER THE GUIDELINES OF THIS DOCUMENT. ANY SUBSTRATES OR CONDITIONS OUTSIDE OF WHAT IS SHOWN HERE-IN SHALL BE SUBJECT TO JOB SPECIFIC ENGINEER'S REVIEW & CERTIFICATION.

ALLOWABLE DESIGN PRESSURE (FIXED "0" PANEL UNITS)

+/-50 PSF

NO.	REVISION DESCRIPTION	BY	DATE

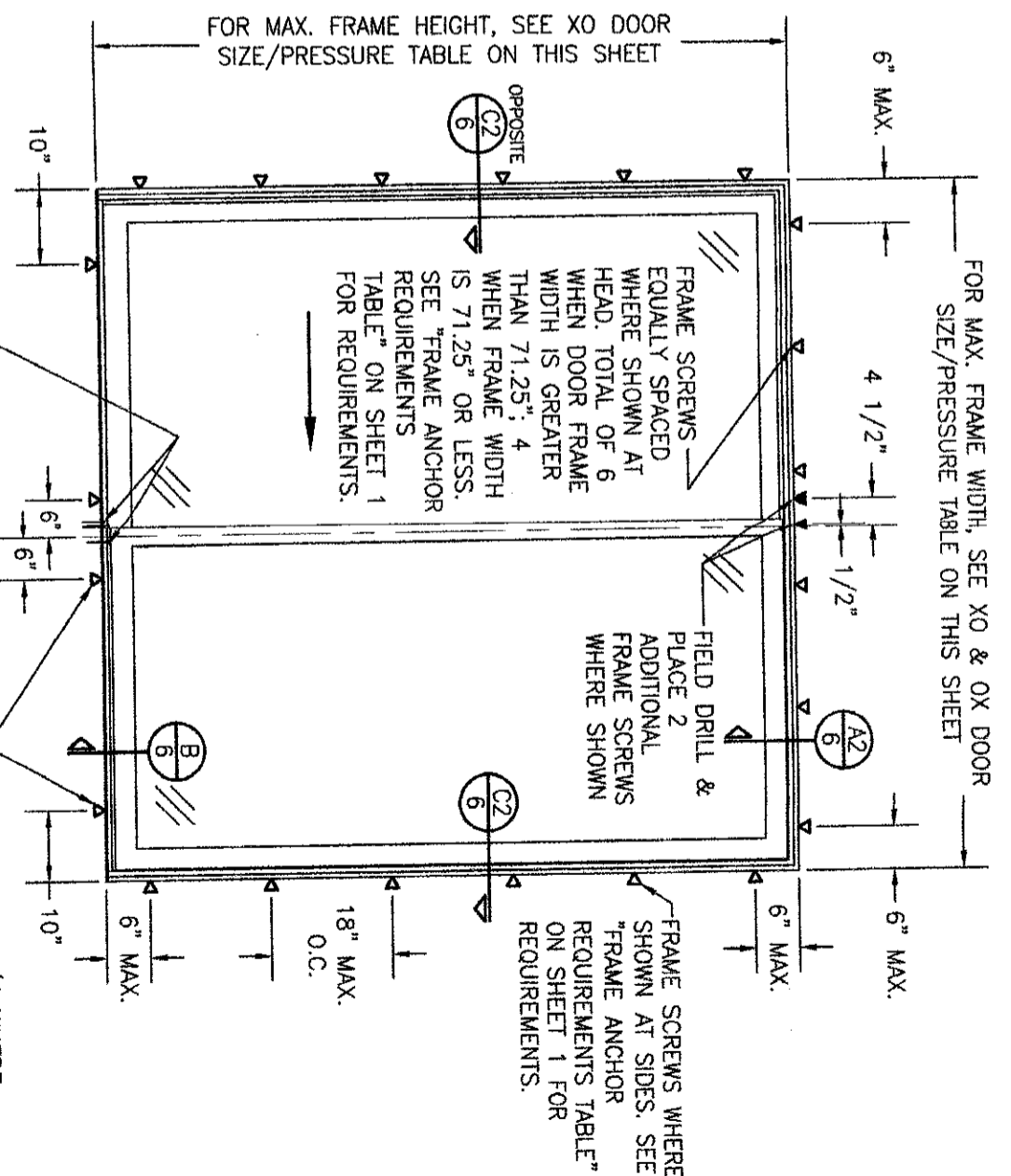
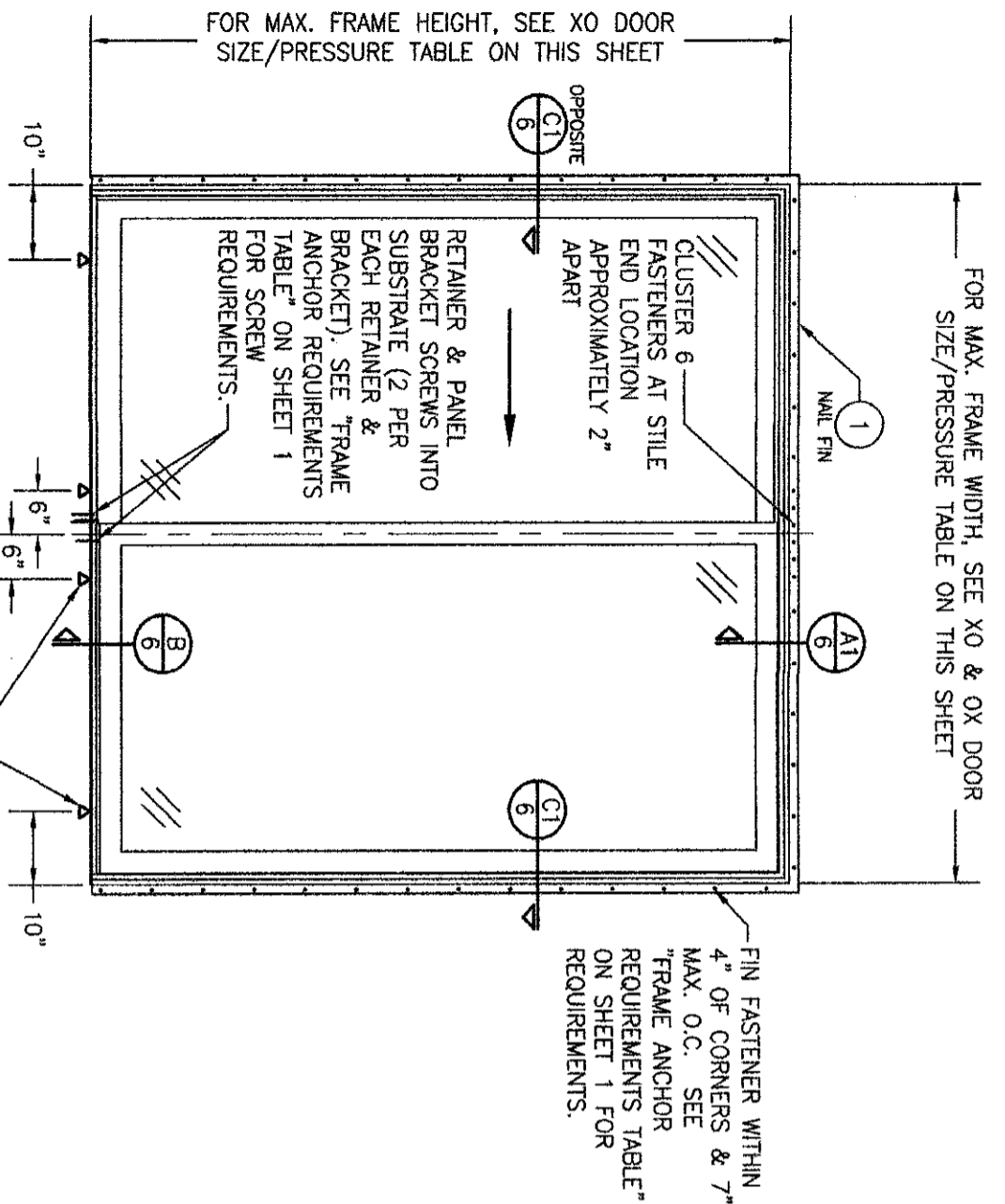
**PELLA CORPORATION**  
102 MAIN STREET  
PELLA, IA 50219  
641-621-1000

**W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)**  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424

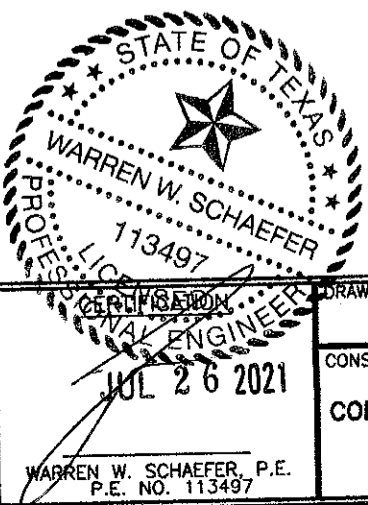
**WARREN W. SCHAEFER, P.E.**  
LICENSED PROFESSIONAL ENGINEER  
113497

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR PATENT AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

DRAWING NO. 2003T  
SHEET NO. 1 OF 7



ALLOWABLE DESIGN PRESSURE (XO & OX DOORS)		
MAX. FRAME WIDTH (IN.)	MAX. FRAME HEIGHT (IN.)	ALLOWABLE PRESSURE (+/- PSF)
71.25	81.5	50
95.25	95.5	35
NAIL FIN MOUNT		
95.25	95.5	50
FRAME SCREW MOUNT		
95.25	95.5	50



DRAWING TITLE: IMPERVIA MODEL 2.0 NON-IMPACT SLIDING PATIO DOORS

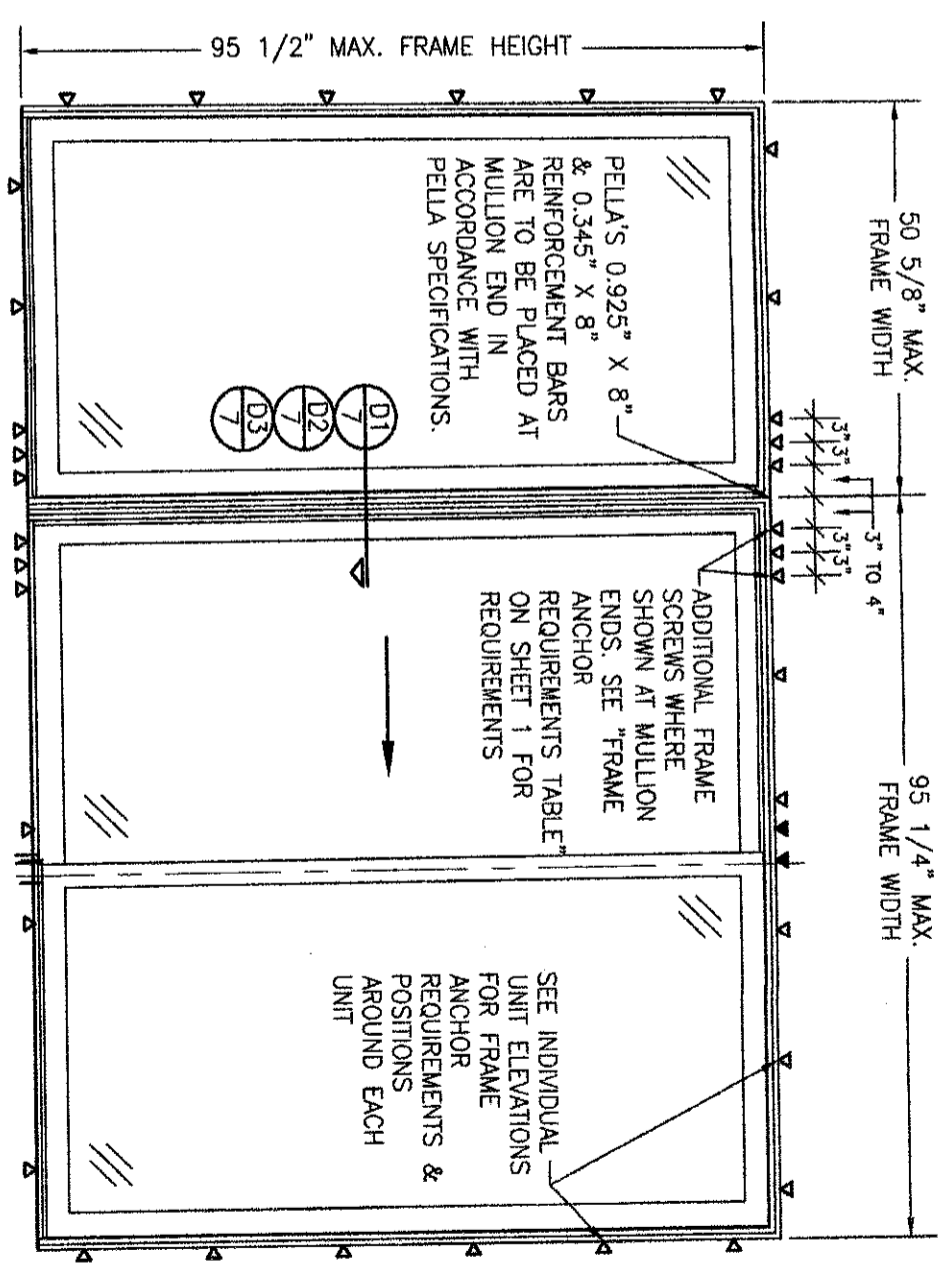
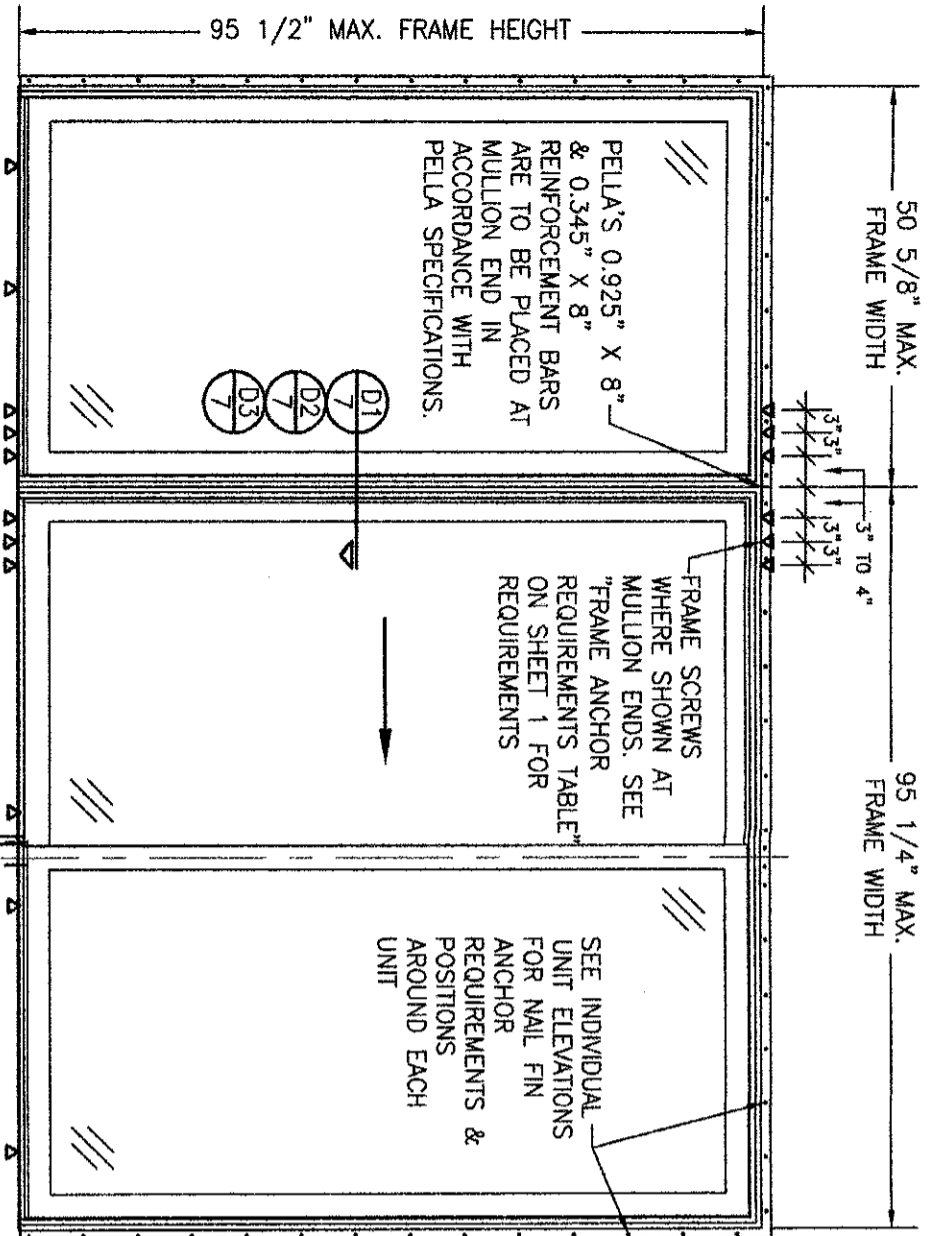
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)  
7480 150TH COURT NORTH, PALM BEACH GARDENS, FL 33418, PHONE: 561-744-3424

JOB INFORMATION: PELLA CORPORATION  
102 MAIN STREET, PELLA, IA 50219, 641-621-1000

WARREN W. SCHAEFER, P.E., P.E. NO. 113497

NO.	REVISION DESCRIPTION	BY	DATE

DRAWN BY: W.W.S. CHECKED BY: W.W.S.  
DATE: 1-24 DATE: 07/26/21  
SHEET NO. 2 OF 7



**EXTERIOR ELEVATION:  
O-XO MULLED UNIT**

SCALE: 1/2" = 1'-0"  
(NAIL FIN MOUNT CONDITION)

(O-XO UNIT IS SHOWN. SEE CONFIGURATION TABLE ON THIS SHEET FOR ALL OTHER APPLICABLE MULLED UNITS CONFIGURATIONS.)

**ALLOWABLE DESIGN  
PRESSURE  
(SIDE-BY-SIDE MULLED UNITS)**

ALLOWABLE PRESSURE FOR THE MULLED UNIT IS AS CONTROLLED BY THE LESSER ALLOWABLE PRESSURE ON EACH THE O, OX & XO DOOR UNIT(S) WITHIN THE MULLED UNIT. SEE THE O, OX & XO DOOR UNIT PRESSURE TABLES ON SHEETS 1 & 2 FOR ALLOWABLE PRESSURE ON EACH UNIT.

NOTE: PRESSURES STATED ABOVE ARE APPLICABLE TO ALL 3 MULLION SECTIONS D1, D2 & D3.

**EXTERIOR ELEVATION:  
O-XO MULLED UNIT**

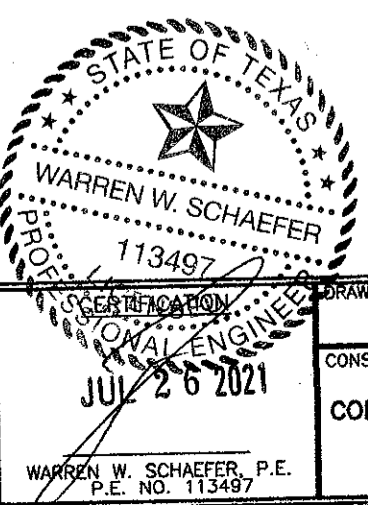
SCALE: 1/2" = 1'-0"  
(FRAME SCREW MOUNT CONDITION)

(O-XO UNIT IS SHOWN. SEE CONFIGURATION TABLE ON THIS SHEET FOR ALL OTHER APPLICABLE MULLED UNITS CONFIGURATIONS.)

**SIDE-BY-SIDE MULLED UNIT  
CONFIGURATION TABLE**

NUMBER OF PANELS	CONFIGURATIONS
1	0
2	0-0
3	0-XO, 0-0X, XO-0, OX-0 & 0-0-0
4	0-XO-0, 0-0X-0, XO-0X, OX-XO, XO-XO, OX-0X, 0-0-0X, 0-0-0X, XO-0-0, OX-0-0 & 0-0-0-0

"O" APPLIES TO A FIXED PANEL;  
"X" APPLIES TO A SLIDING PANEL  
"\_" DESIGNATES A MULLION



DRAWING TITLE: IMPERVIA MODEL 2.0 NON-IMPACT SLIDING PATIO DOORS

CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)  
7480 150TH COURT NORTH  
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PHONE: 561-744-3424

JOB INFORMATION:



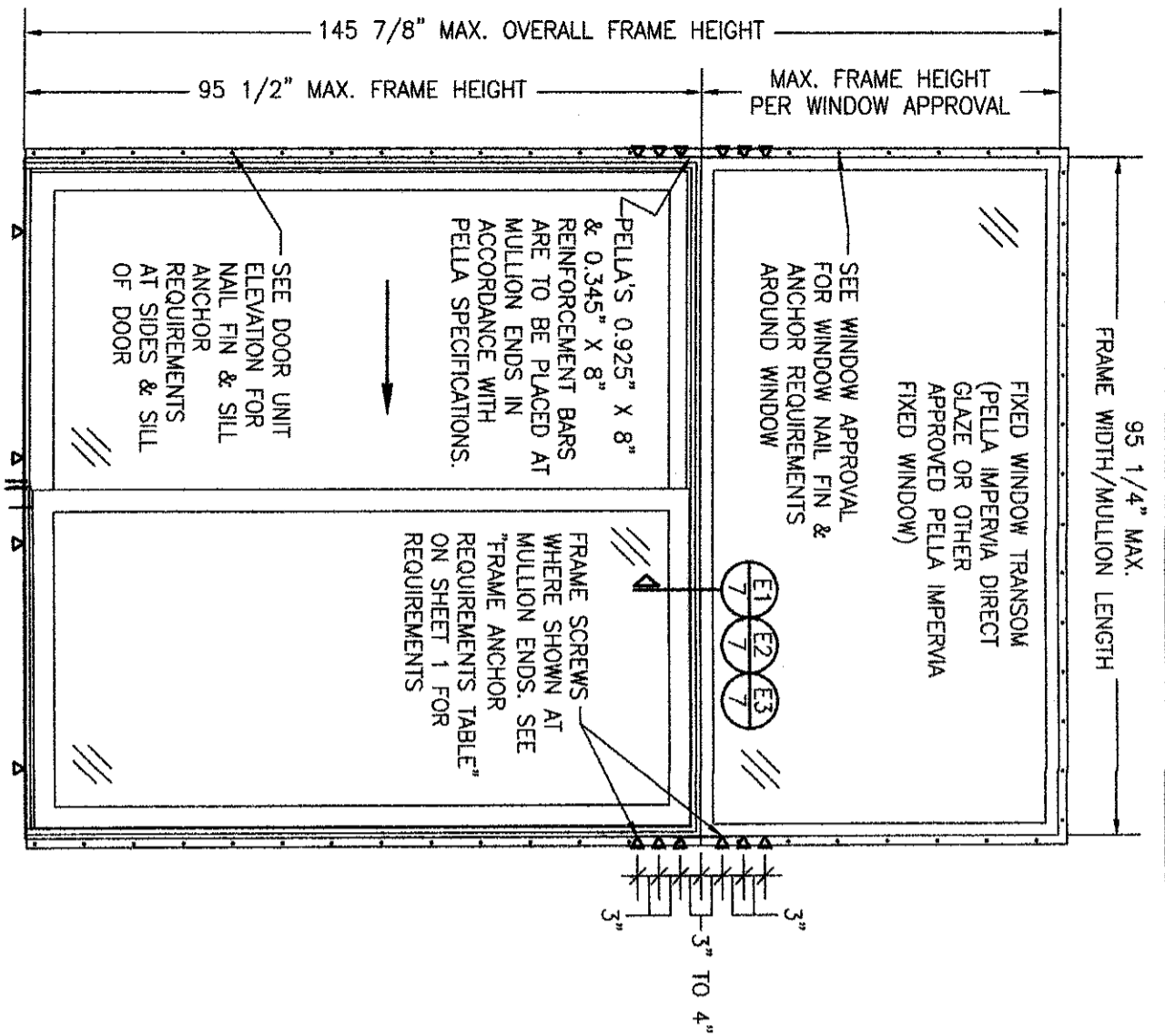
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102 MAIN STREET  
PELLA, IA 50219  
641-621-1000

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING NO. 2003T  
SHEET NO. 3 OF 7

WARREN W. SCHAEFER, P.E.  
P.E. NO. 113497

DRAWN BY: M.W.S.  
CHECKED BY: M.W.S.  
DATE: 07/26/21



**EXTERIOR ELEVATION:  
OX DOOR WITH TRANSOM**  
SCALE: 1/2" = 1'-0"  
(NAIL FIN MOUNT CONDITION)  
(OX DOOR IS SHOWN. OX DOOR ALSO APPLIES.)

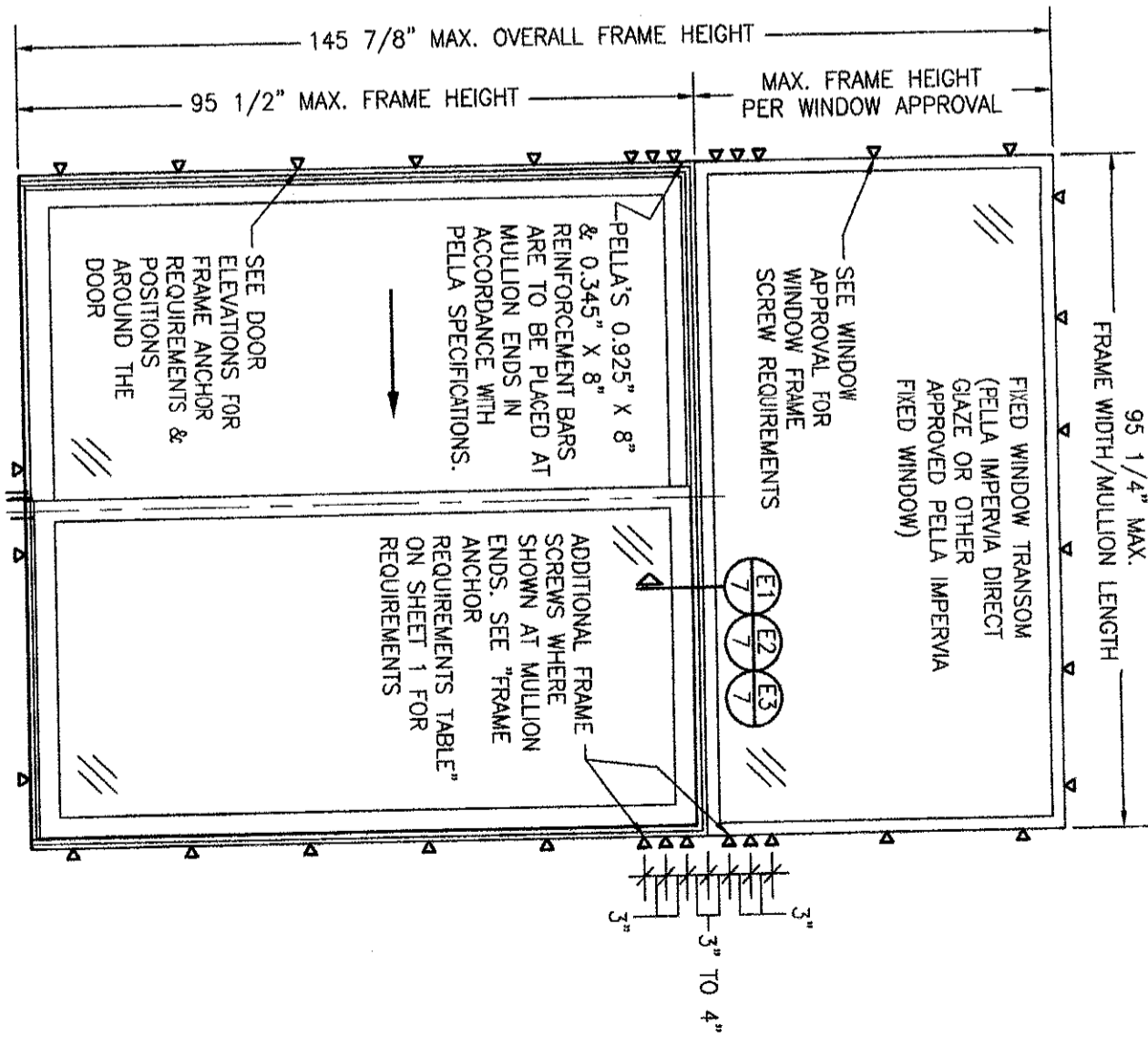
**ALLOWABLE DESIGN PRESSURE  
(OX & OX DOORS WITH TRANSOM)**

FOR ALLOWABLE PRESSURE ON DOOR, SEE XO & OX DOOR ELEVATION SHEET 2.  
FOR ALLOWABLE PRESSURE ON TRANSOM WINDOW, SEE APPLICABLE WINDOW APPROVAL.  
FOR ALLOWABLE PRESSURE ON MULLION, SEE MULLION PRESSURE TABLE ON THIS SHEET.

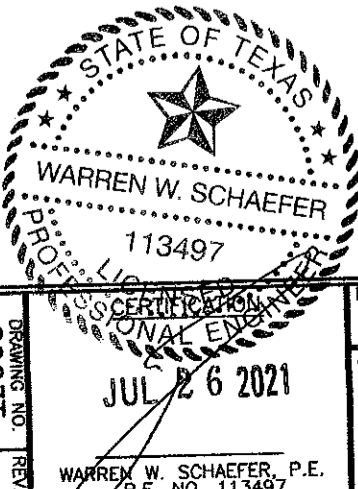
**NOTE:** ALLOWABLE PRESSURE ON THE ENTIRE UNIT SHALL BE THE LESSER OF THE ALLOWABLE PRESSURES REFERENCED ABOVE.


ALLOWABLE TRANSOM MULLION PRESSURE TABLE (JAMB TO JAMB MULLION)		
MAXIMUM FRAME WIDTH (IN.)	MAXIMUM OVERALL FRAME HEIGHT (IN.)	ALLOWABLE PRESSURE (+/- PSF)
95.25	146	28.3
	132	31.3
	120	34.4
92.25	108	38.2
	96	43.0
	92	44.9
89.25	146	30.2
	132	33.4
	120	36.7
	108	40.8
	96	45.9
	92	47.9
86.25	146	32.2
	132	35.7
	120	39.2
	108	43.6
	96	49.0
	94	50.0
83.25	146	34.5
	132	38.2
	120	42.0
	108	46.7
	100	50.0
	146	37.0
80.25	146	39.9
	132	44.1
	120	48.5
	116	50.0
	146	43.0
	132	47.6
77.25	124	50.0
	146	46.6
	136	50.0
71.25	146	50.0

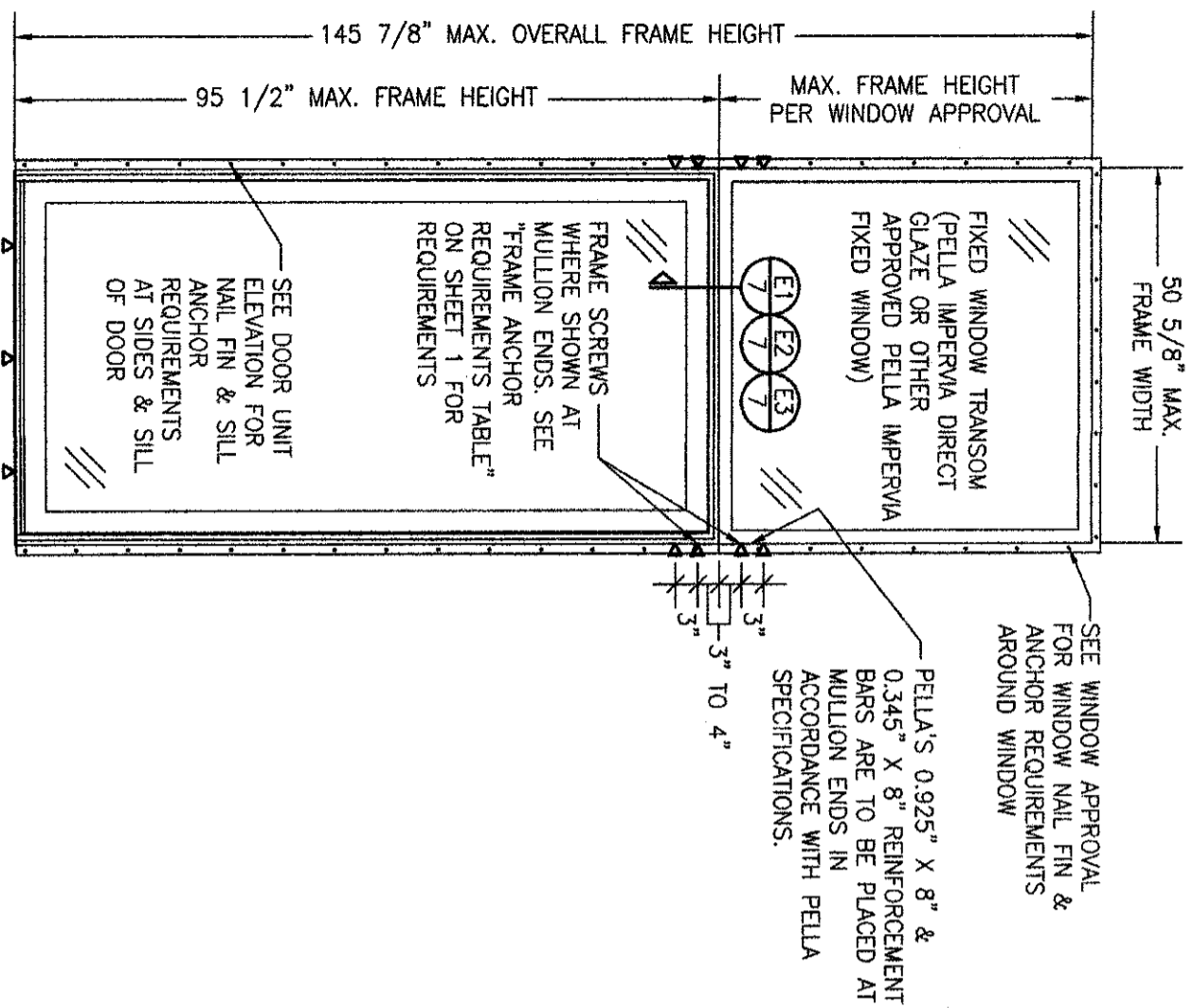
ALLOWABLE TRANSOM MULLION PRESSURE TABLE (1/2" & 1" SPREAD MULLIONS)		
MAXIMUM FRAME WIDTH (IN.)	MAXIMUM OVERALL FRAME HEIGHT (IN.)	ALLOWABLE PRESSURE (+/- PSF)
95.25	146	50.0



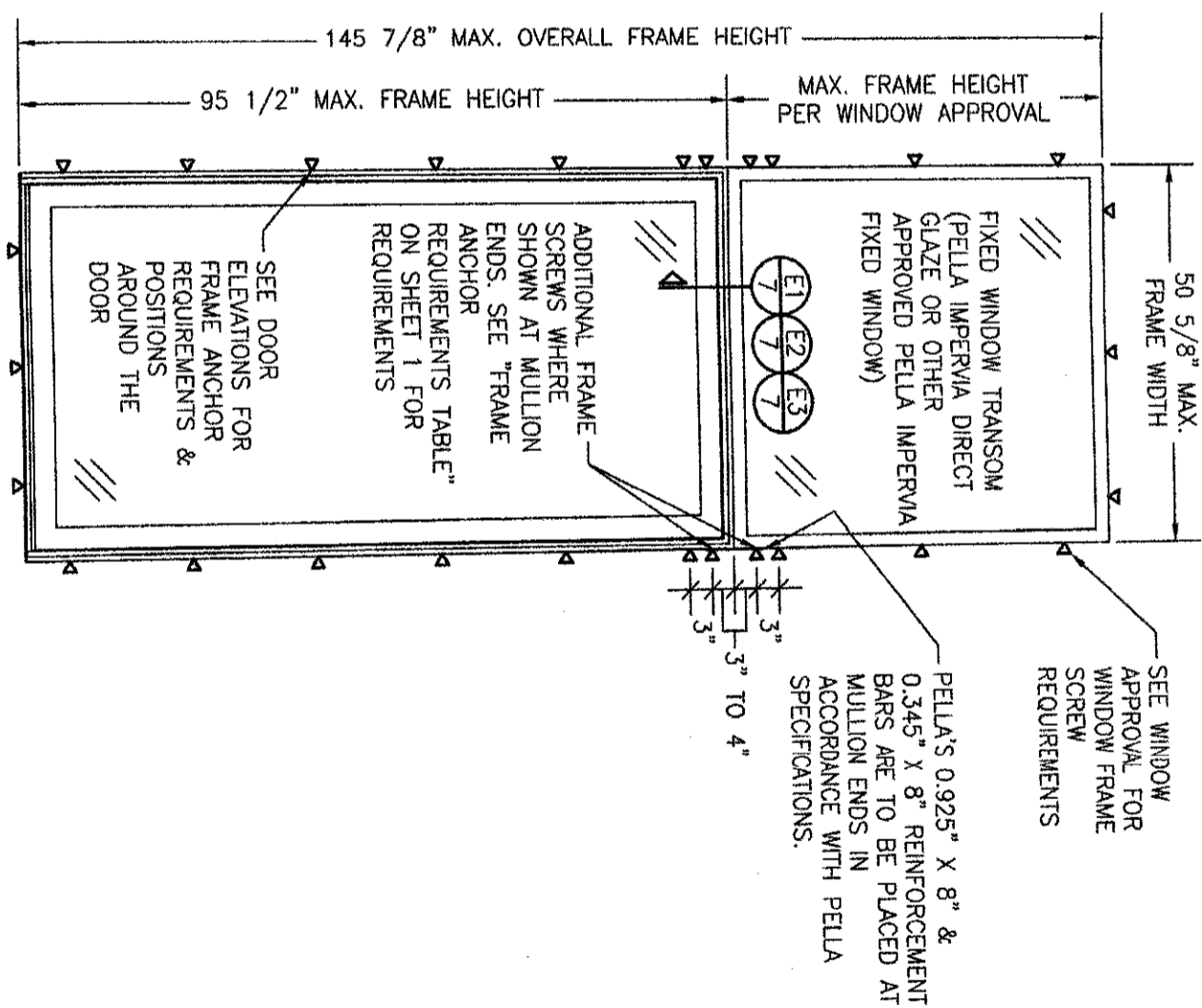
**EXTERIOR ELEVATION:  
OX DOOR WITH TRANSOM**  
SCALE: 1/2" = 1'-0"  
(FRAME SCREW MOUNT CONDITION)  
(OX DOOR IS SHOWN. OX DOOR ALSO APPLIES.)



DRAWING TITLE <b>IMPERVIA MODEL 2.0 NON-IMPACT SLIDING PATIO DOORS</b>	JOB INFORMATION:  <b>PELLA CORPORATION</b> 102 MAIN STREET PELLA, IA 50219 641-621-1000	NO. _____	REVISION DESCRIPTION _____	BY _____	DATE _____
		CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (REG. NO. F-14980)</b> 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	DRAWING NO.: <b>2005T</b>	SHEET NO.: <b>4</b> of <b>7</b>	DATE: <b>07/26/21</b>

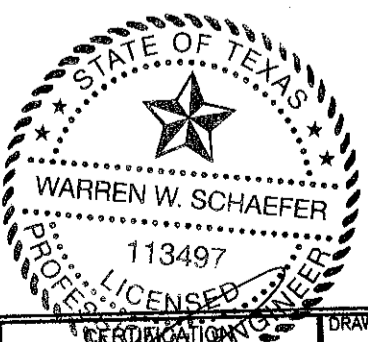


**EXTERIOR ELEVATION:  
FIXED PANEL DOOR WITH TRANSOM**  
(NAIL FIN MOUNT CONDITION)  
SCALE: 1/2" = 1'-0"



**EXTERIOR ELEVATION:  
FIXED PANEL DOOR WITH TRANSOM**  
(FRAME SCREW MOUNT CONDITION)  
SCALE: 1/2" = 1'-0"

**ALLOWABLE DESIGN PRESSURE  
(XO & OX DOORS WITH TRANSOM)**  
FOR ALLOWABLE PRESSURE ON DOOR, SEE  
"O" DOOR ELEVATION SHEET 1.  
FOR ALLOWABLE PRESSURE ON TRANSOM  
WINDOW, SEE APPLICABLE WINDOW APPROVAL.  
**NOTE:** ALLOWABLE PRESSURE ON THE ENTIRE  
UNIT SHALL BE THE LESSER OF THE  
ALLOWABLE PRESSURES ON THE DOOR AND  
TRANSOM WINDOW.



JUL 26 2021

WARREN W. SCHAEFER, P.E.  
P.E. NO. 113497

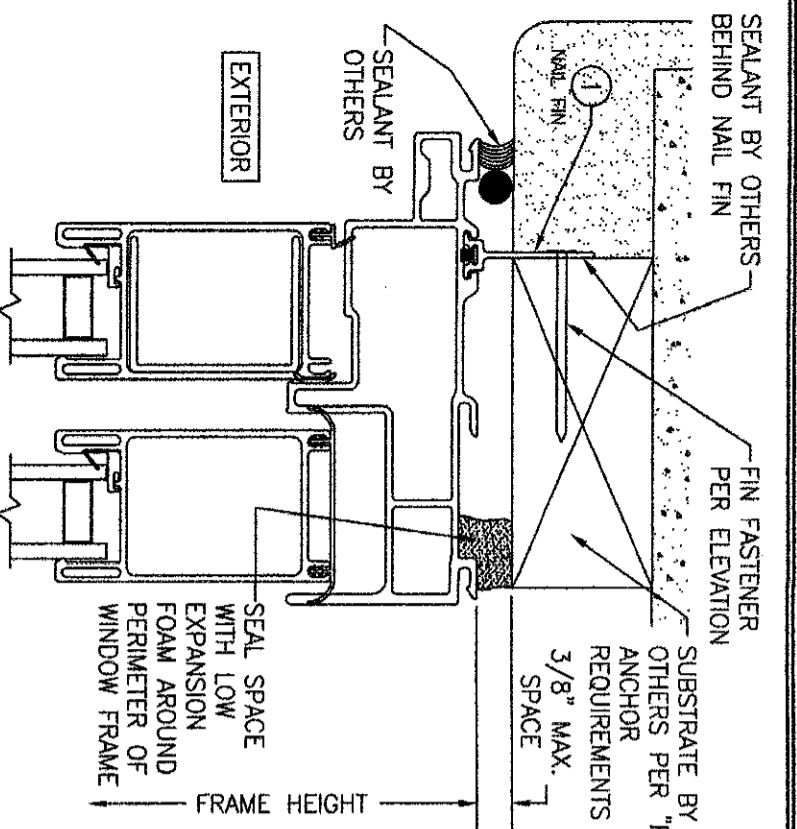
**DRAWING TITLE**  
IMPERVIA MODEL 2.0 NON-IMPACT SLIDING PATIO DOORS

**CONSULTANTS**  
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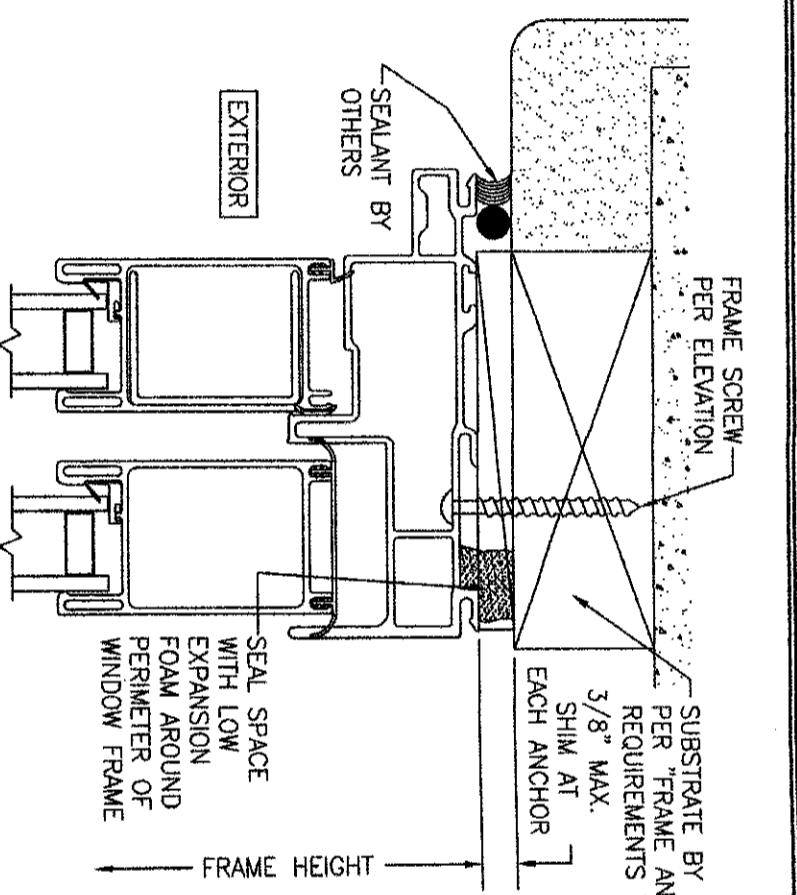
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102 MAIN STREET  
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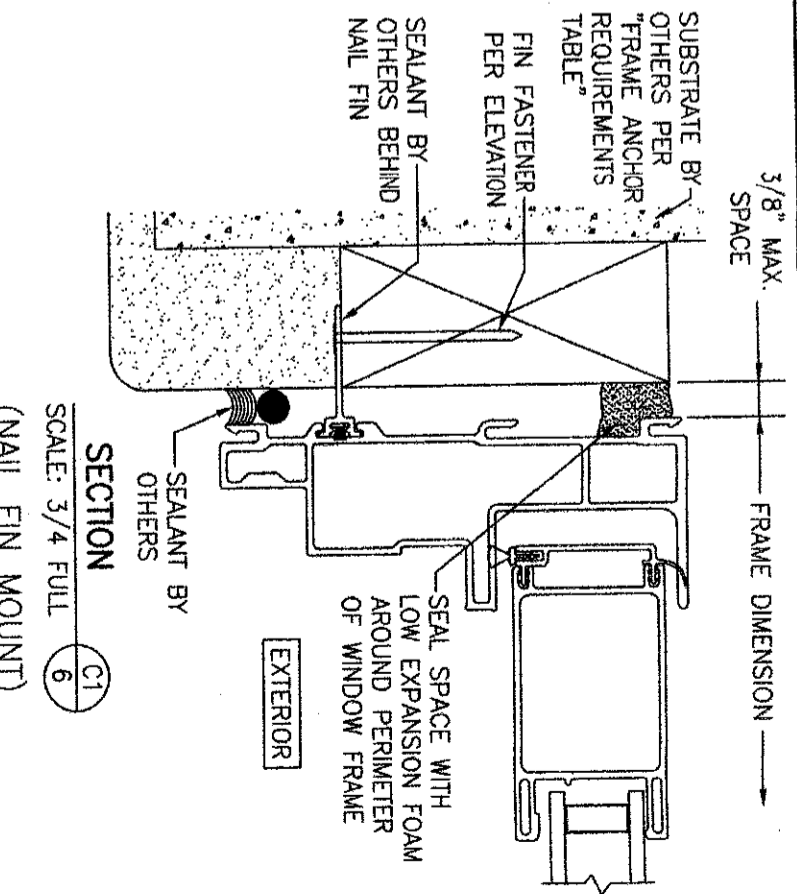
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 SHEET NO. 5 OF 7



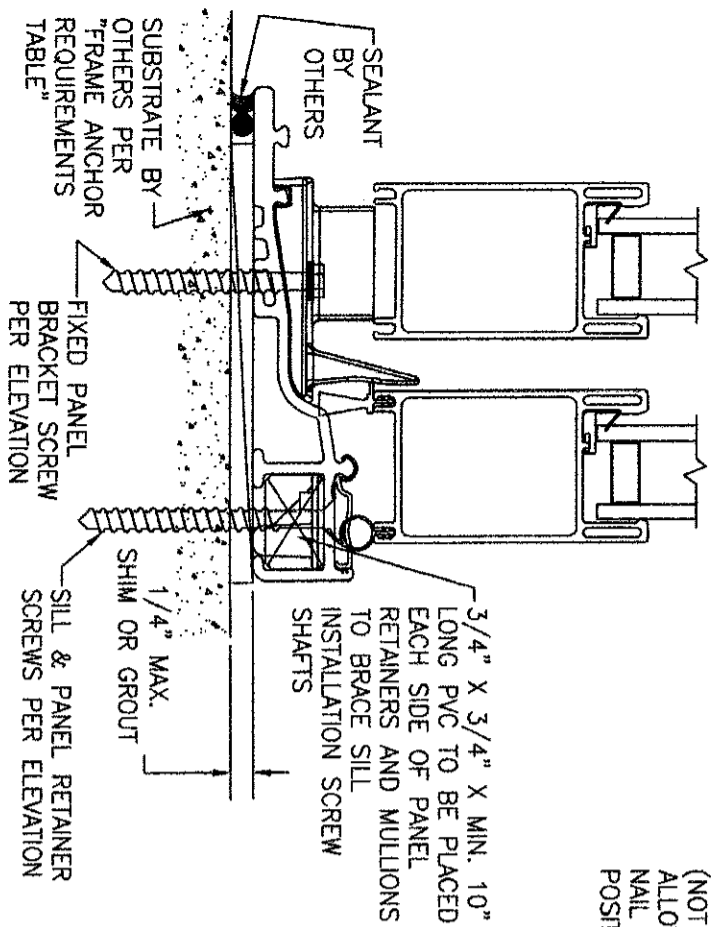
SECTION A1  
SCALE: 3/4 FULL  
(NAIL FIN MOUNT)



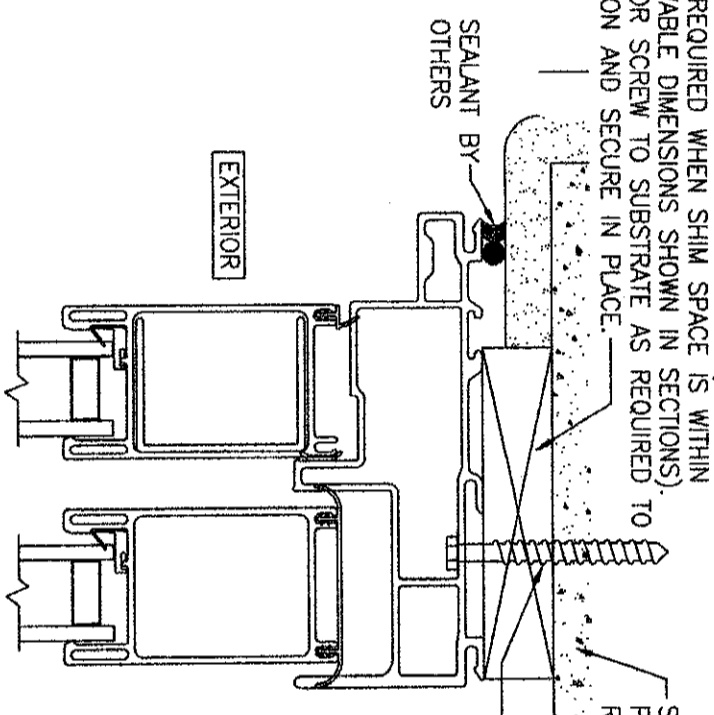
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SCALE: 3/4 FULL  
(FRAME SCREW MOUNT)



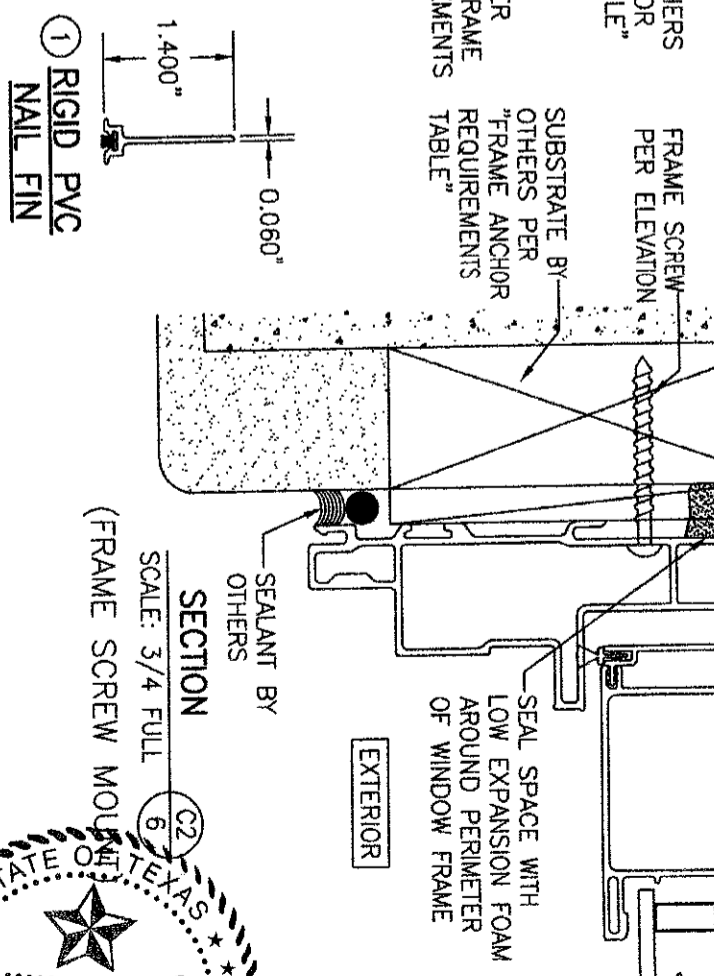
SECTION C1  
SCALE: 3/4 FULL  
(NAIL FIN MOUNT)



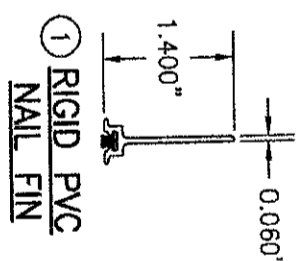
SECTION B  
SCALE: 3/4 FULL



SECTION A  
SCALE: 3/4 FULL  
(FRAME SCREW MOUNT)



SECTION C2  
SCALE: 3/4 FULL  
(FRAME SCREW MOUNT)



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER  
(HEAD SECTION SHOWN; SILL & SIDES ARE INSTALLED THE SAME)  
(DIRECT MOUNT CONDITION IS NOT APPLICABLE AT SILL)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

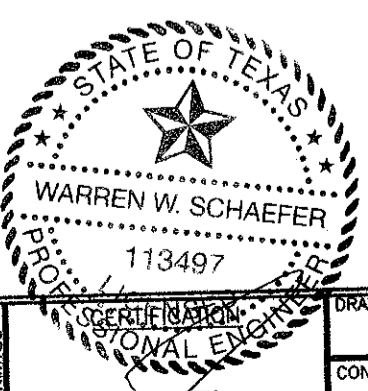
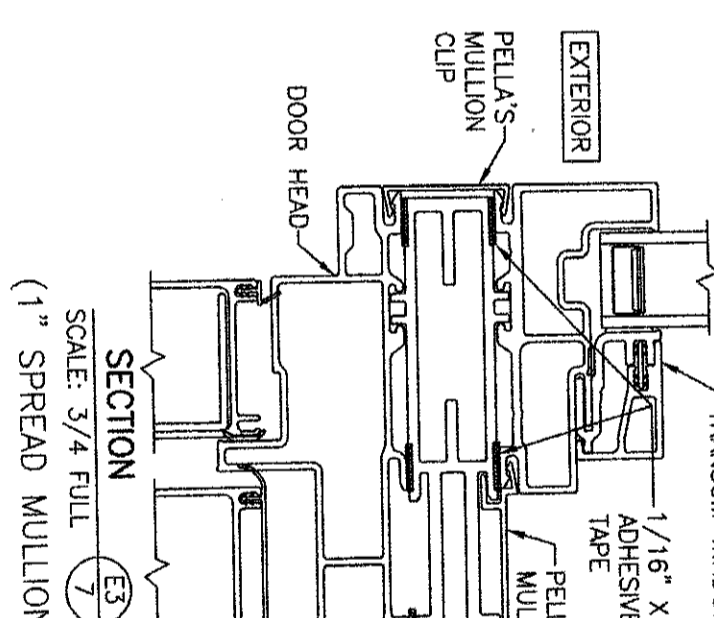
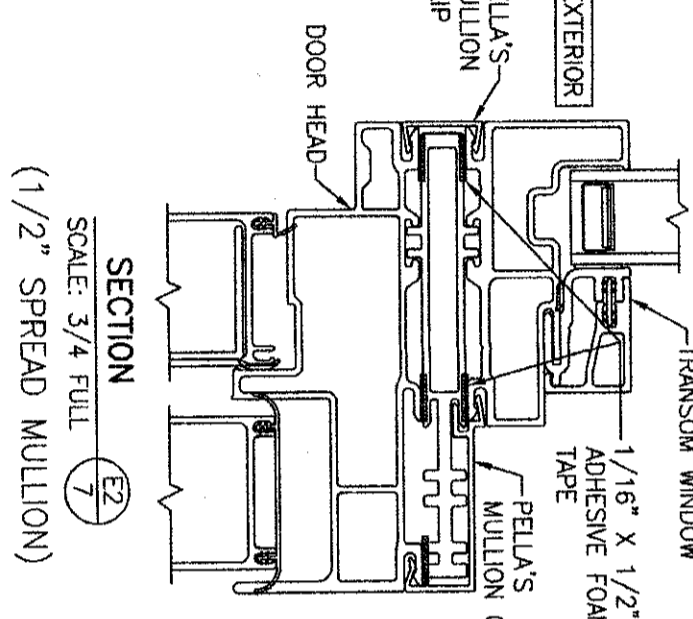
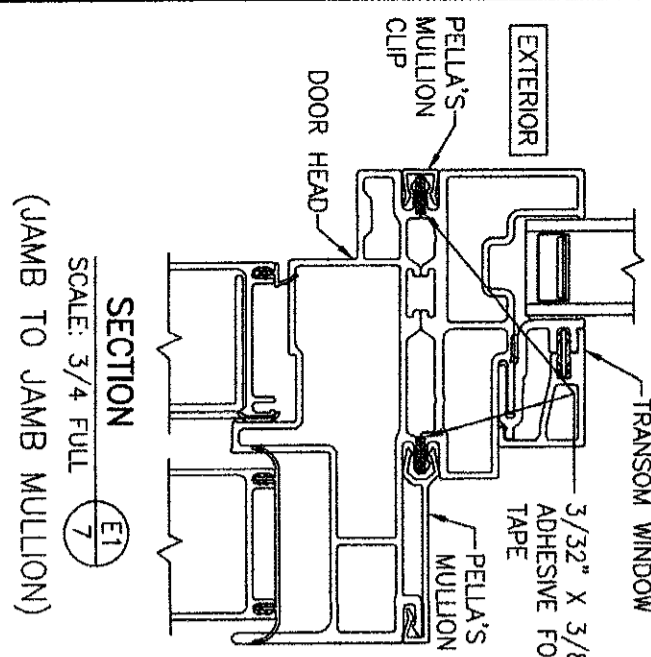
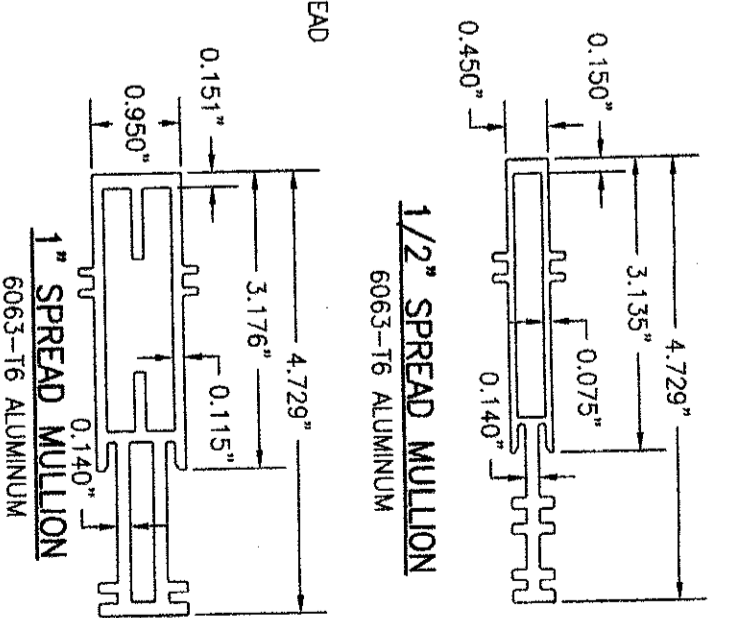
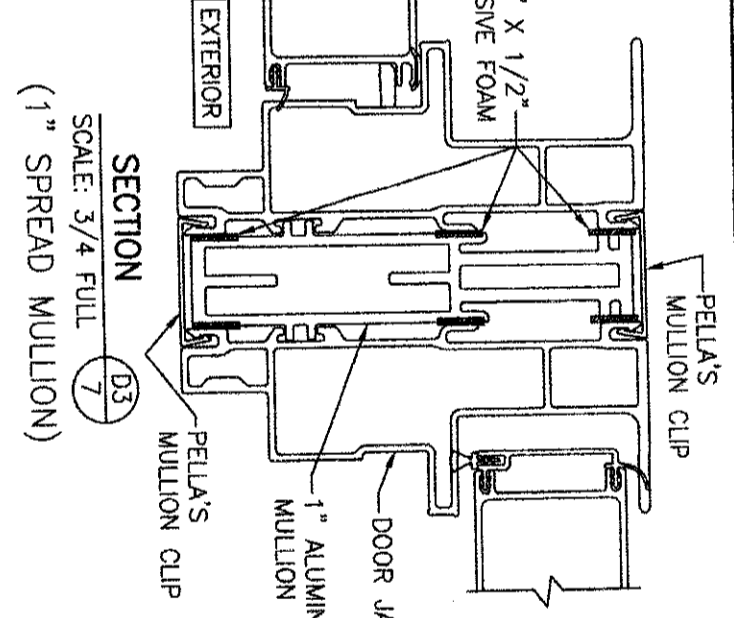
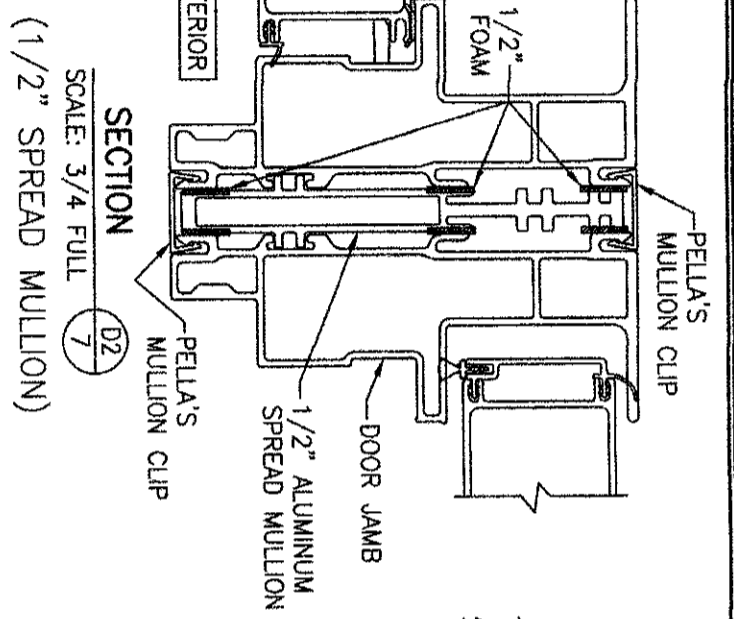
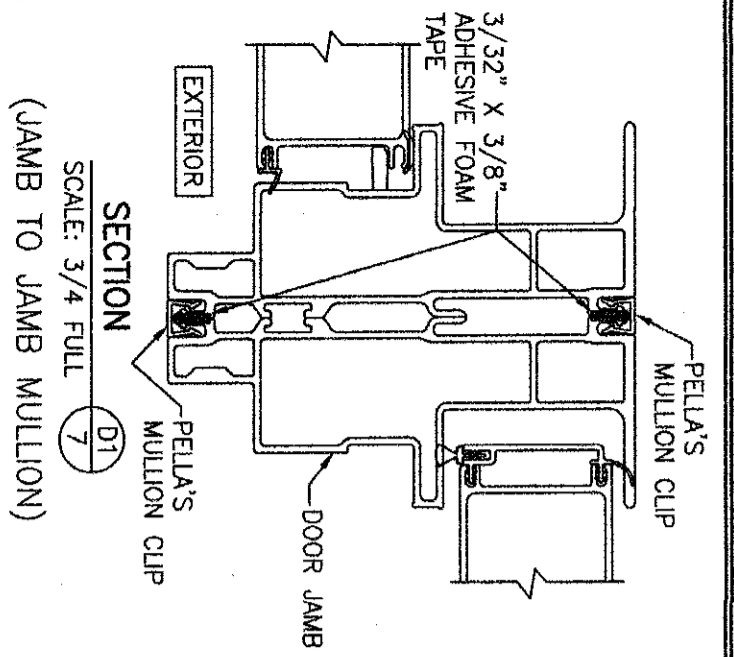
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DRAWING NO. 2003T  
SHEET NO. 6 OF 7



JUL 28 2021

WARREN W. SCHAEFER, P.E.  
P.E. NO. 113497

DRAWING TITLE  
IMPERVIA MODEL 2.0 NON-IMPACT SLIDING PATIO DOORS

CONSULTANTS  
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