

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)."
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH 2018 IBC REFERENCED STANDARDS ASTM E330, E283, E331, E1886 & E1996 & AAMA 1304 FOR LARGE & SMALL MISSILE IMPACT PRODUCTS. ALL TESTING OF THIS PRODUCT TO STANDARDS LESS CURRENT THAN THOSE SPECIFIED IN THE 2018 IBC HAS BEEN DETERMINED EQUIVALENT TO THE MORE CURRENT VERSIONS OF THOSE STANDARDS REFERENCED IN THE 2018 IBC.
5. THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE (IBC) & IS BOTH LARGE & SMALL MISSILE IMPACT RATED.
6. WHEN GLAZED FOR SMALL MISSILE IMPACT, THIS PRODUCT MAY NOT BE INSTALLED AT ELEVATIONS BELOW 30 FT. ABOVE GRADE OR AT ANY CODE DESIGNATED LARGE MISSILE IMPACT LOCATION WITHOUT AN APPROVED SHUTTER.
7. WHEN LARGE MISSILE IMPACT GLAZED, IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
8. ALL ANCHORS SECURING PRODUCT FRAMES TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
9. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, A DIRECTIONALITY FACTOR OF $KD = 0.85$ MAY BE APPLIED PER THE ASCE-7 STANDARD.
10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE SEPARATED OR COATED AS REQUIRED TO AVOID CORROSION OF EITHER MATERIAL.
11. TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN ARE QUALITY ASSURED BY AN APPROVED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH APPLICABLE STANDARDS. THESE DRAWINGS SHOW ALL APPLICABLE ELEVATION, COMBINATION, INSTALLATION & COMPARATIVE ANALYSIS CONDITIONS AS DETERMINED THROUGH TESTING & ENGINEERING RATIONAL ANALYSIS. PRODUCT ASSEMBLY SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.
12. CERTIFICATION OF THIS PRODUCT SHALL BE CONSIDERED VOID IF THEY ARE INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT OR IF THEY ARE INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH INSTALLATIONS OF THIS TYPE OF PRODUCT.

CORNER CONSTRUCTION:

FRAME: MEMBERS ARE MITER CUT, BUTTED & JOINED VIA TWO(2) SHEAR BLOCKS (PART #'S 11 & 12). EACH SHEAR BLOCK IS FASTENED TO THE THE FRAME MEMBER WITH TWO(2) 5MM X 20MM SCREWS (2 PER BLOCK; 4 PER CORNER). CORNERS, ACCESS HOLES AND SCREW HEADS ARE SEALED WITH TREMCO 600 SILICONE SEALANT & A $\phi 1/2$ X 2" BACKER ROD BETWEEN THE THERMAL BREAK.

RAIL TO STILE: MEMBERS ARE MITER CUT, BUTTED & JOINED VIA A SHEAR BLOCK (PART #13). THE SHEAR BLOCK IS SNAP FIT INTO THE STILES & RAILS. CORNERS AND ACCESS HOLES ARE SEALED WITH TREMCO 600 SILICONE SEALANT.

EVALUATION OF THIS PRODUCT IS BASED ON APPLICABLE STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE BUILDING CODE VERSION CONSIDERED WITH THIS 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 THIS PRODUCT, PRIOR TO STATING CODE COMPLIANCE, THE MANUFACTURER SHALL CONFIRM WITH THE EVALUATION ENGINEER OF RECORD THAT EVERYTHING SPECIFIED HERE-IN IS CURRENT WITH ALL CURRENT TESTING, CODES AND APPLICABLE STANDARDS.

FRAME ANCHOR REQUIREMENTS TABLE

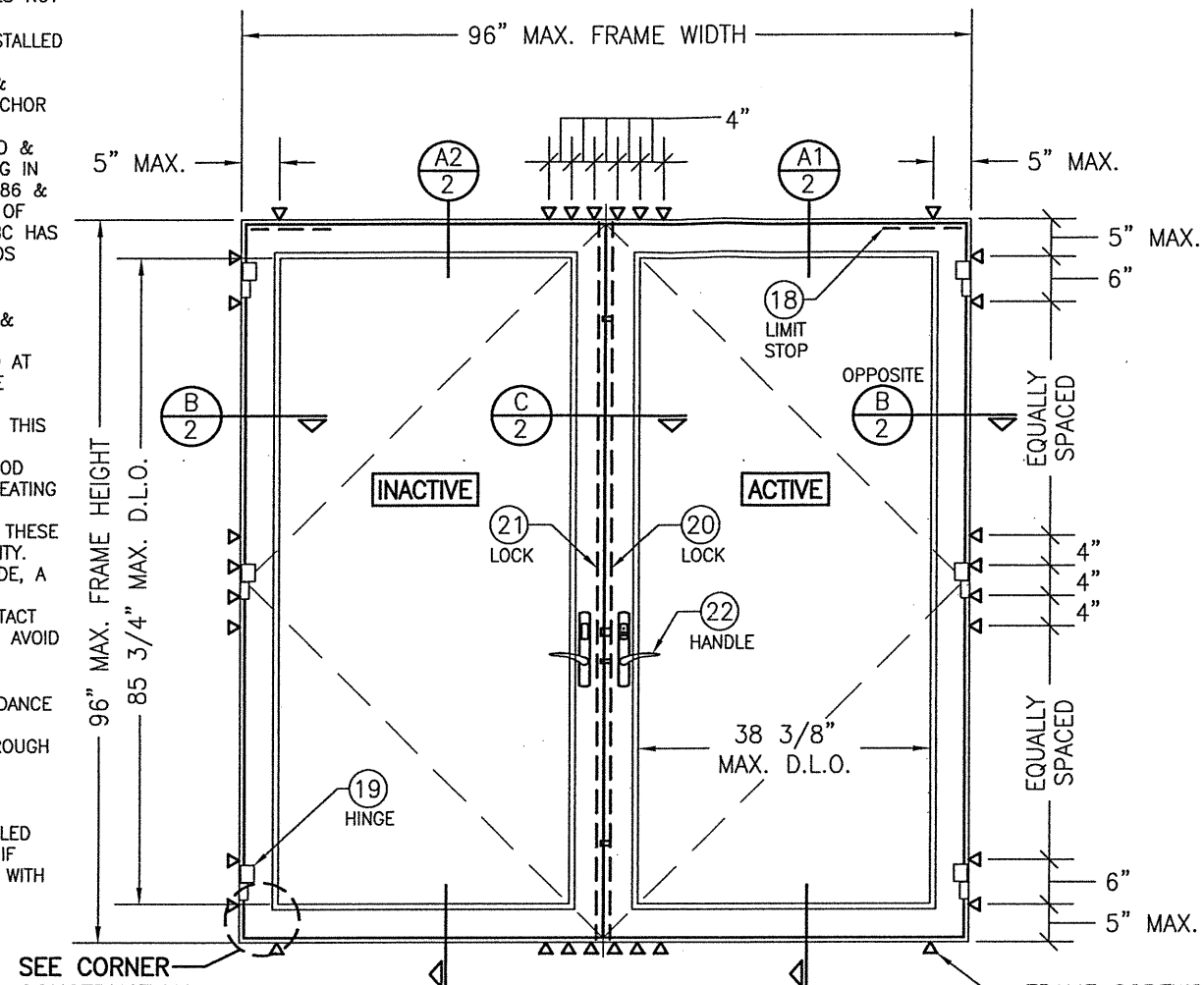
FRAME SCREWS

OPENING TYPE (SUBSTRATE)	FRAME TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 SMS OR WOOD SCREW	1 1/4"	7/8"
MIN. 16 GA. 50 KSI METAL STUD	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 0.100" THK 6063-T5 ALUM.	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2 1/2"
MIN. 3000 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2 1/2"

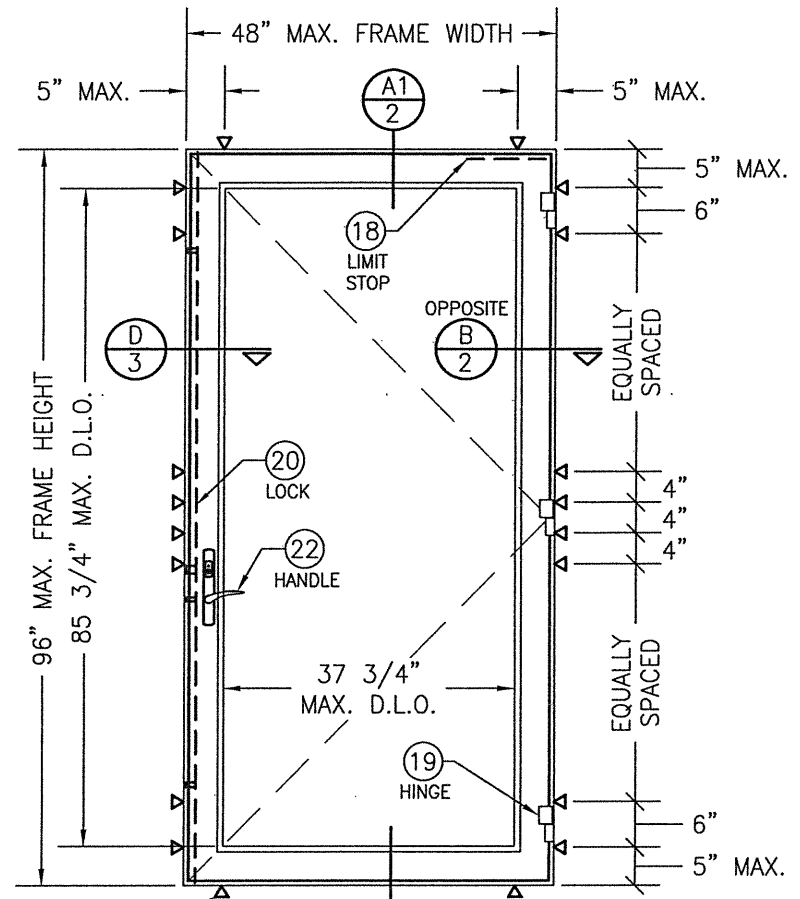
(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KWIK-CON II (C.S OR S.S.).

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 RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLLOT: 1-24	DATE: 02/08/21
DATE	
BY	
REVISION DESCRIPTION	
NO.	



**EXTERIOR ELEVATION;
DOUBLE RECTANGULAR DOOR**
SCALE: 1/2" = 1'-0"



**EXTERIOR ELEVATION;
SINGLE RECTANGULAR DOOR**
SCALE: 1/2" = 1'-0"

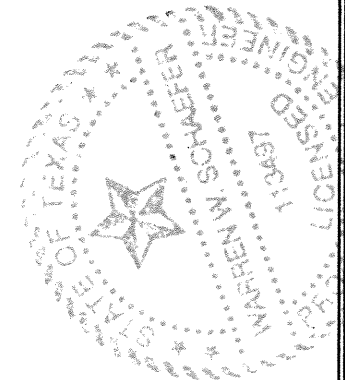
ALLOWABLE DESIGN PRESSURE		
GLAZING DETAIL	GLASS OPTION	ALLOWABLE PRESSURE (+/- PSF)
LARGE MISSILE IMPACT (L.M.I.) DOORS		
1	1	90
1	2	90
1	3	90
1	4	70
1	5	70
2	6	70
SMALL MISSILE IMPACT (S.M.I.) DOORS		
3	7	90
3	8	90

SEE GLAZING DETAILS ON SHEET 3 FOR GLASS & GLAZING OPTIONS

DRAWING TITLE
2000T TERRACE SMALL & LARGE MISSILE IMPACT OUT-SWING DOOR

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

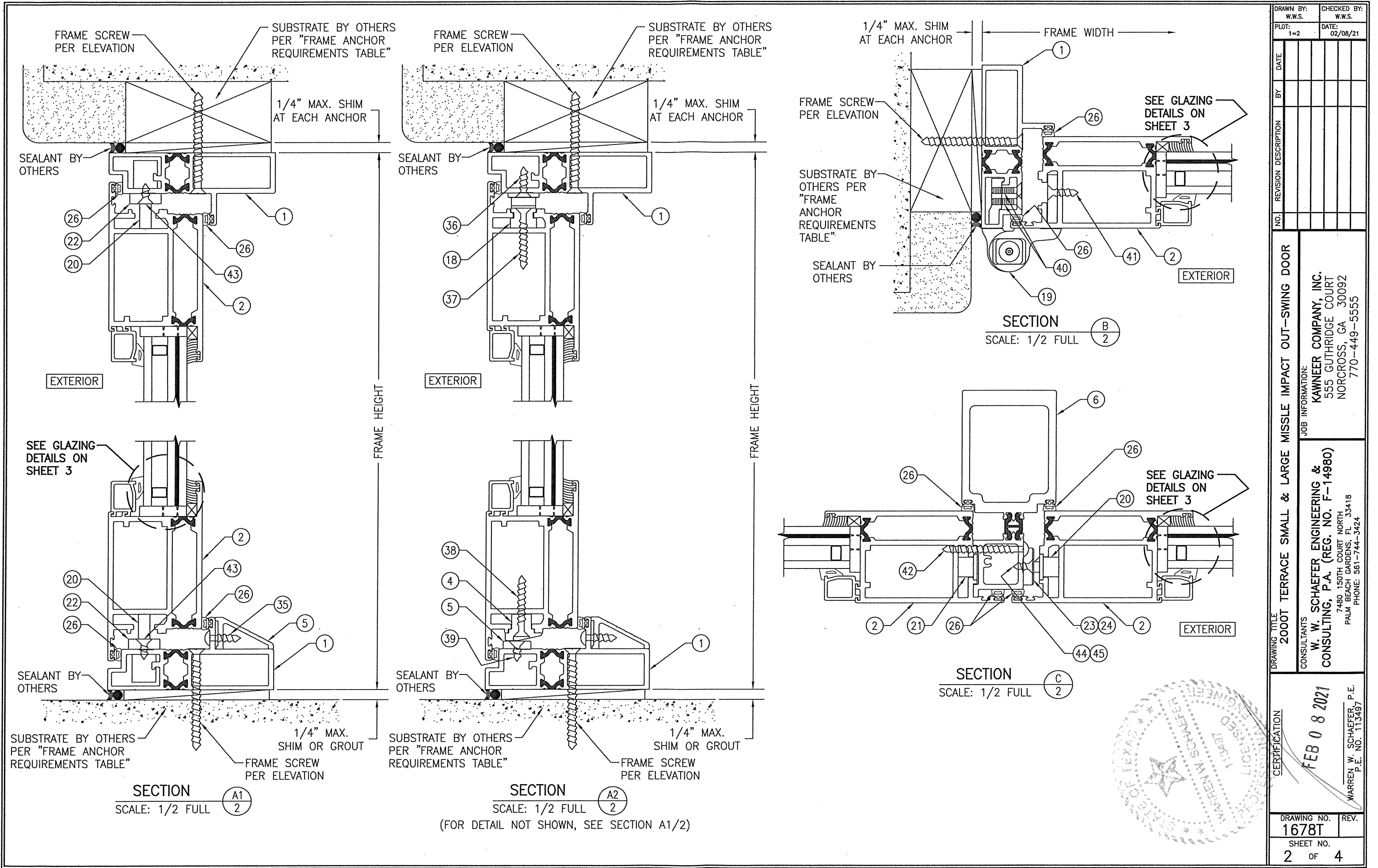
JOB INFORMATION:
KAWNEER COMPANY, INC.
555 GUTHRIE COURT
NORCROSS, GA 30092
770-449-5555



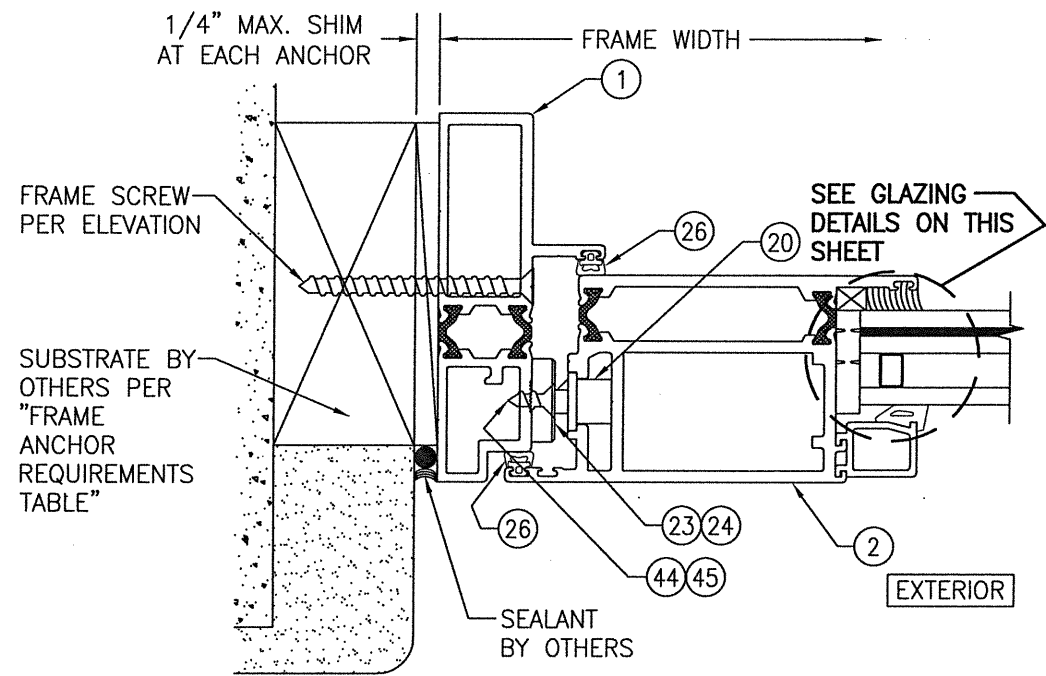
CERTIFICATION
FEB 08 2021
WARREN W. SCHAEFER, P.E.
P.E. NO. 113497

DRAWING NO.
1678T

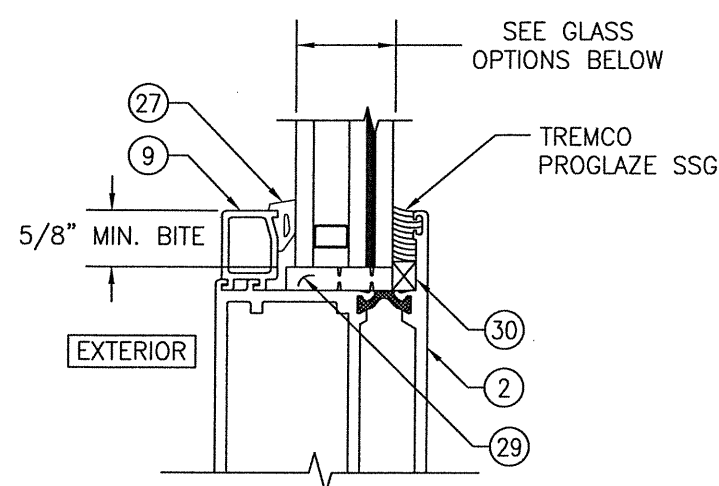
REV.
SHEET NO.
1 OF 4



DRAWN BY: W.W.S. CHECKED BY: W.W.S. PLOT: 1=2 DATE: 02/08/21	NO. REVISION DESCRIPTION NO.
DRAWING TITLE 2000T TERRACE SMALL & LARGE MISSILE IMPACT OUT-SWING DOOR	
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
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	
CERTIFICATION FEB 08 2021 WARREN W. SCHAEFER, P.E. P.E. NO. 113497	
DRAWING NO. 1678T	REV. SHEET NO. 2 OF 4

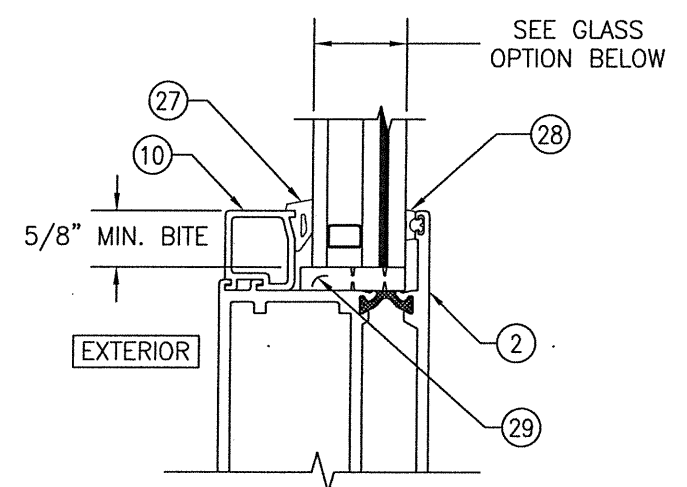


SECTION **D**
SCALE: 1/2 FULL **3**



GLAZING DETAIL 1
(L.M.I. GLASS OPTIONS 1-5)

- GLASS OPTION 1: 1" LAMINATED I.G. (3/16" H.S./0.075" EASTMAN CHEM. CO. SAFLEX STORM/3/16" H.S. INTERIOR; 3/8" SPACER; 3/16" TEMPERED EXTERIOR)
- GLASS OPTION 2: 1" LAMINATED I.G. (3/16" H.S./0.090" KURARAY SG/3/16" H.S. INTERIOR; 3/8" SPACER; 3/16" TEMPERED EXTERIOR)
- GLASS OPTION 3: 1" LAMINATED I.G. (3/16" H.S./0.100" EASTMAN CHEM. CO. SAFLEX HP/3/16" H.S. INTERIOR; 3/8" SPACER; 3/16" TEMPERED EXTERIOR)
- GLASS OPTION 4: 1" LAMINATED I.G. (3/16" H.S./0.090" KURARAY BUTACITE PVB/3/16" H.S. INTERIOR; 3/8" SPACER; 3/16" TEMPERED EXTERIOR)
- GLASS OPTION 5: 1" LAMINATED I.G. (3/16" H.S./0.090" EASTMAN CHEM. CO. SAFLEX/3/16" H.S. INTERIOR; 3/8" SPACER; 3/16" TEMPERED EXTERIOR)

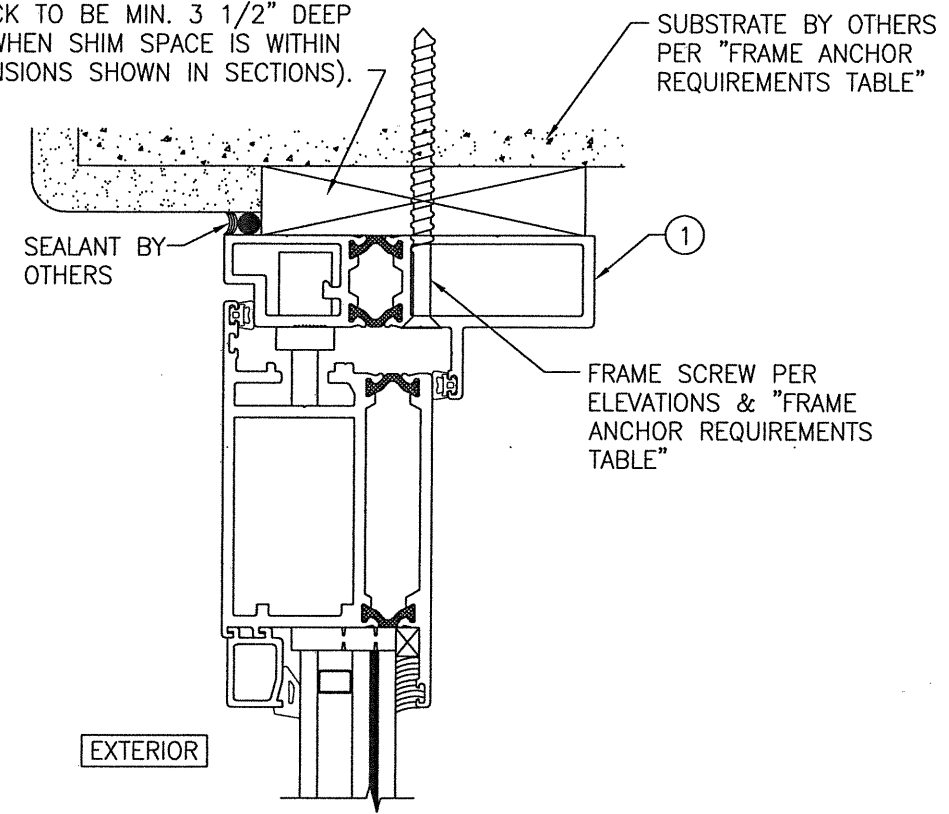


GLAZING DETAIL 2
(L.M.I. GLASS OPTION 6)

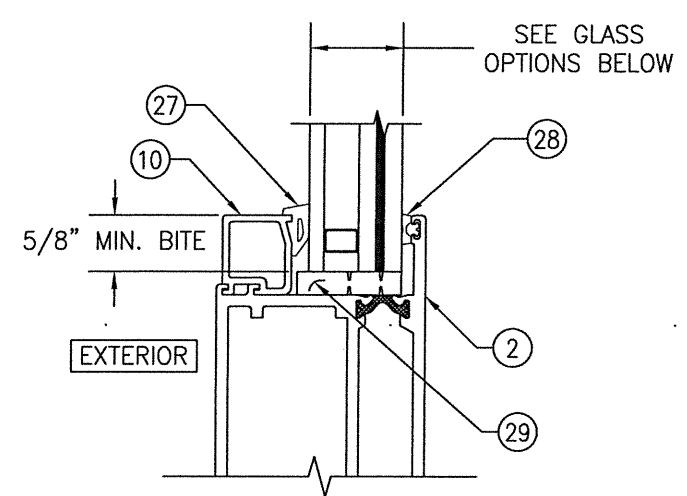
- GLASS OPTION 6: 1" LAMINATED I.G. (3/16" H.S./0.090" KURARAY SG/3/16" H.S. INTERIOR; 3/8" SPACER; 3/16" TEMPERED EXTERIOR)

L.M.I. = LARGE MISSILE IMPACT
S.M.I. = SMALL MISSILE IMPACT

CONTINUOUS WOOD MEMBER LESS IN THICKNESS THAN A 2X BUCK TO BE MIN. 3 1/2" DEEP (NOT REQUIRED WHEN SHIM SPACE IS WITHIN ALLOWABLE DIMENSIONS SHOWN IN SECTIONS).

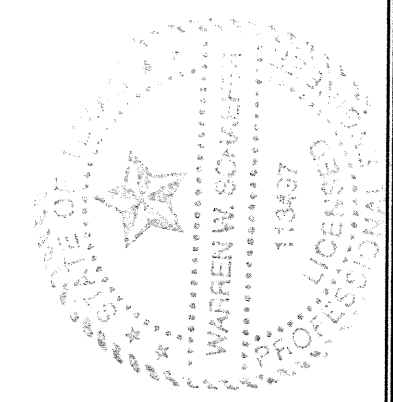


OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER
(HEAD SECTION SHOWN; SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



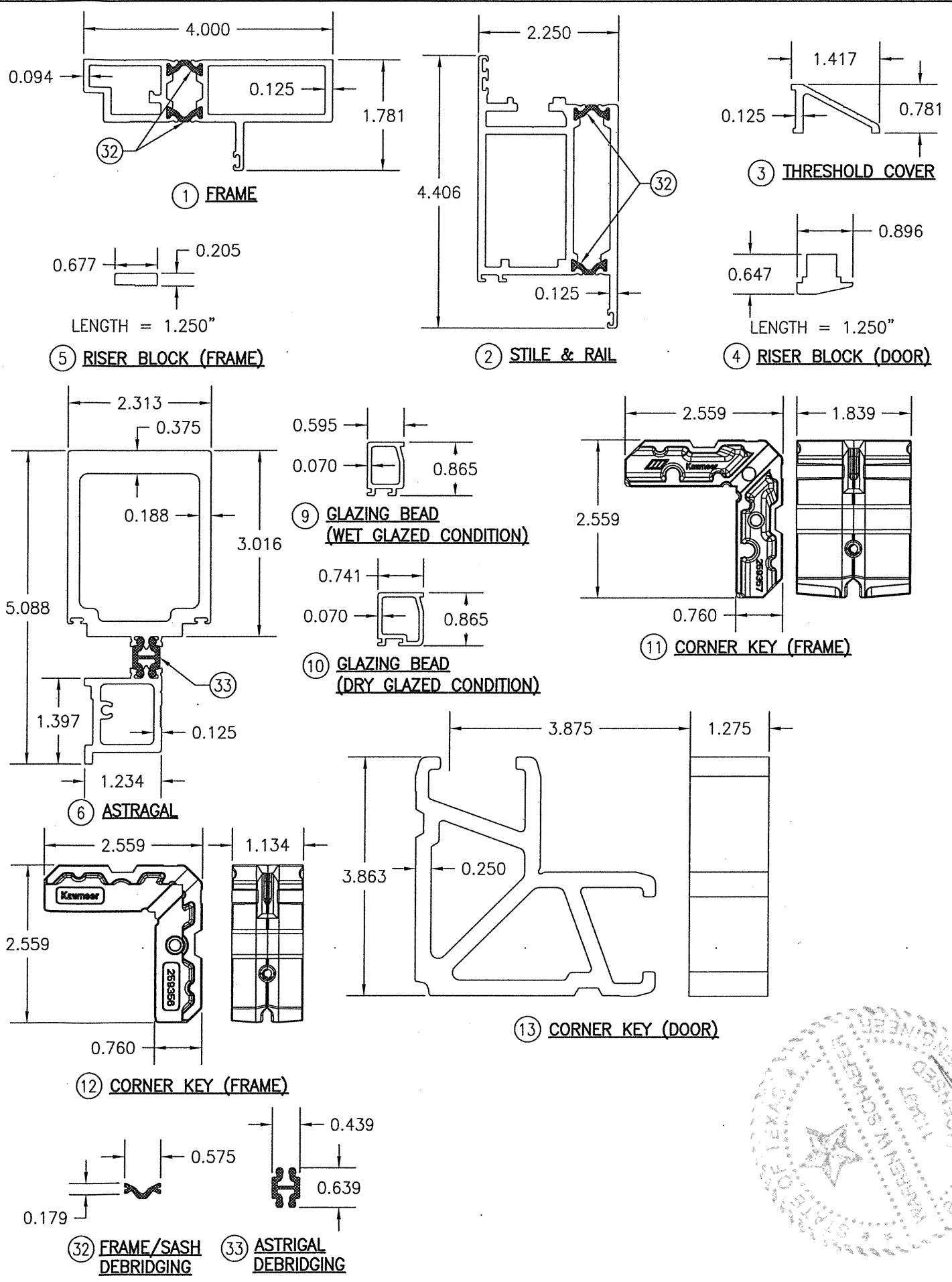
GLAZING DETAIL 3
(S.M.I. GLASS OPTIONS 7 & 8)

- GLASS OPTION 7: 1" LAMINATED I.G. (3/16" H.S./0.060" KURARAY BUTACITE PVB/3/16" H.S. INTERIOR; 3/8" SPACER; 3/16" TEMPERED EXTERIOR)
- GLASS OPTION 8: 1" LAMINATED I.G. (3/16" H.S./0.060" EASTMAN CHEM. CO. SAFLEX/3/16" H.S. INTERIOR; 3/8" SPACER; 3/16" TEMPERED EXTERIOR)



DRAWN BY: W.W.S.	CHECKED BY: W.W.S.	DRAWING TITLE 2000T TERRACE SMALL & LARGE MISSILE IMPACT OUT-SWING DOOR	JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555
PLOT: 1=2	DATE: 02/08/21		
NO.	REVISION DESCRIPTION		
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		CERTIFICATION FEB 08 2021 WARREN W. SCHAEFER, P.E. P.E. NO. 113497	
DRAWING NO. 1678T		REV.	
SHEET NO. 3		OF 4	

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	FRAME	6063-T6 ALUMINUM
2	STILE & RAIL	6063-T6 ALUMINUM
3	THRESHOLD COVER	6063-T6 ALUMINUM
4	RISER BLOCK (DOOR)	NYLON/3 PER DOOR PANEL
5	RISER BLOCK (FRAME)	NYLON/3 PER DOOR PANEL
6	ASTRAGAL	6063-T6 ALUMINUM
9	GLAZING BEAD (WET GLAZED CONDITION)	6063-T6 ALUMINUM
10	GLAZING BEAD (DRY GLAZED CONDITION)	6063-T6 ALUMINUM
11	CORNER KEY (FRAME)	CAST ALUMINUM
12	CORNER KEY (FRAME)	CAST ALUMINUM
13	CORNER KEY (DOOR)	CAST ALUMINUM
HARDWARE		
18	LIMIT STOP	ADVANTAGE MFG. #628
19	HINGE	ADVANTAGE MFG. #1113HCA 6061-T6 ALUMINUM
20	5 POINT MULTI-POINT LOCK SYSTEM	HOPPE HLS 7000
21	2 POINT MULTI-POINT LOCK SYSTEM	HOPPE HLS 7000
22	SHOOTBOLT SLEEVE	ADVANTAGE MFG. #7723
23	SWINGHOOK STRIKE	ADVANTAGE MFG. #1130
24	LATCH/DEADBOLT STRIKE	ADVANTAGE MFG. #1131
25	HANDLE	AS REQUIRED TO OPERATE LOCK SYSTEM
SEALS & SEALANTS		
26	BULB GASKET	RENKO #R2008B EPDM (DUROMETER = 80 +/-5)
27	EXTERIOR GLAZING WEDGE GASKET	TREMCO #TR-3234-E EPDM (DUROMETER = 70 +/-5)
28	INTERIOR GLAZING GASKET	EPG #6508-00-00 EPDM (DUROMETER = 80 +/-5)
29	SETTING BLOCK	TRELLEBORG EPDM
30	SPACE FOAM TAPE	TREMCO #084-276-760 POLYURETHANE
32	DEBRIDGING/THERMAL BREAK	TECATHERM-66-GF
33	DEBRIDGING/THERMAL BREAK	TECATHERM-66-GF
FASTENERS		
35	NO. 10 X 3/4" PHTF SCREW 300 S.S.	WITHIN 6" FROM CORNERS & 12" MAX. O.C.
36	NO. 10-24 X 3/4" FHMS 300 S.S.	4 PER LIMIT STOP INTO FRAME
37	NO. 10 X 1 5/8" FHTF SCREW 300 S.S.	4 PER LIMIT STOP INTO DOOR
38	NO. 10 X 1 5/8" FHTF SCREW 300 S.S.	1 PER RISER BLOCK
39	NO. 10 X 1/2" FHTF SCREW 300 S.S.	1 PER RISER BLOCK
40	NO. 12-24 X 3/4" PHMS 300 S.S.	3 PER HINGE INTO FRAME
41	NO. 10 X 3/4" PHTF SCREW 300 S.S.	3 PER HINGE INTO DOOR
42	NO. 10 X 2" PHTF SCREW 300 S.S.	WITHIN 5" FROM ENDS & 12" MAX. O.C.
43	NO. 10 X 1/2" FHTF SCREW 300 S.S.	1 PER SHOOTBOLT SLEEVE
44	NO. 10 X 1/2" FHTF SCREW 300 S.S.	2 PER SWINGHOOK STRIKE
45	NO. 10 X 1/2" FHTF SCREW 300 S.S.	3 PER LATCH/DEADBOLT STRIKE



DRAWN BY: W.W.S. PLOT: 1=2 DATE: 02/08/21	CHECKED BY: W.W.S. DATE: 02/08/21
NO. _____ REVISION DESCRIPTION _____ BY _____ DATE _____	DRAWING TITLE 2000T TERRACE SMALL & LARGE MISSILE IMPACT OUT-SWING DOOR
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
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	
CERTIFICATION 	FEB 08 2021 WARREN W. SCHAEFER, P.E. P.E. NO. 113467
DRAWING NO. 1678T	REV. _____
SHEET NO. 4 OF 4	