

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. THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ) & IS LARGE MISSILE IMPACT RATED.
5. IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
6. 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.
7. 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 FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF $K_d = 0.85$ MAY BE APPLIED PER THE ASCE-7 STANDARD.
8. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE.
9. TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN IS QUALITY ASSURED BY A FLORIDA STATE APPROVED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH THE FBC AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS. 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.
10. CERTIFICATION OF THIS PRODUCT SHALL BE CONSIDERED VOID IF IT IS INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT OR IF IT IS INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH INSTALLATIONS OF THIS TYPE OF PRODUCT.

EVALUATION OF THIS PRODUCT IS BASED ON APPLICABLE STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE FLORIDA 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 WITH THE STATE, 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.

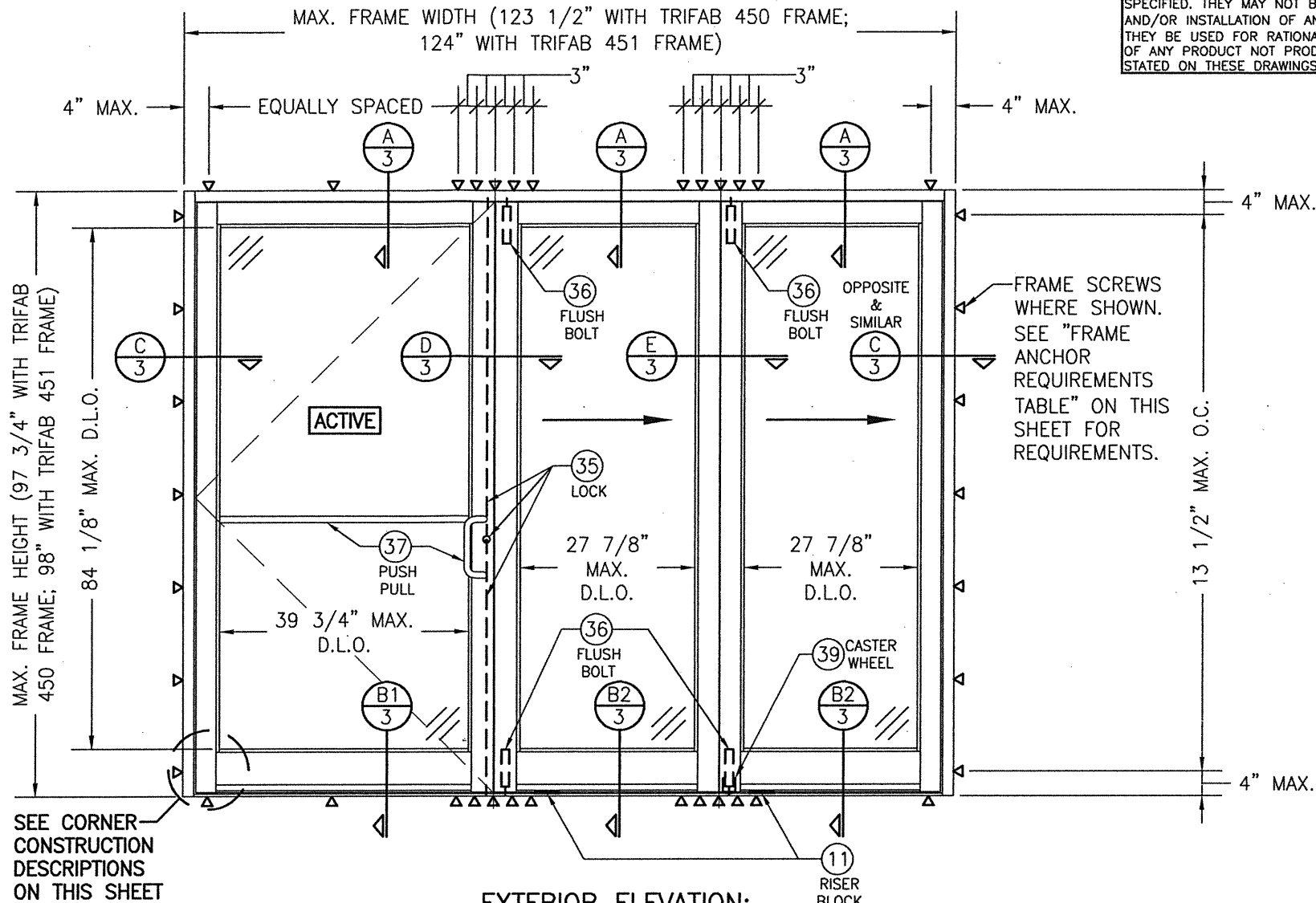
NOTE: THESE DOOR UNITS ARE NOT APPROVED FOR USE WHERE WATER INFILTRATION RESISTANCE IS REQUIRED BY THE DOOR UNLESS THE UNITS ARE INSTALLED IN NON-HABITABLE AREAS WHERE THE UNIT & THE AREA ARE DESIGNED TO ACCEPT WATER INFILTRATION OR THE UNITS ARE INSTALLED AT LOCATIONS PROTECTED BY A CANOPY OR OVERHANG WHERE-BY THE OVERHANG(OH) RATIO IS EQUAL TO OR MORE THAN 1.0 PER FBC.

FRAME ANCHOR REQUIREMENTS TABLE

FRAME SCREWS

OPENING TYPE (SUBSTRATE)	FRAME TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
(2) MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 SMS OR WOOD SCREW	1 1/4"	7/8"
MIN. 16 GA. 33 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. 0.10" THK 6063-T5 ALUM.	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
(3) MIN. C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2 1/2"
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 3/4"	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.).
- (2) 2X6 BUCKS SHALL BE OF A MINIMUM DEPTH REQUIRED TO MEET ANCHOR EDGE DISTANCE REQUIREMENTS BUT NO LESS THAN 4".
- (3) CMU IS NOT APPLICABLE AT HEAD & SILL.



EXTERIOR ELEVATION:
3-PANEL SWING & BI-FOLD DOORS

SCALE: 1/2" = 1'-0"

ALLOWABLE DESIGN PRESSURE
+/-70 PSF

CORNER CONSTRUCTION:

FRAME HEAD: VERTICAL MEMBERS RUN THROUGH WHILE THE HORIZONTAL MEMBERS ARE SQUARE CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL MEMBERS VIA A SHEAR BLOCK (ITEM #10). THE SHEAR BLOCK IS MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER WITH 4 NO. 10 X 1 19/32" PHTF SCREWS. THE HORIZONTAL FRAME MEMBERS ARE ATTACHED TO THE SHEAR BLOCK WITH 2 NO. 10 X 9/16" FHTF SCREWS. CORNERS ARE SEALED WITH SILICONE SEALANT.

SILL: VERTICAL MEMBERS RUN THROUGH WHILE THE THRESHOLD IS SQUARE CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL MEMBER VIA A PIVOT ASSEMBLY OR CLIP (ITEM #20). THE CLIP IS MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER WITH 3 NO. 12-24 X 3/8" FHMS. THE THRESHOLD MEMBER IS ATTACHED TO THE CLIP BLOCK WITH 2 NO. 12-24 X 3/8" FHMS. CORNERS ARE SEALED WITH SILICONE SEALANT.

DOOR PANEL: VERTICAL STILES RUN THROUGH AND ARE SECURED TO THE RAILS AT THE TOP & BOTTOM WITH 5/16" THICK EXTRUDED CHANNELS. EACH CHANNEL IS FASTENED TO THE STILE & RAIL WITH 1/4-20 X 3/4" PHMS & 3/16" THICK STEEL NUT PLATES. THE INTERSECTION OF EACH CORNER JOINT WAS WELDED WITH A 1/2" DIA. PLUG WELD AND A 1 1/8" LONG FILLET WELD AT BOTH WEBS OF THE RAIL.

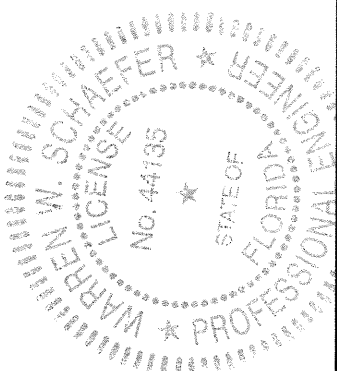
THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

DRAWN BY: W.W.S.
CHECKED BY: W.W.S.
DATE: 06/15/15
PLOT: 1-24

DATE	BY	W.S.	REVISION	DESCRIPTION	NO.
02/16/16			A1	ADD NOTE TO SHEET 2 ELEV.	

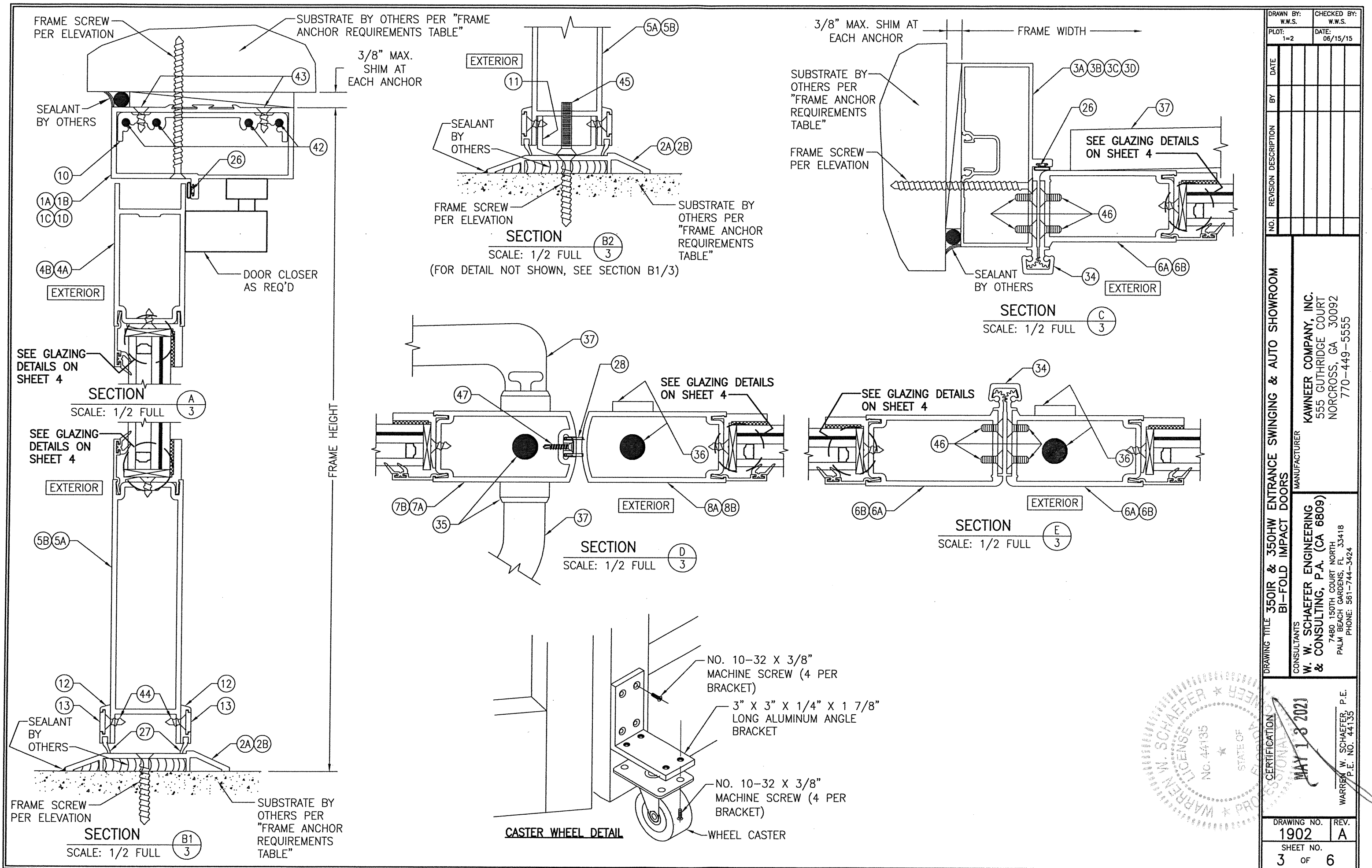
JOB INFORMATION:
DRAWING TITLE: 350IR & 350HW ENTRANCE SWINGING & AUTO SHOWROOM BI-FOLD IMPACT DOORS
CONSULTANTS: KAWNEER COMPANY, INC.
555 GUTHRIE COURT
NORCROSS, GA 30092
770-449-5555

W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)
7480 150TH COURT NORTH
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424



CERTIFICATION
MAX 13 2021
DRAWING NO. 1902
REV. A
SHEET NO. 1 OF 6

DRAWING TITLE 350IR & 350HW ENTRANCE SWINGING & AUTO SHOWROOM BI-FOLD IMPACT DOORS						DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
						PLOT: 1=24		DATE: 06/15/15	
						NO.		REVISION DESCRIPTION	
						BY		DATE	
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555						CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION  MAY 13 2021 WARREN W. SCHAEFFER, P.E. P.E. NO. 44135						DRAWING NO. 1902		REV. A	
						SHEET NO. 2 OF 6			



CONTINUOUS WOOD OR PVC MEMBER
LESS IN THICKNESS THAN A 2X_{__} BUCK
TO BE MIN. 4" DEEP (NOT REQUIRED
WHEN SHIM SPACE IS WITHIN ALLOWABLE
DIMENSIONS SHOWN IN SECTIONS). 7

- SUBSTRATE BY OTHERS
PER "FRAME ANCHOR
REQUIREMENTS TABLE"

SEALANT BY
OTHERS

— FRAME SCREW PER
ELEVATION & "FRAME
ANCHOR REQUIREMENTS
TABLE"

EXTERIOR

OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

(HEAD SECTION SHOWN; SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

EXTERIOR

1" THICK I.G. LAMINATED GLASS
(3/16" TEMP EXTERIOR; 3/8" AIR SPACE;
3/16" HT. ST./0.090" KURARAY SG/3/16"
HT. ST. INTERIOR)

3/4" MIN.
GLASS BITE

-7/8" 3M VHB
GLAZING TAPE

0.375" X 0.255" X
0.016" WALL
THICKNESS UNS
A93105 ALUMINUM
I.G. SPACER

0.187" X 1.125" X
4.125" LONG SILICONE
SETTING BLOCK (2 AT
EACH PANEL OPPOSITE
CORNER; 4
TOTAL/PANEL)

Diagram illustrating the arrangement of the first four rows of the periodic table, showing the placement of elements 4A, 5A, 6A, 7A, and 8A.

I.G. GLAZING DETAIL 1

(APPLICABLE WITH 350IR DOOR PANELS)

EXTERIOR

1" THICK I.G. LAMINATED GLASS
(3/16" TEMP EXTERIOR; 3/8" AIR SPACE;
3/16" HT. ST./0.090" KURARAY SG/3/16"
HT. ST. INTERIOR)

3/4" MIN.
GLASS BITE

7/8" 3M VHB
GLAZING TAPE

0.375" X 0.255" X
0.016" WALL
THICKNESS UNS
A93105 ALUMINUM
I.G. SPACER

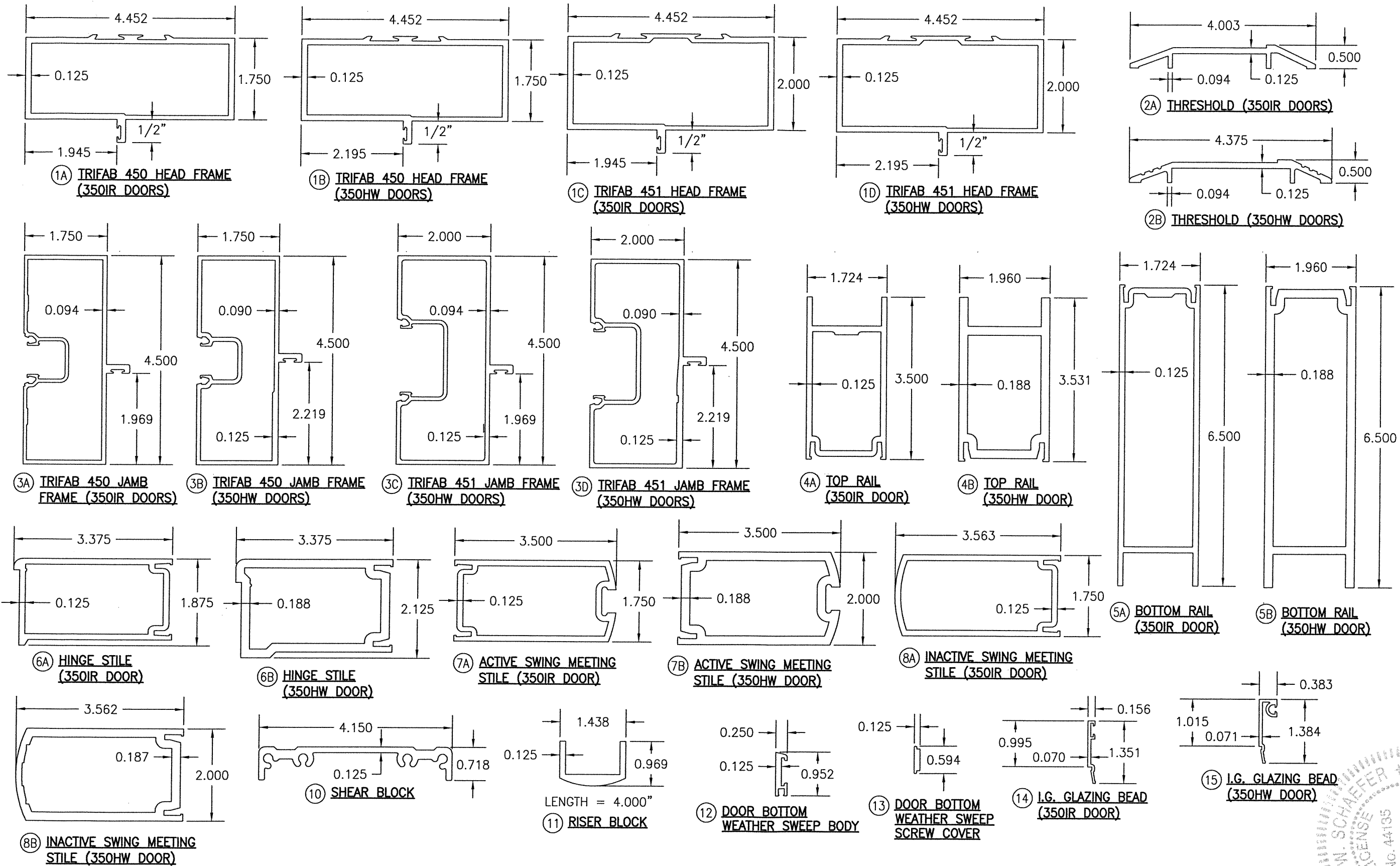
0.187" X 1.25" X
4.125" LONG EPDM
SETTING BLOCK (2 AT
EACH PANEL OPPOSITE
CORNER; 4
TOTAL/PANEL)

4B 5B 6B
7B 8B

I.G. GLAZING DETAIL 2

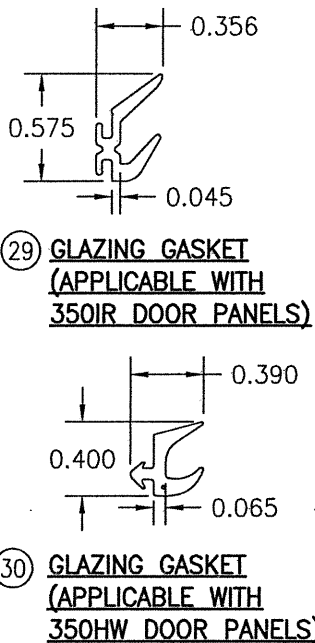
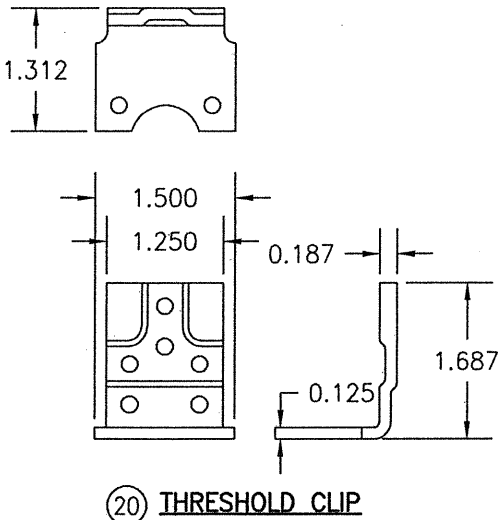
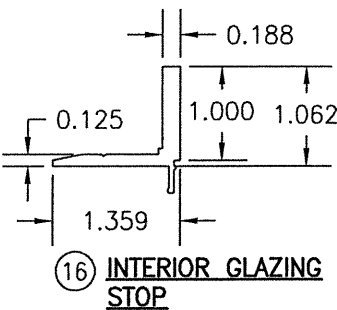
(APPLICABLE WITH 350HW DOOR PANELS).

DRAWING NO. 1902		REV. A	
SHEET NO. 4 OF 6			
CERTIFICATION  WARREN W. SCHAEFER, P.E. P.E. No. 44135			
DRAWING TITLE 350IR & 350HW ENTRANCE SWINGING & AUTO SHOWROOM BI-FOLD IMPACT DOORS		CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555		NO. REVISION DESCRIPTION BY DATE	
PLOT: 1=2		CHECKED BY: W.W.S. DATE: 06/15/15	
DRAWN BY: W.W.S.			



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PLOT: 1=2	DATE: 06/15/15
DATE	BY
REVISION	DESCRIPTION
NO.	
DRAWING TITLE 350IR & 350HW ENTRANCE SWINGING & AUTO SHOWROOM BI-FOLD IMPACT DOORS	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555	
CERTIFICATION WARREN W. SCHAEFER, P.E. NO. 44185	REV. A
DRAWING NO. 1902	SHEET NO. 5 OF 6

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1A	TRIFAB 450 HEAD FRAME (350IR DOORS)	6063-T6 ALUMINUM
1B	TRIFAB 450 HEAD FRAME (350HW DOORS)	6063-T6 ALUMINUM
1C	TRIFAB 451 HEAD FRAME (350IR DOORS)	6063-T6 ALUMINUM
1D	TRIFAB 451 HEAD FRAME (350HW DOORS)	6063-T6 ALUMINUM
2A	THRESHOLD (USED WITH 350IR DOORS)	6063-T6 ALUMINUM
2B	THRESHOLD (USED WITH 350HW DOORS)	6063-T6 ALUMINUM
3A	TRIFAB 450 JAMB FRAME (350IR DOORS)	6063-T6 ALUMINUM
3B	TRIFAB 450 JAMB FRAME (350HW DOORS)	6063-T6 ALUMINUM
3C	TRIFAB 451 JAMB FRAME (350IR DOORS)	6063-T6 ALUMINUM
3D	TRIFAB 451 JAMB FRAME (350HW DOORS)	6063-T6 ALUMINUM
4A	TOP RAIL (350IR DOOR)	6063-T6 ALUMINUM
4B	TOP RAIL (350HW DOOR)	6063-T6 ALUMINUM
5A	BOTTOM RAIL (350IR DOOR)	6063-T6 ALUMINUM
5B	BOTTOM RAIL (350HW DOOR)	6063-T6 ALUMINUM
6A	HINGE STILE (350IR DOOR)	6063-T6 ALUMINUM
6B	HINGE STILE (350HW DOOR)	6063-T6 ALUMINUM
7A	ACTIVE SWING MEETING STILE (350IR DOOR)	6063-T6 ALUMINUM
7B	ACTIVE SWING MEETING STILE (350HW DOOR)	6063-T6 ALUMINUM
8A	INACTIVE SWING MEETING STILE (350IR DOOR)	6063-T6 ALUMINUM
8B	INACTIVE SWING MEETING STILE (350HW DOOR)	6063-T6 ALUMINUM
10	SHEAR BLOCK	6063-T6 ALUMINUM
11	RISER BLOCK	6063-T6 ALUMINUM
12	DOOR BOTTOM WEATHER SWEEP BODY	6063-T6 ALUMINUM
13	DOOR BOTTOM WEATHER SWEEP SCREW COVER	6063-T6 ALUMINUM
14	GLAZING BEAD (350IR DOOR)	6063-T6 ALUMINUM
15	GLAZING BEAD (350HW DOOR)	6063-T6 ALUMINUM
16	INTERIOR GLAZING STOP	6063-T6 ALUMINUM
20	THRESHOLD CLIP	1010-1020 H.R. STEEL
SEALS & SEALANTS		
26	DOOR BULB WEATHERING	ALCRYN DUROMETER 60 +/-5 & RIGID PVC
27	DOOR SWEEP	EPDM 70 +/-5
28	ADJUSTABLE ASTRAGAL WEATHERING	5052-H32 ALUMINUM/NYLON/POLYURETHANE/EPDM
29	350IR GLAZING GASKET	KRP 027-557 POLYPROPYLENE & SANTOPRENE DUROMETER 65 +/-5
30	350HW GLAZING GASKET	TREMCO TR-13536E EPDM DUROMETER 70 +/-5
HARDWARE		
34	CONTINUOUS HINGE (KAWNEER NO. 050-820)	HAGER/ROTON, STANLEY OR ABH
35	ACTIVE PANEL LOCK ASSEMBLY	ADAMS-RITE 3-POINT LOCK SYSTEM WITH KAWNEER'S CYLINDER & THUMBTURN ACTIVATED DEAD BOLT
36	INACTIVE AND BI-FOLD PANEL LOCK ASSEMBLY	ADAMS-RITE FLUSH BLOTS (KAWNEER NO. 50-079)
37	PUSH/PULL	AS REQ'D
38	DOOR CLOSER AT HEAD	AS REQ'D
39	WHEEL CASTER AND CASTING MOUNTING BRACKET	FAULTLESS NO. 527-2 CASTER WITH 2" DIAMETER HARD RUBBER WHEEL OR EQUAL
FASTENERS		
42	NO. 10 X 1 19/32" PHTF SCREW	4 PER SHEAR BLOCK
43	NO. 10 X 9/16" FHTF SCREW	2 PER SHEAR BLOCK
44	NO. 6 X 3/8" FHMS	1/4" FROM ENDS & 9 1/2" MAX. O.C.
45	1/4-20 X 1 9/32" FHM SCREW	2 PER ITEM #11
46	NO. 12-24 X 13/32" SCREW	2 9/16" FROM ENDS & 5 1/8" MAX. O.C.
47	NO. 6 X 11/16" FHTF SCREW	QUANTITY AS SPECIFIED BY KAWNEER
48	NO. 10 X 1/2" FHTF SCREW	WITHIN 2" OF CORNERS AND 8" MAX. O.C.



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CERTIFICATION		P.E.	
WARREN W. SCHAEFER, P.E.		WARREN W. SCHAEFER, P.E.	
NO. 44135		NO. 44135	
MAY 13 2021		MAY 13 2021	
DRAWING NO. 1902		REV. A	
SHEET NO. 6		OF 6	