

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.

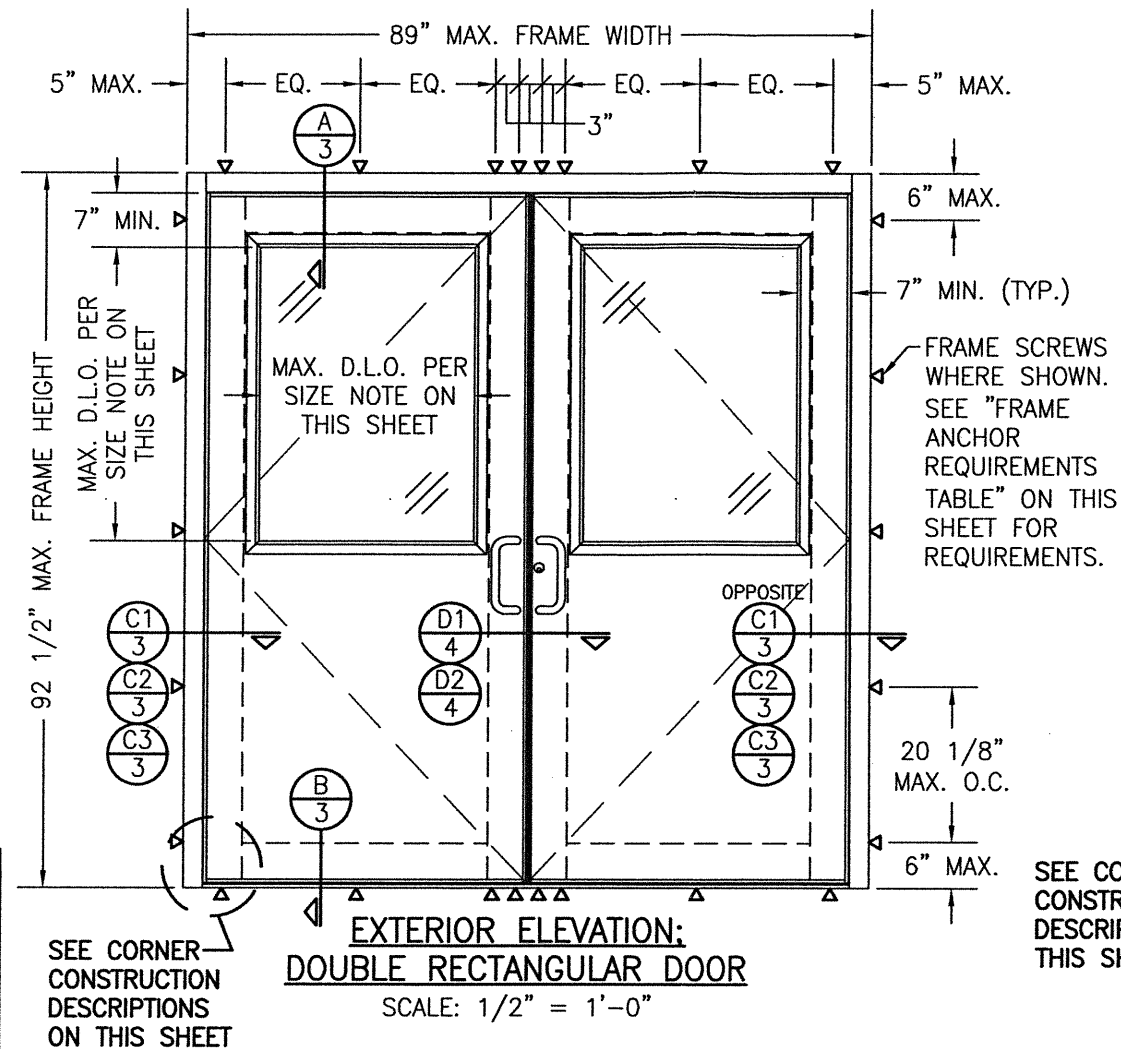
TO AVOID CONFUSION, LOCK & HINGE CONDITIONS ARE NOT CALLED OUT/SPECIFIED IN THE ELEVATIONS. SEE PRESSURE TABLE ON THIS SHEET & PARTS LIST ON SHEET 7 FOR ALL LOCK & HINGE OPTIONS.

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. 18 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. 0.1" THK 6063-T5 ALUM.	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CONCRETE FILLED CMU OR SOLID 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 3/4"	2"

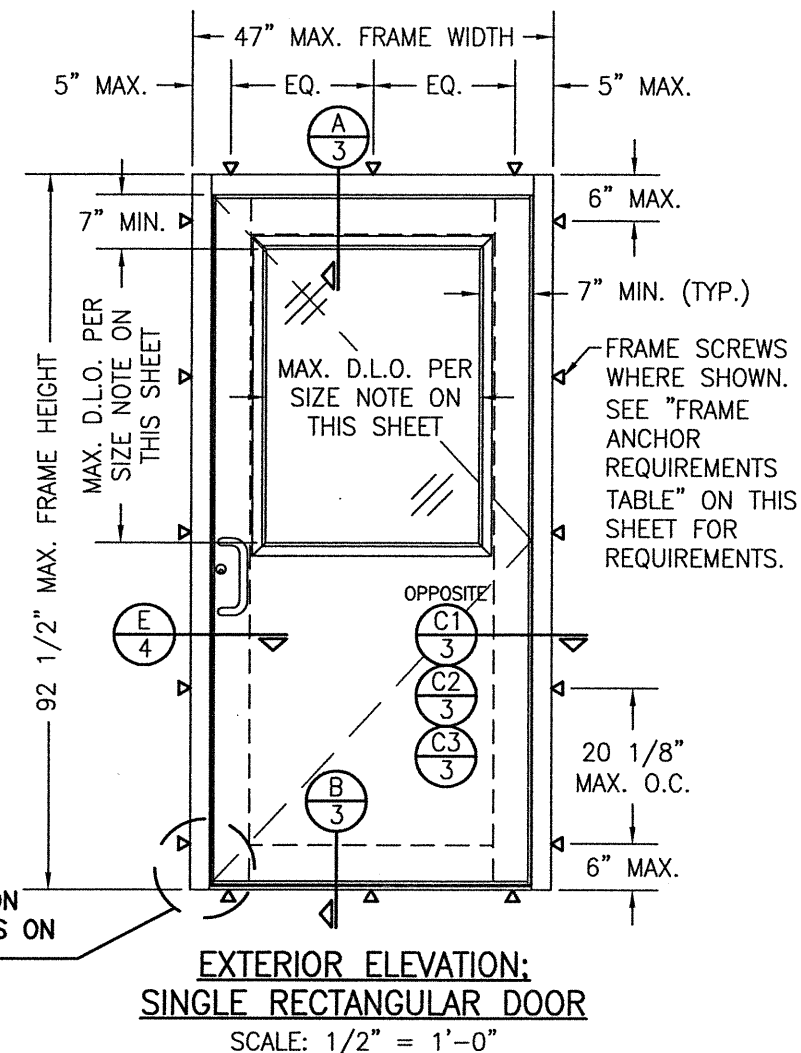
- (1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KWIK-CON II (C.S. OR S.S.).
- (2) 2X6 BUCKS SHALL BE OF A MINIMUM DEPTH REQUIRED TO MEET ANCHOR EDGE DISTANCE REQUIREMENTS BUT NO LESS THAN 4 1/2".



**EXTERIOR ELEVATION:
DOUBLE RECTANGULAR DOOR**

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

SEE CORNER
CONSTRUCTION
DESCRIPTIONS ON
THIS SHEET



**EXTERIOR ELEVATION:
SINGLE RECTANGULAR DOOR**

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

DOOR GLASS D.L.O. SIZE NOTE: DIMENSIONS OF THE DOOR PANEL D.L.O. SHALL BE SUCH THAT THE OVERALL D.L.O. AREA DOES NOT EXCEED 7.36 SQ. FT. (1060 SQ. IN.)

ALLOWABLE DESIGN PRESSURE (INDIVIDUAL & TRANSOM UNITS)

LOCK CONDITION	ALLOWABLE DESIGN PRESSURE (DP)	WIND ZONE RATING
DOUBLE DOORS		
1	+/-70 PSF	4
2	+/-70 PSF	4
3	+/-50 PSF	3
SINGLE DOORS		
1	+/-70 PSF	4
2	+/-70 PSF	4
3	+/-70 PSF	3
4	(1) +/-75 PSF	4

1) ONLY A CONTINUOUS GEAR HINGE IS APPLICABLE FOR USE WHEN DP EXCEEDS +/-70 PSF.

LOCK CONDITION 1:

3-POINT LOCK ITEM #39 AT SINGLE DOOR AND ACTIVE PANEL OF DOUBLE DOOR; TOP & BOTTOM FLUSH BOLTS ITEM #40 & 41 AT INACTIVE PANEL OF DOUBLE DOOR.

LOCK CONDITION 2:

KAWNEER 1686 EXIT DEVICE ITEM #42 AT EACH PANEL (SINGLE & DOUBLE DOORS)

LOCK CONDITION 3:

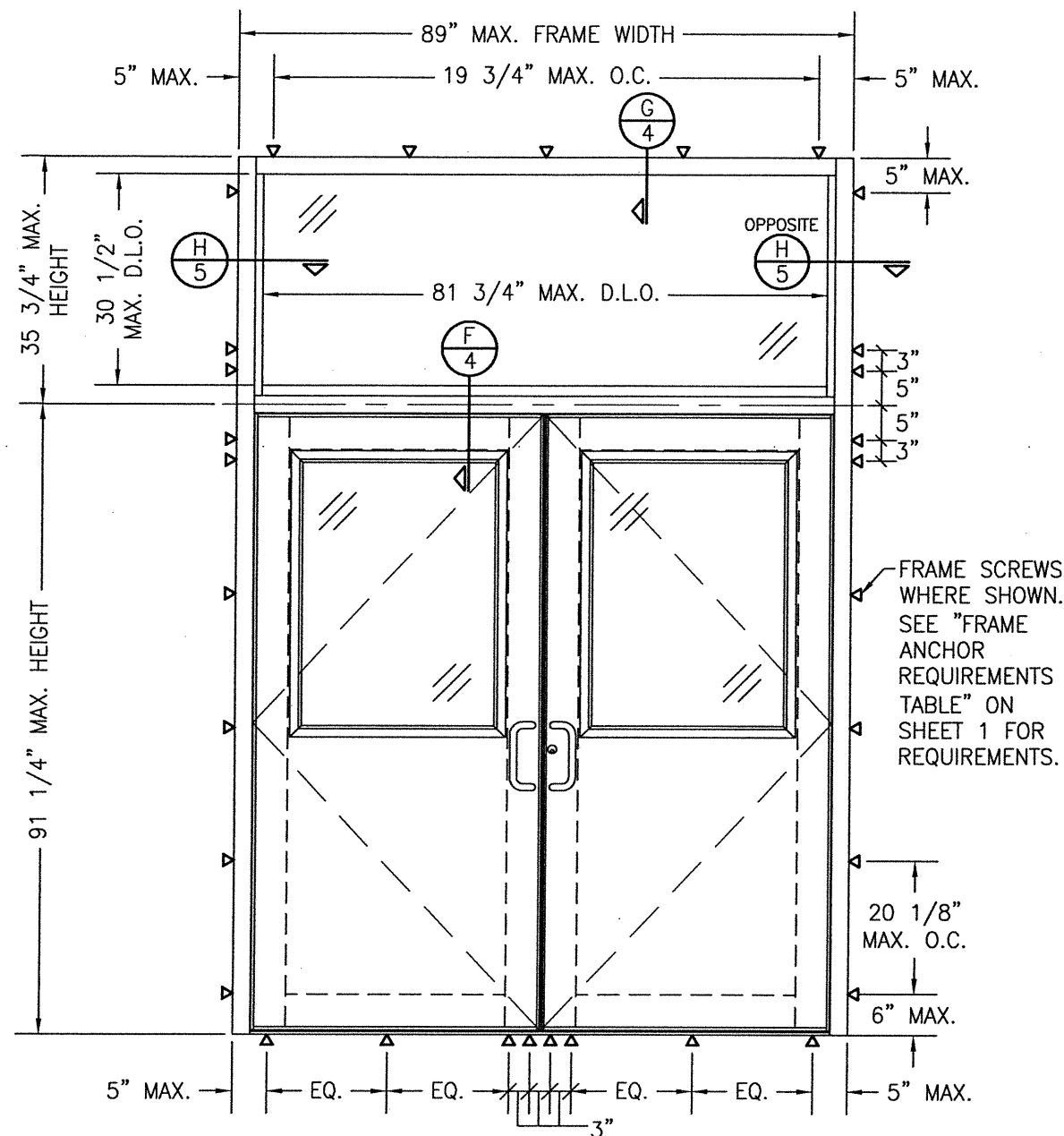
CORBIN RUSWIN EXIT DEVICE ITEM #43 AT EACH PANEL (SINGLE & DOUBLE DOORS) WITH REMOVABLE MULLION AT DOUBLE DOORS.

LOCK CONDITION 4:

SCHLAGE MORTISE LOCK ITEM #44 (SINGLE DOORS ONLY)

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.
PLOT: 1-24	DATE: 02/29/16
DATE 10/03/17	BY W.W.S.
REVISION DESCRIPTION A1 CHANGED DOOR PANEL FOAM	NO.
DRAWING TITLE FLUSHLINE IMPACT DOORS WITH IR501 FRAMES	
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIE 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. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1913	REV. A
SHEET NO. 1 OF 7	



**EXTERIOR ELEVATION:
DOUBLE DOOR WITH TRANSOM**

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

(FOR ALL DETAIL NOT SHOWN, SEE DOUBLE DOOR ELEVATION ON SHEET 1)

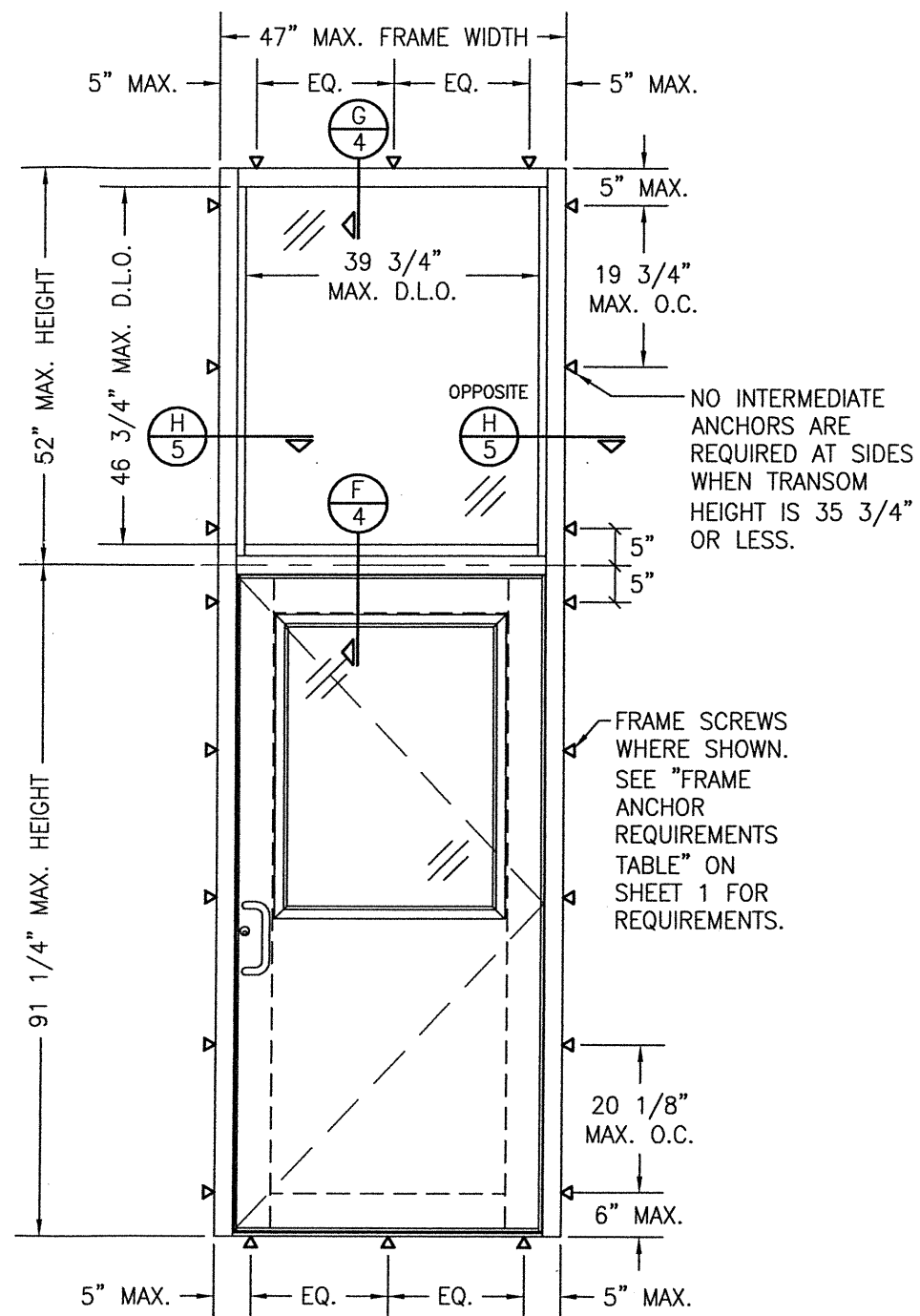
CORNER CONSTRUCTION:

TRANSOM FRAME HEAD CORNER: VERTICAL FRAME MEMBERS RUN THROUGH WHILE THE HORIZONTAL FRAME MEMBER IS SQUARE CUT, BUTTED AND MECHANICALLY FASTENED WITH 3 NO. 12 X 1" PHTF THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBER SCREW SPLINES. CORNERS ARE SEALED WITH DOW 795 SILICONE SEALANT.

DOOR HEAD FRAME ENDS/CORNER: VERTICAL FRAME MEMBERS RUN THROUGH WHILE THE HORIZONTAL DOOR HEAD MEMBER IS SQUARE CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL MEMBERS VIA 3 NO. 12 X 1" PHTF THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBER SCREW SPLINES AND A SHEAR BLOCK (ITEM #17). THE SHEAR BLOCK IS MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER WITH 4 NO. 10 X 1 19/32" PHTF SCREWS. CORNERS ARE SEALED WITH DOW 795 SILICONE SEALANT.

FRAME SILL CORNER: VERTICAL FRAME MEMBERS RUN THROUGH WHILE THE SILL MEMBER IS SQUARE CUT, BUTTED TO THE VERTICAL FRAME MEMBERS & SECURED TO EACH FRAME MEMBER WITH AN ANGLE CLIP ITEM #24. THE ANGLE CLIP IS SCREWED TO THE SILL & FRAME MEMBERS WITH NO. 12 -24 X 3/8" FHMS SCREWS (2 AT SILL; 3 AT FRAME). CORNERS ARE SEALED WITH DOW 795 SILICONE SEALANT.

DOOR PANEL CORNER: VERTICAL STILES RUN THROUGH AND ARE SECURED TO THE RAILS AT THE TOP & BOTTOM WITH A WELD CLIP ITEM #25. EACH WELD CLIP IS FASTENED TO THE STILE & RAIL WITH TWO(2) 1/4-20 X 3/4" PHMS & 3/16" THICK STEEL NUT PLATES. THE INTERSECTION OF EACH CORNER JOINT IS WELDED WITH A 1/2" DIA. PLUG WELD AND A 1 1/8" LONG FILLET WELD AT BOTH WEBS OF THE RAIL.

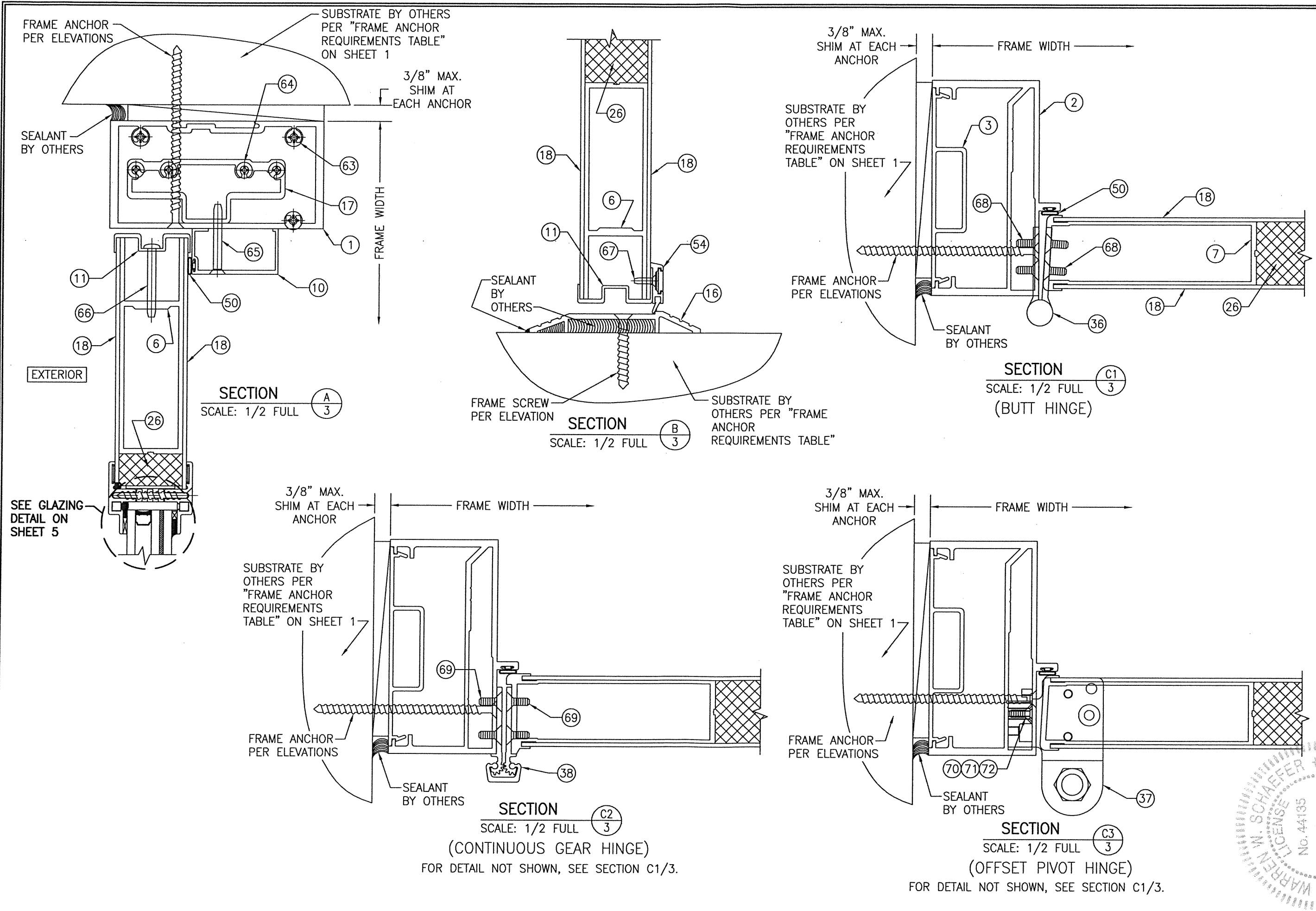


**EXTERIOR ELEVATION:
SINGLE DOOR WITH TRANSOM**

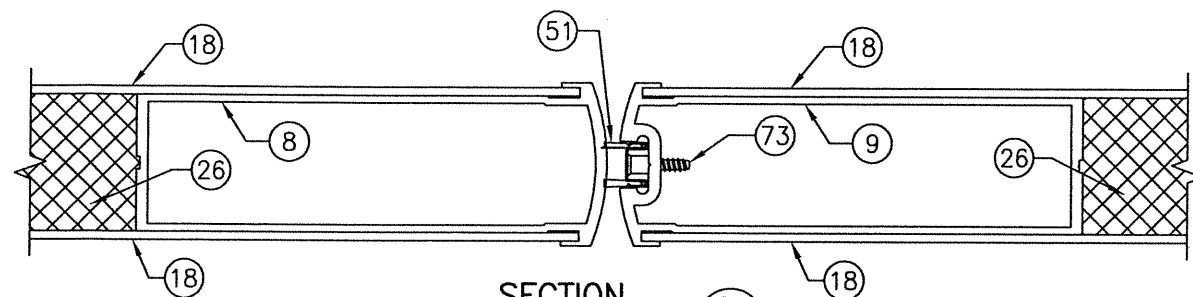
SCALE: 1/2" = 1'-0"

(FOR ALL DETAIL NOT SHOWN, SEE SINGLE DOOR ELEVATION ON SHEET 1)

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1-24		DATE: 02/29/16	
DATE	BY	REVISION	DESCRIPTION
NO.	NO.	NO.	NO.
DRAWING TITLE FLUSHLINE IMPACT DOORS WITH IR501 FRAMES			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)			
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555			
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION MAX 13 2021			
DRAWING NO. 1913			
SHEET NO. 2 OF 7			
REV. A			

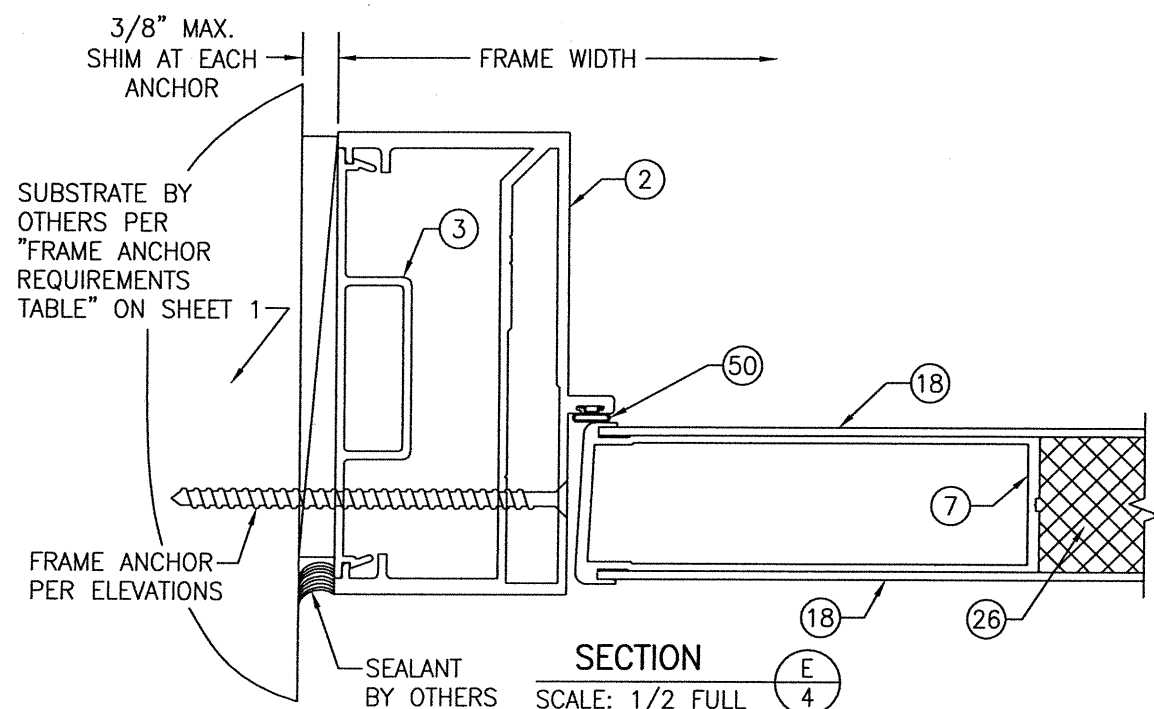


DRAWING TITLE		FLUSHLINE IMPACT DOORS WITH IR501 FRAMES	
CONSULTANTS		KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555	
MANUFACTURER		KAWNEER COMPANY, INC.	
CONSULTANTS		W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION		STATE OF FLORIDA PROFESSIONAL ENGINEER WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO.		1913	
SHEET NO.		3 OF 7	

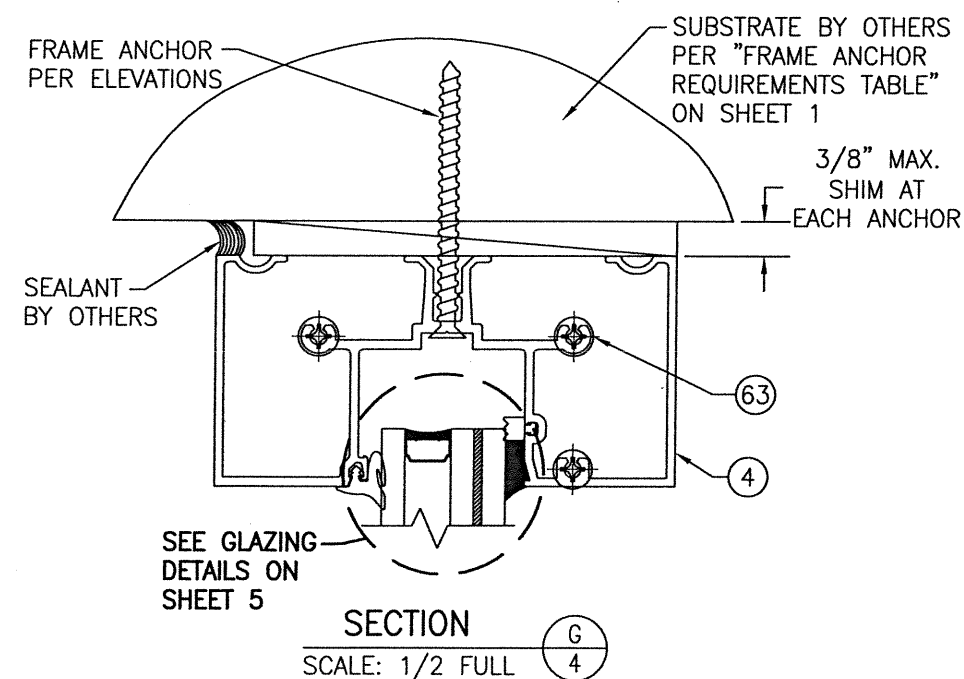


SECTION
SCALE: 1/2 FULL
D1/4

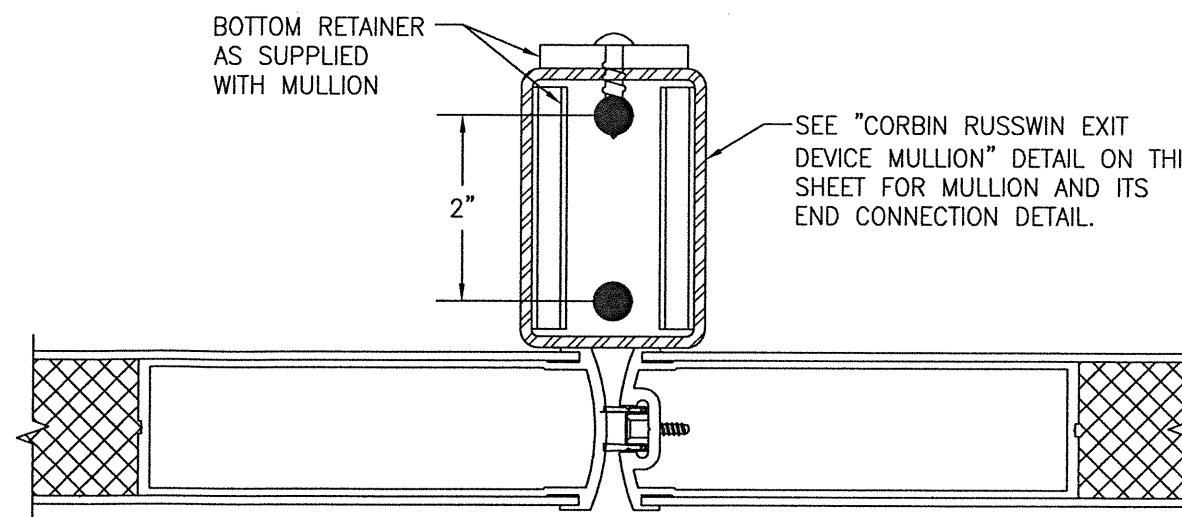
(APPLICABLE WITH LOCK CONDITIONS 1, 2 & 4)



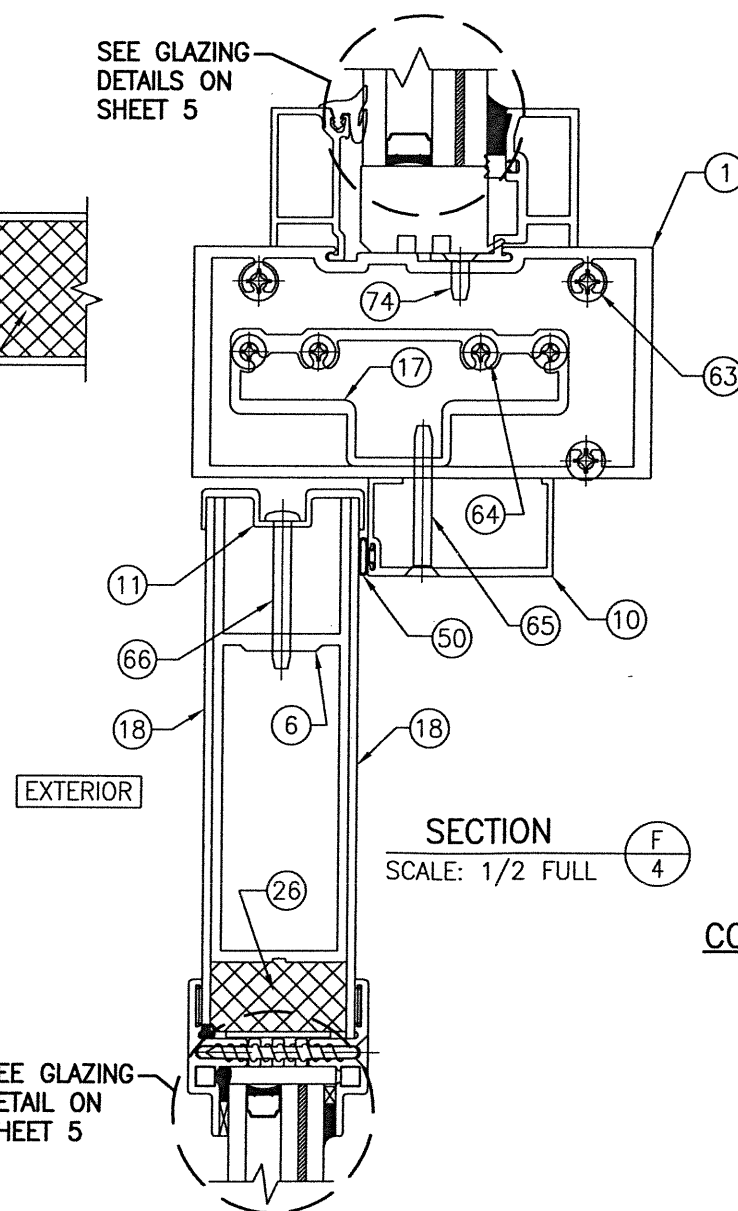
SECTION
SCALE: 1/2 FULL
E/4



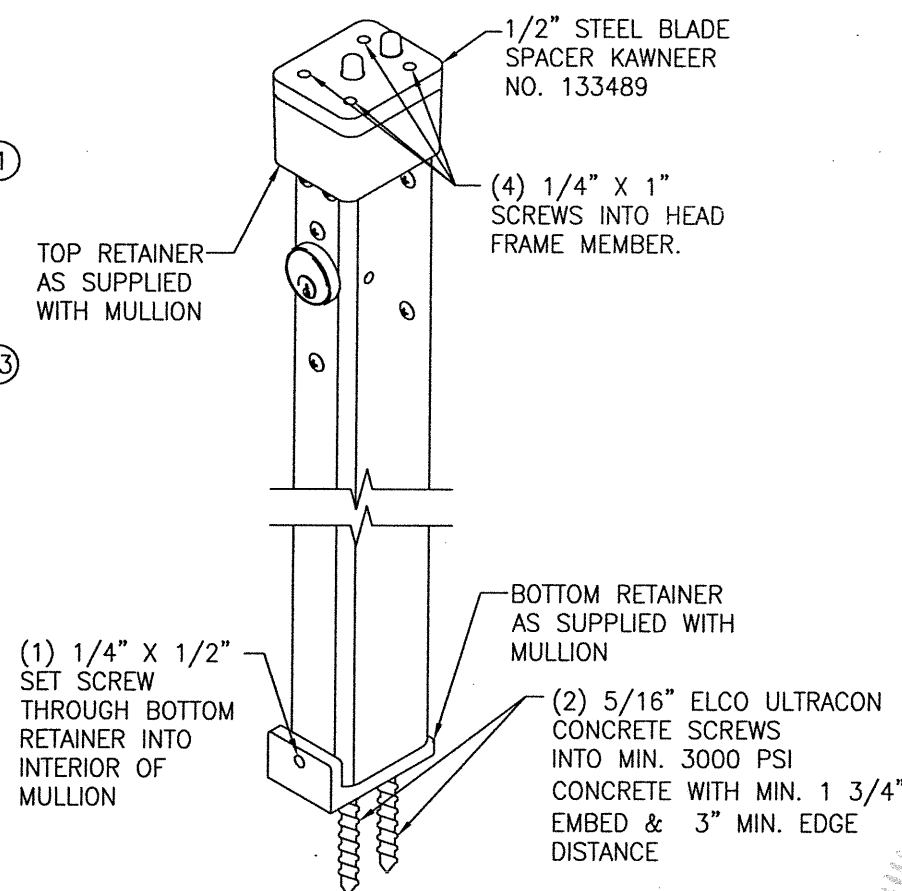
SECTION
SCALE: 1/2 FULL
G/4



SECTION
SCALE: 1/2 FULL
D2/4
(APPLICABLE WITH LOCK CONDITION 3)
FOR DETAIL NOT SHOWN, SEE SECTION D1/4.

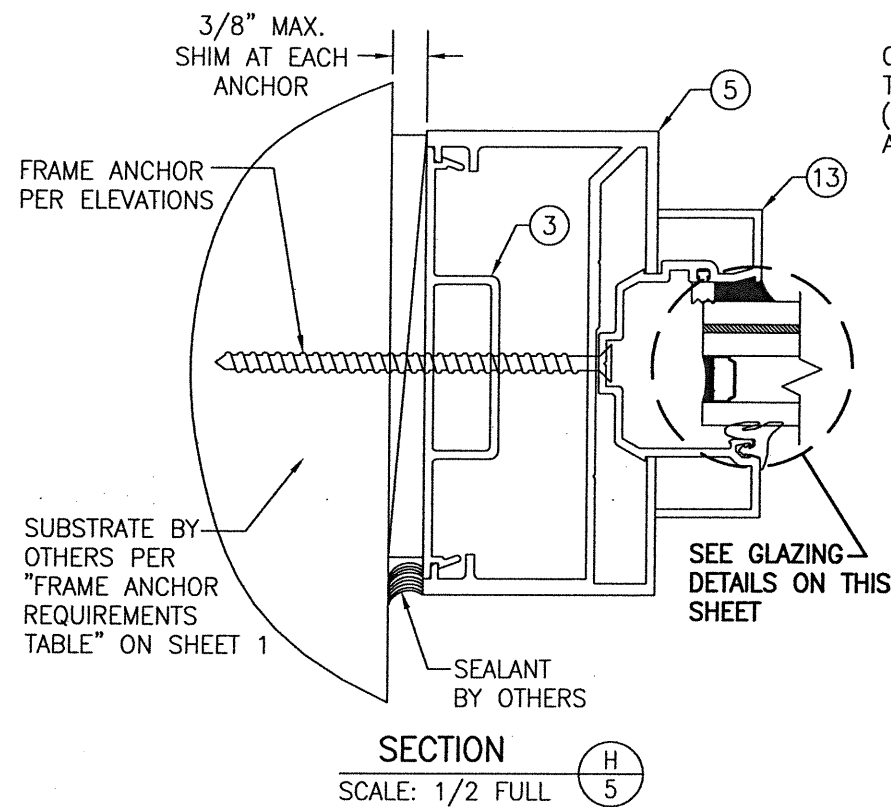


SECTION
SCALE: 1/2 FULL
F/4



CORBIN RUSSWIN WS708AKM KEYED INTERIOR MULLION
(KEYED LOCK SHOWN IS AT INTERIOR)
(APPLICABLE WITH CORBIN RUSSWIN EXIT DEVICE ITEM #43 ONLY)

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PLOT: 1=24	DATE: 02/29/16
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE FLUSHLINE IMPACT DOORS WITH IR501 FRAMES	
MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIE 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 MAX 13 2021 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1913	REV. A
SHEET NO. 4 OF 7	

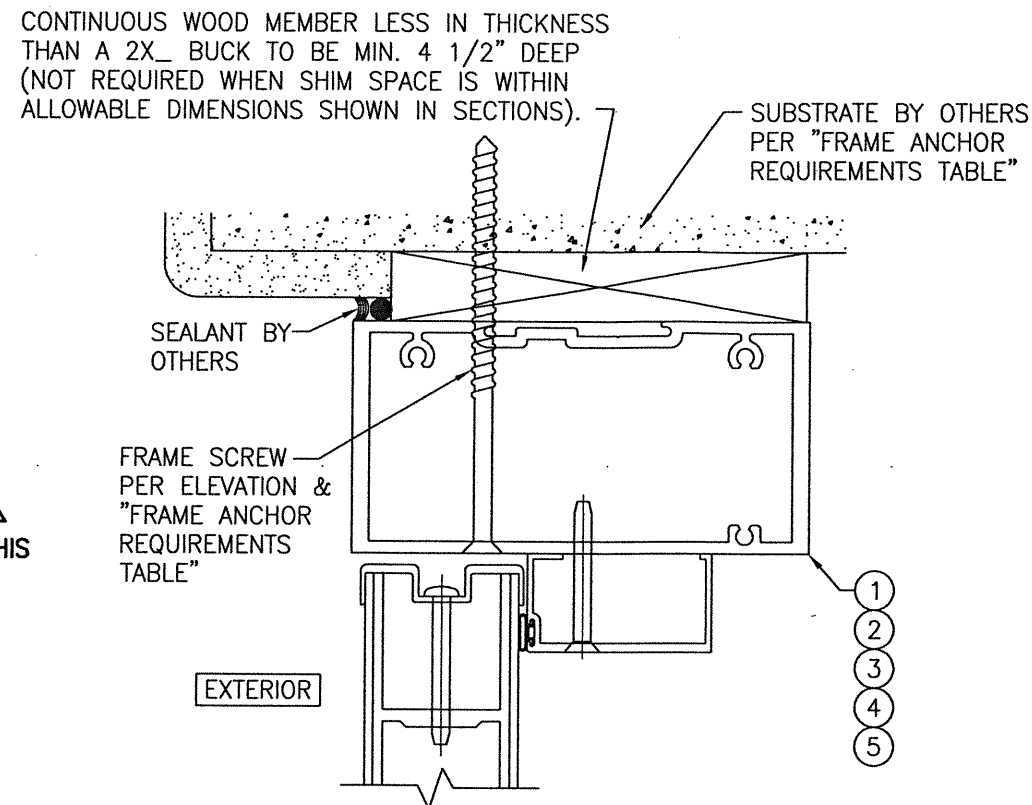


TYPICAL TRANSOM SILL GLAZING DETAIL

GLASS OPTIONS:

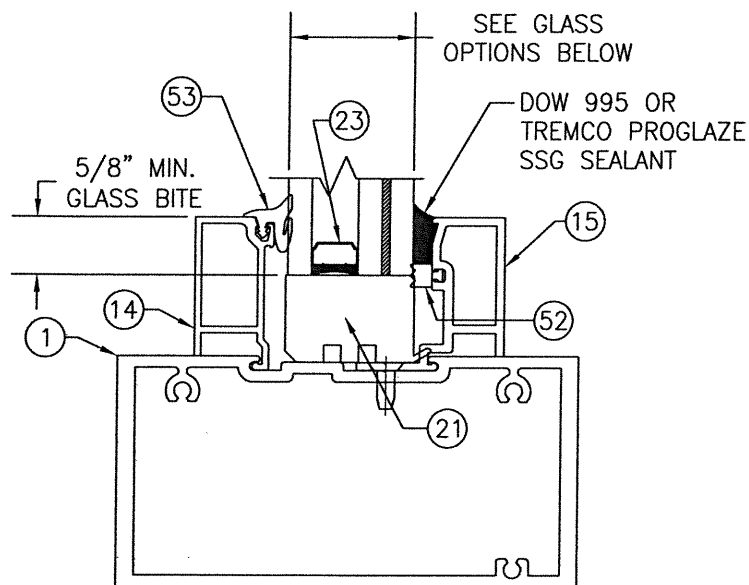
OPTION 1: 1 5/16" THICK I.G. GLASS (1/4" TEMP EXTERIOR; 1/2" SPACER; 1/4" HS/0.09 EASTMAN CHEM. CO. SAFLEX/1/4" HS INTERIOR

OPTION 2: 1 5/16" THICK I.G. GLASS (1/4" TEMP EXTERIOR; 1/2" SPACER; 1/4" HS/0.09 KURARAY BUTACITE PVB/1/4" HS INTERIOR



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

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

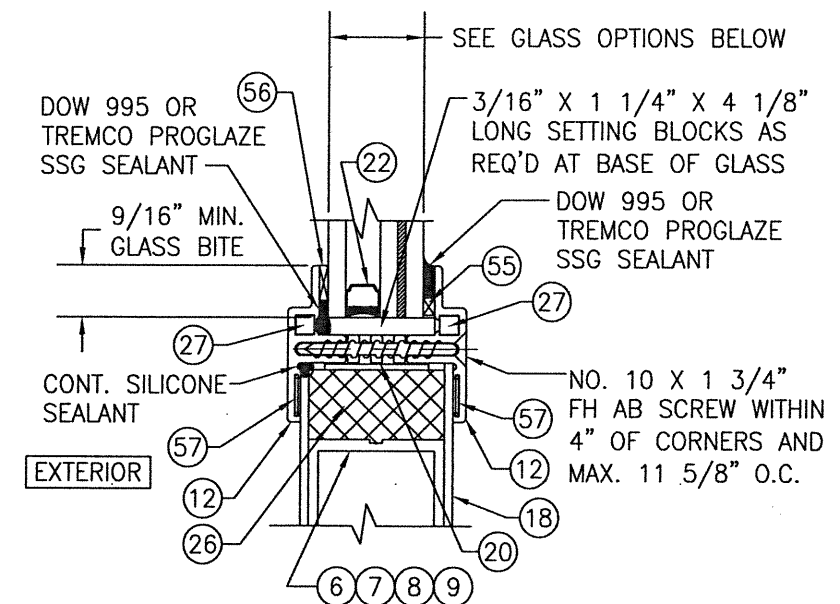


TYPICAL TRANSOM JAMB GLAZING DETAIL

GLASS OPTIONS:

OPTION 1: 1 5/16" THICK I.G. GLASS (1/4" TEMP EXTERIOR; 1/2" SPACER; 1/4" HS/0.09 EASTMAN CHEM. CO. SAFLEX/1/4" HS INTERIOR

OPTION 2: 1 5/16" THICK I.G. GLASS (1/4" TEMP EXTERIOR; 1/2" SPACER; 1/4" HS/0.09 KURARAY BUTACITE PVB/1/4" HS INTERIOR

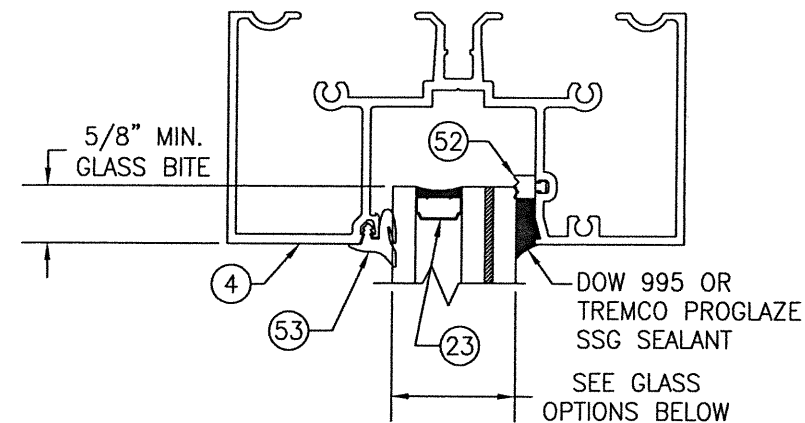


TYPICAL DOOR PANEL GLAZING DETAIL

GLASS OPTIONS:

OPTION 1: 1 1/32" THICK I.G. GLASS (3/16" TEMP EXTERIOR; 3/8" SPACER; 3/16" HS/0.09 EASTMAN CHEM. CO. SAFLEX/3/16" HS INTERIOR

OPTION 2: 1 1/32" THICK I.G. GLASS (3/16" TEMP EXTERIOR; 3/8" SPACER; 3/16" HS/0.09 KURARAY BUTACITE PVB/3/16" HS INTERIOR



TYPICAL TRANSOM HEAD GLAZING DETAIL

GLASS OPTIONS:

OPTION 1: 1 5/16" THICK I.G. GLASS (1/4" TEMP EXTERIOR; 1/2" SPACER; 1/4" HS/0.09 EASTMAN CHEM. CO. SAFLEX/1/4" HS INTERIOR

OPTION 2: 1 5/16" THICK I.G. GLASS (1/4" TEMP EXTERIOR; 1/2" SPACER; 1/4" HS/0.09 KURARAY BUTACITE PVB/1/4" HS INTERIOR

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DATE	BY
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MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIE 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. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1913	REV. A
SHEET NO. 5 OF 7	

