

ALLOWABLE SIZE/PRESSURE TABLE

DOOR TYPE	MAX. DOOR OPENING WIDTH (IN.)	MAX. DOOR OPENING HEIGHT (IN.)	MAX. D.L.O. WIDTH (IN.)	MAX. D.L.O. HEIGHT (IN.)	LOCK OPTION	GLASS OPTION	MISSILE LEVEL	ALLOWABLE PRESSURE (+/- PSF)	
								DOORS IN 450, 451 OR 1600 FRAMES	DOORS IN IR500/501 FRAMES
	96	96	38 13/16	83 13/16	1 OR 2	1, 2 OR 5	D	110	90
	96	96	38 13/16	83 13/16	1	5	E	110	90
	96	96	38 13/16	83 13/16	2	6	E	90	70
	96	96	38 13/16	83 13/16	3	6	E	70	N/A
	72	108	30 13/16	95 3/16	1 OR 2	1 OR 2	D	110	90
DOUBLE	96	96	38 13/16	83 13/16	1 THRU 4	1, 2, 3 & 5	D	70	70
	72	96	30 13/16	83 13/16	1 THRU 4	4	D	60	60
	48	96	38 13/16	83 13/16	1 OR 2	1, 2 OR 5	D	110	90
	48	96	38 13/16	83 13/16	1	5	E	110	90
	48	96	38 13/16	83 13/16	2	6	E	90	70
SINGLE	48	96	38 13/16	83 13/16	3	6	E	70	N/A
	36	108	30 13/16	95 3/16	1 OR 2	1 OR 2	D	110	90
	48	96	38 13/16	83 13/16	1 THRU 4	1, 2, 3 & 5	D	70	70
	36	96	30 13/16	83 13/16	1 THRU 4	4	D	60	60
	36	96	30 13/16	83 13/16	1 THRU 4	4	D	60	60

LOCK OPTIONS:

- OPTION 1 = ADAMS RITE 1850 3 POINT LOCK AT ACTIVE PANEL (ITEM #57) & ADAMS RITE FLUSHBOLTS AT HEAD AND SILL (ITEM #58) OF INACTIVE PANEL.
- OPTION 2 = KAWNEER 1686 DEADBOLT & PANIC DEVICE (ITEM #59) AT ACTIVE PANEL & KAWNEER 1686 PANIC DEVICE (ITEM #60) AT INACTIVE PANEL.
- OPTION 3 = SCHLAGE DEADBOLT WITH VON DUPRIN HH9947 CVR PANIC DEVICE (ITEM #61) AT ACTIVE PANEL & VON DUPRIN HH9947 CVR PANIC DEVICE (ITEM #62) AT INACTIVE PANEL.
- OPTION 4 =SCHLAGE DEADBOLT WITH FALCON HH 1690 PANIC DEVICE (ITEM #61) AT ACTIVE PANEL & FALCON HH 1690 PANIC DEVICE (ITEM #62) AT INACTIVE PANEL.

PRESSURE TABLE FOOTNOTES:

- (1) FOR GLASS OPTIONS SEE GLAZING DETAILS ON SHEET 10.
- (2) WHEN MISSILE LEVEL E IS REQUIRED ONLY LOCK OPTION 1, 2 OR 3 & GLASS OPTION 5 OR 6 ARE APPLICABLE.

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 Kd = 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.

FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME & MULLION PLATE TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
(2) MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 2 & G=0.55)	NO. 14 OR 1/4" GR. 5 COARSE THREAD SCREW OR 1/4" CONCRETE SCREW	1 1/4"	1"
MIN. 16 GA. 50 KSI METAL STUD	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 0.100" THK 6063-T5 ALUM.	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
(3) MIN. C-90 CONCRETE FILLED BLOCK	(1) 1/4" CONCRETE SCREW	1 1/2"	2 1/2"
MIN. 3000 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 1/4".			
(3) CONCRETE FILLED BLOCK SUBSTRATE IS NOT APPLICABLE AT HEAD & SILL			

CORNER CONSTRUCTION:

TRIFAB 450 OR 451 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 #17). THE SHEAR BLOCK IS MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER WITH 4 NO. 10 X 1 19/32" PHF 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.

IR500/501 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 #18). THE SHEAR BLOCK IS MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER WITH 4 NO. 12 X 1 7/8" FHTF SCREWS. THE HORIZONTAL FRAME MEMBERS ARE ATTACHED TO THE MULLION WITH 3 NO. 12 X 1" PHTF SCREWS. CORNERS ARE SEALED WITH SILICONE SEALANT.

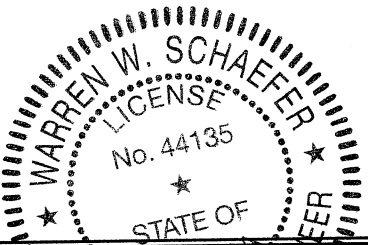
FRAME HEAD WITHIN 1600 SYSTEM 1 CURTAIN WALL: VERTICAL MEMBERS RUN THROUGH WHILE THE HORIZONTAL MEMBERS ARE SQUARE CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL MEMBERS VIA A SHEAR BLOCK (ITEM #19). THE SHEAR BLOCK IS MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER WITH 4 NO. 10 X 1 19/32" 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 #30). 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 1/4" THICK EXTRUDED CHANNELS. EACH CHANNEL IS FASTENED TO THE SILE & RAIL WITH 1/4-20 X 3/4" FHMS & 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.

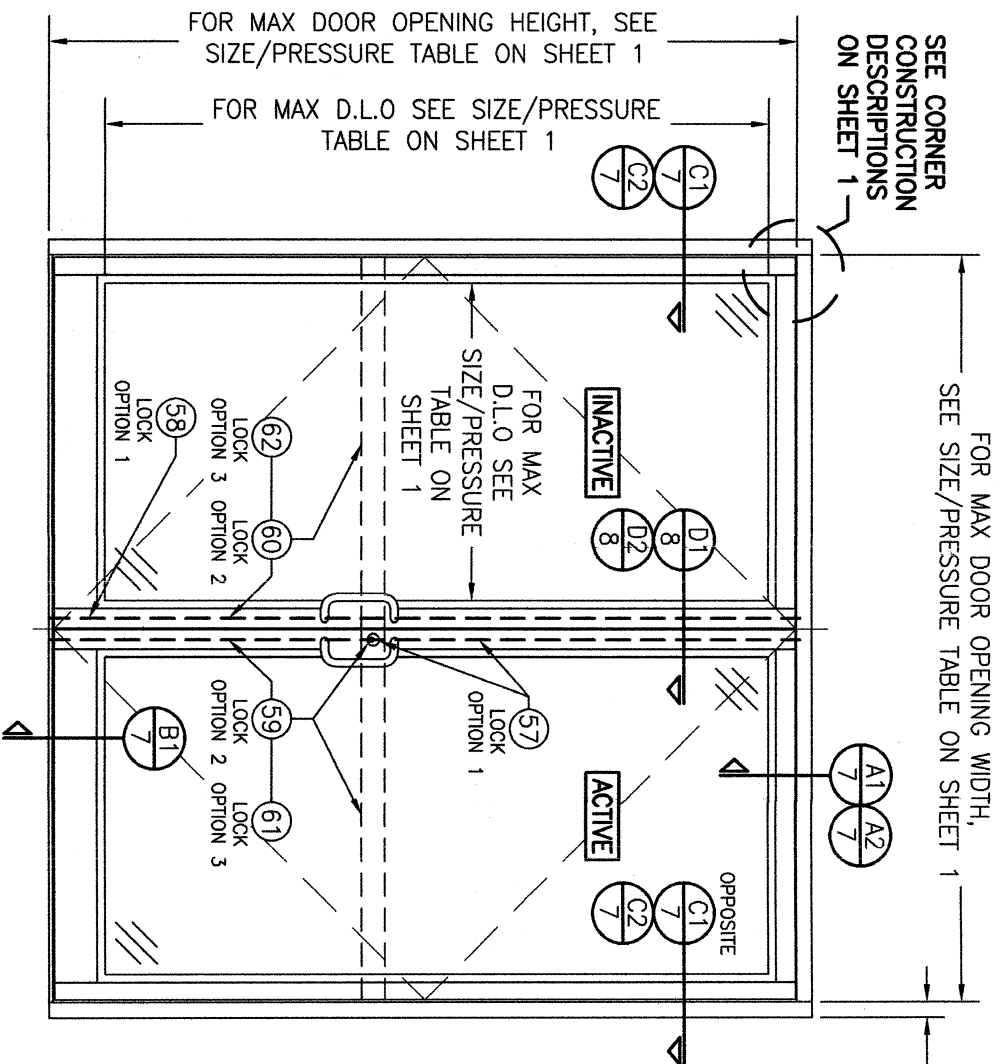
NOTE: THESE DOOR UNITS ARE NOT APPROVED FOR USE WHERE WATER INFILTRATION RESISTANCE IS REQUIRED BY THE DOOR UNLESS THE UNITS ARE INSTALLED IN NON-HABITABLE AREAS WHERE THE UNIT & THE AREA ARE DESIGNED TO ACCEPT WATER INFILTRATION OR THE UNITS ARE INSTALLED AT LOCATIONS PROTECTED BY A CANOPY OR OVERHANG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

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.



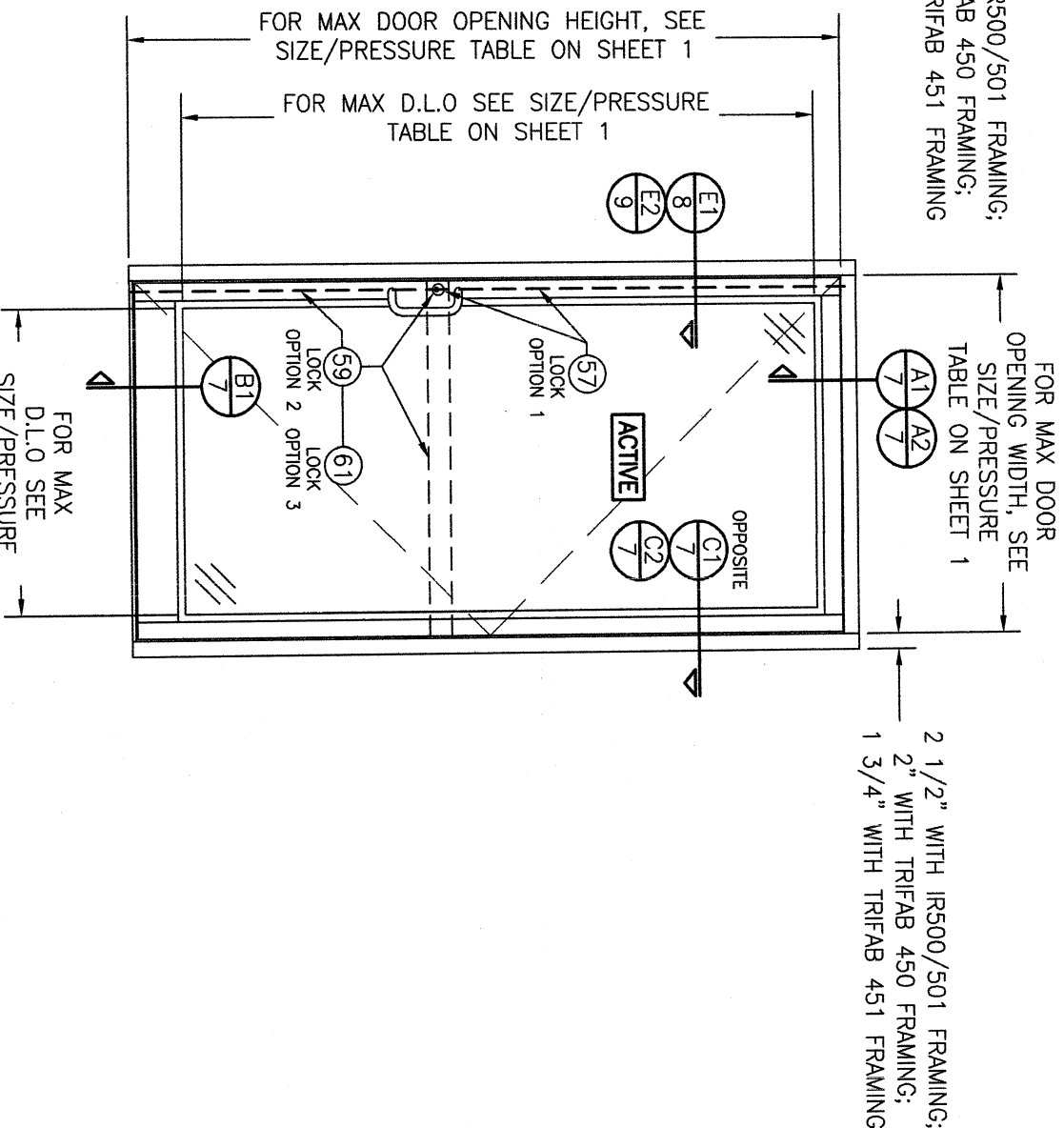
DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
DATE: 08/29/16		DATE: 05/16/12	
NO. 1		NO. 1	
REVISION DESCRIPTION		BY	
A1 CHANGE TO STATE APPROVAL		W.W.S.	
B1 ADDED LEVEL E LOCK OPTIONS & GLASS OPTION 6		W.W.S.	
C1 UPDATED MATERIAL LIST		W.W.S.	
PROJECT TITLE: IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		MANUFACTURER: KAWNEER COMPANY, INC.	
26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-346-5638		555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
DRAWING NO. 1821		REV. C	
SHEET NO. 1		OF 12	

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135



EXTERIOR ELEVATION: DOUBLE DOOR WITH TRIFAB 450, 451 OR IR500/501 FRAMING

SCALE: 1/2" = 1'-0"
(FOR INSTALLATION REQUIREMENTS NOT SHOWN, SEE INSTALLATION ELEVATIONS ON SHEETS 4, 5 & 6)
(FOR HINGE REQUIREMENTS, SEE HINGE LOCATION DIAGRAMS ON SHEET 3)



EXTERIOR ELEVATION: SINGLE DOOR WITH TRIFAB 450, 451 OR IR500/501 FRAMING

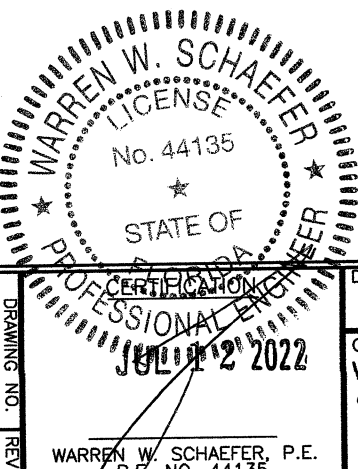
SCALE: 1/2" = 1'-0"
(FOR INSTALLATION REQUIREMENTS NOT SHOWN, SEE INSTALLATION ELEVATIONS ON SHEETS 4, 5 & 6)
(FOR HINGE REQUIREMENTS, SEE HINGE LOCATION DIAGRAMS ON SHEET 3)

ALLOWABLE DESIGN PRESSURE
SEE SIZE/PRESSURE TABLE ON SHEET 1

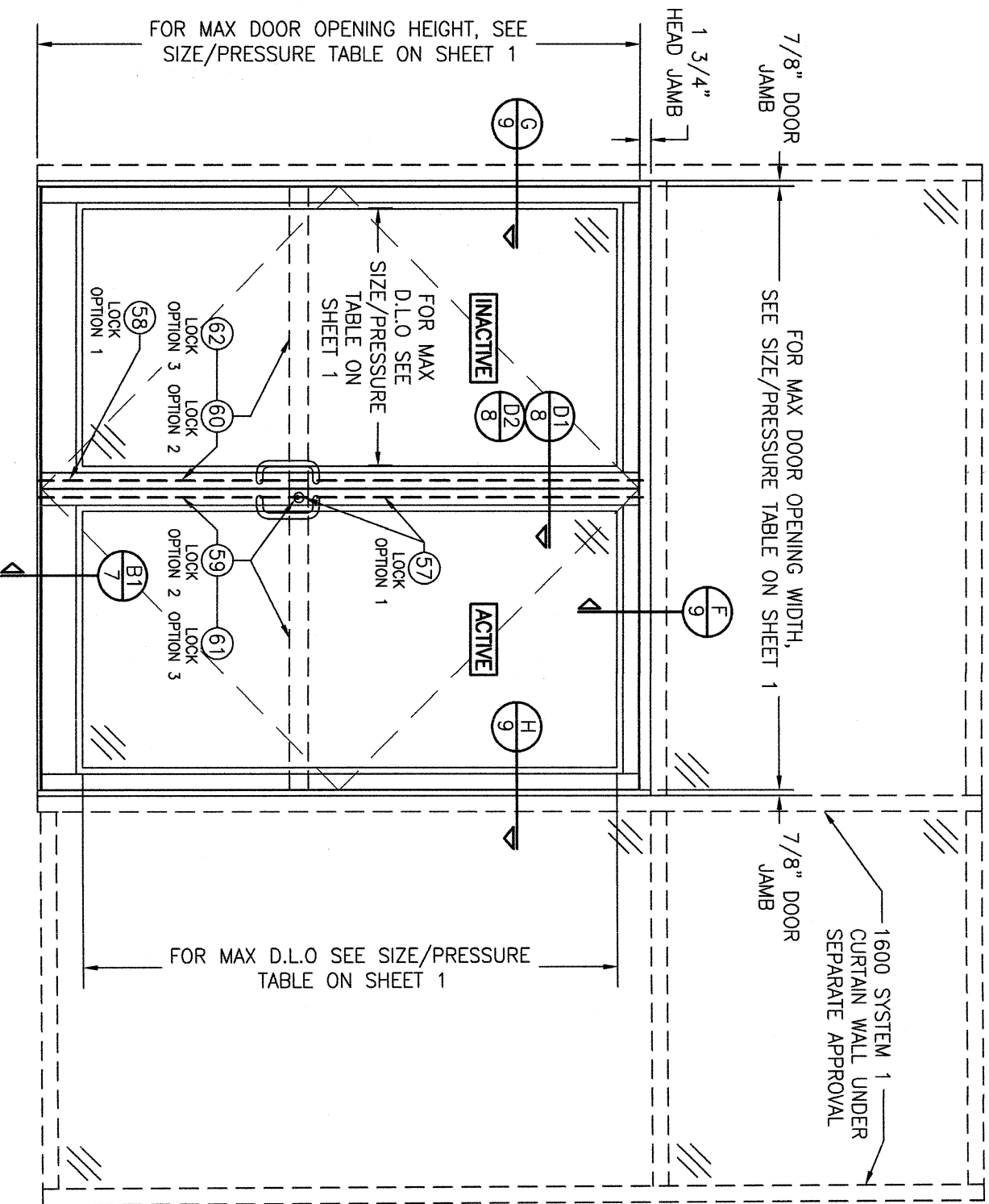
THE 450, 451 & 500/501 SUPPORT FRAMING MAY BE CONFIGURED FOR AND INSTALLED INTO A PUNCHED OPENING AS SHOWN OR BE PART OF A STORE FRONT FRAMING SYSTEM. IF PART OF A STORE FRONT FRAMING SYSTEM, THE LESSER OF THE ALLOWABLE PRESSURE SPECIFIED IN THE STORE FRONT APPROVAL AND THAT STATED HERE-IN SHALL CONTROL FOR THE OVERALL SYSTEM.

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS		MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-346-5638		CHECKED BY: DATE: 05/16/12	



DRAWING NO. 1821	REV. C
SHEET NO. 2	OF 12



EXTERIOR ELEVATION:

DOUBLE DOOR WITHIN 1600 SYSTEM 1 CURTAIN WALL

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

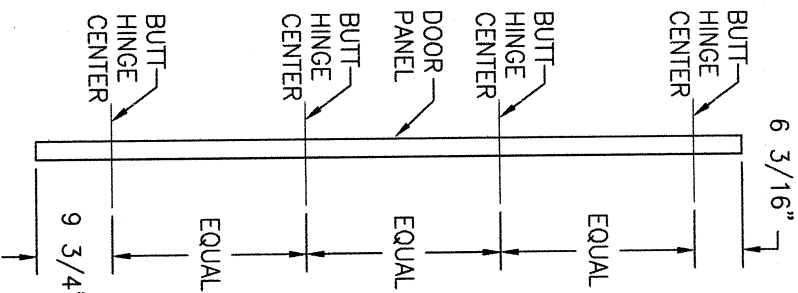
(FOR HINGE REQUIREMENTS, SEE HINGE LOCATION DIAGRAMS ON THIS SHEET.)

ALLOWABLE DESIGN PRESSURE

SEE SIZE/PRESSURE TABLE ON SHEET 1

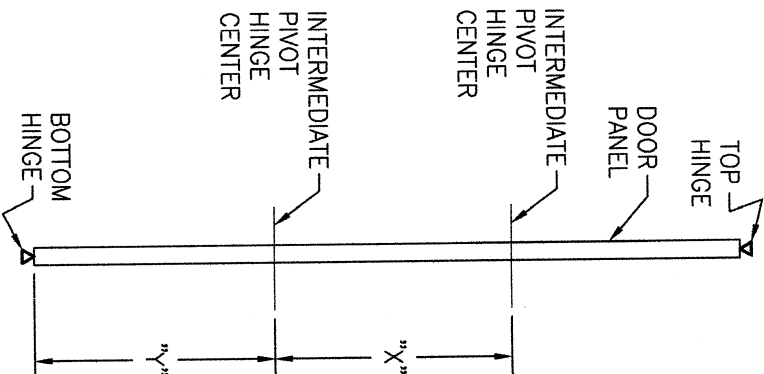
NOTES:

1. FOR DOOR INSTALLATION CONDITIONS NOT SHOWN, SEE INSTALLATION ELEVATIONS ON SHEET 4, 5 & 6.
2. DOUBLE DOOR SHOWN, SINGLE DOOR CONDITION ALSO APPLIES.
3. FOR CURTAIN WALL FRAMING REQUIREMENTS, SEE RESPECTIVE CURTAIN WALL APPROVAL.
4. ALTHOUGH DOOR SECTION IS SHOWN AT A SIDE JAMB, THE DOOR MAY BE LOCATED IN ANY BAY OF THE CURTAIN WALL.
5. THE LESSER ALLOWABLE PRESSURE FOR THE DOOR AND THAT FOR THE 1600 WALL SYSTEM SHALL CONTROL AS THE ALLOWABLE PRESSURE ON THE ASSEMBLY.



BUTT HINGE LOCATION DIAGRAM

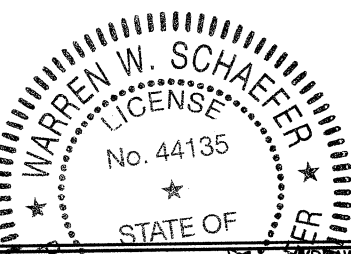
SCALE: 1/2" = 1'-0"



PIVOT HINGE LOCATION DIAGRAM

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

"X" = DOOR OPENING HEIGHT/(NUMBER OF INTERMEDIATE HINGES + 1)
 "Y" = "X" - 13/16"



IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)
 26376 NADIR ROAD; UNIT 309
 PUNTA GORDA, FL 33983
 PHONE: 561-346-5638

MANUFACTURER
KAWNEER COMPANY, INC.
 555 GUTHRIDGE COURT
 NORCROSS, GA 30092
 770-449-5555

NO.	REVISION	DESCRIPTION	BY	DATE
1	24			05/16/12

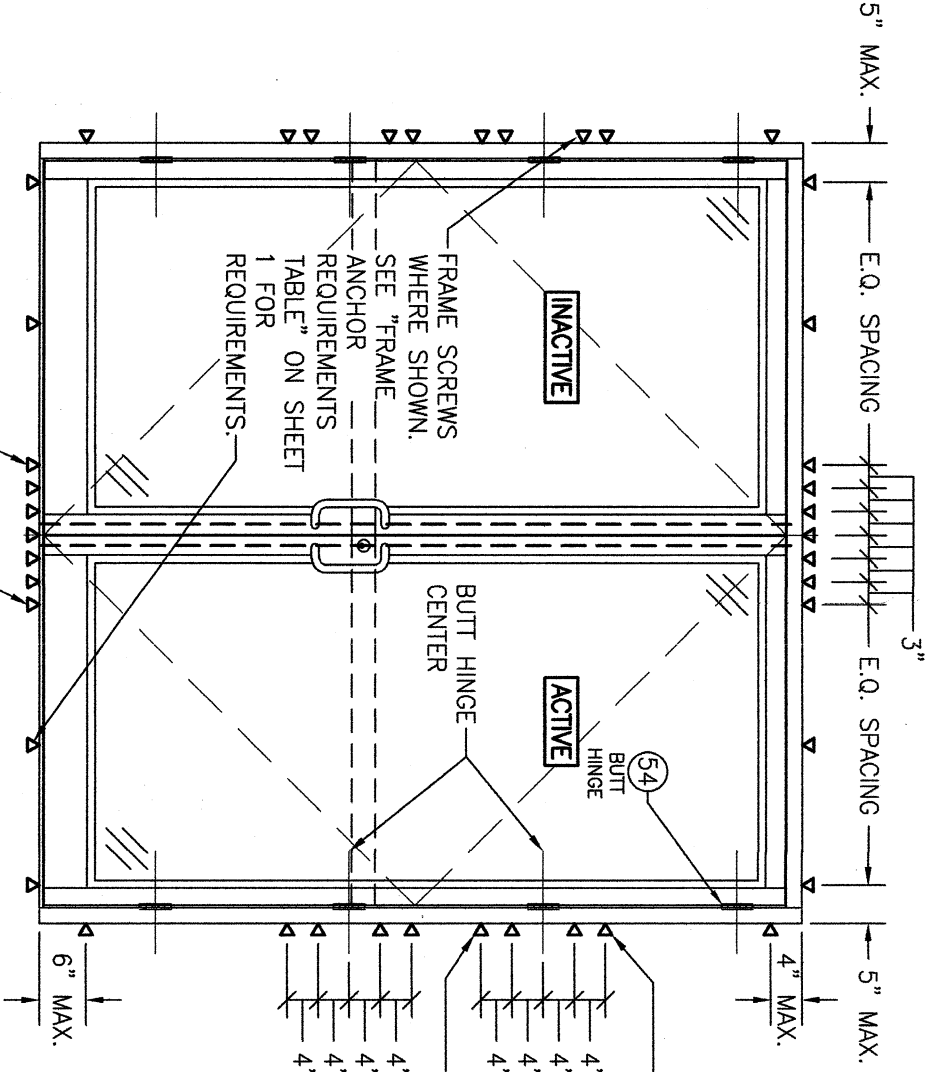
DRAWING NO. 1821
 SHEET NO. 3 OF 12
 WARREN W. SCHAEFER, P.E.
 P.E. NO. 44135

THESE 2 FRAME ANCHORS ARE ONLY REQUIRED WHEN DESIGN PRESSURE EXCEEDS +/-70 PSF (TYP. HEAD AND SILL)

EXTERIOR ELEVATION:
INSTALLATION REQUIREMENTS FOR DOUBLE DOORS
WITH BUTT HINGES

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

(FOR DOOR DETAIL NOT SHOWN, SEE ELEVATIONS ON SHEETS 2 & 3)



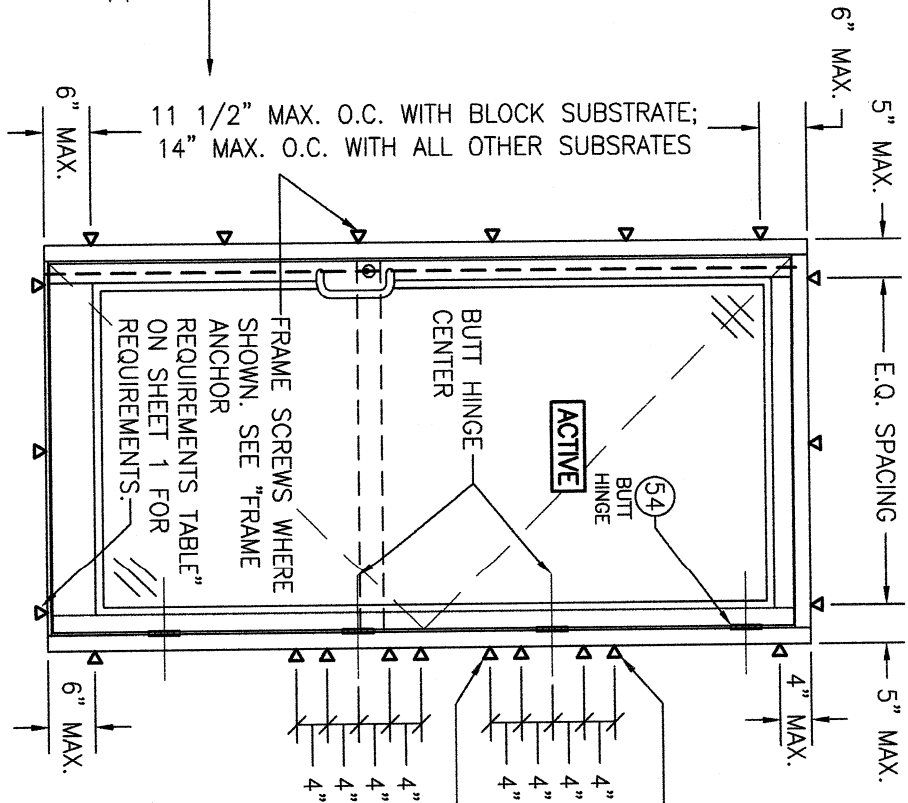
NOTE: WHEN JOB REQUIRED PRESSURE IS +/-70 PSF OR LESS, THESE OUTER MOST SCREWS AT EACH HINGE LOCATION ARE NOT REQUIRED

NOTE: WHEN JOB REQUIRED PRESSURE IS +/-70 PSF OR LESS, SCREW SPACING MAY BE INCREASED TO 17\"/>

EXTERIOR ELEVATION:
INSTALLATION REQUIREMENTS FOR SINGLE DOORS WITH BUTT HINGES

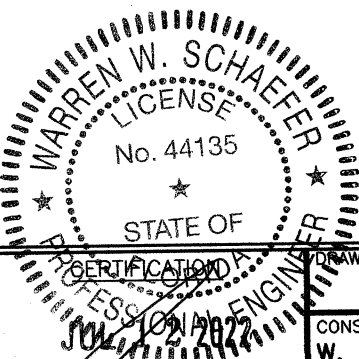
SCALE: 1/2" = 1'-0"

(FOR DOOR DETAIL NOT SHOWN, SEE ELEVATIONS ON SHEETS 2 & 3)



NOTE: WHEN JOB REQUIRED PRESSURE IS +/-70 PSF OR LESS, THESE OUTER MOST SCREWS AT EACH HINGE LOCATION ARE NOT REQUIRED

THE CONDITIONS SHOWN IN THESE ELEVATIONS CONSIDER THE PERIMETER FRAMING TO BE INSTALLED TO A PUNCHED WALL OPENING OR CURTAIN WALL SYSTEM OPENING. WHEN DOOR PANELS ARE INSTALLED INTO A 450, 451 OR 500/501 STOREFRONT SYSTEM (NOT A PUNCHED OPENING), THE INSTALLATION REQUIREMENTS OF THE STORE FRONT APPROVAL SHALL CONTROL WITH THE DOOR PANELS BEING HINGED AND LOCKED TO THE FRAMING AS SHOWN HERE-IN.

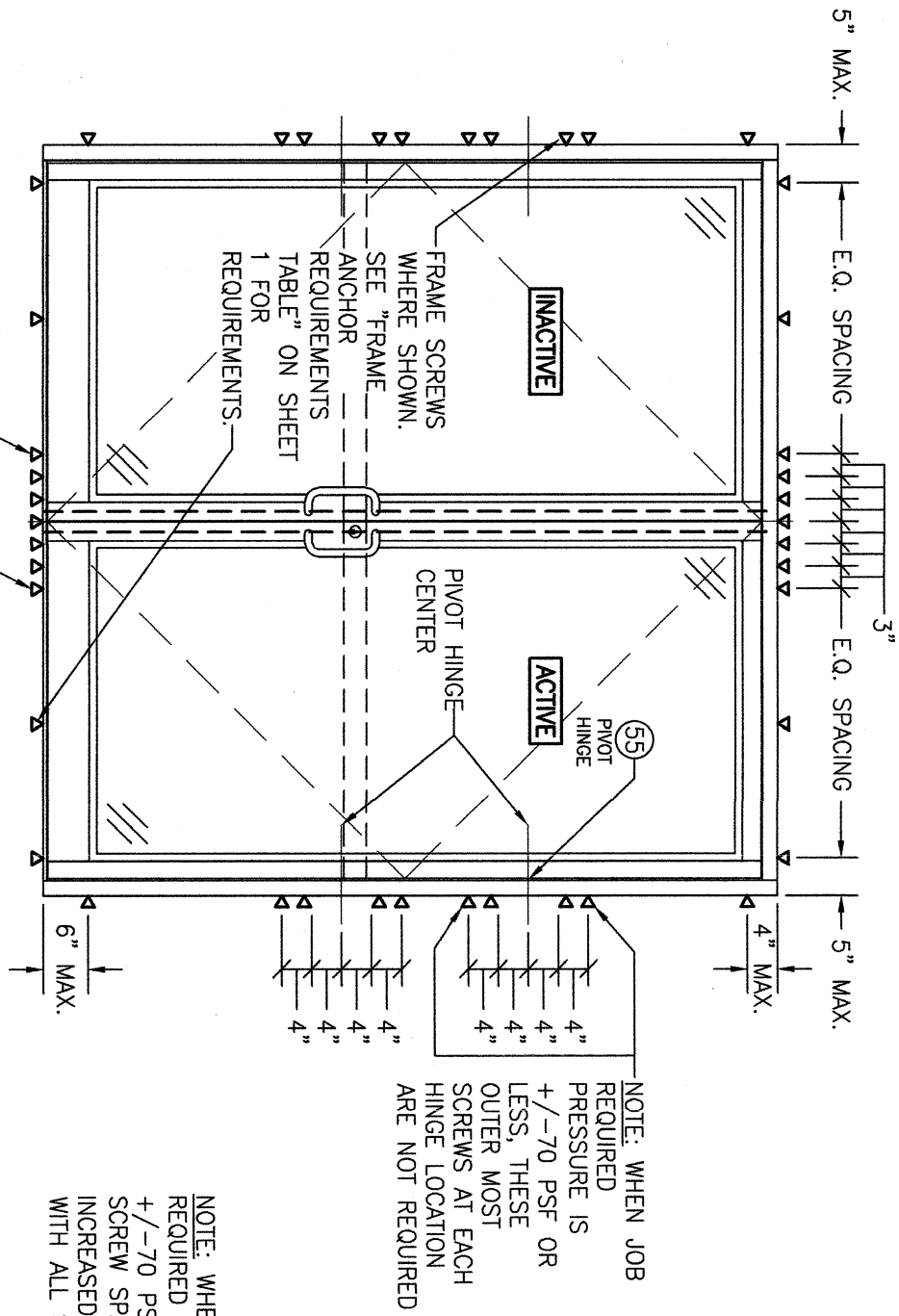


DRAWING TITLE
IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS

CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-346-5638	KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555

DRAWN BY:		CHECKED BY:		
W.R.M.		W.M.S.		
DATE:		DATE:		
1-24		05/16/12		
NO.	REVISION	DESCRIPTION	BY	DATE

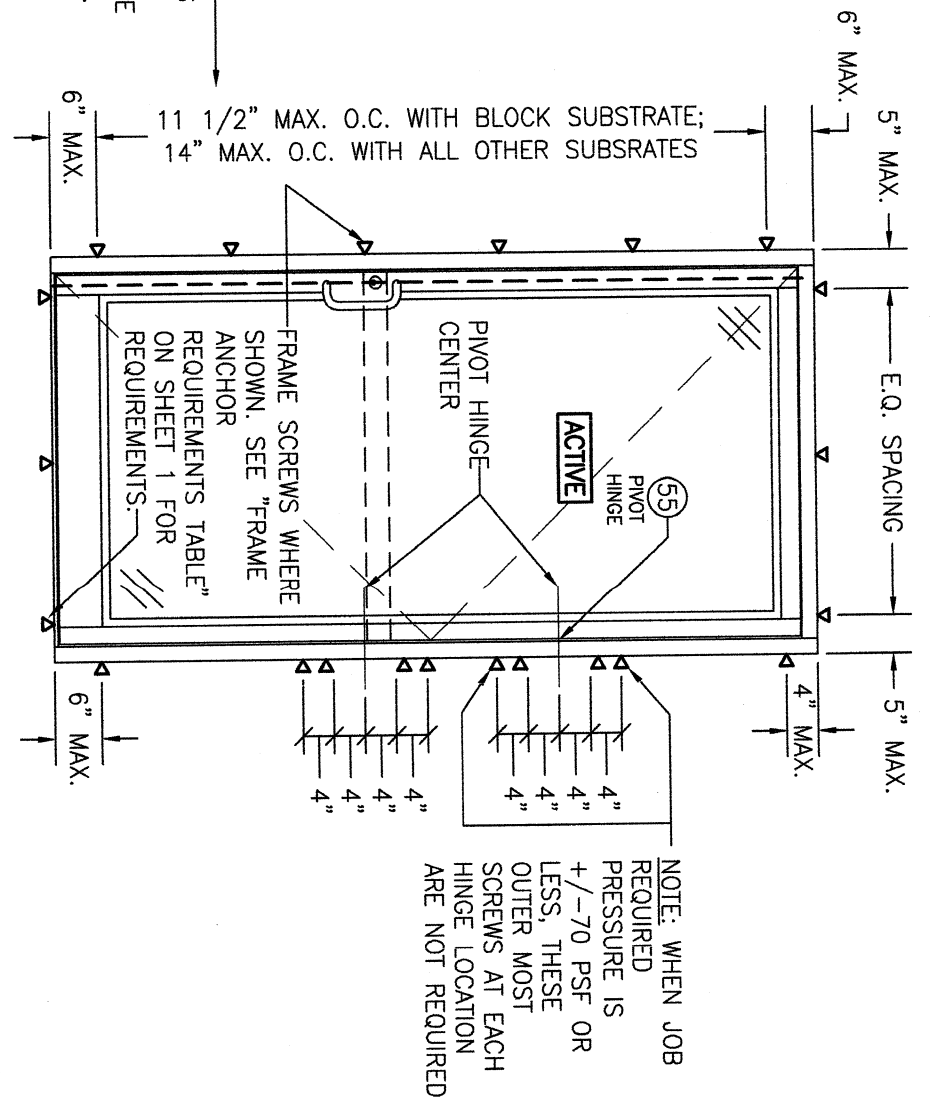
DRAWING NO. 1821
SHEET NO. 4 OF 12



THESE 2 FRAME ANCHORS ARE ONLY REQUIRED WHEN DESIGN PRESSURE EXCEEDS +/-70 PSF (TYP. HEAD AND SILL)

**EXTERIOR ELEVATION:
INSTALLATION REQUIREMENTS FOR DOUBLE DOORS
WITH PIVOT HINGES**
SCALE: 1/2" = 1'-0"
(FOR DOOR DETAIL NOT SHOWN, SEE ELEVATIONS ON SHEETS 2 & 3)

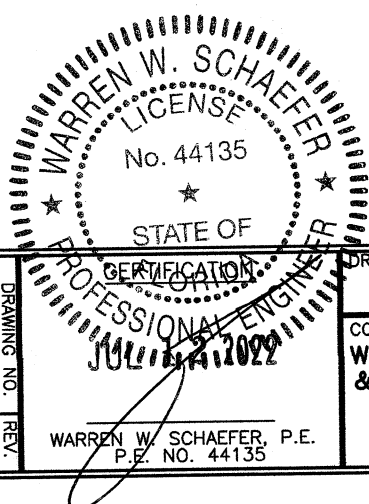
THE CONDITIONS SHOWN IN THESE ELEVATIONS CONSIDER THE PERIMETER FRAMING TO BE INSTALLED TO A PUNCHED WALL OPENING OR CURTAIN WALL SYSTEM OPENING. WHEN DOOR PANELS ARE INSTALLED INTO A 450, 451 OR 500/501 STOREFRONT SYSTEM (NOT A PUNCHED OPENING), THE INSTALLATION REQUIREMENTS OF THE STORE FRONT APPROVAL SHALL CONTROL WITH THE DOOR PANELS BEING HINGED AND LOCKED TO THE FRAMING AS SHOWN HERE-IN.



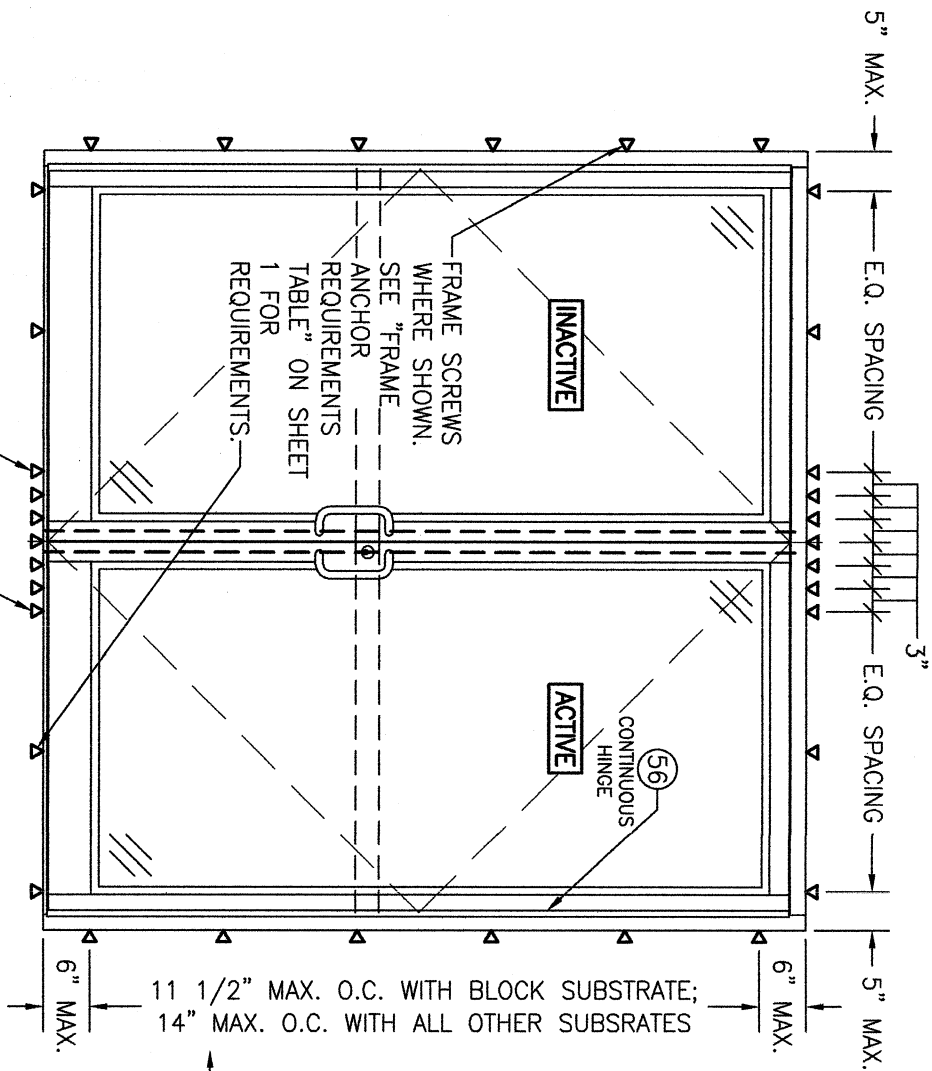
**EXTERIOR ELEVATION:
INSTALLATION REQUIREMENTS FOR SINGLE
DOORS WITH PIVOT HINGES**
SCALE: 1/2" = 1'-0"
(FOR DOOR DETAIL NOT SHOWN, SEE ELEVATIONS ON SHEETS 2 & 3)

DRAWN BY:		CHECKED BY:		
W.R.M.		W.M.S.		
DATE:		DATE:		
1-24		05/16/12		
NO.	REVISION	DESCRIPTION	BY	DATE
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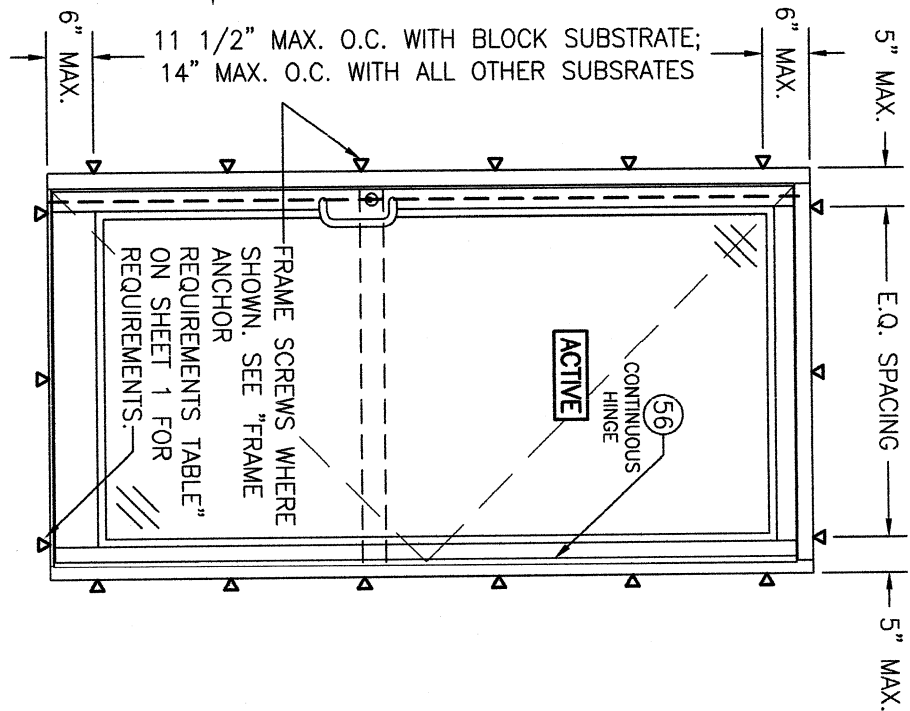
DRAWING TITLE	
IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)	KAWNEER COMPANY, INC.
26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-346-5638	555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555



DRAWING NO.		SHEET NO.	
1821		5 OF 12	
REV.		C	
WARREN W. SCHAEFER, P.E.		P.E. NO. 44135	



NOTE: WHEN JOB
REQUIRED PRESSURE IS
+/-70 PSF OR LESS,
SCREW SPACING MAY BE
INCREASED TO 17" O.C.
WITH ALL SUBSTRATES



THESE 2 FRAME ANCHORS ARE
ONLY REQUIRED WHEN DESIGN
PRESSURE EXCEEDS +/-70
PSF (TYP. HEAD AND SILL)

**EXTERIOR ELEVATION:
INSTALLATION REQUIREMENTS FOR DOUBLE DOORS
WITH CONTINUOUS HINGES**
SCALE: 1/2" = 1'-0"
(FOR DOOR DETAIL NOT SHOWN, SEE ELEVATIONS ON SHEETS 2 & 3)

THE CONDITIONS SHOWN IN THESE ELEVATIONS CONSIDER THE PERIMETER FRAMING TO BE INSTALLED TO A PUNCHED WALL OPENING OR CURTAIN WALL SYSTEM OPENING. WHEN DOOR PANELS ARE INSTALLED INTO A 450, 451 OR 500/501 STOREFRONT SYSTEM (NOT A PUNCHED OPENING), THE INSTALLATION REQUIREMENTS OF THE STORE FRONT APPROVAL SHALL CONTROL WITH THE DOOR PANELS BEING HINGED AND LOCKED TO THE FRAMING AS SHOWN HERE-IN.

**EXTERIOR ELEVATION:
INSTALLATION REQUIREMENTS FOR SINGLE
DOORS WITH CONTINUOUS HINGE**
SCALE: 1/2" = 1'-0"
(FOR DOOR DETAIL NOT SHOWN, SEE ELEVATIONS ON SHEETS 2 & 3)

NO.	REVISION	DESCRIPTION	BY	DATE

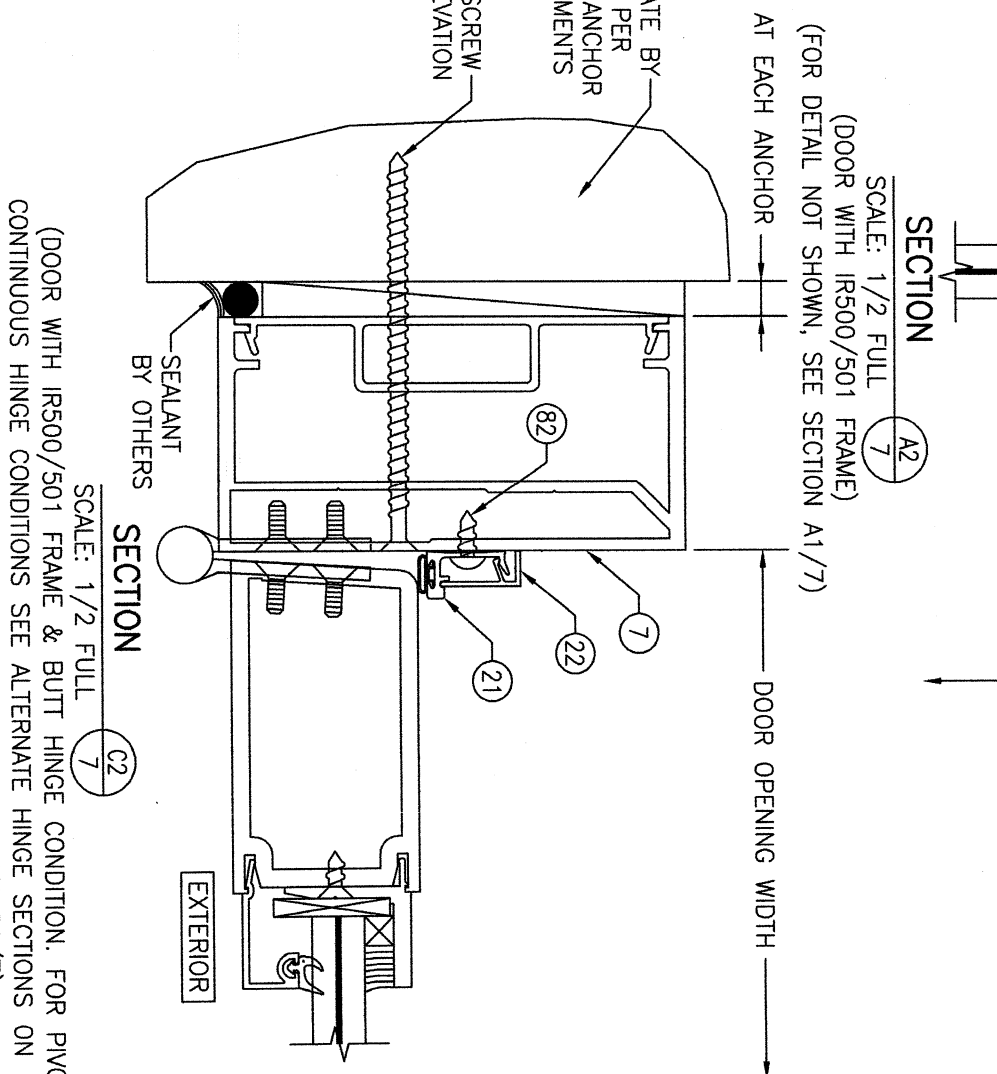
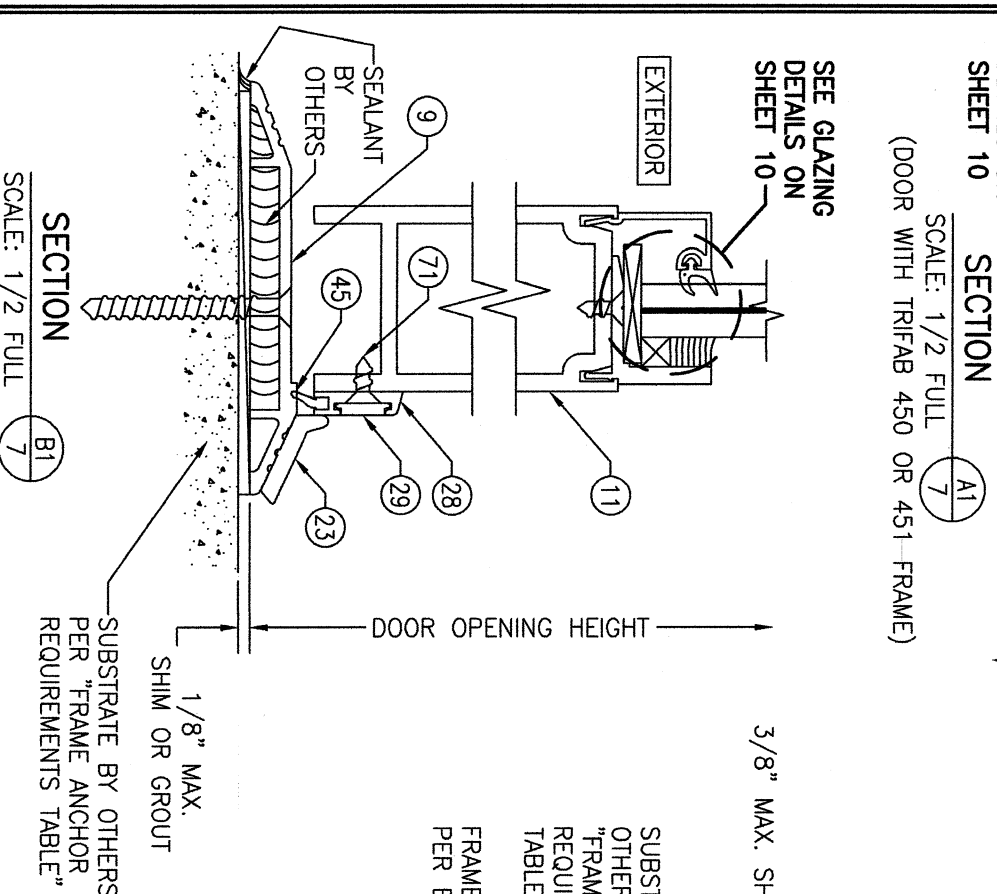
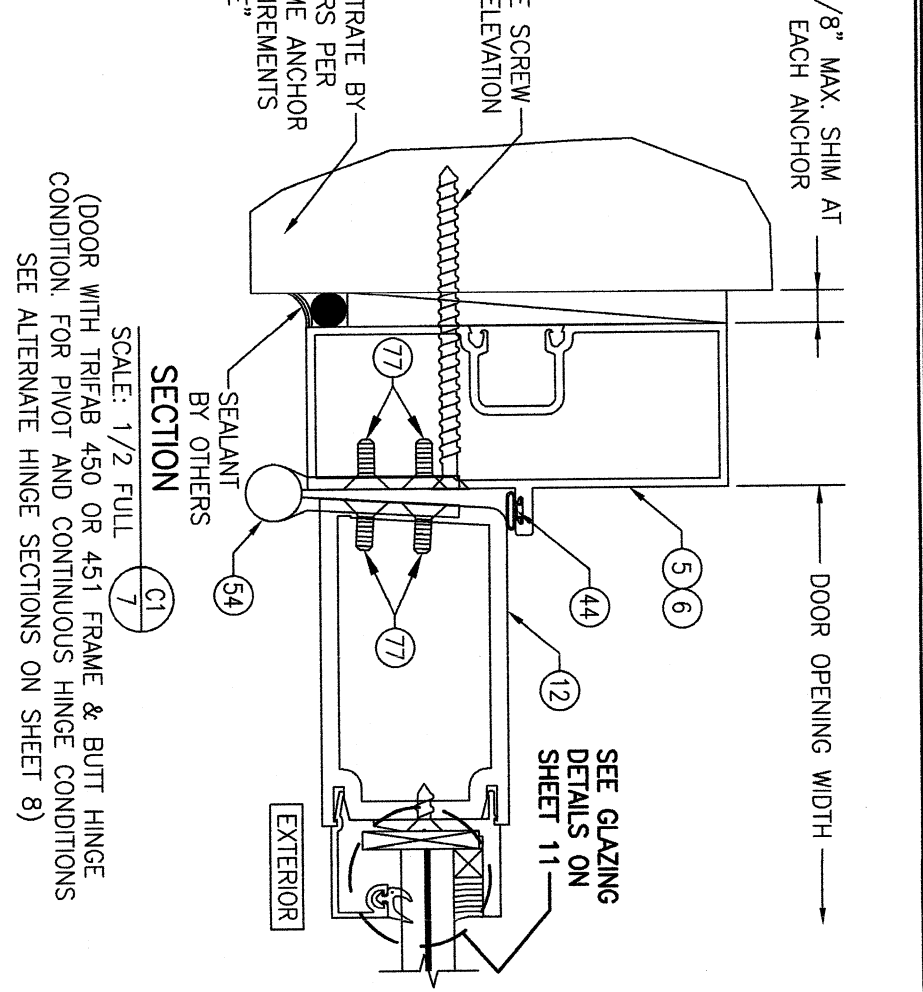
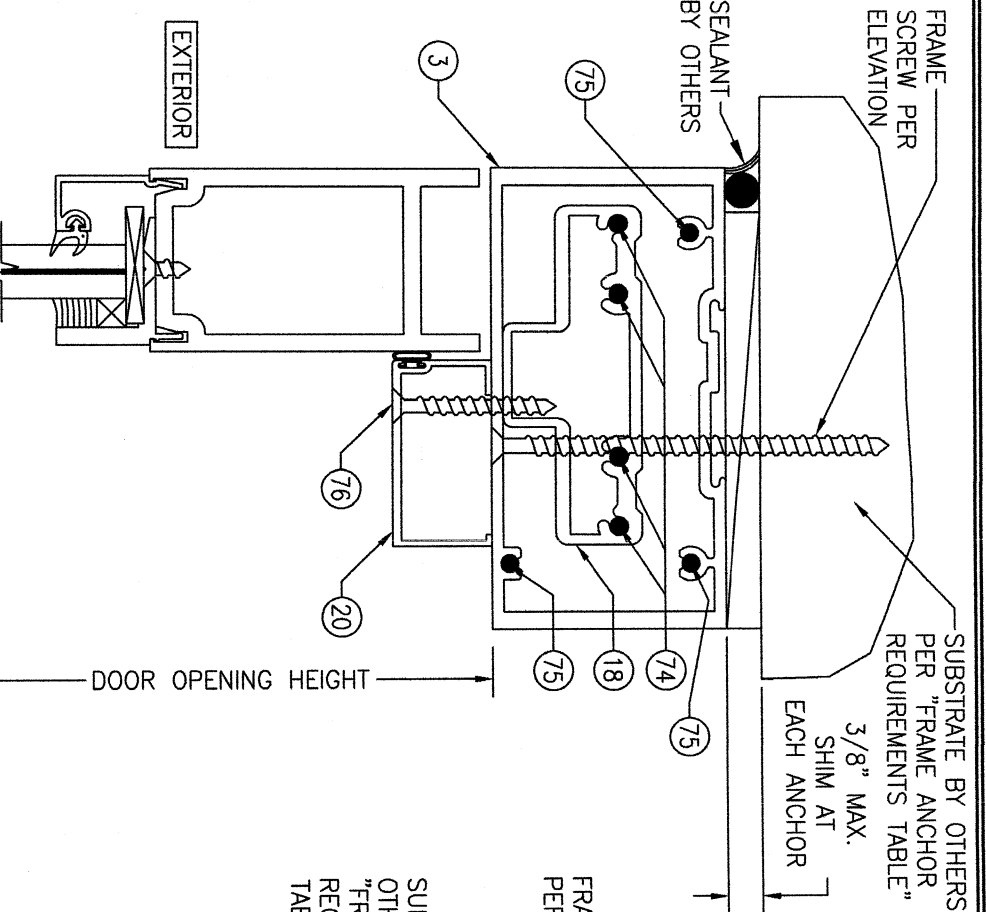
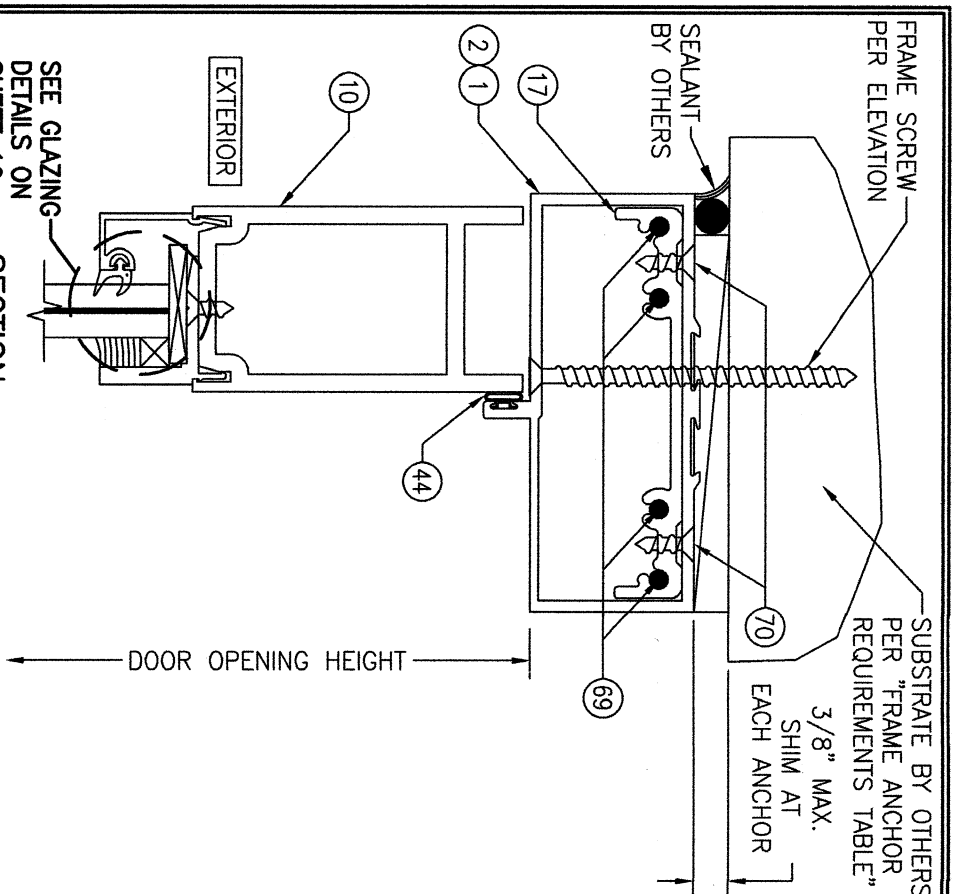
DRAWING TITLE IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS	MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-346-5638	CHECKED BY: W.R.M. DATE: 05/16/12

WARREN W. SCHAEFER
P.E. NO. 44135

DRAWING NO.
1821

REV.
C

SHEET NO.
6 OF 12



NO.	REVISION	DESCRIPTION	BY	DATE
1	1	1-2		
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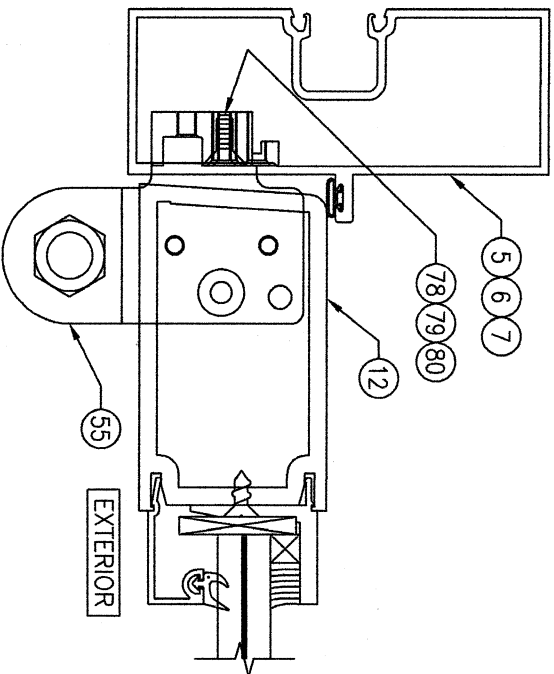
DRAWING TITLE
IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)
26376 NADIR ROAD; UNIT 309
PUNTA GORDA, FL 33983
PHONE: 561-346-5638

MANUFACTURER
KAWNEER COMPANY, INC.
555 GUTHRIDGE COURT
NORCROSS, GA 30092
770-449-5555

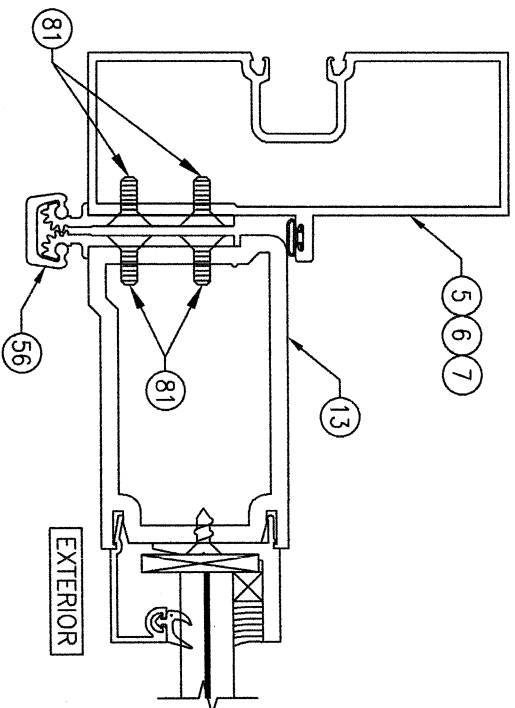
DRAWING NO.
1821
SHEET NO.
7 OF 12

DATE
05/16/12
CHECKED BY
W.M.S.



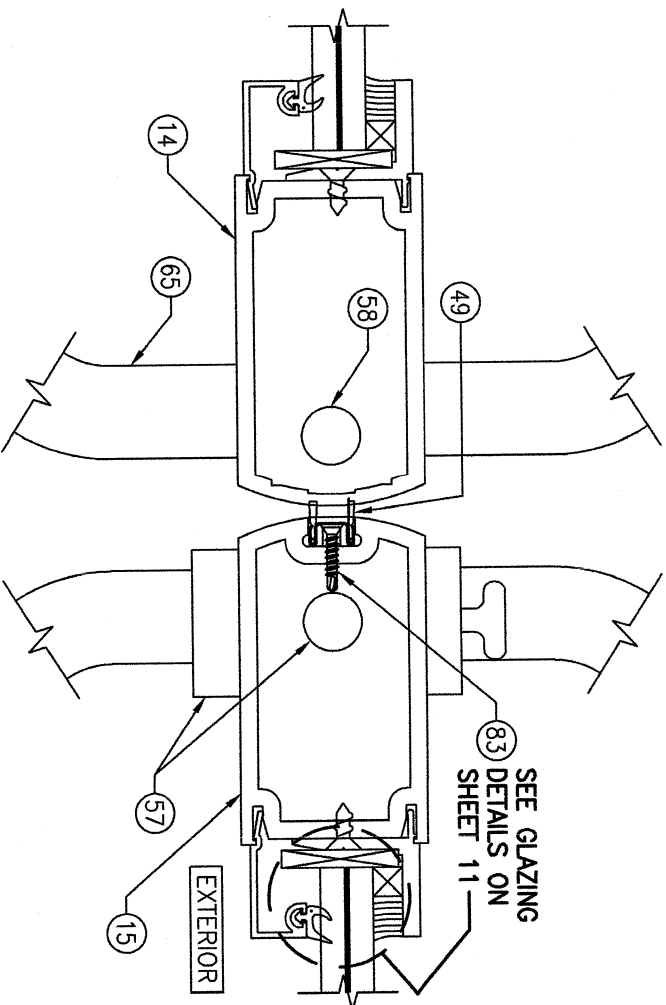
ALTERNATE HINGE SECTION

(PIVOT HINGE CONDITION)
(FOR DETAIL AND INSTALLATION NOT SHOWN, SEE SECTION C1/7)



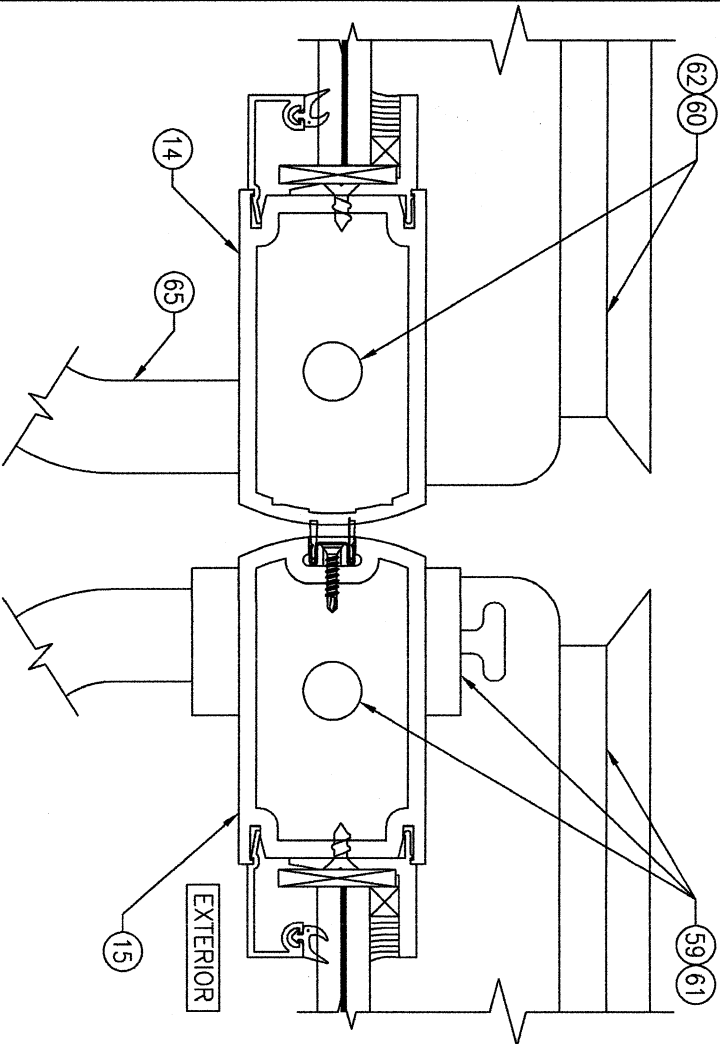
ALTERNATE HINGE SECTION

(CONTINUOUS HINGE CONDITION)
(FOR DETAIL AND INSTALLATION NOT SHOWN, SEE SECTION C1/7)



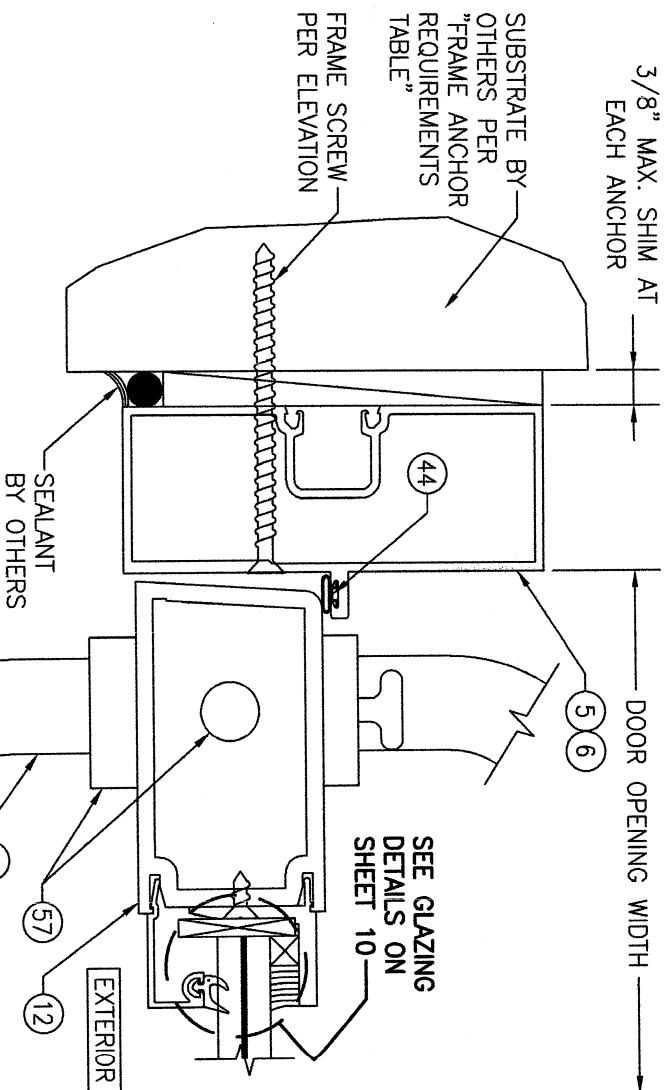
SECTION

SCALE: 1/2 FULL
D1
(DOOR WITH LOCK OPTION 1)



SECTION

SCALE: 1/2 FULL
D2
(DOOR WITH LOCK OPTIONS 2 & 3)
(FOR DETAIL NOT SHOWN, SEE SECTION D1/8)



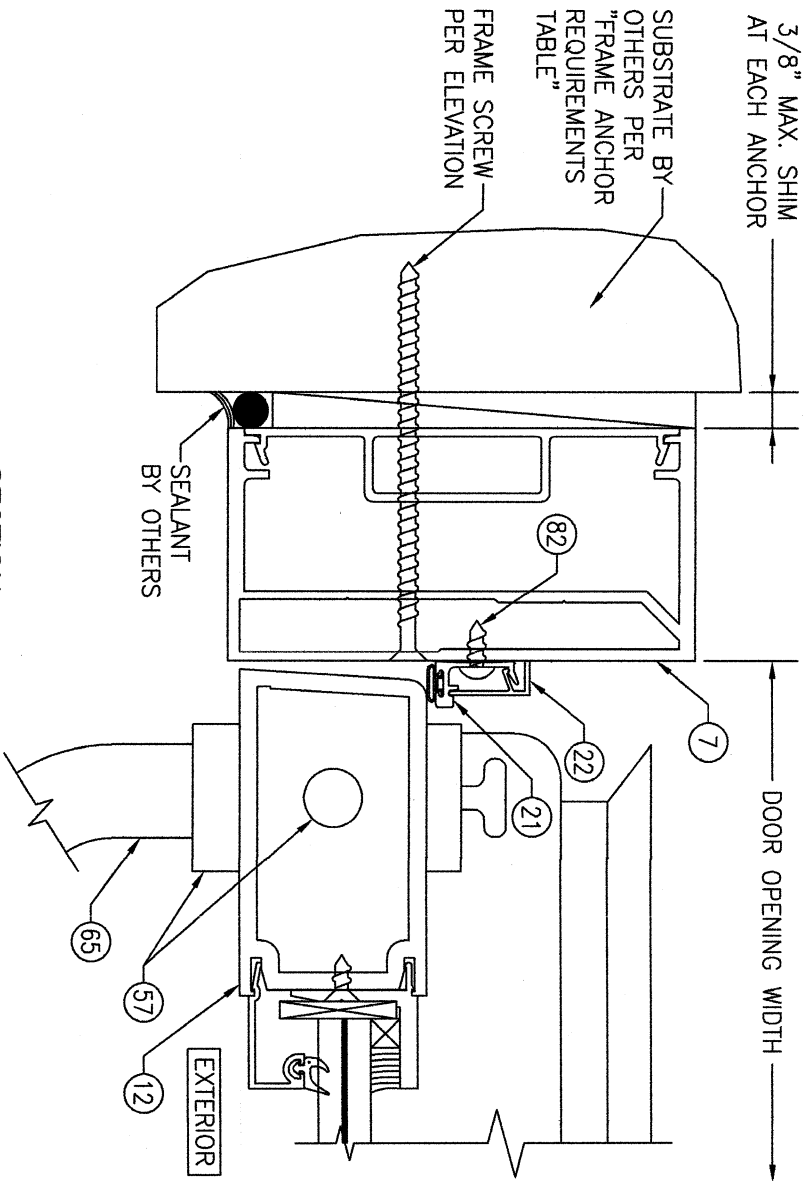
SECTION

SCALE: 1/2 FULL
E1
(DOOR WITH TRIFAB 450 OR 451 FRAME & LOCK OPTION 1. FOR LOCK OPTIONS 2 & 3 SEE ALTERNATE LOCK SECTION ON SHEET 9)

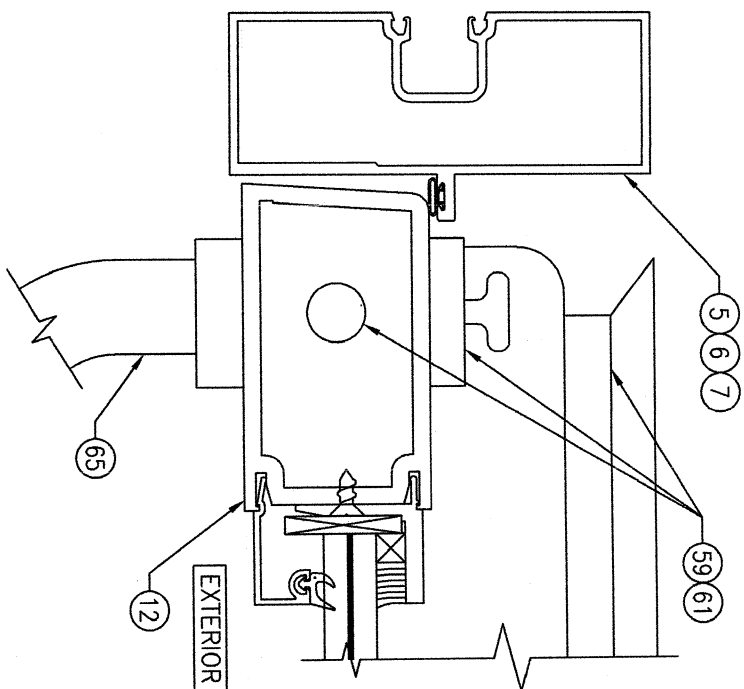
NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE	
IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)	KAWNEER COMPANY, INC.
26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-346-5638	555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555

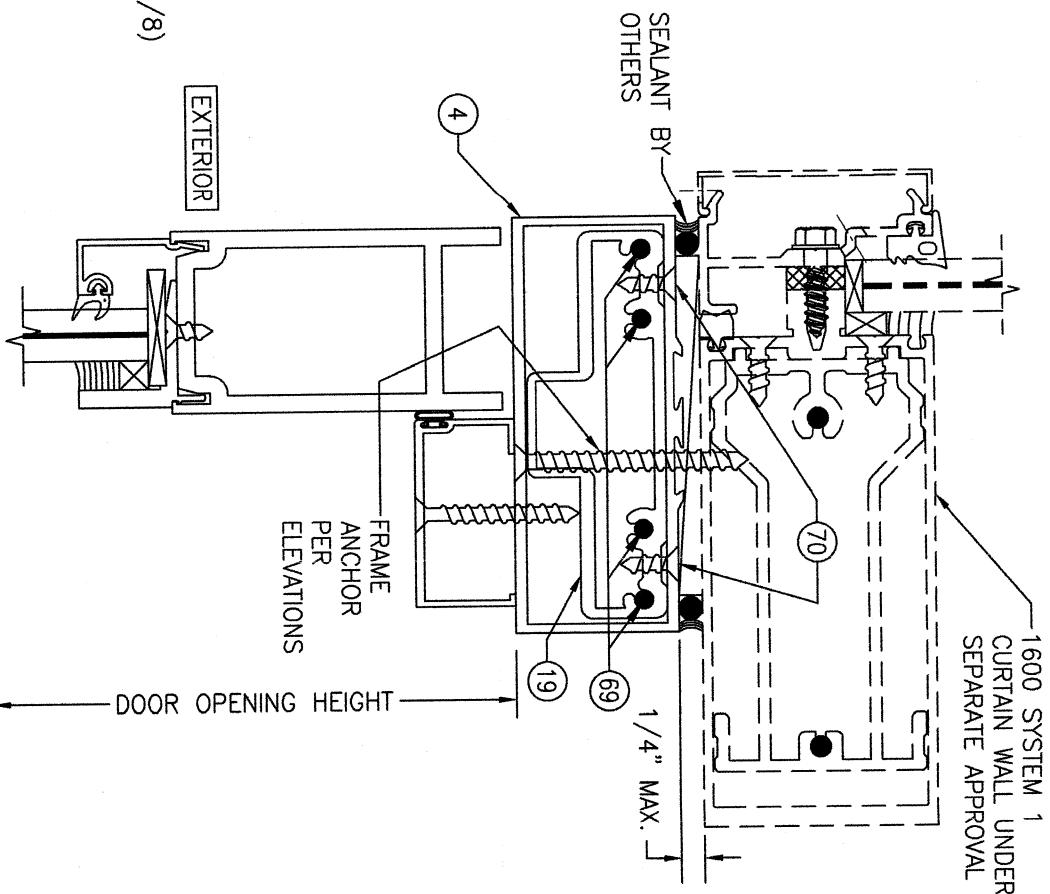
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING NO. 1821 REV. C	SHEET NO. 8 OF 12
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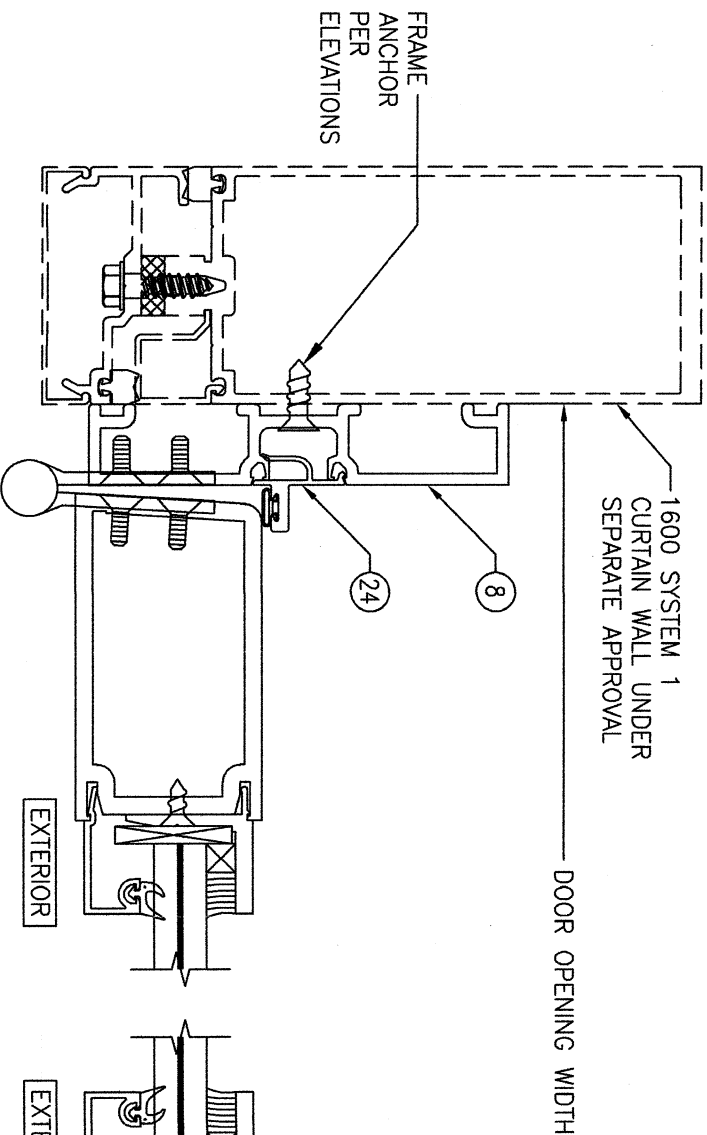
SECTION E2
SCALE: 1/2 FULL
(DOOR WITH IR500/501 FRAME & LOCK OPTION 1. FOR LOCK OPTIONS 2 & 3 SEE ALTERNATE LOCK SECTION ON THIS SHEET)
(FOR DETAIL NOT SHOWN, SEE SECTION E1/8)



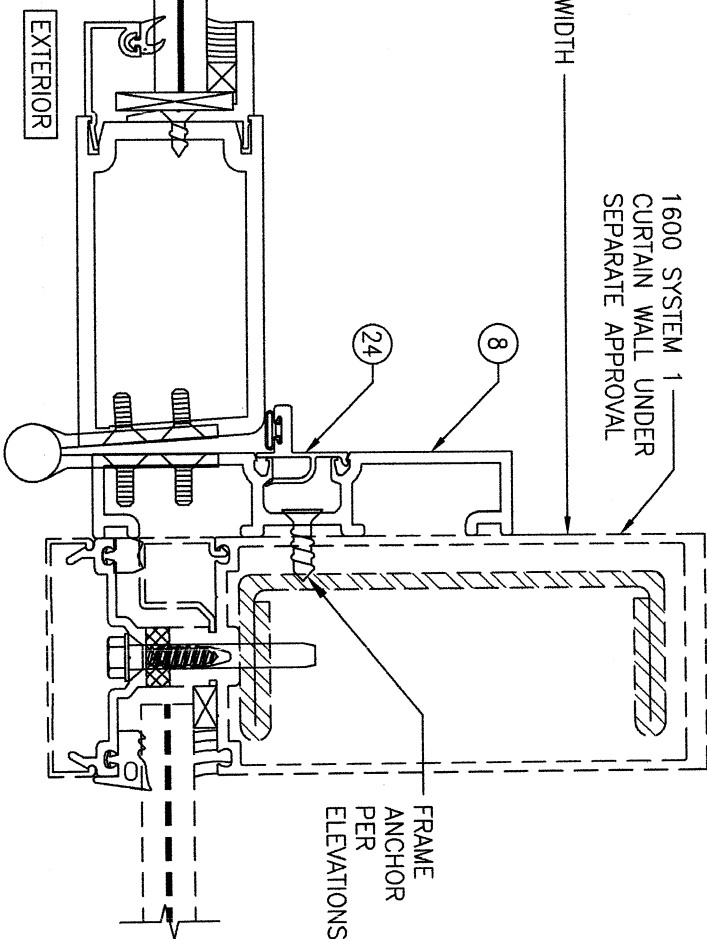
ALTERNATE LOCK SECTION
(LOCK OPTIONS 2 & 3)
(FOR DETAIL AND INSTALLATION NOT SHOWN, SEE SECTION E1/8)



SECTION F
SCALE: 1/2 FULL
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION G
SCALE: 1/2 FULL
(BUTT HINGE CONDITION SHOWN. PIVOT AND CONTINUOUS HINGE CONDITIONS ALSO APPLY)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

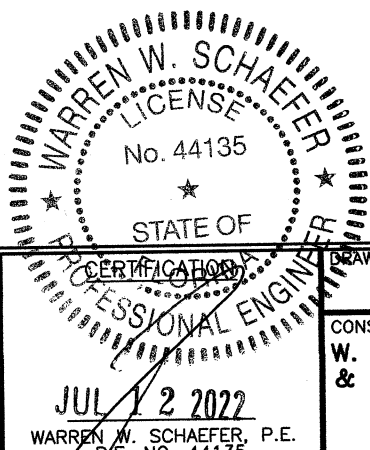


SECTION H
SCALE: 1/2 FULL
(BUTT HINGE CONDITION SHOWN. PIVOT AND CONTINUOUS HINGE CONDITIONS ALSO APPLY)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

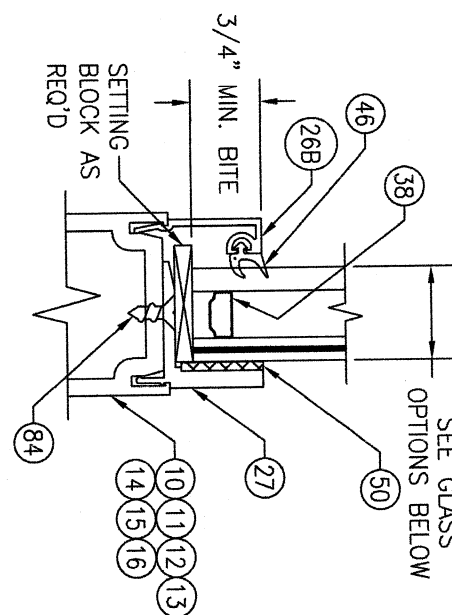
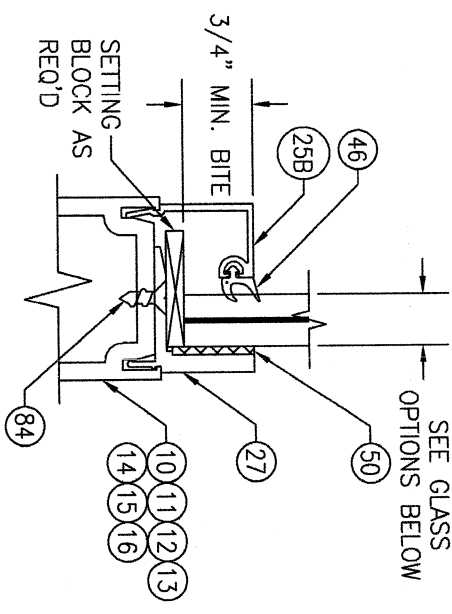
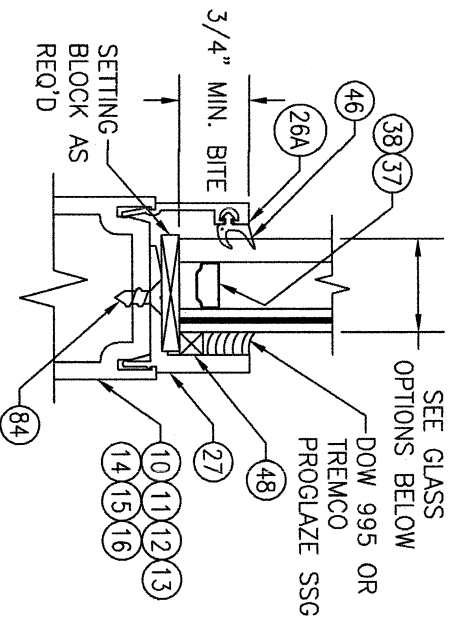
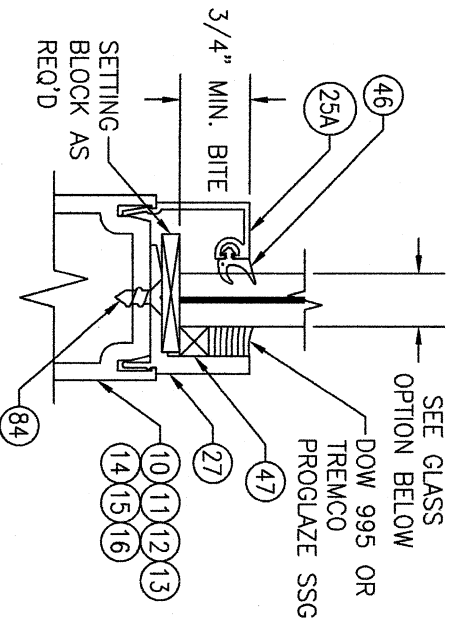
NO.	REVISION	DESCRIPTION	BY	DATE
1-2				

DRAWN BY:	CHECKED BY:
W.R.M.	W.M.S.
DATE:	DATE:
05/16/12	

DRAWING TITLE	
IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)	KAWNEER COMPANY, INC.
26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-346-5638	555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555



DRAWING NO.	REV.
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TYPICAL MONOLITHIC GLAZING DETAIL

TYPICAL I.G. GLAZING DETAIL

TYPICAL MONOLITHIC GLAZING DETAIL

TYPICAL I.G. GLAZING DETAIL

GLASS OPTION: (WET GLAZED)

OPTION 1: 9/16" THICK LAMINATED GLASS (1/4" HT. ST./0.090" KURARAY SG/1/4" HT. ST.)

GLASS OPTIONS: (WET GLAZED)

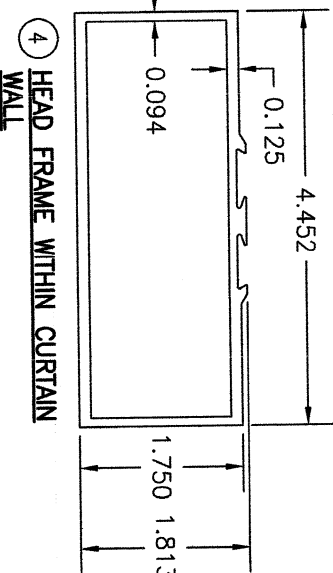
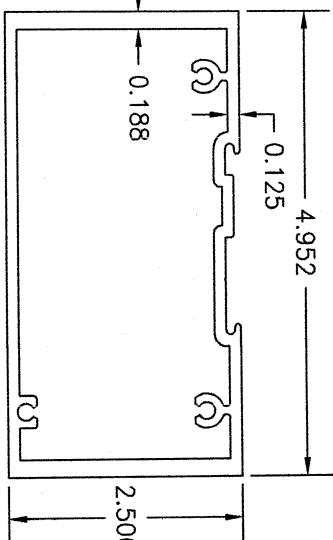
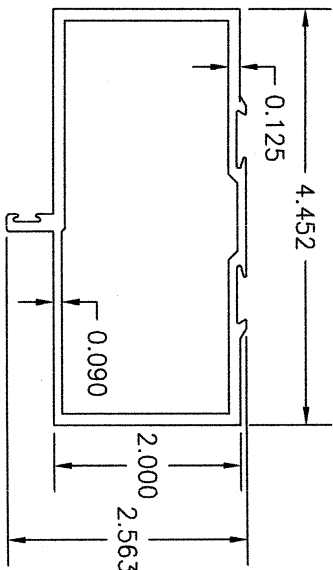
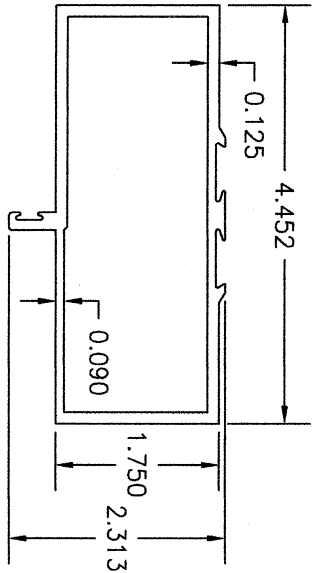
OPTION 2: 1" THICK I.G. LAMINATED GLASS (1/4" TEMP EXTERIOR; 1/2" AIR SPACE; 1/8" HT. ST./0.090" KURARAY SG/1/8" HT. ST. INTERIOR)
OPTION 5: 1" THICK I.G. LAMINATED GLASS (1/4" TEMP EXTERIOR; 1/4" AIR SPACE; 3/16" HT. ST./0.180" KURARAY SG/3/16" HT. ST. INTERIOR)

GLASS OPTIONS: (TAPE GLAZED)

OPTION 3: 9/16" THICK LAMINATED GLASS (1/4" HT. ST./0.090" KURARAY BUTACITE PVB/1/4" HT. ST.)

GLASS OPTIONS: (TAPE GLAZED)

OPTION 4: 1" THICK I.G. LAMINATED GLASS (1/4" TEMP EXTERIOR; 1/2" AIR SPACE; 1/8" HT. ST./0.090" KURARAY BUTACITE PVB/1/8" HT. ST. INTERIOR)
OPTION 6: 1" THICK I.G. LAMINATED GLASS (1/4" TEMP EXTERIOR; 1/4" AIR SPACE; 3/16" HT. ST./0.180" KURARAY SG/3/16" HT. ST. INTERIOR)

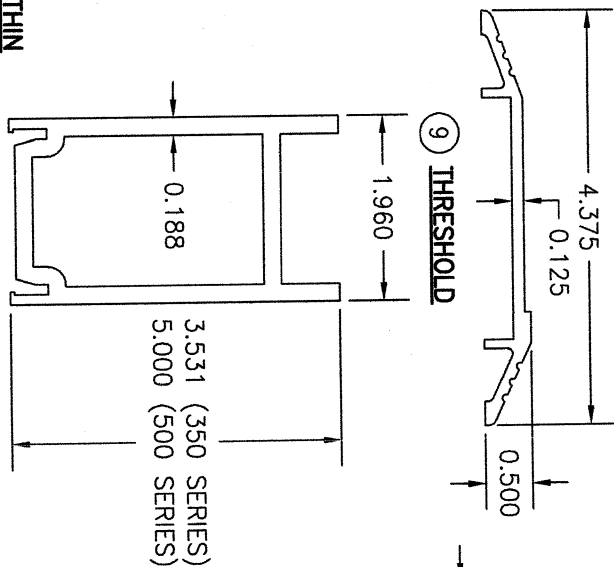
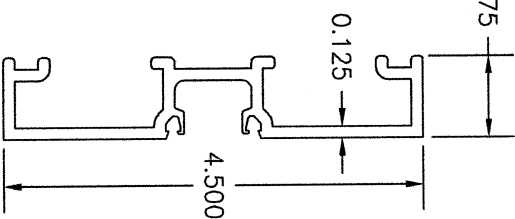
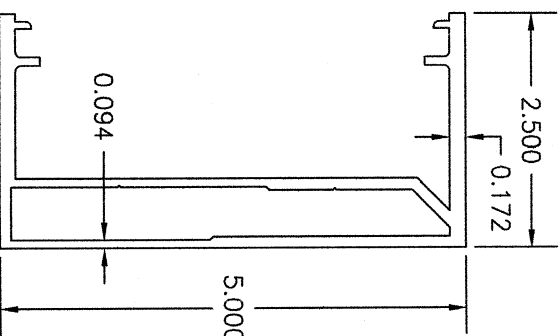
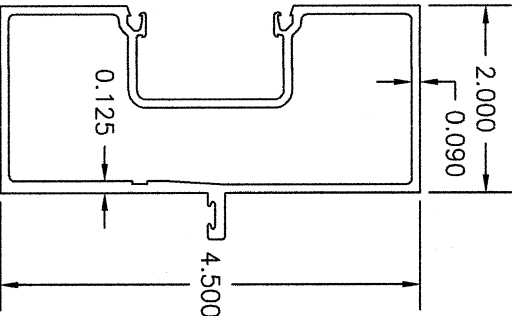
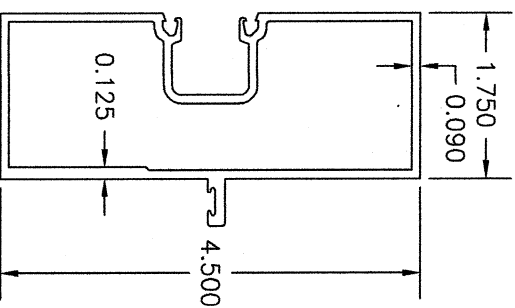


① TRIFAB 450 HEAD FRAMING

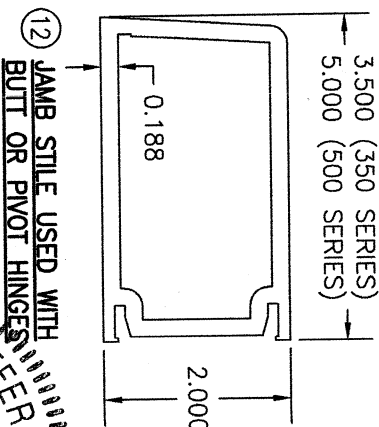
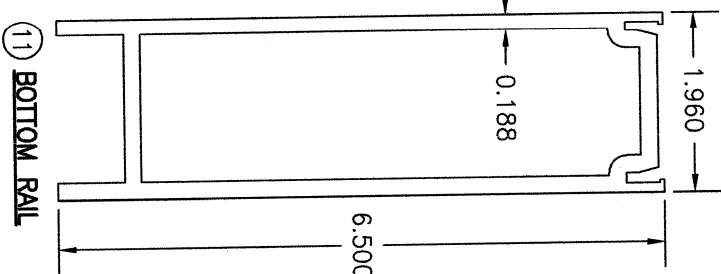
TRIFAB 451 HEAD FRAMING ②

③ IR500/501 HEAD FRAMING

④ HEAD FRAME WITHIN CURTAIN WALL



⑩ TOP RAIL



⑫ JAMB STYLE USED WITH BUTT OR PIVOT HINGES

⑤ TRIFAB 450 JAMB FRAMING

⑥ TRIFAB 451 JAMB FRAMING

⑦ IR500/501 JAMB FRAMING

⑧ DOOR ADAPTOR WITHIN CURTAIN WALL SYSTEM

⑩ TOP RAIL

⑪ BOTTOM RAIL

⑫ JAMB STYLE USED WITH BUTT OR PIVOT HINGES

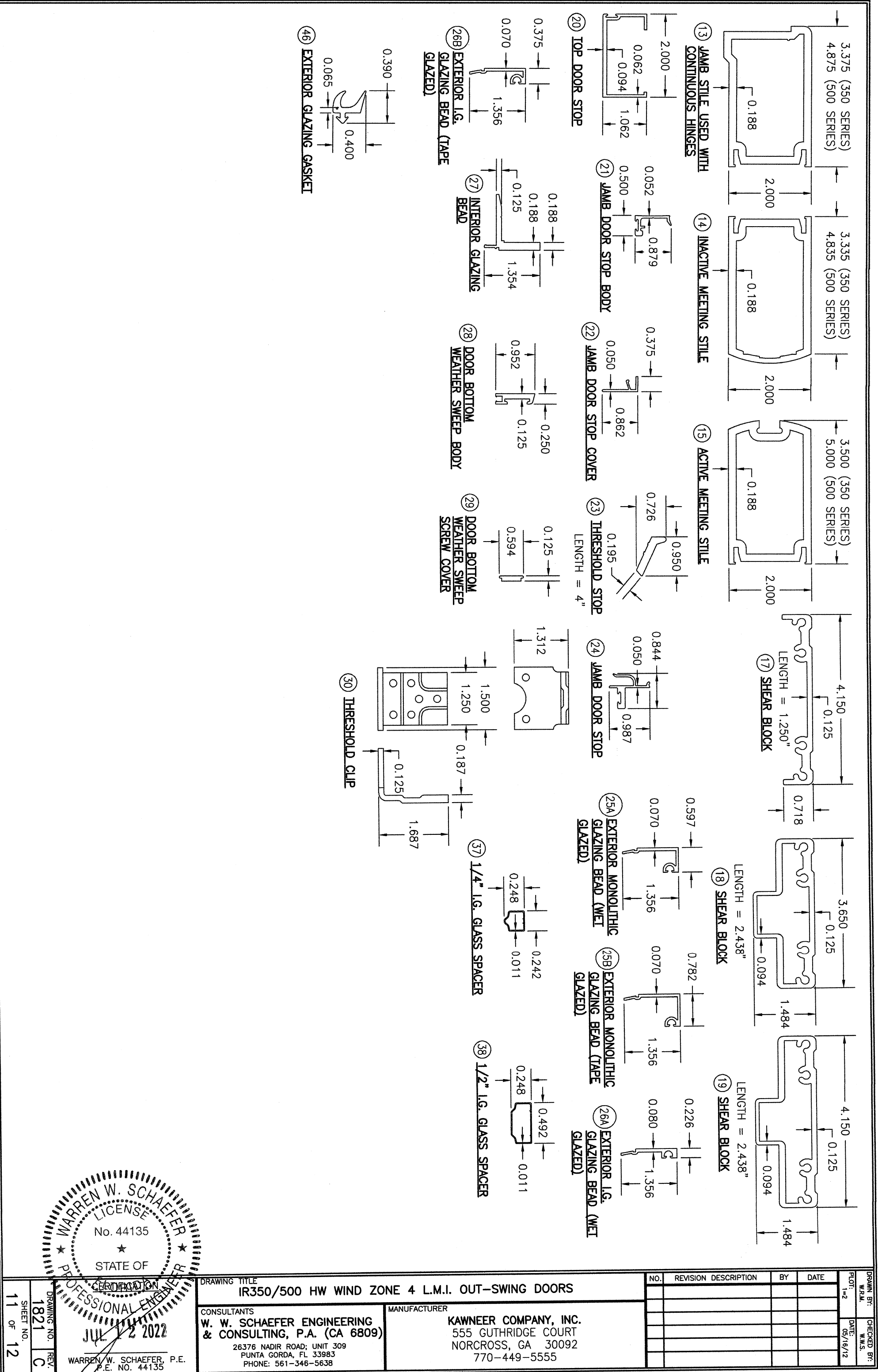
DRAWING TITLE		CONSULTANTS		MANUFACTURER	
IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS		W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		KAWNEER COMPANY, INC.	
26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-346-5638		555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555			

NO.	REVISION DESCRIPTION	BY	DATE
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2			

DRAWING NO.	REV.	SHEET NO.	OF
1821	C	10	12

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

WARREN W. SCHAEFER
LICENSE
No. 44135
FLORIDA
PROFESSIONAL ENGINEER



NO.	REVISION	DESCRIPTION	BY	DATE	PLOT:	W.R.M.	DATE:	W.M.S.
1-2							05/16/12	

DRAWING TITLE		MANUFACTURER	
IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS		KAWNEER COMPANY, INC.	
CONSULTANTS		555 GUTHRIDGE COURT	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		NORCROSS, GA 30092	
26376 NADIR ROAD; UNIT 309		770-449-5555	
PUNTA GORDA, FL 33983			
PHONE: 561-346-5638			

DRAWING NO.		SHEET NO.	
1821		11 OF 12	
REV.			
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ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	TRIFAB 450 HEAD FRAMING	6063-T6 ALUMINUM
2	TRIFAB 451 HEAD FRAMING	6063-T6 ALUMINUM
3	IR500/501 HEAD FRAMING	6063-T6 ALUMINUM
4	HEAD FRAME WITHIN CURTAIN WALL SYSTEM	6063-T6 ALUMINUM
5	TRIFAB 450 JAMB FRAMING	6063-T6 ALUMINUM
6	TRIFAB 451 JAMB FRAMING	6063-T6 ALUMINUM
7	IR500/501 JAMB FRAMING	6063-T6 ALUMINUM
8	DOOR ADAPTOR WITHIN CURTAIN WALL SYSTEM	6063-T6 ALUMINUM
9	THRESHOLD	6063-T6 ALUMINUM
10	TOP RAIL	6063-T6 ALUMINUM
11	BOTTOM RAIL	6063-T6 ALUMINUM
12	JAMB STILE USED WITH BUTT OR PIVOT HINGES	6063-T6 ALUMINUM
13	JAMB STILE USED WITH CONTINUOUS HINGES	6063-T6 ALUMINUM
14	INACTIVE MEETING STILE	6063-T6 ALUMINUM
15	ACTIVE MEETING STILE	6063-T6 ALUMINUM
17	SHEAR BLOCK	6063-T6 ALUMINUM
18	SHEAR BLOCK	6063-T6 ALUMINUM
19	SHEAR BLOCK	6063-T6 ALUMINUM
20	TOP DOOR STOP	6063-T6 ALUMINUM
21	JAMB DOOR STOP BODY	6063-T6 ALUMINUM
22	JAMB DOOR STOP COVER	6063-T6 ALUMINUM
23	THRESHOLD STOP	6063-T6 ALUMINUM (PLACED @ MID-SPAN OF SILL)
24	JAMB DOOR STOP	6063-T6 ALUMINUM
25A	EXTERIOR MONOLITHIC GLAZING BEAD (WET GLAZED)	6063-T6 ALUMINUM
25B	EXTERIOR MONOLITHIC GLAZING BEAD (TAPE GLAZED)	6063-T6 ALUMINUM
26A	EXTERIOR I.G. GLAZING BEAD (WET GLAZED)	6063-T6 ALUMINUM
26B	EXTERIOR I.G. GLAZING BEAD (TAPE GLAZED)	6063-T6 ALUMINUM
27	INTERIOR GLAZING BEAD	6063-T6 ALUMINUM
28	DOOR BOTTOM WEATHER SWEEP BODY	6063-T6 ALUMINUM
29	DOOR BOTTOM WEATHER SWEEP SCREW COVER	6063-T6 ALUMINUM
30	THRESHOLD CLIP	1010-1020 H.R. STEEL
37	1/4" I.G. GLASS SPACER	3005 OR 3105 ALUMINUM
38	1/2" I.G. GLASS SPACER	3005 OR 3105 ALUMINUM
SEALS & SEALANTS		
44	DOOR BULB WEATHERING	ALCRYN DUROMETER 70 +/-5 & RIGID PVC
45	DOOR SWEEP	NEOPRENE
46	EXTERIOR GLAZING GASKET	TRESCO TR-13536E EPDM DUROMETER 70 +/-5
47	5/16" X 5/16" GLAZING TAPE	POLYURETHANE FAOM DUROMETER 30 +/-5
48	1/4" X 1/4" GLAZING TAPE	POLYURETHANE FAOM DUROMETER 30 +/-5
49	ADJUSTABLE ASTRAGAL WEATHERING	5052-H32 ALUMINUM/NYLON/POLYURETHANE/EPDM
50	0.090" X 0.875" GLAZING TAPE	3M CONFORMABLE ACRYLIC FOAM
HARDWARE		
54	BUTT HINGE (3 PER PANEL); KAWNEER NO. 037-264	HAGER, STANLEY OR MCKINNEY
55	TOP OFFSET PIVOT HINGE	KAWNEER NO. 050-322
	INTERMEDIATE PIVOT HINGE	KAWNEER NO. 037-233/037-234
	BOTTOM OFFSET PIVOT HINGE	KAWNEER NO. 050-326/050-327
56	CONTINUOUS HINGE	KAWNEER NO. 050-820

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
HARDWARE CONTINUED		
57	ACTIVE DOOR LOCK ASSEMBLY (LOCK OPTION 1)	ADAMS-RITE 1850 3-POINT LOCK SYSTEM WITH KAWNEER'S CYLINDER, THUMBTURN & PUSH PACKAGE
58	INACTIVE DOOR LOCK ASSEMBLY (LOCK OPTION 1)	ADAMS-RITE FLUSH BLOTS 50-079 TOP FLUSH BOLT 50-075 BOTTOM FLUSH BOLT
59	ACTIVE DOOR LOCK ASSEMBLY (LOCK OPTION 2)	KAWNEER 1686 PANIC DEVICE SYSTEM WITH KAWNEER'S CYLINDER (PANIC DEVICE ACTUATES TOP & BOTTOM SHOOTBOLTS)
60	INACTIVE DOOR LOCK ASSEMBLY (LOCK OPTION 2)	KAWNEER 1686 PANIC DEVICE (PANIC DEVICE ACTUATES TOP & BOTTOM SHOOTBOLTS)
61	ACTIVE DOOR LOCK ASSEMBLY (LOCK OPTION 3)	FALCON HH 1690 OR VON DUPRIN HH9947 CONSEALED VERTICAL ROD PANIC DEVICE SYSTEM WITH SCHLAGE'S CYLINDER (PANIC DEVICE ACTUATES TOP & BOTTOM SHOOTBOLTS)
62	INACTIVE DOOR LOCK ASSEMBLY (LOCK OPTION 3)	FALCON HH 1690 OR VON DUPRIN HH9947 CONSEALED VERTICAL ROD PANIC DEVICE SYSTEM (PANIC DEVICE ACTUATES TOP & BOTTOM SHOOTBOLTS)
65	PUSH-PULL HANDLE	AS REQ'D
FASTENERS		
69	NO. 10 X 1 19/32" PHTF SCREW	4 PER SHEAR BLOCK
70	NO. 10 X 9/16" FHTF SCREW	2 PER SHEAR BLOCK
71	NO. 6 X 3/8" FHTF SCREW	WITHIN 2" FROM ENDS & 10" MAX. O.C.
74	NO. 12 X 1 7/8" FHTF SCREW	4 PER SHEAR BLOCK
75	NO. 12 X 1" PHTF SCREW	3 PER HORIZONTAL
76	NO. 8 X 3/8" PHTF SCREW	WITHIN 1" FROM ENDS & 16" MAX. O.C.
77	NO. 12-24 X 9/16" SCREW	8 PER HINGE
78	5/16"-18 X 5/8" SCREW	2 PER TOP PIVOT HINGE
79	NO. 12-24 X 9/16" SCREW	2 PER INTERMEDIATE PIVOT HINGE
80	1/4-20 X 3/8" SCREW	3 PER BOTTOM PIVOT HINGE
81	NO. 12-24 X 13/32" SCREW	2 9/16" FROM ENDS & 5 1/8" MAX. O.C.
82	NO. 8 X 3/8" FHTF SCREW	WITHIN 1" FROM ENDS & 9" MAX. O.C.
83	NO. 6-18 FHTF SCREW	10 PER LEAF
84	NO. 10 X 1/2" FHTF SCREW	WITHIN 3" FROM ENDS & 11 1/8" MAX. O.C.

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE IR350/500 HW WIND ZONE 4 L.M.I. OUT-SWING DOORS	MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-346-5638	

DRAWING NO. 1821	REV. C
SHEET NO. 12	OF 12

