# TUBELITE INC. MONUMENTAL ENTRANCE SERIES ALUMINUM OUT-SWING DOOR

THESE DOORS ARE RATED FOR LARGE MISSILE IMPACT. INSTALLATION OF THIS SYSTEM OUTSIDE THE HVHZ AREA SHALL MEET THE APPLICABLE REQUIREMENTS FOR WIND BORNE DEBRIS PROTECTION.

#### MONUMENTAL

#### ALUMINUM OUT-SWING ENTRANCE DOOR

SEE SHEET 2 FOR DESIGN LOAD CAPACITY OF SINGLE AND DOUBLE DOORS

DOORS NOT APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2017 (6TH EDITION)/2020 (7TH EDITION) FLORIDA BUILDING CODE FOR NON HIGH VELOCITY HURRICANE ZONE.

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2017/2020 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.

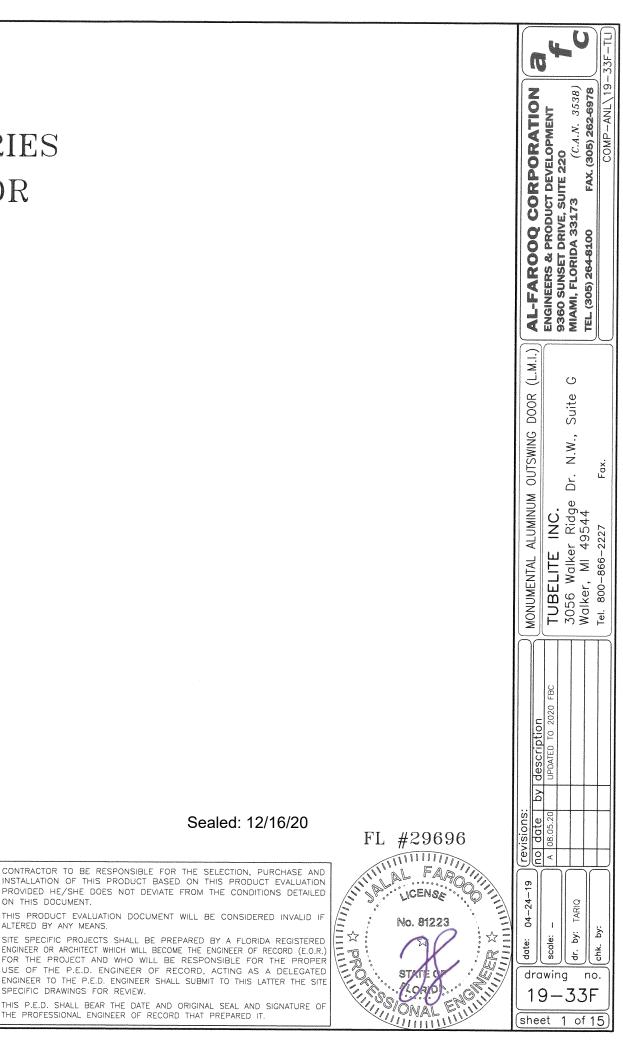
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. LABELING TO COMPLY WITH SECTION 1709.9.2.

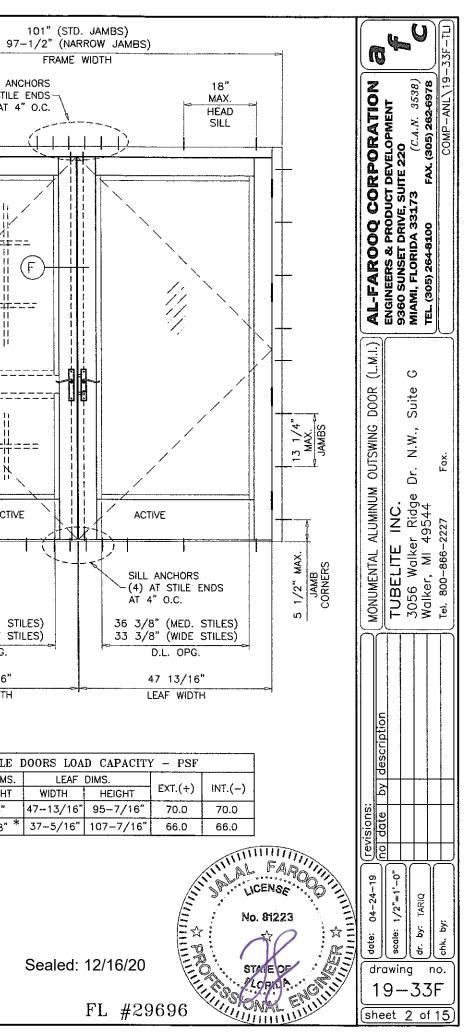
NOTE: GLASS CAPACITIES ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

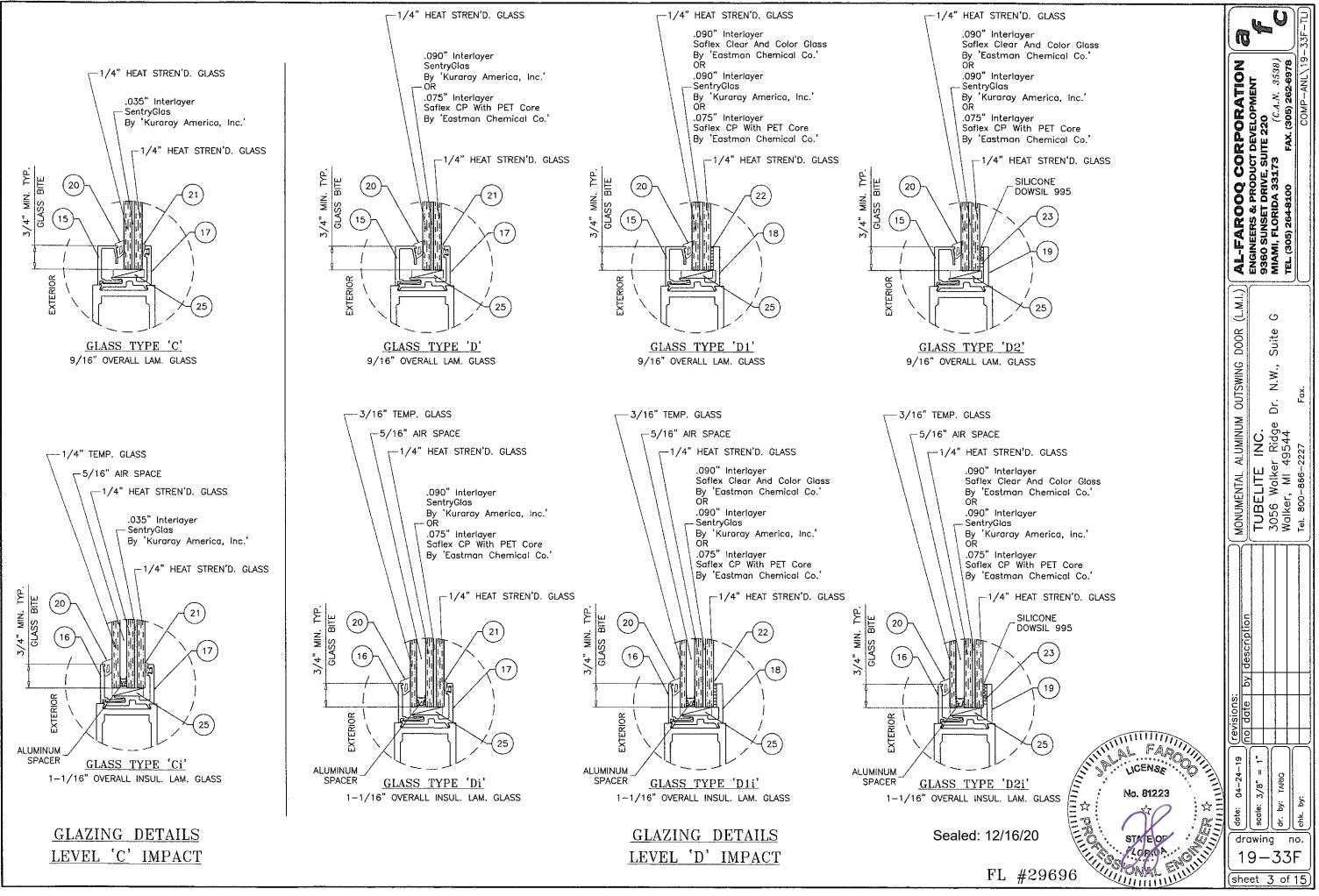
- INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS. - SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW. THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF
- THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

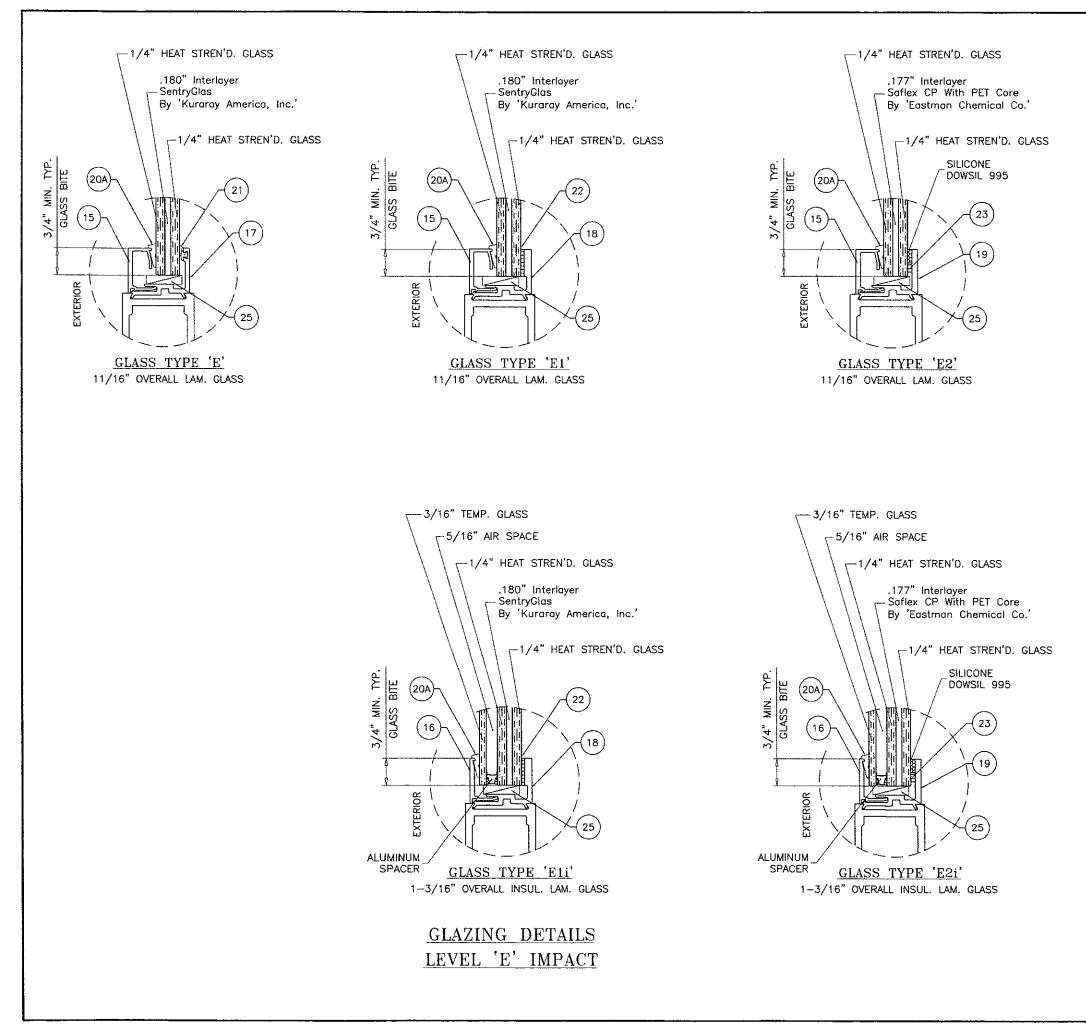


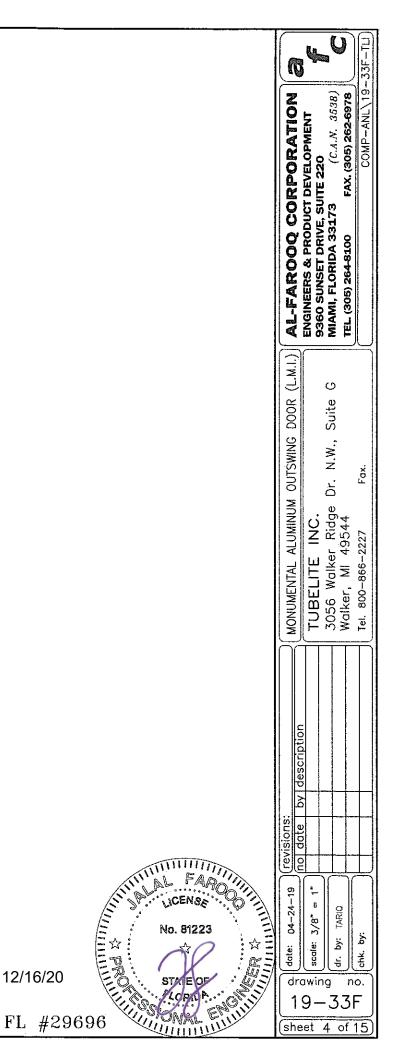
	FRAME WIDTH		FRAME WIDTH
BB 1/2" (MAX. HEAD/SILL CORNERS BB 1/2" (INNERON HEAD) FRAME HEIGHT BB 2/16" (MED STILES) 78 2/16" (MED STILES) 76 15/16" (MED STILES) D. OP. D. OP.	A HEAD SILL HEAD HEA	MAX. MAX.   JAMBS 0   JAMBS 98   1/2" (STD. HEAD)   96 3/4" (MARROW HEAD)   96 3/4" (MARROW HEAD)   96 3/4" (MARROW HEAD)   95 7/16"   78 7/16" (MED. STILES)   76 15/16" (MIDE. STILES)   76 15/16" (MIDE. STILES)	
SURFACE APPLIED FALSE MUNTINS MAY BE USED	C 36 3/8" (MED. STILES) 33 3/8" (WIDE STILES) D.L. OPG. 47 13/16"		C 36 3/8" (MED. STILES) 33 3/8" (WIDE STILES) D.L. OPG. 47 13/16"
	LEAF WIDTH		LEAF WIDTH
		TYPICAL ELEVATIONS	
SIN DOOR OP WIDTH 48" 37-1/2" GLASS D.L.O. FORMULAE:	HEIGHT     WIDTH     HEIGHT     EXT.(+)     II       96"     47–13/16"     95–7/16"     70.0	NT.(-) 70.0 66.0	DOUBLE     DOORS     LOAD     C.       DOOR     OPNG.     DIMS.     LEAF     DIMS       WIDTH     HEIGHT     WIDTH     H       96"     96"     4713/16"     95       75"     108"     375/16"     107
D.L.O. WIDTH = LEAF WIDTH $-$ 11.438" (MEDIUM STILES) = LEAF WIDTH $-$ 14.438" (WIDE STILES) D.L.O. HEIGHT = LEAF HEIGHT $-$ 17" (MEDIUM STILES) = LEAF HEIGHT $-$ 18.50" (WIDE STILES)		LIMIT THESE SIZES TO DOORS GLAZED WITH DOWS	SIL 995 ONLY.
DOOR LEAF WIDTH (X DOORS) = FRAME WIDTH - 5.187" (STD.	JAMBS)		
= FRAME WIDTH - 1.687" (NARF DOOR LEAF WIDTH (XX DOORS) = FRAME WIDTH - 5.375" (STE = FRAME WIDTH - 1.875" (NAF	). JAMBS) GLA	'E: SS CAPACITIES ARE ED ON ASTM E1300–09 (3 SEC. GUSTS)	Sealed: 12/
DOOR LEAF HEIGHT = FRAME HEIGHT - 3.062" (STD. HEAD) = FRAME HEIGHT - 1.3125" (NARROW HEAD	ANE	ED ON ASTM ET300-09 (3 SEC. GOSTS) FLORIDA BUILDING COMMISSION LARATORY STATEMENT DCA05-DEC-219	FL

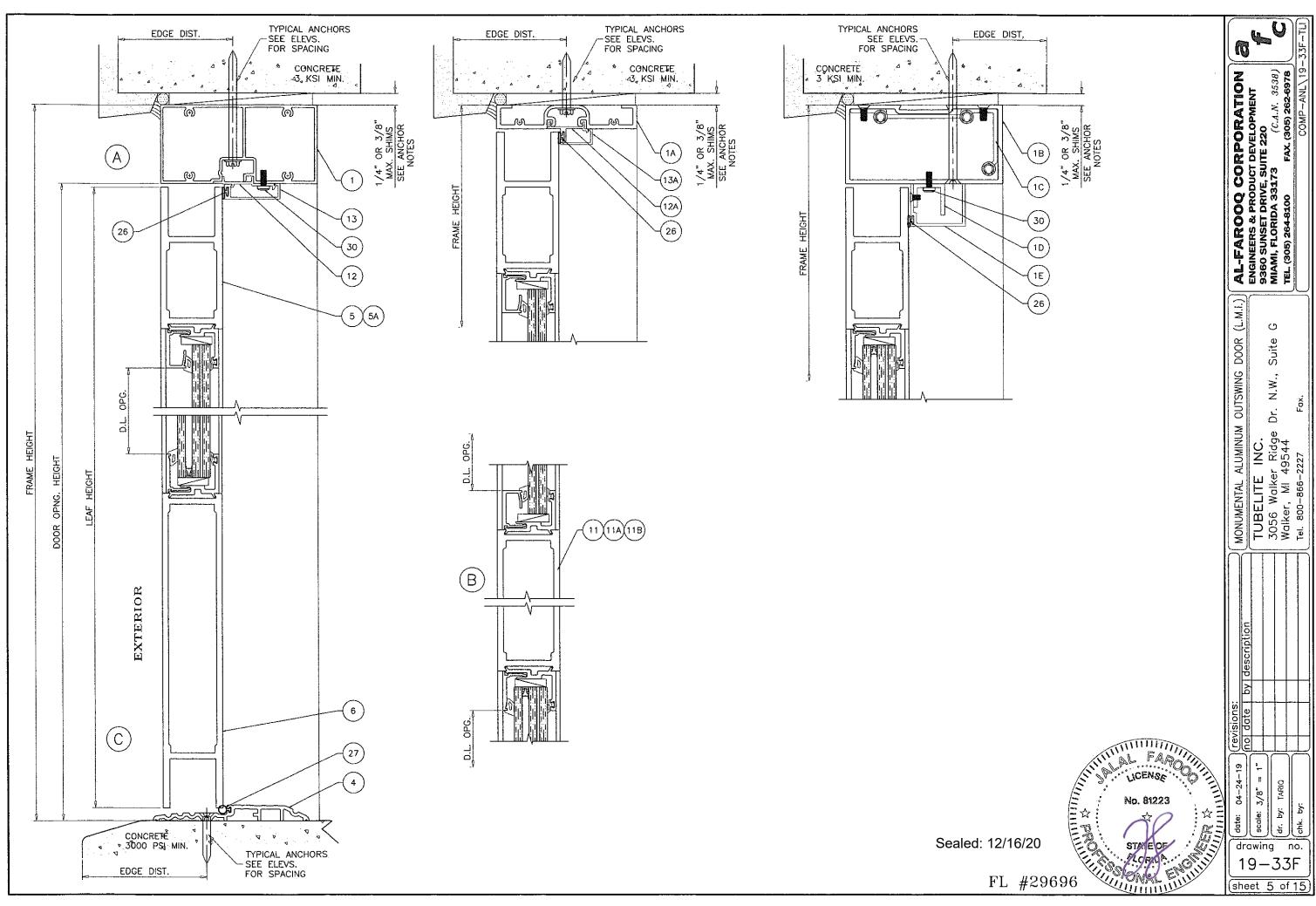
53" (STD. JAMBS) 49-1/2" (NARROW JAMBS)

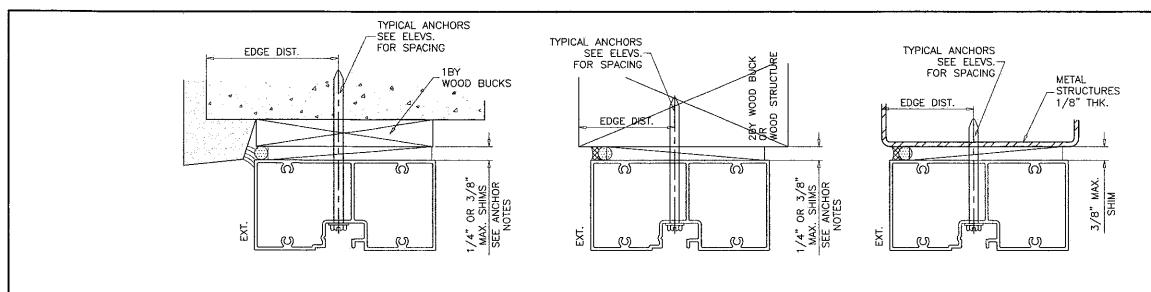












WOOD BUCKS AND METAL STRUCTURE NOT BY 'TUBELITE INC." MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

1/4" DIA. TAPCON BY 'ITW' (Fu=125 KSI, Fy=100 KSI) (1/4" MAX. SHIMS)

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI) (3/8" MAX. SHIMS)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 1-1/2" MIN. PENETRATION INTO WOOD (HEAD/JAMBS)

THRU 1BY BUCKS INTO CONC. OR MASONRY 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS) 1-1/4" MIN. EMBED INTO MASONRY (JAMBS)

DIRECTLY INTO CONCRETE OR MASONRY 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS) 1-1/4" MIN. EMBED INTO MASONRY (JAMBS)

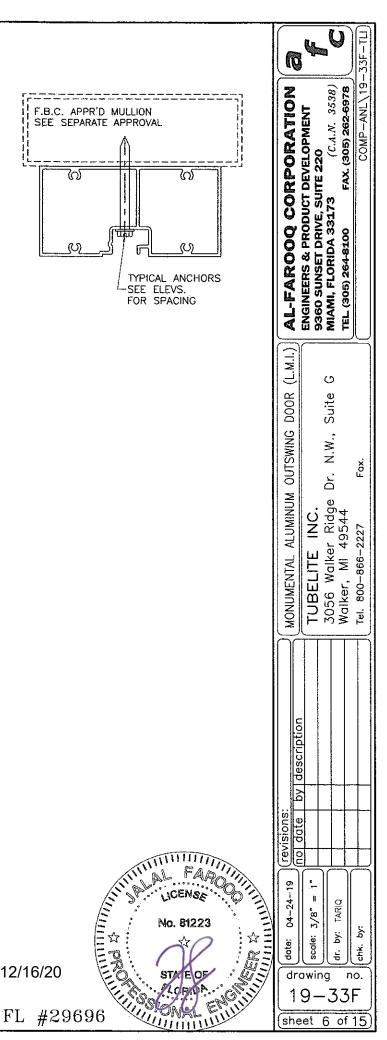
1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS) (3/8" MAX. SHIMS)

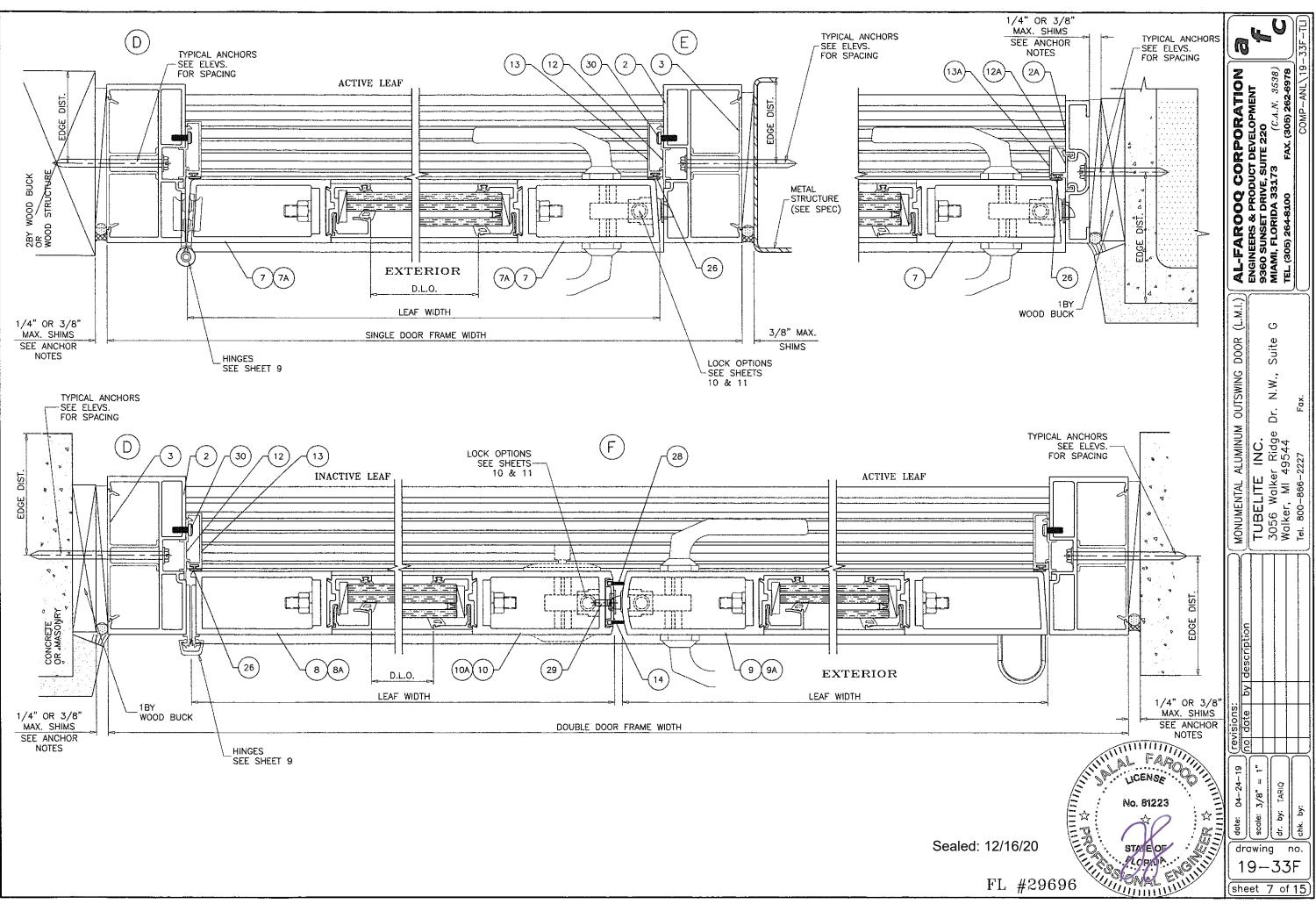
INTO F.B.C. APPROVED MULLIONS OR INTO 18 GA. METAL STUDS (Fy = 33 KSI MIN.) OR INTO METAL STRUCTURES (HEAD/SILL/JAMBS) ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.) STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

#### TYPICAL EDGE DISTANCE

INTO CONCRETE AND MASONRY = 2-1/2" MIN. INTO WOOD STRUCTURE = 1" MIN. INTO METAL STRUCTURE = 1/2" MIN.

WOOD AT HEAD OR JAMBS SG = 0.55 MIN. CONCRETE AT HEAD, SILL OR JAMBS I'C = 3000 PSI MIN. C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

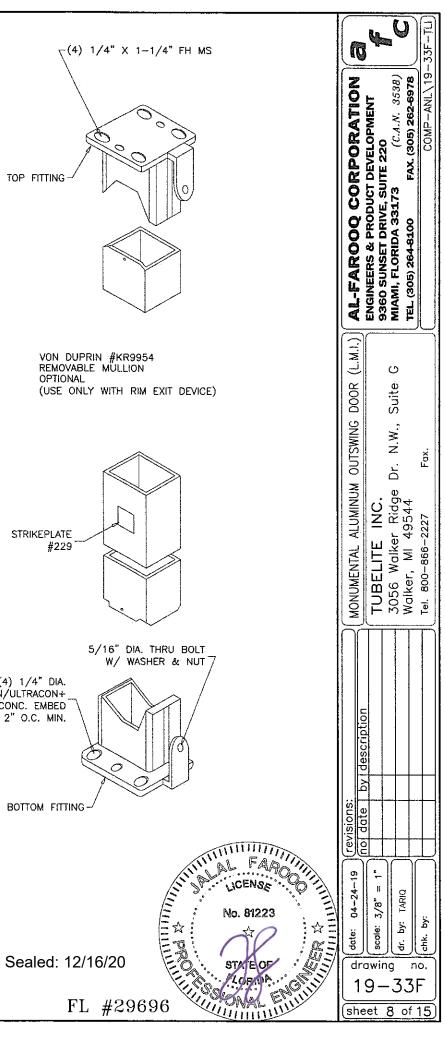




VON DUPRIN #KR9954 OR 9954 REMOVABLE MULLION OPTIONAL SEE DETAIL AT RIGHT AP (10A) 10 LEAF WIDTH LEAF WIDTH

(4) 1/4" DIA. TAPCON/ULTRACON+\_\_ 1-3/4" MIN. CONC. EMBED AT 2" O.C. MIN.

TOP FITTING

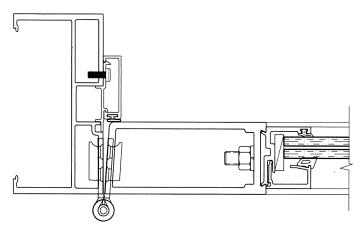


# HINGE OPTIONS:

### OPTION #1:

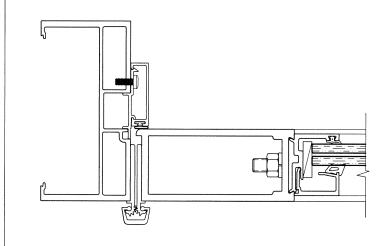
4-1/2" LONG FLUSH MOUNT STEEL BUTT HINGES 'BB1191' BY 'HAGER' OR 'ABH-663' BY 'ABH MANUFACTURING INC.' FASTENED WITH 12-20 X 1/2" FH MACHINE SCREWS FOUR PER HASP(LEAF). TOP AND BOTTOM HINGES AT 5-1/2" FROM ENDS INTERMEDIATE HINGES AT 32" O.C. MAX.

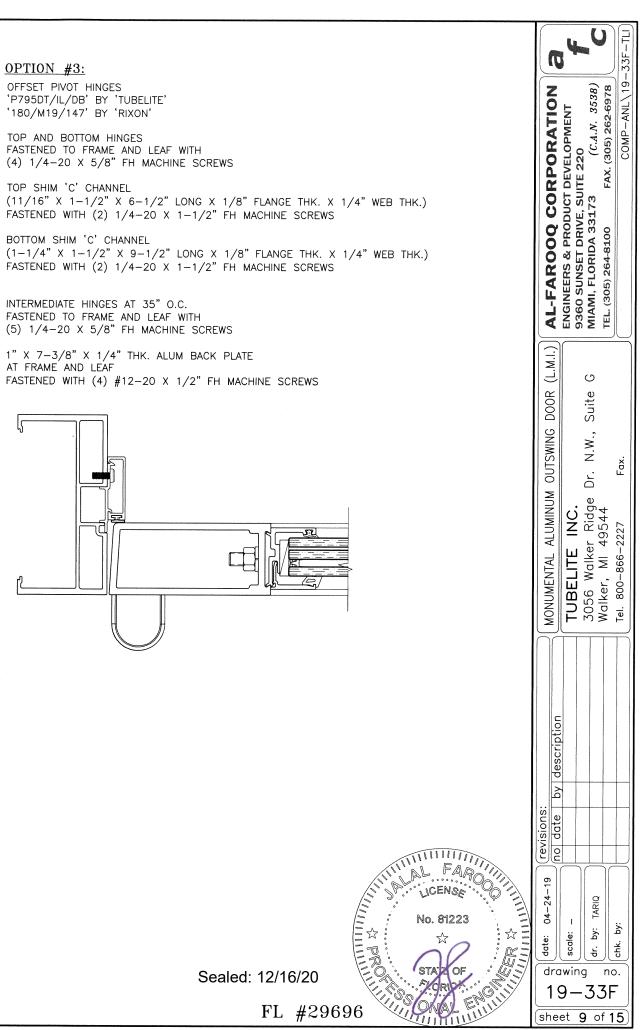
#### 1" X 7-3/8" X 1/4" THK. ALUM BACK PLATE AT FRAME AND LEAF FASTENED WITH (4) #12-20 X 1/2" FH MACHINE SCREWS



#### OPTION #2:

CONTINUOUS GEAR ALUMINUM ROTON HINGE 'SL 11HD' BY 'SELECT' '780' BY 'HAGER' 'KCFM-95HD1' BY 'PEMKO' 'A110HD' BY 'ABH' FASTENED TO FRAME JAMB AND TO JAMB STILE WITH #12-24 X 7/16" FH MS SCREWS IN PAIRS AT 2", 4" AND 6" FROM TOP AND BOTTOM ENDS AND IN SINGLE ROW AT 10" O.C. THEREAFTER.





# LOCK OPTIONS:

# <u>3 POINT LOCK</u>

MAX. LEAF HEIGHT = 96 IN.	MAX. LEAF HEIGHT = 108 IN.
MAX. LEAF WIDTH = 48 IN.	MAX. LEAF WIDTH = $37-1/2$ IN.
MAX. DESIGN LOAD = 70 PSF	MAX. DESIGN LOAD = 66 PSF

#### ACTIVE LEAF:

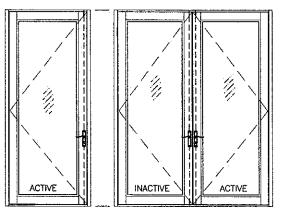
KEY OPERATED THREE POINT LOCK SYSTEM 'MS1853A/4015/4016' AND 'MS1850S/4015/4016' BY 'ADAMS RITE' WITH CONCEALED FLUSH BOLTS AT TOP & BOTTOM OF LOCK STILE AND A THUMB TURN ON THE INTERIOR, LOCATED AT 40" FROM BOTTOM OF PANEL FASTENED WITH (2) #12-24 X 1/2" FH MACHINE SCREWS

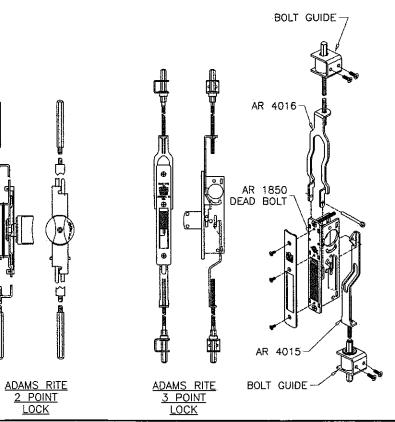
#### INACTIVE LEAF:

T

MANUALLY OPERATED TWO POINT LOCK SYSTEM 'MS1881' AND 'MS2180' BY 'ADAMS RITE' WITH CONCEALED FLUSH BOLTS AT TOP & BOTTOM OF LOCK STILE AND A THUMB TURN ON THE INTERIOR, LOCATED AT 40" FROM BOTTOM OF PANEL FASTENED WITH

#### (2) #8-32 X 1/4" PH MACHINE SCREWS





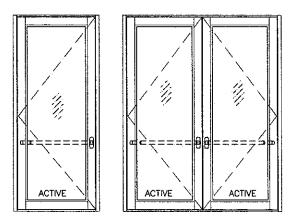
# LOCK OPTIONS:

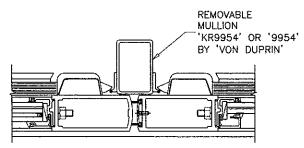
# RIM PANIC EXIT DEVICES

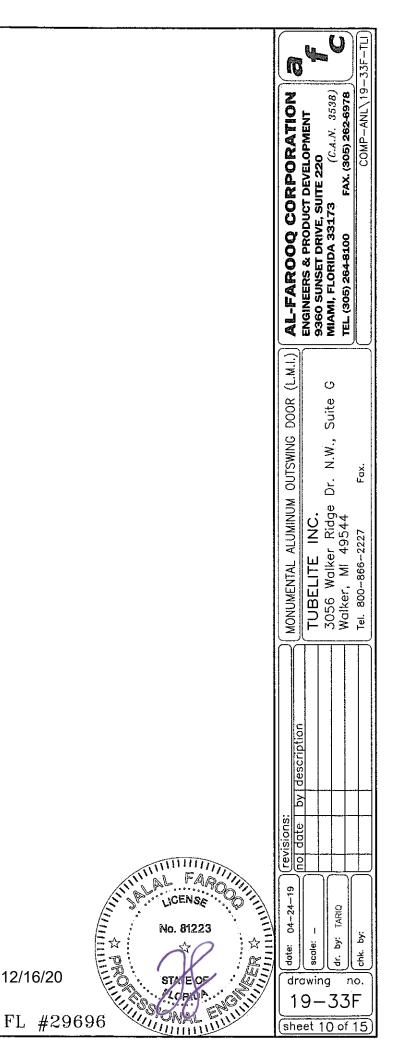
PANIC EXIT DEVICE MAX. LEAF HEIGHT = 96 IN. MAX. LEAF WIDTH = 42 IN. MAX. DESIGN LOAD = 50 PSF

#### ACTIVE LEAF:

RIM PANIC EXIT DEVICE '98/99XP' BY 'VON DUPRIN' '33A/35A' BY 'VON DUPRIN' 'FL3790' BY 'FIRST CHOICE' 'WS AD8500' BY 'SARGENT' LOCATED AT 40" FROM BOTTOM FASTENED TO ACTIVE LEAF WITH WITH (6) 10-24 X 1-1/8" PH MS







# LOCK OPTIONS:

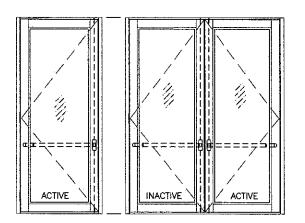
# **CVR** PANIC EXIT DEVICES

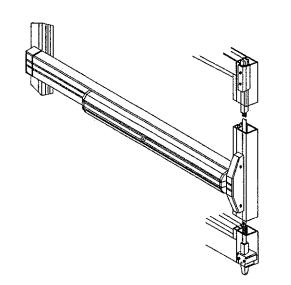
# OPTION #1:

PANIC EXIT DEVICE MAX. LEAF HEIGHT = 96 IN. MAX. LEAF WIDTH = 48 IN. MAX. DESIGN LOAD = 70 PSF

#### ACTIVE & INACTIVE LEAF:

CONCEALED VERTICAL ROD PANIC EXIT DEVICE '#2086' BY 'JACKSON PANIC SYSTEM' '3690FL' BY 'FIRST CHOICE' LOCATED AT 41" FROM SILL AT EACH LEAF. FASTENED WITH (1)  $\#14 \times 1$ " HH SELF DRILLING SCREW AT ONE END AND (2)  $\#12-24 \times 1/2$ " OH MACHINE SCREWS AT OTHER END





## OPTION #2:

PANIC EXIT DEVICE MAX. LEAF HEIGHT = 96 IN. MAX. LEAF WIDTH = 48 IN. MAX. DESIGN LOAD = 70 PSF

#### ACTIVE & INACTIVE LEAF:

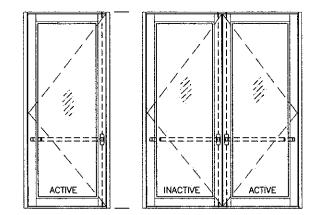
CONCEALED VERTICAL ROD PANIC EXIT DEVICE 'HH9947' BY 'VON DUPRIN' LOCATED AT 40" FROM SILL AT EACH LEAF. FASTENED WITH (2) #10-32 X 3/4" FH MACHINE SCREWS AT ONE END AND (2) #10-24 X 1/2" FH MACHINE SCREWS AT OTHER END

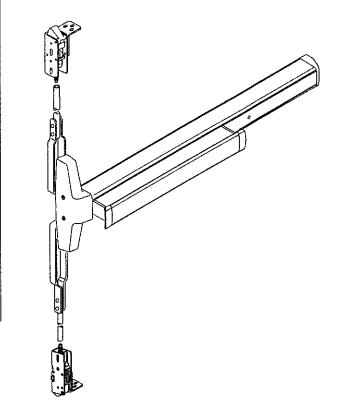
# OPTION #3:

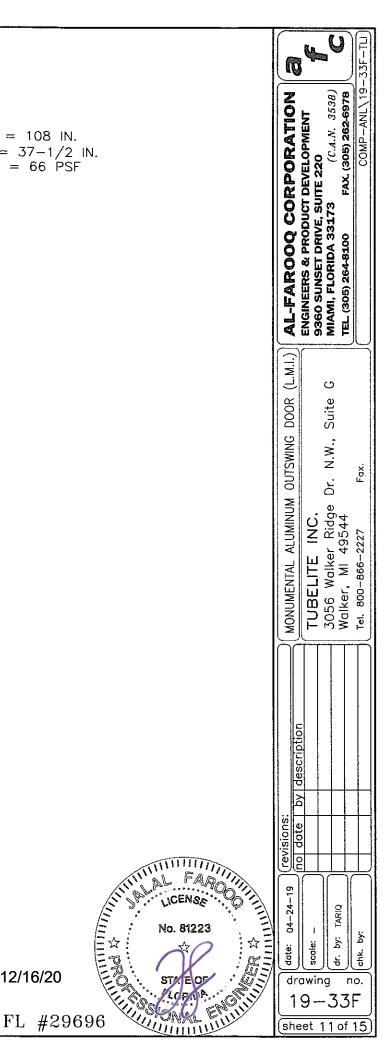
PANIC EXIT DEVICE	PANIC EXIT DEVICE
	MAX. LEAF HEIGHT =
MAX. LEAF WIDTH = 48 IN.	MAX. LEAF WIDTH =
MAX. DESIGN LOAD = 70 PSF	MAX. DESIGN LOAD =

#### ACTIVE & INACTIVE LEAF:

CONCEALED VERTICAL ROD PANIC EXIT DEVICE '1690HH' BY 'FALCON' LOCATED AT 41" FROM SILL AT EACH LEAF. FASTENED WITH (1) #14 X 1" HH SELF DRILLING SCREW AT ONE END AND (2) #12-24 X 1/2" OH MACHINE SCREWS AT OTHER END







ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	E34224	1	DOOR FRAME HEAD (STANDARD)	6063-T6	
1A	E4TB111	1	DOOR FRAME HEAD (NARROW)	6063-T6	tro
1B	E34125	1	DOOR FRAME HEAD (CONCEALED CLOSERS)	6063-T6	
1C	P4441	1	FRAME HEAD (CONCEALED CLOSERS) CORNER KEY	6063-T6	· · · · · · · · · · · · · · · · · · ·
1D	E6504	1	HEAD (CONCEALED CLOSERS) DOOR STOP	6063T6	-
1E	E2298	1	HEAD (CONCEALED CLOSERS) DOOR STOP COVER	6063T6	
2	E34144	2	DOOR FRAME JAMB (STANDARD)	606376	-
2A	E4TB11	2	DOOR FRAME JAMB (NARROW)	6063-T6	
3	E34242	2	JAMB SHEAR CLIP (STANDARD)	6063-T6	_
4	E3550	1	THRESHOLD	6063-T6	
5	E3029	1/ LEAF	LEAF TOP RAIL (MEDIUM)	6063-T6	_
5A	E1051	1/ LEAF	LEAF TOP RAIL (WIDE)	6063-T6	
6	E2954	1/ LEAF	BOTTOM RAIL.	6063-T6	
7	E1397	1/ LEAF	LEAF HINGE/LOCK STILE (MEDIUM)	6063-T6	-
7A	E2937	1/ LEAF	LEAF HINGE/LOCK STILE (WIDE)	6063T6	
8	E3245	1/ LEAF	LEAF ALT. HINGE/LOCK STILE (MEDIUM)	6063T6	
8A	E3246	1/ LEAF	LEAF ALT, HINGE/LOCK STILE (WIDE)	6063-T6	k
9	E3027	1/ LEAF	LEAF ACTIVE STILE (MEDIUM)	6063-T6	
9A	E2938	1/ LEAF	LEAF ACTIVE STILE (WIDE)	6063T6	
10	E1154	1/ LEAF	LEAF INACTIVE STILE (MEDIUM)	6063T6	
10A	E1155	1/ LEAF	LEAF INACTIVE STILE (WIDE)	6063-T6	· · · · · · · · · · · · · · · · · · ·
11	E2944	AS REQD.	MID RAIL	6063-T6	OPTIONAL
11A	E2945	AS REQD.	MID RAIL	6063-T6	OPTIONAL
11B	E2946	AS REQD.	MID RAIL	6063-T6	OPTIONAL
12	E6510	AS REOD.	DOOR STOP BASE (STANDARD)	6063-T6	
12A	E6500	AS REQD.	DOOR STOP BASE (NARROW)	6063-T6	· · · · · · · · · · · · · · · · · · ·
13	E6505	AS REQD.	DOOR STOP (STANDARD)	6063-T6	_
13A	E6501	AS REOD.	DOOR STOP (NARROW)	6063-T6	<u> </u>
.14	E1152	AS REQD.	ASTRAGAL W'STRIP ADAPTER	6063-T6	
15	E6533	4/ LEAF	EXTERIOR GLASS STOP (LAM. GLASS)	6063T6	_
16	E6523	4/ LEAF	EXTERIOR GLASS STOP (INSUL. LAM. GLASS)	6063T6	
17	E6532	4/ LEAF	INTERIOR GLASS STOP (DRY GASKET)	6063-T6	
18	E6512	4/ LEAF	INTERIOR GLASS STOP (GLAZING TAPE)	6063-T6	
19	E6522	4/ LEAF	INTERIOR GLASS STOP (SILICONE)	6063-T6	v.
20	P2908	4/ LEAF	EXTERIOR GLAZING GASKET (LEVEL D IMPACT)	EPDM	· · · · · · · · · · · · · · · · · · ·
20A	P2901	4/ LEAF	EXTERIOR GLAZING GASKET (LEVEL E IMPACT)	EPDM	
21	P0017	4/ LEAF	INTERIOR GLAZING GASKET	EPDM	-
22	3M VHB	4/ LEAF	INTERIOR GLAZING TAPE (.090" X .750")	FOAM	-
23	P6552	4/ LEAF	INTERIOR SPACER TAPE	FOAM	
25	P1912	2/ LITE	SETTING BLOCK AT 6" FROM ENDS	EPDM	DUROMETER 80±5 SHORE A
26	P6296	AS REQD.	FRAME HEAD/JAMB BULB W'STRIPPING	VINYL	-
27	P3450	AS REQD.	FRAME SILL BULB W'STRIPPING	VINYL	
28	P938	AS REQD.	ASTRAGAL PILE W'STRIPPING	WOOL	ULTRAFAB
29	#10 X 5/8"	AS REQD.	ASTRAGAL ADAPTER FASTENERS, AT 12" O.C.	ST. STEEL	FH SELF DRILLING SCREWS
30	#10 X 1/2"	AS REQD.	GLASS STOP FASTENERS, AT 2" FROM ENDS & 12" O.C.	ST. STEEL	FH SELF DRILLING SCREWS
31	#12 X 1-1/2"	AS REQD.	FRAME ASSEMBLY FASTENERS	ST. STEEL	HH SELF DRILLING SCREWS
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