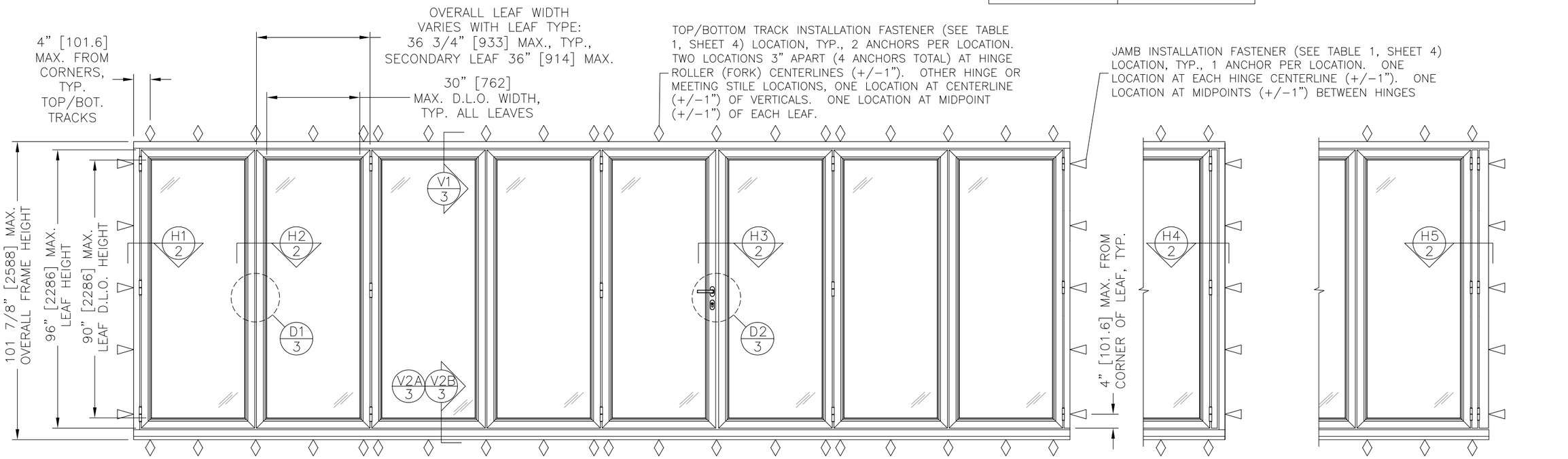
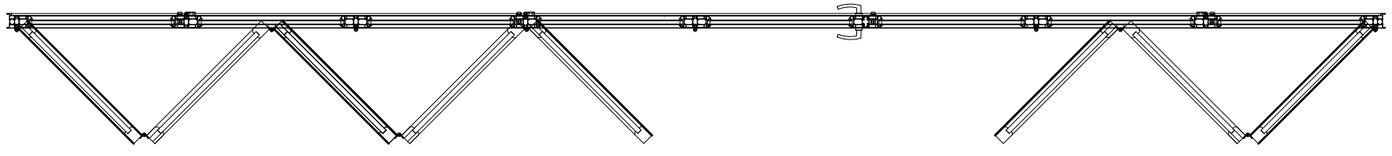
ORIGIN EASIFOLD 3000 FOLDING / SWINGING DOOR
LARGE MISSILE IMPACT, NON–HVHZ

DESIGN PRESSURE RATING	IMPACT RATING
+50/–55 PSF	LARGE AND SMALL MISSILE

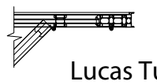
TABLE OF CONTENTS



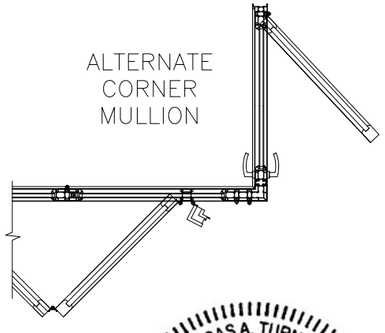
SAMPLE ELEVATION FOR SECTION CALLOUTS; SEE NOTE 3 BELOW FOR ALLOWABLE CONFIGURATIONS



ALTERNATE MULLION JAMB



ALTERNATE CORNER MULLION



Lucas Turner
2020.10.21
19:33:17 -05'00'

GENERAL NOTES

1. THIS PRODUCT, FABRICATED AND ANCHORED AS DETAILED IN THIS DRAWING, IS LARGE MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE THE USE OF IMPACT PROTECTIVE DEVICES (SHUTTERS) IN WINDBORNE DEBRIS REGIONS.
2. THIS PRODUCT HAS BEEN TESTED TO AAMA/WDMA/CSA 101/I.S.2/A440–08, ASTM E1886/1996 (WIND ZONE 4 LARGE MISSILE IMPACT FOR ALL CONFIGURATIONS, EXCEPT 72" MAX. PANEL HEIGHT PASS–THRU OPTION, WHICH IS WIND ZONE 3 LARGE MISSILE RATED), AND TAS 201/202/203, AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, 7TH EDITION (2020), FOR USE OUTSIDE THE HIGH VELOCITY HURRICANE ZONE. OUTSWING DOORS ARE FULLY TESTED FOR WATER INFILTRATION RESISTANCE WITH BOTH LOW–THRESHOLD SILL AND WITH SILL RISER. INSWING DOORS WITH LOW THRESHOLDS HAVE NOT BEEN TESTED FOR WATER INFILTRATION RESISTANCE THEREFORE THESE DOORS MUST BE INSTALLED UNDER AN OVERHANG WITH A HORIZONTAL LENGTH FROM THE WALL WHICH IS EQUAL TO OR GREATER THAN THE HEIGHT OF THE OVERHANG ABOVE THE BOTTOM OF THE DOOR (A 1:1 OVERHANG PER FBC 1709.5.1 EXCEPTION 2). INSWING DOORS WITH SILL RISERS HAVE BEEN TESTED FOR LIMITED WATER RESISTANCE, WITH FULL WATER SPRAY VOLUME PER ASTM E 331 BUT WITH ZERO PRESSURE DIFFERENTIAL, SO THESE DOORS MAY BE INSTALLED AS ALLOWED BY THE AUTHORITY HAVING JURISDICTION WHERE THE LIMITED WATER TESTING IS DEEMED TO COMPLY, OR WITH A 1:1 OVERHANG AS DESCRIBED ABOVE FOR ANY LOCATION.
3. ALLOWABLE CONFIGURATIONS: SINGLE OR DOUBLE–LEAF SWING DOORS, OR FOLDING DOORS WITH ANY NUMBER OF LEAVES. CONFIGURATIONS MAY BE STRAIGHT DOORS IN INSWING OR OUTSWING OPERATION, OR OUTSIDE 90 DEGREE CORNER DOORS IN OUTSWING OPERATION. STRAIGHT DOORS MAY BE IN ANY CONFIGURATION THAT CAN BE PRODUCED USING ONE LOCKING LOCATION (AT JAMB OR AT LOCKING MEETING STILES) PER DOOR. CORNER DOORS ARE ALL SECONDARY PANELS ON ONE SIDE OF THE CORNER MULLION AND ON THE OTHER SIDE THE JAMB LOCKS TO THE CORNER MULLION. STRAIGHT DOORS ALSO AVAILABLE IN 72" MAX. PANEL HEIGHT PASS–THRU CONFIGURATION USING PASS–THRU HARDWARE AS INDICATED IN TEST REPORT K3261.01–450–44–r0.
4. THE DESIGN PRESSURE RATINGS AS SHOWN ON THIS SHEET, ARE AS LIMITED BY ASTM E–1300 GLASS TABLES, AND TESTED WATER, STRUCTURAL, AND CYCLIC PRESSURES.
5. THE 4/3 ALLOWABLE STRESS INCREASE FACTOR (SHORT–TERM INCREASE FACTOR) HAS NOT BEEN USED IN THE ANCHOR ANALYSIS FOR THIS SYSTEM. THE 1.6 Cd FACTOR WAS USED IN THE ANALYSIS OF ANCHORAGE INTO WOOD SUBSTRATE.
6. INSTALLATION OF 1X OR 2X WOOD BUCKS TO THE SUBSTRATE TO BE ENGINEERED BY OTHERS OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION (A.H.J.). BUCKING, OPENINGS, & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED BY OTHERS IN ACCORDANCE WITH THE FBC TO TRANSFER SUPERIMPOSED LOADS TO THE STRUCTURE. ADEQUACY OF THE STRUCTURE TO RECEIVE THESE LOADS SHALL BE VERIFIED BY THE CONTRACTOR OR A.H.J.
7. DISSIMILAR MATERIALS THAT COME INTO CONTACT SHALL BE COATED OR OTHERWISE PROTECTED PER FBC CHAPTER 20 TO PREVENT GALVANIC REACTIONS. WOOD BUCKS, IF USED, SHALL BE PRESSURE TREATED, WITH EITHER A TREATMENT OR COATING COMPATIBLE WITH 6063–T5. ALL ANCHORS USED SHALL BE OF A MATERIAL OR HAVE A COATING COMPATIBLE WITH THE PRESSURE TREATED WOOD BUCKS AND ALL OTHER WINDOW MATERIALS.
8. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, OR AS APPROVED, SIGNED, AND SEALED BY A FLORIDA–REGISTERED PROFESSIONAL ENGINEER ON A SITE–SPECIFIC BASIS.
9. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER INFILTRATION RESISTANCE OF THE INSTALLED PRODUCT SHALL BE THE RESPONSIBILITY OF OTHERS AND IS NOT ADDRESSED BY THIS DOCUMENT.

LUCAS A. TURNER LICENSE No. 58201 STATE OF FLORIDA PROFESSIONAL ENGINEER

10/16/2020
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ALUMINUM EASIFOLD 3000 FOLDING/SWINGING DOOR LARGE MISSILE IMPACT

DRAWN BY: LAT

DATE: 3/6/2017

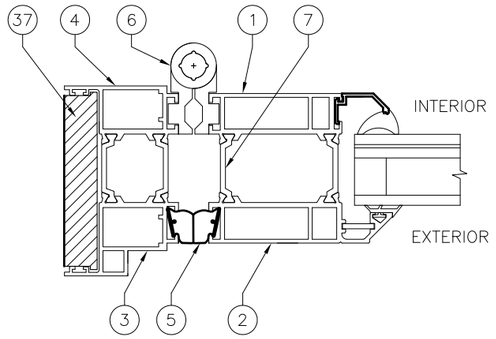
SCALE: NTS

REVISION 1/6/2018: A: 2017 UPDATE

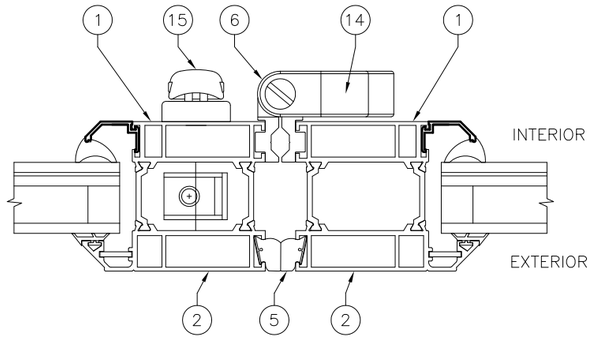
REVISION 10/16/2020: B: 2020 UPDATE

DRAWING # FPA–EASIFOLD–LM–NON–HVHZ

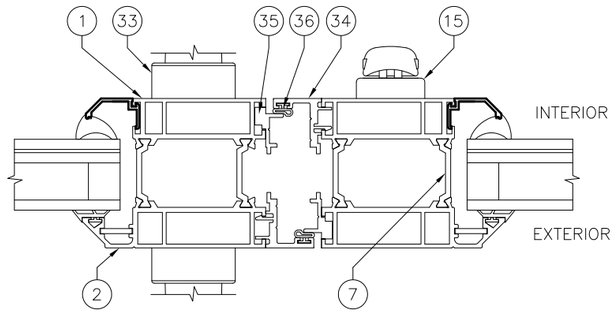
SHEET DESCRIPTION: NOTES, ELEVATION



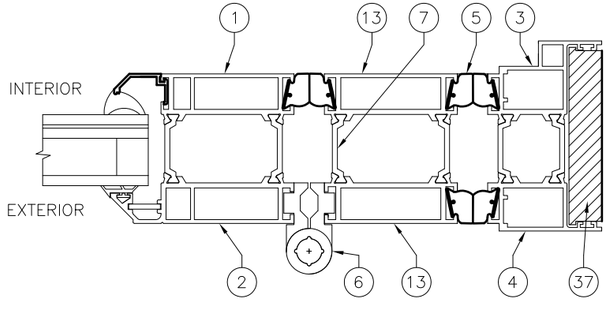
DETAIL H1. OPEN–IN HINGE JAMB, REVERSE HINGES (6) AND JAMB (3&4) FOR OPEN–OUT



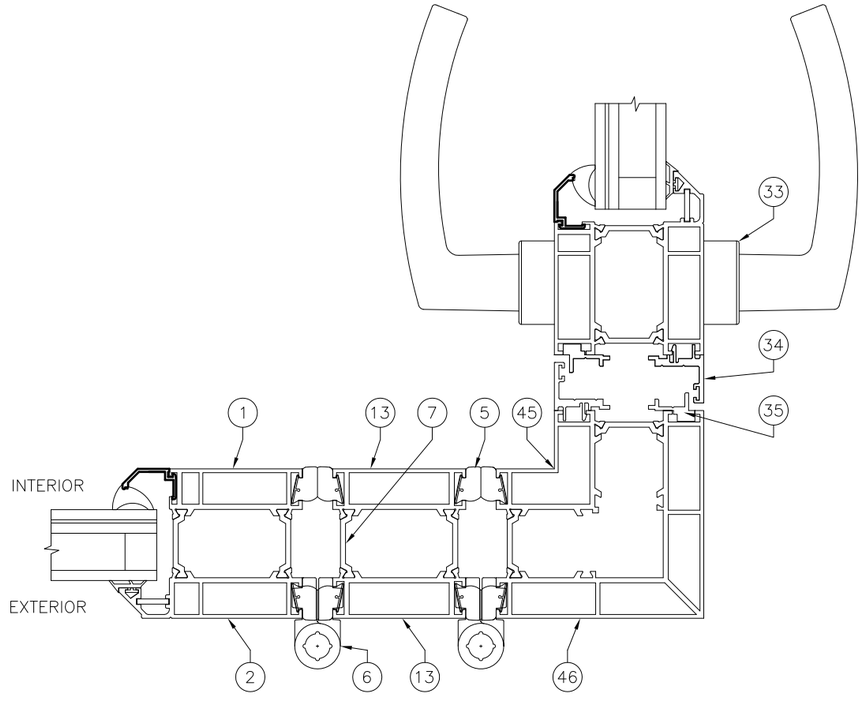
DETAIL H2. OPEN–OUT STILES, REVERSE HINGES FOR OPEN–IN



DETAIL H3. OPEN–OUT LOCKING MEETING STILES, REVERSE PARTS 34 AND 35 FOR OPEN–IN



DETAIL H4. OPEN–OUT MULLION, REVERSE HINGES (6) AND JAMB (3&4) FOR OPEN–IN



DETAIL H5. OPEN–OUT OUTSIDE 90–DEG. CORNER MULLION

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DRAWING # FPA–EASIFOLD–LM–NON–HVHZ

SHEET DESCRIPTION: HORIZONTAL SECT. DETAILS

SHEET 2 of 5

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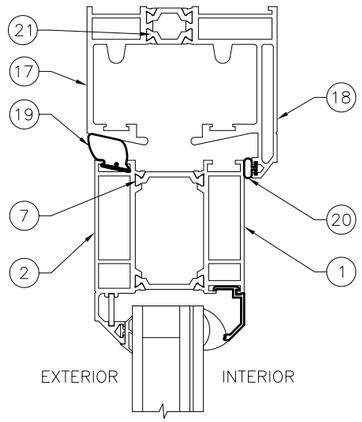
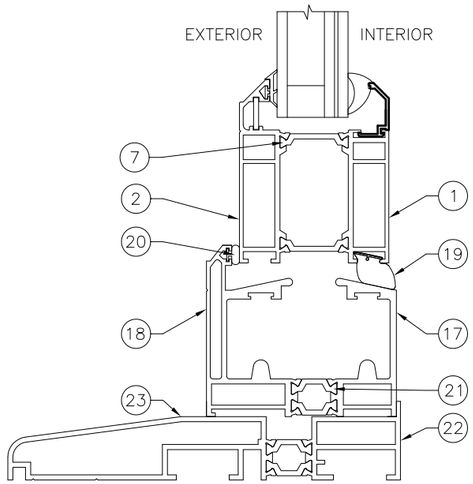
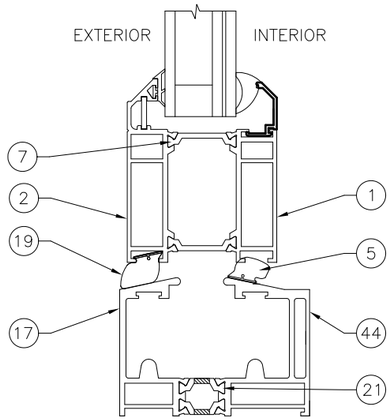


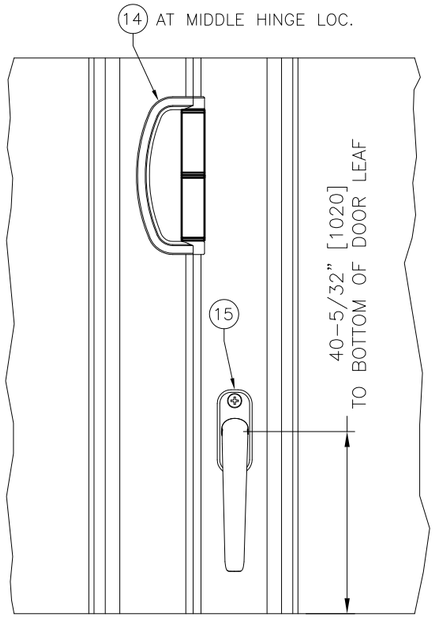
DETAIL V1. OPEN–OUT TOP TRACK, REVERSE TRACKS (17 AND 18) FOR OPEN–IN



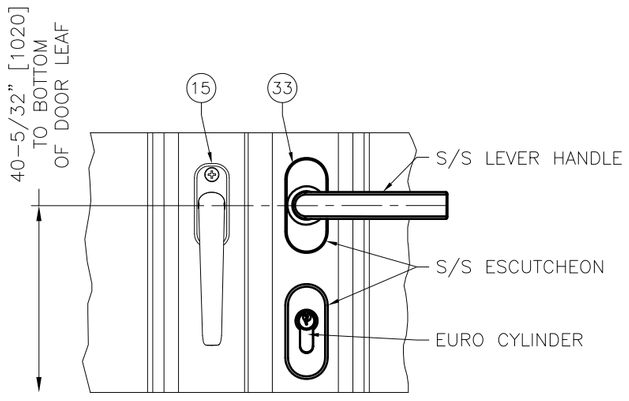
DETAIL V2A. OPEN–IN BOTTOM TRACK, REVERSE TRACKS (17 AND 18) FOR OPEN–OUT



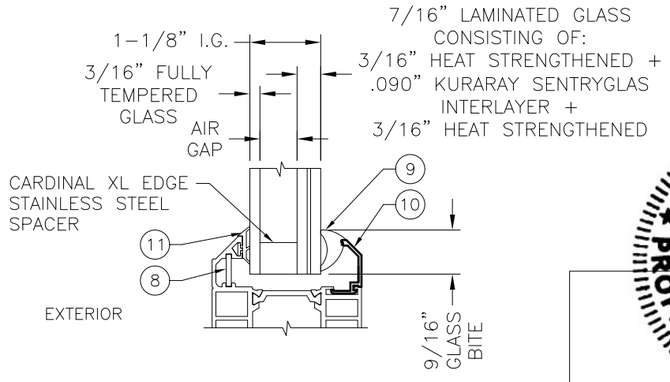
DETAIL V2B. OPEN–OUT LOW THRESHOLD BOTTOM TRACK, REVERSE TRACKS (17 AND 18) FOR OPEN–OUT



DETAIL D1. SECONDARY AND D–HANDLE (VIEW FROM INTERIOR)



DETAIL D2. HANDLE AND LOCK (VIEW FROM INTERIOR)



TYP. GLAZING DETAIL

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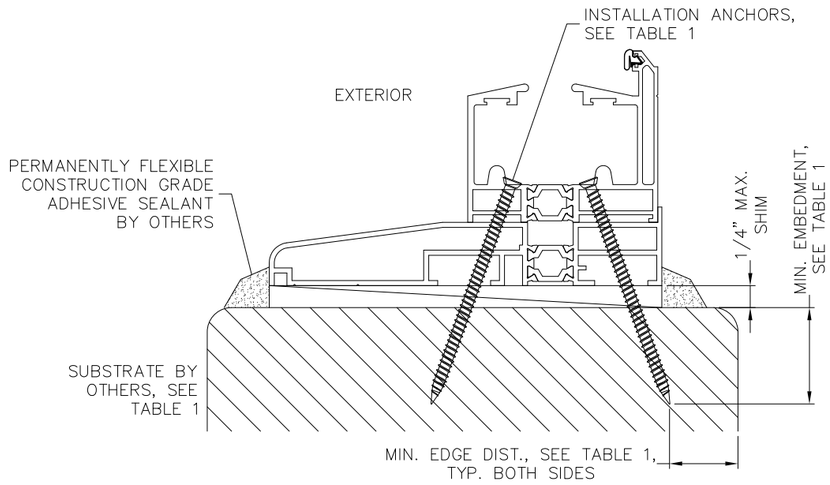
DRAWING # FPA–EASIFOLD–LM–NON–HVHZ

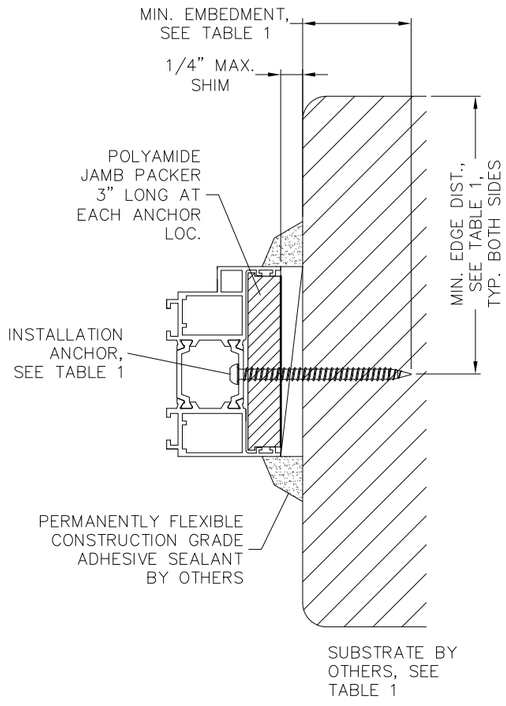
SHEET DESCRIPTION: VERTICAL DET., TYP. GLAZING

GENERAL ANCHOR NOTES:

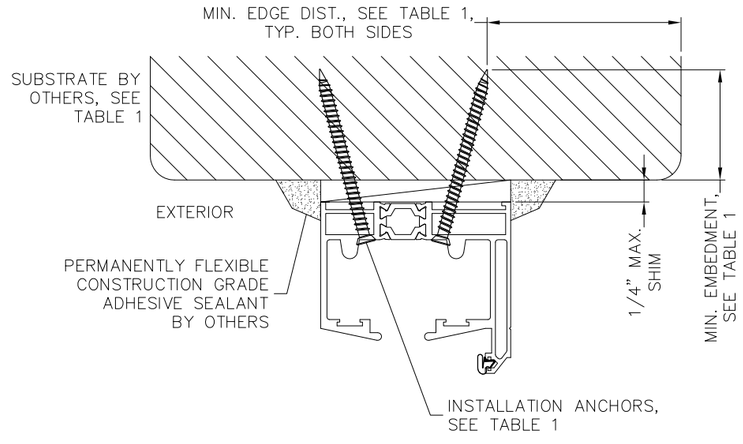
1. AT TOP AND BOTTOM TRACKS INSTALL TWO ANCHORS PER LOCATION AND AT JAMBS INSTALL ONE ANCHOR PER LOCATION, WITH LOCATIONS SHOWN IN THE ELEVATIONS ON SHEET 1 FOR PRODUCT PERIMETER. USE ANCHORS APPROPRIATE FOR SUBSTRATE TYPE (SEE TABLE 1).
2. INSTALL SHIMS AT EACH ANCHOR LOCATION WHERE A GAP OF 1/16" OR GREATER EXISTS BETWEEN PRODUCT FRAME AND SUBSTRATE.
3. SHIMS SHALL BE LOAD–BEARING (PLASTIC OR METALLIC) AND CAPABLE OF TRANSFERRING LOADS TO SUBSTRATE.
4. SPECIFIED ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL FINISH OR STUCCO.
5. FOR INSTALLATION TO METAL SUBSTRATES, ANCHORS SHALL BE LONG ENOUGH TO BE FULLY THREADED THROUGH THE METAL THICKNESS WITH AN ADDITIONAL 1/4" MIN. OF THREADS BEYOND.
6. A MINIMUM CENTER–TO–CENTER SPACING OF 3" SHALL BE MAINTAINED BETWEEN ALL CONCRETE OR CMU ANCHORS IN ANY DIRECTION. CONCRETE/MASONRY SUBSTRATES SHALL NOT BE CRACKED.



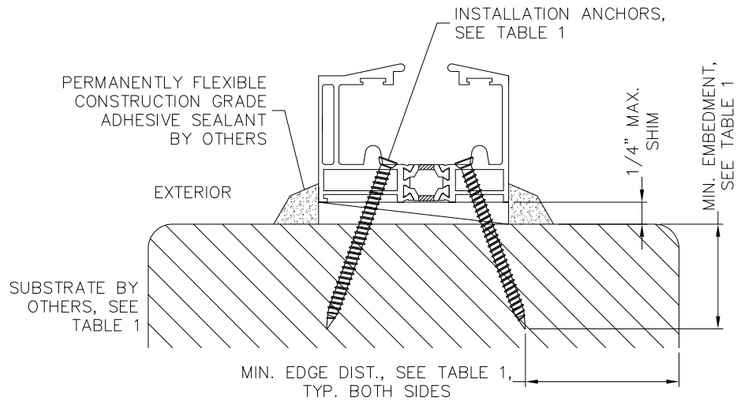
TYPICAL INSTALLATION STANDARD BOTTOM TRACK



TYPICAL INSTALLATION JAMB



TYPICAL INSTALLATION TOP TRACK



TYPICAL INSTALLATION LOW THRESHOLD BOTTOM TRACK

TABLE 1. QUALIFIED ANCHOR INFORMATION

LOCATION / HEAD TYPE	SUBSTRATE	ANCHOR	MIN. EMBEDMENT	MIN. EDGE DISTANCE
HEAD OR SILL: FLAT HEAD JAMB: PAN OR HEX HEAD	SOLID CONCRETE (2850 PSI MIN)	1/4" ELCO COATED CARBON STEEL ULTRACON	1 3/4"	2 1/2"
	SOLID CONCRETE (2220 PSI MIN)	1/4" ELCO AGGRE-GATOR 300 SS	1 3/4"	1 1/2"
	GROUT-FILLED CMU (ASTM C-90)	1/4" ELCO AGGRE-GATOR 300 SS	2"	2"
	SOLID CONCRETE (3000 PSI MIN)	1/4" HILTI COATED CARBON STEEL OR STAINLESS STEEL KWIK-CON II	1"	2 1/2"
	2x MIN. SOUTHERN PINE WOOD (G=0.55 MIN)	#14 GRADE 5 WOOD SCREW	1 3/8"	1"
	1/8" ALUM. 6063-T5 MIN. OR 1/8" STEEL 33 KSI YIELD MIN.	1/4" GRADE 5 SELF-TAPPING / DRILLING SCREW	FULL THREAD THRU 1/8" WALL	5/8"
JAMB ONLY: PAN OR HEX HEAD	HOLLOW OR GROUT-FILLED CMU (ASTM C-90)	1/4" ELCO AGGRE-GATOR 300 SS	1 1/4"	2"
		1/4" HILTI COATED CARBON STEEL OR STAINLESS STEEL KWIK-CON II	1"	2 1/2"
		1/4" ELCO CRETE-FLEX SS4	1 1/4"	2 1/2"

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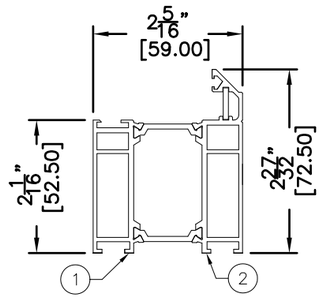
DRAWING # FPA–EASIFOLD–LM–NON–HVHZ

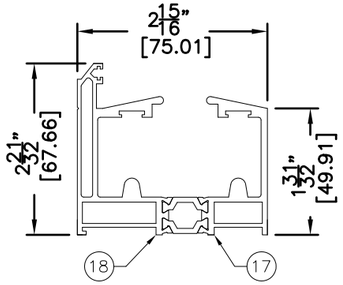
SHEET DESCRIPTION: ANCHORS, INSTALL DETAILS

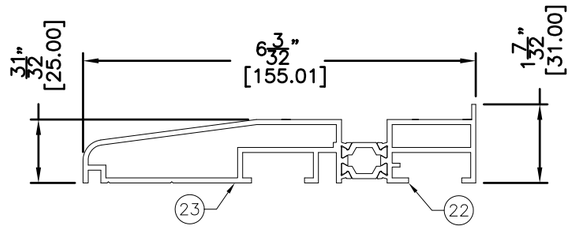
BILL OF MATERIALS

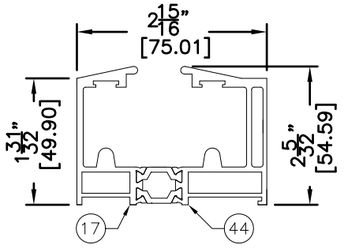
BOM NO.	PART NO.	SUPPLIER	DESCRIPTION	REMARKS
1	OF42	Cortizo/Vertikal	Hinge stile bottom rail	Powder Coated Aluminum
2	OF41	Cortizo/Vertikal	Hinge stile to rail	Powder Coated AIuminum
3	OF43	Cortizo/Vertikal	Jamb	Powder Coated Aluminum
4	OF44	Cortizo/Vertikal	Jamb	Powder Coated Aluminum
5	QL 9135	Schlegel	Hinge Gasket	Q-Lon
6	OR1001/0R1006	PMS Die Casting	Hinge	Zinc ZL2
7	STM0064C	Cortizo/Vertikal	Polyamide strip 27mm	Polyamide
8	ORI-CHEVRON	Montrose	Pressed chevron	Aluminium
9	474	Plastech	Glazing Gasket	Polypropylene
10	OF22	Cortizo/Vertikal	28mm Bead	Powder Coated AIuminum
11	3434	Plastech	E-gasket	Polypropylene
12	Glazing		See Typ. Glazing Sht. 3	
13	OF47	Cortizo/Vertikal	Mullion	Powder Coated AIuminum
14		PMS Die Casting	D-Handle	Zinc ZL2
15		PMS Die Casting	Secondary handle	Zinc ZL2
16		PMS Die Casting	Gearbox	Zinc ZL2
17	OF49	Cortizo/Vertikal	Track	Powder Coated AIuminum
18	OF48	Cortizo/Vertikal	Track	Powder Coated Aluminum
19	QL9141	Schlegel	Top Gasket	Q-Lon
20	QL 9257	Schlesel	Track gasket	Q- Lon
21	COR3219	Cortizo/Vertikal	Polyamide strip 18mm	Polyamide
22	OF24	Cortizo/Vertikal	155 Sill	Powder Coated Aluminum
23	OF25	Cortizo/Vertikal	155 Sill	Powder Coated Aluminum
24		PMS Die Casting	Top Carrier Bar	Zinc ZL2
25		PMS Die Casting	Top and Bottom Fork	Zinc ZL2
26	OFLBO1/OFSB01	Plasticom	Hinge Bushes	Acetal
27		Cortizo/Vertikal	Door Leaf	Aluminium/Polyamide
28		Plasticom	Top Roller	Acetal
29		Montrose	Grub Screw	Hardened Steel
30		PMS Die Casting	Bogie	Zinc ZL2
31		Plasticom	Bogie Wheel	Acetal
32		Montrose	Bogie adjustment screw	Hardened Steel
33	253/280	Hafi	Hafi Handle	Stainless Steel
34	OF46	Cortizo/Vertikal	Rebate	Aluminium
35	OF45	Cortizo/Vertikal	Slamb	Aluminium
36	QL4.2 *2.7	Schlegel	Rebate Gasket	Q-Lon
37		Origin	Jamb Packer	Acetal
40	JTTC-01	J Banks	Jamb to Track connector	Black Nylon 6
41		Plasticom	Shootbolt End	Acetal
42		Plasticom	Shootbolt Guide	Acetal
43		Montrose	Threaded Rod	Steel
44	OF50	Cortizo/Vertikal	Low Threshold Track	Powder Coated AIuminum
45	OF29	Cortizo/Vertikal	Corner Mull Inner	Powder Coated AIuminum
46	OF30	Cortizo/Vertikal	Corner Mull Outer	Powder Coated AIuminum

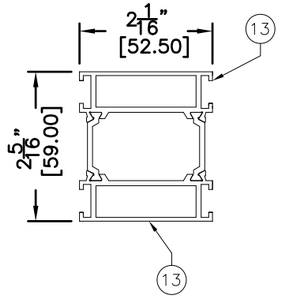
ALL ALUMINUM PARTS ARE 6063–T5 MINIMUM

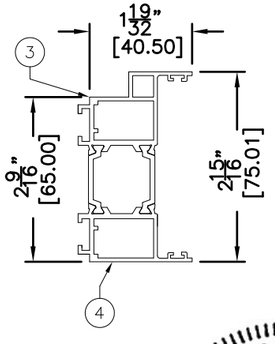


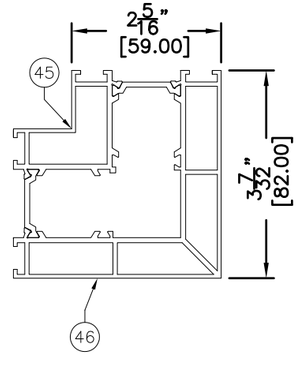












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REVISION 1/6/2018: A: 2017 UPDATE

REVISION 10/16/2020: B: 2020 UPDATE

DRAWING # FPA–EASIFOLD–LM–NON–HVHZ

SHEET DESCRIPTION: BILL OF MATERIALS

SHEET 5 of 5

LUCAS A. TURNER LICENSE No. 58201 STATE OF FLORIDA PROFESSIONAL ENGINEER

10/16/2020
LUCAS A. TURNER, P.E.
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