



MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/building

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)

Cross Aluminum Products, Inc.
1770 Mayflower Road
Niles, MI 49120

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "FLT-400 (Thermally Broken)" Outswing Opaque Aluminum Door - L.M.I.

APPROVAL DOCUMENT: Drawing No. **1863**, titled "FLT-400 Thermal Aluminum Panel Impact Out-Swing Door", sheets 1 through 11 of 11, dated 04/11/13, with revision **B1** dated 10/13/22, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

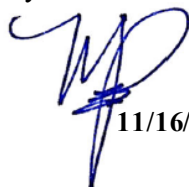
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises and renews** NOA No. **20-0623.16** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**




11/16/22

NOA No. **22-1027.08**
Expiration Date: **September 26, 2028**
Approval Date: **November 23, 2022**
Page 1

Cross Aluminum Products, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA's No. 14-0428.02 and 13-0624.06)
2. Drawing No. **1863**, titled "FLT-400 Thermal Aluminum Panel Impact Out-Swing Door", sheets 1 through 11 of 11, dated 04/11/13, with revision **A1** dated 12/14/17, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
(Submitted under NOA No. 18-0110.08)

B. TESTS

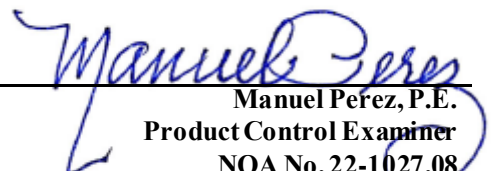
1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
along with marked-up drawings and installation diagram of an aluminum outswing glazed/opaque entrance door, prepared by Architectural Testing, Inc. Test Report No. **C7190.01-602-18**, dated 06/03/13, signed and sealed by Shawn G. Collins, P.E.
Note: Clarification letter of SVR panic engagement, dated 08/28/13, issued by Architectural Testing, Inc., signed by John Bordagaray, Director, ATI.
(Submitted under NOA's No. 14-0428.02 and 13-0624.06)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 6th Edition (2017)**, dated 12/14/17, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
(Submitted under NOA No. 18-0110.08)
2. Glazing complies with **ASTM E1300-02 & 04**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)


Manuel Pérez, P.E.
Product Control Examiner
NOA No. 22-1027.08
Expiration Date: September 26, 2028
Approval Date: November 23, 2022

Cross Aluminum Products, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)

E. MATERIAL CERTIFICATIONS

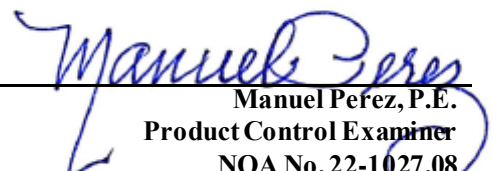
1. Notice of Acceptance No. **16-1129.05** issued to Dyplast Products, LLC, (Former Apache Product Co.) for "E and R Board Expanded Polystyrene Rigid Foam Insulation", dated 01/19/17 and expiring on 01/11/22.
2. Test report # 61261.01-106-18 dated 01/04/06, issued by Architectural Testing, Inc. for Polyamide I-strut per ASTM D-2843 and ASTM D635, issued to Technoform Group.
3. Tensile test report # ETC-07-1043-2008.0 dated 09/18/07, issued by ETC Laboratories for Strut material, issued to Technoform Group

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 7th Edition (2020)**, dated 06/04/20, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
(Submitted under NOA No. 20-0623.16)
2. Statement letter of conformance, complying with **FBC 5th Edition (2014)**, and of no financial interest, dated 04/14/14, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
(Submitted under NOA No. 17-0713.20)
3. Lab. compliance as part of the above referenced test report.
(Submitted under NOA's No. 14-0428.02 and 13-0624.06)

G. OTHERS

1. Notice of Acceptance No. **18-0110.08**, issued to Cross Aluminum Products, Inc., for their Series FLT400 Aluminum Outswing Opaque Doors (Thermally Broken) – L.M.I., approved on 03/08/18 and expiring on 09/26/23.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 22-1027.08
Expiration Date: September 26, 2028
Approval Date: November 23, 2022

Cross Aluminum Products, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **1863**, titled “FLT-400 Thermal Aluminum Panel Impact Out-Swing Door”, sheets 1 through 11 of 11, dated 04/11/13, with revision **B1** dated 10/13/22, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

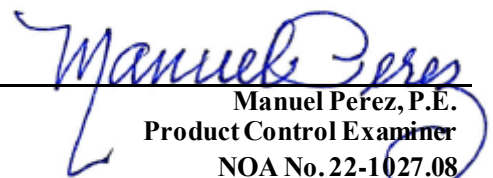
1. Notice of Acceptance No. **22-0627.04** issued to Kingspan Insulation, LLC, (Formerly Dyplast Products, LLC) for “E and R Board Expanded Polystyrene Rigid Foam Insulation”, dated 07/21/22, expiring on 01/11/27.

F. STATEMENTS

1. Statement letter dated October 13, 2022, NOA drawings and testing have been reviewed to the current **FBC 7th Edition (2020)** and found compliant and that no change to existing NOA documents were required for renewal, prepared by W. W. Schaefer Engineering & Consulting, P.A. and signed by Warren W. Schaefer, P.E.
2. Statement letter dated October 11, 2022, requesting renewal with no change, issued by Cross-Aluminum Products, Inc., signed by Joshua Leets, Plant Engineer

G. OTHERS

1. Notice of Acceptance No. **20-0623.16**, issued to Cross Aluminum Products, Inc., for their Series FLT400 Aluminum Outswing Opaque Door (Thermally Broken) – L.M.I., approved on 09/03/20 and expiring on 09/26/23.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 22-1027.08
Expiration Date: September 26, 2028
Approval Date: November 23, 2022

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. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT PRODUCTS.
5. THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
7. 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.
8. 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.
9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR $C_d = 1.6$ WAS USED FOR WOOD SCREW ANALYSIS ONLY.
10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE.

PANEL TYPE	HARDWARE REQUIRED
DOOR WITH LOCK OPTION 1	
ACTIVE PANEL	3-POINT PANIC LOCK DEVICE (ITEM 31)
INACTIVE PANEL	3-POINT PANIC LOCK DEVICE (ITEM 31)
DOOR WITH LOCK OPTION 2	
ACTIVE PANEL	DEAD BOLT (ITEM 35)
	PASSAGE LOCK (ITEM 36)
	TOP & BOTTOM SURFACE BOLTS (ITEM 33)
INACTIVE PANEL	TOP & BOTTOM SURFACE BOLTS (ITEM 33)
	TOP & BOTTOM FLUSH BOLTS (ITEM 34)
DOOR WITH LOCK OPTION 3	
ACTIVE PANEL	2-POINT PANIC LOCK DEVICE (ITEM 37)
	TOP & BOTTOM SURFACE BOLTS (ITEM 33)
INACTIVE PANEL	TOP & BOTTOM SURFACE BOLTS (ITEM 33)

NOTES:

1. SEE PARTS LIST ON SHEET 11 FOR DESCRIPTION OF LOCK ITEMS.
2. ALL MANUAL FLUSH &/OR SURFACE LOCK BOLTS SHALL BE ENGAGED UPON A BUILDING LOCK-DOWN &/OR IN THE EVENT OF A SEVERE STORM THREAT

MAX. FRAME WIDTH (IN.)	MAX. FRAME HEIGHT (IN.)	ALLOWABLE PRESSURE	
		POSITIVE (PSF)	NEGATIVE (PSF)
DOUBLE DOOR			
91 1/2	97 3/8	60.0	60.0
81 3/8	97 3/8	(1) 67.5	(1) 67.5
73 1/4	97 3/8	(1) 75.0	(1) 75.0
SINGLE DOOR			
47 5/8	97 3/8	60.0	60.0
42 3/8	97 3/8	(1) 67.5	(1) 67.5
38 1/8	97 3/8	(1) 75.0	(1) 75.0

HINGES ARE NOT SHOWN IN THE
ELEVATION VIEWS DUE TO THE CHOICE
OF THEM BEING CONTINUOUS OR
INDIVIDUAL BUTT HINGES. WHEN BUTT
HINGES ARE USED, THERE SHALL BE A
TOTAL OF 4 WITH EACH DOOR PANEL
POSITIONED 7 5/8" FROM BOTH TOP
& BOTTOM TO HINGE CENTERLINE &
EQUALLY SPACE BETWEEN. SEE
APPLICABLE SECTIONS & PARTS LIST
FOR ALL HINGE DETAIL.

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.

[illegible]

OPENING TYPE (SUBSTRATE)	FRAME & MULLION PLATE TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
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(3) MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 2 & G=0.55)	NO. 20 SMS OR WOOD SCREW	1 1/2"	1"
MIN. 16 GA. 50 KSI METAL STUD	5/16" GR. 5 SELF TAP/DRILL SCREW	FULL	5/8"
MIN. 1/8" THK A36 STEEL	5/16" GR. 5 SELF TAP/DRILL SCREW	FULL	5/8"
MIN. 0.100" THK 6063-T5 ALUM.	5/16" GR. 5 SELF TAP/DRILL SCREW	FULL	5/8"
(4) MIN. C-90 CONCRETE FILLED BLOCK	(2) 5/16" CONCRETE SCREW	1 1/2"	2"
MIN. 2500 PSI CONCRETE	(2) 5/16" CONCRETE SCREW	1 3/4"	2"

(3) MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 2 & G=0.55)	NO. 14 SMS OR WOOD SCREWS	1 1/2"	3/4" AT SIDES; 1" AT SILL
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"
(4) MIN. C-90 CONCRETE FILLED BLOCK	(1) 1/4" CONCRETE SCREW	1 1/2"	2"
MIN. 3000 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 3/4"	2"

MIN. 2500 PSI CONCRETE	(5) EXPANSION ANCHOR WITH 5/16-18 X 1 3/4" MACHINE SCREW	FULL (1 5/8")	2 1/2"
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- (1) 1/4" 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) 5/16" CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.)
- (3) 2X6 BUCKS SHALL BE OF A MINIMUM DEPTH REQUIRED TO MEET ANCHOR EDGE DISTANCE REQUIREMENTS BUT NO LESS THAN 4 1/4".
- (4) CONCRETE FILLED BLOCK SUBSTRATE IS NOT APPLICABLE AT HEAD AND SILL
- (5) EXPANSION ANCHORS SHALL BE POWERS SINGLE SHELL EXPANSION ANCHOR.

FRAME HEAD: VERTICAL MEMBERS RUN THROUGH WHILE THE HORIZONTAL MEMBERS ARE SQUARE CUT, BUTTED AND MECHANICALLY FASTENED WITH (3) NO. 10 X 1" PHTF THROUGH THE VERTICAL MEMBER INTO THE HORIZONTAL MEMBERS SCREW SPLINES. CORNERS ARE SEALED WITH SILICONE SEALANT.

SILL: VERTICAL MEMBERS RUN THROUGH WHILE THE THRESHOLD IS SQUARE CUT, BUTTED AND SEALED WITH SILICONE SEALANT.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 22-102708
Expiration Date: 09/26/2028
By: Manuel Perez
Miami-Dade Product Control



TURER
CROSS ALUMINUM PRODUCTS, INC.

CONSULTANTS
W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A. (CA 6809)

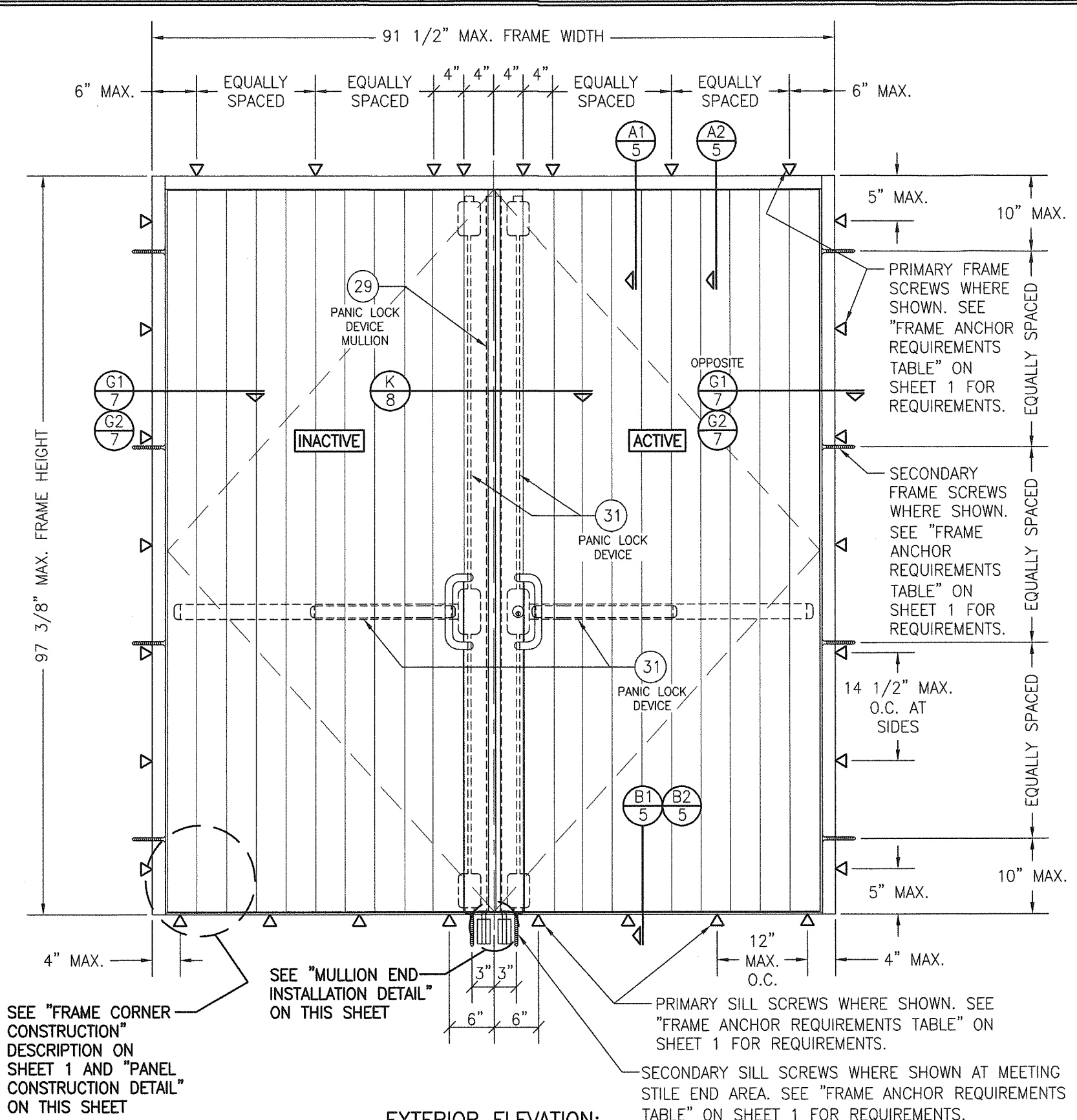
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING TITLE
FLT-400 THERMAL ALUMINUM PANEL IMPACT OUT-SWING DOOR

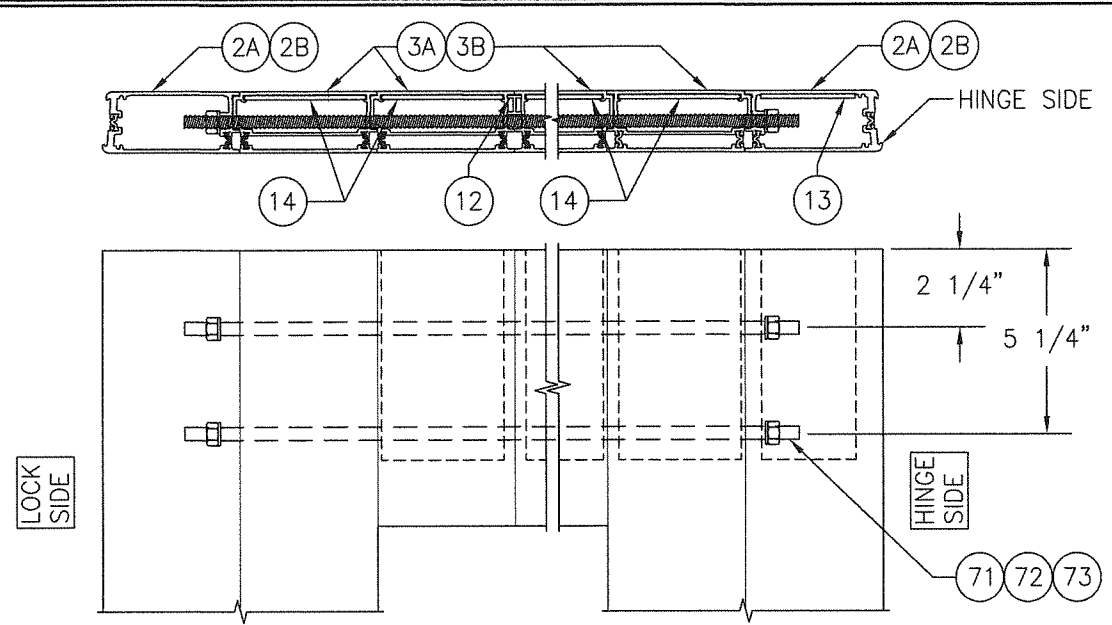
CERTIFICATION

OCT 13 2022

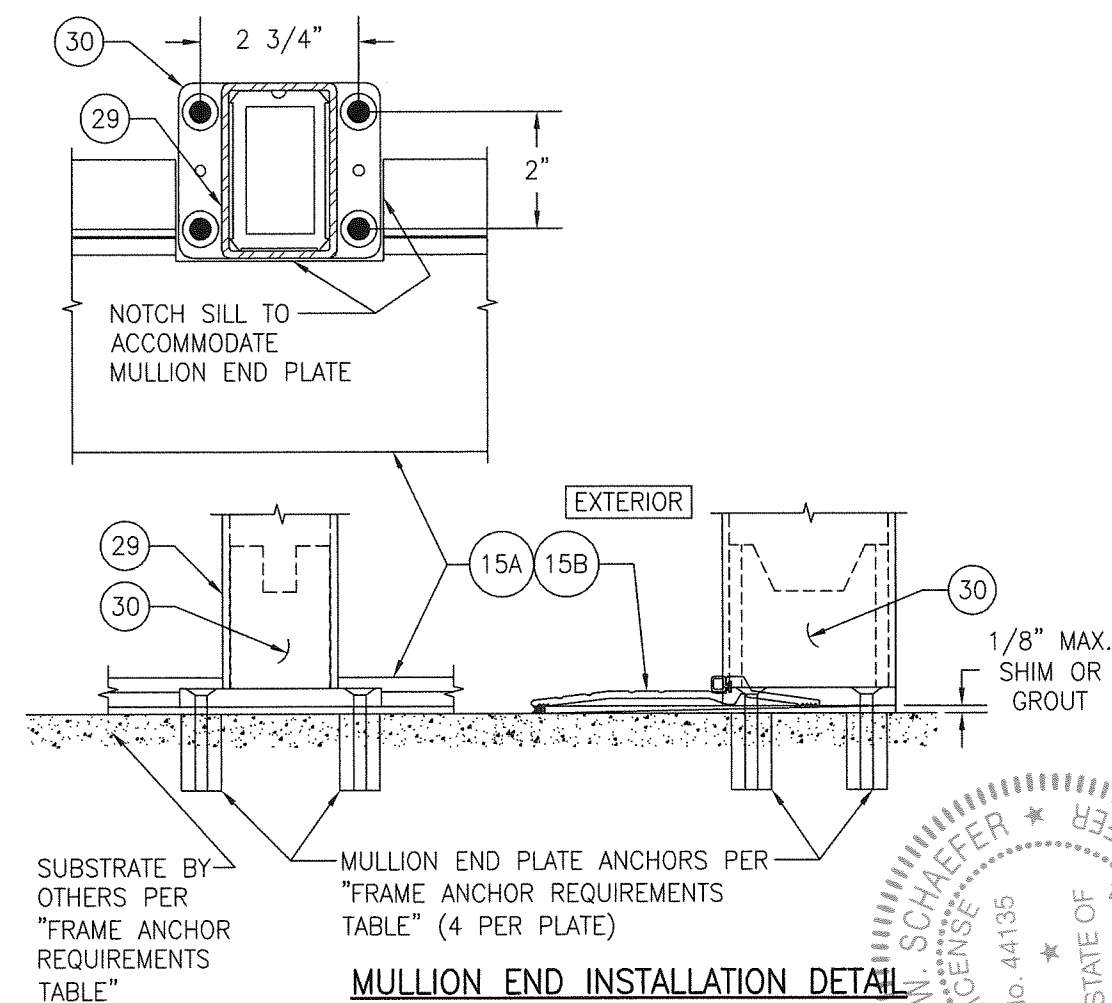
DRAWING NO.	REV.
1863	B
SHEET NO.	
1	OF 11



EXTERIOR ELEVATION:
DOUBLE DOOR WITH LOCK HARDWARE OPTION 1
 SCALE: 3/4" = 1'-0"
 (SEE TABLE ON SHEET 1 FOR LOCK OPTION REQUIREMENTS)
 NOTE: SINGLE DOOR IS NOTE APPLICABLE WITH LOCK OPTION 1



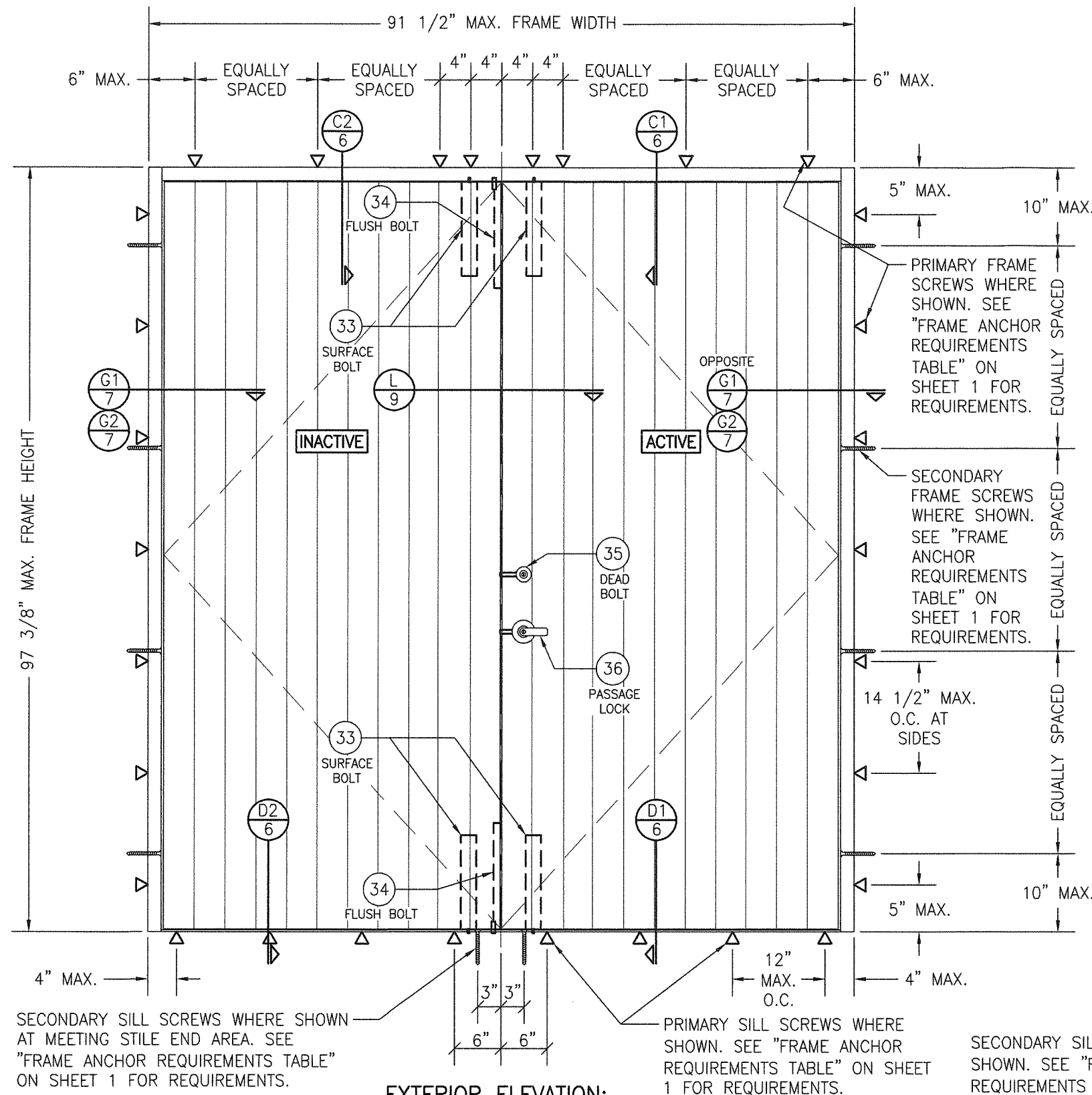
PANEL CONSTRUCTION DETAIL
 SCALE: N.T.S.
 (TOP OF PANEL SHOWN. BOTTOM OF PANEL IS CONSTRUCTED THE SAME)



MULLION END INSTALLATION DETAIL
 SCALE: N.T.S.
 (DOOR PANEL NOT SHOWN FOR CLARITY)
 (FOR SILL SCREWS NOT SHOWN. SEE SECTION B1/5)

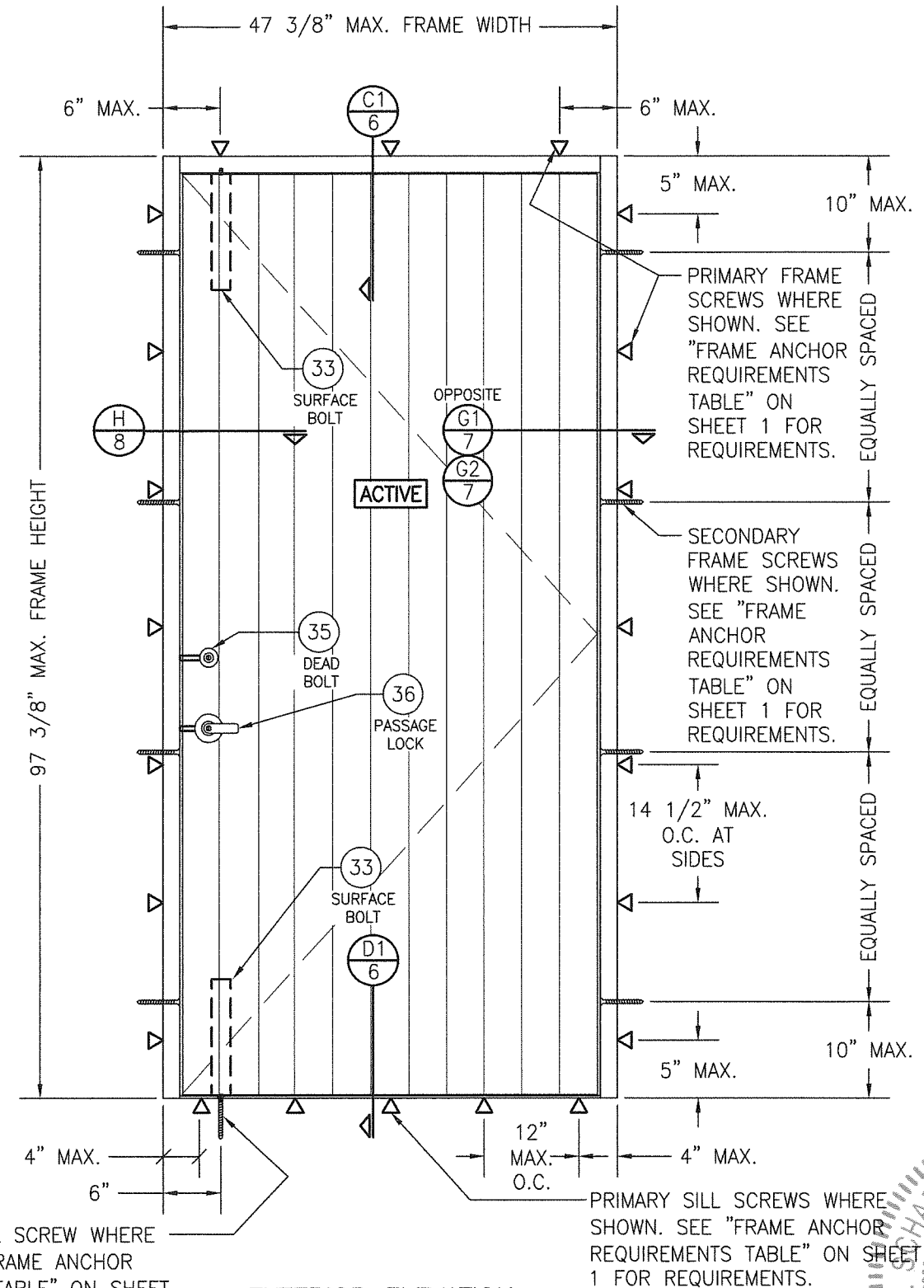
PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. **22-1027.08**
 Expiration Date: **09/26/2028**
 By: *Manuel Perez*
 Miami-Dade Product Control

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 04/11/13	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE FLT-400 THERMAL ALUMINUM PANEL IMPACT OUT-SWING DOOR			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424		MANUFACTURER CROSS ALUMINUM PRODUCTS, INC. 1770 MAYFLOWER RD. NILES, MI 49120 800-806-3667	
CERTIFICATION OCT 13 2022 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1863		REV. B	
SHEET NO. 2 OF 11			



EXTERIOR ELEVATION:
DOUBLE DOOR WITH LOCK HARDWARE OPTION 2

SCALE: 3/4" = 1'-0"
(SEE TABLE ON SHEET 1 FOR LOCK OPTION REQUIREMENTS)

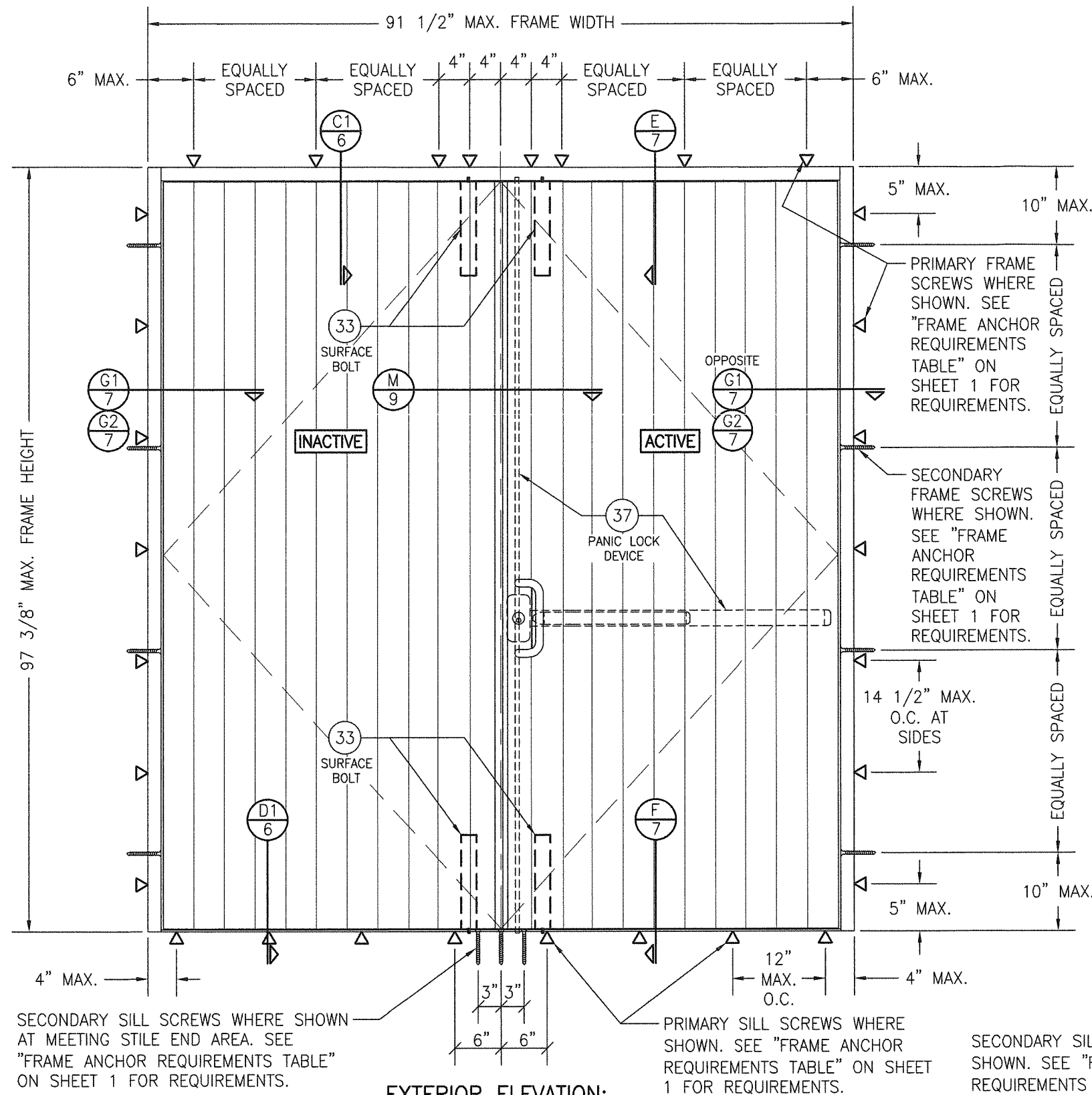


EXTERIOR ELEVATION:
SINGLE DOOR WITH LOCK HARDWARE OPTION 2

SCALE: 3/4" = 1'-0"
(SEE TABLE ON SHEET 1 FOR LOCK OPTION REQUIREMENTS)

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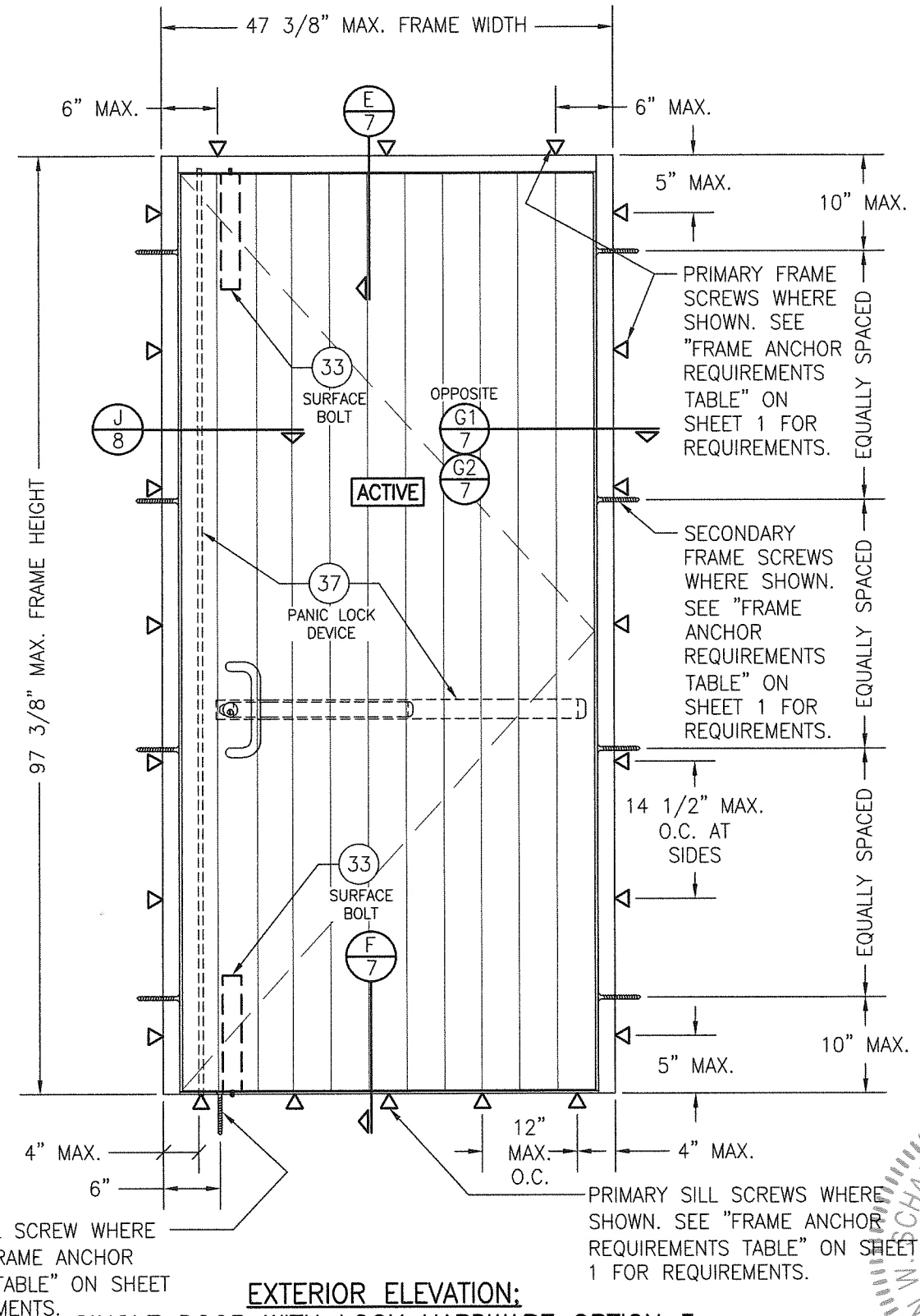
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 04/11/13
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE FLT-400 THERMAL ALUMINUM PANEL IMPACT OUT-SWING DOOR	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD, UNIT 309 PUNTA GORDA, FL 33963 PHONE: 561-744-3424	
MANUFACTURER CROSS ALUMINUM PRODUCTS, INC. 1770 MAYFLOWER RD. NILES, MI 49120 800-806-3667	
CERTIFICATION STATE OF FLORIDA PROFESSIONAL ENGINEER WARREN W. SCHAEFER, P.E. P.E. NO. 14135	
DRAWING NO. 1863	REV. B
SHEET NO. 3 OF 11	



EXTERIOR ELEVATION:
DOUBLE DOOR WITH LOCK HARDWARE OPTION 3

SCALE: 3/4" = 1'-0"
(SEE TABLE ON SHEET 1 FOR LOCK OPTION REQUIREMENTS)

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **22-1027.08**
Expiration Date: **09/26/2028**
By: *Manuel Perez*
Miami-Dade Product Control



EXTERIOR ELEVATION:
SINGLE DOOR WITH LOCK HARDWARE OPTION 3

SCALE: 3/4" = 1'-0"
(SEE TABLE ON SHEET 1 FOR LOCK OPTION REQUIREMENTS)

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 04/11/13
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE FLT-400 THERMAL ALUMINUM PANEL IMPACT OUT-SWING DOOR	
MANUFACTURER CROSS ALUMINUM PRODUCTS, INC. 1770 MAYFLOWER RD. NILES, MI 49120 800-806-3667	
CONSULTANTS W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD, UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424	
CERTIFICATION OCT 13 2022 WARREN W. SCHAEFER, P.E. P.E. NO. 11153	
DRAWING NO. 1863	REV. B
SHEET NO. 4 OF 11	

SUBSTRATE BY OTHERS PER "FRAME ANCHOR REQUIREMENTS TABLE"

PRIMARY FRAME SCREW PER ELEVATION

1/4" MAX. SHIM AT EACH ANCHOR

SEALANT BY OTHERS

SILICONE SEALANT

EXTERIOR

EXTERIOR

EXTERIOR

EXTERIOR

SEE "MULLION END INSTALLATION DETAIL" ON SHEET 2 FOR MULLION REQUIREMENTS

SEALANT BY OTHERS

SUBSTRATE BY OTHERS PER "FRAME ANCHOR REQUIREMENTS TABLE"

PRIMARY SILL SCREW PER ELEVATION

1/8" MAX. SHIM OR GROUT

SECONDARY SILL SCREW PER ELEVATION

SECTION

SCALE: 1/2 FULL

(SECTION SHOWING MULLION DETAIL)

SECTION

SCALE: 1/2 FULL

(SECTION SHOWING LOCK DETAIL)
(FOR INSTALLATION AND DETAIL NOT SHOWN, SEE SECTION A1/5)

SECTION

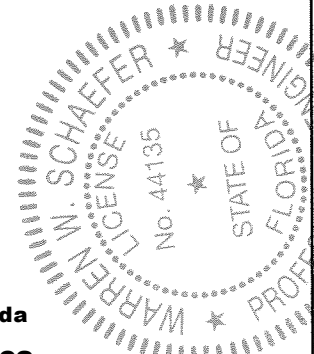
SCALE: 1/2 FULL

SECTION

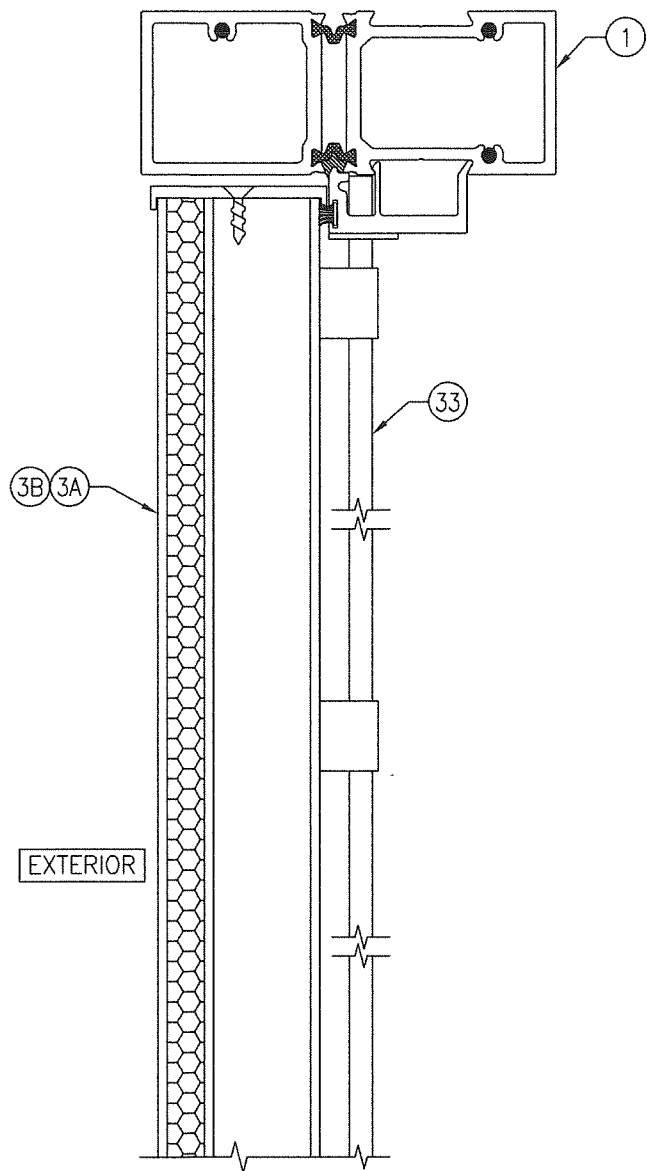
SCALE: 1/2 FULL

(FOR INSTALLATION AND DETAIL NOT SHOWN, SEE SECTION B1/5)

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **22-1027.08**
Expiration Date: **09/26/2028**
By: *Manuel Ferrer*
Miami-Dade Product Control

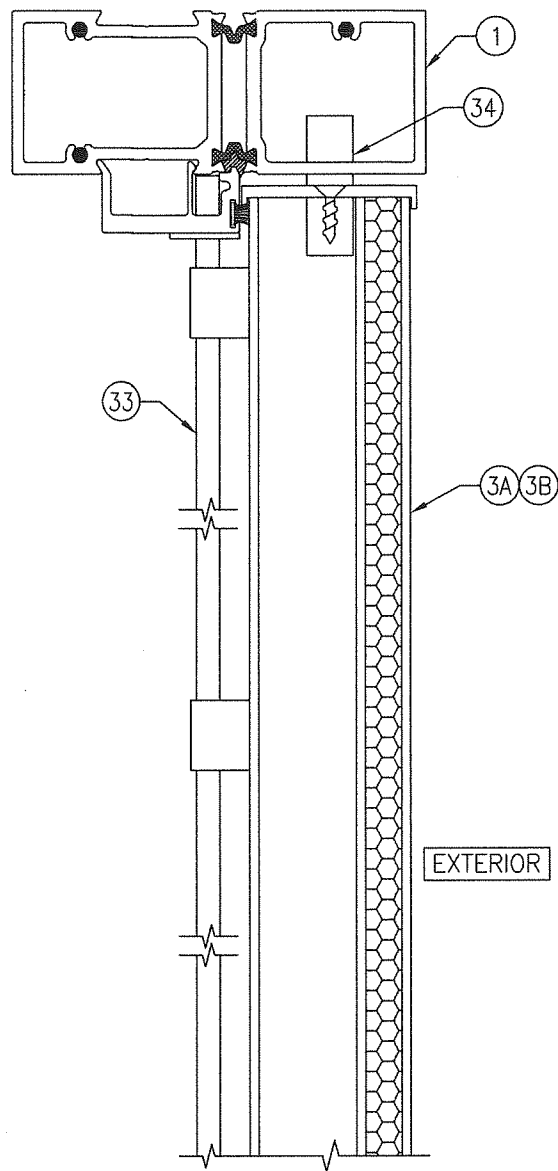


DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 04/11/13	
NO.	REVISION	DESCRIPTION	DATE
DRAWING TITLE FLT-400 THERMAL ALUMINUM PANEL IMPACT OUT-SWING DOOR			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD, UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424		MANUFACTURER CROSS ALUMINUM PRODUCTS, INC. 1770 MAYFLOWER RD. NILES, MI 49120 800-806-3667	
CERTIFICATION OCT 13 2022		DRAWING NO. 1863	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135		REV. B	
SHEET NO. 5		OF 11	



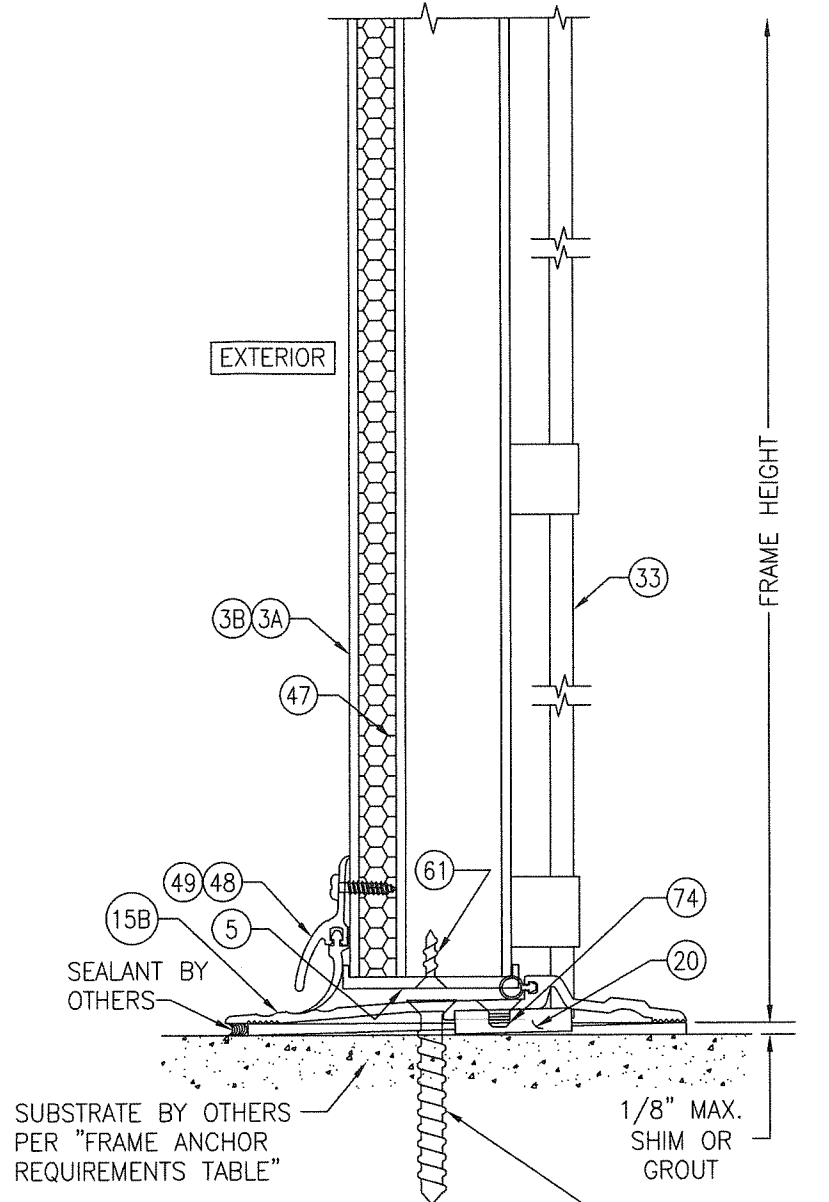
SECTION C1
SCALE: 1/2 FULL 6

(ACTIVE PANEL)
(FOR INSTALLATION AND DETAIL
NOT SHOWN, SEE SECTION A1/5)



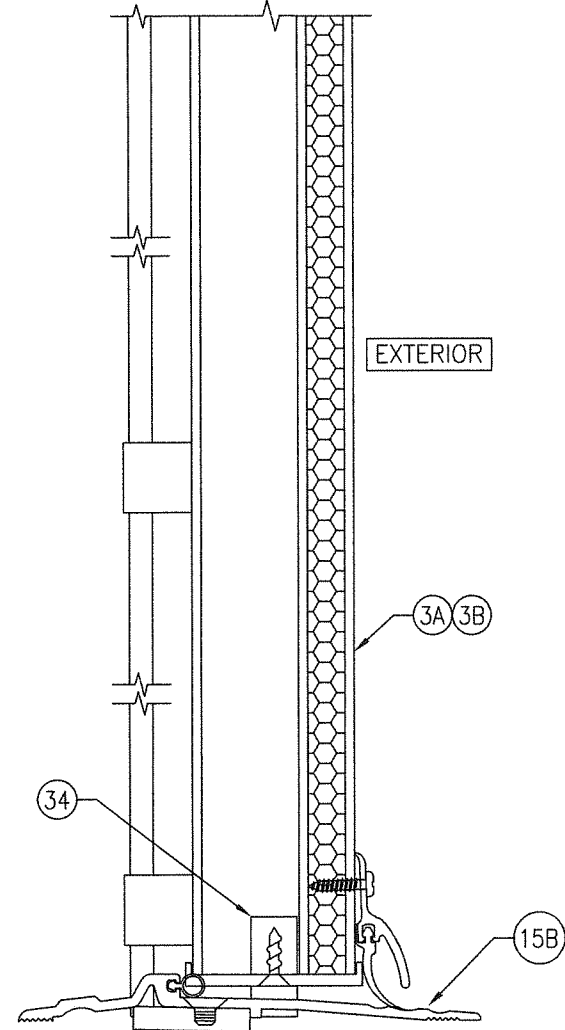
SECTION C2
SCALE: 1/2 FULL 6

(INACTIVE PANEL)
(FOR INSTALLATION AND DETAIL
NOT SHOWN, SEE SECTION A1/5)



SECTION D1
SCALE: 1/2 FULL 6

(ACTIVE PANEL)



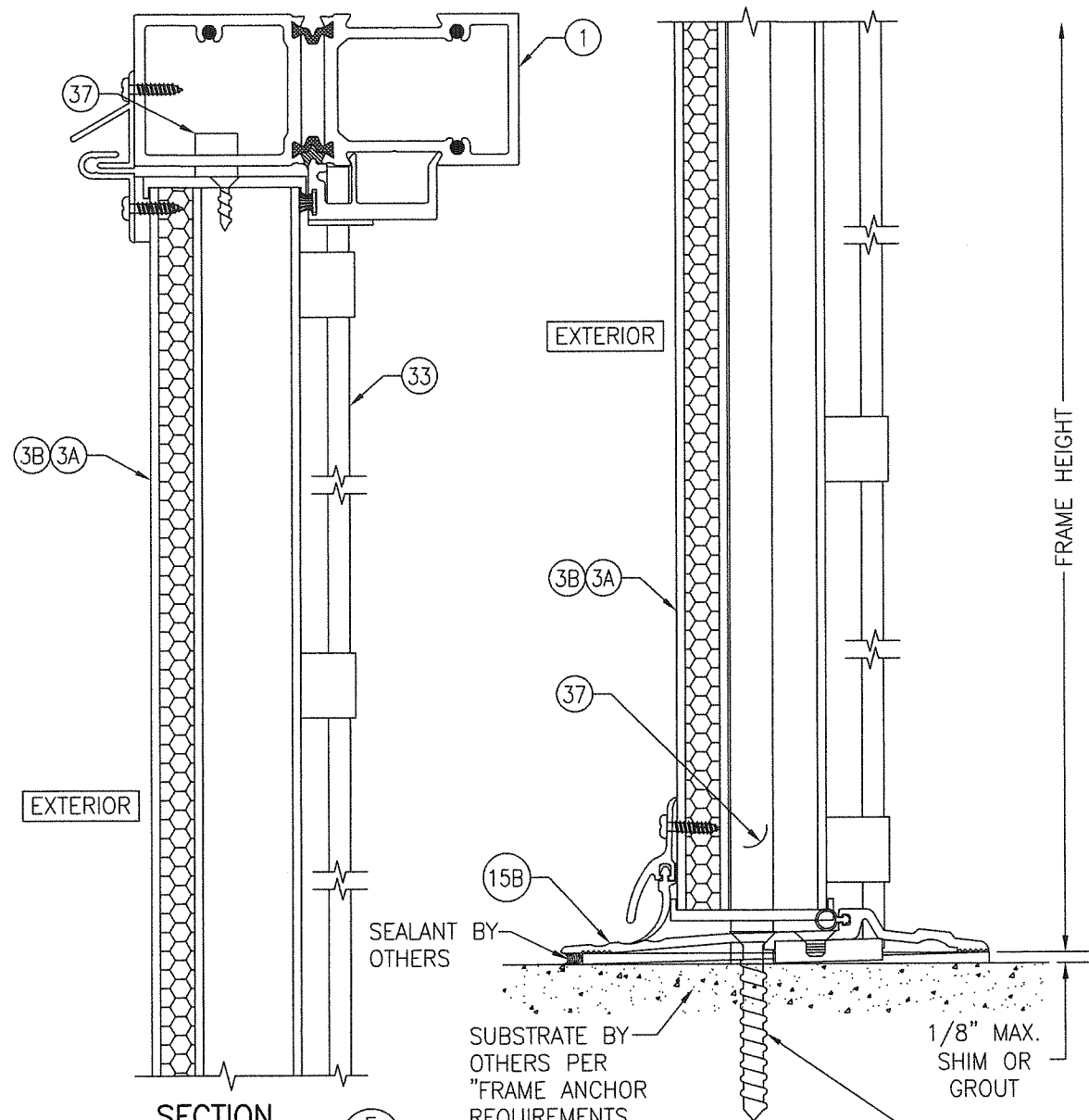
SECTION D2
SCALE: 1/2 FULL 6

(INACTIVE PANEL)
(FOR INSTALLATION AND DETAIL
NOT SHOWN, SEE SECTION D1/6)

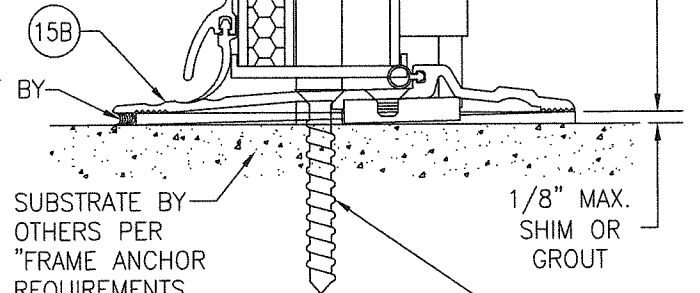
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **22-1027.08**
Expiration Date: **09/26/2028**
By: *Manuel Perez*
Miami-Dade Product Control



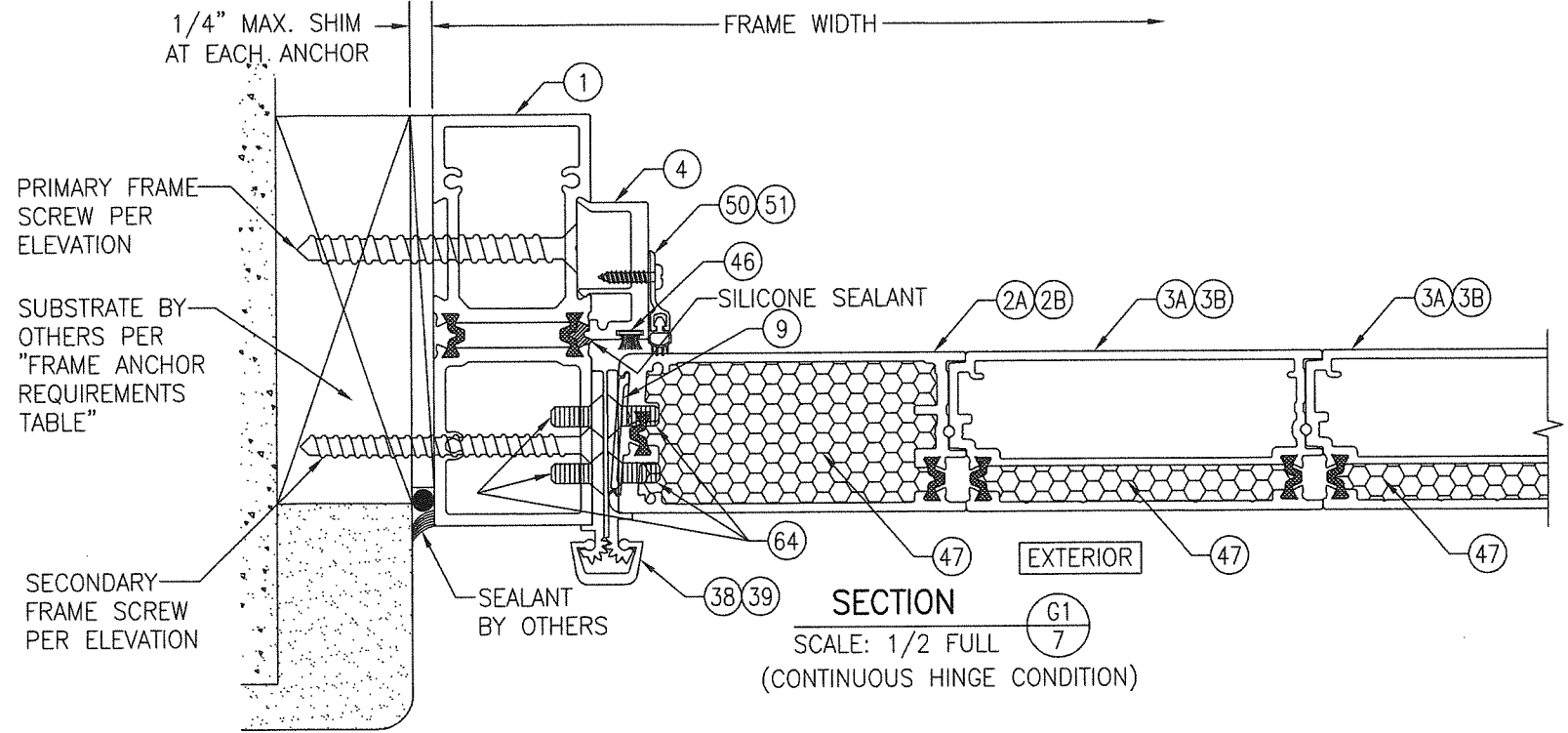
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 04/11/13
NO.	DATE
REVISION	DESCRIPTION
NO.	DESCRIPTION
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MANUFACTURER CROSS ALUMINUM PRODUCTS, INC. 1770 MAYFLOWER RD. NILES, MI 49120 800-806-3667	
CERTIFICATION OCT 13 2022	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1863	REV. B
SHEET NO. 6	OF 11



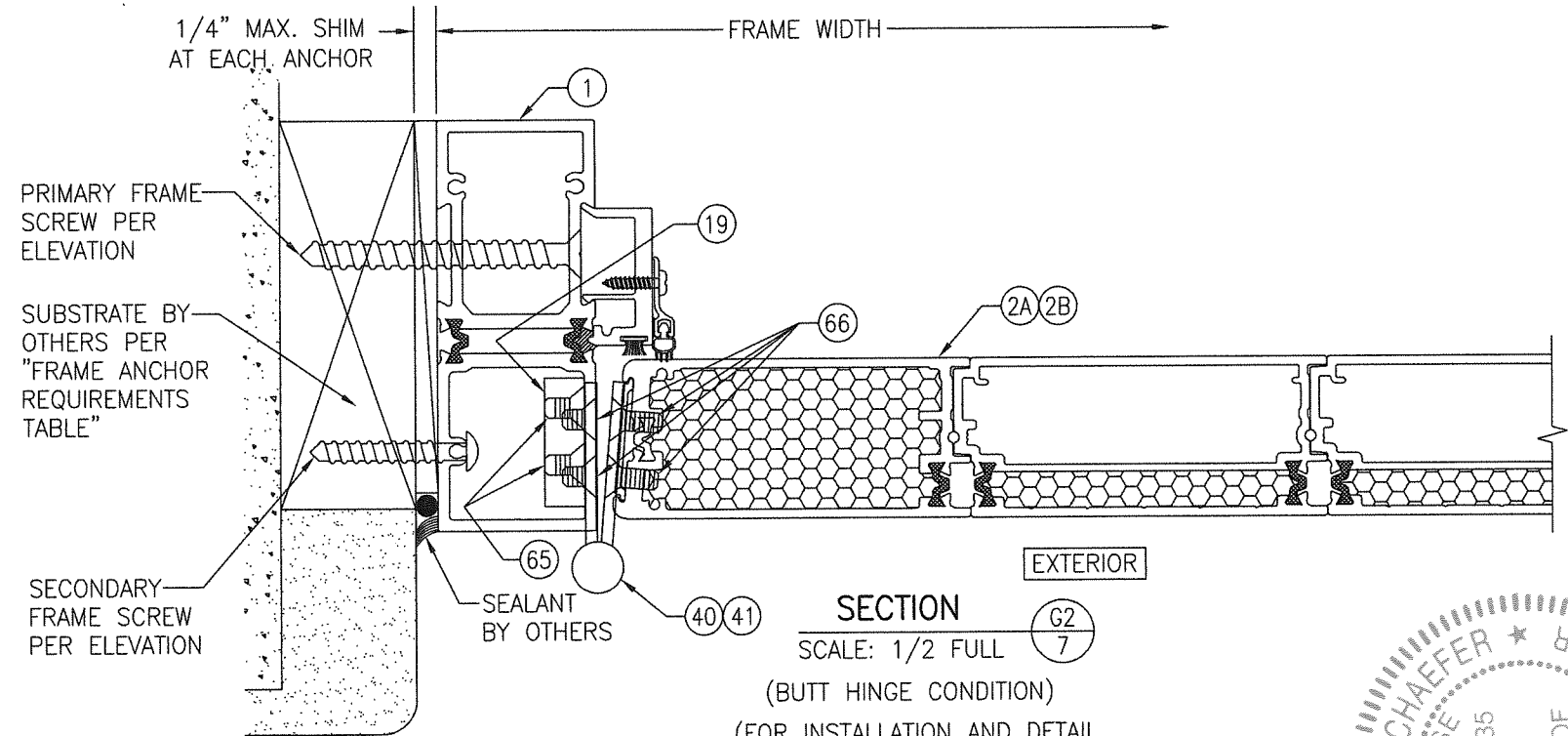
SECTION E
SCALE: 1/2 FULL
(FOR INSTALLATION AND DETAIL NOT SHOWN, SEE SECTION A1/5)



SECTION F
SCALE: 1/2 FULL
(FOR DETAIL NOT SHOWN, SEE SECTION D1/6)



SECTION G1
SCALE: 1/2 FULL
(CONTINUOUS HINGE CONDITION)

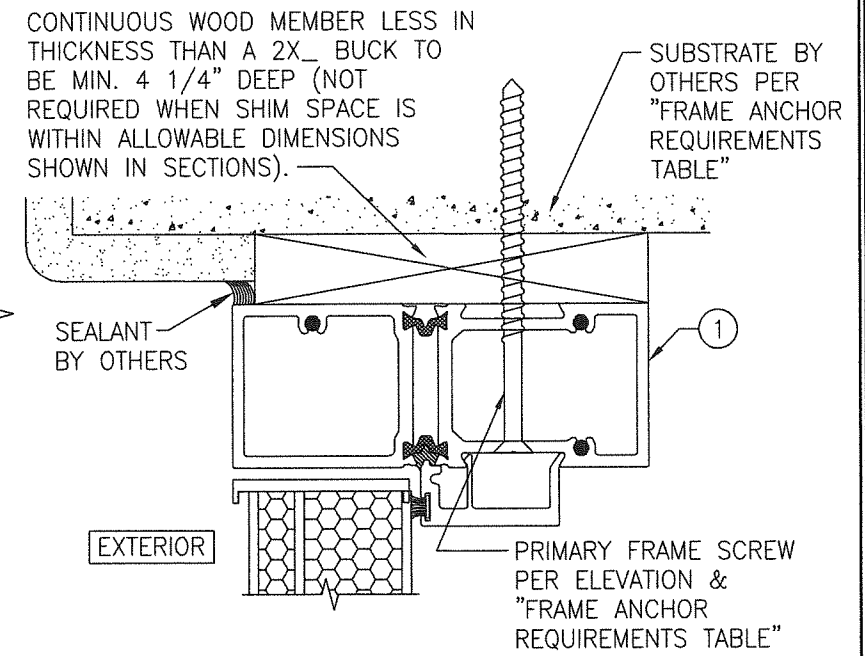
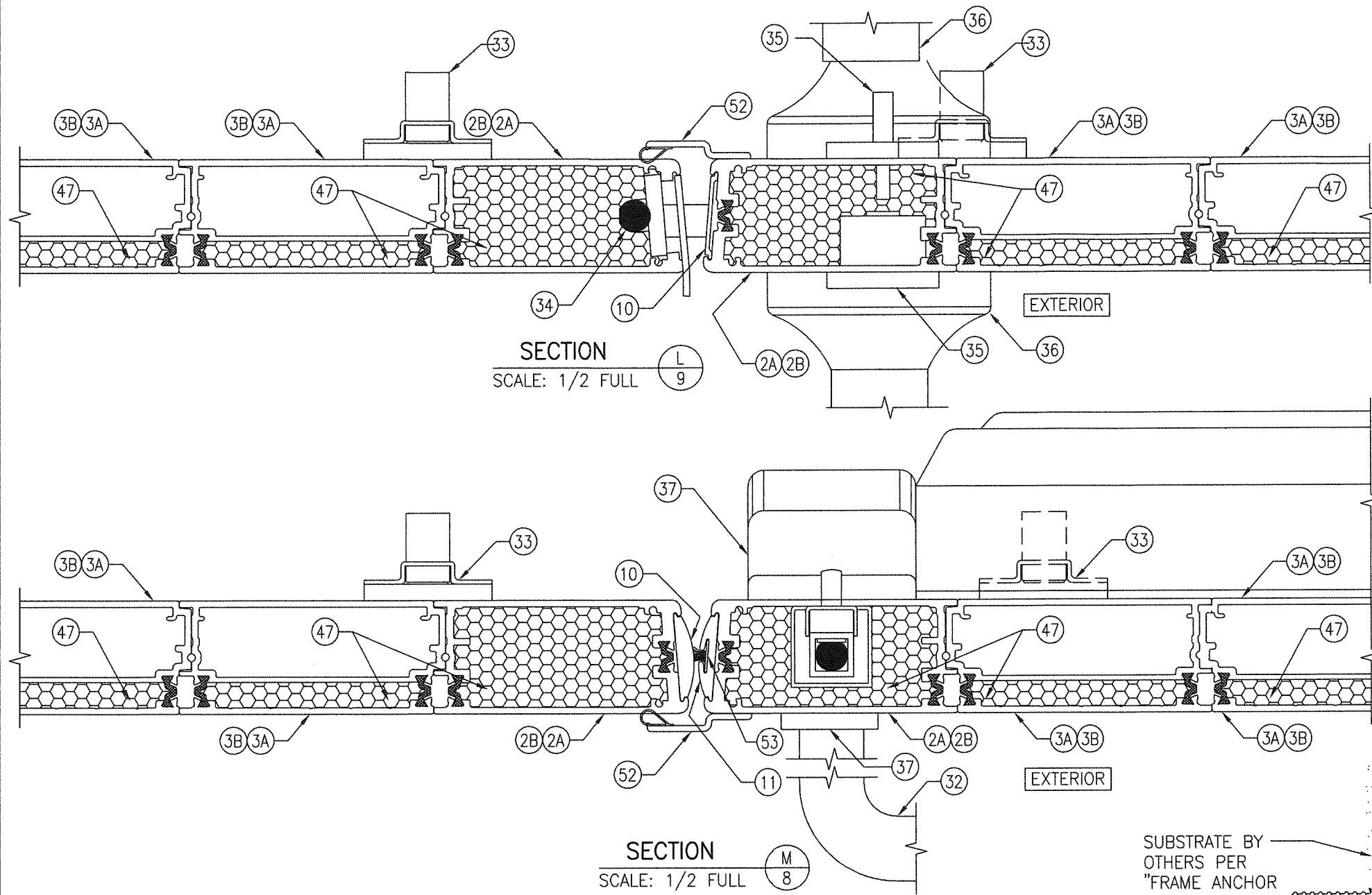


SECTION G2
SCALE: 1/2 FULL
(BUTT HINGE CONDITION)
(FOR INSTALLATION AND DETAIL NOT SHOWN, SEE SECTION G1/7)

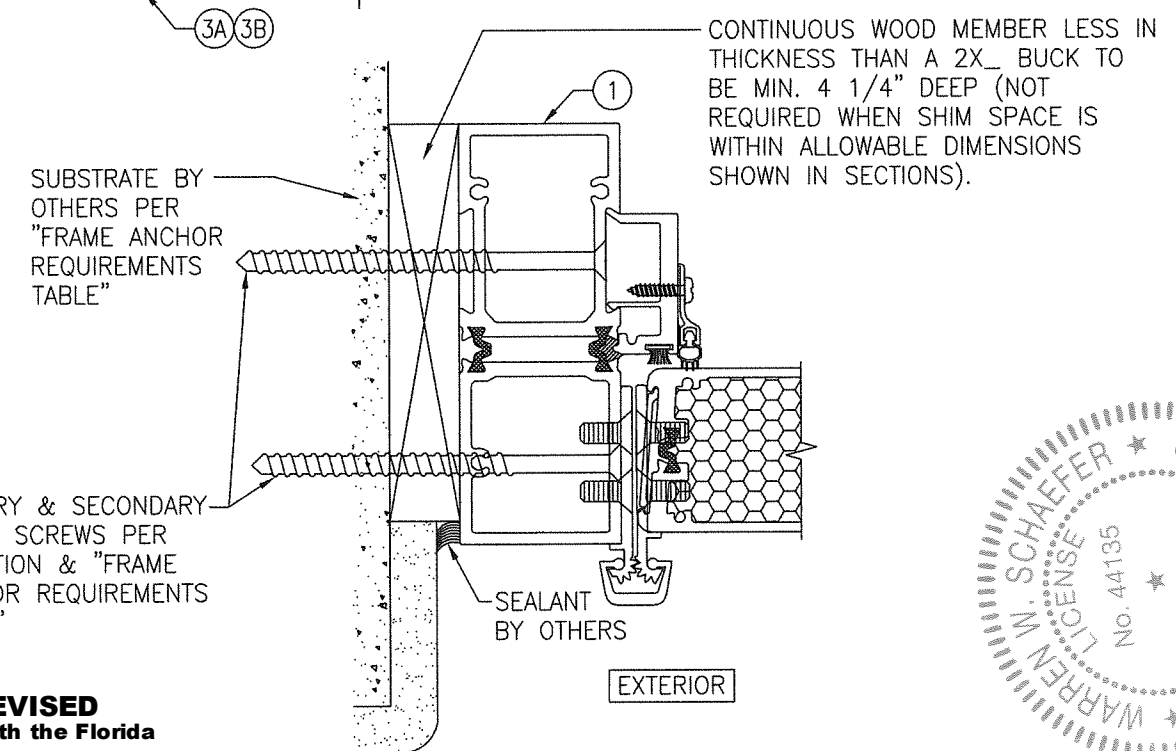
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Miami-Dade Product Control



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PLOT: 1=2	DATE: 04/11/13
NO.	DATE
BY	DATE
REVISION DESCRIPTION	DATE
NO.	DATE
DRAWING TITLE FLT-400 THERMAL ALUMINUM PANEL IMPACT OUT-SWING DOOR	
MANUFACTURER CROSS ALUMINUM PRODUCTS, INC. 1770 MAYFLOWER RD. NILES, MI 49120 800-806-3667	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD, UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424	
OCT 13 2022	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1863	REV. B
SHEET NO. 7 OF 11	

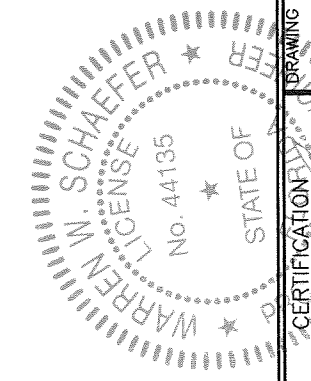


**OPTIONAL DIRECT MOUNT DETAIL
TO SUBSTRATE WITH SPACER AT HEAD**
(FOR DETAIL NOT SHOWN, SEE OTHER HEAD SECTIONS)

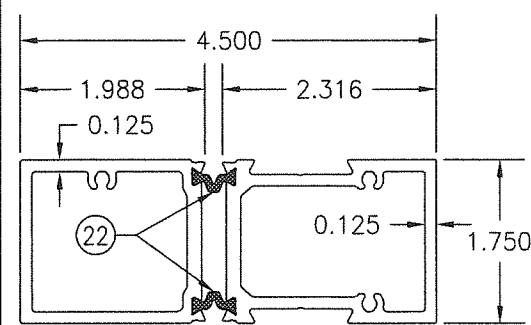


**OPTIONAL DIRECT MOUNT DETAIL
TO SUBSTRATE WITH SPACER AT SIDES**
(FOR DETAIL NOT SHOWN, SEE OTHER SIDE SECTIONS)

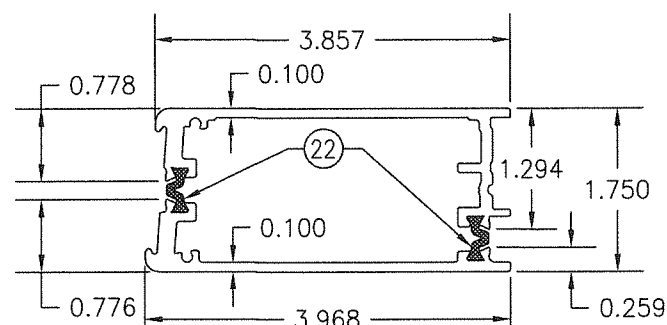
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Expiration Date: **09/26/2028**
By: *Manuel Perez*
Miami-Dade Product Control



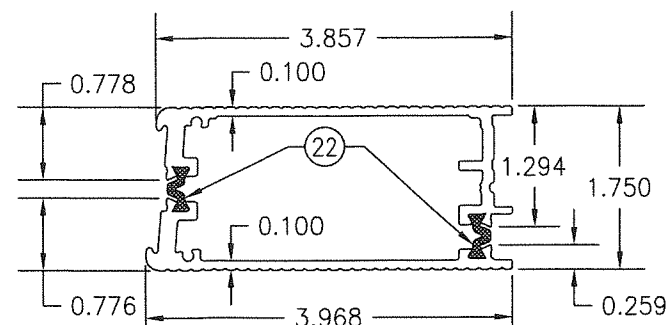
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/11/13
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE FLT-400 THERMAL ALUMINUM PANEL IMPACT OUT-SWING DOOR	
MANUFACTURER CROSS ALUMINUM PRODUCTS, INC. 1770 MAYFLOWER RD. NILES, MI 49120 800-806-3667	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424	
CERTIFICATION OCT 13 2022 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1863	REV. B
SHEET NO. 9 OF 11	



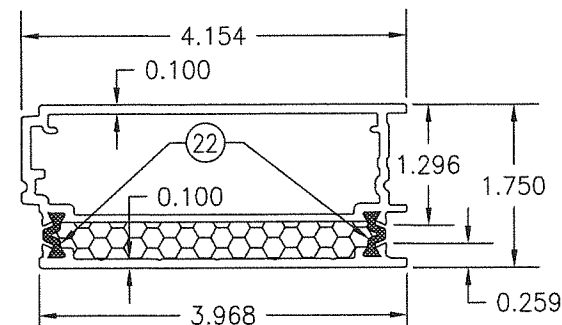
① HEAD & JAMB FRAME



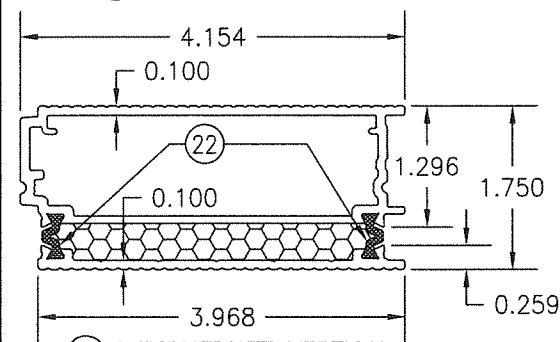
②A MEETING & HINGE
VERTICAL PANEL SLATS
(SMOOTH FINISH)



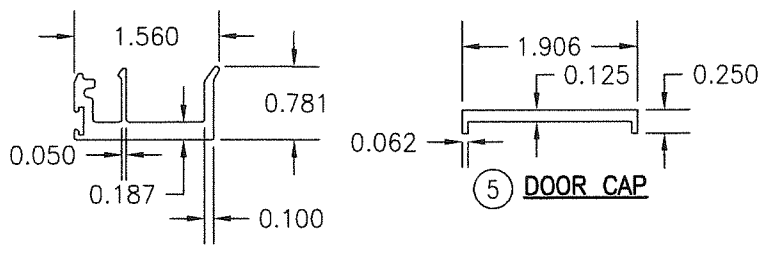
②B MEETING & HINGE
VERTICAL PANEL SLATS
(FLUTED FINISH)



③A INTERMEDIATE VERTICAL
PANEL SLATS
(SMOOTH FINISH)

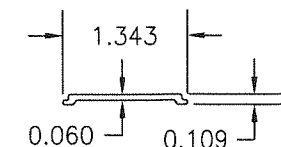


③B INTERMEDIATE VERTICAL
PANEL SLATS
(FLUTED FINISH)

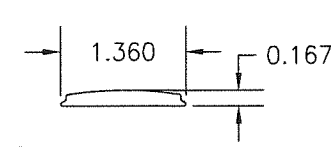


④ DOOR STOP

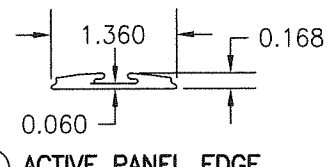
⑤ DOOR CAP



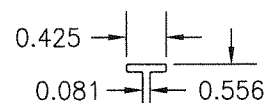
⑨ DOOR EDGE FILLER



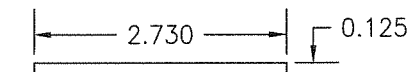
⑩ INACTIVE PANEL EDGE
FILLER



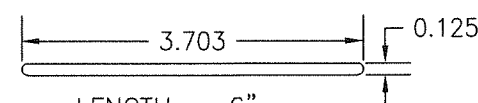
⑪ ACTIVE PANEL EDGE
FILLER



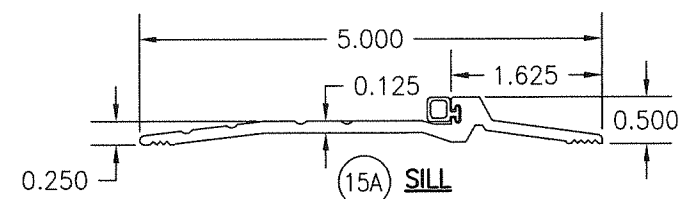
⑫ DOOR SPACER
(ALLOWS PANEL
MEMBERS TO
REVERSE DIRECTION)



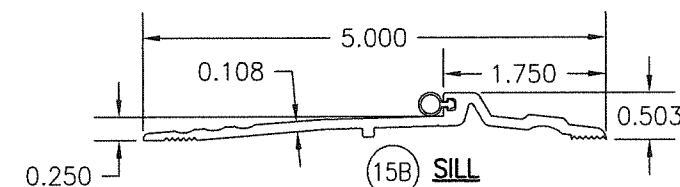
⑬ LOCK & HINGE VERTICAL
PANEL SLAT REINFORCEMENT
(1 REQ'D AT ALL HINGE
SLATS; 2 REQ'D AT
SURFACE LOCK BOLT
LOCATIONS WITH LOCK
OPTIONS 2 & 3)



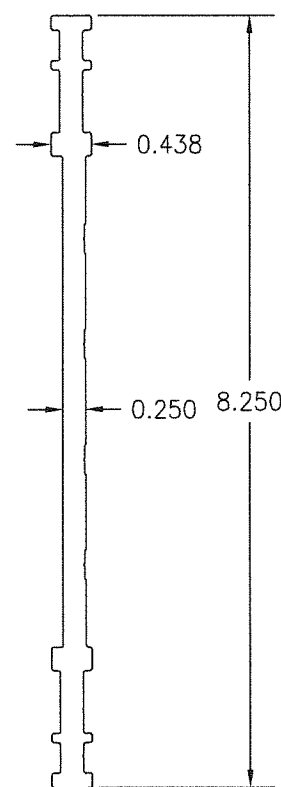
⑭ INTERMEDIATE VERTICAL
PANEL SLAT
REINFORCEMENT



⑮A SILL



⑮B SILL



LENGTH = 1 1/4"

⑰ BUTT HINGE BACK-UP PLATE

DRAWN BY:	W.R.M.	CHECKED BY:	W.S.S.
PLOT:	1=2	DATE:	04/11/13
NO.		DATE	
BY			
REVISION DESCRIPTION			

FLT-400 THERMAL ALUMINUM PANEL IMPACT OUT-SWING DOOR

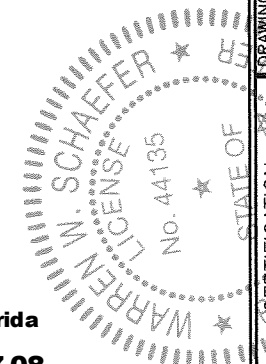
CROSS ALUMINUM PRODUCTS, INC.
1770 MAYFLOWER RD.
NILES, MI 49120
800-806-3667

W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A. (CA 6809)
26376 NADIR ROAD; UNIT 309
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

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

DRAWING NO.	REV.
1863	B
SHEET NO.	
10	OF 11

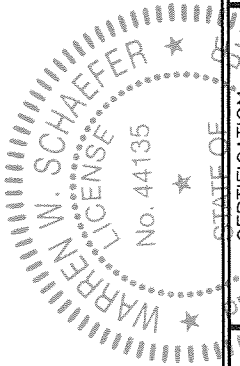
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Miami-Dade Product Control



ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD & JAMB FRAME	6063-T5 ALUMINUM
2A	MEETING & HINGE VERTICAL PANEL SLATS (SMOOTH FINISH)	6063-T5 ALUMINUM
2B	MEETING & HINGE VERTICAL PANEL SLATS (FLUTED FINISH)	6063-T5 ALUMINUM
3A	INTERMEDIATE VERTICAL PANEL SLATS (SMOOTH FINISH)	6063-T5 ALUMINUM
3B	INTERMEDIATE VERTICAL PANEL SLATS (FLUTED FINISH)	6063-T5 ALUMINUM
4	DOOR STOP	6063-T5 ALUMINUM
5	DOOR CAP	6063-T5 ALUMINUM
9	DOOR EDGE FILLER	6063-T5 ALUMINUM
10	INACTIVE PANEL EDGE FILLER	6063-T5 ALUMINUM
11	ACTIVE PANEL EDGE FILLER	6063-T5 ALUMINUM
12	DOOR SPACER (ALLOWS PANEL MEMBERS TO REVERSE DIRECTION; 1 PER TOP & BOTTOM OF EACH PANEL)	6063-T5 ALUMINUM
13	LOCK & HINGE VERTICAL PANEL SLAT REINFORCEMENT (1 REQ'D AT ALL HINGE SLATS; 2 REQ'D AT SURFACE LOCK BOLT LOCATIONS WITH LOCK OPTIONS 2 & 3)	6063-T5 ALUMINUM
14	INTERMEDIATE VERTICAL PANEL SLAT REINFORCEMENT	6063-T5 ALUMINUM
15A	SILL	PEMKO 2005T (6063-T5 ALUMINUM)
15B	SILL	NATIONAL GUARD 896V (6063-T5 ALUMINUM)
18	MULLION TOP MOUNTING PLATE 3" X 2" X 5/8" THICK	6061-T6 ALUMINUM
19	BUTT HINGE BACK-UP PLATE	6061-T6 ALUMINUM
20	1/4" X 1 1/4" X 14" LONG FLAT BAR AT CENTER LINE OF SILL	6061-T6 ALUMINUM
22	INSULBAR	TECHNOFORM POLYIMIDE 66
HARDWARE		
25	REMOVABLE MULLION ASSEMBLY (LOCK OPTION 1)	VON DUPRIN KR9954 (USED WITH ITEM 31)
26	TOP MULLION PLATE	SUPPLIED WITH PART ITEM 25 (ALL A36 STEEL)
27	TOP MULLION PLATE FUSIBLE SPACER	
28	LOCKING MULLION PLATE	
29	3" X 2" X 1/8" TUBE MULLION	
30	BOTTOM MULLION PLATE	
31	3-POINT SURFACE VERTICAL ROD PANIC LOCK DEVICE (LOCK OPTION 1)	VON DUPRIN 9957NL-OP & 9957EOV 299F
32	PUSH-PULL HANDLE WITH LOCK OPTIONS 1 & 3	AS REQ'D WITH ITEM 31
33	TOP & BOTTOM SURFACE BOLTS	HAGAR 276D
34	TOP & BOTTOM FLUSH BOLTS	HAGAR 282
35	DEAD BOLT (LOCK OPTION 2)	SARGENT 28-487
36	PASSAGE LOCK (LOCK OPTION 2)	SARGENT 28-10G05-LL
37	2-POINT CONCEALED VERTICAL ROD PANIC LOCK DEVICE (LOCK OPTION 3)	SARGENT MD8600
38	CONTINUOUS GEAR HINGE	HAGAR 780-111HD (ALUMINUM)
39	CONTINUOUS GEAR HINGE	SELECT PRODUCTS SL-18-HD (ALUMINUM)
40	BUTT HINGE 4 1/2" X 4 1/2"	HAGAR BB-1199 (BRASS OR S.S.)
41	BUTT HINGE 4 1/2" X 4 1/2"	MCKINEY T4A3786 (BRASS OR S.S.)

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
SEALS & SEALANTS		
44	HEAD SEAL USED WITH LOCK OPTIONS 1 & 3	PEMKO 347_68R (ALUMINUM)
45	HEAD SEAL USED WITH LOCK OPTIONS 1 & 3	NATIONAL GUARD 123NAX124A (ALUMINUM)
46	PILE SEAL	ULTRAFAB, INC. F-PILE
47	RIGID FOAM INSULATION	CROSS (POLYISOCYANURATE)
48	BOTTOM DOOR SWEEP	PEMKO 345_V (ALUMINUM WITH VINYL SEAL)
49	BOTTOM DOOR SWEEP	NATIONAL GUARD 345_V (ALUMINUM WITH VINYL SEAL)
50	PERIMETER GASKET	PEMKO 306_V (ALUMINUM WITH VINYL SEAL)
51	PERIMETER GASKET	NATIONAL GUARD 190_V (ALUMINUM WITH VINYL SEAL)
52	ASTRAGAL	NATIONAL GUARD 178SA (ALUMINUM WITH SILICONE SEAL)
53	PILE SEAL	ULTRAFAB, INC. D-PILE
54	SELF ADHESIVE GASKET	PEMKO 5110 (NEOPRENE/SILICONE)
55	SELF ADHESIVE GASKET	NATIONAL GUARD 5100S (NEOPRENE/SILICONE)
FASTENERS		
60	NO. 10 X 1" PHTF SCREW	3 PER HEAD TO JAMB CORNER INTO SCREW SPLINE
61	NO. 6 X 5/8" FHTF SCREW	THROUGH DOOR CAP INTO PANEL SLAT SCREW SPLINES
62	1/4-20 X 1" FHM SCREW	4 PER ITEM 18
63	1/4-20 X 3/8" PHM SCREW	2 PER ITEM 27
64	12-24 X 5/8" FHM SCREW	2 9/16" FROM ENDS & 5 1/8" MAX. O.C.
65	12-24 X 5/8" FHM SCREW	4 PER ITEM 19
66	12-24 X 3/8" FHM SCREW	4 PER BUTT HINGE ITEMS 40 & 41
67	5/16-18 X 1 1/4" FHM SCREW	2 PER ITEM 26
68	5/16-18 X 5/8" FHM SCREW	2 PER ITEM 26
71	3/8-16 ALL THREAD	PER PANEL CONSTRUCTION DETAIL ON SHEET 2
72	3/8 LOCK WASHER	
73	3/8-18 HEAVY DUTY NUT	
74	12-24 X 1/4" FHM SCREW	4 PER ITEM 20

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CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424			
STATE OF FLORIDA CERTIFICATION No. 44135 08/13/2022 PROFESSIONAL ENGINEER WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1863		REV. B	
SHEET NO. 11 OF 11			