

c:\users\milton\engineering\express\production - documents\projects\23-59952 multiple products 2023 fbc update fl 5499\work\2023 fbc\drawings & cad\23-59953a - fl5499.2 - doc.dwg
8/29/2023 11:53 AM MILTON

ELITE 2000 ALUMINUM STOREFRONT GLAZING SYSTEM

NON-IMPACT RESISTANT

VALID FOR USE INSIDE AND OUTSIDE THE HVHZ (SEE LIMITATIONS HEREIN)
NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. A DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR CERTIFYING THE APPLICATION OF THIS INFORMATION TO ANY SITE-SPECIFIC LOCATION.

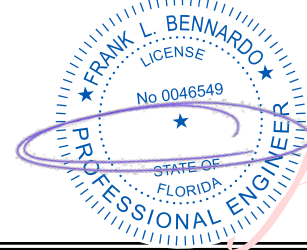
GENERAL NOTES

- THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE EIGHTH EDITION (2023), FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ),SYSTEM TESTED PER:
- TAS 201-94
- AAMA 501-05
- WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
- DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY 1.5 SAFETY FACTOR.
- POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE. SITE SPECIFIC LOAD WIND LOAD REQUIREMENTS SHALL BE DETERMINED IN ACCORDANCE WITH ASCE 7 AND THE FLORIDA BUILDING CODE EIGHTH EDITION (2023) BY SEPARATE ENGINEERING CERTIFICATION AND SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUE LISTED HEREIN FOR ANY ASSEMBLY WITHIN THE LIMITATIONS STATED HEREIN.
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- THE ARCHITECT/ENGINEER OF RECORD FOR THE PROJECT SUPERSTRUCTURE WITH WHICH THIS DESIGN IS USED SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO EXISTING STRUCTURE
- ANCHOR EMBEDMENT SPECIFIED IS INTO HOST STRUCTURE MINIMUM.
- ALL EXTRUSIONS SHALL BE 6063-T5 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE.
- EXTERIOR SEAM OF FRAME CORNERS, INSTALLATION SCREWS, AND GLAZING BEAD ENDS SHALL BE SEALED WITH SILICONE.
- FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3.7.2 BY THE ALUMINUM ASSOCIATION IN.C, AND ANY APPLICABLE FEDERAL, STATE AND OR LOCAL CODES.
- REFER TO FASTENER MANUFACTURER'S PUBLISHED DATA SHEETS AND RECOMMENDATIONS FOR FASTENER INSTALLATION INSTRUCTIONS.
- ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI.

- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- NOT APPROVED FOR LARGE AND SMALL MISSILE IMPACT APPLICATIONS. SEE GLASS TYPES FOR ANY RESTRICTIONS. AN IMPACT PROTECTION SYSTEM MUST BE ADOPTED IF REQUIRED BY CODE.
- TEST REPORTS: CONSTRUCTION TESTING CORP. REPORT # 00-030
- THIS SYSTEM MAY BE USED IN CONJUNCTION WITH ELITE DOOR SERIES 3000 OUT SWING ENTRY DOOR
- CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED AND ARE NOT IN THIS CERTIFICATION.
- WINDOW TO SUBSTRATE WATER PROOFING IS NOT INCLUDED IN THIS DOCUMENT AND MUST BE ADDRESSED ON A SITE SPECIFIC BASIS. NOT BY ELITE ALUMINUM CORP.
- ENGINEER SEAL AFFIXED HERETO VALIDATE STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- PRESSURE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.
- ALTERATIONS ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- PRODUCT SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER SYSTEM CONTAINING THE FOLLOWING:
ELITE ALUMINUM CORPORATION
4650 LYONS TECHNOLOGY PARKWAY
COCONUT CREEK, FLORIDA 33073
TAS 202
APPROVED BY FLORIDA BUILDING COMMISSION
FLORIDA PRODUCT APPROVAL NUMBER FL#5499.2

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

AUGUST 29, 2023



Digitally signed by
Frank Bennardo
Date: 2023.08.29
15:14:28 -04'00'

NOTE REGARDING USE OF THIS DOCUMENT & USE OUTSIDE FLORIDA:

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. THIS PRODUCT EVALUATION IS VALID FOR USE IN **FLORIDA ONLY**. USE OF THIS EVALUATION REQUIRES A REVIEW & CERTIFICATION BY A LOCAL DESIGN PROFESSIONAL WHO SHALL BE RESPONSIBLE FOR THE PROPER ADAPTATION OF THIS GENERAL PERFORMANCE EVALUATION TO ANY SITE-SPECIFIC PROJECT. CONTACT THIS OFFICE AT **ENGINEERINGEXPRESS.COM/QUOTE** FOR ASSISTANCE WITH YOUR PROJECT-SPECIFIC NEEDS & FOR ADAPTATION & CERTIFICATION OF THIS DOCUMENT OUTSIDE OF FLORIDA.

SHEET INDEX

# SHEET	DESCRIPTION
1	COVER SHEET
2	ELEVATIONS
3-4	DETAILS
5	GLASS LOADING CHARTS
6-8	MULLION LOADING CHARTS
9	ANCHORING SCHEDULE
10	PARTS & PARTS LIST
11	FRAME ASSEMBLY

TERMINOLOGY:

THE FOLLOWING ABBREVIATIONS APPEAR IN THIS APPROVAL: "U.N.O." FOR "UNLESS NOTED OTHERWISE", "FBC" FOR "FLORIDA BUILDING CODE", "CORP." FOR "CORPORATION", "ALUM" FOR "ALUMINUM", "ASD" FOR "ALLOWABLE STRESS DESIGN", "ASTM" FOR "AMERICAN SOCIETY FOR TESTING AND MATERIALS", "CS" FOR "CARBON STEEL", "CONN" FOR "CONNECTION", "EMBED" FOR "EMBEDMENT", "DIST." FOR "DISTANCE", "GA" FOR "GAUGE", "HVHZ" FOR "HIGH-VELOCITY HURRICANE ZONE", "LB" FOR "POUND", "MAX" FOR "MAXIMUM", "N.T.S." FOR "NOT TO SCALE", "PSF" FOR "POUNDS PER SQUARE FOOT (lb/ft²)", "KSI" FOR "KILOPOUNDS PER SQUARE INCH (klb/in²)", "SPECS" FOR "SPECIFICATIONS", "&" FOR "AND", "MAX" FOR "MAXIMUM", "W/" FOR "WITH", "EXIST." FOR "EXISTING", "STRUCT." FOR "STRUCTURE", "SHT" FOR "SHEET", "REF" FOR "REFERENCE", "D.L.O." FOR "DAYLIGHT OPENING". CONTACT ENGINEERING EXPRESS FOR ADDITIONAL ABBREVIATION/TERMINOLOGY CLARIFICATIONS.

VISIT [ECALC.IO/59953](https://ecalculator.com/59953)

FOR SITE-SPECIFIC DEVIATIONS
& MORE INFORMATION ABOUT THIS DOCUMENT
OR SCAN THIS QR CODE

VISIT [ENGINEERINGEXPRESS.COM/STORE](https://engineeringexpress.com/store)
FOR ADDITIONAL PLANS, REPORTS & RESOURCES



FL 5499.2

**ENGINEERING
EXPRESS®**

POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

Elite Aluminum Corporation

4650 Lyons Technology Parkway
Coconut Creek, FL 33073

Elite 2000 Storefront Glazing System
Non-Impact Resistance

FBC 8TH ED. (2023) | FLORIDA STATEWIDE APPROVAL

REMARKS	DATE	DRWN	CHKD
PREV. SUBMITTAL (20-20074)	07/13/20	JEM	AJP
2023 FBC UPDATE	08/15/23	MRT	RWN

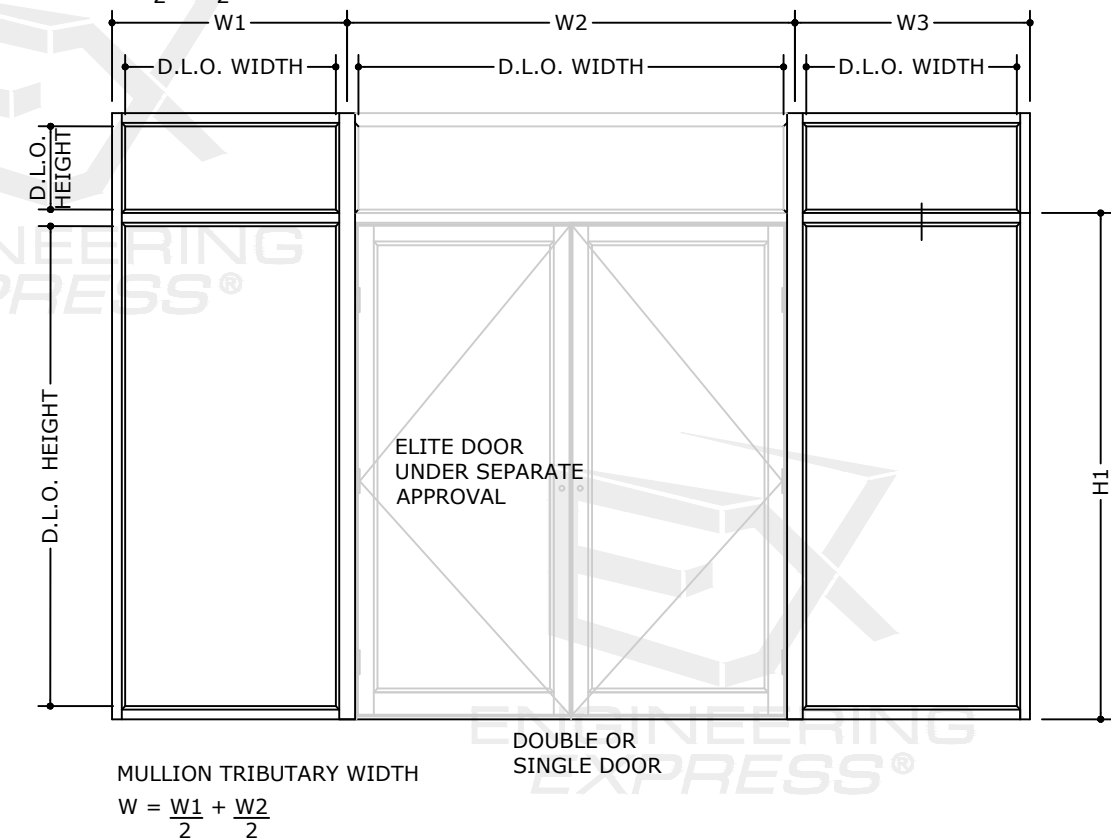
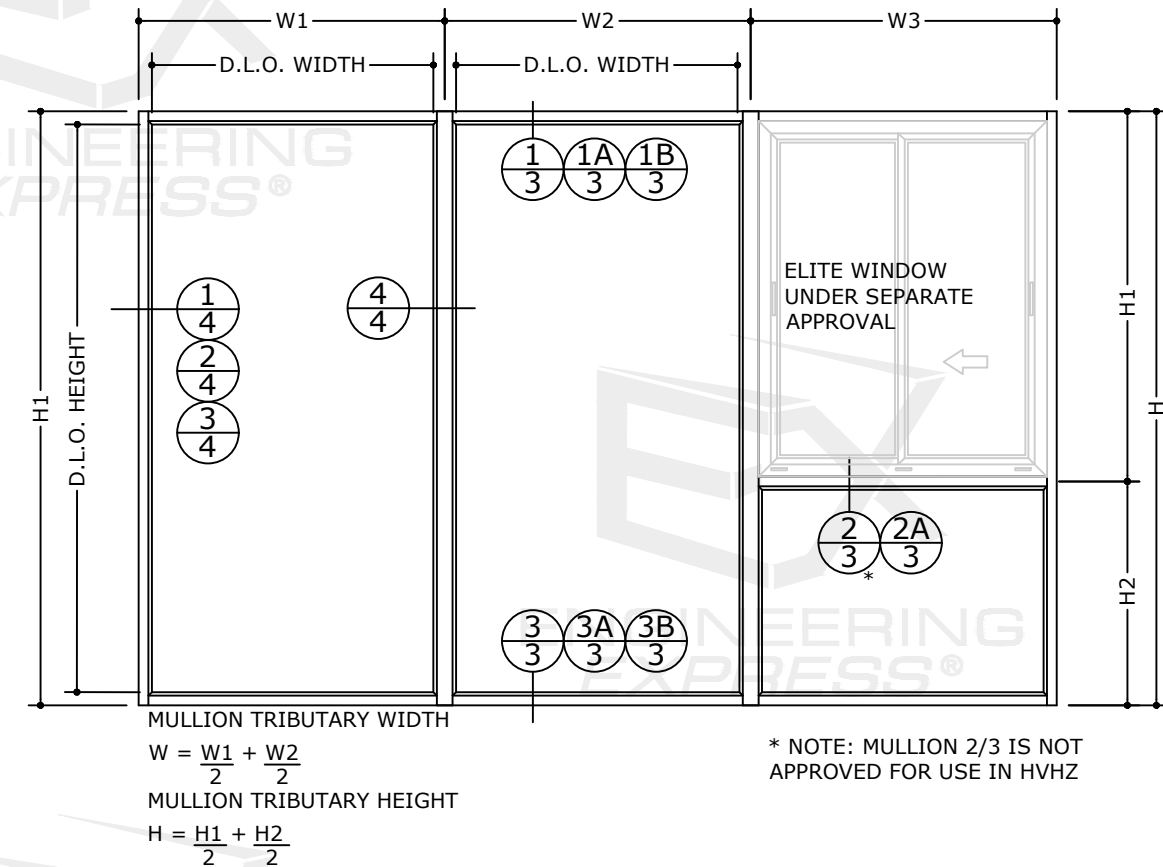
23-59953

SCALE: NTS UNLESS NOTED

1 OF 11

FL

TYPICAL ELEVATIONS



FL 5499.2

**EXENGINEERING
EXPRESS®**

POSTAL ADDRESS:

401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

Elite Aluminum Corporation
4650 Lyons Technology Parkway
Coconut Creek, FL 33073

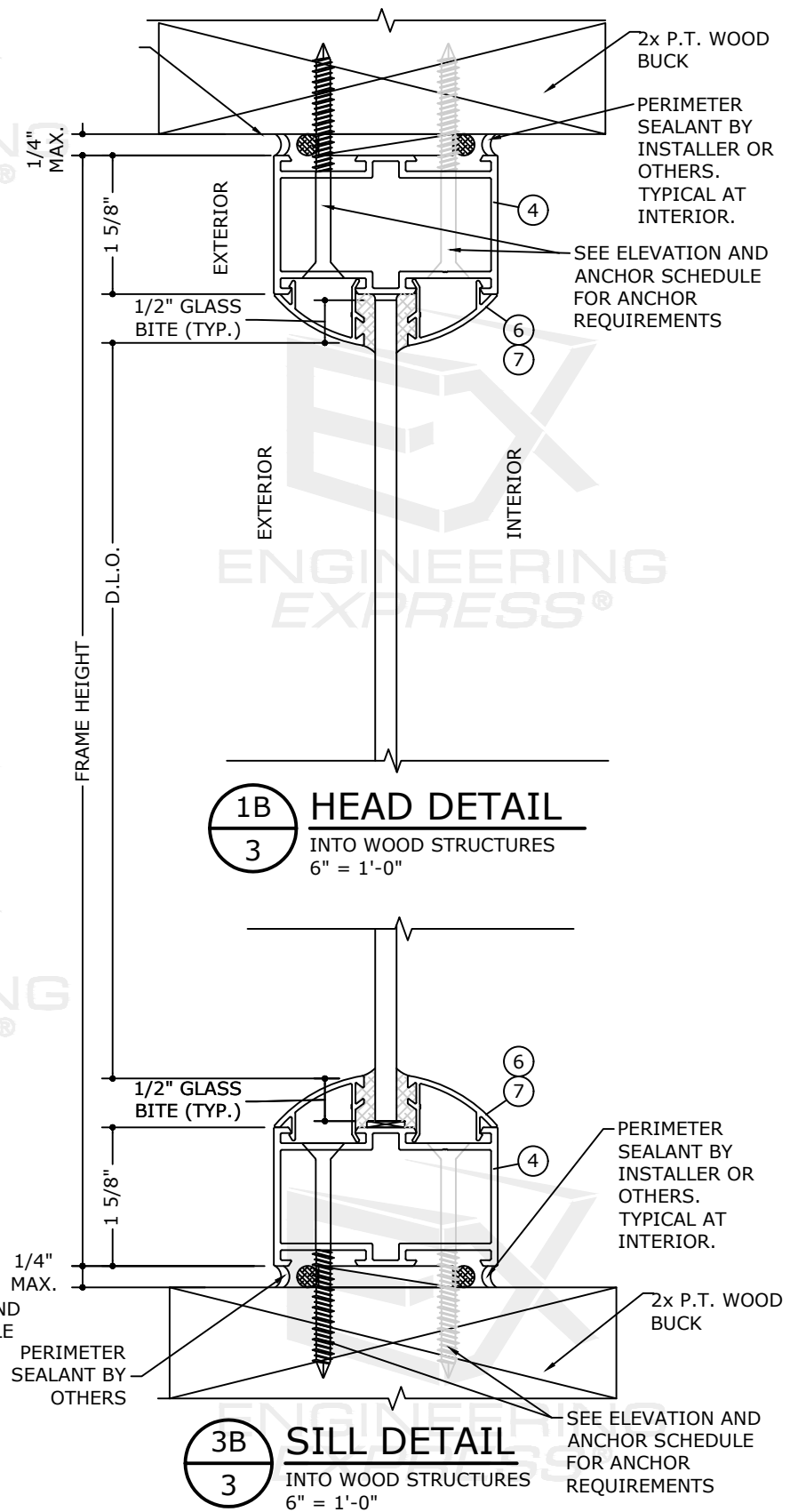
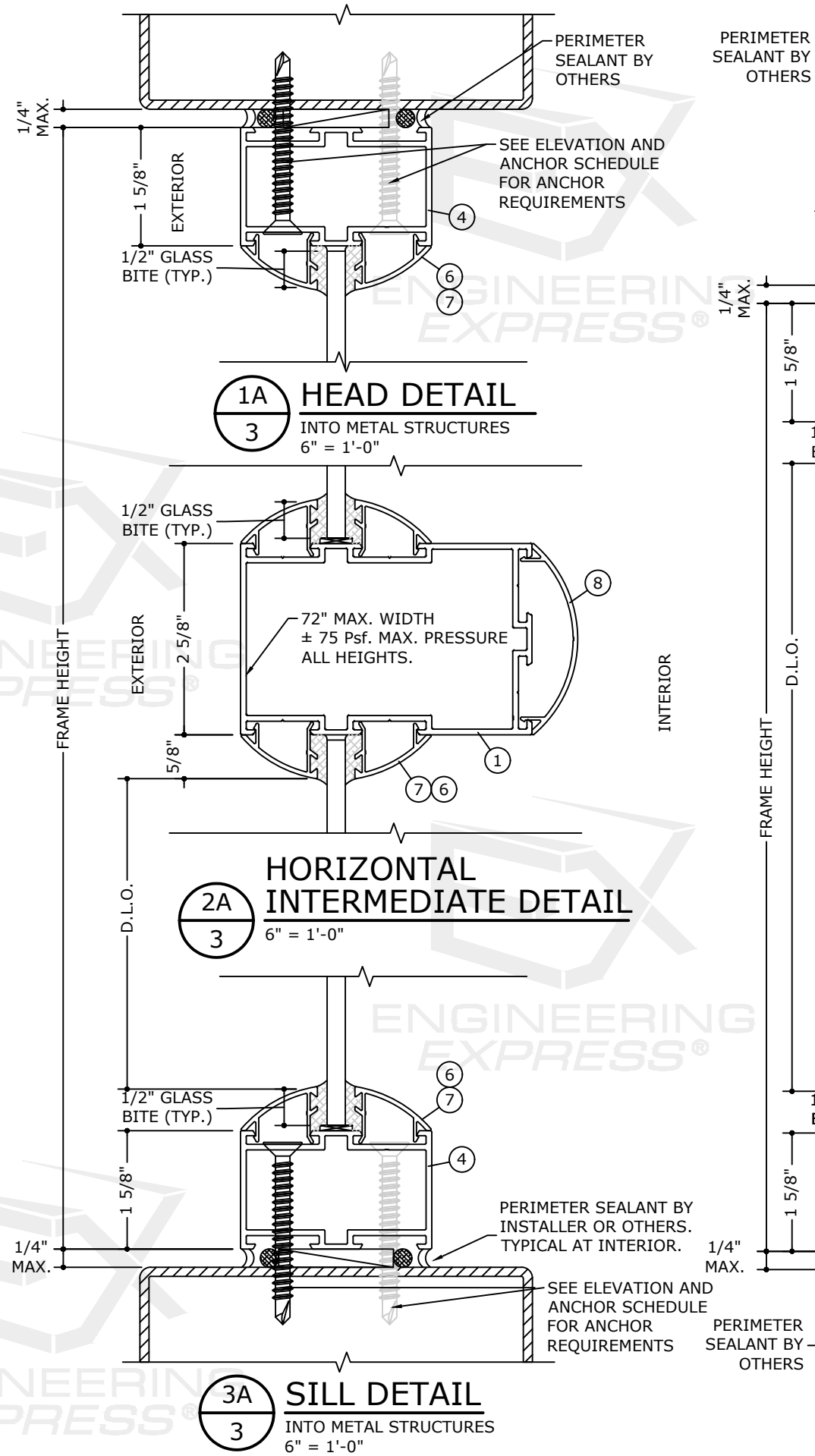
Elite 2000 Storefront Glazing System
Non-Impact Resistance

FBC 8TH ED. (2023) | FLORIDA STATEWIDE APPROVAL

[illegible]

23-59953

SCALE: NTS UNLESS NOTED



**ENGINEERING
EXPRESS®**

401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

Elite Aluminum Corporation
4650 Lyons Technology Parkway

4650 Lyons Technology Parkway
Coconut Creek, FL 33073

Elite 2000 Storefront Glazing System

FBC 8TH ED. (2023) | FLORIDA STATEWIDE APPROVAL

[illegible]

23-59953

SCALE: NTS UNLESS NOTED

3

FL

EXENGINEERING[®]EXPRESS[®]

401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

Elite Aluminum Corporation
4650 | Vons Technology Parkway

4650 Lyons Technology Parkway
Coconut Creek, FL 33073

Elite 2000 Storefront Glazing System

FFBC 8TH ED. (2023) | FLORIDA STATEWIDE APPROVAL

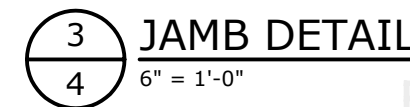
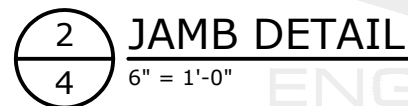
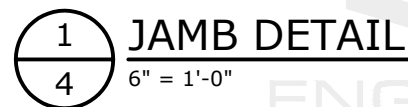
[illegible]

COPYRIGHT ENGINEERING EXPRESS®

SCALE: NTS UNLESS NOTED

4

11





FL 5499.2



POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

Elite Aluminum Corporation

0 Lyons Technology Parkway
Coconut Creek, FL 33073

Elite 2000 Storefront Glazing System

Non-Impact Resistance

[illegible]

COPYRIGHT ENGINEERING EXPRESS®

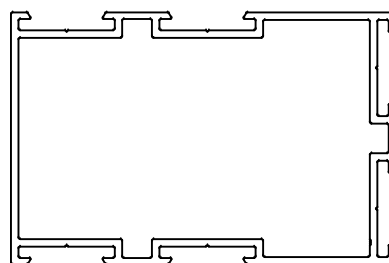
23-59953

SCALE: NTS UNLESS NOTED

6

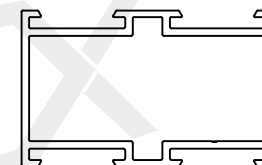
OF
1

21013 VERTICAL MULLION
WITH REINFORCEMENT
TYPE 1



72" MAX. WIDTH
± 75 Psf MAX. PRESSURE
ALL HEIGHTS.

21013 HORIZONTAL MULLION



55" MAX. WIDTH
± 56 Psf MAX. PRESSURE
ALL HEIGHTS.

21013 HORIZONTAL MULLION

MULLION W/ REINFORCEMENT TYPE 1			
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	24	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 5⁄8		61.9	61.9
66		61.9	61.9
72		61.9	61.9
78		61.9	61.9
84		61.9	61.9
90		61.9	61.9
96		61.9	61.9
99		61.9	61.9
102		61.9	61.9
108		61.9	61.9
109 5⁄8		61.9	61.9
132		61.9	61.9
138		61.9	61.9
144	61.9	61.9	
150	61.9	61.9	
156	61.9	61.9	
162	61.9	61.9	

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	30	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 ⁵ / ₈		61.9	61.9
66		61.9	61.9
72		61.9	61.9
78		61.9	61.9
84		61.9	61.9
90		61.9	61.9
96		61.9	61.9
99		61.9	61.9
102		61.9	61.9
108		61.9	61.9
109 ⁵ / ₈		61.9	61.9
132		61.9	61.9
138		61.9	61.9
144	61.9	61.9	
150	61.9	61.9	
156	61.9	61.9	
162	61.9	61.9	

MULLION W/ REINFORCEMENT TYPE 1			
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	36	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 ⅜		61.9	61.9
66		61.9	61.9
72		61.9	61.9
78		61.9	61.9
84		61.9	61.9
90		61.9	61.9
96		61.9	61.9
99		61.9	61.9
102		61.9	61.9
108		61.9	61.9
109 ⅝	61.9	61.9	
132	61.9	61.9	
138	61.9	61.9	

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	42	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 5/8		61.9	61.9
66		61.9	61.9
72		61.9	61.9
78		61.9	61.9
84		61.9	61.9
90		61.9	61.9
96		61.9	61.9
99		61.9	61.9
102		61.9	61.9
108	61.9	61.9	
109 5/8	61.9	61.9	

MULLION W/ REINFORCEMENT TYPE 1			
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	48	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 5⁄8		61.9	61.9
66		61.9	61.9
72		61.9	61.9
78		61.9	61.9
84		61.9	61.9
90		61.9	61.9
96		61.9	61.9
99		61.9	61.9
102	61.9	61.9	

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	51	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 ⁵ / ₈		61.9	61.9
66		61.9	61.9
72		61.9	61.9
78		61.9	61.9
84		61.9	61.9
90		61.9	61.9
96		61.9	61.9
99	61.9	61.9	

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	54	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 3⁄8		61.9	61.9
66		61.9	61.9
72		61.9	61.9
78		61.9	61.9
84		61.9	61.9
90		61.9	61.9

MULLION W/ REINFORCEMENT TYPE 1			
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	58 5/8	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 3/8		61.9	61.9
66		61.9	61.9
72		61.9	61.9
78		61.9	61.9
84		61.9	61.9

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	66	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 $\frac{5}{8}$		61.9	61.9
66		61.9	61.9
72		61.9	61.9

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	72	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 ³ / ₈		61.9	61.9
66		61.9	61.9

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	78	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 $\frac{5}{8}$		61.9	61.9

MULLION W/ REINFORCEMENT TYPE 1			
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	84	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9
58 3/8		61.9	61.9

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	90	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9
54		61.9	61.9

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	96	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61.9	61.9

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	99	61.9	61.9
30		61.9	61.9
36		61.9	61.9
42		61.9	61.9
48		61.9	61.9
51		61	61



FL 5499.2



POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

Elite Aluminum Corporation

4650 Lyons Technology Parkway
Coconut Creek, FL 33073

Elite 2000 Storefront Glazing System

FLORIDA STATEWIDE APPROVAL

[illegible]

23-59953

SCALE: NTS UNLESS NOTED

7

OF
1

WITH AND WITHOUT HORIZONTALS

MULLION W/ REINFORCEMENT TYPE 2			
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	24	85	75
30		85	75
36		85	75
42		85	75
48		85	75
51		85	75
54		85	75
58 5⁄8		85	75
66		85	75
72		85	75
78		85	75
84		85	75
90		85	75
96		85	75
99		85	75
102		85	75
108		85	75
109 5⁄8		85	75
132		85	75
138		85	75
144	85	75	
150	85	75	
156	85	75	
162	85	75	

MULLION W/ REINFORCEMENT TYPE 2			
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	36	85	75
30		85	75
36		85	75
42		85	75
48		85	75
51		85	75
54		85	75
58 5⁄8		85	75
66		85	75
72		85	75
78		85	75
84		85	75
90		85	75
96		85	75
99		85	75
102		85	75
108		85	75
109 5⁄8		85	75
132		85	75
138		85	75
144	85	75	
150	85	75	
156	85	75	
162	85	75	

MULLION W/ REINFORCEMENT TYPE 2			
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	48	85	75
30		85	75
36		85	75
42		85	75
48		85	75
51		85	75
54		85	75
58 5⁄8		85	75
66		85	75
72		85	75
78		85	75
84		85	75
90		85	75
96		85	75
99		85	75
102		85	75
108	85	75	
109 5⁄8	85	75	
132	85	75	

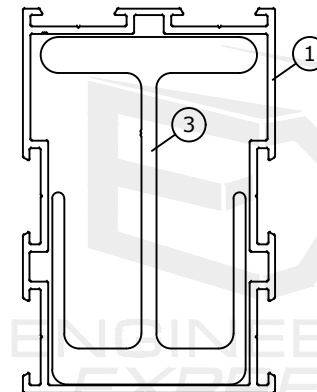
MULLION W/ REINFORCEMENT TYPE 2			
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	54	85	75
30		85	75
36		85	75
42		85	75
48		85	75
51		85	75
54		85	75
58 5⁄8		85	75
66		85	75
72		85	75
78		85	75
84		85	75
90		85	75
96		85	75
99		85	75
102		85	75
108		85	75
109 5⁄8	85	75	

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	30	85	75
30		85	75
36		85	75
42		85	75
48		85	75
51		85	75
54		85	75
58 ⁵ / ₈		85	75
66		85	75
72		85	75
78		85	75
84		85	75
90		85	75
96		85	75
99		85	75
102		85	75
108		85	75
109 ⁵ / ₈		85	75
132		85	75
138		85	75
144	85	75	
150	85	75	
156	85	75	
162	85	75	

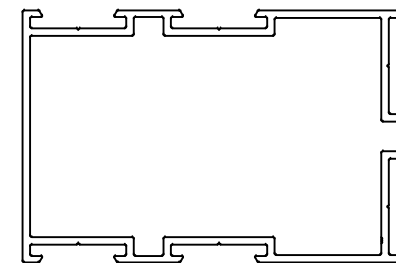
NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	42	85	75
30		85	75
36		85	75
42		85	75
48		85	75
51		85	75
54		85	75
58 5/8		85	75
66		85	75
72		85	75
78		85	75
84		85	75
90		85	75
96		85	75
99		85	75
102		85	75
108		85	75
109 5/8		85	75
132		85	75
138		85	75
144	85	75	
150	85	75	

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	51	85	75
30		85	75
36		85	75
42		85	75
48		85	75
51		85	75
54		85	75
58 ⁵ / ₈		85	75
66		85	75
72		85	75
78		85	75
84		85	75
90		85	75
96		85	75
99		85	75
102		85	75
108	85	75	
109 ⁵ / ₈	85	75	

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	58 5/8	85	75
30		85	75
36		85	75
42		85	75
48		85	75
51		85	75
54		85	75
58 5/8		85	75
66		85	75
72		85	75
78		85	75
84		85	75
90		85	75
96		85	75
99		85	75
102		85	75
108	85	75	
109 5/8	85	75	

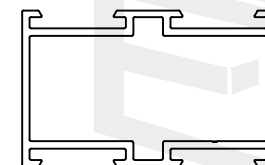


21013 VERTICAL MULLION
WITH REINFORCEMENT
TYPE 2



72" MAX. WIDTH
± 75 Psf MAX. PRESSURE
ALL HEIGHTS.

21013 HORIZONTAL MULLION

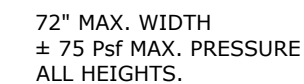
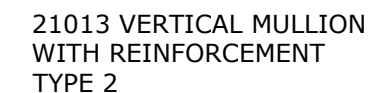


55" MAX. WIDTH
± 56 Psf MAX. PRESSURE
ALL HEIGHTS.

21013 HORIZONTAL MULLION

FL

NOMINAL DIMS		PRESSURES	
WIDTH (in.)	HEIGHT (in.)	NEGATIVE (Psf)	POSITIVE (Psf)
24	109 $\frac{5}{8}$	85	75
30		85	75
36		85	75
42		85	75
48		85	75
51		85	75
54		85	75
58 $\frac{5}{8}$		85	75



55" MAX. WIDTH
± 56 Psf MAX. PRESSURE
ALL HEIGHTS.

21013 HORIZONTAL MULLION

EXENGINEERING
EXPRESS®

POSTAL ADDRESS:
#401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

4650 Lyons Technology Parkway
Coconut Creek, FL 33073

Elite 2000 Storefront Glazing System
Non-Impact Resistance

NON-IMPACT RESISTANCE

[illegible]

COPYRIGHT ENGINEERING EXPRESS®

SCALE: NTS UNLESS NOTED

c:\users\milton\engineering express\production - documents\projects\23-59952 multiple products 2023 fbc update fl 5499\work\2023 fbc\drawings & cad\23-59953a - fl5499.2 - doc.dwg
8/29/2023 11:54 AM MILTON

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

AUGUST 29, 2023



FL 5499.2



POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

Elite Aluminum Corporation
4650 Lyons Technology Parkway
Coconut Creek, FL 33073

Elite 2000 Storefront Glazing System
Non-Impact Resistance
FBC 8TH ED. (2023) | FLORIDA STATEWIDE APPROVAL

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-28074)	JEM	AJP	07/13/20
2023 FBC UPDATE	MRT	RWN	08/15/23

COPYRIGHT ENGINEERING EXPRESS®

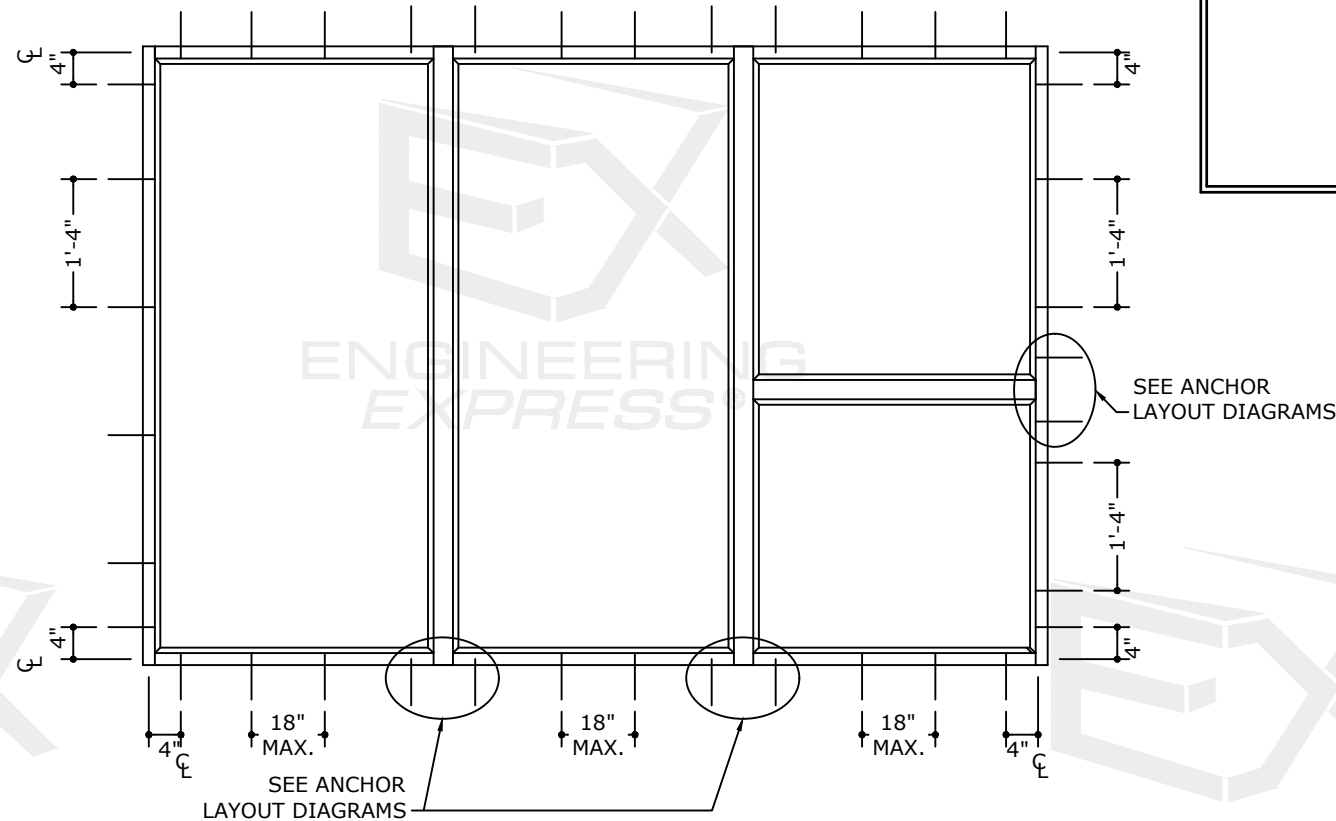
23-59953

SCALE: NTS UNLESS NOTED

9

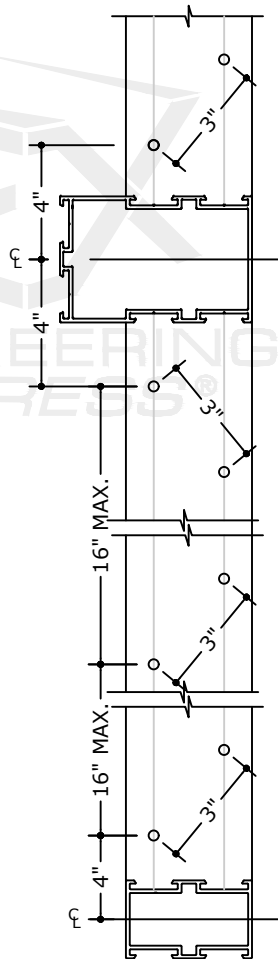
OF
11

ANCHOR SPACING LAYOUT

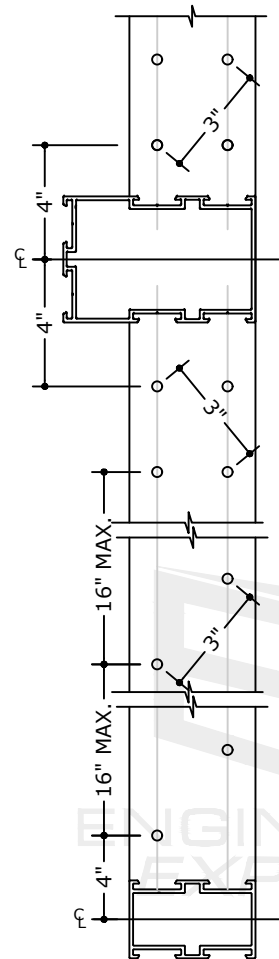


TYPICAL ANCHORS:

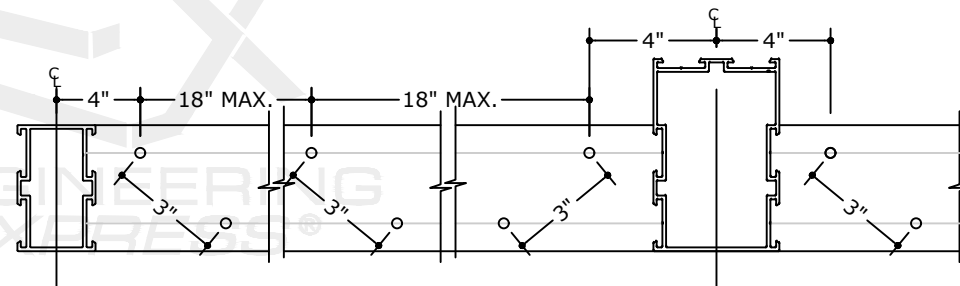
TYPE 'A'	
CONCRETE	DIRECTLY INTO CONCRETE OR GROUT FILLED BLOCK (3000 PSI. MIN. / f'm=2000 Psi MIN.) 5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) 1-1/2" MIN. EMBEDMENT
TYPE 'B'	
WOOD	INTO 2BY WOOD BUCKS OR WOOD STRUCTURES (SYP#2 G=0.55 MIN. 1 1/2" MIN. THICKNESS) 5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) 1-1/2" MIN. PENETRATION
TYPE 'C'	
METAL	INTO METAL STRUCTURES (3 PINCHES PASS THE THREAD PLANE MIN.) STEEL: 1/8" THK MIN. (Fy=36 KSI MIN) ALUMINUM: 1/8" THK MIN. (6063-T5 MIN) 5/16-24 DIA. DRIL-FLEX BY 'DEWALT' (GRADE 5 MIN) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
TYPICAL EDGE DISTANCE INTO CONCRETE/HOLLOW BLOCK/GROUT FILLED BLOCK= 2-1/2" MIN. INTO WOOD STRUCTURE = 1" MIN. INTO METAL STRUCTURE = 3/4" MIN.	



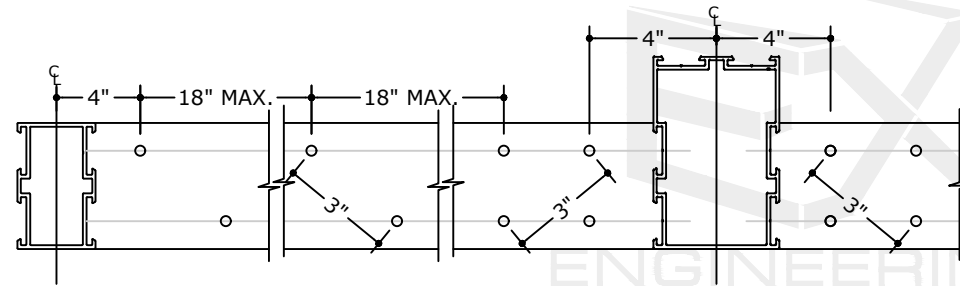
JAMB ANCHOR LAYOUT
(INTO CONCRETE OR METAL)



JAMB ANCHOR LAYOUT
(INTO WOOD)



HEAD/ SILL ANCHOR LAYOUT
(INTO CONCRETE OR METAL)



HEAD/ SILL ANCHOR LAYOUT
(INTO WOOD)



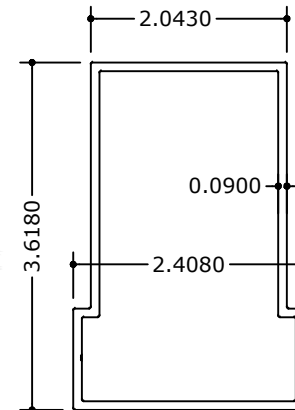
2.6252

4.0000

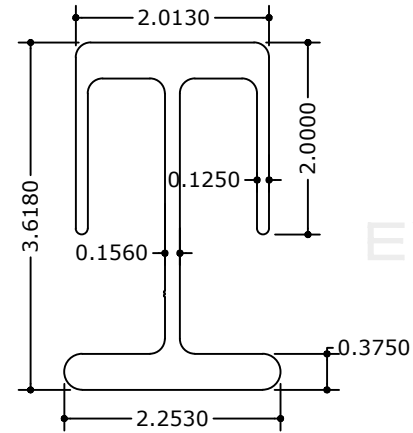
0.0780
TYP

ENGINEERING
EXPRESSION

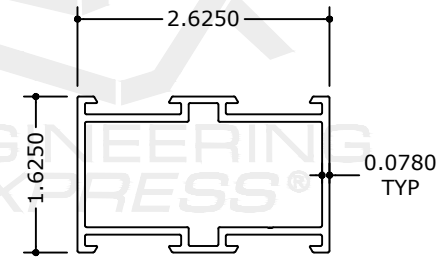
① VERTICAL MULLION



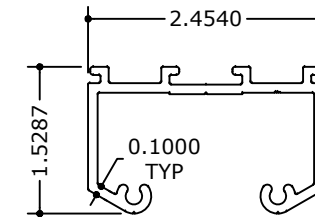
2 VERTICAL MULLION
INSERT (REINF.)



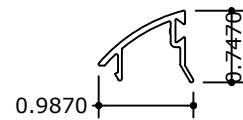
3 VERTICAL MULLION REINFORCEMENT



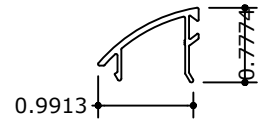
4 PERIMETER EXTRUSION



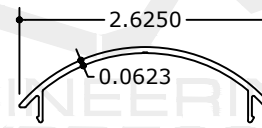
5 CONNECTION BRACKET



6 GLAZING CLIP
(ROUNDED)



7 GLAZING CLIP
(ROUNDED)



8 SNAP TRIM (ROUNDED)

PARTS LIST			
	PART	MATERIAL	PART No.
1	VERTICAL MULLION	ALU 6063-T5	21013
2	VERTICAL MULLION INSERT	ALU 6063-T6	API-2510
3	VERTICAL MULLION REINFORCEMENT	ALU 6063-T5	22056
4	HEAD/ SILL/ JAMB / HORIZ. INTERMEDIATE	ALU 6063-T5	21002
5	CONNECTION BRACKET	ALU 6063-T6	22001
6	GLAZING STOP	ALU 6063-T5	22119
7	GLAZING STOP	ALU 6063-T5	22107
8	SNAP TRIM	ALU 6063-T5	-

PARTS LIST			
	PART	MATERIAL	PART No.
1	VERTICAL MULLION	ALU 6063-T5	21013
2	VERTICAL MULLION INSERT	ALU 6063-T6	API-2510
3	VERTICAL MULLION REINFORCEMENT	ALU 6063-T5	22056
4	HEAD/ SILL/ JAMB / HORIZ. INTERMEDIATE	ALU 6063-T5	21002
5	CONNECTION BRACKET	ALU 6063-T6	22001
6	GLAZING STOP	ALU 6063-T5	22119
7	GLAZING STOP	ALU 6063-T5	22107
8	SNAP TRIM	ALU 6063-T5	-

FL 5499.2



**ENGINEERING
EXPRESS®**

POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

Elite Aluminum Corporation
4650 Lyons Technology Parkway

4650 Lyons Technology Parkway
Coconut Creek, FL 33073

Elite 2000 Storefront Glazing System
Non-Impact Resistance

FBC 8TH ED. (2023) | FLORIDA STATEWIDE APPROVAL

REMARKS	DRWN	CHKD	DATE
PREV SUBMITTAL (20-28074)	JEM	AJP	07/13/20
2023 FBC UPDATE	MRT	RWN	08/15/23
-			-
-			-
-			-

23-59953

SCALE: NTS UNLESS NOTED

10

FL 5499.2

EXENGINEERING
EXPRESS®

POSTAL ADDRESS:
401 W. ATLANTIC AVE R10 BOX 219
DELRAY BEACH, FL 33444
ENGINEERINGEXPRESS.COM

Elite Aluminum Corporation
4650 | Vons Technology Parkway

4650 Lyons Technology Parkway
Coconut Creek, FL 33073

Elite 2000 Storefront Glazing System

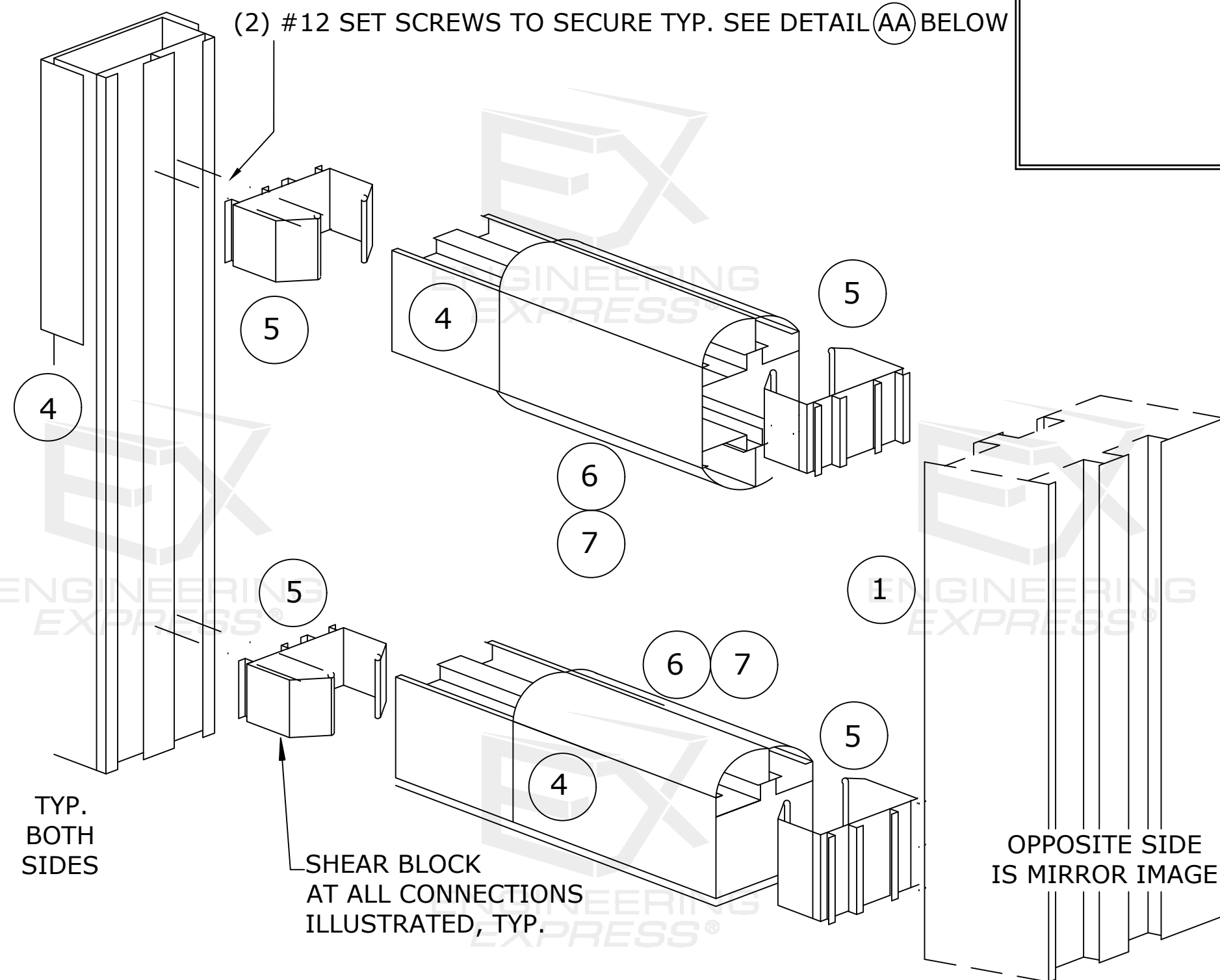
FBC 8TH ED. (2023) | FLORIDA STATEWIDE APPROVAL

REMARKS	DRWN	CHKD	JEM	AJP	RWN	DATE
PREV. SUBMITTAL (20-28074)						07/13/20
2023 FBC UPDATE	MRT					08/15/23
-			-			-
-			-	-		-
-				-		

23-59953

SCALE: NTS UNLESS NOTED

11

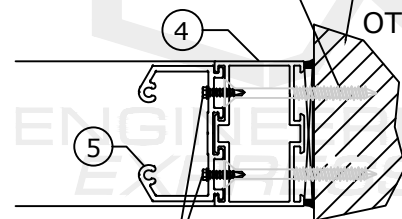


FRAME ASSEMBLY DETAIL

NOTE:
SEAL ALL CORNERS WITH
DOWSIL 795 SILICONE OR
C.R. LAURENCE SJ88
NARROW JOINT SEALER.

SEE ELEVATION AND
ANCHOR SCHEDULE
FOR ANCHOR
REQUIREMENTS.

EXISTING HOST
STRUCTURE BY
OTHERS, TYP.



(2) #12 SMS PER
CONNECTION
BRACKET TO
PERIMETER
EXTRUSION

CONNECTION BRACKET DETAIL

N.T.S.

SECTION