

# RIOT GLASS, INC. TEST REPORT

**SCOPE OF WORK**

HUMAN IMPACT TESTING CONDUCTED ON AN AP-25 IMPACT PROTECTION SYSTEM

**REPORT NUMBER**

M0618.01-303-44

**TEST DATE**

03/02/21

**ISSUE DATE**

03/05/21

**RECORD RETENTION END DATE**

03/02/25

**PAGES**

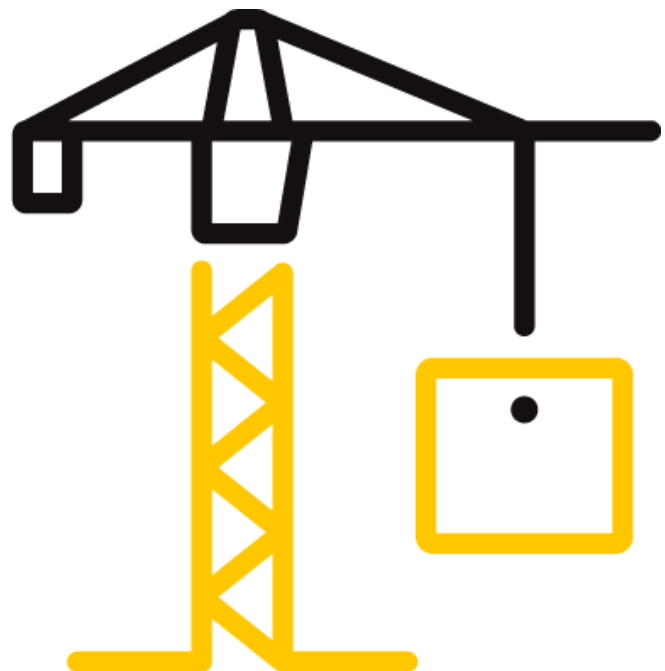
13

**DOCUMENT CONTROL NUMBER**

ATI 00231 (09/05/17)

RT-R-AMER-Test-2827

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## TEST REPORT FOR RIOT GLASS, INC.

Report No.: M0618.01-303-44

Date: 03/05/21

### REPORT ISSUED TO

#### RIOT GLASS, INC.

17941 Brookshire Lane

Huntington Beach, California 92647

### SECTION 1

#### SCOPE

##### Products:

Intertek Building & Construction (B&C) was contracted by Riot Glass, Inc., Huntington Beach, California, to perform testing in accordance with AAMA 501.8 – Standard Test Method for Determination of Resistance to Human Impact of Window Systems Intended for Use in Psychiatric Applications on their AP-25 Protection System. Testing was conducted at Intertek B&C test facility in Fresno, California.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

### SECTION 2

#### SUMMARY OF TEST RESULTS

**Product Type:** Protection System

**Series/Model:** AP-25

TITLE	RESULTS
Impacts	Met performance requirements.

For INTERTEK B&C:

<b>COMPLETED BY:</b>	Aaron Baker	<b>REVIEWED BY:</b>	Jarod Hardman
<b>TITLE:</b>	Technician Team Lead	<b>TITLE:</b>	Operations Manager
<b>SIGNATURE:</b>		<b>SIGNATURE:</b>	
<b>DATE:</b>	03/05/21	<b>DATE:</b>	03/05/21

JSH:ab

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### SECTION 3

#### TEST METHOD

The specimens was evaluated in accordance with the following:

**AAMA 501.8-14**, *Standard Test Method for Determination of Resistance to Human Impact of Window Systems Intended for Use in Psychiatric Applications*

### SECTION 4

#### MATERIAL SOURCE

The test specimen was provided by the client. Representative samples of the test specimen will be retained by Intertek B&C for a minimum of four years from the test completion date.

The specimen was installed into a Douglas-fir lined steel test buck. The rough opening allowed for a 1/4" shim space. The exterior perimeter of the window was sealed with silicone sealant.

### SECTION 5

#### TEST SPECIMEN DESCRIPTIONS

**Product Type:** Protection System

**Series/Model:** AP-25

#### Product Size(s):

OVERALL AREA:	WIDTH		HEIGHT	
	millimeters	inches	millimeters	inches
6.1 m <sup>2</sup> (65.6 ft <sup>2</sup> )				
Storefront Size	1934	76-1/8	3153	124-1/8
Panel Size	1829	72	3048	120

#### Storefront Frame Construction:

FRAME MEMBER	MATERIAL	DESCRIPTION
Head	Aluminum	Base extrusion, see attached Drawings Section 12.
Head	Aluminum	Glass stop extrusion, clipped to base extrusion, see attached Drawings Section 12.
Sill	Aluminum	Base extrusion, see attached Drawings Section 12.

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### Storefront Frame Construction: (Continued)

FRAME MEMBER	MATERIAL	DESCRIPTION
Sill	Aluminum	Glazing channel insert extrusion, clipped to base extrusion, see attached Drawings Section 12.
Jambs	Aluminum	Base extrusion, clipped to base clip see attached Drawings Section 12.
Jambs	Aluminum	Base clip, see attached Drawings Section 12.
	JOINERY TYPE	DETAIL
All Corners	Flush	Dry fit corner

**Note 1:** Base curtain wall assembly consisted of non-impact rated system to confirm performance and compliance of tested AP-25 system for protection.

### Protective System Frame Construction:

FRAME MEMBER	PART #	MATERIAL	DESCRIPTION
Base	A-09003	Aluminum	0.060" extrusion, secured to system with self-tapping tamper resistant screws, see attached Drawings Section 12.
Wedge	A-09902	Aluminum	Secured to face of AP-25 system into base with supplied self-tapping tamper resistant screws 6" on center and 2" from end spacing, see attached Drawings Section 12.
Cap	A-09005	Aluminum	0.040" extrusion, press fit over wedge, see attached Drawings Section 12.
	JOINERY TYPE	DETAIL	
All Corners	Flush		Dry fit corners

**Reinforcement:** No reinforcement was utilized.

**Weatherstripping:** No weatherstripping was utilized.

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**Glazing:** *No conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made.*

GLASS TYPE	GLAZING	GLAZING METHOD
Monolithic	1/4" Clear Tempered	Exterior set, dry fit with wedge gasket.

PROTECTIVE SYSTEM	GLAZING	GLAZING METHOD
Armorplast 25 (AP-25)	1/4" Clear Polycarbonate	Dry fit with wedge and cover cap.

LOCATION	QUANTITY	DAYLIGHT OPENING		GLASS BITE
		millimeters	inches	
Fixed lite	1	1708 x 3007	70-3/8 x 118-3/8	13/16"

**Drainage:** *No drainage was utilized.*

**Hardware:** *No hardware was utilized.*

**Screen Construction:** *No screen was utilized.*

## SECTION 6

### TEST RESULTS

The results are tabulated as follows:

Impact #	Impact Location	Results	Observations
1	Lower Left Corner	PASS	No visible damage
2	Center of Light	PASS	No visible damage
3	Center Right Edge	PASS	No visible damage

General Note: All testing was performed in accordance with the referenced standard.

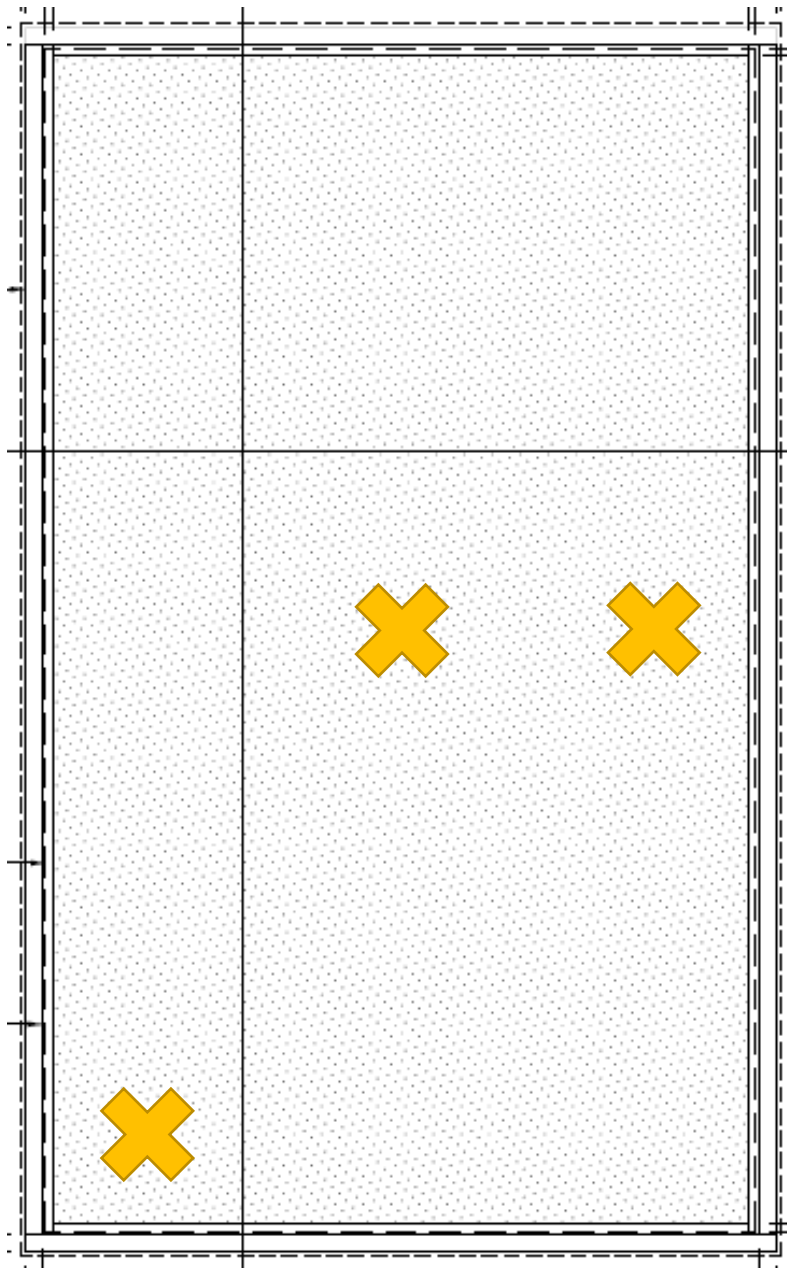
Note #1: See Intertek-ATI Sketch #1 in Section 7 for impaction location.

## TEST REPORT FOR RIOT GLASS, INC.

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### SECTION 6 SKETCHES



**Sketch #1**  
**Impact Test Locations**



Total Quality. Assured.

25800 Commercentre Drive  
Lake Forest, California 92630

Telephone: 949-460-9600  
Facsimile: 717-764-4129  
[www.intertek.com/building](http://www.intertek.com/building)

## **TEST REPORT FOR RIOT GLASS, INC.**

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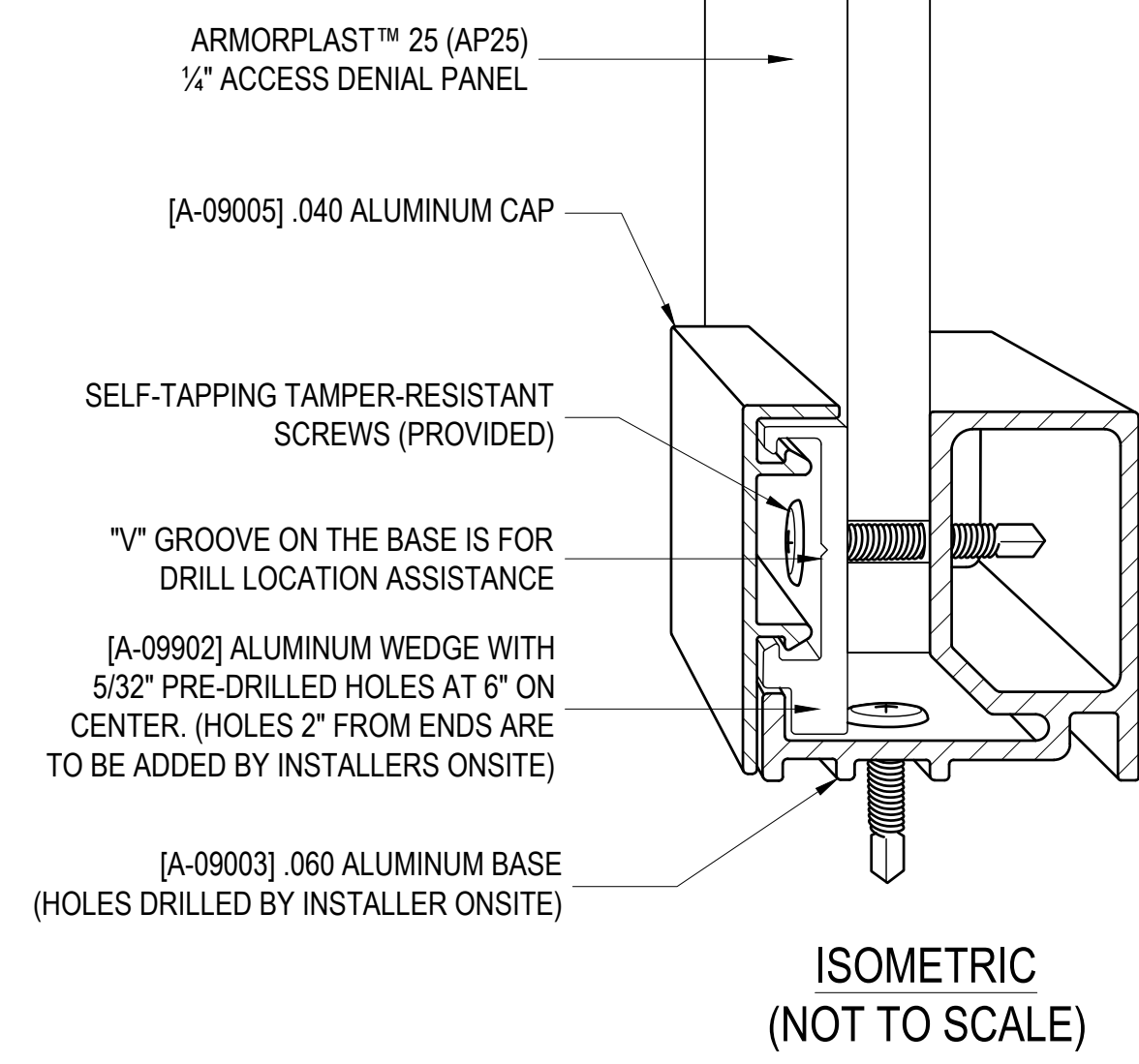
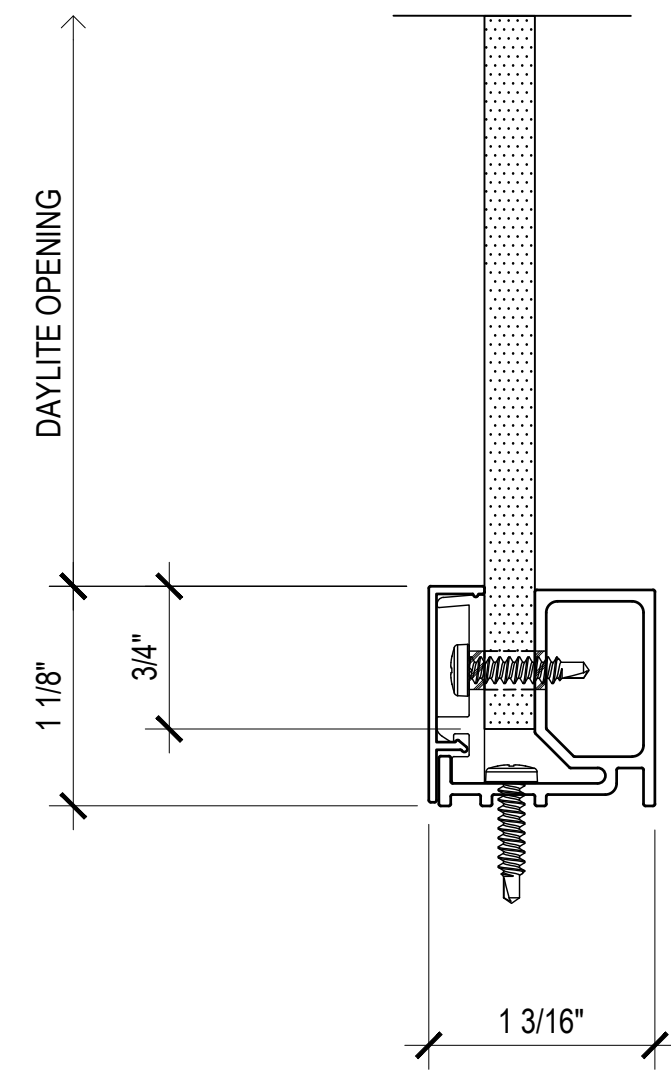
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### **SECTION 7 DRAWINGS**

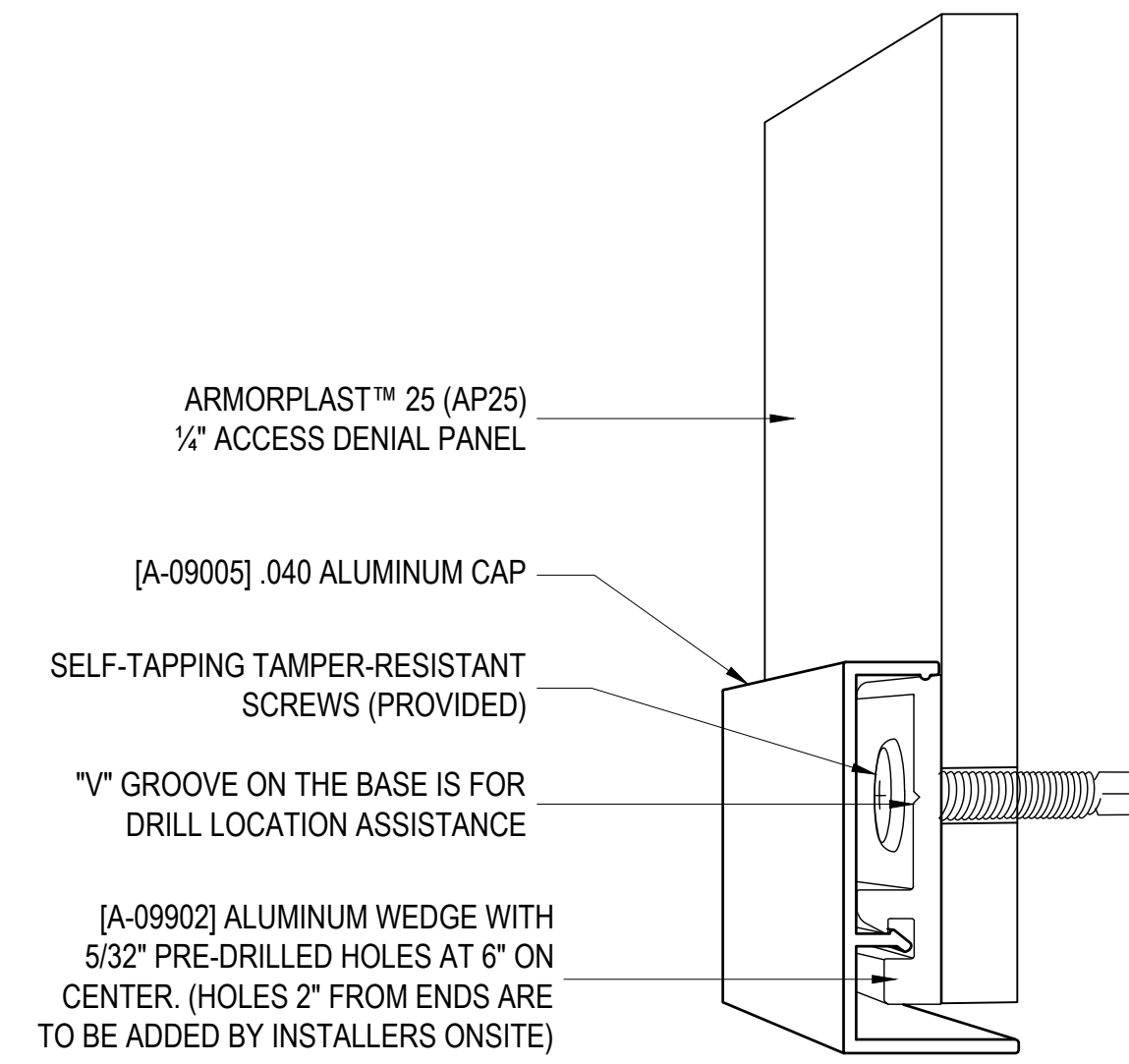
The test specimen drawings have been reviewed by Intertek B&C and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek B&C per the drawings included in this report. Any deviations are documented herein or on the drawings.



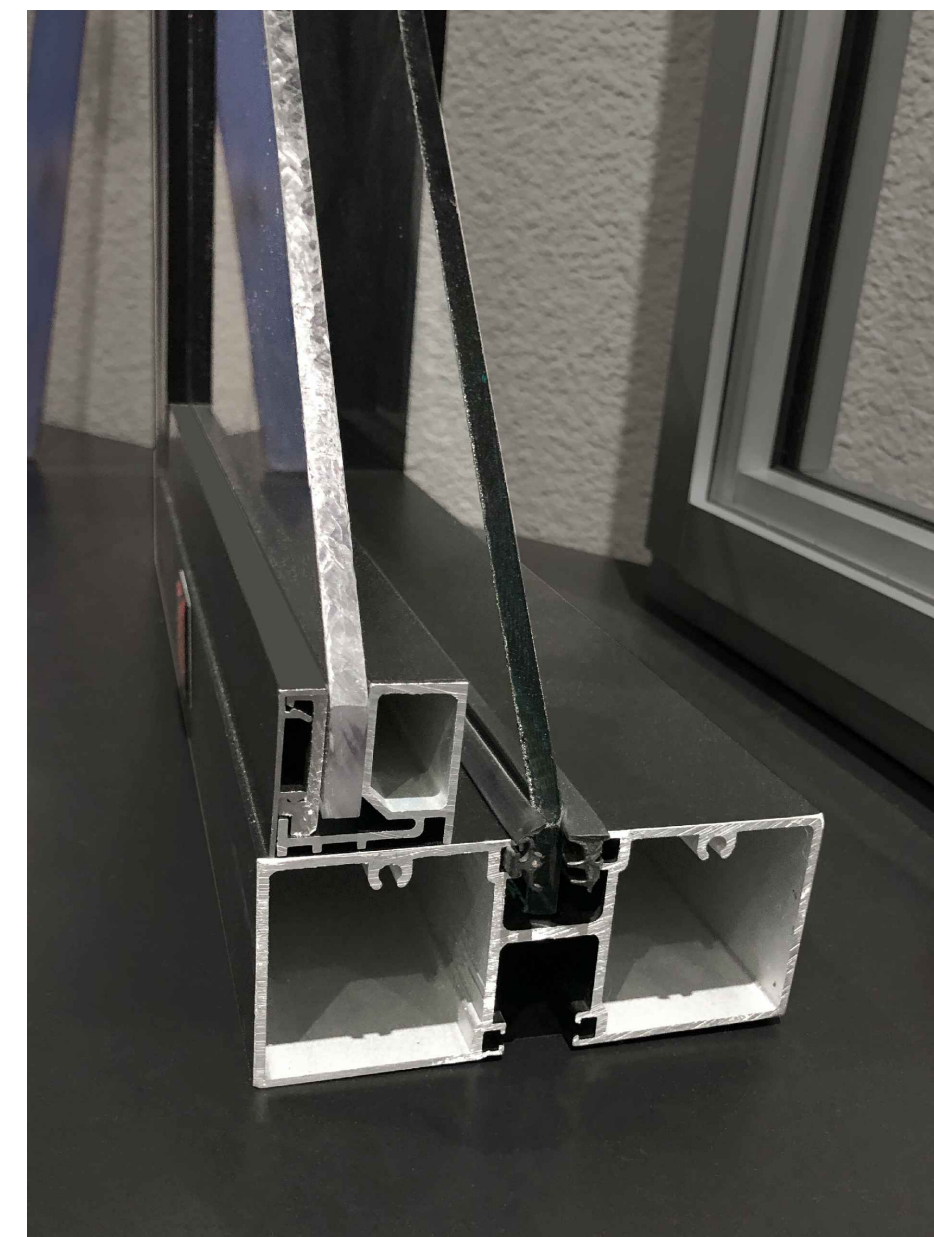
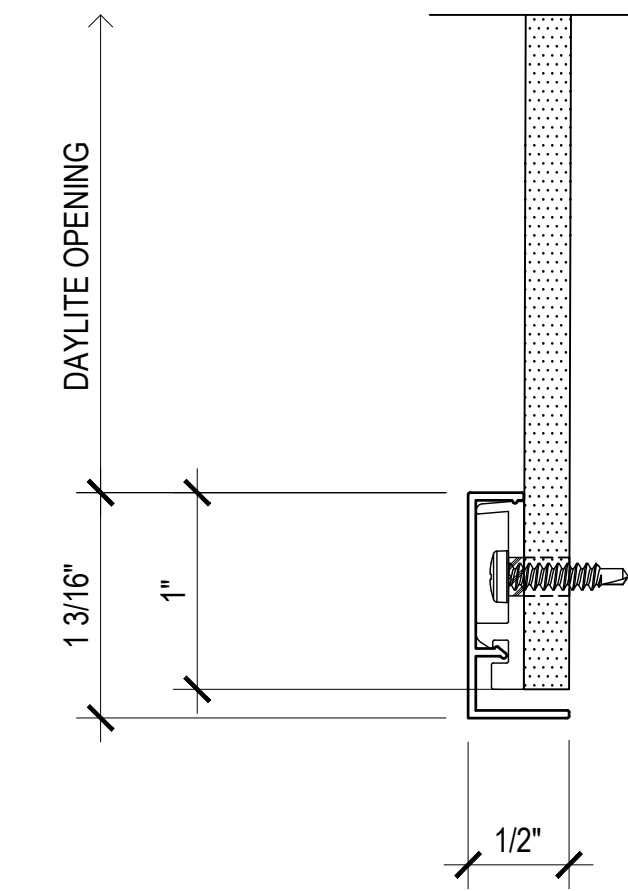




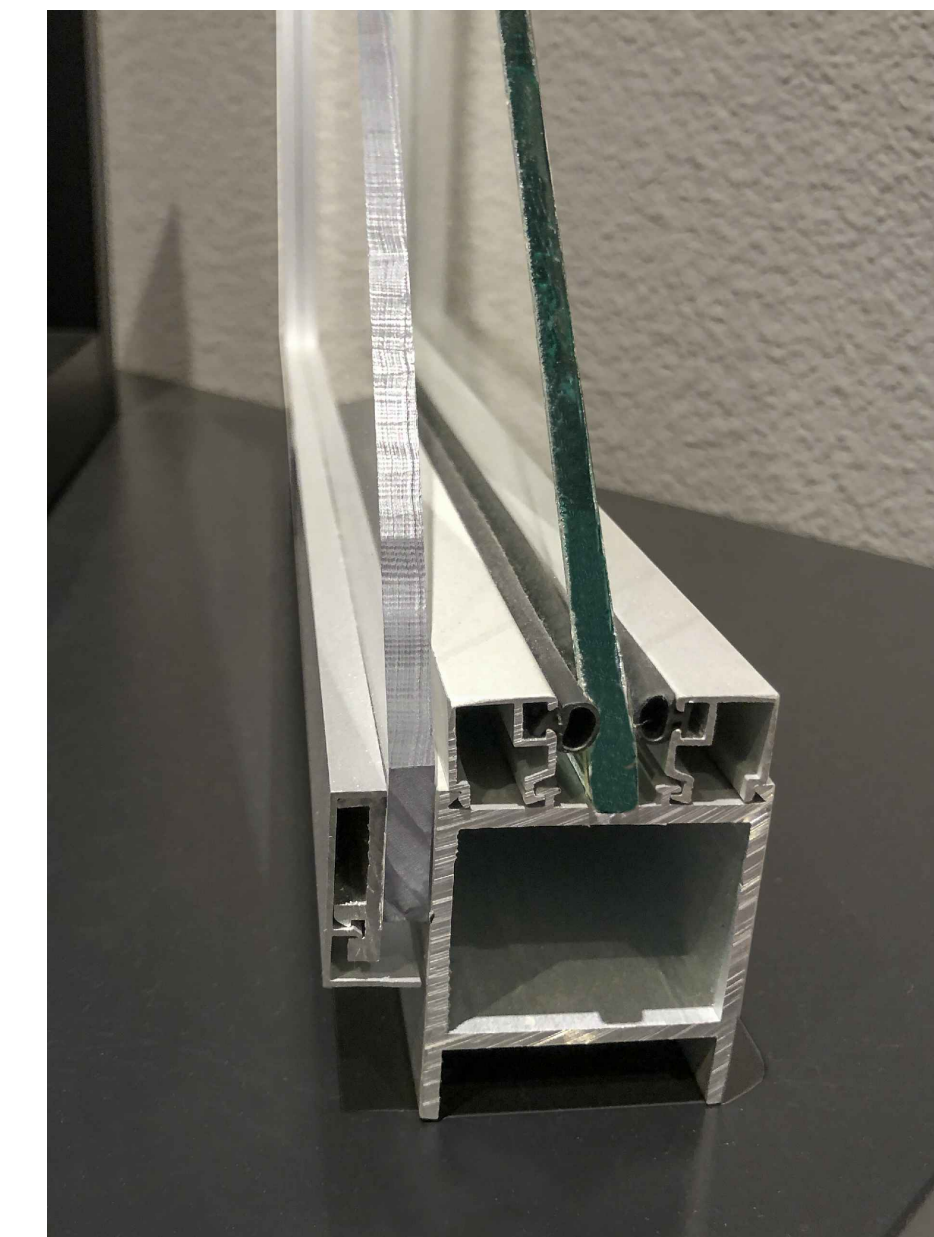
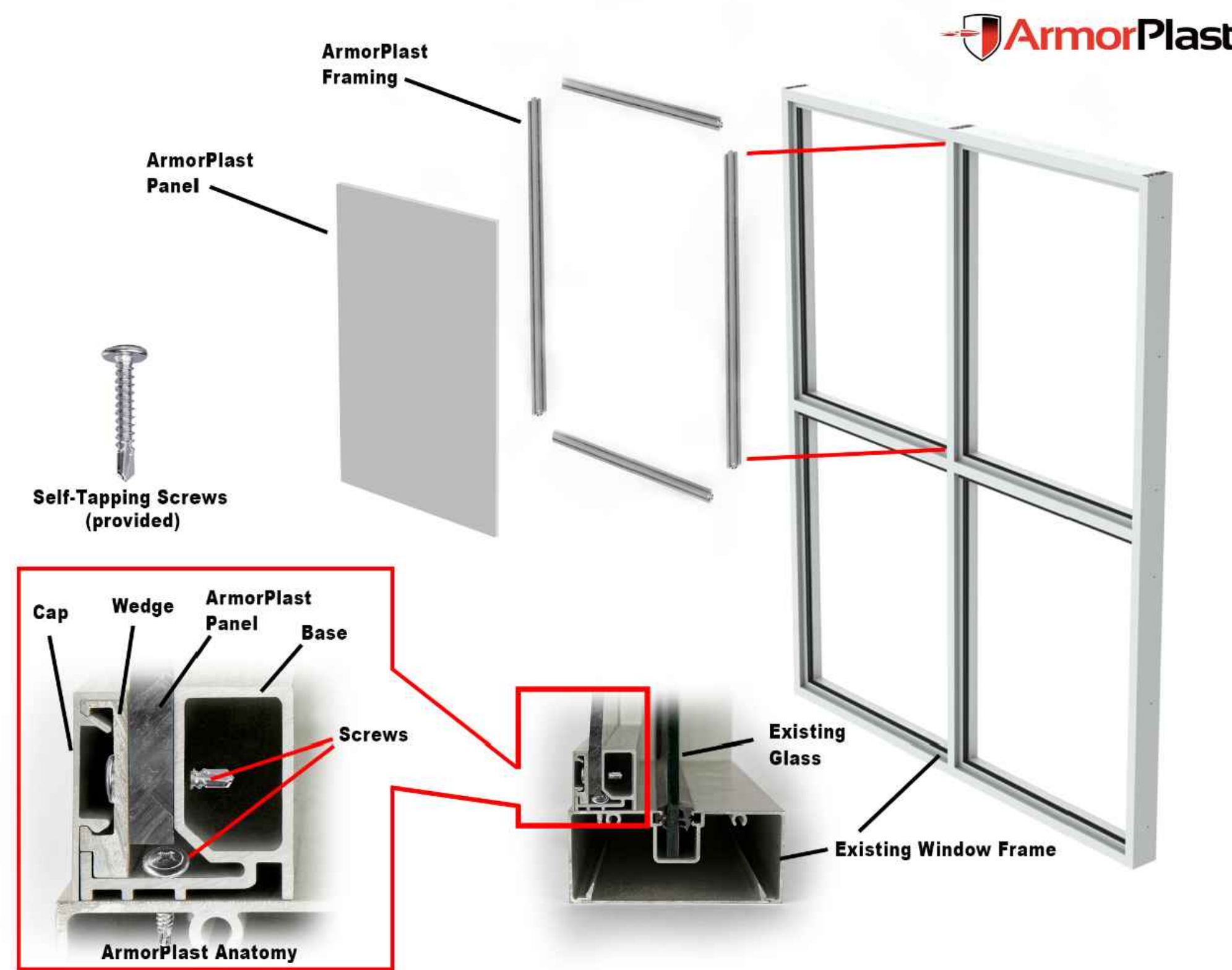
FULL FRAME



SURFACE MOUNT



FULL FRAME



SURFACE MOUNT

ARCHITECT OF RECORD'S APPROVAL

STRUCTURAL ENGINEER OF RECORD'S APPROVAL

STRUCTURAL ENGINEER'S APPROVAL

GENERAL CONTRACTOR'S APPROVAL

REVISIONS	BY
▲ SF DIMENSIONS CHANGED TO 1.75"x4.00"	TGM
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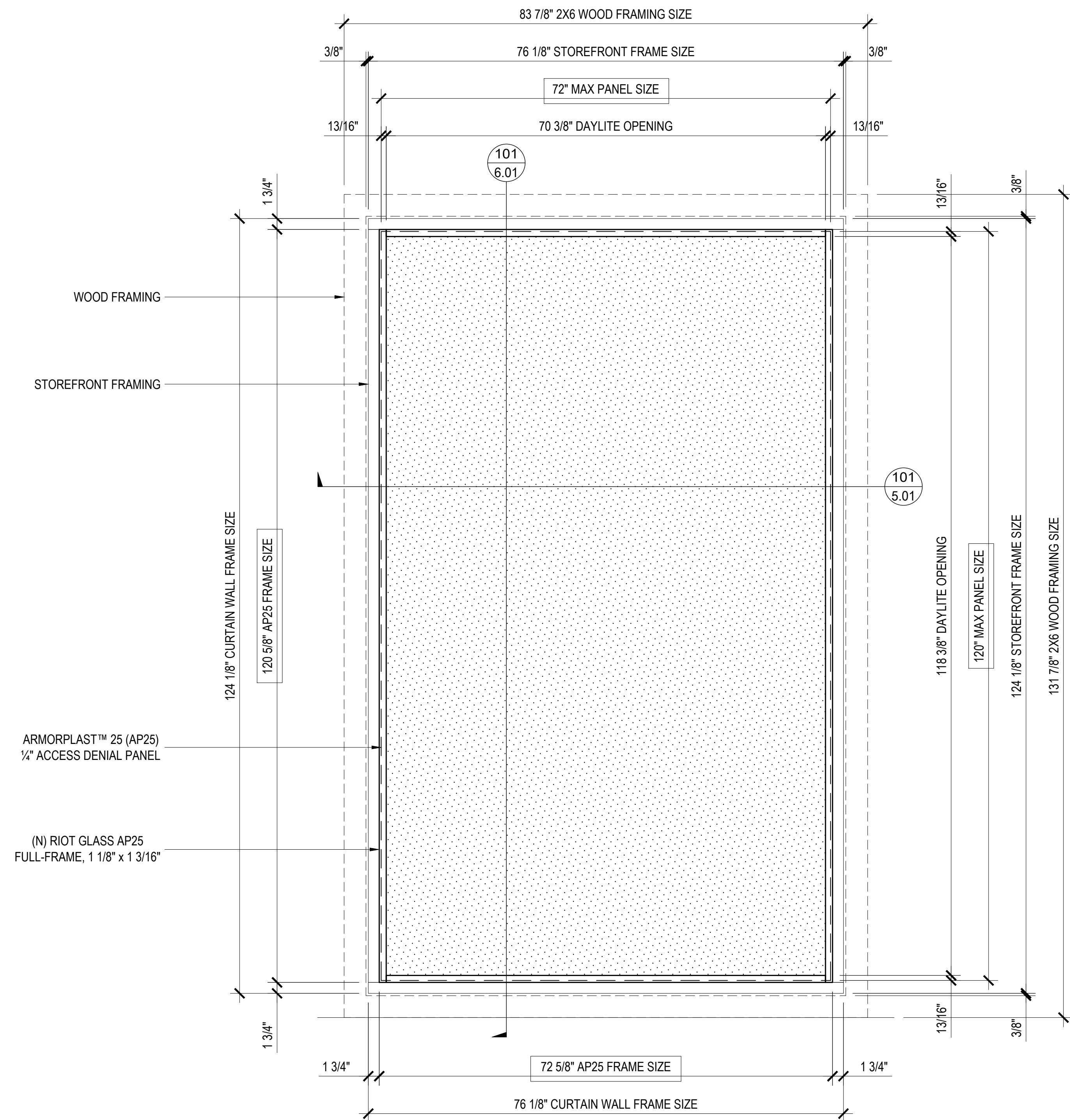
**RIOT GLASS**  
RIOT GLASS, INC.  
17941 BROOKSHIRE LANE  
HUNTINGTON BEACH, CA 92647  
(800) 580 - 2303

RIOT GLASS  
FRAMING DETAILS  
AVAILABLE IN USA & CANADA

FULL FRAME  
SURFACE MOUNT

DATE	1/15/2021
SCALE	N/A
DRAWN	TGM
JOB	N/A
SHEET	





WOOD FRAMING

STOREFRONT FRAMING

ARMORPLAST™ 25 (AP25)  
¼" ACCESS DENIAL PANEL

(N) RIOT GLASS AP25  
FULL-FRAME, 1 1/8" x 1 3/16"

A	(E) STOREFRONT FRAMING
4	THUS RIOT GLASS AP25 FULL-FRAME, 1 1/8" x 1 3/16"
	ARMORPLAST™ 25 (AP25) ¼" ACCESS DENIAL PANEL
	FINISH TO BE DETERMINED

ARCHITECT OF RECORD'S APPROVAL

STRUCTURAL ENGINEER OF RECORD'S  
APPROVAL

STRUCTURAL ENGINEER'S APPROVAL

GENERAL CONTRACTOR'S APPROVAL

REVISIONS	BY
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STOREFRONT  
ELEVATION  
AP-25 FULL FRAME

DATE: 1/15/2021  
SCALE: 1" = 1' - 0"  
DRAWN: TGM  
JOB: N/A  
SHEET:

2.01

THE DRAWING IS NOT TO SCALE IF NOT PRINTED ON A4 OR B1 PAPER

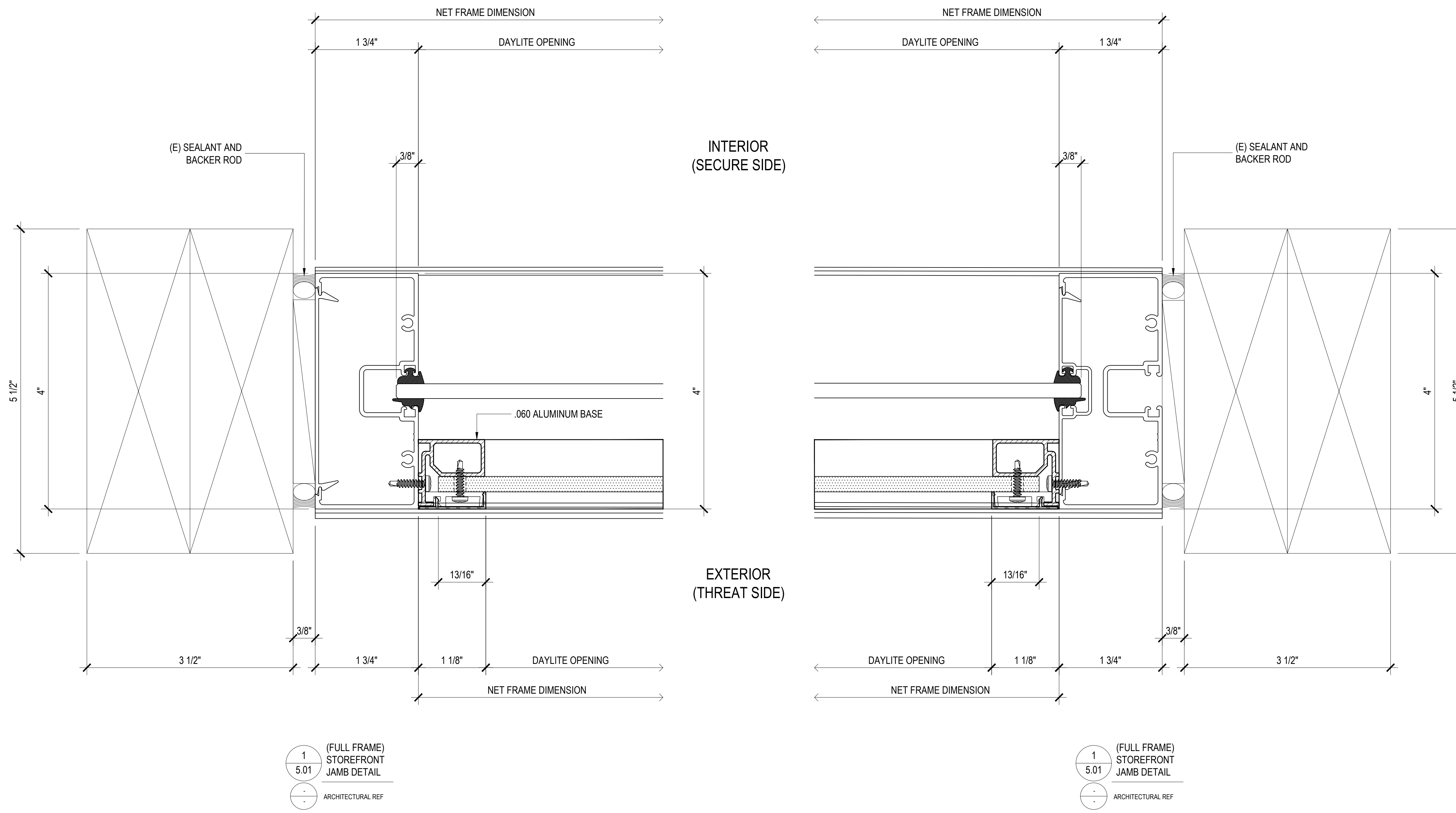
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STOREFRONT  
DETAILS  
AP-25 FULL FRAME

DATE: 1/15/2021  
SCALE: 1" = 1' - 0"  
DRAWN: TGM  
JOB: N/A  
SHEET:



AP-25 FULL FRAME SYSTEM WITH SERIES 450 CENTER / INTERIOR GLAZED STOREFRONT SYSTEM





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**SECTION 8**

**REVISION LOG**

REVISION #	DATE	PAGES	REVISION
0	03/05/21	N/A	Original Report Issue