

SHEET INDEX	
101	COVER PAGE
102	TYPICAL ELEVATIONS
103	GLAZING DETAILS
104	SECTIONAL DETAILS - THERMALLY BROKEN FRENCH CASEMENT
105	SECTIONAL DETAILS - THERMALLY BROKEN FRENCH CASEMENT
106	SECTIONAL DETAILS - NON THERMALLY BROKEN FRENCH CASEMENT
107	SECTIONAL DETAILS - NON THERMALLY BROKEN FRENCH CASEMENT
108	SECTIONAL DETAILS - THERMALLY BROKEN ARCHED CASEMENT
109	SECTIONAL DETAILS - THERMALLY BROKEN ARCHED CASEMENT
110	SECTIONAL DETAILS - NON THERMALLY BROKEN - ARCHED CASEMENT
111	SECTIONAL DETAILS - NON THERMALLY BROKEN - ARCHED CASEMENT
112	ANCHORAGE LAYOUT
113	ANCHORAGE DETAIL
114	PARTS LIST
115	FRAME ASSEMBLY DETAILS
NOTE: THIS PRODUCT CAN BE COMBINED WITH OTHER FBC APPROVED AMERICAN STEEL MANUFACTURING, LLC PRODUCTS. WHEN MULLED COMBINATIONS ARE USED, THE LOWER DESIGN PRESSURE FROM EACH PRODUCT WILL APPLY TO THE ENTIRE SYSTEM. FINAL APPROVAL OF ALL DESIGNS SHALL BE GRANTED BY THE GOVERNING MUNICIPALITY.	
<u>DESIGN PRESSURES:</u> PLEASE SEE SHEET 103 FOR PRESSURES	

GENERAL NOTES		
1. 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) PER TAS 201/202/203.	7. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE ANY SITE SPECIFIC INSTALLATION INFORMATION. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A QUALIFIED ENGINEER LICENSED IN THE STATE OF FLORIDA SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.	13. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
2. GLASS CAPACITIES MENTIONED IN THE PRESSURE CHARTS IN THIS CERTIFICATION ARE BASED ON ASTM E1300-16 (3 SEC. GUSTS).	8. THE CONTRACTOR IS RESPONSIBLE FOR INSULATING ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.	14. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
3. DESIGN PRESSURES MENTIONED IN THIS CERTIFICATION AS ALLOWABLE PRESSURES (ASD) BASED ON TESTED PRESSURE DIVIDED BY A FACTOR OF SAFETY OF 1.5.	9. FASTENERS DESCRIBED IN THIS CERTIFICATION ARE PERMITTED TO BE SUBSTITUTE PROVIDED THE STRENGTH OF THE ALTERNATIVE ANCHOR IS EQUAL TO OR GREATER THAN THE ORIGINALLY SPECIFIED ANCHOR. FINAL APPROVAL OF SUBSTITUTED ANCHORS SHALL BE BY OTHERS.	15. SAFEGUARDS MUST BE OBSERVED (NOT IN THIS CERTIFICATION).
4. THIS PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH THE STANDARDS IN NOTE 1 OF THE GENERAL NOTES AND IS LARGE MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE IMPACT RESISTANT SHUTTERS.	10. FASTENERS SHALL BE CADMIUM PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3 OF THE CURRENT CODE BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.	16. PRODUCT SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER SYSTEM CONTAINING THE FOLLOWING: AMERICAN STEEL MANUFACTURING, LLC 280 W. HILLSBORO BLVD / DEERFIELD BEACH, FL 33441 APPROVED BY FLORIDA BUILDING COMMISSION FLORIDA PRODUCT APPROVAL NUMBER FL# 47351.1
5. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.	11. ENGINEER'S SEAL AFFIXED HERE VALIDATES THE STRUCTURAL DESIGN AS SHOWN ONLY. THE USE OF THIS SPECIFICATION BY THE CONTRACTOR, ET AL., INDEMNIFIES AND SAVES HARMLESS THIS ENGINEER FROM ALL COSTS AND DAMAGES, INCLUDING LEGAL FEES AND APPELLATE FEES, RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, AND CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, AND FEDERAL CODES, AND FROM DEVIATIONS OF THIS PLAN.	THIS SYSTEM IS APPROVED FOR INSTALLATION WHERE WATER INFILTRATION RESISTANCE IS REQUIRED. THIS SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT.
6. 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 THE EXISTING STRUCTURE.	12. THIS PRODUCT IS APPROVED FOR FORCED ENTRY RESISTANCE AS PER ASTM F588.	

AMERICAN STEEL MANUFACTURING, LLC

OUTSWING/INSWING FRENCH CASEMENT WINDOW SYSTEM

(LARGE AND SMALL MISSILE IMPACT RATED)

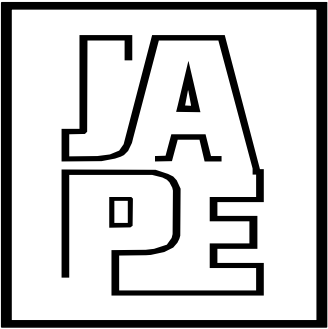


FRENCH CASEMENT WINDOW SYSTEM



FRENCH ARCHED CASEMENT WINDOW SYSTEM

FL#47351.1



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

Scale: N/A

Drawn by: SA

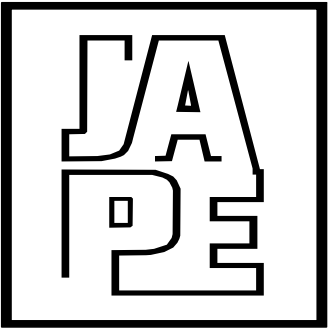
Check by: MK

Drawing no. JA-1582-23

Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



SEALED: 02-26-2025



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

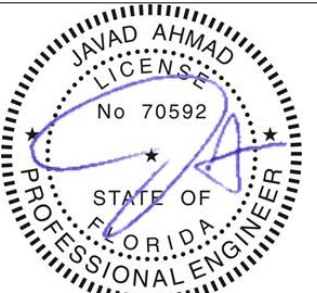
Scale: N/A

Drawn by: SA

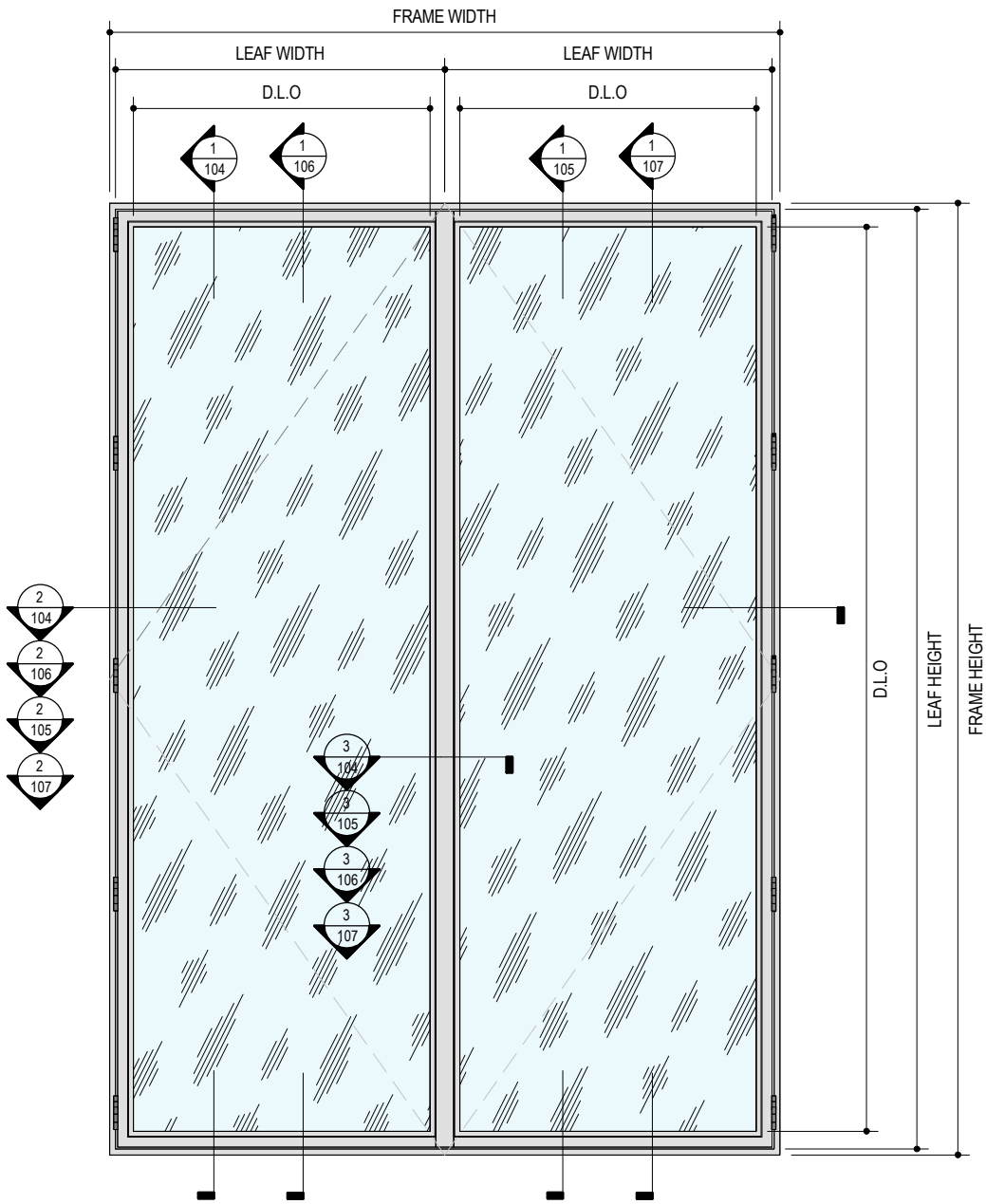
Check by: MK

Drawing no. JA-1582-23

Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



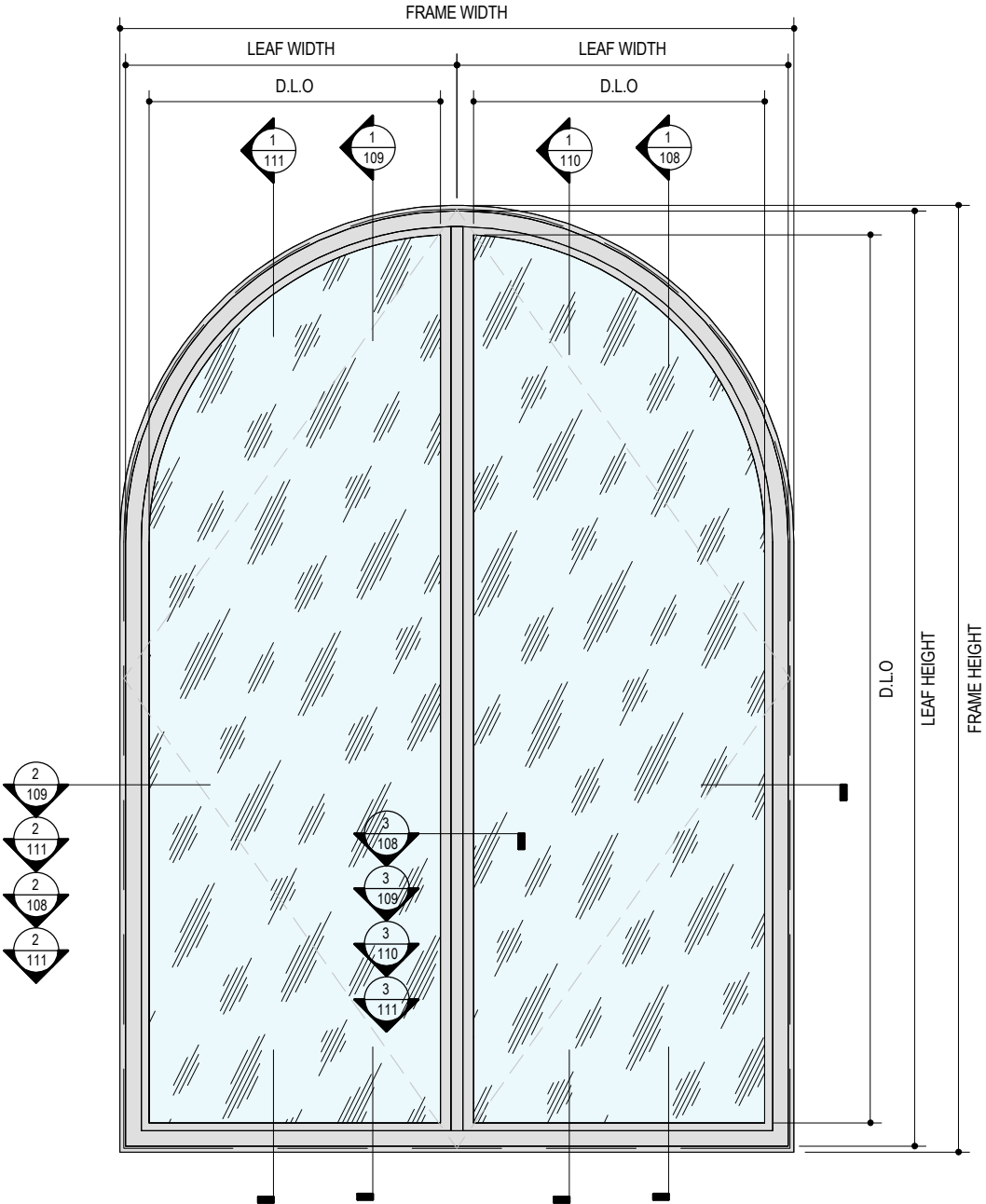
SEALED: 02-26-2025



1
102 TYPICAL OUTSWING/ INSWING FRENCH CASEMENT WINDOW ELEVATION
NOT TO SCALE

D.L.O CALCULATION

- THERMALLY BROKEN FRENCH CASEMENT WINDOW - D.L.O HEIGHT = FRAME HEIGHT - 6"
D.L.O. WIDTH = $\frac{\text{FRAME WIDTH}}{2}$ - 4-7/8"
- NON THERMALLY BROKEN FRENCH CASEMENT WINDOW - D.L.O HEIGHT = FRAME HEIGHT - 5-1/8"
D.L.O. WIDTH = $\frac{\text{FRAME WIDTH}}{2}$ - 4-5/8"
- THERMALLY BROKEN ARCHED FRENCH CASEMENT WINDOW - D.L.O HEIGHT = FRAME HEIGHT - 7 1/2"
D.L.O. WIDTH = $\frac{\text{FRAME WIDTH}}{2}$ - 5-7/8"
- NON THERMALLY BROKEN ARCHED FRENCH CASEMENT WINDOW - D.L.O HEIGHT = FRAME HEIGHT - 6-5/8"
D.L.O. WIDTH = $\frac{\text{FRAME WIDTH}}{2}$ - 5-5/8"



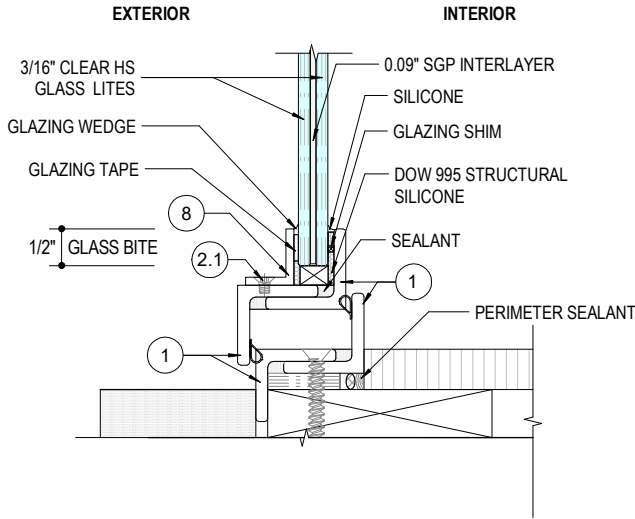
2
102 TYPICAL OUTSWING/ INSWING ARCHED FRENCH CASEMENT WINDOW ELEVATION
NOT TO SCALE

NOTE:

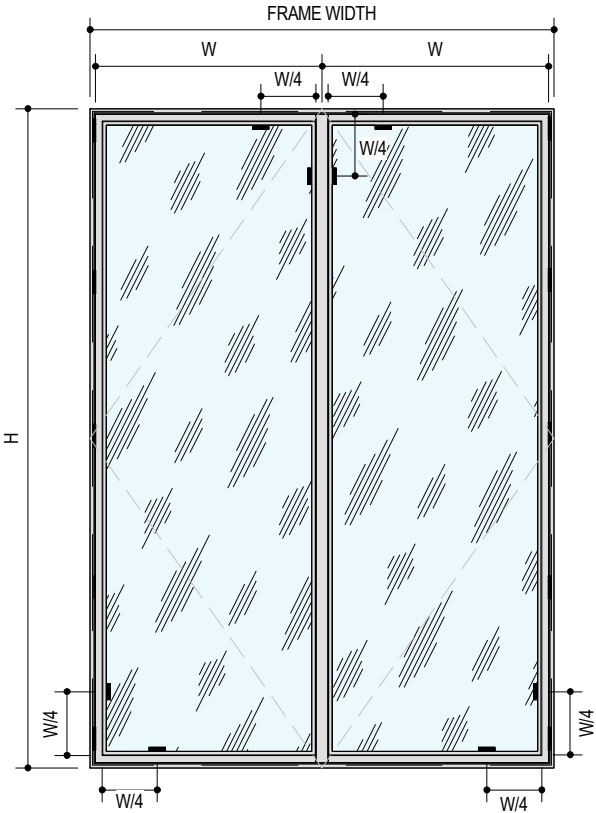
- THERMALLY BROKEN EXTERIOR GLAZED: SEE SHEET 104 & 108
- THERMALLY BROKEN INTERIOR GLAZED: SEE SHEET 105 & 109
- NON-THERMALLY BROKEN EXTERIOR GLAZED: SEE SHEET 106 & 110
- NON-THERMALLY BROKEN INTERIOR GLAZED: SEE SHEET 107 & 111

GLAZING DETAILS

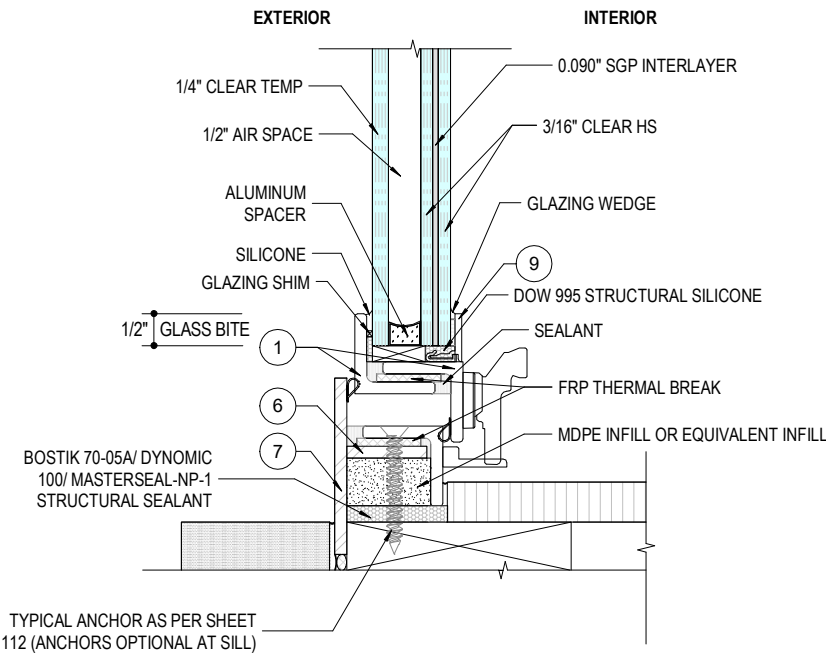
FL#47351.1



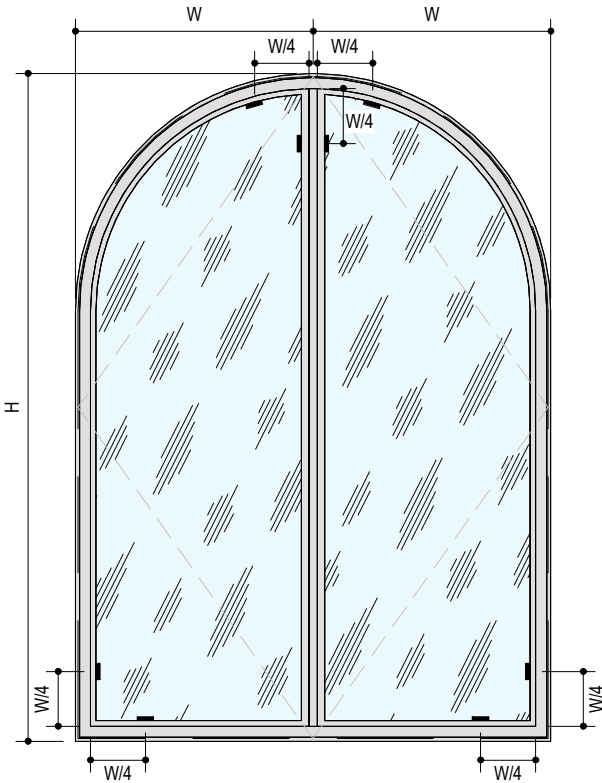
1
103 GL1 - 7/16" LAMINATED GLASS UNIT
NOT TO SCALE



3
103 SETTING BLOCK LAYOUT
NOT TO SCALE



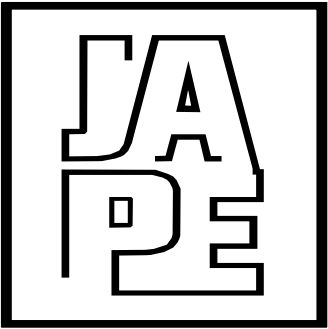
2
103 GL2 - 1-1/4" INSULATED GLASS UNIT
NOT TO SCALE



4
103 SETTING BLOCK LAYOUT
NOT TO SCALE

ALLOWABLE DESIGN LOAD CAPACITY - PSF							
GLASS TYPE: GL-1 & GL-2							
D.L.O. WIDTH (IN.)	D.L.O. HEIGHT (IN.)	INSWING WINDOW			OUTSWING WINDOW		
		BRONZE	ALUMINUM	STEEL	BRONZE	ALUMINUM	STEEL
22	66	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	74	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	82	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	90	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	98	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	106	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	114	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
26	66	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	74	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	82	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	90	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	98	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	106	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	114	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
30	66	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	74	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	82	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	90	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	98	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	106	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	114	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
34	66	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	74	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	82	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	90	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	98	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	106	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	114	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
37-3/8	66	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	74	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	82	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	90	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	98	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	106	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65
	114	+/- 45	+/- 55	+/- 55	+/- 45	+/- 65	+/- 65

NOTES:
• MAXIMUM THICKNESS OF THERMAL BREAK IS 0.5"



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

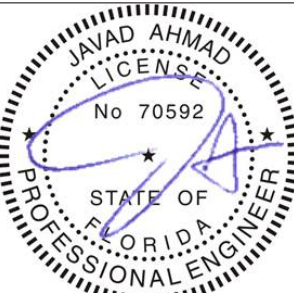
Scale: N/A

Drawn by: SA

Check by: MK

Drawing no. JA-1582-23

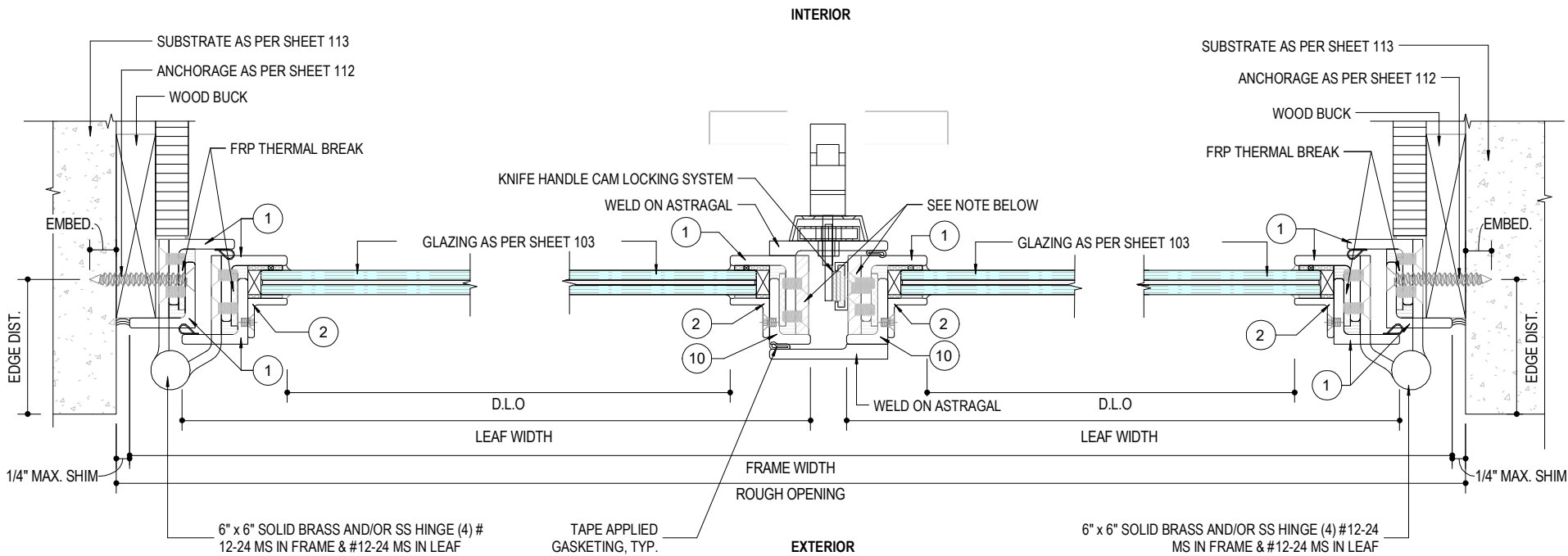
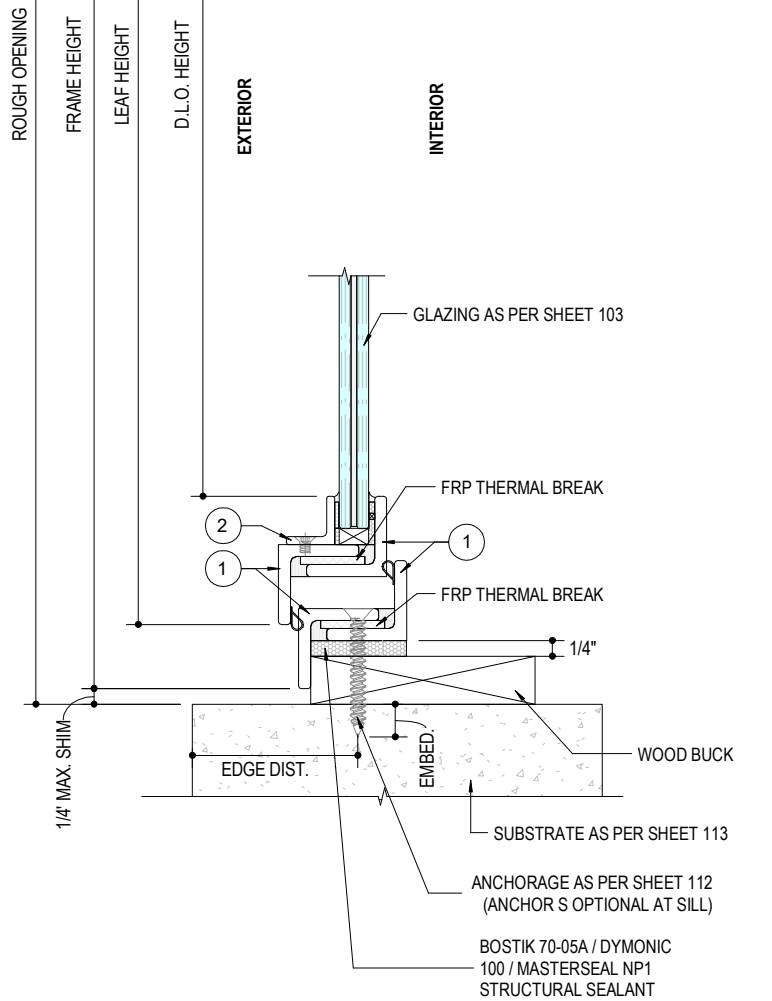
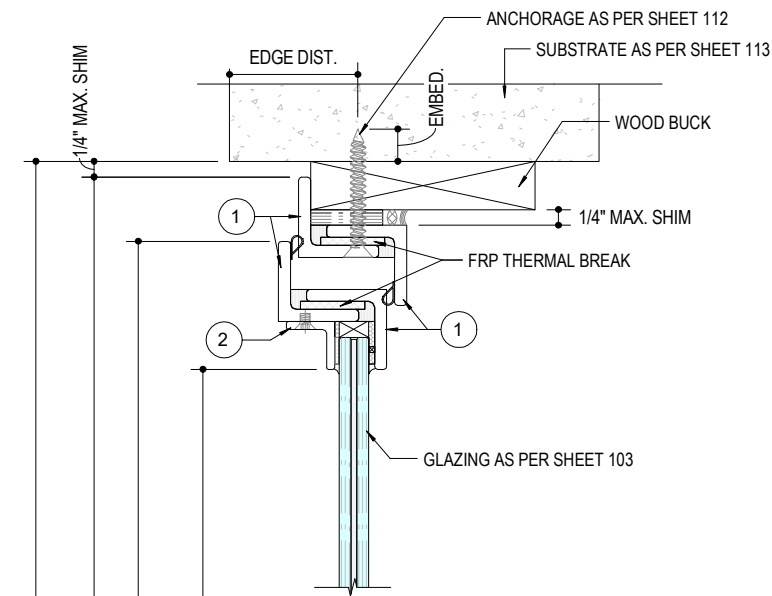
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



SEALED: 02-26-2025

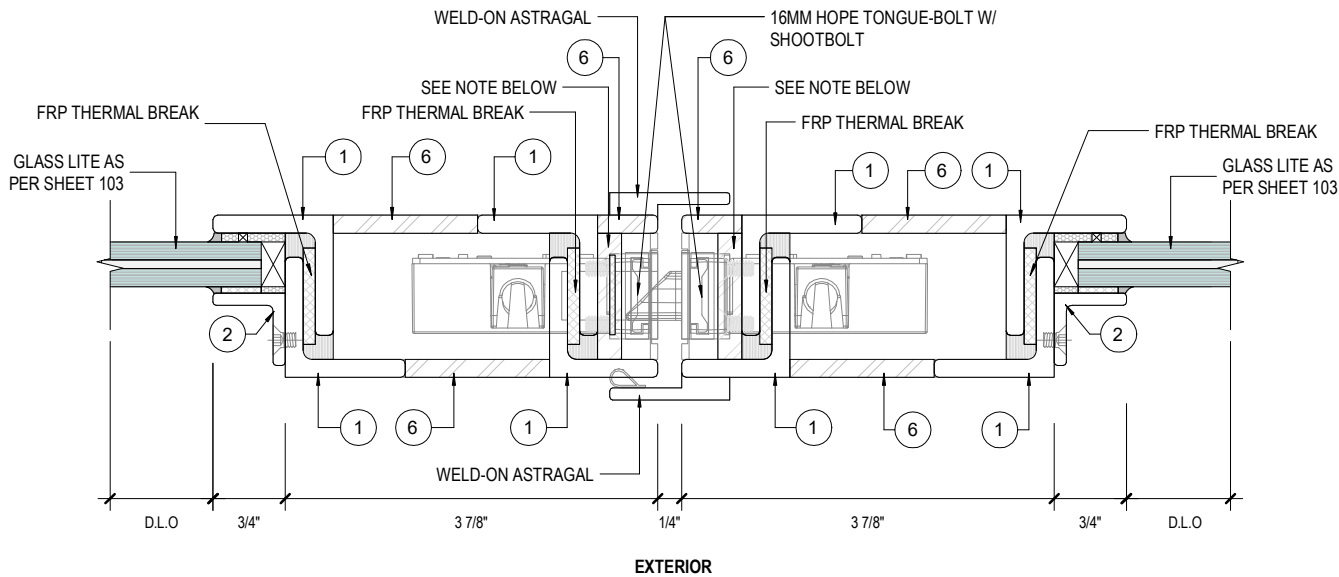
SECTIONAL DETAILS - THERMALLY BROKEN FRENCH CASEMENT

FL#47351.1



NOTE:
VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.

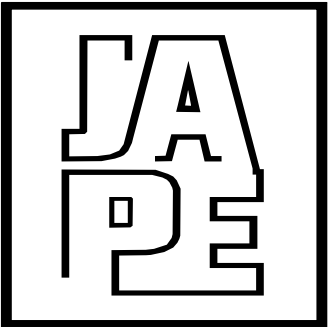
2
104 THERMALLY BROKEN - OUTSWING JAMB AND MEETING STILE DETAIL
NOT TO SCALE



3
104 THERMALLY BROKEN - OUTSWING ALTERNATE DOOR LOCK BOX DETAIL
NOT TO SCALE

1
104 THERMALLY BROKEN - OUTSWING HEAD AND SILL DETAIL
NOT TO SCALE

NOTE:
• VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.
• ANCHORS LAYOUT AS SHOWN ON SHEET 112 CAN BE USED IN LIEU OF STRUCTURAL SILICON.



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

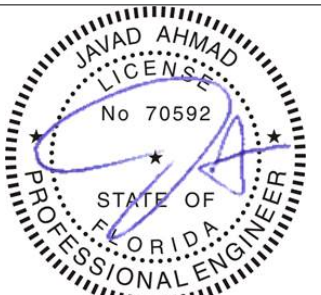
Scale: N/A

Drawn by: SA

Check by: MK

Drawing no. JA-1582-23

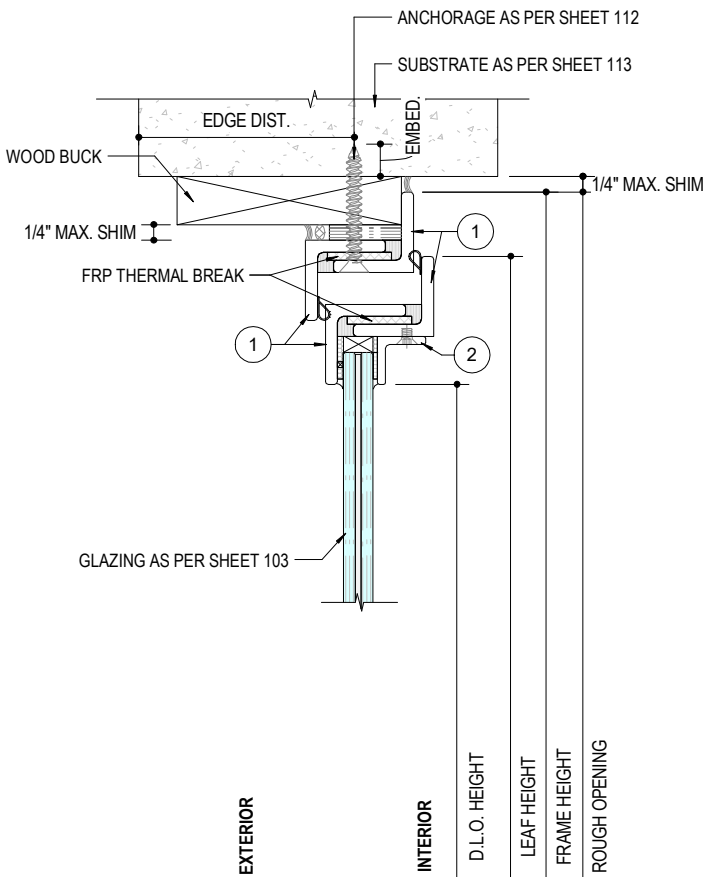
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



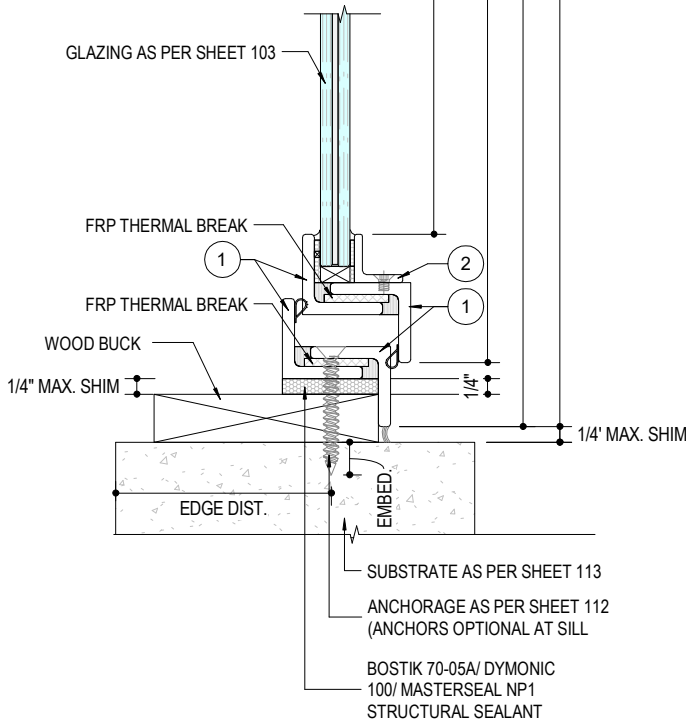
SEALED: 02-26-2025

SECTIONAL DETAILS - THERMALLY BROKEN FRENCH CASEMENT

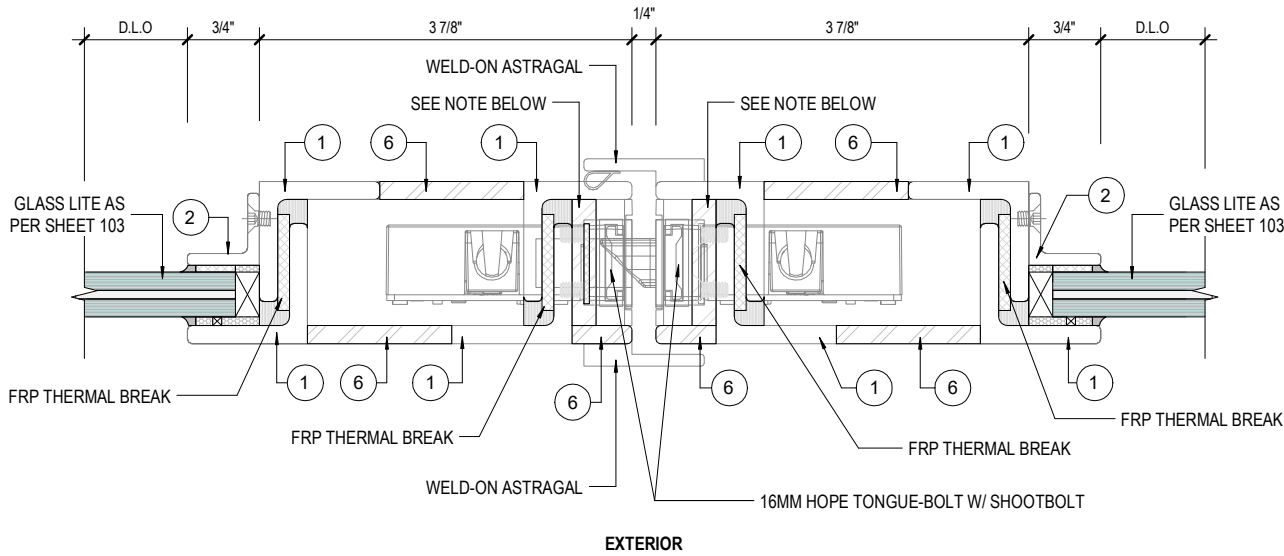
FL#47351.1



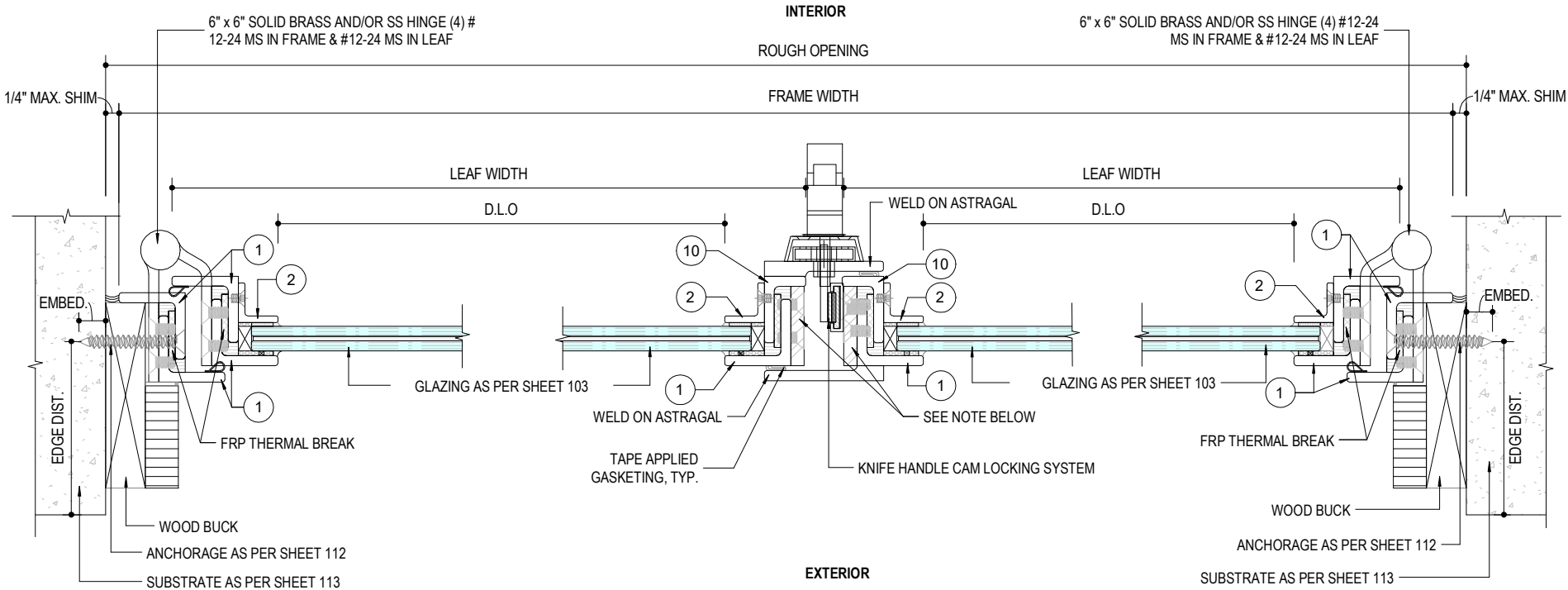
1
105 THERMALLY BROKEN - INSWING HEAD AND SILL DETAIL
NOT TO SCALE



2
105 THERMALLY BROKEN - INSWING JAMB AND MEETING STILE DETAIL
NOT TO SCALE

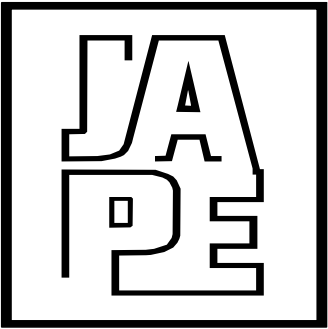


3
105 THERMALLY BROKEN - INSWING ALTERNATE DOOR LOCK BOX DETAIL
NOT TO SCALE



NOTE:
VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.

NOTE:
• VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.
• ANCHORS LAYOUT AS SHOWN ON SHEET 112 CAN BE USED IN LIEU OF STRUCTURAL SILICON.



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

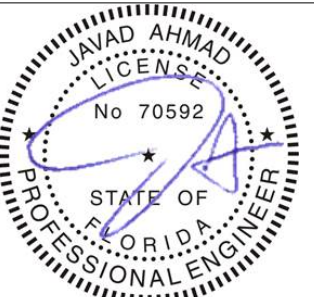
Scale: N/A

Drawn by: SA

Check by: MK

Drawing no. JA-1582-23

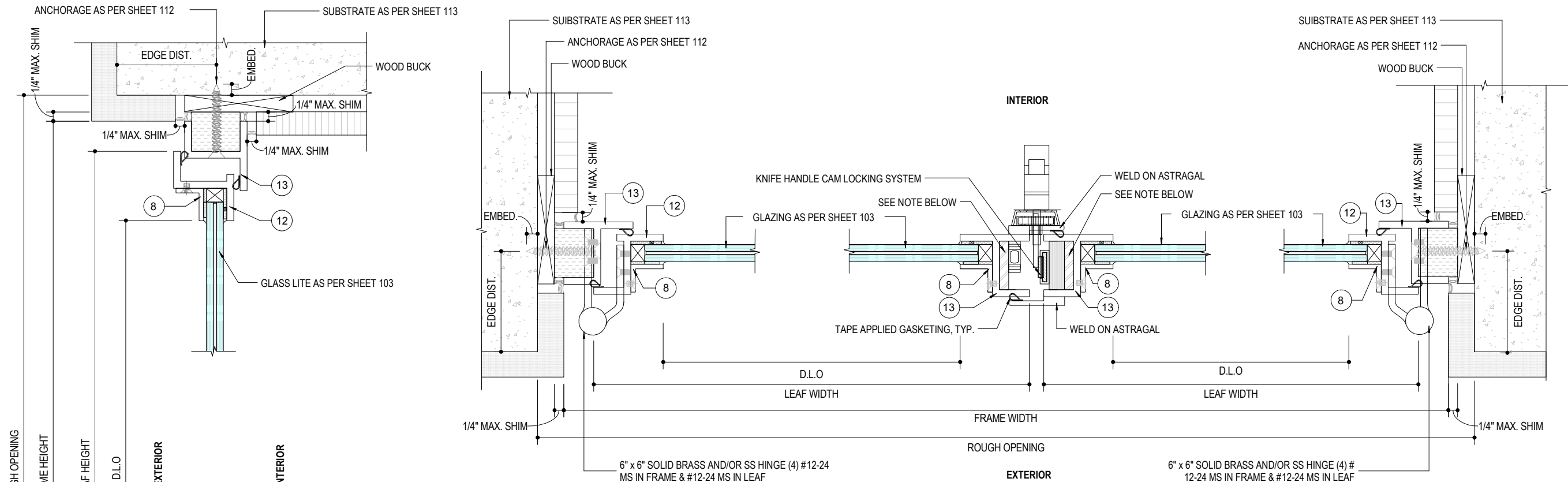
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



SEALED: 02-26-2025

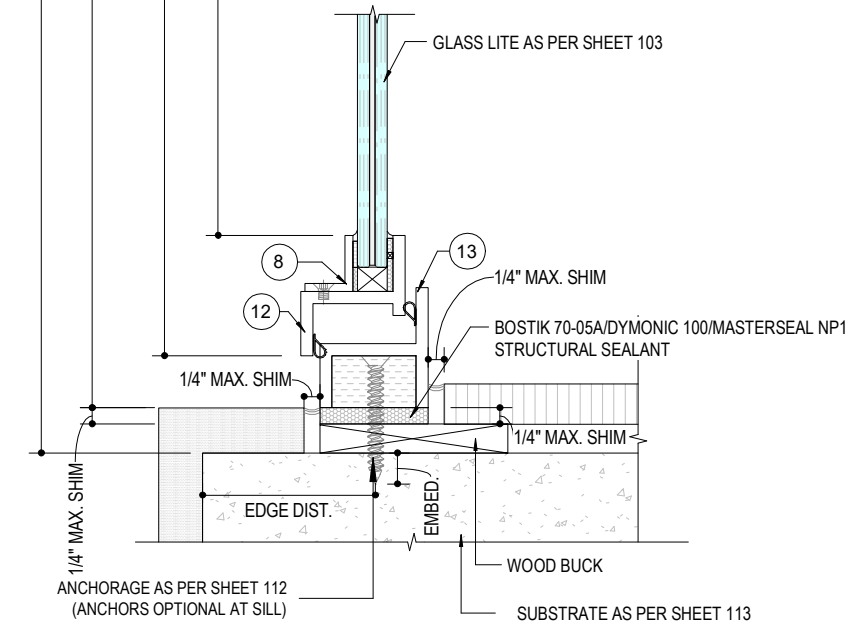
SECTIONAL DETAILS - NON THERMALLY BROKEN FRENCH CASEMENT

FL#47351.1

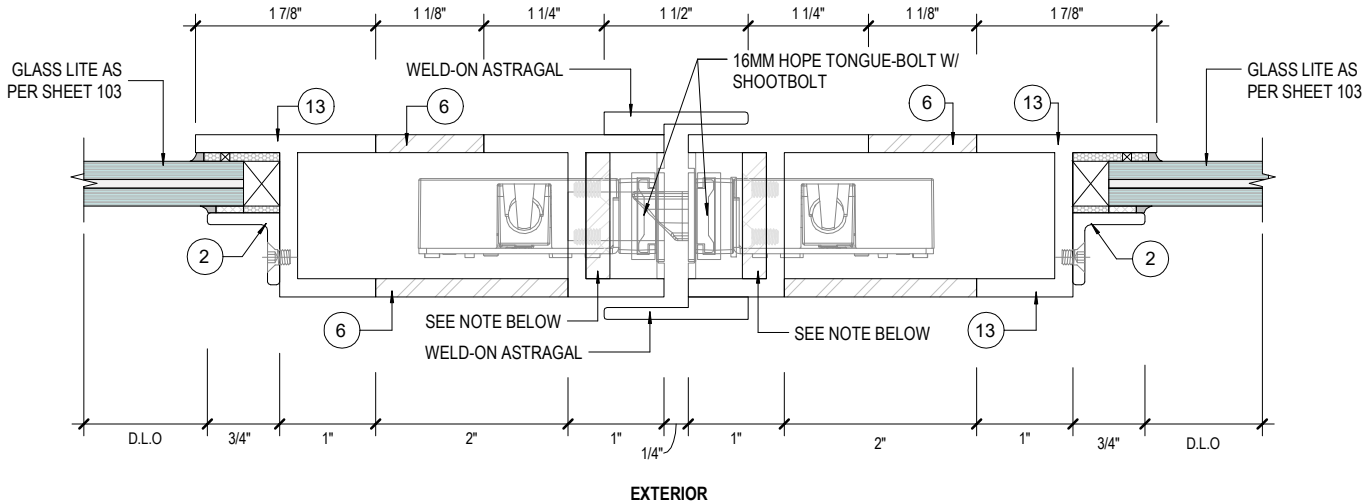


NOTE:
VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.

2 NON THERMALLY BROKEN - OUTSWING JAMB AND MEETING STILE DETAIL
106 NOT TO SCALE

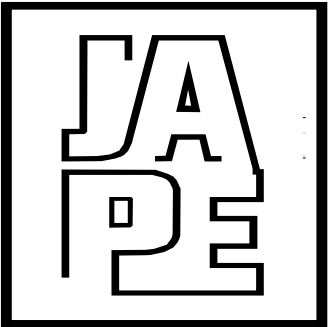


1 NON THERMALLY BROKEN - OUTSWING HEAD AND SILL DETAIL
106 NOT TO SCALE



3 NON THERMALLY BROKEN - OUTSWING ALTERNATE DOOR LOCK BOX DETAIL
106 NOT TO SCALE

NOTE:
• VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.
• ANCHORS LAYOUT AS SHOWN ON SHEET 112 CAN BE USED IN LIEU OF STRUCTURAL SILICON.



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

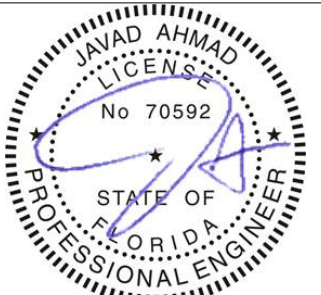
Scale: N/A

Drawn by: SA

Check by: MK

Drawing no. JA-1582-23

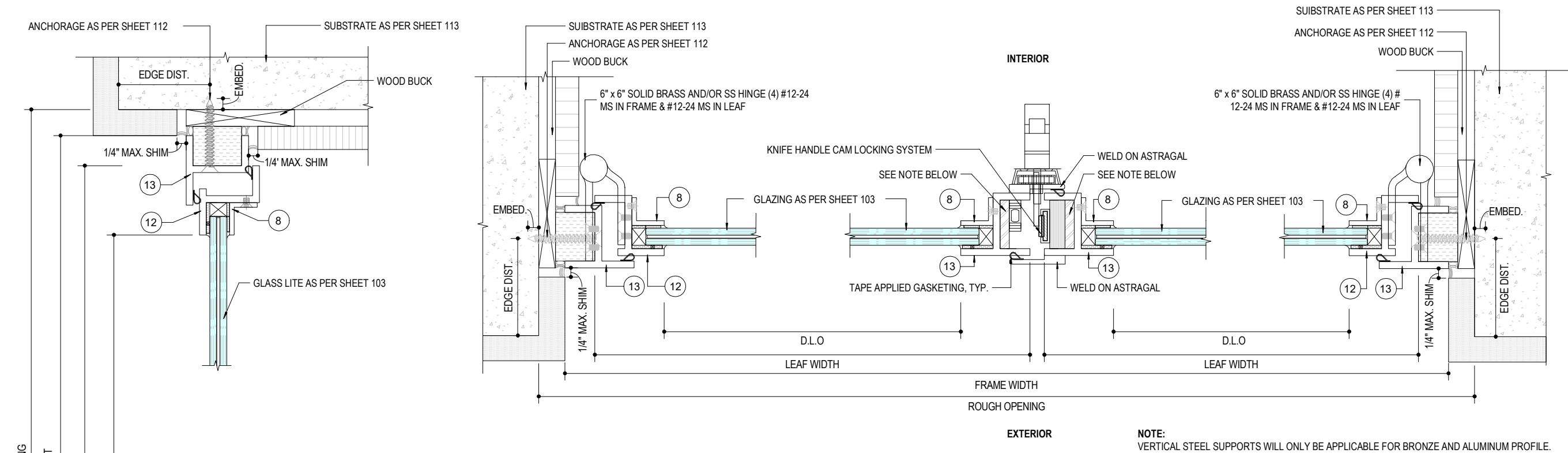
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



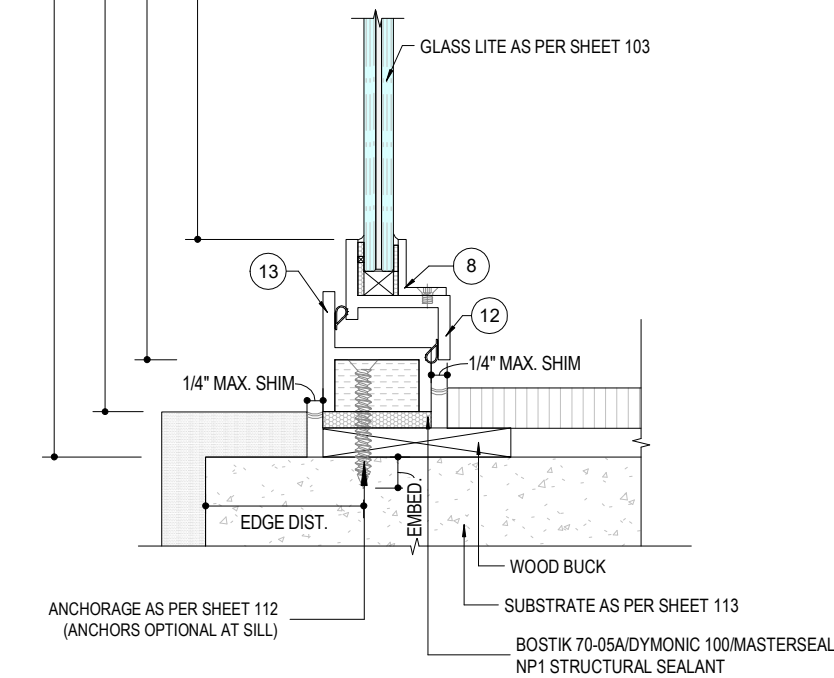
SEALED: 02-26-2025

SECTIONAL DETAILS - NON THERMALLY BROKEN FRENCH CASEMENT

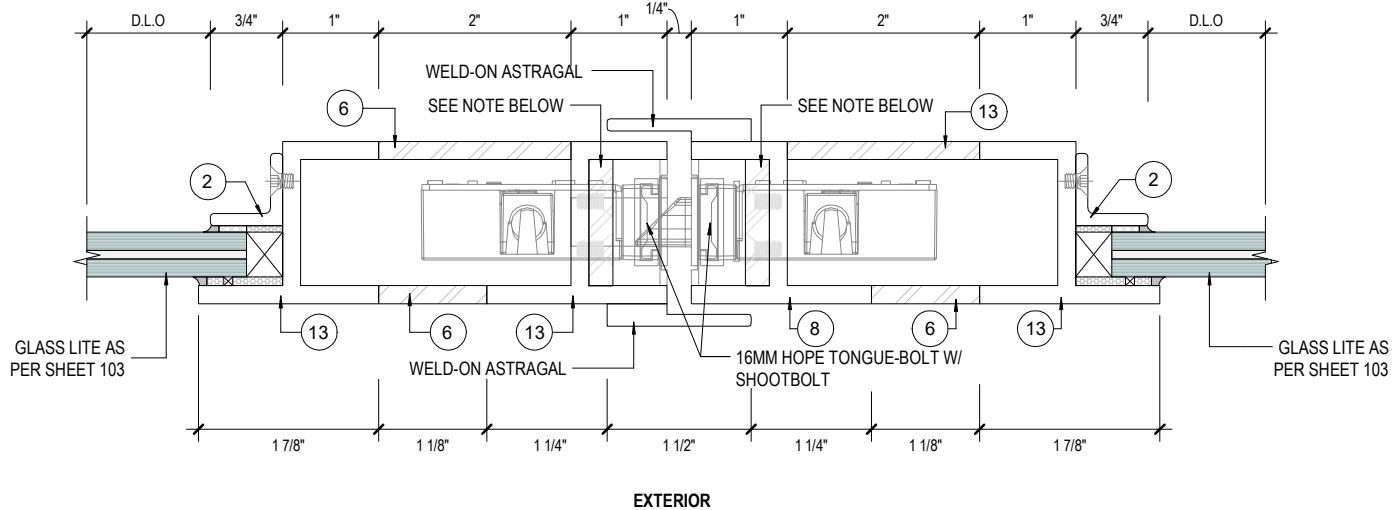
FL#47351.1



2 NON THERMALLY BROKEN - INSWING JAMB AND MEETING STILE DETAIL
107 NOT TO SCALE

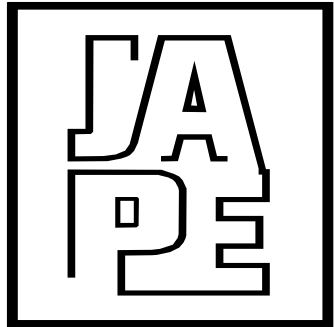


1 NON THERMALLY BROKEN - INSWING HEAD AND SILL DETAIL
107 NOT TO SCALE



3 NON THERMALLY BROKEN - INSWING ALTERNATE DOOR LOCK BOX DETAIL
107 NOT TO SCALE

NOTE:
• VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.
• ANCHORS LAYOUT AS SHOWN ON SHEET 112 CAN BE USED IN LIEU OF STRUCTURAL SILICON.



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

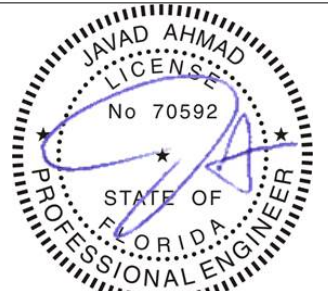
Scale: N/A

Drawn by: SA

Check by: MK

Drawing no. JA-1582-23

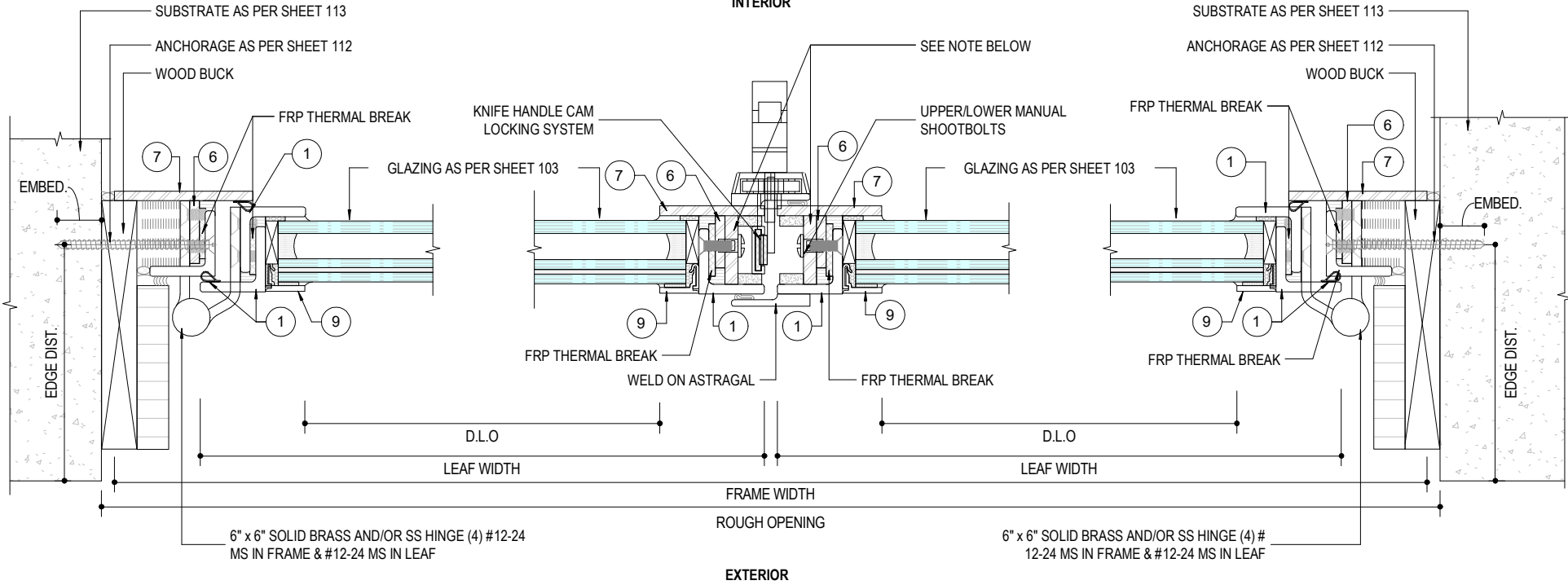
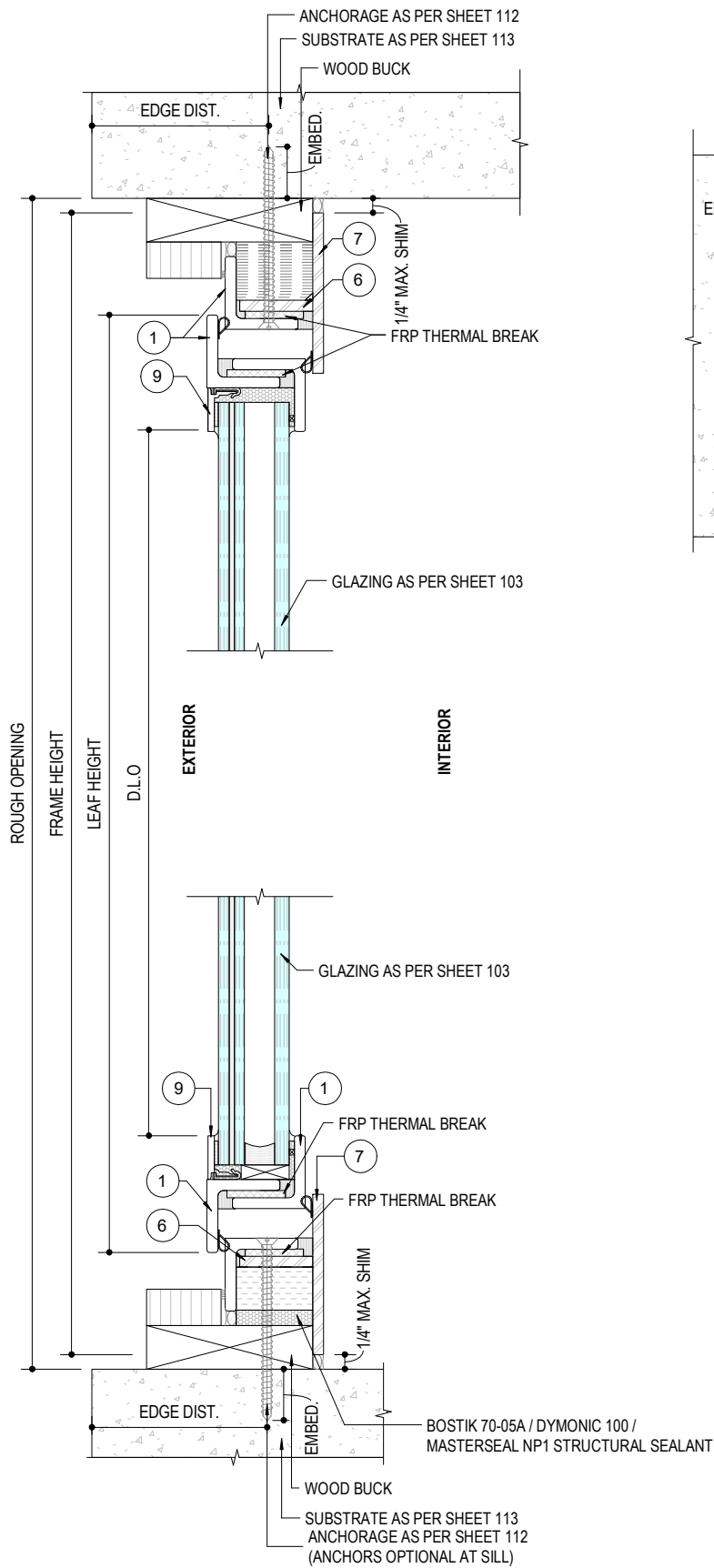
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



SEALED: 02-26-2025

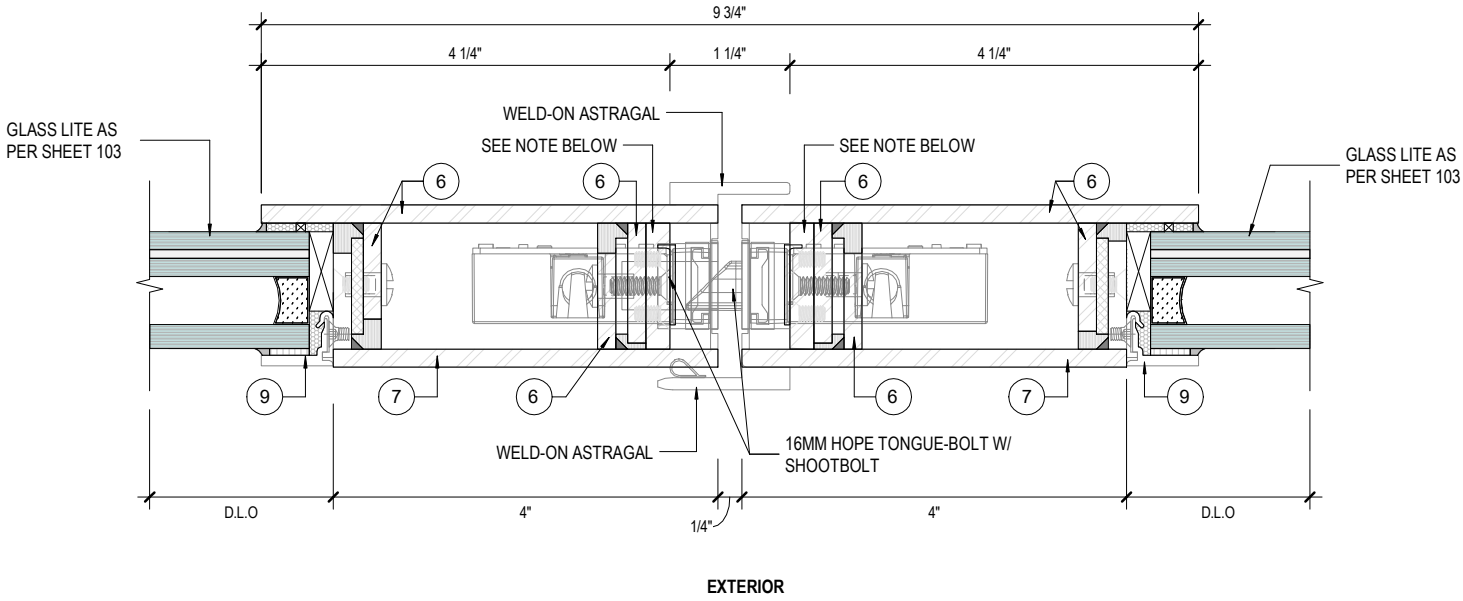
SECTIONAL DETAILS - THERMALLY BROKEN ARCHED CASEMENT

FL#47351.1



NOTE:
VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.

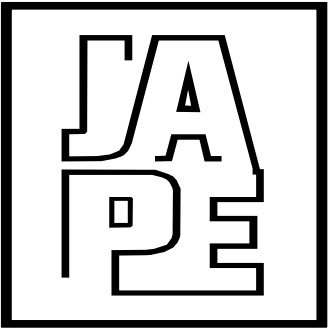
2
108 THERMALLY BROKEN - ARCHED CASEMENT OUTSWING JAMB AND MEETING STILE DETAIL
NOT TO SCALE



NOTE:
• VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.
• ANCHORS LAYOUT AS SHOWN ON SHEET 112 CAN BE USED IN LIEU OF STRUCTURAL SILICON.

3
108 THERMALLY BROKEN - ARCHED OUTSWING ALTERNATE DOOR LOCK BOX DETAIL
NOT TO SCALE

1
108 THERMALLY BROKEN - ARCHED CASEMENT OUTSWING HEAD AND SILL DETAIL
NOT TO SCALE



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

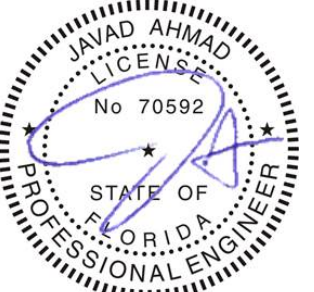
Scale: N/A

Drawn by: SA

Check by: MK

Drawing no. JA-1582-23

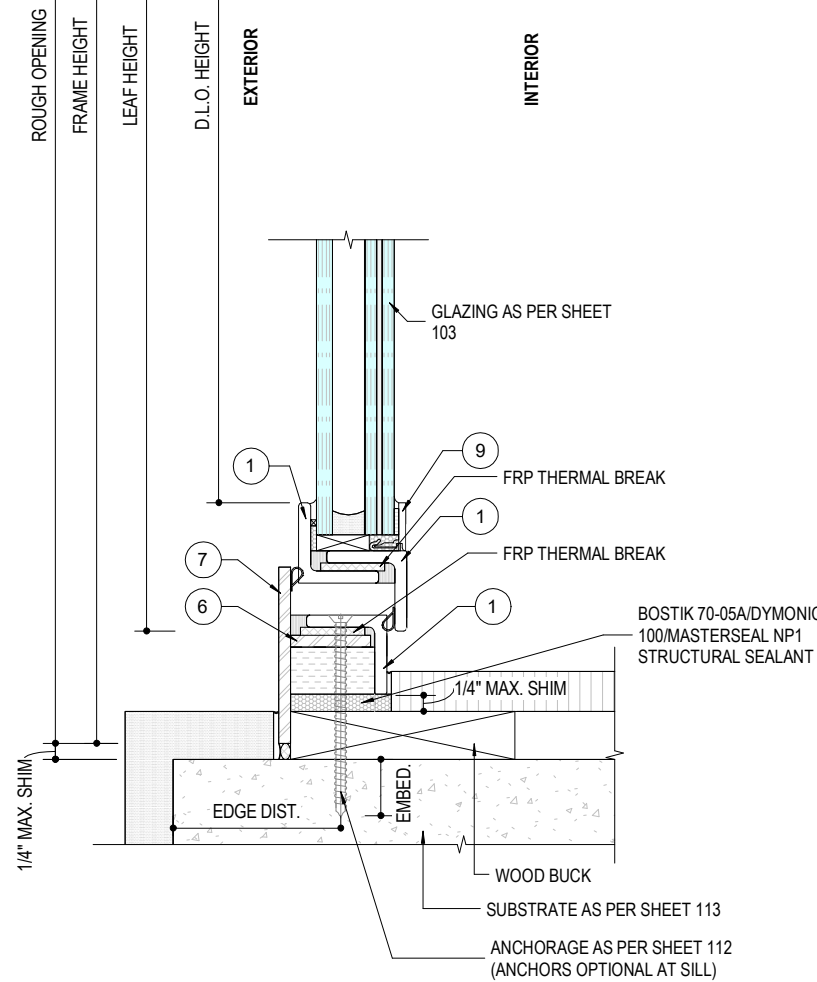
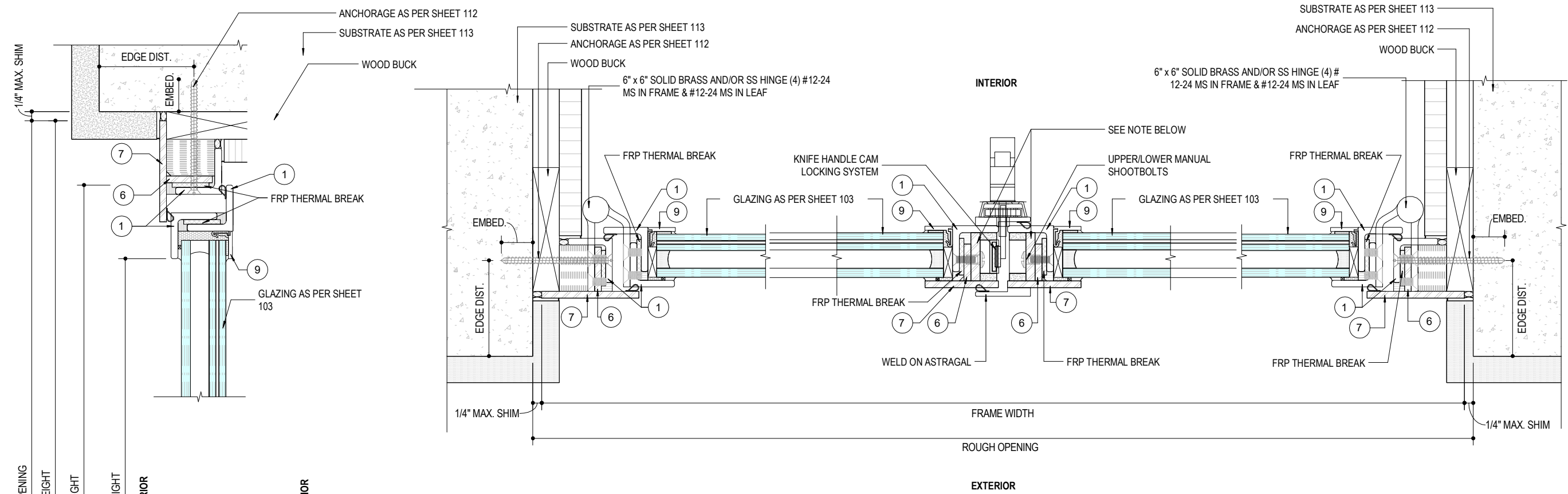
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



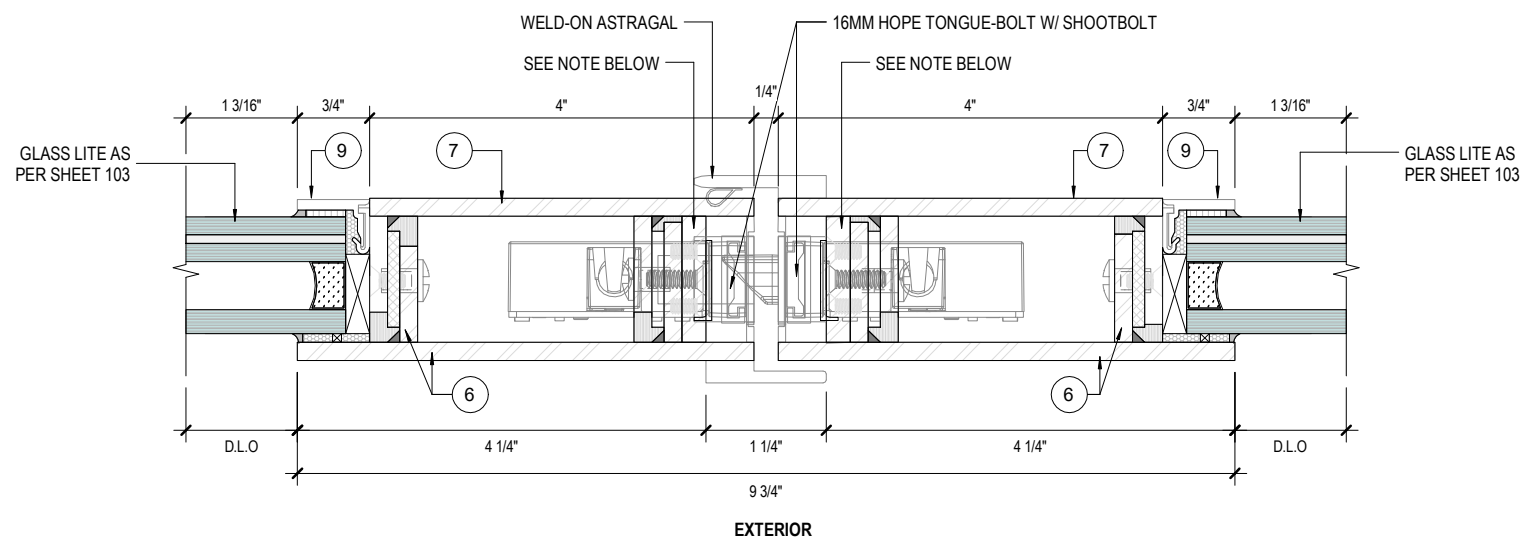
SEALED: 02-26-2025

SECTIONAL DETAILS - THERMALLY BROKEN ARCHED CASEMENT

FL#47351.1



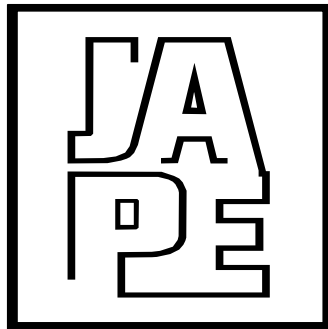
2 THERMALLY BROKEN - ARCHED CASEMENT INSWING JAMB AND MEETING STILE DETAIL
109 NOT TO SCALE



3 THERMALLY BROKEN - ARCHED INSWING ALTERNATE DOOR LOCK BOX DETAIL
109 NOT TO SCALE

1 THERMALLY BROKEN - ARCHED CASEMENT INSWING HEAD AND SILL DETAIL
109 NOT TO SCALE

NOTE:
• VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.
• ANCHORS LAYOUT AS SHOWN ON SHEET 112 CAN BE USED IN LIEU OF STRUCTURAL SILICON.



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

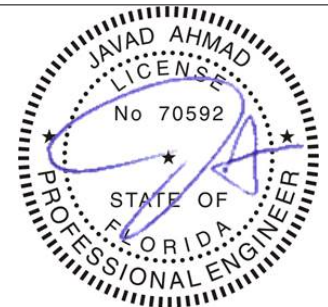
Scale: N/A

Drawn by: SA

Check by: MK

Drawing no. JA-1582-23

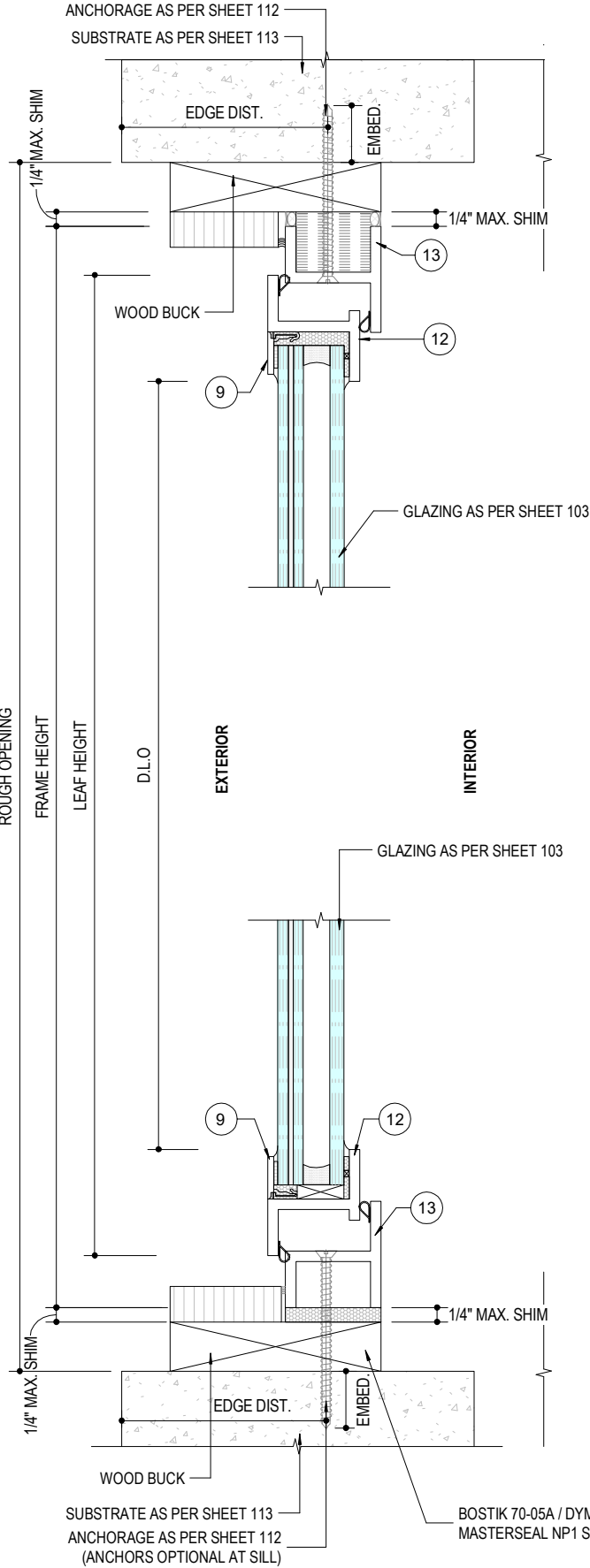
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



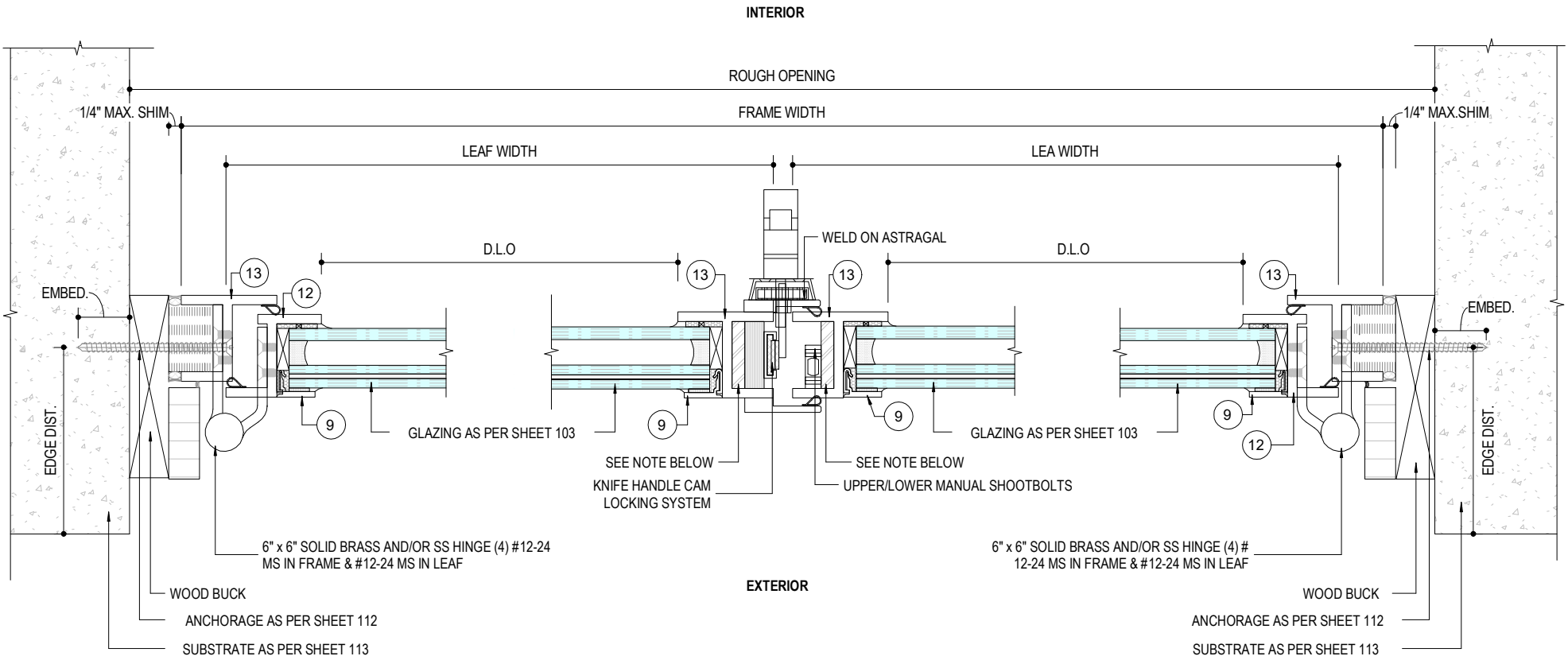
SEALED: 02-26-2025

SECTIONAL DETAILS - NON THERMALLY BROKEN - ARCHED CASEMENT

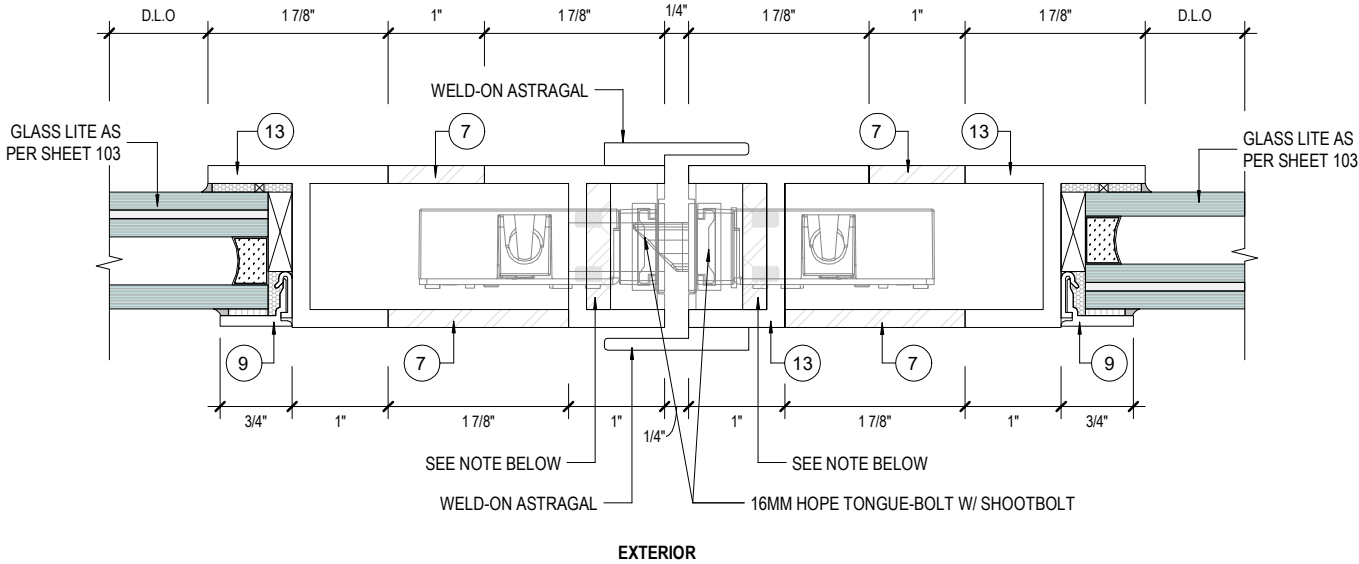
FL#47351.1



1
110
NON THERMALLY BROKEN - ARCHED CASEMENT OUTSWING HEAD AND SILL DETAIL
NOT TO SCALE

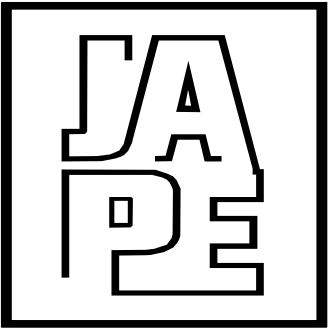


2
110
NON THERMALLY BROKEN - ARCHED CASEMENT OUTSWING JAMB AND MEETING STILE DETAIL
NOT TO SCALE



3
110
NON THERMALLY BROKEN - ARCHED OUTSWING ALTERNATE DOOR LOCK BOX DETAIL
NOT TO SCALE

NOTE:
• VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.
• ANCHORS LAYOUT AS SHOWN ON SHEET 112 CAN BE USED IN LIEU OF STRUCTURAL SILICON.



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

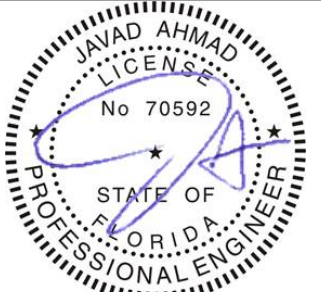
Scale: N/A

Drawn by: SA

Check by: MK

Drawing no. JA-1582-23

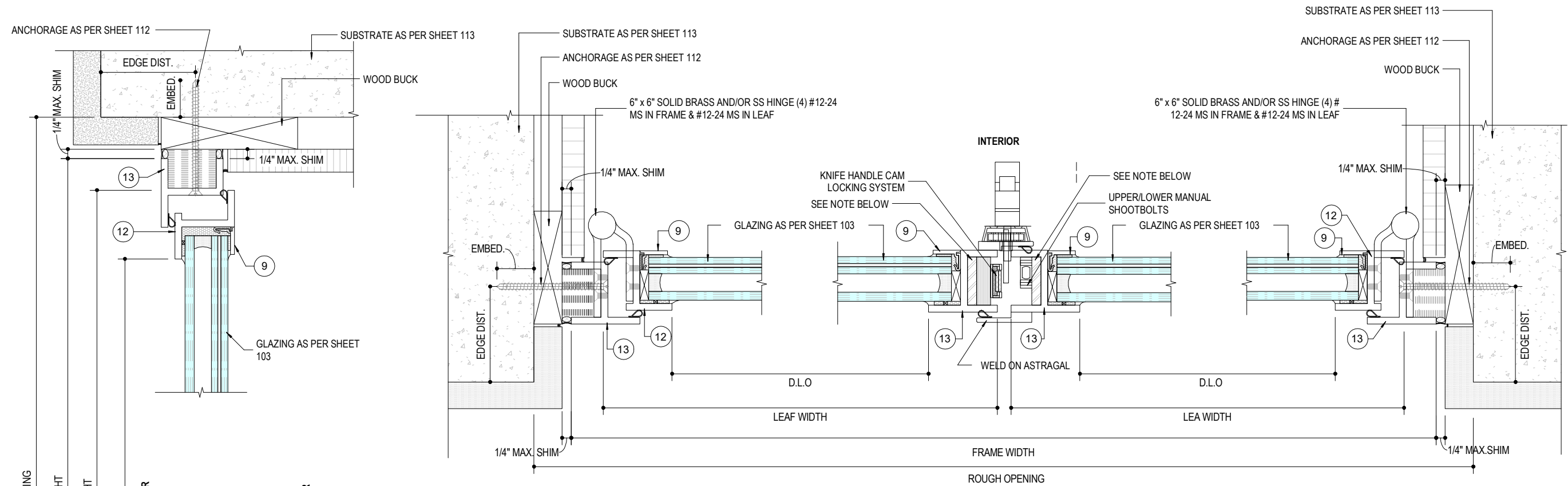
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



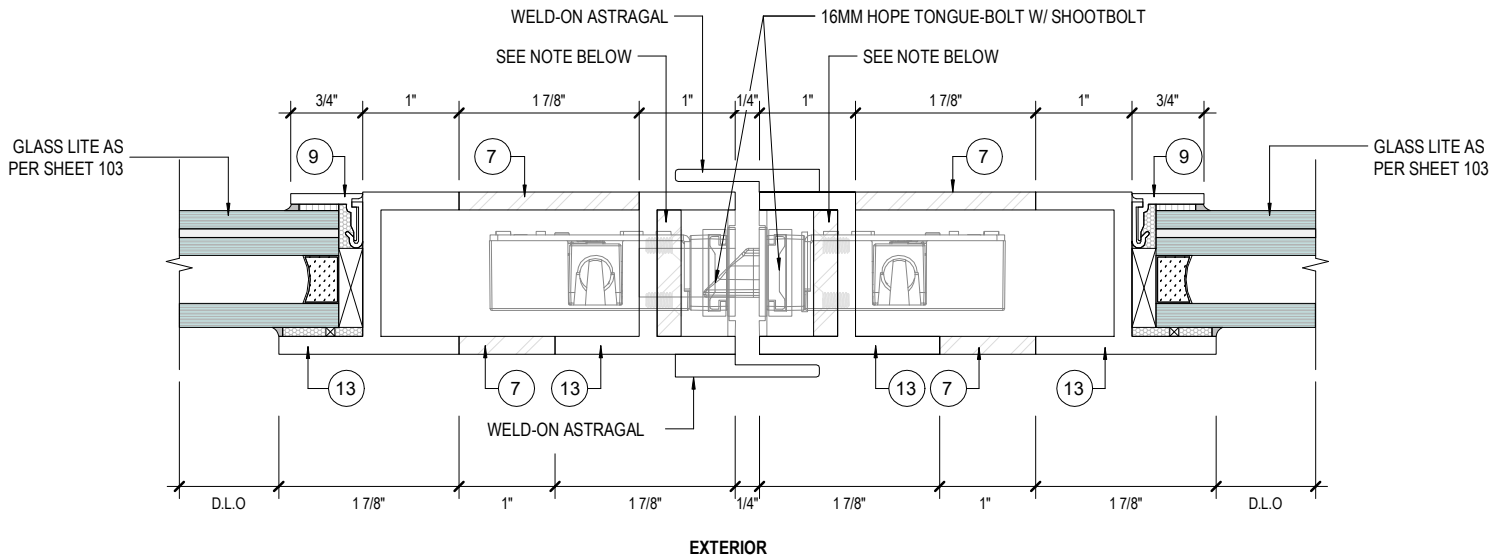
SEALED: 02-26-2025

SECTIONAL DETAILS - NON THERMALLY BROKEN - ARCHED CASEMENT

FL#47351.1



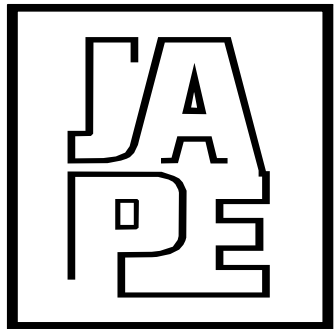
2
111
NON THERMALLY BROKEN - ARCHED CASEMENT INSWING JAMB AND MEETING STILE DETAIL
NOT TO SCALE



3
111
NON THERMALLY BROKEN - ARCHED INSWING ALTERNATE DOOR LOCK BOX DETAIL
NOT TO SCALE

1
111
NON THERMALLY BROKEN - ARCHED CASEMENT INSWING HEAD AND SILL DETAIL
NOT TO SCALE

NOTE:
• VERTICAL STEEL SUPPORTS WILL ONLY BE APPLICABLE FOR BRONZE AND ALUMINUM PROFILE.
• ANCHORS LAYOUT AS SHOWN ON SHEET 112 CAN BE USED IN LIEU OF STRUCTURAL SILICON.



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

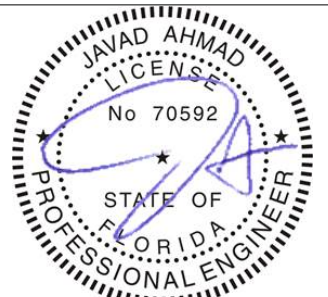
Scale: N/A

Drawn by: SA

Check by: MK

Drawing no. JA-1582-23

Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



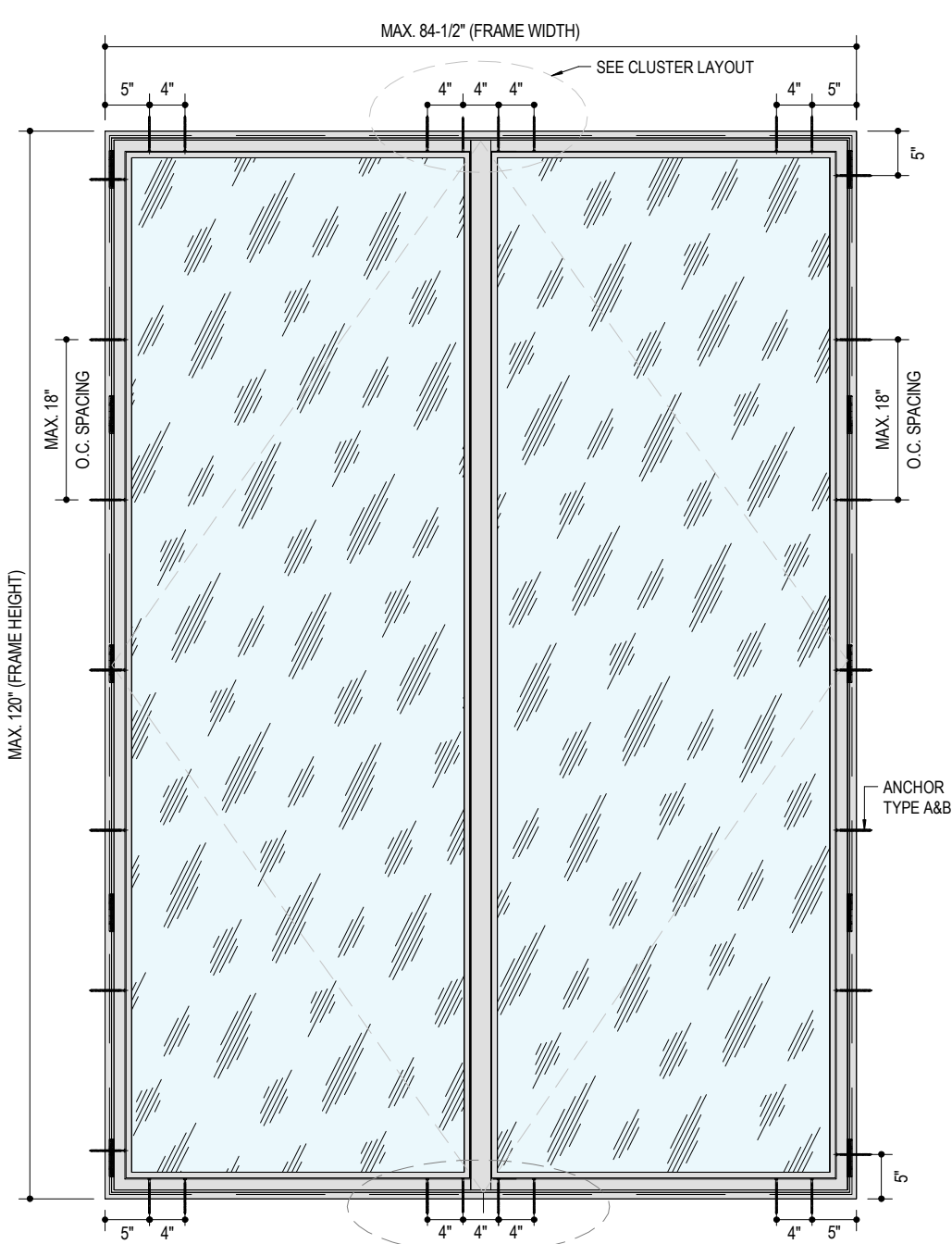
SEALED: 02-26-2025

111

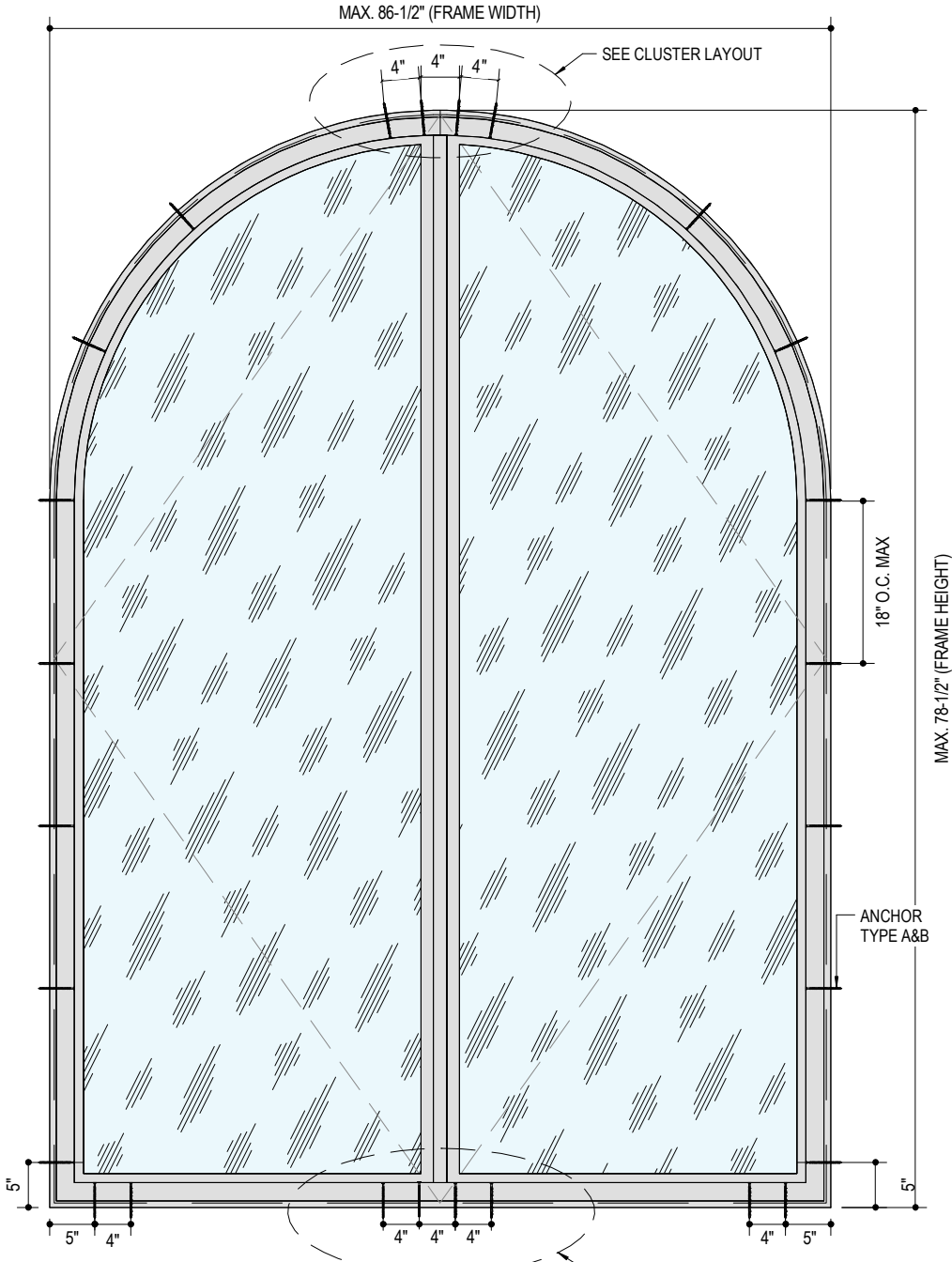
OF 115

ANCHORAGE LAYOUT

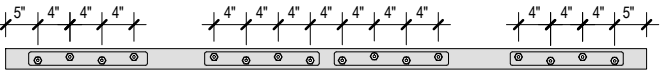
FL#47351.1



1
112 FRENCH CASEMENT ANCHORAGE LAYOUT
NOT TO SCALE



2
112 ARCHED WINDOW ANCHORAGE LAYOUT
NOT TO SCALE



CLUSTER TYPE-A



CLUSTER TYPE-B

CLUSTER LAYOUTS

NOTE:

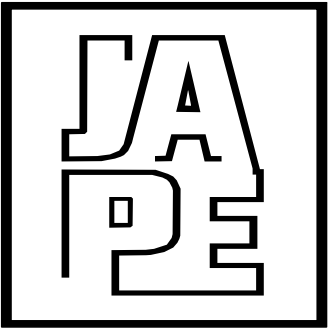
CLUSTER TYPE-A: PROVIDE CLUSTER OF (8) AT INTERMEDIATE AND, (3) AT END;
PROVIDE TYPE A ANCHORS IN HOLLOW/GFCMU SUBSTRATE.

CLUSTER TYPE-B: PROVIDE CLUSTER OF (4) AT INTERMEDIATE AND, (2) AT END;
PROVIDE TYPE A/B ANCHORS IN CONCRETE/METAL SUBSTRATE.

TYPICAL ANCHOR TYPES:

- TYPE A - 1/4" DEWALT ULTRACON+ (Fu = 177,000 PSI, Fy = 155,000 PSI)**
- INTO 2BY WOOD WITH 1-1/2" MIN PENETRATION, AND 1-3/4" MIN EDGE DISTANCE AND 18" O.C. SPACING.
 - DIRECTLY INTO CONCRETE OR GROUT FILLED MASONRY WITH 1-3/4" EMBEDMENT, 2-1/2" MIN EDGE DISTANCE AND 18" O.C. SPACING
 - DIRECTLY INTO HOLLOW MASONRY WITH 1-1/4" EMBEDMENT, 2-1/4" MIN EDGE DISTANCE, AND 18" O.C. SPACING
- TYPE B - #12-24 SS SCREWS (GRADE 5 MIN)**
- INTO 1/8" MIN. THK. ALUMINUM / STEEL WITH (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS, AND 3/4" MIN EDGE DISTANCE AND 18" O.C. SPACING
 - INTO MIN. 1/8" THK. APPROVED MULLIONS AND ALUMINUM BEAMS WITH (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS, AND 3/4" MIN EDGE DISTANCE AND 18" O.C. SPACING

- ANCHOR / SUBSTRATE NOTES:**
- WOOD AT HEAD OR JAMBS SHOULD BE MIN. SOUTHERN YELLOW PINE #2 (SG=0.55 MIN.) OR EQ.
 - CONCRETE AT HEAD OR JAMBS SHOULD BE MIN. f'c= 3000 PSI
 - C-90 HOLLOW/GROUT FILLED MASONRY UNITS AT JAMBS f'm= 2000 PSI
 - STEEL (1/8" THK., A36 MIN) AT HEAD OR JAMBS
 - ALUMINUM (1/8" THK., 6063-T6 MIN) AT HEAD OR JAMBS
 - STEEL IN CONTACT WITH ALUMINUM TO BE PAINTED BY OTHERS.
- NOTE:**
- THE SUPPORTING WOOD BUCKS, CONCRETE AND METAL STRUCTURE SHOWN ON THIS SHEET SHALL BE DESIGNED BY OTHERS AND ARE NOT PART OF THIS APPROVAL. THEY MUST BE CAPABLE OF WITHSTANDING THE LOADS IMPOSED BY THE GLAZING SYSTEM AND TRANSFERRING THEM TO THE BUILDING STRUCTURE.



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

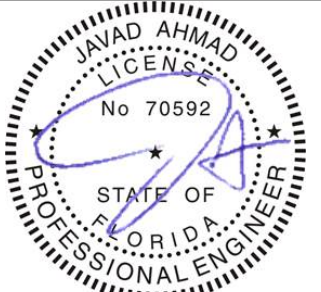
AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

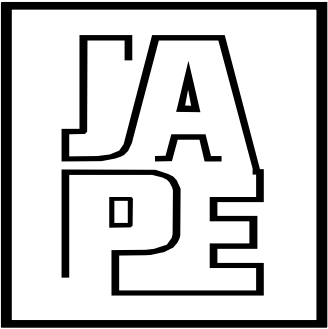
REVISION

No.	DATE	BY	DESCRIPTION
Date:	02-26-2025		
Scale:	N/A		
Drawn by:	SA		
Check by:	MK		
Drawing no.	JA-1582-23		

Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



SEALED: 02-26-2025



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

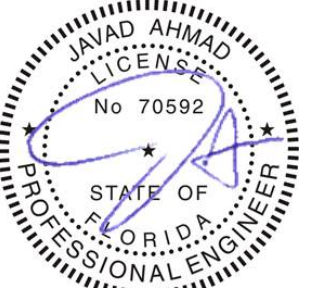
Scale: N/A

Drawn by: SA

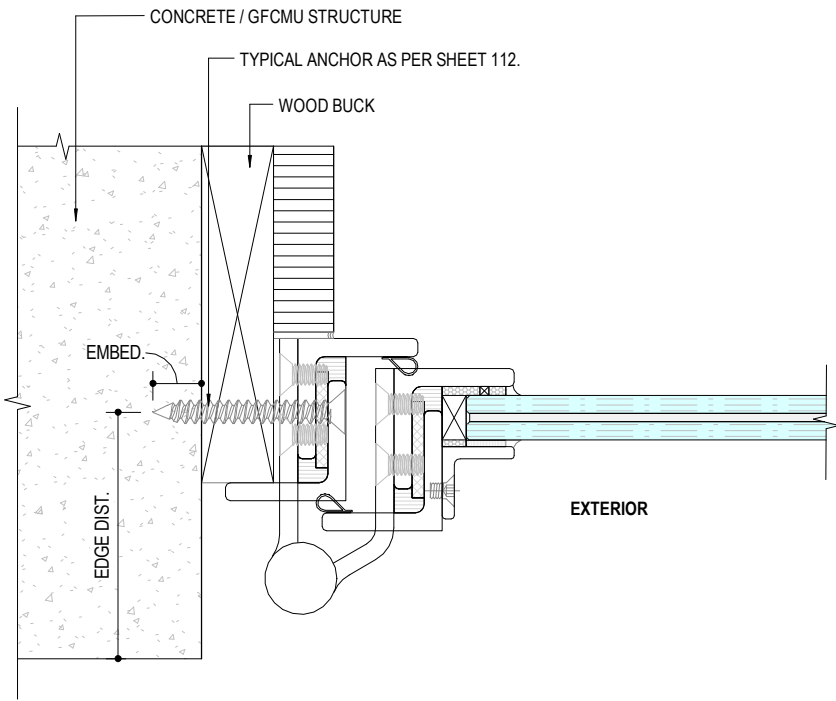
Check by: MK

Drawing no. JA-1582-23

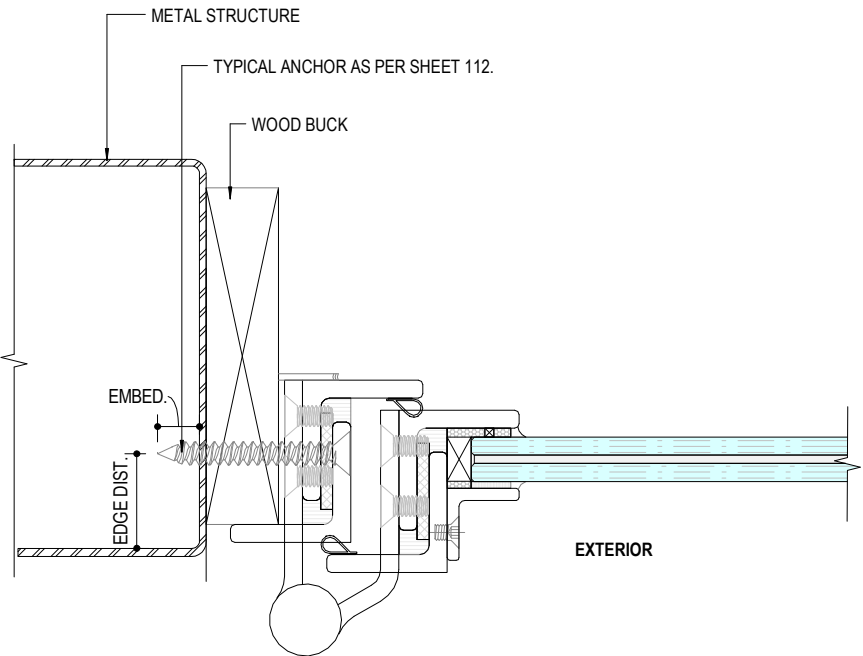
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



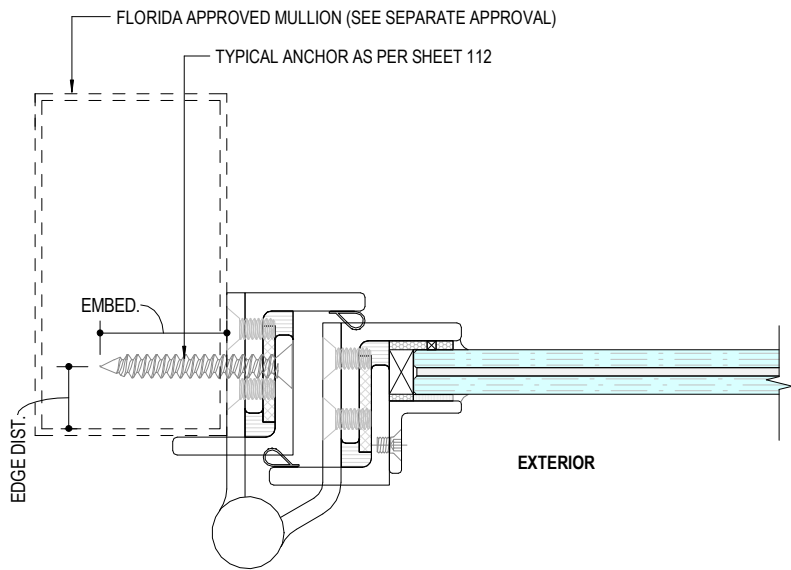
SEALED: 02-26-2025



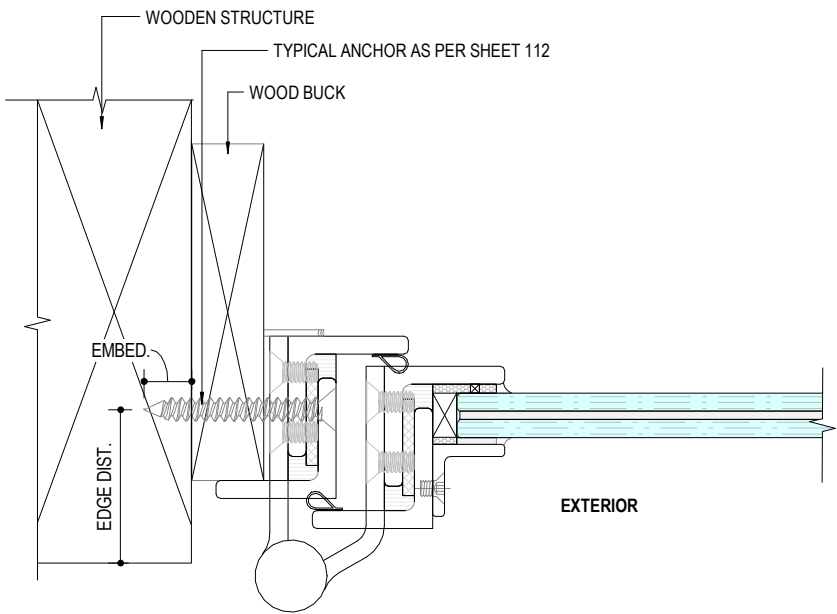
1 ANCHORAGE INTO CONCRETE
113 NOT TO SCALE



2 ANCHORAGE INTO METAL STRUCTURE
113 NOT TO SCALE



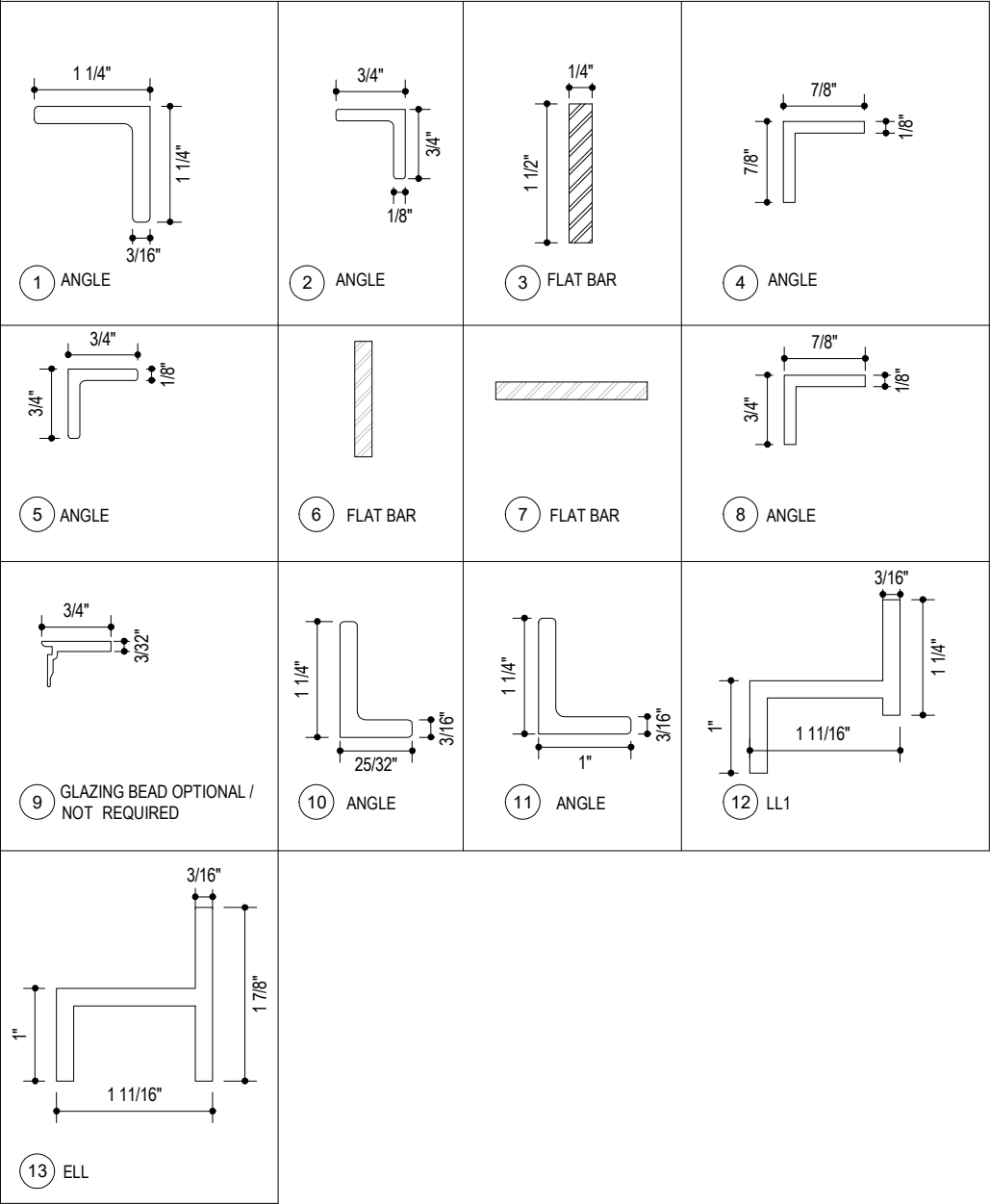
3 ANCHORAGE INTO ALUMINUM MULLION
113 NOT TO SCALE



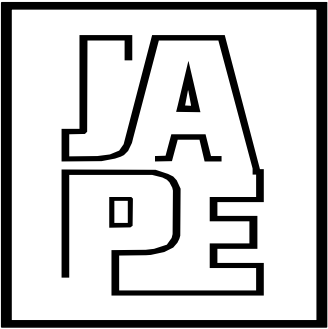
4 ANCHORAGE INTO WOOD STRUCTURE
113 NOT TO SCALE

PARTS LIST

FL#47351.1



BILL OF MATERIALS				
ITEM #	QUANTITY	PART #	DESCRIPTION	MATERIAL
METAL				
1	AS REQD.	-	1-1/4" x 1-1/4" x 3/16" CUSTOM ANGLE	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
2	AS REQD.	-	3/4" x 3/4" x 1/8" CUSTOM ANGLE	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
3	AS REQD.	-	3/4" x 3/4" x 1/8" FLAT BAR	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
4	AS REQD.	-	7/8" x 7/8" x 1/8" CUSTOM ANGLE	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
5	AS REQD.	-	3/4" x 3/4" x 1/8" CUSTOM ANGLE	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
6	AS REQD.	-	3/16" x 1-1/4" FLAT BAR	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
7	AS REQD.	-	3/16" x 2-3/4" FLAT BAR	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
8	AS REQD.	-	7/8" x 3/4" x 1/8" CUSTOM ANGLE	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
9	AS REQD.	-	CUSTOM SNAP GLAZING STOP	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
10	AS REQD.	-	1-1/4' x 25/32" x 3/16" CUSTOM ANGLE	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
11	AS REQD.	-	1-1/4" x 1" x 3/16" CUSTOM ANGLE	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
12	AS REQD.	-	LL1(CUSTOM PROFILE BY MANUFACTURER)	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
13	AS REQD.	-	ELL (CUSTOM PROFILE BY MANUFACTURER)	BRONZE-C385/ALUMINUM-6061/STAINLESS STEEL-316
FASTENERS				
2.0	AS REQD.	-	1/4"-20 x 1/2" FLAT HEAD PHILLIPS	SS
2.1	AS REQD.	-	#14 SS FLAT HEAD PHILLIPS	SS
2.2	AS REQD.	-	1/4"-20 x 3/8" FLAT HEAD PHILLIPS	SS
2.3	AS REQD.	99637A183	18-8 SS BINDING BARREL	SS
2.4	AS REQD.	91771A241	PASSIVATED 18-8 SS PHILLIPS FLAT HEAD SCREW	SS
CAULKING				
3.0	AS REQD.	-	LAZER BLOCK SEAL	-
3.1	AS REQD.	-	PRO MS-50 WHITE	-
3.2	AS REQD.	-	DOW 995-BLACK	-
3.3	AS REQD.	-	DOW 795-BLACK	--
3.4	AS REQD.	-	3/8" CLOSED CELL BACKER ROD	-
3.5	AS REQD.	-	1/8" x 1/8" x 3" GLAZING SHIM	-
3.6	AS REQD.	-	9/16" x 3/8" x 3" SETTING BLOCK (CUSTOM)	-
3.7	AS REQD.	-	GLAZING TAPE	-
3.8	AS REQD.	-	GLAZING WEDGE	-
3.9	AS REQD.	TBD	FRP	-
3.10	AS REQD.	PK55	TAPE APPLIED GASKET	-
3.11	AS REQD.	70-05A	BOSTIK 70-05A ADHESIVE	SILYL MODIFIED POLYMER
3.12	AS REQD.	-	TREMCO DYMONIC 100 SEALANT	POLYURETHANE SEALANT
3.13	AS REQD.	-	MASTERSEAL NP1 SEALANT	POLYURETHANE SEALANT
HARDWARE				
4.0	AS REQD.	T4B3786	6" x 6" HINGE	SS
4.1	AS REQD.	OK5032B3R	KNUCKLE HINGES 5" x 3-1/4"	SOLID BRASS
4.2	AS REQD.	DSB4B3	4" x 4" SQUARE HINGES BALL BEARINGS	SOLID BRASS
4.3	AS REQD.	-	ADJUSTABLE HINGE	SOLID BRASS
4.4	AS REQD.	-	CAM LOCK	-
4.5	AS REQD.	-	MULTIPLE POINT HARDWEAR WITH XX OC LOCKS AS PER FL APPROVAL	-



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

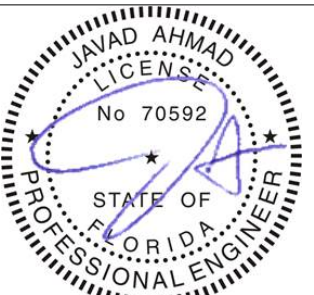
Scale: N/A

Drawn by: SA

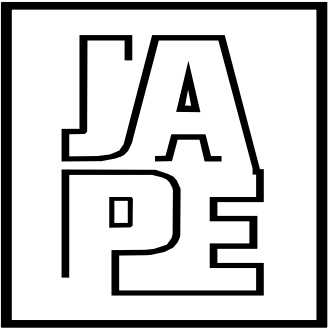
Check by: MK

Drawing no. JA-1582-23

Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



SEALED: 02-26-2025



JAVAD AHMAD PE, inc

7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com

CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING
ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

OUTSWING/INSWING FRENCH
CASEMENT WINDOW SYSTEM

CLIENT :

AMERICAN STEEL
MANUFACTURING, LLC

280 W. HILLSBORO BLVD /
DEERFIELD BEACH, FL 33441

REVISION

No.	DATE	BY	DESCRIPTION

Date: 02-26-2025

Scale: N/A

Drawn by: SA

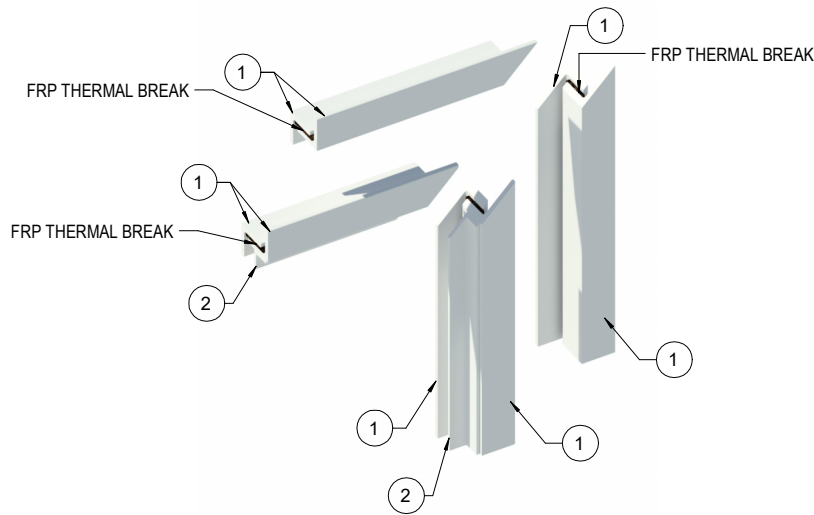
Check by: MK

Drawing no. JA-1582-23

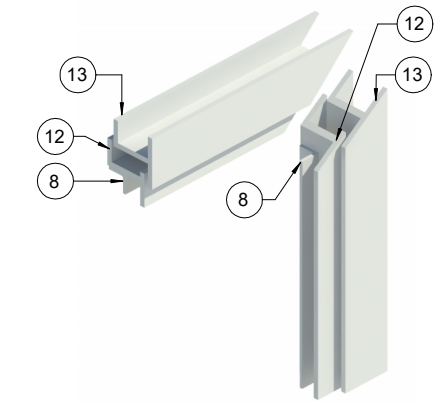
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 - C.A.N.34254



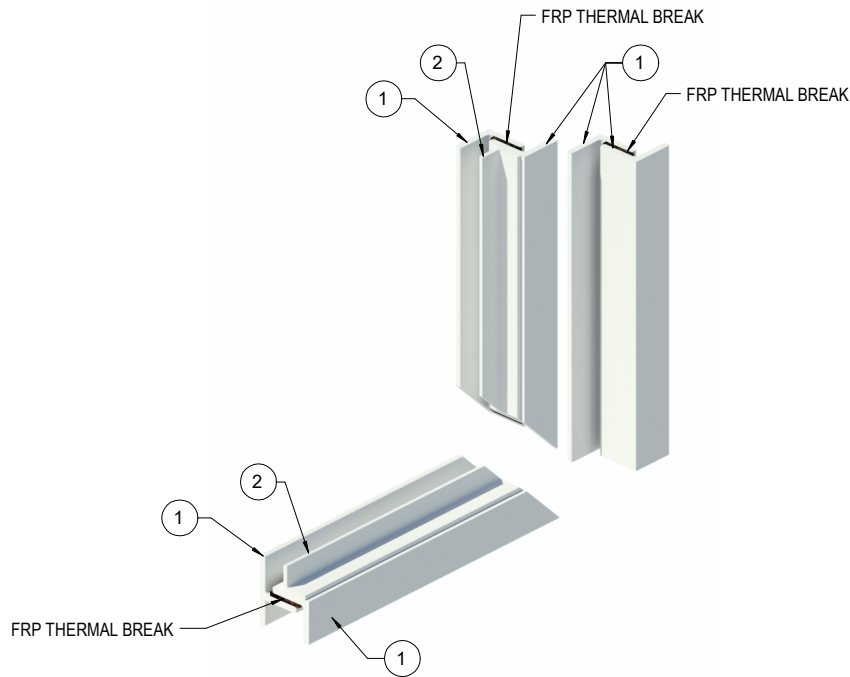
SEALED: 02-26-2025



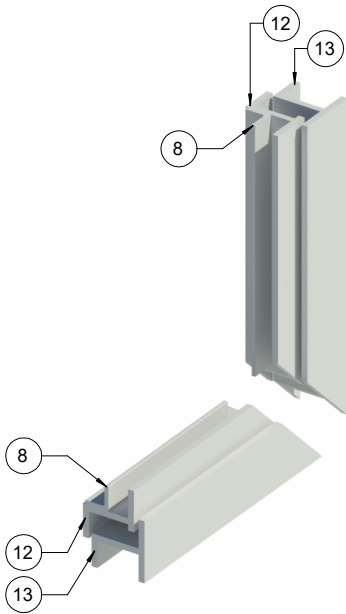
Thermally Broken - Top Corner Frame Assembly Details



Non-Thermally Broken - Top Corner Frame Assembly Details



Thermally Broken - Bottom Corner Frame Assembly Details



Non-Thermally Broken - Bottom Corner Frame Assembly Details