

GENERAL NOTES:

THESE R4000 COMPOSITE PANELS SHALL BE USED FOR WALL, SOFFIT, FASCIA CONSTRUCTION, OR AS A WALL CLADDING. EACH ACTUAL WALL PROJECT SHALL BE CONSTRUCTED USING THE DETAILS SHOWN ON THESE DRAWINGS AS MINIMUM REQUIRED SPECIFICATIONS. PANELS CAN RUN HORIZONTALLY OR VERTICALLY. STEEL METAL FRAMES MUST BE 90 DEGREES RELATIVE TO THE STIFFENER/RETAINER. OVER WALLS SHEATED WITH PLYWOOD, CMU, CONCRETE NO RESTRICTIONS APPLY.

1. THE PRODUCT SHOWN IN THE INSTALLATION DRAWINGS IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE AND IS FOR USE WITHIN THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
2. THE EXTERIOR COLD-FORMED STEEL FRAMING IS TO BE DESIGNED AND SECURED SUCH THAT ALL LOADS ARE TO BE TRANSFERRED TO THE PRIMARY STRUCTURE. THE EXTERIOR COLD-FORMED STEEL FRAMING IS TO BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL AND IS THE RESPONSIBILITY OF THE ARCHITECT AND/OR THE ENGINEER OF RECORD.
3. THE EXTERIOR COLD-FORMED STEEL FRAMING IS TO HAVE THE FOLLOWING MINIMUM REQUIREMENTS:

A. MINIMUM THICKNESS - 0.0451" (18 GAUGE)

B. YIELD STRENGTH - Fy = 33 ksi

C. ULTIMATE TENSILE STRENGTH - Fu = 45 ksi

D. MAXIMUM SPACING - 16" O.C.
4. SHEATHING TO BE 5/8" MINIMUM THICKNESS AND SECURED TO THE FRAMING PROPERLY SUCH THAT ALL EXTERNALLY APPLIED LOADS ARE TRANSFERRED TO THE COLD-FORMED STEEL FRAMING.
5. ALUMINUM COMPOSITE MATERIAL IS TO BE 4mm IN THICKNESS. REFERENCE FIGURE A FOR ADDITIONAL DETAILS.
6. THE MAXIMUM PANEL WIDTH IS NOT TO EXCEED 60".
7. SHIM AS REQUIRED AT EACH SUBSTRATE ATTACHMENT FASTENER WITH LOAD BEARING SHIM. WHERE THERE IS A GAP THAT EXCEEDS 0.063" (1/16") A SHIM IS REQUIRED.
8. THE SUBSTRATE ATTACHMENT FASTENER IS TO BE A #12 DIAMETER SELF-DRILLING FASTENER WITH LENGTH SUCH THAT 3 PITCHES OF THE THREADS PENETRATES BEYOND THE COLD-FORMED STEEL FRAMING MEMBERS. SELF-DRILLING FASTENERS ARE NOT TO EXCEED A SPACING OF 16" ON CENTER. REFERENCE THE INSTALLATION DRAWINGS AND DETAILS FOR ADDITIONAL REQUIREMENTS.

NOTE: A REGISTERED DESIGN PROFESSIONAL SHOULD BE CONSULTED TO DETERMINE THE ANCHOR TYPE, SIZE, SPACING AND QUANTITY WHEN THE PANELS ARE INSTALLED OVER SUBSTRATES THAT VARY FROM THE CONDITIONS AS DETAILED.
9. THE PANEL FACE IS TO BE ATTACHED TO THE CONTINUOUS ALUMINUM EXTRUSION USING A 3/16 DIAMETER BUTTON HEAD RIVET. THE PANEL FACE RIVETS ARE NOT TO EXCEED AN EDGE DISTANCE OF 2-1/4" AND A MAXIMUM SPACING OF 12" ON CENTER ALONG THE LENGTH OF THE PANEL. REFERENCE THE INSTALLATION DRAWINGS AND DETAILS FOR ADDITIONAL REQUIREMENTS.
10. ALL FASTENERS ARE TO BE CORROSION RESISTANT.

- A - METAL SKIN

- THICKNESS = 0.5 mm (0.020")

- MINIMUM MECHANICAL PROPERTIES

TENSILE YIELD STRENGTH - Fy = 17 ksi

ULTIMATE TENSILE STRENGTH - Fu = 20 ksi
- B - TIE LAYER BETWEEN SKIN AND CORE
- C - CORE POLYMERIC COMPOUND (FR - FIRE RETARDANT)
- D - FINISH - PAINT FINISH OR NATURAL METAL SURFACE

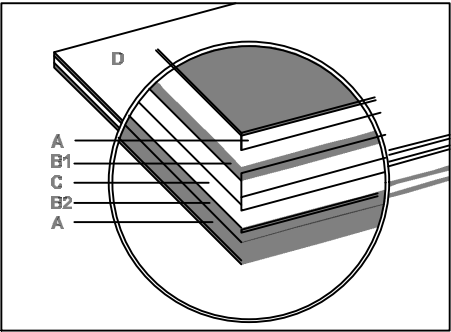


FIGURE A

DESIGN PRESSURE RATING	IMPACT RATING
+120 PSF / -120 PSF	PRODUCT MUST BE INSTALLED OVER AN IMPACT RATED WALL

THE DESIGN WIND PRESSURES ABOVE ARE FOR ALLOWABLE STRESS DESIGN AS DEFINED IN ASCE 7. FOR LOAD AND RESISTANCE FACTOR DESIGN APPLICATIONS, THE WIND LOADING PRESENTED MUST BE DIVIDED BY 0.6.

PRODUCT MANUFACTURER:

CEI COMPOSITE MATERIALS, LLC

800 E. DUNCAN STREET

MANCHESTER, MI 48158

PRODUCT NAME:

HVHZ R4000 COMPOSITE PANEL SYSTEM

SCALE: FULL

DATE: 08/22/2025

SHEET NUMBER: 1 OF 6

C

CLADDTECH

ENGINEERING

FLORIDA CERTIFICATE OF AUTHORIZATION NO. 32444

ACWORTH, GA. 30101

PHONE: (770) 656-9923

2025.08.22 13:24:15-04'00'

TYLER DOUGLAS BRUTON

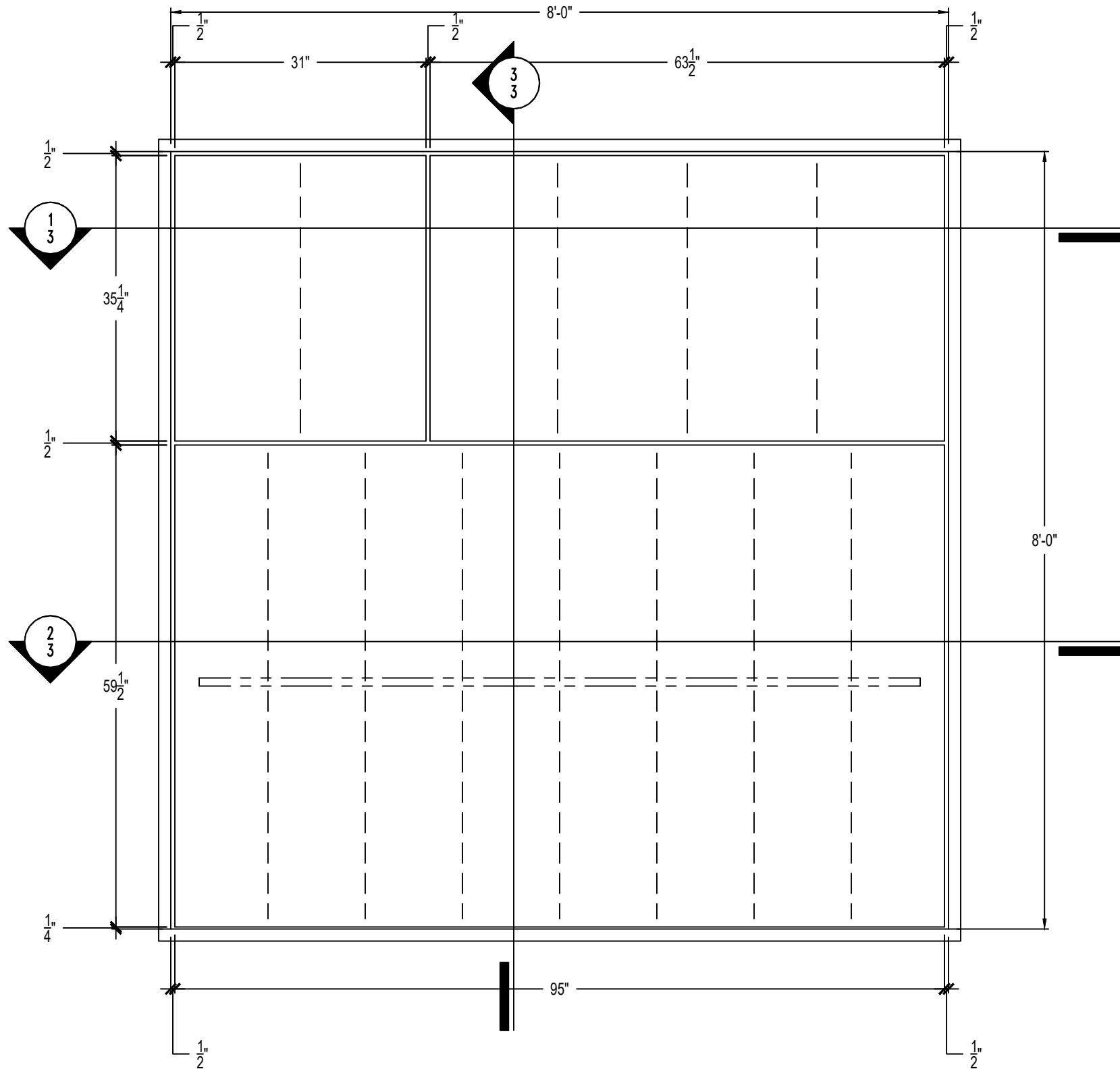
LICENSE

No 78595

STATE OF FLORIDA

PROFESSIONAL ENGINEER

TYLER DOUGLAS BRUTON, PE
FLORIDA PE LICENSE NO. 78595



1 TEST WALL ELEVATION
2 SCALE: 3/4" = 1'-0"

TABLE 1 - PANEL FACE STIFFENER REQUIRMENTS (IN.)					
		PANEL WIDTHS			
		MAXIMUM UNSTIFFENED WIDTH (IN.)	36 IN.	48 IN.	60 IN.
DESIGN PRESSURE	60 PSF	19	24	18	18*
	90 PSF	16	20	18*	12*
	120 PSF	14	16	12*	12*

- THE DESIGN WIND PRESSURES ABOVE ARE FOR ALLOWABLE STRESS DESIGN AS DEFINED IN ASCE 7. FOR LOAD AND RESISTANCE FACTOR DESIGN APPLICATIONS, THE WIND LOADING PRESENTED MUST BE DIVIDED BY 0.6.
- * INDICATES THAT A PANEL & WALL INTERMEDIATE WIND STIFFENER EXTRUSION IS REQUIRED

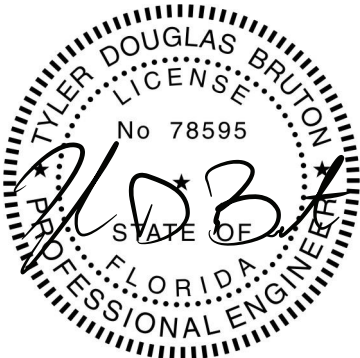
PRODUCT MANUFACTURER: CEI COMPOSITE MATERIALS, LLC
800 E. DUNCAN STREET
MANCHESTER, MI 48158

PRODUCT NAME: HVHZ R4000 COMPOSITE PANEL SYSTEM

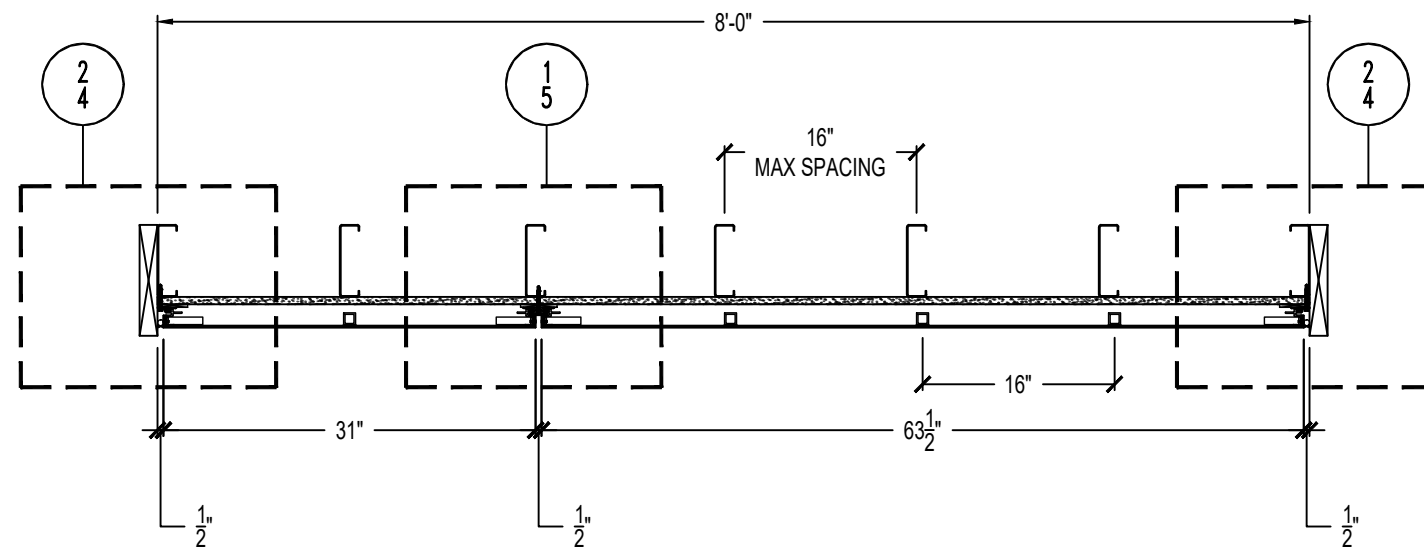
SCALE: 3/4" = 1'-0" DATE: 08/22/2025 SHEET NUMBER: 2 OF 6

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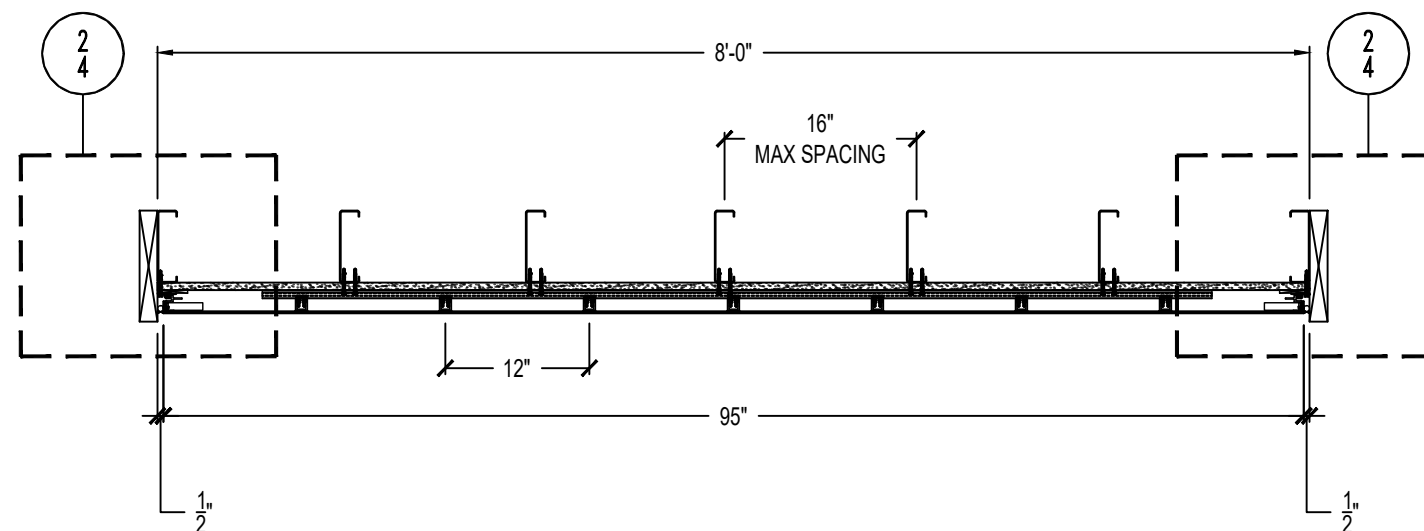
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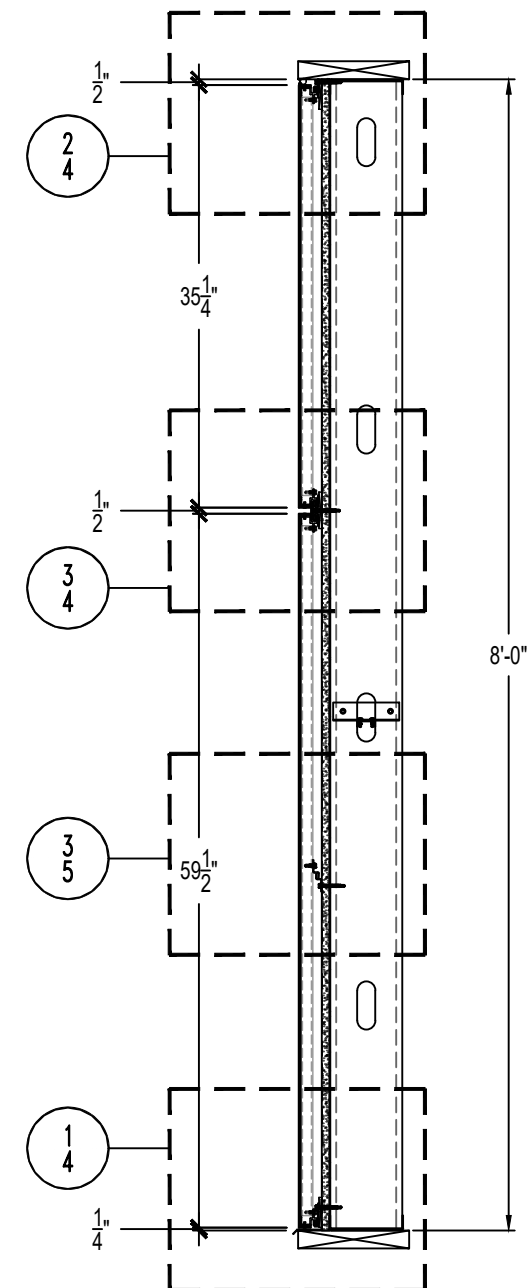
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1 VERTICAL SECTION #1
3 SCALE: 3/4" = 1'-0"



2 VERTICAL SECTION #1
3 SCALE: 3/4" = 1'-0"

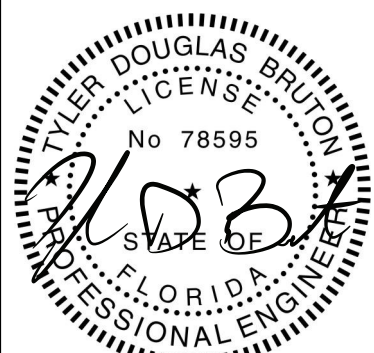


3 VERTICAL SECTION #1
3 SCALE: 3/4" = 1'-0"

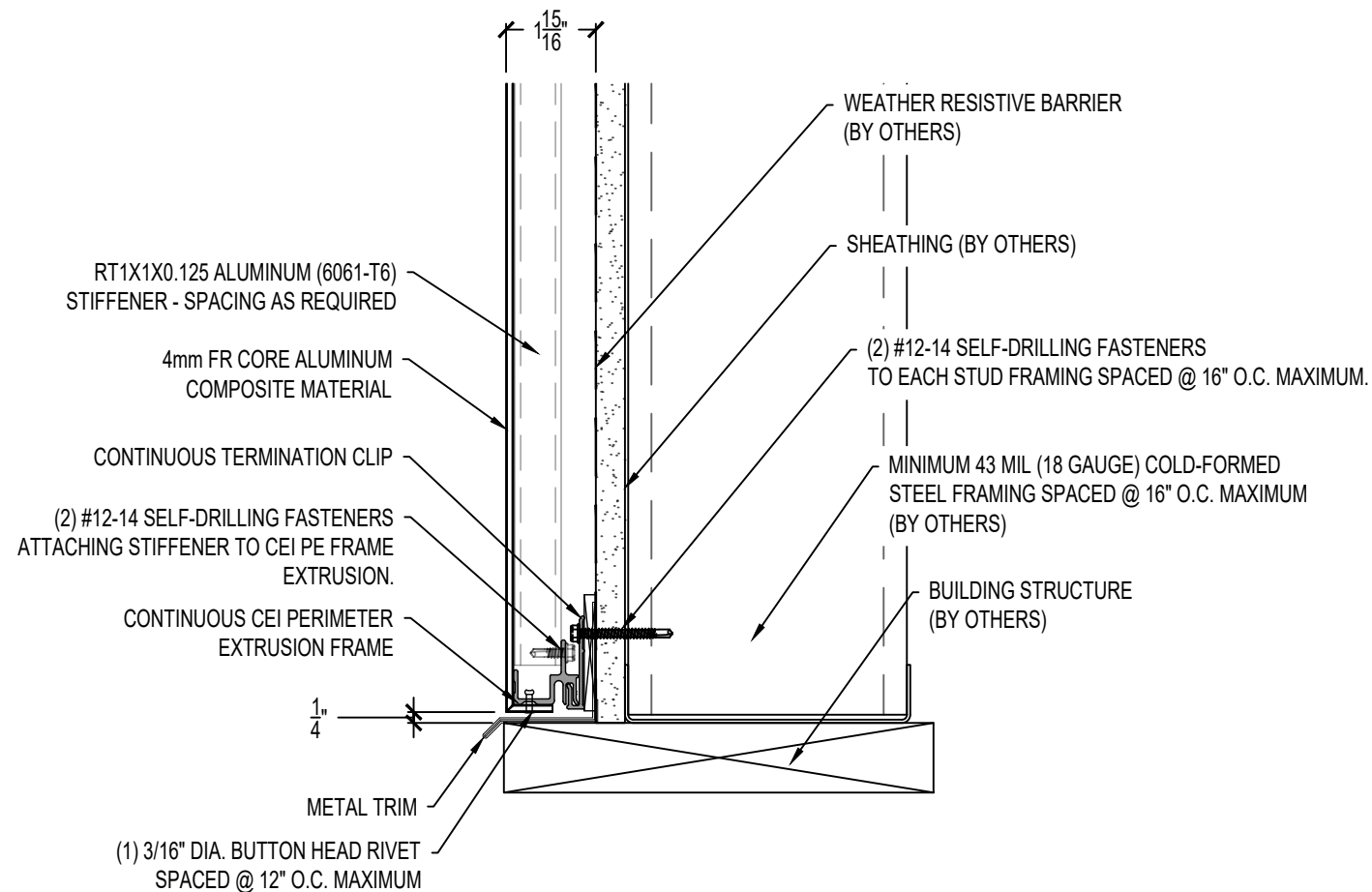
PRODUCT MANUFACTURER:	CEI COMPOSITE MATERIALS, LLC 800 E. DUNCAN STREET MANCHESTER, MI 48158	
PRODUCT NAME:	HVHZ R4000 COMPOSITE PANEL SYSTEM	
SCALE: 3/4" = 1'-0"	DATE: 08/22/2025	SHEET NUMBER: 3 OF 6

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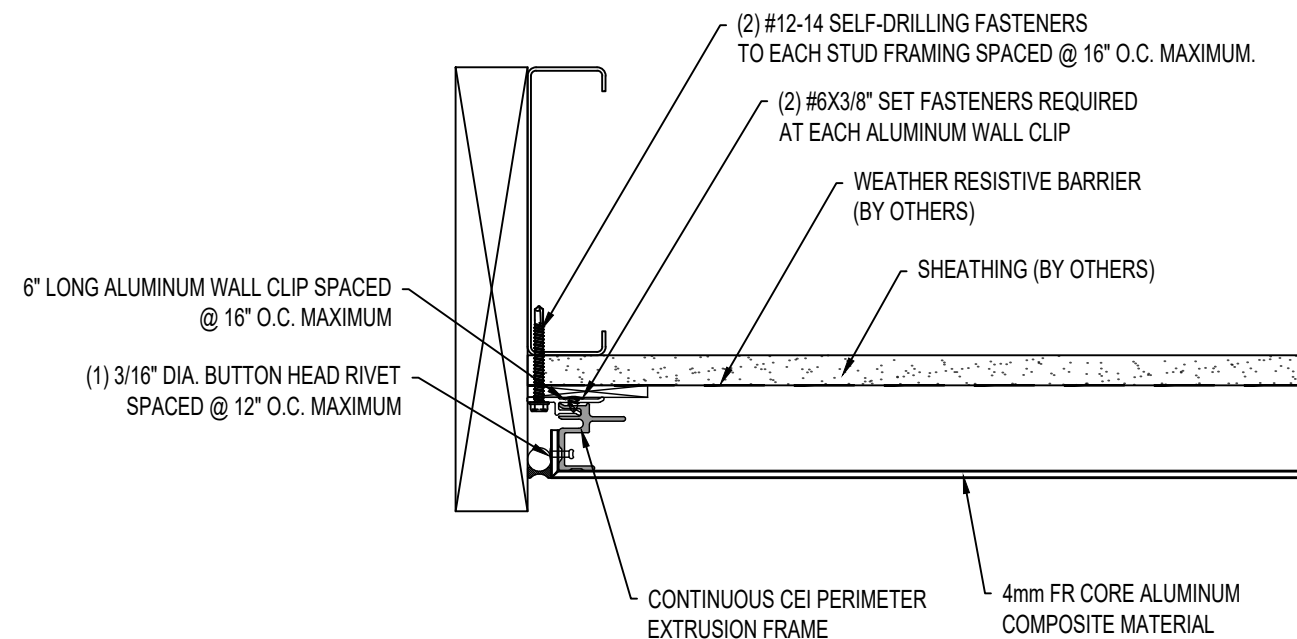
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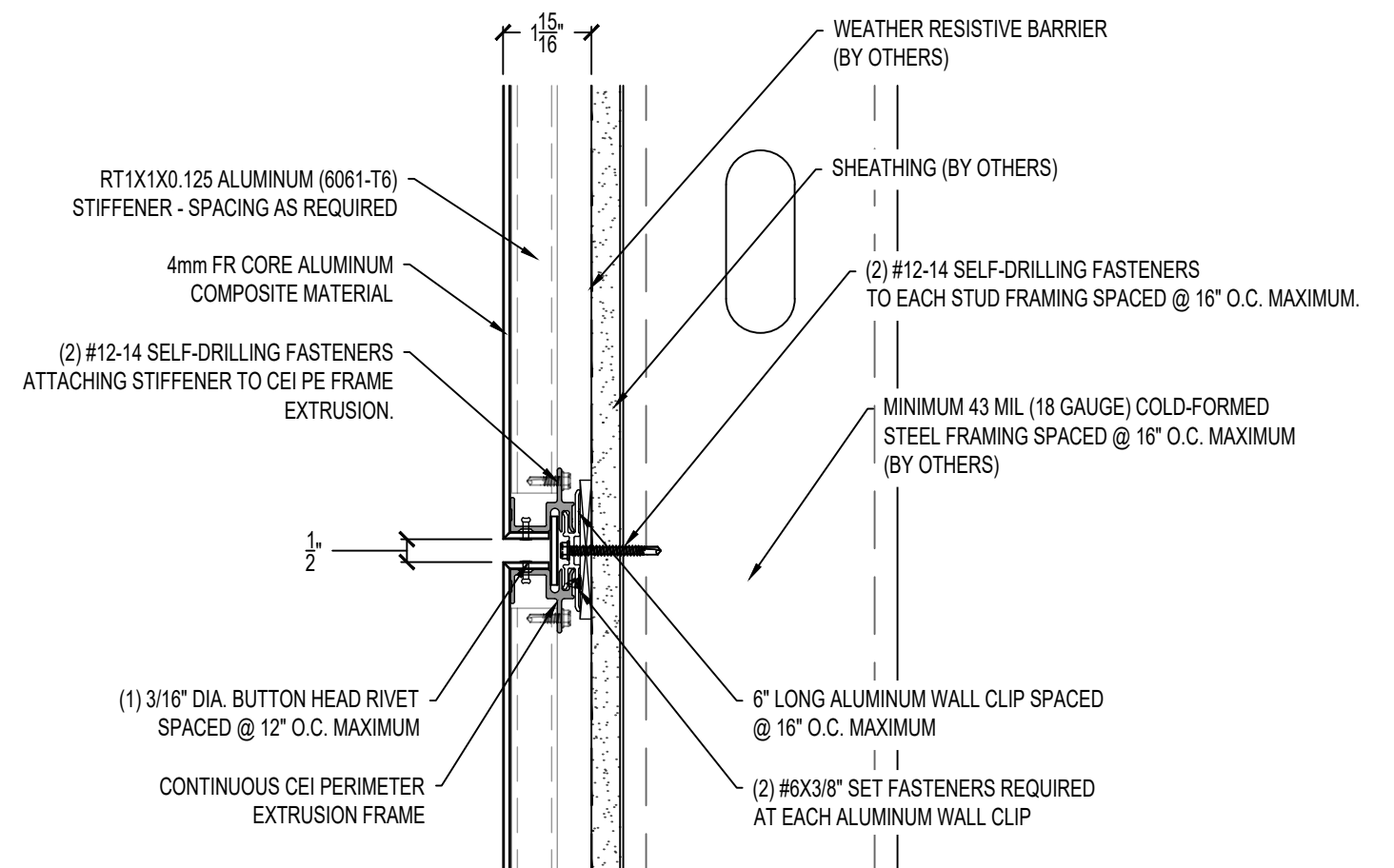
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1 CONNECTION DETAIL #1
4 SCALE: 3" = 1'-0"



2 CONNECTION DETAIL #2
4 SCALE: 3" = 1'-0"

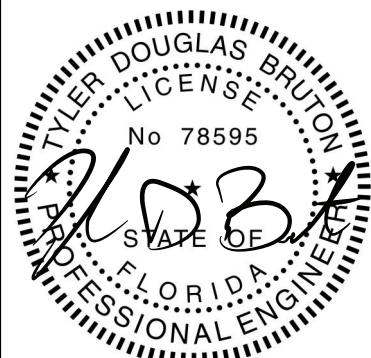


3 CONNECTION DETAIL #3
4 SCALE: 3" = 1'-0"

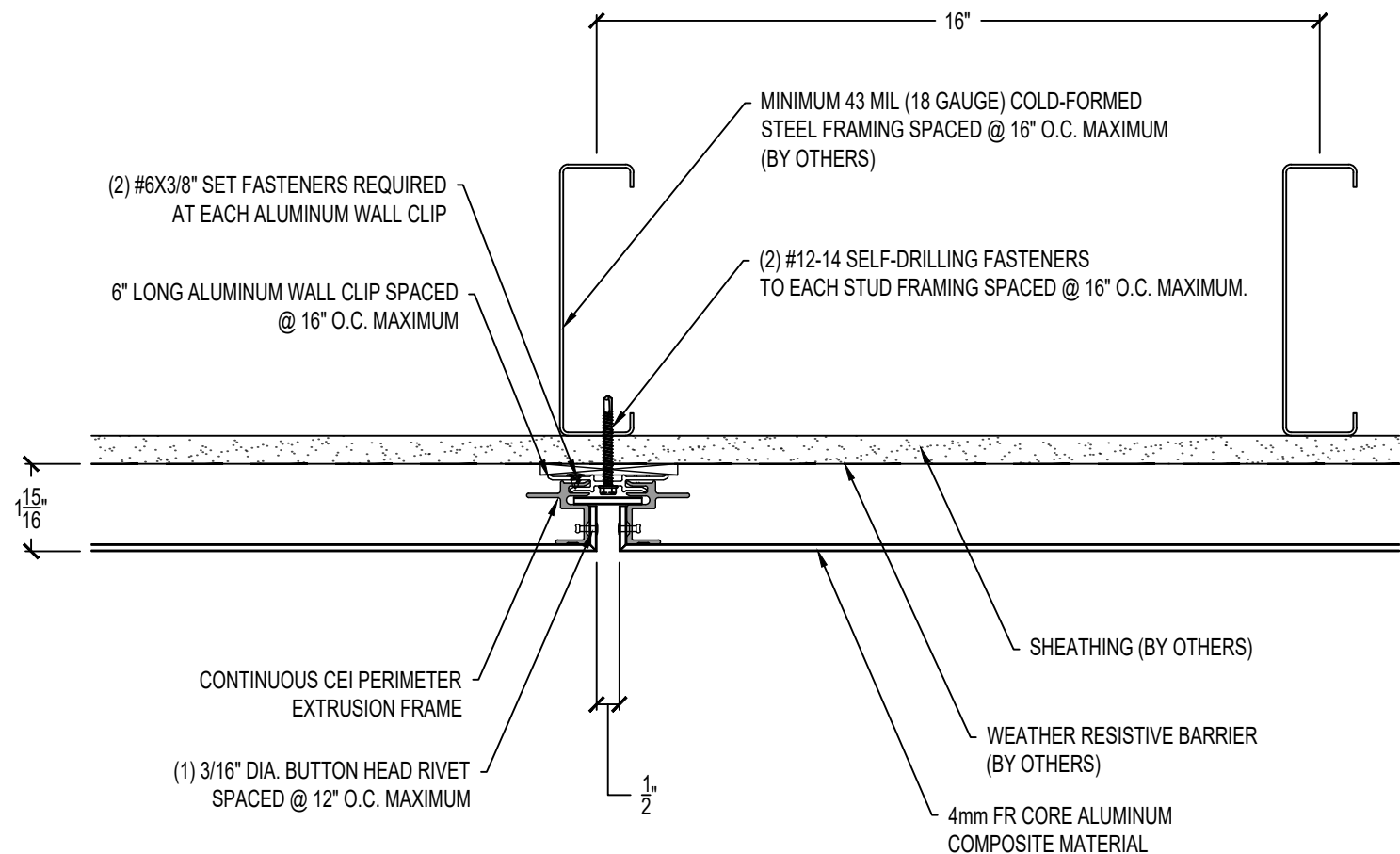
PRODUCT MANUFACTURER:	CEI COMPOSITE MATERIALS, LLC 800 E. DUNCAN STREET MANCHESTER, MI 48158	
PRODUCT NAME:	HVHZ R4000 COMPOSITE PANEL SYSTEM	
SCALE: 3" = 1'-0"	DATE: 08/22/2025	SHEET NUMBER: 4 OF 6

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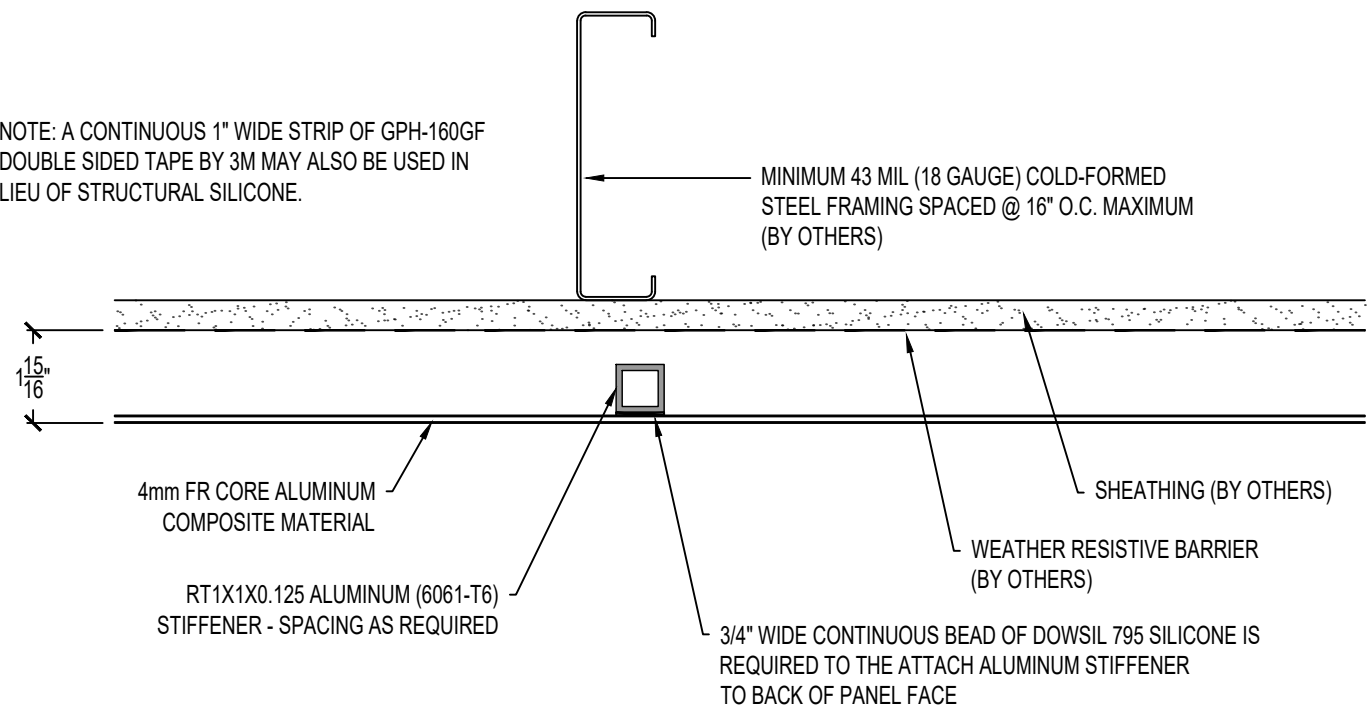


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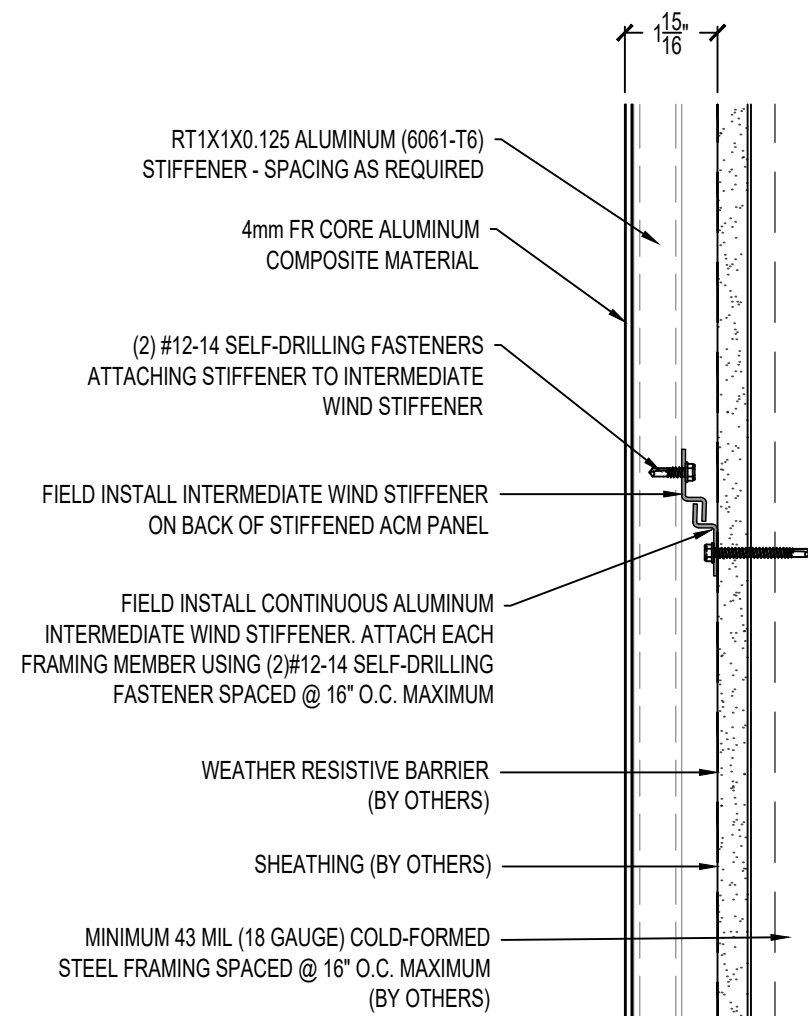


1 CONNECTION DETAIL #4
5 SCALE: 3" = 1'-0"

NOTE: A CONTINUOUS 1" WIDE STRIP OF GPH-160GF DOUBLE SIDED TAPE BY 3M MAY ALSO BE USED IN LIEU OF STRUCTURAL SILICONE.



2 CONNECTION DETAIL #5
5 SCALE: 3" = 1'-0"



3 CONNECTION DETAIL #6
5 SCALE: 3" = 1'-0"

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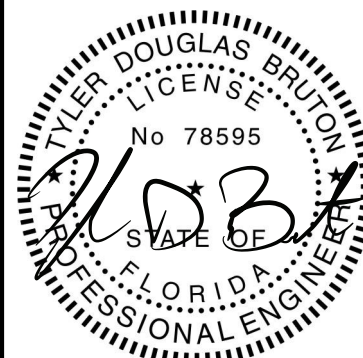
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DATE: 08/22/2025

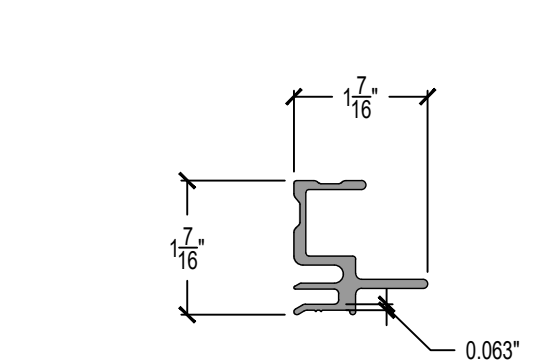
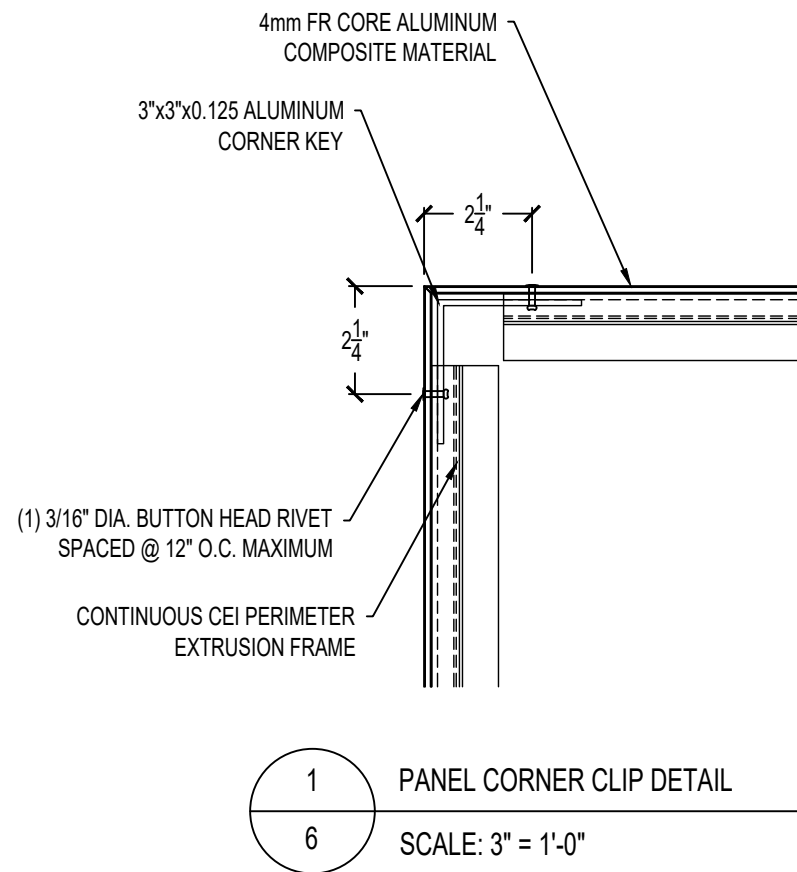
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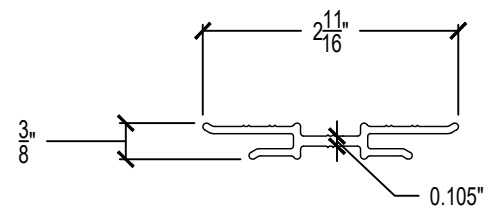


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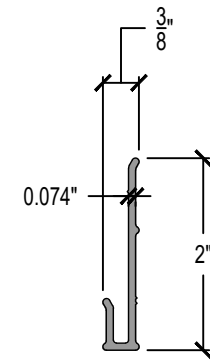
CEI PERIMETER EXTRUSION FRAME

TYPE: CONTINUOUS EXTRUSION
ALUMINUM 6063-T6
MINIMUM THICKNESS = 0.063"



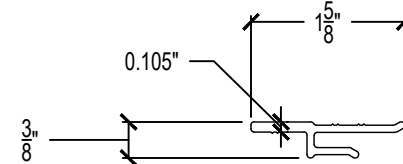
STANDARD RAINSCREEN CLIP

TYPE: 6" LONG CLIP
ALUMINUM 6063-T6
MINIMUM THICKNESS = 0.105"



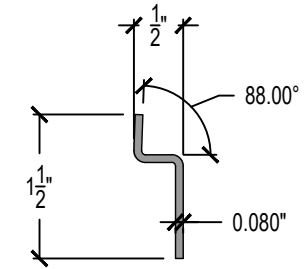
TERMINATION EXTRUSION

TYPE: CONTINUOUS EXTRUSION
ALUMINUM 6063-T6
MINIMUM THICKNESS = 0.063"



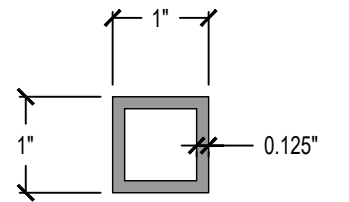
HALF RAINSCREEN CLIP

TYPE: 6" LONG CLIP
ALUMINUM 6063-T6
MINIMUM THICKNESS = 0.105"



INTERMEDIATE WIND STIFFENER

TYPE: CONTINUOUS EXTRUSION
ALUMINUM 3003-H14
MINIMUM THICKNESS = 0.080"



RT1X1X0.125 TUBE STIFFENER

TYPE: CONTINUOUS EXTRUSION
ALUMINUM 6061-T6
MINIMUM THICKNESS = 0.125"

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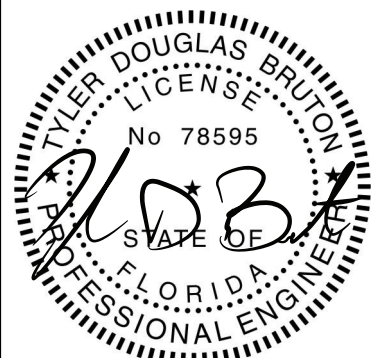
SCALE: 6" = 1'-0"

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