

Arcwall Advanced is a high-performance pressure-equalized rain screen wall system made from formed aluminum, stainless, or zinc plate that provides highly advanced water management capabilities.

The system achieves tested and certified AAMA 508-07 performance for nearly instantaneous pressure equalization between the exterior and interior of the wall cladding, significantly dampening capillary action created by negative pressure and vapor drive from exterior to interior. Additionally, where required, the system compartmentalizes the drained and back-ventilated wall cavity to baffle lateral air flow, a key principle of pressure-equalized rain screen design.

Arcwall Advanced features a dry-joint design and may be installed in horizontal orientation over continuous masonry, concrete, studs/sheathing, or as the outer cladding in a wall assembly that incorporates continuous insulation and a suitable air and water barrier to achieve AAMA 508-07 performance.



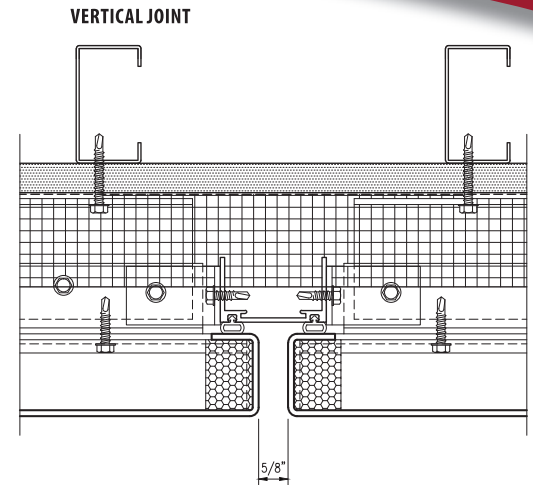
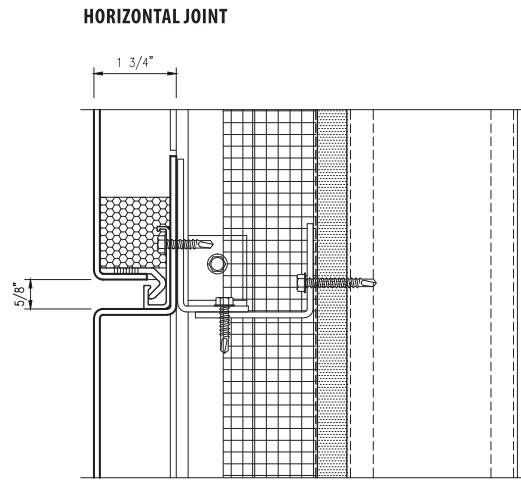
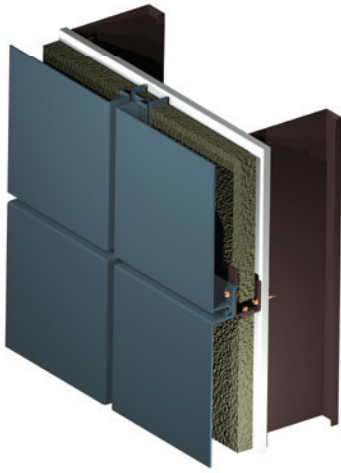
DETAILS

- AAMA 508-07 certified
- Manufactured from solid aluminum or stainless plate with integral panel returns formed from a single piece of metal
- Solid aluminum and stainless steel: high resistance to denting and puncturing, ideal for high-traffic or abusive areas
- Fully mitered and welded corners ground smooth for seamless appearance
- 0.625" (15.88 mm) standard horizontal and vertical joint with variable options
- Adjustable furring to address variable construction tolerances and ensuring vertical sealing to air and water barrier
- Non-Combustible: minimal smoke or fuel contribution
- Avoids NFPA 285 complications by avoiding thermo-plastic cores
- All panel systems are reinforced/stiffened to resist deflection limits
- Vertical gasketed gutter extrusions and integrated horizontal gutters to drain moisture to the exterior
- Panels install horizontally
- Cavity compartmentalization option
- Concealed fastened using corrosion-resistant self-tapping screws

- Aluminum: post-applied finishing for longterm performance and uniform aesthetic
- As rain screen systems rely on gravity to drain water, all skyward facing surfaces, copings, sloped conditions and all perimeters must be sealed
- 100% recyclable with high percentage of post-consumer and industrial content, which may contribute to LEED credits

DESIGN OPTIONS

- Panels may be flat, curved, or custom 3D profiles
- Unlimited color options for aluminum plate
- Options for #4, #6, #8, and non-directional finishes for stainless plate
- Matching perforated and louvered panels
- Available shop-applied appliqués for accents
- May also be used for column, beam and pilaster cladding
- ***Optional back-cuts on formed panel edges for a sharper bend and crisper appearance***



METAL SUBSTRATE AND FINISH OPTIONS

ALUMINUM

3003-H14 aluminum alloy-temper

Thickness: 0.125" (3.18 mm) standard and 0.188" (4.78 mm) option

Finishes: Kynar®, architectural TGIC polyester powder coating or anodized

STAINLESS STEEL

T304 or T316

Thickness: 14 gauge (0.078") (1.98 mm) standard and 12 gauge (0.101") (2.78 mm) option

Finishes: #4, #6, #8, and non-directional satin in smooth or custom embossed patterns

PANEL SIZES

Widths: 12" (305 mm) to 72" (1,829 mm)*

Lengths: 12" (305 mm) to 160" (4,064 mm)*

Depth: 3.75" (95.25 mm) minimum

* Maximum panel size depends upon plate material, gauge, finish, and geometry

PANEL WEIGHT RANGE

(dependent upon gauge and geometry)

Aluminum: 2.62 - 3.52 lbs./ft²

Stainless Steel: 4.64 - 5.913 lbs./ft²

Zinc: Consult with Metalwërks

Ranges provided for clarification. Consult with Metalwërks for further options.

ACCESSORIES

Flashing: 0.040" (1.02 mm) to 0.063" (1.60 mm) aluminum

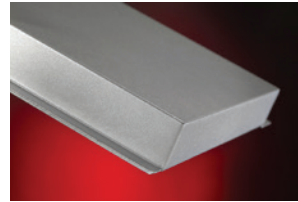
Coping: May be produced with the same material as the wall panel system

Furring Channels: As required for proper mounting of panels

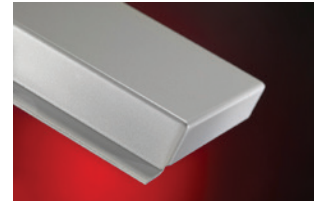
Fasteners: Type 304 stainless steel or cadmium-plated as recommended

Shims: High impact thermally-broken plastic shims to maintain co-planar surfaces

SHARP CORNER



STANDARD CORNER



TESTING

AAMA 508-07 *Voluntary Test Method and Specification for Pressure Equalized Rain Screen Wall Cladding Systems*, including:

Air Infiltration - ASTM E 283-04

Testing conducted at 1.57 psf positive static air pressure difference
Passed at 0.12 cfm/ft² (0.13 allowed)

Cyclic Static Air Pressure - ASTM 1233-06

Testing conducted at 25.0 psf in 100 three-second cycles
Passed at < .08 seconds

Static Pressure Water Resistance - ASTM E331-00

Testing conducted at 15.05 psf positive static air pressure difference
Passed at 0.31 ft² (3.2 ft² allowed)

Dynamic Pressure Water Resistance - AAMA 501.1-05

Testing conducted with dynamic pressure equivalent of 15.05 psf for a 15 minute duration
Passed at 0.73 ft² (3.2 ft² allowed).

Structural - ASTM E 330

Used for applying loads between tests.

WARRANTY

Material & Workmanship: 1-year standard, with 2- or 5-year options

Finish Integrity: 10-year standard and up to 20-year for coated aluminum

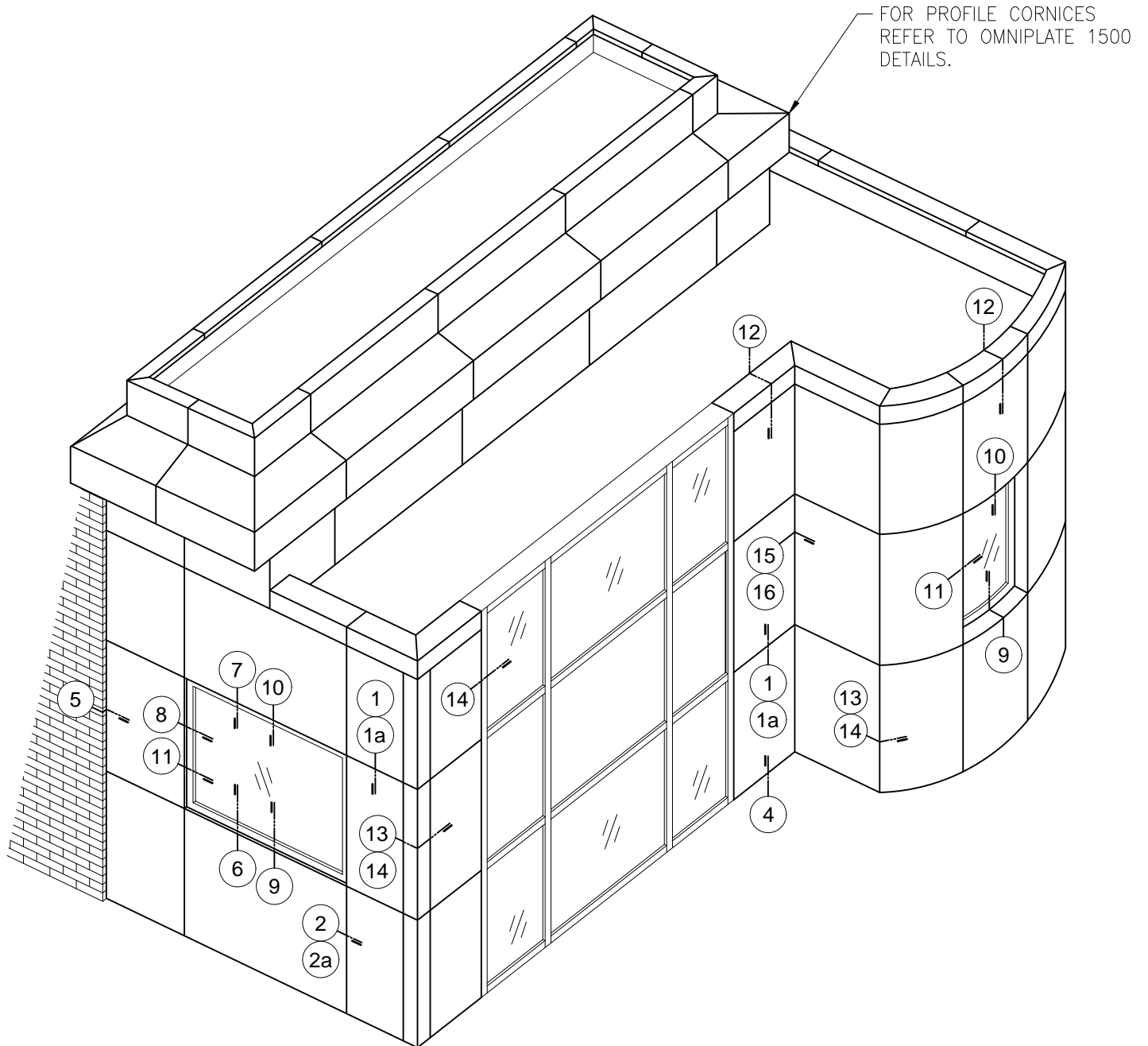
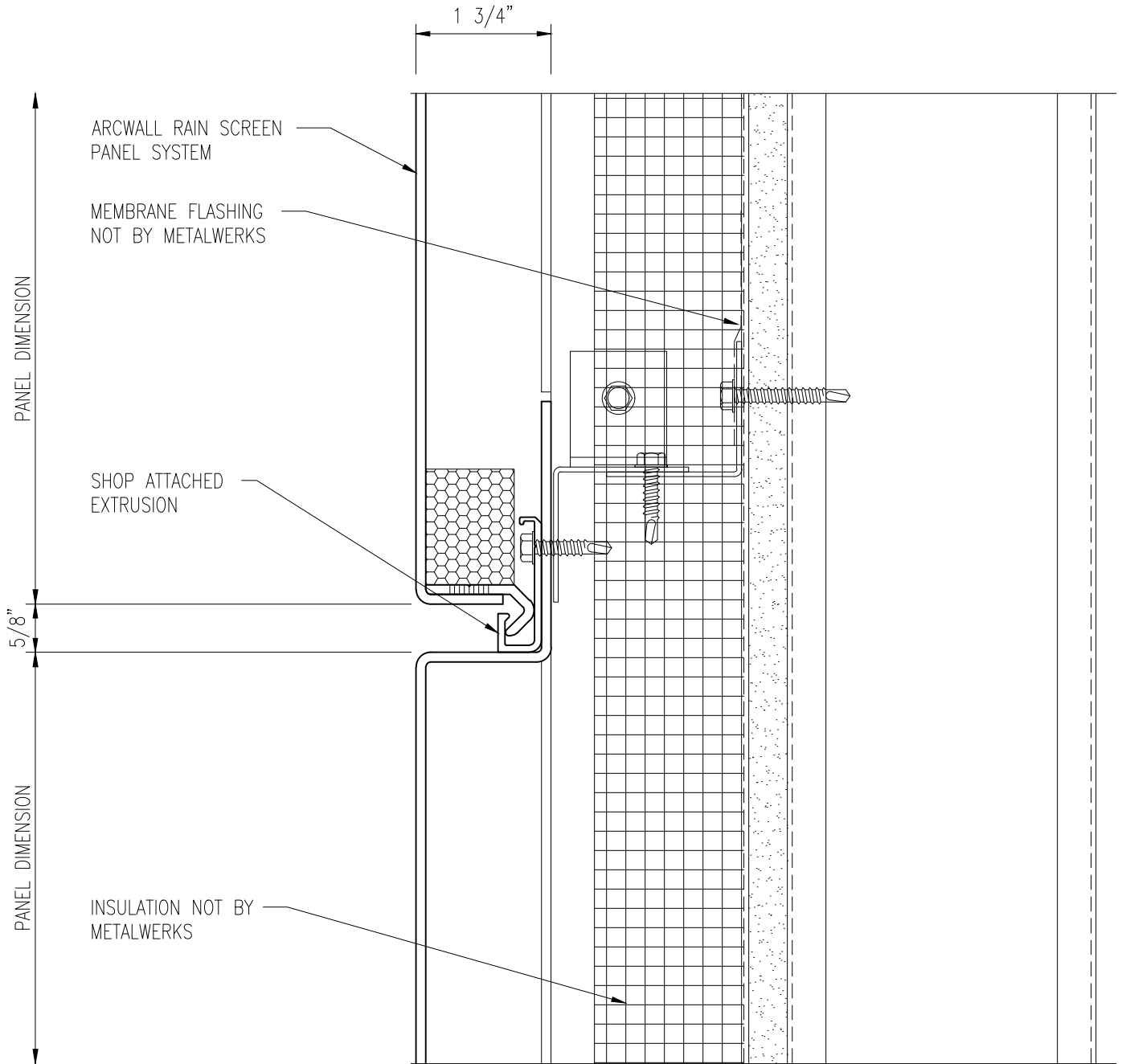


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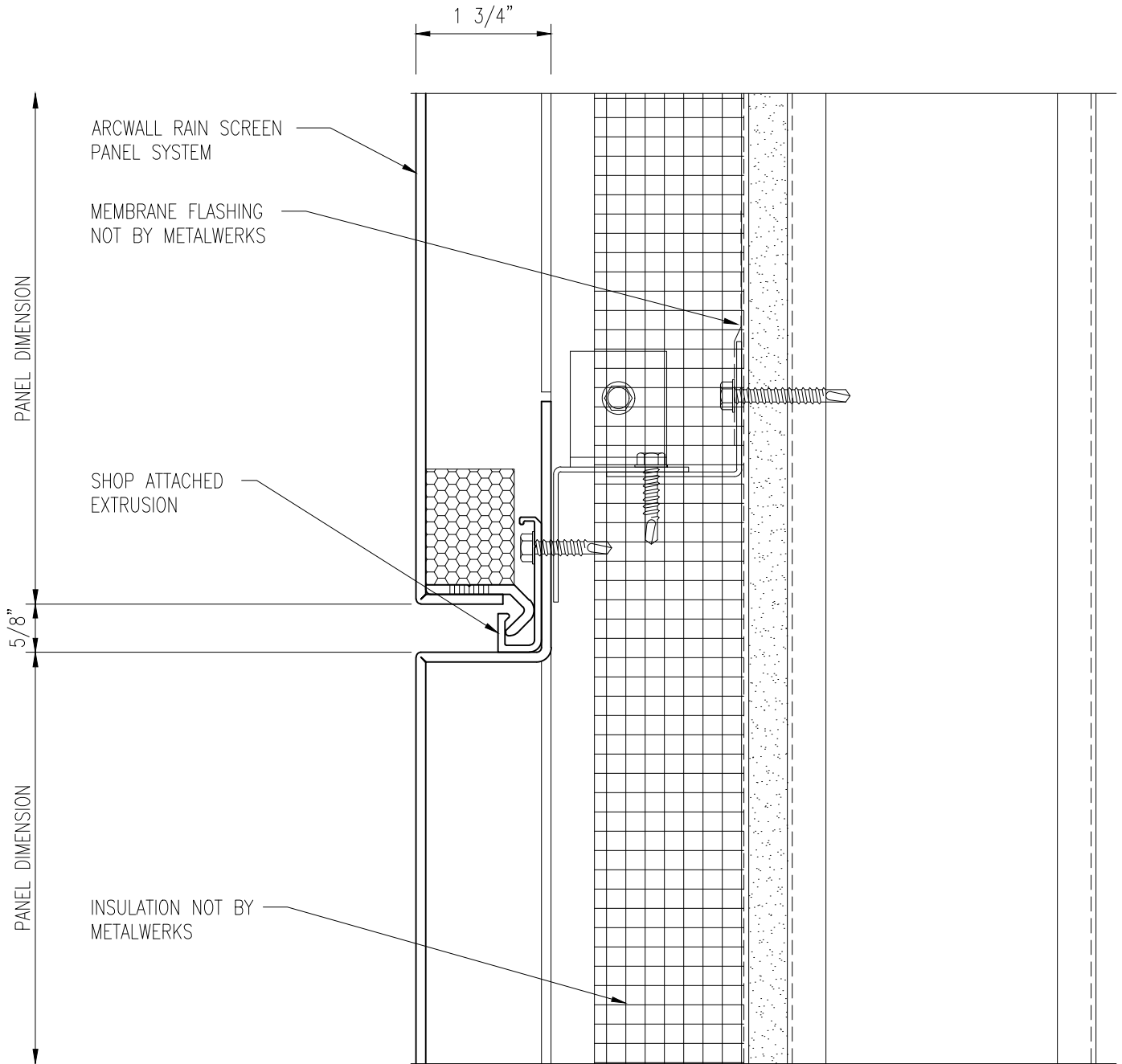
DETAIL DESCRIPTION

- 1 Horizontal Joint
- 1a Horizontal Joint w/ Back Routed Edges
- 2 Vertical Joint
- 2a Vertical Joint w/ Back Routed Edges
- 3 Panel Stiffener
- 4 Panel Sill
- 5 Panel Jamb
- 6 Storefront Sill
- 7 Storefront Head
- 8 Storefront Jamb
- 9 Curtain Wall Sill
- 10 Curtain Wall Head
- 11 Curtain Wall Jamb
- 12 Coping
- 13 Outside Corner
- 14 Outside Mitered Corner
- 15 Inside Corner
- 16 Inside Mitered Corner



PRIMARY WALL CONSTRUCTION AND INSULATION NOT BY METALWERKS. 16 GAGE METAL STUDS MINIMUM REQUIRED

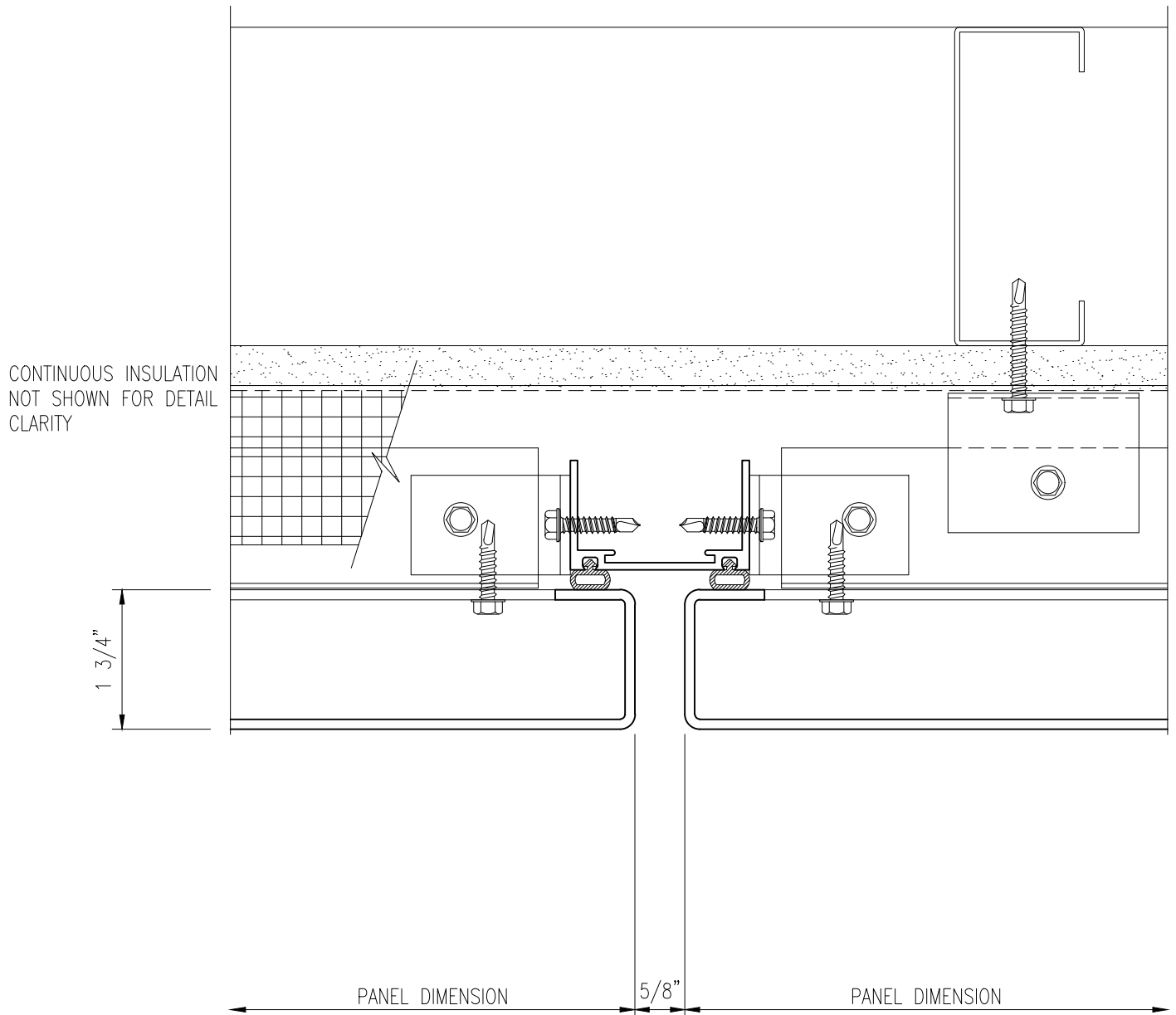
1) Horizontal Joint



PRIMARY WALL CONSTRUCTION AND INSULATION NOT BY METALWERKS. 16 GAGE METAL STUDS MINIMUM REQUIRED

1a) Horizontal Joint w/ Back Routed Edges

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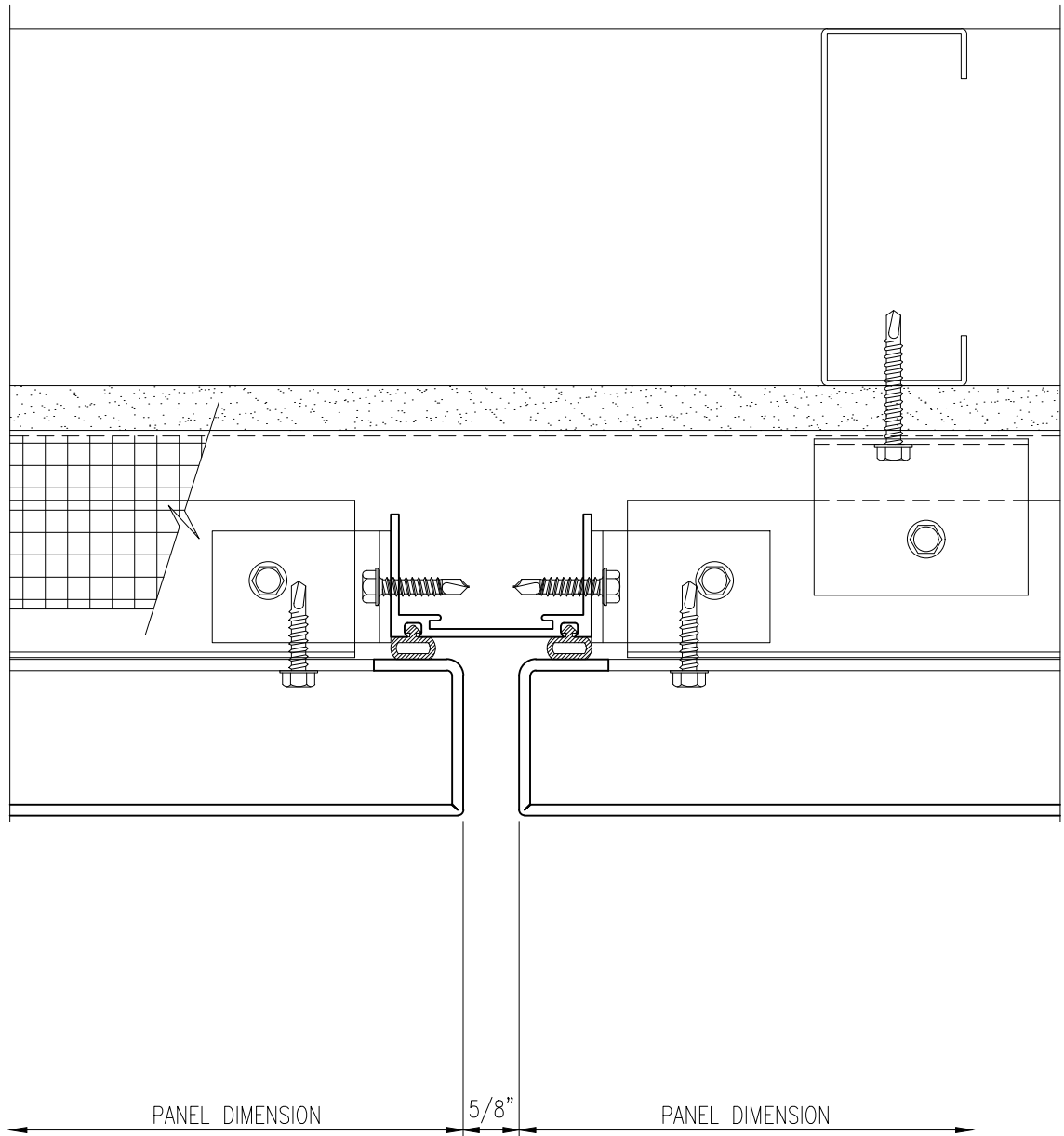


2) Vertical Joint

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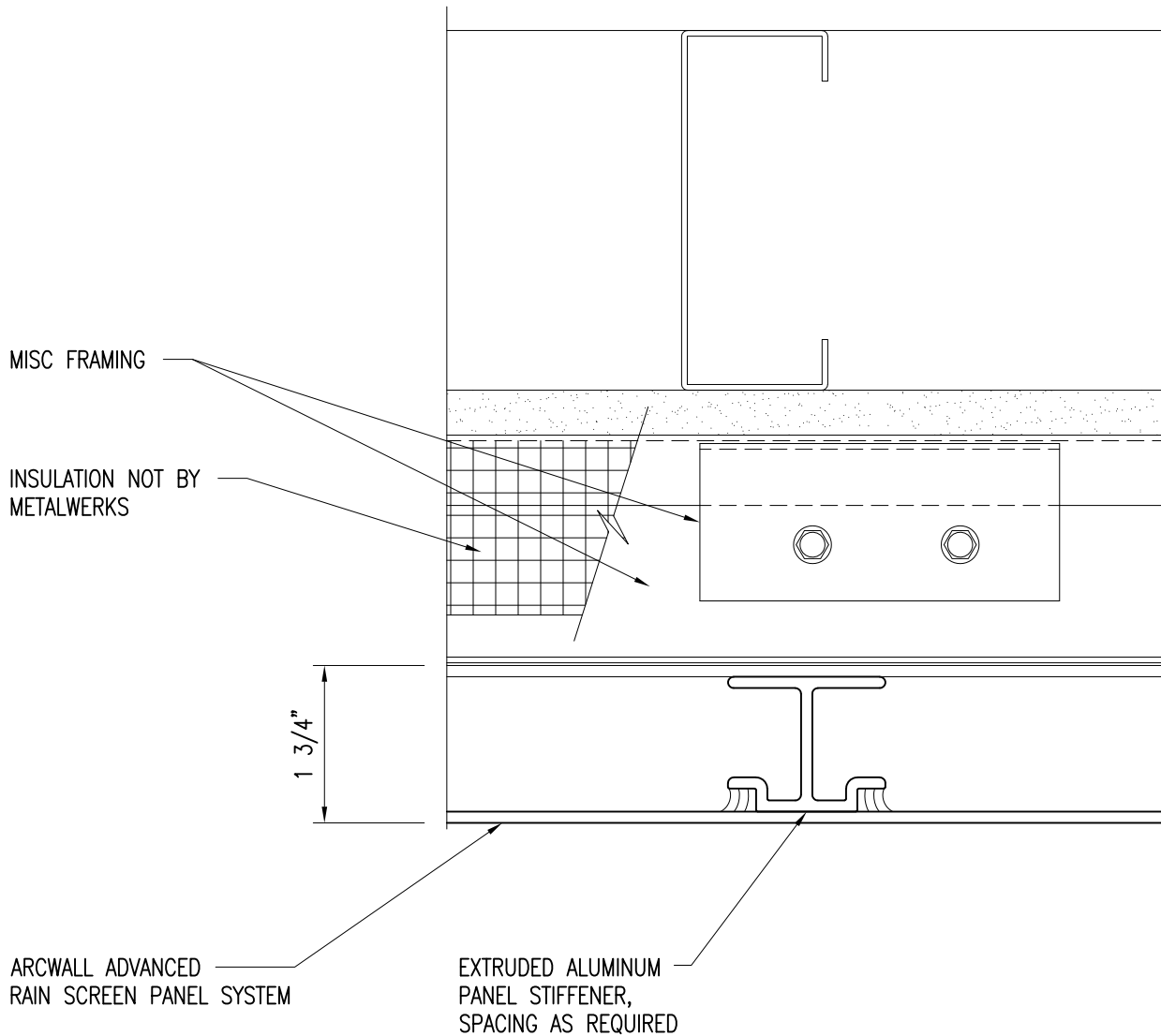
CONTINUOUS INSULATION
NOT SHOWN FOR DETAIL
CLARITY

1 3/4"

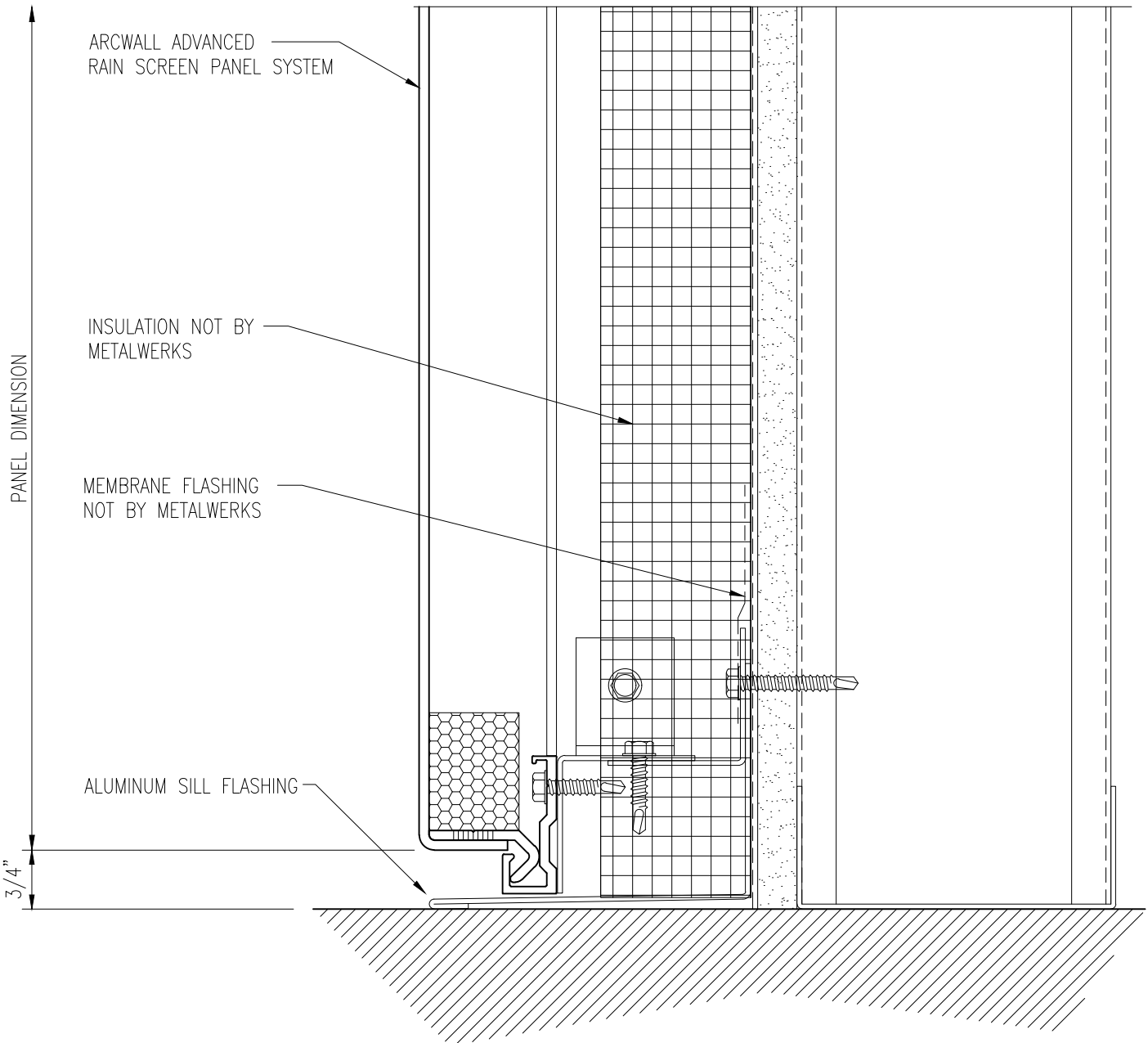


2a) Vertical Joint w/ Back Routed Edges

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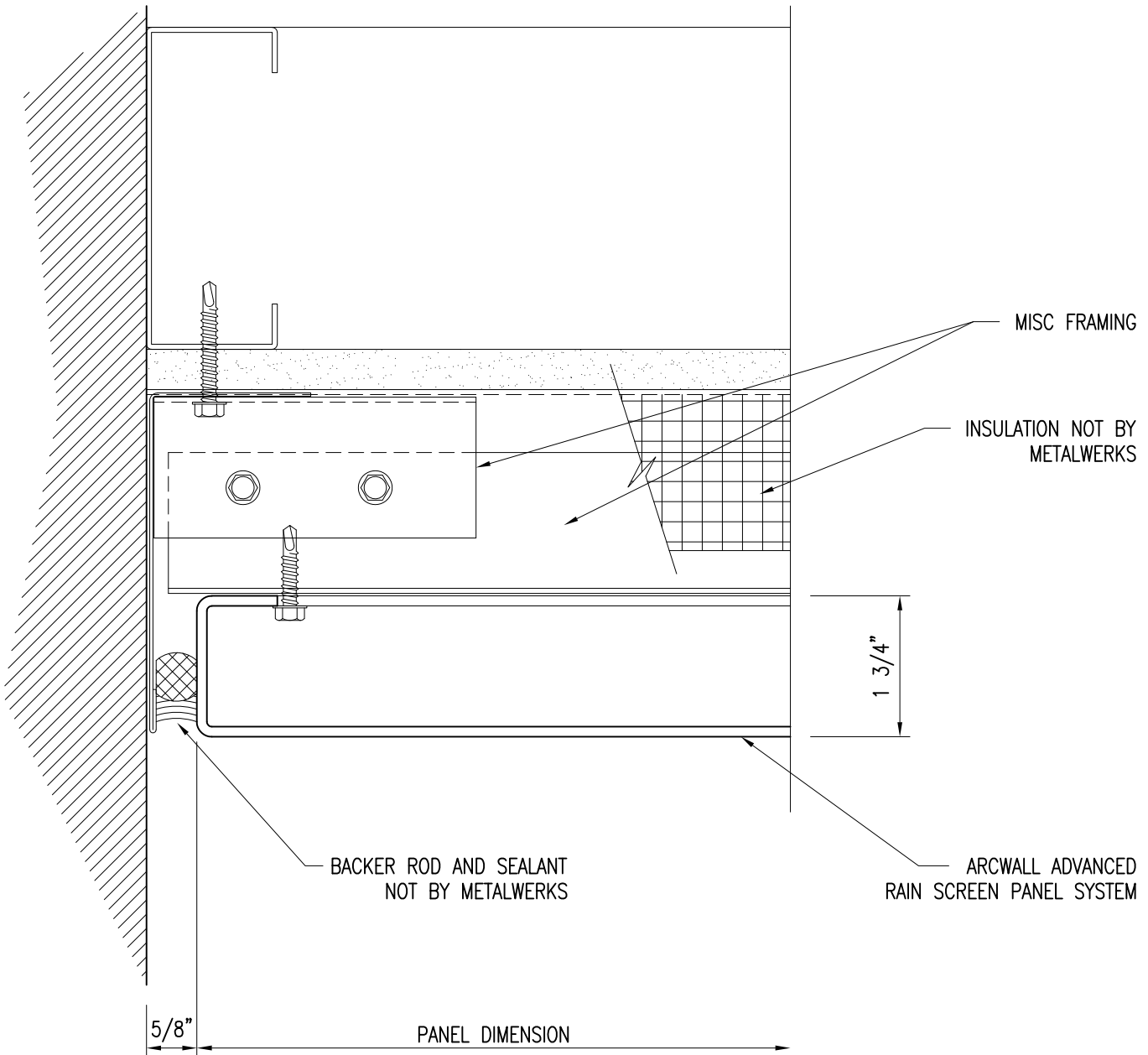
3) Panel Stiffener



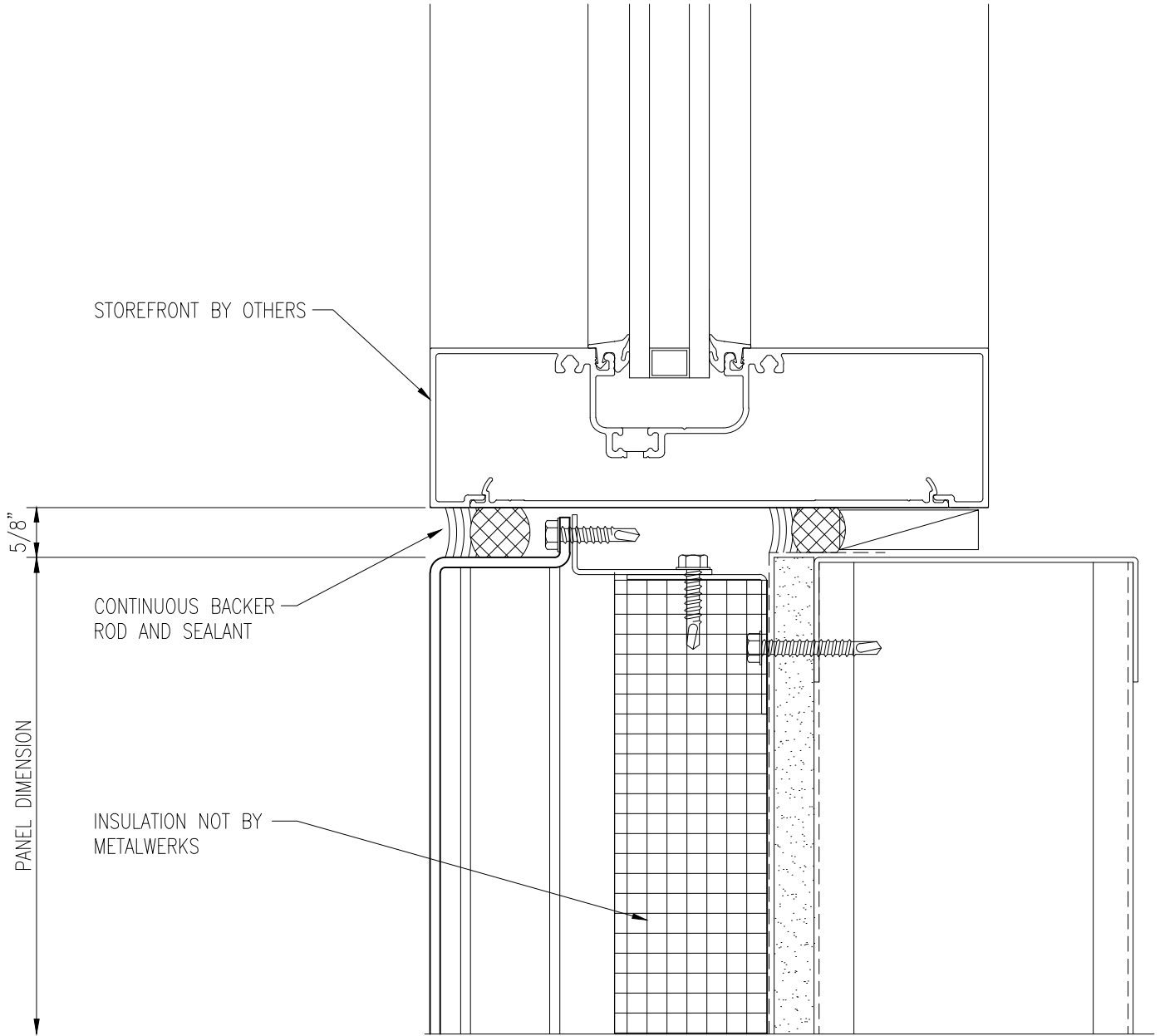
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4) Panel Sill

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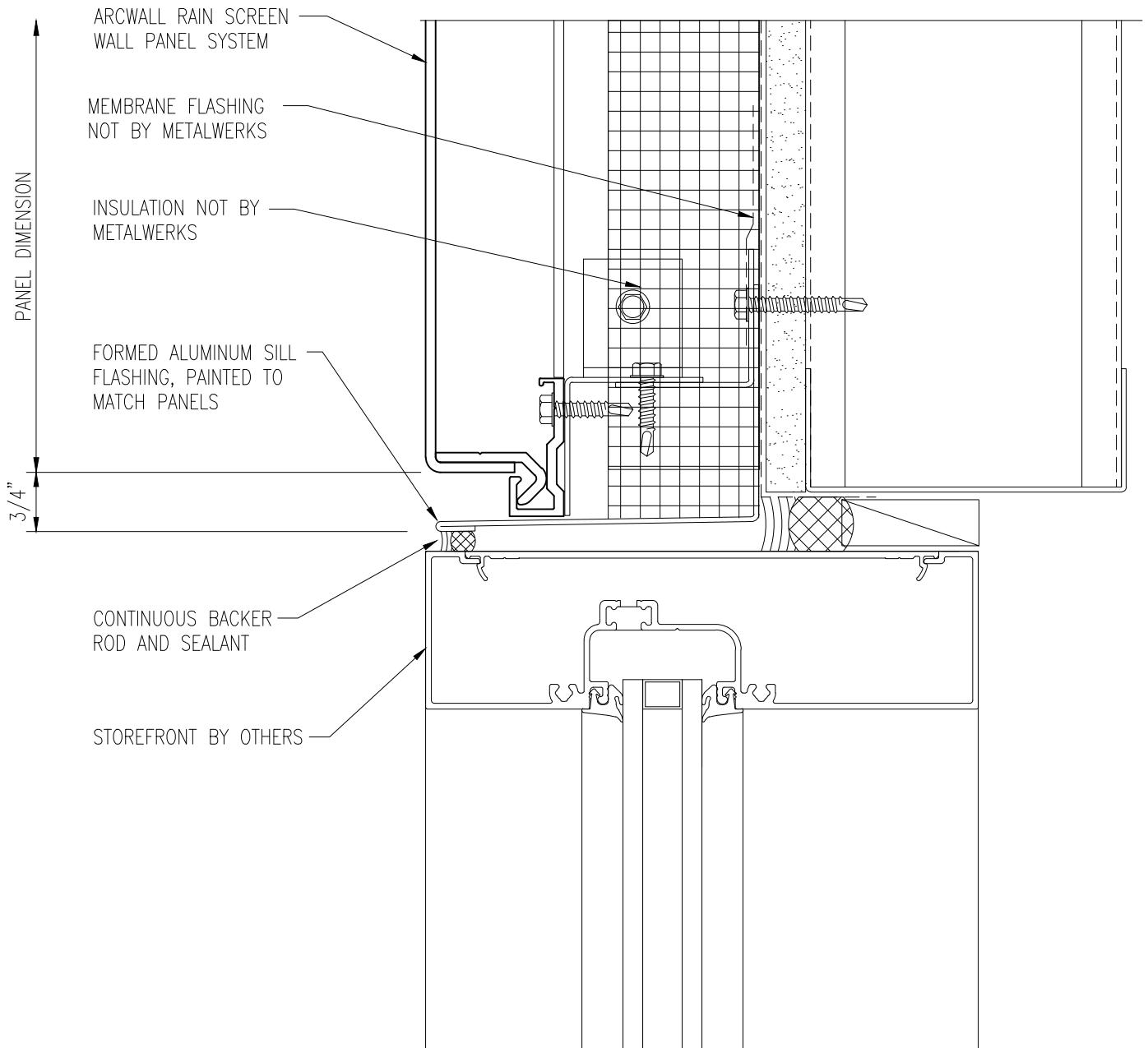


5) Panel Jamb Detail



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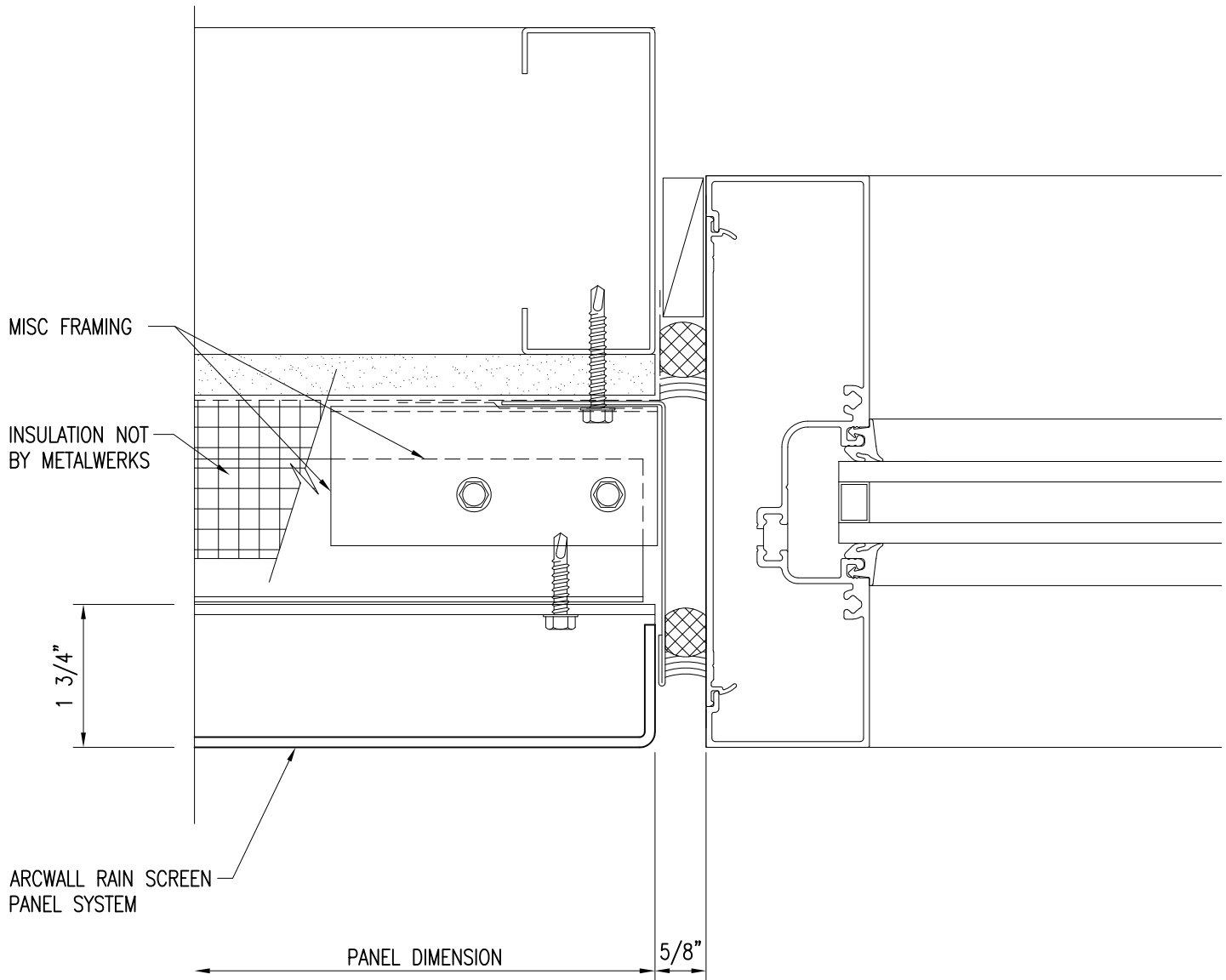
6) Storefront Sill



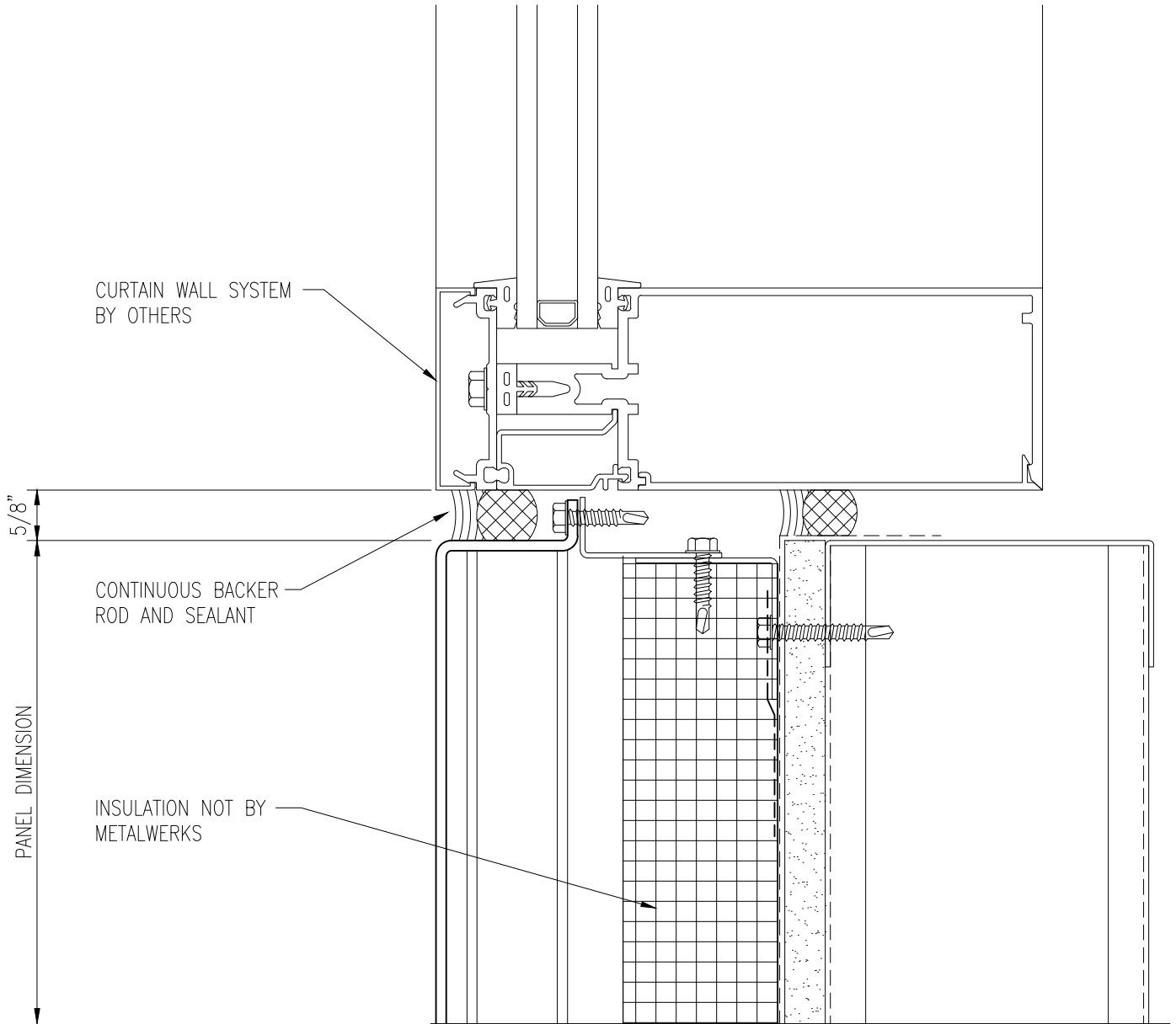
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7) Storefront Head

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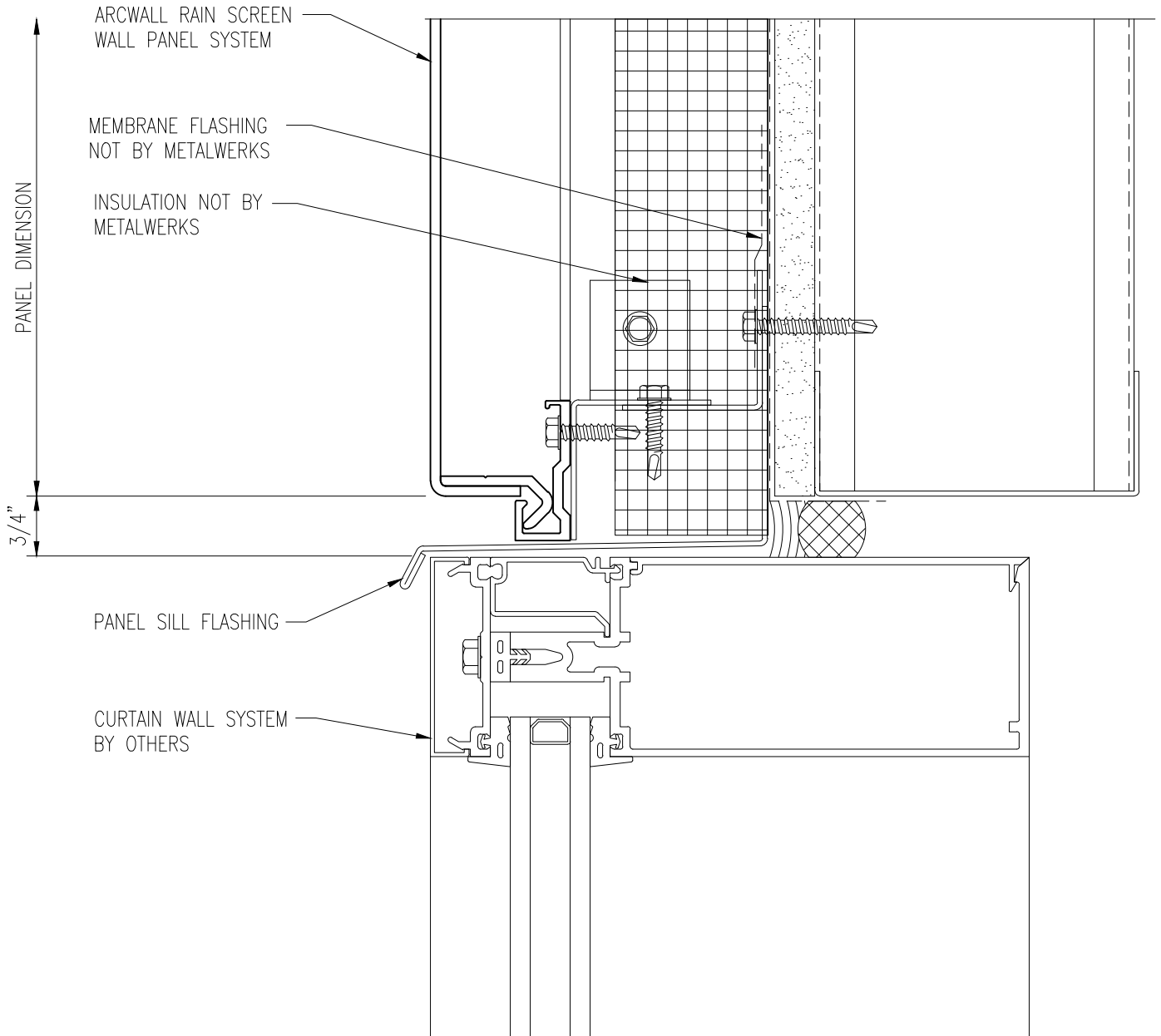


8) Storefront Jamb



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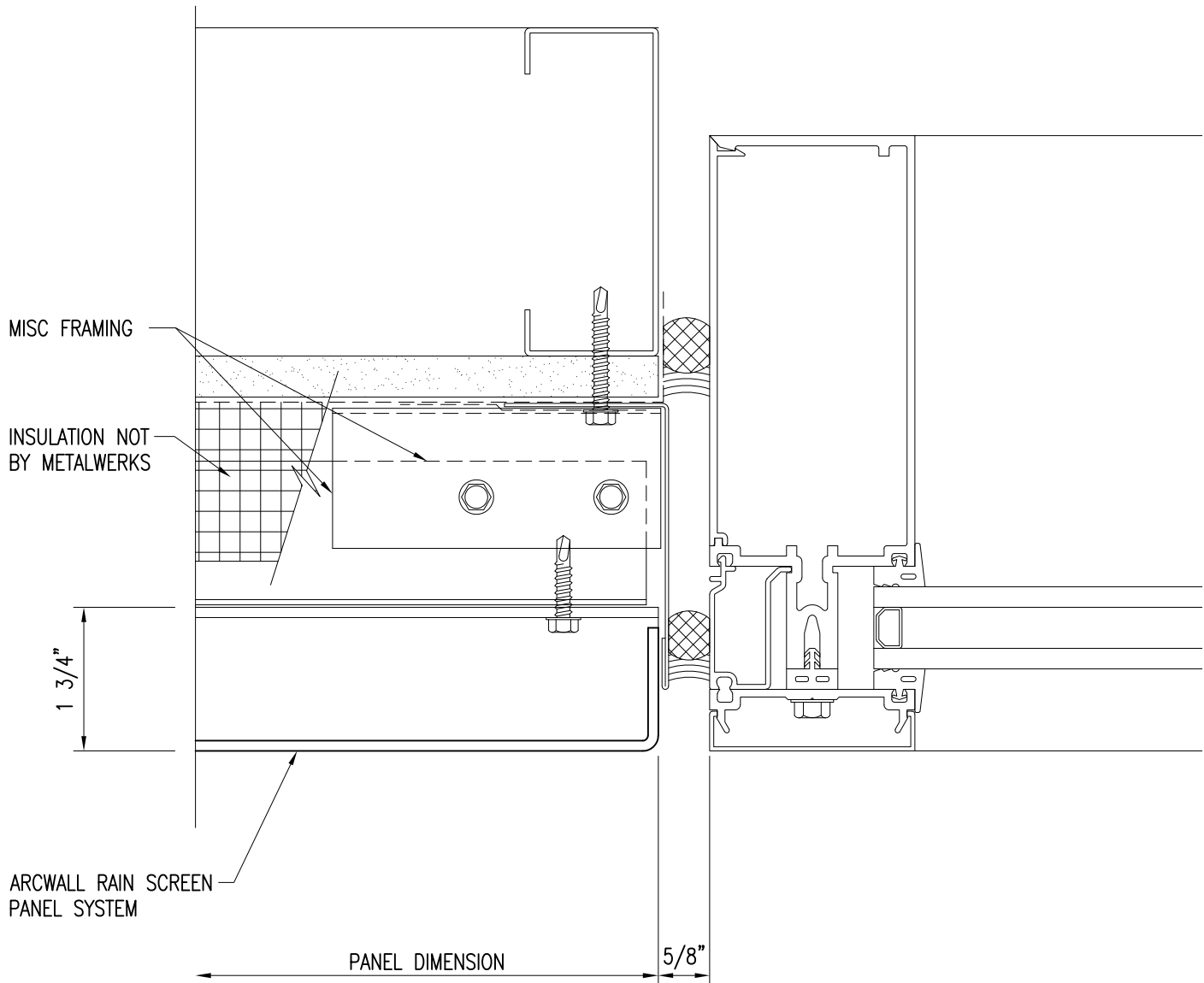
9) Curtain Wall Sill



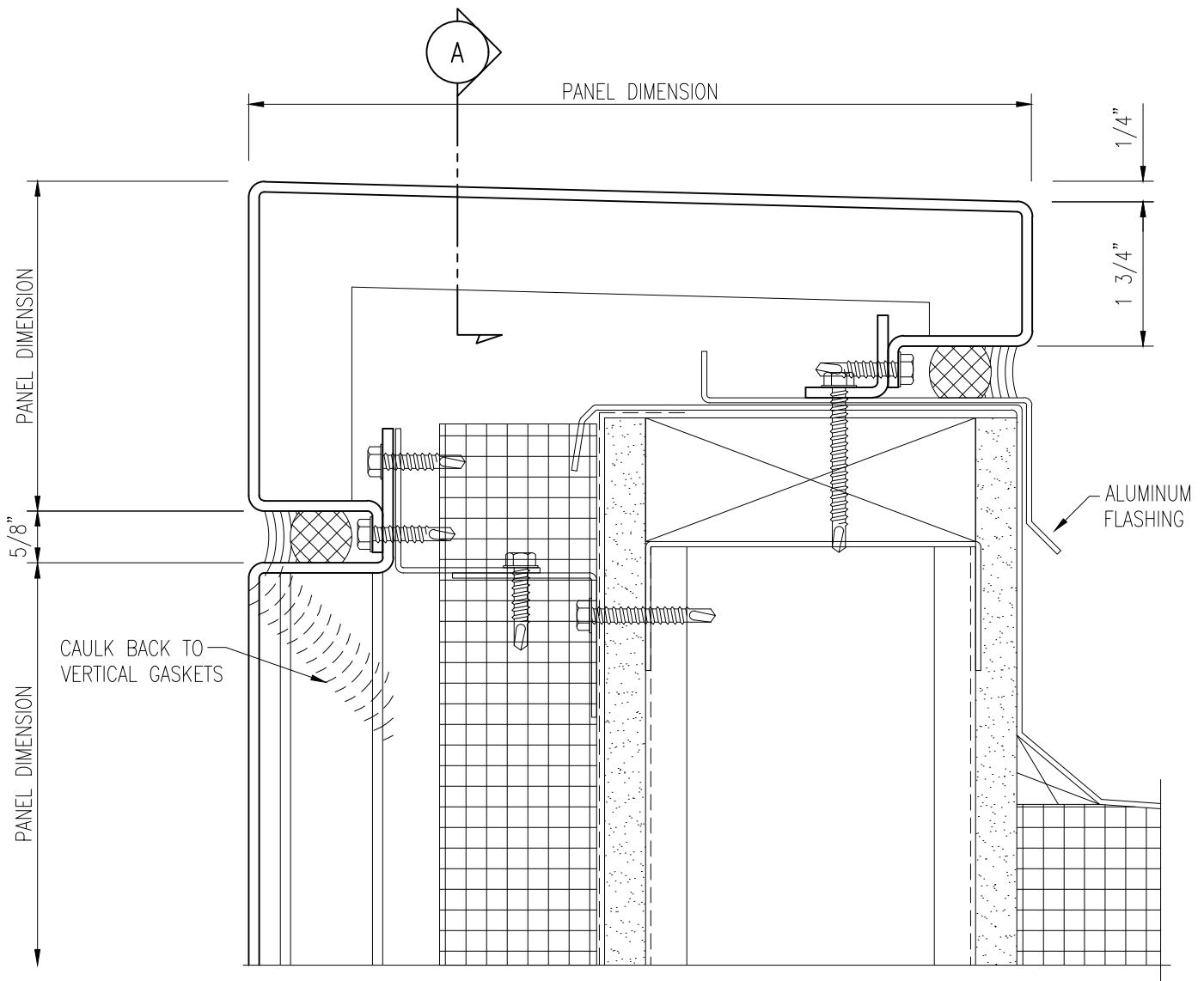
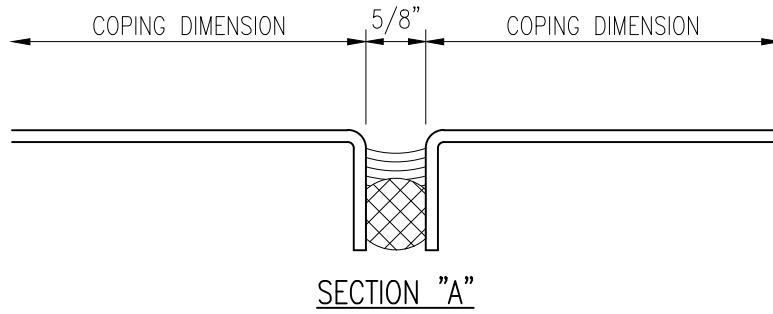
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10) Curtain Wall Sill

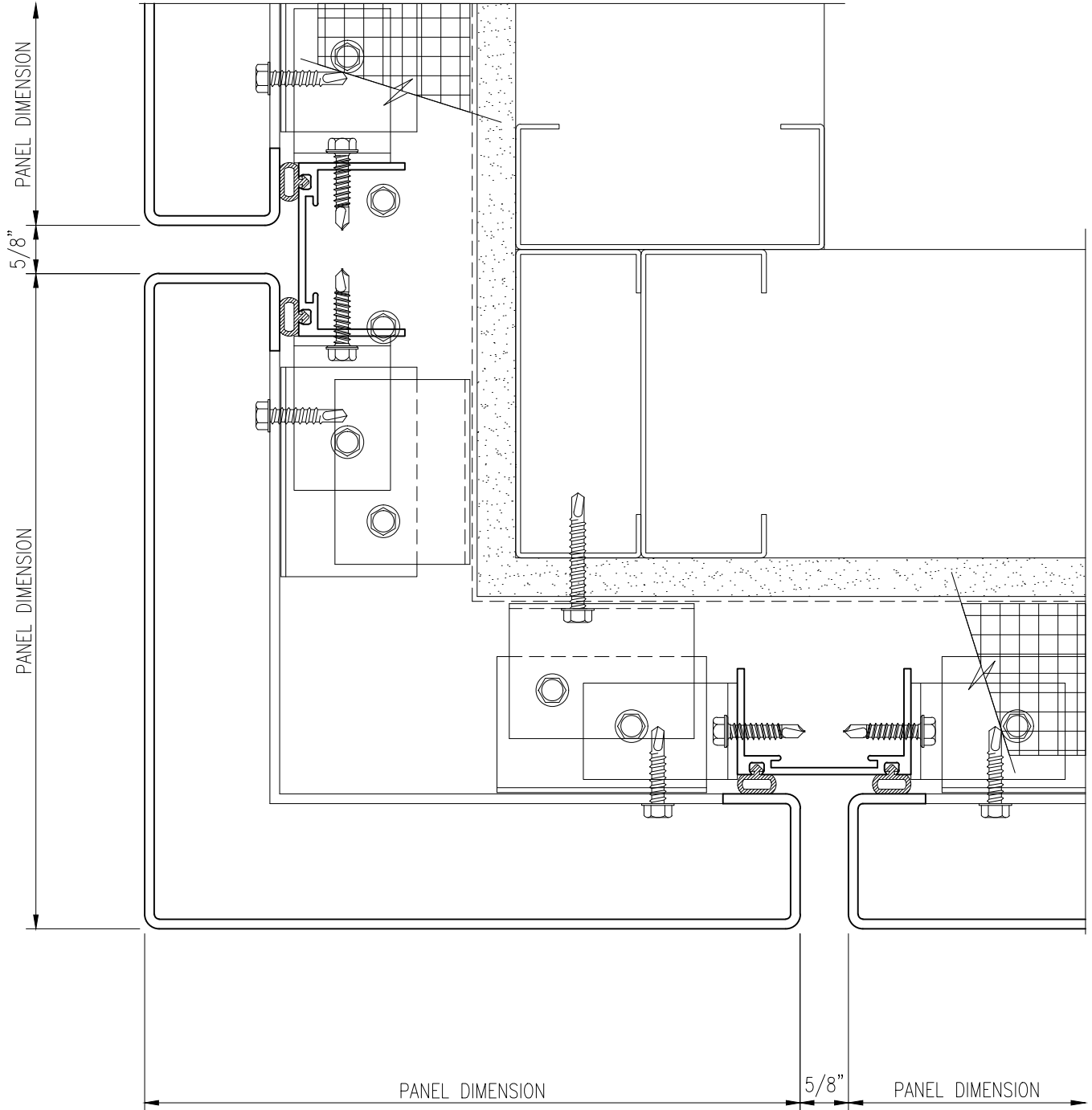
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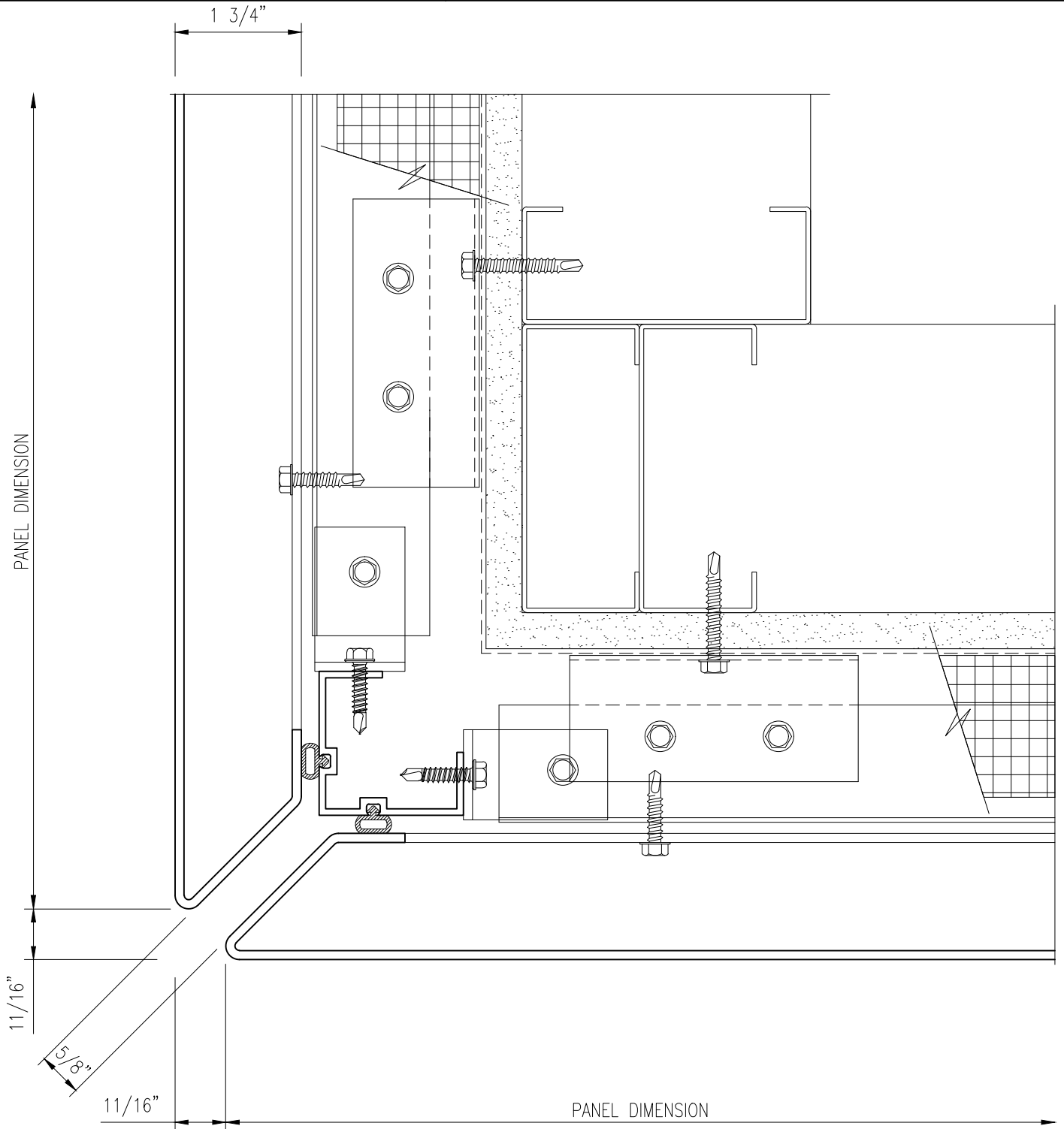
11) Curtain Wall Jamb



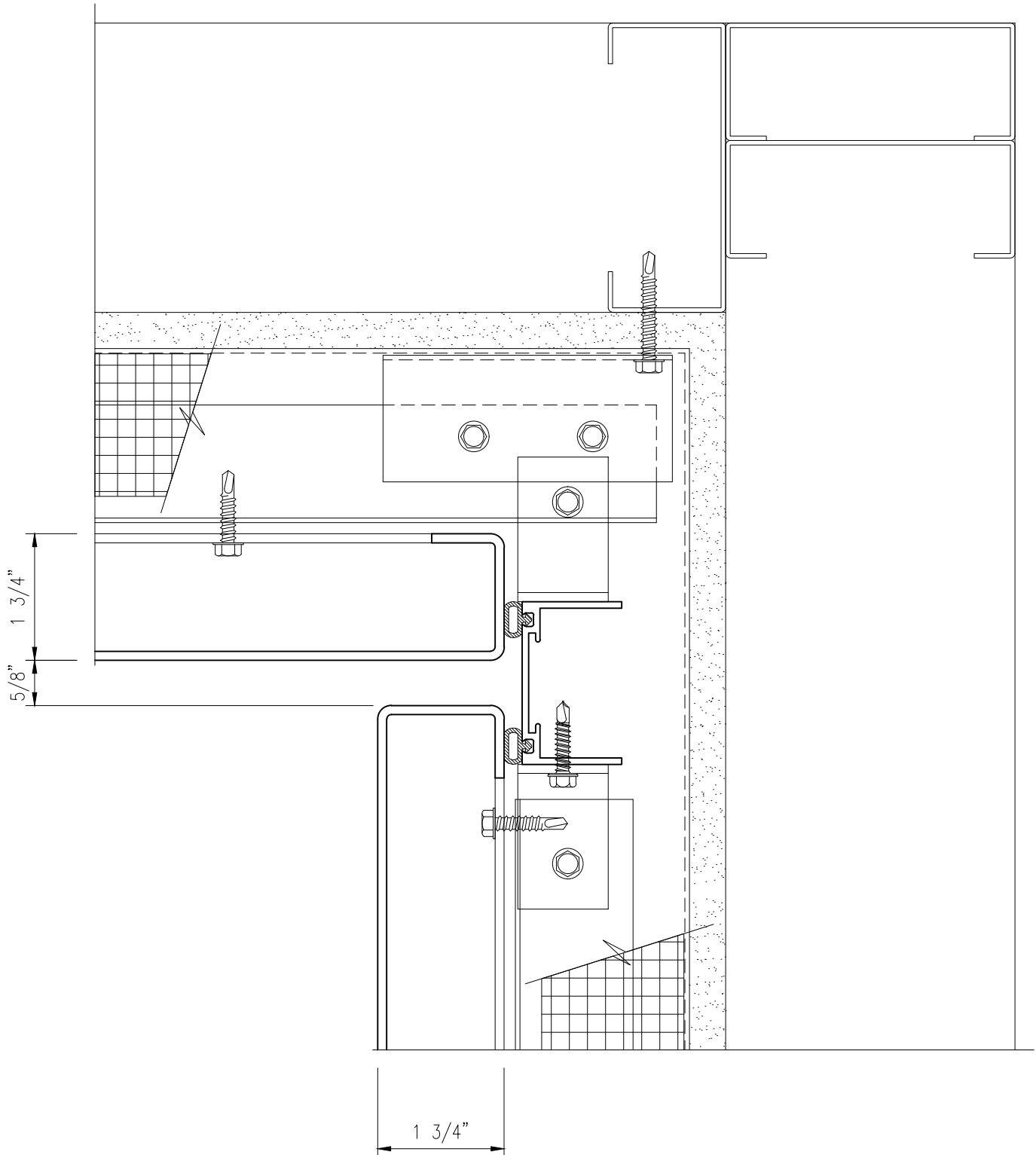
12) Coping



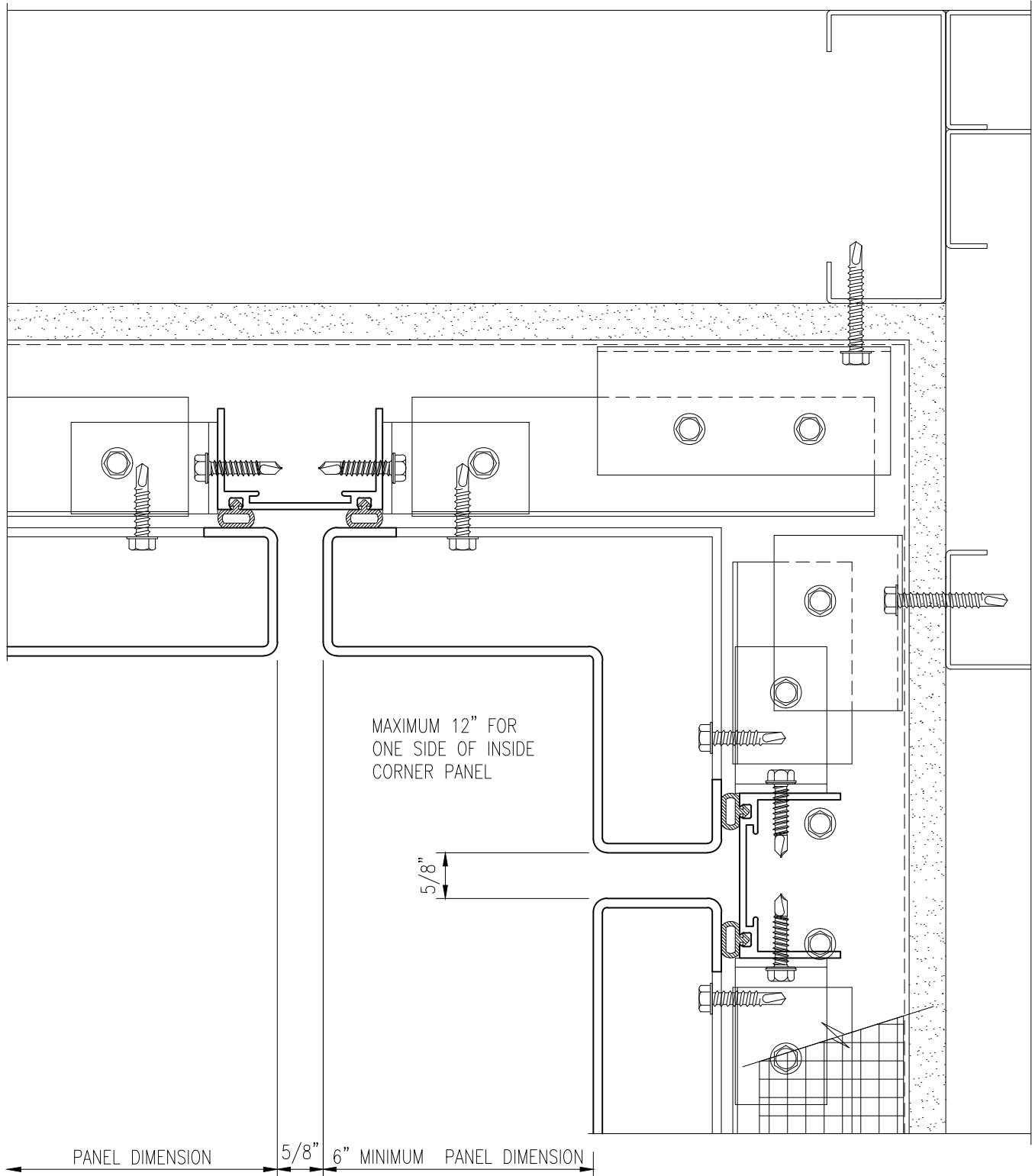
13) Outside Corner



14) Optional Outside Corner



15) Standard Inside Corner



16) Inside Corner w/ Optional Mitered Panel