

DISCLAIMER:

These details are based on industry accepted practices and provide a guideline for proper insulated metal panel and component installation.

The location of vapor barriers and associated sealants shown in these details is based on standard design practices for *commercial industrial* applications for most U.S. and Canadian climatic zones. The default vapor barrier location is on the warm side in winter (the interior side of the panels).

For projects located in extremely cold climates, exposed to high wind-driven rain or unusual interior conditions (sustained temperatures below 65°F), it may be advisable to modify the vapor barrier (joint sealant) location, or to add optional exterior joint sealants.

It is the sole responsibility of the project architect to verify vapor barrier location, insulation required by code and HVAC equipment/ventilation requirements to allow proper air flow and the prevention of condensation.

It is also the sole responsibility of the project architect to determine project-specific design loads. Metl-Span Technical Services is available to verify allowable panel spans and fastening requirements when provided with this information.

The details contained herein show side joint fastening only. Please contact Metl-Span technical services for project-specific fastening requirements.

All structural supports are shown for clarity only, and are not provided by Metl-Span.

Butyl caulk: For commercial/industrial projects the caulk is usually applied to the interior joint female pocket (see DISCLAIMER). Butyl caulk is also used to create "marriage beads" which tie the panel sidejoint vapor seals to panel endjoint vapor seals. Butyl caulk is considered "non-skinning", which means it stays soft, flexible, and does not harden. *Butyl caulk is for unexposed areas only, and cannot be used where it will be exposed to weather or sunlight*

Butyl sealant tape: Applied between flashings and panels to form a weathertight seal. All fasteners penetrating the flashing must be inserted through the sealant tape.

Urethane caulk: Used in lieu of butyl sealant where there is exposure to the elements. It is recommended for lapped trims, exposed perimeter seals at framed openings or to seal between different construction materials, such as metal to concrete.

Panel fasteners: Insulated metal panel fasteners are generally either self-drilling/self-tapping (also known as TEK screws), or self-tapping (also known as B point screws).

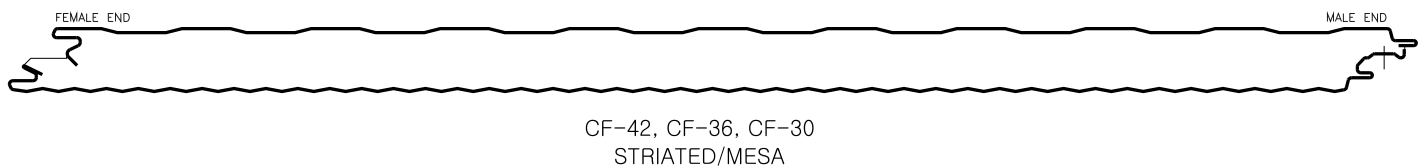
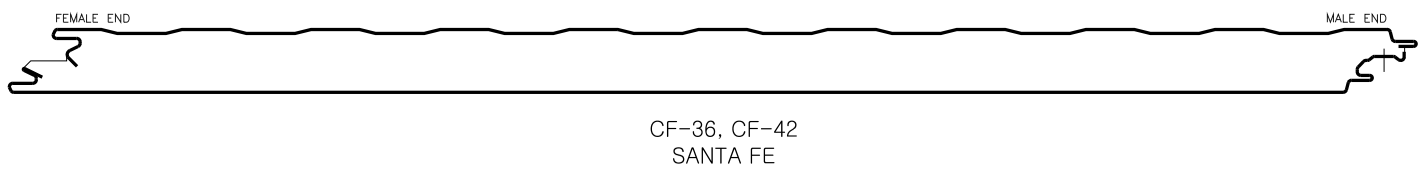
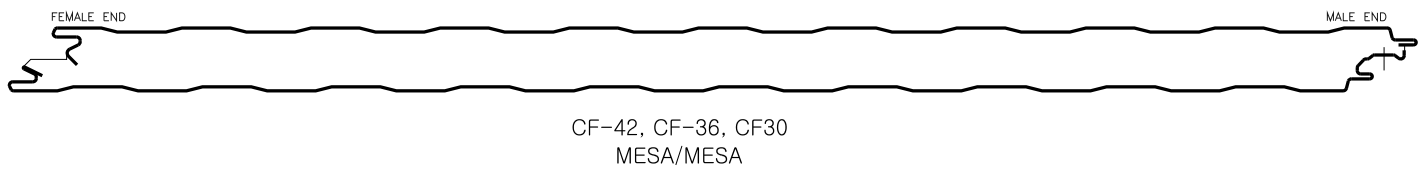
TEK Fasteners contain a built-in drill point, and do not require pre-drilling. They are the quickest and easiest way to attach panels to light-medium gauge supports.

B Point fasteners require a two-step operation: First holes are pre-drilled into the panel and structural support with an appropriate sized bit, then the fastener is inserted into the hole and tightened. B points are typically used to attach panels to medium-heavy gauge supports that are not penetrable by TEK fasteners. It is important that the pre-drilled holes are sized correctly for the fasteners to achieve proper pullout values.

Bulb-Tite® Rivets: Are similar to expansion fasteners, and are used where back fastening of the panels to structural supports is required. Holes must be pre-drilled with a 5/16" diameter. The grip range of the rivets must be matched to the thickness of the structural support to ensure proper fastening.

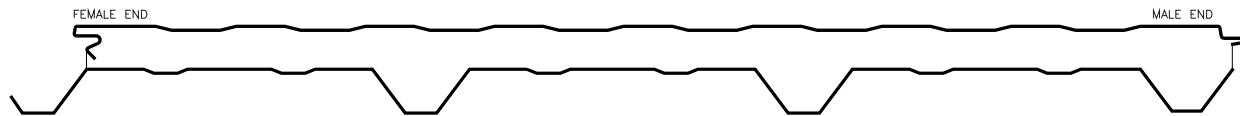
CI-CF-INFO-1	C & I DISCLAIMER
CI-CF-INFO-2	SEALANTS & FASTENERS
CI-CF-JT-01	PANEL PROFILES
CI-CF-JT-02	PANEL PROFILES
CI-CF-JT-03	CF PANEL JOINT DETAILS
CI-CF-FSTN-01A	ATTACHMENT-SIDEJOINT-PRE-ENGINEERED SUPPORT
CI-CF-FSTN-01B	ATTACHMENT-SIDEJOINT-STRUCTURAL STEEL SUPPORT
CI-CF-FSTN-01C	ATTACHMENT-BACK FASTENED W/GIRT CLIPS
CI-CF-FSTN-01D	ATTACHMENT-BACK FASTENED W/RIVETS
CI-CF-BE-06	BASE-OVERHANG W/DRIP TRIM
CI-CF-BE-06-A	BASE-OVERHANG W/DRIP TRIM
CI-CF-BE-07	BASE-OVERHANG W/EDGE TRIM
CI-CF-BE-07-A	BASE-OVERHANG W/EDGE TRIM
CI-CF-BE-08	BASE-OVERHANG W/BASE SUPPORT
CI-CF-BE-08-A	BASE-OVERHANG W/BASE SUPPORT
CI-CF-EB-02	BASE-OVERHANG W/EXTRUSION
CI-CF-EB-02-A	BASE-OVERHANG W/EXTRUSION
CI-CF-BE-02	BASE-OVERHANG W/NOTCHED SLAB
CI-CF-BE-02-A	BASE-OVERHANG W/NOTCHED SLAB
CI-CF-BE-04	BASE-OVERHANG W/NOTCHED SLAB-ALT.
CI-CF-BE-04-A	BASE-OVERHANG W/NOTCHED SLAB-ALT.
CI-CF-EB-01	BASE-OVERHANG W/NOTCHED SLAB, EXTRUSION
CI-CF-EB-01-A	BASE-OVERHANG W/NOTCHED SLAB, EXTRUSION
CI-CF-CE-01	OUTSIDE CORNER W/FLUSH TRIM
CI-CF-CE-01-A	OUTSIDE CORNER W/FLUSH TRIM
CI-CF-EC-01	OUTSIDE CORNER W/TWO PIECE EXTRUSION
CI-CF-EC-01-A	OUTSIDE CORNER W/TWO PIECE EXTRUSION
CI-CF-CE-03	INSIDE CORNER W/FLUSH TRIM
CI-CF-CE-03-A	INSIDE CORNER W/FLUSH TRIM
CI-CF-EC-02	INSIDE CORNER W/TWO PIECE EXTRUSION
CI-CF-EC-02-A	INSIDE CORNER W/TWO PIECE EXTRUSION
CI-CF-HD-01	HEAD W/TWO PIECE TRIM
CI-CF-HD-01-A	HEAD W/TWO PIECE TRIM
CI-CF-EH-01	HEAD W/TWO PIECE EXTRUSION
CI-CF-EH-01-A	HEAD W/TWO PIECE EXTRUSION
CI-CF-JB-01	JAMB W/TWO PIECE TRIM
CI-CF-JB-01-A	JAMB W/TWO PIECE TRIM
CI-CF-JB-02	JAMB W/DEEP TRIM
CI-CF-JB-02-A	JAMB W/DEEP TRIM
CI-CF-EJ-01	JAMB W/EXTRUSION
CI-CF-EJ-01-A	JAMB W/EXTRUSION
CI-CF-SL-01	SILL DETAIL W/FLAT TRIM
CI-CF-SL-01-A	SILL DETAIL W/FLAT TRIM

CI-CF-ES-01	SILL DETAIL W/EXTRUSION
CI-CF-ES-01-A	SILL DETAIL W/EXTRUSION
CI-CF-HD-02	O.H. DOOR HEAD W/TWO PIECE TRIM
CI-CF-HD-02-A	O.H. DOOR HEAD W/TWO PIECE TRIM
CI-CF-EH-02	O.H. DOOR HEAD W/TWO PIECE EXTRUSION
CI-CF-EH-02-A	O.H. DOOR HEAD W/TWO PIECE EXTRUSION
CI-CF-DJ-01	O.H. DOOR JAMB W/TWO PIECE TRIM
CI-CF-DJ-01-A	O.H. DOOR JAMB W/TWO PIECE TRIM
CI-CF-ED-01	O.H. DOOR JAMB W/EXTRUSION
CI-CF-ED-01-A	O.H. DOOR JAMB W/EXTRUSION
CI-CF-T-01	TRIM LAPS AT FRAMED OPENING
CI-CF-E-01	EXTRUSION AT FRAMED OPENING
CI-CF-SJ-01	STACK JOINT W/TRIM
CI-CF-SJ-01-A	STACK JOINT W/TRIM
CI-CF-ESJ-01	STACK JOINT W/EXTRUSION
CI-CF-ESJ-01-A	STACK JOINT W/EXTRUSION
CI-CF-VE-01	EAVE DETAIL-CONVENTIONAL ROOF
CI-CF-VE-01-A	EAVE DETAIL-CONVENTIONAL ROOF
CI-CF-TP-01	PARAPET (SUPPORTED) W/TRIM
CI-CF-TP-01-A	PARAPET (SUPPORTED) W/TRIM
CI-CF-EP-02	PARAPET (SUPPORTED) W/EXTRUSION
CI-CF-EP-02-A	PARAPET (SUPPORTED) W/EXTRUSION
CI-CF-EL-B	TRIM END LAP-BASE
CI-CF-EL-C	TRIM END LAP-CORNER
CI-CF-EL-H	TRIM END LAP-TWO PIECE HEAD
CI-CF-EL-J	TRIM END LAP-TWO PIECE JAMB
CI-CF-EL-S	TRIM END LAP-SILL
CI-CF-EL-SJ	TRIM END LAP-STACK JOINT
CI-CF-2-EXT	2" EXTRUSIONS
CI-CF-2.5 EXT	2.5" EXTRUSIONS
CI-CF-3-EXT	3" EXTRUSIONS
CI-CF-4-EXT	4" EXTRUSIONS
CI-CF-FP 1-2	FASTENING PATTERNS 1-2
CI-CF-FP 3-4	FASTENING PATTERNS 3-4
CI-CF-FP 5-6	FASTENING PATTERNS 5-6
CI-CF-FP 7-8	FASTENING PATTERNS 7-8
CI-CF-FP 9-10	FASTENING PATTERNS 9-10
CI-CF-PEN-1	PIPE PENETRATION - FIELD OF PANEL
CI-CF-PEN-2	PIPE PENETRATION - NOTCHED PANEL
CI-CF-PEN-3	PIPE PENETRATION - AT PANEL JOINT
CI-CF-PEN-4	PIPE PENETRATION - WEATHER SEALS AT JOINT
CI-CF-PEN-5	PIPE PENETRATION - FLASHING
CI-CF-PEN-6	BEAM PENETRATION
CI-CF-PEN-7	BEAM PENETRATION - FLASHING





36" 7.2 INSUL-RIB

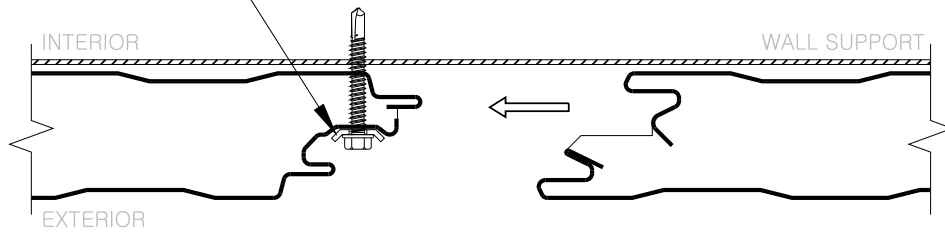


36" LS 36

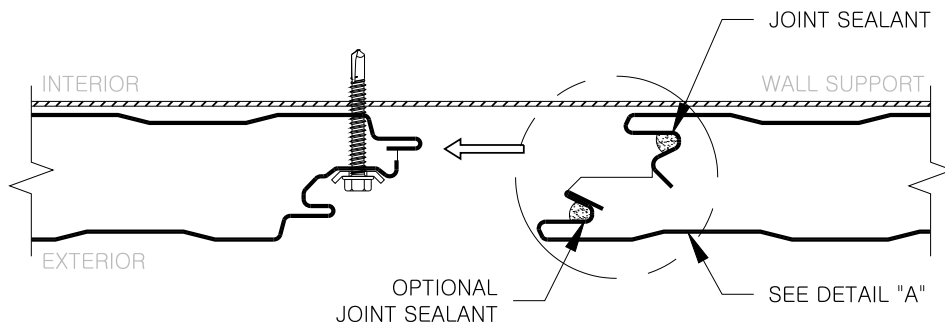


CF-36, CF-42
TUFF-CAST, TUFF-WALL

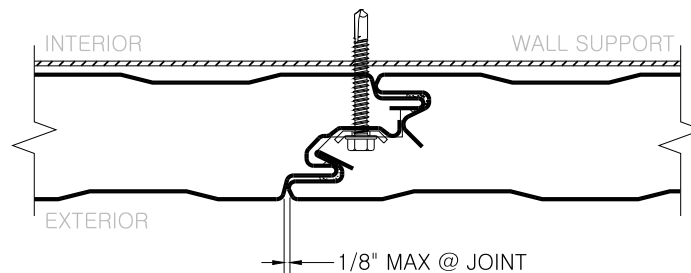
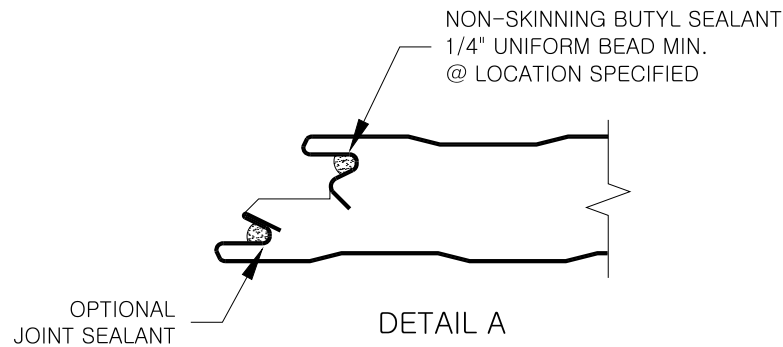
14 GA. PANEL CLIP
W/ 1/4" HWH FASTENERS
@ EACH WALL SUPPORT

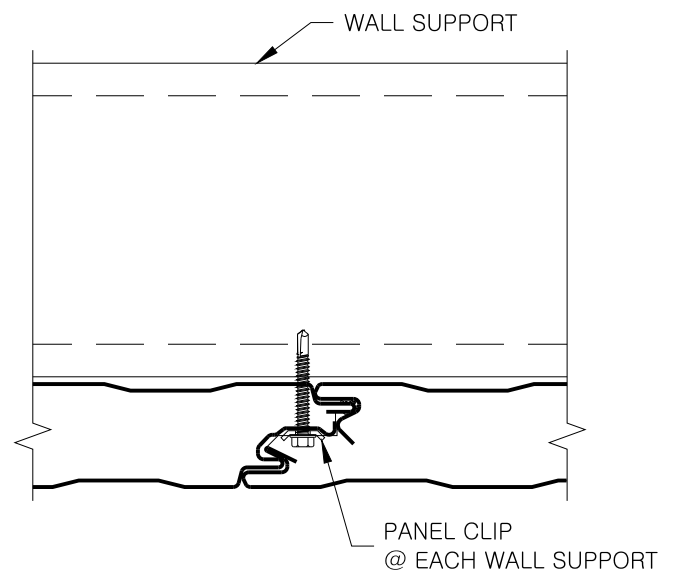
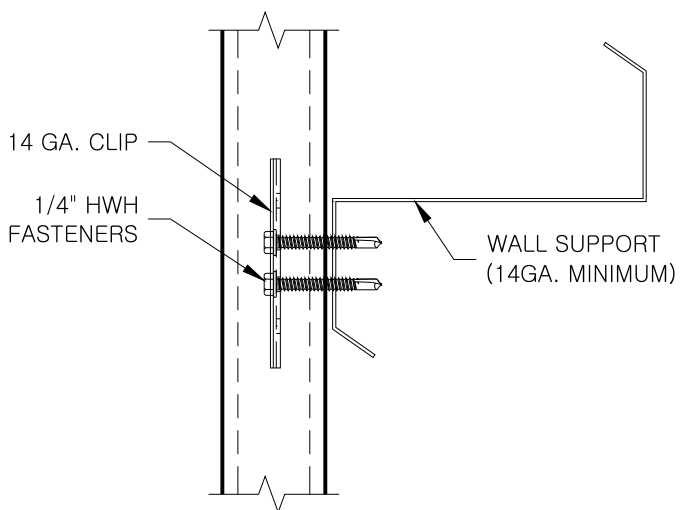
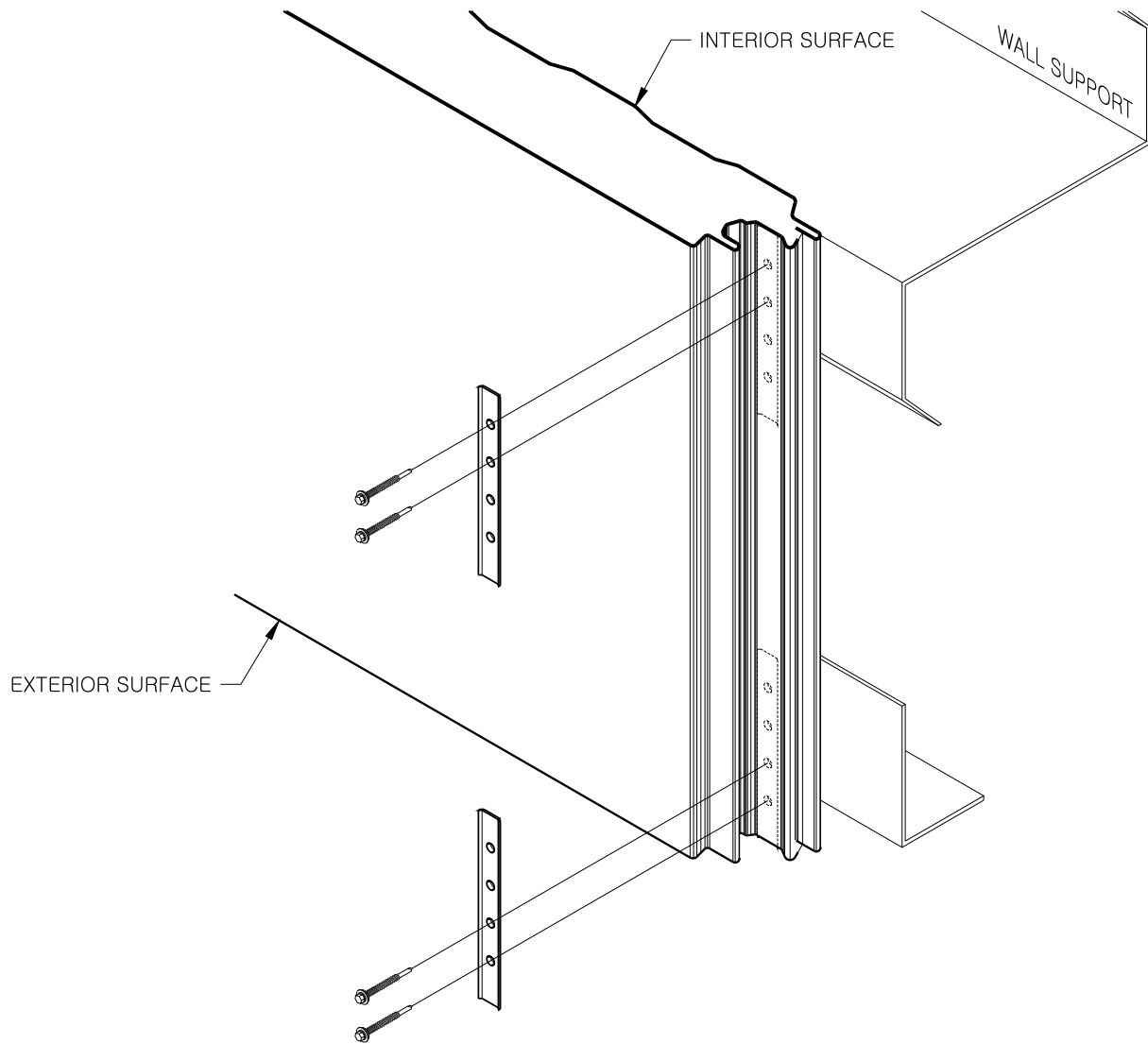


CLIP AND FASTENER ASSEMBLY



JOINT SEALANT APPLICATION

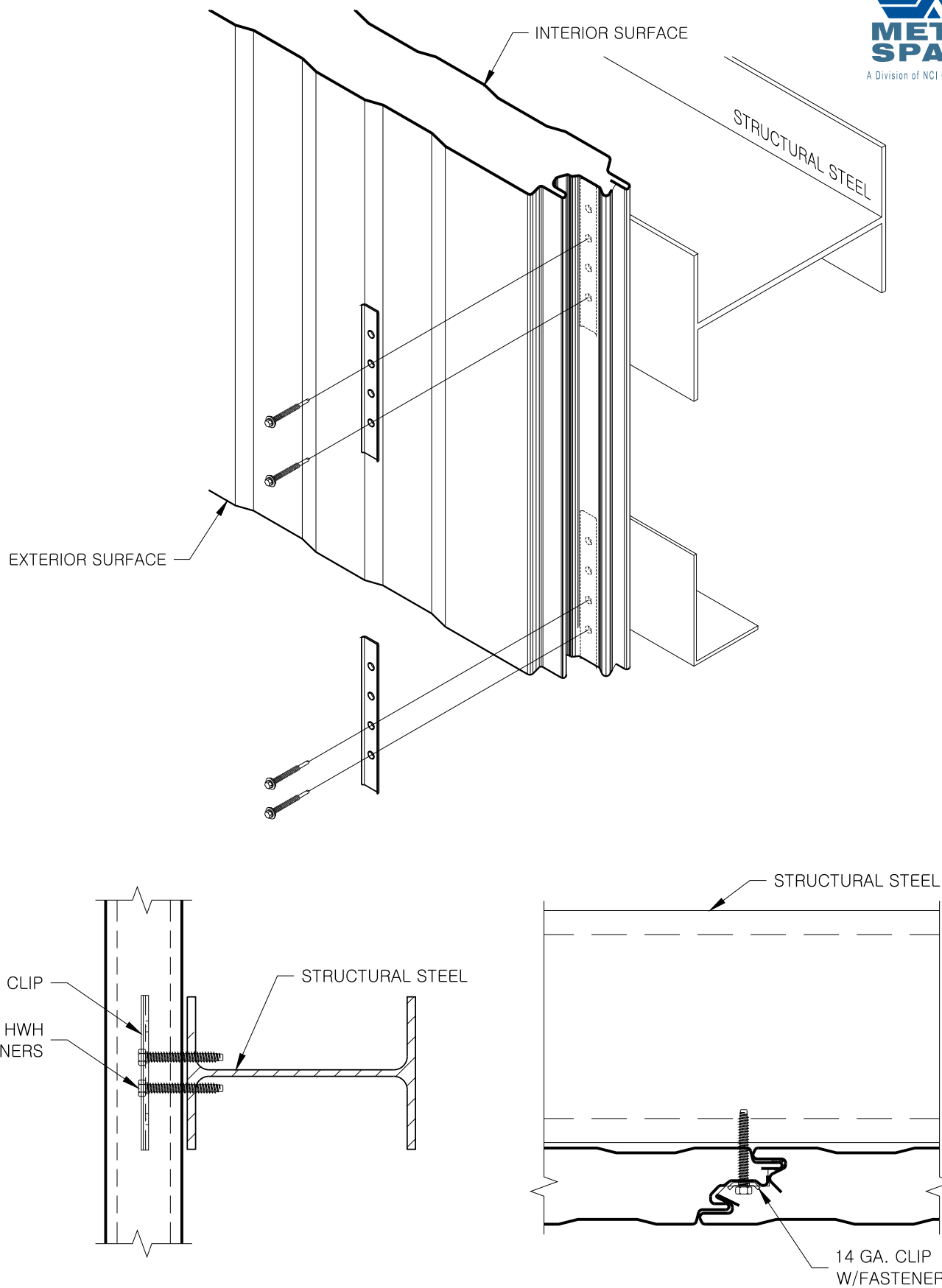




COMMERCIAL &
INDUSTRIAL

ATTACHMENT – SIDEJOINT –
PRE-ENGINEERED SUPPORT

CI-CF-FSTN-01A
DATE: Jul '19

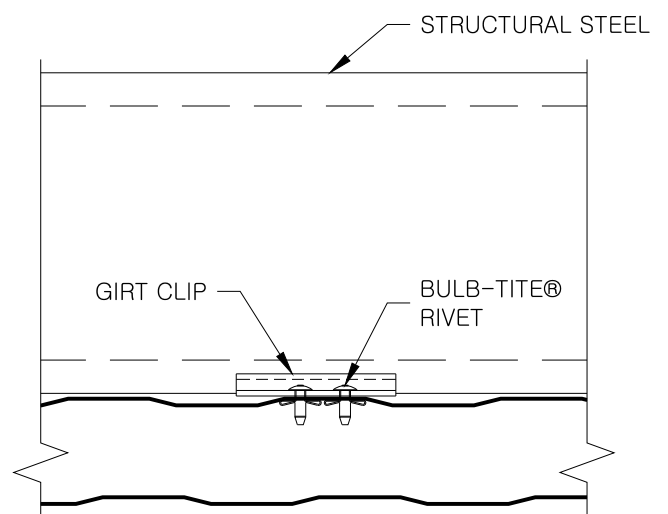
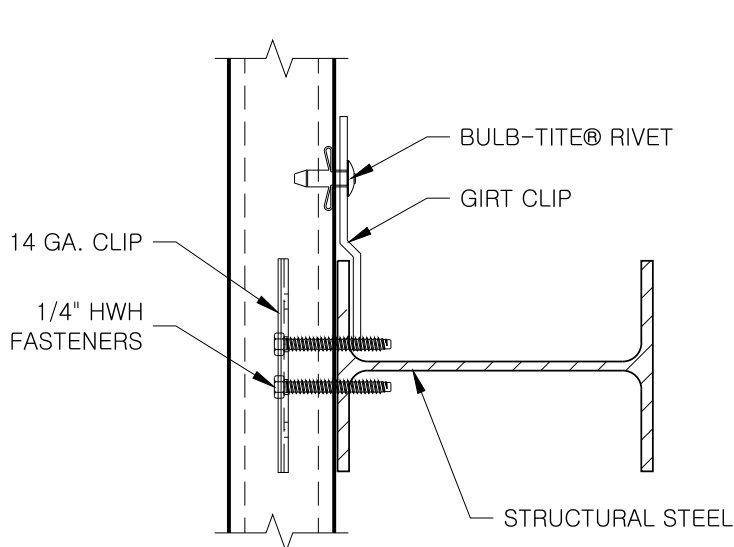
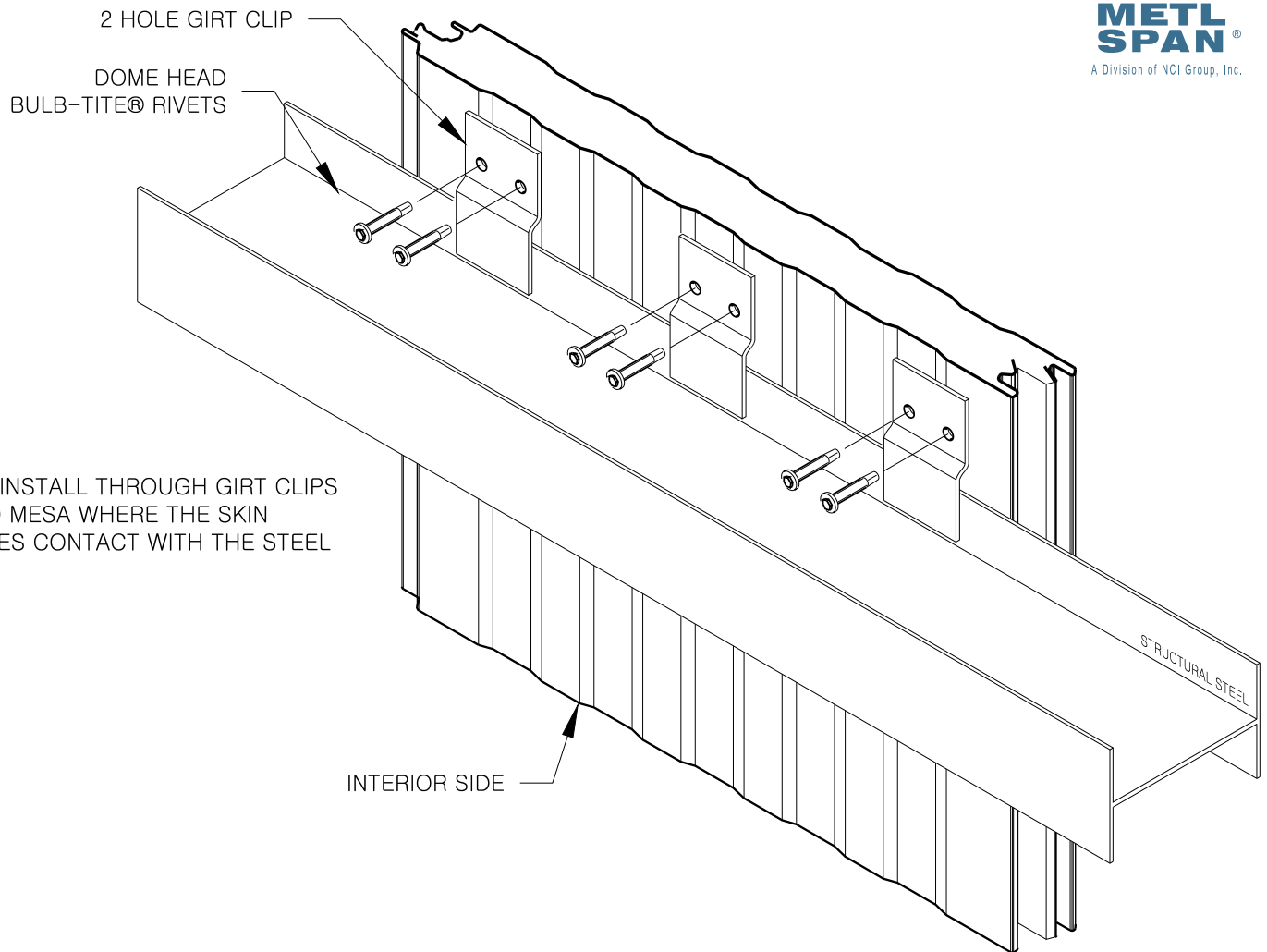


COMMERCIAL &
INDUSTRIAL

ATTACHMENT – SIDEJOINT–
STRUCTURAL STEEL SUPPORT

CI-CF-FSTN-01B

DATE: Jul '19



DOME HEAD
BULB-TITE® RIVETS

* INSTALL THROUGH GIRT
FLANGE INTO MESA WHERE THE
SKIN MAKES CONTACT WITH STEEL

INTERIOR SIDE

WALL SUPPORT

14 GA. CLIP

1/4" HWH
FASTENERS

BULB-TITE® RIVET

WALL SUPPORT

WALL SUPPORT

BULB-TITE® RIVET

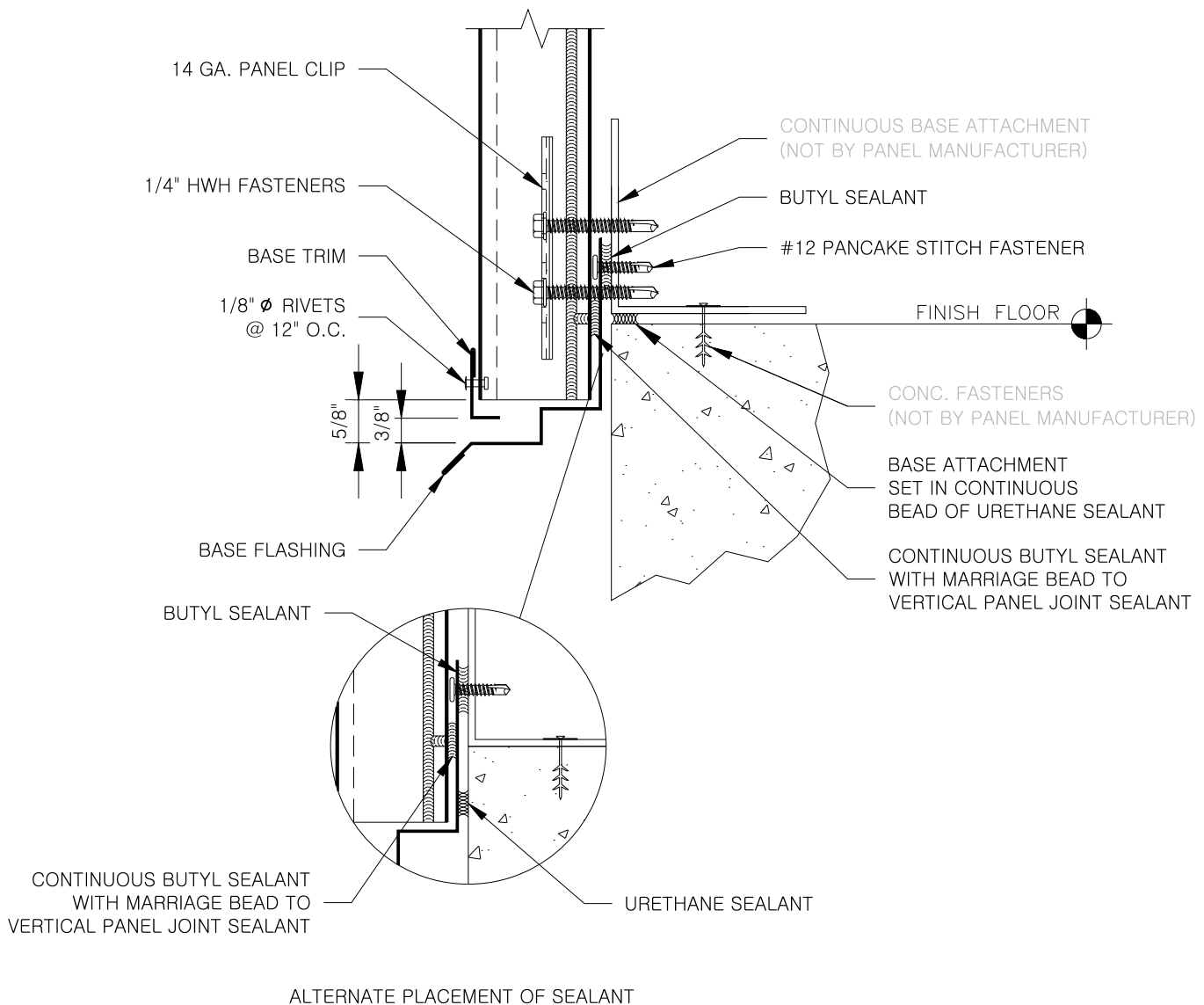
14 GA. CLIP
W/FASTENERS

COMMERCIAL &
INDUSTRIAL

ATTACHMENT – BACK FASTENED
W/ RIVETS

CI-CF-FSTN-01D

DATE: Jul '19

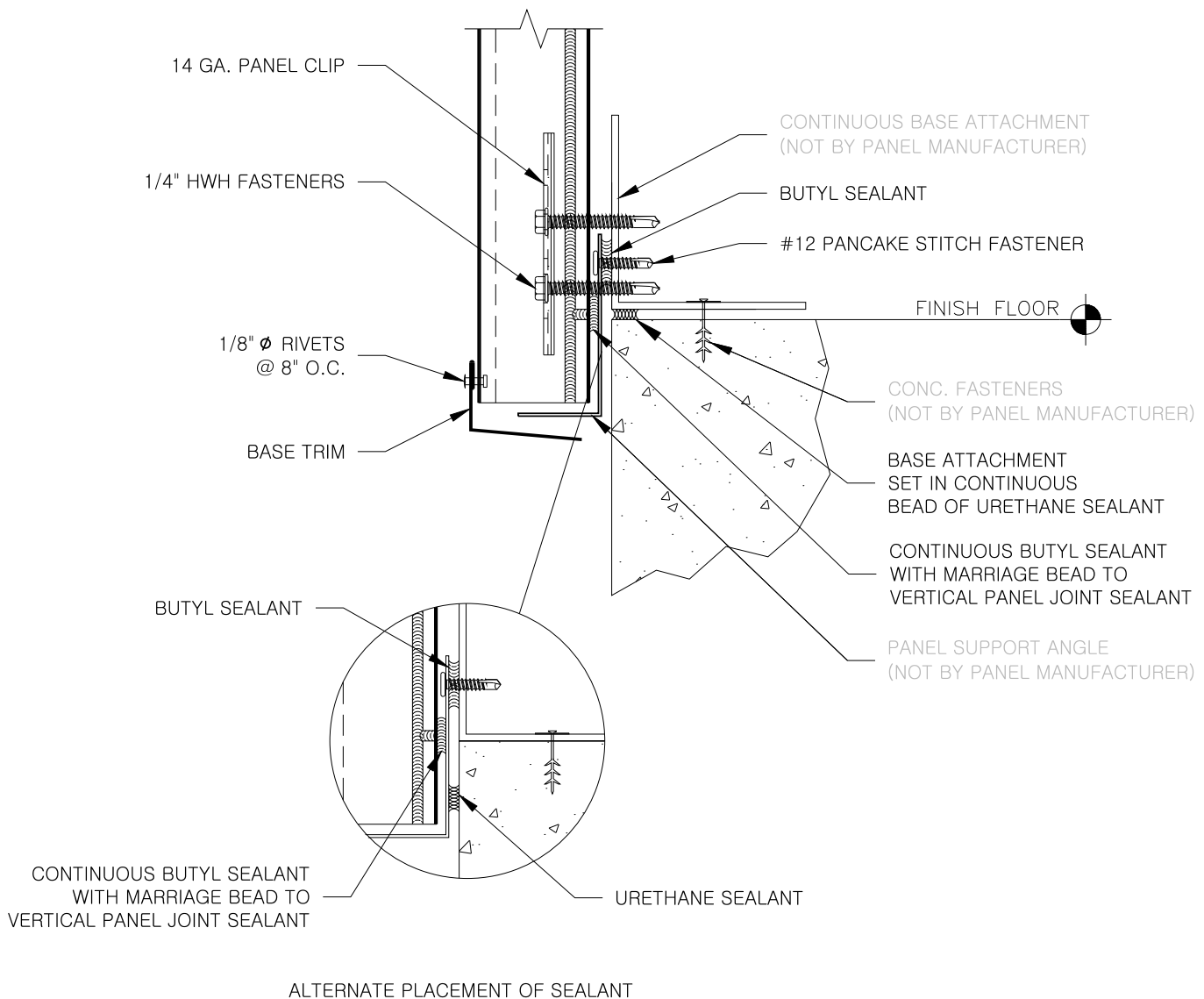


COMMERCIAL &
INDUSTRIAL

BASE – OVERHANG
W/ DRIP TRIM

CI-CF-BE-06

DATE: Jul '19

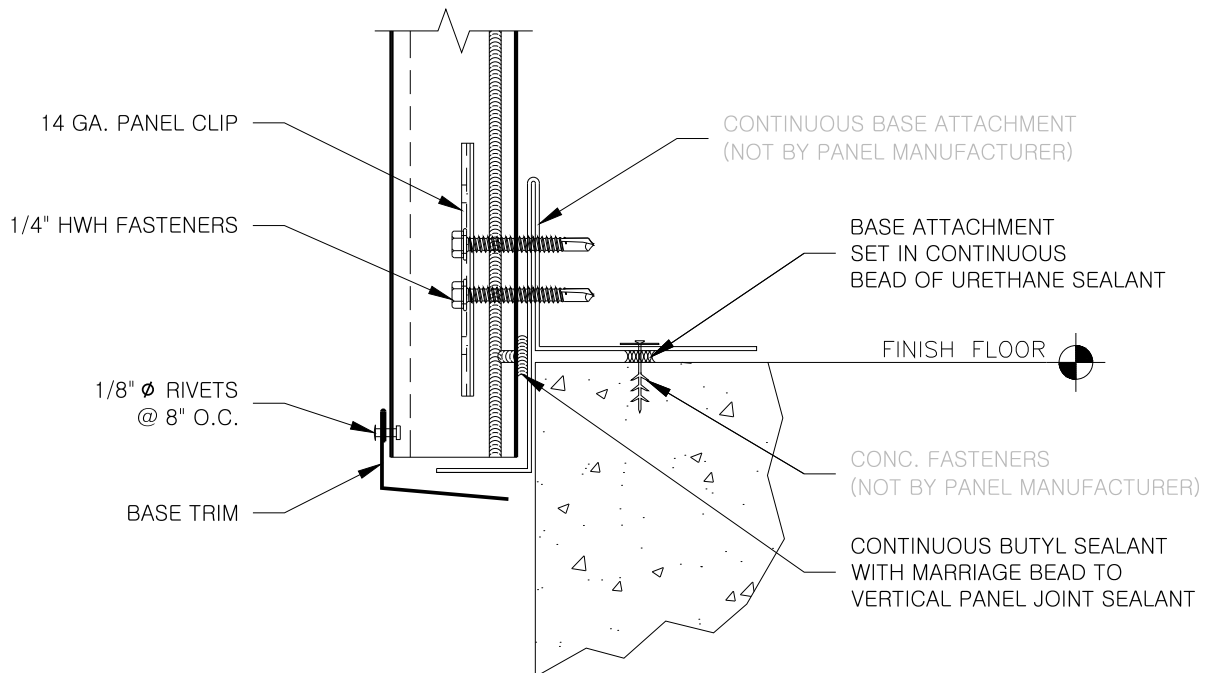


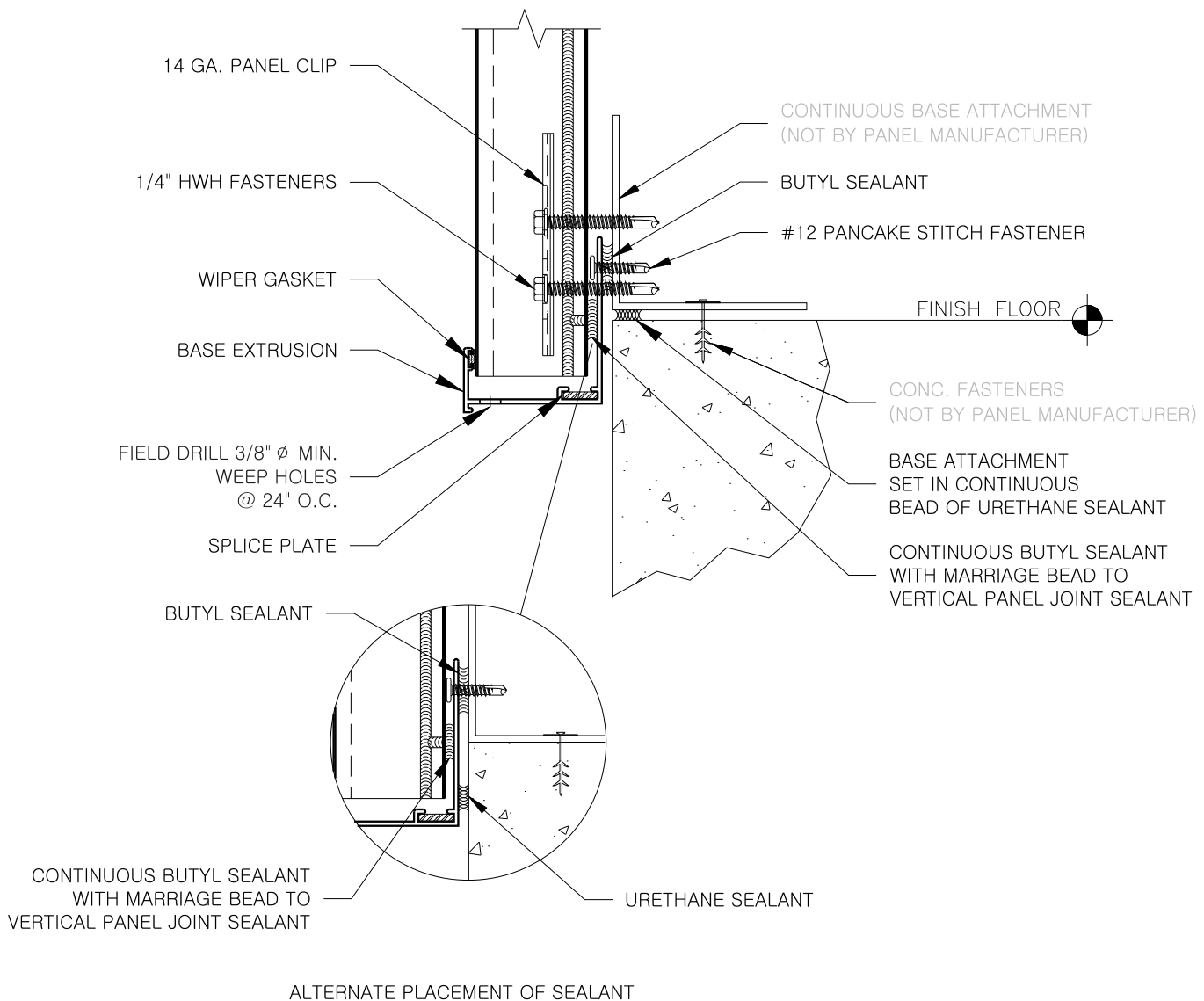
COMMERCIAL &
INDUSTRIAL

BASE – OVERHANG
W/ EDGE TRIM

CI-CF-BE-07

DATE: Jul '19



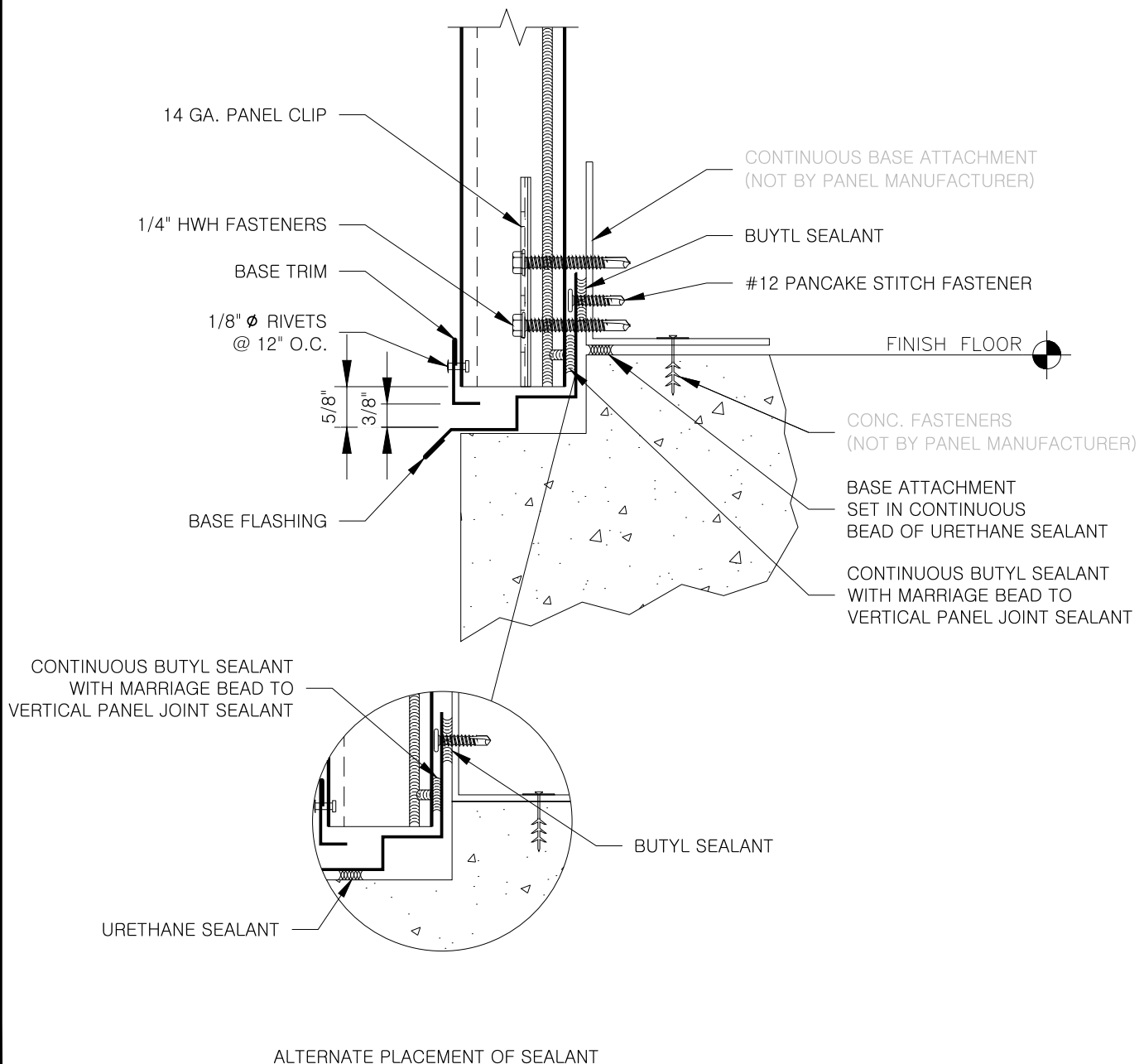


COMMERCIAL &
INDUSTRIAL

BASE – OVERHANG
W/ EXTRUSION

CI-CF-EB-02

DATE: Jul '19

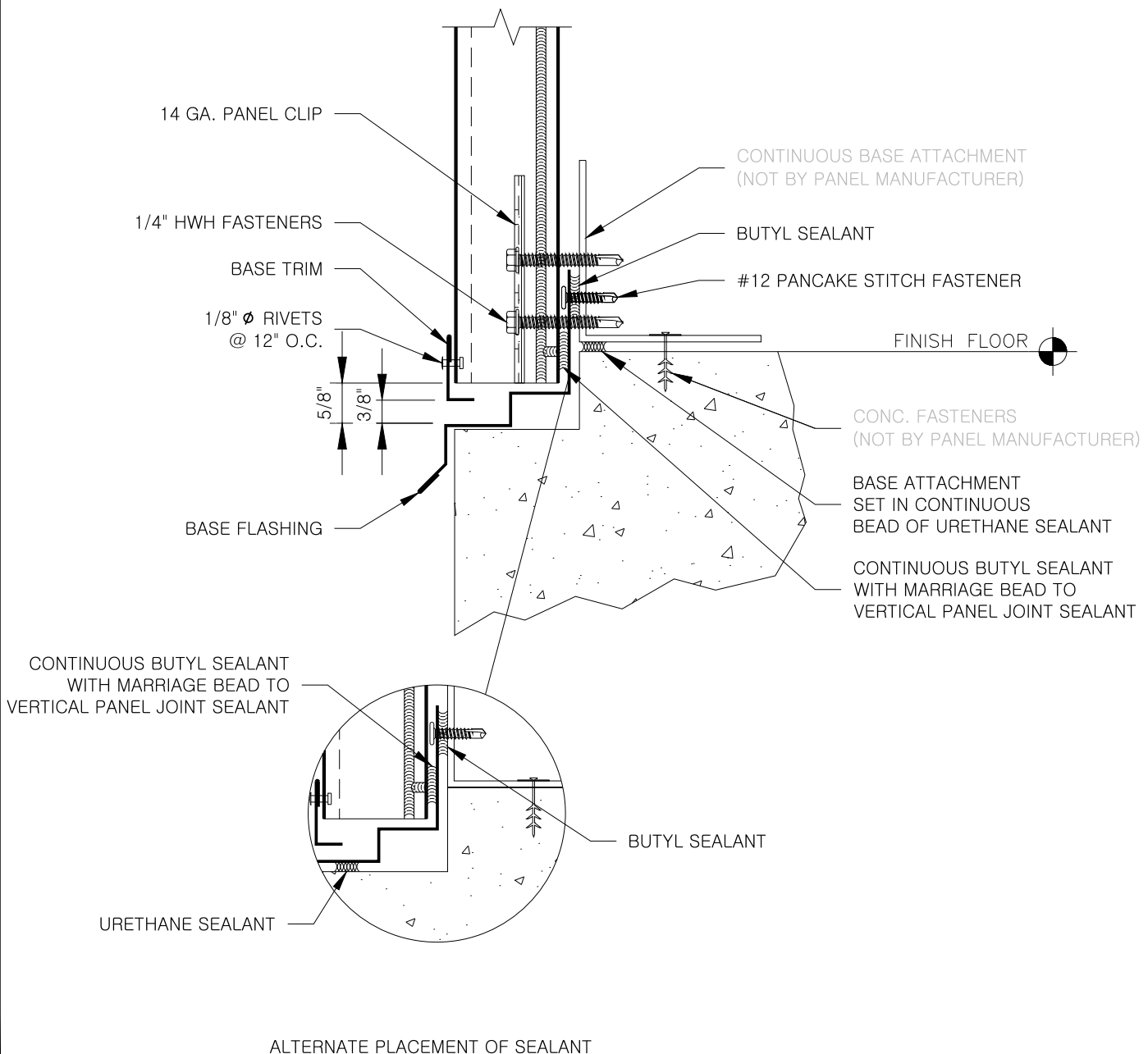


COMMERCIAL &
INDUSTRIAL

BASE - OVERHANG
W/ NOTCHED SLAB

CI-CF-BE-02

DATE: Jul '19

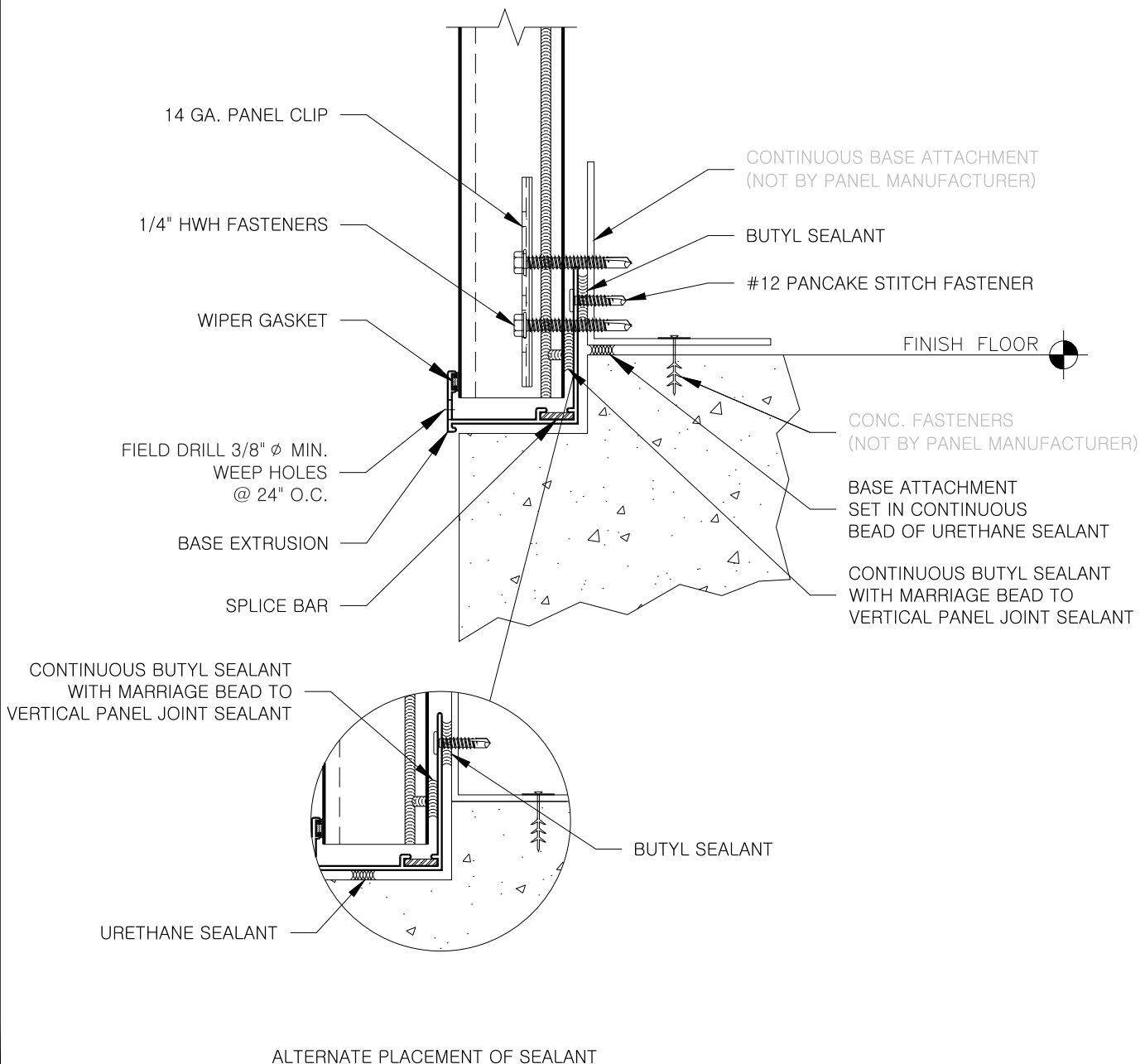


COMMERCIAL &
INDUSTRIAL

BASE - OVERHANG
W/ NOTCHED SLAB - ALT.

CI-CF-BE-04

DATE: Jul '19

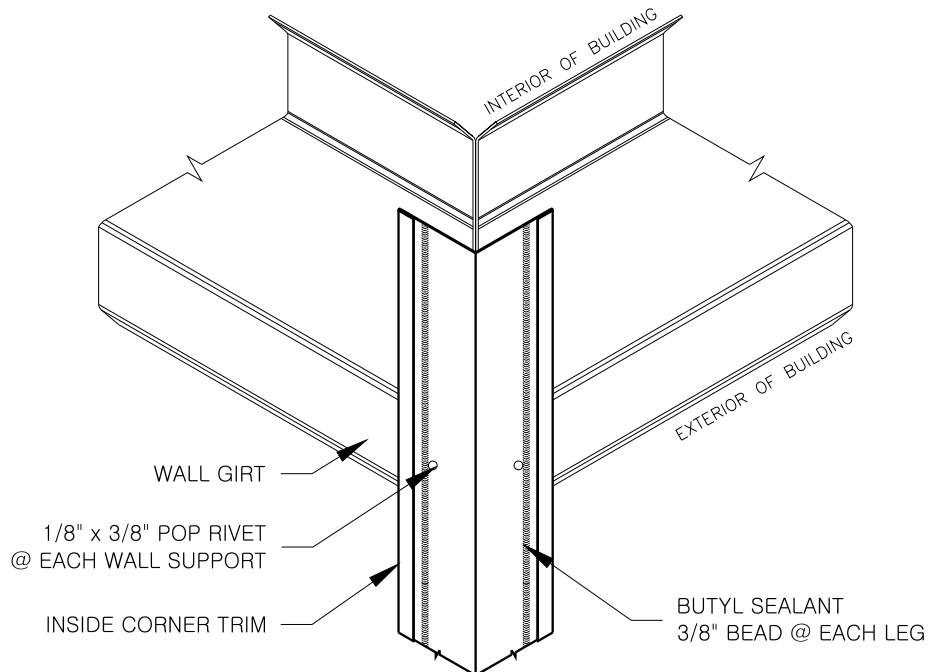
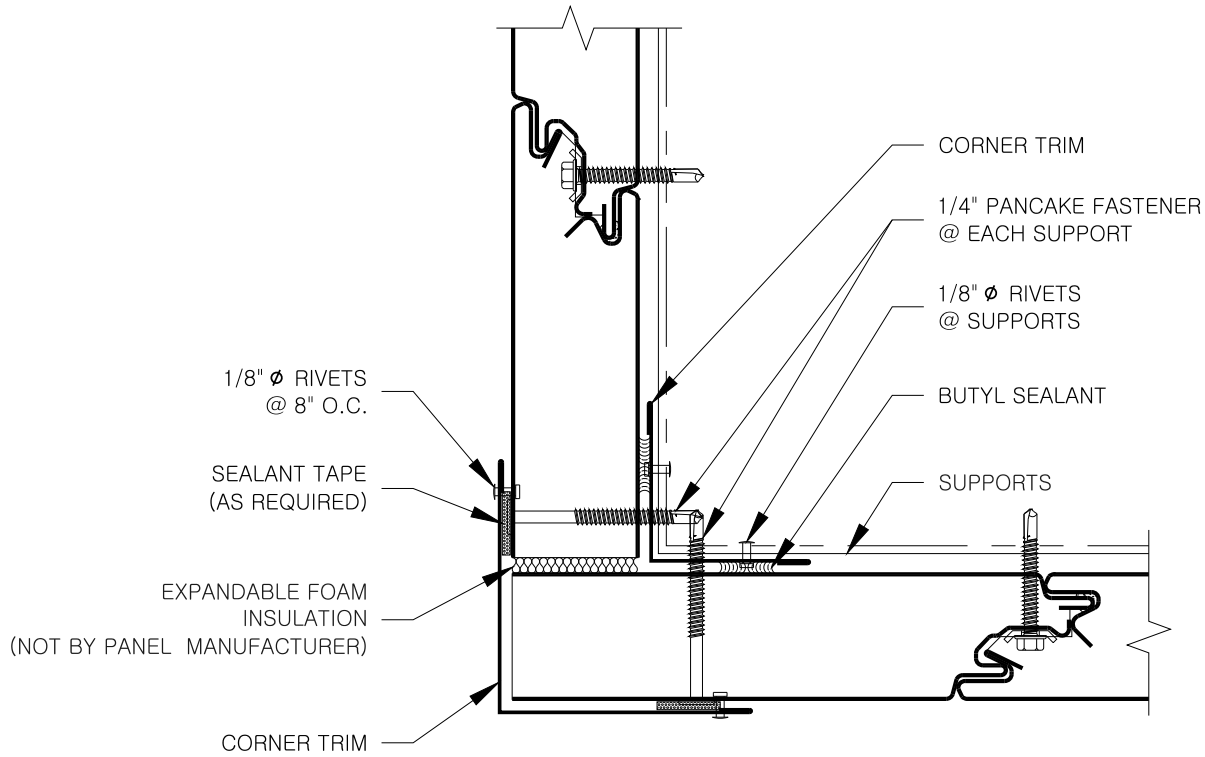


COMMERCIAL &
INDUSTRIAL

BASE – OVERHANG
W/ NOTCHED SLAB, EXTRUSION

CI-CF-EB-01

DATE: Jul '19

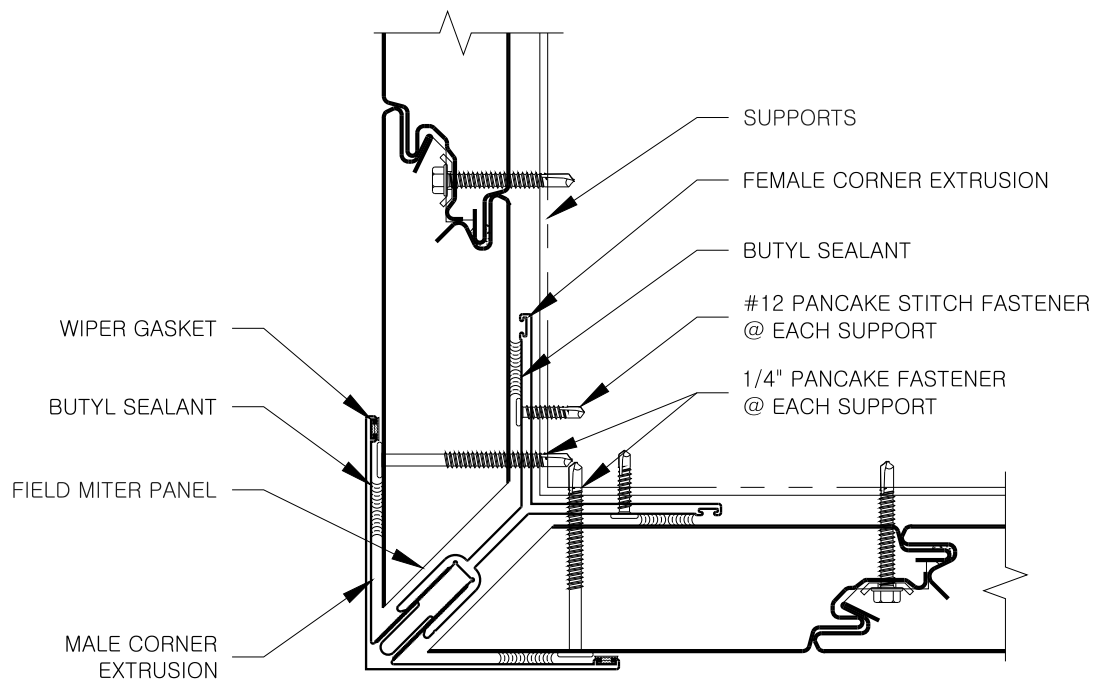


COMMERCIAL &
INDUSTRIAL

OUTSIDE CORNER
W/ FLUSH TRIM

CI-CF-CE-01

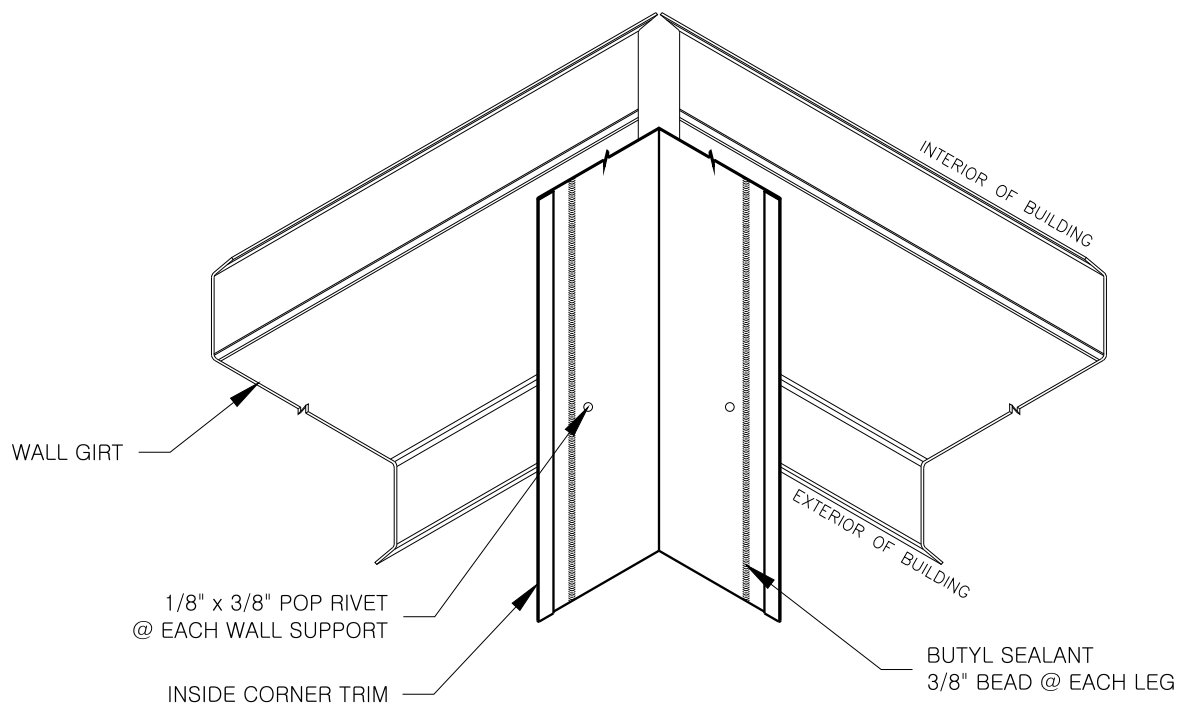
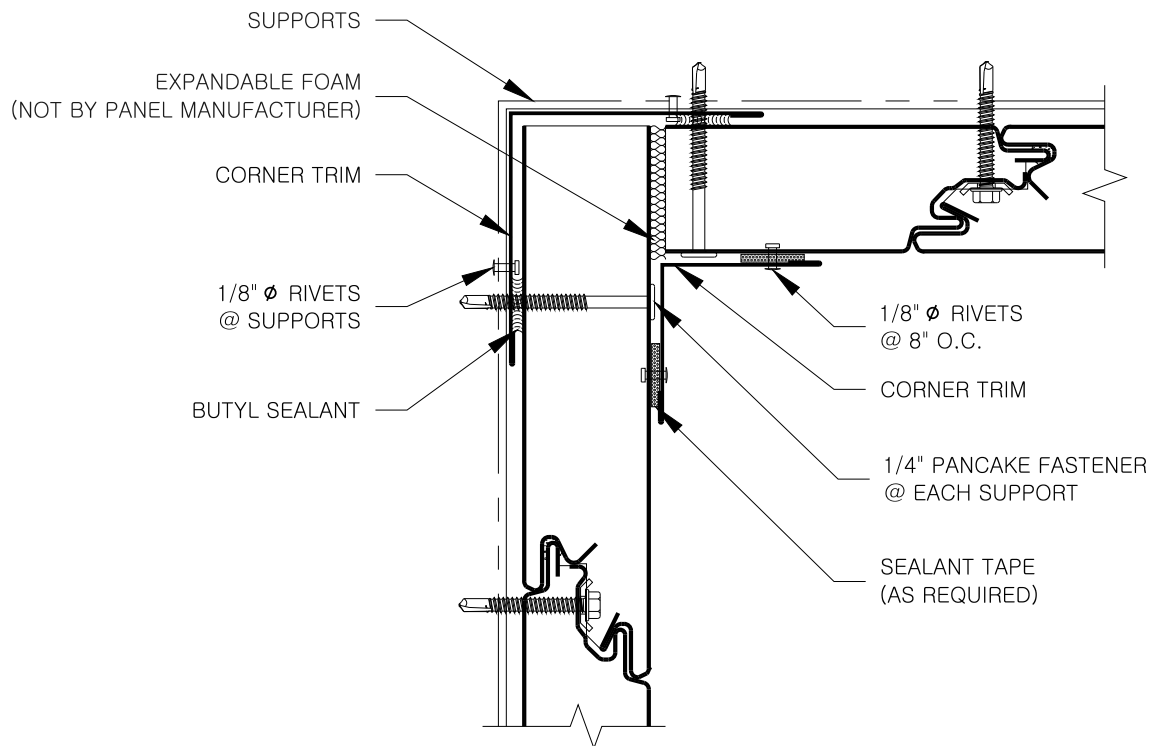
DATE: Jul '19



COMMERCIAL &
INDUSTRIAL

OUTSIDE CORNER
W/ TWO PIECE EXTRUSION

CI-CF-EC-01
DATE: Jul '19

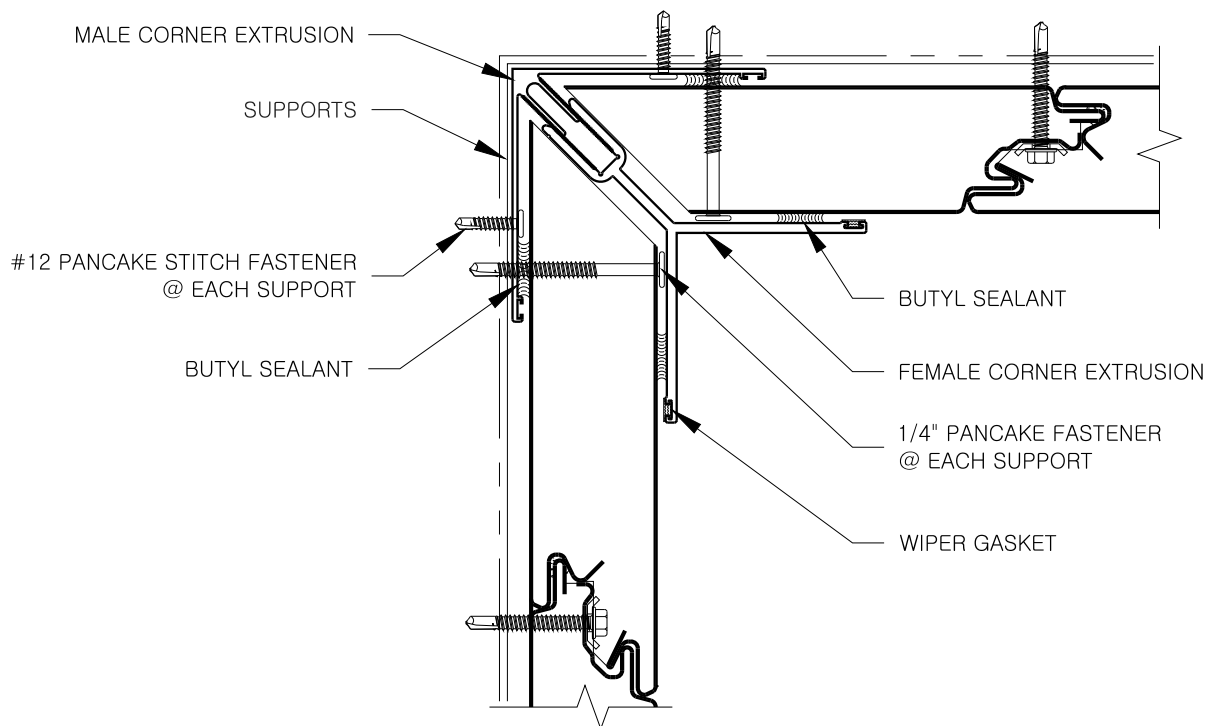


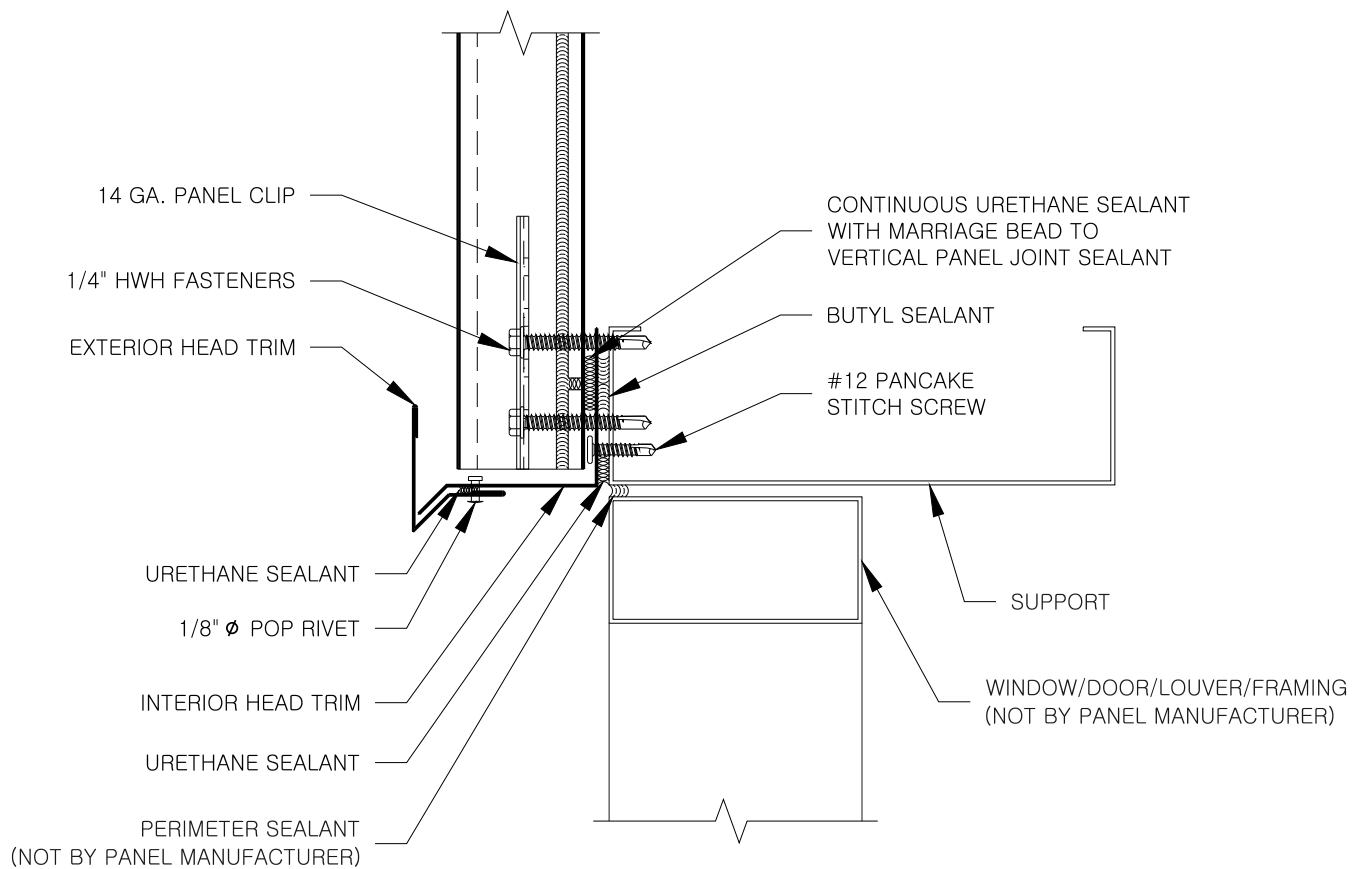
COMMERCIAL &
INDUSTRIAL

INSIDE CORNER
W/ FLUSH TRIM

CI-CF-CE-03

DATE: Jul '19



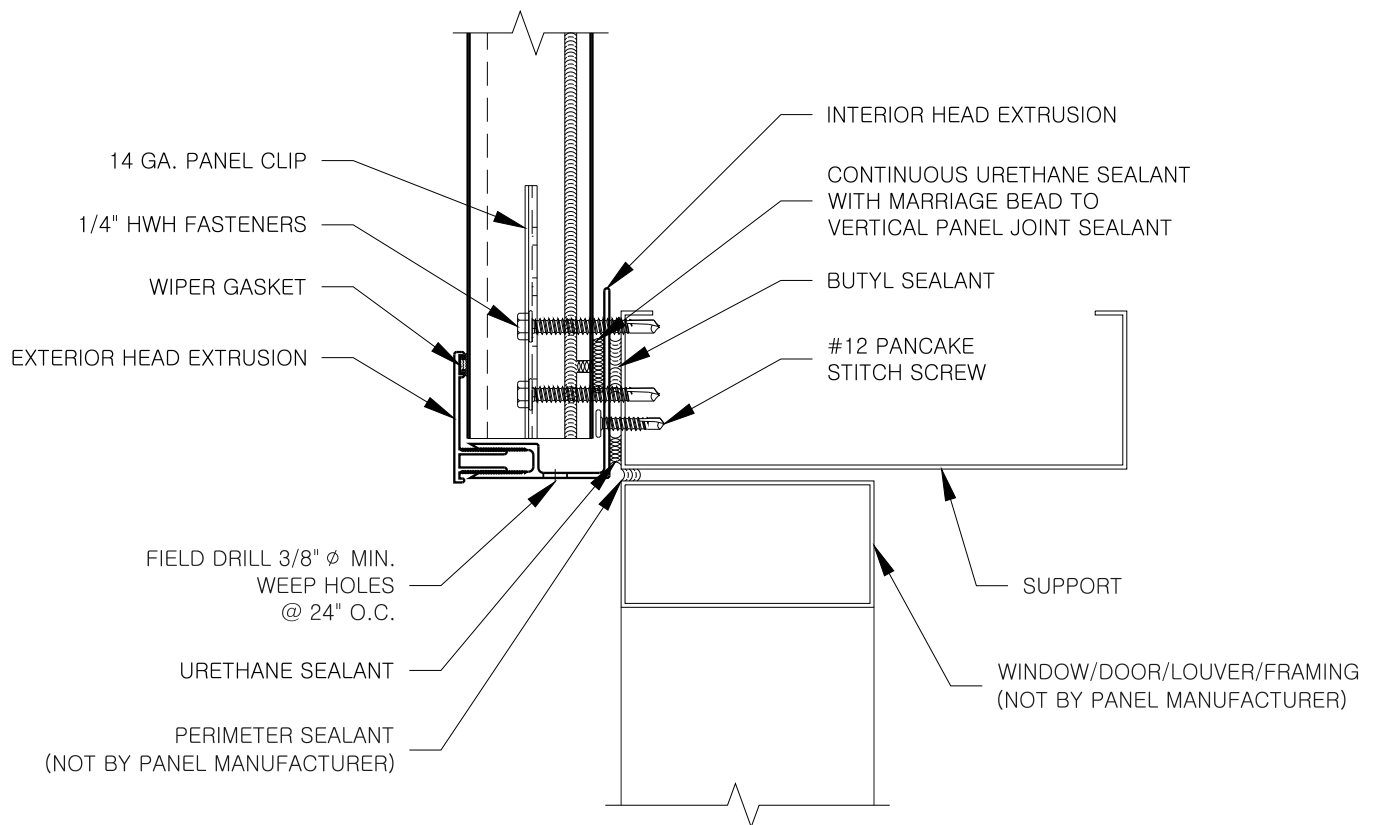


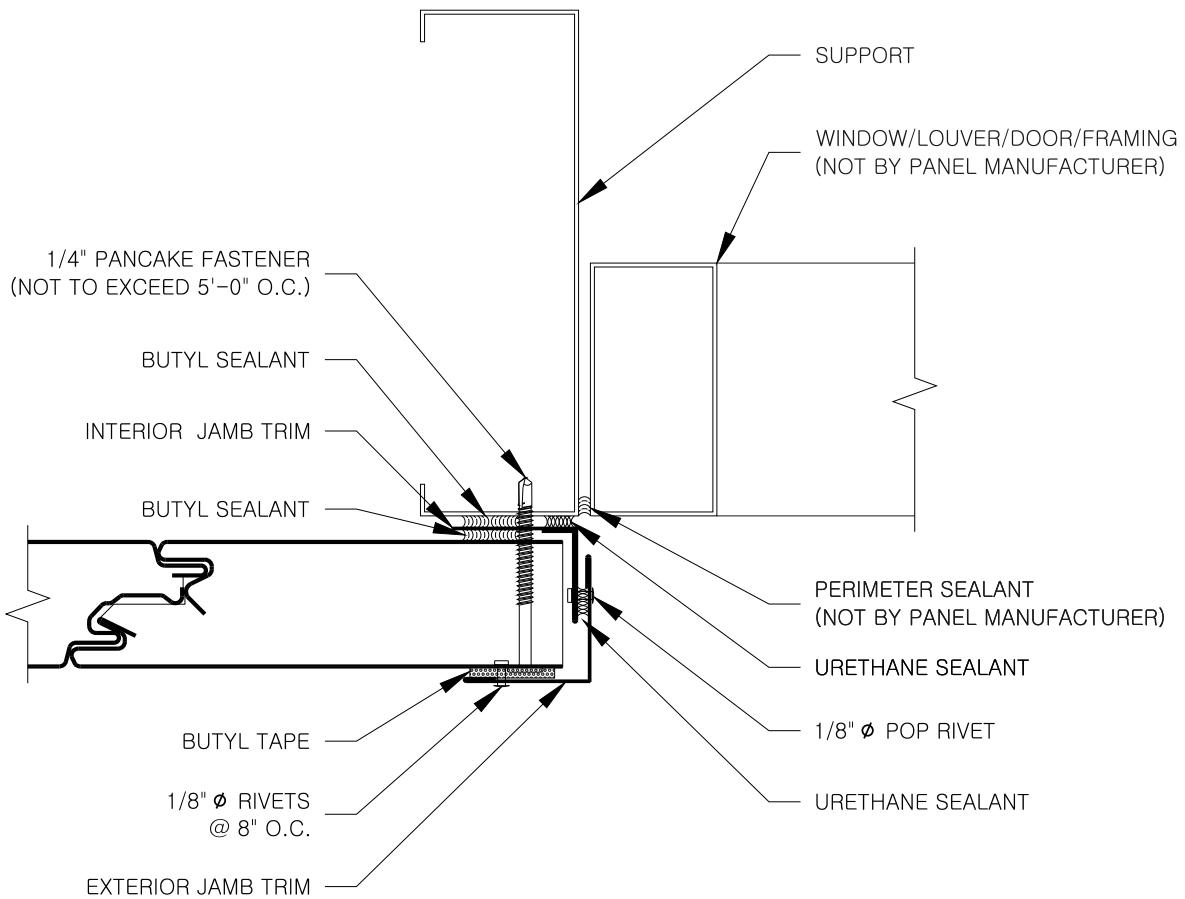
COMMERCIAL &
INDUSTRIAL

HEAD W/ TWO PIECE TRIM

CI-CF-HD-01

DATE: Jul '19



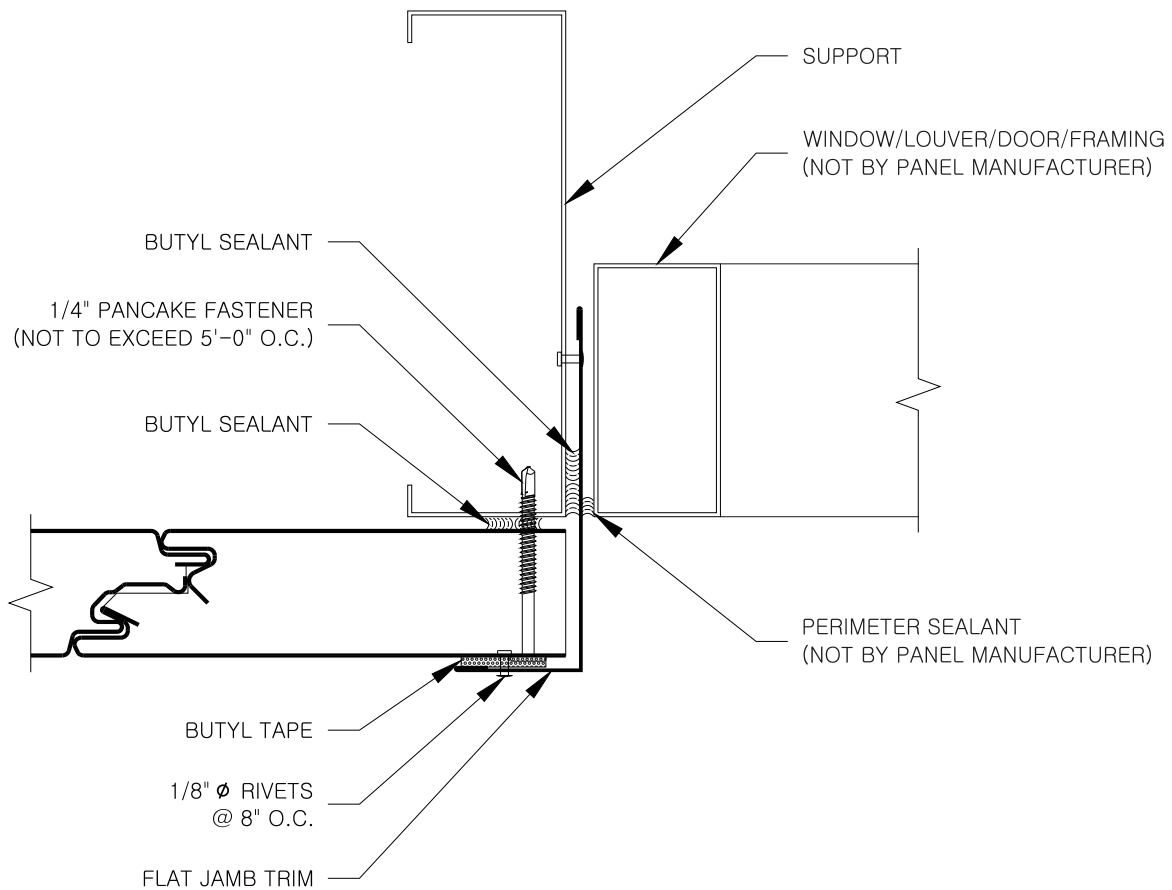


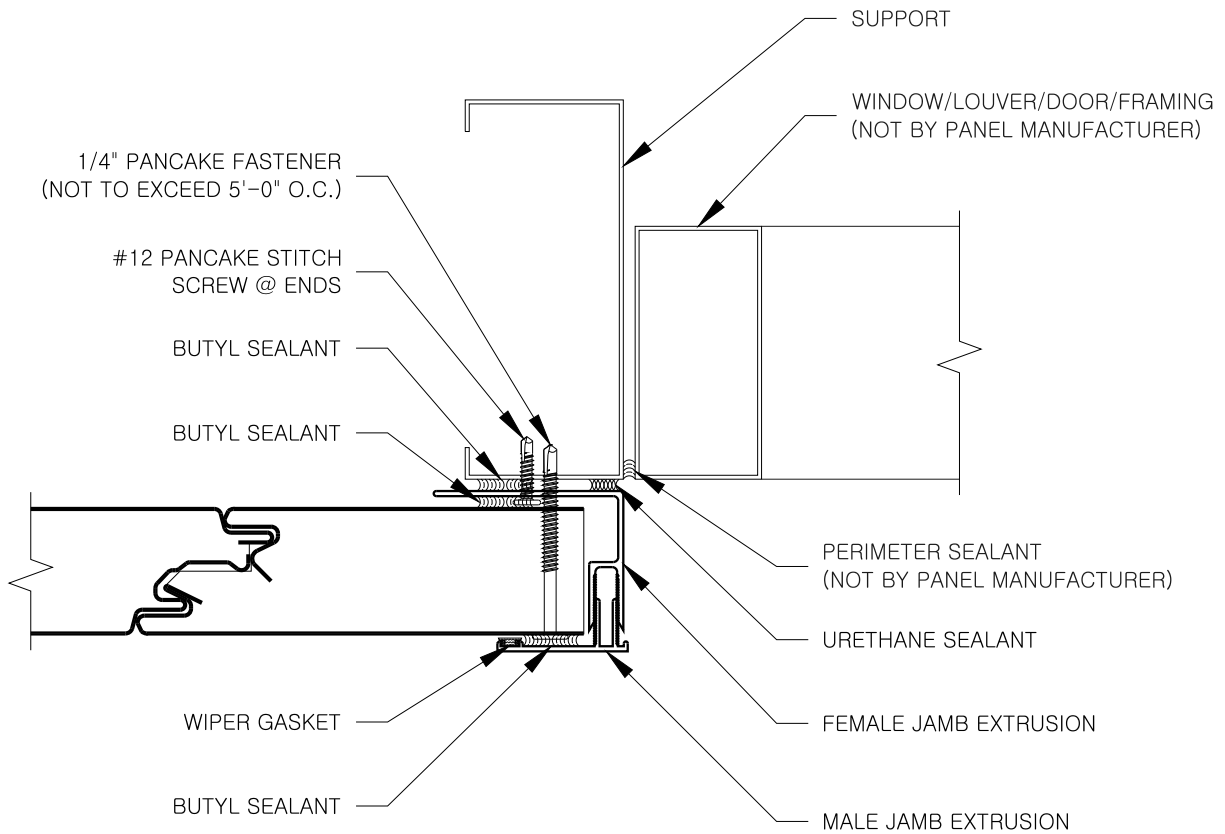
COMMERCIAL &
INDUSTRIAL

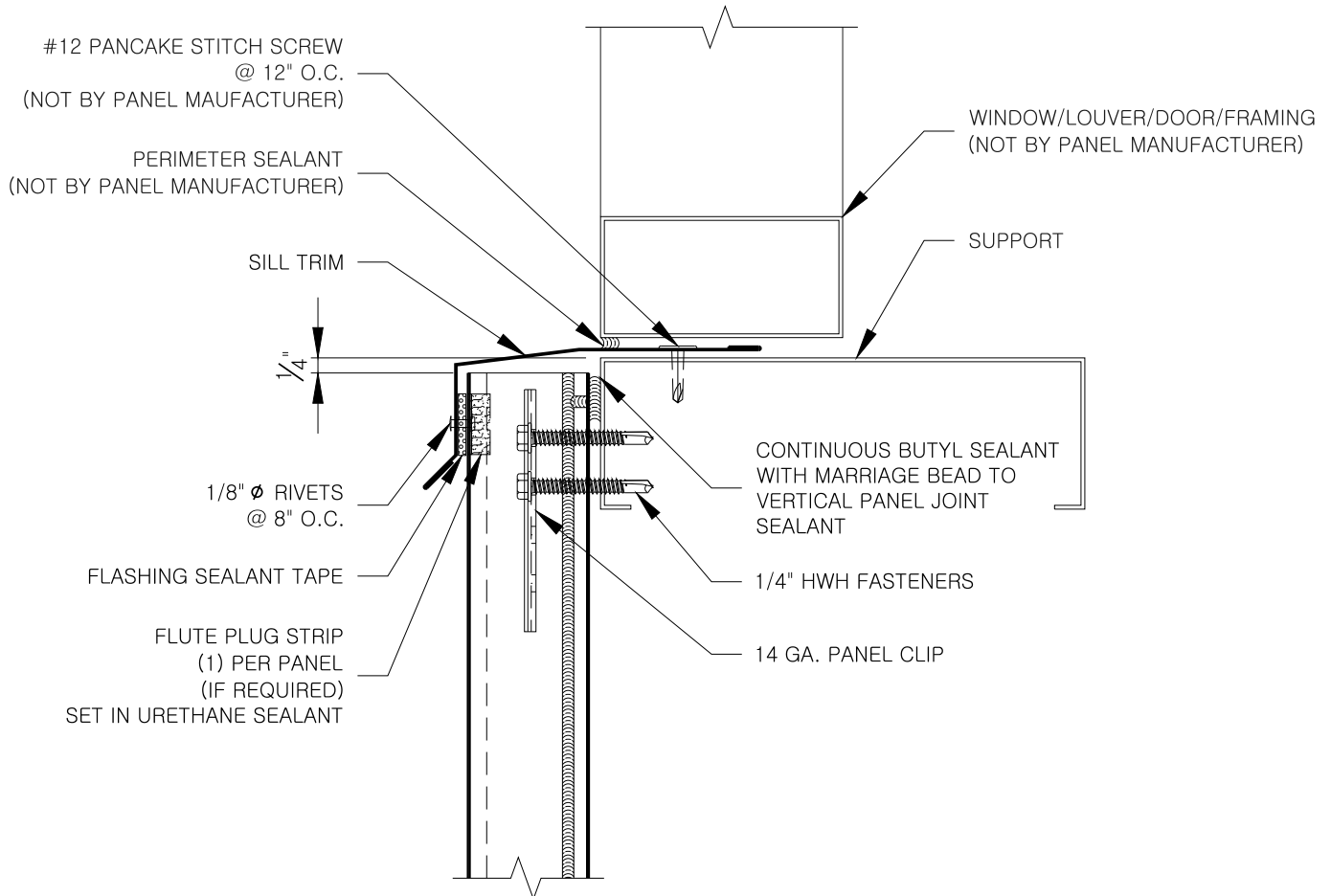
JAMB W/ TWO PIECE TRIM

CI-CF-JB-01

DATE: Jul '19





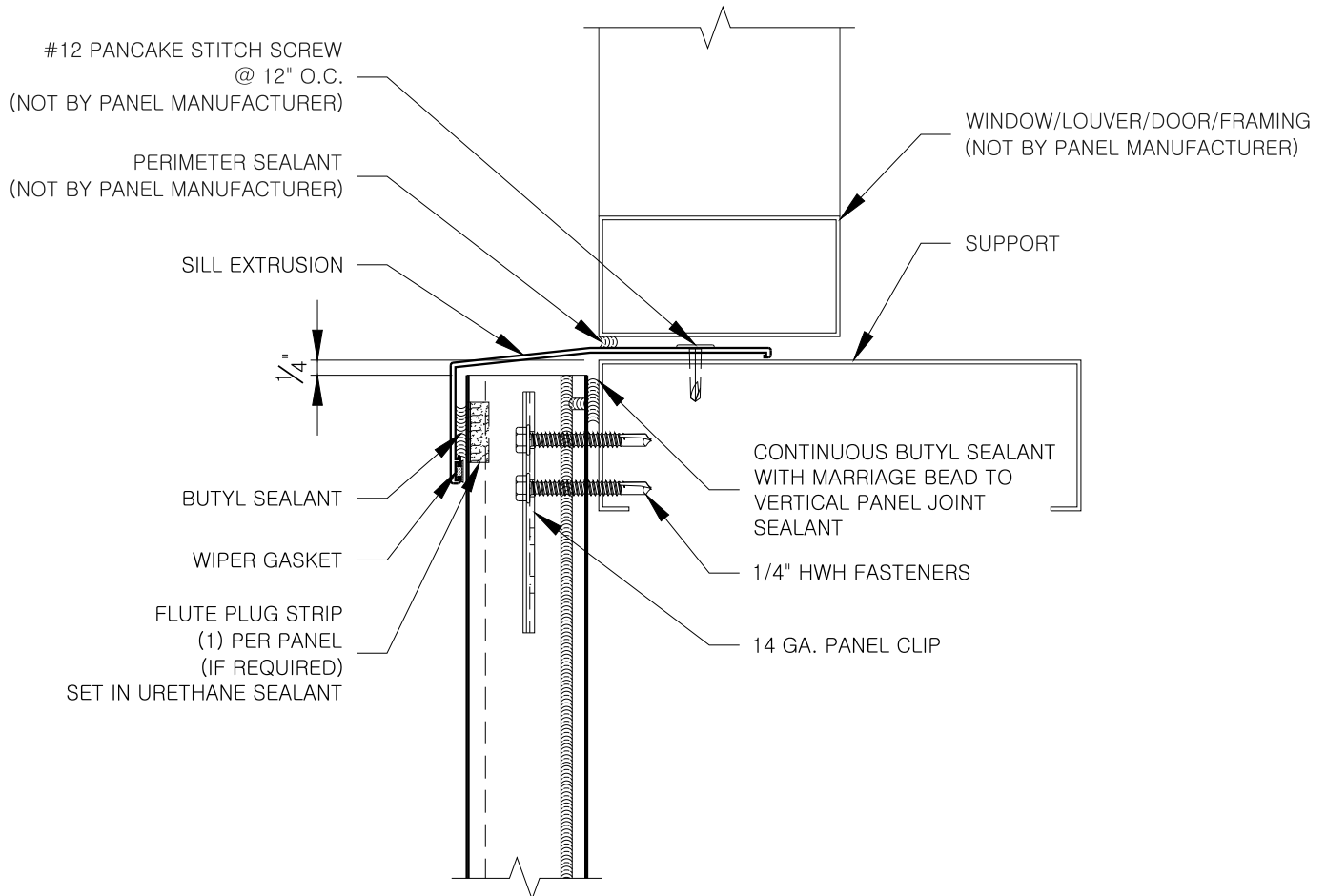


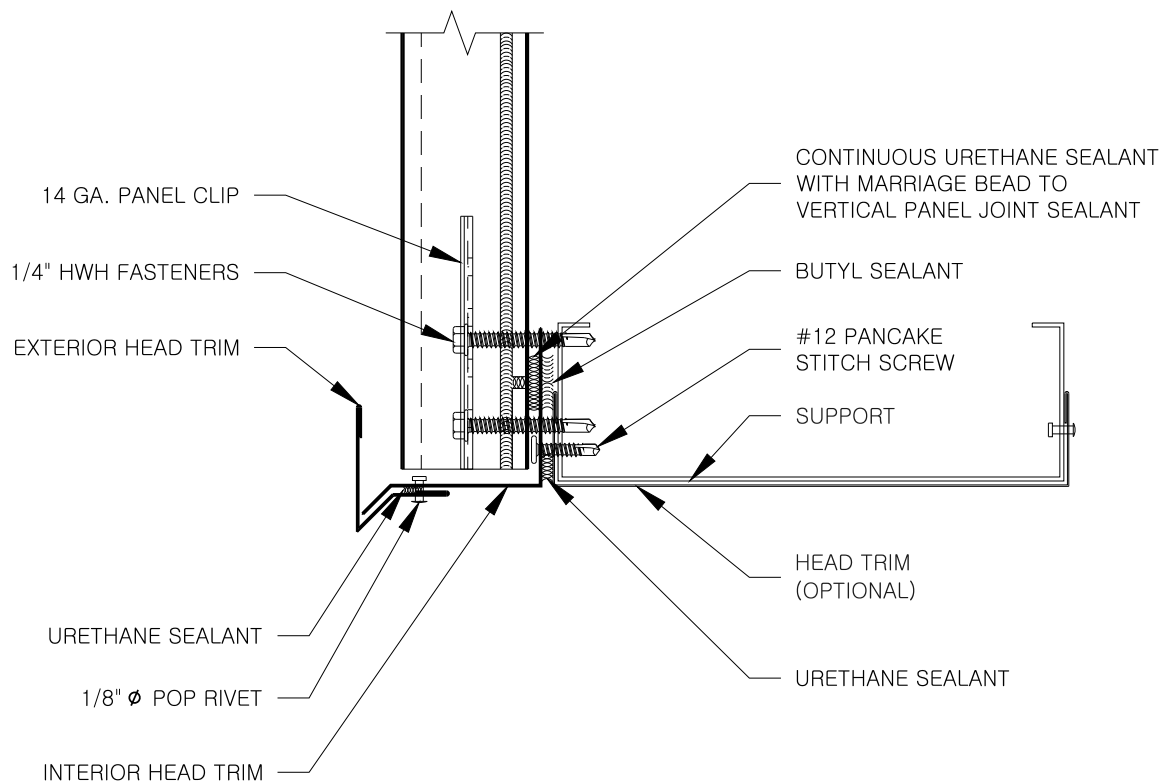
COMMERCIAL &
INDUSTRIAL

SILL DETAIL
W/ FLAT TRIM

CI-CF-SL-01

DATE: Jul '19

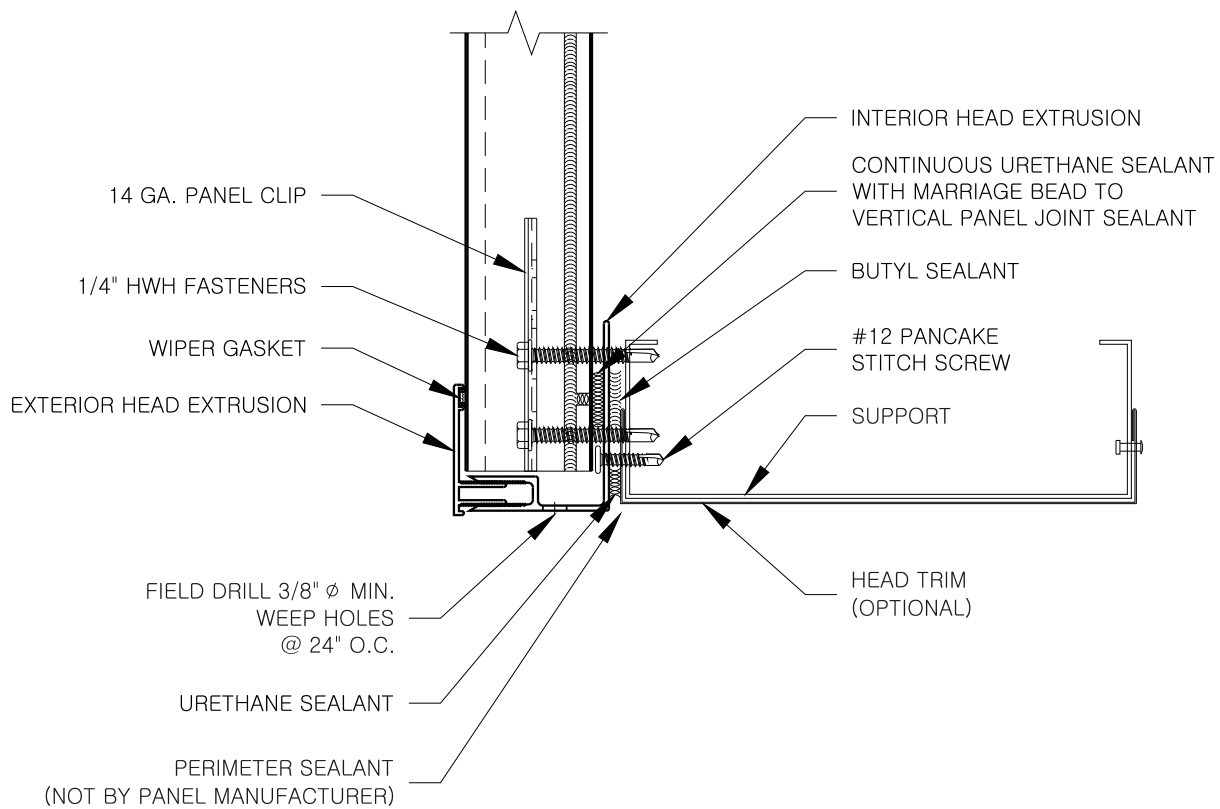


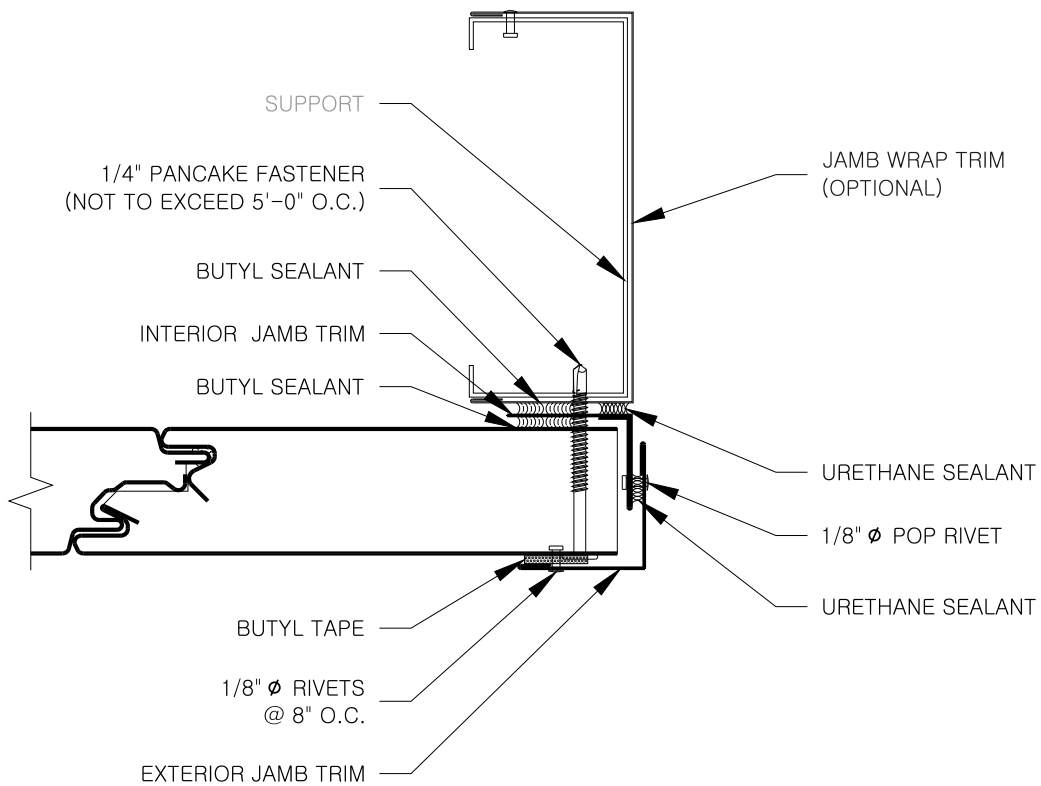


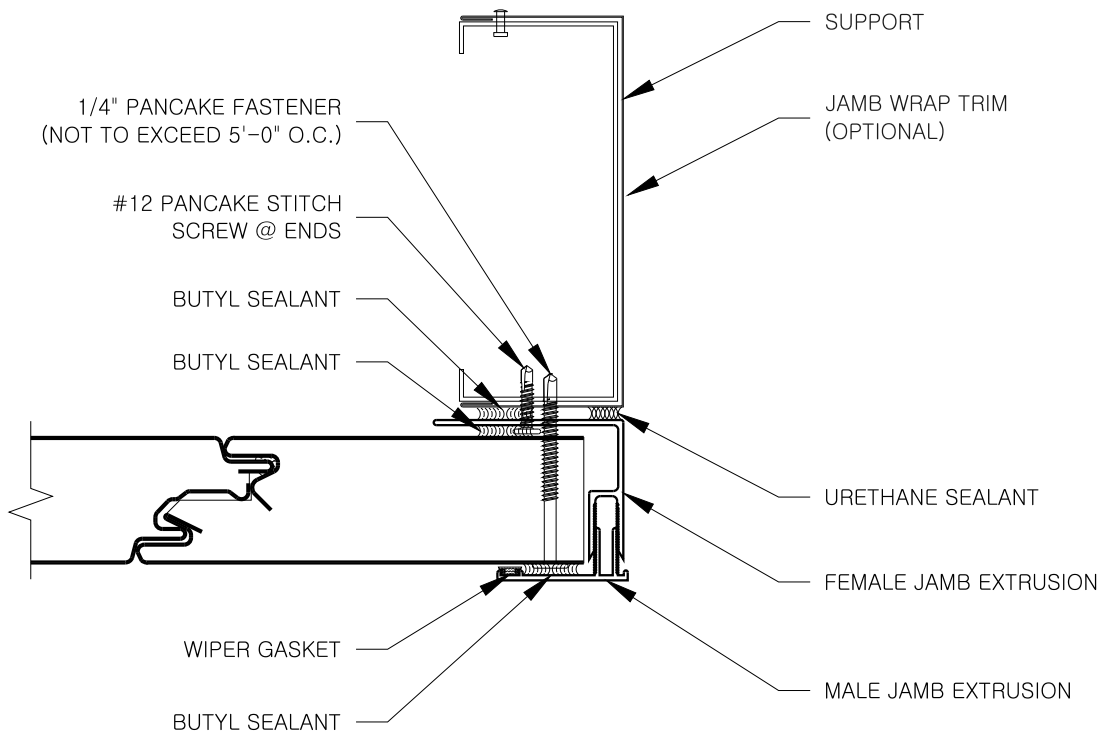
COMMERCIAL &
INDUSTRIAL

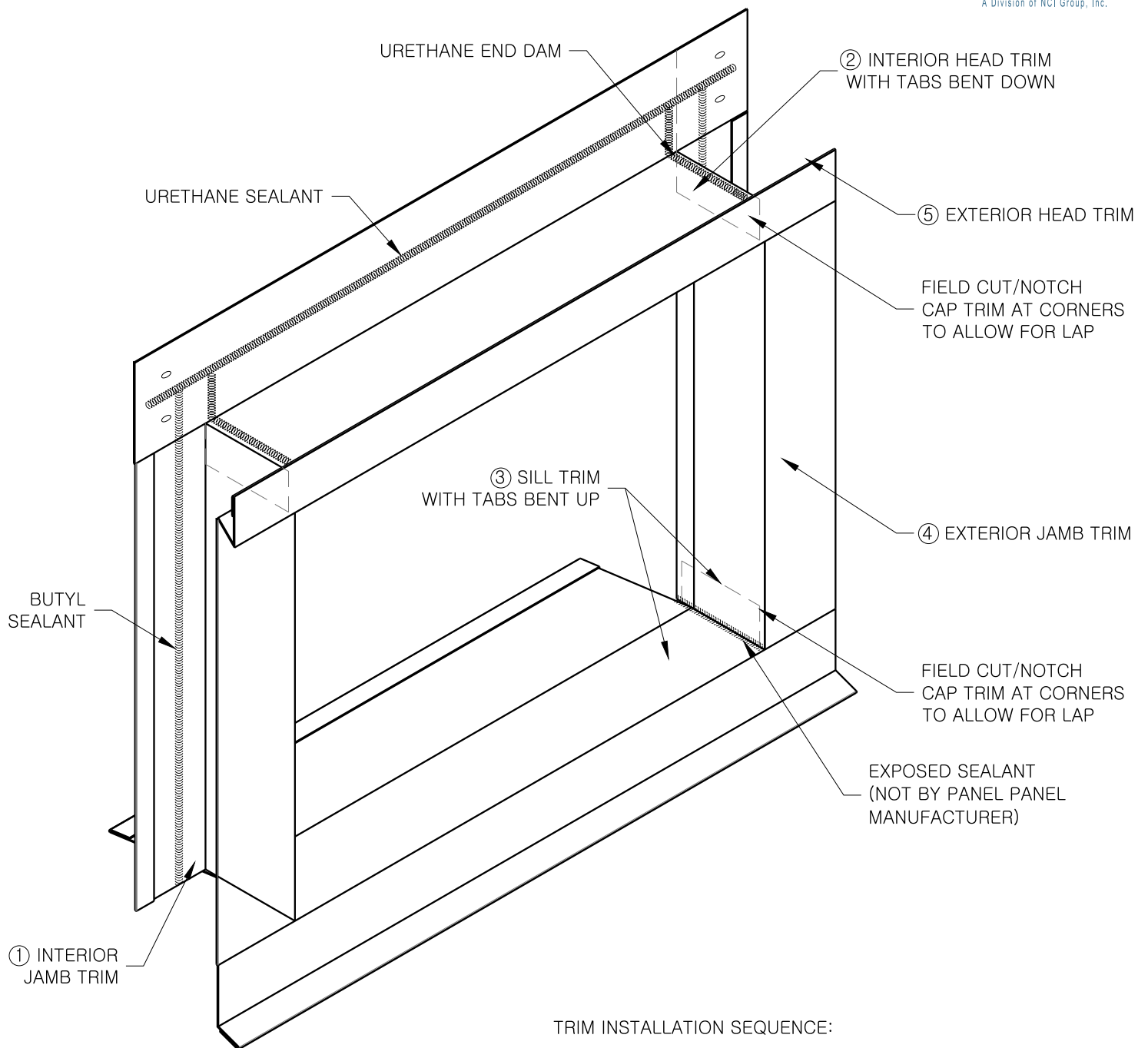
O.H. DOOR HEAD
W/ TWO PIECE TRIM

CI-CF-HD-02
DATE: Jul '19



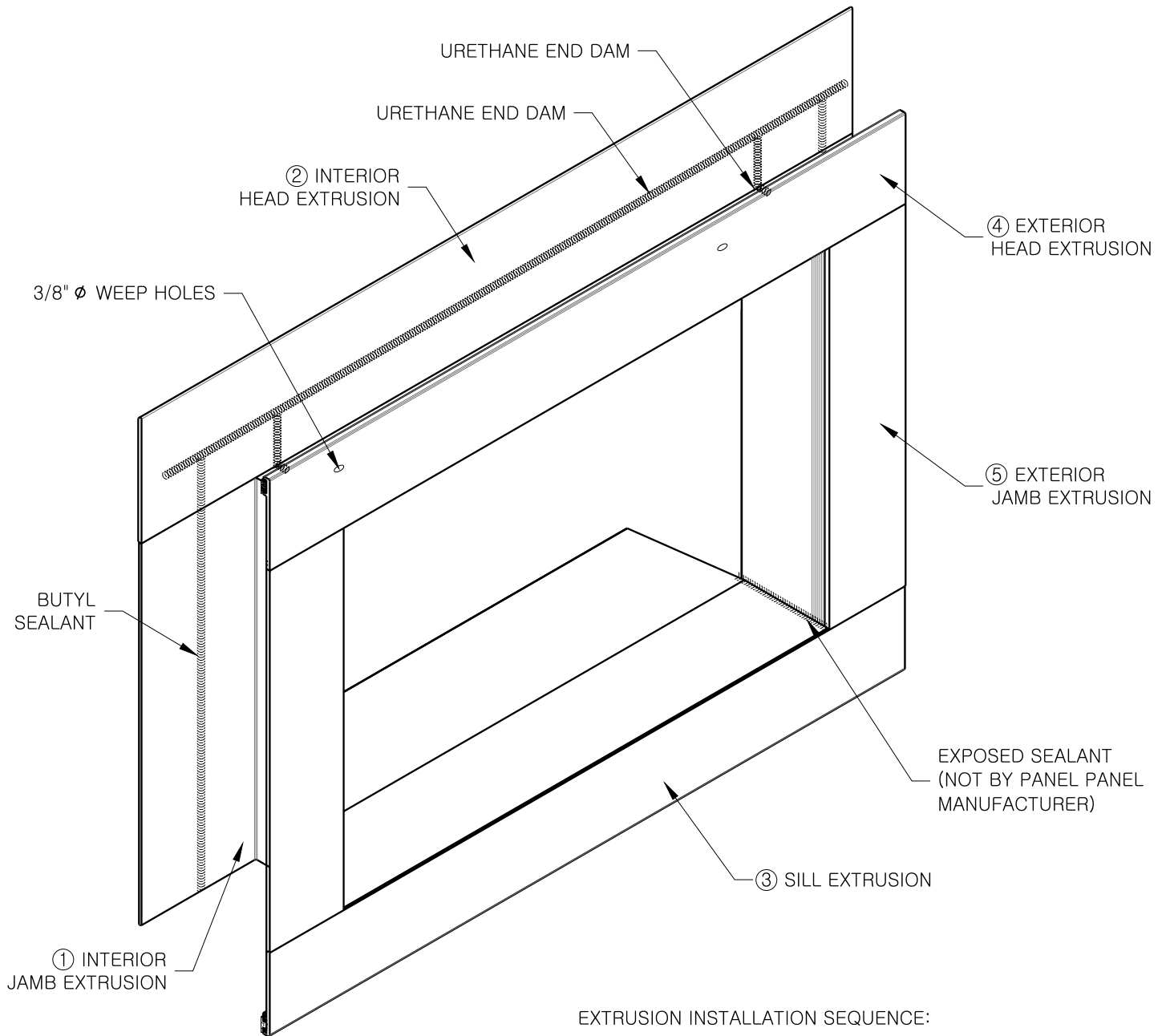






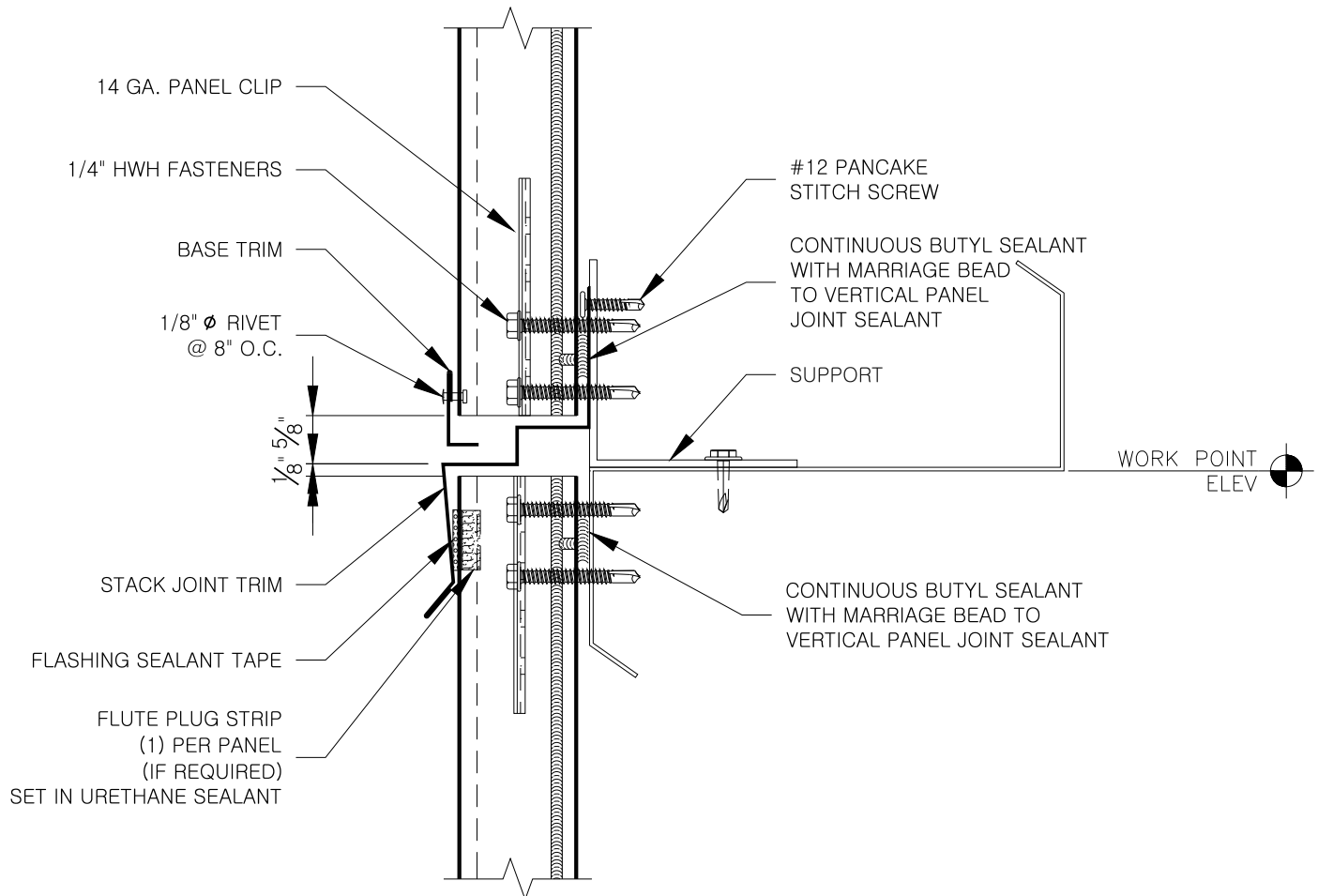
TRIM INSTALLATION SEQUENCE:

- ① INTERIOR JAMB TRIMS
- ② INTERIOR HEAD TRIM WITH TABS BENT DOWN (NOTCHED)
- ③ SILL TRIM WITH TABS BENT UP (NOTCHED)
- ④ EXTERIOR JAMB TRIMS
- ⑤ EXTERIOR HEAD TRIM



EXTRUSION INSTALLATION SEQUENCE:

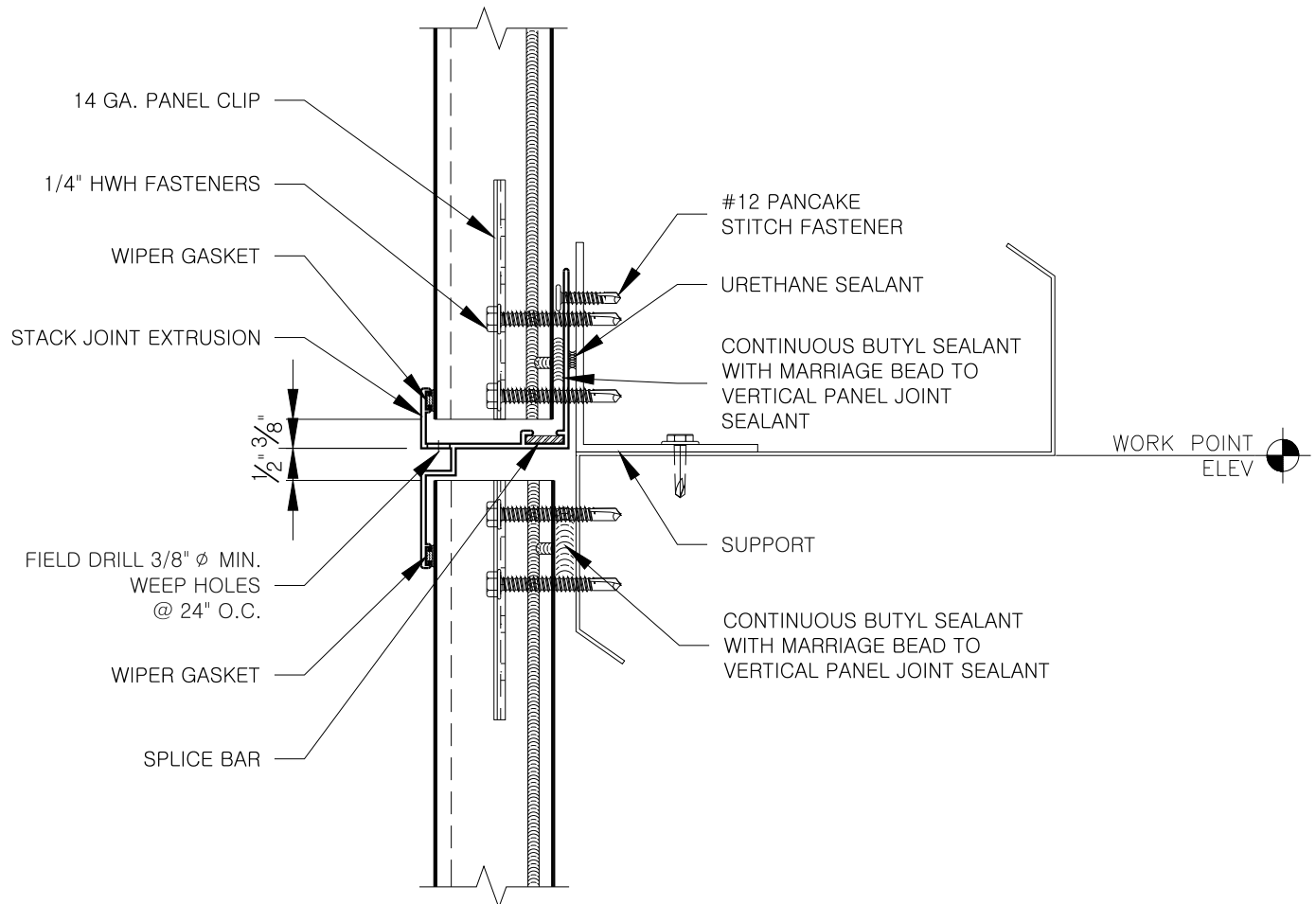
- ① INTERIOR JAMB EXTRUSIONS
- ② INTERIOR HEAD EXTRUSION (NOTCHED)
- ③ SILL EXTRUSION (NOTCHED)
- ④ EXTERIOR HEAD EXTRUSION (NOTCHED)
- ⑤ EXTERIOR JAMB EXTRUSIONS



COMMERCIAL &
INDUSTRIAL

STACK JOINT
W/ TRIM

CI-CF-SJ-01
DATE: Jul '19



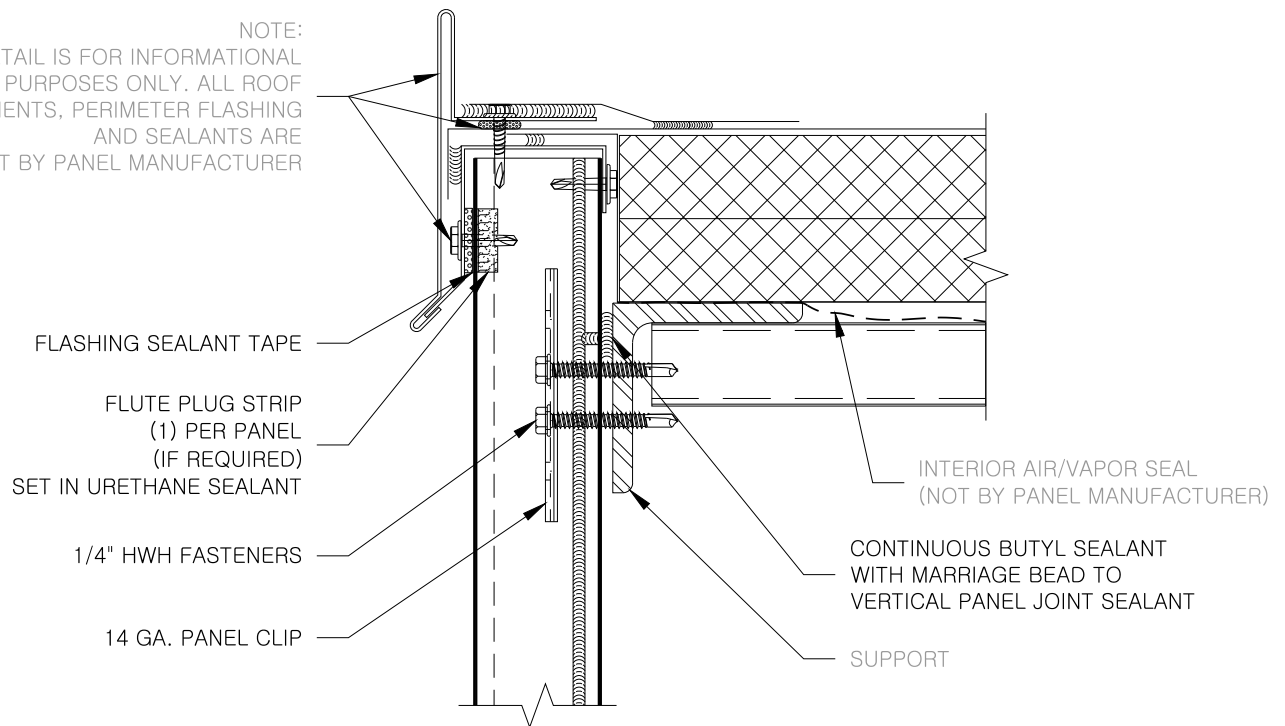
COMMERCIAL &
INDUSTRIAL

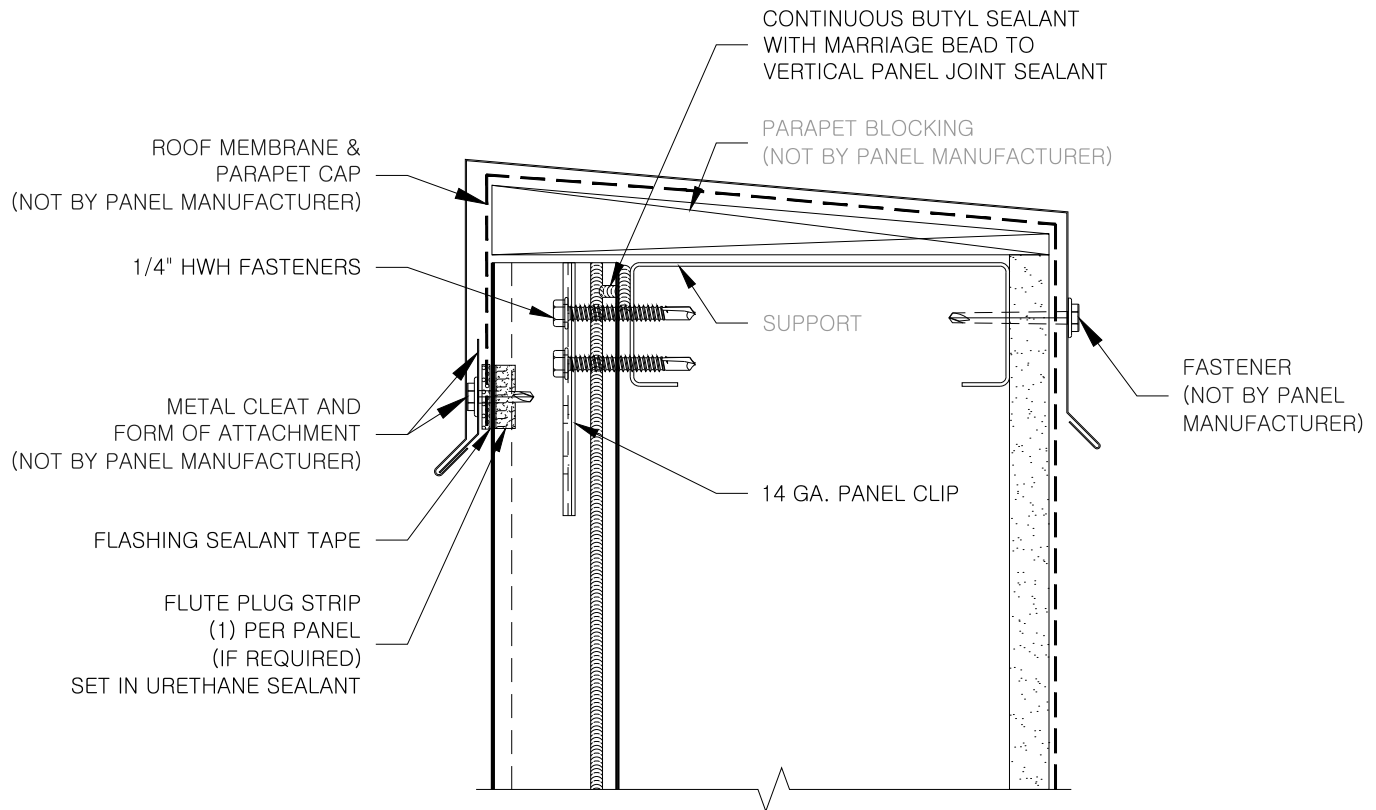
STACK JOINT
W/ EXTRUSION

CI-CF-ESJ-01

DATE: Jul '19

NOTE:
THIS DETAIL IS FOR INFORMATIONAL
PURPOSES ONLY. ALL ROOF
COMPONENTS, PERIMETER FLASHING
AND SEALANTS ARE
NOT BY PANEL MANUFACTURER

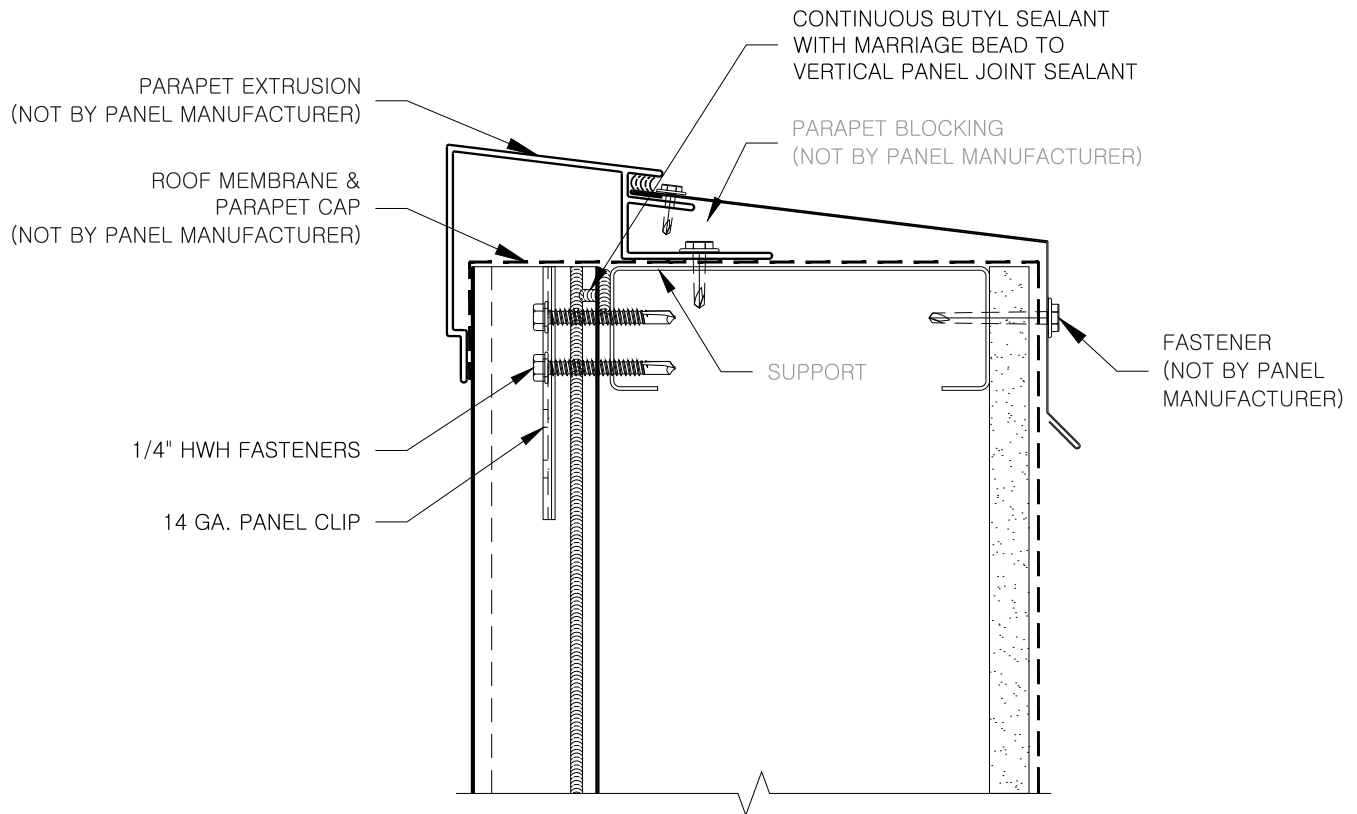




COMMERCIAL &
INDUSTRIAL

PARAPET (SUPPORTED)
W/ TRIM

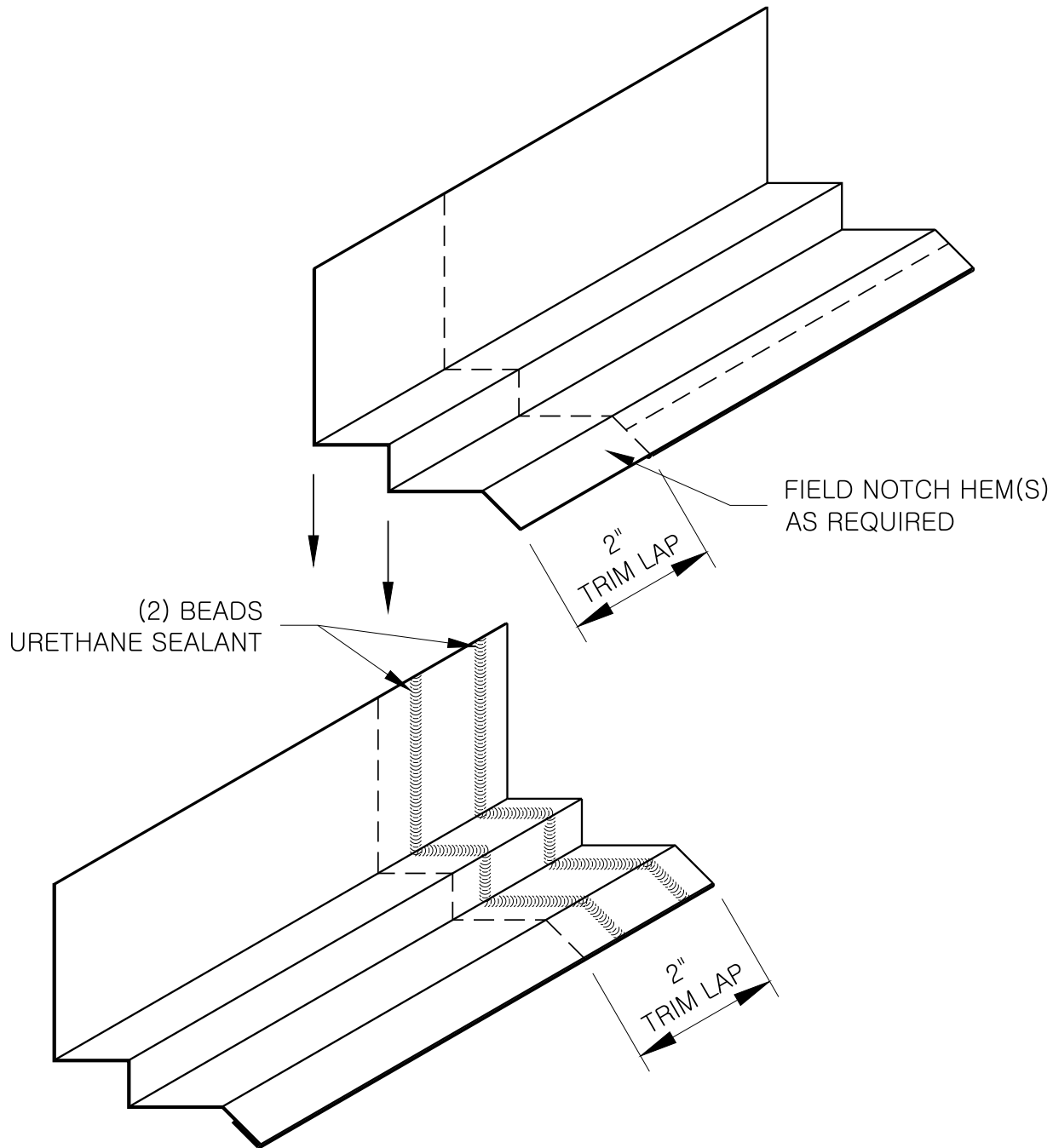
CI-CF-TP-01
DATE: Jul '19



COMMERCIAL &
INDUSTRIAL

PARAPET (SUPPORTED)
W/ EXTRUSION

CI-CF-EP-02
DATE: Jul '19

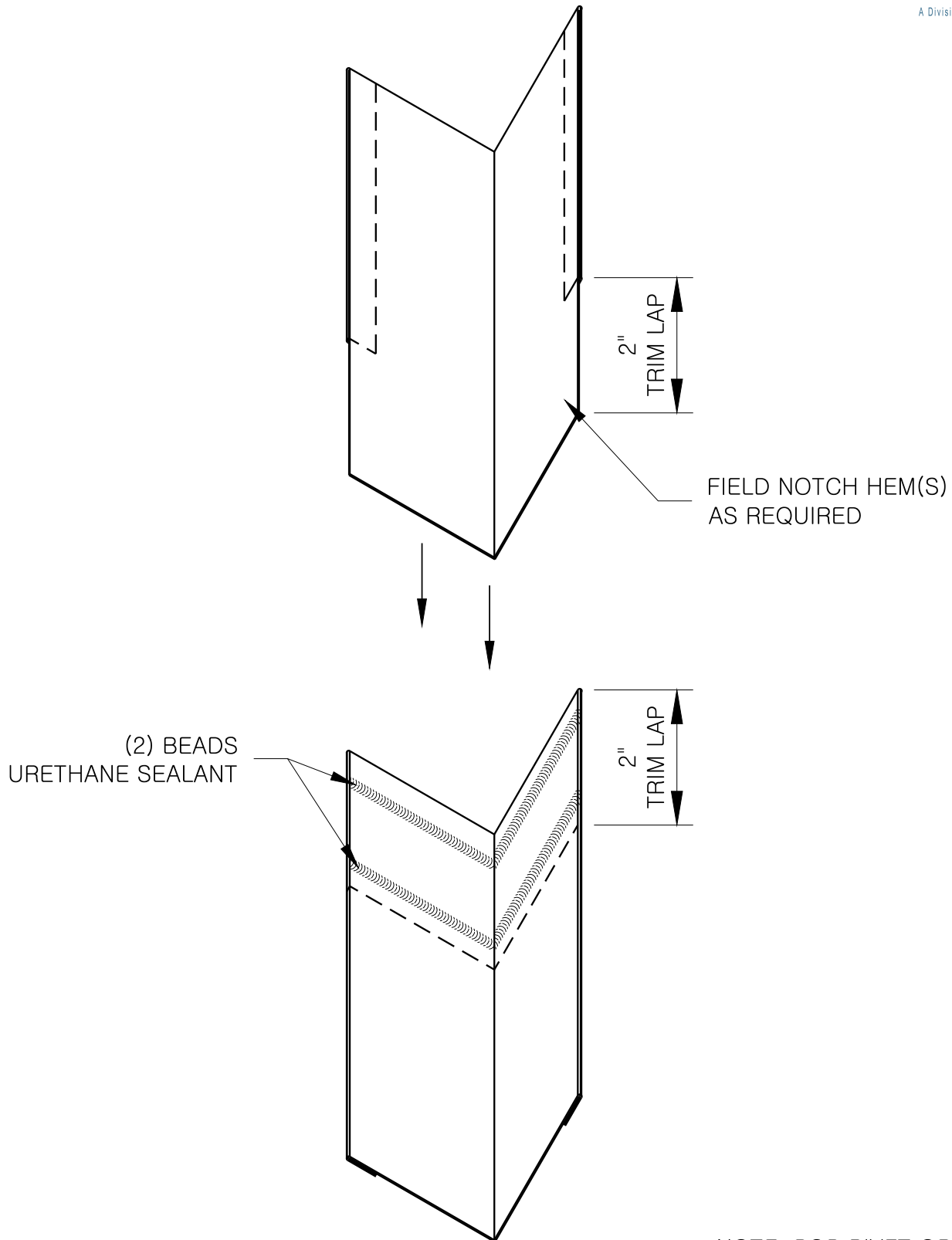


NOTE: POP RIVET OR STITCH
SCREW AS NECESSARY

COMMERCIAL &
INDUSTRIAL

TRIM END LAP –
BASE

CI-CF-EL-B
DATE: Jul '19

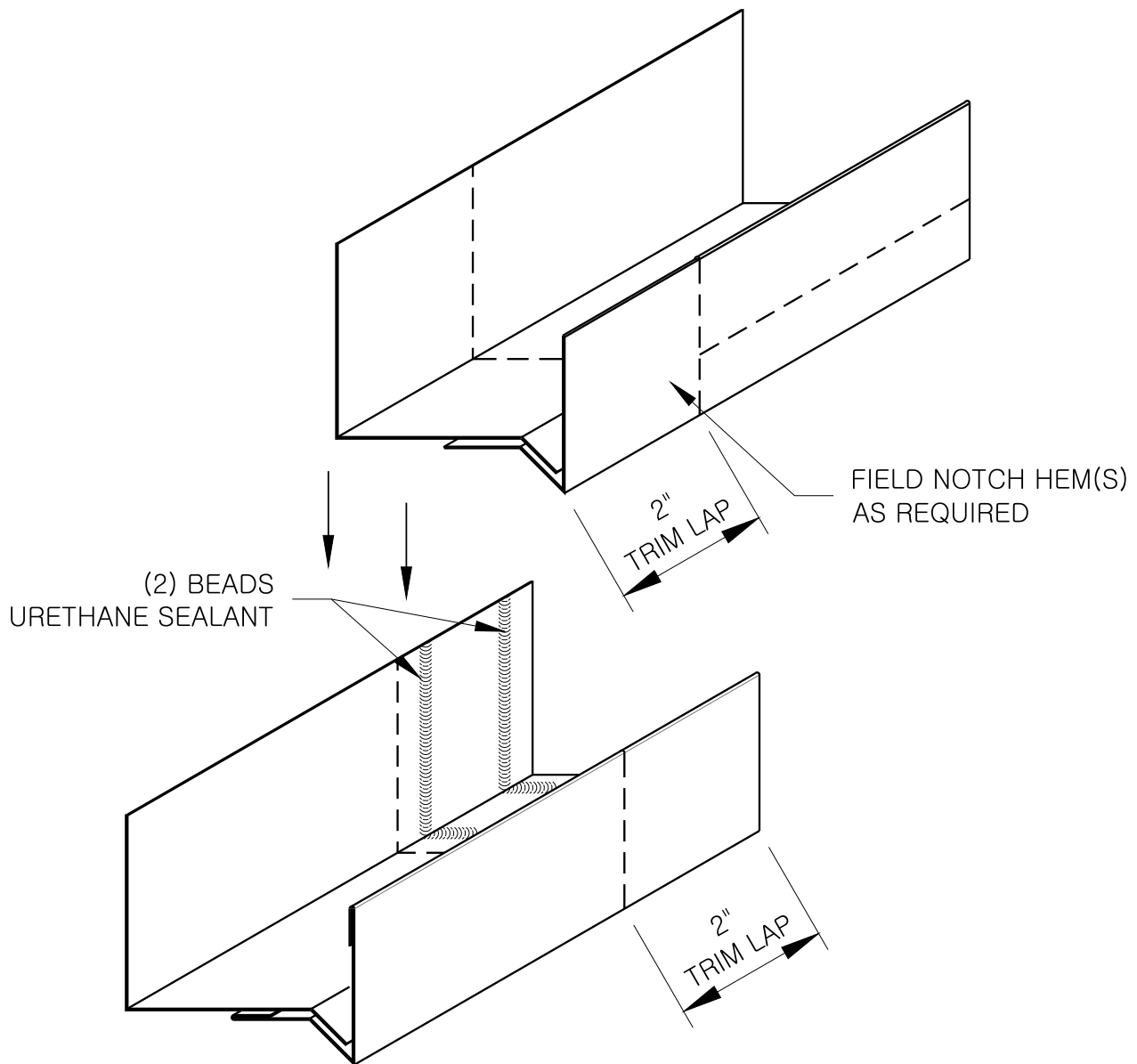


NOTE: POP RIVET OR STITCH
SCREW AS NECESSARY

COMMERCIAL &
INDUSTRIAL

TRIM END LAP –
CORNER

CI-CF-EL-C
DATE: Jul '19

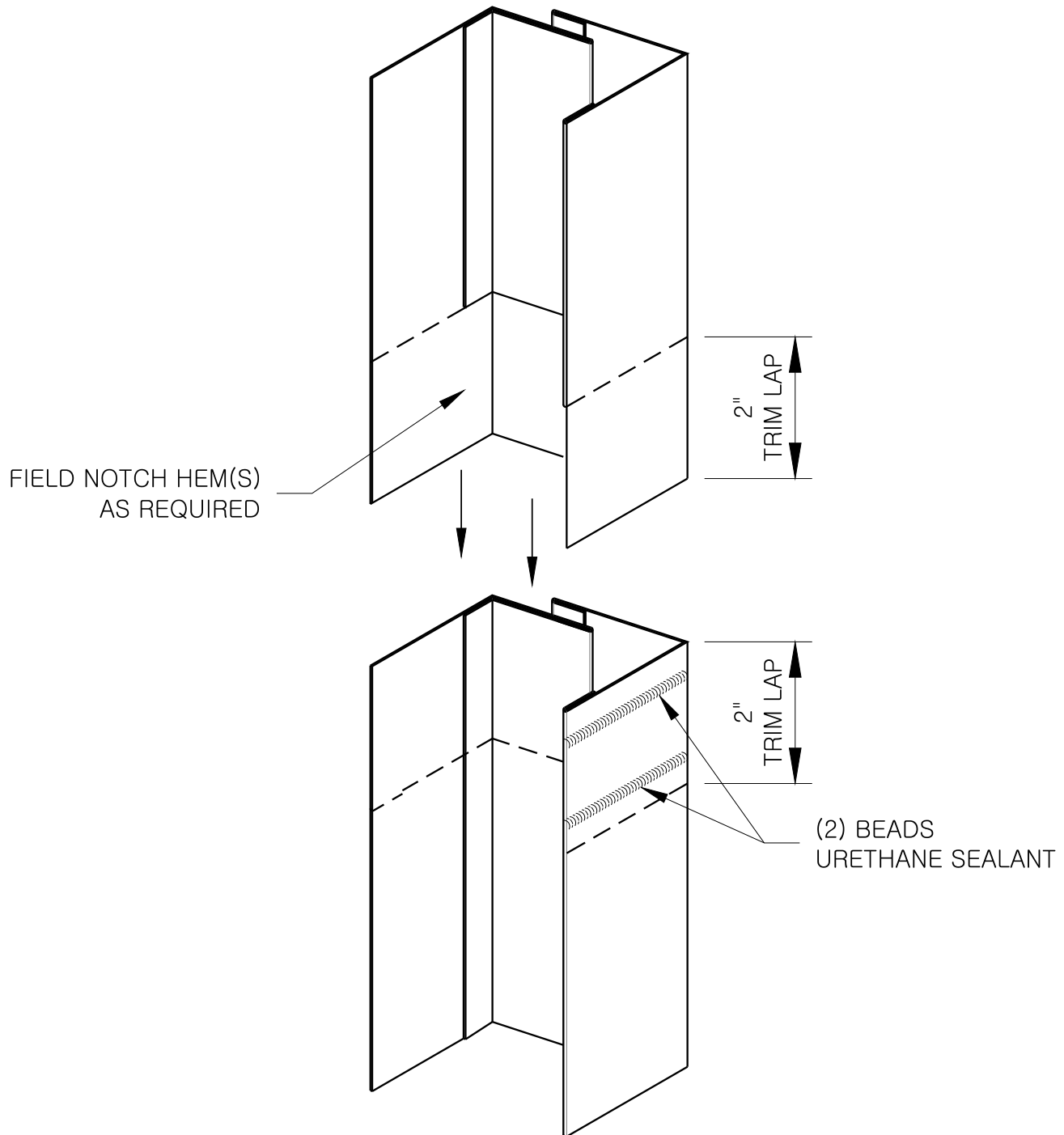


NOTE: POP RIVET OR STITCH
SCREW AS NECESSARY

COMMERCIAL &
INDUSTRIAL

TRIM END LAP –
TWO PIECE HEAD

CI-CF-EL-H
DATE: Jul '19

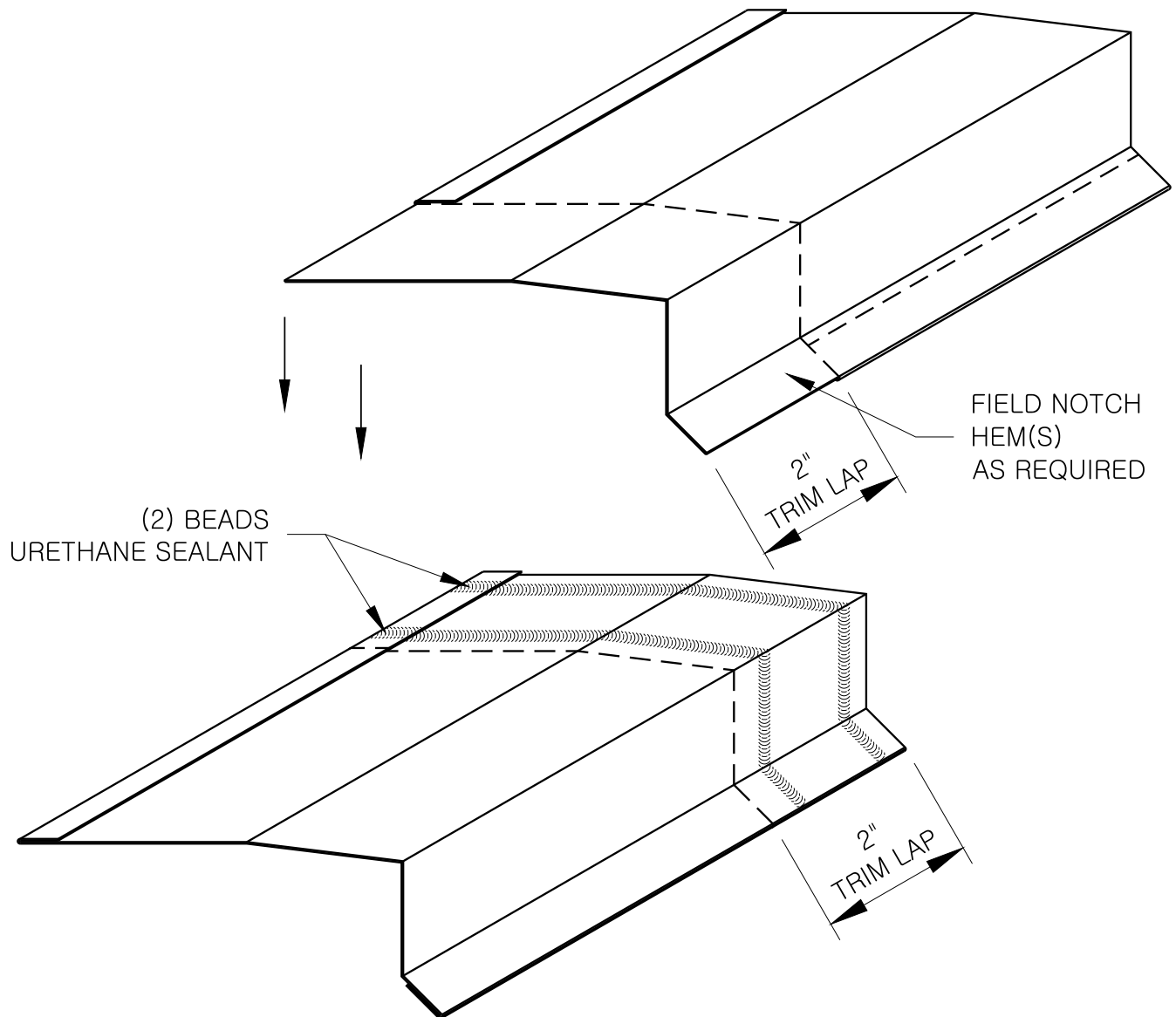


NOTE: POP RIVET OR STITCH
SCREW AS NECESSARY

COMMERCIAL &
INDUSTRIAL

TRIM END LAP –
TWO PIECE JAMB

CI-CF-EL-J
DATE: Jul '19

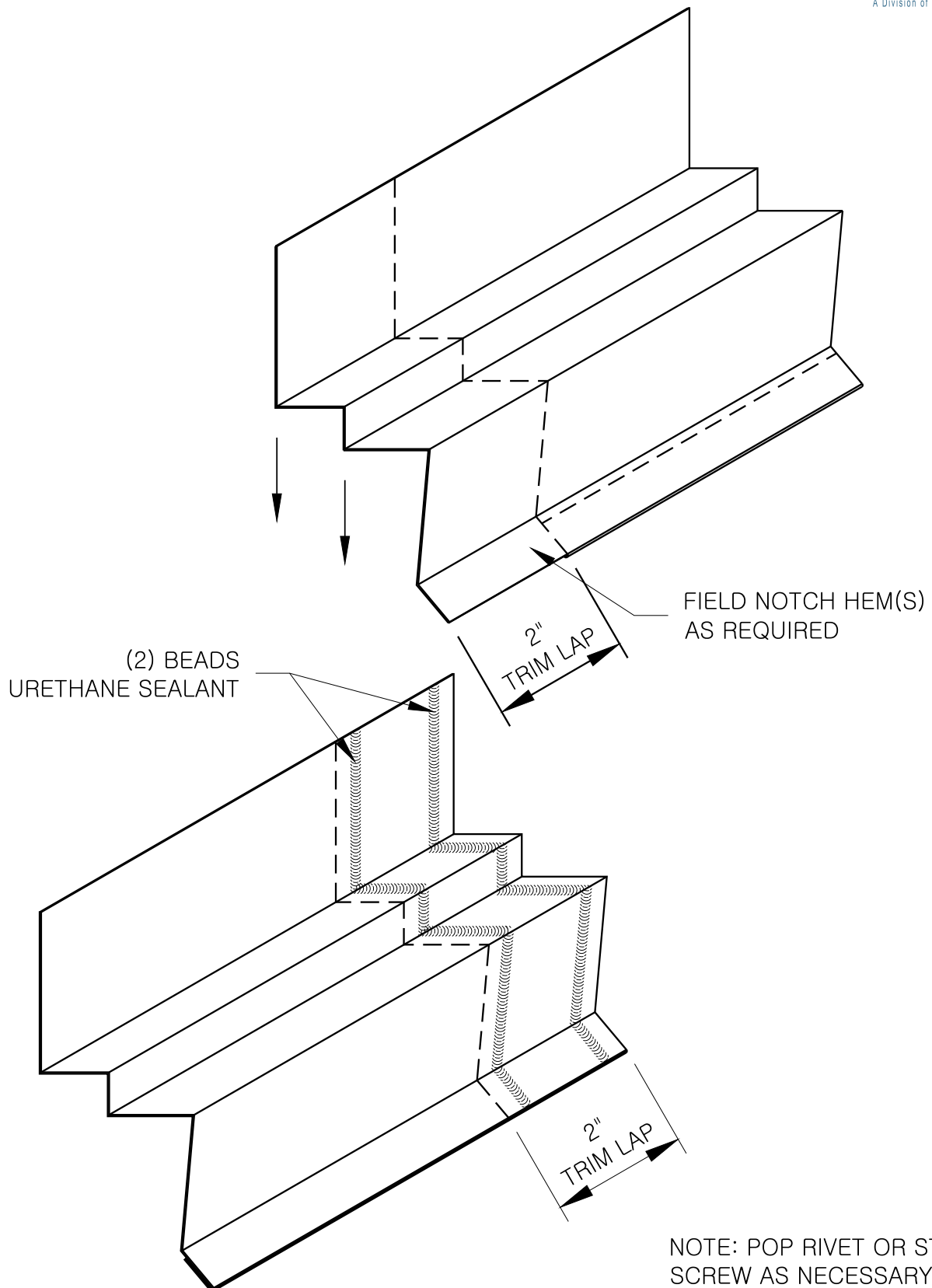


NOTE: POP RIVET OR STITCH
SCREW AS NECESSARY

COMMERCIAL &
INDUSTRIAL

TRIM END LAP -
SILL

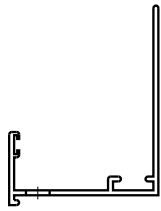
CI-CF-EL-S
DATE: Jul '19



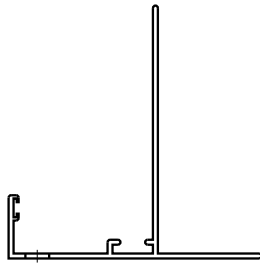
COMMERCIAL &
INDUSTRIAL

TRIM END LAP –
STACK JOINT

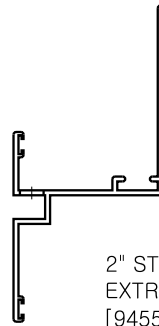
CI-CF-EL-SJ
DATE: Jul '19



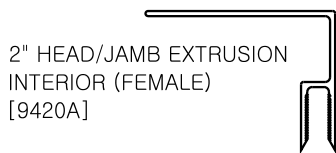
2" BASE
EXTRUSION
[9405A]



2" BASE/SOFFT
EXTRUSION
[9414A]

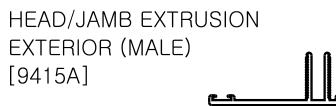
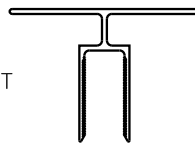


2" STACK JOINT
EXTRUSION
[9455A]



2" HEAD/JAMB EXTRUSION
INTERIOR (FEMALE)
[9420A]

2" VERTICAL H JOINT
EXTRUSION
INTERIOR (FEMALE)
[9450A]

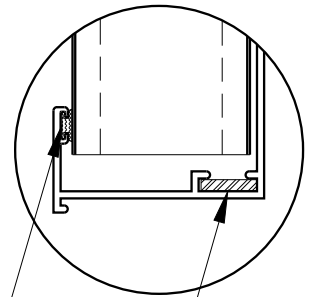


HEAD/JAMB EXTRUSION
EXTERIOR (MALE)
[9415A]

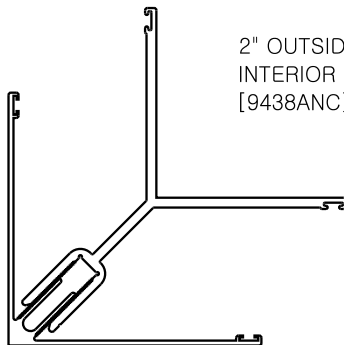
2" VERTICAL H JOINT
EXTRUSION
EXTERIOR (MALE)
[9445A]



WIPER GASKET
[7800VGR]



EXTRUDED ALUMINUM
SPLICE BAR
[9495A]

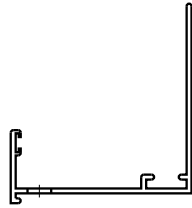


2" OUTSIDE CORNER
INTERIOR (FEMALE)
[9438ANC]

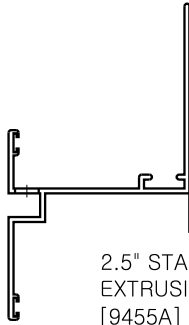
OUTSIDE CORNER
EXTERIOR (MALE)
[9425A]



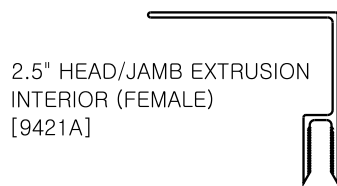
2" SILL EXTRUSION
[9413A]



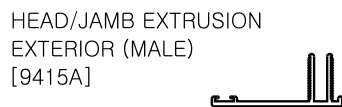
2.5" BASE
EXTRUSION
[9406A]



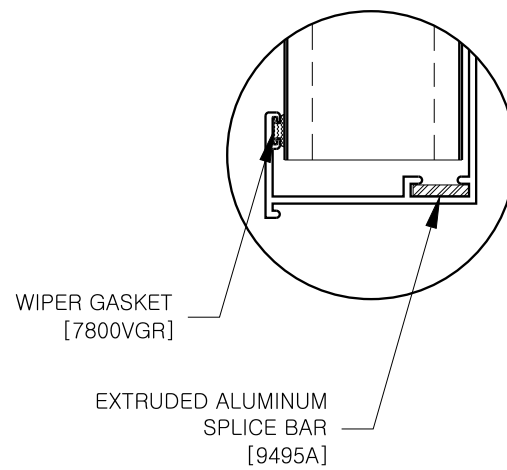
2.5" STACK JOINT
EXTRUSION
[9455A]



2.5" HEAD/JAMB EXTRUSION
INTERIOR (FEMALE)
[9421A]

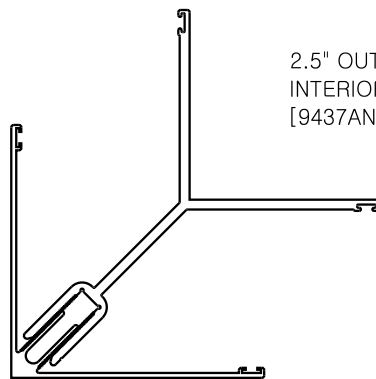


HEAD/JAMB EXTRUSION
EXTERIOR (MALE)
[9415A]



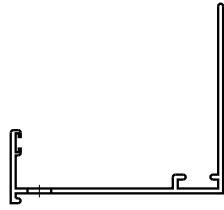
WIPER GASKET
[7800VGR]

EXTRUDED ALUMINUM
SPLICE BAR
[9495A]

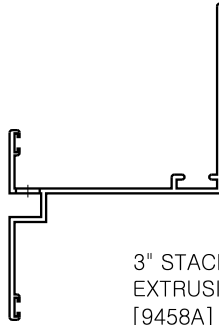


2.5" OUTSIDE CORNER
INTERIOR (FEMALE)
[9437ANC]

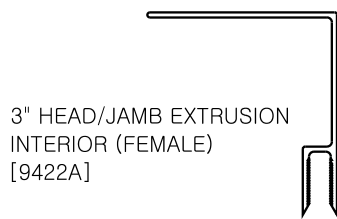
OUTSIDE CORNER
EXTERIOR (MALE)
[9429ANC]



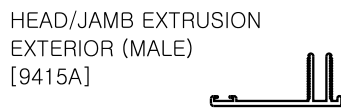
3" BASE EXTRUSION
[9407A]



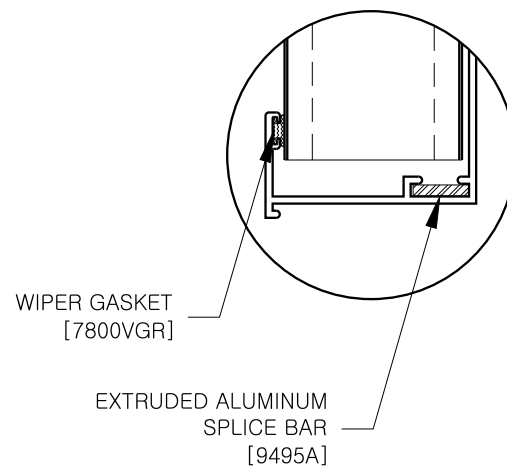
3" STACK JOINT
EXTRUSION
[9458A]



3" HEAD/JAMB EXTRUSION
INTERIOR (FEMALE)
[9422A]

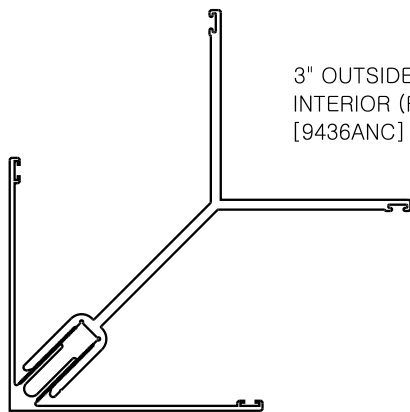


HEAD/JAMB EXTRUSION
EXTERIOR (MALE)
[9415A]



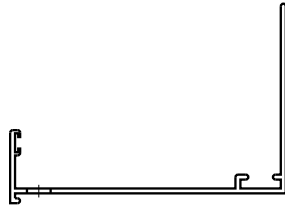
WIPER GASKET
[7800VGR]

EXTRUDED ALUMINUM
SPLICE BAR
[9495A]

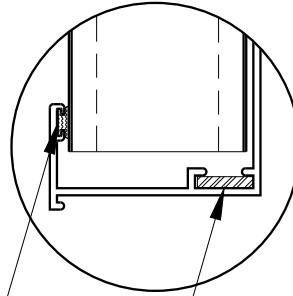


3" OUTSIDE CORNER
INTERIOR (FEMALE)
[9436ANC]

OUTSIDE CORNER
EXTERIOR (MALE)
[9429ANC]

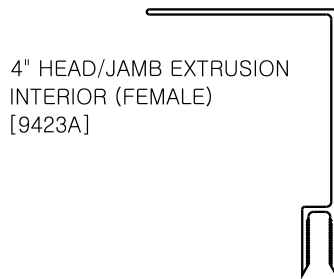


4" BASE EXTRUSION
[9404A]



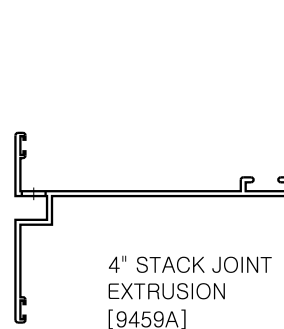
WIPER GASKET
[7800VGR]

EXTRUDED ALUMINUM
SPLICE BAR
[9495A]

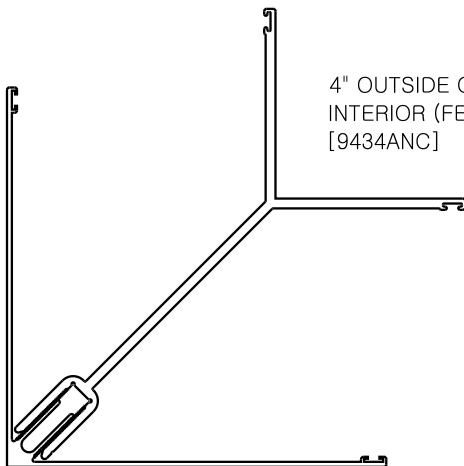


4" HEAD/JAMB EXTRUSION
INTERIOR (FEMALE)
[9423A]

HEAD/JAMB EXTRUSION
EXTERIOR (MALE)
[9415A]



4" STACK JOINT
EXTRUSION
[9459A]

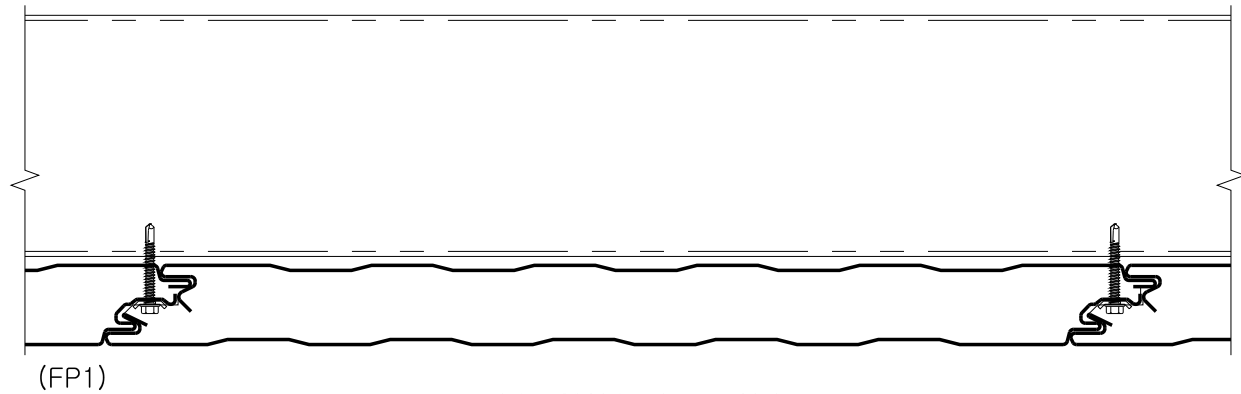


4" OUTSIDE CORNER
INTERIOR (FEMALE)
[9434ANC]

OUTSIDE CORNER
EXTERIOR (MALE)
[9429ANC]

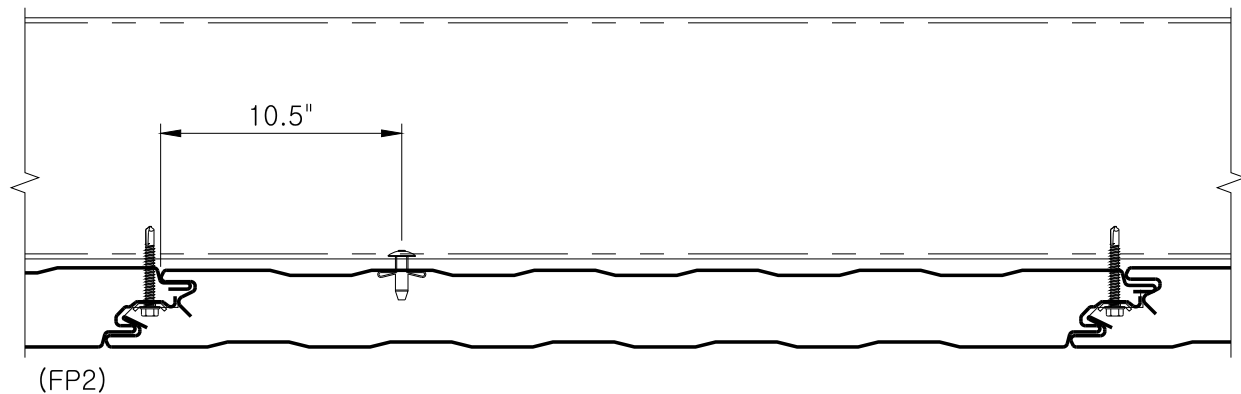


4" SILL EXTRUSION
[9412A]



FASTENING PATTERN 1
SIDE JOINT FASTENING

DIMENSION IS FROM
FEMALE EDGE +/- 1.5"

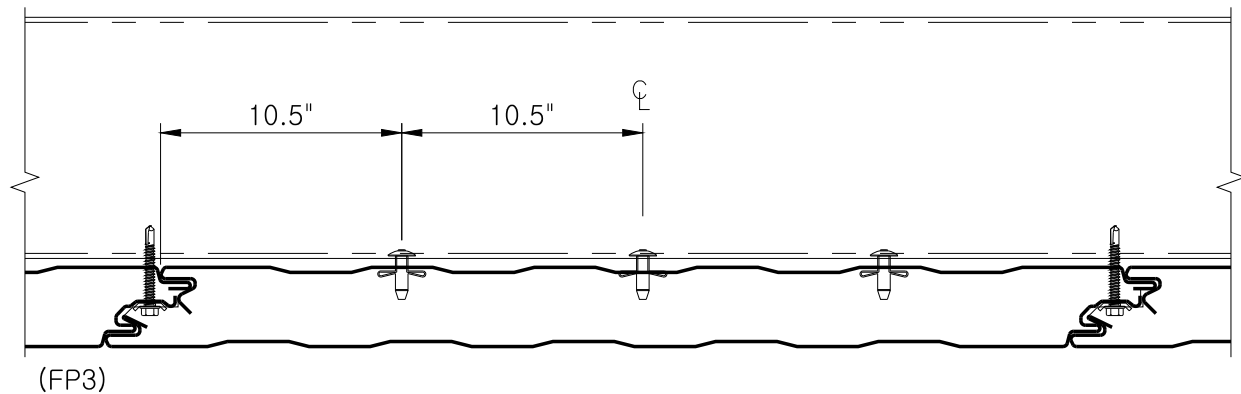


FASTENING PATTERN 2
SIDE JOINT FASTENING
AND ONE DOME HEAD
BULB-TITE® RIVET

INSTALL RIVET THROUGH GIRT FLANGE
INTO MESA WHERE THE SKIN MAKES
CONTACT WITH THE STEEL

(CONSULT FACTORY FOR FASTENER REQUIREMENTS NEEDED TO MEET SPECIFIC LOAD REQUIREMENTS)

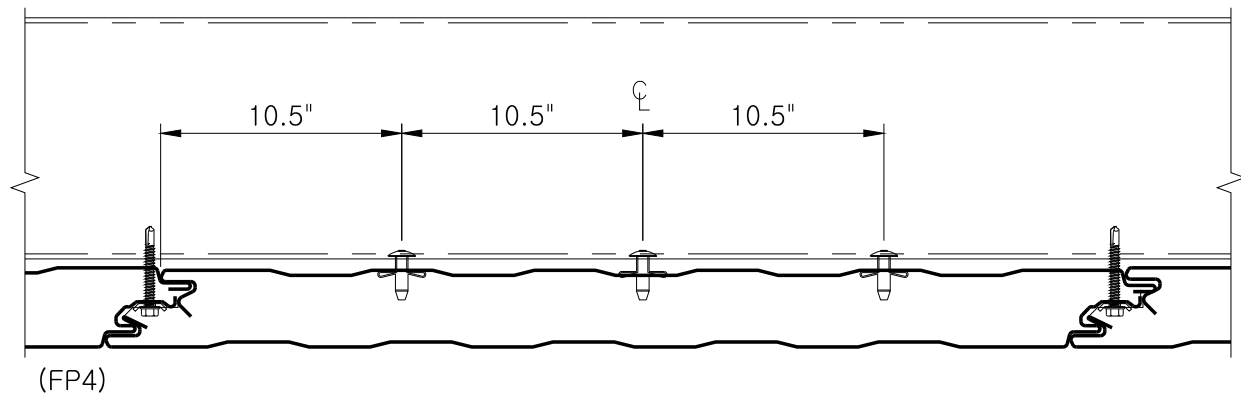
DIMENSION IS FROM
FEMALE EDGE $\pm 1.5"$



FASTENING PATTERN 3
SIDE JOINT FASTENING
AND TWO DOME HEAD
BULB-TITE® RIVETS

INSTALL RIVET THROUGH GIRT FLANGE
INTO MESA WHERE THE SKIN MAKES
CONTACT WITH THE STEEL

DIMENSION IS FROM
FEMALE EDGE $\pm 1.5"$

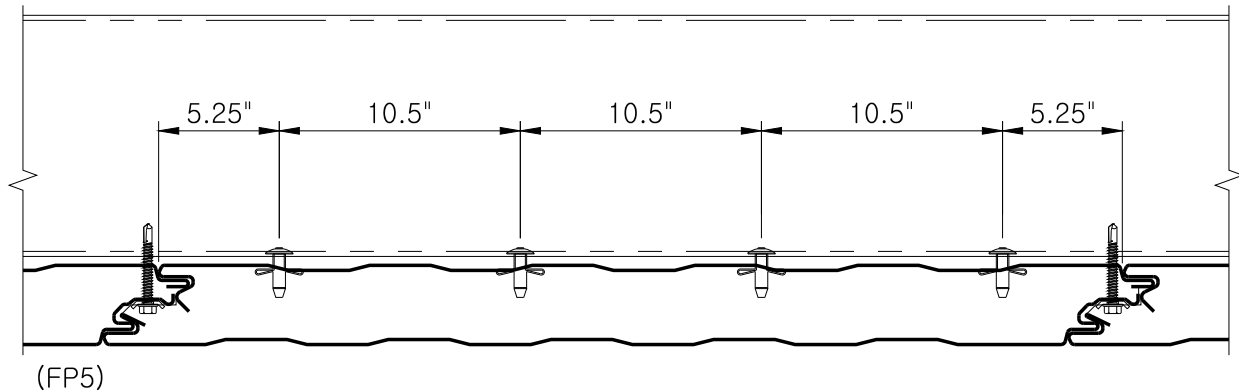


FASTENING PATTERN 4
SIDE JOINT FASTENING
WITH THREE DOME HEAD
BULB-TITE® RIVETS

INSTALL RIVET THROUGH GIRT FLANGE
INTO MESA WHERE THE SKIN MAKES
CONTACT WITH THE STEEL

(CONSULT FACTORY FOR FASTENER REQUIREMENTS NEEDED TO MEET SPECIFIC LOAD REQUIREMENTS)

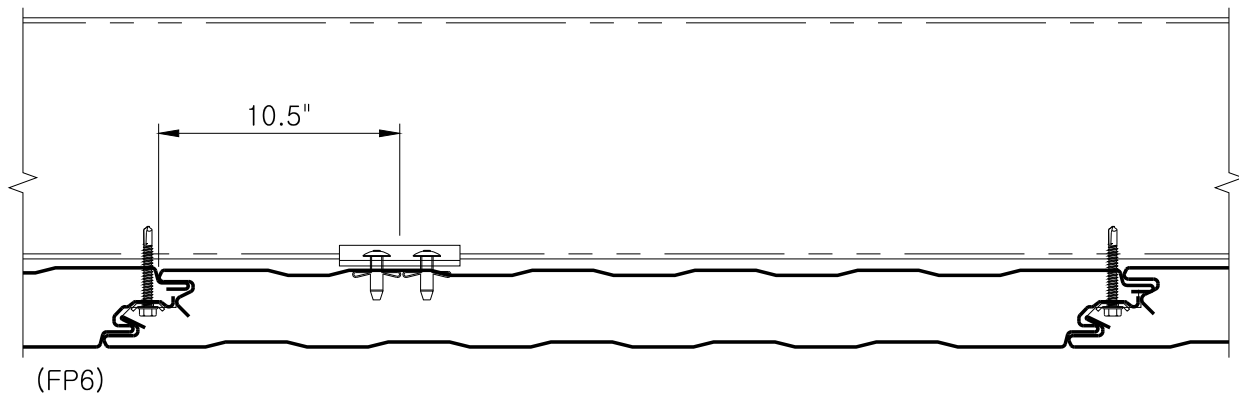
DIMENSION IS FROM
FEMALE EDGE $\pm 1.5"$



FASTENING PATTERN 5
SIDE JOINT FASTENING
AND BACK FASTENING WITH
FOUR DOME HEAD BULB-TITE® RIVETS

INSTALL RIVET THROUGH GIRT FLANGE
INTO MESA WHERE THE SKIN MAKES
CONTACT WITH THE STEEL

DIMENSION IS FROM
FEMALE EDGE $\pm 1.5"$

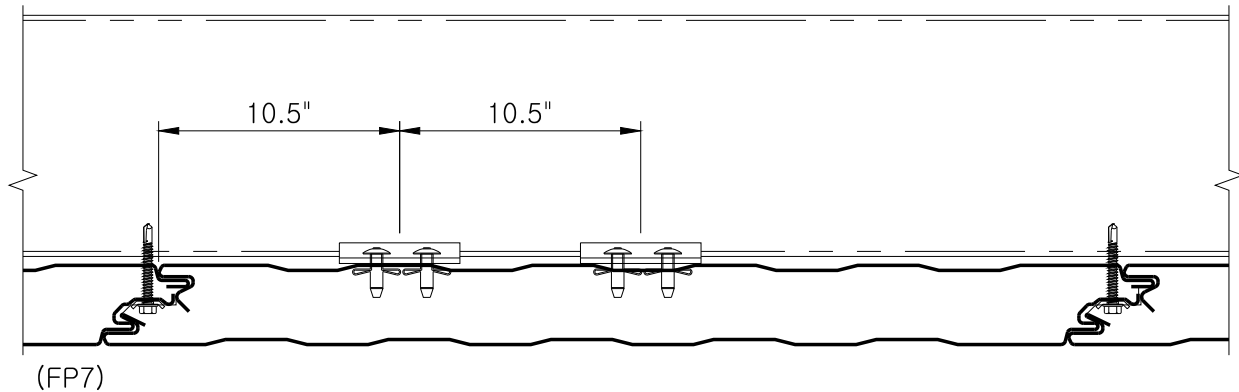


FASTENING PATTERN 6
SIDE JOINT FASTENING
AND ONE GIRT CLIP WITH TWO DOME HEAD
BULB-TITE® RIVETS

INSTALL RIVET THROUGH GIRT FLANGE
INTO MESA WHERE THE SKIN MAKES
CONTACT WITH THE STEEL

(CONSULT FACTORY FOR FASTENER REQUIREMENTS NEEDED TO MEET SPECIFIC LOAD REQUIREMENTS)

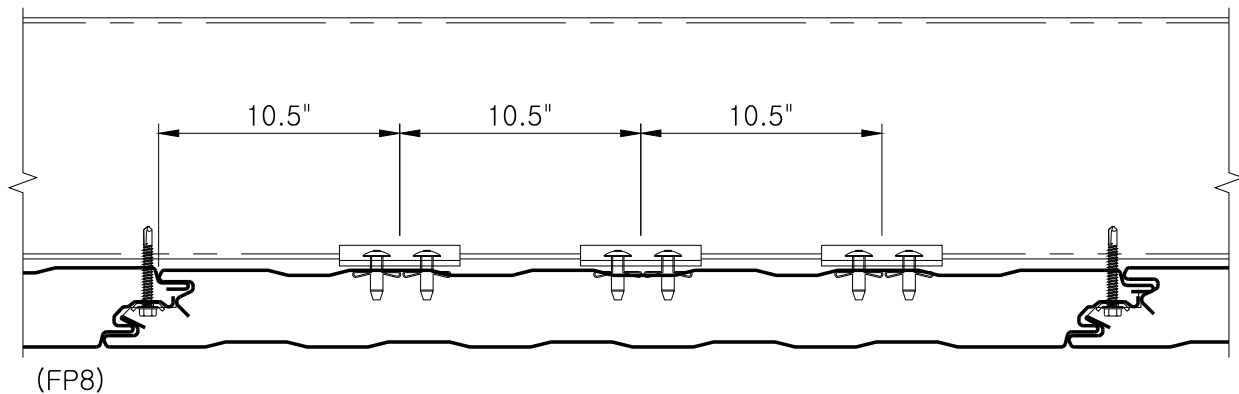
DIMENSION IS FROM
FEMALE EDGE $\pm 1.5"$



FASTENING PATTERN 7
SIDE JOINT FASTENING
AND TWO GIRT CLIPS WITH FOUR DOME HEAD
BULB-TITE® RIVETS

INSTALL RIVET THROUGH GIRT FLANGE
INTO MESA WHERE THE SKIN MAKES
CONTACT WITH THE STEEL

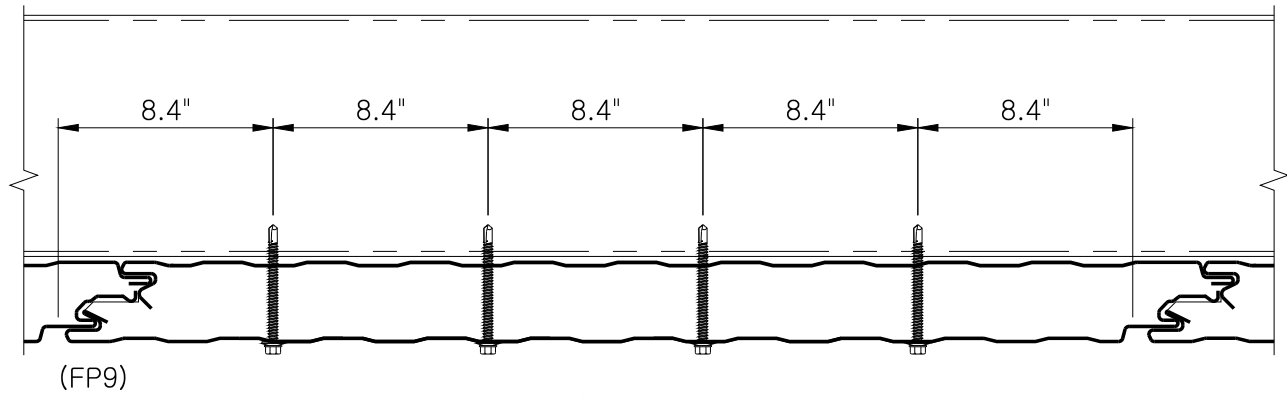
DIMENSION IS FROM
FEMALE EDGE $\pm 1.5"$



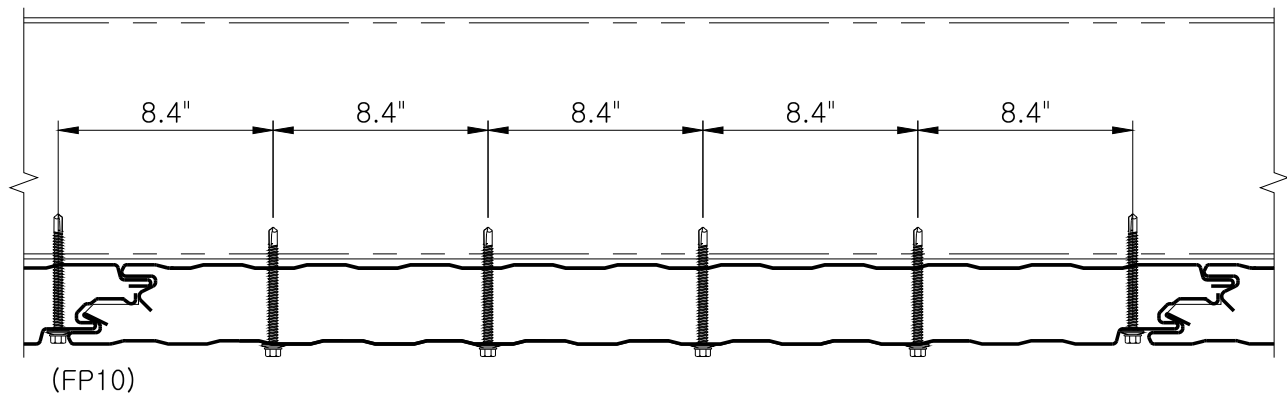
FASTENING PATTERN 8
SIDE JOINT FASTENING
WITH THREE GIRT CLIPS WITH SIX DOME HEAD
BULB-TITE® RIVETS

INSTALL RIVET THROUGH GIRT FLANGE
INTO MESA WHERE THE SKIN MAKES
CONTACT WITH THE STEEL

(CONSULT FACTORY FOR FASTENER REQUIREMENTS NEEDED TO MEET SPECIFIC LOAD REQUIREMENTS)



FASTENING PATTERN 9
WITH FOUR SELF-TAPPING
SCREWS WITH MIN. 20 GA.
NEOPRENE BONDED WASHER



FASTENING PATTERN 10
WITH FIVE SELF-TAPPING
SCREWS WITH MIN. 20 GA.
NEOPRENE BONDED WASHER

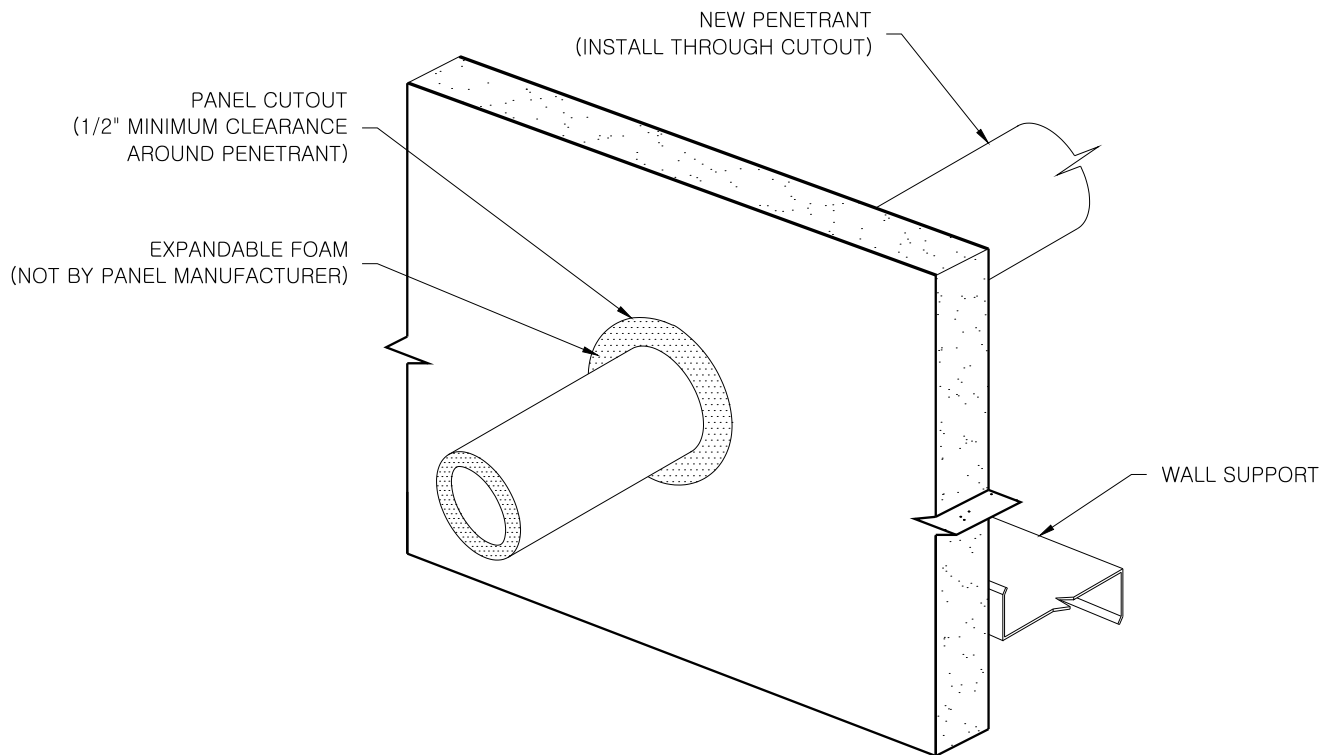
(CONSULT FACTORY FOR FASTENER REQUIREMENTS NEEDED TO MEET SPECIFIC LOAD REQUIREMENTS)

COMMERCIAL &
INDUSTRIAL

FASTENING PATTERNS

CI-CF-FP 9-10

DATE: Jul '19



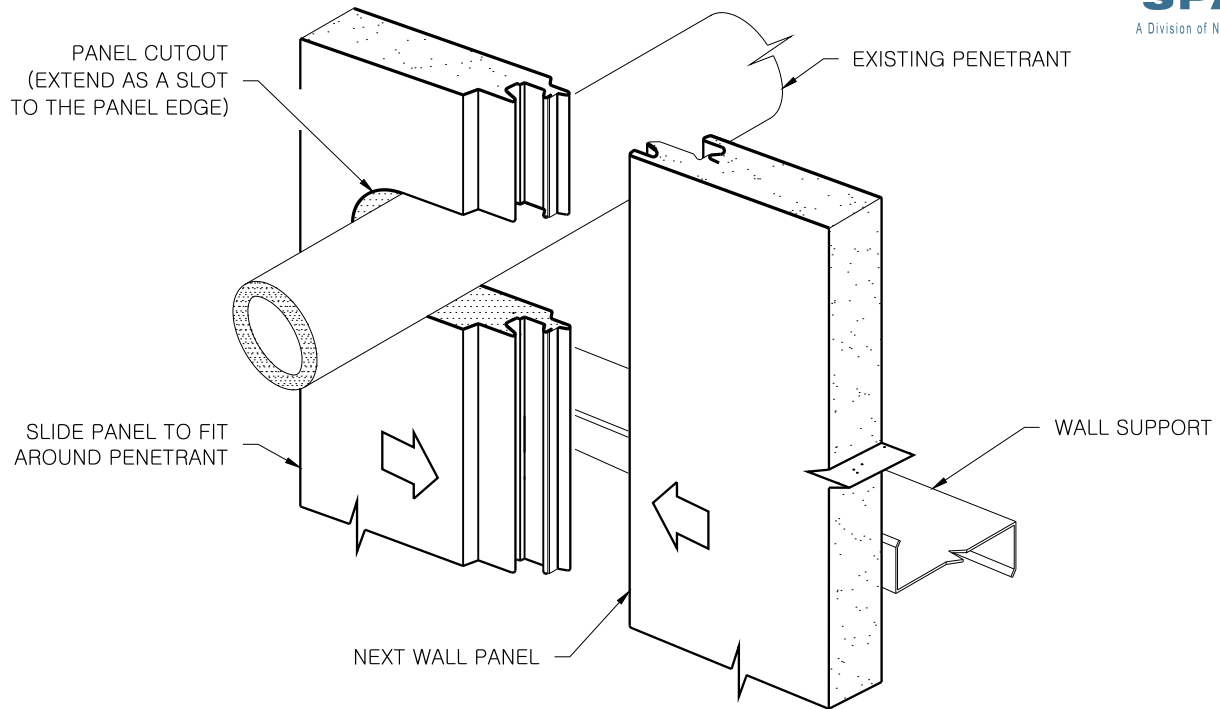
NEW PENETRANT IN EXISTING WALL

SEE DETAIL CI-CF-PEN-5 FOR FLASHING INFORMATION

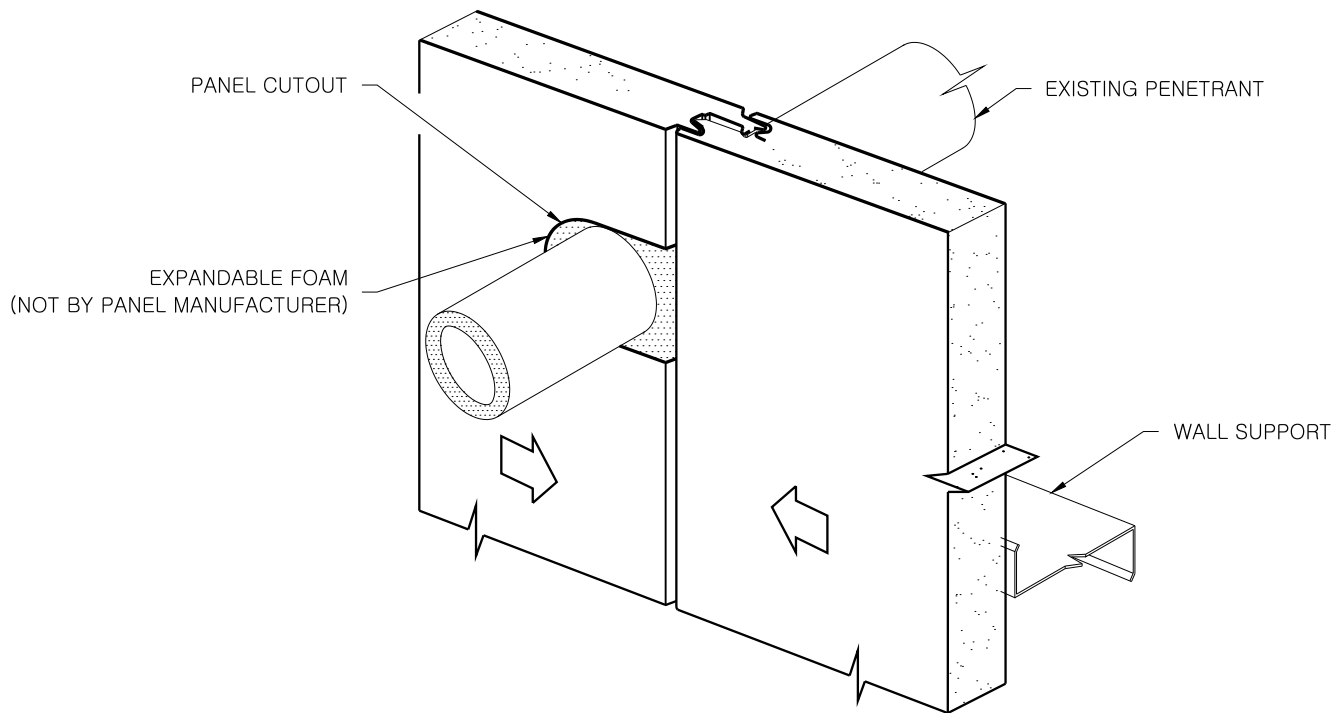
COMMERCIAL &
INDUSTRIAL

PIPE PENETRATION –
FIELD OF PANEL

CI-CF-PEN-1
DATE: Jul '19



EXISTING PENETRANT IN NEW WALL

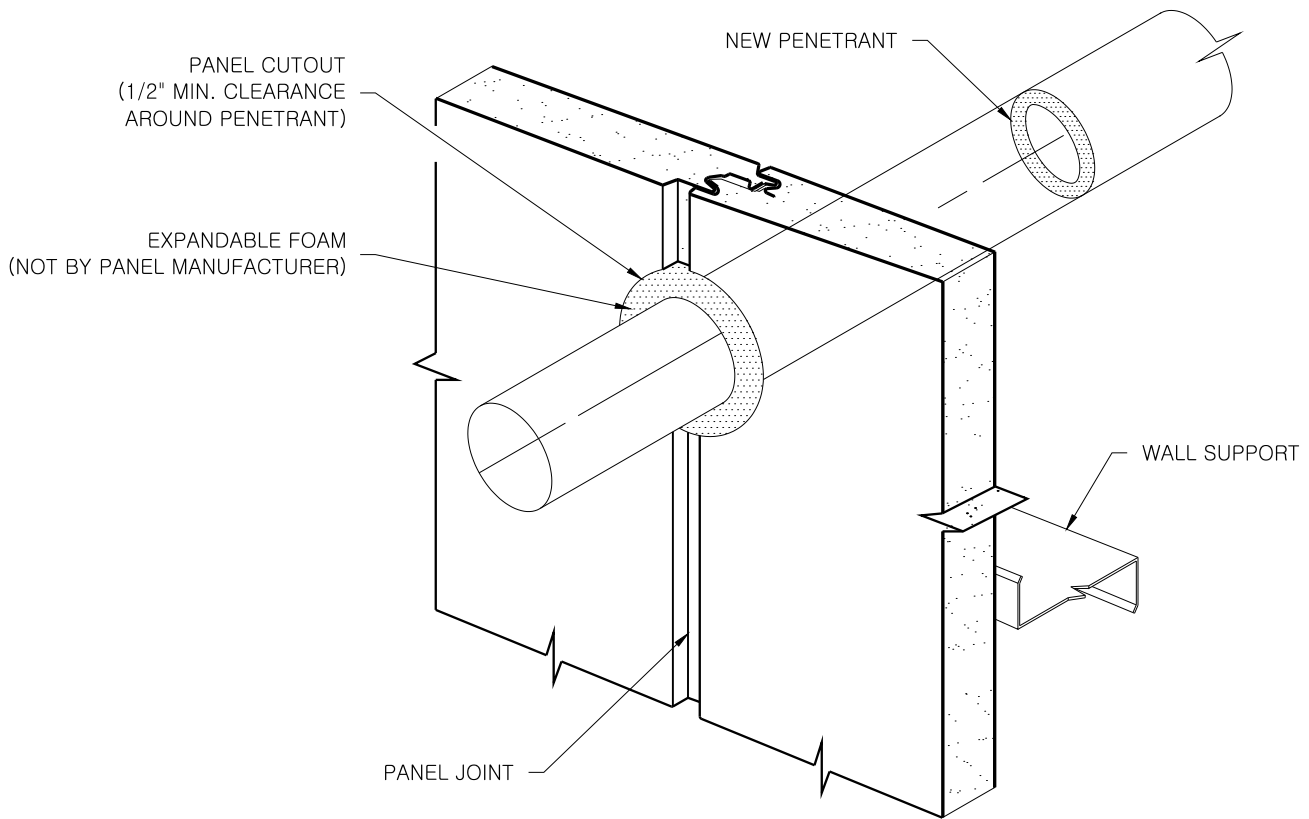


SEE DETAIL CI-CF-PEN-4 FOR SEALANT LOCATIONS
SEE DETAIL CI-CF-PEN-5 FOR FLASHING INFORMATION

COMMERCIAL &
INDUSTRIAL

PIPE PENETRATION –
NOTCHED PANEL

CI-CF-PEN-2
DATE: Jul '19



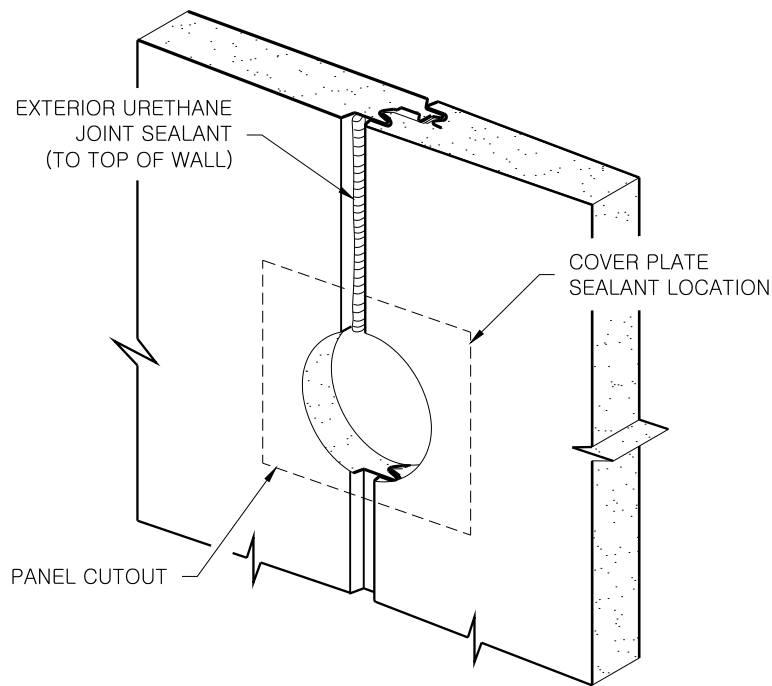
NEW PENETRATION IN EXISTING WALL AT PANEL JOINTS

SEE DETAIL CI-CF-PEN-4 FOR SEALANT LOCATIONS

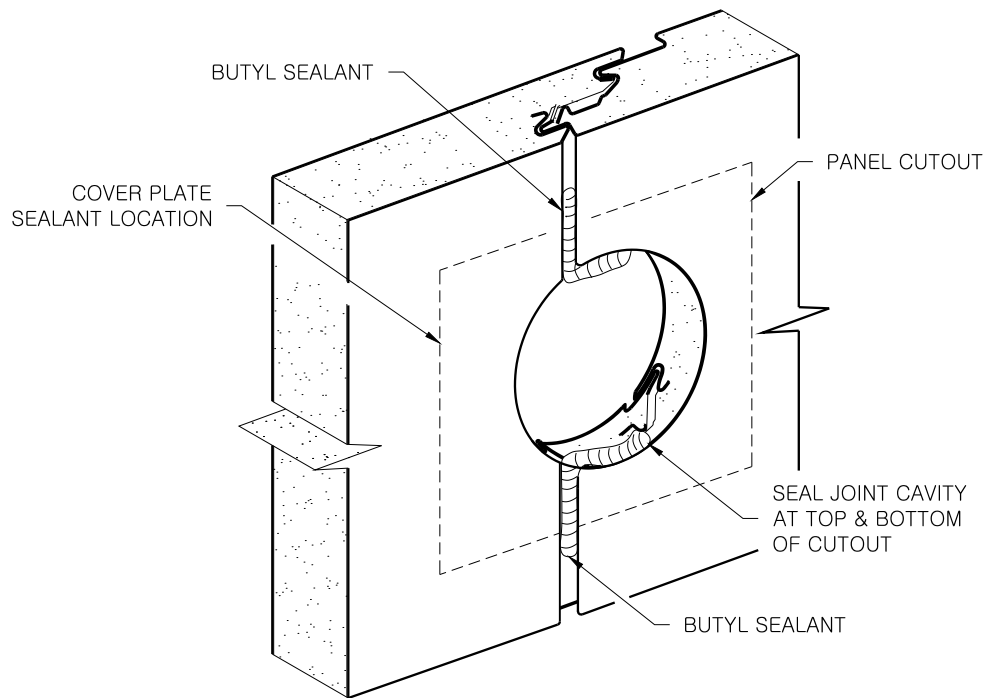
COMMERCIAL &
INDUSTRIAL

PIPE PENETRATION –
AT PANEL JOINT

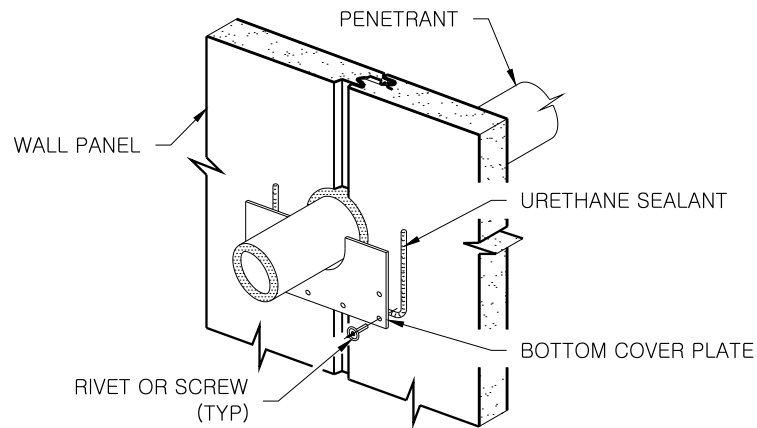
CI-CF-PEN-3
DATE: Jul '19



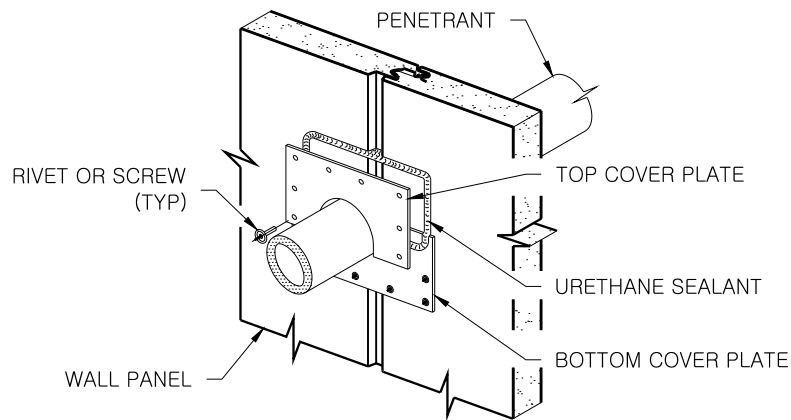
EXTERIOR WEATHER SEAL (NEW PENETRANT, EXISTING WALL)



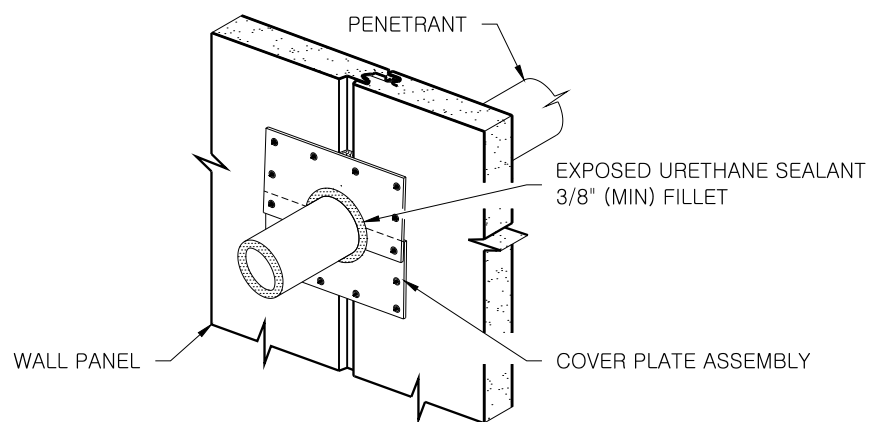
INTERIOR AIR/VAPOR SEAL (NEW PENETRANT, EXISTING WALL)



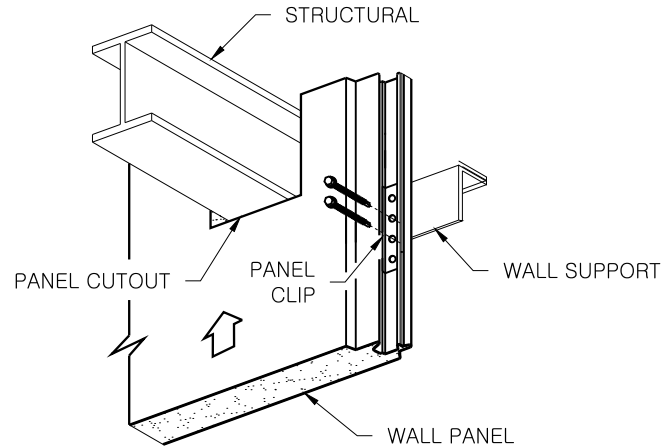
BOTTOM COVER PLATE INSTALLATION



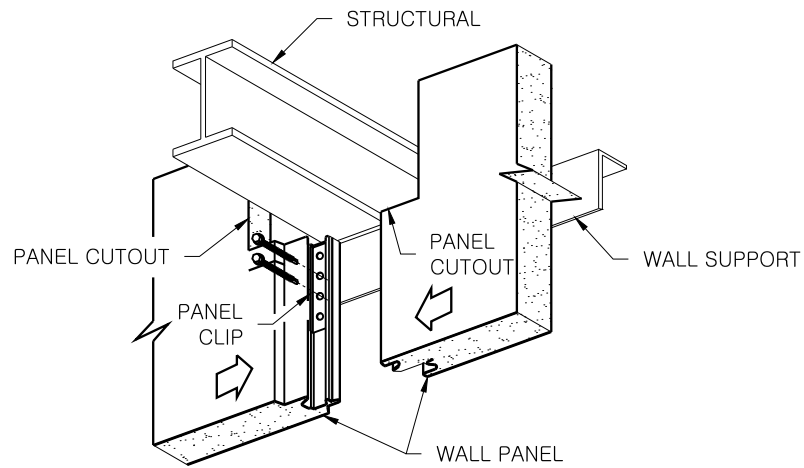
TOP COVER PLATE INSTALLATION



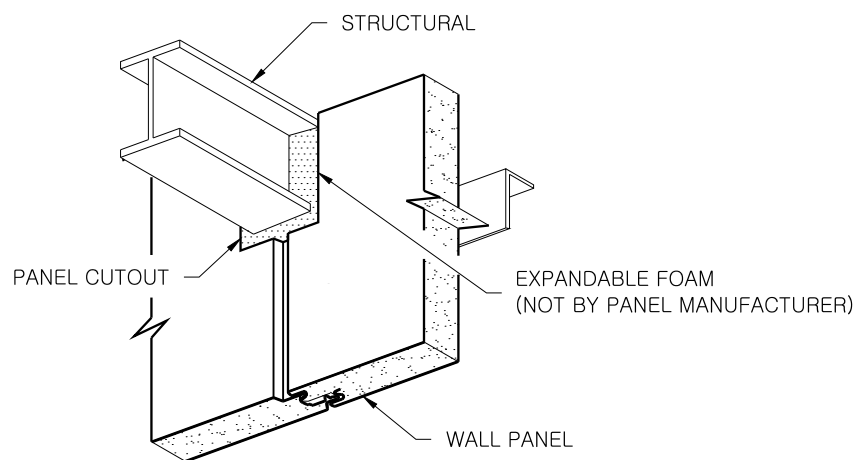
PENETRATION PERIMETER SEAL



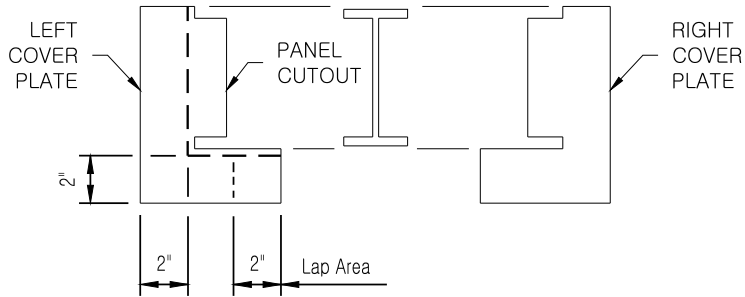
PANEL CUTOUT (AT CENTER OF PANEL)



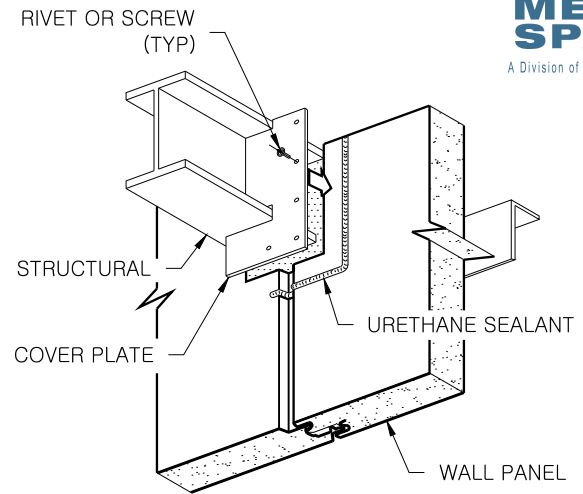
PANEL CUTOUT (AT PANEL JOINT)



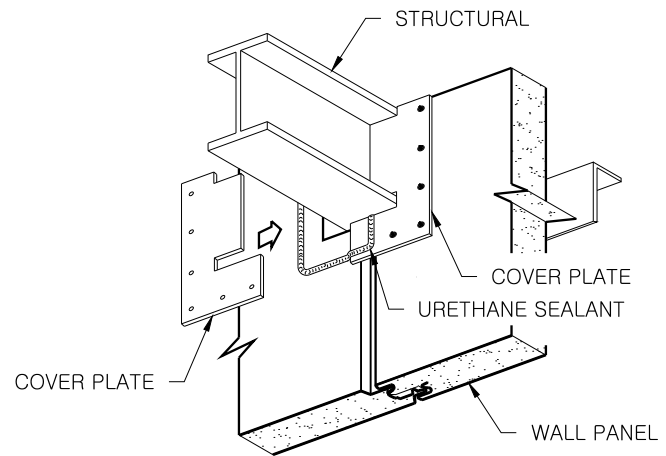
FILLER INSULATION



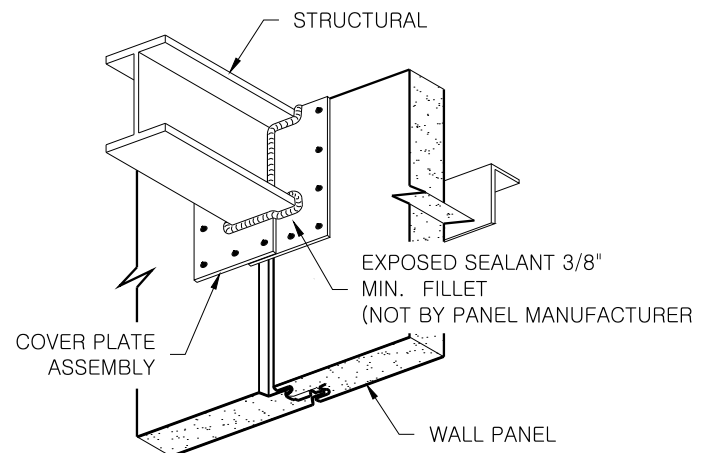
COVER PLATE LAYOUT



RIGHT COVER PLATE INSTALLATION



LEFT COVER PLATE INSTALLATION



PENETRATION PERIMETER SEAL