AEP SPAN®

Flush Panel

(Vertical Install.)
Installation Guide

Flush Panel
(Vertical Install.)
Installation Guide

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General Notes

The attached installation details are intended to be a design aid and do not depict all situations. Modifications are the responsibility of the designer/user and should take into account climate conditions such as wind and snow, governing code requirements, and the actual usage and maintenance of the structure.

Applications:

Flush Panel is designed to be a soffit panel, but can also be utilized as a wall panel installed in the vertical or horizontal orientation. It shall not be utilized for roof applications. Flush Panel can be used over solid substrates or over spaced supports. This installation guide depicts panels installed over solid substrate. Details for panels installed over spaced supports would be similar.

Flashings:

Where possible, flashings should be lapped away from prevailing winds. Certain flashings should be supported if it is likely that equipment
(ladder, etc.) will be used against them. Check with AEP Span any time you intend to specify a prefinished flashing in a gauge or finish different than with Flush Panel. It is good practice to specify that all flashings be of the same material (gauge, color, finish) as the roof panels to ensure long-term durability. Field-painted flashings rarely equal the durability and colorfastness of factory baked-on paint systems. The enclosed details have minimized the use of exposed fasteners where possible. The edges of flashings have also been shown hemmed to strengthen and to minimize the exposure of cut edges.

Flashing design and fabrication is generally the responsibility of the contractor. For convenience, we have provided some typical flashing drawings on our website at http://www.aepspan.com/roof/ prodDetailad08.ht ml?id=35 . Applicable Flush Panel flashing part numbers are referenced within this installation guide. Note that flashing shapes and dimensions may vary greatly based on project requirements. Installation details and flashings referenced within are for general design guidance only.

Condensation, Insulation, & Ventilation:

It is the designer's responsibility to determine the need and composition of condensation control materials including insulation and vapor retarders, as well as ventilation requirements. Metal wall products are susceptible to condensation and its control should be carefully considered.

Thermal Movement:

Both panels and flashings must allow for thermal movement (expansion and contraction) of the materials, especially where long lengths are used. Appropriate gaps or other provisions must be provided to accommodate thermal movement.

Oil Canning:

Flat metal surfaces often display waviness commonly referred to as 'oil canning'. This can be caused by variations in raw material, processing variations, product handling, or variations in the installation substrate. Oil canning is a characteristic, not a defect, of panels manufactured from light-gauge metal. To reduce potential for oil canning, substrates should not deviate from a flat plane more than 1/4 inch in 20 feet, or 1/8 inch in 5 feet. Oil canning is not a cause for panel rejection. Additional technical information is available upon request.

References:

The Sheet Metal and Air Conditioning Contractors' National Association Inc. (SMACNA) manual is an excellent reference for sheet metal contractors. It's guidelines for underlayments, gutter and downspout size requirements, and expansion/contraction of metals and flashing joints should be followed.
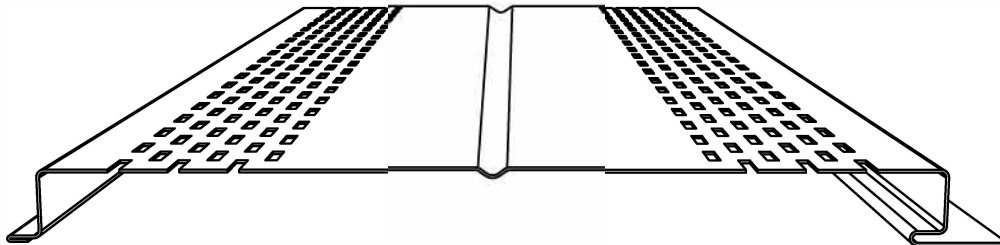
Technical Assistance:

Contact your AEP Span Sales Representative for additional information.
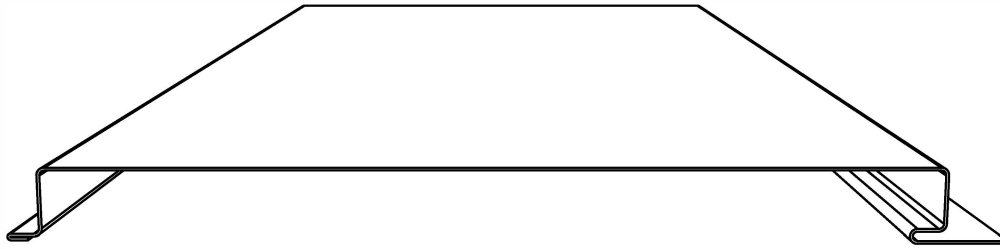
FLUSH PANEL OPTIONS:

- FLAT FINISH
- 1 RIB (CENTERED)
- 2 RIBS (SPACED 4")

FLUSH PANEL (VENTED) OPTIONS:

- 7.8% OPEN AREA
  (11.23IN^2/SQ-FT OPEN AREA
- WITH 1 RIB (CENTERED)
- WITH 2 RIBS (SPACED 4")

AVAILABLE MATERIALS:
STEEL: 20, 22, 24, & 26GA

NOTE: 26GA PANELS REQUIRE 1 OR 2 RIBS.
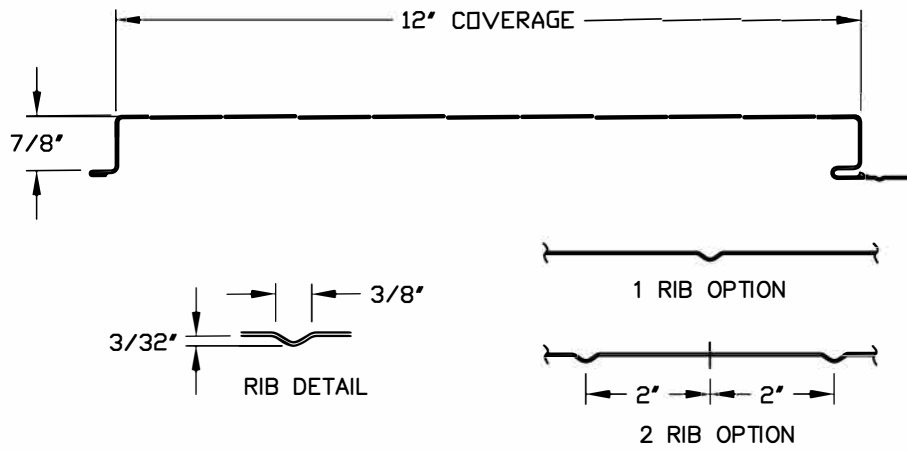VENTED PANELS REQUIRE 1 OR 2 RIBS.

NOTE:
PANEL OPTIONS
SUBJECT TO CHANGE.

AEP SPAN®

FLUSH PANEL
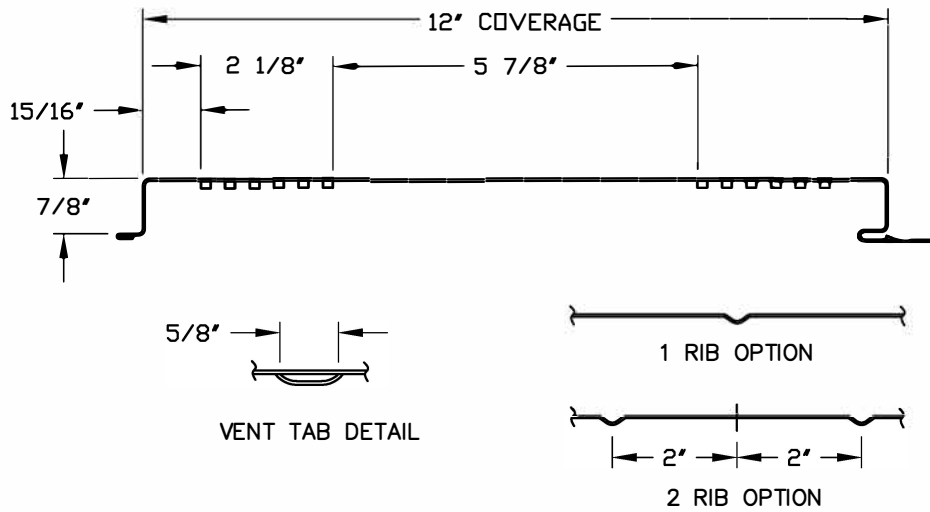VERTICAL INSTALL.

PANEL OPTIONS

FPV-01

REV. 9/23/16

12" COVERAGE

7/8"

3/32"

3/8"

RIB DETAIL

1 RIB OPTION

2' 2'

2 RIB OPTION

FLUSH PANEL

12" COVERAGE

2 1/8'

5 7/8'

15/16"

7/8"

5/8'

VENT TAB DETAIL

1 RIB OPTION

2' 2'

2 RIB OPTION

VENTED FLUSH PANEL

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

PANEL DETAILS

FPV-02

4"

1" | 1 1/4"

1/2"

135°

DF026

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)

BUTYL FLASHING TAPE (X)

PANEL FASTENER

INSIDE CLOSURE (SEALED & SECURED WITH SEALANT)

DRIP FLASHING (DF026)

1/4" GAP
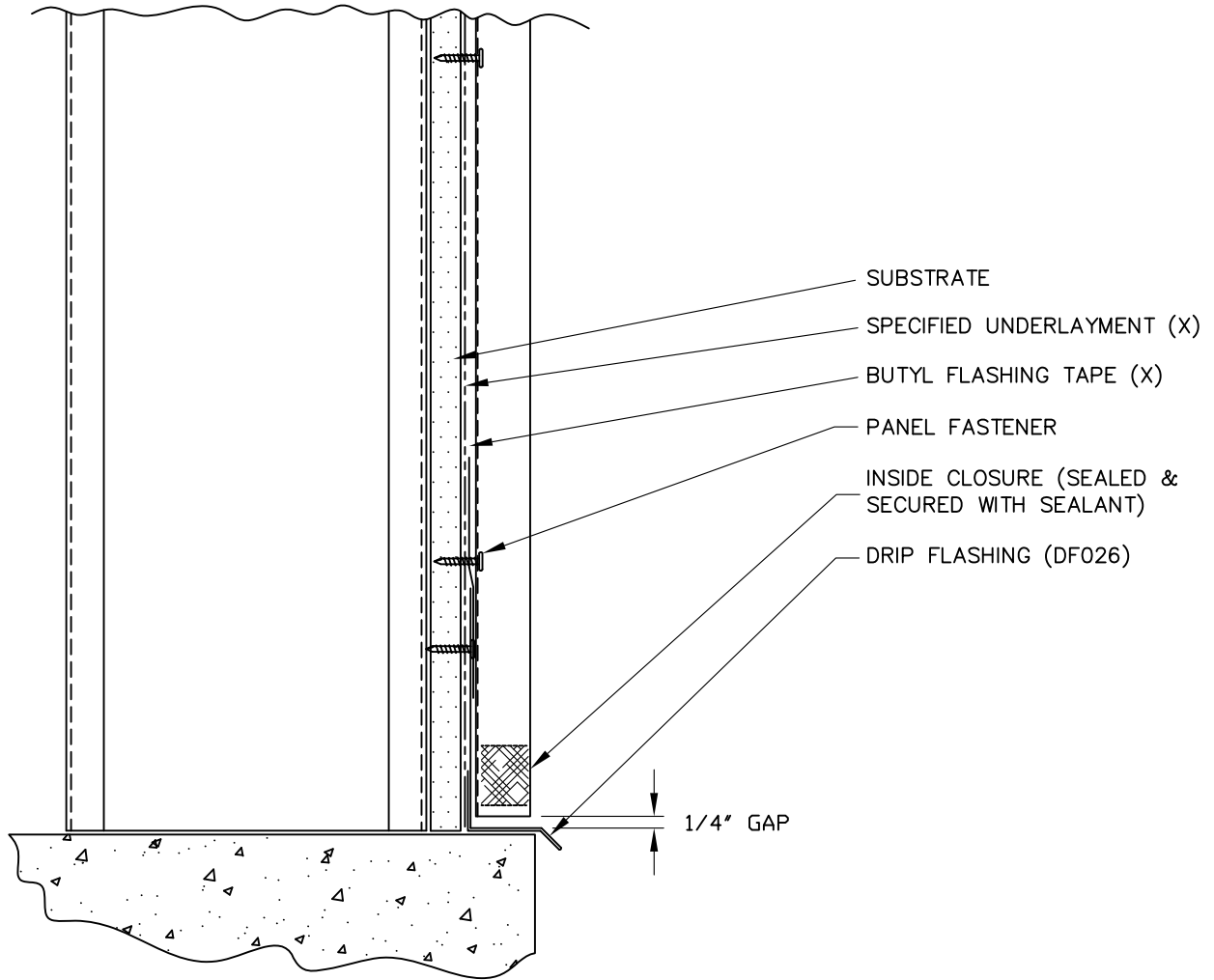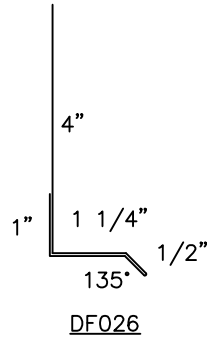
(X) — NOT BY AEP SPAN

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

BASE

FPV-03
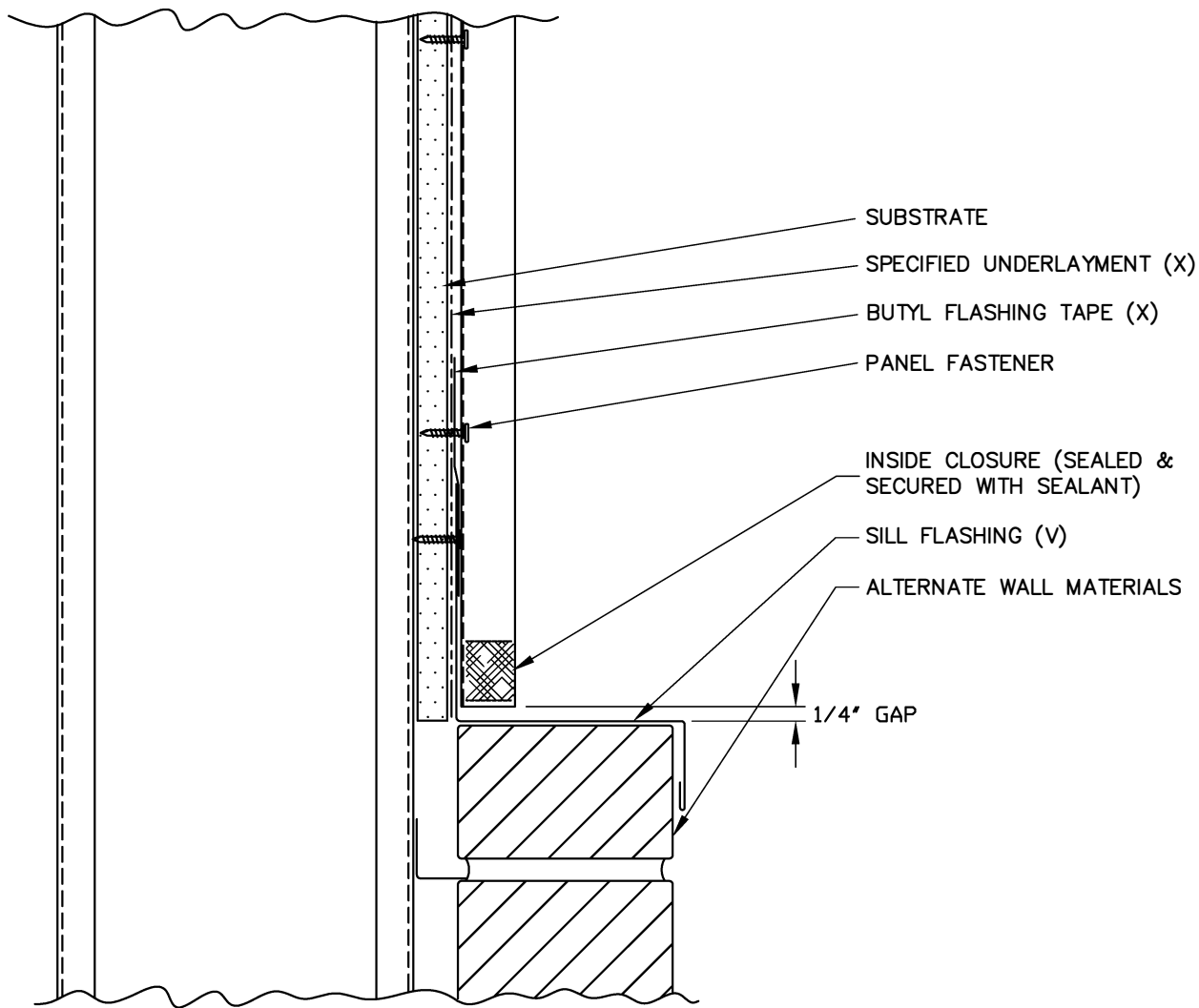
REV. 9/23/16

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)

BUTYL FLASHING TAPE (X)

PANEL FASTENER

INSIDE CLOSURE (SEALED & SECURED WITH SEALANT)

SILL FLASHING (V)

ALTERNATE WALL MATERIALS

1/4" GAP

(X) – NOT BY AEP SPAN
(V) – DIMENSIONS VARY BASED ON PROJECT CONDITIONS

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

SILL

FPV-04

REV. 9/23/16

3"

1 1/8" 1/2"

1 1/8"

JT108

1 1/2" 7/8"

1 1/2"

ZC225

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)

Z-METAL (ZC225)

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT

TRIM FASTENER W/SEALING WASHER
OR RIVET AT 12" O.C. MAXIMUM

J TRIM (JT108)

SEALANT / BACKER ROD
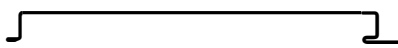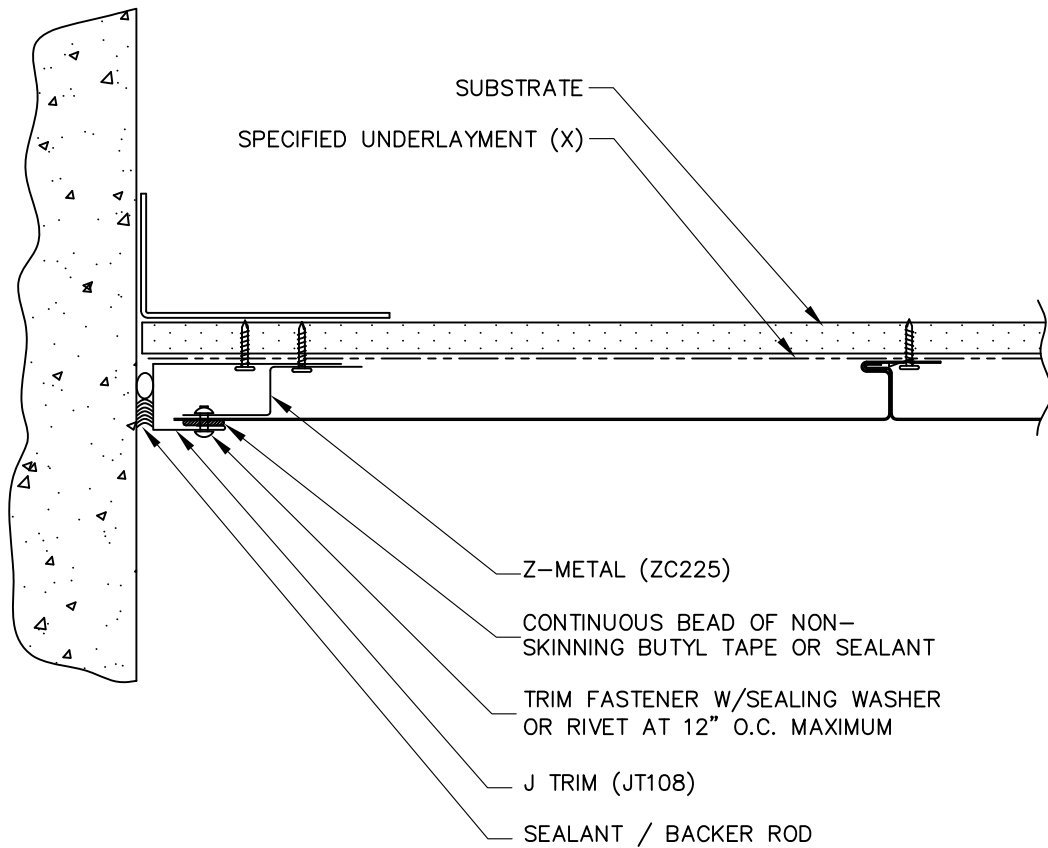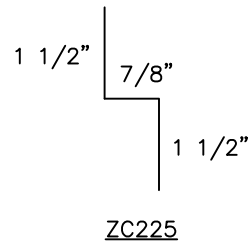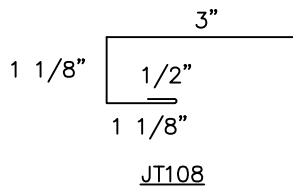
(X) – NOT BY AEP SPAN
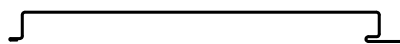
AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

END WALL

FPV-05

REV. 9/23/16

1/2"

4"

OC111

1 1/2" 7/8"

1 1/2"

ZC225

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT

TRIM FASTENER W/SEALING WASHER
OR RIVET AT 12" O.C. MAXIMUM

Z-METAL (ZC225)

OUTSIDE CORNER TRIM (OC111)
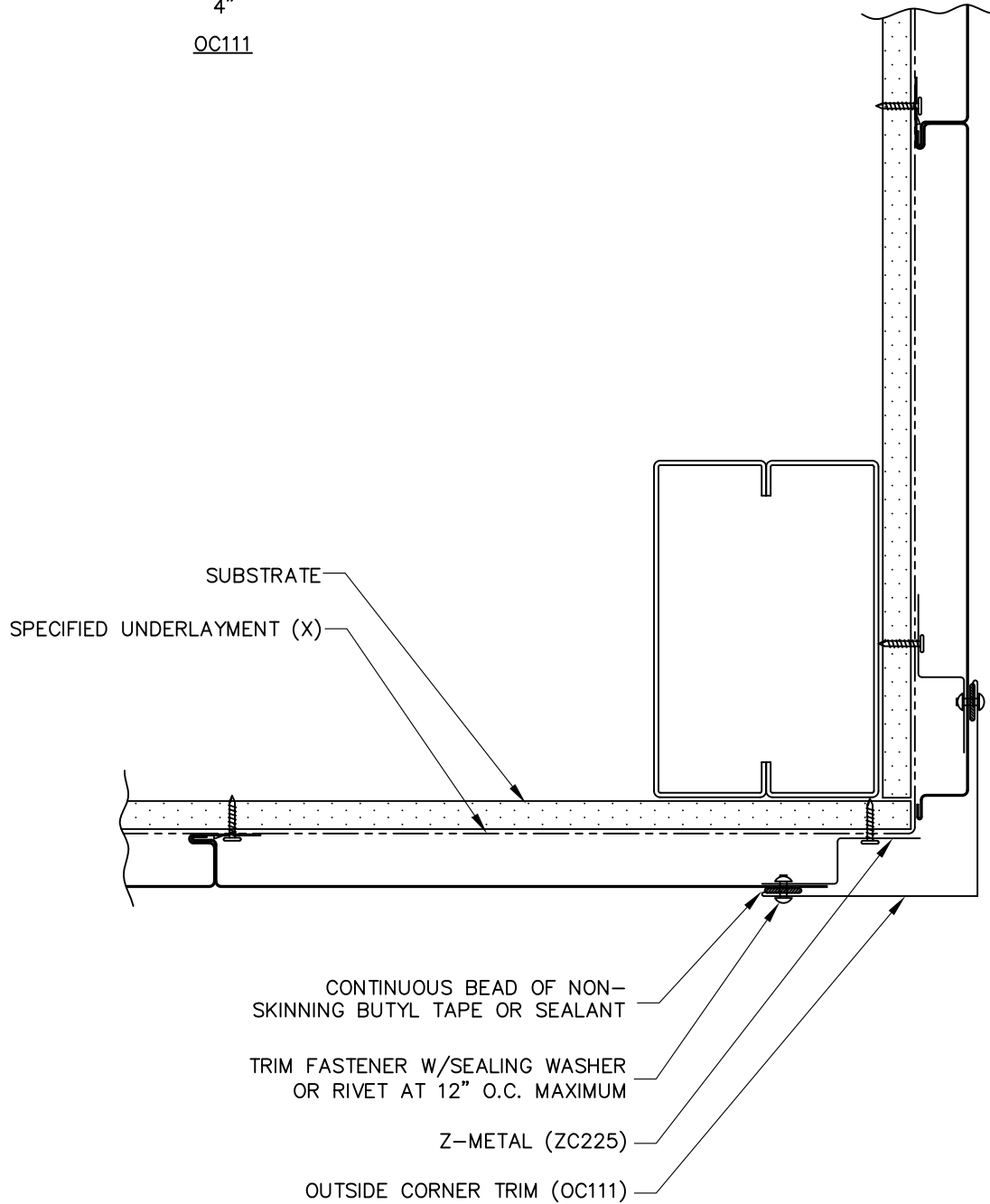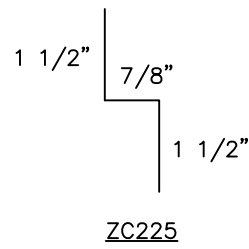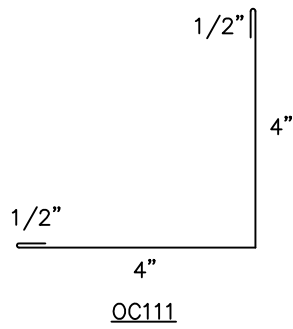
(X) — NOT BY AEP SPAN

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

OUTSIDE CORNER

FPV-06
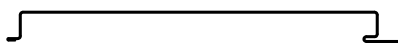
REV. 9/23/16

ZC225

1 1/2"
7/8"
1 1/2"

IC093

1/2"
4"
4"
1/2"

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)

Z-METAL (ZC225)

INSIDE CORNER TRIM (IC093)

TRIM FASTENER W/SEALING WASHER
OR RIVET AT 12" O.C. MAXIMUM

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT

(X) — NOT BY AEP SPAN

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

INSIDE CORNER

FPV-07
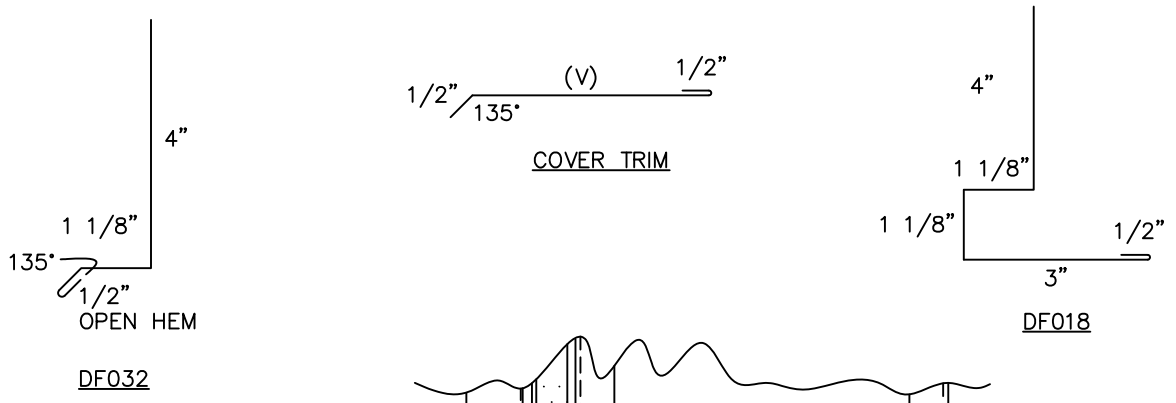
REV. 9/23/16

4"

1 1/8"

135°

1/2"

OPEN HEM

DF032

(V)

1/2" ⟋135°   1/2"

COVER TRIM

4"

1 1/8"

1 1/8"   1/2"

3"
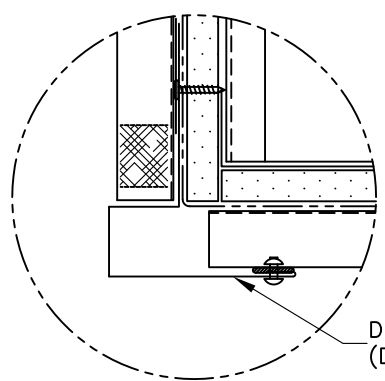
DF018

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)

BUTYL FLASHING TAPE (X)

INSIDE CLOSURE (SEALED &
SECURED WITH SEALANT)

DRIP FLASHING (DF032)

1/4"
GAP

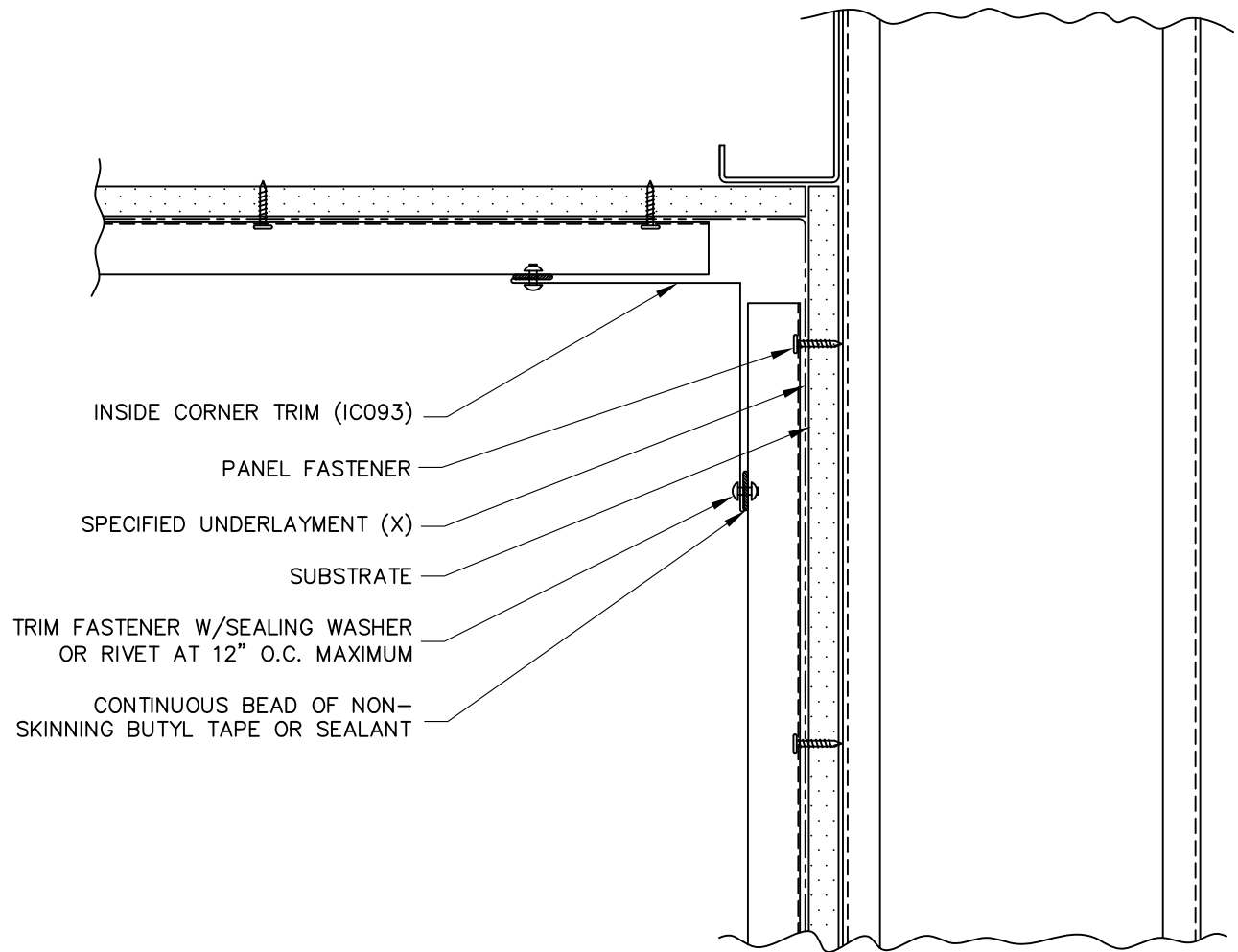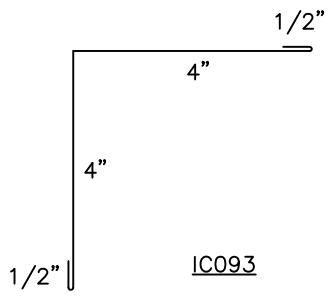DRIP FLASHING
(DF018)

ALTERNATE DETAIL

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT

TRIM FASTENER W/SEALING WASHER
OR RIVET AT 12" O.C. MAXIMUM

COVER TRIM (V)
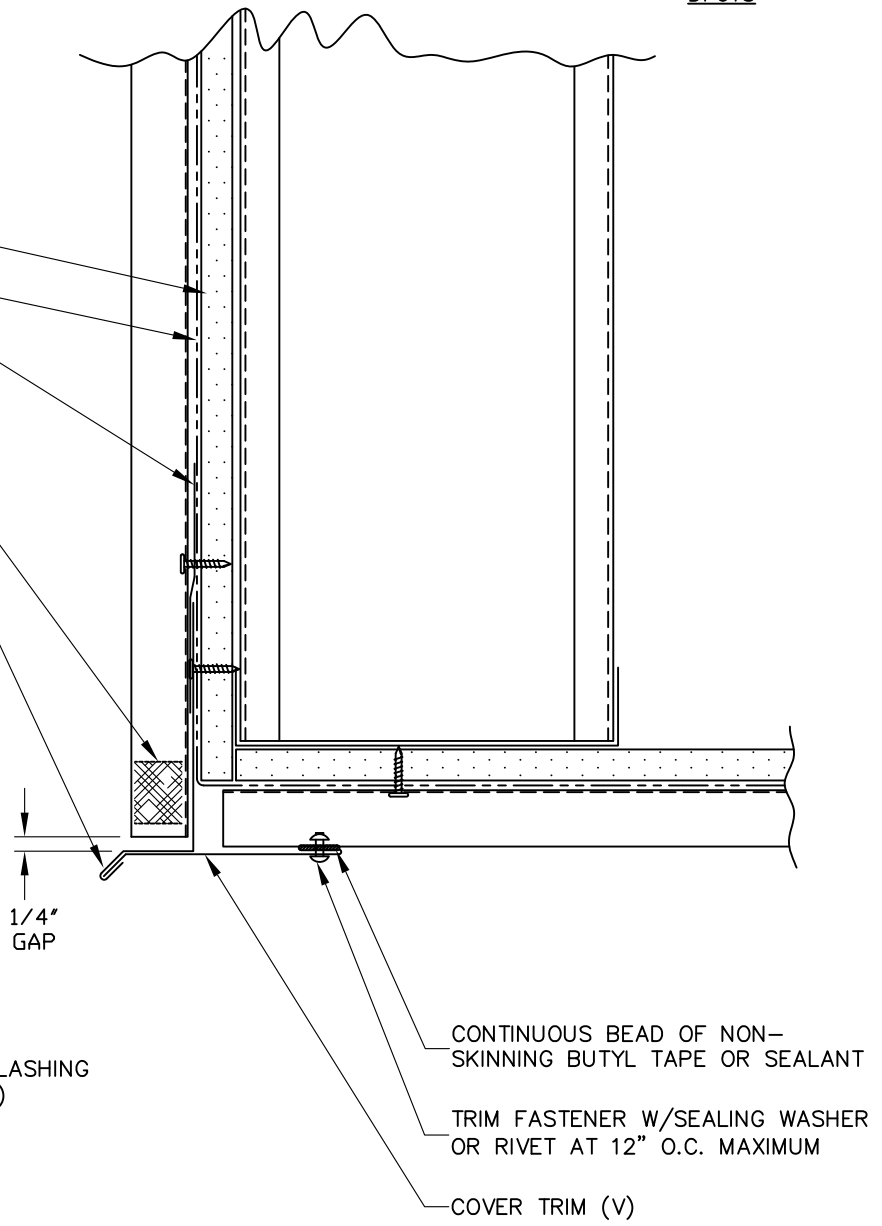
(X) – NOT BY AEP SPAN
(V) – DIMENSIONS VARY BASED ON PROJECT CONDITIONS

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

SOFFIT (FRONT)

FPV-08

REV. 9/23/16

1/2"

4"

4"

1/2"

IC093

INSIDE CORNER TRIM (IC093)

PANEL FASTENER

SPECIFIED UNDERLAYMENT (X)

SUBSTRATE

TRIM FASTENER W/SEALING WASHER
OR RIVET AT 12" O.C. MAXIMUM

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT

(X) — NOT BY AEP SPAN

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

SOFFIT (BACK)

FPV-09

MT110

3"
1 1/8"
1/2"   1 1/2"
3"

JT108

3"
1 1/8"   1/2"
1 1/8"

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)

END SPLICE (MT110)

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT

TRIM FASTENER W/SEALING WASHER
OR RIVET AT 12" O.C. MAXIMUM

J TRIM (JT108)

REVEAL FLASHING (V)

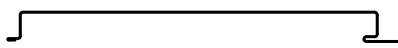REVEAL SIZE PER
PROJECT DESIGN
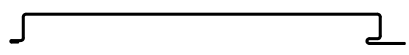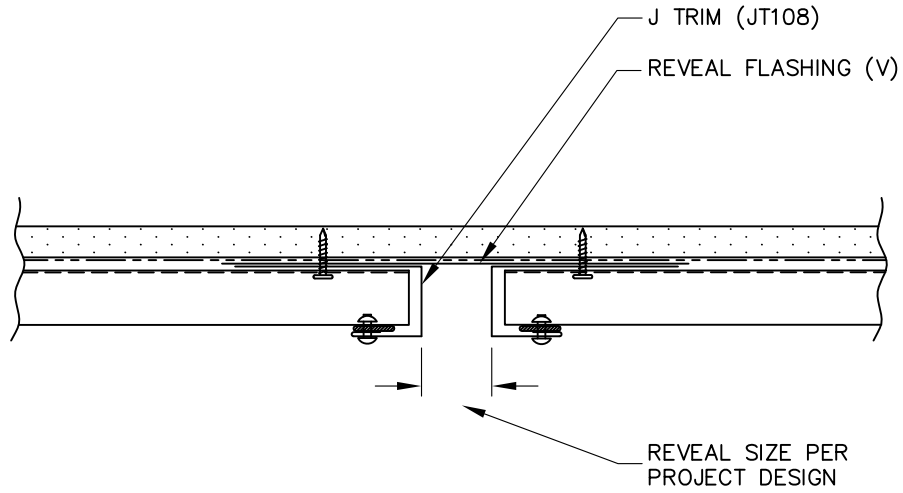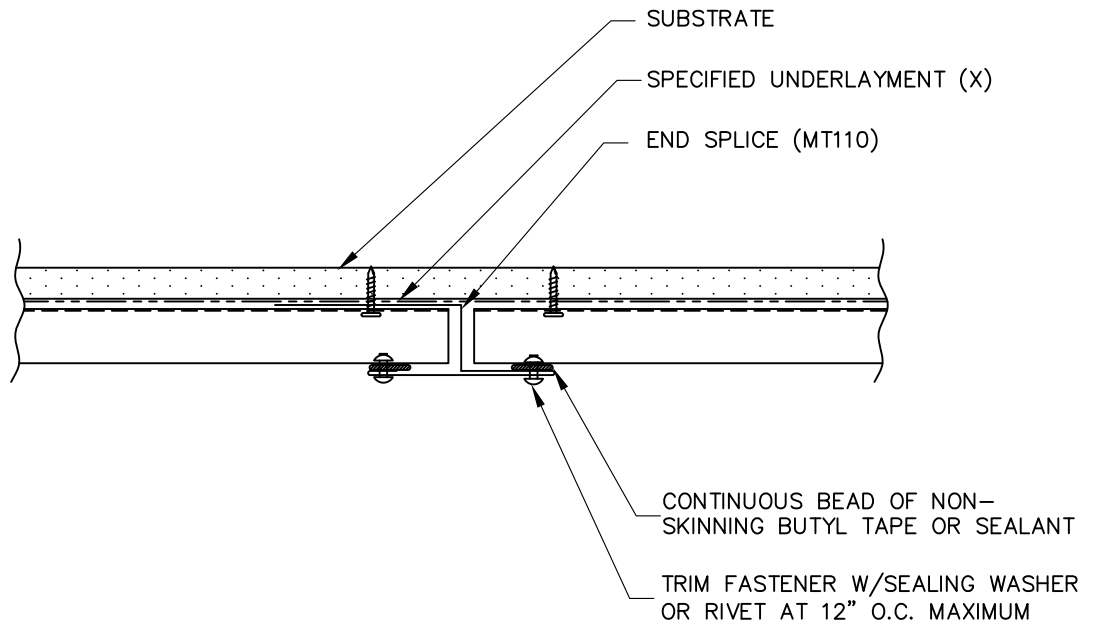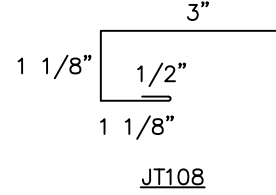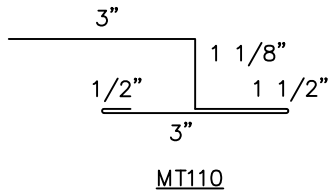
ALTERNATE DETAIL

(X) — NOT BY AEP SPAN
(V) — DIMENSIONS VARY BASED ON PROJECT CONDITIONS

AEP SPAN®
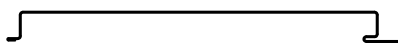
FLUSH PANEL
VERTICAL INSTALL.

SOFFIT END SPLICE

FPV-10

REV. 9/23/16

4"

1 1/8"

1 1/2"

1/2"

HT092

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)

BUTYL FLASHING TAPE (X)

INSIDE CLOSURE (SEALED & SECURED WITH SEALANT)

END SPLICE /SILL FLASHING (HT092)

TRIM FASTENER W/SEALING WASHER OR RIVET AT 12" O.C. MAXIMUM
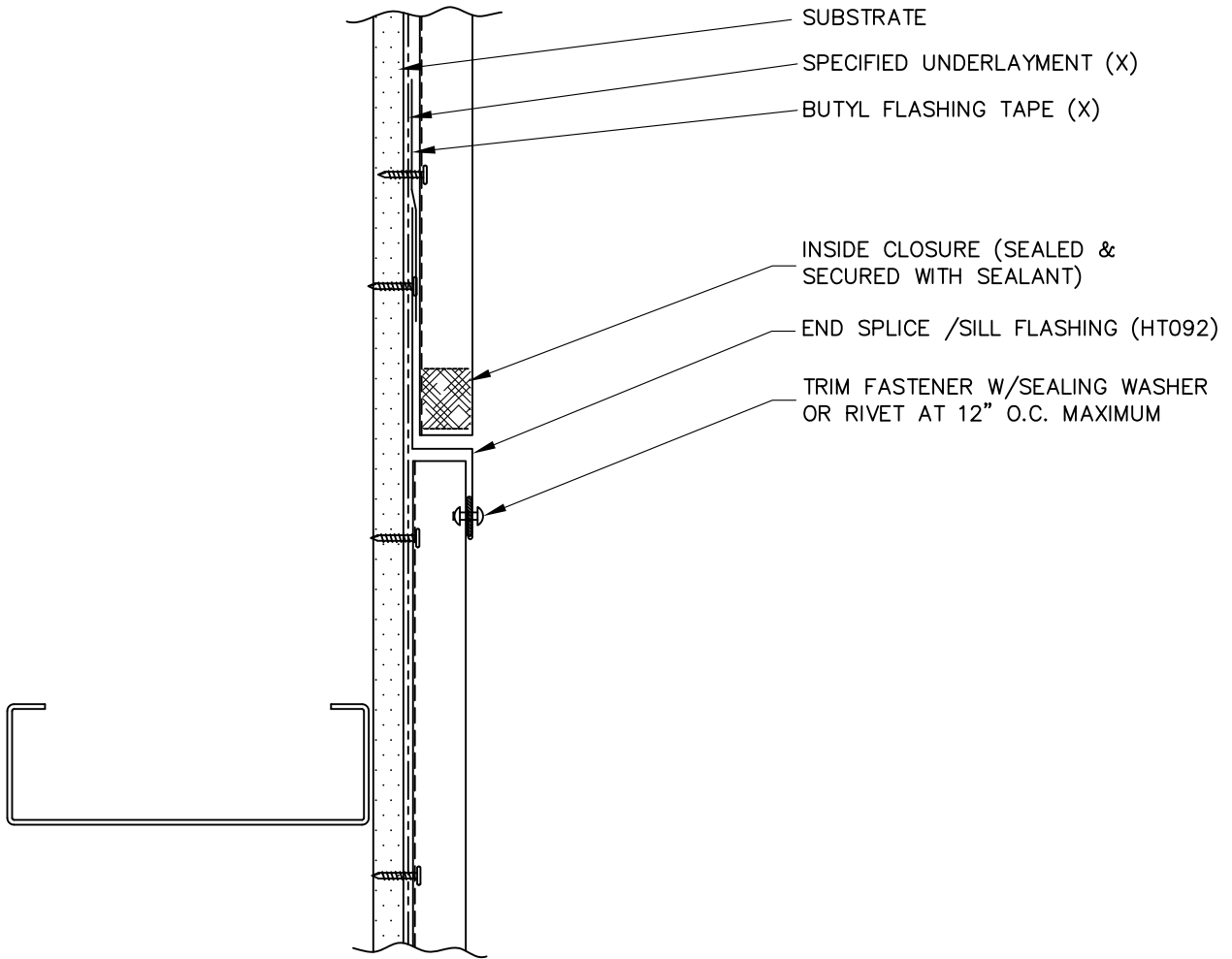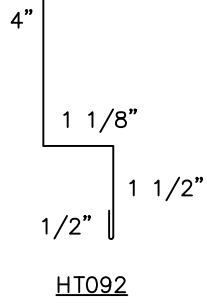
(X) – NOT BY AEP SPAN

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

END SPLICE (W/TRIM)

FPV-11
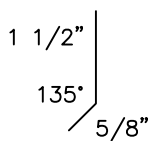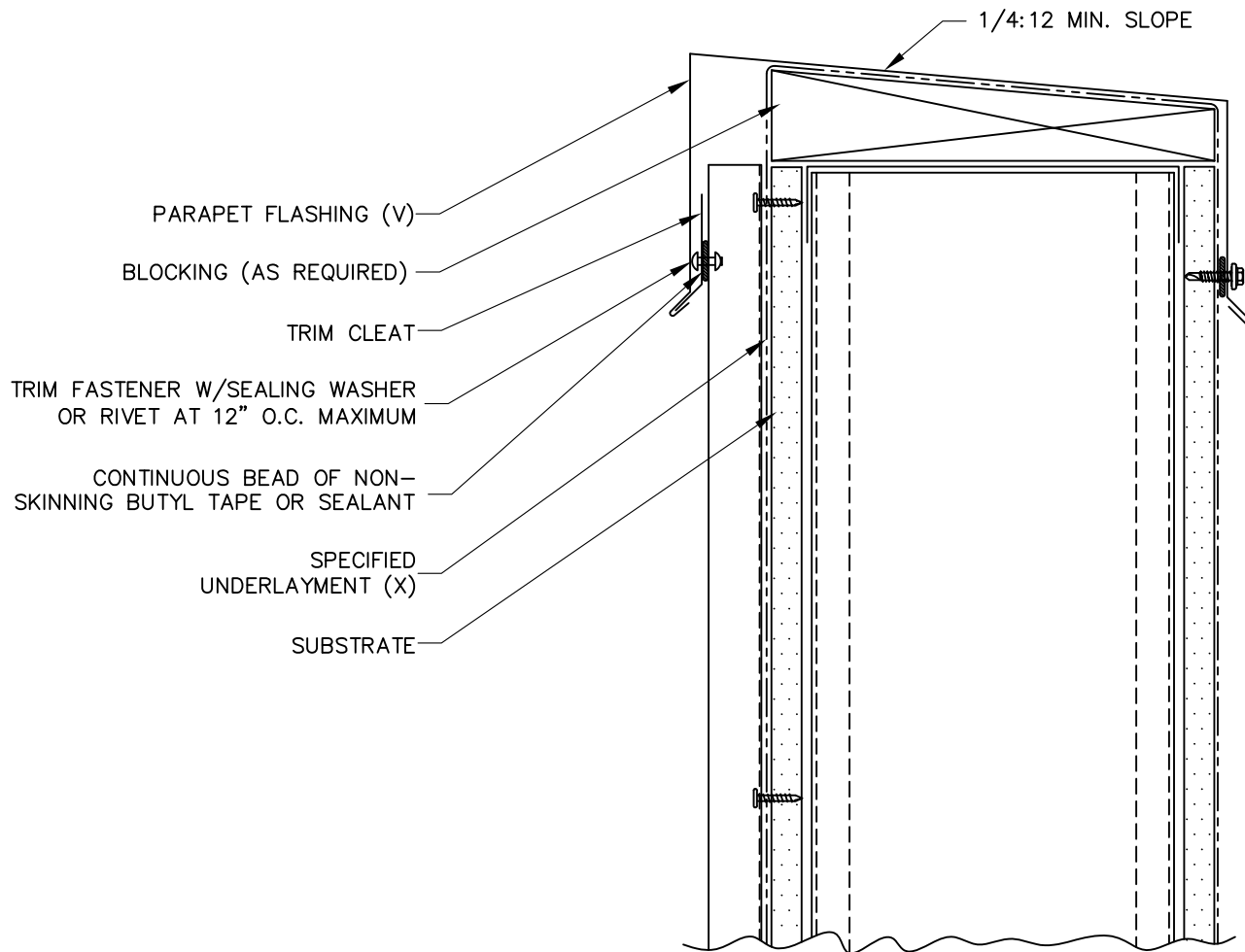
REV. 9/23/16

1 1/2"

135°

5/8"

TC209

1/4:12 MIN. SLOPE

PARAPET FLASHING (V)

BLOCKING (AS REQUIRED)

TRIM CLEAT

TRIM FASTENER W/SEALING WASHER
OR RIVET AT 12" O.C. MAXIMUM

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT

SPECIFIED
UNDERLAYMENT (X)

SUBSTRATE

(X) — NOT BY AEP SPAN
(V) — DIMENSIONS VARY BASED ON PROJECT CONDITIONS

![AEP SPAN logo]

FLUSH PANEL
VERTICAL INSTALL.

PARAPET

FPV-12

4"

1 1/8"
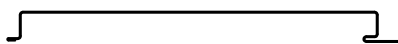
1/2"   135°   4"   135°   1/2"
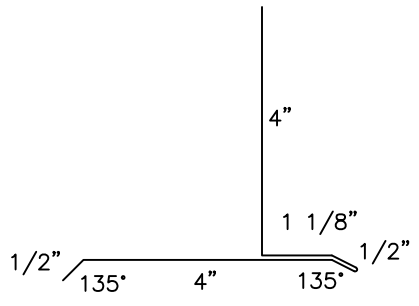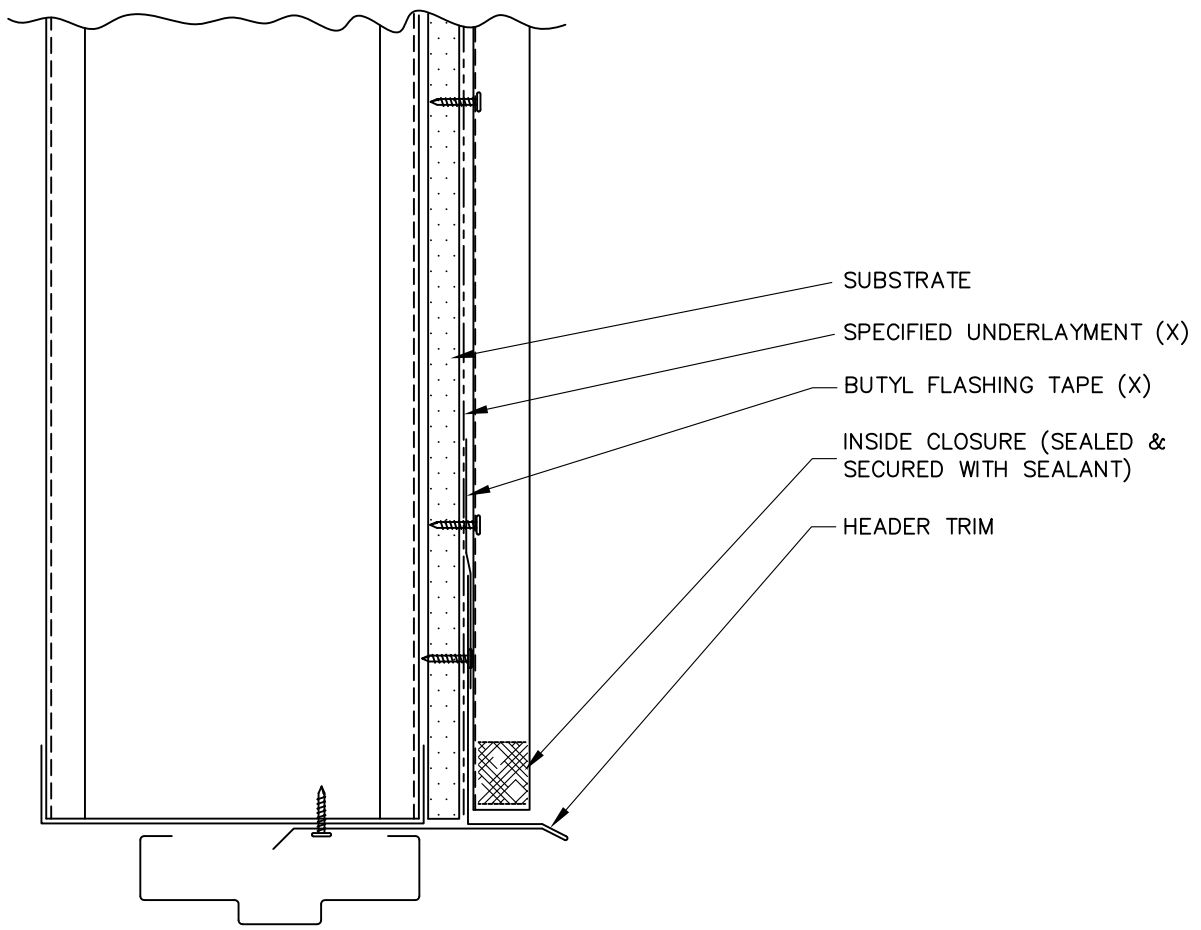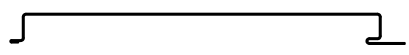
HT093

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)

BUTYL FLASHING TAPE (X)

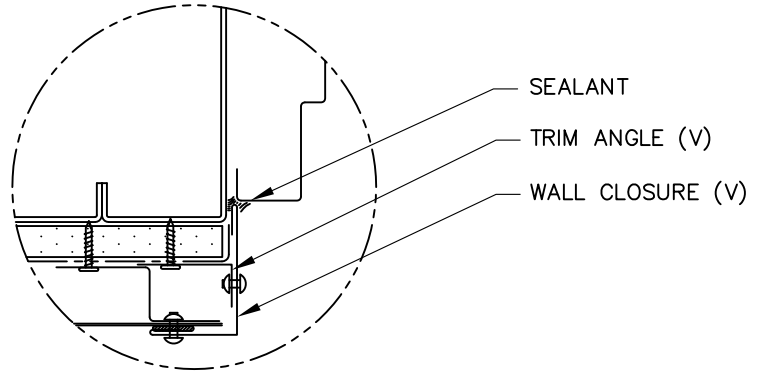INSIDE CLOSURE (SEALED & SECURED WITH SEALANT)
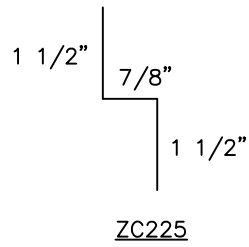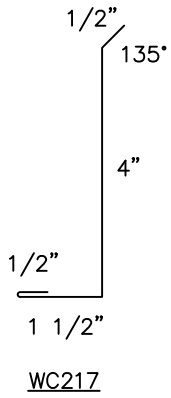
HEADER TRIM

(X) — NOT BY AEP SPAN

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

DOOR / WINDOW
(HEAD)

FPV-13
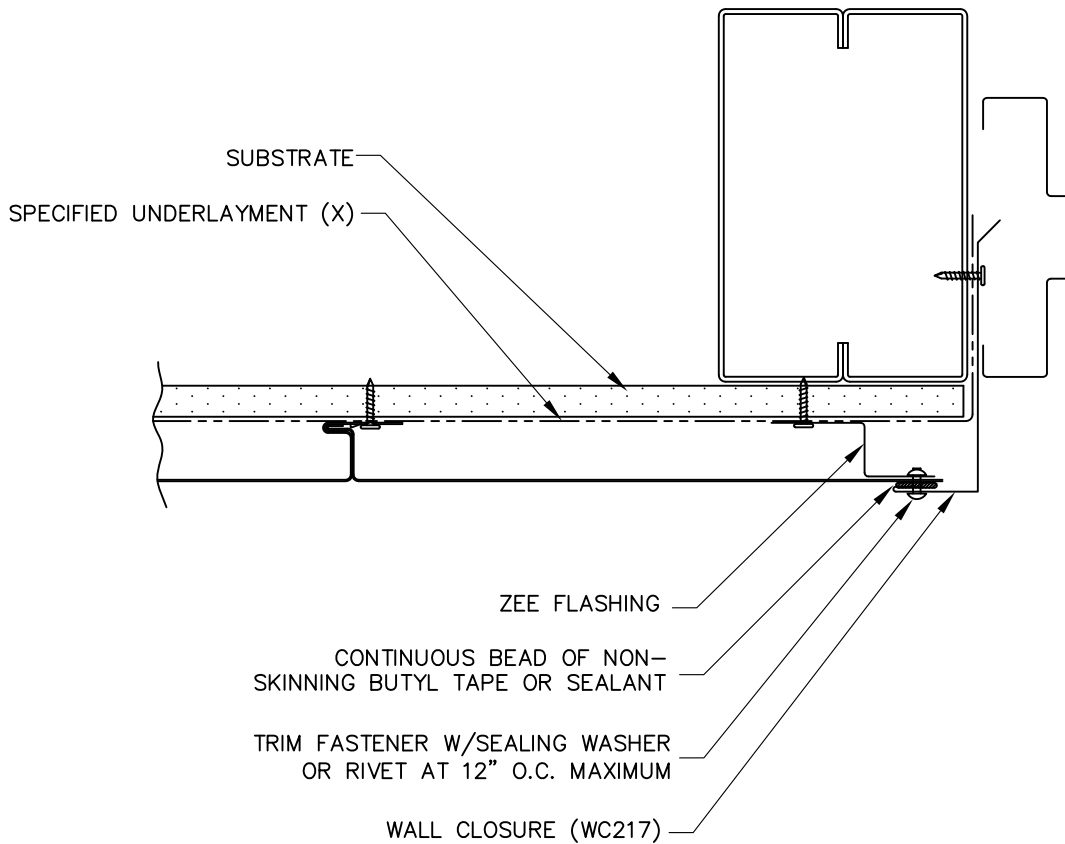
REV. 9/23/16

1/2"
135°
4"
1/2"
1 1/2"

WC217

1 1/2"
7/8"
1 1/2"

ZC225

SEALANT
TRIM ANGLE (V)
WALL CLOSURE (V)

ALTERNATE DETAIL

SUBSTRATE
SPECIFIED UNDERLAYMENT (X)

ZEE FLASHING

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT

TRIM FASTENER W/SEALING WASHER
OR RIVET AT 12" O.C. MAXIMUM

WALL CLOSURE (WC217)

(X) — NOT BY AEP SPAN
(V) — DIMENSIONS VARY BASED ON PROJECT CONDITIONS

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

DOOR / WINDOW
(JAMB)

FPV-14

REV. 9/23/16

1/2"

135°

4"

1/2"

1 1/2"

WC217

WALL CLOSURE (WC217)

TRIM FASTENER W/SEALING WASHER
OR RIVET AT 12" O.C. MAXIMUM

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT

PANEL FASTENER

SUBSTRATE

SPECIFIED UNDERLAYMENT (X)
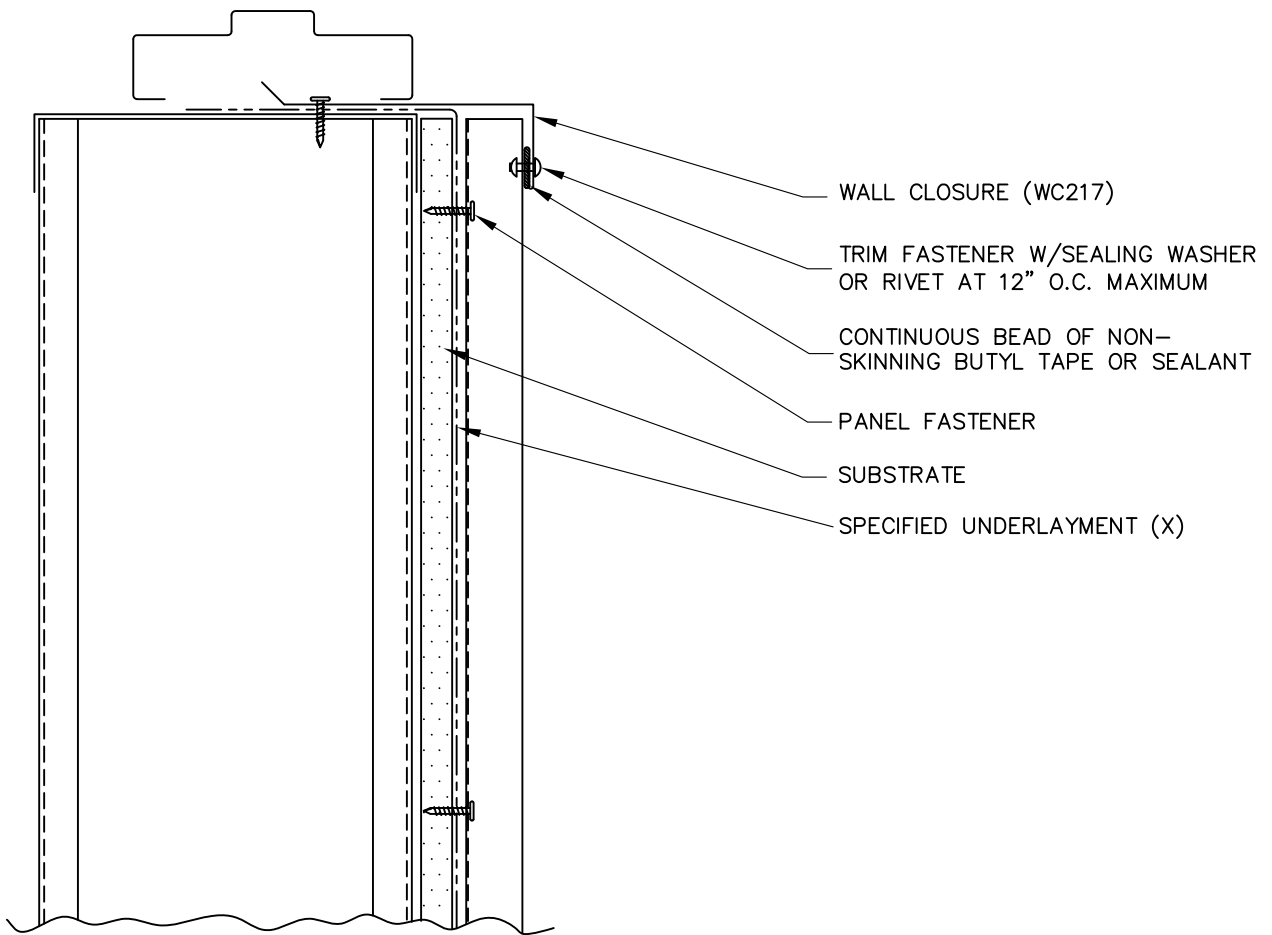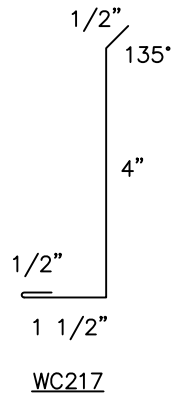
(X) — NOT BY AEP SPAN
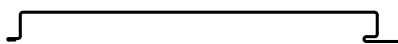
AEP SPAN®

FLUSH PANEL
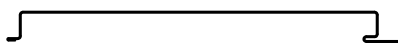VERTICAL INSTALL.

DOOR / WINDOW
(SILL)

FPV-15

REV. 9/23/16

DRIP FLASHING

TRIM FASTENER W/SEALING
WASHER, OR RIVET

SEALANT

OVERLAP UPPER/LOWER
FLASHINGS

WALL PENETRATION

SEAL PERIMETER OF FLASHINGS AND
ALL TRIM OVERLAPS WITH A
CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT
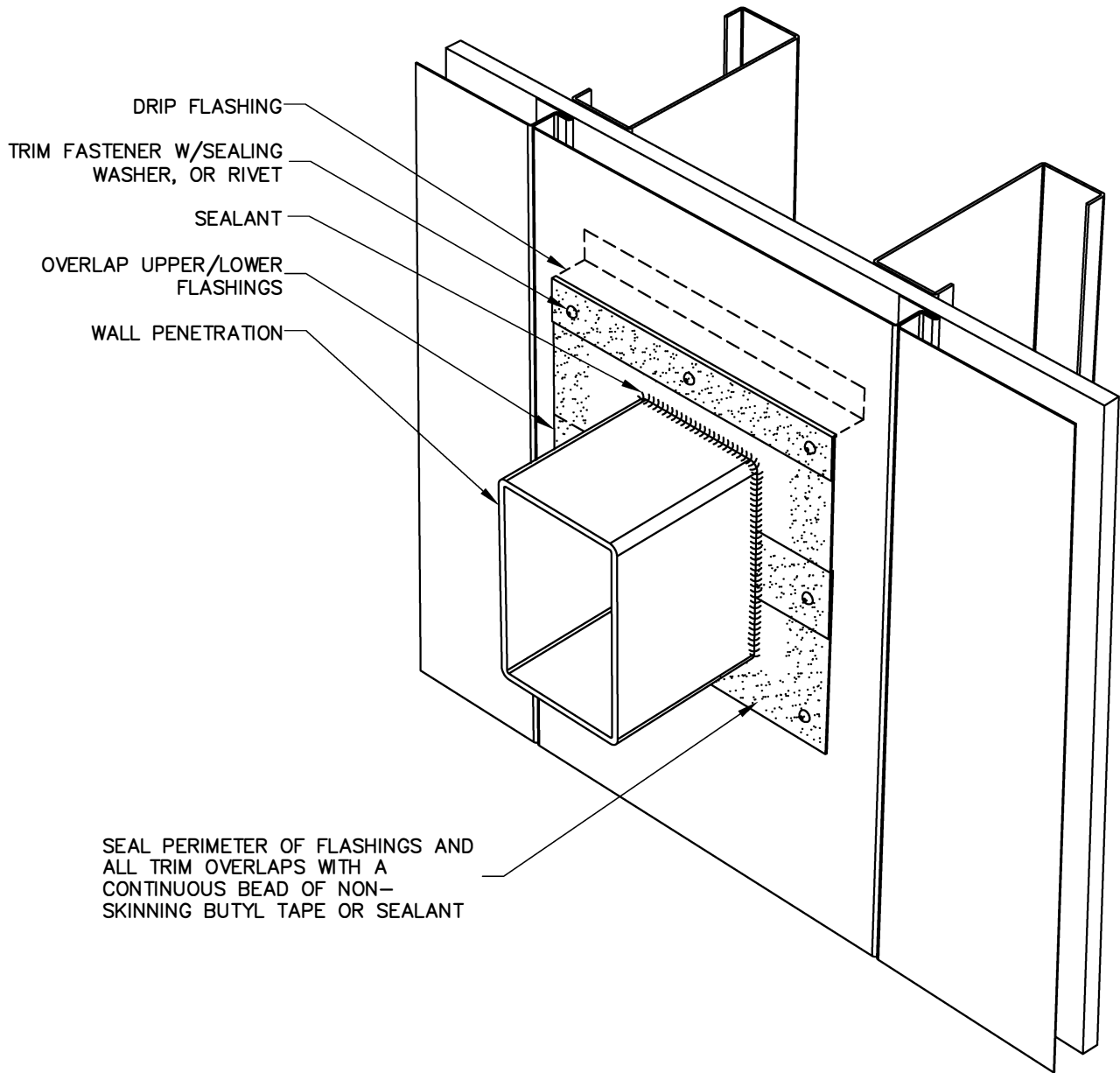
AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.
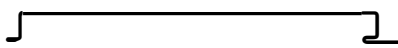
WALL PENETRATION (3D)

FPV-16
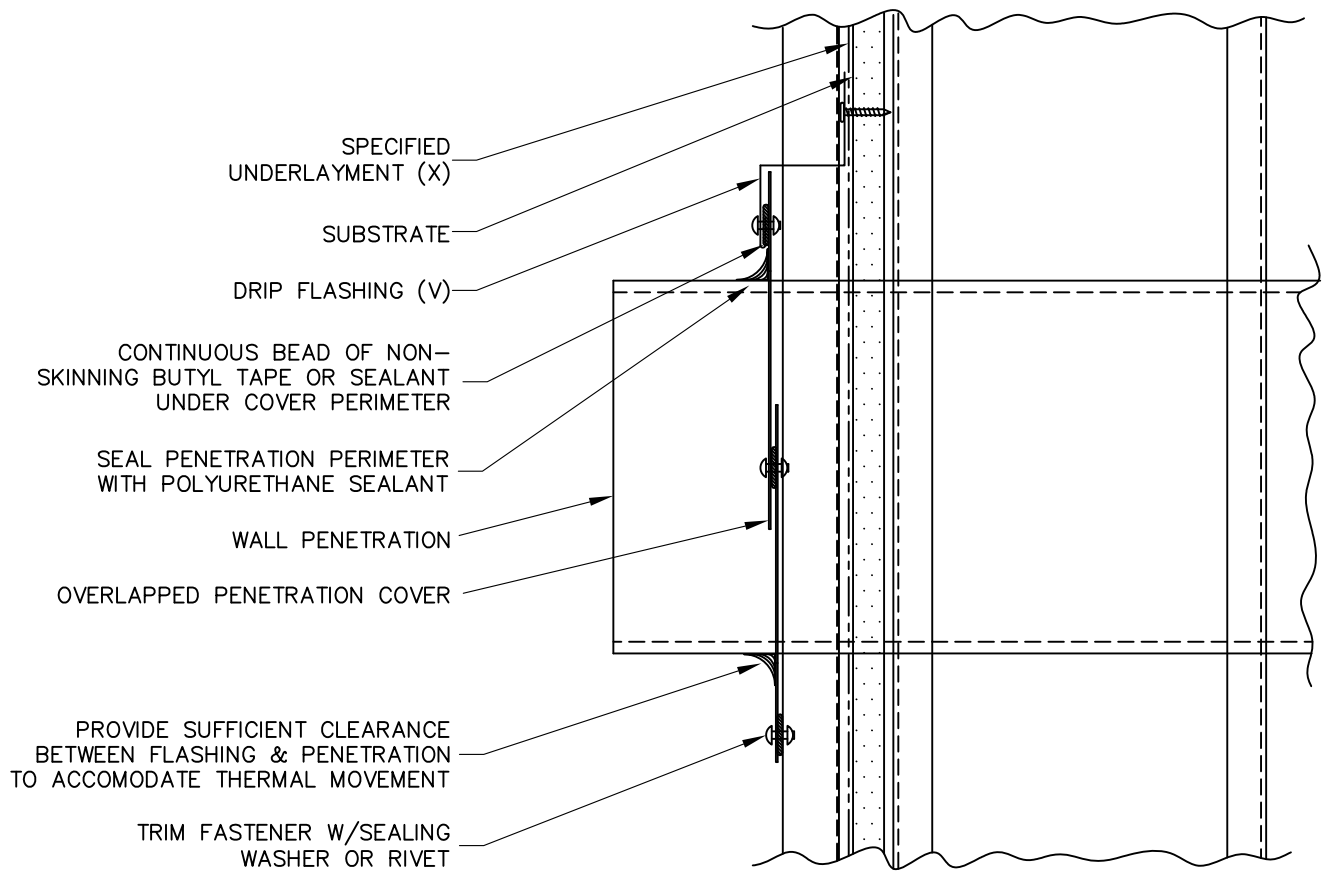
REV. 9/23/16

SPECIFIED
UNDERLAYMENT (X)

SUBSTRATE

DRIP FLASHING (V)

CONTINUOUS BEAD OF NON-
SKINNING BUTYL TAPE OR SEALANT
UNDER COVER PERIMETER

SEAL PENETRATION PERIMETER
WITH POLYURETHANE SEALANT

WALL PENETRATION

OVERLAPPED PENETRATION COVER

PROVIDE SUFFICIENT CLEARANCE
BETWEEN FLASHING & PENETRATION
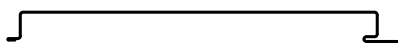TO ACCOMADATE THERMAL MOVEMENT

TRIM FASTENER W/SEALING
WASHER OR RIVET

(X) — NOT BY AEP SPAN
(V) — DIMENSIONS VARY BASED ON PROJECT CONDITIONS

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

WALL PENETRATION

FPV-17

REV. 9/23/16

SUBSTRATE

RIGID INSULATION (X)

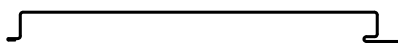SPECIFIED
UNDERLAYMENT (X)

PANEL FASTENER

ZEE FLASHING (V)
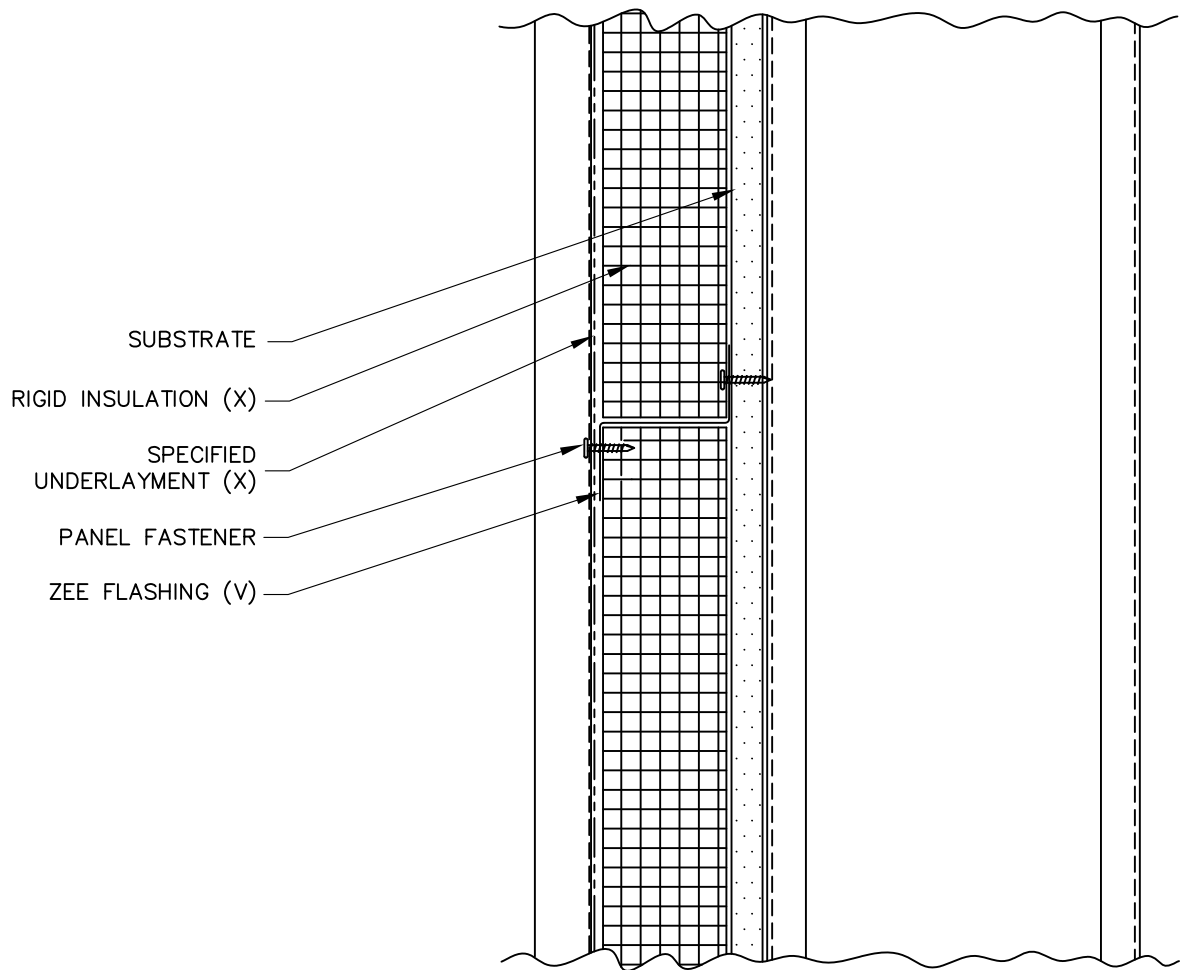
(X) — NOT BY AEP SPAN
(V) — DIMENSIONS AND GAGE VARY BASED ON PROJECT CONDITIONS

AEP SPAN®

FLUSH PANEL
VERTICAL INSTALL.

RIGID INSULATION

FPV-18

REV. 9/23/16

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