

## **Flex Series**

(Horizontal Installation)  
Installation Guide

# Flex Series

(Horizontal  
Install.)  
Installation Guide

- Table of Contents -

<b>Section</b>	<b>Page</b>
<i>General Notes</i> .....	<i>i</i>
<i>Panel Details</i> .....	<i>1</i>
<i>Clips</i> .....	<i>2</i>
<i>Panel Closures</i> .....	<i>3</i>
<i>Closure Installation</i> .....	<i>4</i>
<i>Base</i> .....	<i>5</i>
<i>Sill</i> .....	<i>6</i>
<i>End Wall</i> .....	<i>7</i>
<i>Outside Corner</i> .....	<i>8</i>
<i>Inside Corner</i> .....	<i>9</i>
<i>Soffit (Front)</i> .....	<i>10</i>
<i>Soffit (Back)</i> .....	<i>11</i>
<i>End Splice (w/Trim)</i> .....	<i>12</i>
<i>Parapet</i> .....	<i>13</i>
<i>Door/Window (Head)</i> .....	<i>14</i>
<i>Door/Window (Jamb)</i> .....	<i>15</i>
<i>Door/Window (Sill)</i> .....	<i>16</i>
<i>Wall Penetration (3D)</i> .....	<i>17</i>
<i>Wall Penetration</i> .....	<i>18</i>
<i>Rigid Insulation</i> .....	<i>19</i>

## 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:

Flex Series can be utilized as a wall panel installed in the vertical or horizontal orientation. It shall not be utilized for roof applications. Flex Series can be used over solid substrates or over spaced supports. This installation guide depicts clip attached panels installed using flush mounted clips. Details for direct fastened panels or clip attached panels using standoff clips 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 the Flex Series. 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 <https://www.aepspan.com/products/trims-flashings/>. Applicable Flex Series 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 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:

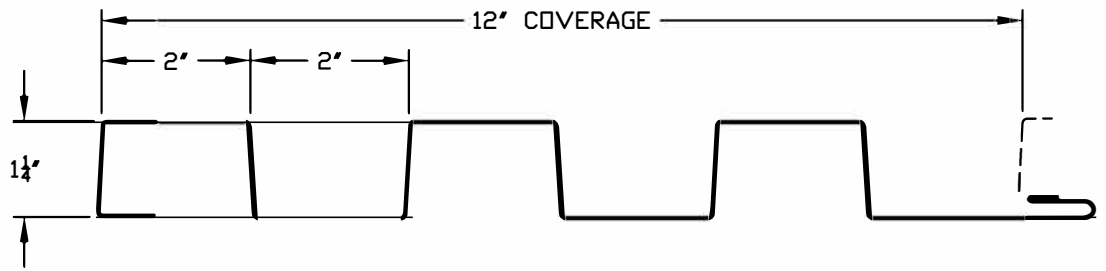
The Sheet Metal and Air Conditioning Contractors' National Association Inc. (SMACNA) manual is an excellent reference for sheet metal contractors. It's guidelines for underlayments, gutter and downspout size requirements, and expansion/contraction of metals and flashing joints should be followed.

### Technical Assistance:

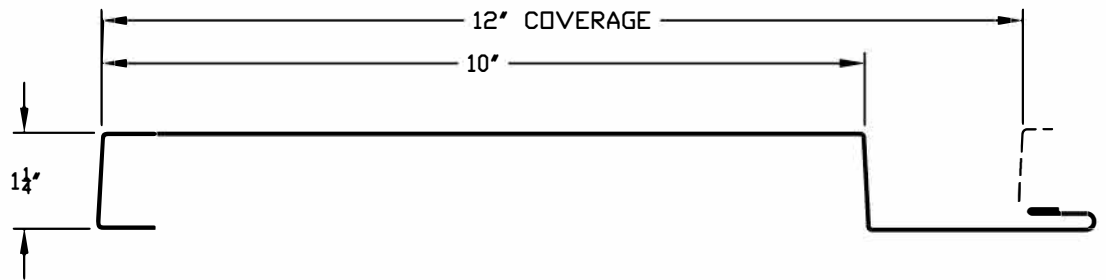
Contact your AEP Span Sales Representative for additional information.



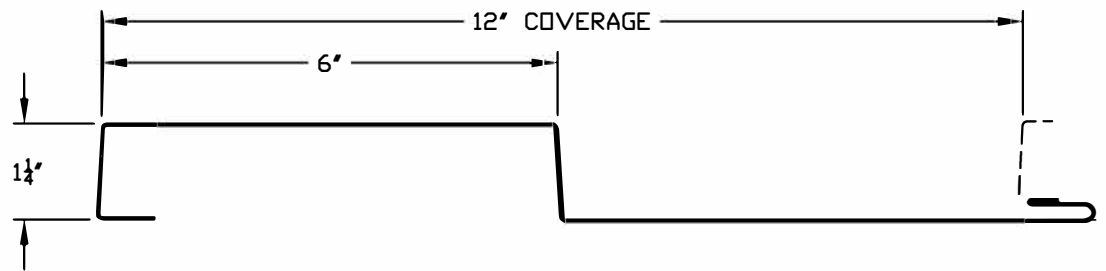
1.2FX10-12



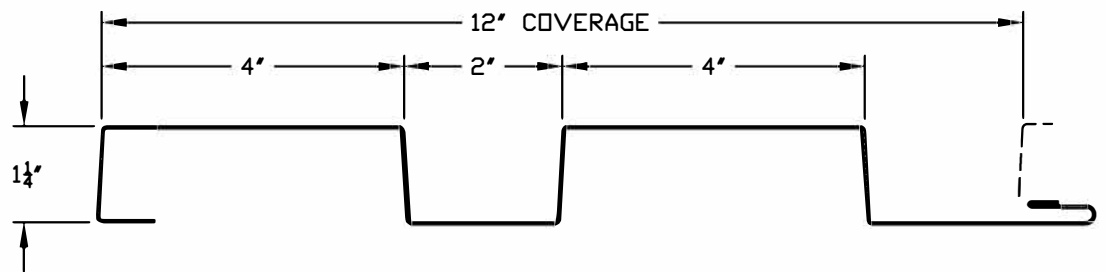
1.2FX20-12



1.2FX30-12



1.2FX40-12



PANEL INTERLOCK OPTIONS



DIRECT FASTENED  
(‘D’ P/N SUFFIX)



CLIP ATTACHED  
(‘C’ P/N SUFFIX)

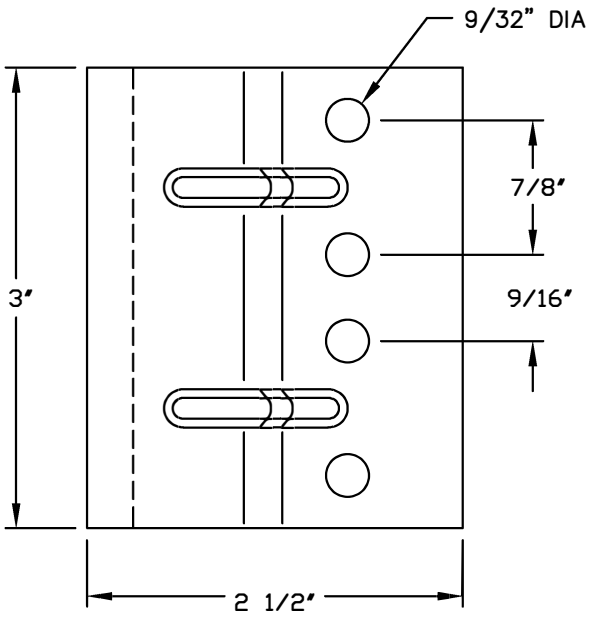


FLEX SERIES  
HORIZONTAL INSTALL.

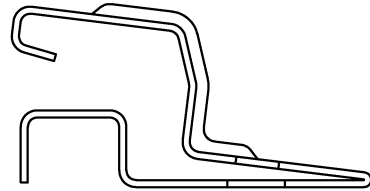
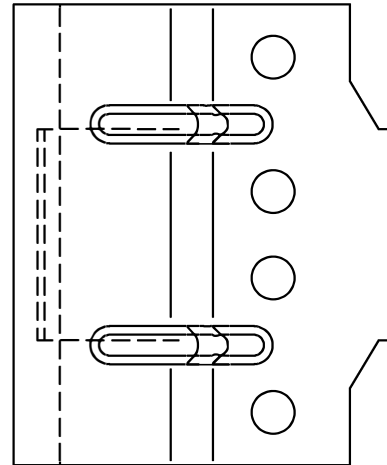


PANEL DETAILS

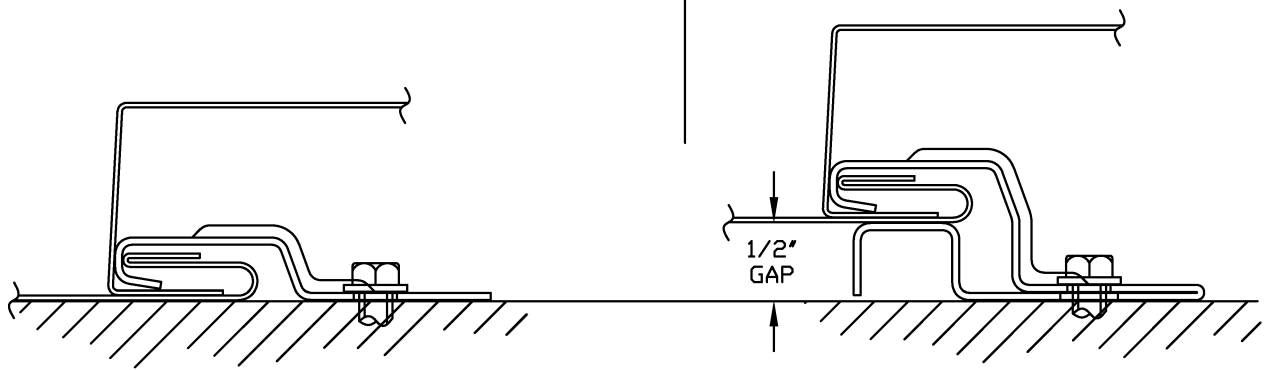
FXH-01



FLUSH CLIP  
P/N: #WALLCLP



STANDOFF CLIP  
P/N: #WALLCLP0.5



INSTALLED POSITION



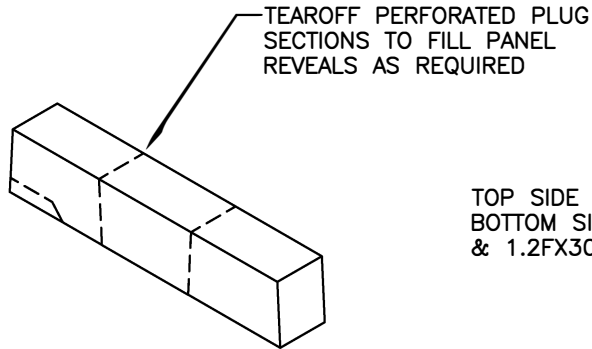
**FLEX SERIES**  
HORIZONTAL INSTALL.



CLIPS

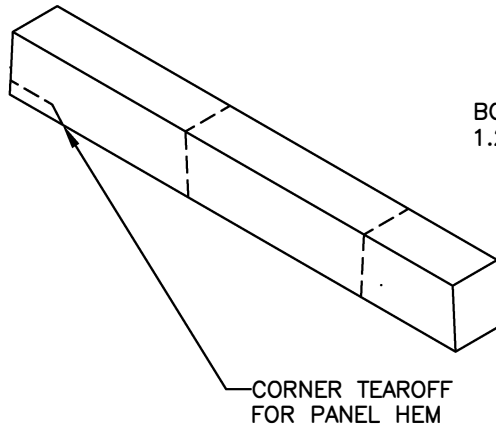
FXH-02

CL1.2FX-1P



TOP SIDE CLOSURE FOR ALL PANELS &  
BOTTOM SIDE CLOSURE FOR 1.2FX10-12  
& 1.2FX30-12

CL1.2FX-2P



BOTTOM SIDE CLOSURE FOR  
1.2FX20-12 & 1.2FX40-12

NOTE: APPLICATIONS UTILIZING STANDOFF CLIP ALSO REQUIRE  
UNIVERSAL CLOSURE STRIP (AEP #CLEM1x19.68 OR EQUIV.) TO  
SEAL OFF ADDITIONAL 1/2" PANEL-TO-SUBSTRATE GAP.



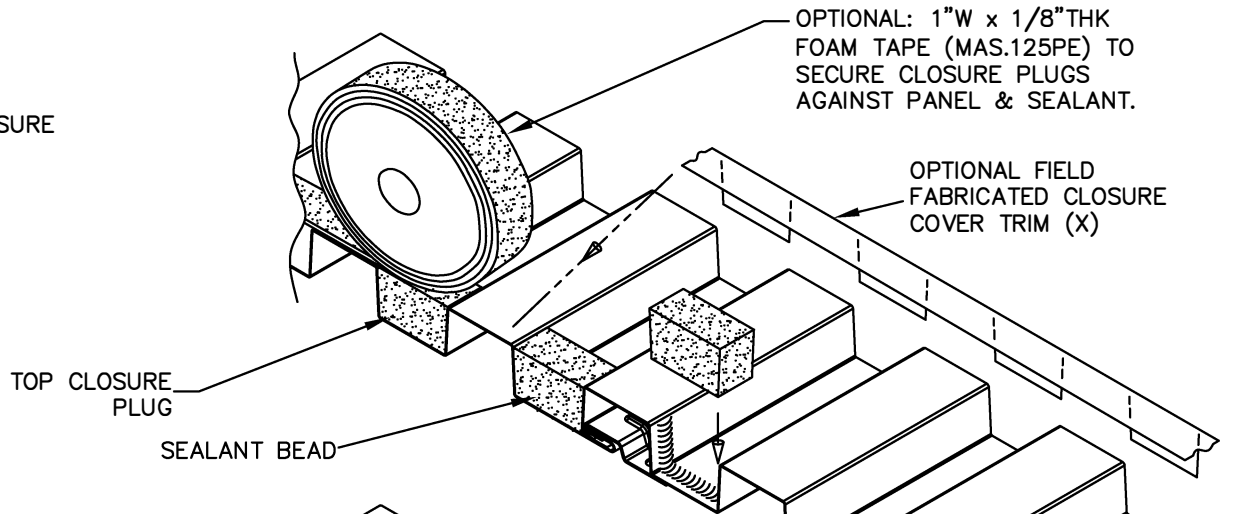
**FLEX SERIES**  
HORIZONTAL INSTALL.



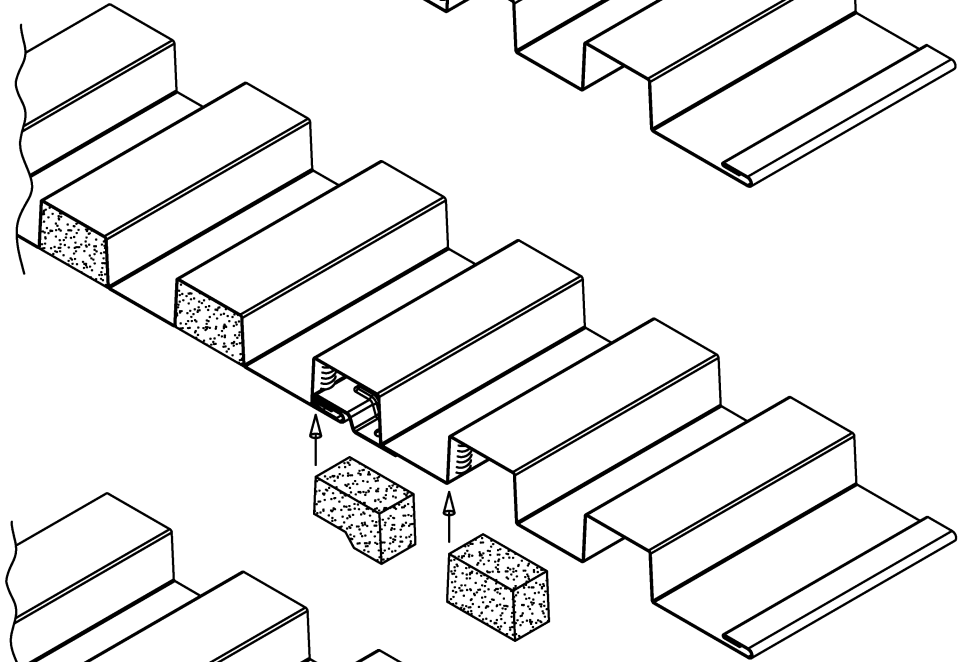
PANEL CLOSURES

FXH-03

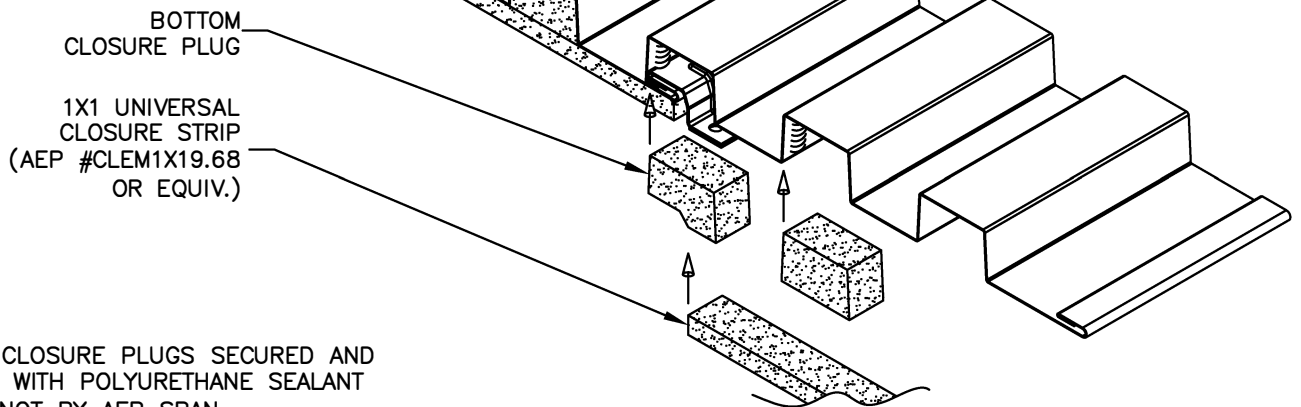
TOP SIDE CLOSURE  
INSTALLATION



BOTTOM SIDE CLOSURE  
INSTALLATION  
(FLUSH MOUNTED PANELS)



BOTTOM SIDE CLOSURE  
INSTALLATION  
(PANELS WITH STANDOFF CLIP)



NOTES:  
- ALL CLOSURE PLUGS SECURED AND  
SEALED WITH POLYURETHANE SEALANT  
(X) - NOT BY AEP SPAN



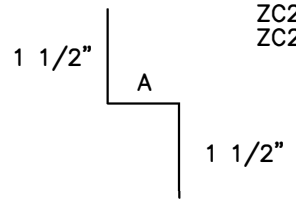
FLEX SERIES  
HORIZONTAL INSTALL.



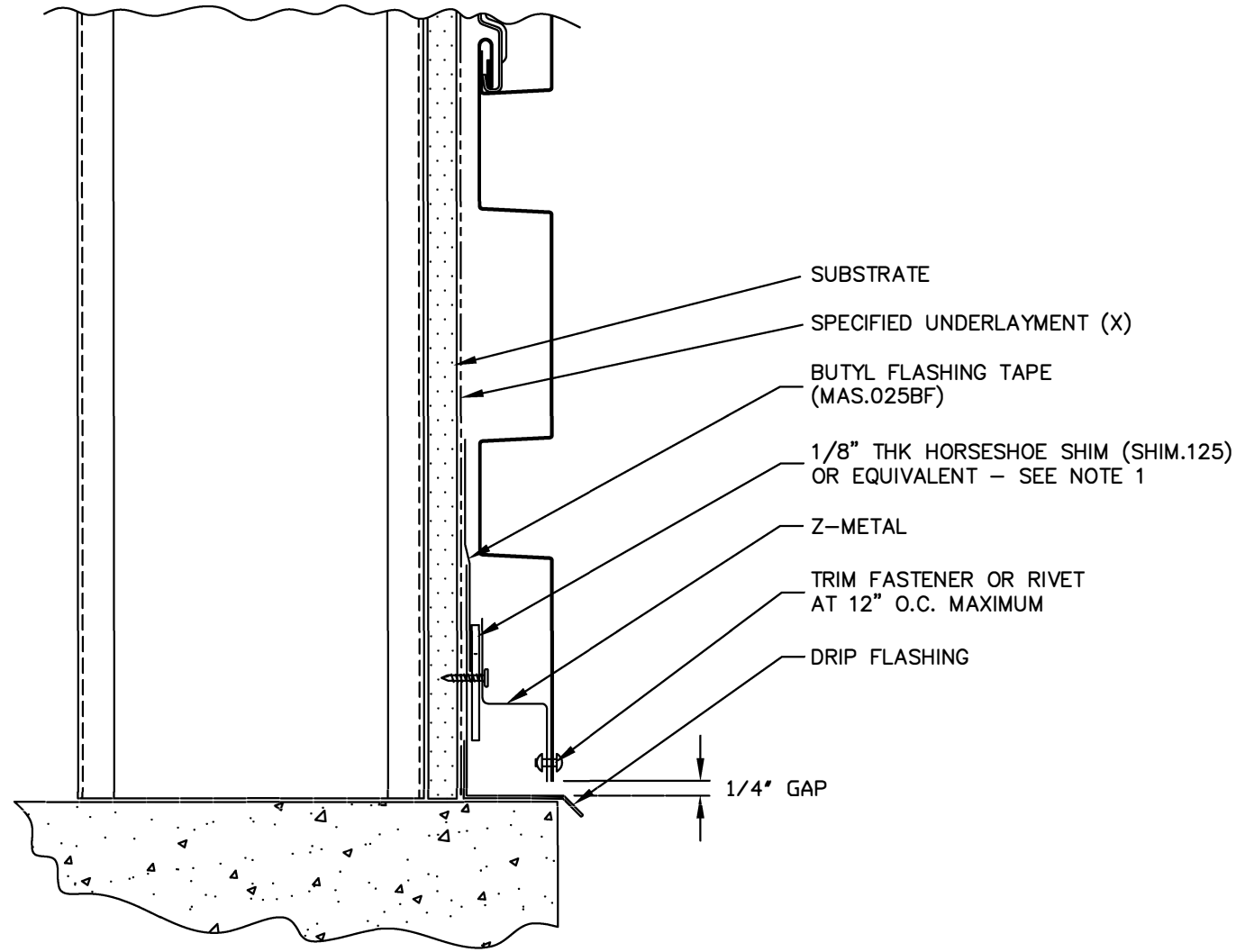
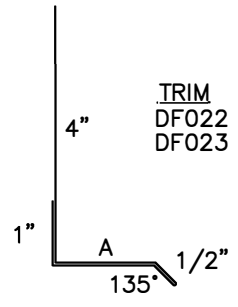
CLOSURE  
INSTALLATION

FXH-04

TRIM	DIM A	USAGE
ZC226	1 1/4"	1.2FX FLUSH MOUNT
ZC220	1 3/4"	1.2FX W/0.5" STANDOFF



TRIM	DIM A	USAGE
DF022	1 5/8"	1.2FX FLUSH MOUNT
DF023	2 1/8"	1.2FX W/0.5" STANDOFF



1. SHIM USED FOR MOISTURE CONTROL (DRAINAGE) IN FLUSH MOUNT APPLICATIONS.  
(X) - NOT BY AEP SPAN

FLEX SERIES PANELS ARE INSTALLED FROM GROUND TO EAVE.

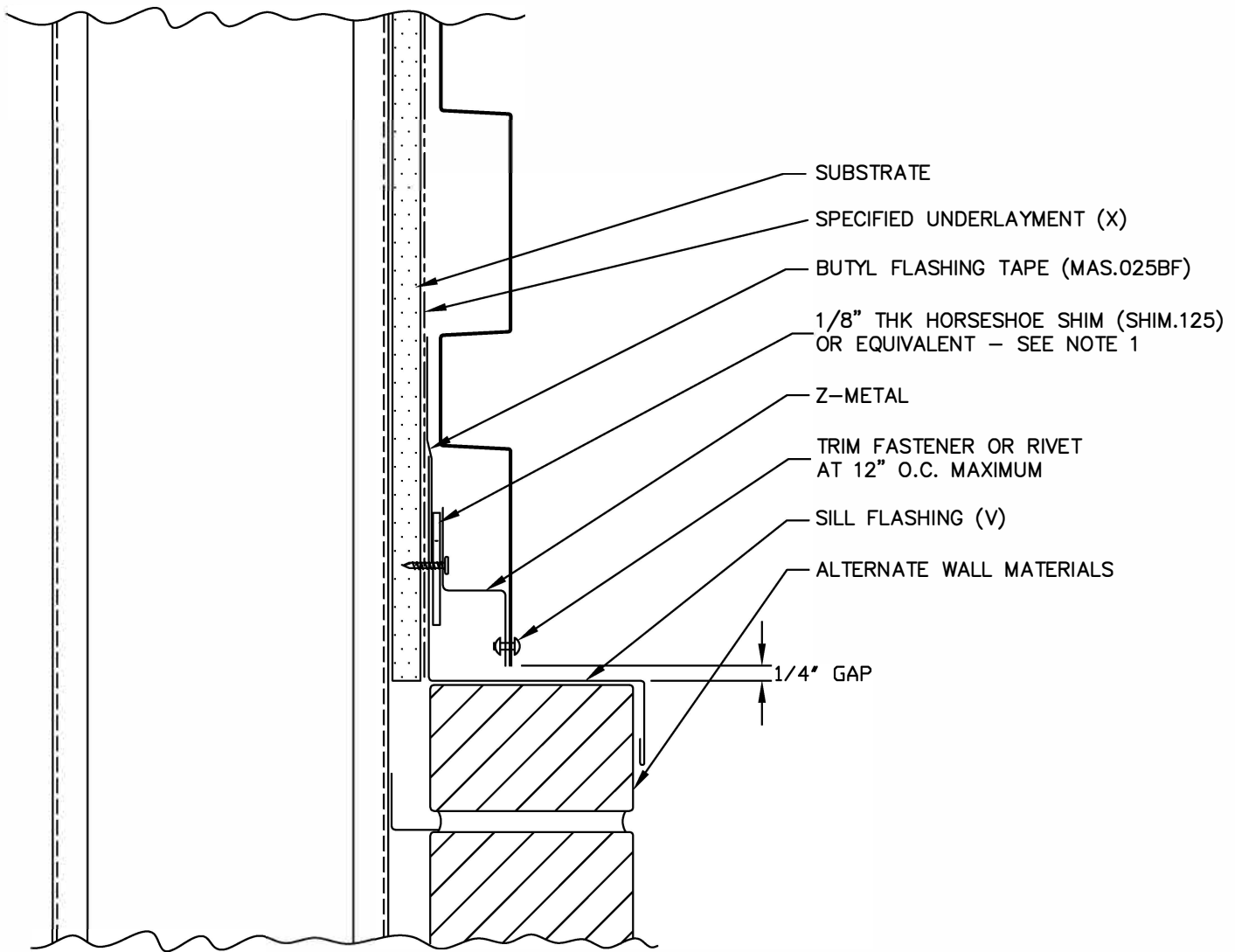
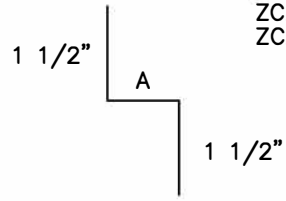


BASE

FXH-05



TRIM	DIM A	USAGE
ZC226	1 1/4"	1.2FX FLUSH MOUNT
ZC220	1 3/4"	1.2FX W/0.5" STANDOFF



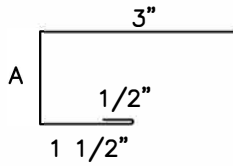
1. SHIM USED FOR MOISTURE CONTROL (DRAINAGE) IN FLUSH MOUNT APPLICATIONS.  
 (X) - NOT BY AEP SPAN  
 (V) - DIMENSIONS VARY BASED ON PROJECT CONDITIONS



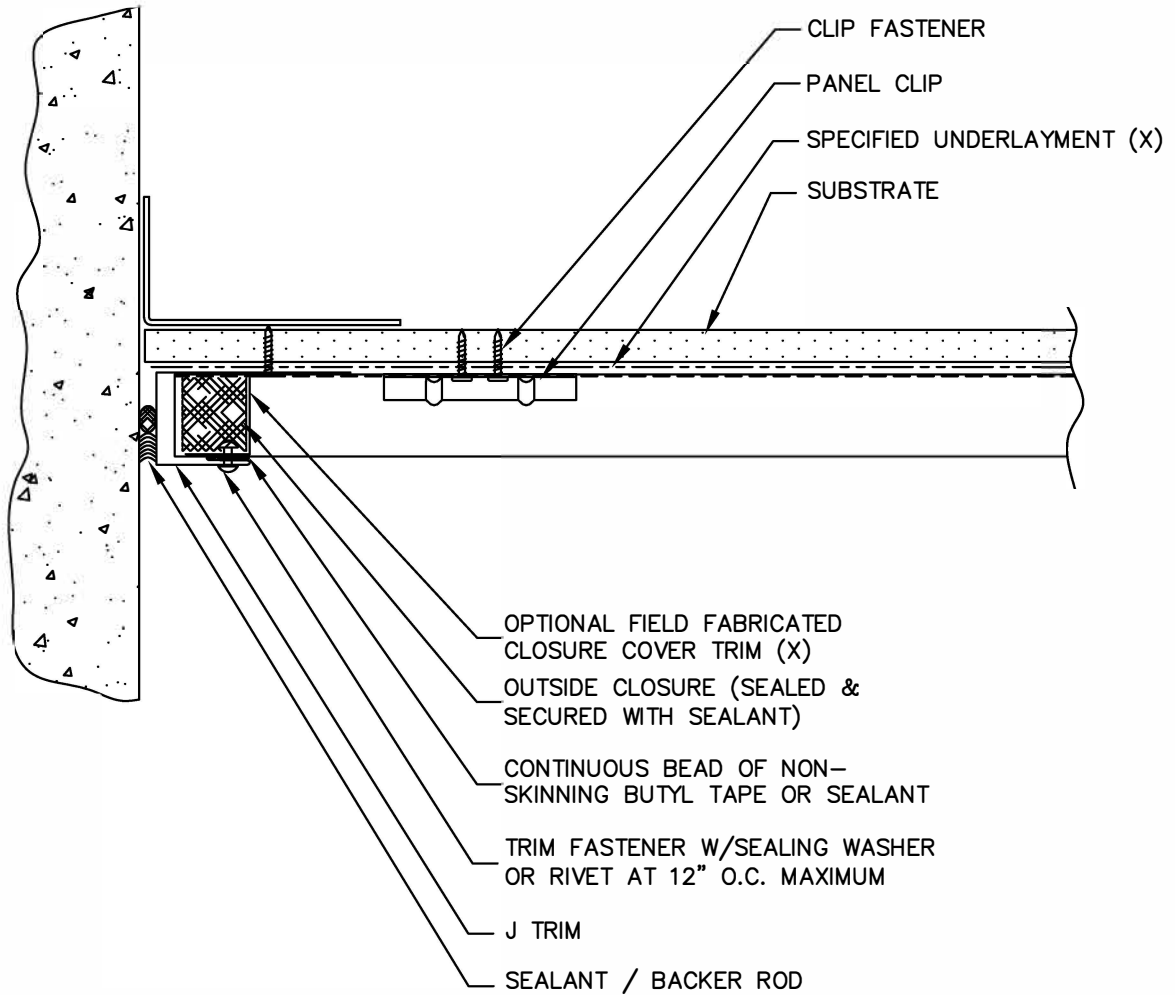
SILL

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FXH-06



TRIM	DIM A	USAGE
JT109	1 1/2"	1.2FX FLUSH MOUNT
JT110	2"	1.2FX W/0.5" STANDOFF



(X) - NOT BY AEP SPAN

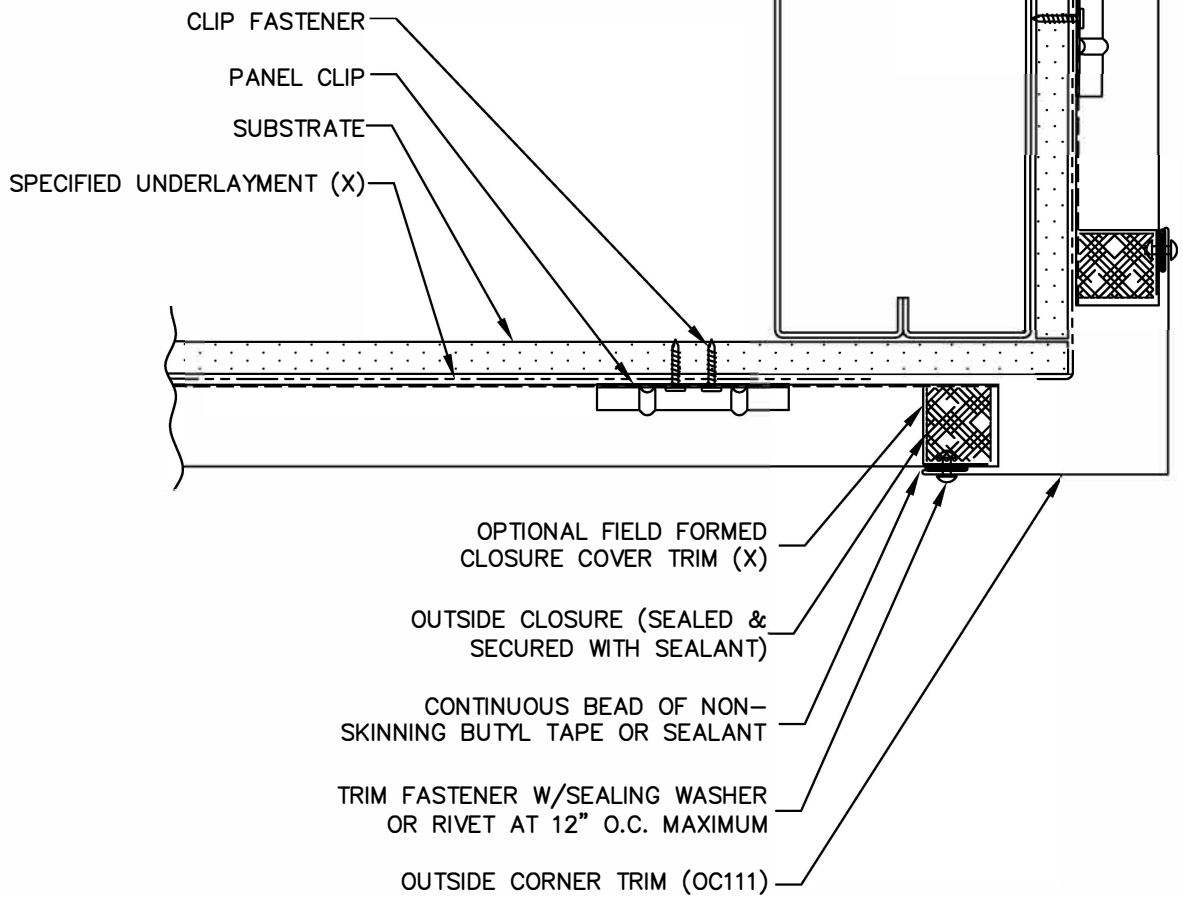
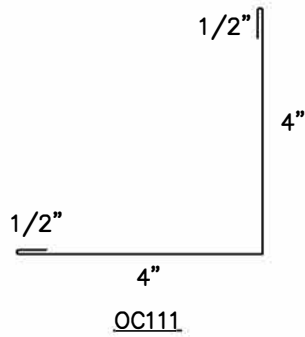


**FLEX SERIES**  
HORIZONTAL INSTALL.



END WALL

FXH-07



(X) - NOT BY AEP SPAN

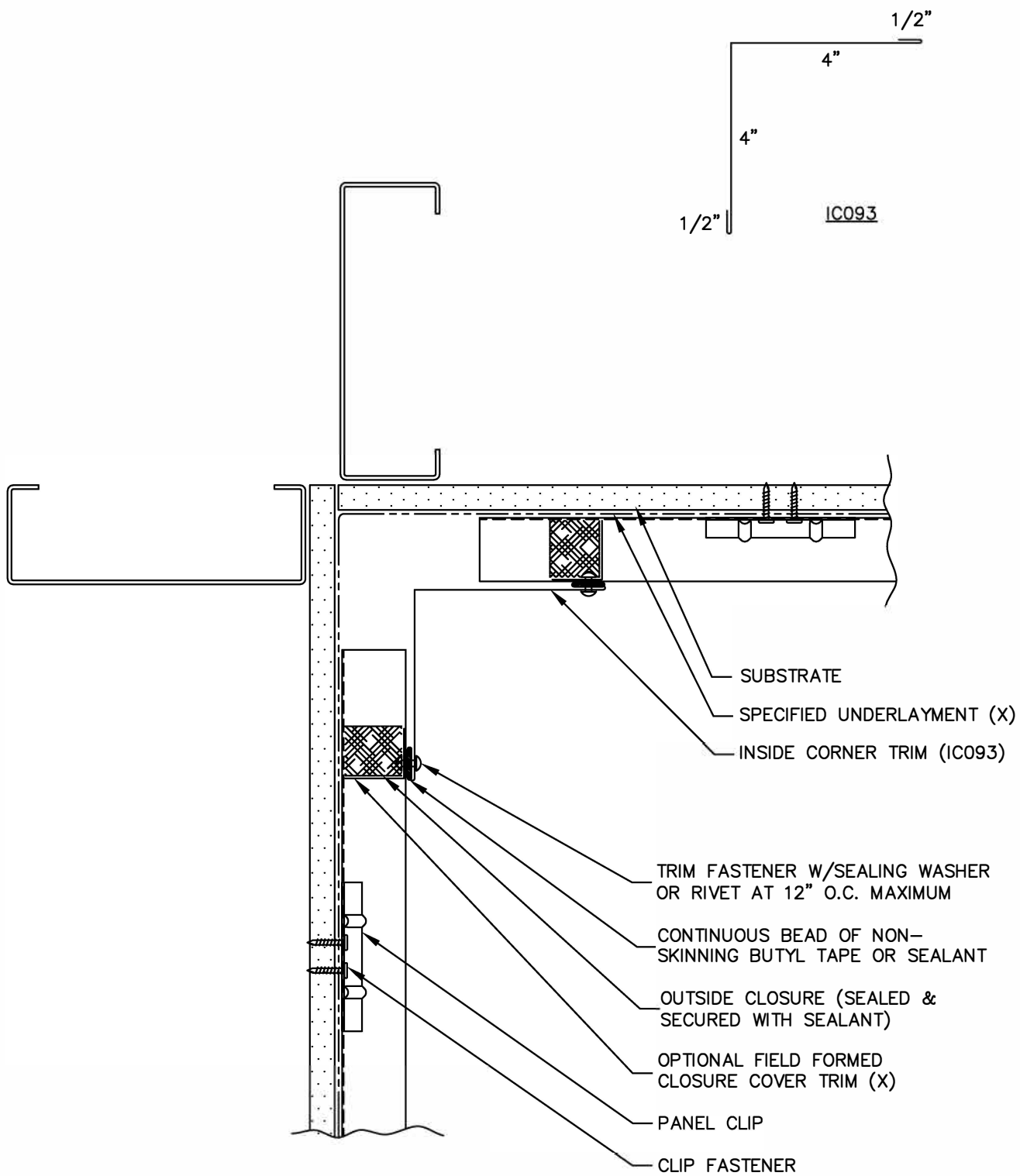


**FLEX SERIES**  
 HORIZONTAL INSTALL.



OUTSIDE CORNER

FXH-08



(X) - NOT BY AEP SPAN



**FLEX SERIES**  
HORIZONTAL INSTALL.

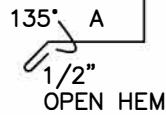
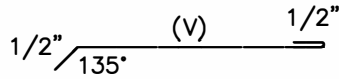
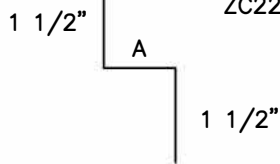


INSIDE CORNER

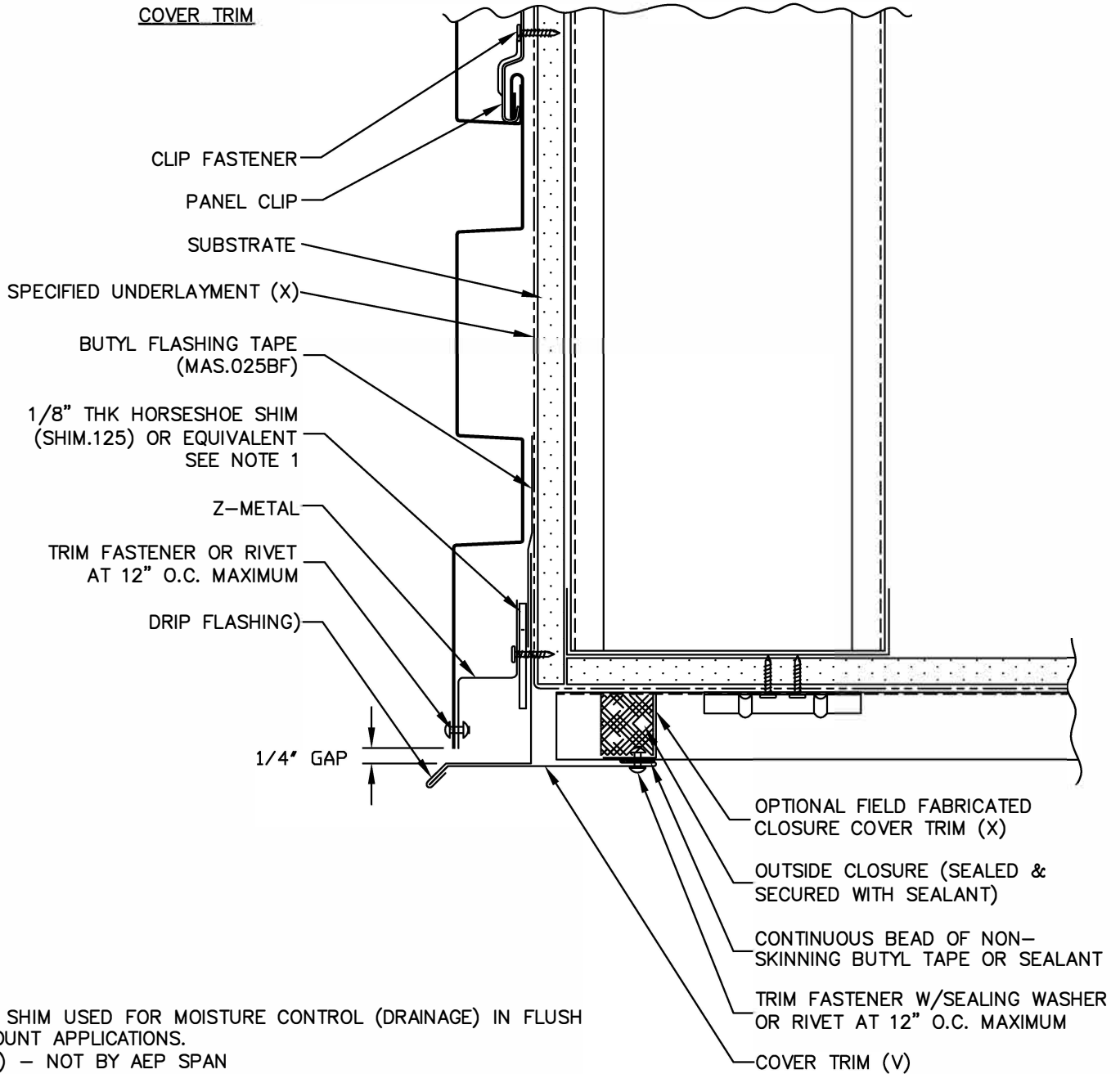
FXH-09

TRIM	DIM A	USAGE
ZC226	1 1/4"	1.2FX FLUSH MOUNT
ZC220	1 3/4"	1.2FX W/0.5" STANDOFF

TRIM	DIM A	USAGE
DF028	1 1/2"	1.2FX FLUSH MOUNT
DF029	2"	1.2FX W/0.5" STANDOFF



COVER TRIM



1. SHIM USED FOR MOISTURE CONTROL (DRAINAGE) IN FLUSH MOUNT APPLICATIONS.

(X) - NOT BY AEP SPAN

(V) - DIMENSIONS VARY BASED ON PROJECT CONDITIONS

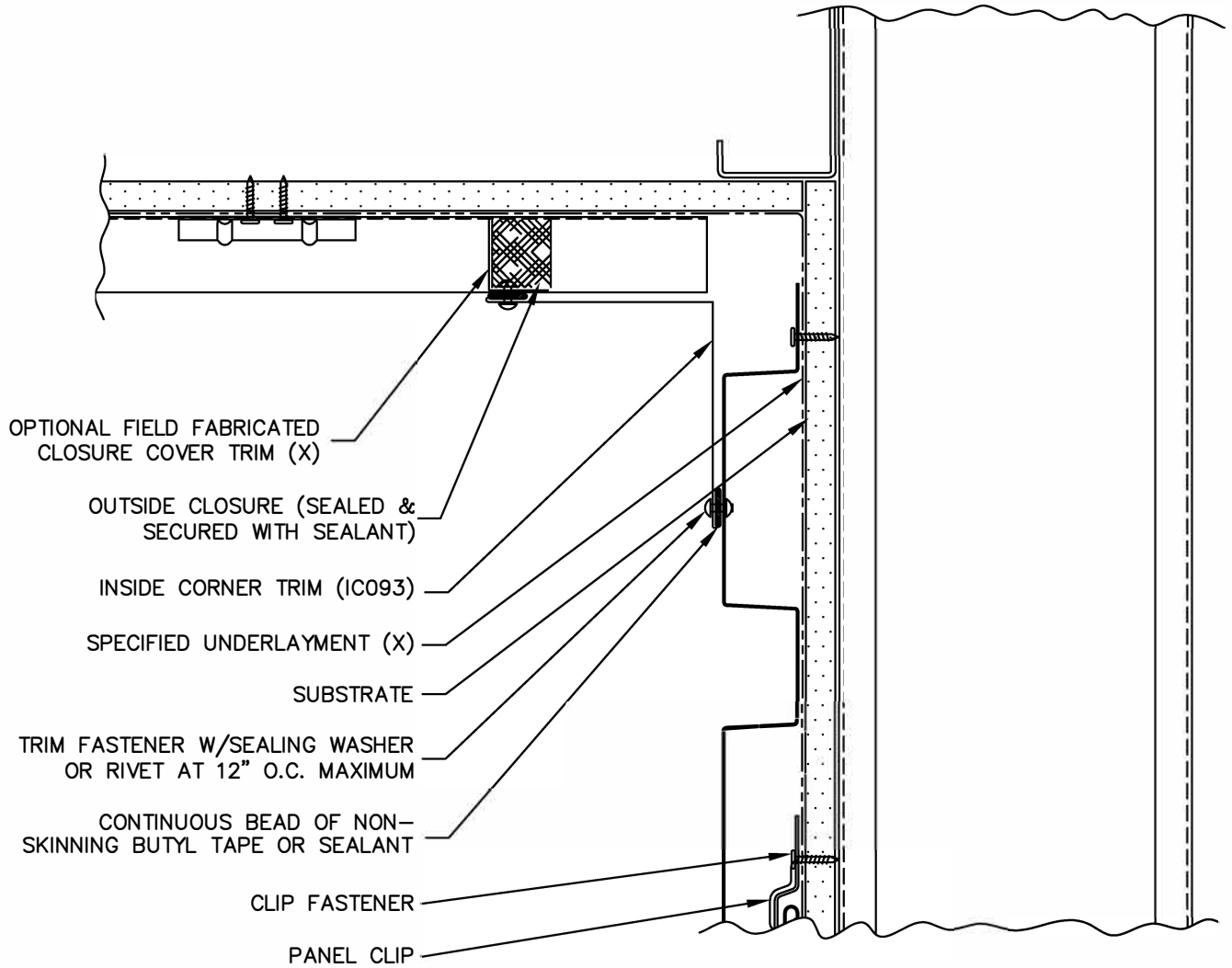
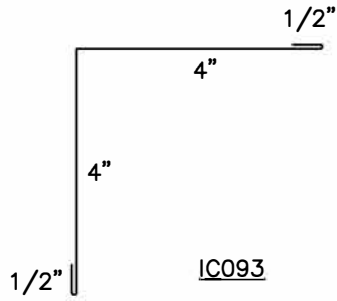


**FLEX SERIES**  
HORIZONTAL INSTALL.



SOFFIT (FRONT)

FXH-10



- OPTIONAL FIELD FABRICATED CLOSURE COVER TRIM (X)
- OUTSIDE CLOSURE (SEALED & SECURED WITH SEALANT)
- INSIDE CORNER TRIM (IC093)
- 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
- CLIP FASTENER
- PANEL CLIP

(X) - NOT BY AEP SPAN

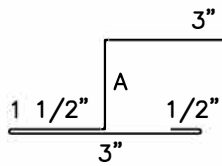


**FLEX SERIES**  
HORIZONTAL INSTALL.

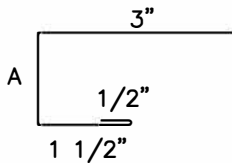
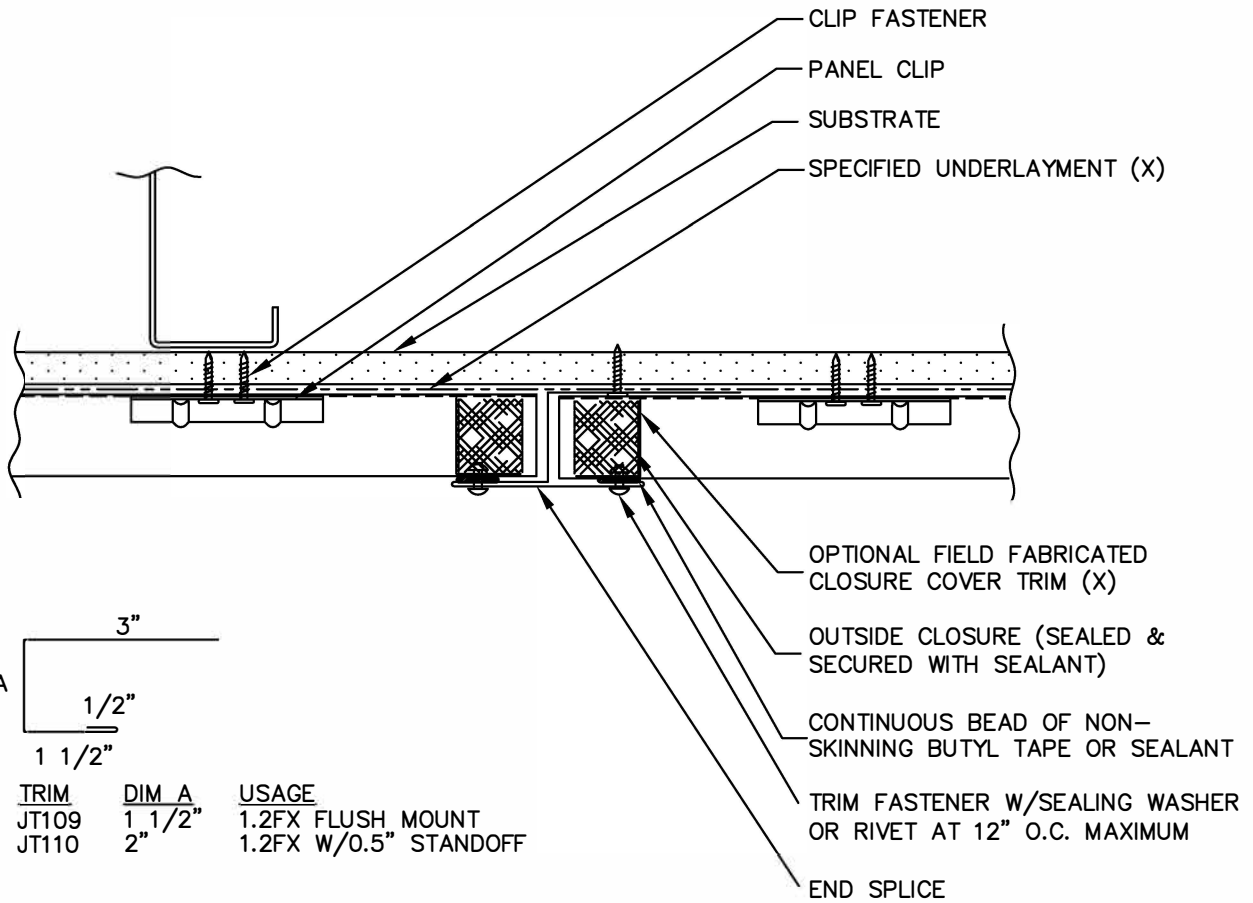


SOFFIT (BACK)

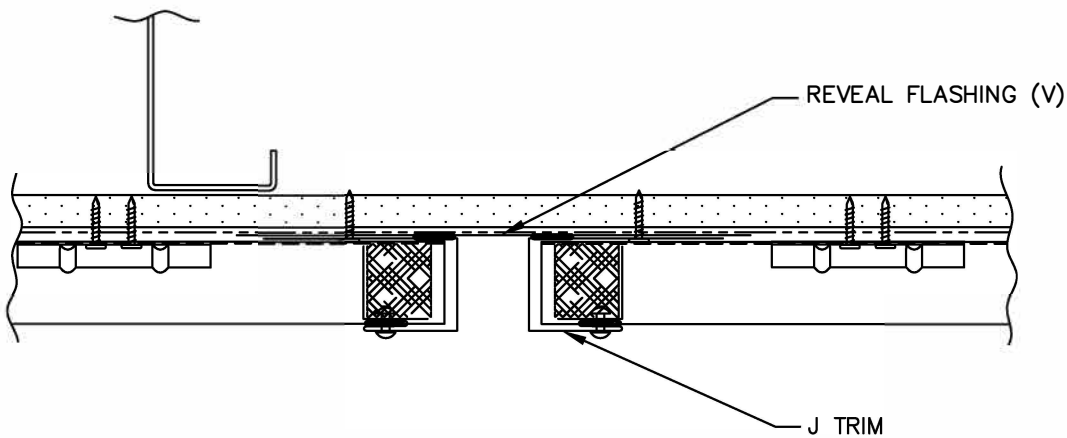
FXH-11



TRIM	DIM A	USAGE
MT111	1 1/2"	1.2FX FLUSH MOUNT
MT112	2"	1.2FX W/0.5" STANDOFF



TRIM	DIM A	USAGE
JT109	1 1/2"	1.2FX FLUSH MOUNT
JT110	2"	1.2FX W/0.5" STANDOFF



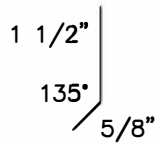
(X) - NOT BY AEP SPAN  
 (V) - DIMENSIONS VARY BASED ON PROJECT CONDITIONS



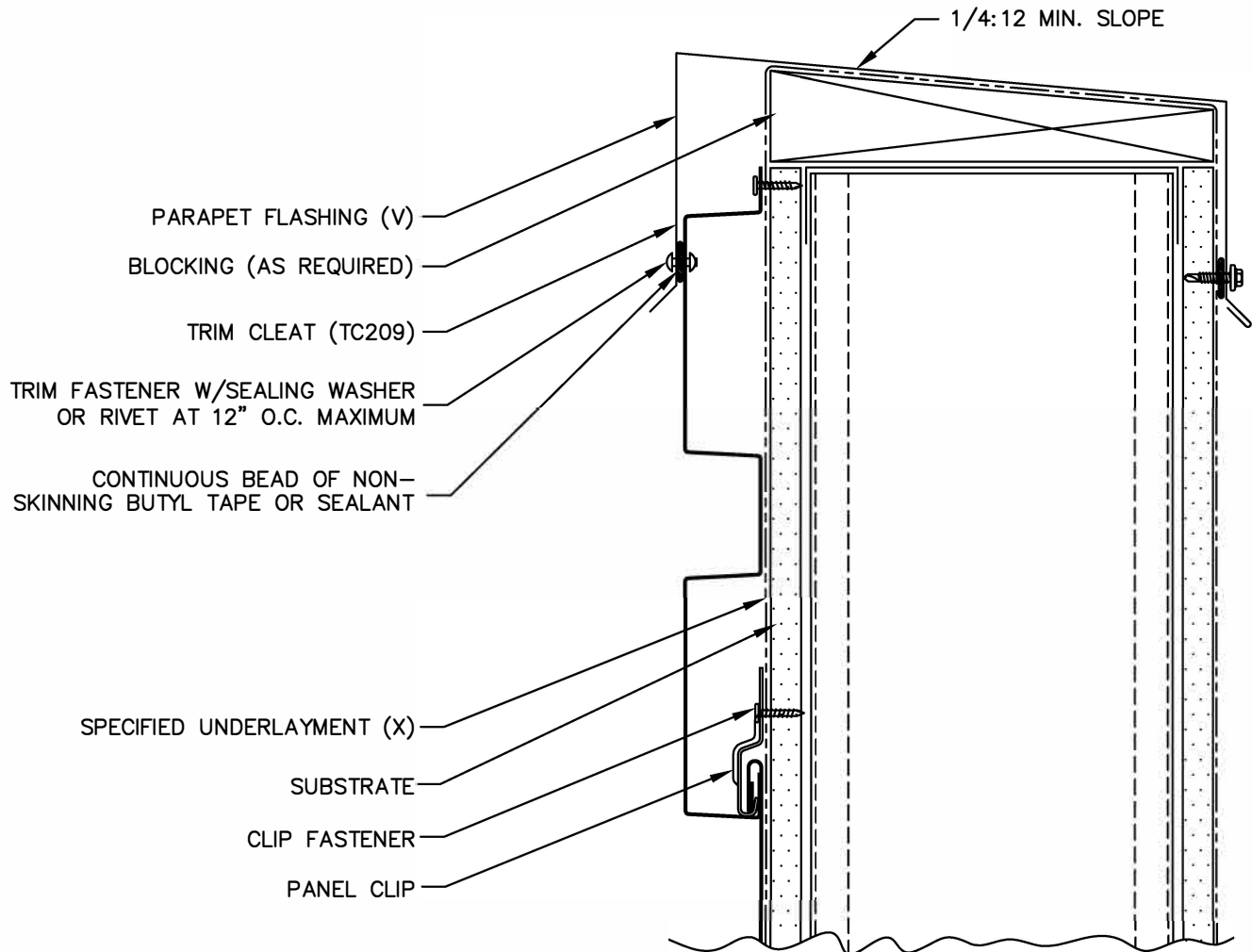
**FLEX SERIES**  
 HORIZONTAL INSTALL.

END SPLICE (W/TRIM)

FXH-12



TC209



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



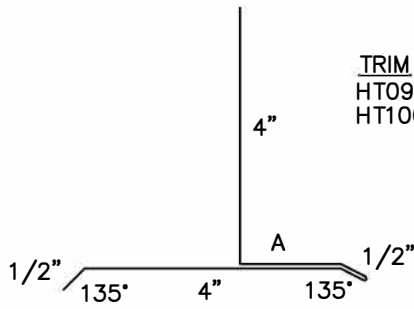
FLEX SERIES  
HORIZONTAL INSTALL.



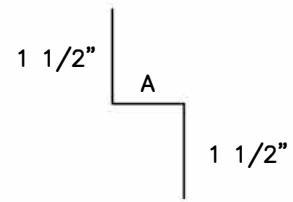
PARAPET

FXH-13

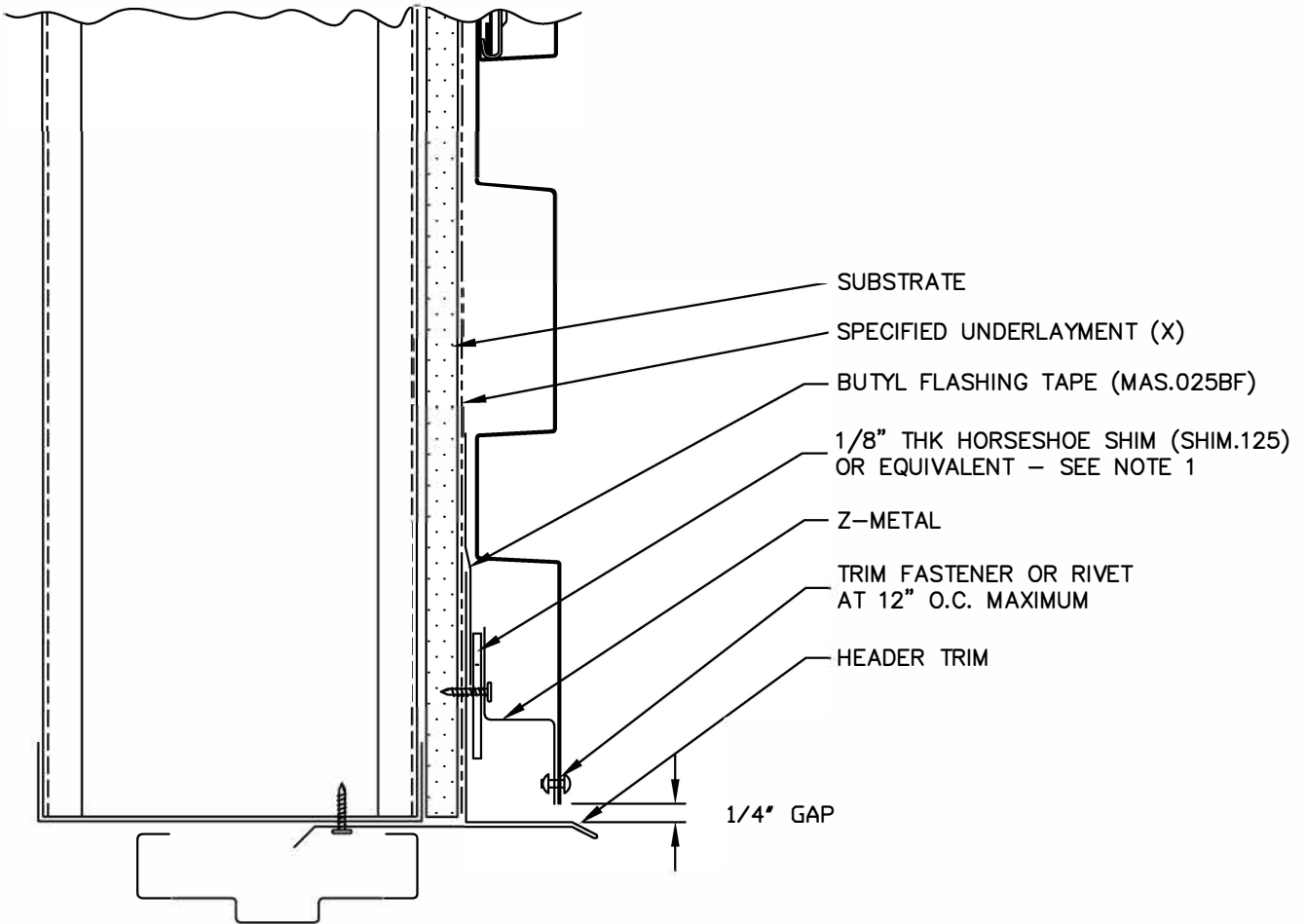




TRIM	DIM A	USAGE
HT095	1 1/2"	1.2FX FLUSH MOUNT
HT100	2"	1.2FX W/0.5" STANDOFF



TRIM	DIM A	USAGE
ZC226	1 1/4"	1.2FX FLUSH MOUNT
ZC220	1 3/4"	1.2FX W/0.5" STANDOFF



1. SHIM USED FOR MOISTURE CONTROL (DRAINAGE) IN FLUSH MOUNT APPLICATIONS.  
(X) - NOT BY AEP SPAN

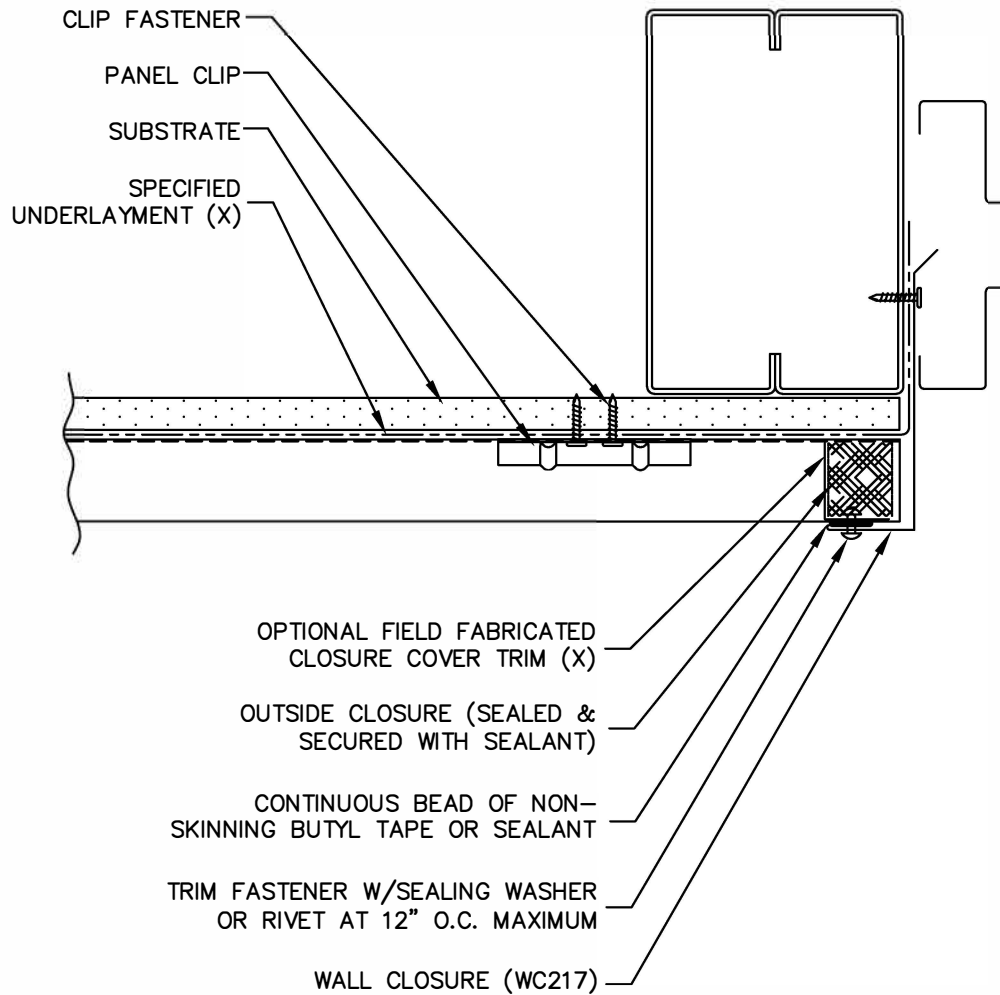
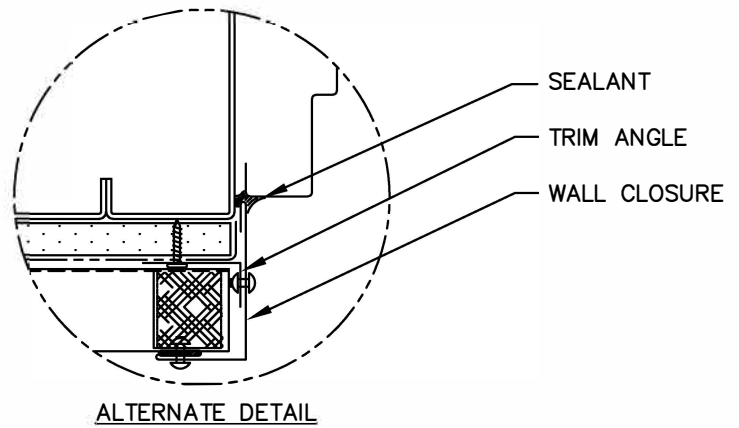
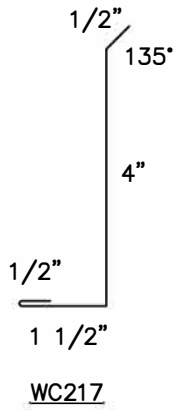


**FLEX SERIES**  
HORIZONTAL INSTALL.



DOOR / WINDOW  
(HEAD)

FXH-14



(X) - NOT BY AEP SPAN

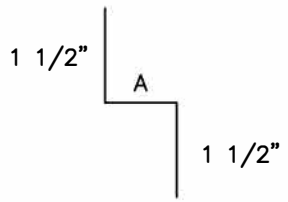


**FLEX SERIES**  
HORIZONTAL INSTALL.

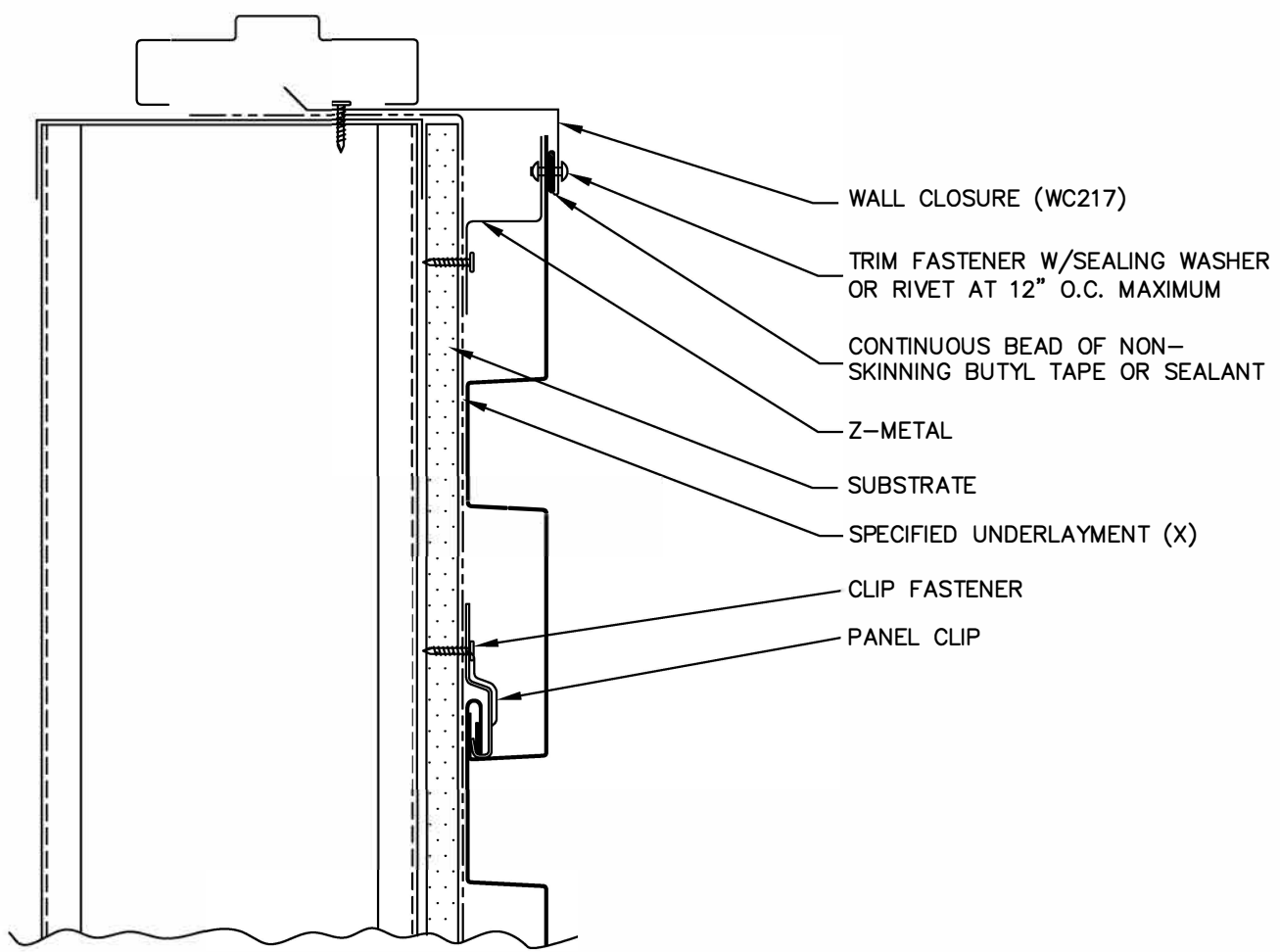
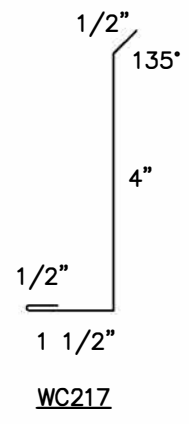


**DOOR / WINDOW**  
(JAMB)

**FXH-15**



TRIM	DIM. A	USAGE
ZC226	1 1/4"	1.2FX FLUSH MOUNT
ZC220	1 3/4"	1.2FX W/0.5" STANDOFF



- WALL CLOSURE (WC217)
- TRIM FASTENER W/SEALING WASHER OR RIVET AT 12" O.C. MAXIMUM
- CONTINUOUS BEAD OF NON-SKINNING BUTYL TAPE OR SEALANT
- Z-METAL
- SUBSTRATE
- SPECIFIED UNDERLAYMENT (X)
- CLIP FASTENER
- PANEL CLIP

(X) - NOT BY AEP SPAN



**FLEX SERIES**  
HORIZONTAL INSTALL.

DOOR / WINDOW  
(SILL)

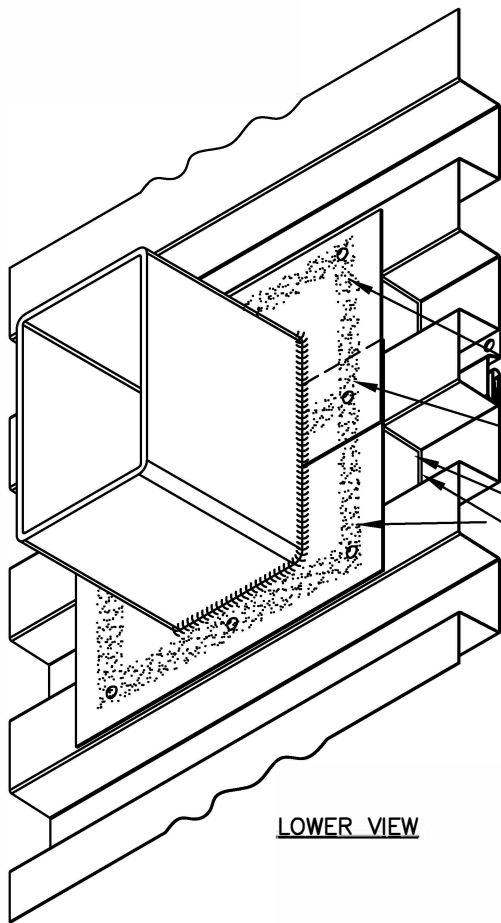
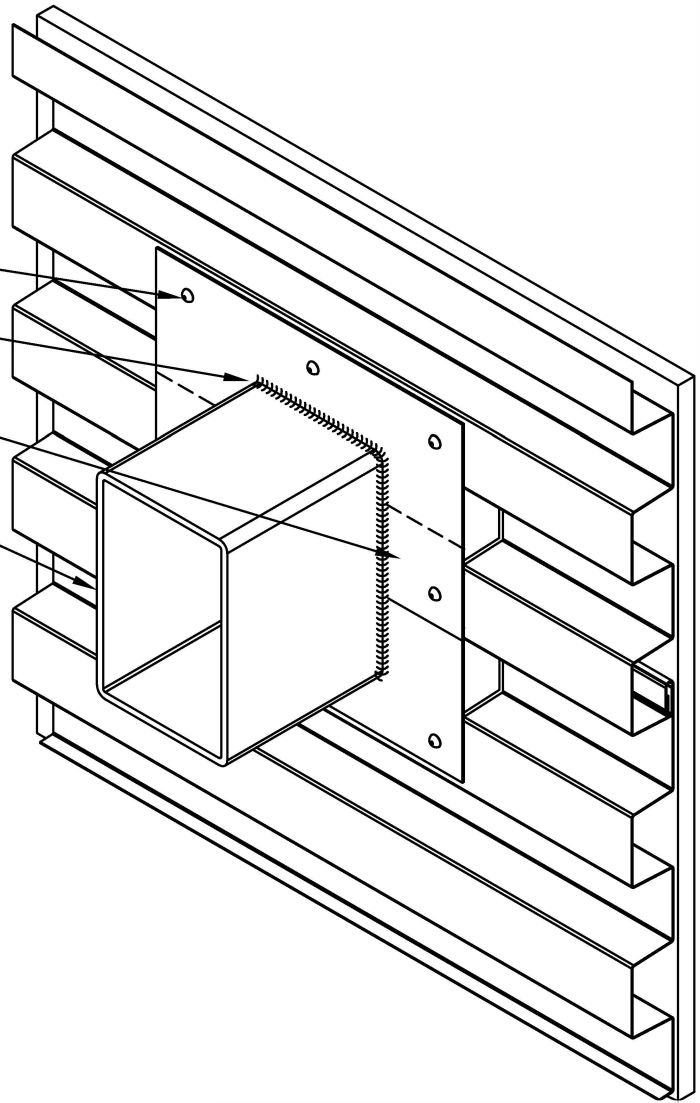
FXH-16

TRIM FASTENER W/SEALING  
WASHER, OR RIVET

SEALANT

OVERLAP UPPER/LOWER  
FLASHINGS

WALL PENETRATION



LOWER VIEW

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

OPTIONAL FIELD FABRICATED  
CLOSURE COVER TRIM (X)

OUTSIDE CLOSURE (SEALED &  
SECURED WITH SEALANT)

(X) - NOT BY AEP SPAN

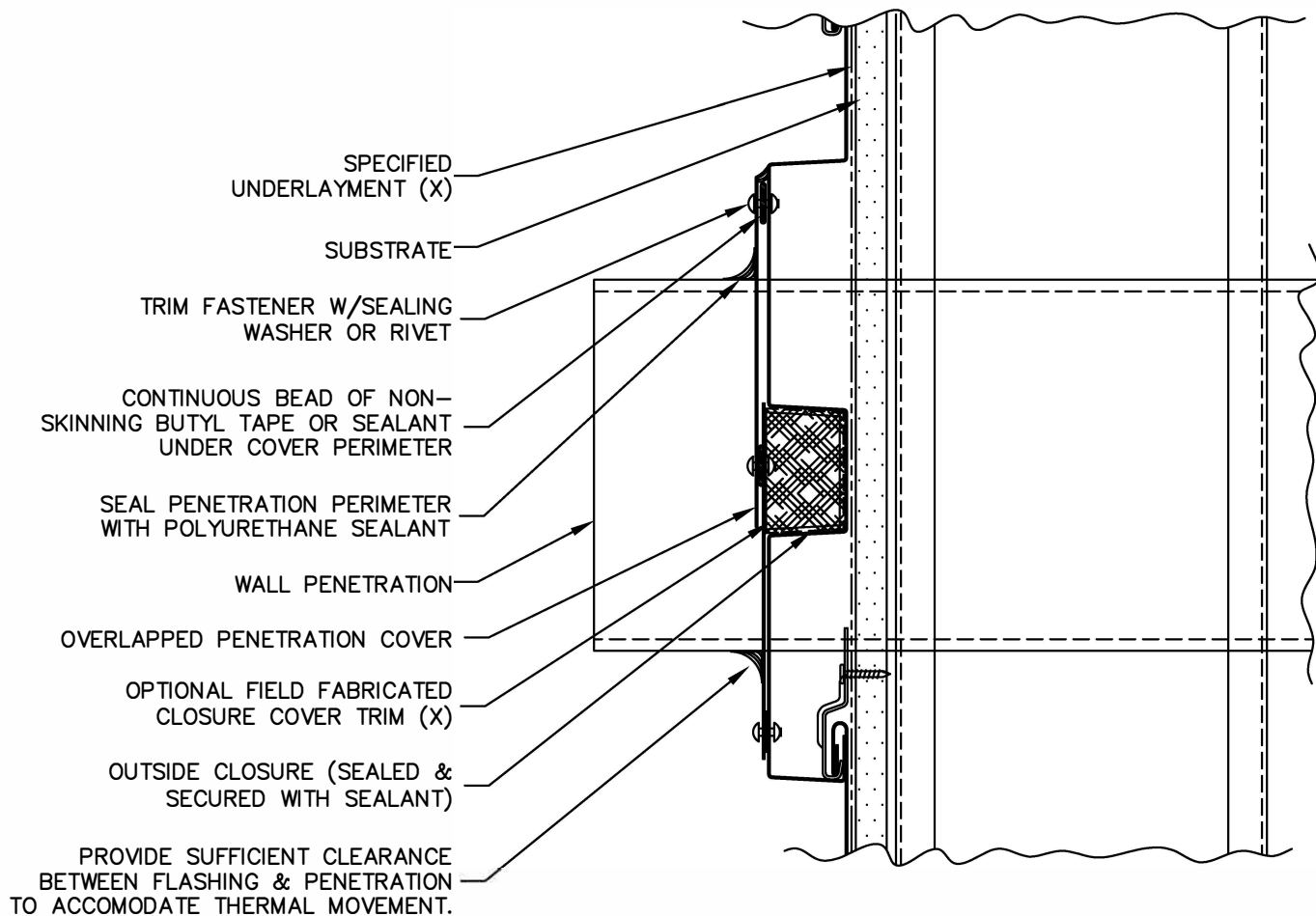


**FLEX SERIES**  
HORIZONTAL INSTALL.



WALL PENETRATION (3D)

FXH-17



(X) – NOT BY AEP SPAN

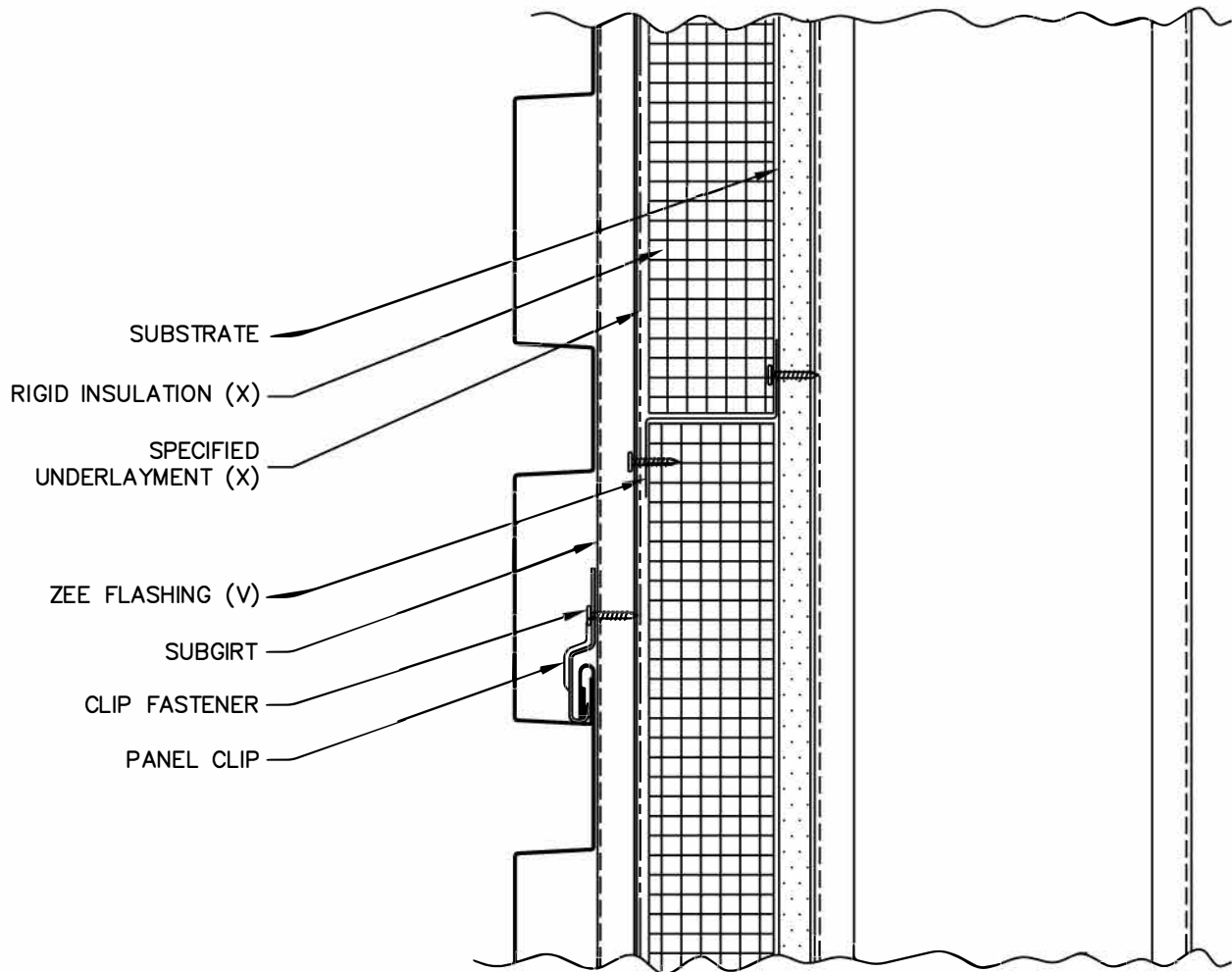


**FLEX SERIES**  
HORIZONTAL INSTALL.



WALL PENETRATION

FXH-18



(X) - NOT BY AEP SPAN

(V) - DIMENSIONS AND GAGE VARY BASED ON PROJECT CONDITIONS



**FLEX SERIES**  
HORIZONTAL INSTALL.



RIGID INSULATION

FXH-19

MANUFACTURING FACILITY:

**Tacoma, Washington**

2141 Milwaukee Way  
Tacoma, WA 98421

CORPORATE HEADQUARTERS:

**ASC Profiles LLC**

2110 Enterprise Boulevard  
West Sacramento, CA 95691

CUSTOMER SERVICE:

**800-733-4955**

Visit us at:

**[www.aepspan.com](http://www.aepspan.com)**

