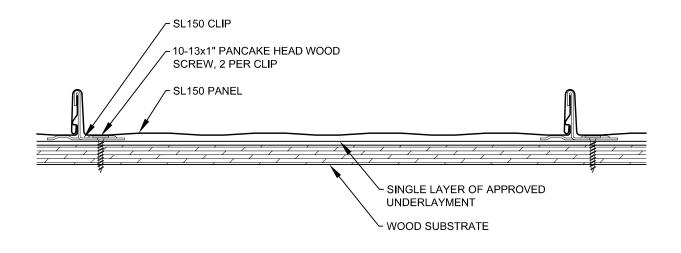


# **SL150 Standing Seam**Wood Substrate Master Details

### Architectural / Solid Substrate / Steep Slope

The following details are commonly used over steep sloped applications including those over solid substrates such as plywood or steel decking with rigid insulation. Such details are largely based on hydrokinetic (water shedding) design principles and architectural detailing.







# SL150 Standing Seam -Wood Substrate-

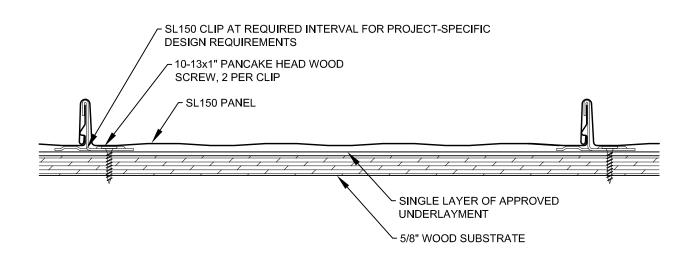
| Panel Information  | Detail No. |
|--|------------|
| Panel Application  | 0.10       |
| System Overview - Panel Profiles   |            |
| System Overview - Clips  |            |
| Thermal Gap Installation Chart - Steel   |            |
| Thermal Gap Installation Chart - Steel Thermal Gap Installation Chart - Aluminum |            |
| Thermal Gap installation Chart - Aluminum  | 0.31       |
| Eave Details   | Detail No. |
|  |            |
| Extended Eave  |            |
| Extended Eave - Steep Slope  |            |
| Extended Eave with Gutter  |            |
| Extended Eave with Gutter - Steep Slope  |            |
| Extended Eave with Soffit  | 1.30       |
| Extended Eave with Soffit & Gutter   |            |
| Extended Eave with Vertical Flush Panel  | 1.50       |
| Extended Eave with Vertical Standing Seam Panel                                  | 1.60       |
| Extended Eave Lap Detail   | 1.90       |
| - · · - · · ·  |            |
| Gable Details  | Detail No. |
| Gable - Extended Drip  | 2 10       |
| Gable - Exterided Drip   |            |
| Gable - Box with Zee Closure   |            |
| Box Gable Lap Detail   |            |
| Бох баше сар Бетан   | 2.90       |
| Valley Details   | Detail No. |
|  |            |
| Valley - Integral Cleat  |            |
| Valley - Offset Cleat  |            |
| Valley Lap Detail  | 3.90       |
|  | 5 ( ".)    |
| Ridge & Hip Details  | Detail No. |
| Standard Ridge & Hip   | 4.10       |
| Vented Ridge   |            |
| Vented Nidge  Vented Ridge-to-Standard Ridge Transition                          |            |
|  |            |
| Ridge Termination at Valley  |            |
| Ridge & Hip Lap Detail   |            |
| Ridge Cap Expansion Detail   | 4.91       |
| Peak Details   | Detail No. |
|  |            |
| Peak Detail  |            |
| Vented Peak Detail   |            |
| Peak Detail with Vertical Flush Panel  | 5.40       |

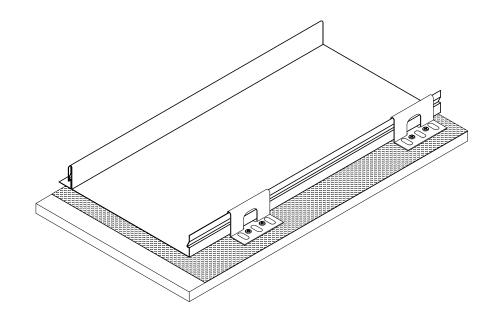




## SL150 Standing Seam -Wood Substrate-

| High Wall & Low Wall Details                                | Detail No. |
|---|------------|
| High Wall - Reglet  | 6.10       |
| Vented High Wall - Reglet                                   |            |
| High Wall - Surface Mount                                   |            |
| High Wall - Vertical Panel with Sill                        |            |
|   |            |
| High Wall - Parapet   |            |
| Valley Wall Detail  |            |
| High Wall Lap Detail  | 6.90       |
| Sidewall Details  | Detail No. |
| Oideanall Devolution the Outstanding Assault                | 7.44       |
| Sidewall - Reglet with Subflashing Angle                    | 7.11       |
| Sidewall - Surface Mount with Subflashing Angle             | 7.12       |
| Sidewall - Wood Framing & Siding with Subflashing Angle     | 7.13       |
| Sidewall - Reglet with J-Channel Subflashing                | 7.21       |
| Sidewall - Surface Mount with J-Channel Subflashing         | 7.22       |
| Sidewall - Wood Framing & Siding with J-Channel Subflashing | 7.23       |
| Sidewall - Reglet with Zee Closure                          | 7.31       |
| Sidewall - Surface Mount with Zee Closure                   | 7.32       |
| Sidewall - Wood Framing & Siding with Zee Closure           | 7.33       |
| Sidewall Expansion Joint                                    | 7.40       |
| Expansion Joint Mid-Roof                                    | 7.50       |
| Sidewall Lap Detail   | 7.90       |
| Slope Transition Details                                    | Detail No. |
| Ol T "  | 0.40       |
| Slope Transition  |            |
| Transition at Membrane Roofing                              | 8.20       |
| General Information Details                                 | Detail No. |
| Panel Hemming   | 10 10      |
| End Lap Detail - Steep Slope                                |            |
| Zee Closure Installation                                    | 10.13      |
| Pipe Penetration  |            |
| Pipe PenetrationPipe Penetration Through Panel Rib          |            |
| Curb at High Wall & Low Wall                                |            |
| Curb at Right Wall & Low Wall  Curb at Sidewall             |            |
|   |            |
| Curb Installation Series                                    | UKD 1-0    |





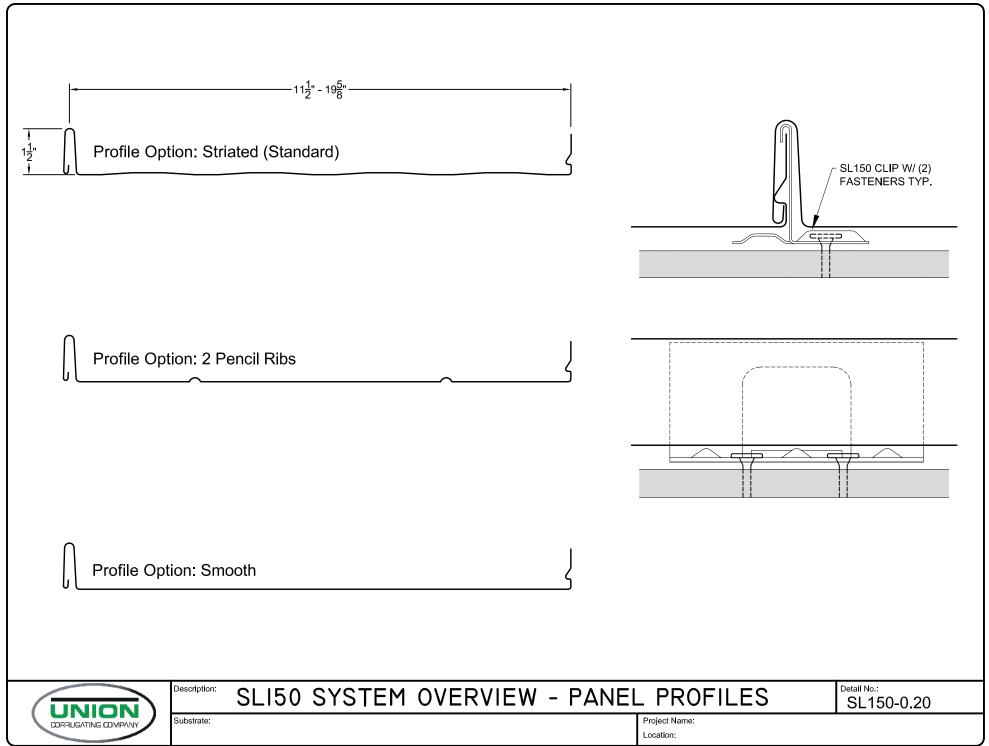


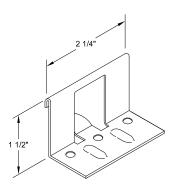
SLI50 APPLICATION

etail No.:

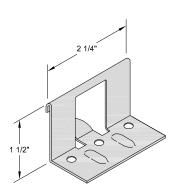
SL150-WS-0.10

Substrate: WOOD SUBSTRATE

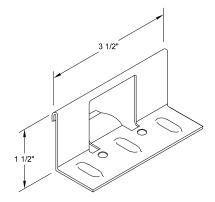




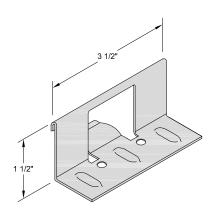
Clip 10 20 Ga. Galvanized 1.5" x 2.25"



Clip 12
20 Ga. Stainless Steel
1.5" x 2.25"
Recommended for use with aluminum panels



Clip 11 UL 18 Ga. Galvanized 1.5" x 3.5"



Clip 13 UL

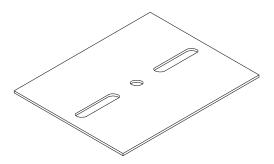
18 Ga. Stainless Steel

1.5" x 3.5"

Recommended for use with aluminum panels

#### **IMPORTANT INSTALLATION NOTE**

- SL<sub>150</sub> CLIPS ALLOW FOR UNLIMITED THERMAL EXPANSION/CONTRACTION OF PANELS.
- "UL" CLIP TYPES MAY BE REQUIRED TO MEET SPECIFIC WIND UPLIFT TESTING.



4" X 5" Bearing Plate
16 Ga. Galvanized
Required for use when clips are applied
directly over rigid board insulation



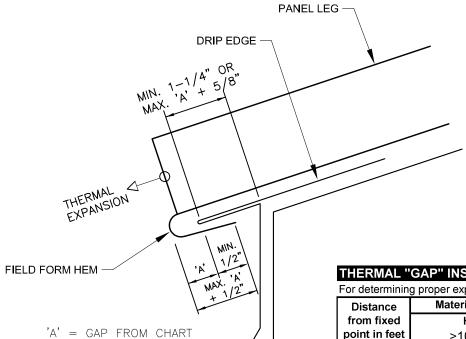
Description:

### SLI50 SYSTEM OVERVIEW - CLIPS

Detail No.:

SL150-0.21

Substrate:



#### THERMAL "GAP" INSTALLATION CHART (In inches) - STEEL

For determining proper expansion/contraction gap at panel ends during installation

| Distance      | Material Temperature (Surface Temperature) During Installation |   |               |       |        |       |   |      |
|---------------|--|---|---------------|-------|--------|-------|---|------|
| from fixed    | Hot<br>>100° F   |   | Warm          |       | Cold   |       |   |      |
| point in feet |  |   | 100° to 50° F |       | <50° F |       |   |      |
| 10            | 0.145  |   | 1/8           | 0.072 | 1/16   | 0.000 | 0 |      |
| 20            | 0.289  |   | 5/16          | 0.145 | 1/8    | 0.000 | 0 |      |
| 30            | 0.434  |   | 7/16          | 0.217 | 3/16   | 0.125 |   | 1/8  |
| 40            | 0.579  |   | 9/16          | 0.289 | 5/16   | 0.125 |   | 1/8  |
| 50            | 0.724  |   | 3/4           | 0.362 | 3/8    | 0.188 |   | 3/16 |
| 60            | 0.868  |   | 7/8           | 0.434 | 7/16   | 0.188 |   | 3/16 |
| 70            | 1.013  | 1 |               | 0.507 | 1/2    | 0.250 |   | 1/4  |
| 80            | 1.158  | 1 | 3/16          | 0.579 | 9/16   | 0.250 |   | 1/4  |
| 90            | 1.302  | 1 | 5/16          | 0.651 | 5/8    | 0.375 |   | 3/8  |
| 100           | 1.447  | 1 | 7/16          | 0.724 | 3/4    | 0.375 |   | 3/8  |

<sup>\*</sup> Chart based on temperature differential of:

180 degrees F



Description: THERMAL GAP INSTALLATION CHART - STEEL

Detail No.:

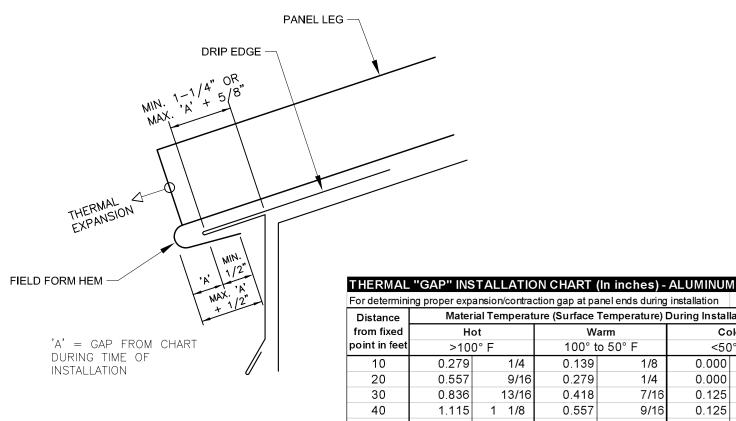
SL150-0.30

Substrate:

Project Name: Location:

DURING TIME OF INSTALLATION

<sup>\*</sup> Coefficient of thermal expansion for steel: 0.0000067



| Distance      | Material Temperature (Surface Temperature) During Installation |         |        |          |       |      |
|---------------|--|---------|--------|----------|-------|------|
| from fixed    | He   | Hot     |        | arm      | Co    | old  |
| point in feet | >100° F  |         | 100° t | :o 50° F | <50   | )° F |
| 10            | 0.279  | 1/4     | 0.139  | 1/8      | 0.000 | 0    |
| 20            | 0.557  | 9/16    | 0.279  | 1/4      | 0.000 | 0    |
| 30            | 0.836  | 13/16   | 0.418  | 7/16     | 0.125 | 1/8  |
| 40            | 1.115  | 1 1/8   | 0.557  | 9/16     | 0.125 | 1/8  |
| 50            | 1.393  | 1 3/8   | 0.697  | 11/16    | 0.188 | 3/16 |
| 60            | 1.672  | 1 11/16 | 0.836  | 13/16    | 0.188 | 3/16 |
| 70            | 1.950  | 1 15/16 | 0.975  | 1        | 0.250 | 1/4  |
| 80            | 2.229  | 2 1/4   | 1.115  | 1 1/8    | 0.250 | 1/4  |
| 90            | 2.508  | 2 1/2   | 1.254  | 1 1/4    | 0.375 | 3/8  |
| 100           | 2.786  | 2 13/16 | 1.393  | 1 3/8    | 0.375 | 3/8  |

\* Chart based on temperature differential of: 180 degrees F
\* Coefficient of thermal expansion for alum.: 0.0000129

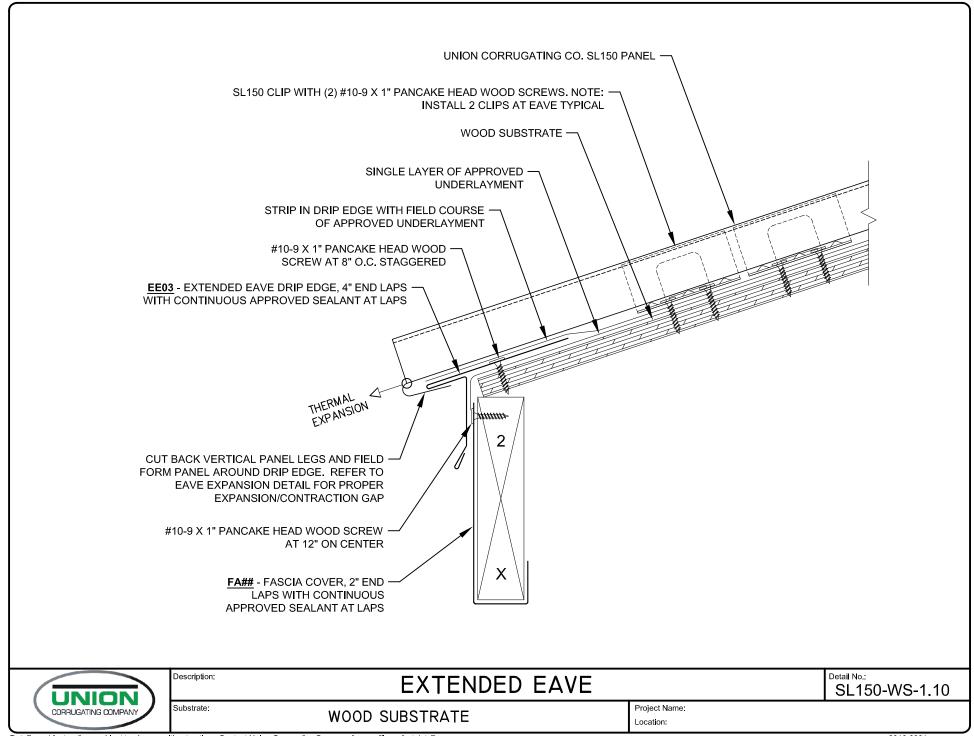


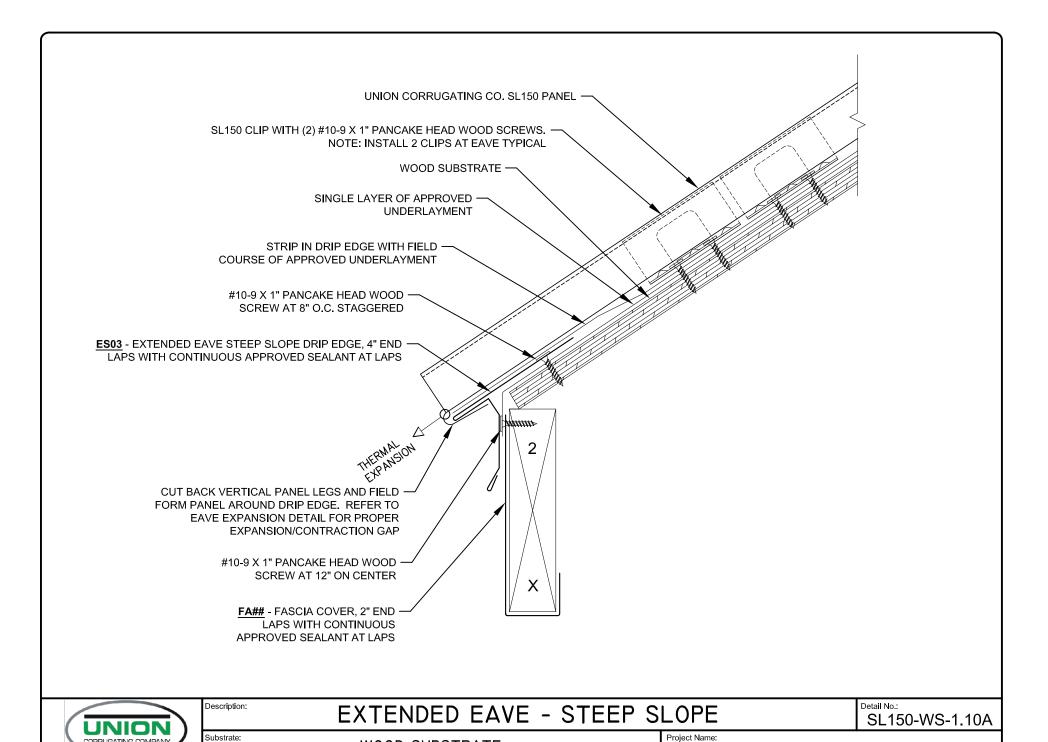
Description: THERMAL GAP INSTALLATION CHART - ALUMINUM

Substrate: Project Name:

Project Name: Location: Detail No.:

SL150-0.31

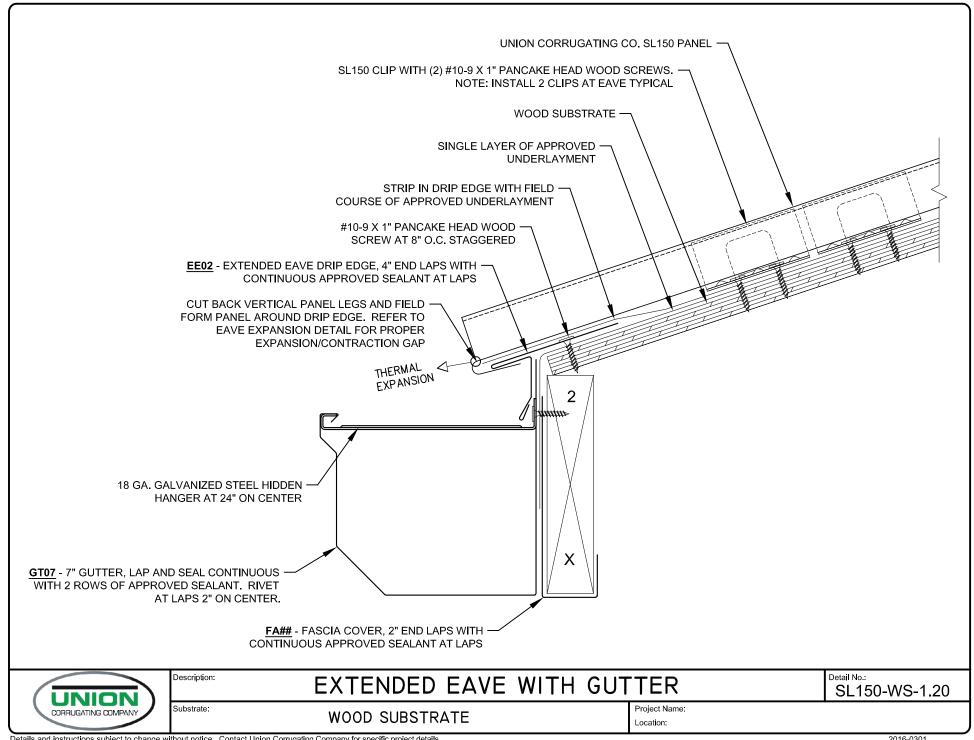


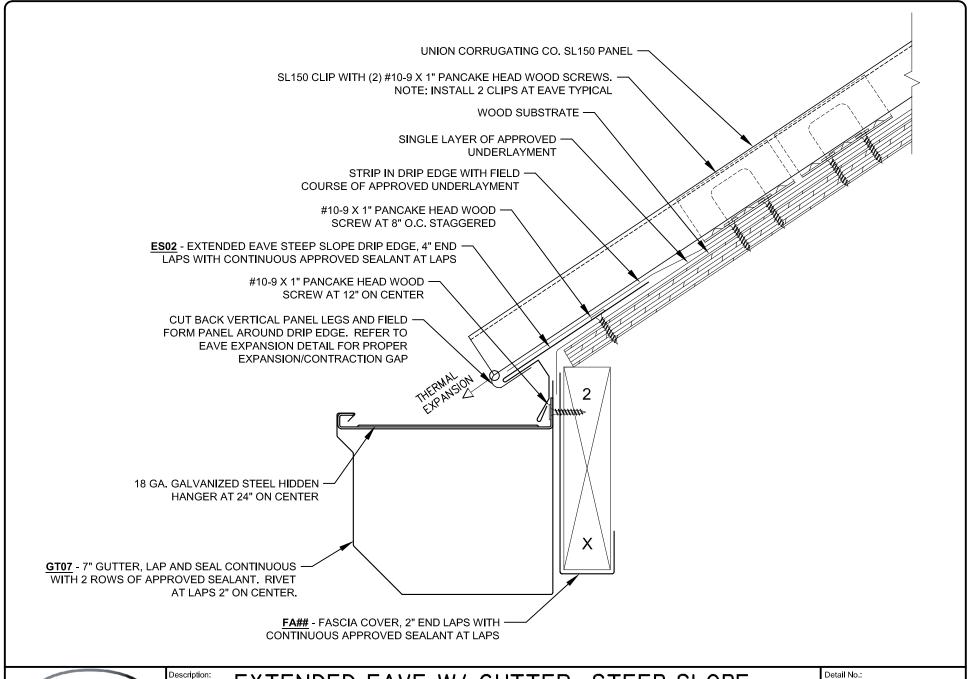


Location:

Details and instructions subject to change without notice. Contact Union Corrugating Company for specific project details.

2016-0301



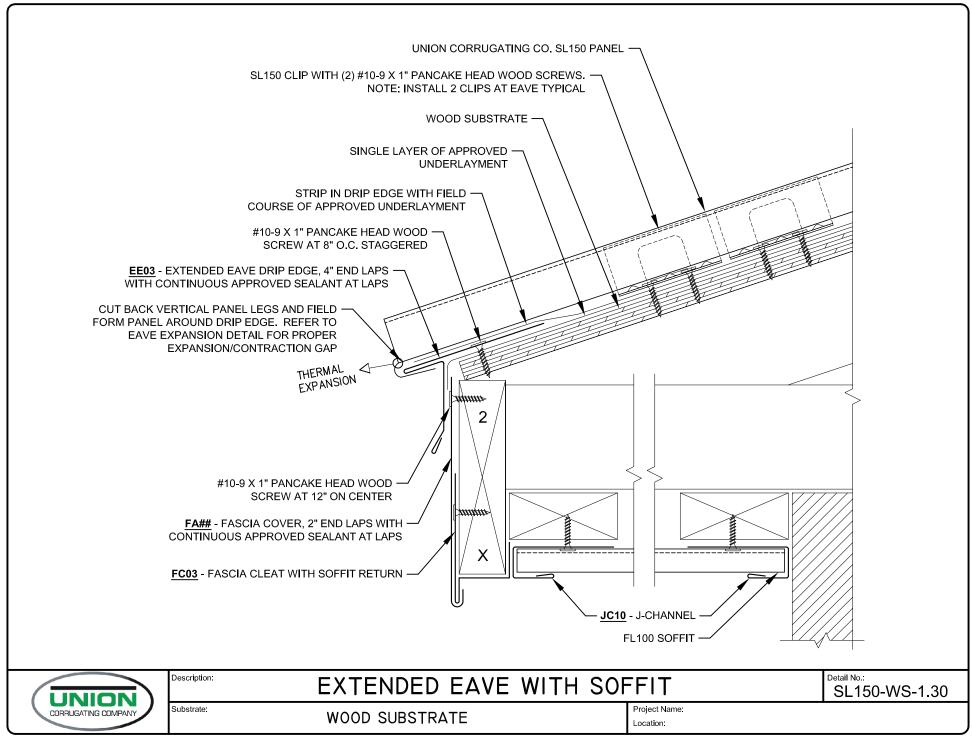


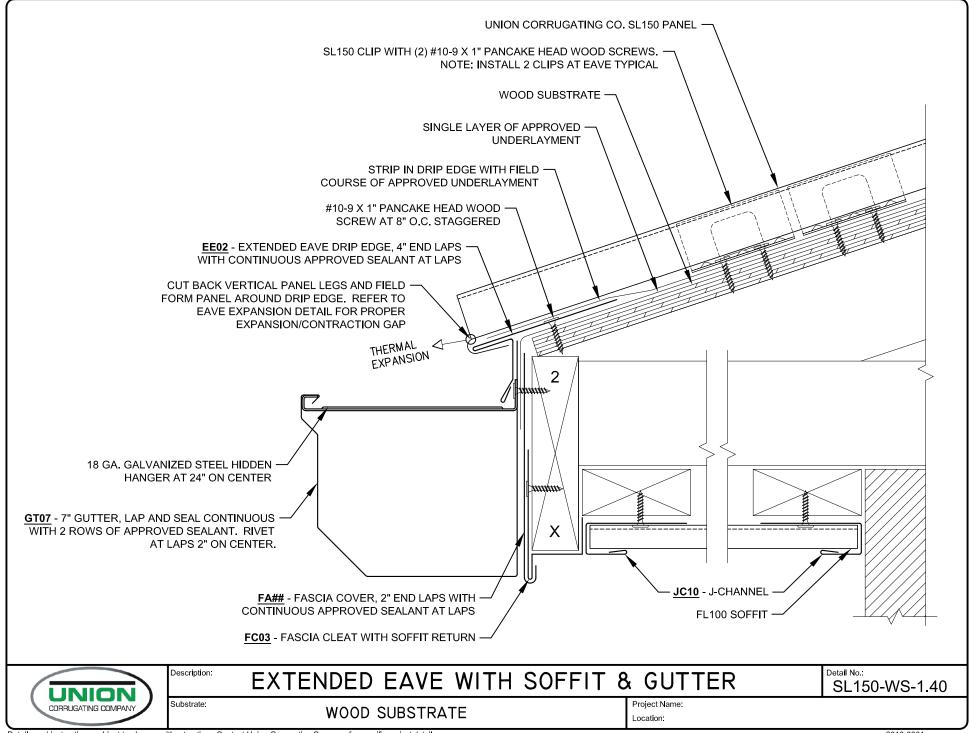


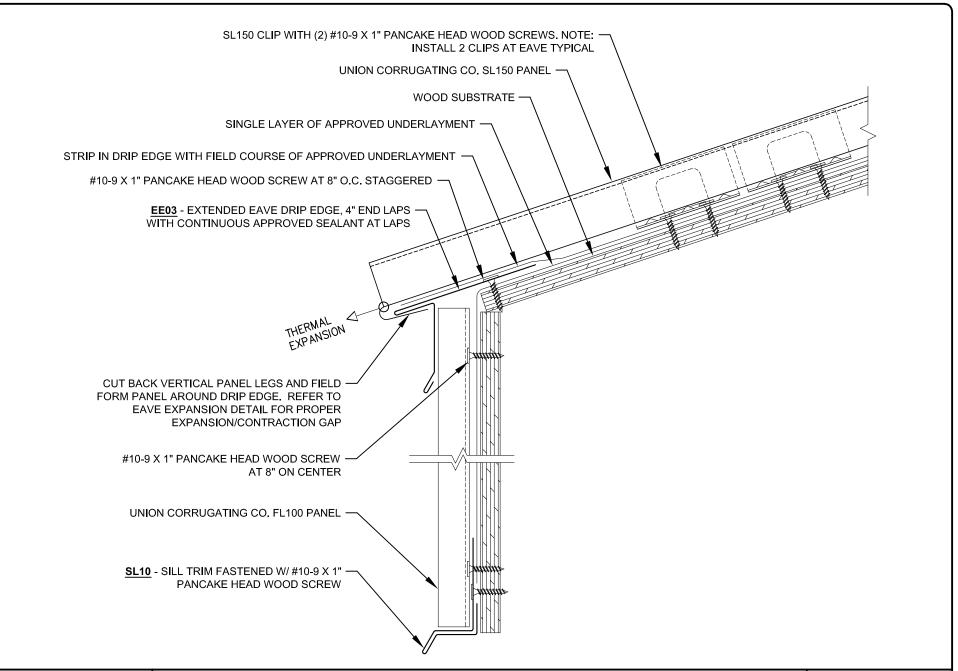
| EXTENDED EAVE W/ GUTTER- STEEP SLOPE

SL150-WS-1.20A

Substrate: WOOD SUBSTRATE









Description:

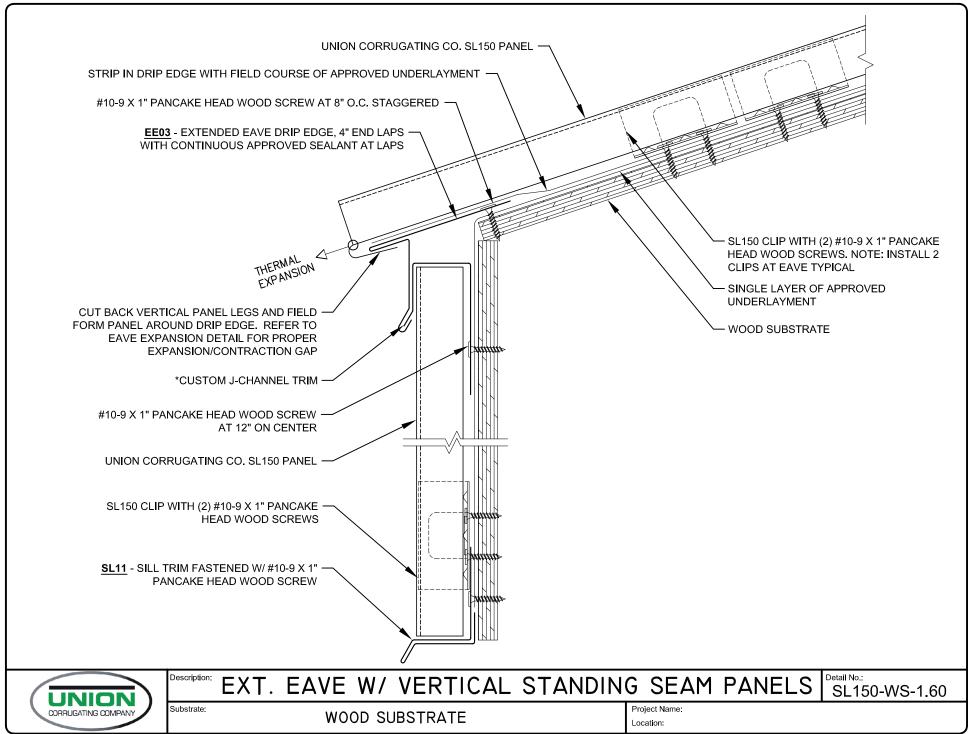
EXTENDED EAVE W/ VERTICAL FLUSH PANEL

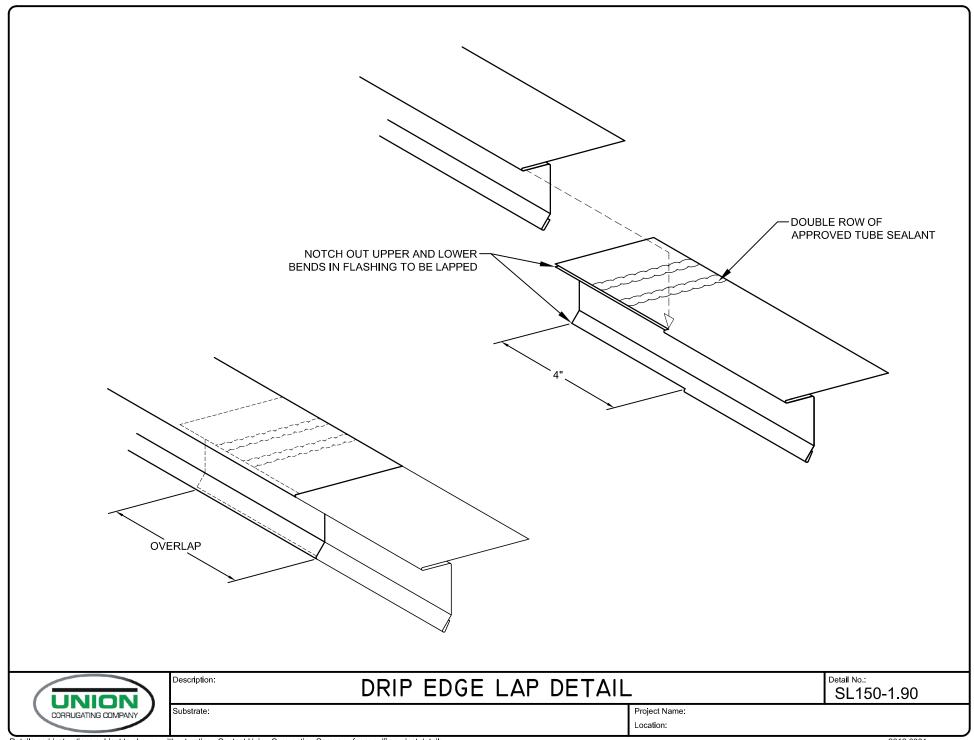
Detail No.:

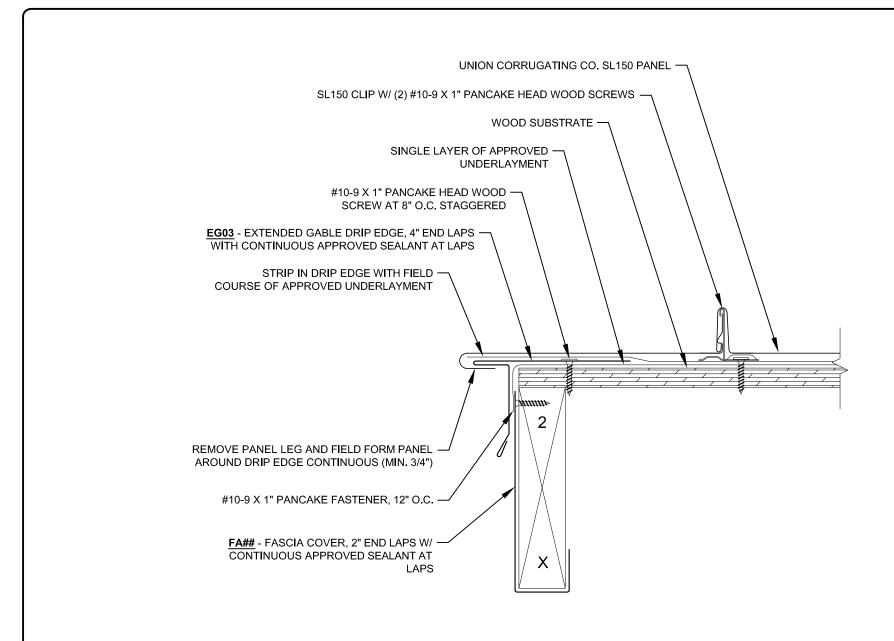
SL150-WS-1.50

Substrate:

WOOD SUBSTRATE





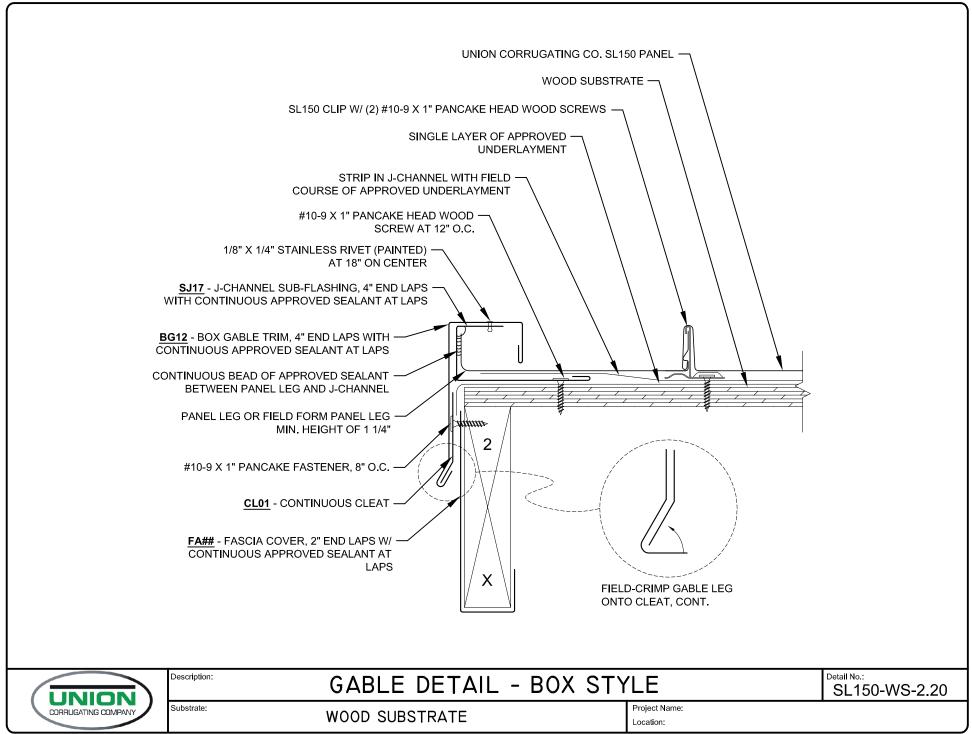


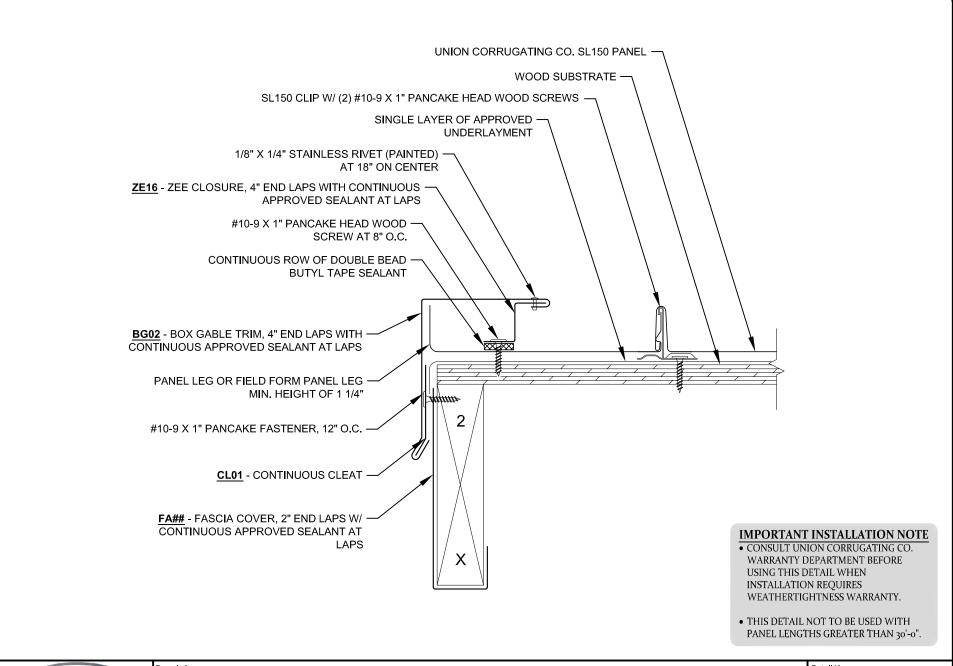


GABLE DETAIL - EXTENDED DRIP STYLE

Detail No.: SL150-WS-2.10

Substrate: WOOD SUBSTRATE







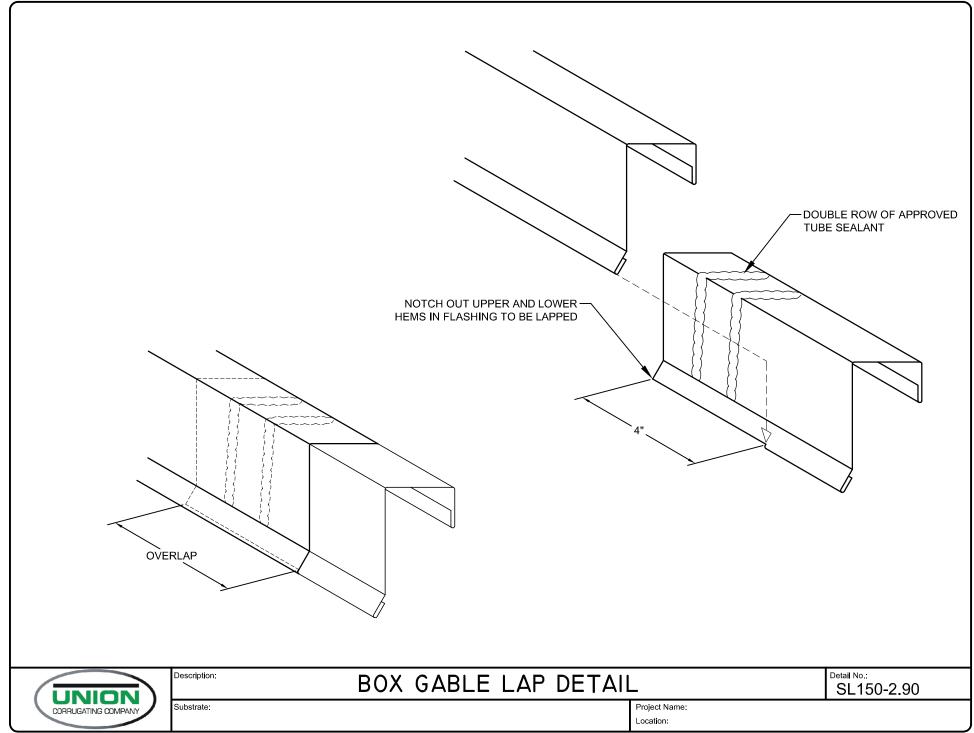
Description: GABLE DETAIL - BOX STYLE w/ Z-CLOSURE

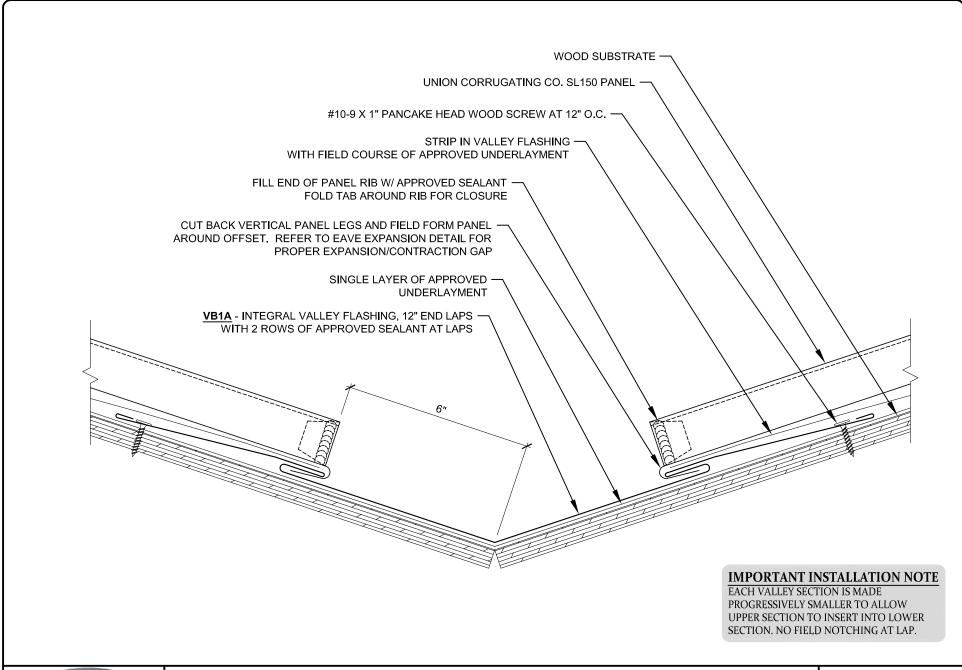
Detail No.:

SL150-WS-2.30

Substrate:

WOOD SUBSTRATE







Description:

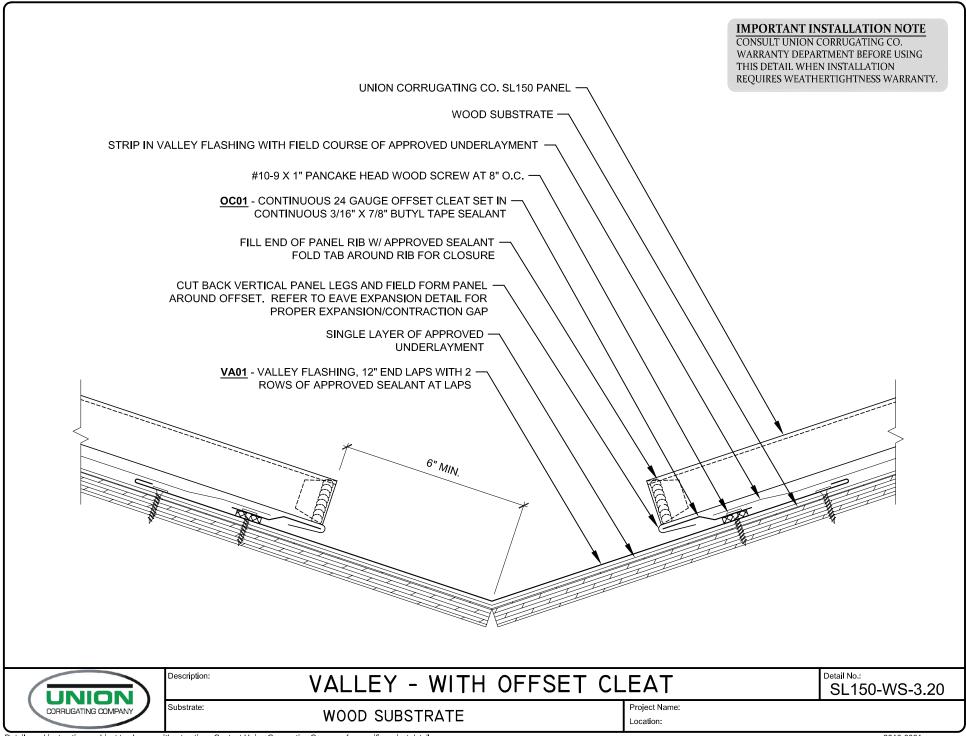
VALLEY DETAIL - INTEGRAL CLEAT

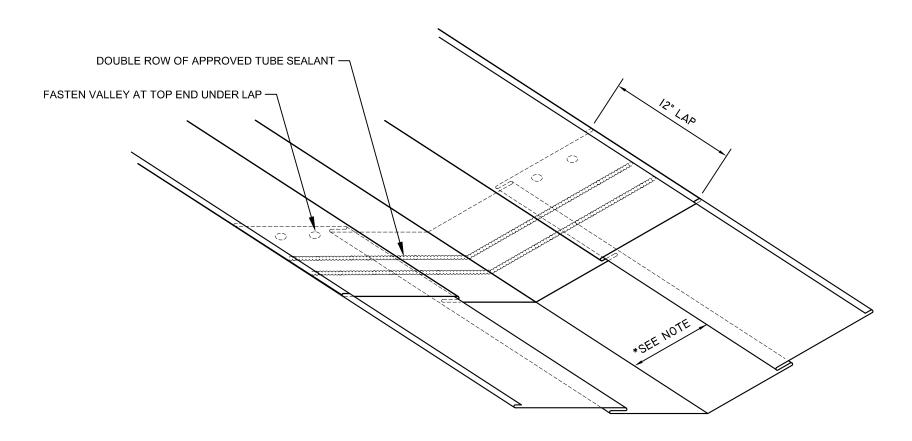
Detail No.:

SL150-WS-3.10

Substrate: WOOD SUBSTRATE Project Name: Location:

Details and instructions subject to change without notice. Contact Union Corrugating Company for specific project details.





TELESCOPING VALLEY FLASHING LAP

#### IMPORTANT INSTALLATION NOTE

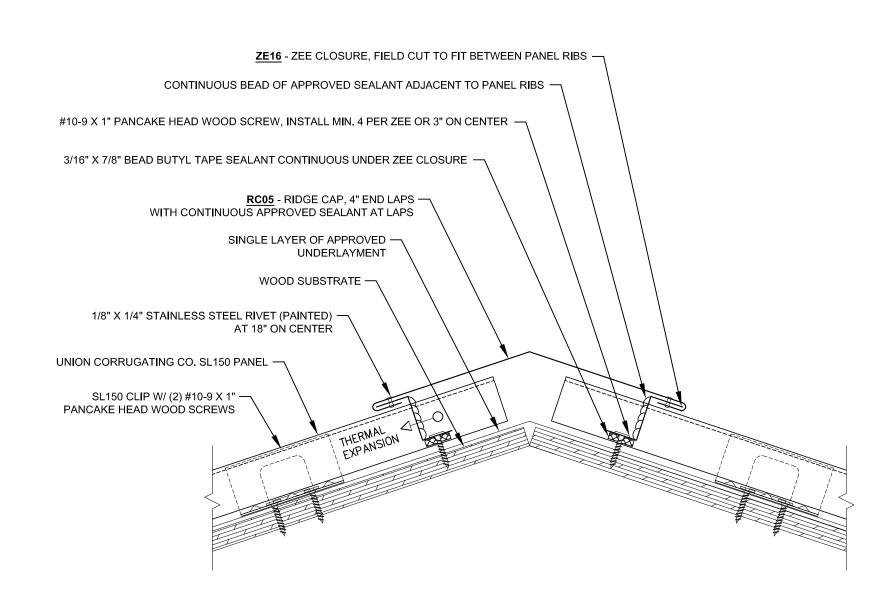
EACH VALLEY SECTION IS MADE PROGRESSIVELY SMALLER TO ALLOW UPPER SECTION TO INSERT INTO LOWER SECTION. NO FIELD NOTCHING AT LAP.

UNION CORRUGATING COMPANY VALLEY LAP DETAIL

Detail No.: SL150-3.90

Substrate:

Description:

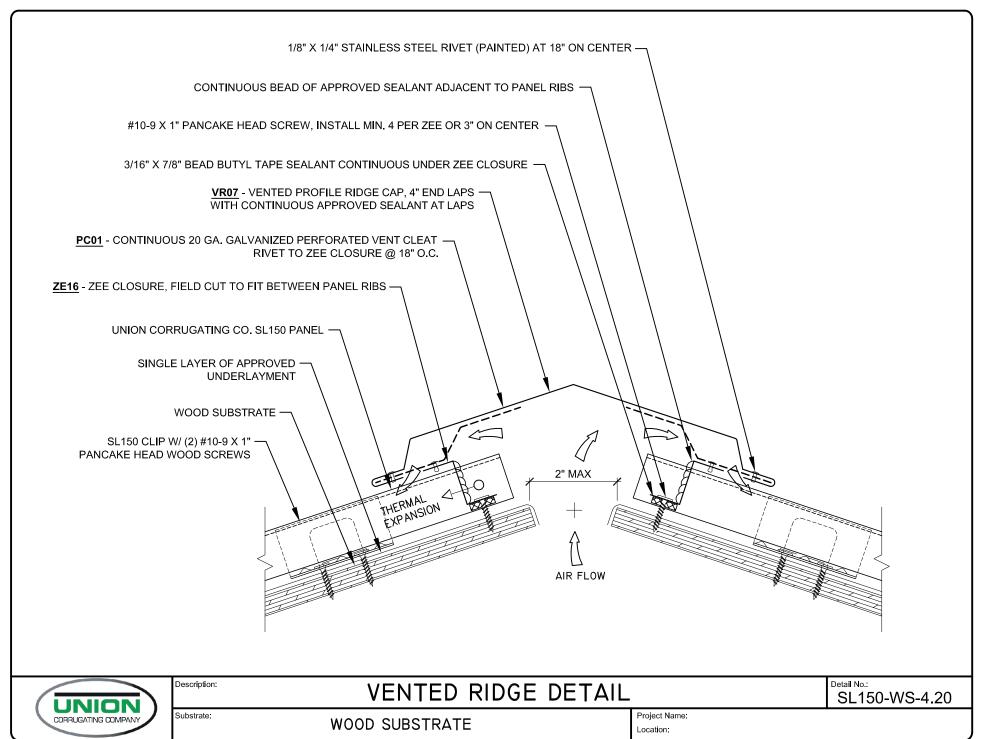


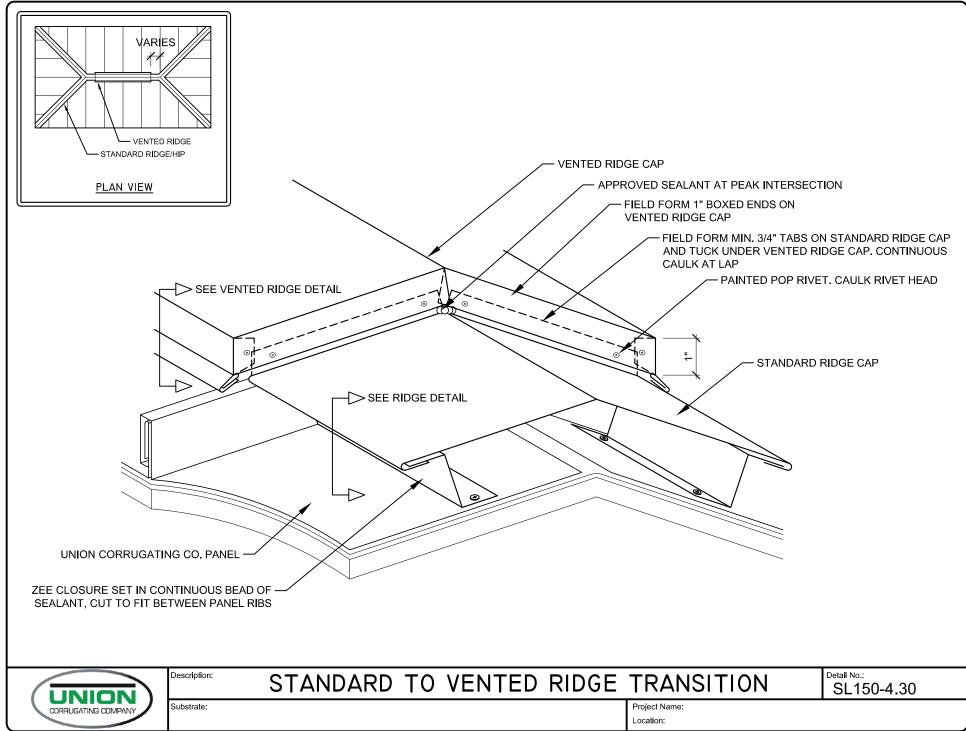


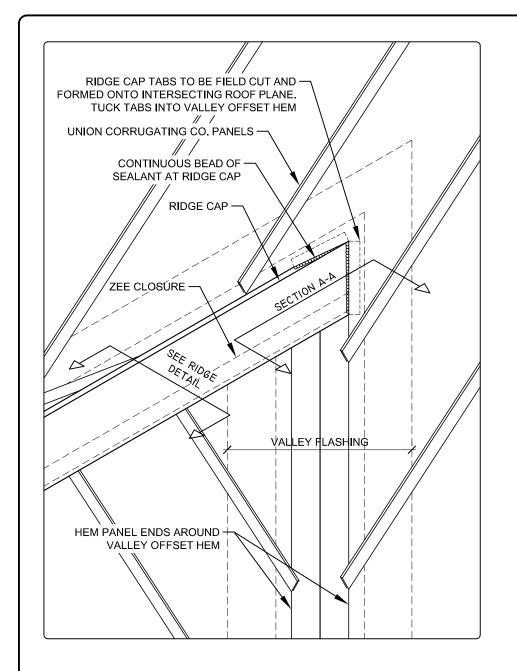
Description: HIP AND RIDGE DETAIL

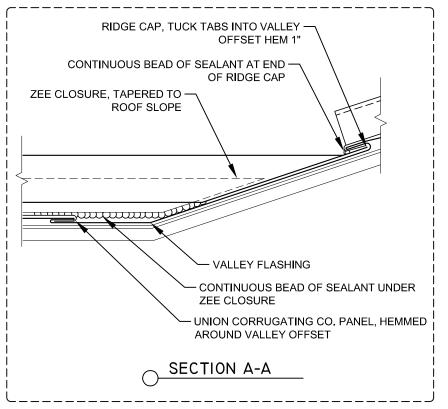
SL150-WS-4.10

WOOD SUBSTRATE











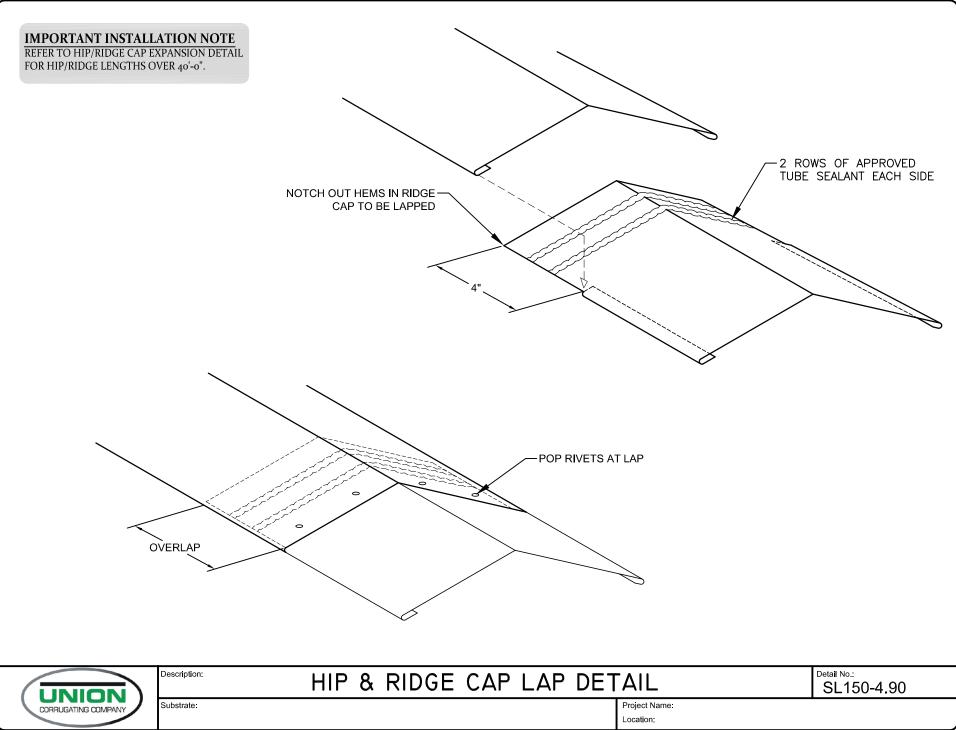
Description:

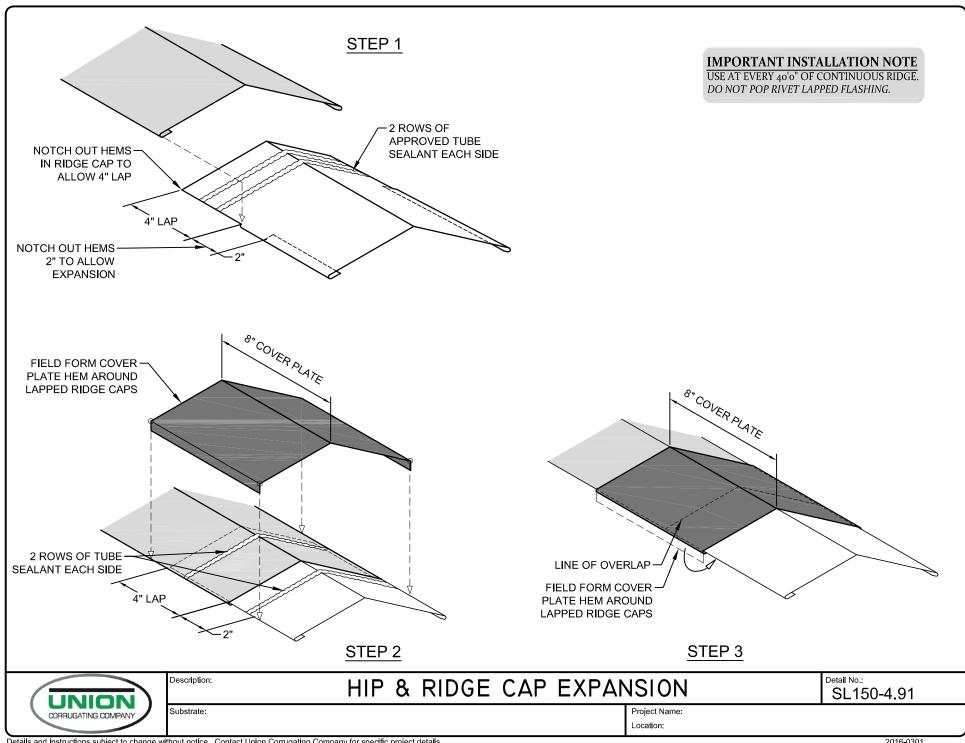
Substrate:

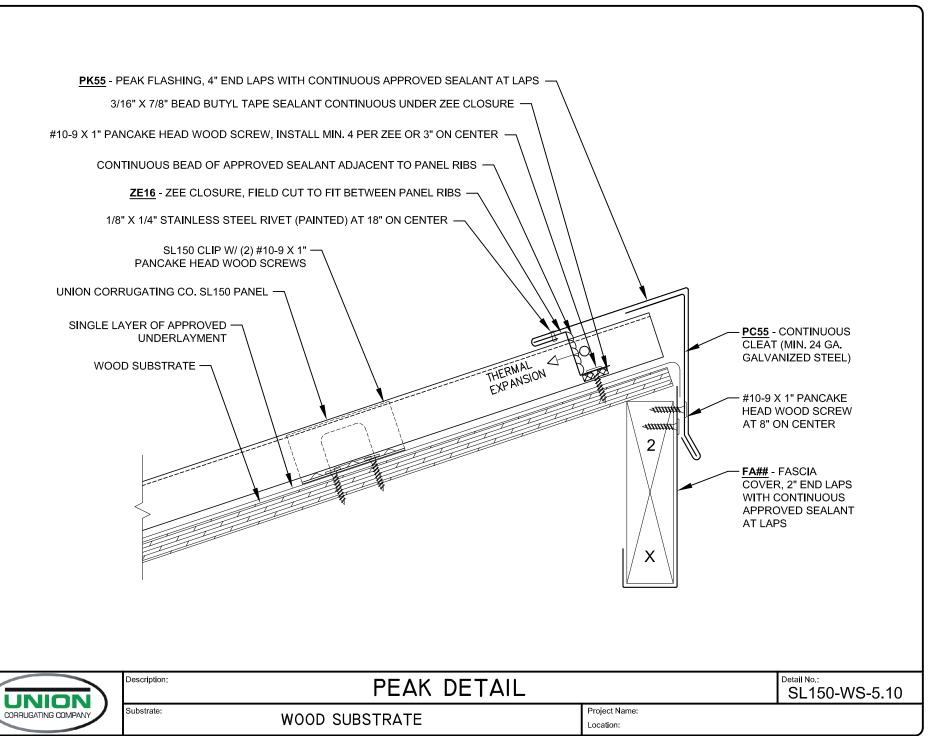
RIDGE TERMINATION @ VALLEY

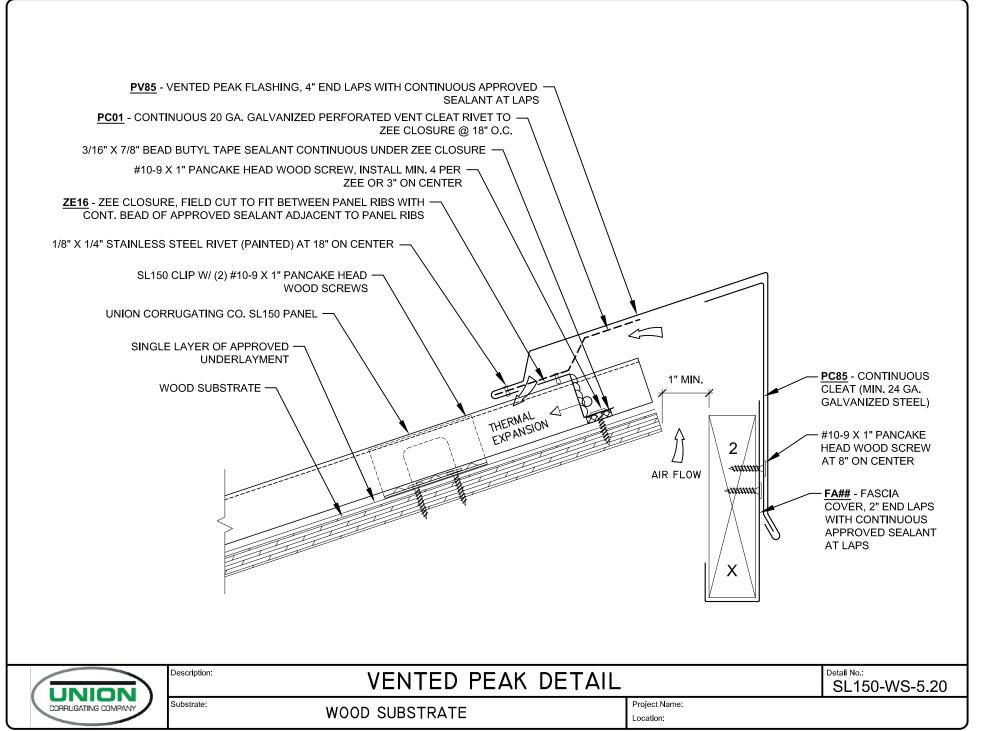
Detail No.:

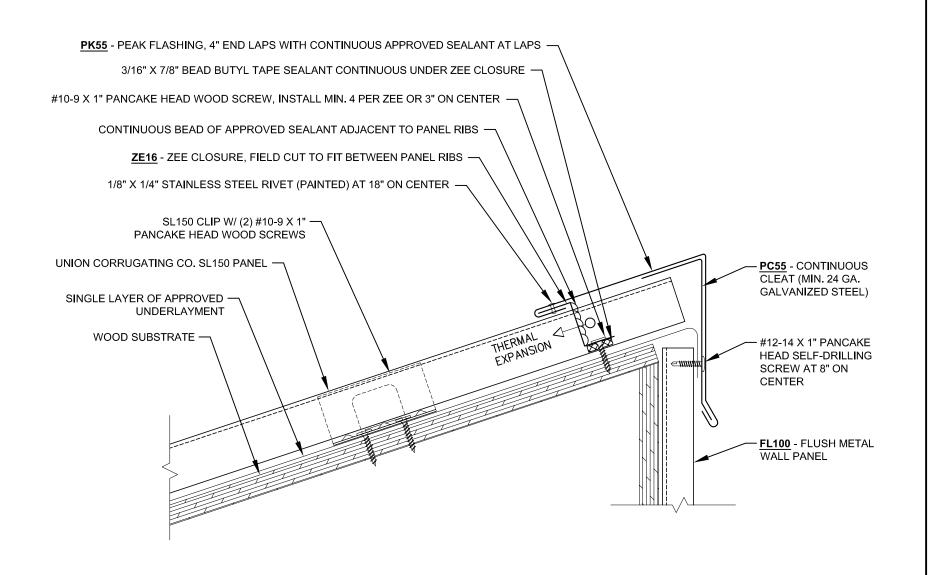
SL150-4.40









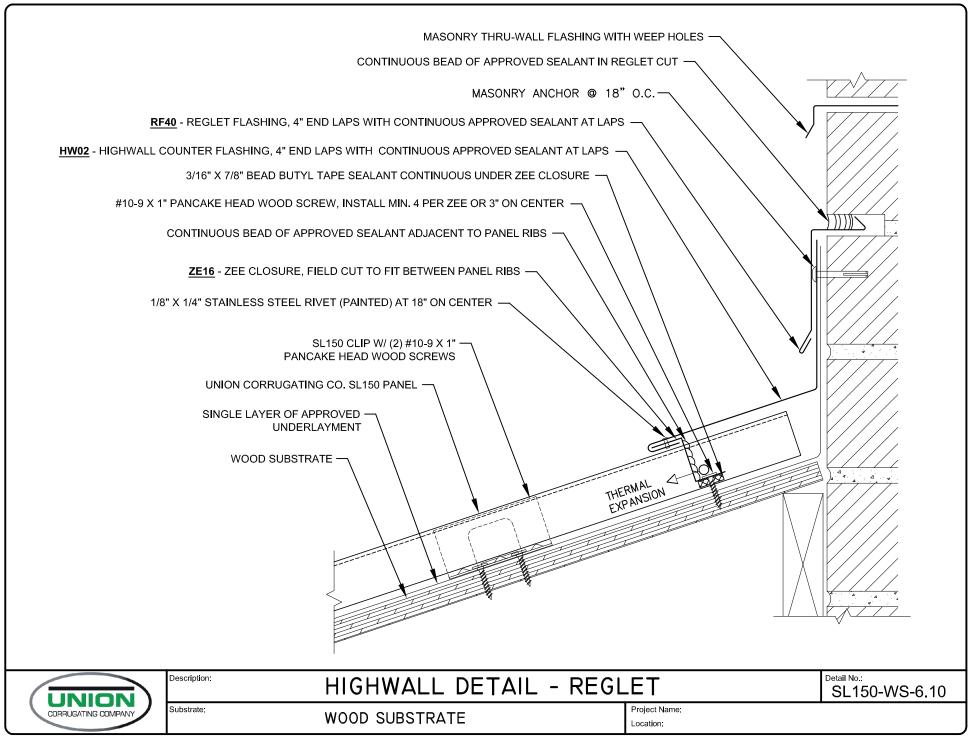


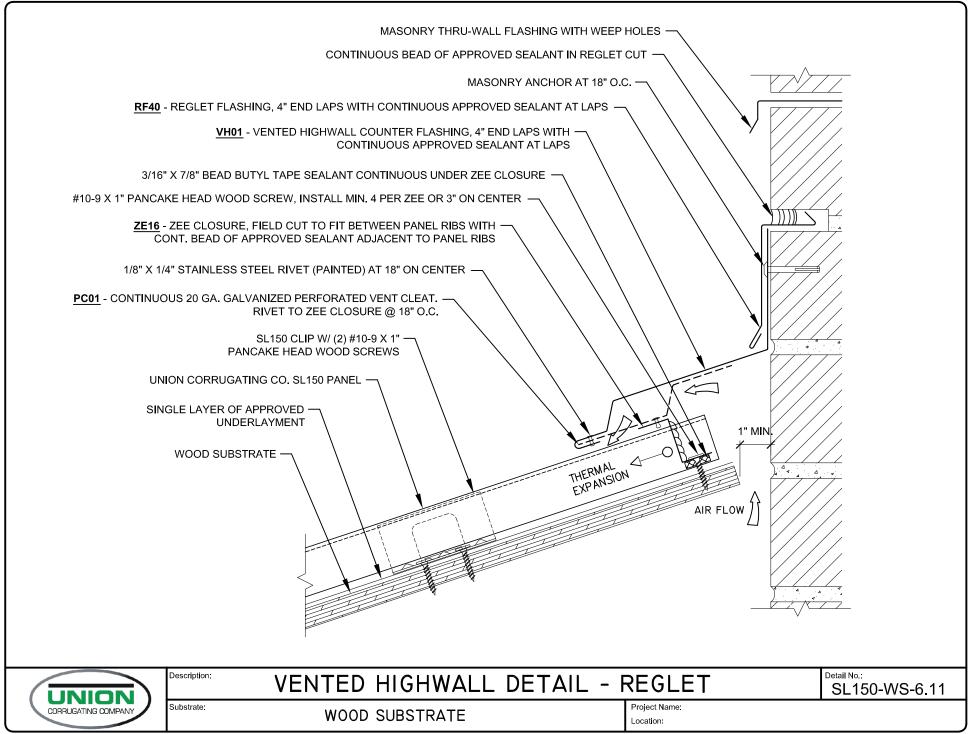


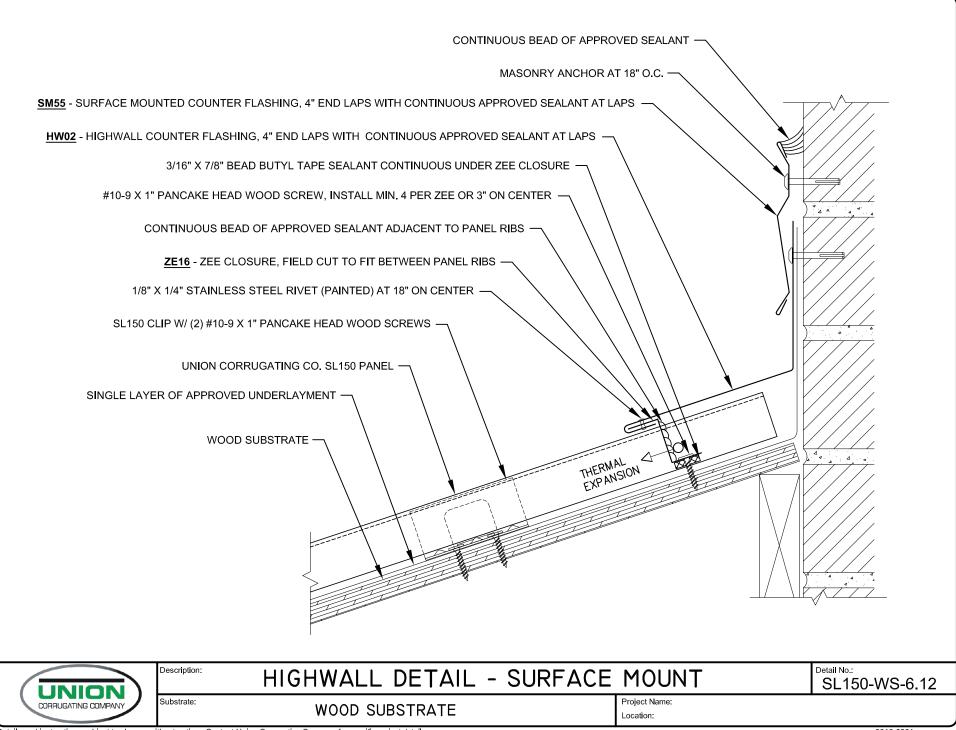
PEAK DETAIL - WITH WALL PANELS

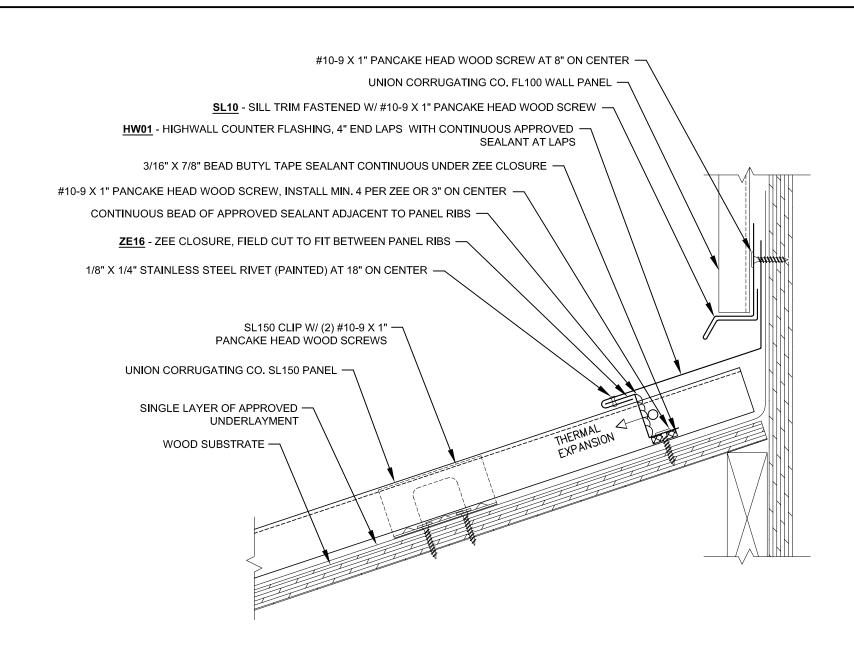
Detail No.: SL150-WS-5.40

Substrate: WOOD SUBSTRATE











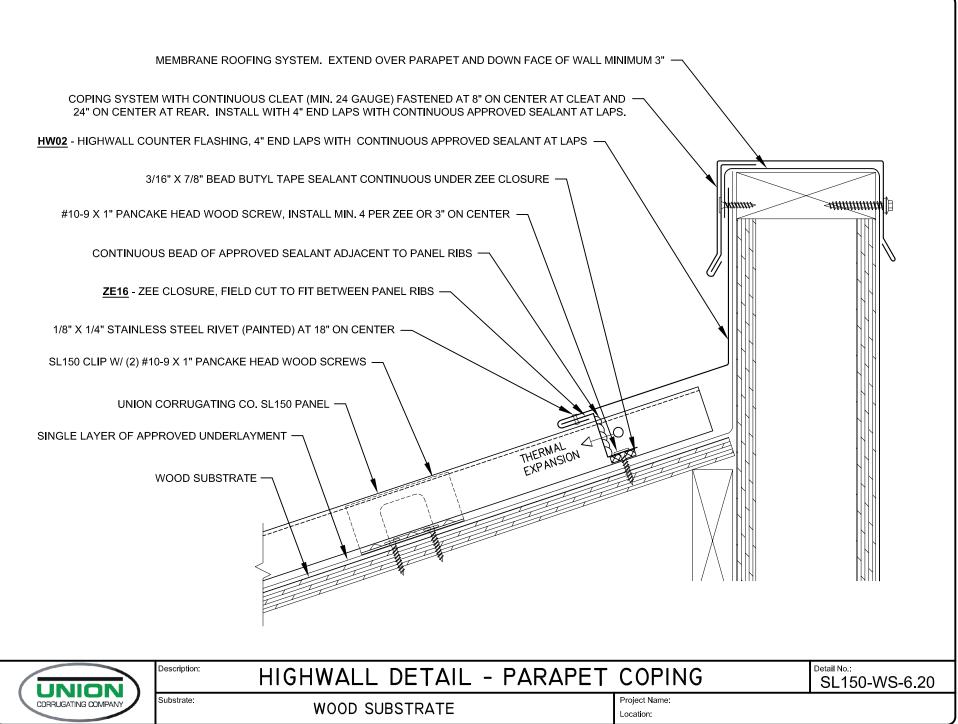
Description: HIGHWALL DETAIL - WALL PANEL W/ SILL

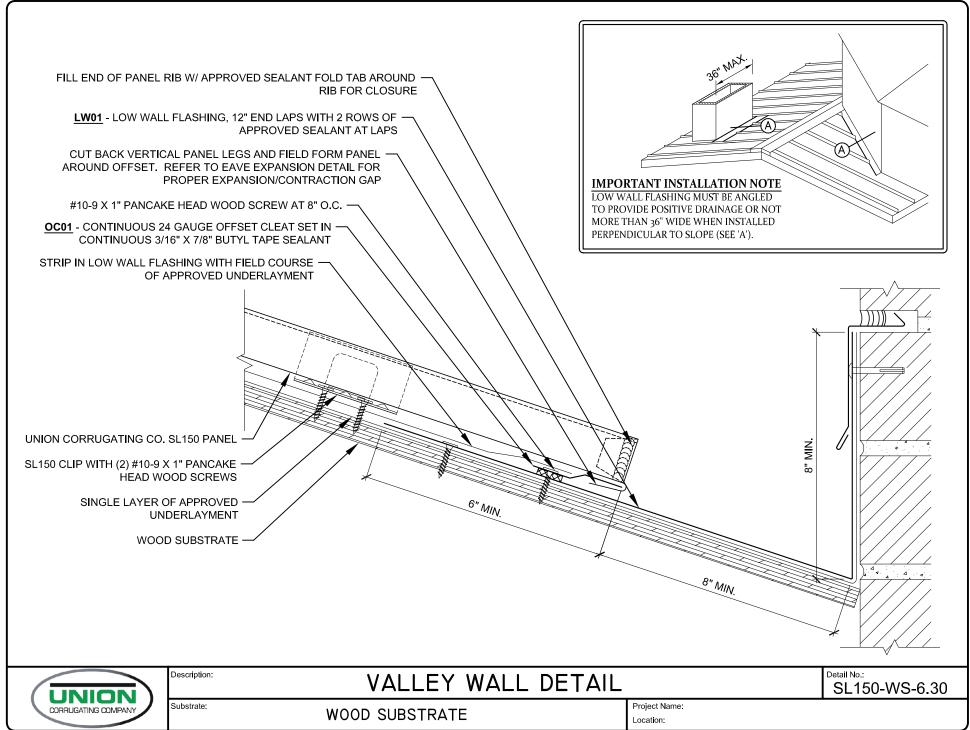
Detail No.:

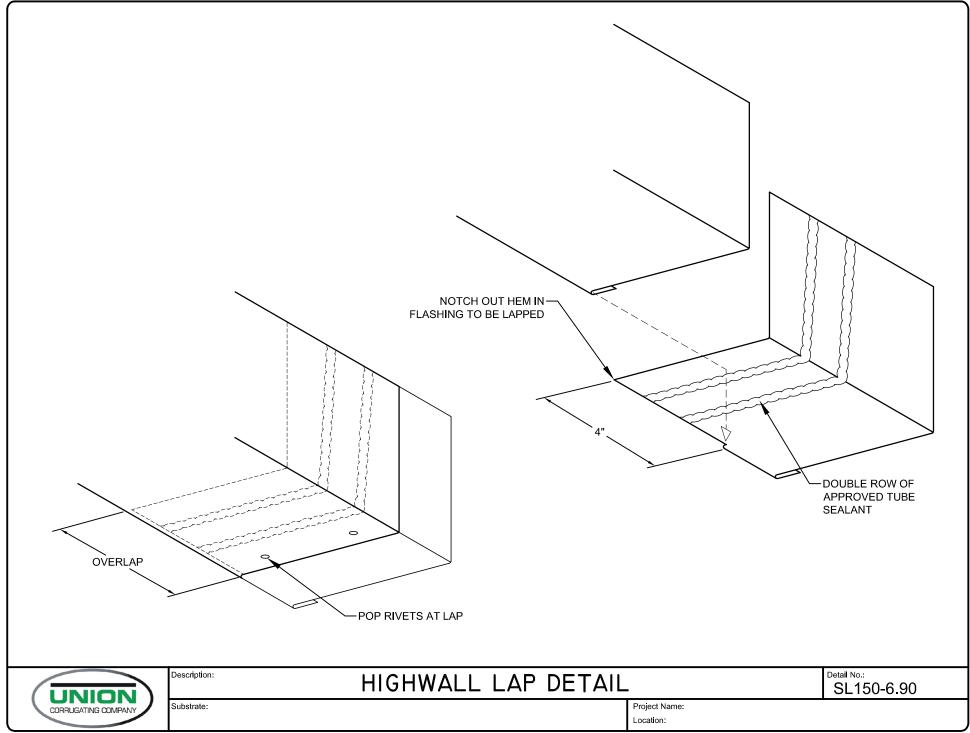
SL150-WS-6.14

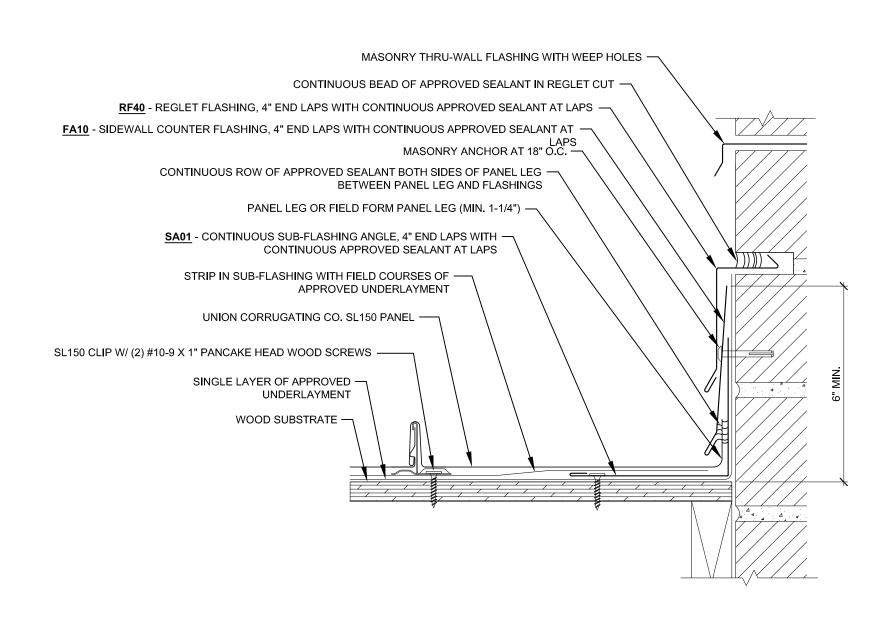
Substrate:

WOOD SUBSTRATE











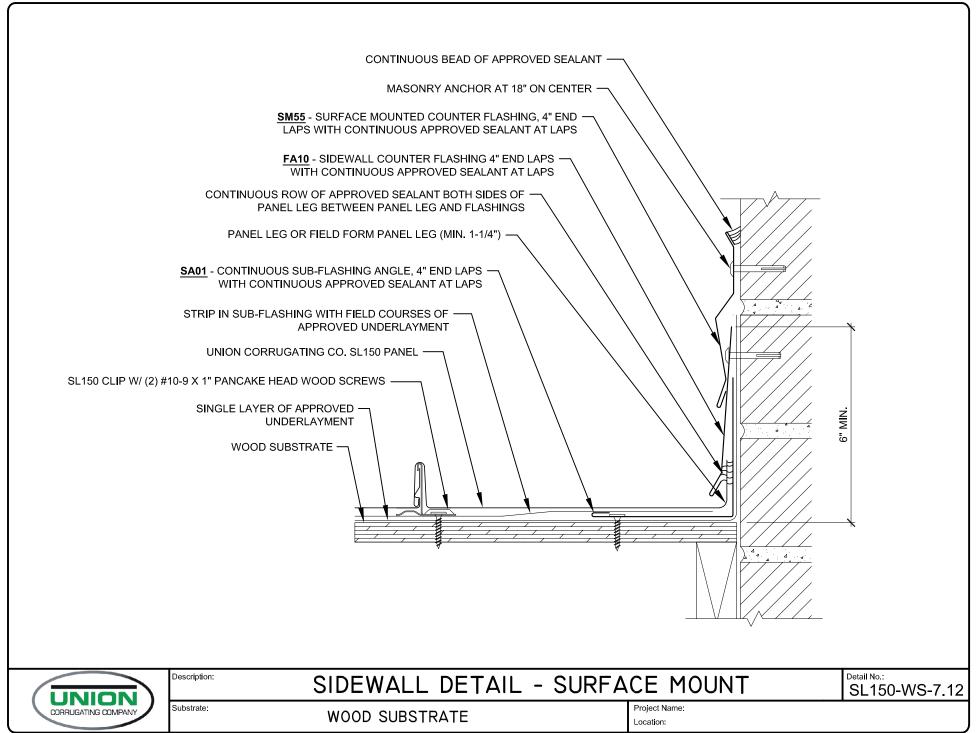
SIDEWALL DETAIL - REGLET

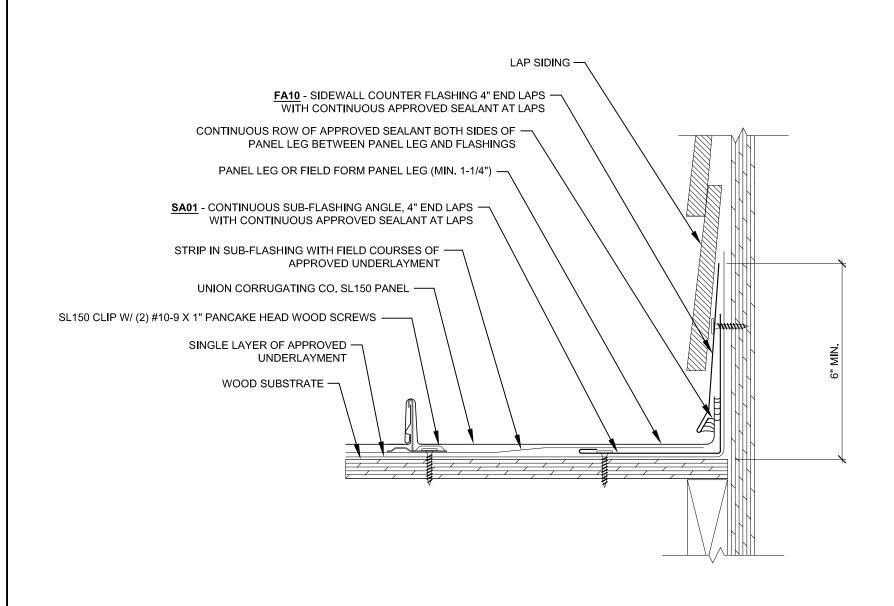
Detail No.: SL150-WS-7.11

Substrate: WOOD SUBSTRATE

Project Name: Location:

Description:







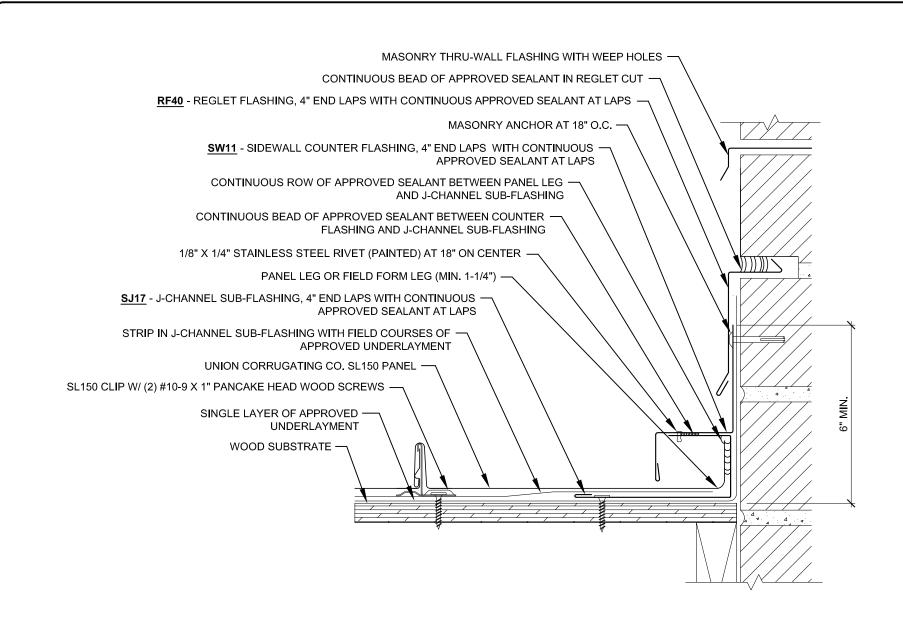
Description: SIDEWALL DETAIL - WOOD FRAMING & SIDING

Detail No.:

SL150-WS-7.13

Substrate:

WOOD SUBSTRATE

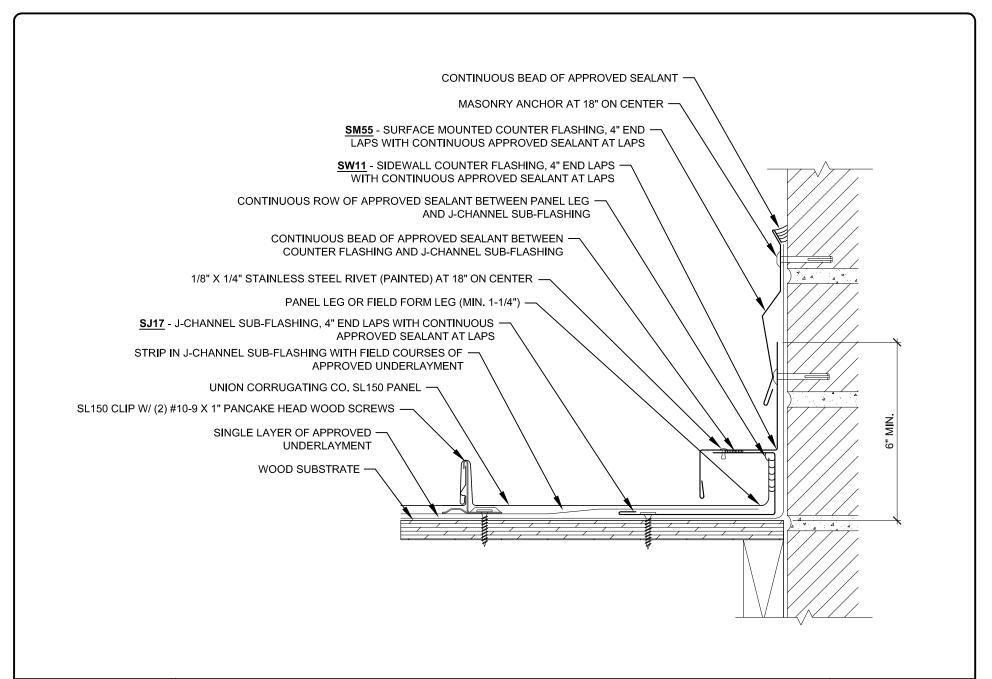




SIDEWALL DETAIL - REGLET

Detail No.: SL150-WS-7.21

Substrate: WOOD SUBSTRATE





Description:

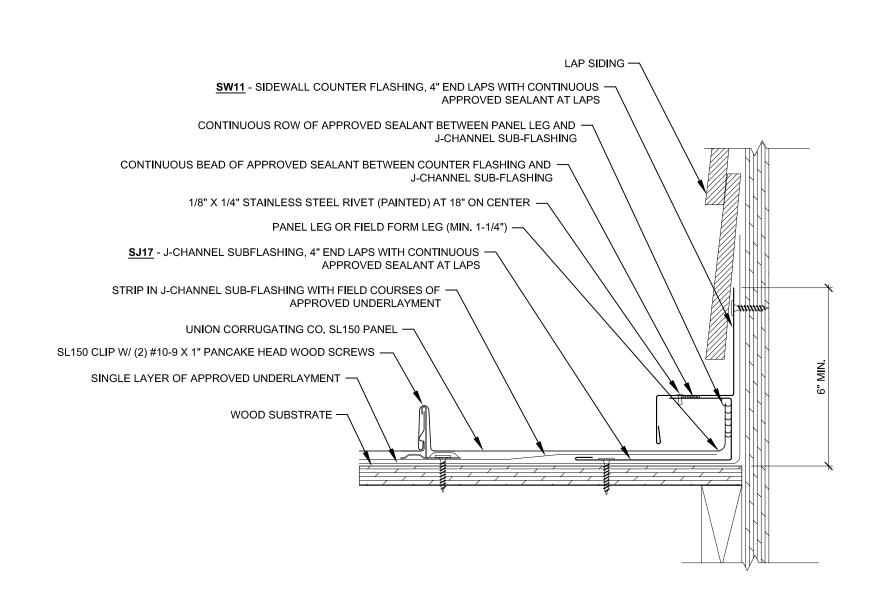
SIDEWALL DETAIL - SURFACE MOUNT

SL150-WS-7.22

Detail No.:

Substrate:

WOOD SUBSTRATE





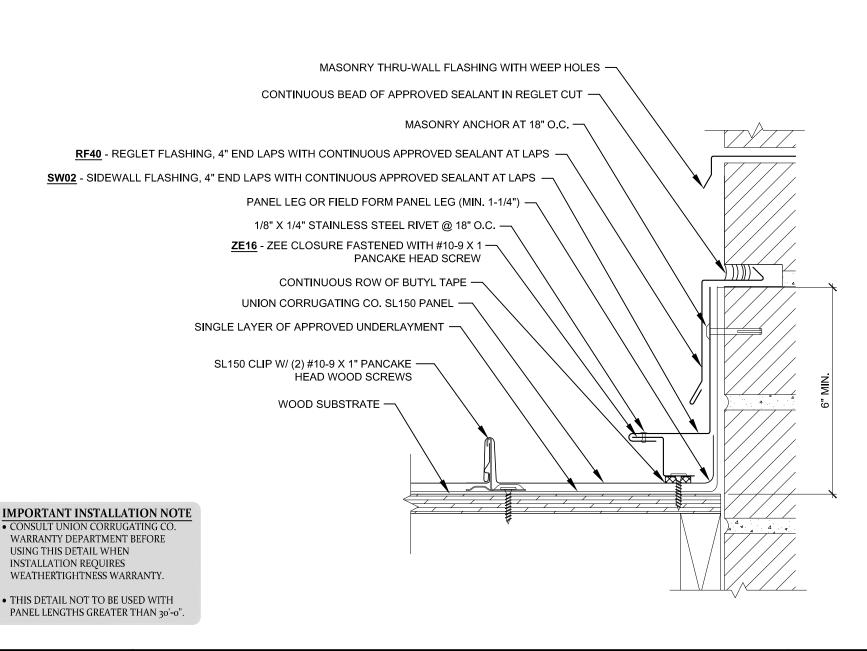
Description: SIDEWALL DETAIL - WOOD FRAMING & SIDING

Detail No.:

SL150-WS-7.23

Substrate:

WOOD SUBSTRATE





Description:

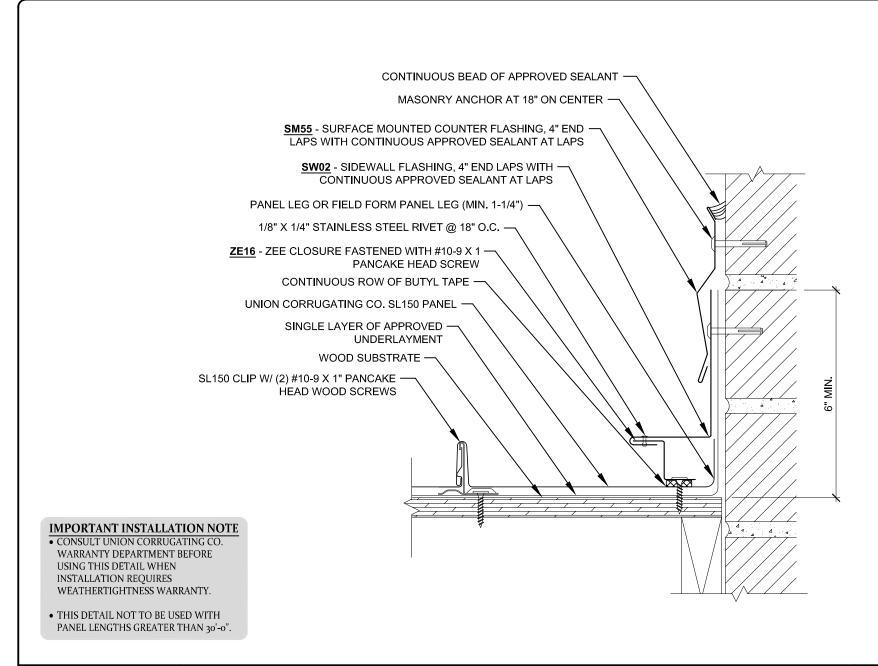
Substrate:

#### SIDEWALL W/ ZEE DETAIL - REGLET

Detail No.:

SL150-WS-7.31

WOOD SUBSTRATE





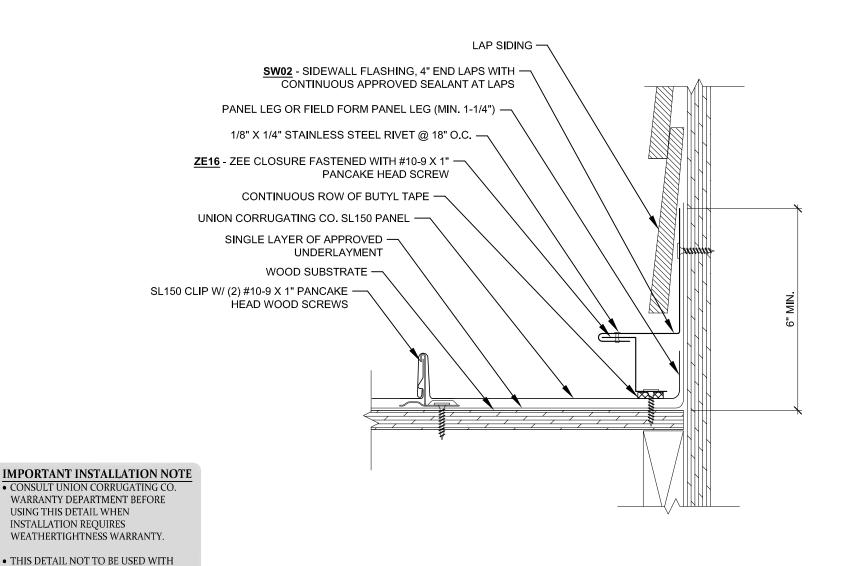
Description:

SIDEWALL W/ ZEE DETAIL - SURFACE MOUNT

SL150-WS-7.32

Substrate:

WOOD SUBSTRATE





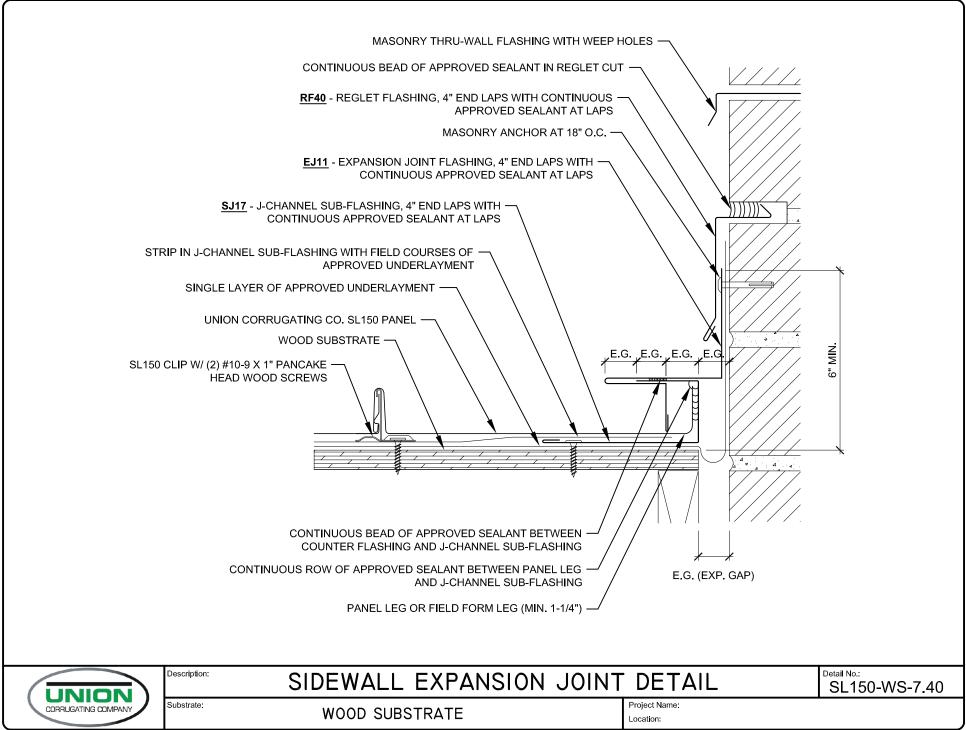
PANEL LENGTHS GREATER THAN 30'-0".

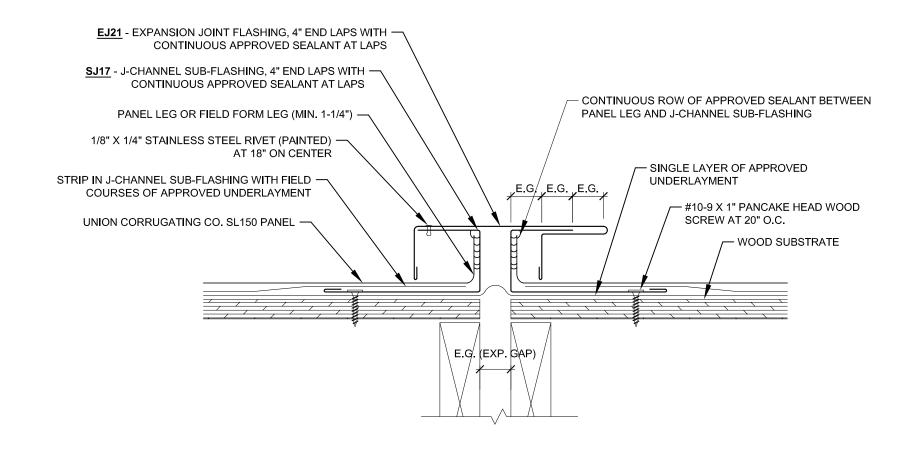
Description: SIDEWALL W/ ZEE - WOOD FRAMING & SIDING

etail No.:

SL150-WS-7.33

Substrate: WOOD SUBSTRATE







EXPANSION JOINT (MID-ROOF)

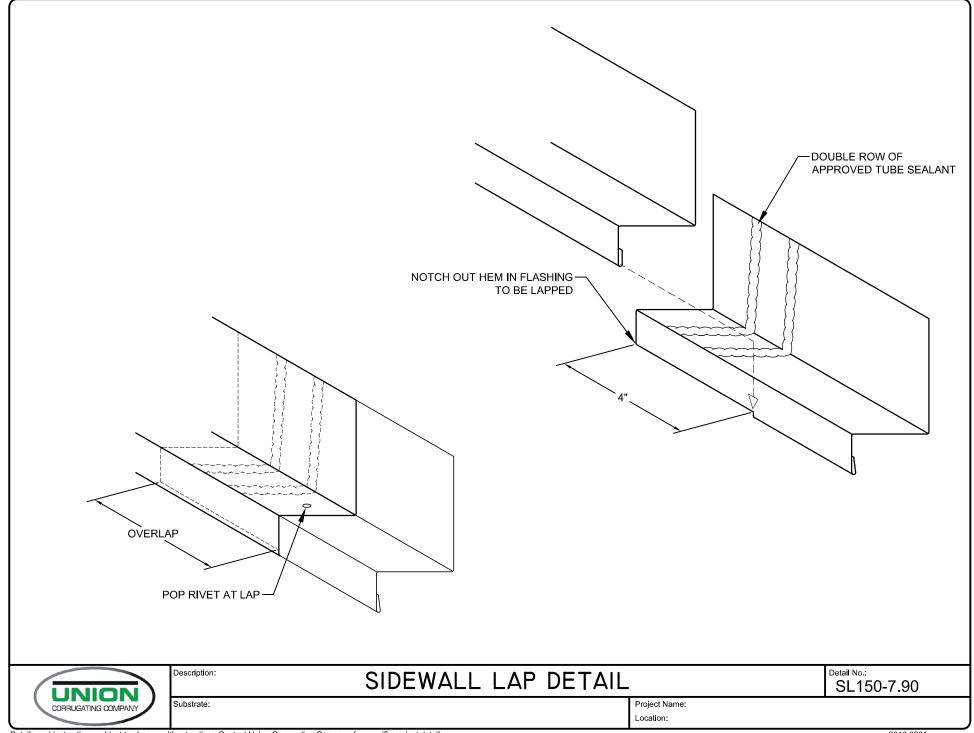
Detail No.:

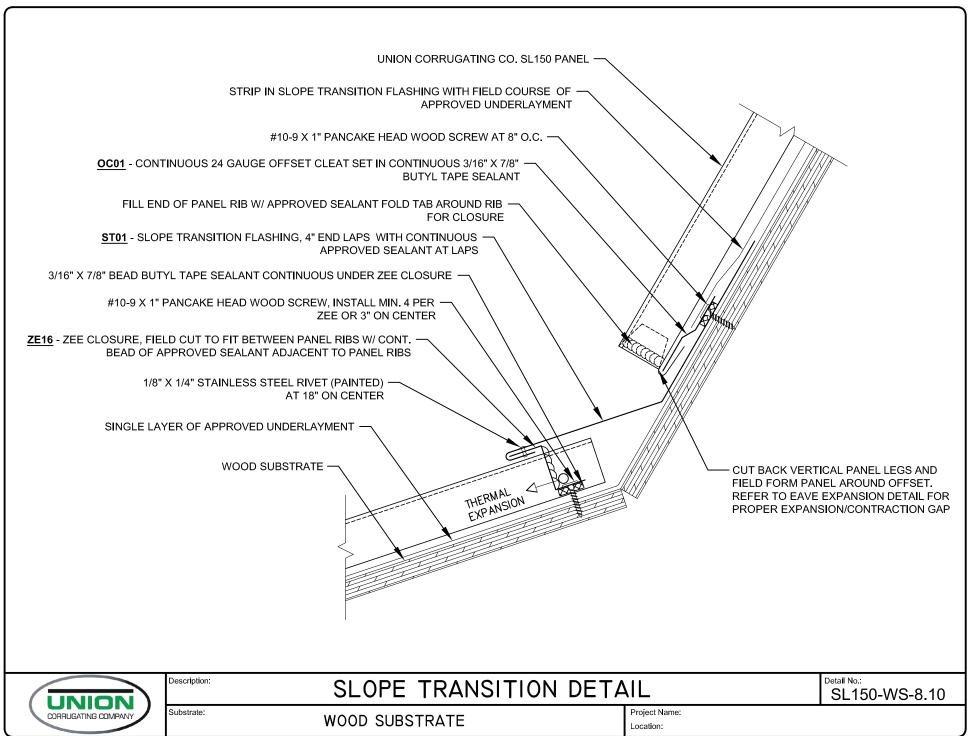
SL150-WS-7.50

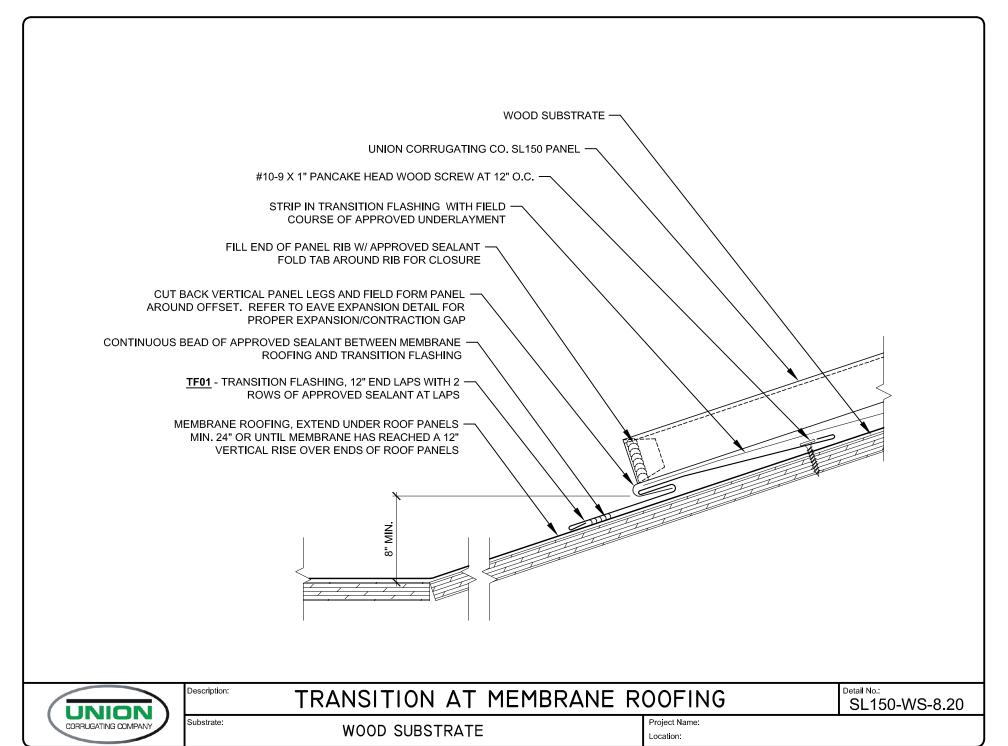
Substrate: WOOD SUBSTRATE

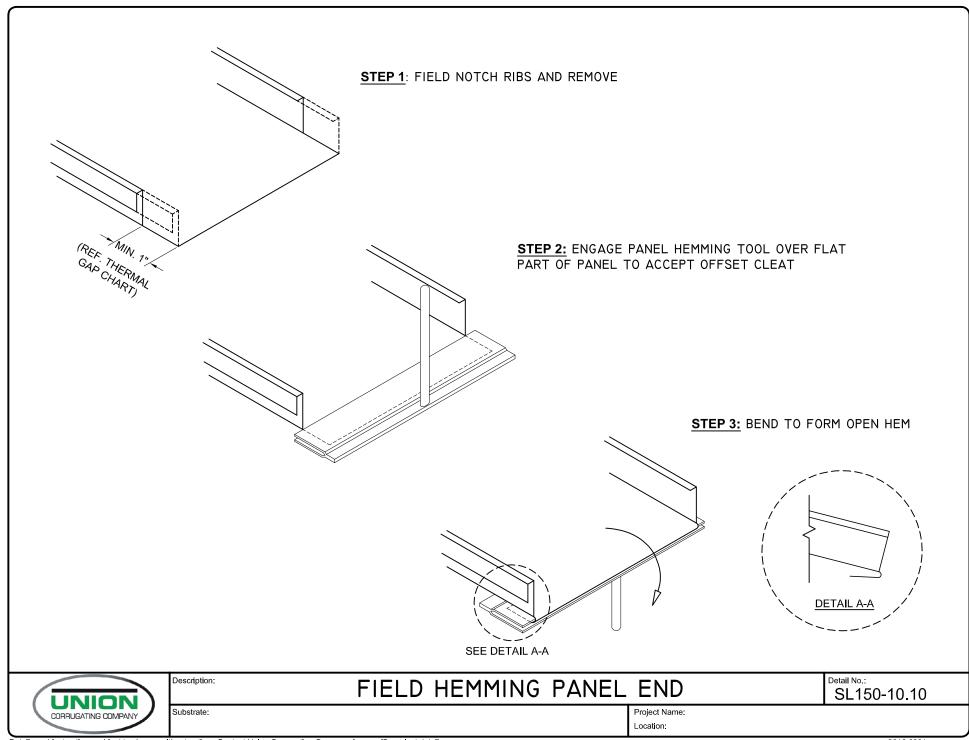
Project Name: Location:

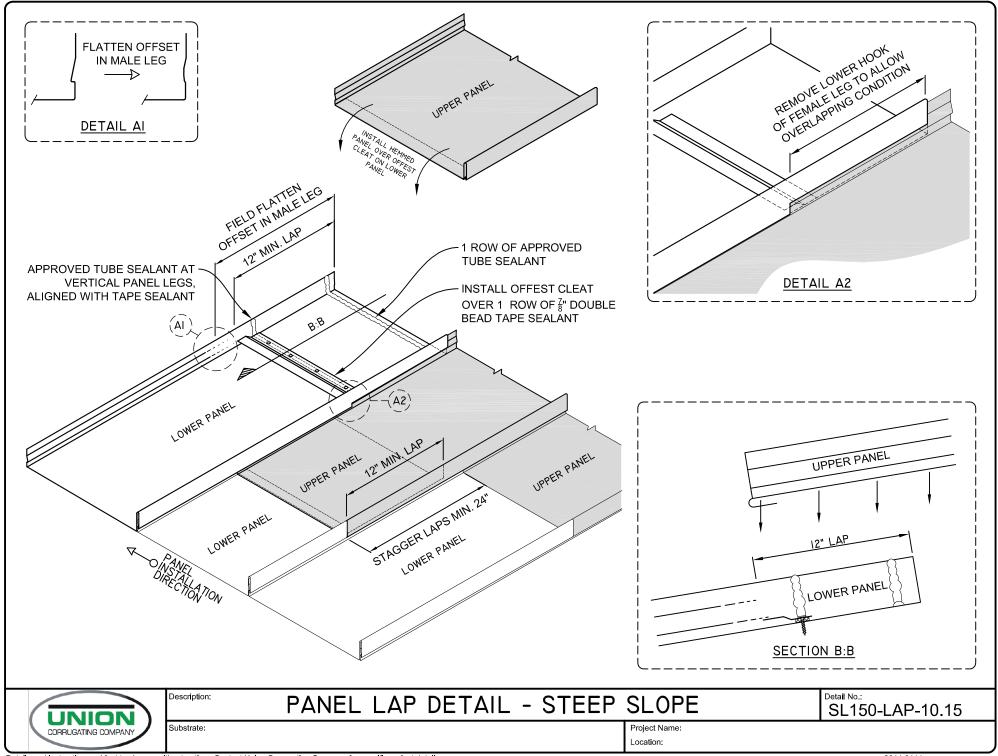
Description:

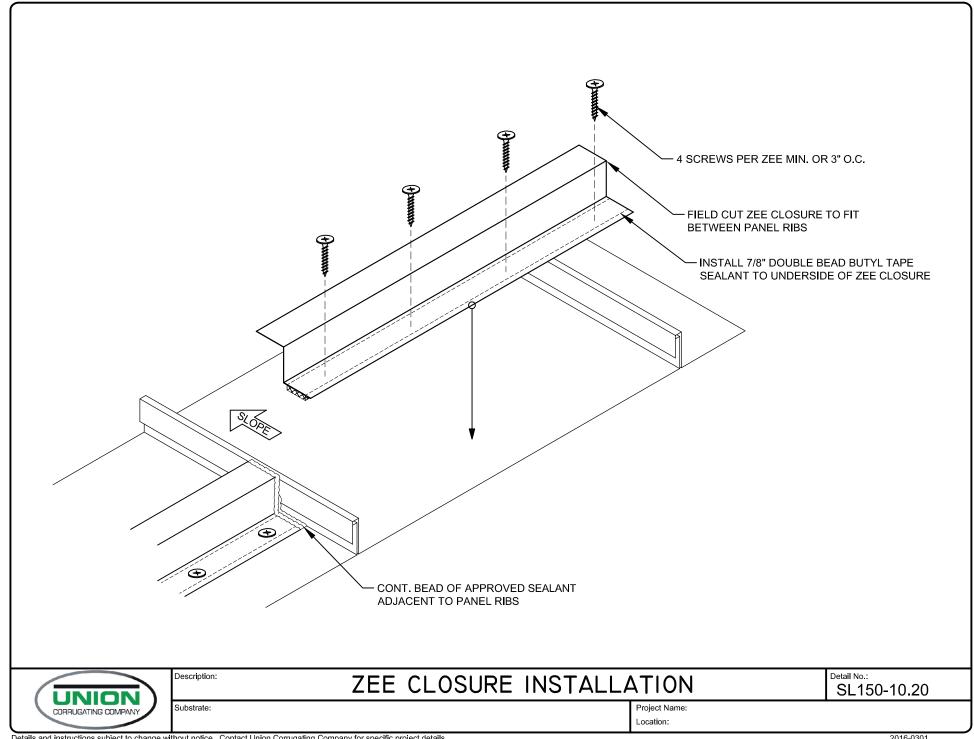


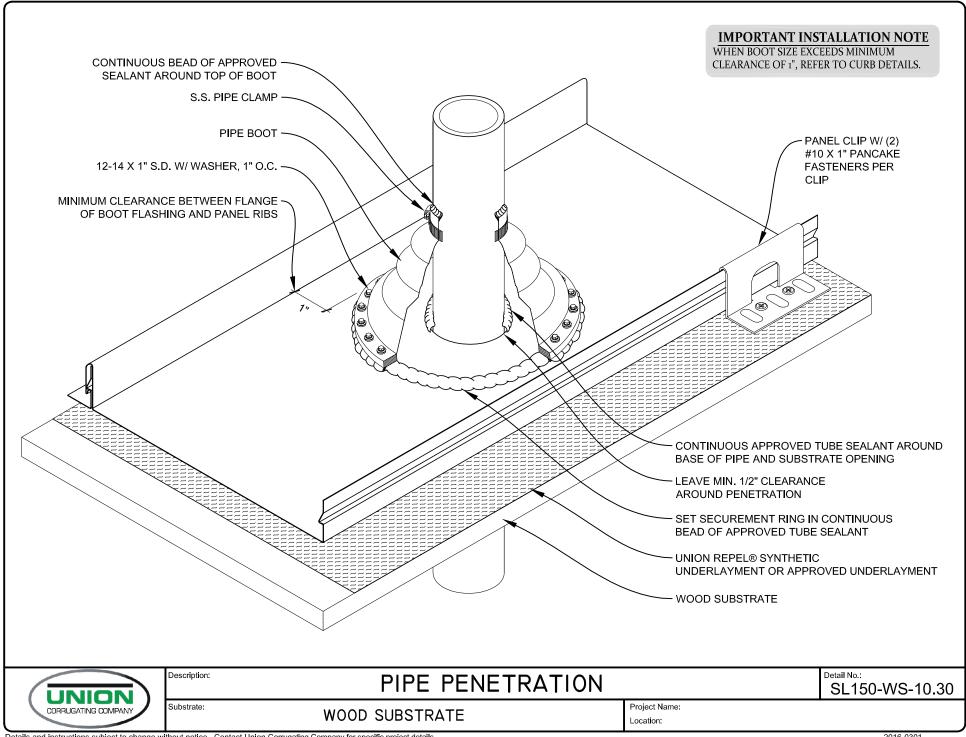


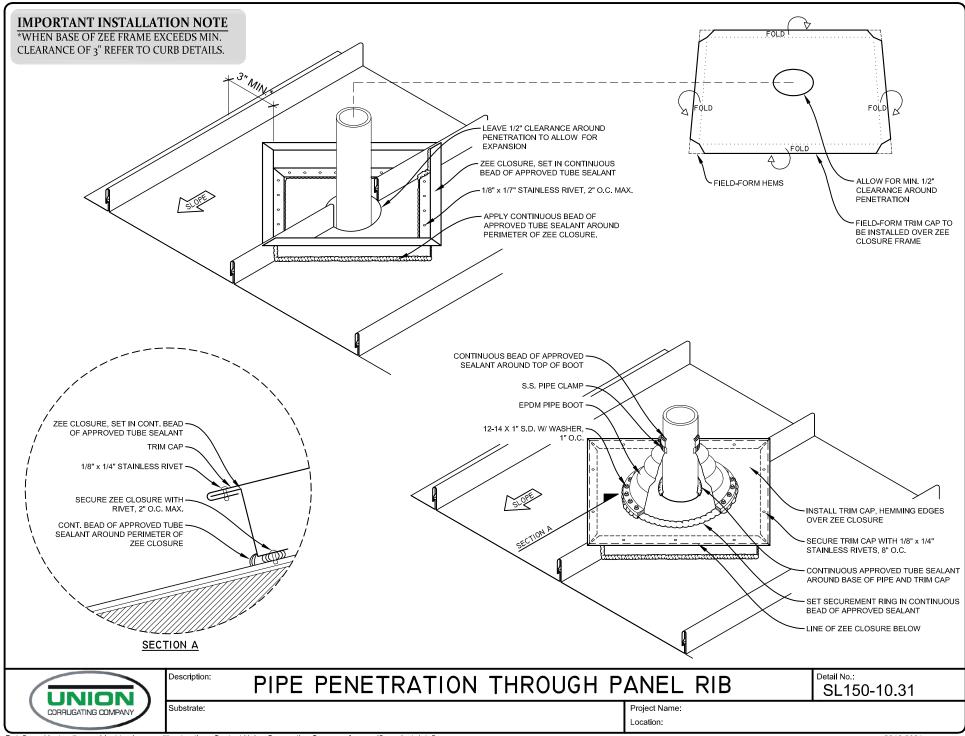


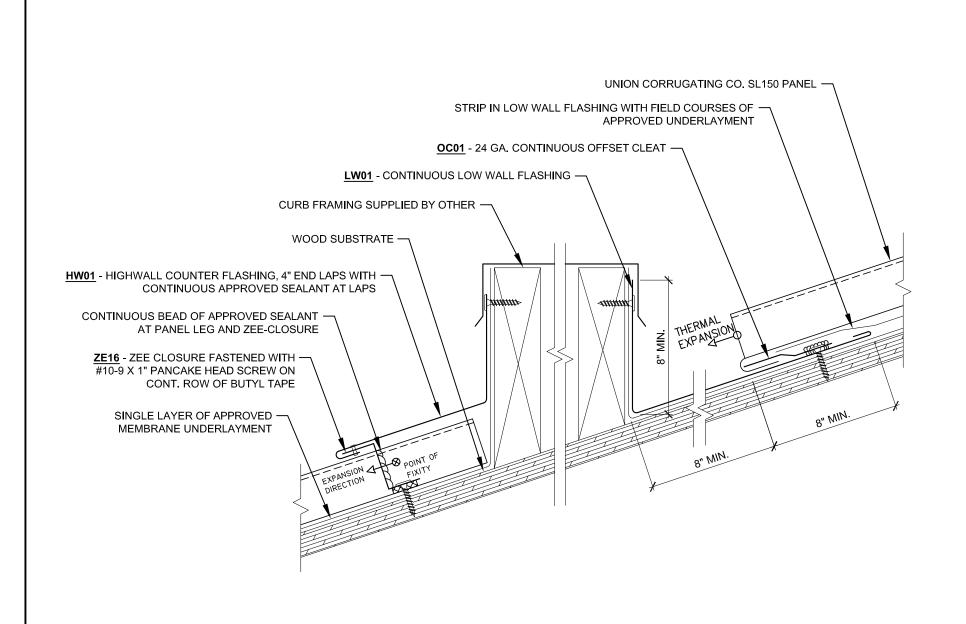














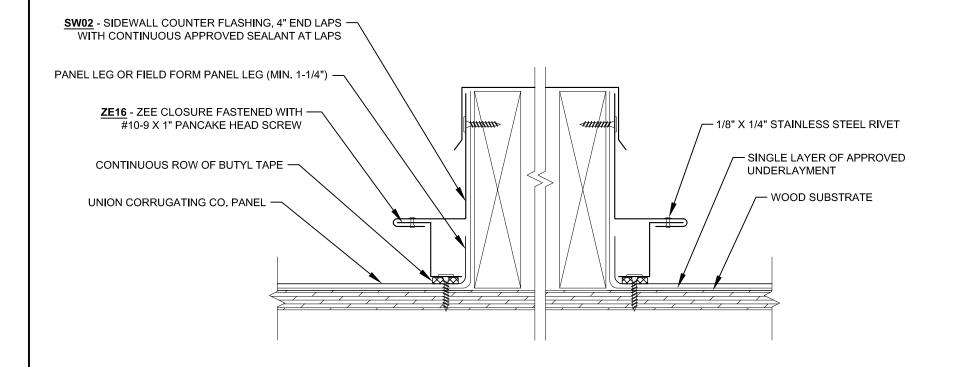
Description: LOW WALL & HIGHWALL @ SQUARE PENETRATION

Detail No.:

SL150-WS-10.40

Substrate:

WOOD SUBSTRATE





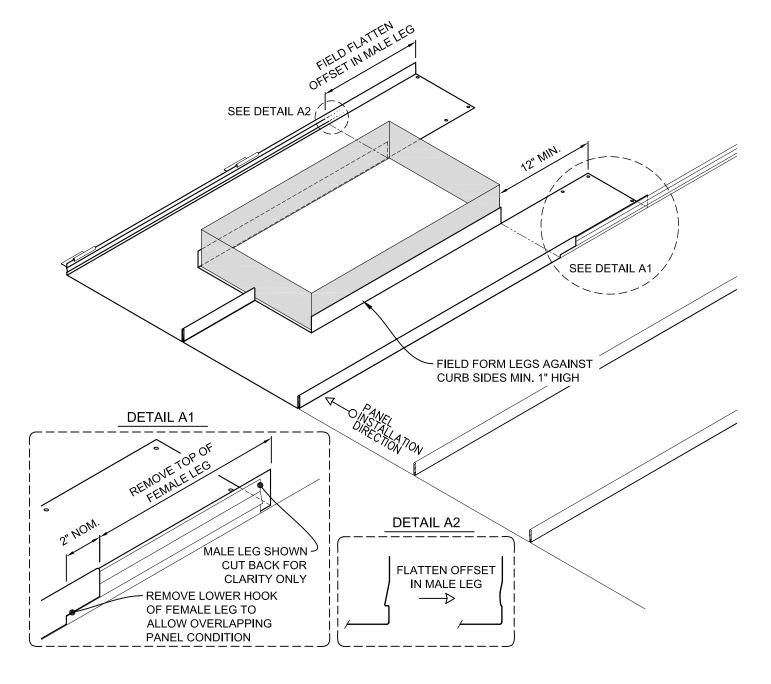
Description: SIDEWALL @ SQUARE PENETRATION

etail No.:

SL150-WS-10.41

Substrate: WOOD SUBSTRATE

# STEP I INSTALL PANELS AROUND CURB.





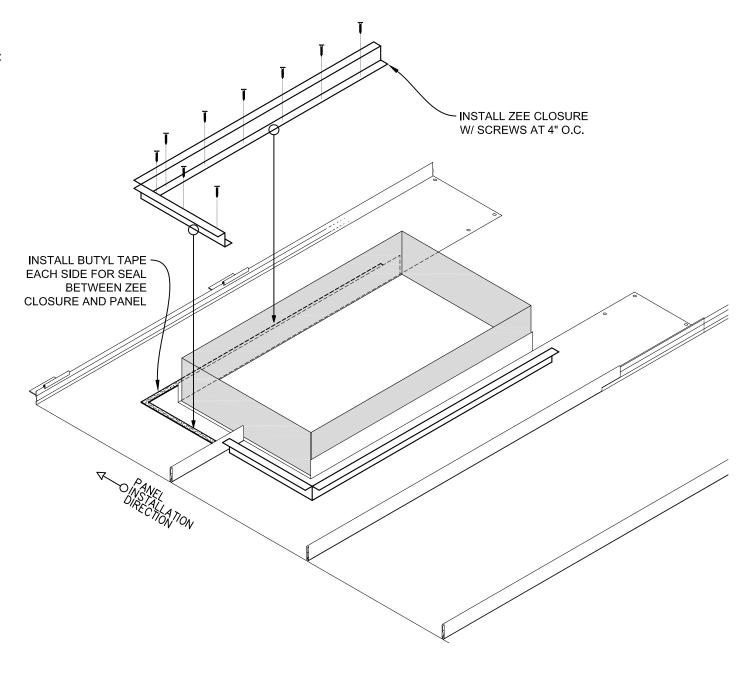
SLI50 CURB DETAILS - STEP I

SL150-CRB: 1 of 6

Substrate: Project Name: Location: Location:

# STEP 2

APPLY ZEE CLOSURE FLASHING OVER DOUBLE BEAD MASTIC





SLI50 CURB DETAILS - STEP 2

SL150-CRB: 2 of 6

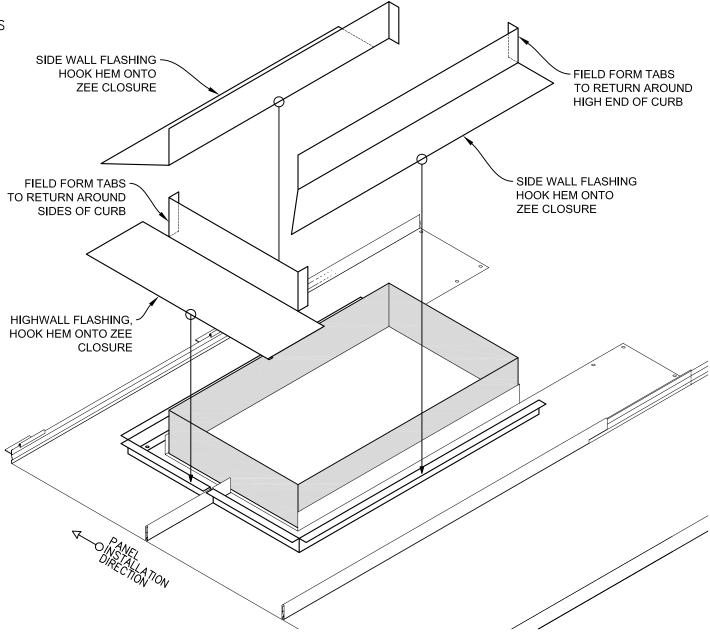
Substrate: GENERAL INFORMATION

Project Name:

Location:

### STEP 3

INSTALL SIDEWALL AND HIGH WALL FLASHINGS ATOP ZEE CLOSURE.





SLI50 CURB DETAILS - STEP 3

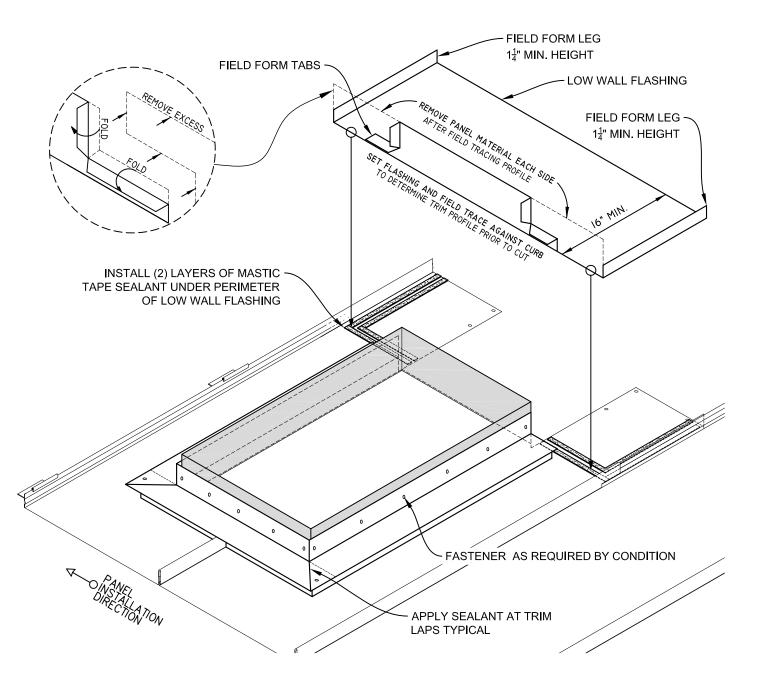
SL150-CRB: 3 of 6

Substrate: GENERAL INFORMATION

Project Name:

Location:

STEP 4
INSTALL LOW
WALL FLASHING





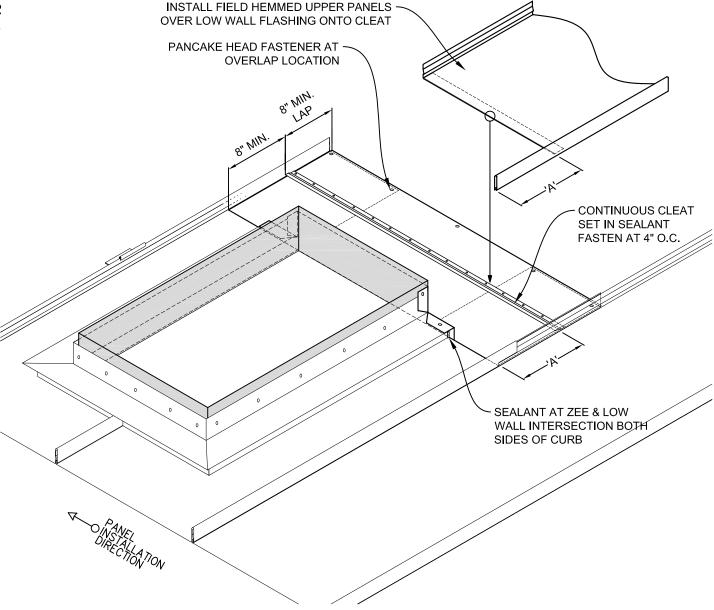
SLI50 CURB DETAILS - STEP 4

SL150-CRB: 4 of 6

Substrate: GENERAL INFORMATION

## STEP 5

INSTALL CLEAT AND PREPARE FOR UPPER PANEL INSTALLATION.





Description: SLI50 CURB DETAILS - STEP 5

SL150-CRB: 5 of 6

Substrate: GENERAL INFORMATION

Project Name: Location:

Details and instructions subject to change without notice. Contact Union Corrugating Company for specific project details.

