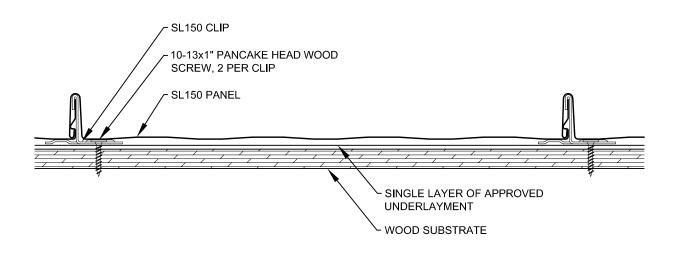


SL150 Standing SeamWood Substrate Master Details

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-

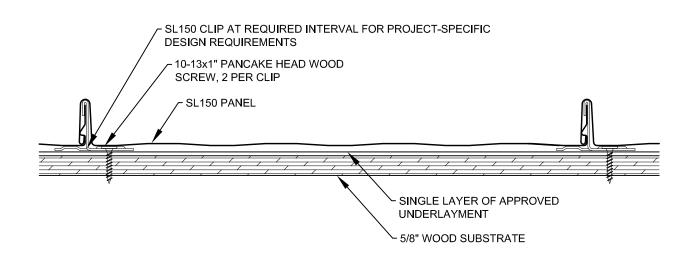
Panel Information	Detail No.
Panel Application	0.10
System Overview - Panel Profiles	
System Overview - Clips	
Thermal Gap Installation Chart - Steel	
Thermal Gap Installation Chart - Steel	
memai Gap installation Chart - Aluminum	0.51
Eave Details	Detail No.
E (4.40
Extended Eave	
Extended Eave - Steep Slope	
Extended Eave with Gutter	
Extended Eave with Gutter - Steep Slope	
Extended Eave with Soffit	
Extended Eave with Soffit & Gutter	
Extended Eave with Vertical Flush Panel	
Extended Eave with Vertical Standing Seam Panel	
Extended Eave Lap Detail	1.90
Gable Details	Detail No.
Gable - Extended Drip	2.10
Gable - Box	
Gable - Box with Zee Closure	2.30
Box Gable Lap Detail	2.90
Valley Details	Detail No.
Valley - Integral Cleat	
Valley - Offset Cleat	
Valley Lap Detail	3.90
Ridge & Hip Details	Detail No.
Triage a rip betains	Detail ivo.
Standard Ridge & Hip	4.10
Vented Ridge	
Vented Ridge-to-Standard Ridge Transition	
Ridge Termination at Valley	
Ridge & Hip Lap Detail	
Ridge Cap Expansion Detail	
	_
Peak Details	Detail No.
Peak Detail	5.10
Vented Peak Detail	
Peak Detail with Vertical Flush Panel	
r oan Dolair Will recition i lagir i alloi	0.70

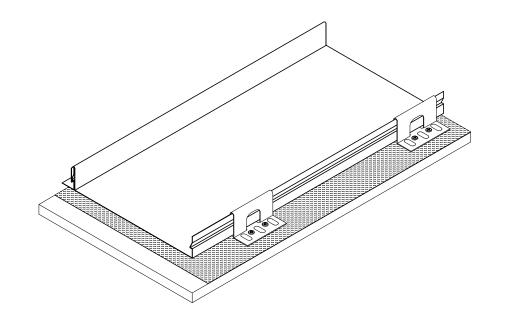




SL150 Standing Seam -Wood Substrate-

	-
High Wall - Reglet	6.10
Vented High Wall - Reglet	6.11
High Wall - Surface Mount	6.12
High Wall - Vertical Panel with Sill	
High Wall - Parapet	
Valley Wall Detail	
High Wall Lap Detail	
Sidewall Details	Detail No.
Sidewall - Reglet with Subflashing Angle	7.11
Sidewall - Surface Mount with Subflashing Angle	7.12
Sidewall - Wood Framing & Siding with Subflashing Angle	7.12
Sidewall - Reglet with J-Channel Subflashing	7.70
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.
O "	0.40
Slope Transition	
Transition at Membrane Roofing	8.20
General Information Details	Detail No.
Panel Hemming	
End Lap Detail - Steep Slope	
Zee Closure Installation	
Pipe Penetration	
Pipe Penetration Through Panel Rib	
Curb at High Wall & Low Wall	
Curb Installation Series	10.41







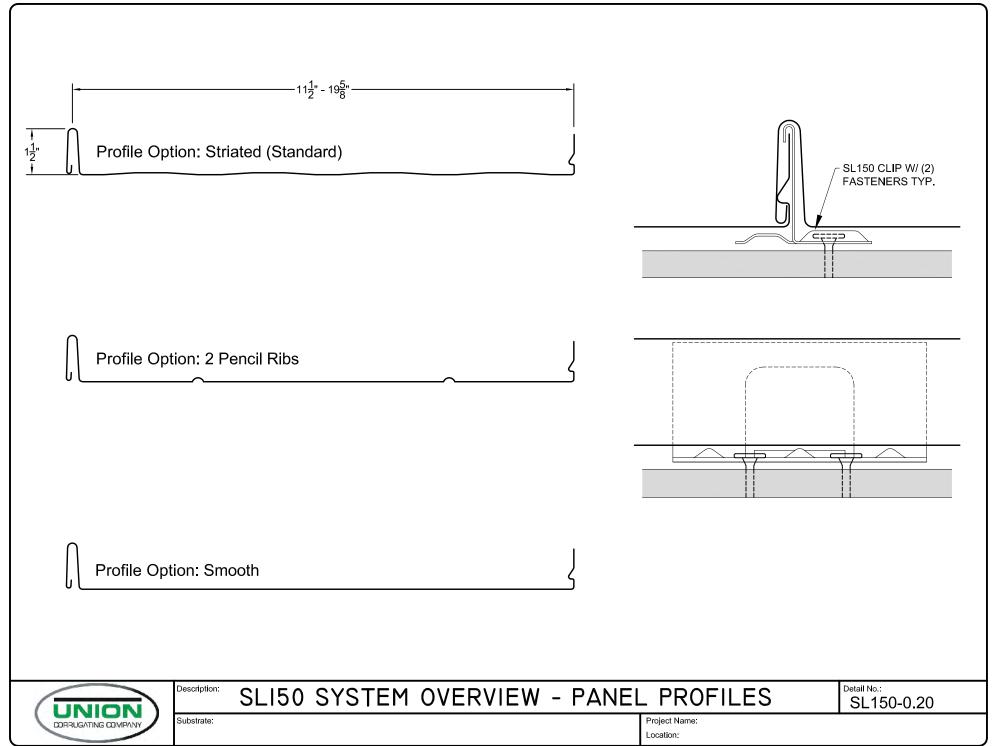
SLI50 APPLICATION

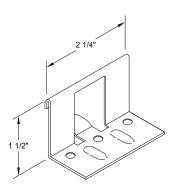
SL150-WS-0.10

WOOD SUBSTRATE

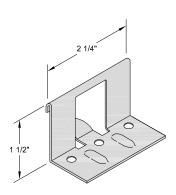
Project Name: Location:

Substrate:

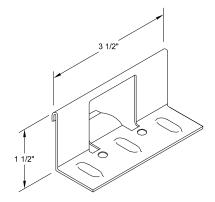




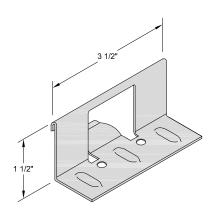
Clip 10 20 Ga. Galvanized 1.5" x 2.25"



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

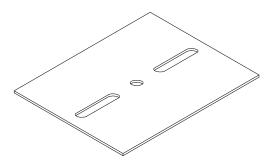
18 Ga. Stainless Steel

1.5" x 3.5"

Recommended for use with aluminum panels

IMPORTANT INSTALLATION NOTE

- SL₁₅₀ 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



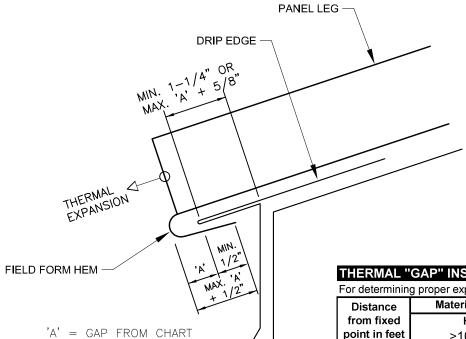
Description:

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			Warm		Cold		
point in feet	>100° F		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

^{*} Chart based on temperature differential of:

180 degrees F

0.0000067



THERMAL GAP INSTALLATION CHART - STEEL

Detail No.:

SL150-0.30

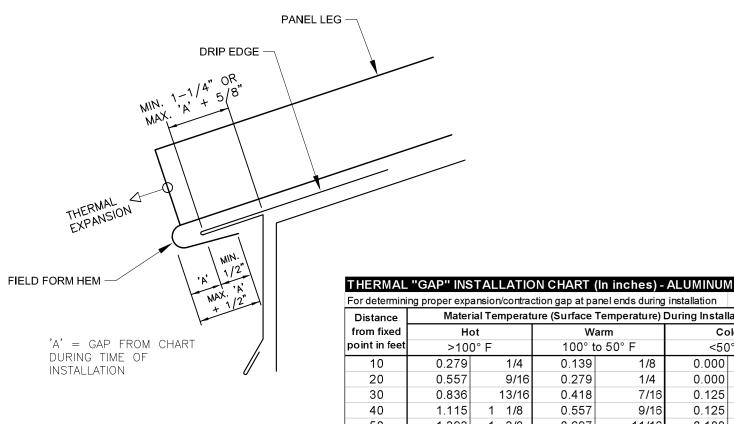
Substrate:

Description:

Project Name: Location:

DURING TIME OF INSTALLATION

^{*} Coefficient of thermal expansion for steel:



Distance	Material Temperature (Surface Temperature) During Installation						
from fixed Hot		Warm		Cold			
point in feet	>100° F		100° to 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

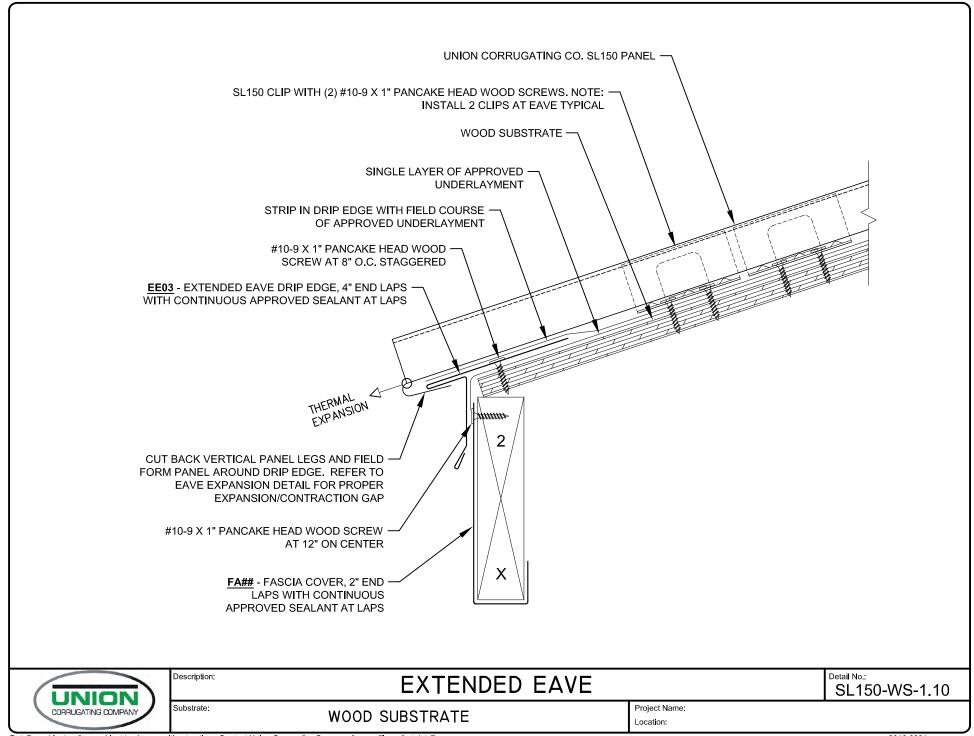
* Coefficient of thermal expansion for alum.: 0.0000129

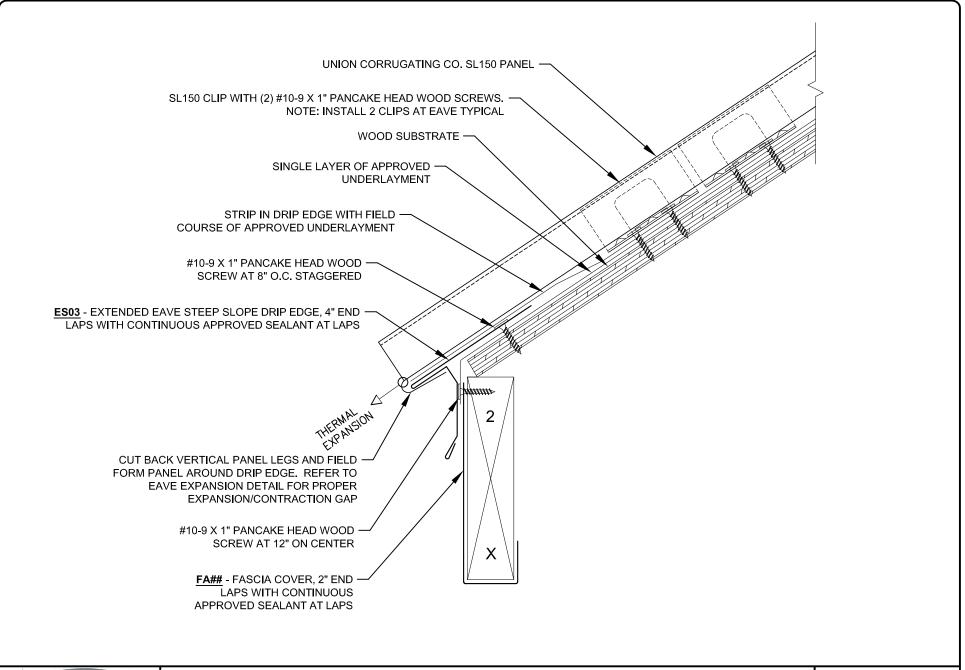


THERMAL GAP INSTALLATION CHART - ALUMINUM

Detail No.: SL150-0.31

Substrate:



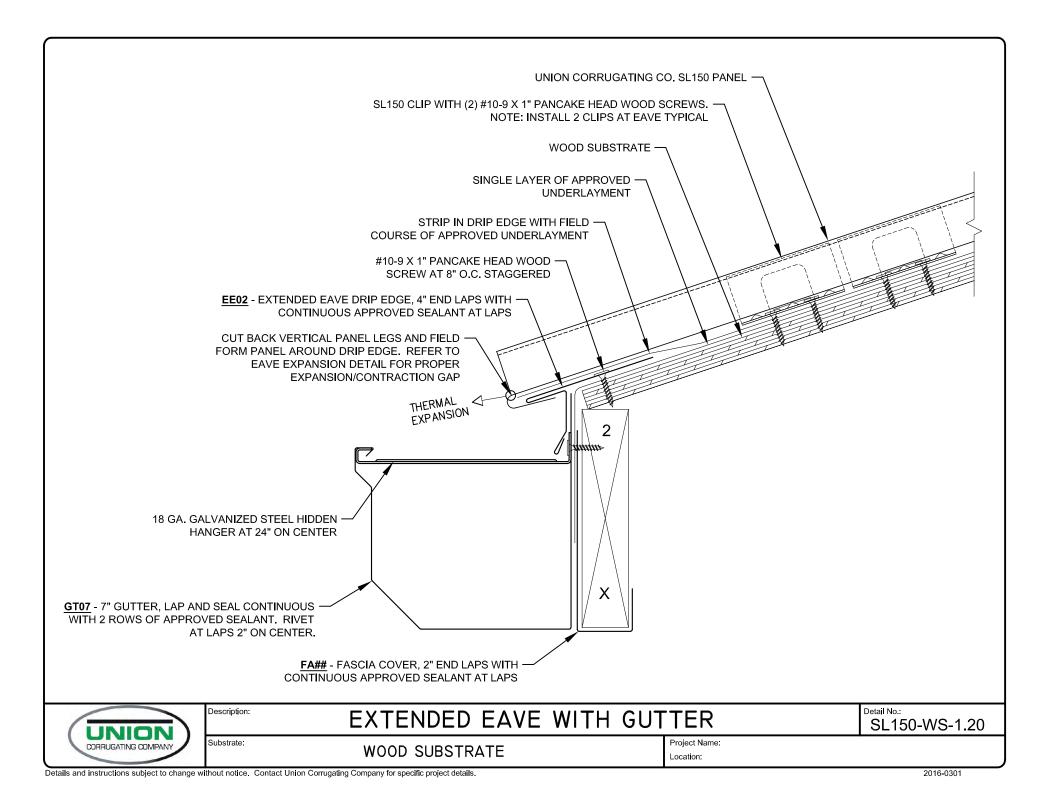


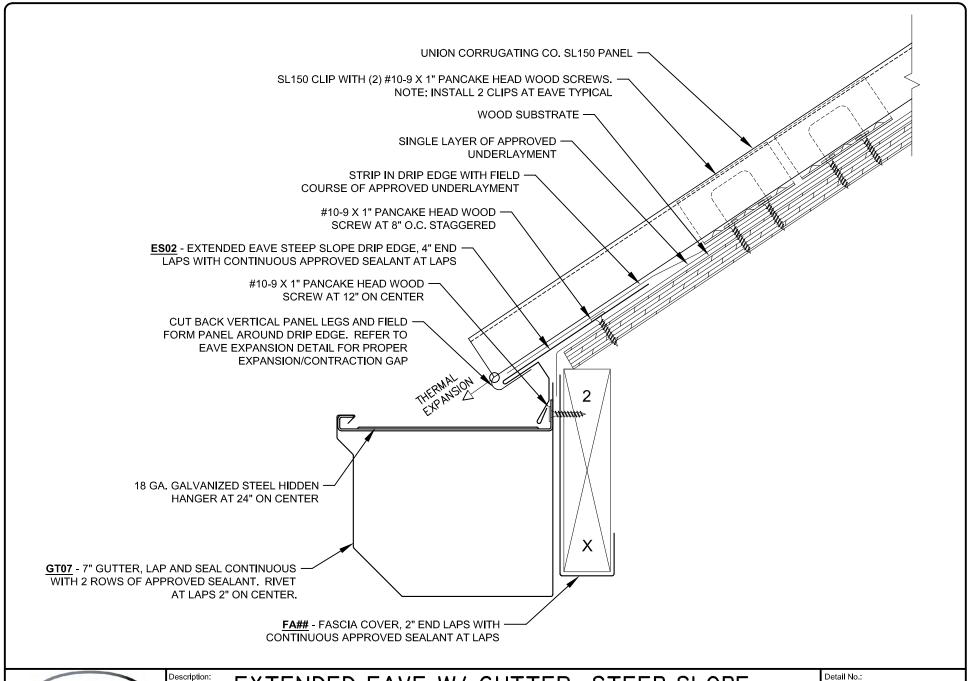


EXTENDED EAVE - STEEP SLOPE

Detail No.: SL150-WS-1.10A

Substrate: WOOD SUBSTRATE





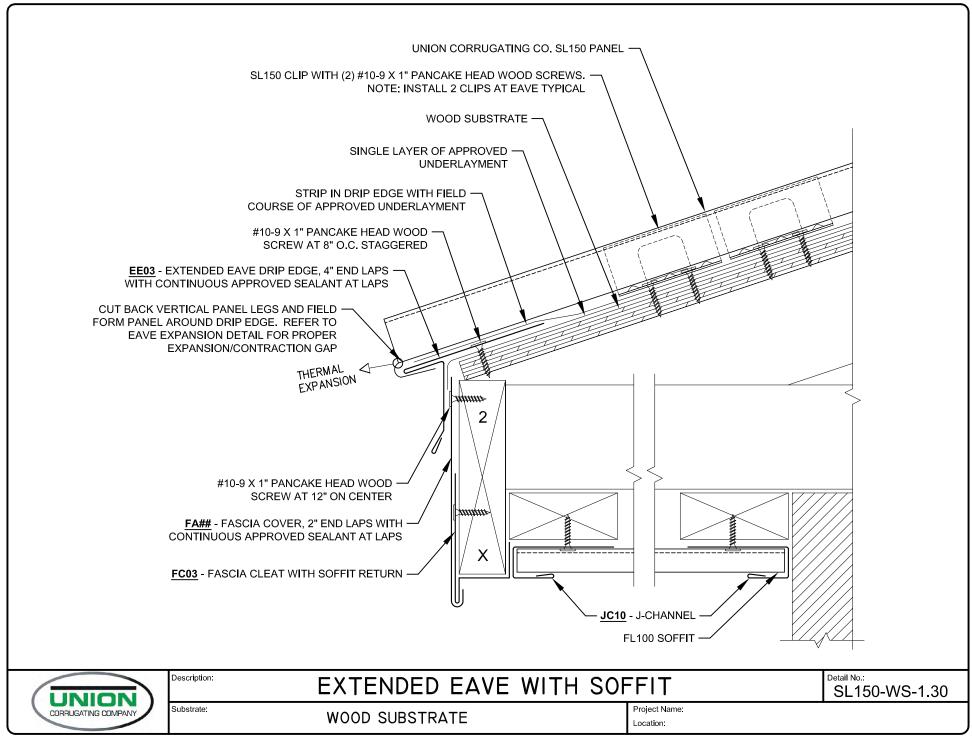


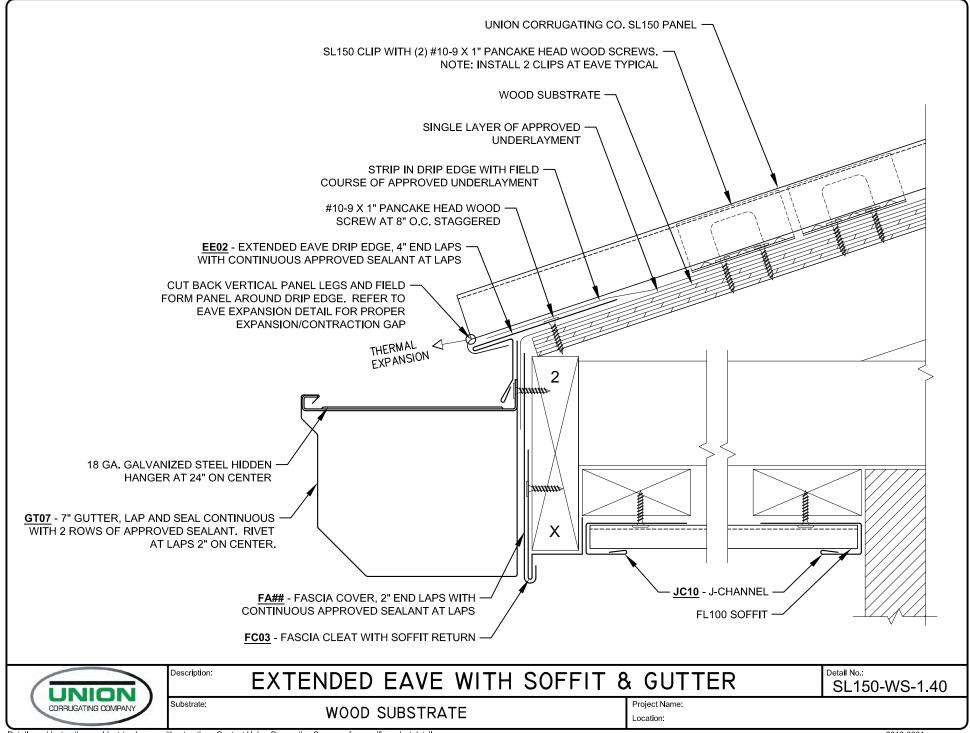
Description: EXTENDED EAVE W/ GUTTER- STEEP SLOPE

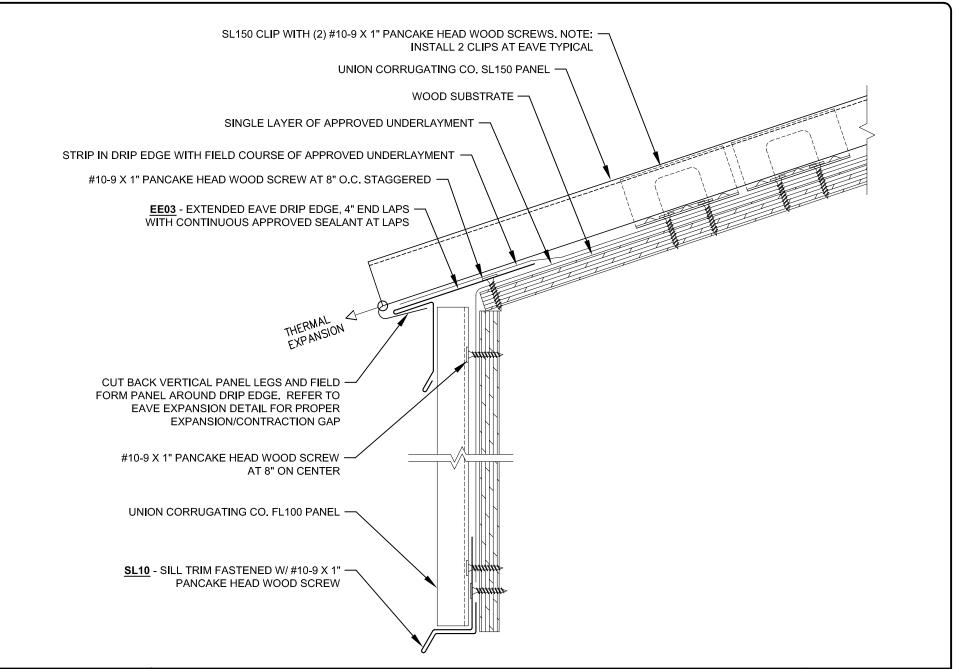
SL150-WS-1.20A

Substrate:

WOOD SUBSTRATE









Description:

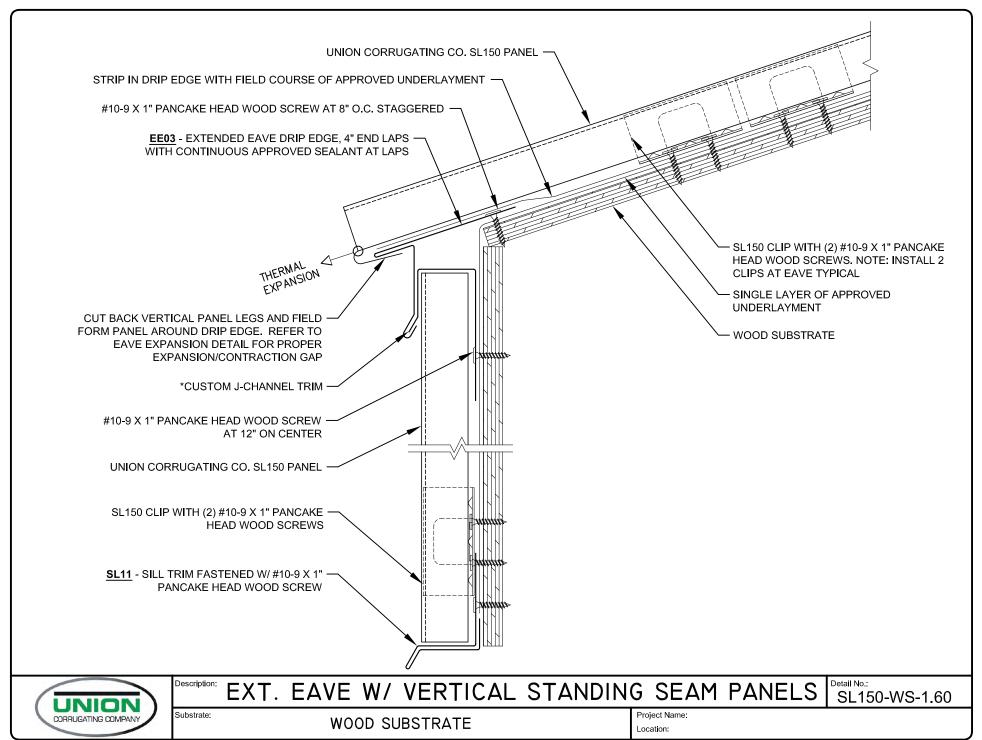
EXTENDED EAVE W/ VERTICAL FLUSH PANEL

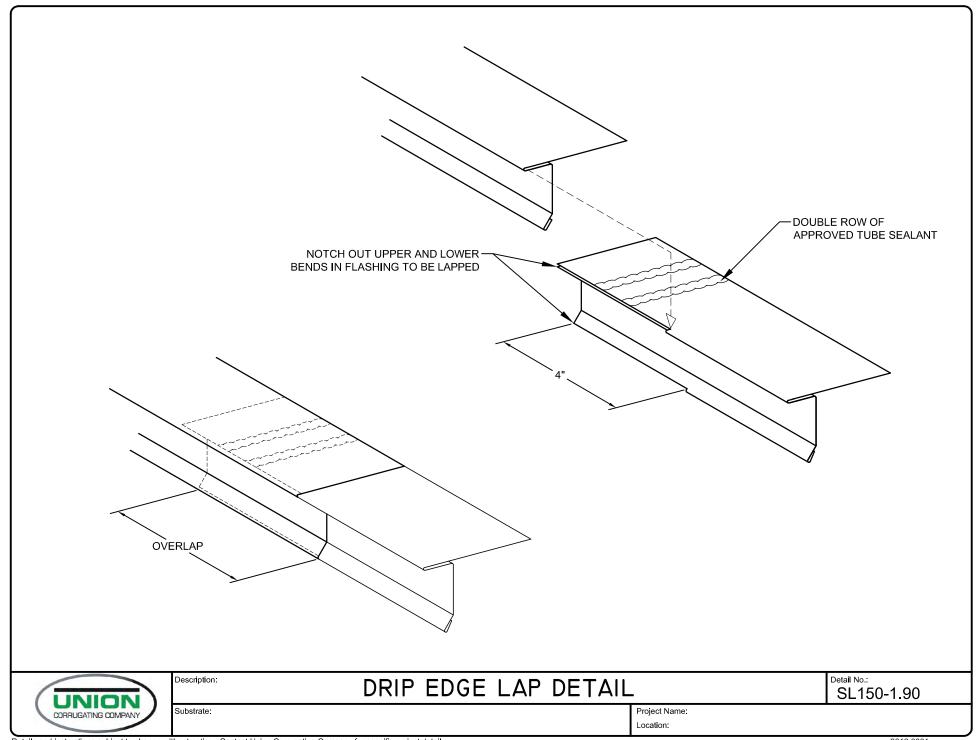
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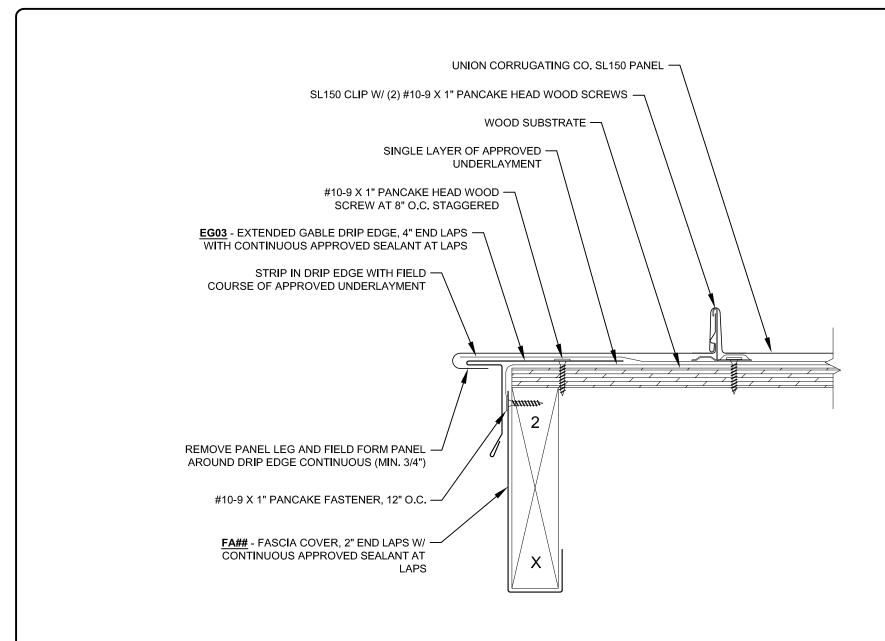
SL150-WS-1.50

Substrate:

WOOD SUBSTRATE









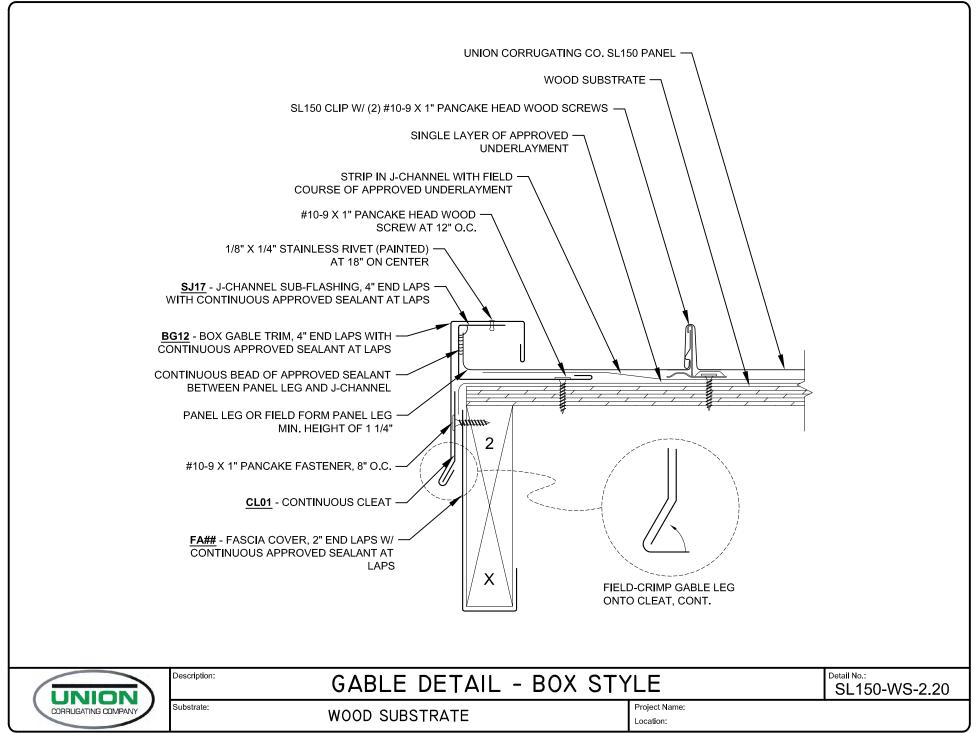
Description:

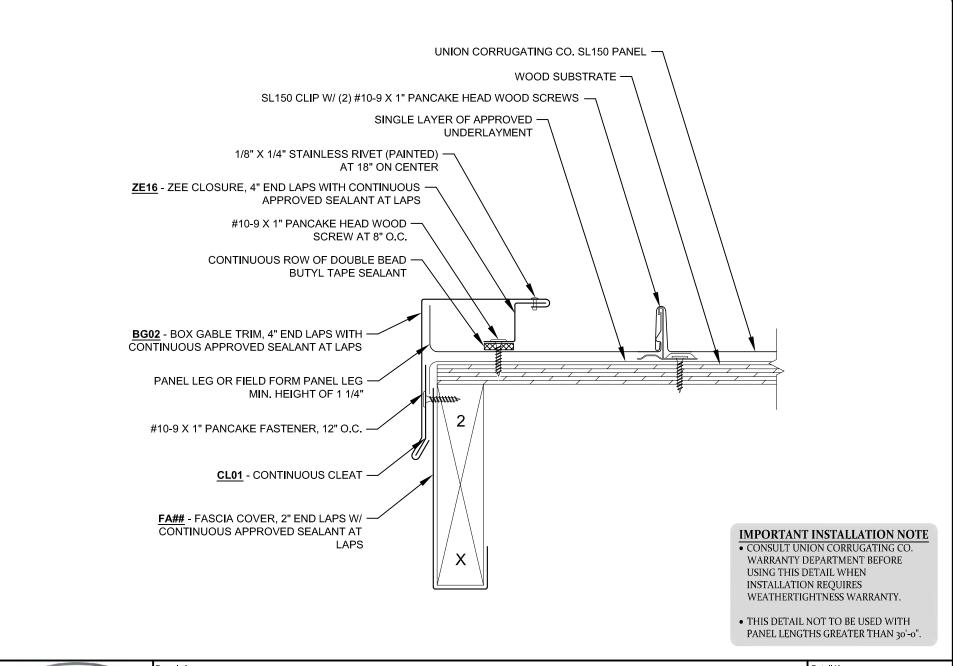
GABLE DETAIL - EXTENDED DRIP STYLE

Detail No.: SL150-WS-2.10

Substrate:

WOOD SUBSTRATE







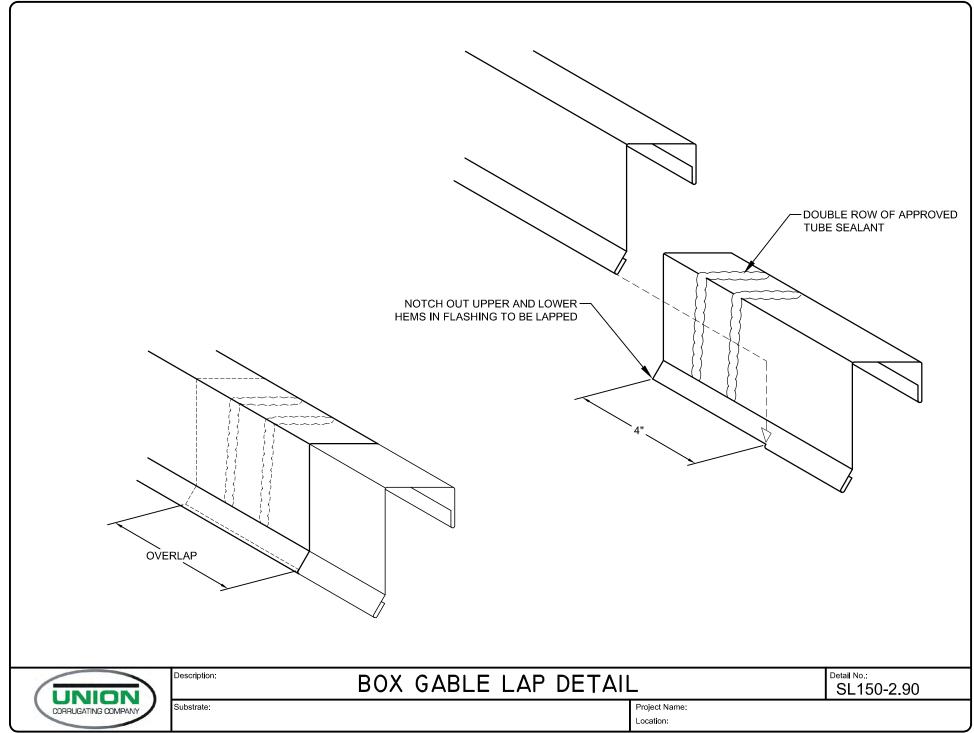
Description: GABLE DETAIL - BOX STYLE w/ Z-CLOSURE

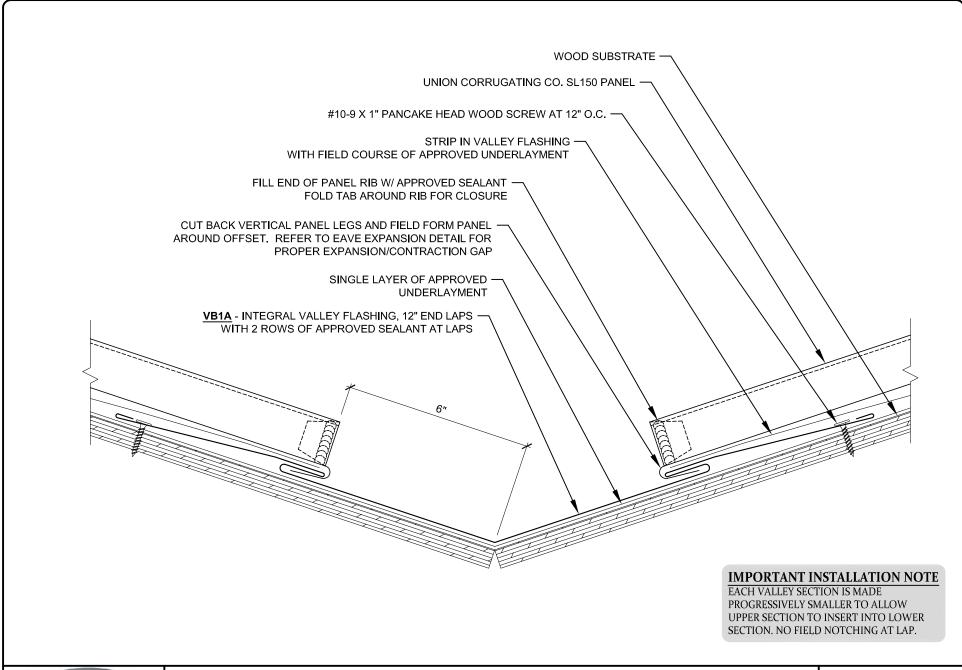
Detail No.:

SL150-WS-2.30

Substrate:

WOOD SUBSTRATE



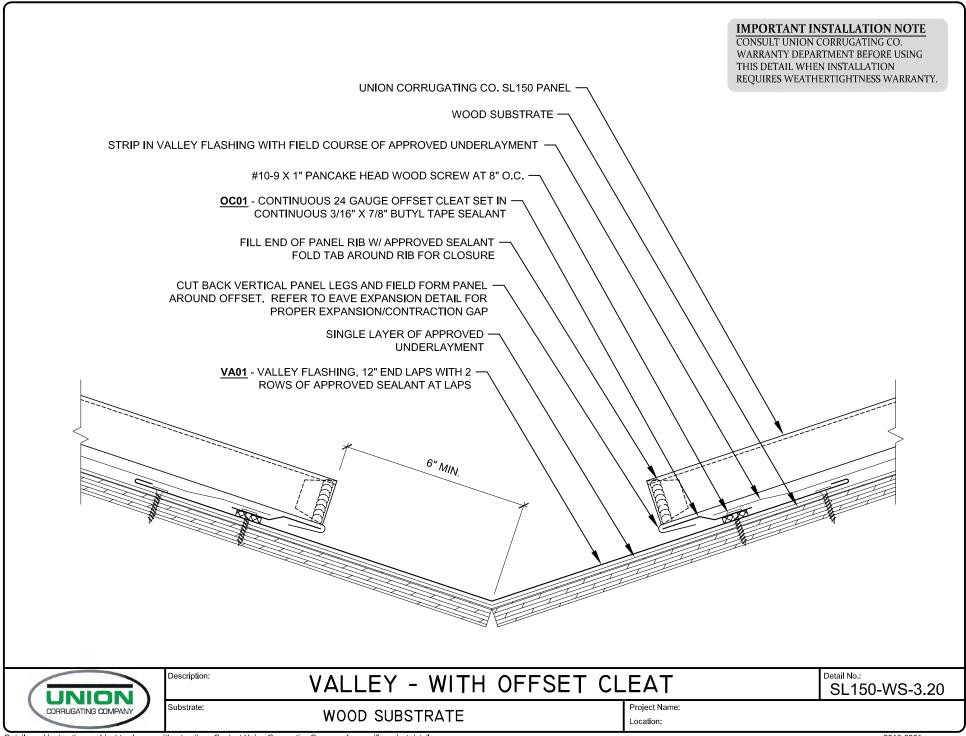


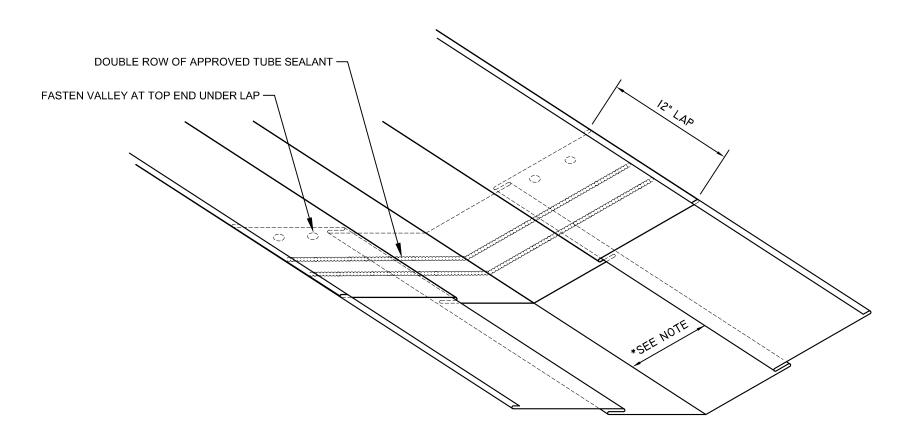


Description: VALLEY DETAIL - INTEGRAL CLEAT Detail No.:

SL150-WS-3.10

Substrate: WOOD SUBSTRATE





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.

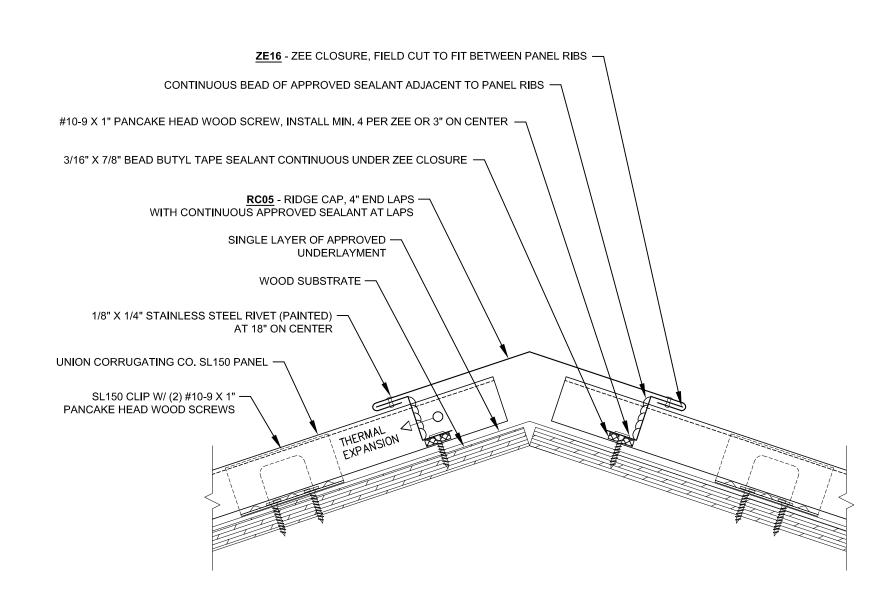
UNION CORRUGATING COMPANY Description: VALLEY LAP DETAIL

Detail No.: SL150-3.90

Project Name:

Project Na Location:

Substrate:

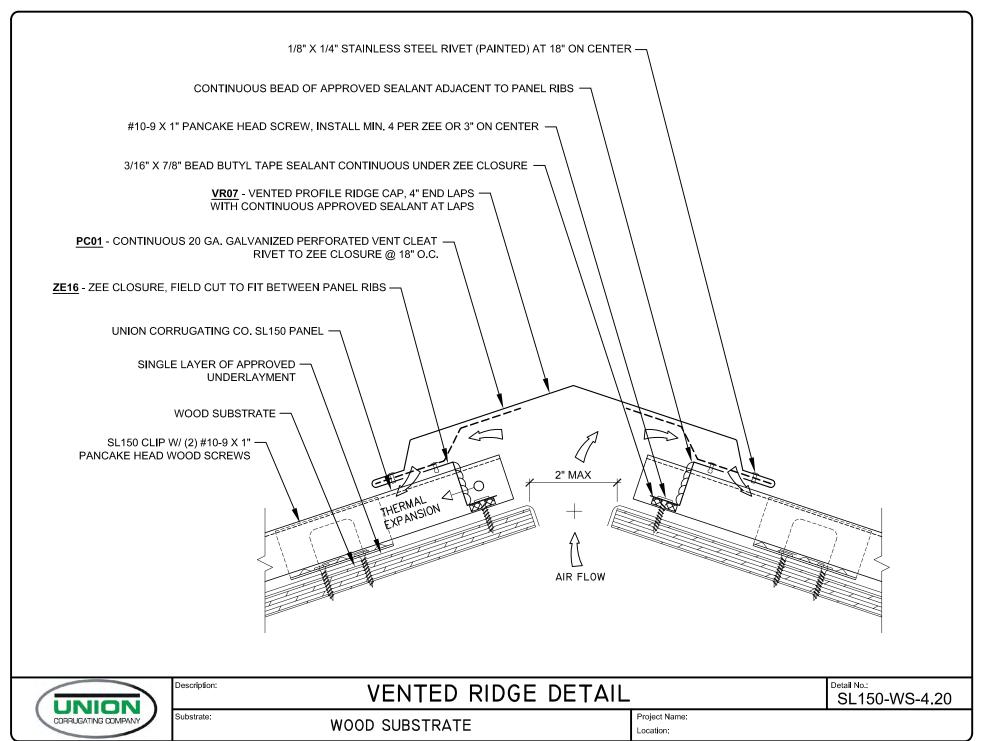


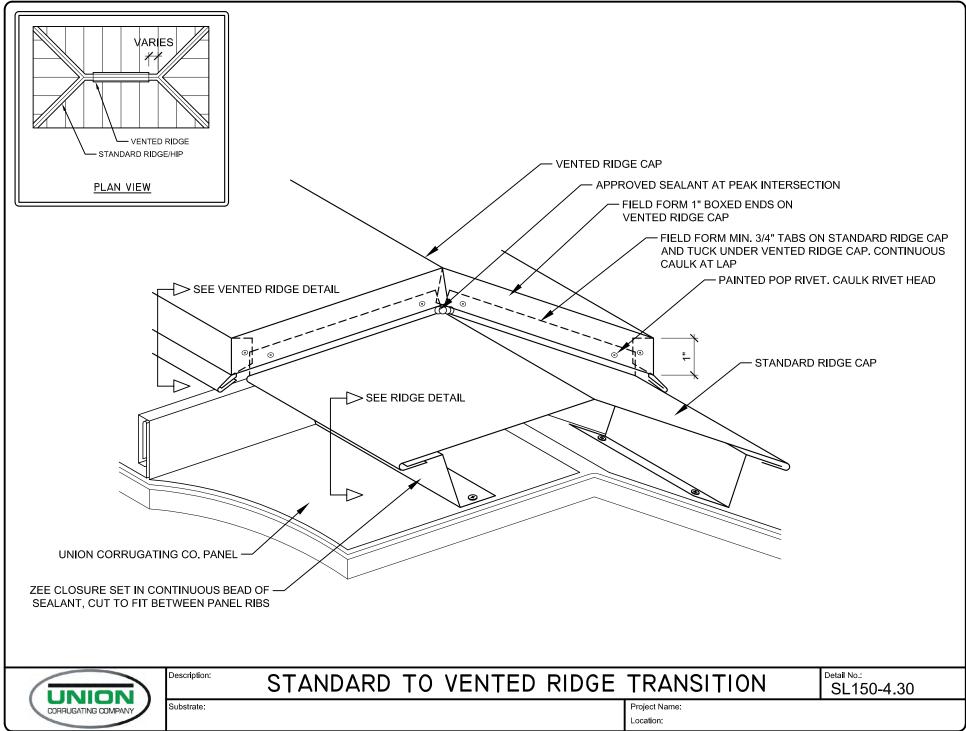


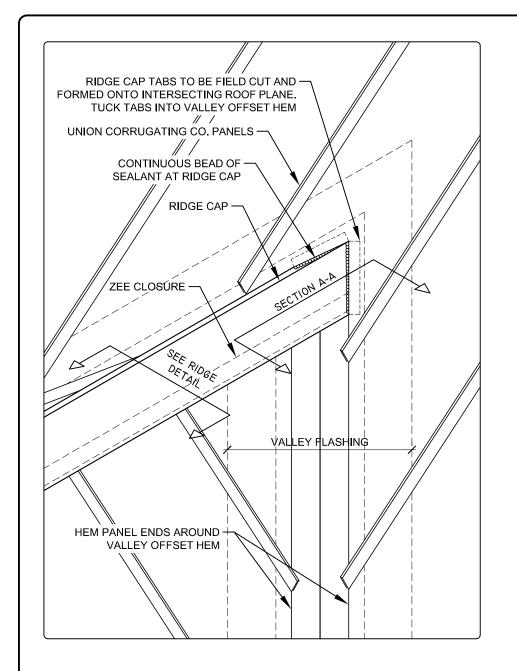
Description: HIP AND RIDGE DETAIL

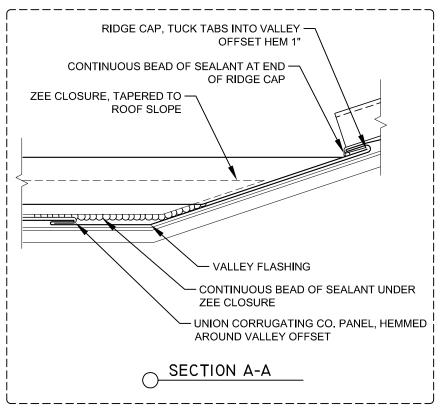
SL150-WS-4.10

WOOD SUBSTRATE











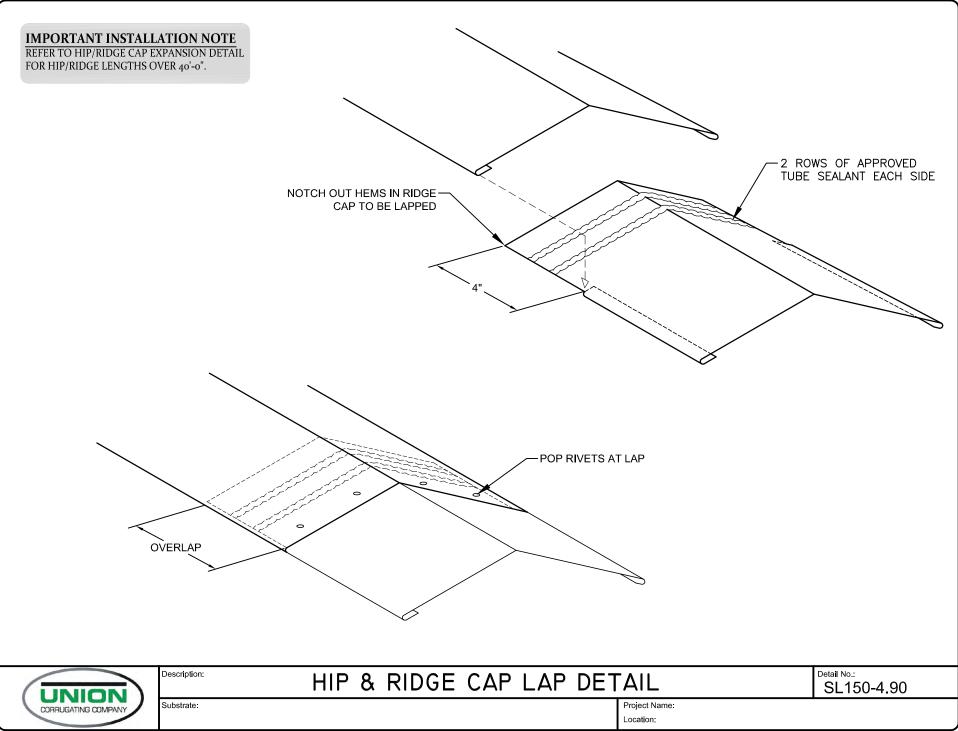
Description:

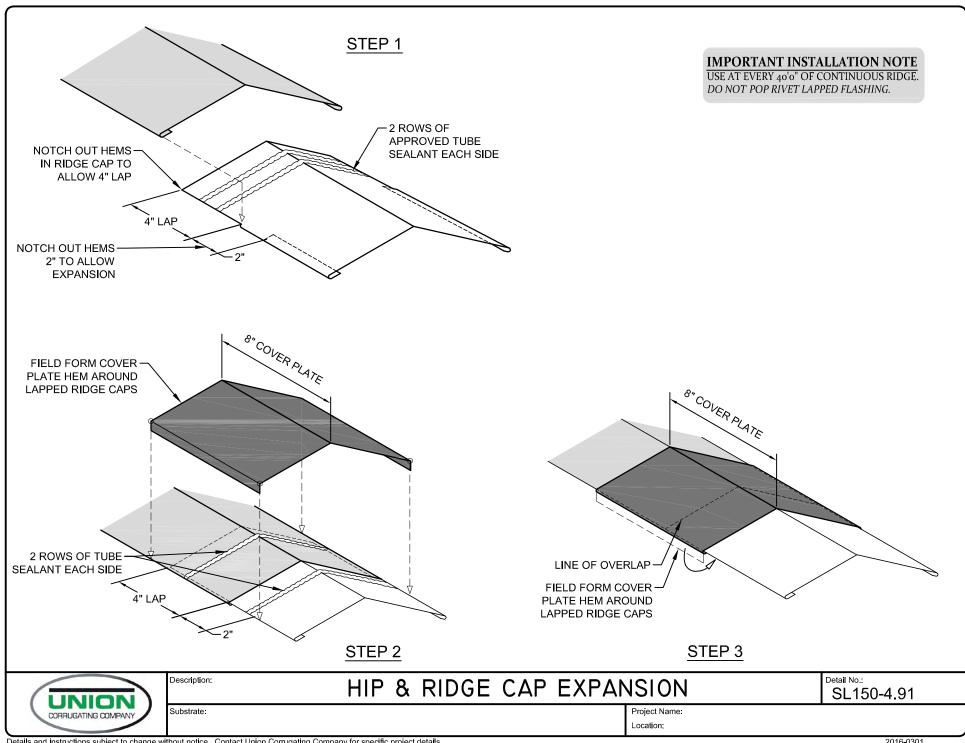
RIDGE TERMINATION @ VALLEY

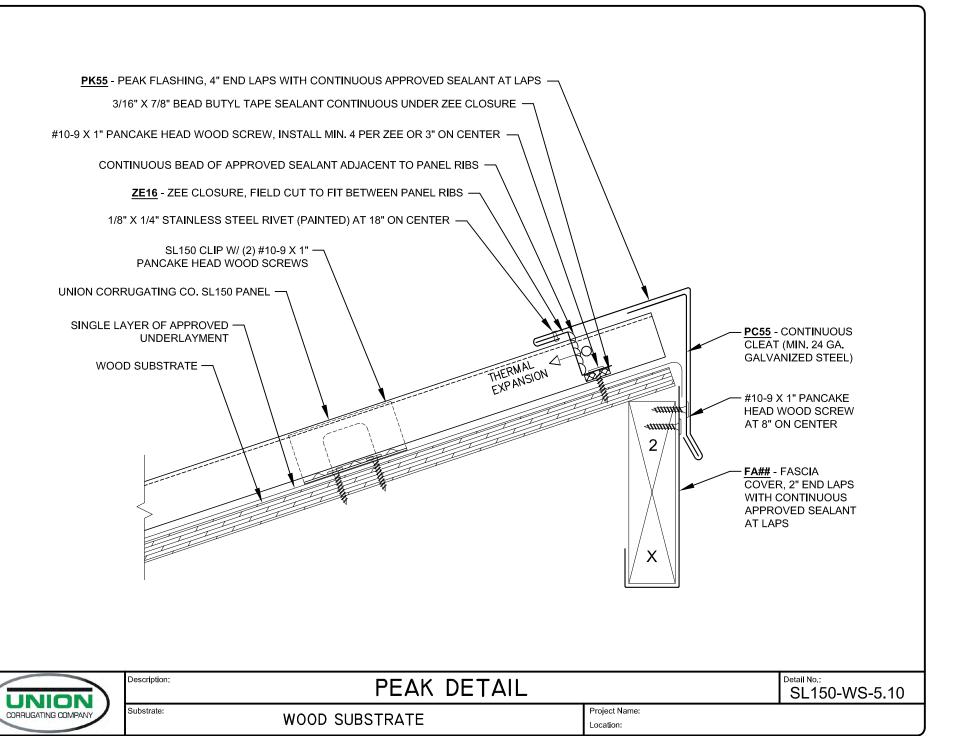
Detail No.:

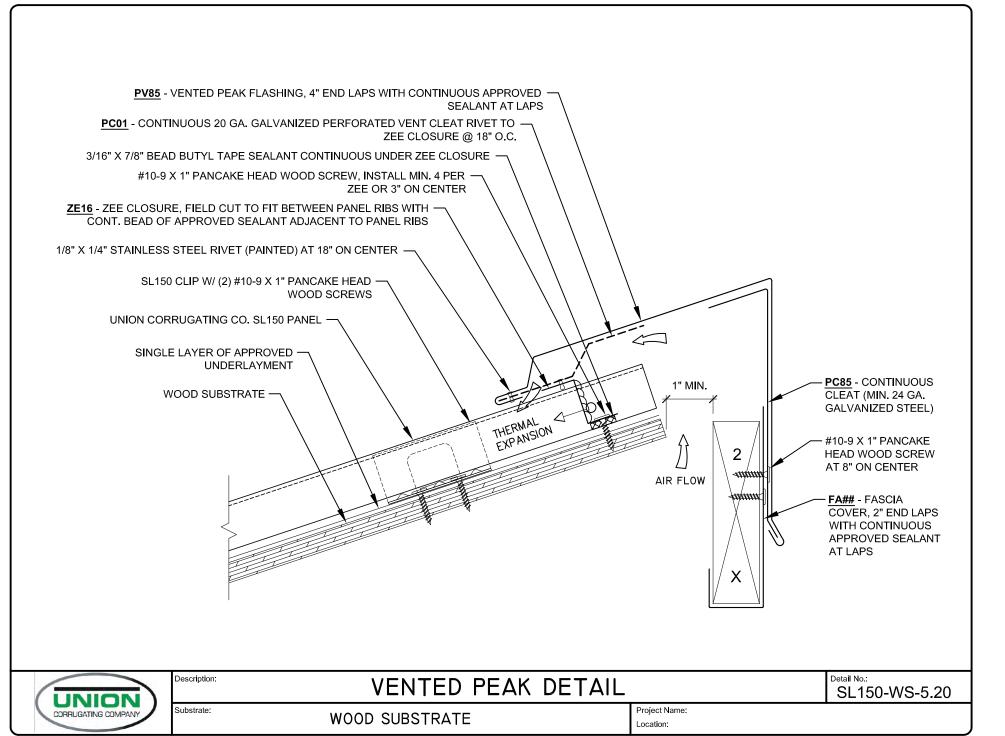
SL150-4.40

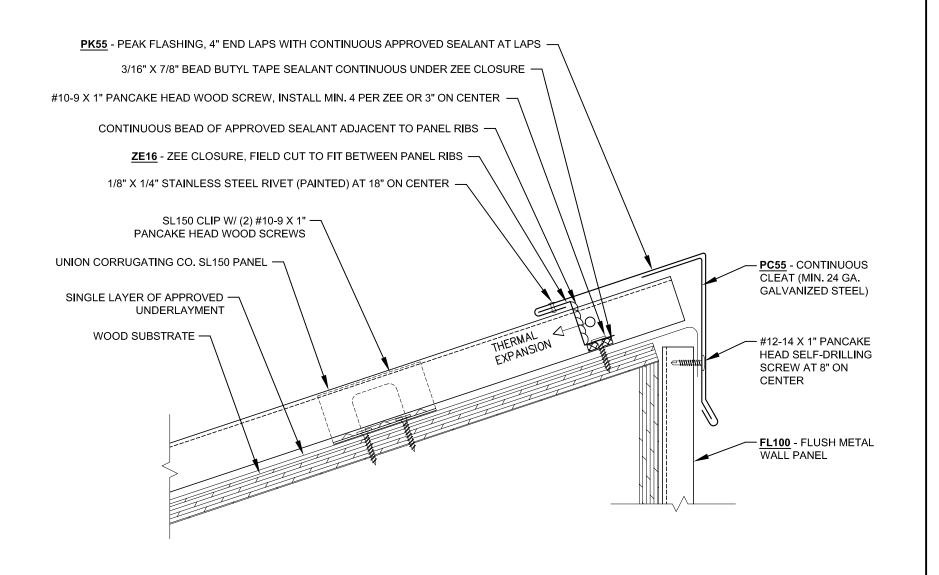
Substrate:









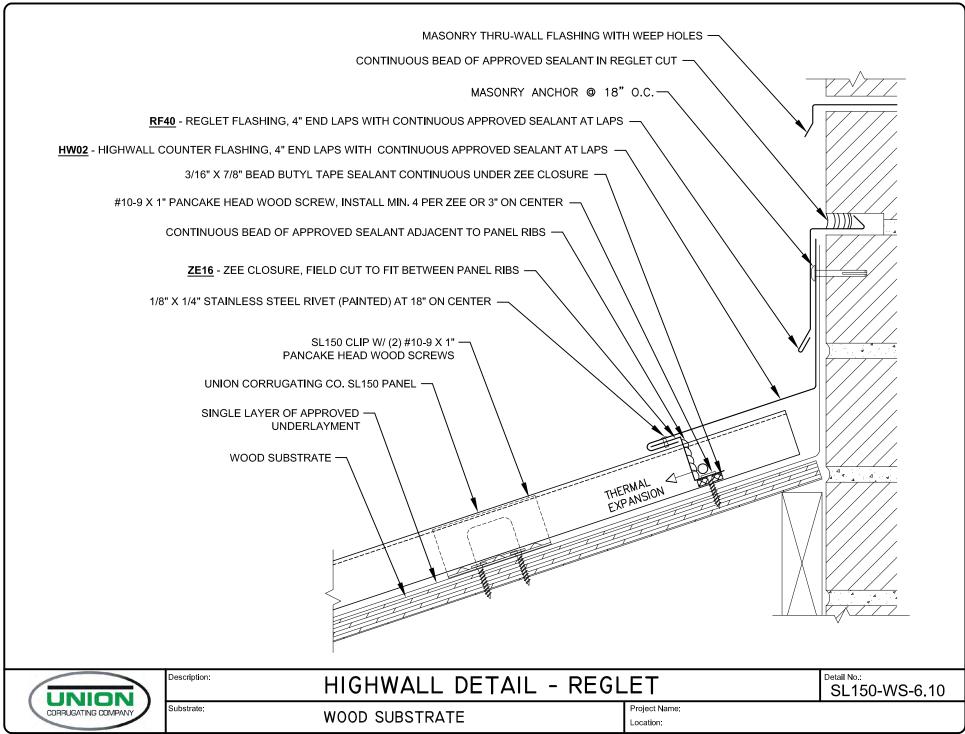


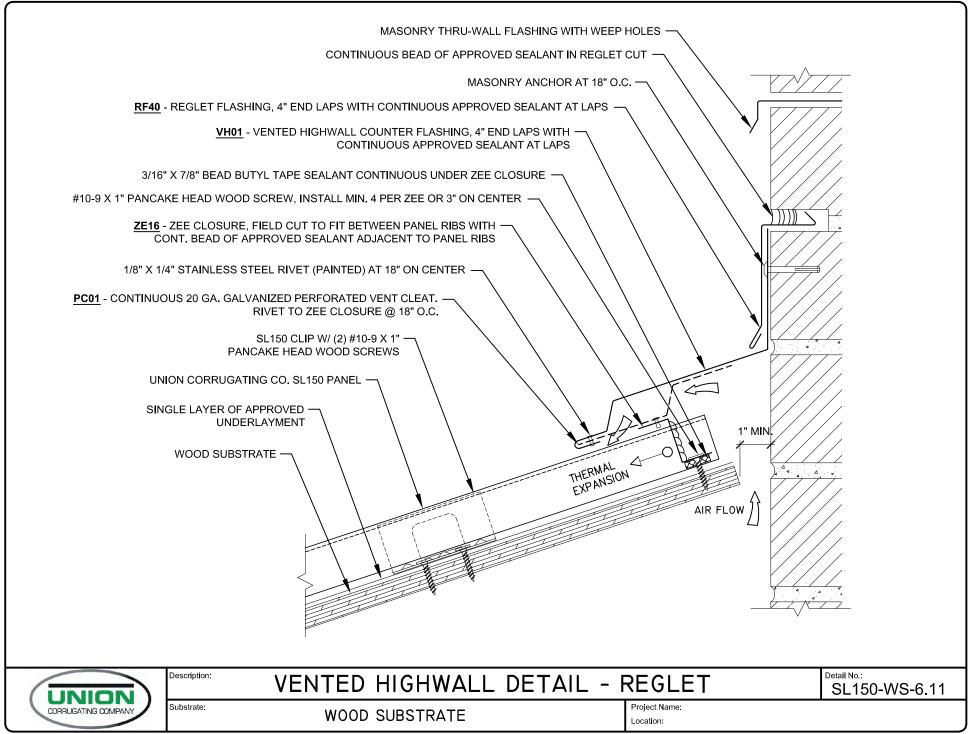


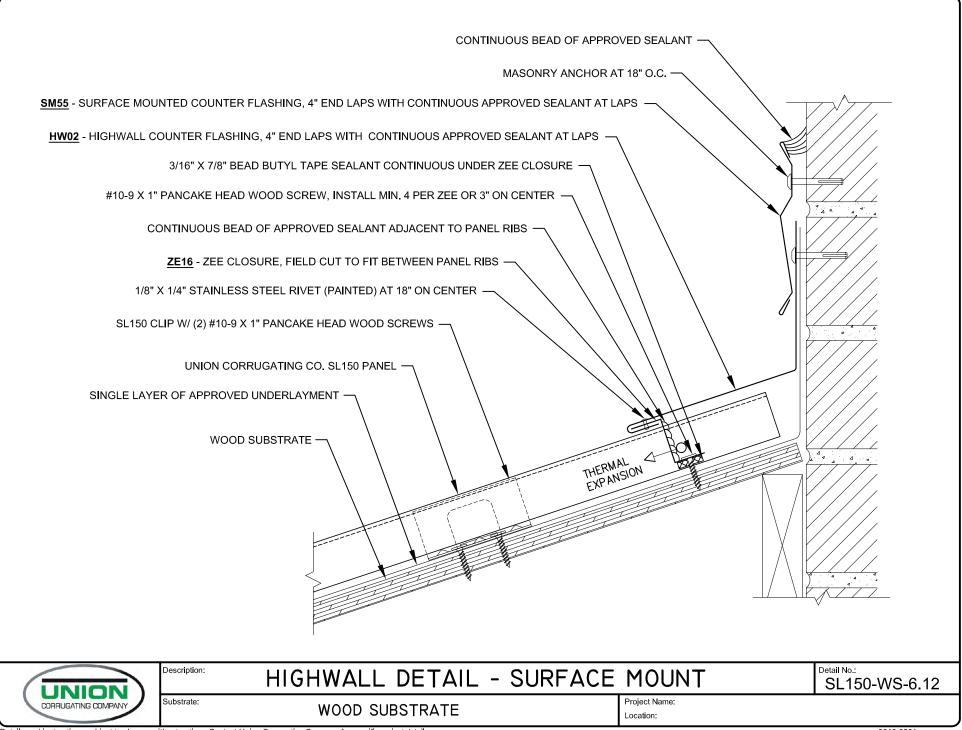
PEAK DETAIL - WITH WALL PANELS

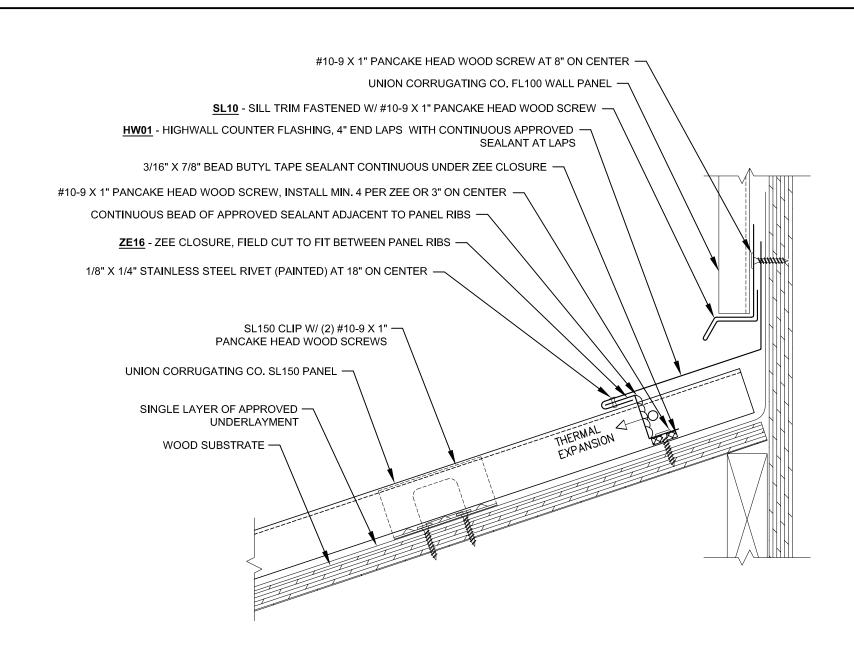
Detail No.: SL150-WS-5.40

Substrate: WOOD SUBSTRATE











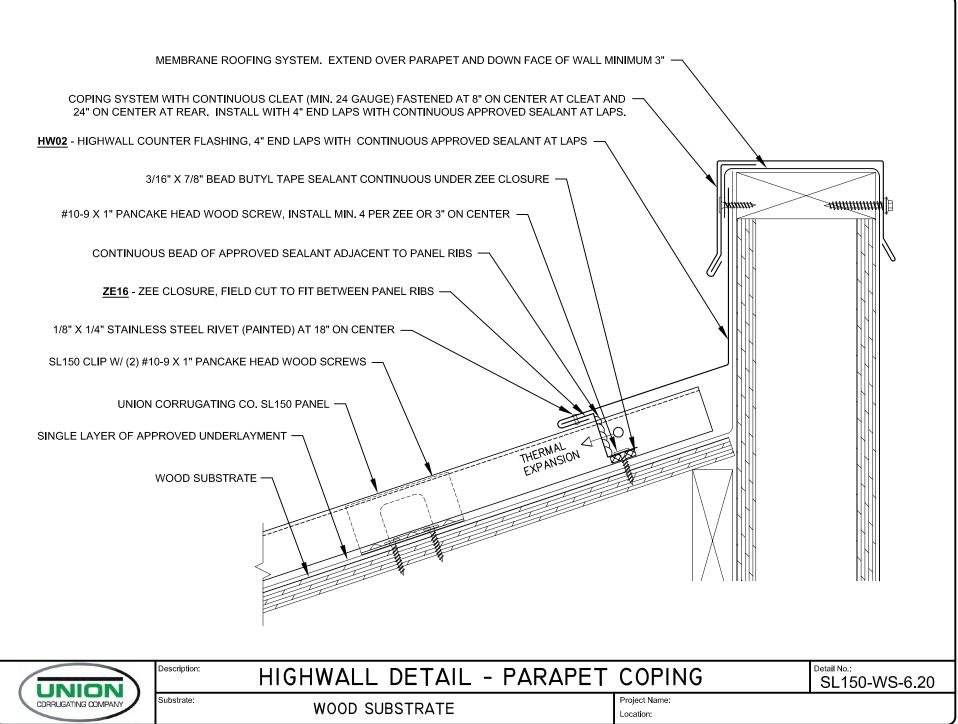
Description: HIGHWALL DETAIL - WALL PANEL W/ SILL

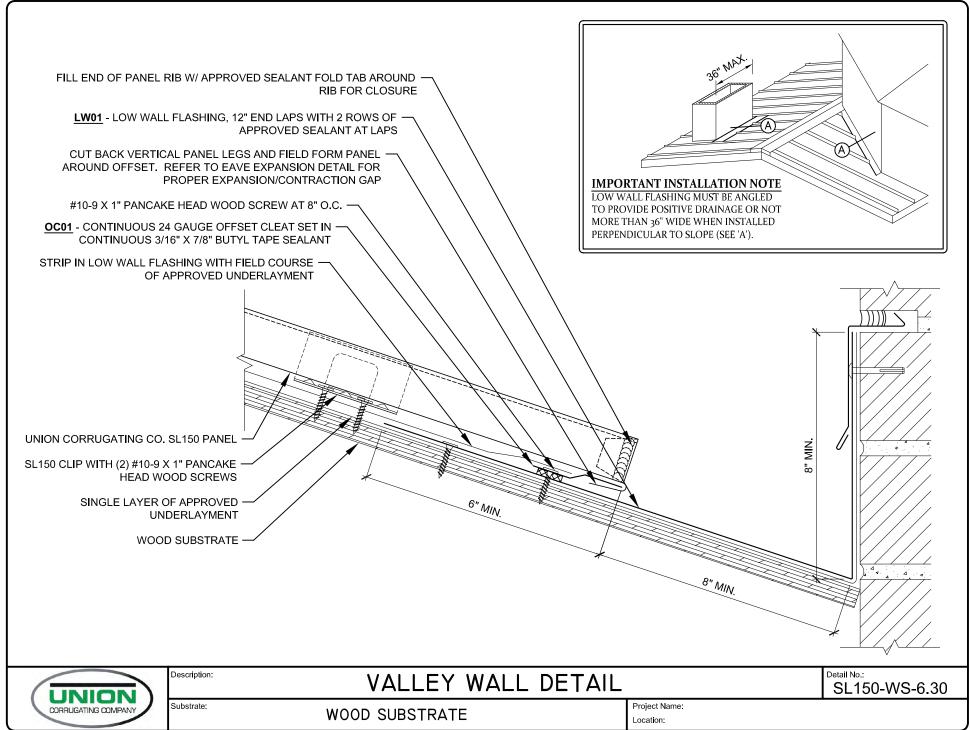
Detail No.:

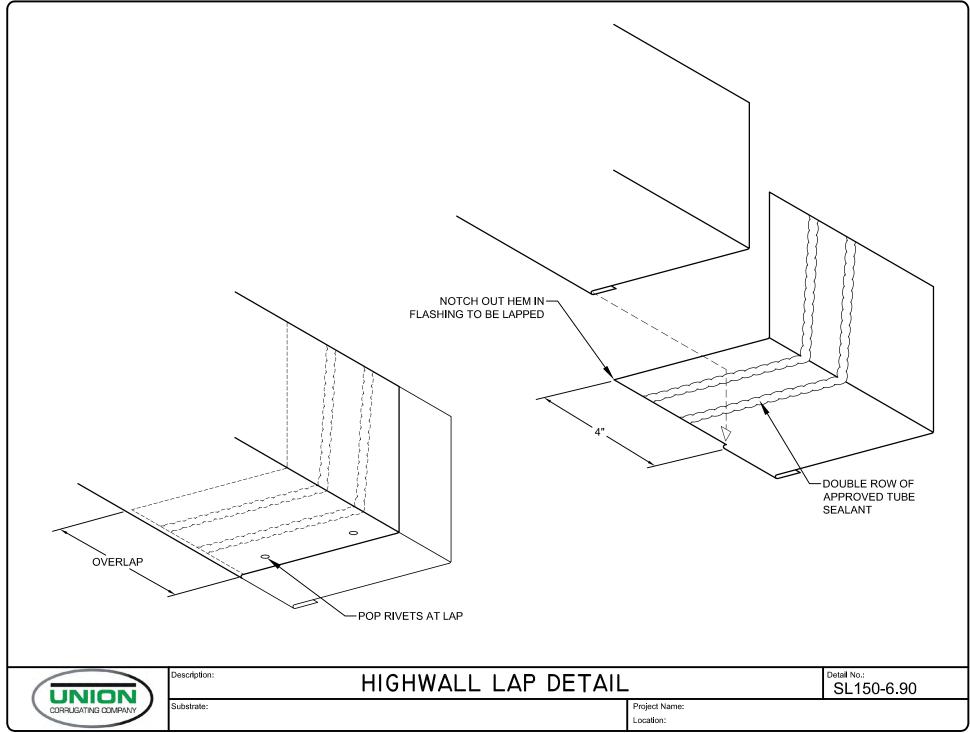
SL150-WS-6.14

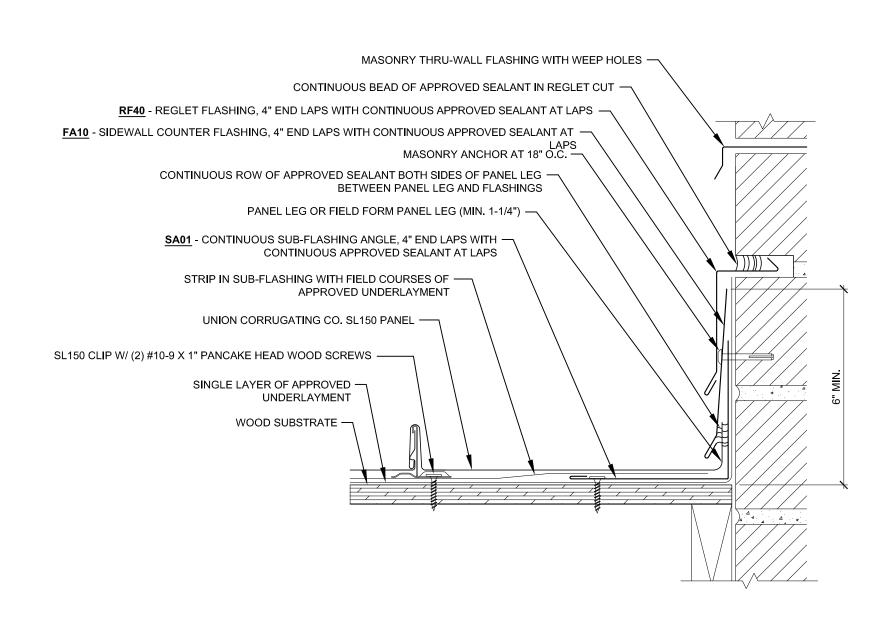
Substrate:

WOOD SUBSTRATE











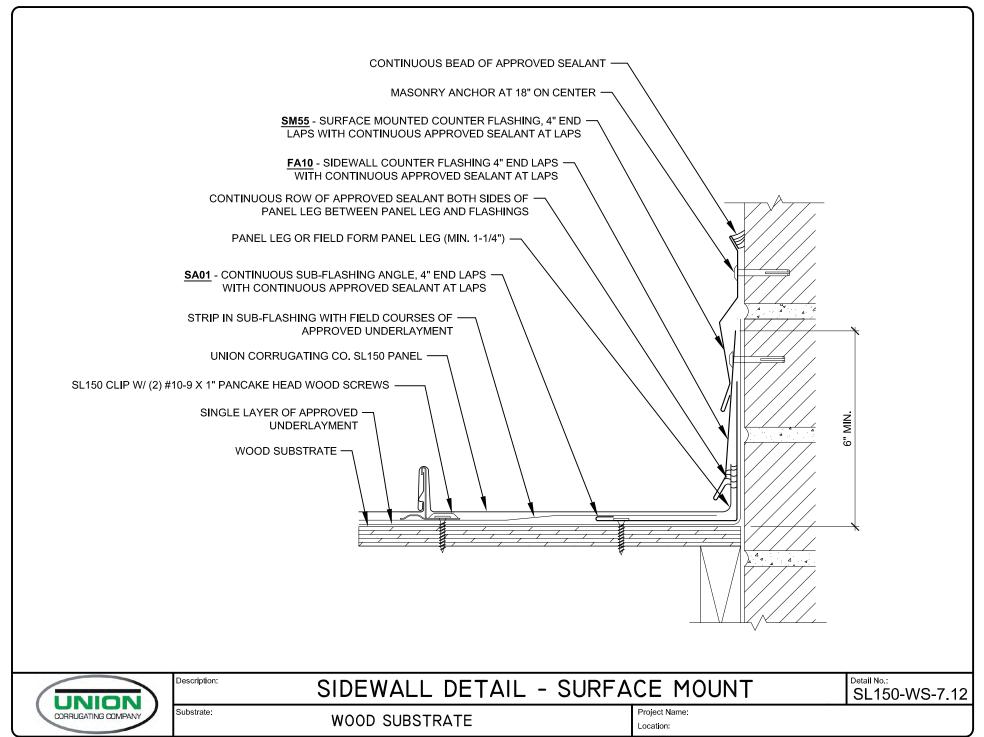
SIDEWALL DETAIL - REGLET

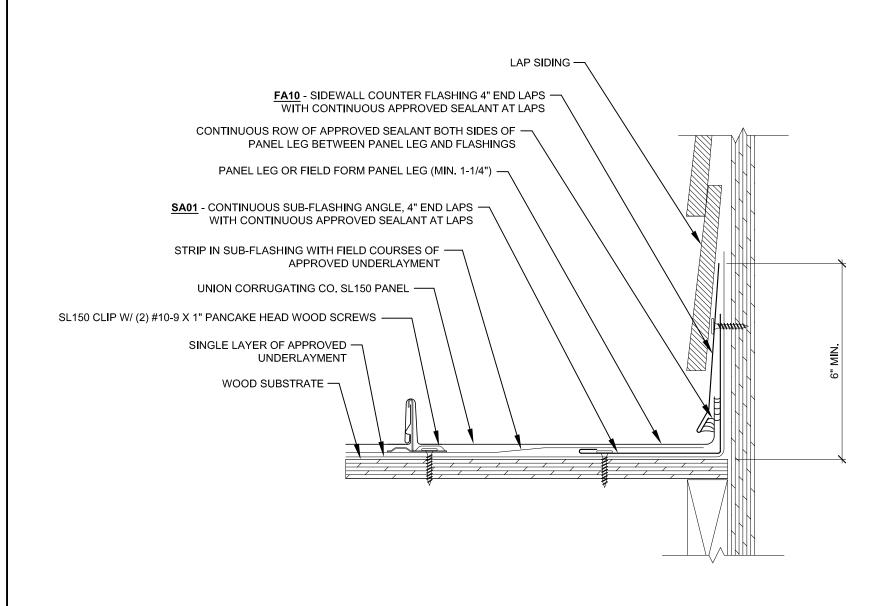
Detail No.: SL150-WS-7.11

Substrate: WOOD SUBSTRATE

Project Name: Location:

Description:







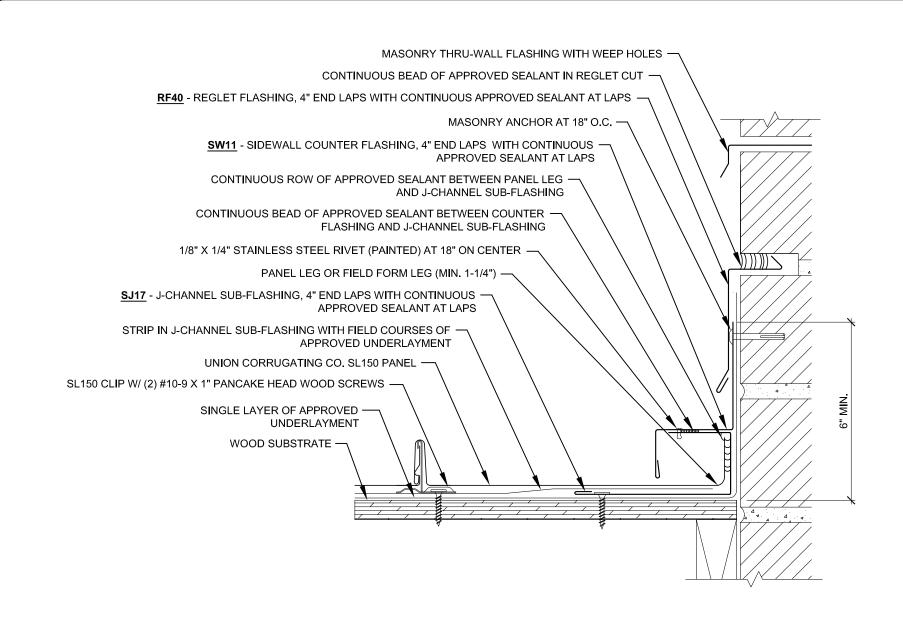
Description: SIDEWALL DETAIL - WOOD FRAMING & SIDING

Detail No.:

SL150-WS-7.13

Substrate:

WOOD SUBSTRATE





SIDEWALL DETAIL - REGLET

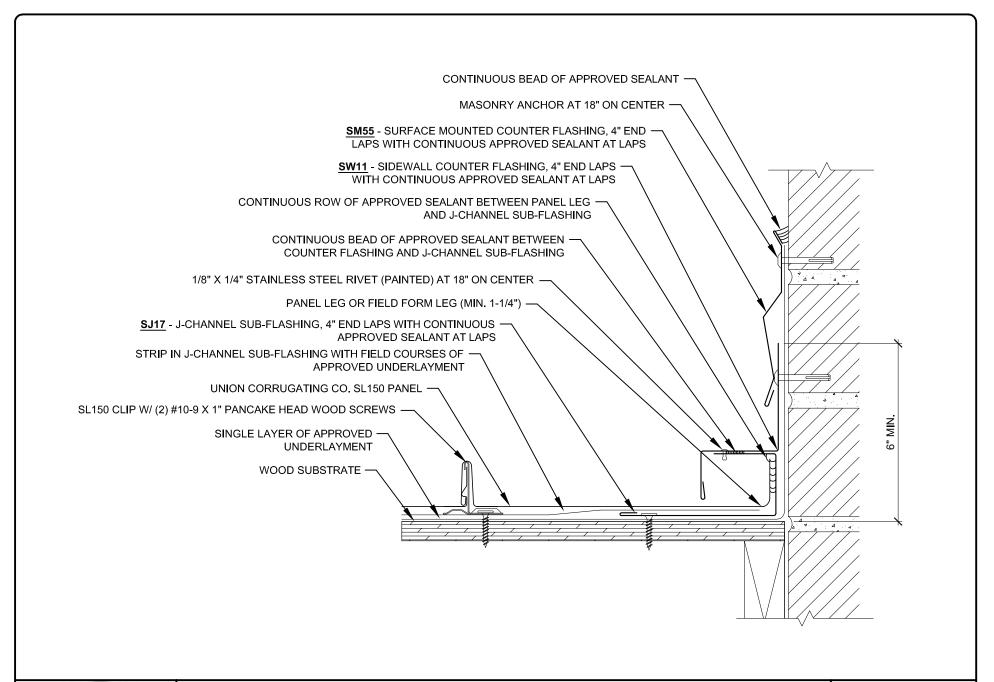
Detail No.: SL150-WS-7.21

Substrate: WOOD SUBSTRATE

Location

Project Name:

Description:





Description:

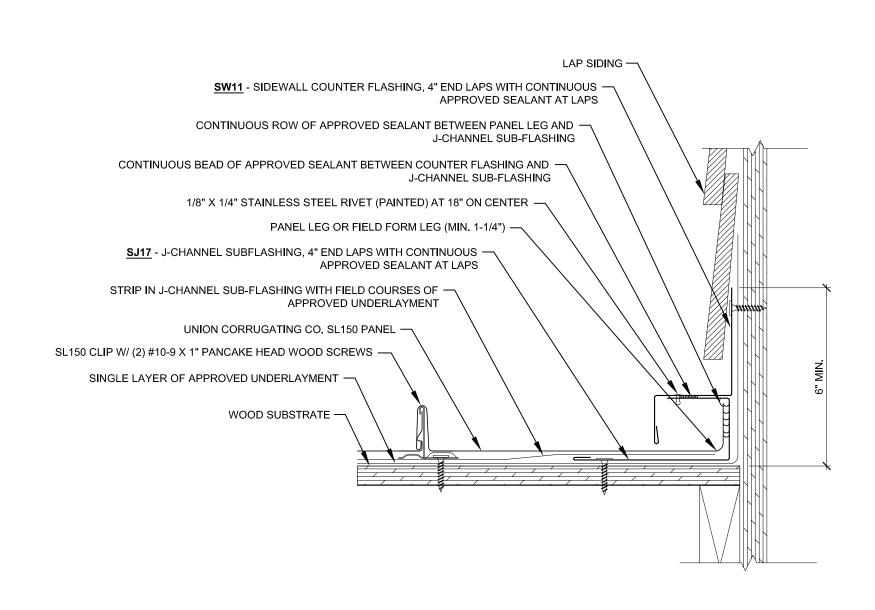
SIDEWALL DETAIL - SURFACE MOUNT

Detail No.:

SL150-WS-7.22

Substrate:

WOOD SUBSTRATE





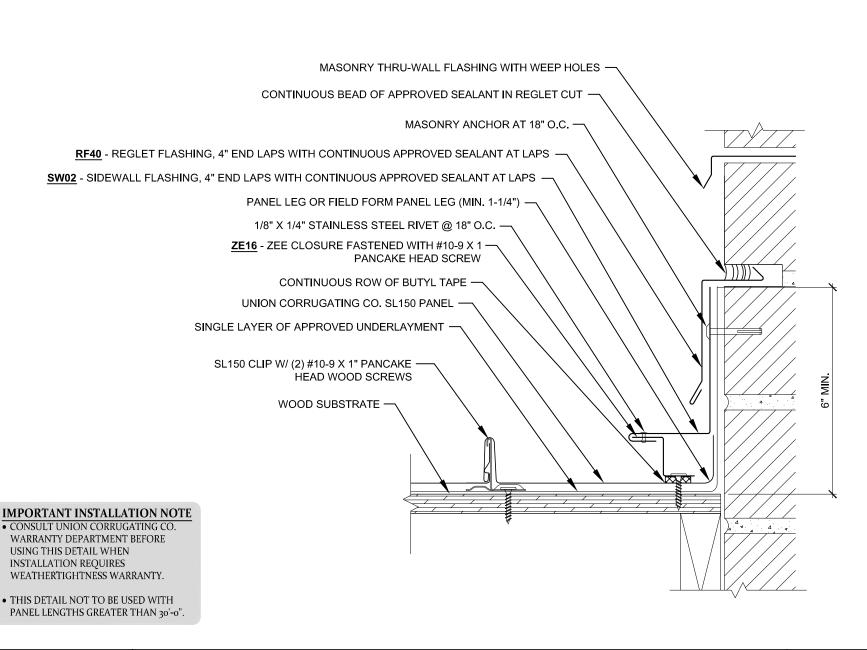
Description: SIDEWALL DETAIL - WOOD FRAMING & SIDING

Detail No.:

SL150-WS-7.23

Substrate:

WOOD SUBSTRATE





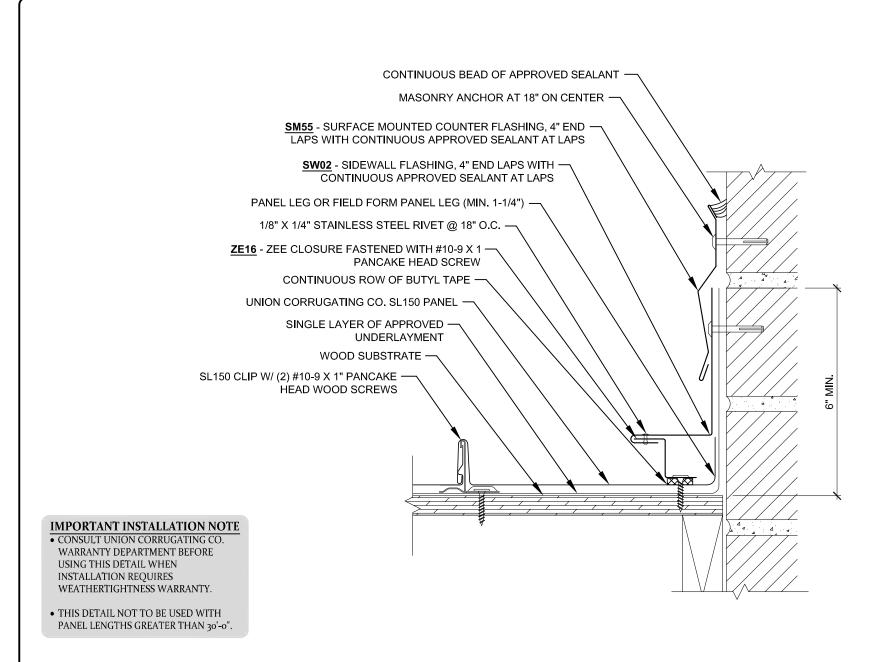
Description:

SIDEWALL W/ ZEE DETAIL - REGLET

Detail No.:

SL150-WS-7.31

Substrate: WOOD SUBSTRATE





Description:

SIDEWALL W/ ZEE DETAIL - SURFACE MOUNT

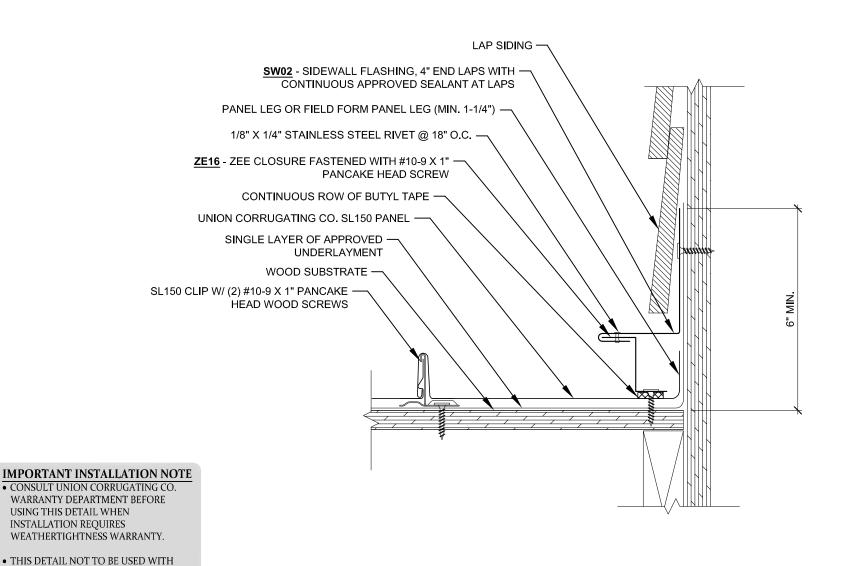
Location:

etail No.:

Substrate:

WOOD SUBSTRATE

RFACE MOUNI SL150-WS-7.32





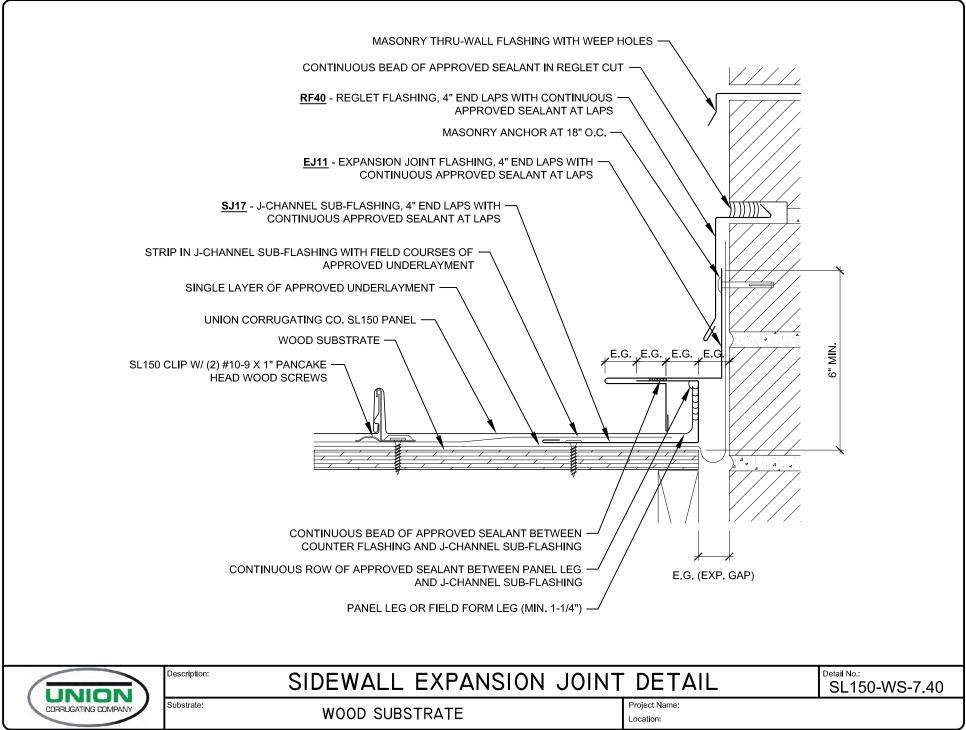
PANEL LENGTHS GREATER THAN 30'-0".

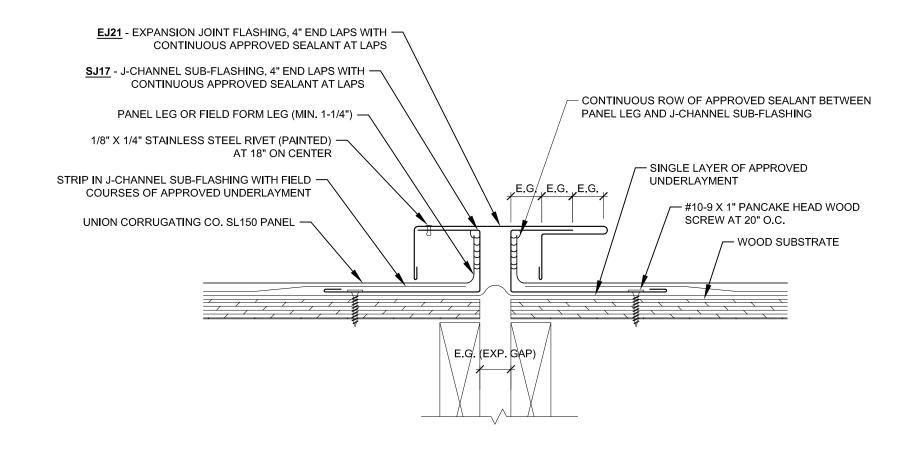
Description: SIDEWALL W/ ZEE - WOOD FRAMING & SIDING

Detail No.:

SL150-WS-7.33

Substrate: WOOD SUBSTRATE







EXPANSION JOINT (MID-ROOF)

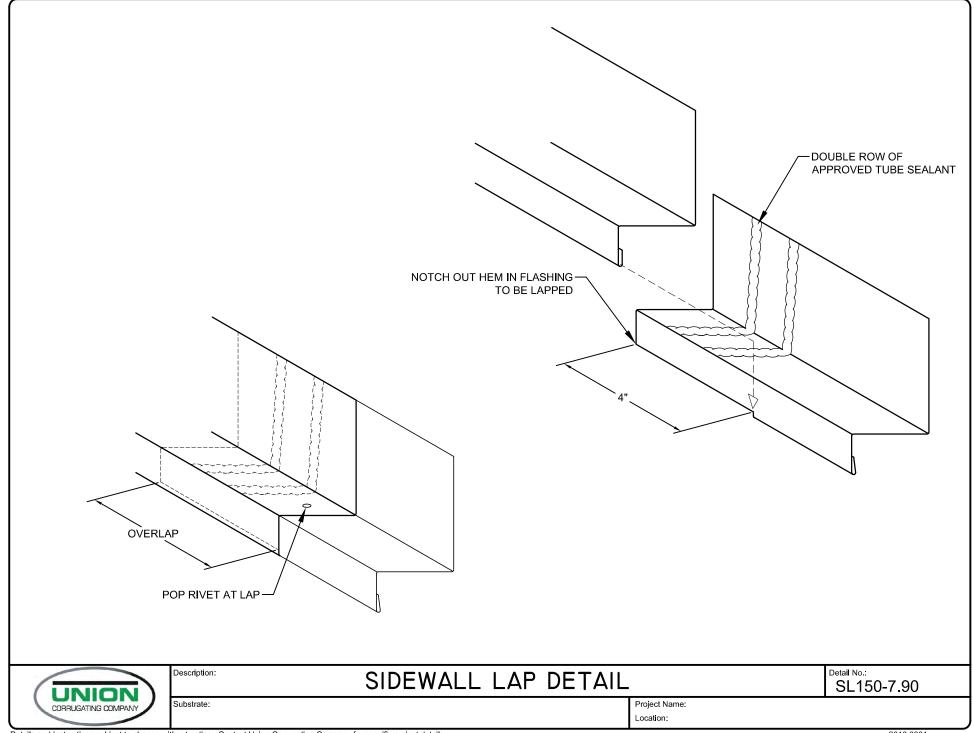
Detail No.:

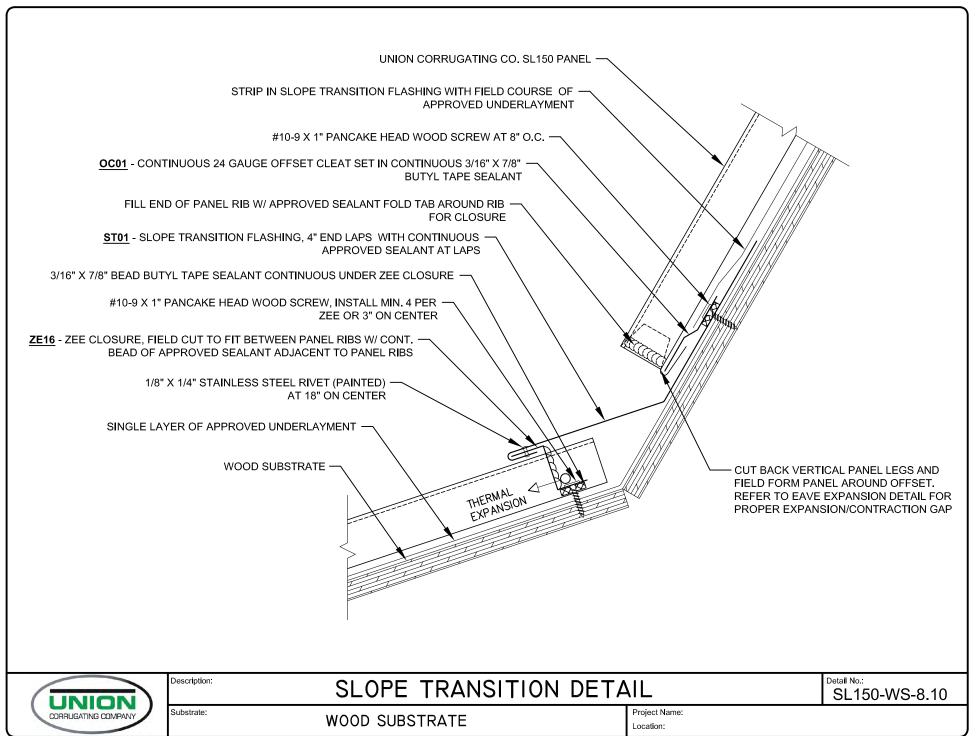
SL150-WS-7.50

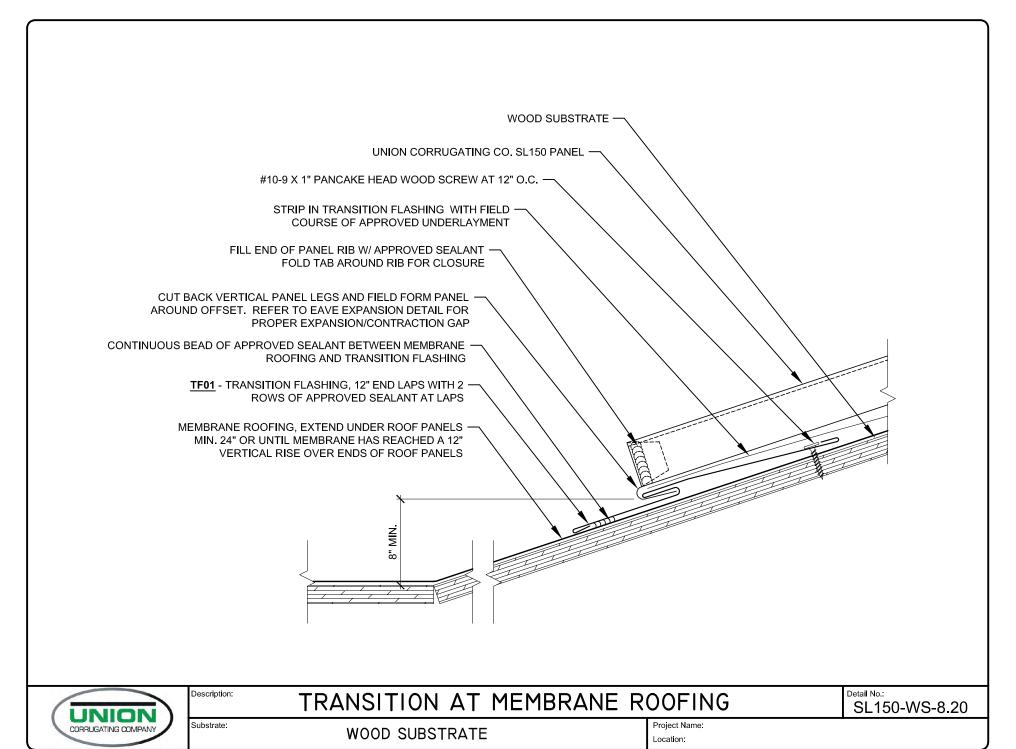
Substrate: WOOD SUBSTRATE

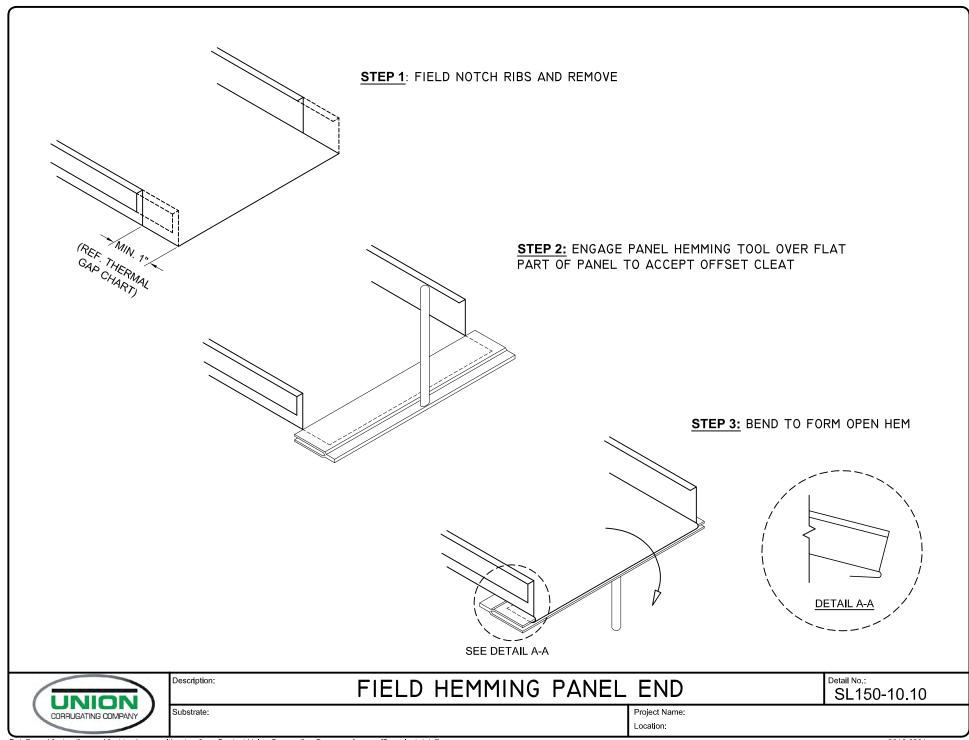
Project Name: Location:

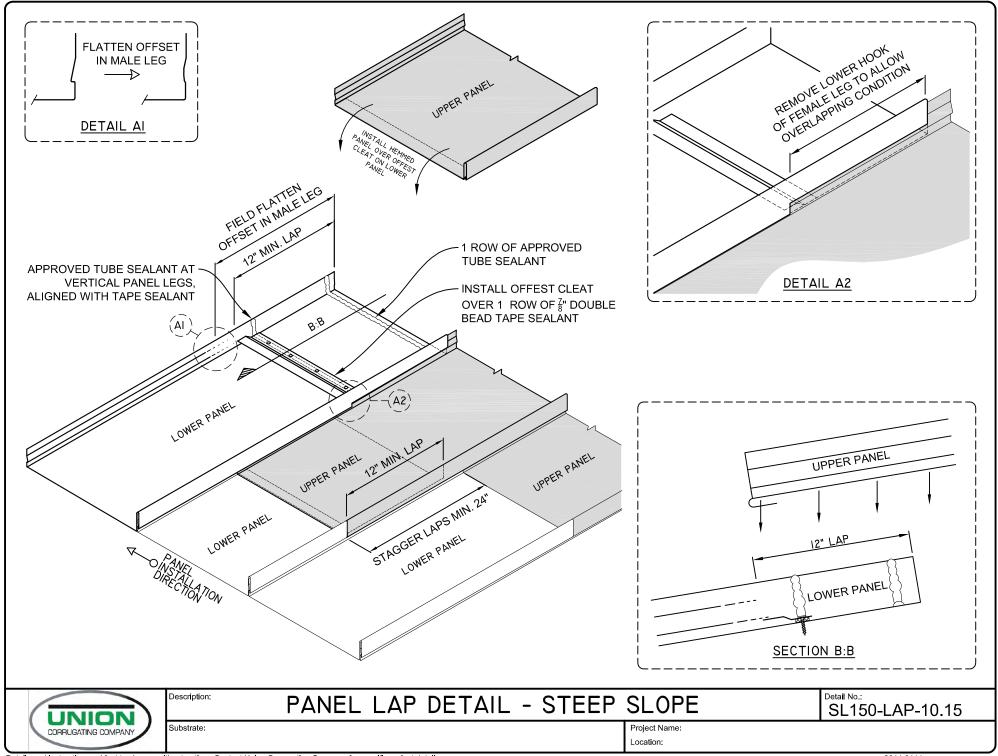
Description:

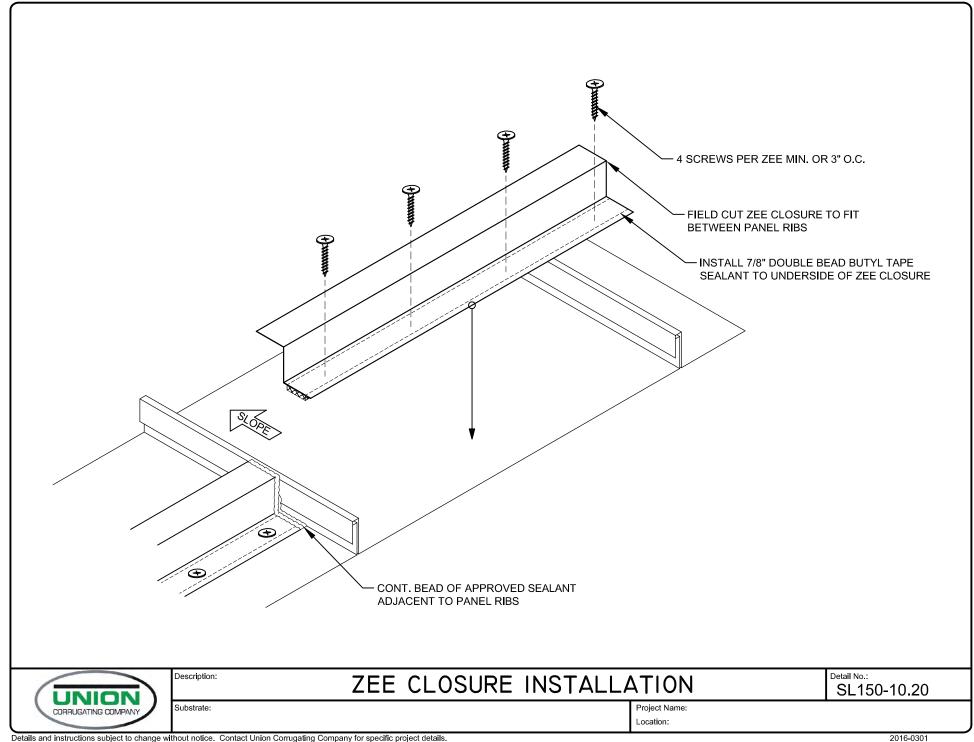


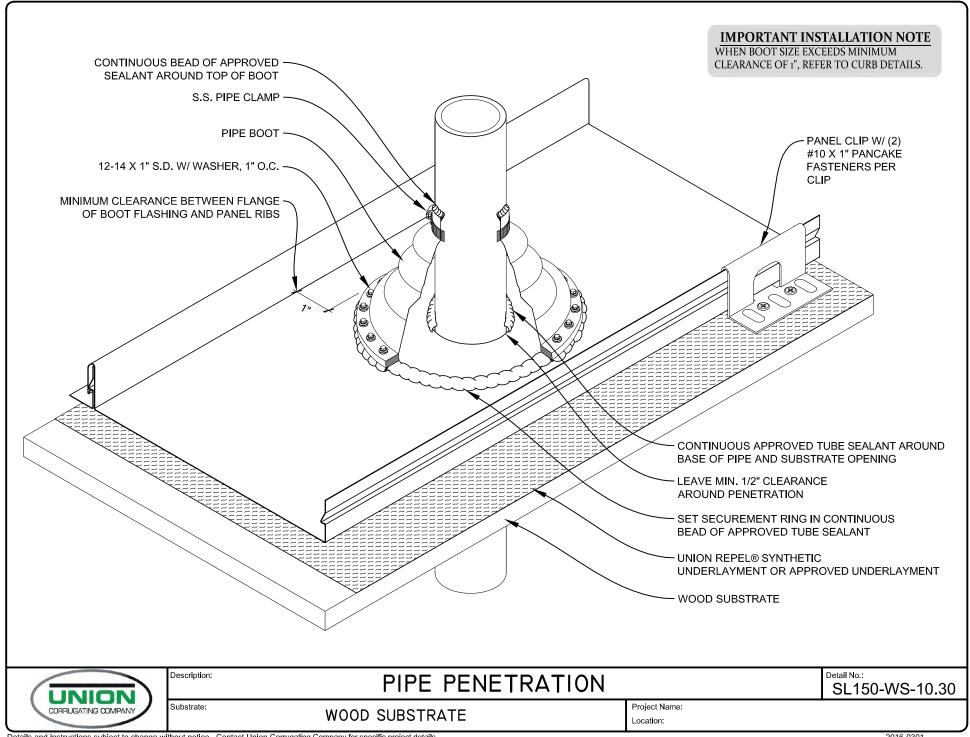


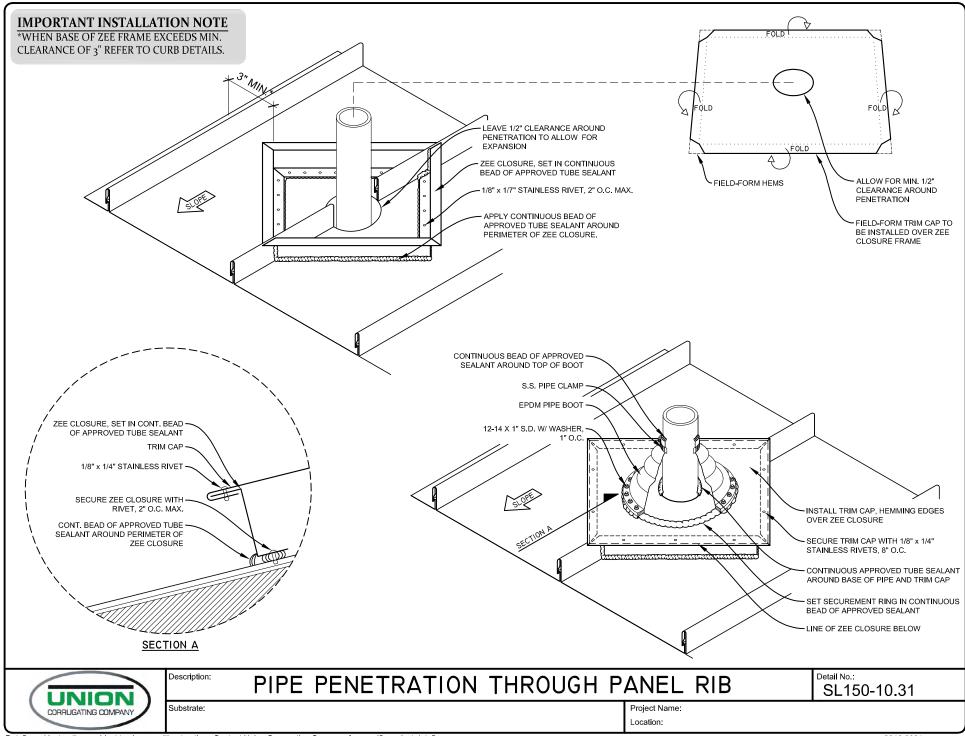


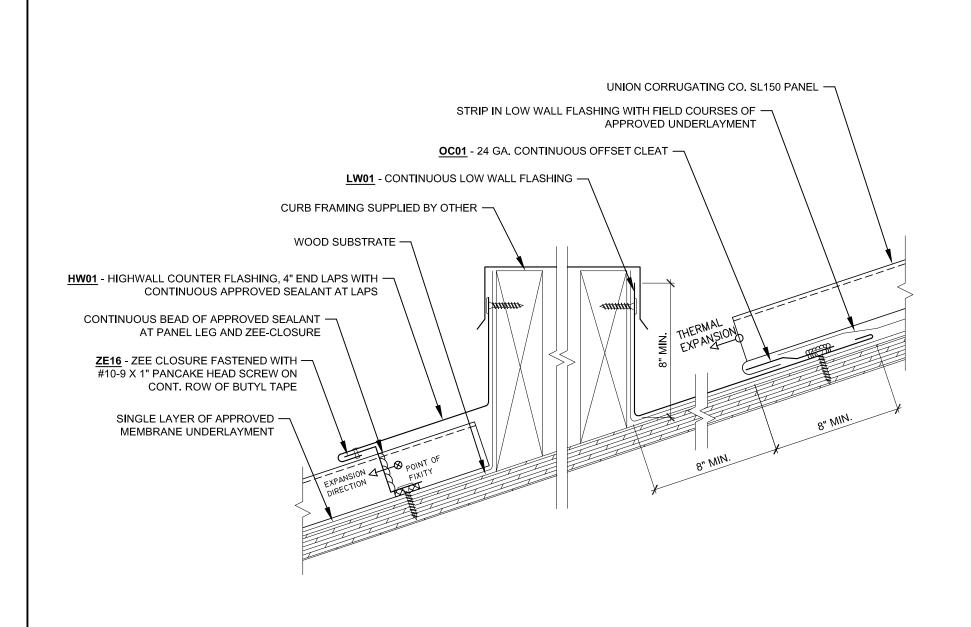












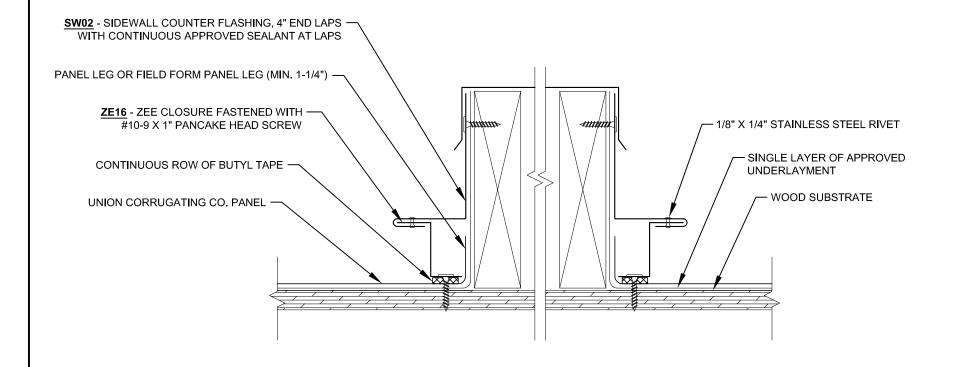


Description: LOW WALL & HIGHWALL @ SQUARE PENETRATION

SL150-WS-10.40

Substrate:

WOOD SUBSTRATE





Description: SIDEWALL @ SQUARE PENETRATION

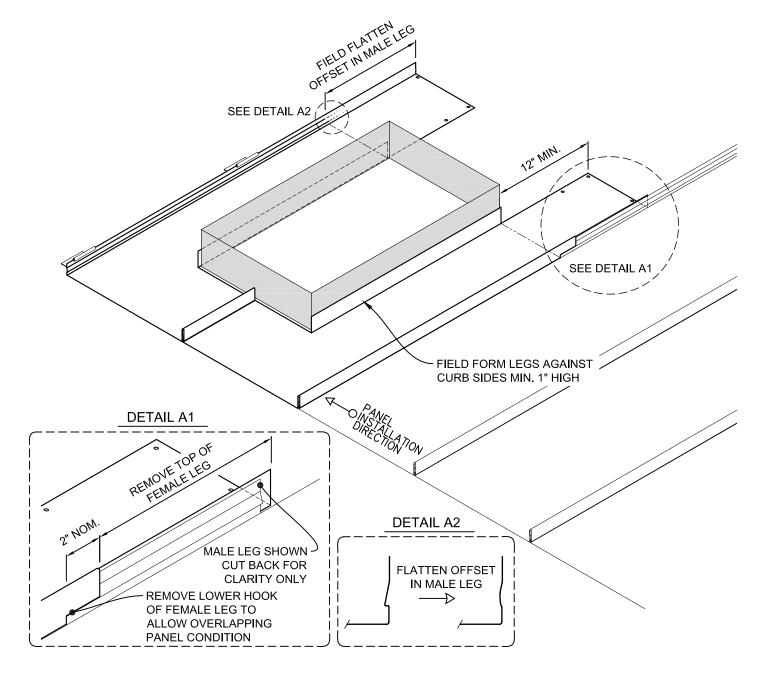
SL150-WS-10.41

Substrate: WOOD SUBSTRATE

Project Name:

Location:

STEP I INSTALL PANELS AROUND CURB.





SLI50 CURB DETAILS - STEP I

Project Name:

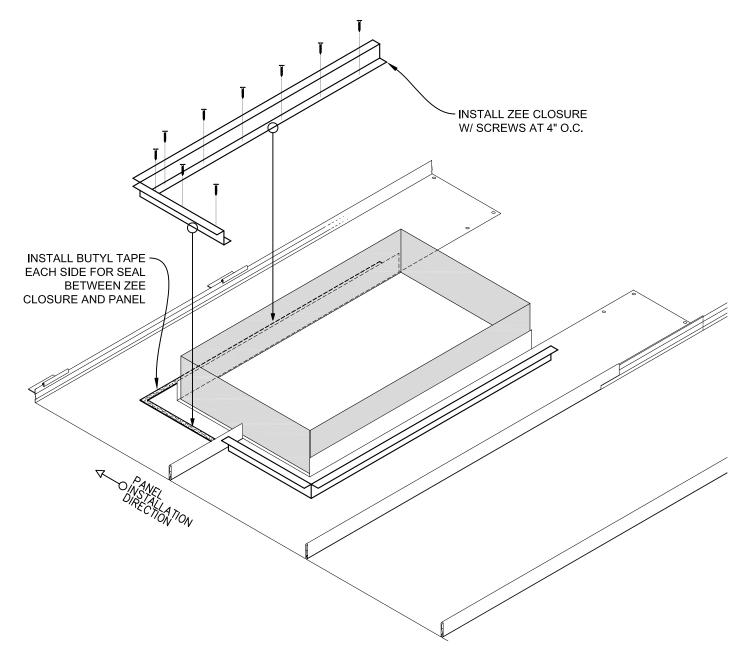
GENERAL INFORMATION

Location:

SL150-CRB: 1 of 6

STEP 2

APPLY ZEE CLOSURE FLASHING OVER DOUBLE BEAD MASTIC





SLI50 CURB DETAILS - STEP 2

SL150-CRB: 2 of 6

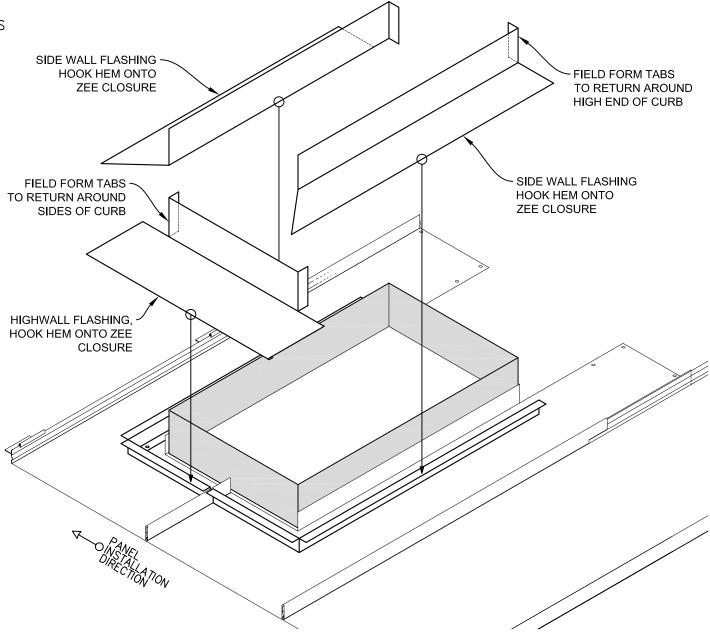
Substrate:

Project Name: Location:

GENERAL INFORMATION

STEP 3

INSTALL SIDEWALL AND HIGH WALL FLASHINGS ATOP ZEE CLOSURE.





SLI50 CURB DETAILS - STEP 3

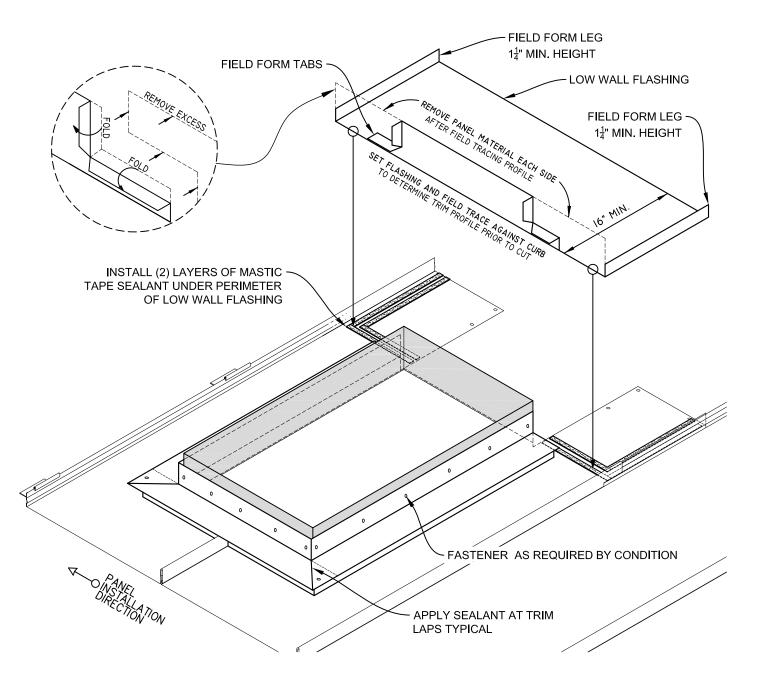
SL150-CRB: 3 of 6

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Project Name: Location:

GENERAL INFORMATION

STEP 4 INSTALL LOW WALL FLASHING





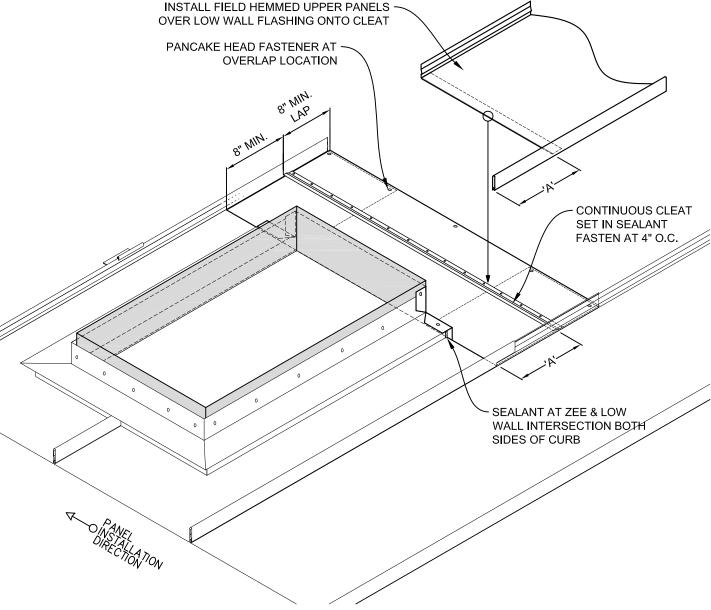
SLI50 CURB DETAILS - STEP 4

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:

Project Name:

Location:

GENERAL INFORMATION

