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WESTERN STATES METAL ROOFING

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STANDING SEAM

INSTALLATION GUIDE WITH TRIM, FLASHINGS AND DETAILS



Phoenix: 901 W Watkins St., Phoenix, AZ 85007
☎ (602) 495-0048
✉ sales@westernstatesmetalroofing.com

Tucson: 4975 E. Drexel Rd., Tucson, AZ 85706
☎ (520) 574-4247
✉ tucsonsales@westernstatesmetalroofing.com



Western States “Western Lock™”
 Standing SeamPanel
 Installation, Flashings & Shop Drawing Detail Guide

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Western States “Western Lock™” Panel

Installation, Flashings & Shop Drawing Detail Guide

Notes to Designer and Installers

The details contained in this guide are proven industry details and are intended to be used as a design aid and installation guide. It does not depict all situations that may be encountered on all projects. Modifications are the responsibility of the designer/ owner/ installer. Consideration should be given for Fit for Purpose, Building use, Climate conditions such as temperature, snow, wind, and moisture, Governing Building Codes, and Maintenance. It is highly recommended that all trims and flashings be of the same material as the panels (metal, gauge, finish) to ensure long term performance and durability. Where possible, flashing edges should be hemmed to strengthen the edge and protect the cut edge from exposure.

Framing and Substrates

“Western Lock™” panels are used over all type of substrates like Steel Decking, open purlins, spaced sheathing, and wood decking such as plywood. Most details in this guide are shown with panels attached to Solid Decking.

Note on Underlayment

Not all conditions require an underlayment, However metal roofing is susceptible to Condensation and it is recommended that an appropriate Roofing underlayment be use on all wood substrates to protect the structure during installation. For added protection from rain and snow, it is recommended to use rubberized Ice and water shield on eaves, valleys, and areas of roof penetrations.

Technical Assistance Contact your WSDI sales or technical representative for any additional information or assistance.

Slope Requirements

It is recommended that “Western Lock™” panels have a minimum slope requirement of 3:12 on all structures.

Valley and Snow Design

Valley design and dimension must be the proper width to accommodate high snow, rain, ice, and slope conditions. If possible, splices, penetrations, valleys, roof elevation changes, should be minimized in areas of high snow and ice accumulations.

Oil Canning

Oil canning is a condition common with flat metal surfaces. This waviness is caused by steel mill tolerances, forming, variations in the structures surfaces, and hardness of the steel. Measures are taken at the roll forming process, like profile design, steel gauge, corrective leveling, to minimize the effects of oil canning. Oil Canning is a Characteristic of steel and can not be eliminated totally and therefore is not reason for rejection of the panels.

Job Site Storage

While waiting to be installed on the job site, Storage of panels, trim crates, and flat sheet should be sloped in order to allow for proper moisture run off. One end should be elevated so as not to allow ponding of water on the metal surface. When using tarps for protection, proper ventilation should be provided to prevent condensation. Moisture or condensation that is trapped inside a bundle can lead to white rust on sheeting.

References

For other installation techniques and details, The Sheet Metal and Air Conditioning Contractors National Association Inc. (SMACNA) and NRCA manuals are great resource for working with sheet metal.

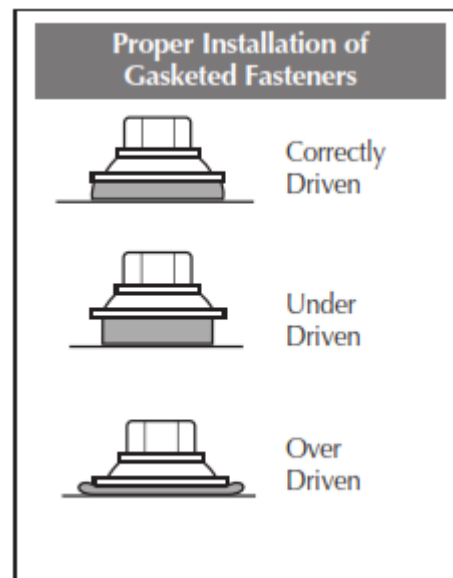
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Installation, Flashings & Shop Drawing Detail Guide

Fastener Selection

Notes to Installers:

- Fastener Selection will vary depending on type and thickness of substrate.
 - Design Calculations for clip spacing should be completed by the design engineer.
 - The use of Butyl tape mastic, Butyl sealants and Curing Sealants is always recommended to insure weather tight installation.
 - Panels and flashings should never be installed in contact with dissimilar metals.
 - Use only those flashings and accessories designed for use with this panel.
 - Panel clip attachment screws must be long enough to fully penetrate through roof deck substrate or penetrate solid lumber at least one inch.
-
- Exposed Trim Fasteners should have sealing washers and be coated to provide protection against corrosion.
 - Screws must be properly driven to ensure holding strength and proper seal. (see diagram)
 - Recommended drill speed is 2000rpm. Improper setting of drill speed can lead to snapping of screw heads.
 - Pre drilling of screw holes may be necessary with heavy gauge metals.



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Installation, Flashings & Shop Drawing Detail Guide

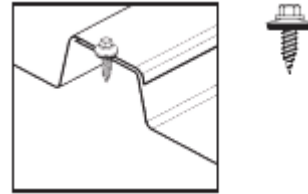
Fastener Selection

Description

Application

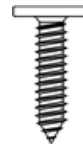
14 x 7/8” Lap Self tap
14 x 7/8” Lap Stainless

Used to attach Trims .
Stainless to be used with
A606-4 Steel



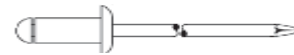
#10-12 x 1” Pancake head
Wood
#10-12 x 1” SD PH Self Driller
Steel

Used to attach Panel clips.
Used to secure trims to
substrates. Also available in
Stainless Steel.



1/8” Stainless Rivets

Used for Trim to Trim
attachment or trim to wall
panels.

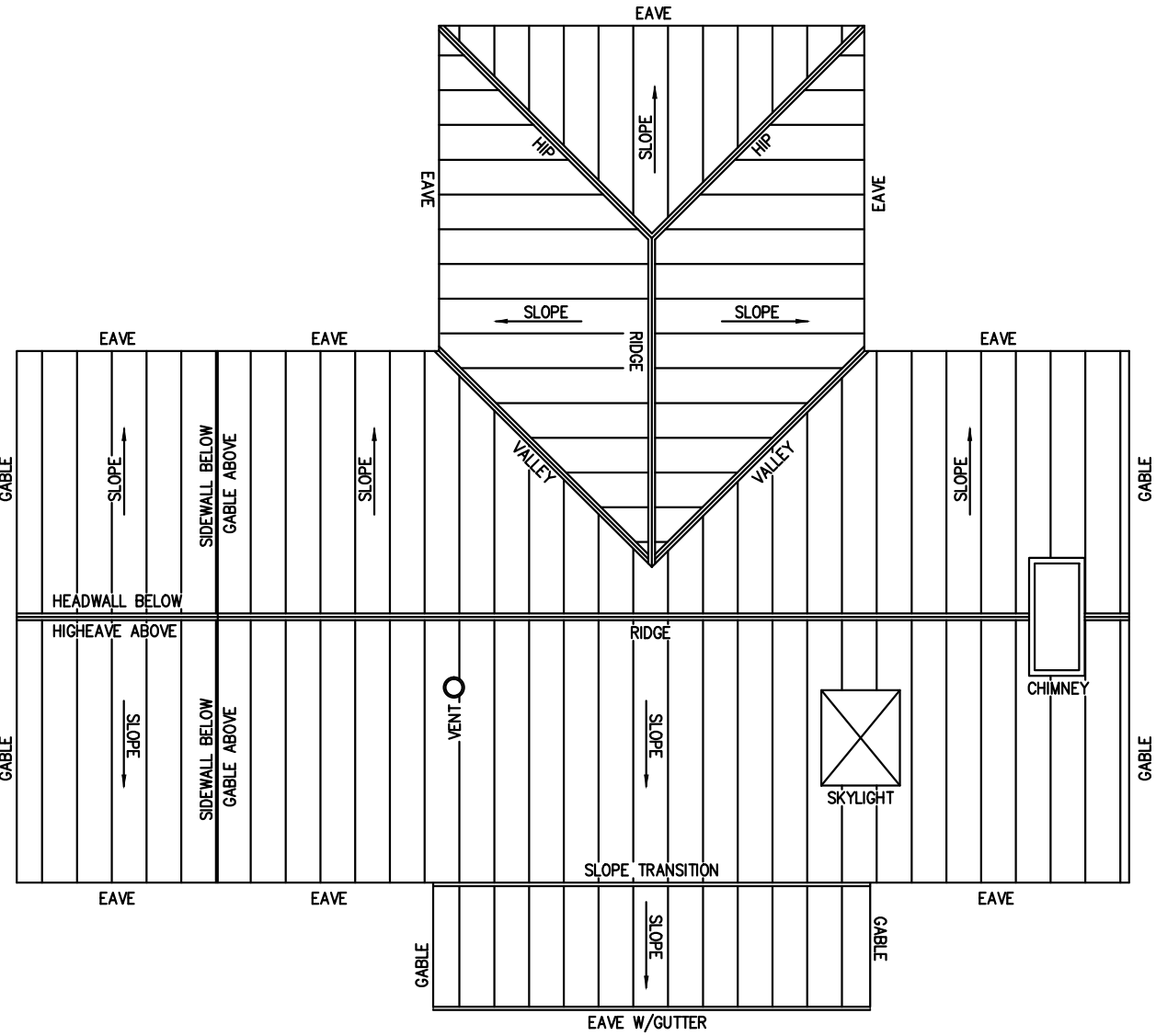


Stainless Screws
#10 x 1 x 1/4” Wood Drillers
#10 x 1.5 x 1/4”
#10 x 2” x 1/4”

Used for panel attachment
for panels made with
A606-4 Steel



- The table above shows the panel Fasteners provided by WSD. Special order screws are available.



FLASHING TYPE	DETAIL NO.
STANDARD TRIM	WSD-ST5
STANDARD TRIM	WSD-ST6
STANDARD TRIM	WSD-ST7
STANDARD TRIM	WSD-ST8
EAVE FLASHING WITH BULL NOSE DETAIL	WSD-D1
FIXED EAVE DETAIL	WSD-D2
EAVE FLASHING WITH JOGGLE CLEAT DETAIL	WSD-D3
EAVE WITH GUTTER DETAIL	WSD-D4
EAVE GUTTER SPLICE DETAIL	WSD-D5
TURN DOWN KNEE DETAIL	WSD-D6
FIXED RIDGE & HIP DETAIL	WSD-D7
FLOATING RIDGE & HIP DETAIL	WSD-D8
FIXED VENTED RIDGE DETAIL	WSD-D9
FLOATING VENTED RIDGE DETAIL	WSD-D10
FLOATING VALLEY DETAIL	WSD-D11
FIXED VALLEY DETAIL	WSD-D12
FIXED HIGH EAVE DETAIL	WSD-D13
FLOATING HIGH EAVE DETAIL	WSD-D14
GABLE DETAIL	WSD-D15
ALTERNATE GABLE DETAIL	WSD-D15A
ALTERNATE GABLE DETAIL	WSD-D15B
ALTERNATE GABLE DETAIL	WSD-D15C
RAKE DETAIL	WSD-D16
ALTERNATE RAKE DETAIL	WSD-D16A
ALTERNATE RAKE DETAIL	WSD-D16B
FIXED HEADWALL DETAIL	WSD-D17
FLOATING HEADWALL DETAIL	WSD-D18
HIGH TO LOW TRANSITION DETAIL	WSD-D19
LOW TO HIGH TRANSITION DETAIL	WSD-D20
HALF VALLEY DETAIL	WSD-D21
ISOMETRIC CURB & CHIMNEY DETAIL	WSD-D22
CRICKET FLASHING AT CURB & CHIMNEY DETAIL	WSD-D23
PITCHBREAK AT CURB & CHIMNEY DETAIL	WSD-D24
SIDEWALL AT CURB & CHIMNEY DETAIL	WSD-D25
PANEL END LAP DETAIL	WSD-D26
FIELD LAP DETAIL	WSD-D27
PANEL HEM DETAIL	WSD-D28
PIPE PENETRATION DETAIL	WSD-D29
MISC. NOTES	WSD-MN30
CUSTOM TRIM SHEET	WSD-CT31

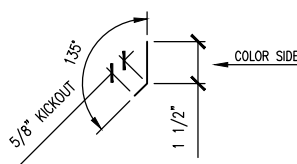
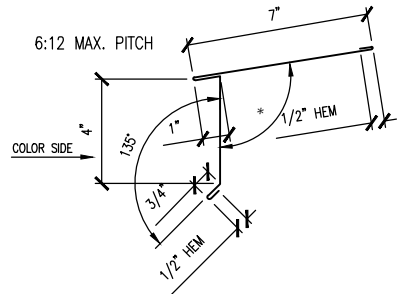
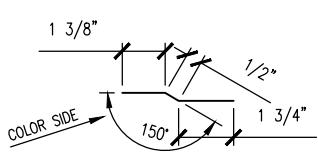
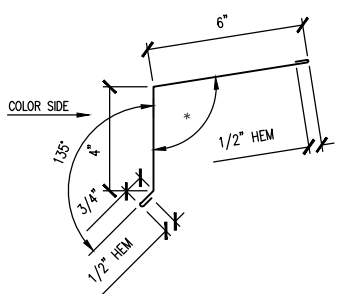
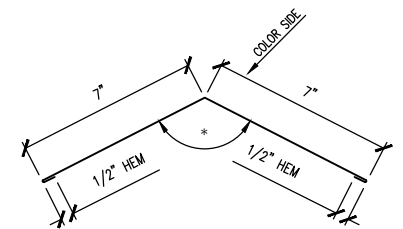
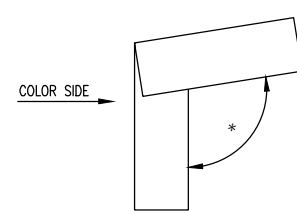
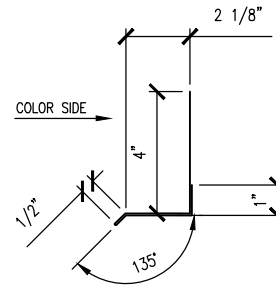
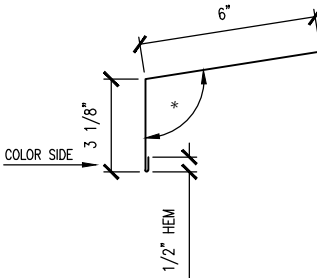
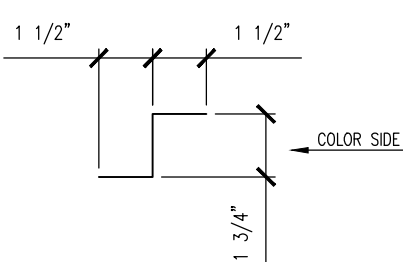
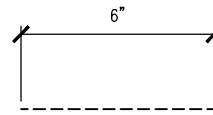
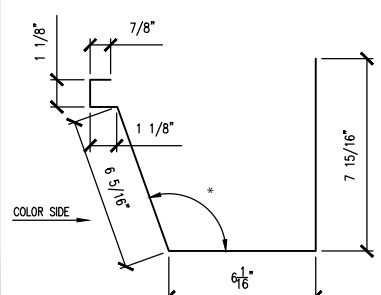
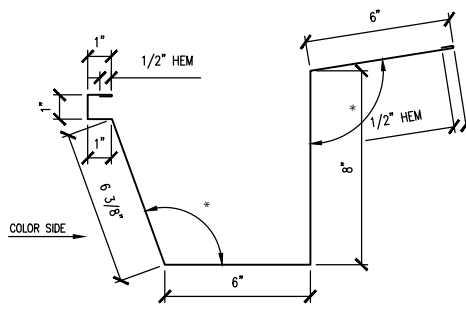
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DETAIL:		
KEY ROOF PLAN	A	05-20-13
PANEL TYPE:	REV:	DATE:
WESTERN LOCK	DETAIL #:	

<p>TRIM CLEAT WS-401</p> 	<p>BULL NOSE DRIP/ EAVE TRIM WS-402</p> 	<p>JOGGLE CLEAT WS-403</p> 	<p>STANDARD EAVE TRIM WS-404</p> 
<p>7" RIDGE/HIP CAP FLASHING WS-405H</p> 	<p>KNEE/RIB COVER WS-406</p> 	<p>DRIP FLASHING WS-407</p> 	<p>GUTTER EAVE TRIM WS-408</p> 
<p>ZEE CLOSURE WS-410</p> 	<p>6" PERFORATED VENT STRIP WS-411</p> 	<p>GUTTER SPLICE WS-413</p> 	<p>STD. PRE-HUNG BOX GUTTER WS-415</p> 

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STANDARD TRIM

PANEL TYPE:
WESTERN LOCK

A	05-20-13
REV:	DATE:
DETAIL #:	WSD-ST5

<p>PEAK/HIGH EAVE WS-419</p>	<p>10\"/> </p>	<p>VALLEY PAN 18 3/4\"/> </p>	<p>HEAD/END WALL TRIM WS-428</p>
<p>REGLET FLASHING WS-429</p>	<p>RECEIVER TRIM WS-430</p>	<p>ANGLE TRIM WS-431</p>	<p>RAKE SIDEWALL TRIM WS-432</p>
<p>GABLE TRIM WS-434</p>	<p>ALTERNATE GABLE TRIM WS-435</p>	<p>TRANSITION TRIM HIGH TO LOW WS-436</p>	<p>TRANSITION TRIM LOW TO HIGH WS-437</p>

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STANDARD TRIM

PANEL TYPE:
WESTERN LOCK

A	05-20-13
REV:	DATE:
DETAIL #:	WSD-ST6

<p>CRICKET FLASHING WS-450</p>	<p>GABLE DRIP TRIM WS-451</p>	<p>GABLE STARTER TRIM WS-452</p>	<p>ALTERNATE GABLE TRIM WS-453</p>
<p>ALTERNATE RAKEWALL TRIM WS-454</p>	<p>ALTERNATE RAKEWALL TRIM WS-455</p>	<p>DOWNSPOUT STRAIGHT WS-426</p>	<p>DOWNSPOUT W/KICK OUT WS-427</p> <p>*45 DEG. BEND UNLESS NOTED*</p>
<p>DOWNSPOUT ELBOW WS-443</p> <p>*45 DEG. BEND UNLESS NOTED*</p>	<p>DOWNSPOUT OUTLET WS-475</p>	<p>GUTTER STRAP WS-412</p>	<p>GUTTER END WS-414</p>

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STANDARD TRIM

PANEL TYPE:
WESTERN LOCK

A	05-20-13
REV:	DATE:
DETAIL #:	WSD-ST7

DOWNSPOUT STRAP WS-442	FLOATING RIDGE/HIP CAP WS-456	FLOATING HIGH EAVE/PEAK WS-457	FLOATING HEA/END WALL WS-458
18GA PANEL SUPPORT WS-459			

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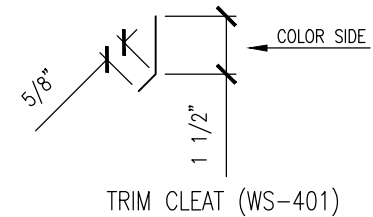
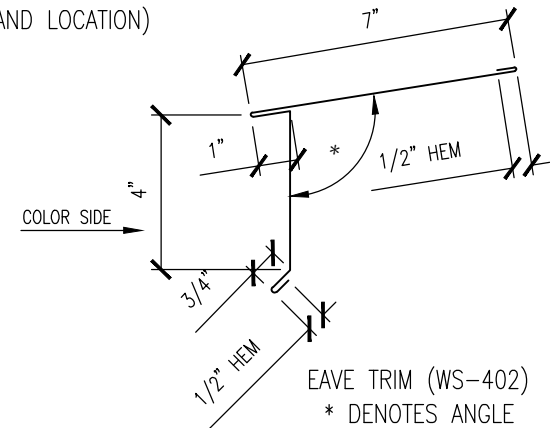
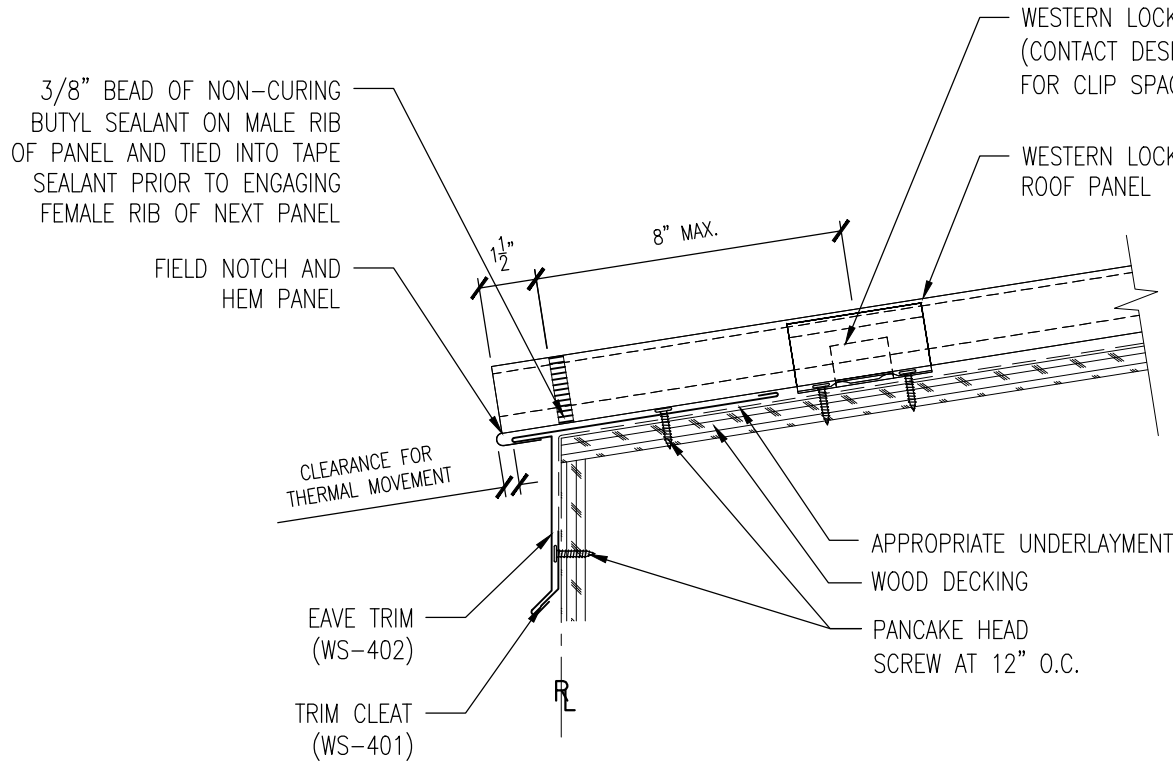
STANDARD TRIM

PANEL TYPE:

WESTERN LOCK

A	05-20-13
REV:	DATE:
DETAIL #:	WSD-ST8

* CAN ONLY BE BENT
FOR MAX. 6:12 PITCH



GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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EAVE FLASHING W/ BULLNOSE DETAIL

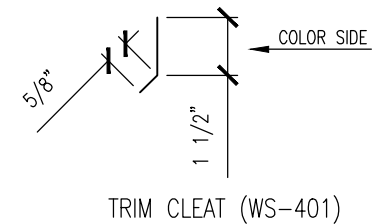
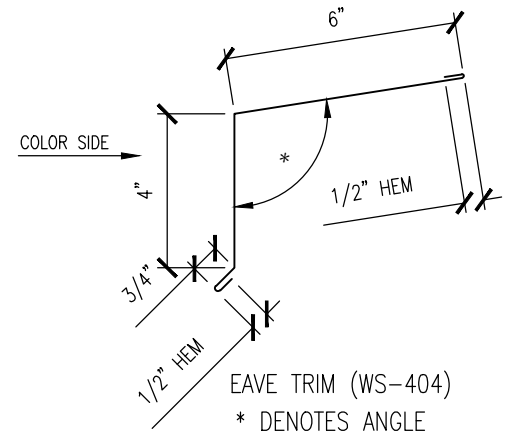
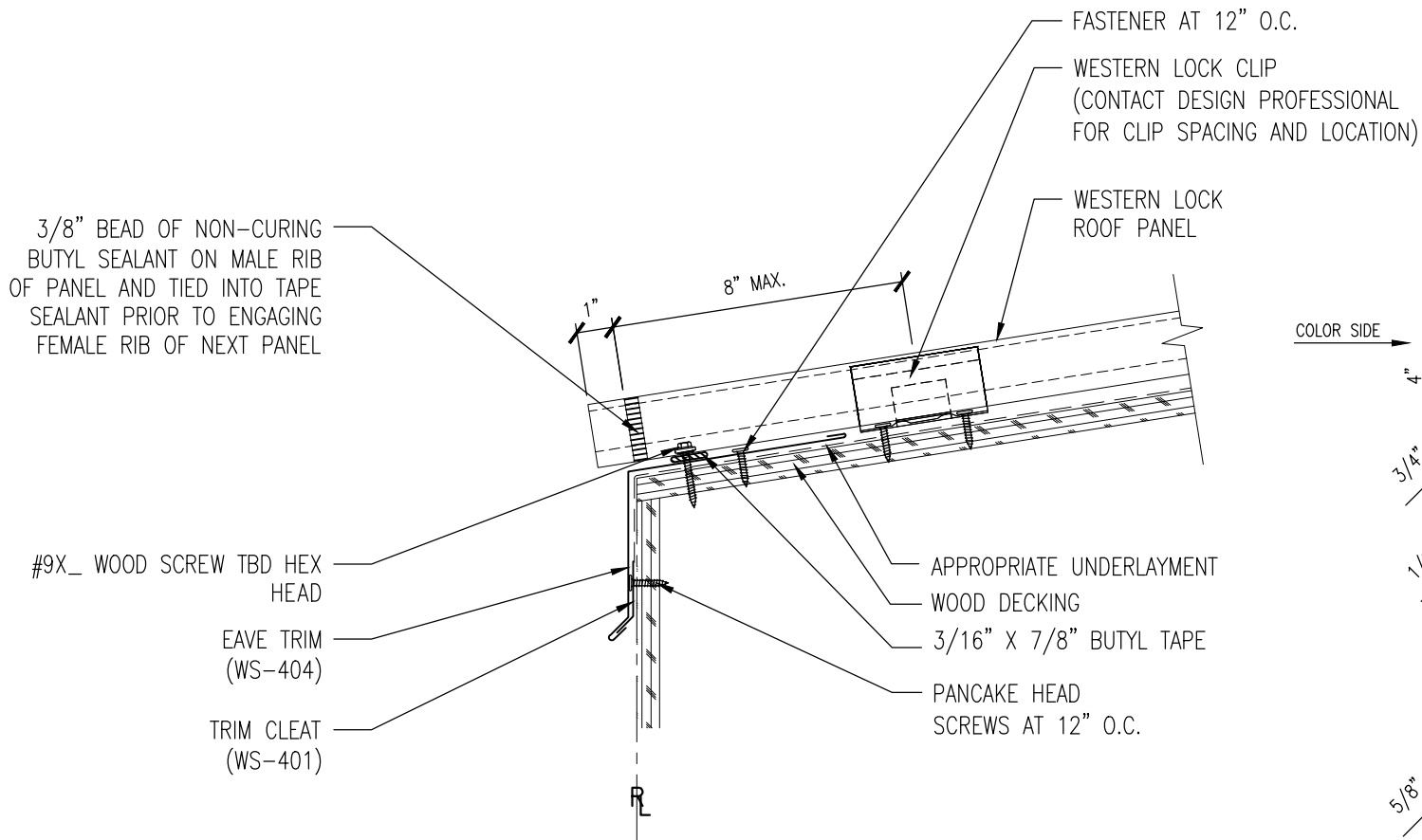
PANEL TYPE:

WESTERN LOCK

A 05-20-13

REV: DATE:

DETAIL #:
WSD-D1



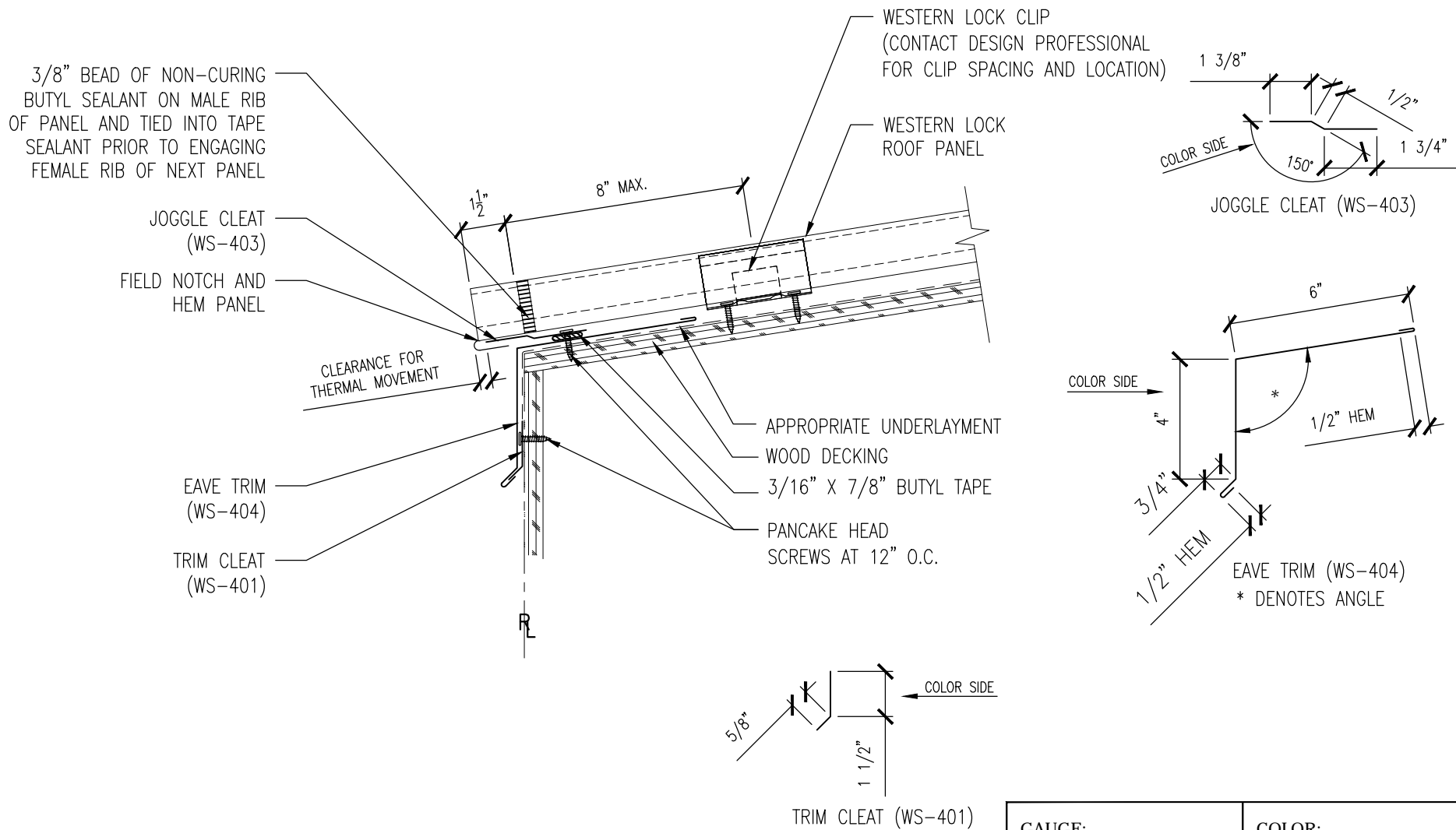
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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FIXED EAVE DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D2	

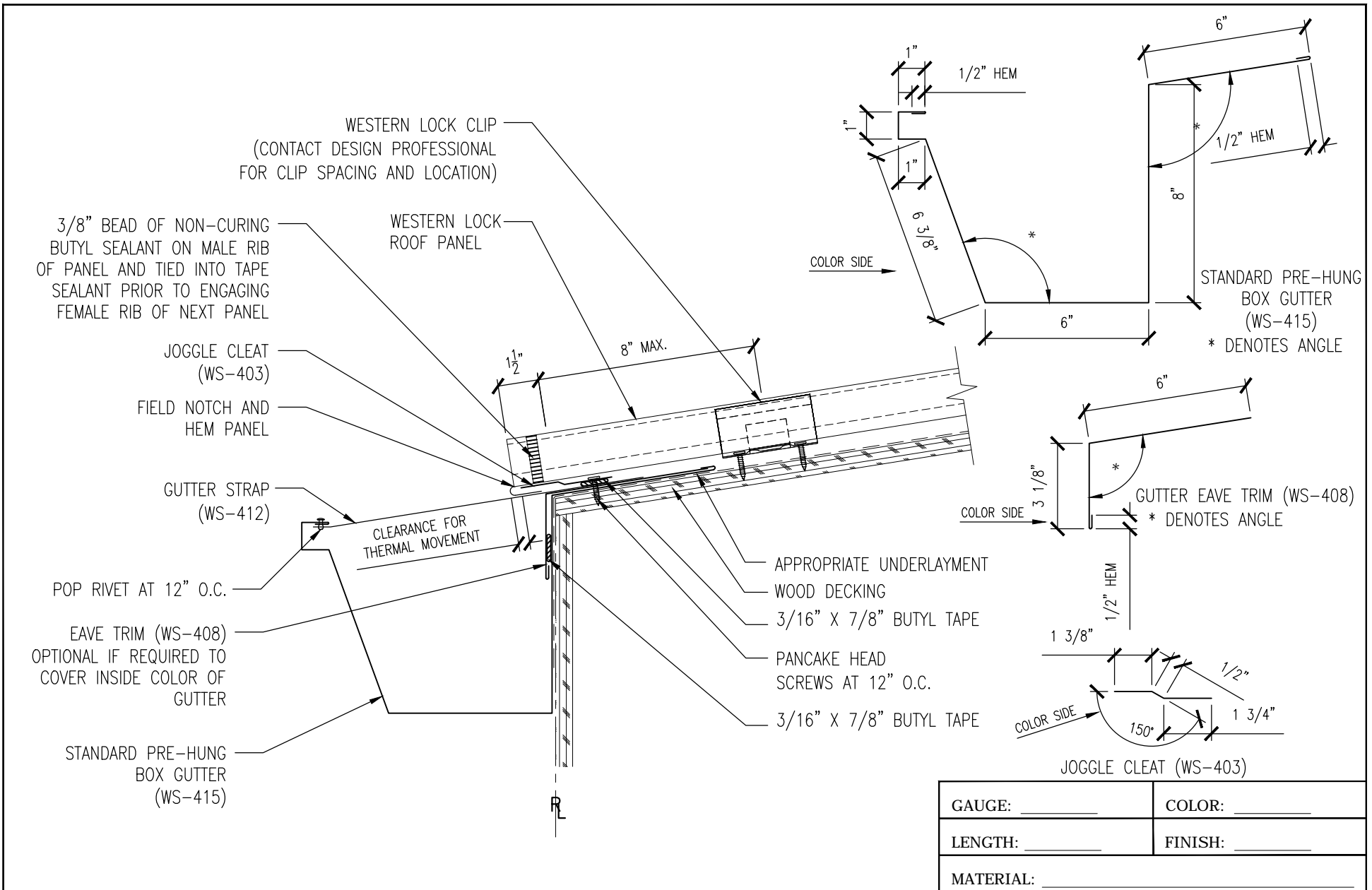


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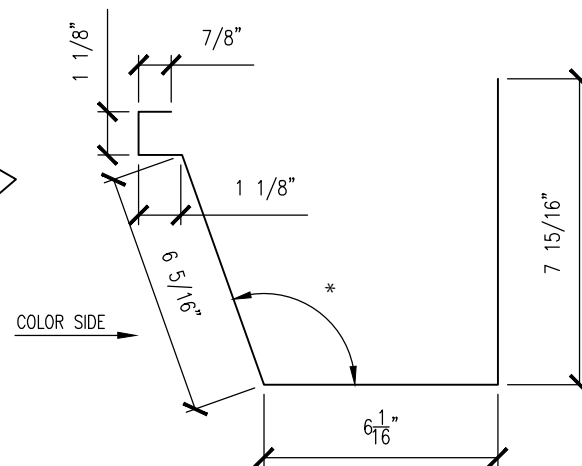
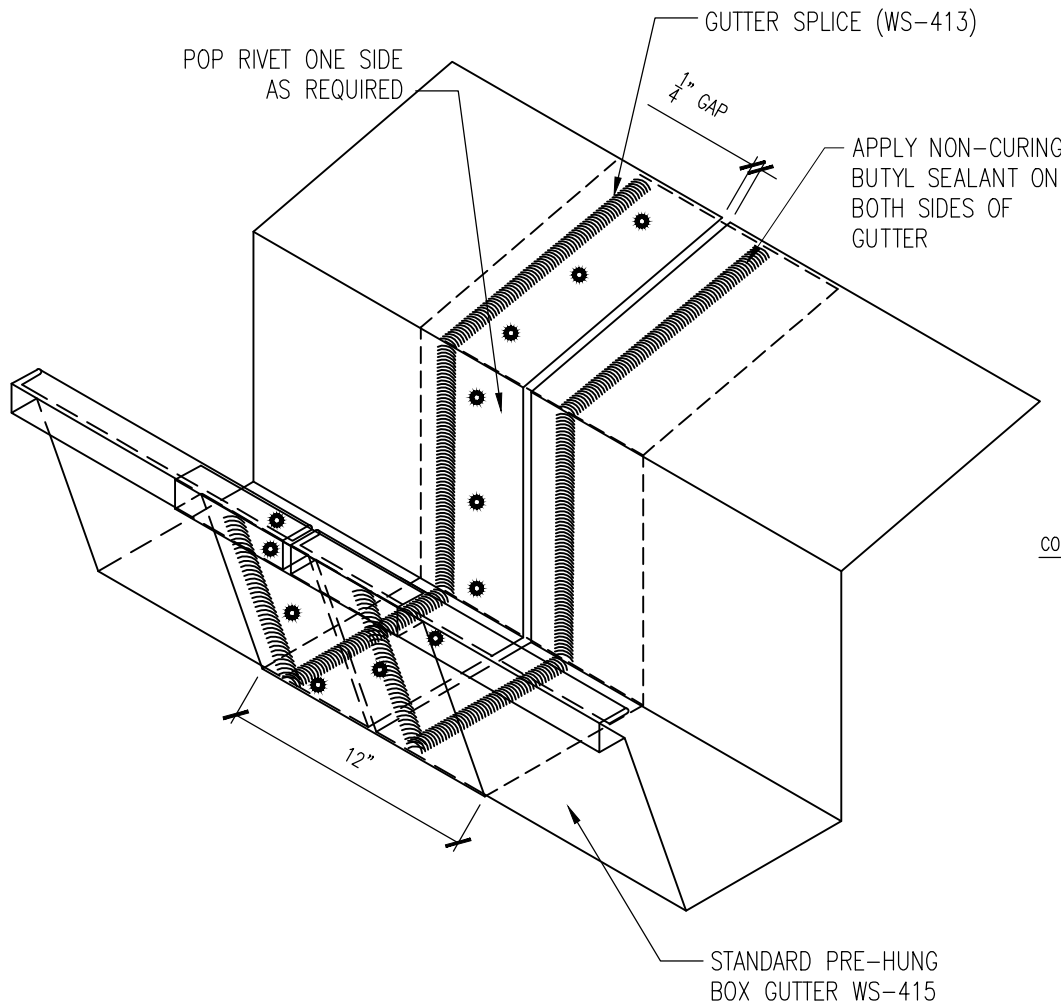
GAUGE: _____	COLOR: _____						
LENGTH: _____	FINISH: _____						
MATERIAL: _____							
EAVE FLASHING W/ JOGGLE CLEAT DETAIL							
PANEL TYPE: WESTERN LOCK	<table border="1"> <tr> <td>A</td> <td>05-20-13</td> </tr> <tr> <td>REV:</td> <td>DATE:</td> </tr> <tr> <td colspan="2">DETAIL #: WSD-D3</td> </tr> </table>	A	05-20-13	REV:	DATE:	DETAIL #: WSD-D3	
A	05-20-13						
REV:	DATE:						
DETAIL #: WSD-D3							



GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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EAVE WITH GUTTER DETAIL	A	05-20-13
	REV:	DATE:
PANEL TYPE: WESTERN LOCK	DETAIL #: WSD-D4	



GUTTER SPLICE (WS-413)
* DENOTES ANGLE

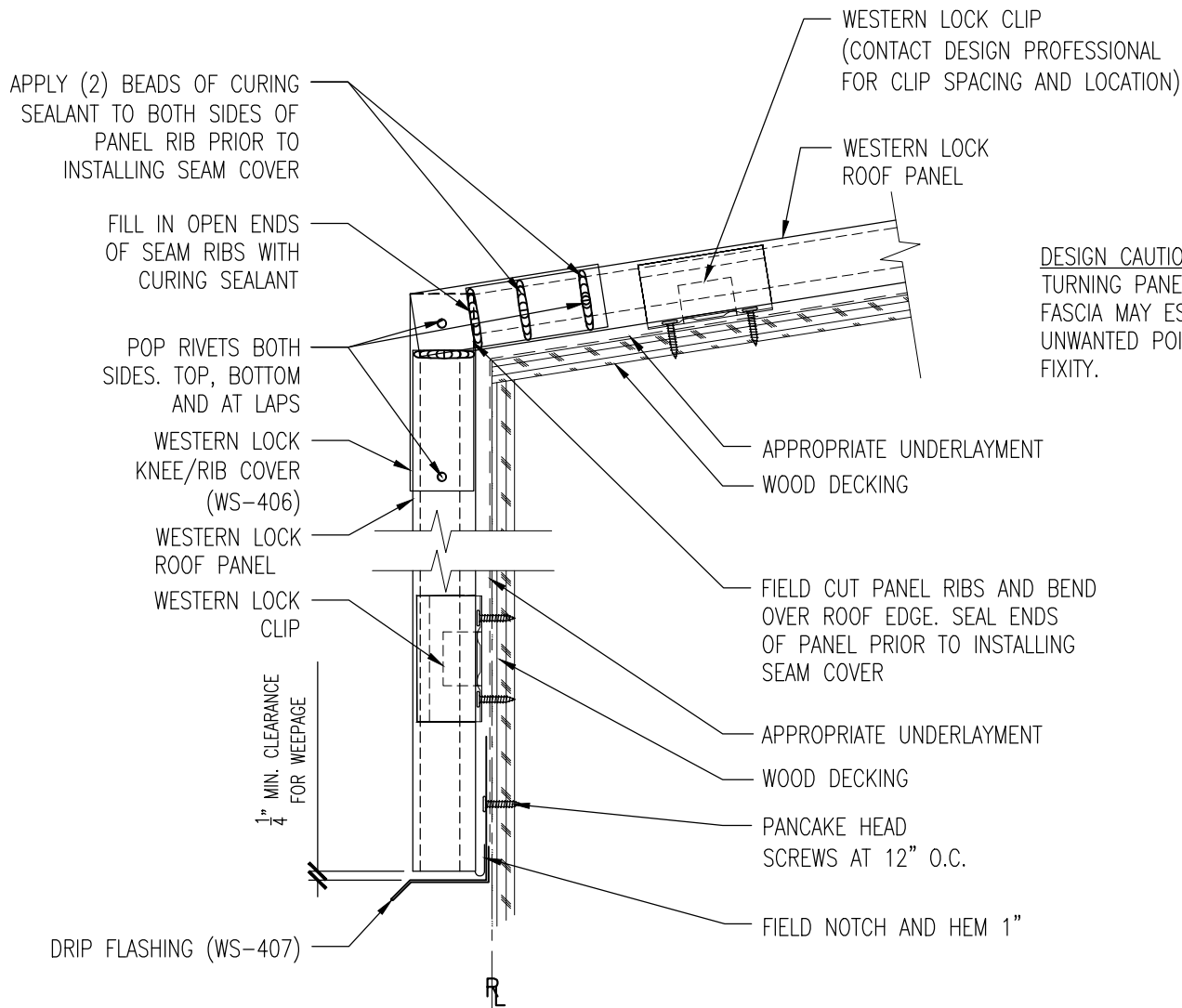
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

Western States Metal Roofing

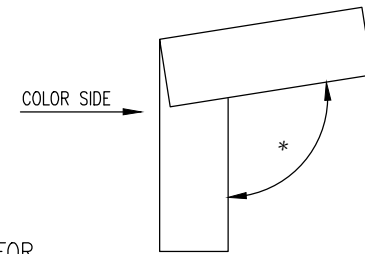
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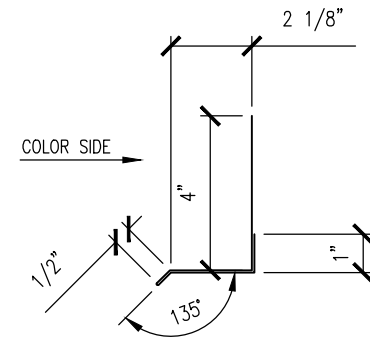
EAVE GUTTER SPLICE DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D5	



DESIGN CAUTION:
TURNING PANELS DOWN FOR FASCIA MAY ESTABLISH UNWANTED POINT OF PANEL FIXITY.



STANDING SEAM KNEE/RIB COVER (WS-406)
* DENOTES ANGLE



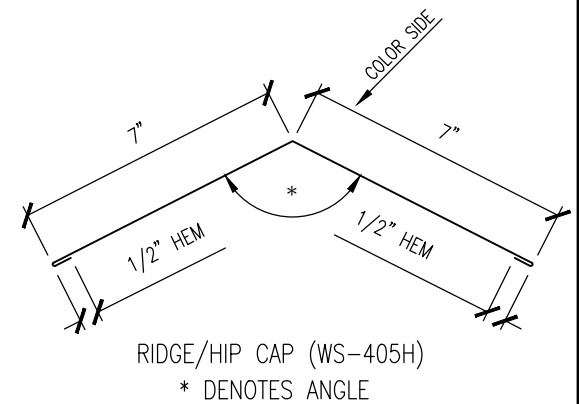
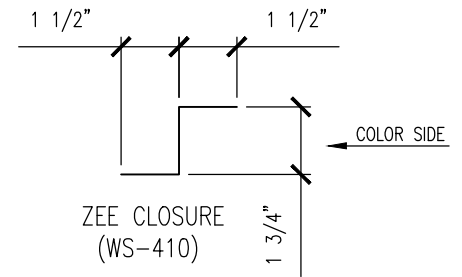
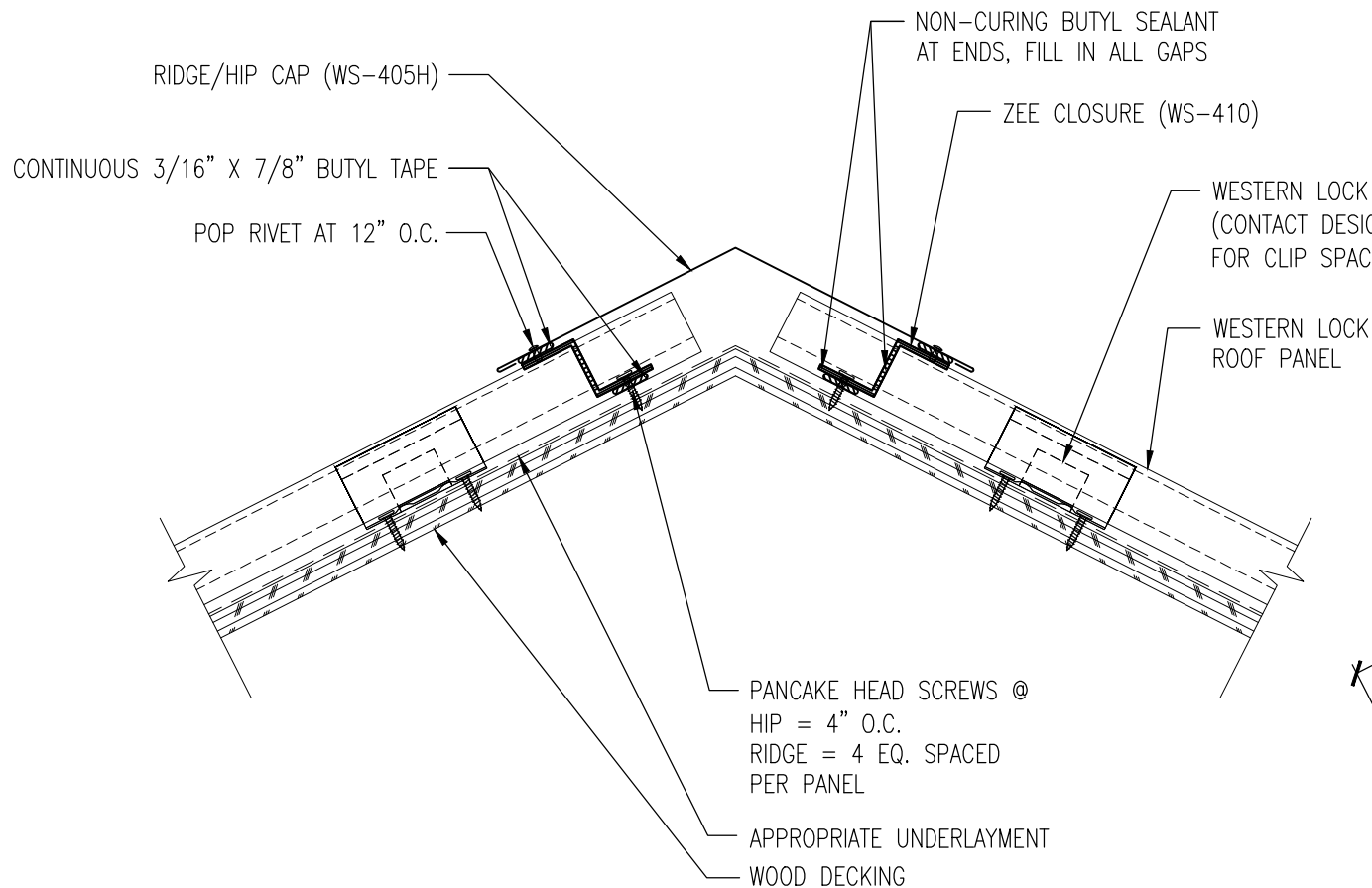
DRIP FLASHING (WS-407)

GAUGE: _____		COLOR: _____	
LENGTH: _____		FINISH: _____	
MATERIAL: _____			
TURN DOWN KNEE DETAIL			
		A	05-20-13
PANEL TYPE: WESTERN LOCK		REV:	DATE:
		DETAIL #: WSD-D6	

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GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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FIXED RIDGE/HIP DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D7	

FLOATING RIDGE/HIP CAP
(WS-456)

18GA PANEL END SUPPORT
(WS-459)

CONTINUOUS 3/16" X 7/8"
BUTYL TAPE

HWH FASTENER W/WASHER
AT 12" O.C.

NON-CURING BUTYL SEALANT
AT ENDS, FILL IN ALL GAPS

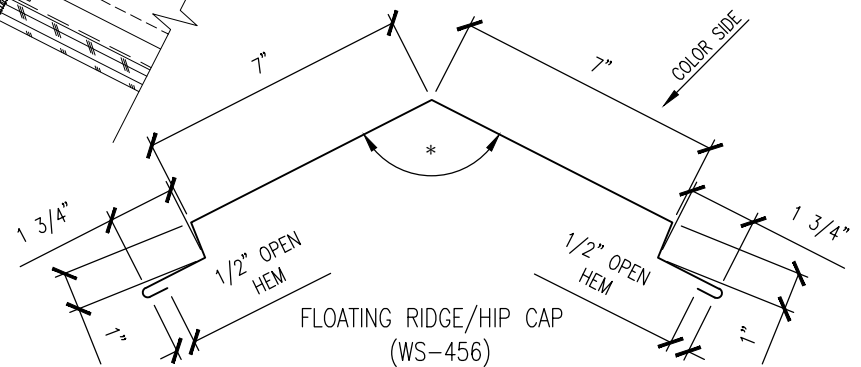
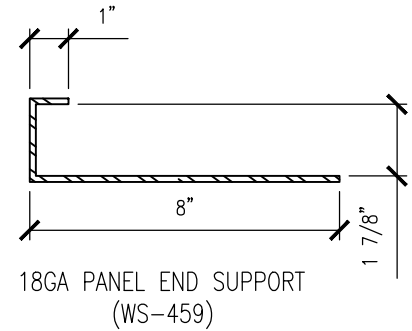
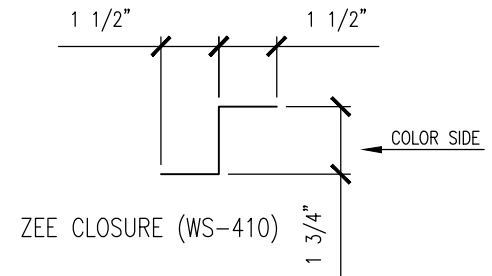
ZEE CLOSURE (WS-410)

WESTERN LOCK CLIP
(CONTACT DESIGN PROFESSIONAL
FOR CLIP SPACING AND LOCATION)

WESTERN LOCK
ROOF PANEL

PRE-POP 1/8" RIVET TO PANEL
PRIOR TO INSTALLATION
@ HIP = 4" O.C.
RIDGE = 4 EQ. SPACED
PER PANEL

APPROPRIATE UNDERLAYMENT
WOOD DECKING



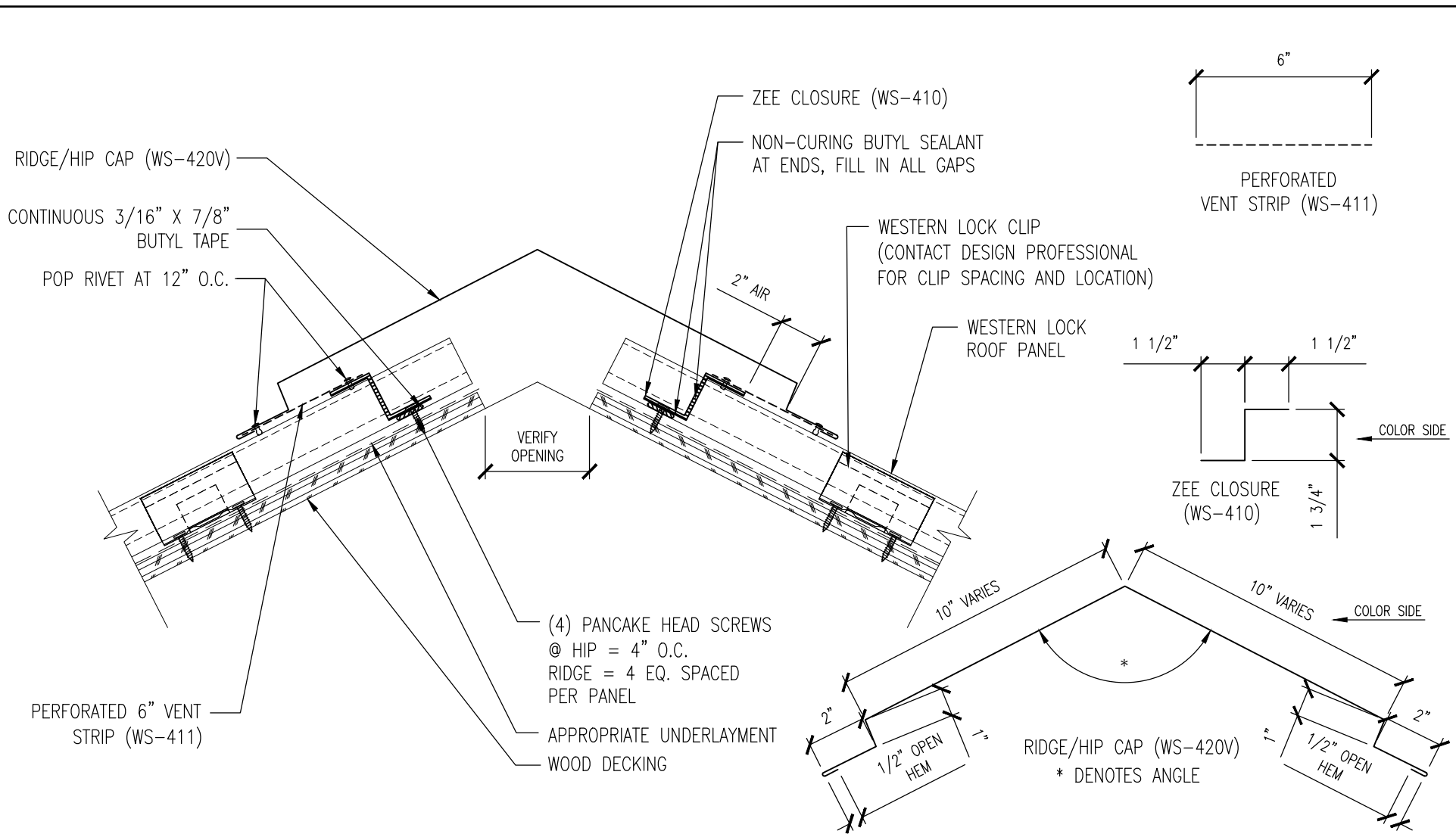
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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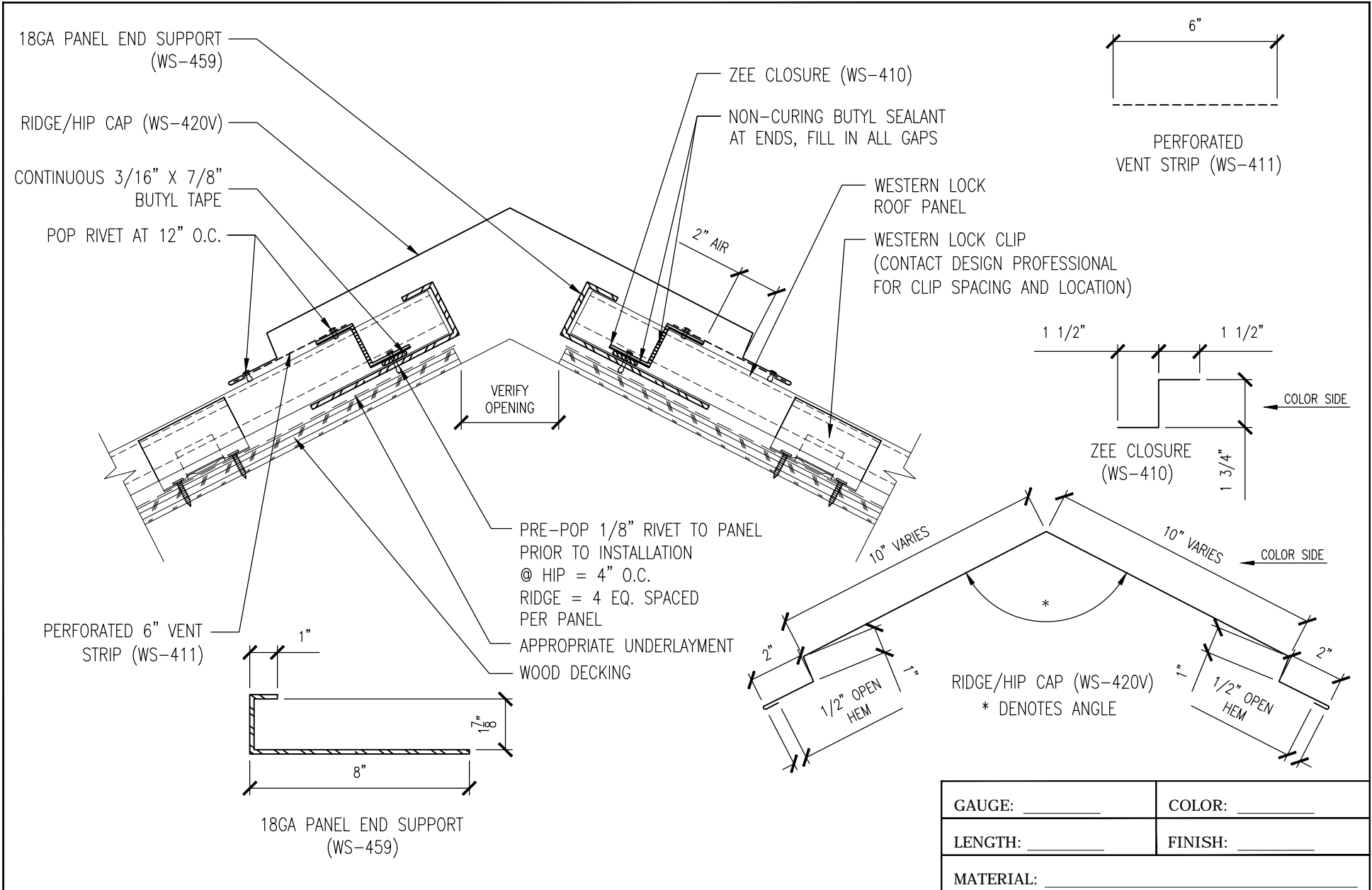
FLOATING RIDGE/HIP DETAIL	A	05-20-13
	REV:	DATE:
PANEL TYPE: WESTERN LOCK	DETAIL #: WSD-D8	



GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

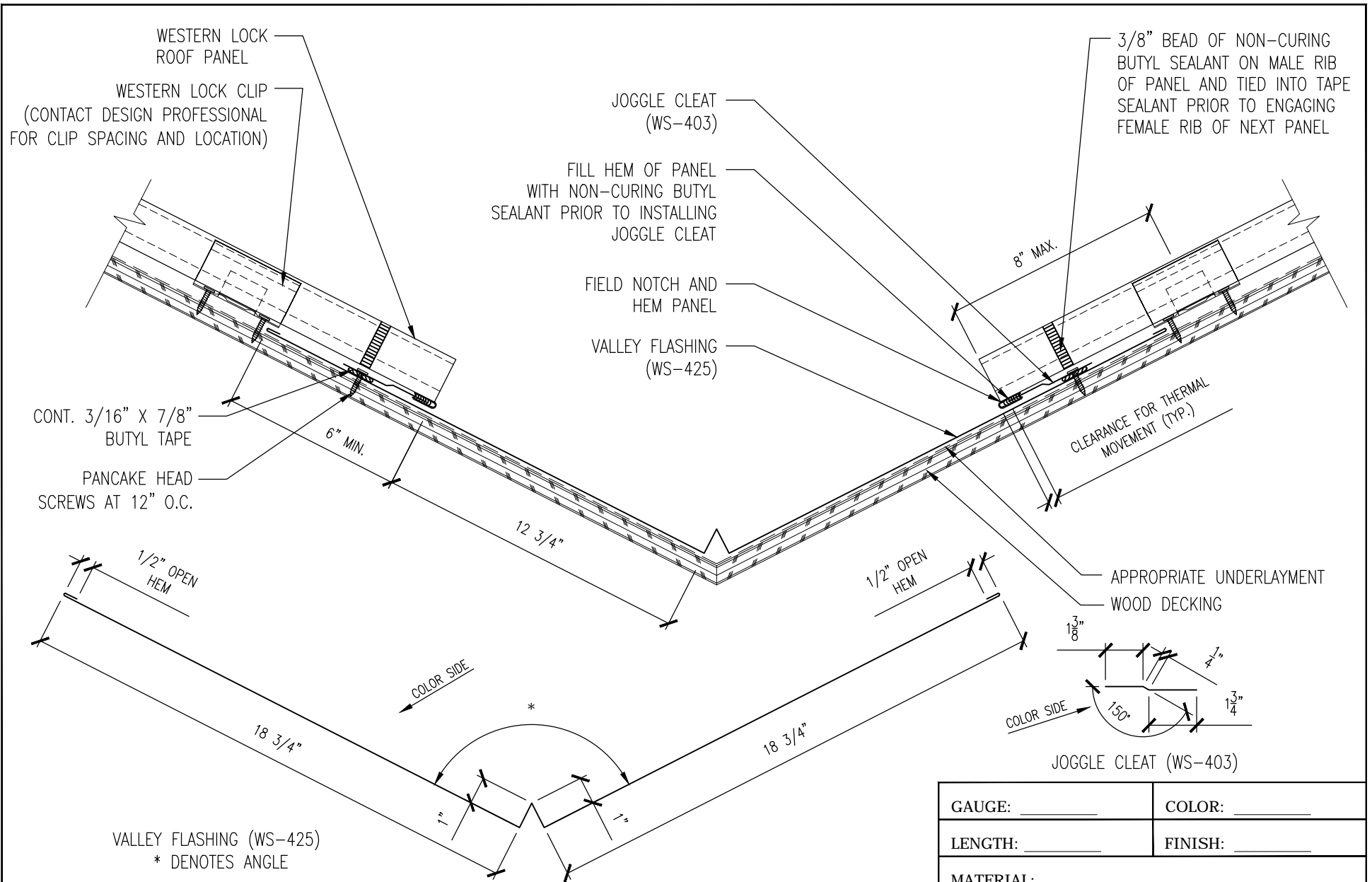
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FIXED VENTED RIDGE DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D9	



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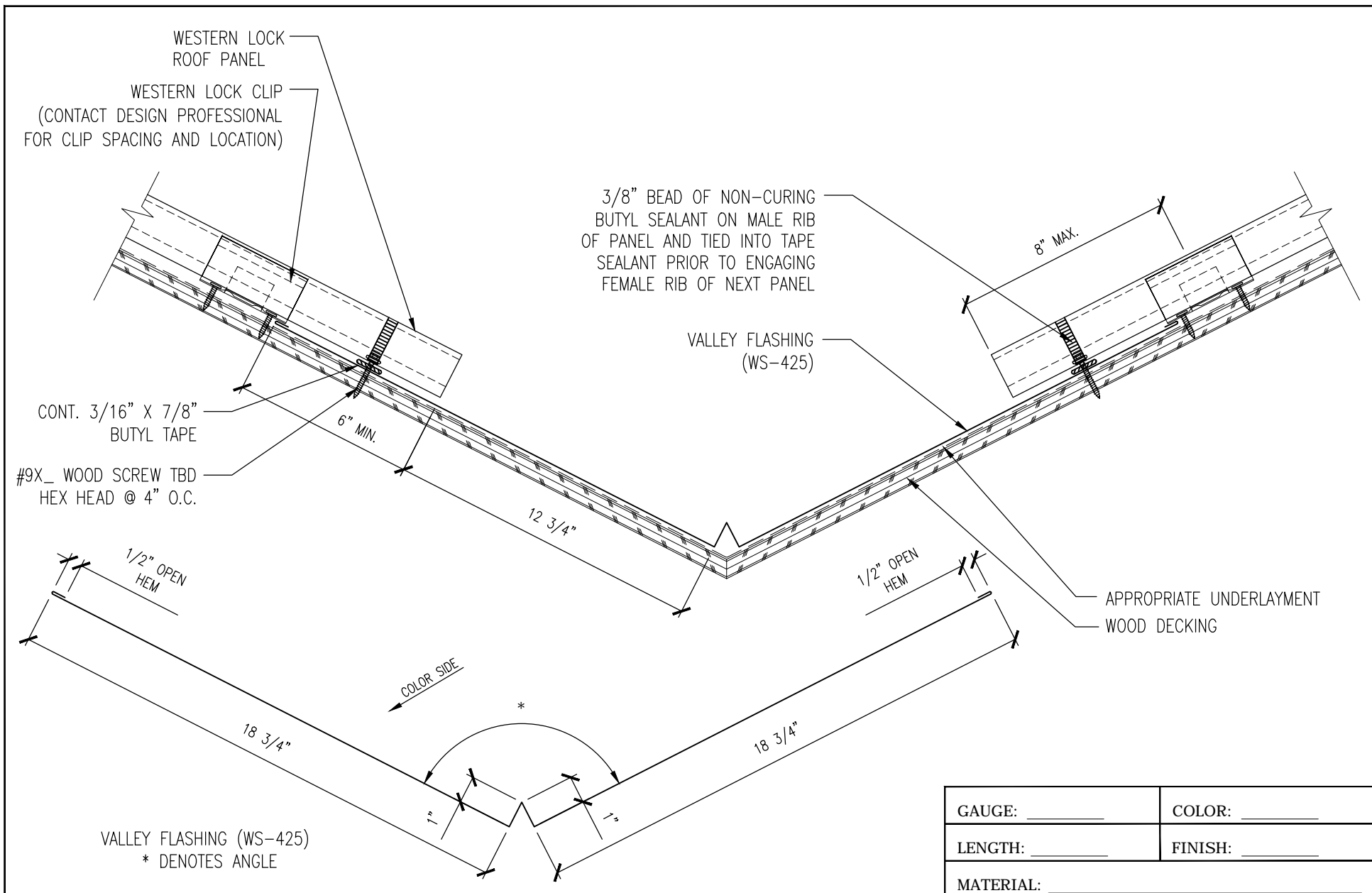
GAUGE: _____	COLOR: _____		
LENGTH: _____	FINISH: _____		
MATERIAL: _____			
FLOATING VENTED RIDGE DETAIL		A	05-20-13
		REV:	DATE:
PANEL TYPE: WESTERN LOCK		DETAIL #: WSD-D10	



GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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FLOATING VALLEY DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D11	



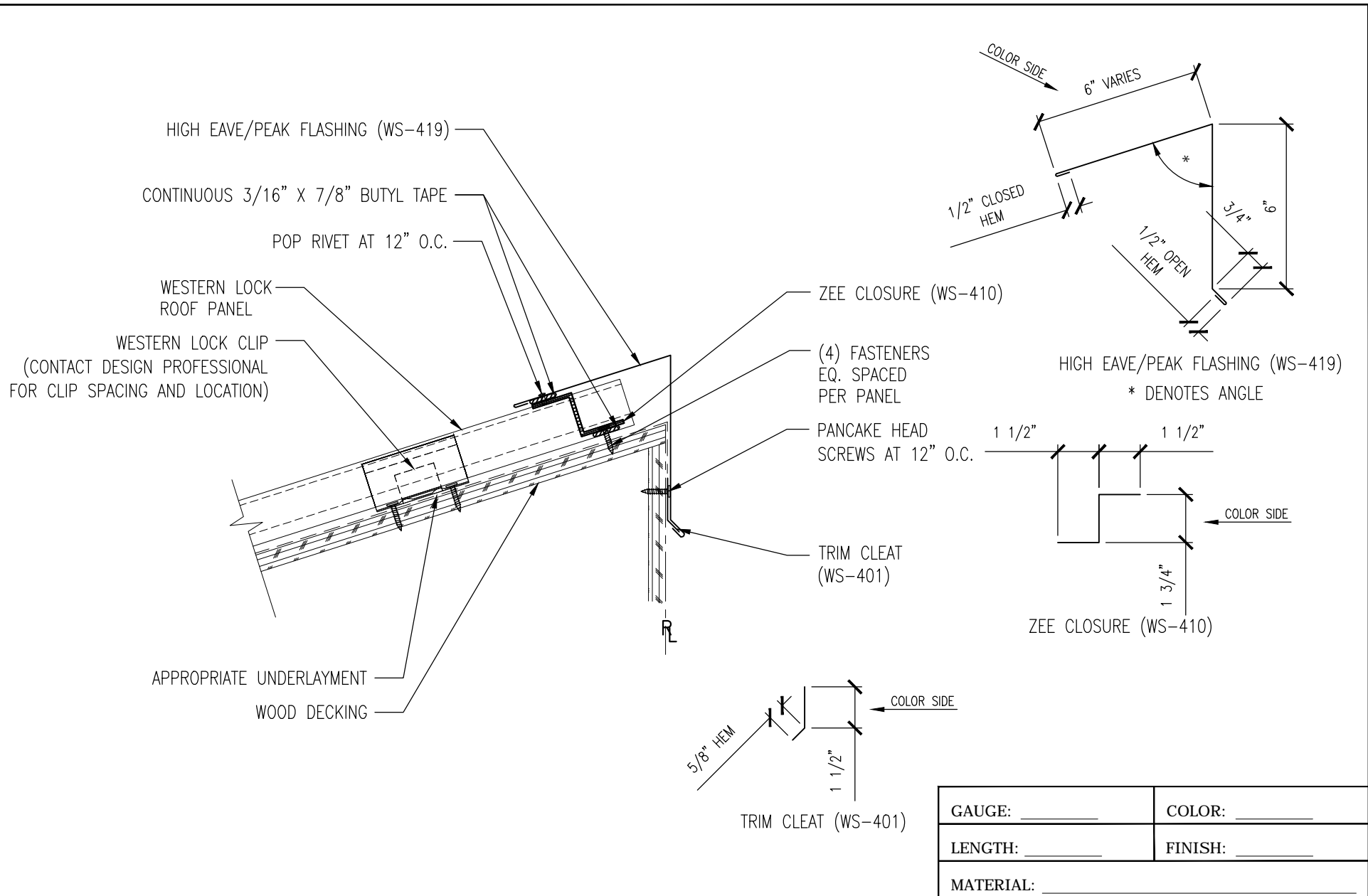
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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FIXED VALLEY DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D12	

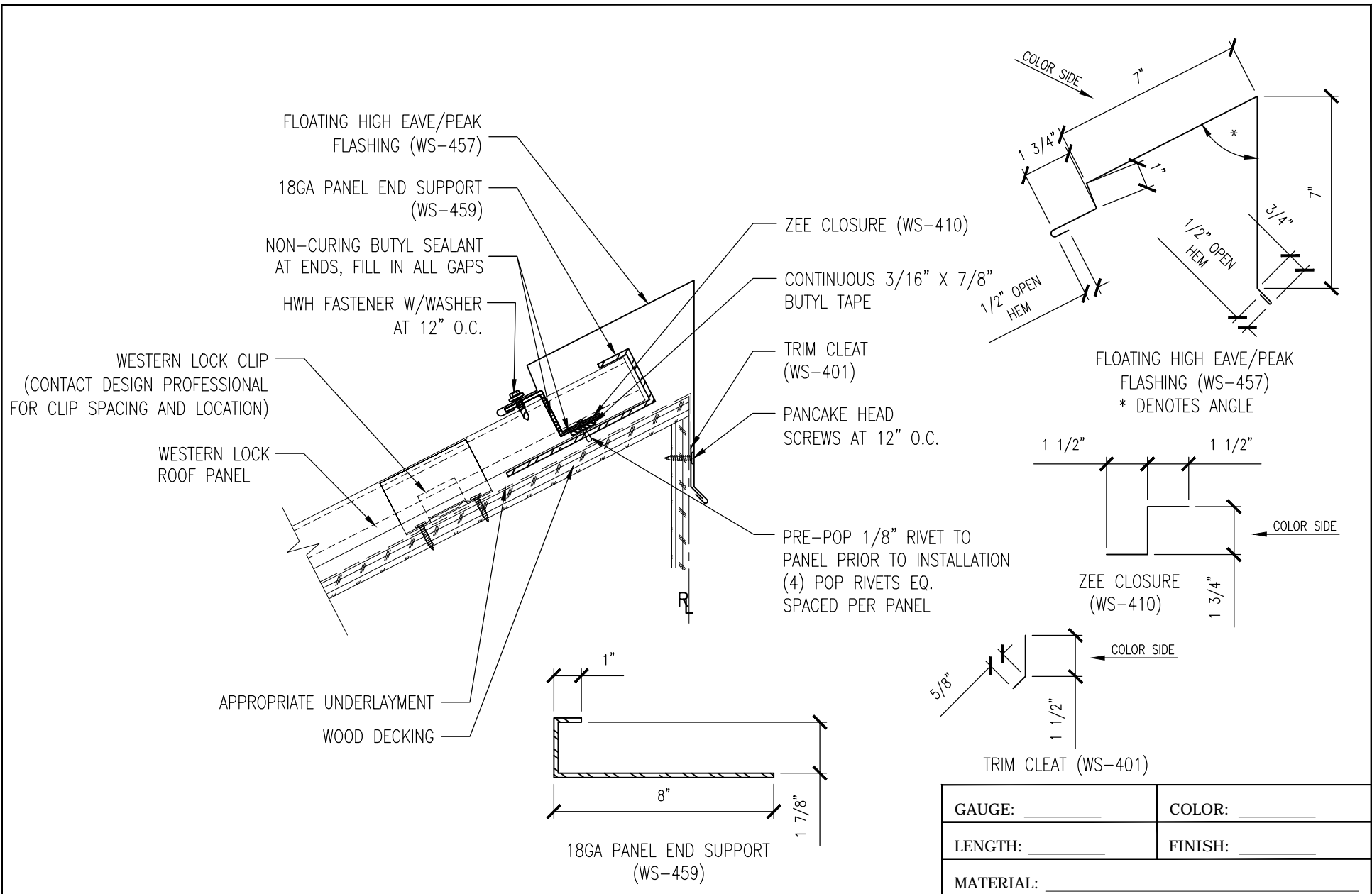


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GAUGE: _____	COLOR: _____		
LENGTH: _____	FINISH: _____		
MATERIAL: _____			
FIXED HIGH EAVE DETAIL		A	05-20-13
		REV:	DATE:
PANEL TYPE: WESTERN LOCK		DETAIL #: WSD-D13	



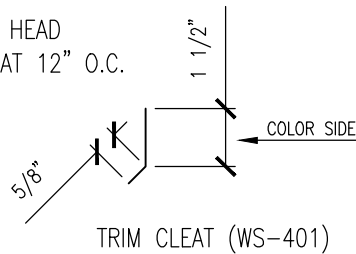
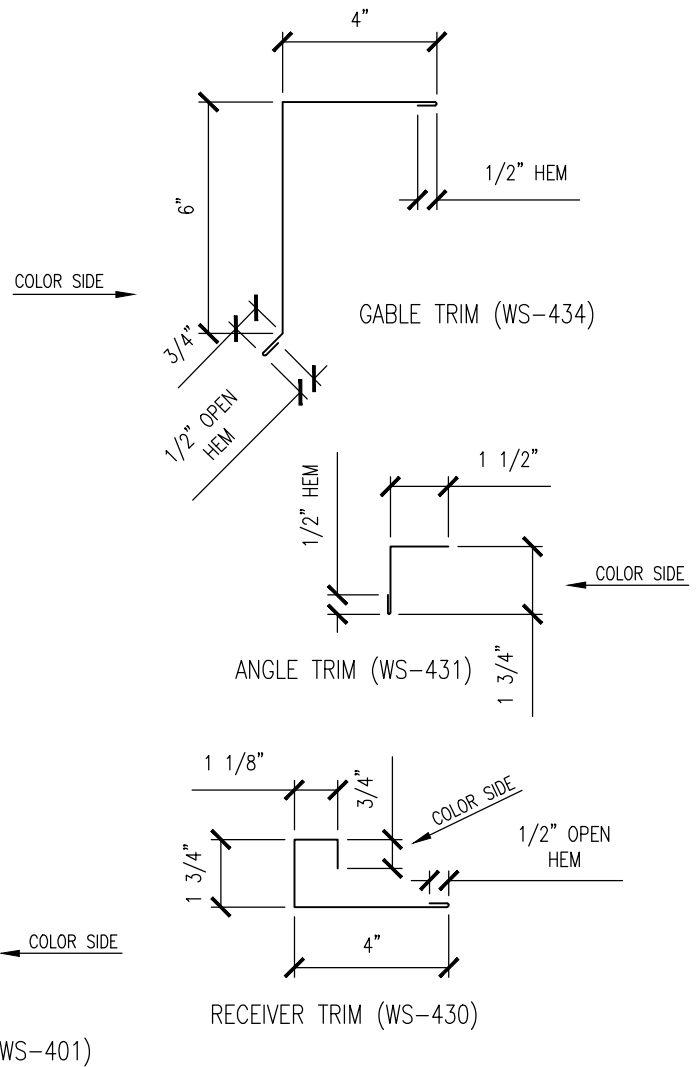
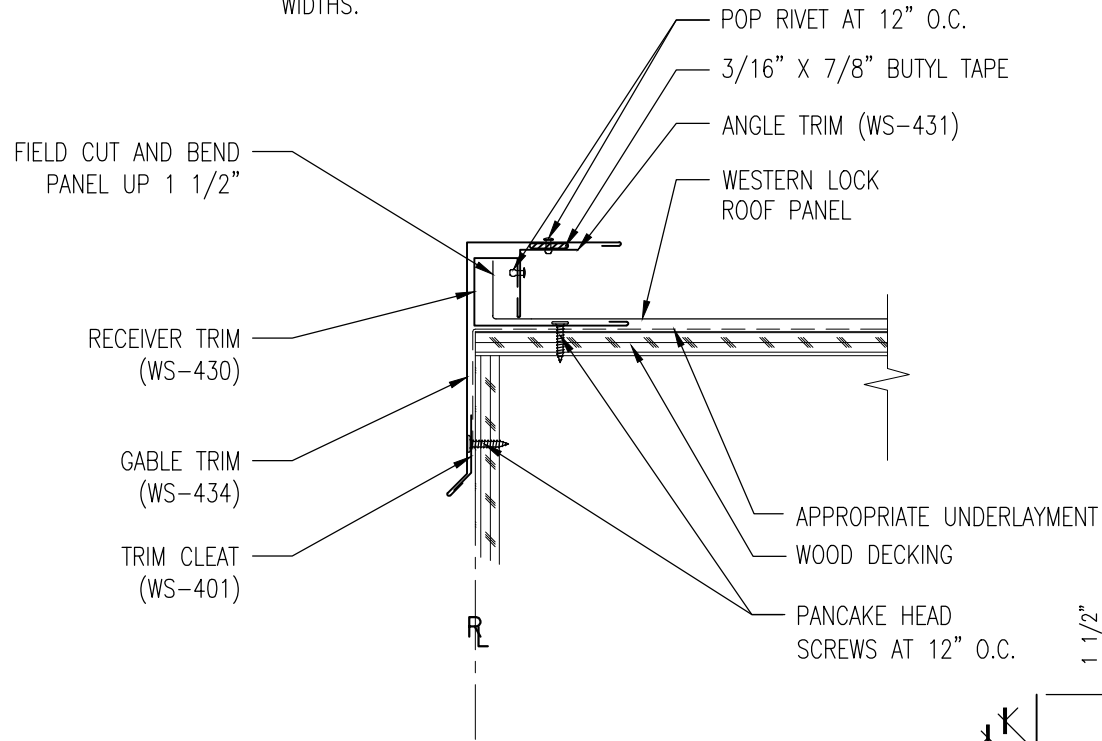
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GAUGE: _____	COLOR: _____		
LENGTH: _____	FINISH: _____		
MATERIAL: _____			
FLOATING HIGH EAVE DETAIL			
		A	05-20-13
PANEL TYPE: WESTERN LOCK		REV:	DATE:
		DETAIL #: WSD-D14	

NOTE:
FIELD CUT FIRST AND
LAST PANELS TO EQUAL
WIDTHS.



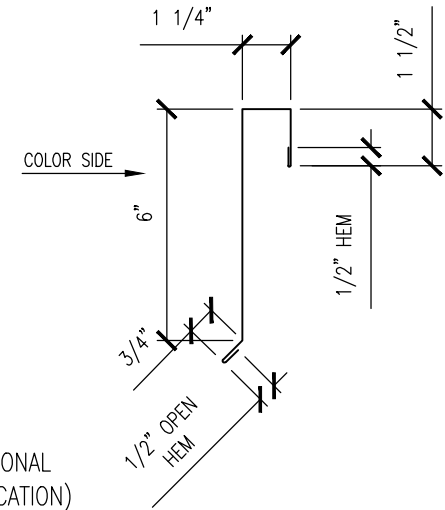
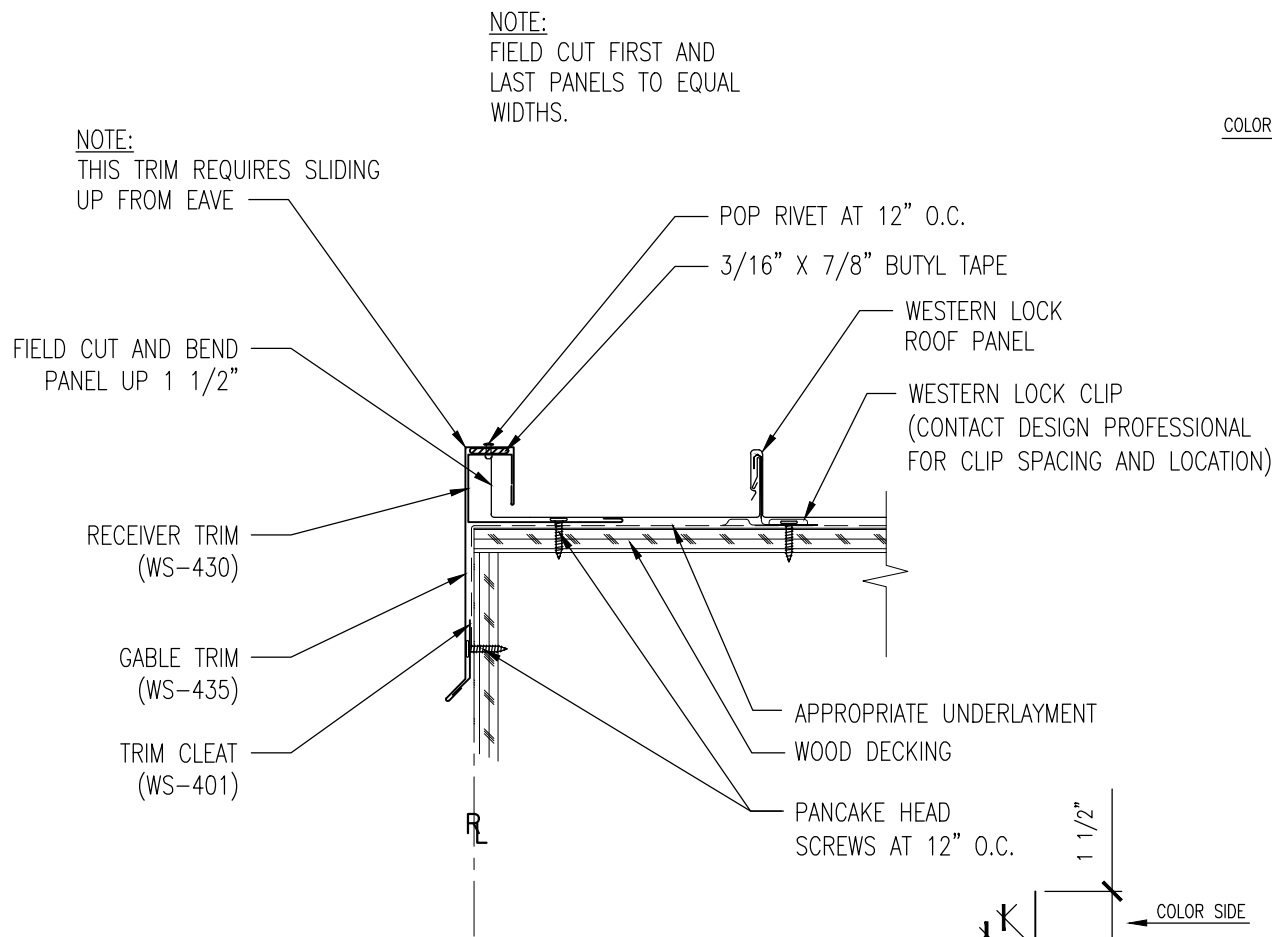
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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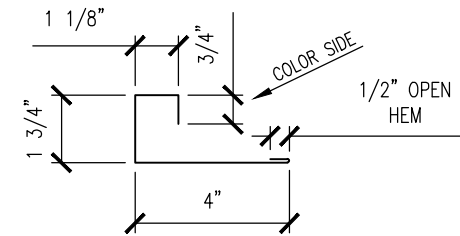
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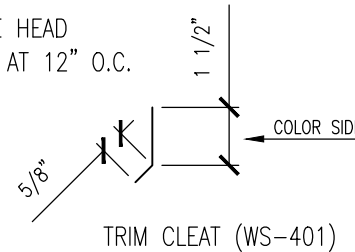
4 PIECE GABLE DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D15	



ALTERNATE
GABLE TRIM (WS-435)



RECEIVER TRIM (WS-430)



TRIM CLEAT (WS-401)

GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

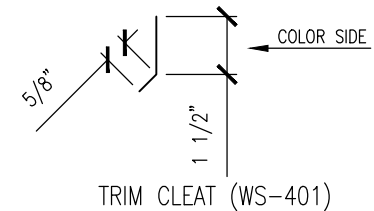
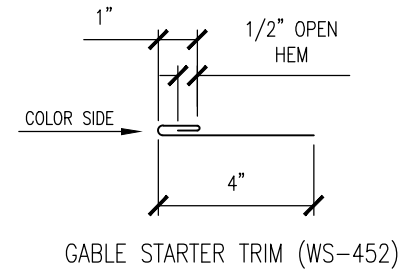
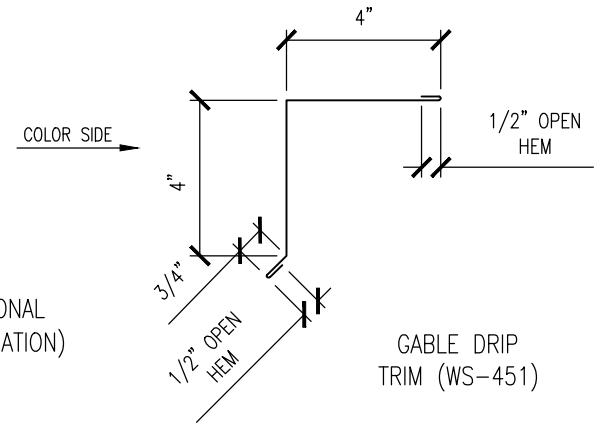
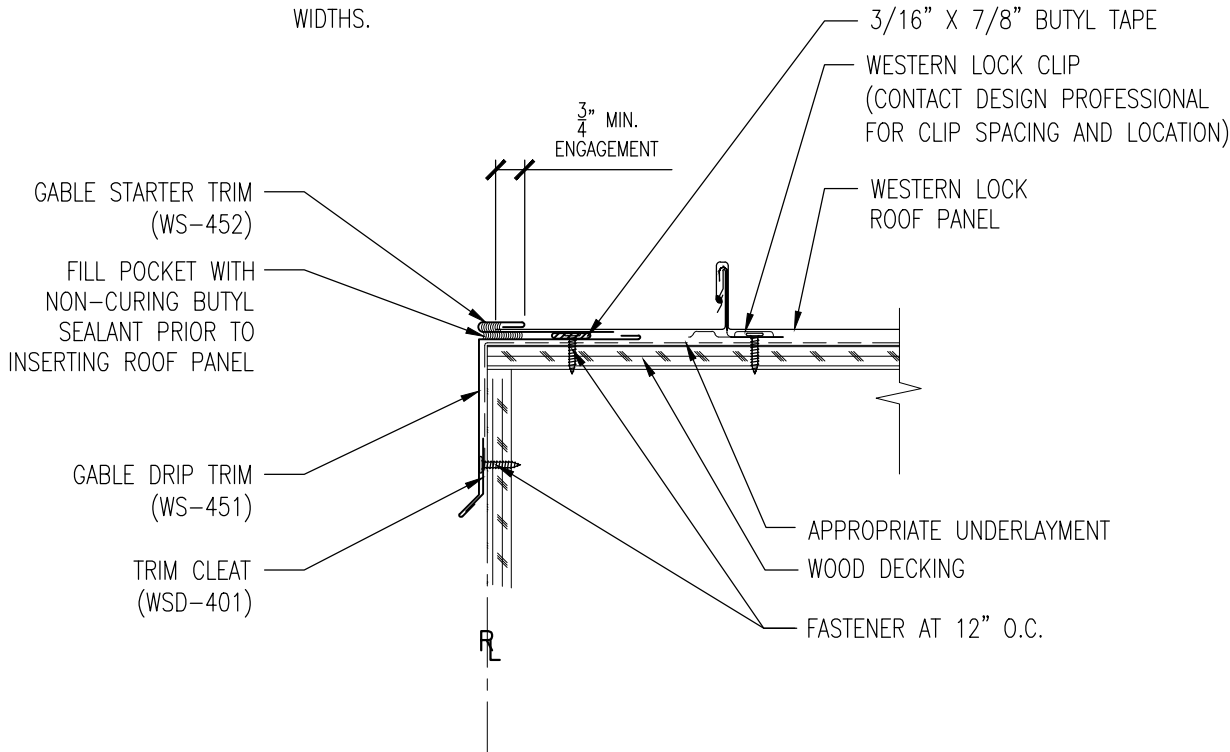
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3 PIECE GABLE DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D15A	

NOTE:
FIELD CUT FIRST AND
LAST PANELS TO EQUAL
WIDTHS.



GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

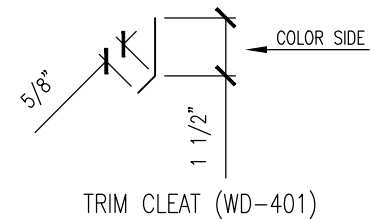
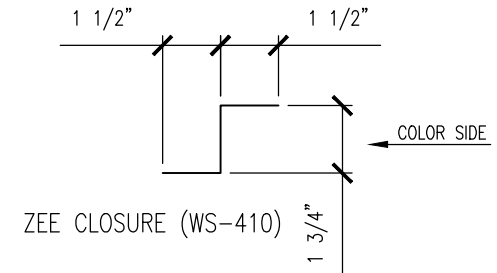
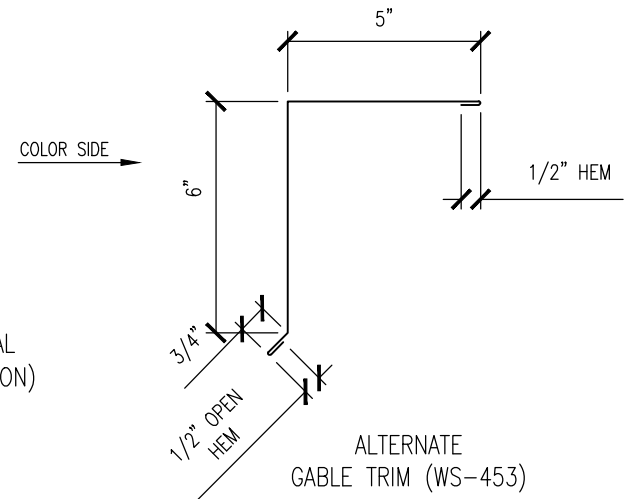
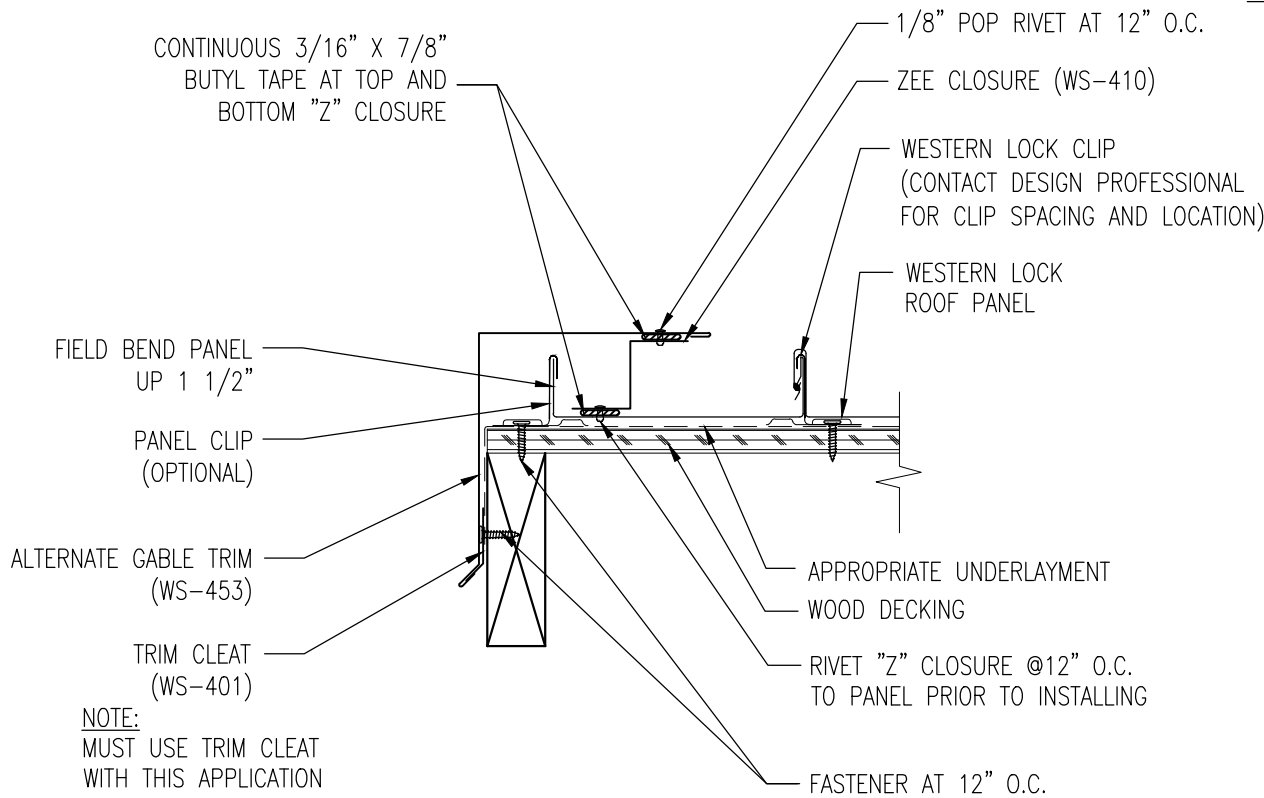
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STARTER GABLE DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D15B	

NOTE:
FIELD CUT FIRST AND
LAST PANELS TO EQUAL
WIDTHS.



GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

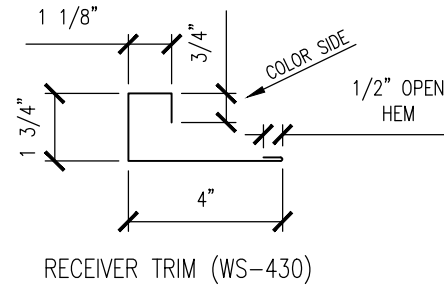
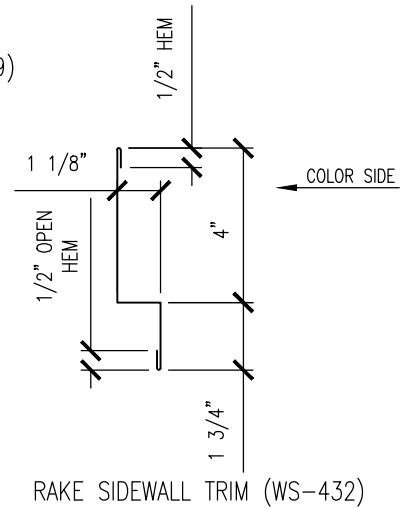
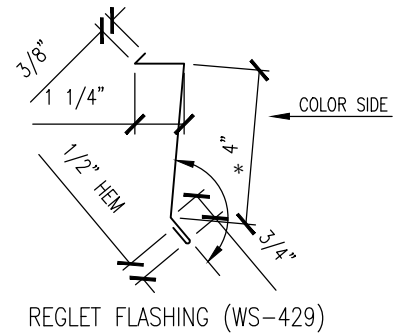
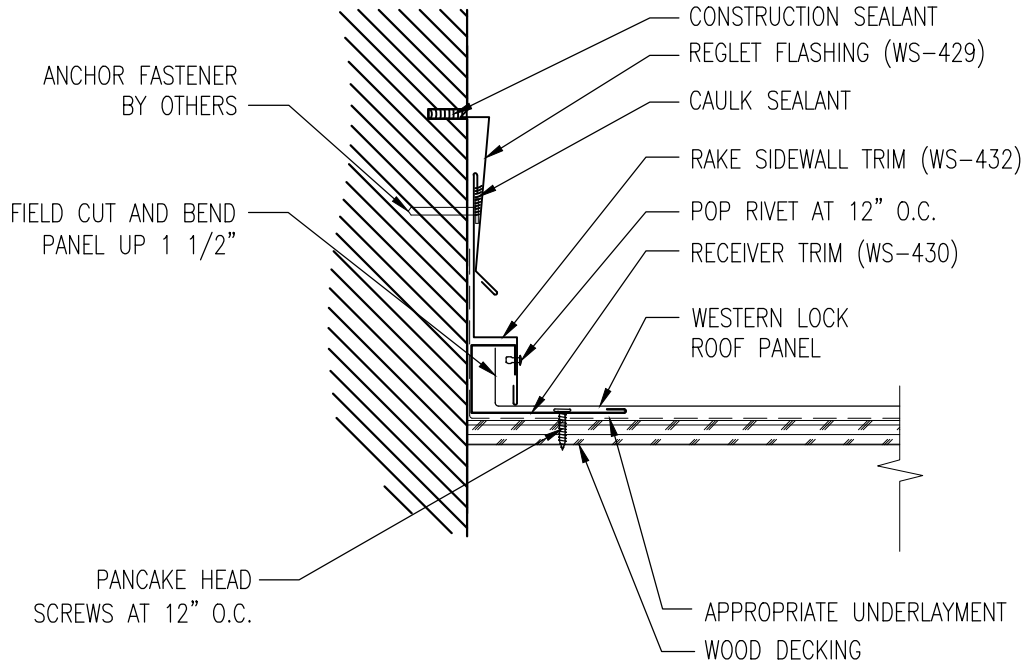
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ALTERNATE GABLE DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D15C	

NOTE:
FIELD CUT FIRST AND
LAST PANELS TO EQUAL
WIDTHS.



GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

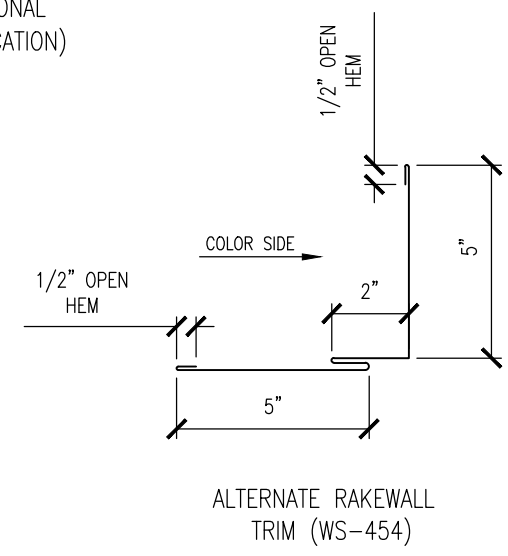
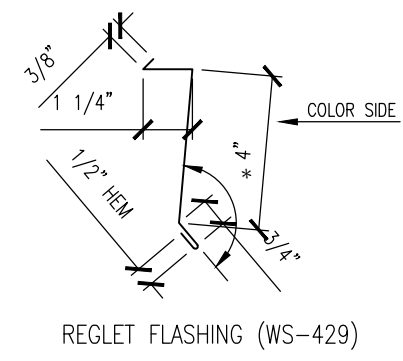
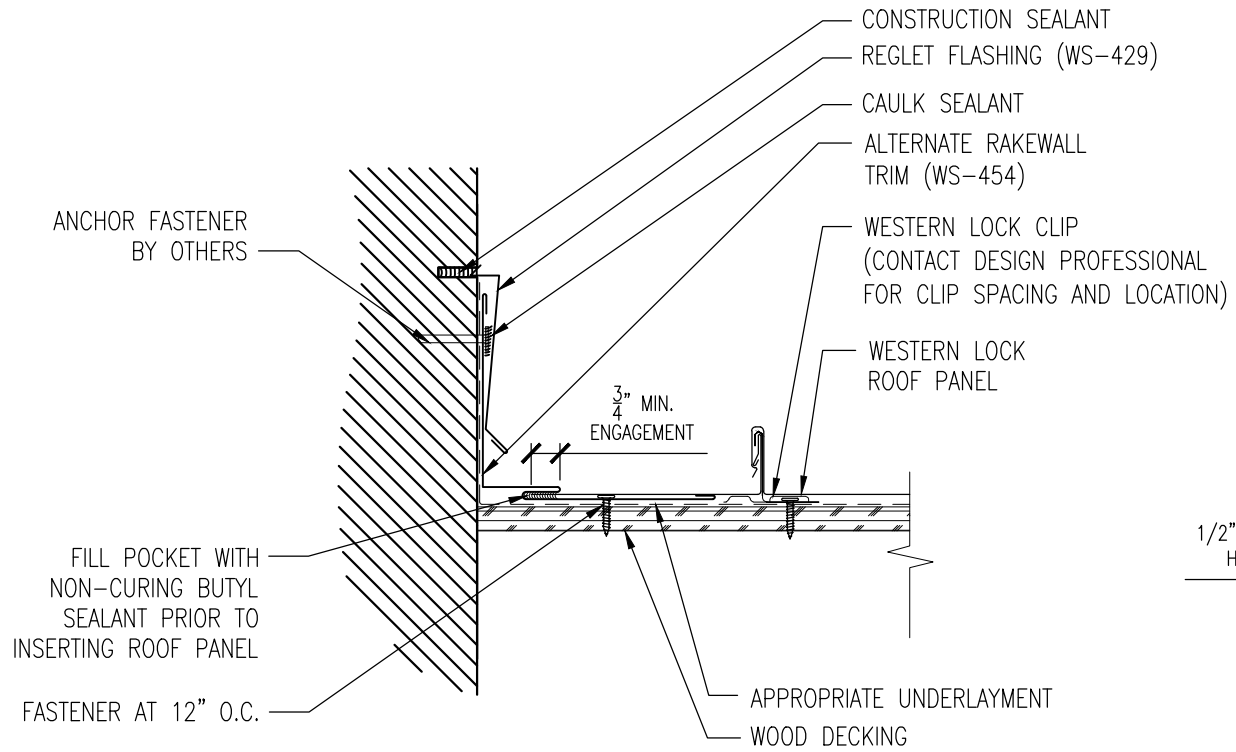
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RAKE DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D16	

NOTE:
FIELD CUT FIRST AND
LAST PANELS TO EQUAL
WIDTHS.



GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

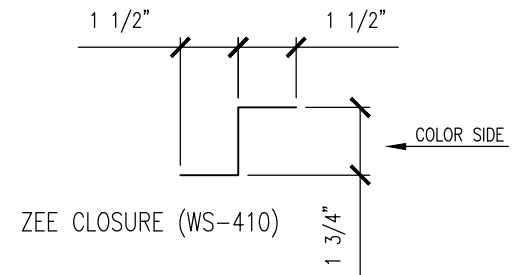
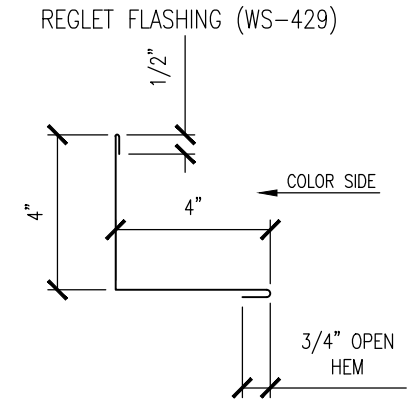
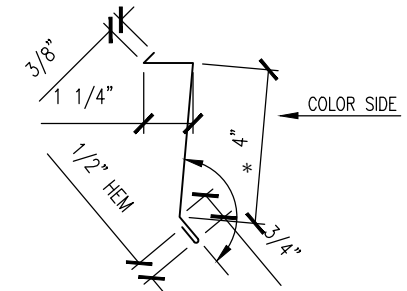
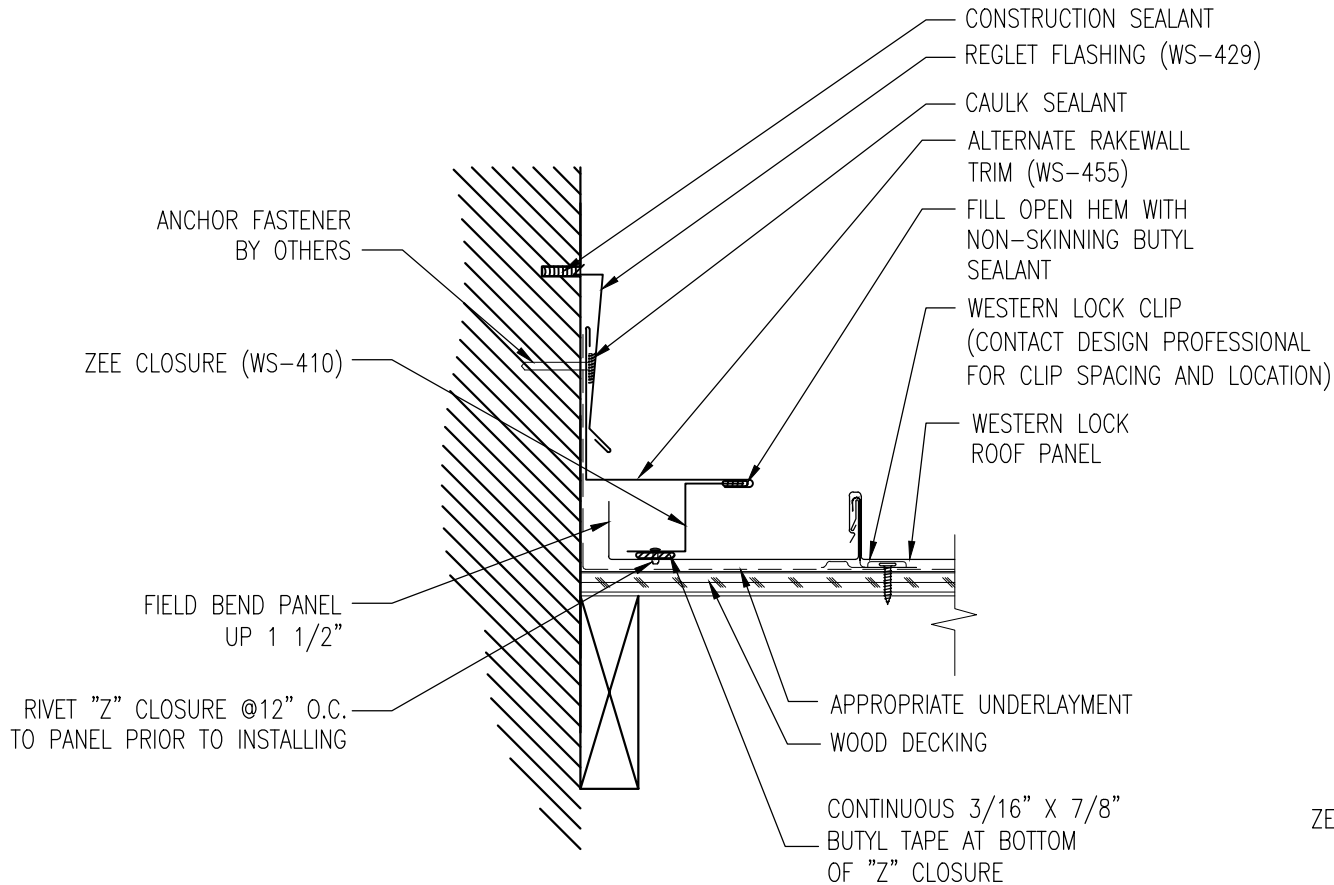
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ALTERNATE RAKEWALL DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D16A	

NOTE:
FIELD CUT FIRST AND
LAST PANELS TO EQUAL
WIDTHS.



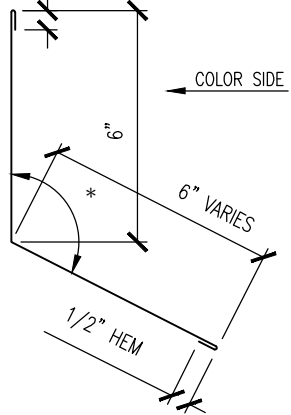
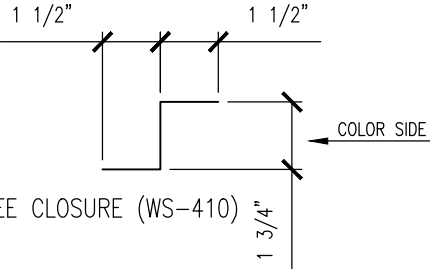
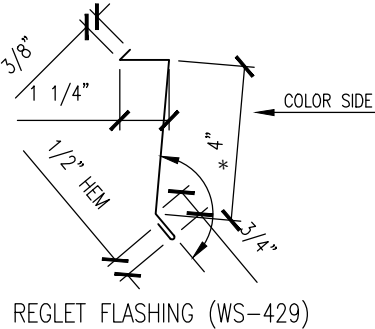
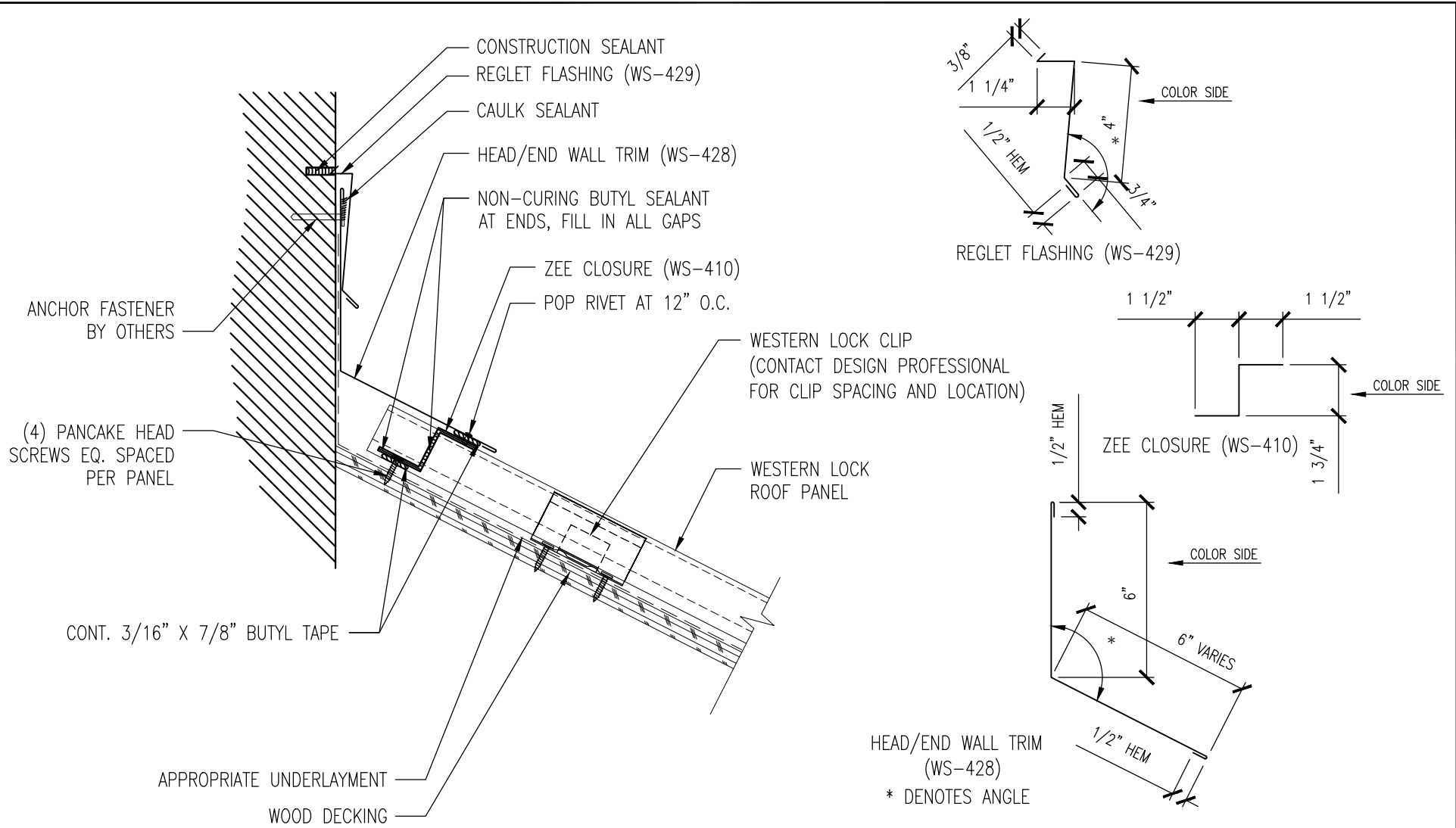
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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ZEE CLOSURE ALTERNATE RAKEWALL DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #:	WSD-D16B

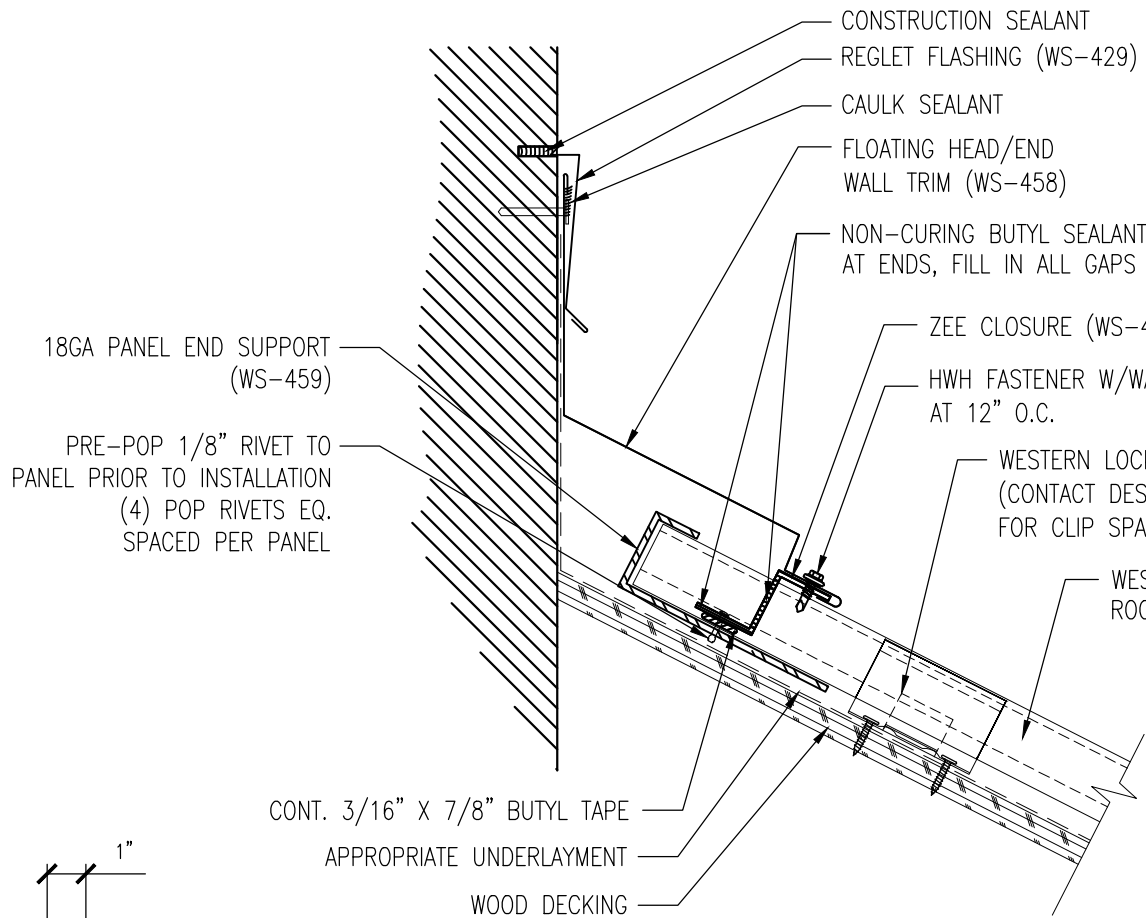


HEAD/END WALL TRIM (WS-428)
* DENOTES ANGLE

GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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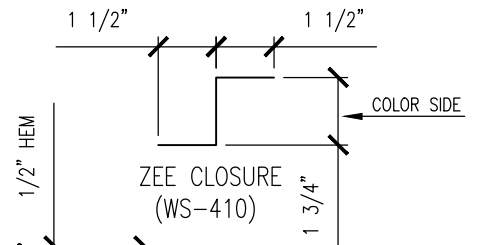
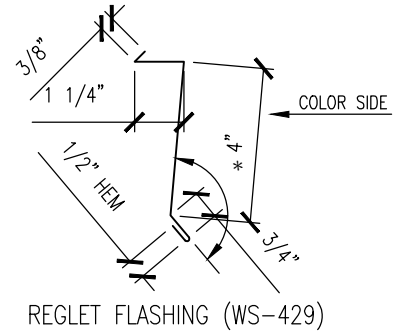
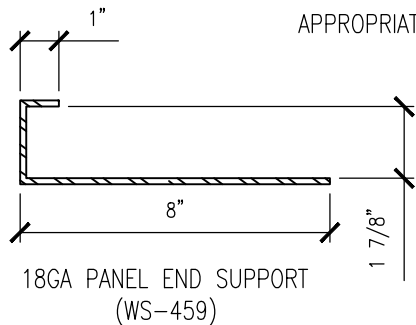
FIXED END WALL/ HEAD WALL DETAIL	A	05-20-13
	REV:	DATE:
PANEL TYPE: WESTERN LOCK	DETAIL #: WSD-D17	



18GA PANEL END SUPPORT
(WS-459)

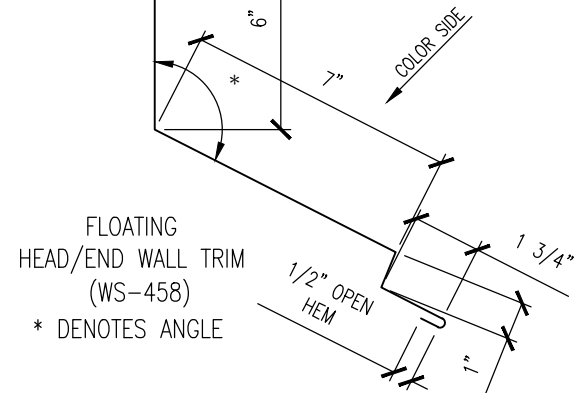
PRE-POP 1/8" RIVET TO
PANEL PRIOR TO INSTALLATION
(4) POP RIVETS EQ.
SPACED PER PANEL

CONT. 3/16" X 7/8" BUTYL TAPE
APPROPRIATE UNDERLAYMENT
WOOD DECKING



WESTERN LOCK CLIP
(CONTACT DESIGN PROFESSIONAL
FOR CLIP SPACING AND LOCATION)

WESTERN LOCK
ROOF PANEL



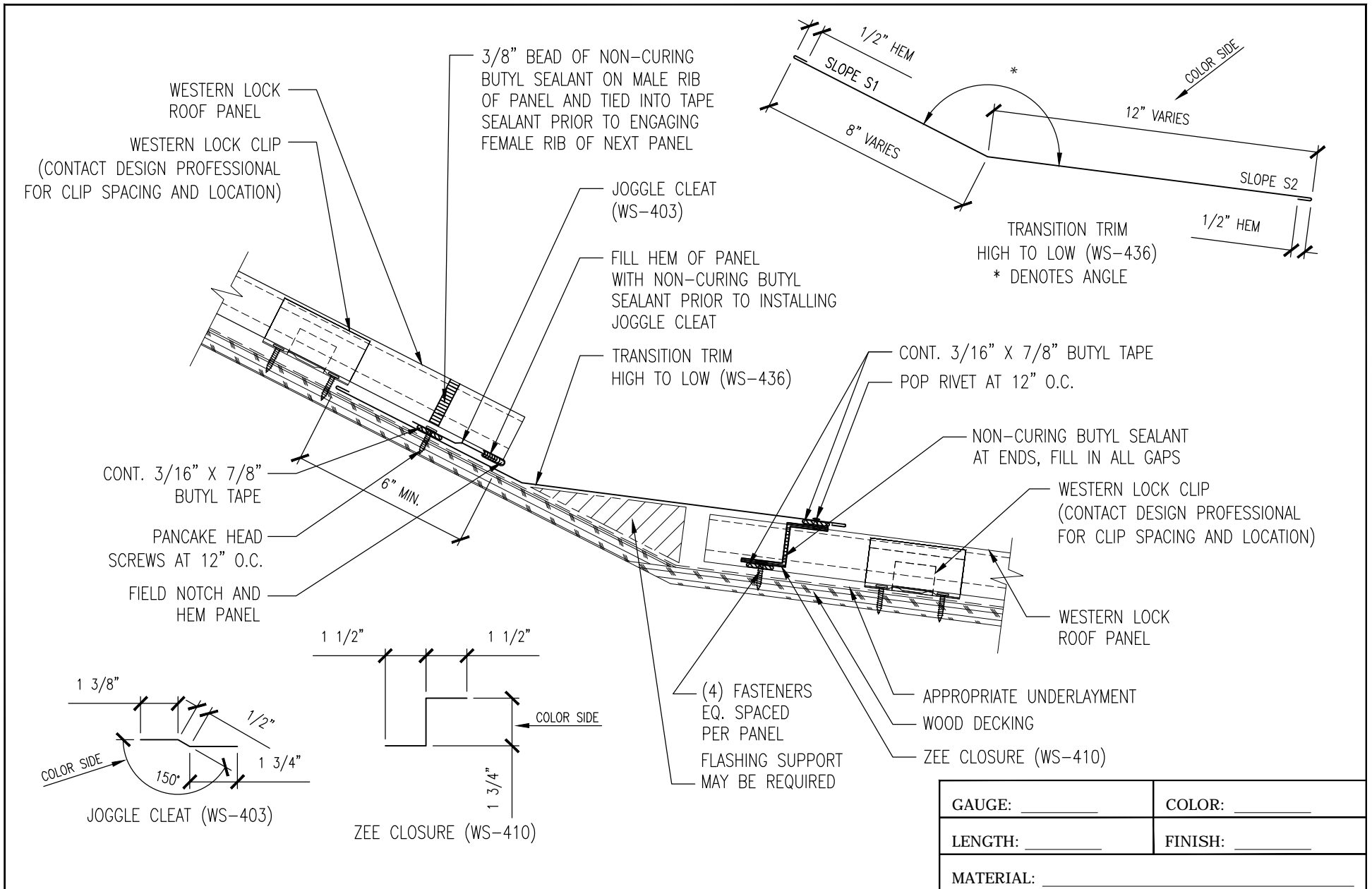
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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FLOATING HEAD/ END WALL DETAIL	A	05-20-13
	REV:	DATE:
PANEL TYPE: WESTERN LOCK	DETAIL #: WSD-D18	



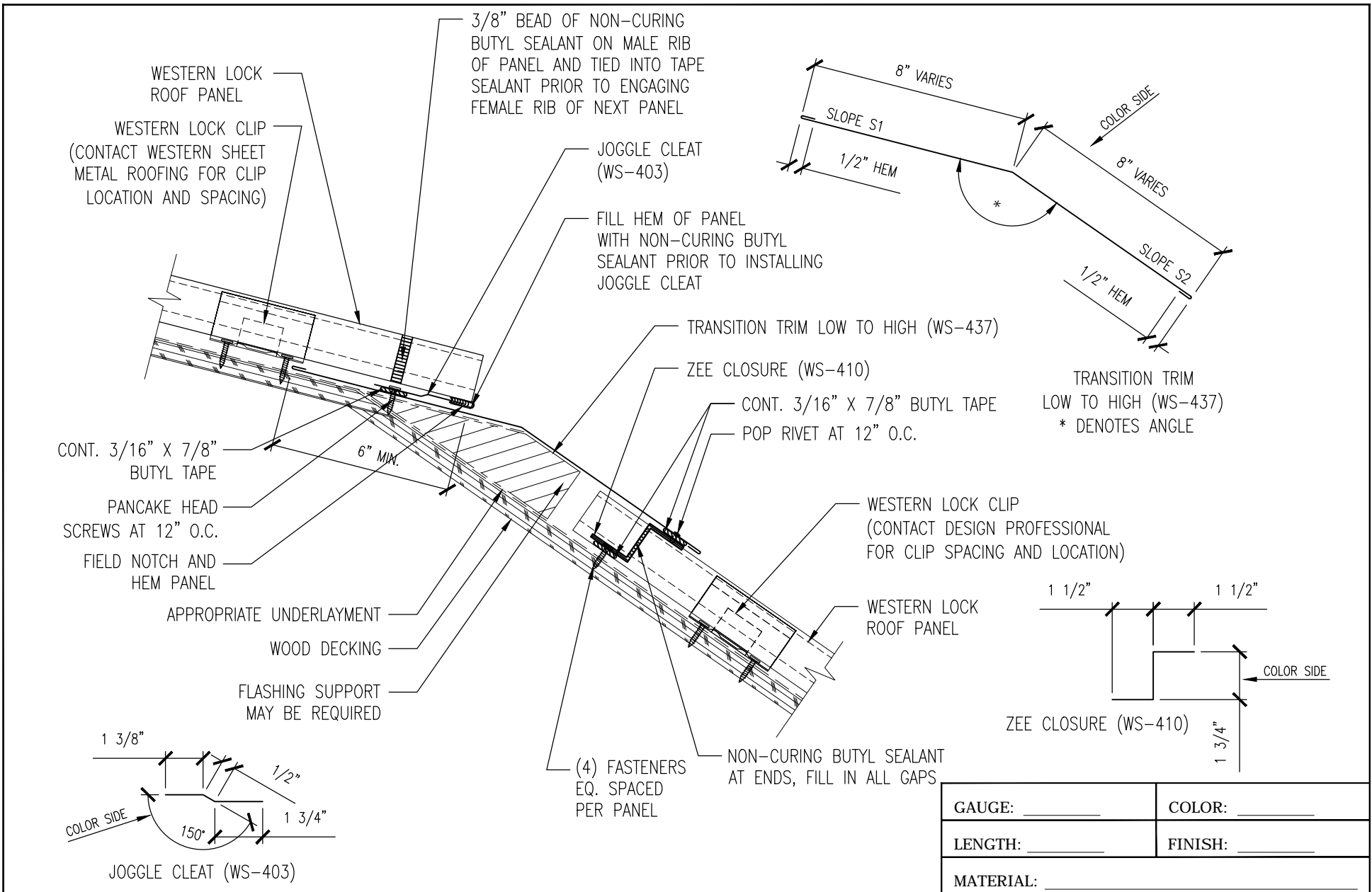
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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HIGH TO LOW TRANSITION DETAIL	A	05-20-13
	REV:	DATE:
PANEL TYPE: WESTERN LOCK	DETAIL #: WSD-D19	

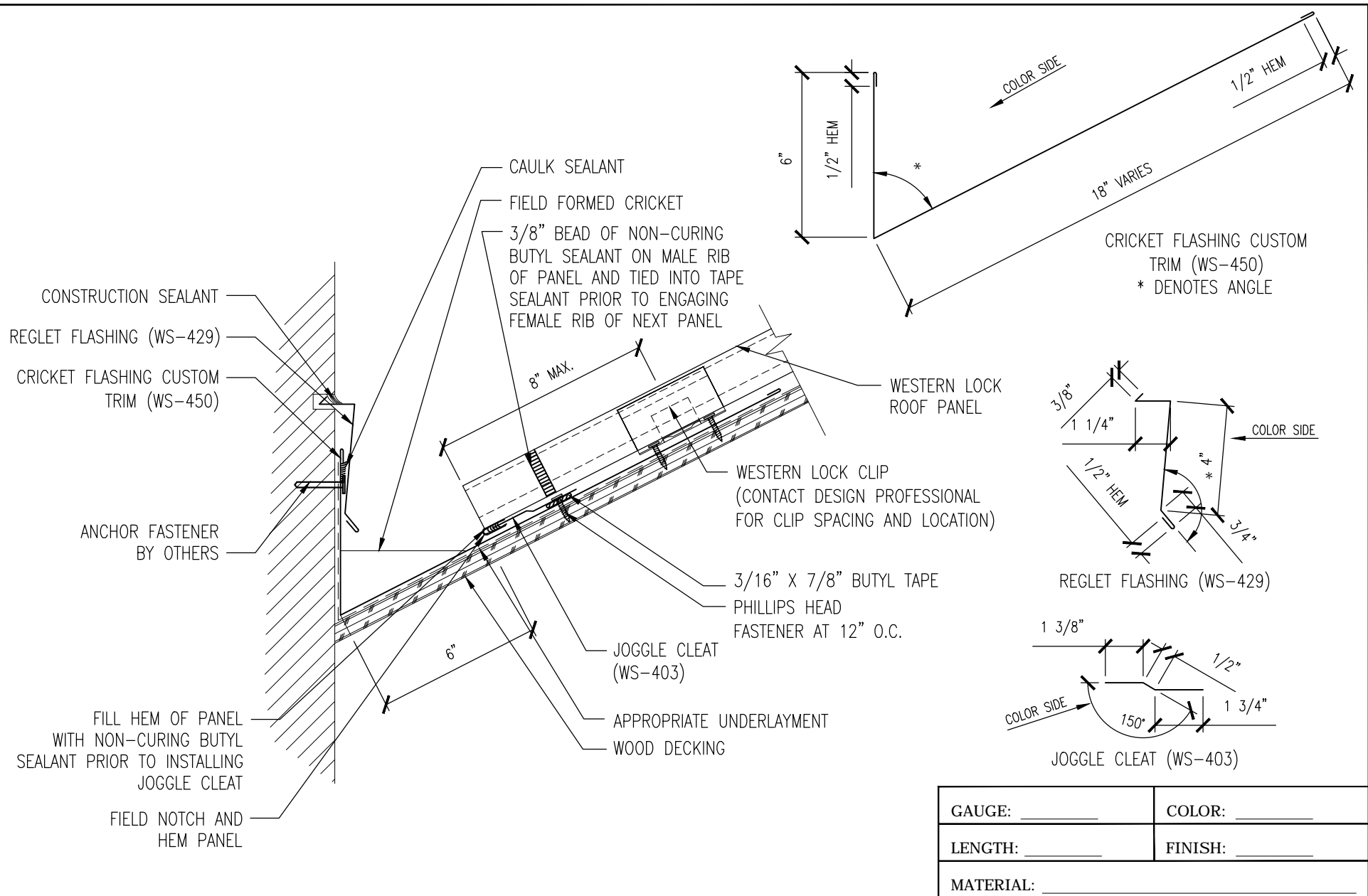


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GAUGE: _____		COLOR: _____	
LENGTH: _____		FINISH: _____	
MATERIAL: _____			
LOW TO HIGH TRANSITION DETAIL		A	05-20-13
		REV:	DATE:
PANEL TYPE: WESTERN LOCK		DETAIL #: WSD-D20	



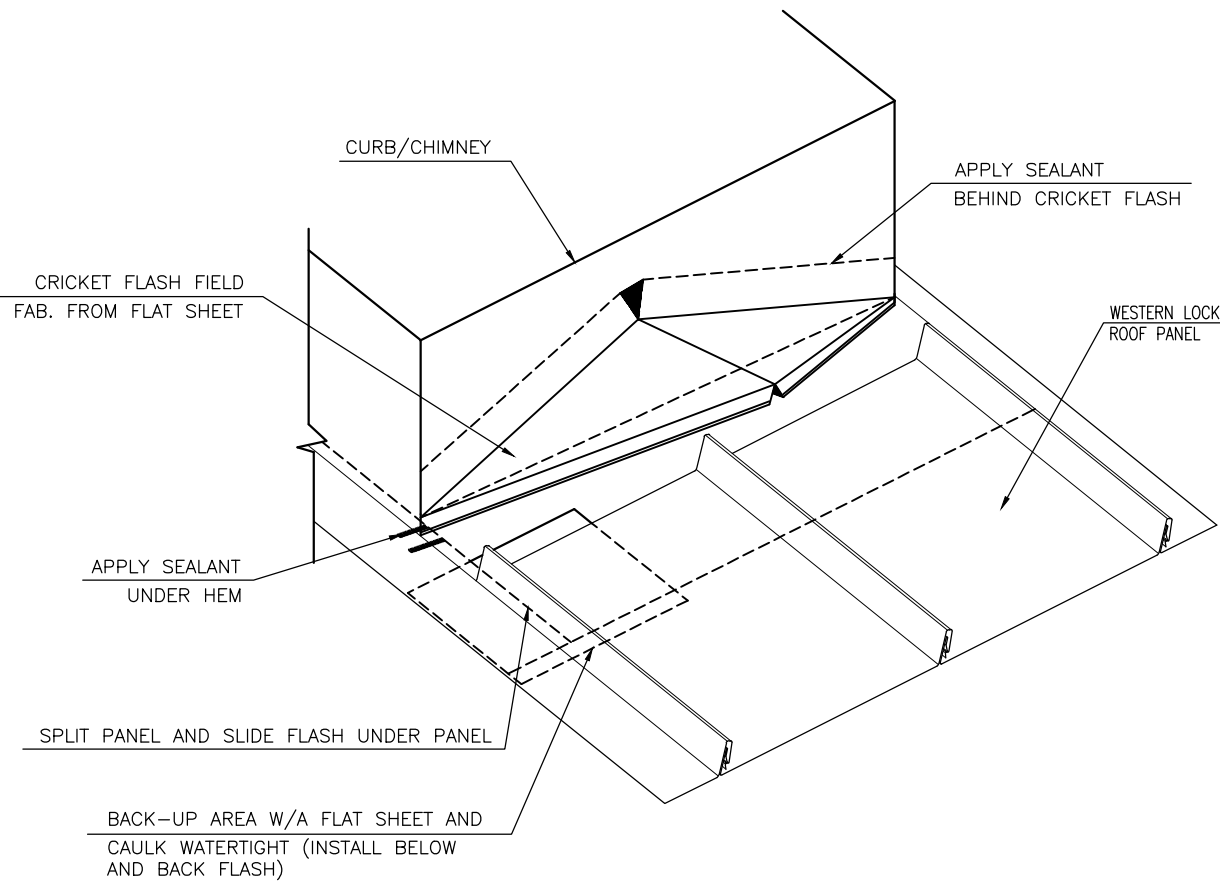
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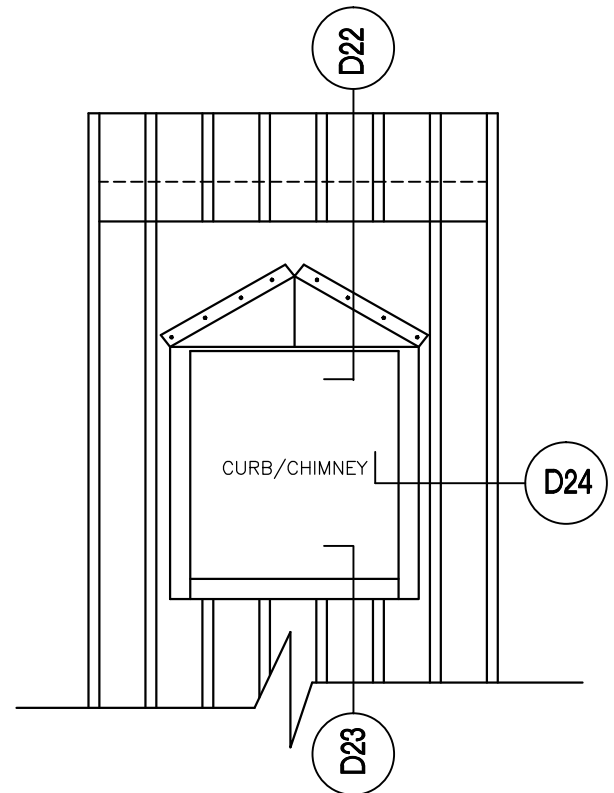
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GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

HALF VALLEY DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D21	



ISOMETRIC VIEW



PLAN VIEW

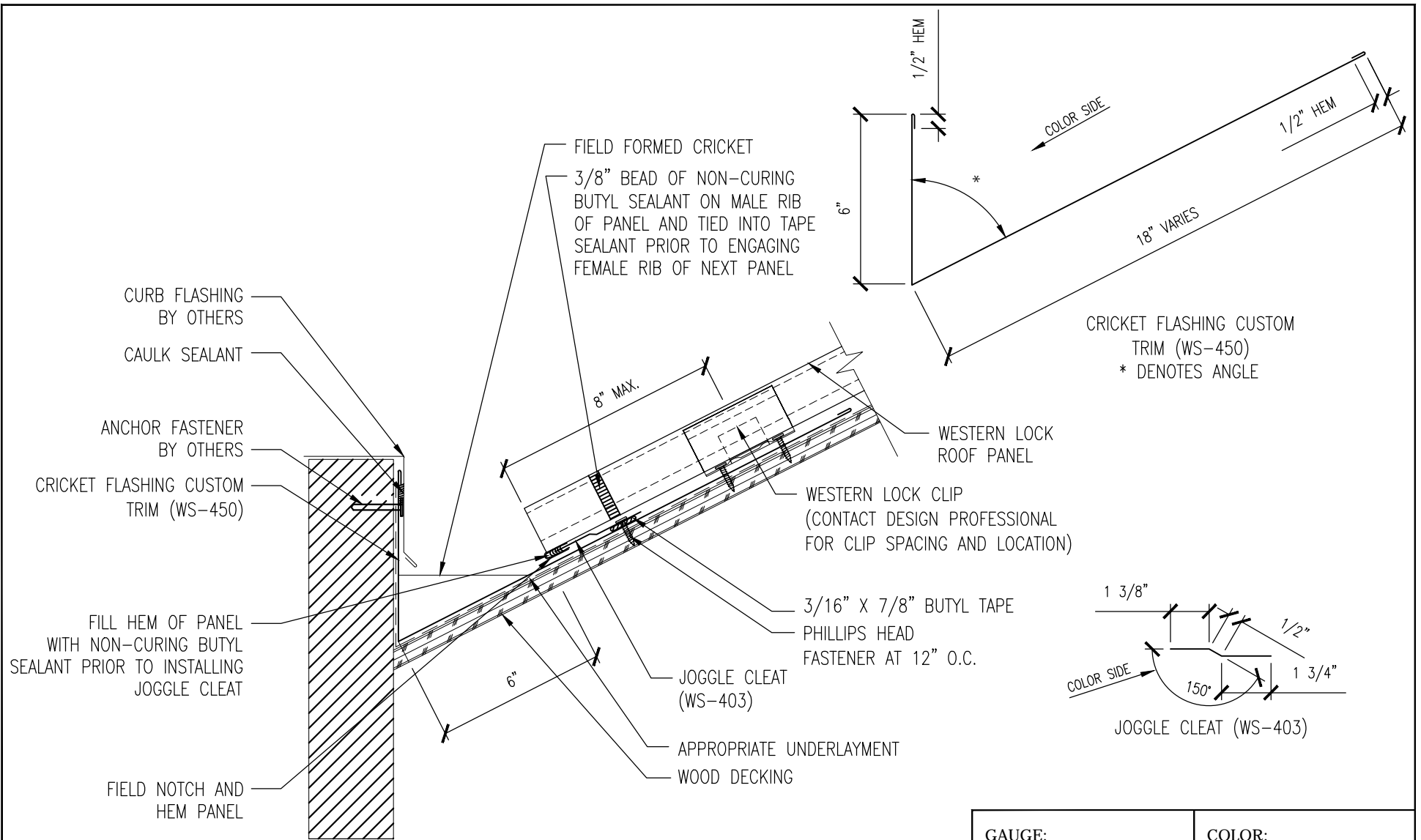
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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ISOMETRIC CURB/CHIMNEY DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D22	

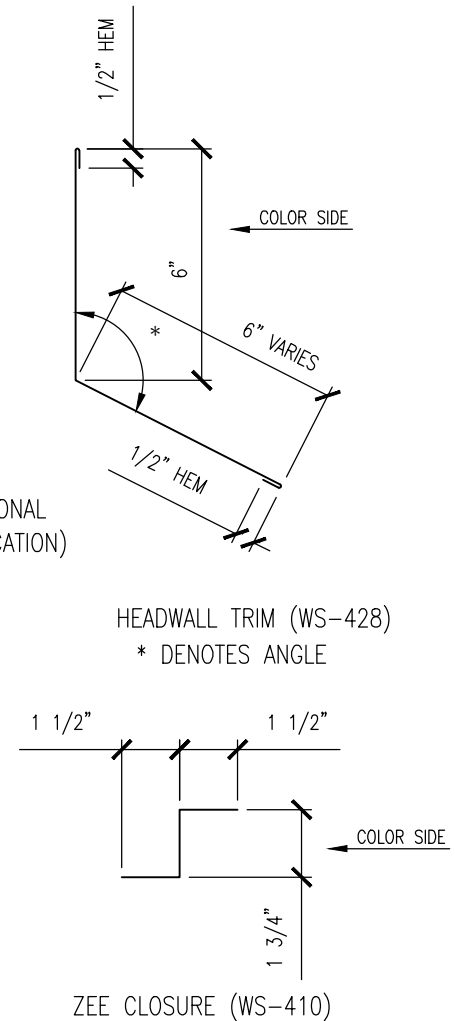
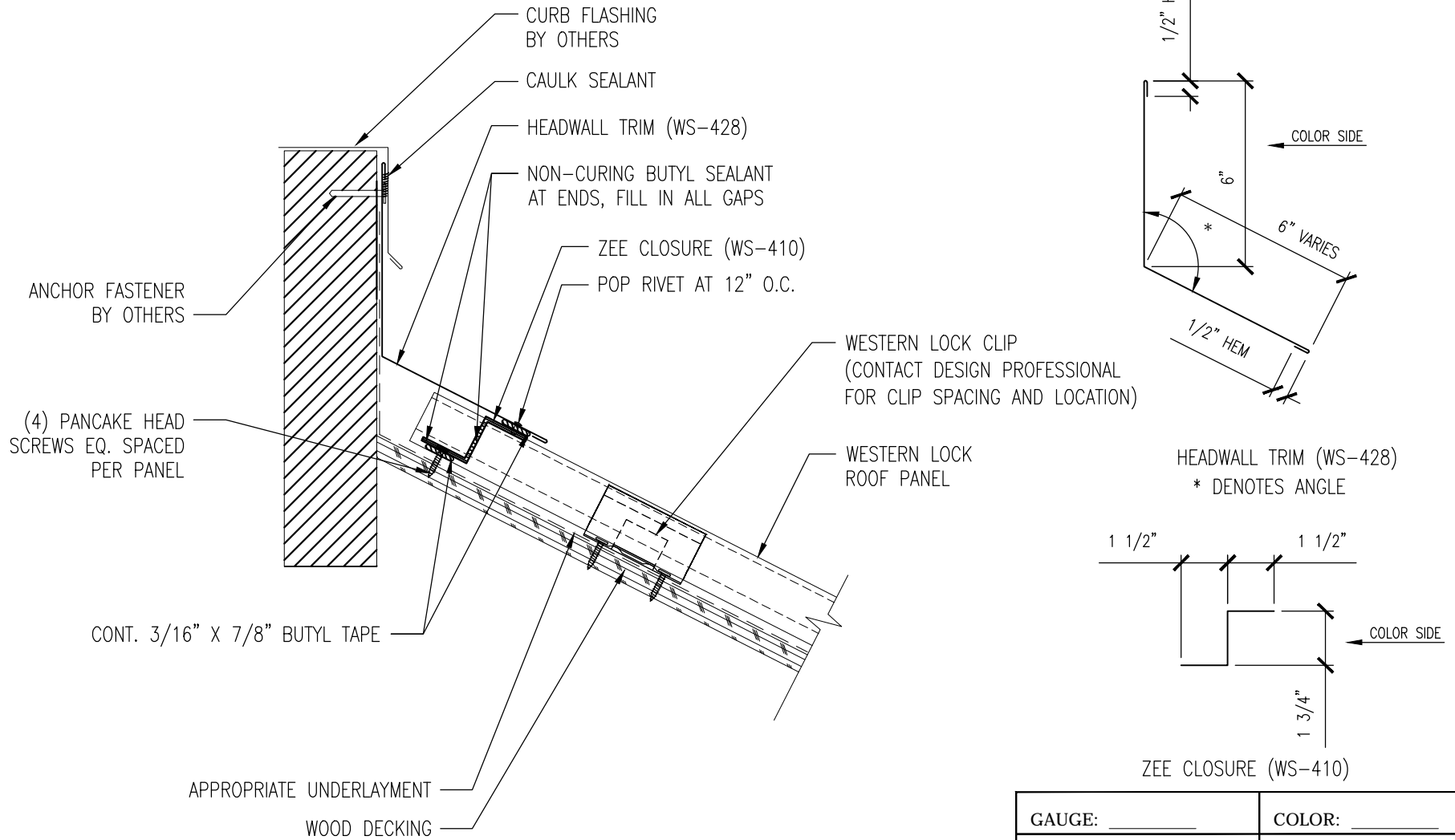


GAUGE: _____	COLOR: _____		
LENGTH: _____	FINISH: _____		
MATERIAL: _____			
CRICKET FLASHING @ CURB/CHIMNEY DETAIL		A	05-20-13
		REV:	DATE:
PANEL TYPE: WESTERN LOCK	DETAIL #: WSD-D23		

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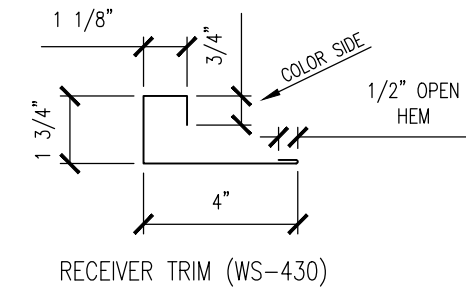
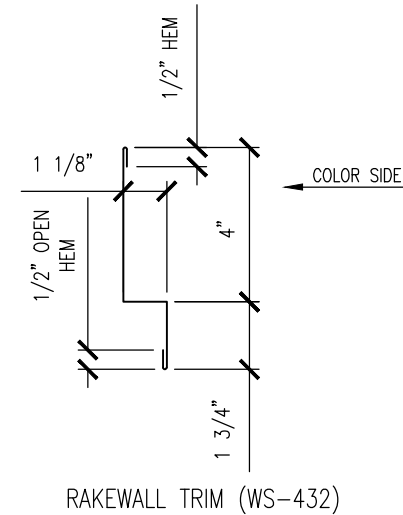
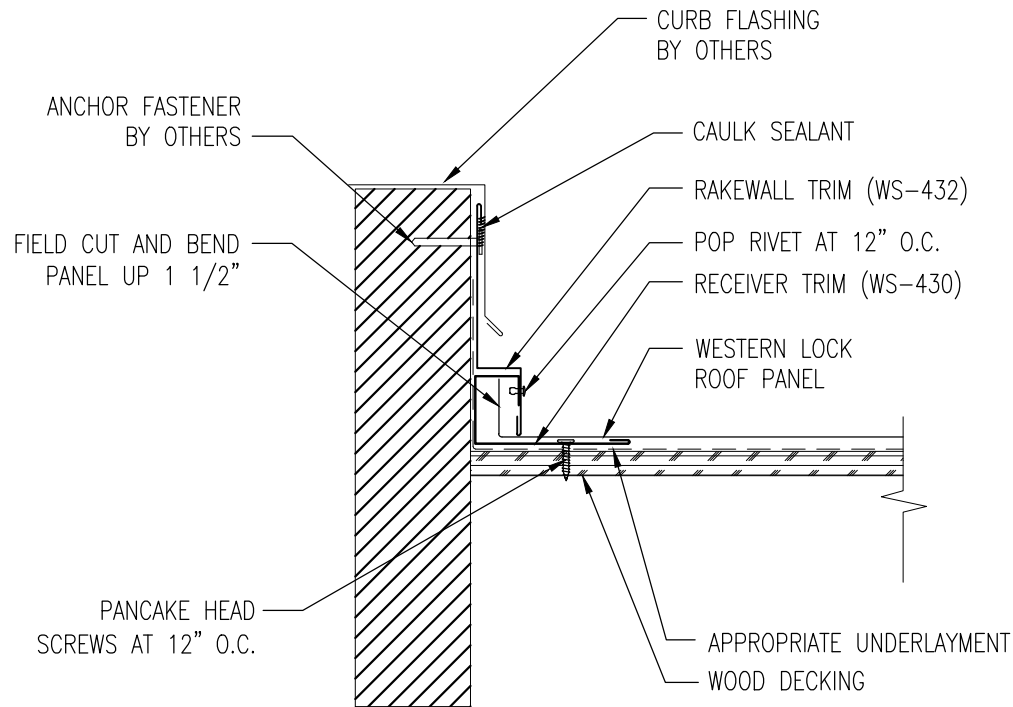
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GAUGE: _____		COLOR: _____	
LENGTH: _____		FINISH: _____	
MATERIAL: _____			
PITCHBREAK @ CURB/CHIMNEY DETAIL		A	05-20-13
		REV:	DATE:
PANEL TYPE: WESTERN LOCK		DETAIL #: WSD-D24	

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NOTE:
FIELD CUT FIRST AND
LAST PANELS TO EQUAL
WIDTHS.



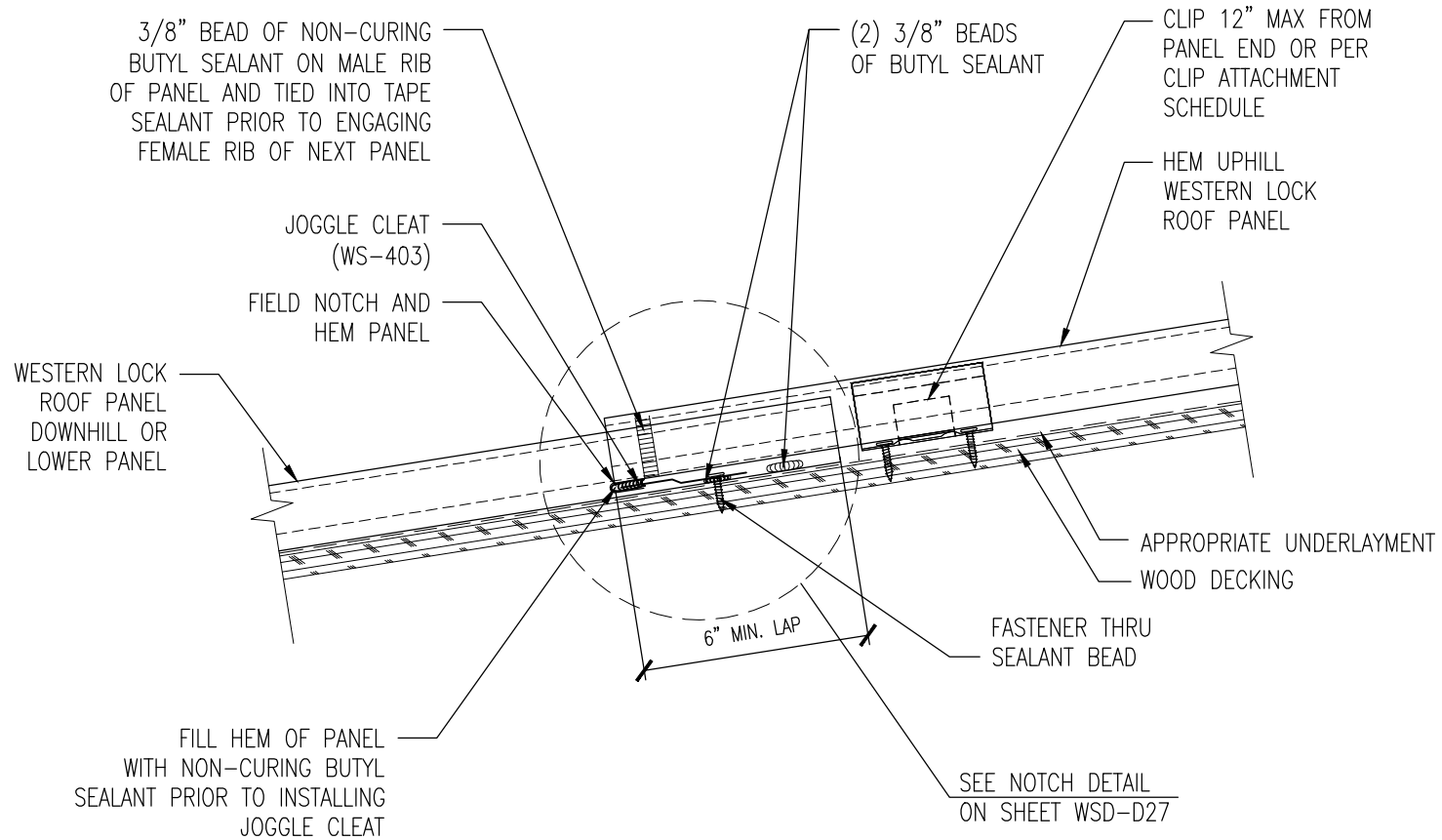
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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SIDEWALL @ CURB/CHIMNEY DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D25	



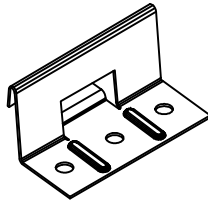
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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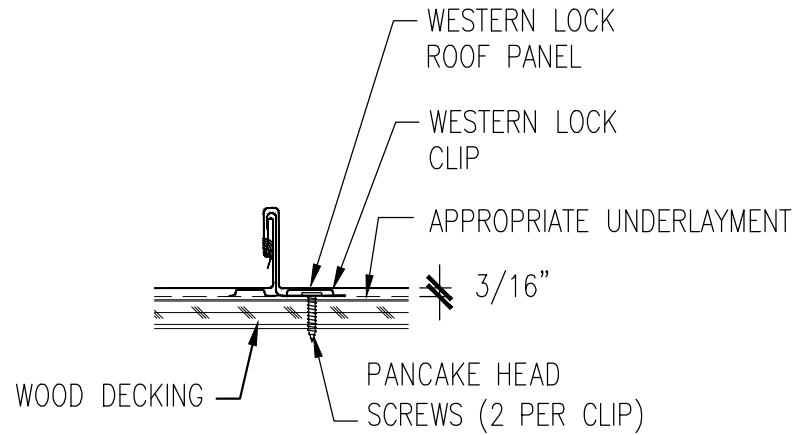
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PANEL ENDLAP DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D26	



WESTERN LOCK CLIP



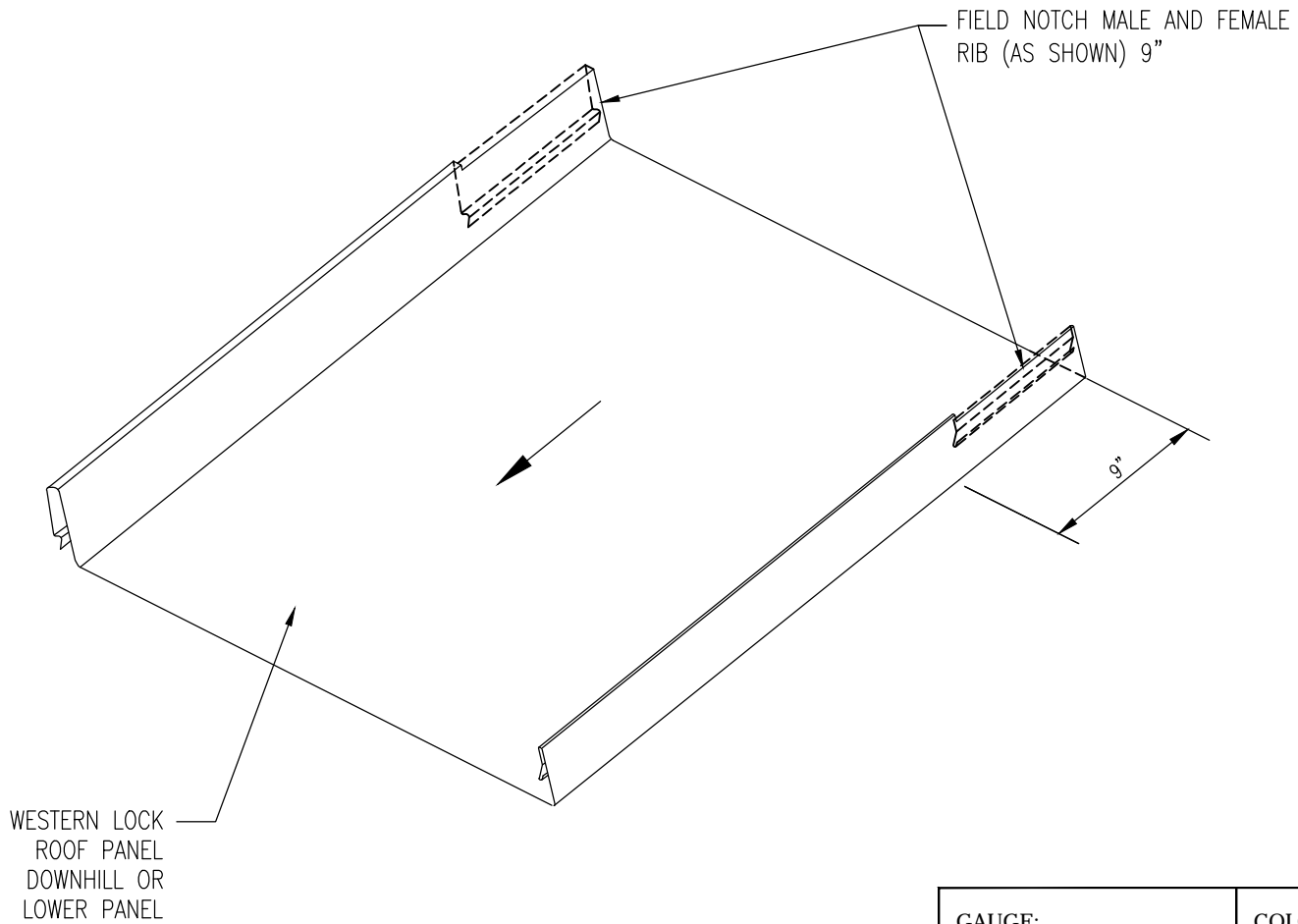
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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PANEL CLIP DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D26A	



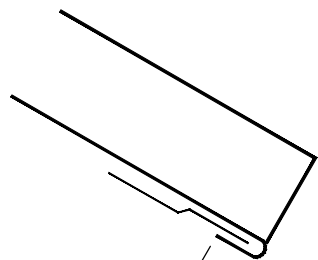
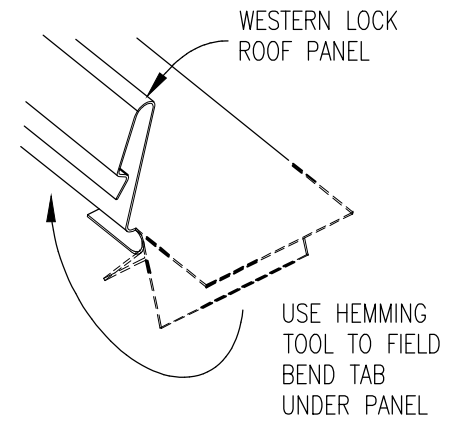
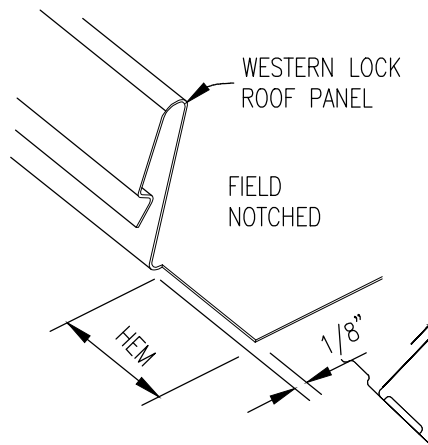
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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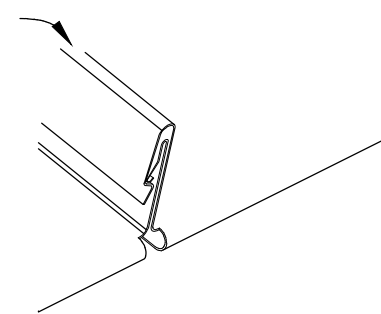
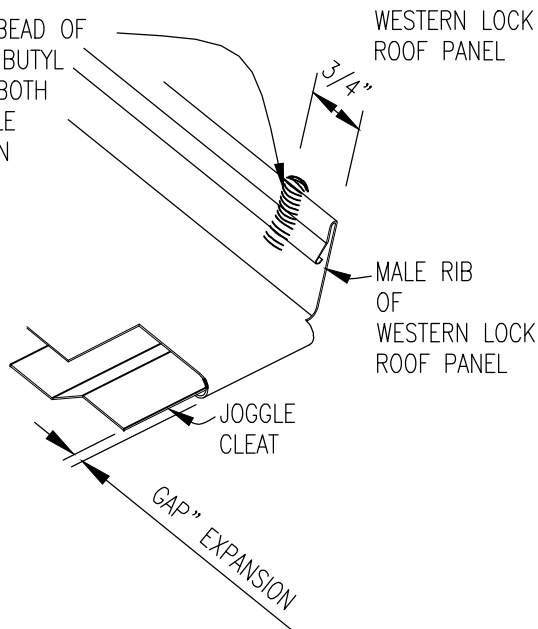
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FIELD LAP DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D27	



3/8" GAP FOR THERMAL MOVEMENT
1" HEM REQUIRED

APPLY 3/8" BEAD OF NON-CURING BUTYL SEALANT ON BOTH SIDES OF MALE RIB AS SHOWN



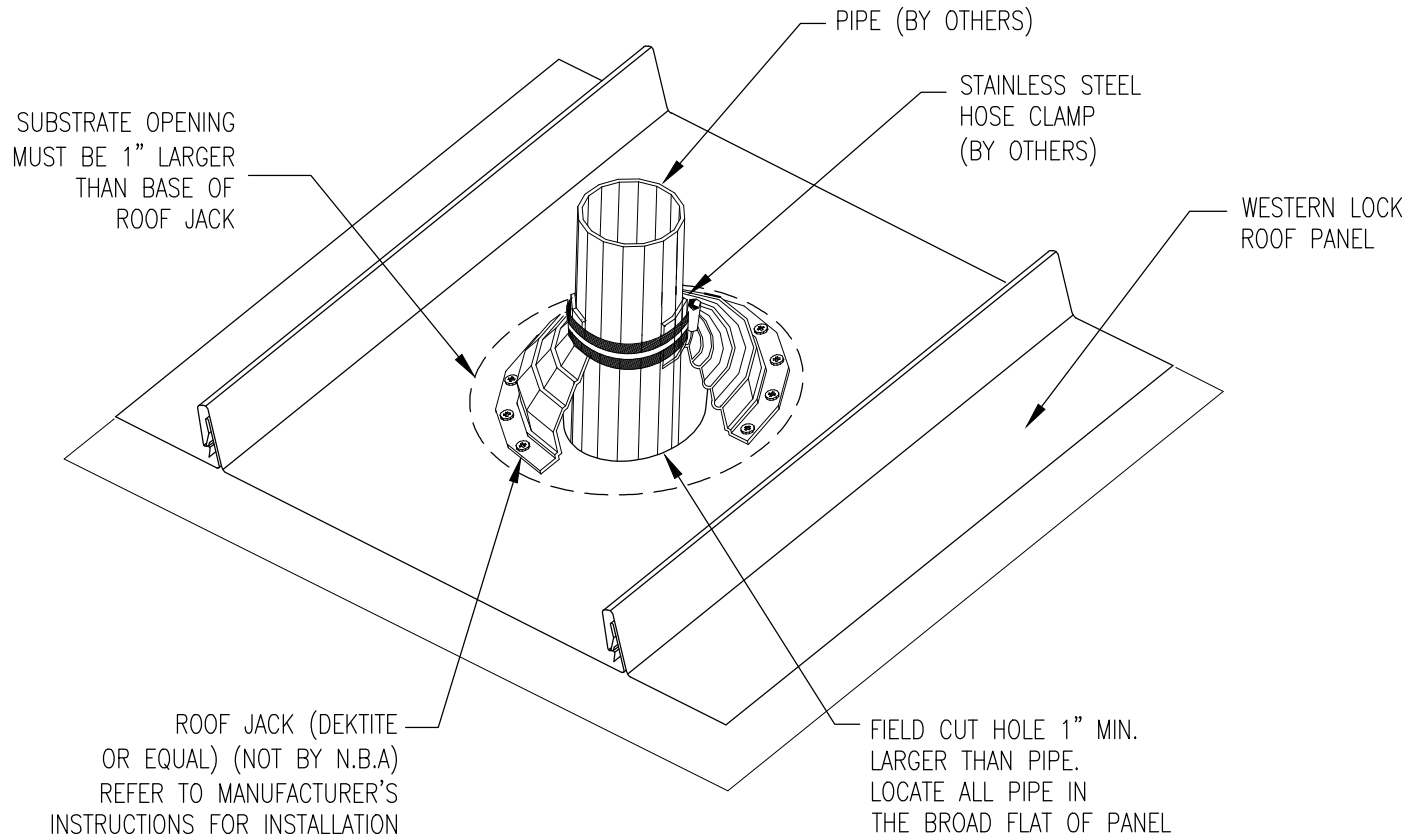
GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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PANEL HEM DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D28	



GAUGE: _____	COLOR: _____
LENGTH: _____	FINISH: _____
MATERIAL: _____	

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PIPE PENETRATION DETAIL		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-D29	

CUSTOM TRIM

GAUGE: _____	COLOR: _____	
BREAKS: _____	FINISH: _____	
LENGTH: _____	STRETCH OUT: _____	
MATERIAL: _____		
CUSTOM TRIM NAME: _____		
	A	05-20-13
PANEL TYPE: WESTERN LOCK	REV:	DATE:
	DETAIL #: WSD-CT31	

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Western States “Western Lock™” Panel Installation, Flashings & Shop Drawing Detail Guide

Special Design Considerations

The details contained in this guide are proven industry details and are intended to be used as a design aid and installation guide. It does not depict all situations that may be encountered on all projects. Modifications are the responsibility of the designer/ owner/ installer.

Consideration should be given for Fit for Purpose, Building use, Climate conditions such as temperature, snow, wind, and moisture, Governing Building Codes, and Maintenance.

It is highly recommended that all trims and flashings be of the same material as the panels (metal, gauge, finish) to ensure long term performance and durability. Where possible, flashing edges should be hemmed to strengthen the edge and protect the cut edge from exposure.

Acceptance

Use of this manual is strictly voluntary. Details that are provided are to be used as a guide only. Details may not be applicable for all situations. This guide provides one standard detail and WSDI accepts that other installation details may be needed and other details may exist. WSDI makes no guarantee as to the Weather Tightness of the system or details found with in this guide. The information in this manual is believed to be correct and accurate at the time of printing. WSDI reserves the right to change details, discontinue products, change designs at any time without incurring obligation. It is best to consult your Design Engineer for recommendations.

Underlayment

There are many types of underlayment’s on the market today. All designed with a special purpose depending on the type of Metal and profile. Many different types of metal will require a different type of underlayment, such as A606-4 (Corten) which requires a High Temperature underlayment. It is best to consult your Design Engineer for recommendations.

Valley and Snow Design

Valley design and dimension must be the proper width to accommodate high snow, rain, ice, and slope conditions. If possible, splices, penetrations, valleys, roof elevation changes, should be minimized in areas of high snow and ice accumulations. Details found in this manual may not pertain in areas of high snow and ice accumulations.

Panel coverage and fastening

Normal panel width of “Western Lock” panel is 16”. However depending on the finish selected and the required coil feed, other sizes may be available. . Please consult with your WSDI representative for details and fastening recommendations.

Safety and Maintenance

Walking on and installing any roof is dangerous! Extreme care should always be used when walking on roofs. Safety should always be a top priority and approved fall protection and equipment as approved by OSHA should always be used.

No roof is immune to severe weather or is completely maintenance free. To keep your roof performing as it was designed; an inspection and comprehensive maintenance program should be implemented.

References

For other installation techniques and details, The Sheet Metal and Air Conditioning Contractors National Association Inc. (SMACNA) and NRCA manuals are great resource for working with sheet metal.

Technical Assistance

Contact your WSDI sales or technical representative for any additional information or assistance. To insure you have the latest information available, please inquire or visit our web sites at www.metaldeck.com or Rustedroofing.com



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