



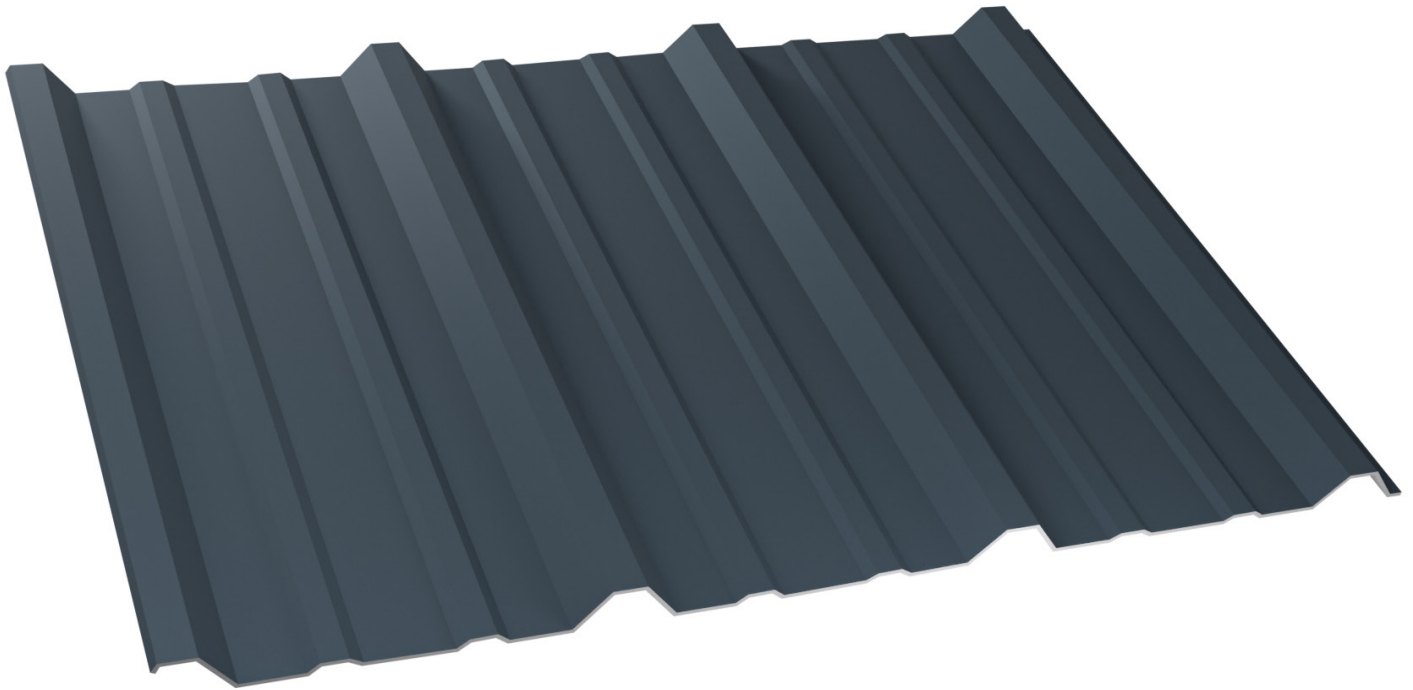
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# WESTERN STATES METAL ROOFING

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## R PANEL / PBR PANEL

### INSTALLATION GUIDE WITH TRIM, FLASHINGS AND DETAILS



4201-22



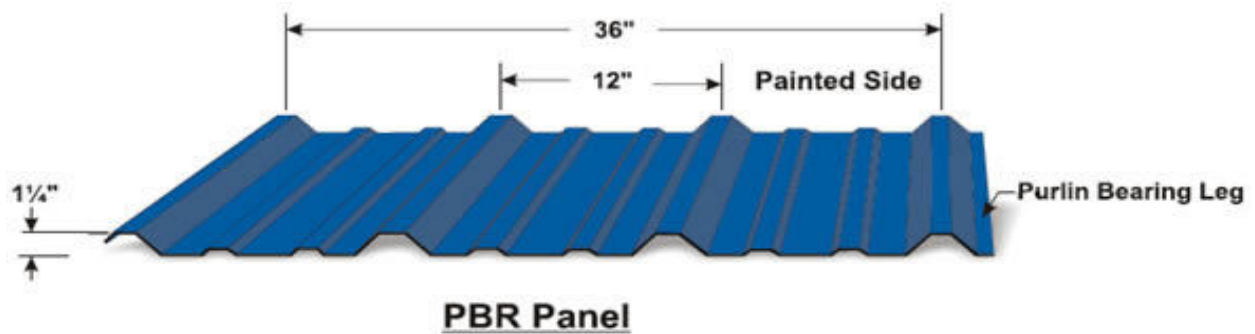
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# Western States R Panel

Installation, Flashings & Shop Drawing Detail *Guide*

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## Western States “R” 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

“R “ 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 Purlins.

### 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.

### Slope Requirements

It is recommended that “R” panels have a minimum slope requirement of 1:12 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 resources for working with sheet metal.

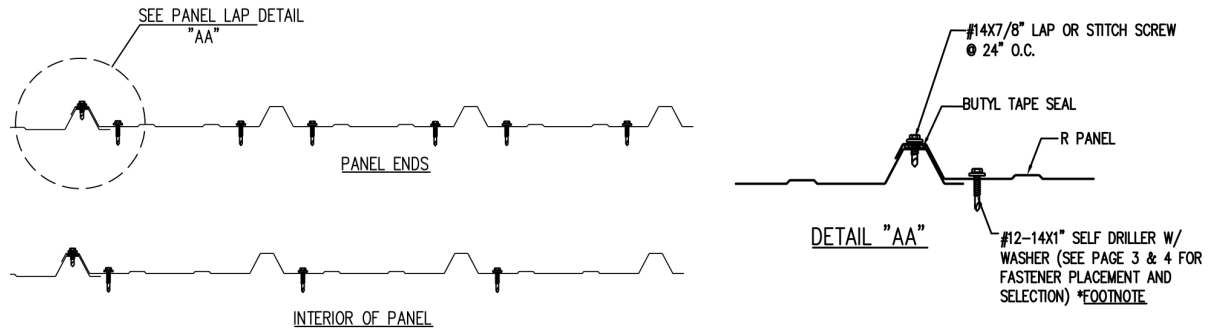
### Technical Assistance

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

# Western States Metal Roofing "R" Panel

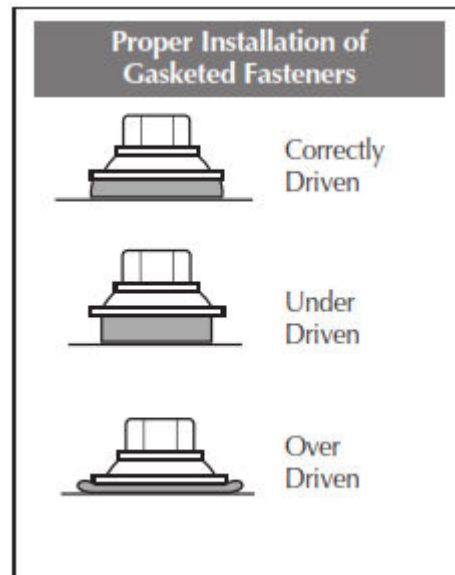
## Installation, Flashings & Shop Drawing Detail Guide

### Fastener Placement and Selection



#### Notes to Installers:

- Fastener Selection will vary depending on type and thickness of substrate.
- Space panel lap screws 12" minimum -24" O.C. maximum. Consult with design engineer.
- Spacing of fastener rows to be engineered by others.
- Lap panels away from prevailing winds whenever possible.
- The use of Butyl tape mastic is always recommended on the panel lap when used for roof panels.
- 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 attachment screws must be long enough to fully penetrate through roof deck substrate or penetrate solid lumber at least one inch.
- Exposed 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.



**Western States Metal Roofing "R" Panel**  
 Installation, Flashings & Shop Drawing Detail Guide

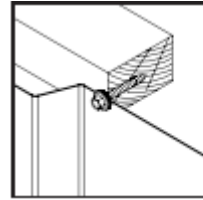
**Fastener Selection**

Description

Application

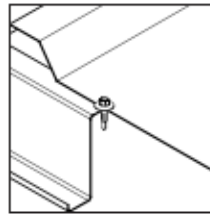
#9 x1" Wood Drillers  
 #9 x 1.5" Wood Drillers  
 #9 x2" Wood Drillers

Used to attach panels to dimensional Lumber and plywood



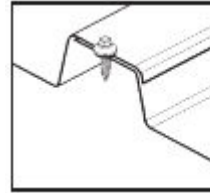
#12-14 x 1" SD  
 #12- 14 x1.5" SD  
 #12- 14 x 2" SD  
 #12-24 x1.25 SD

Used to attach panels to Purlins and other metal substrates



¼ x 7/8" Lap Self tap  
 ¼" x7/8 Lap Stainless

Used to attach Trims and panel side laps. Stainless to be used with A606-4 Steel



#10-12 x1" Pancake Wood  
 #10-12 x 1" SD Self Driller

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.

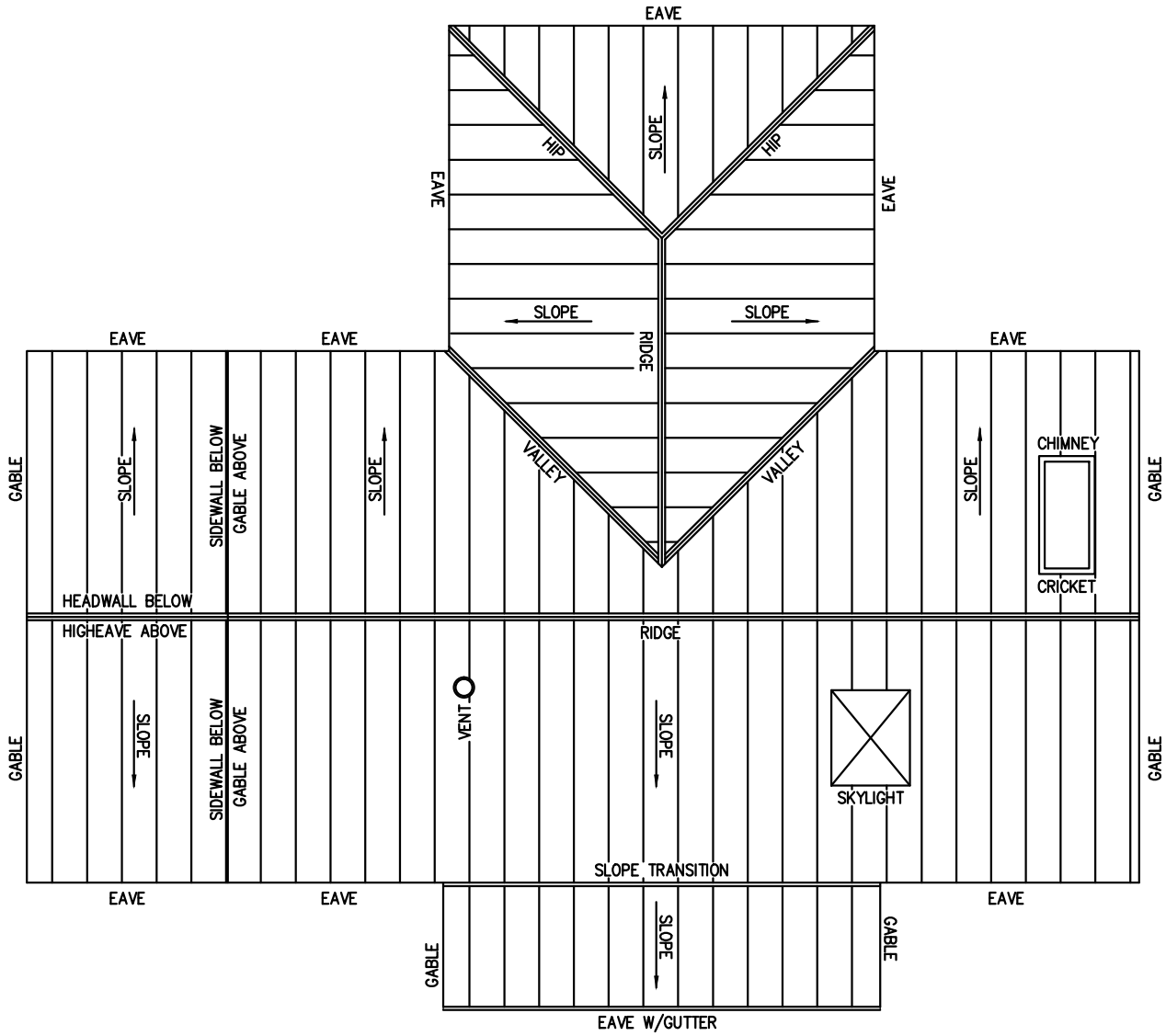


Stainless Screws  
 #10 x1 Wood Drillers  
 #10 x 1.5 Wood Drillers  
 #10 x 2" Wood Drillers

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	WSD-E1
MINE EAVE	WSD-ME1
EAVE-PRE-HUNG GUTTER	WSD-EPRG1
EAVE-POST-HUNG GUTTER	WSD-EPOG2
POST-HUNG GUTTER SPLICE	WSD-EG3
GABLE FLASHING	WSD-GF2
MINI GABLE FLASHING	WSD-MGF2
SCULPTURED GABLE FLASHING	WSD-SGF2
UNIVERSAL GABLE FLASHING	WSD-UGF2
PEAK-HIGH EAVE FLASHING	WSD-PK3
SIDEWALL FLASHING	WSD-SW4
ENDWALL FLASHING	WSD-EW5
FORMED RIDGE	WSD-FR6
RIDGE-HIP	WSD-RH6
VALLEY FLASHING	WSD-V7
PITCH BREAK HIGH TO LOW	WSD-PB8
PITCH BREAK LOW TO HIGH	WSD-PB9
CHIMNEY FLASHING	WSD-CF10
CHIMNEY FLASHING	WSD-CF11
CHIMNEY CRICKET FLASHING	WSD-CF12
ISOMETRIC DETAIL	WSD-CF13
PIPE FLASHING	WSD-PF14
WALL DETAILS	WSD-W15
ISOMETRIC WALL DETAIL	WSD-W16
WALL DETAIL	WSD-W17
WALL DETAIL	WSD-W18
WALL DETAIL	WSD-W19
NOTES	WSD-N20
CUSTOM TRIM SHEET	WSD-CT21

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DETAIL:	
<b>KEY ROOF PLAN</b>	
PANEL TYPE:	
<b>R-Panel</b>	

B	01-14-13
A	06-18-12
REV:	DATE:
DETAIL #:	

<p><b>EAVE FLASHING WS-204</b></p>	<p><b>MINI EAVE FLASHING WS-240</b></p>	<p><b>SCULPTURED EAVE WS-245</b></p>	<p><b>PITCH BREAK HIGH TO LOW WS-236</b></p>
<p><b>PITCH BREAK LOW TO HIGH WS-237</b></p>	<p><b>CUSTOM TRIM REGLET FLASHING WS-229</b></p>	<p><b>SCULPTURED GABLE WS-209</b></p>	<p><b>GABLE FLASHING WS-211</b></p>
<p><b>MINI GABLE FLASHING WS-241</b></p>	<p><b>UNIVERSAL GABLE FLASHING WS-298</b></p>	<p><b>OVERSIZED VALLEY WS-223</b></p>	<p><b>STANDARD VALLEY WS-224</b></p>

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## STANDARD TRIM

PANEL TYPE:

R-Panel

B	01-14-13
A	06-18-12
REV:	DATE:
DETAIL #:	WSD-ST5

<p><b>EXTENDED VALLEY WS-225</b></p>	<p><b>PEAK FLASHING WS-219</b></p>	<p><b>JAMB TRIM WS-203</b></p>	<p><b>HEAD TRIM WS-208</b></p>
<p><b>BASE TRIM WS-206</b></p>	<p><b>ENDWALL FLASHING WS-228</b></p>	<p><b>SIDEWALL FLASHING WS-207</b></p>	<p><b>RIDGE/HIP CAP WS-205</b></p>
<p><b>RIDGE/HIP CAP WS-205H</b></p>	<p><b>RIDGE/HIP CAP WS-220</b></p>	<p><b>RIDGE/HIP CAP WS-220H</b></p>	<p><b>DIE FORMED RIDGE CAP WS-221</b></p> <p>* 6:12 PITCH MAX.</p> <p>* AVAILABLE IN 24GA ONLY</p>

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**STANDARD TRIM**

PANEL TYPE:

**R-Panel**

B	01-14-13
A	06-18-12
REV:	DATE:
DETAIL #:	<b>WSD-ST6</b>



<p><b>OUTSIDE CORNER WS-202</b></p>	<p><b>INSIDE CORNER WS-230</b></p>	<p><b>CRICKET FLASHING CUSTOM TRIM WS-299</b></p>	<p><b>SCULPTURED PRE-HUNG GUTTER WS-201</b></p>
<p><b>BOX GUTTER PRE-HUNG WS-210</b></p>	<p><b>BOX GUTTER POST-HUNG WS-215</b></p>	<p><b>SCULPTURED POST-HUNG GUTTER WS-217</b></p>	<p><b>SPLICE WS-213 FOR BOX GUTTER</b></p>
<p><b>SPLICE WS-260 FOR SCULPTURED GUTTER</b></p>	<p><b>DOWNSPOUT STRAIGHT WS-226</b></p>	<p><b>DOWNSPOUT WITH KICKOUT WS-227</b></p>	<p><b>DOWNSPOUT ELBOW WS-243</b></p>

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<b>STANDARD TRIM</b>	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-ST7</b>	

<p>DOWNSPOUT STRAP WS-242</p>	<p>DOWNSPOUT OUTLET WS-275</p>	<p>GUTTER STRAP WS-212</p>	<p>BOX GUTTER END CAP WS-214</p>
<p>SCULPTURE GUTTER END CAP WS-249</p>			

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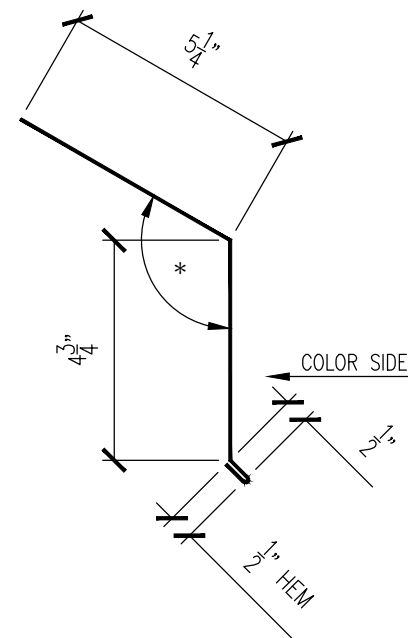
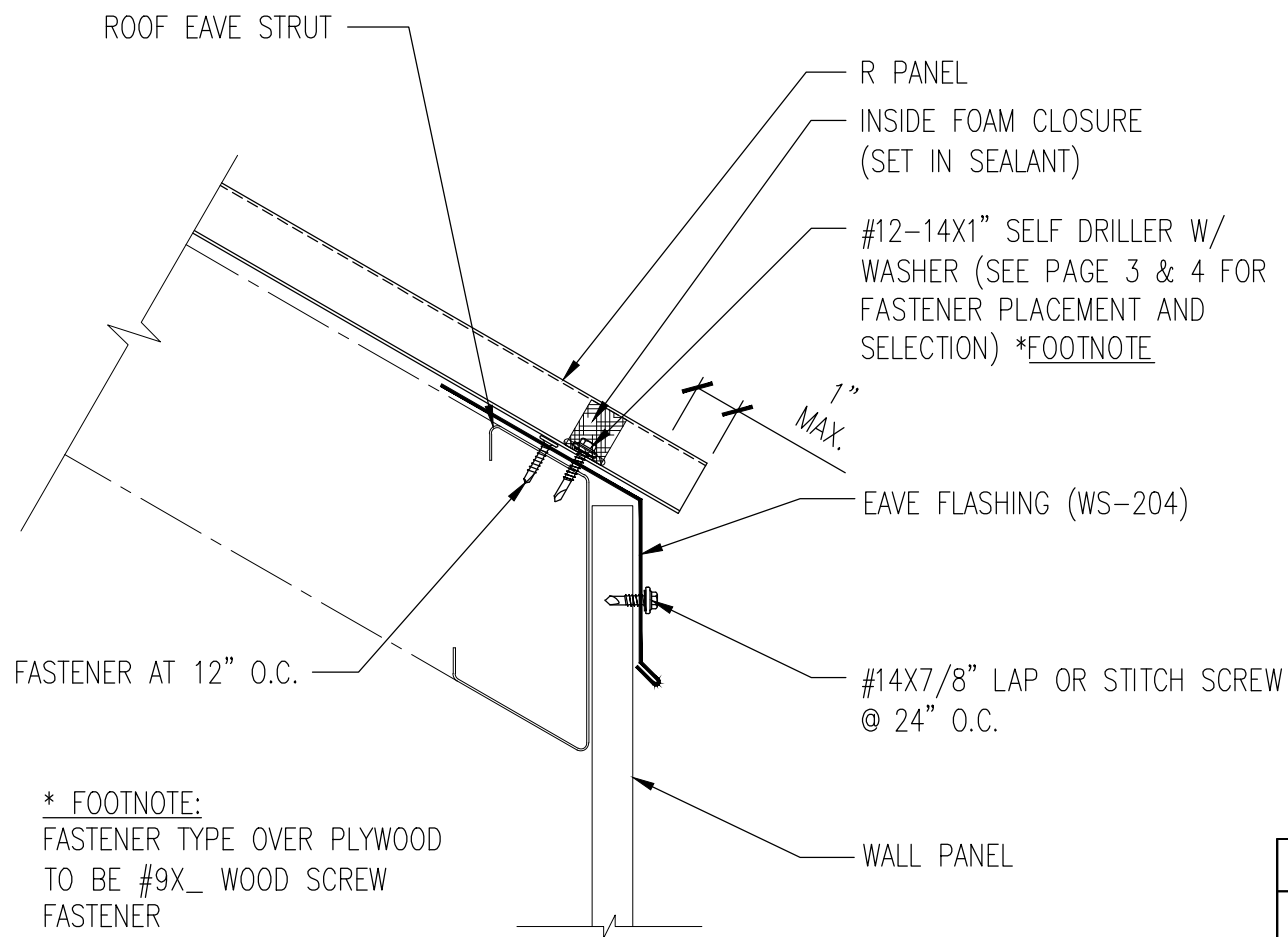
## STANDARD TRIM

PANEL TYPE:

R-Panel

B	01-14-13
A	06-18-12
REV:	DATE:
DETAIL #:	
WSD-ST8	

NOTE:  
FOR HIGH SNOW AREA THE OVERHANG  
SHOULD BE 1" MAX.



EAVE FLASHING (WS-204)  
\* DENOTES ANGLE

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

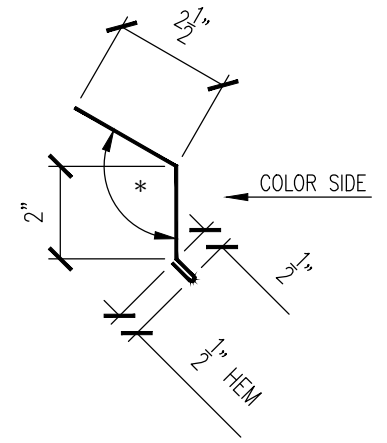
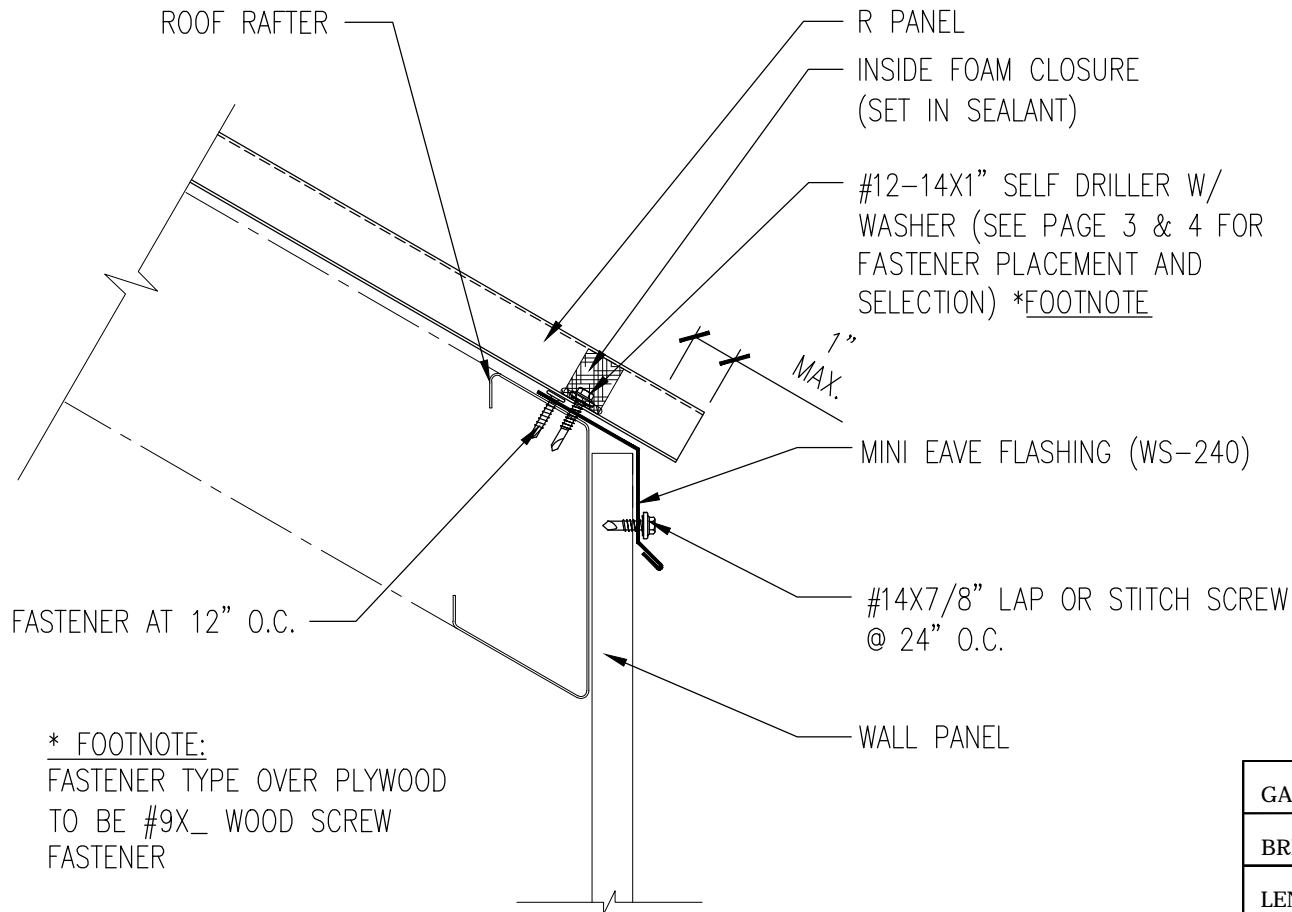
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EAVE DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-E1</b>	

NOTE:  
FOR HIGH SNOW AREA THE OVERHANG  
SHOULD BE 1" MAX.



MINI EAVE FLASHING  
(WS-240)

\* DENOTES ANGLE

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

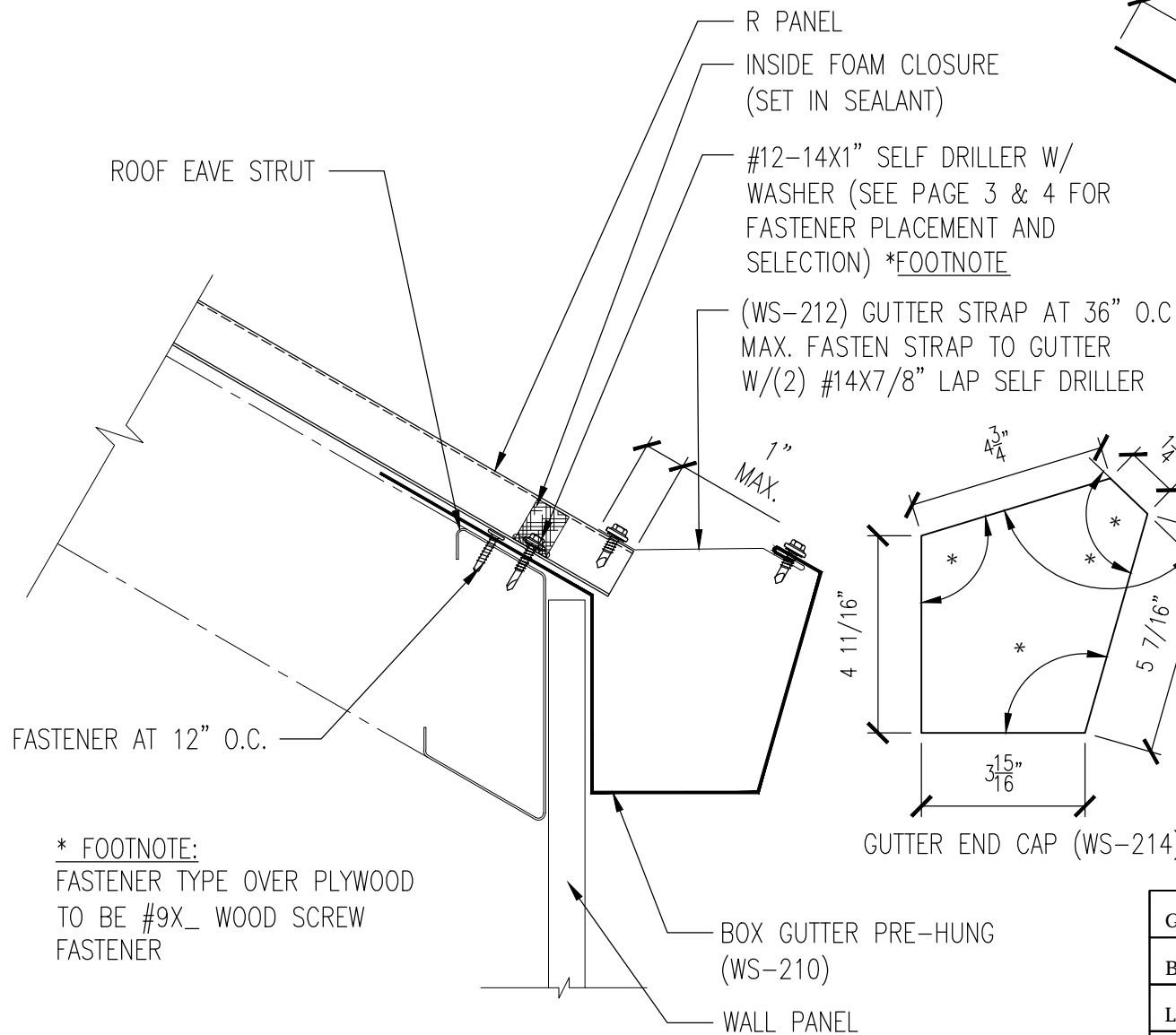
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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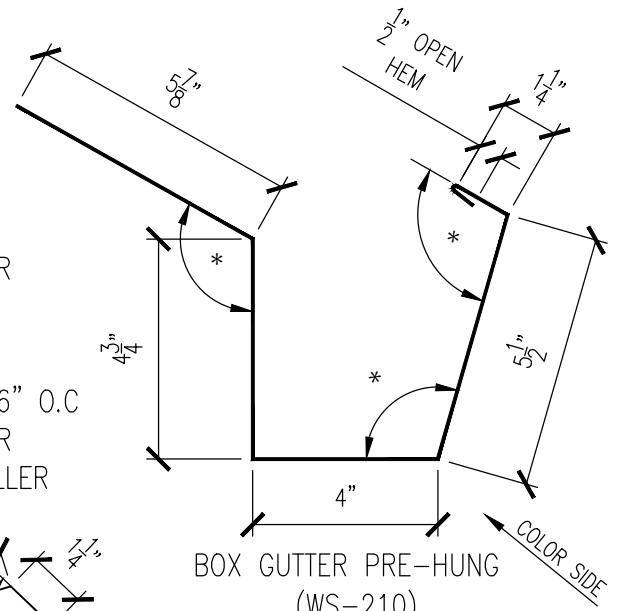
MINI EAVE DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-ME1</b>	



FASTENER AT 12" O.C.

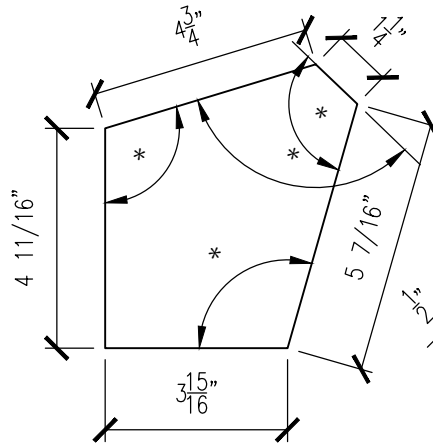
\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

(WS-212) GUTTER STRAP AT 36" O.C  
MAX. FASTEN STRAP TO GUTTER  
W/(2) #14X7/8" LAP SELF DRILLER

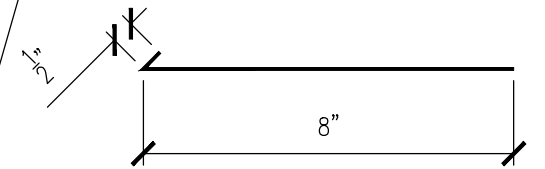


BOX GUTTER PRE-HUNG  
(WS-210)

\* DENOTES ANGLE



GUTTER END CAP (WS-214)



GUTTER STRAP (WS-212)

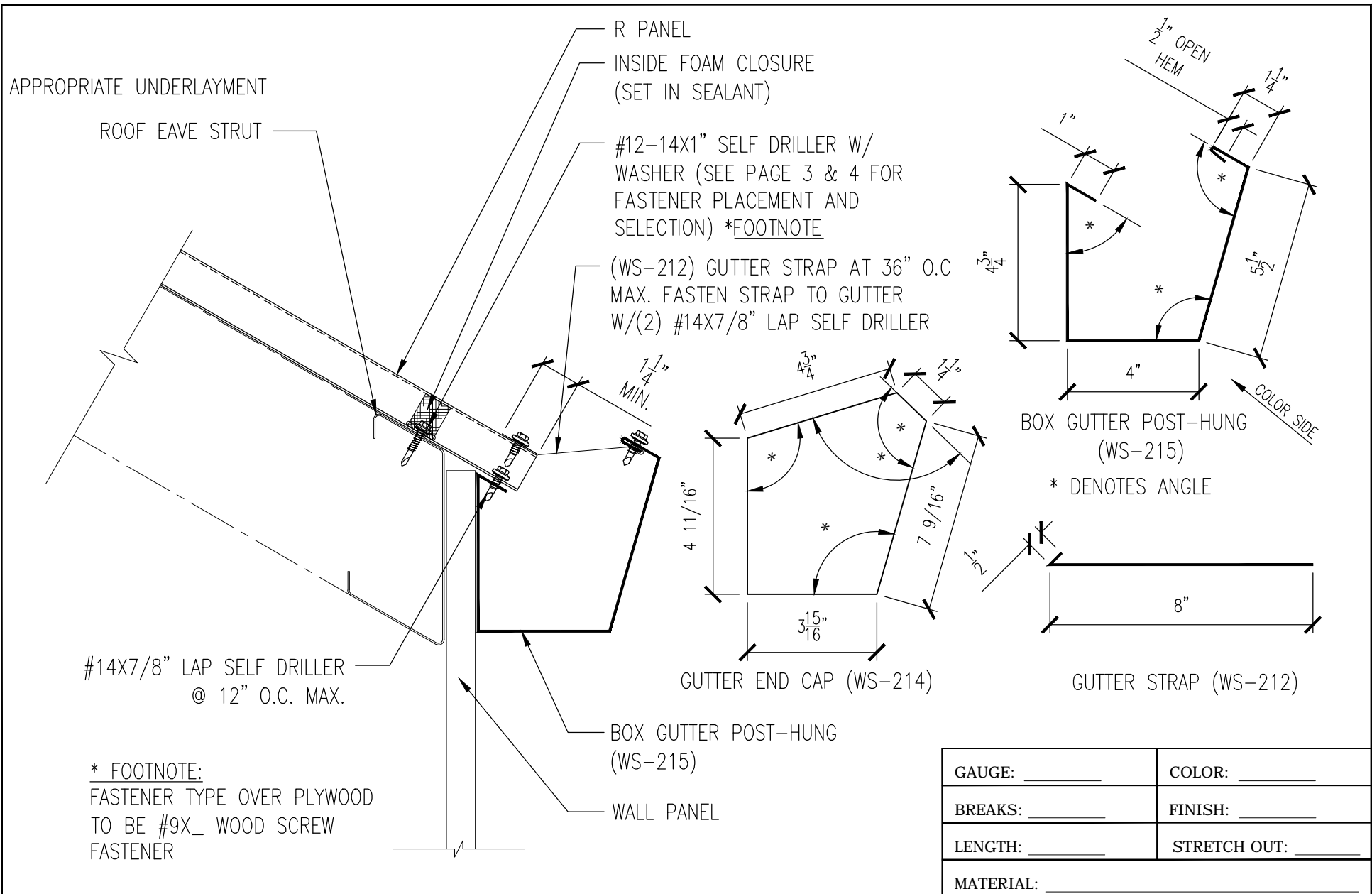
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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EAVE DETAIL PRE-HUNG GUTTER DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-EPRG1</b>	

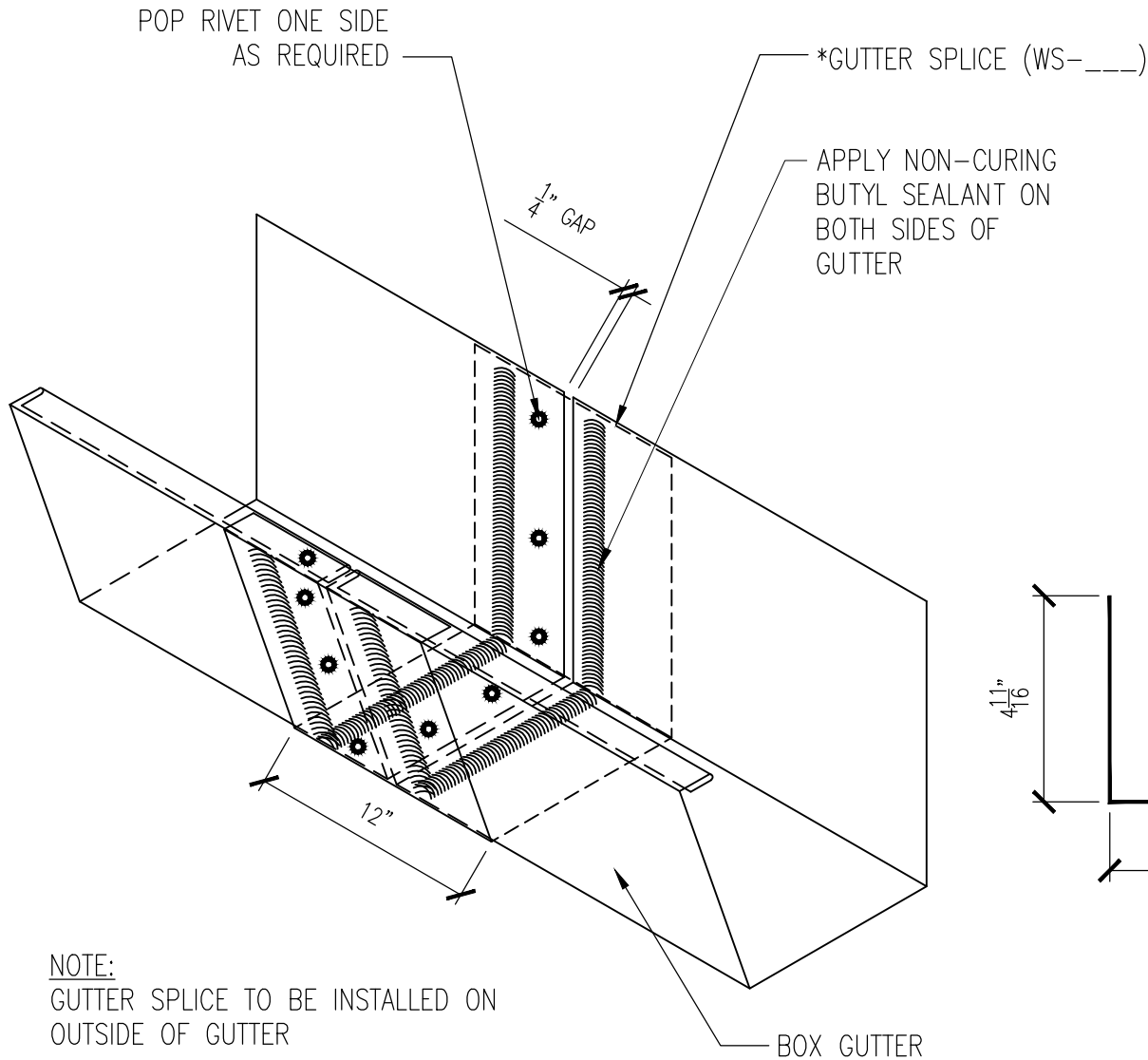


GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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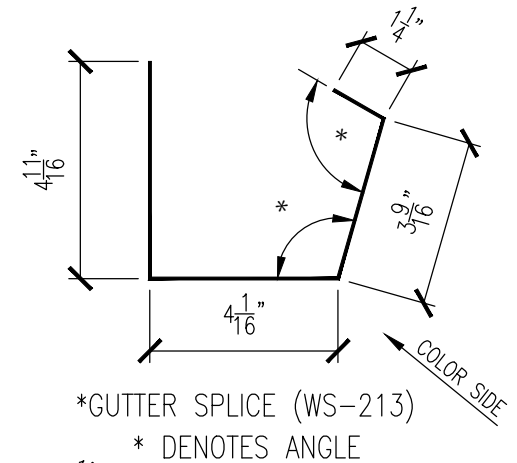
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EAVE DETAIL POST HUNG GUTTER DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #:	<b>WSD-EG2</b>

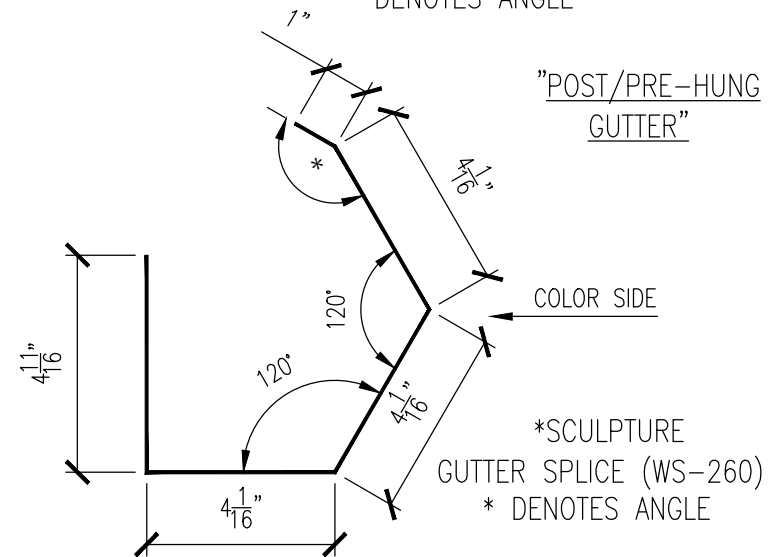


NOTE:  
GUTTER SPLICE TO BE INSTALLED ON  
OUTSIDE OF GUTTER

BOX GUTTER



\*GUTTER SPLICE (WS-213)  
\* DENOTES ANGLE



\*SCULPTURE  
GUTTER SPLICE (WS-260)  
\* DENOTES ANGLE

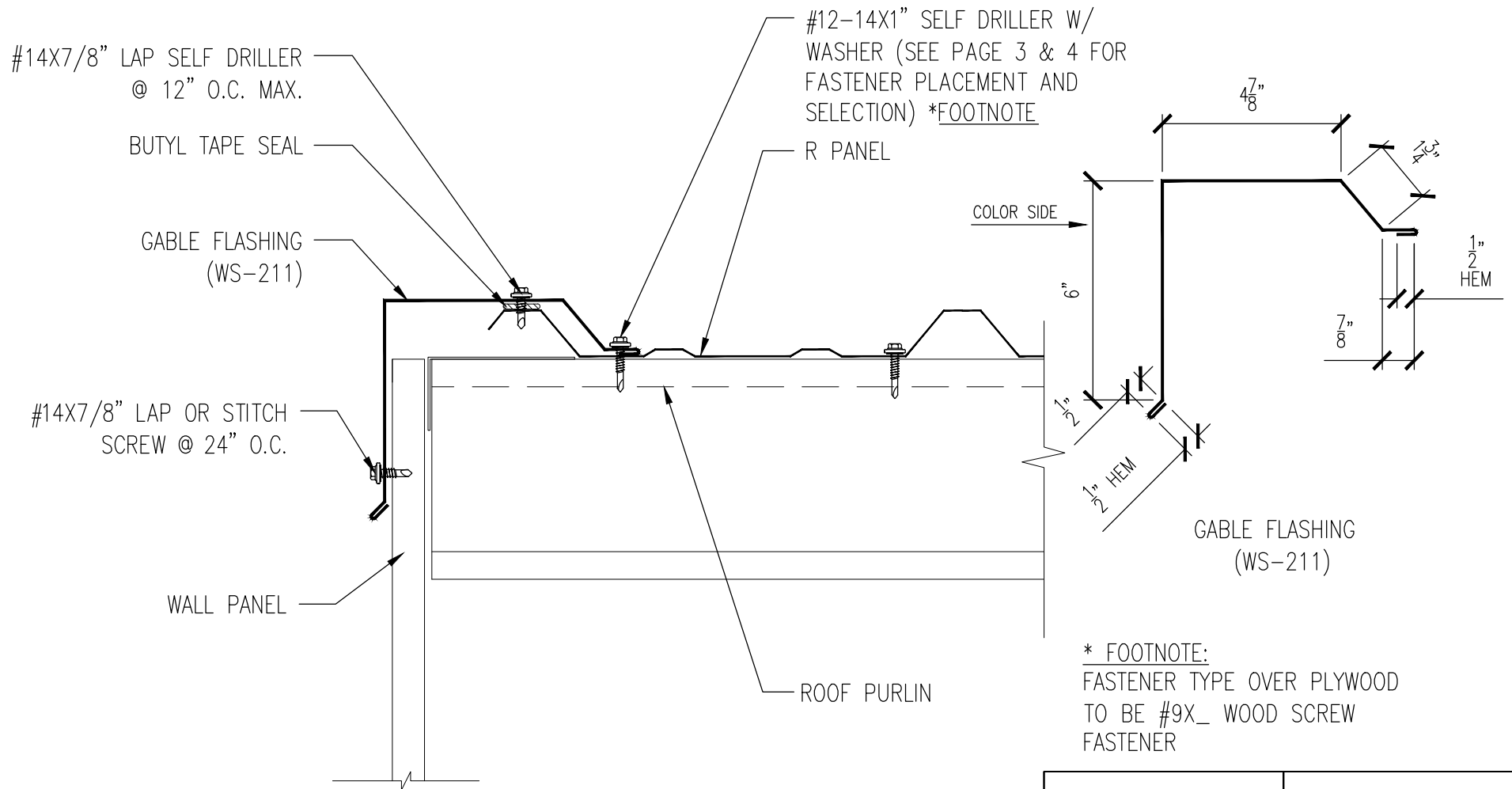
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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GUTTER SPLICE DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-EG3</b>	



\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

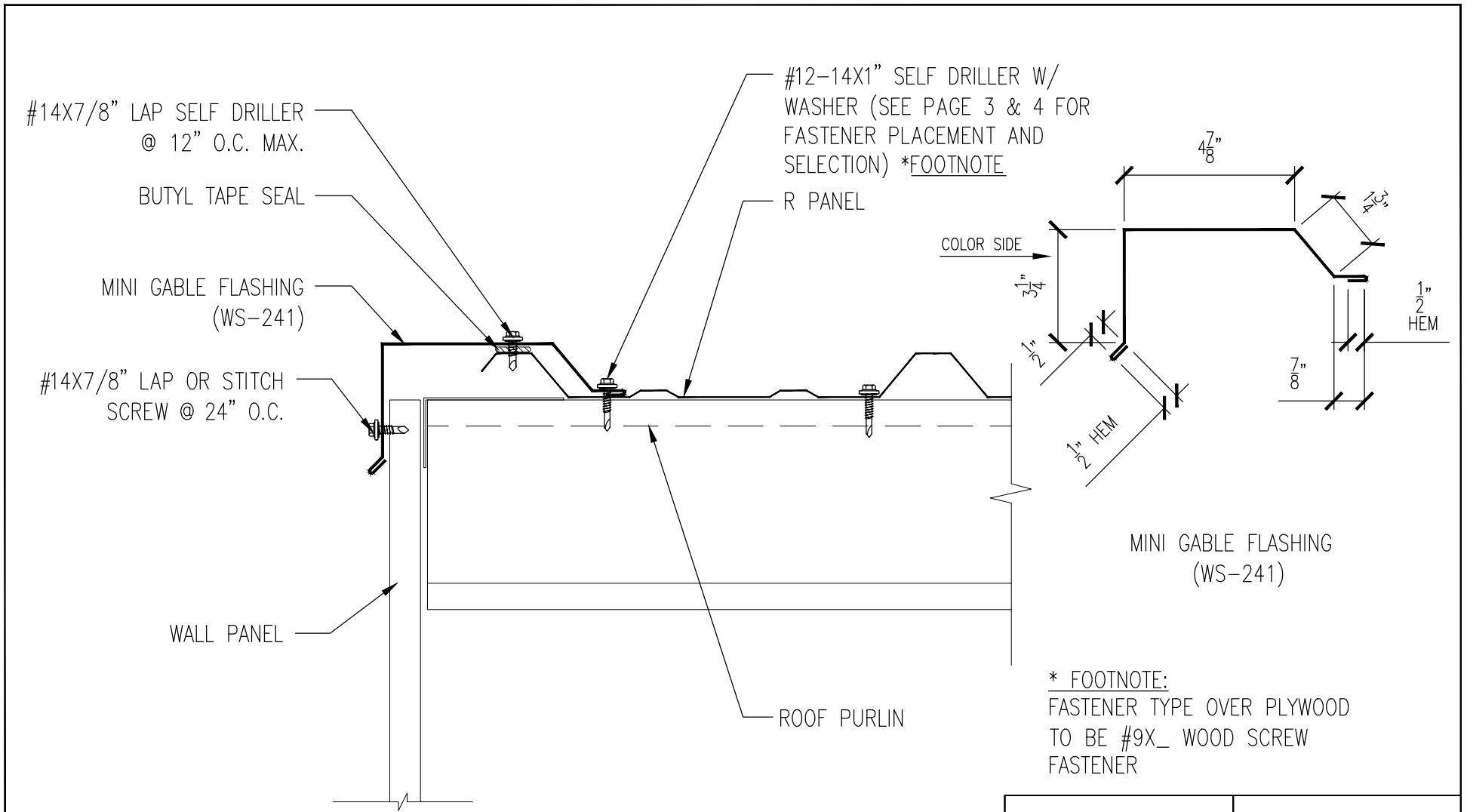
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GABLE FLASHING DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-GF2</b>	



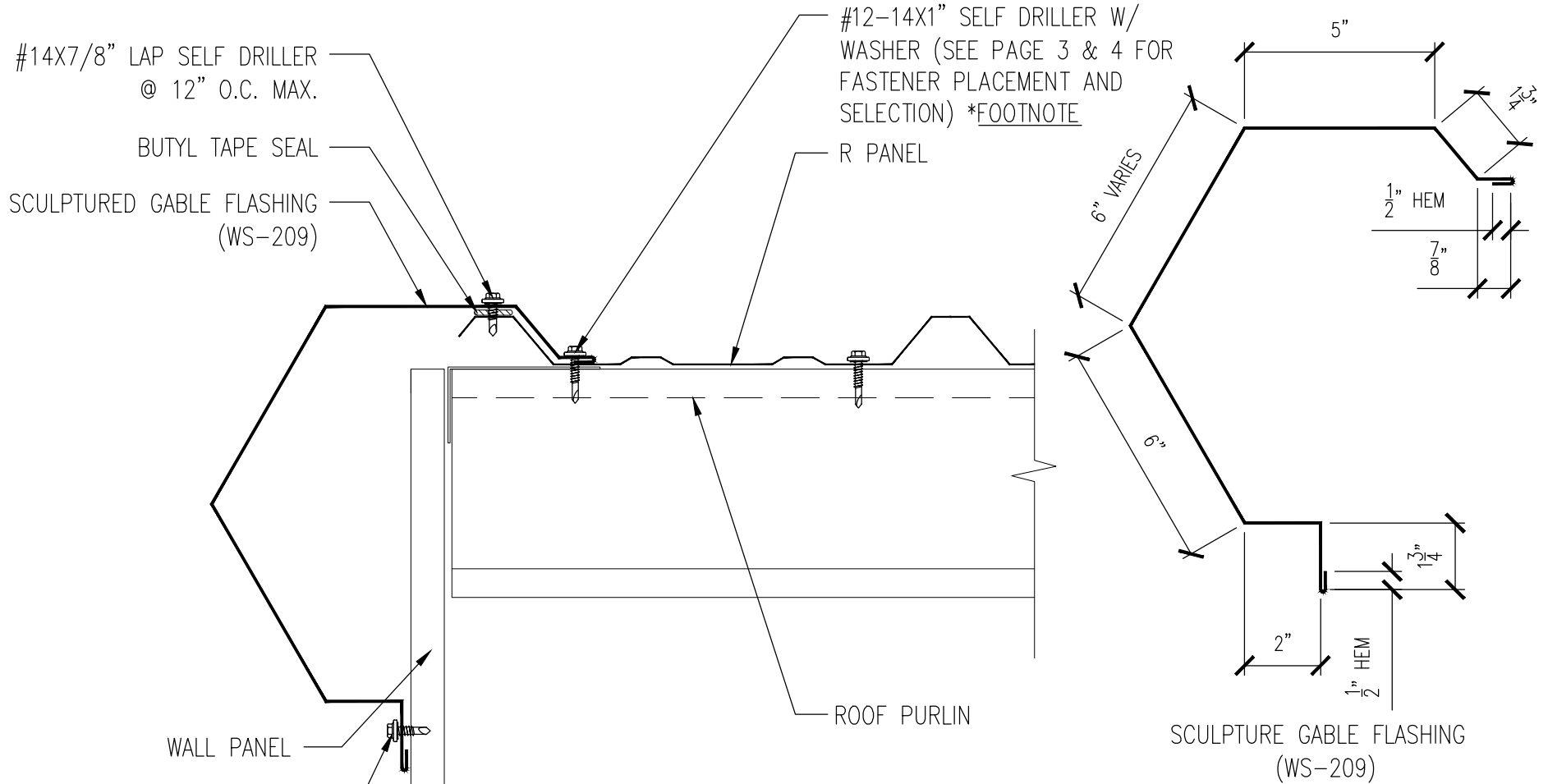


\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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MINI GABLE FLASHING DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: R-Panel	REV:	DATE:
	DETAIL #: WSD-MGF2	



\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

SCULPTURE GABLE FLASHING  
(WS-209)

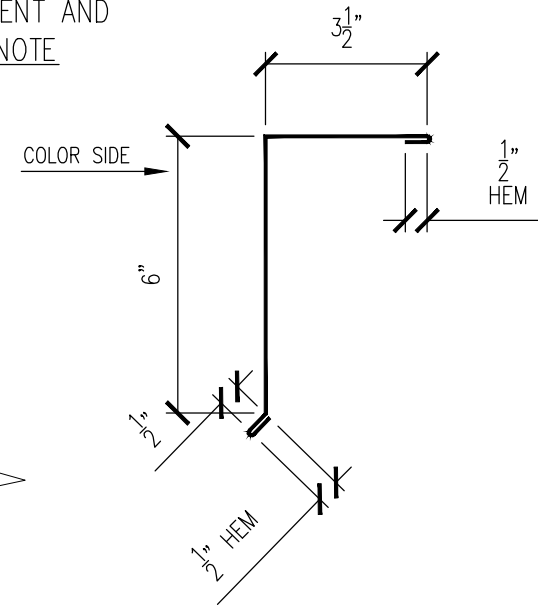
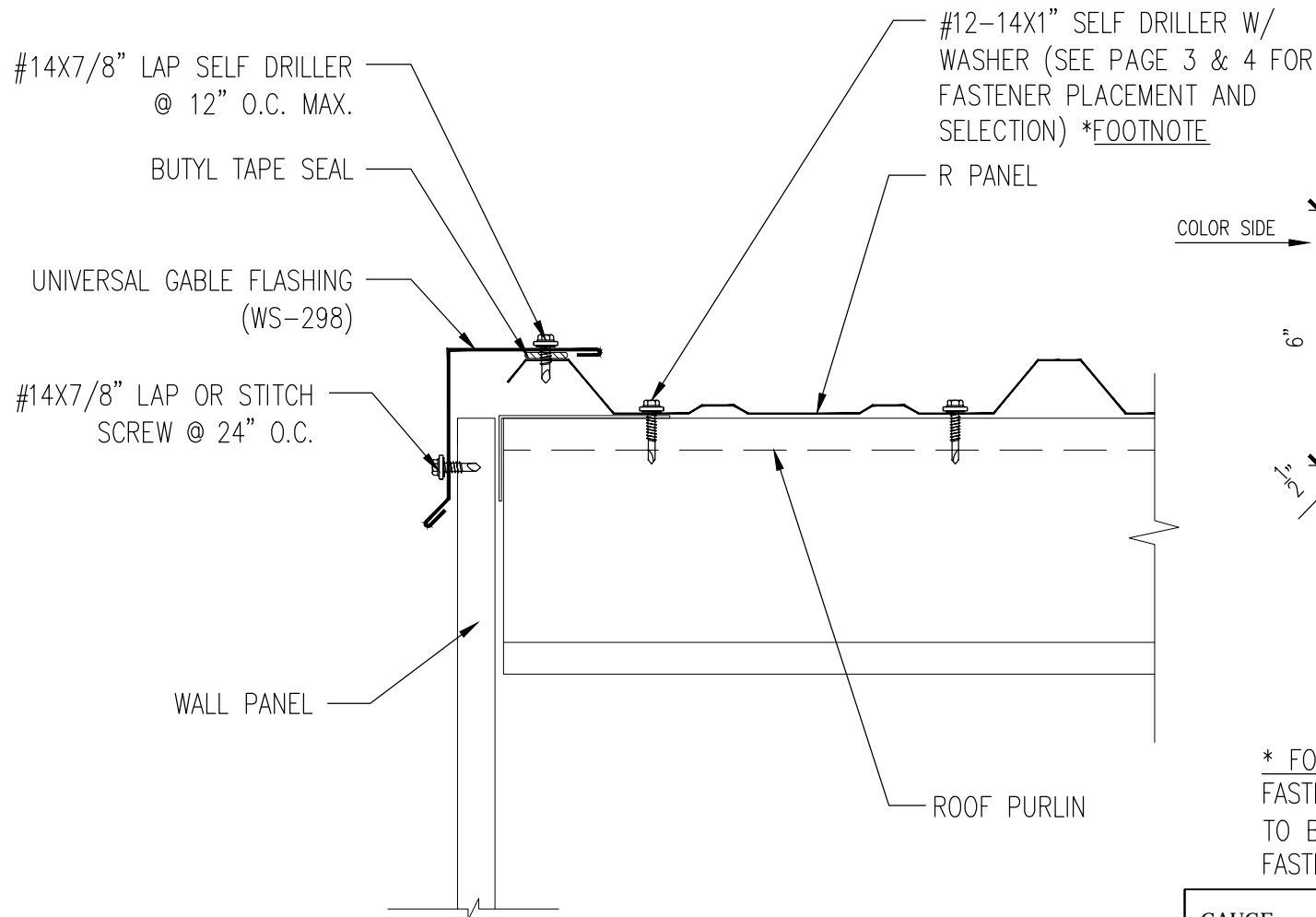
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

SCULPTURED GABLE FLASHING DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE:  R-Panel	REV:	DATE:
	DETAIL #: WSD-SGF2	

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UNIVERSAL GABLE FLASHING (WS-298)

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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UNIVERSAL GABLE FLASHING DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE:  R-Panel	REV:	DATE:
	DETAIL #: WSD-UGF2	

#14X7/8" LAP SELF DRILLER  
@ 12" O.C. MAX.

BUTYL TAPE SEAL

PEAK FLASHING  
(WS-219)

BUTYL TAPE SEAL

#14X7/8" LAP OR STITCH  
SCREW @ 24" O.C.

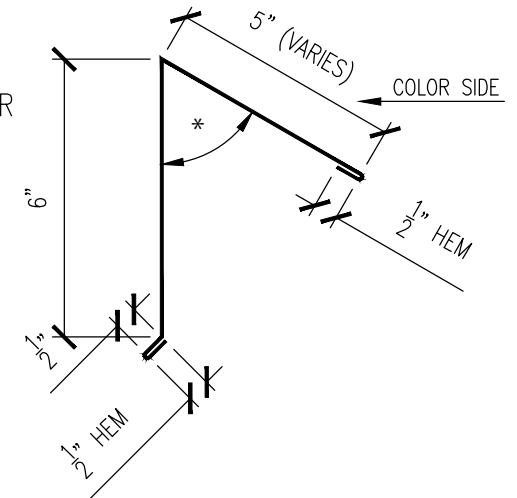
WALL PANEL

ROOF PURLIN

OUTSIDE FOAM CLOSURE  
(SET IN SEALANT)

#12-14X1" SELF DRILLER W/  
WASHER (SEE PAGE 3 & 4 FOR  
FASTENER PLACEMENT AND  
SELECTION) \*FOOTNOTE

R PANEL



PEAK FLASHING/HIGH EAVE FLASHING  
(WS-219)

\* DENOTES ANGLE

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

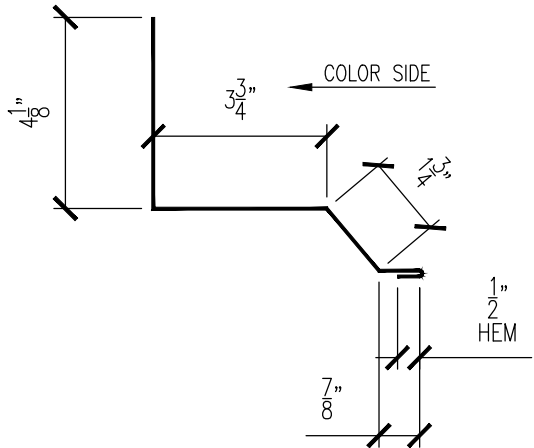
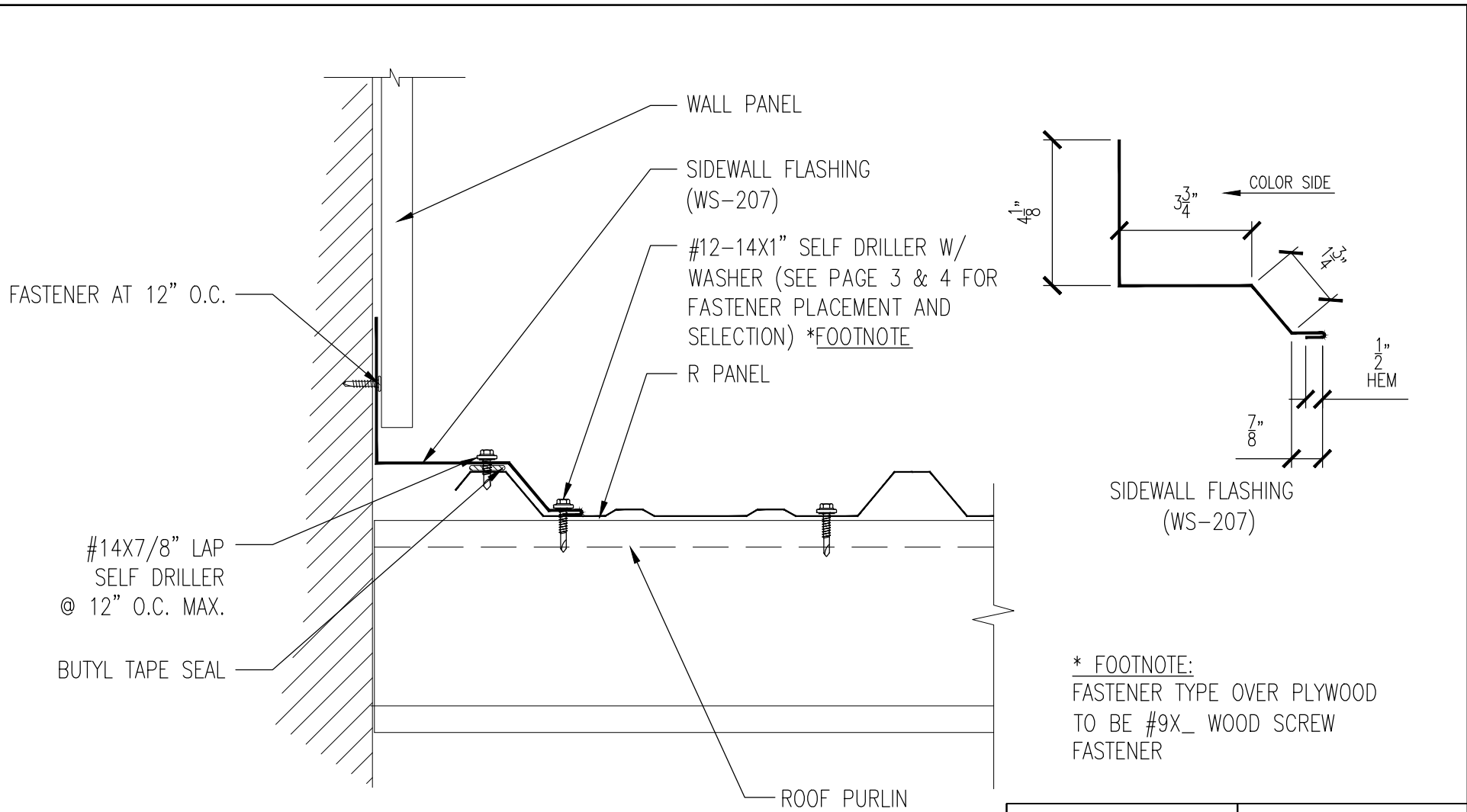
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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PEAK FLASHING/ HIGH EAVE DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE:  R-Panel	REV:	DATE:
	DETAIL #: WSD-PK3	



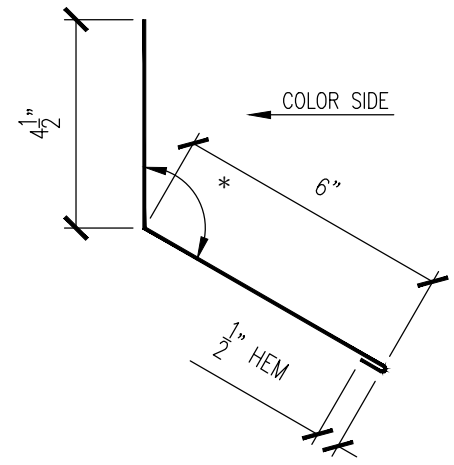
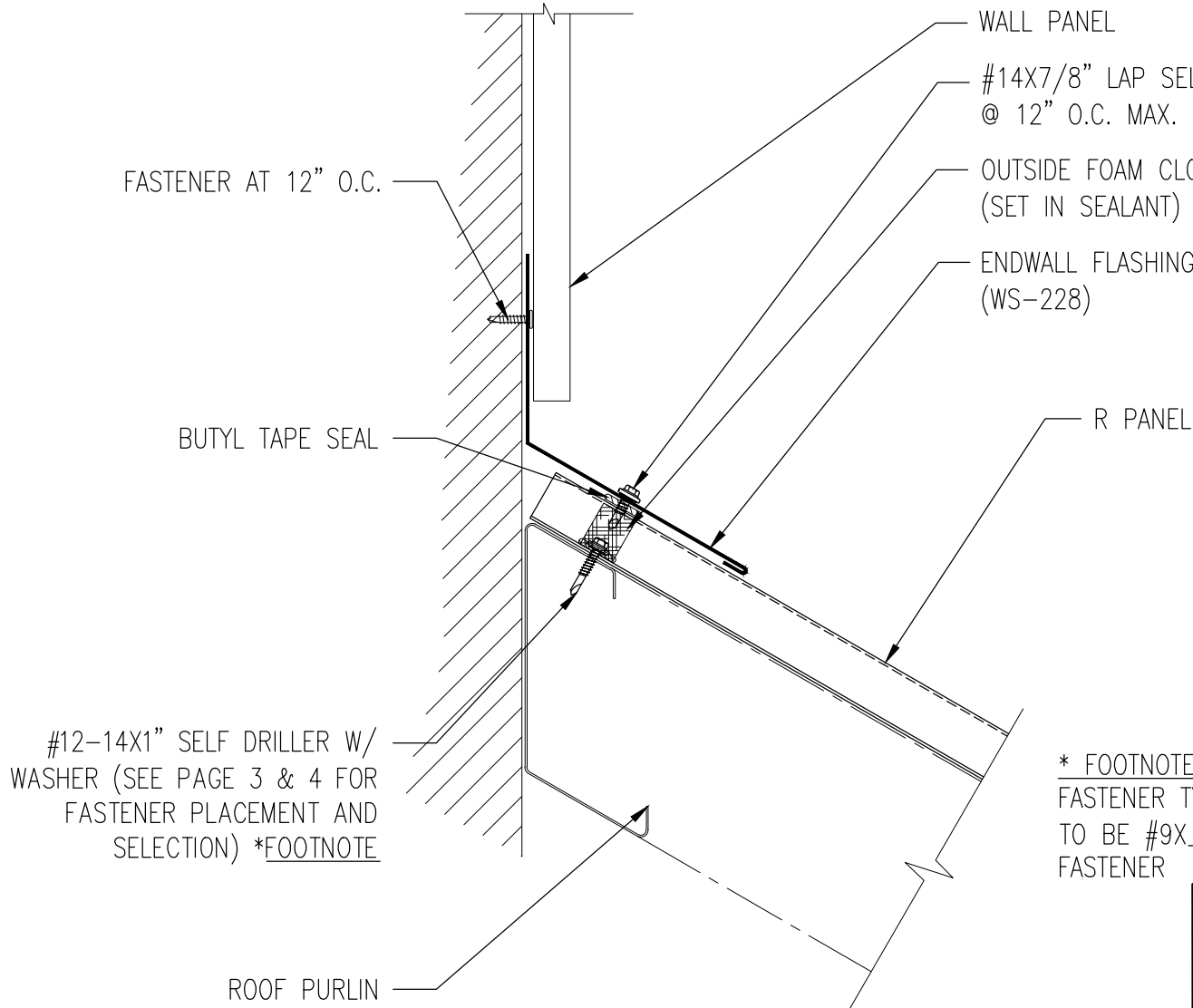
SIDEWALL FLASHING (WS-207)

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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<b>SIDEWALL FLASHING DETAIL</b>	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-SW4</b>	



ENDWALL FLASHING (WS-228)

\* DENOTES ANGLE

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

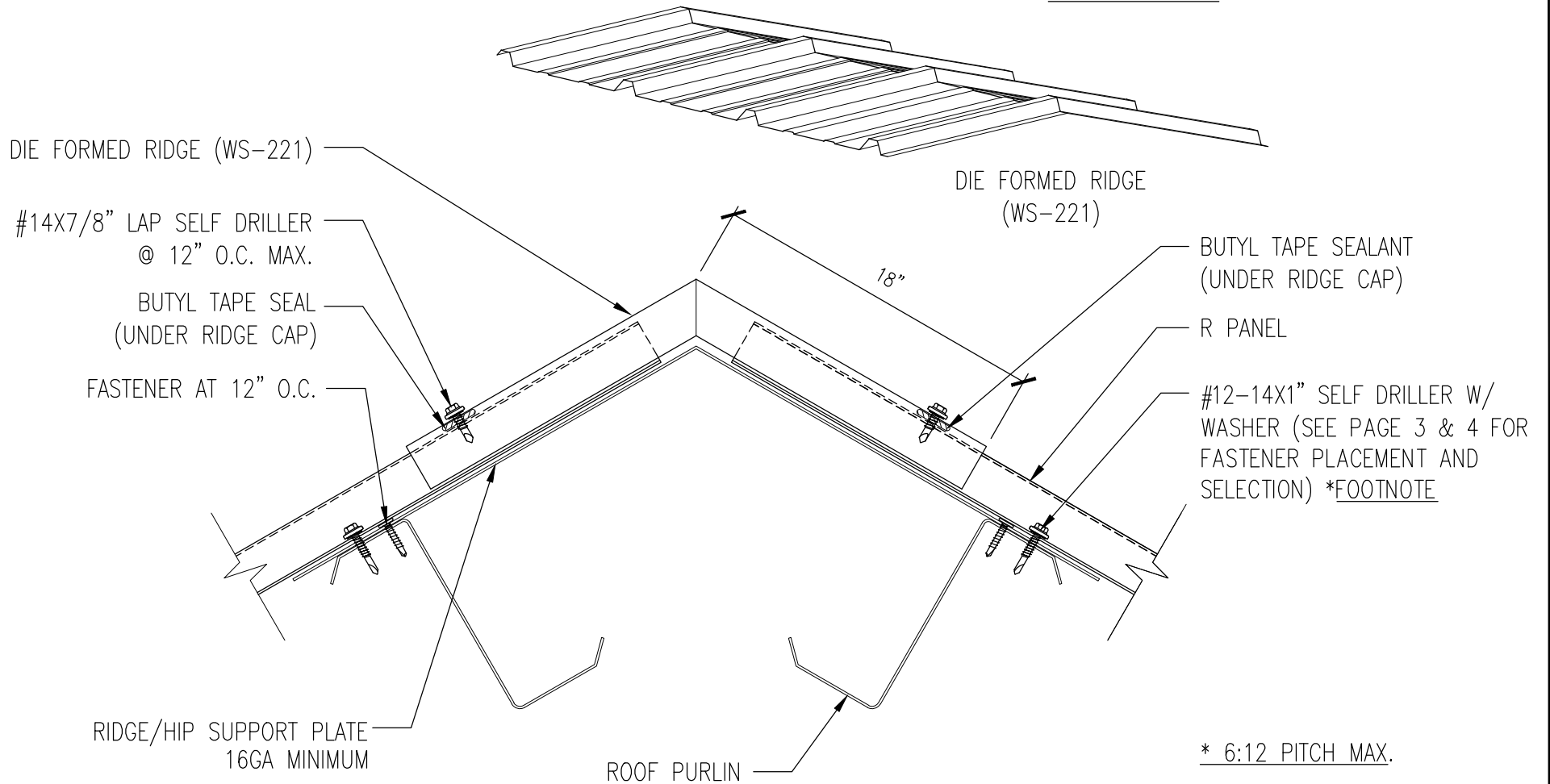
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ENDWALL FLASHING DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-EW5</b>	

\* 6:12 PITCH MAX.



\* 6:12 PITCH MAX.

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

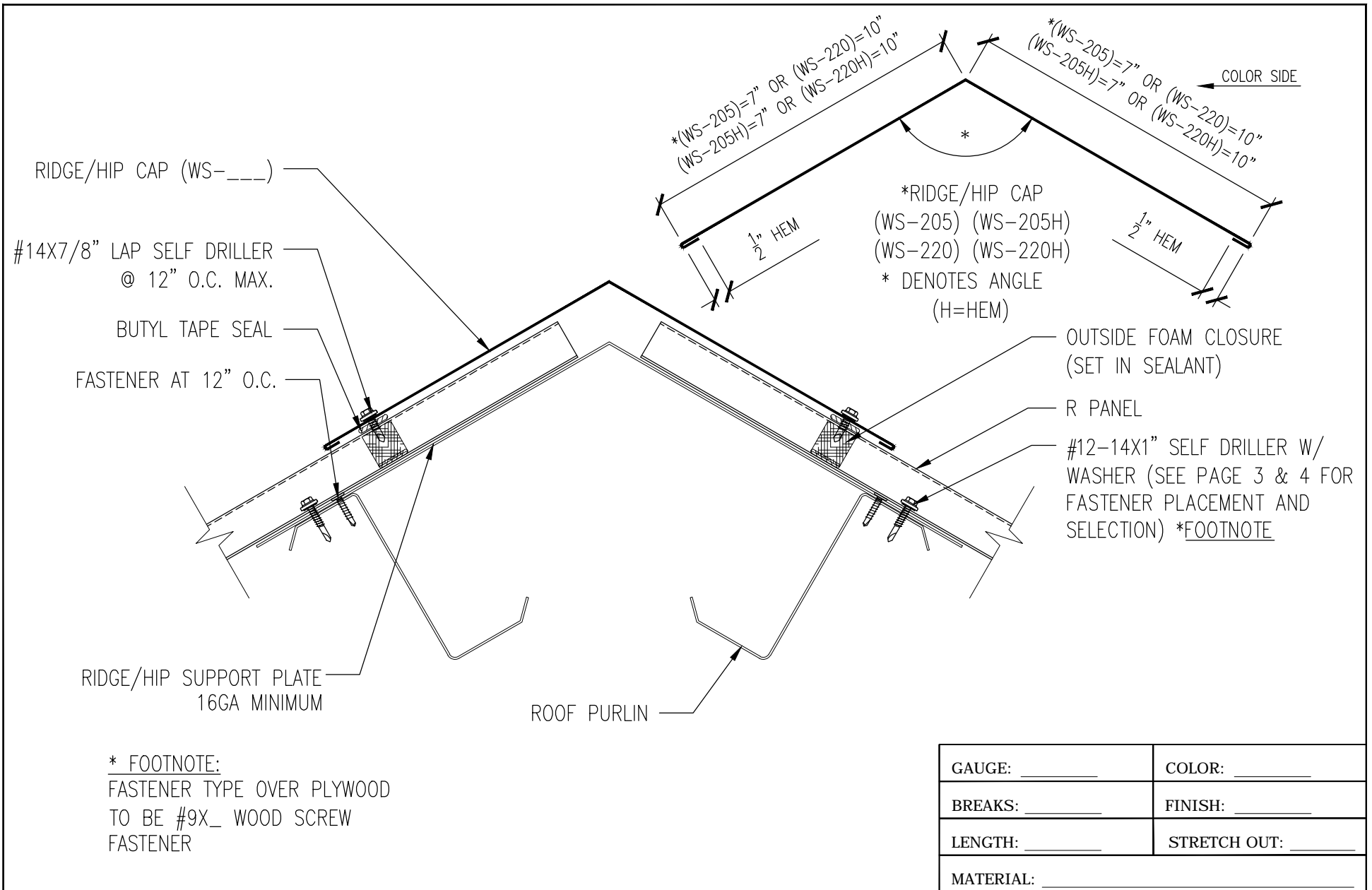
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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FORMED RIDGE DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: R-Panel	REV:	DATE:
	DETAIL #: WSD-FR6	



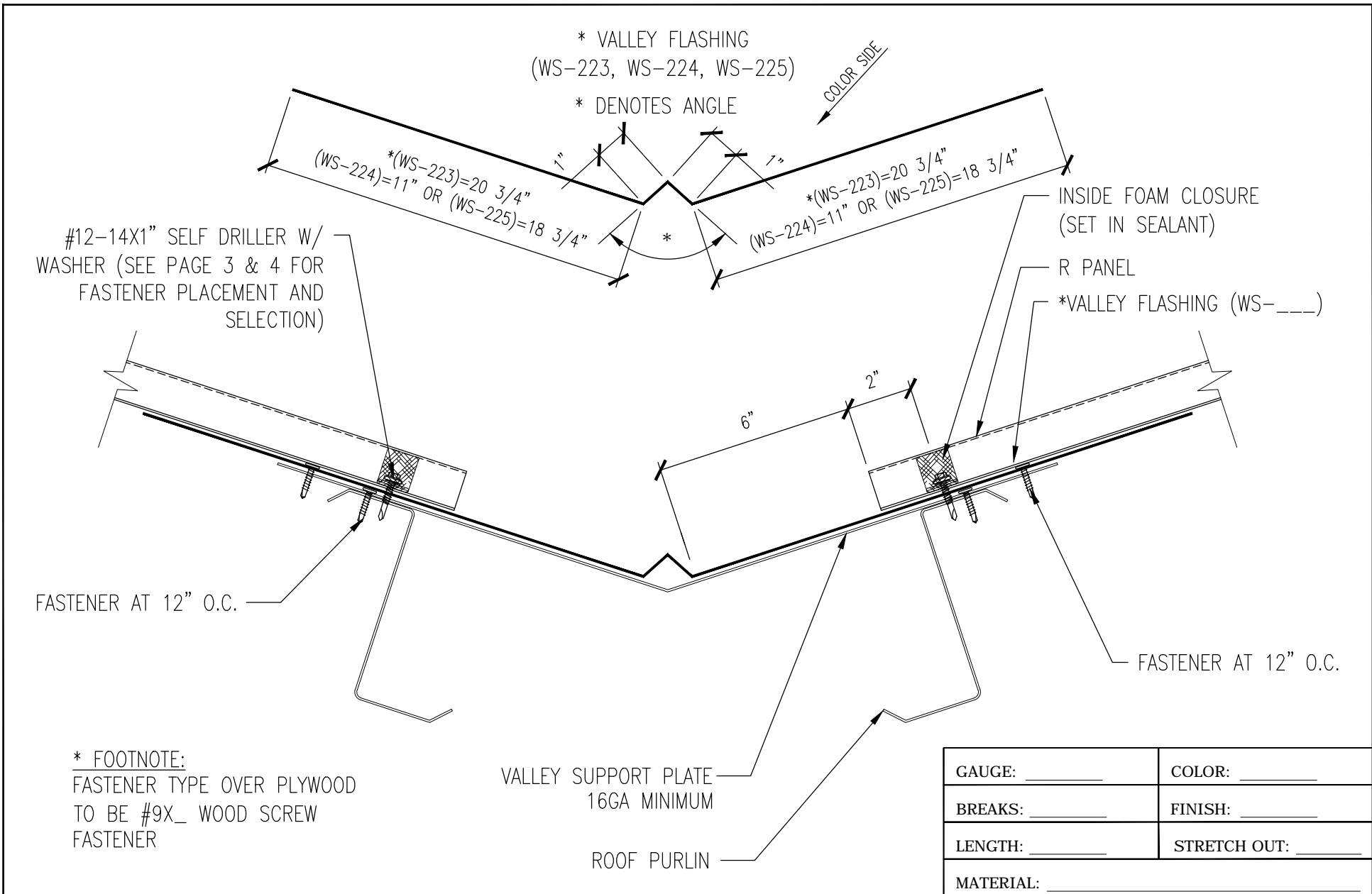
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RIDGE/HIP CAP DETAIL		B	01-14-13
R-Panel		A	06-18-12
PANEL TYPE:		REV:	DATE:
		DETAIL #: WSD-RH6	





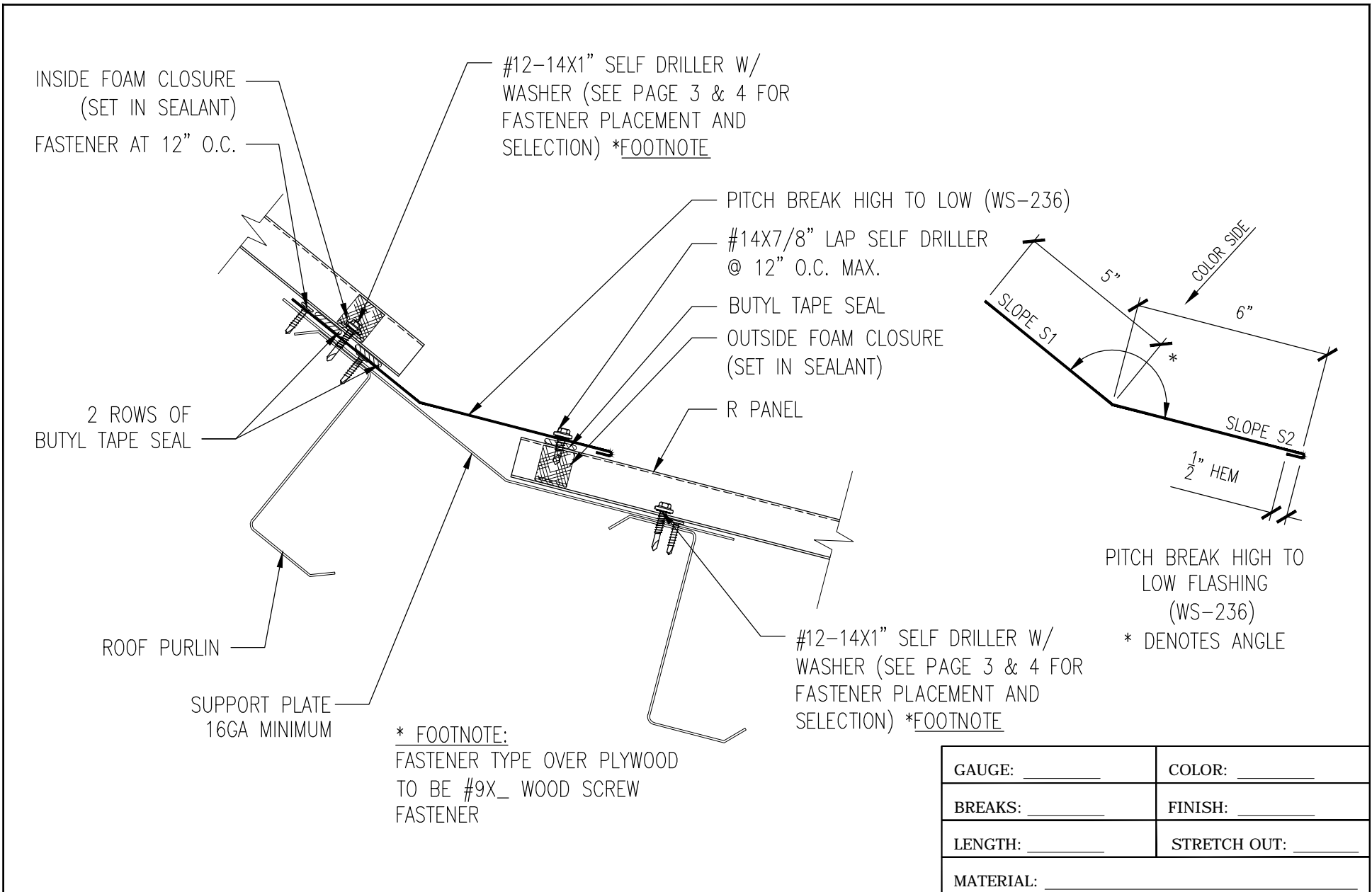
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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VALLEY DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-V7</b>	



GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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PITCH BREAK HIGH TO LOW DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE:  R-Panel	REV:	DATE:
	DETAIL #: WSD-PB8	

#12-14X1" SELF DRILLER W/  
WASHER (SEE PAGE 3 & 4 FOR  
FASTENER PLACEMENT AND  
SELECTION)

FASTENER AT 12" O.C.

R PANEL

INSIDE FOAM CLOSURE  
(SET IN SEALANT)

PITCH BREAK LOW TO HIGH (WS-237)

#14X7/8" LAP SELF DRILLER  
@ 12" O.C. MAX.

BUTYL TAPE SEAL

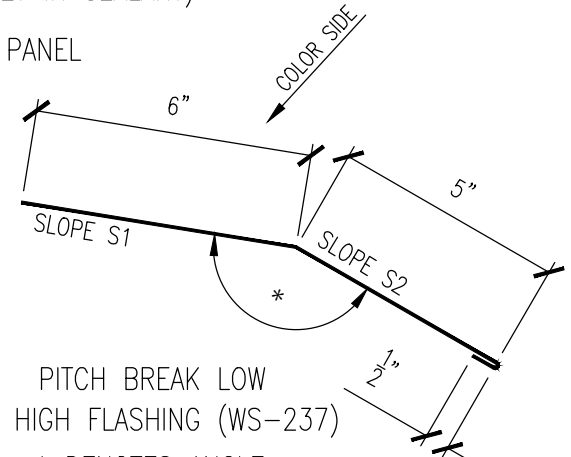
OUTSIDE FOAM CLOSURE  
(SET IN SEALANT)

R PANEL

FASTENER AT 12" O.C.

2 ROWS OF BUTYL TAPE SEAL

SUPPORT PLATE  
16GA MINIMUM



PITCH BREAK LOW  
TO HIGH FLASHING (WS-237)

\* DENOTES ANGLE

FASTENER AT 12" O.C.

#12-14X1" SELF DRILLER W/  
WASHER (SEE PAGE 3 & 4 FOR  
FASTENER PLACEMENT AND  
SELECTION)

ROOF PURLIN

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

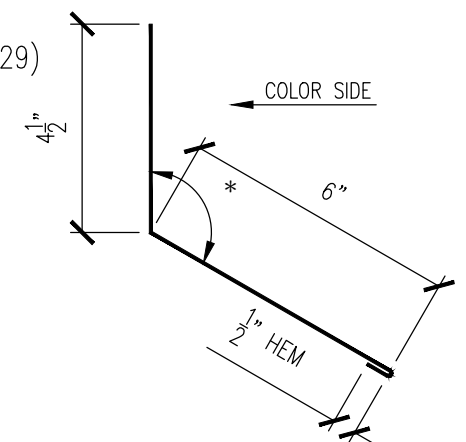
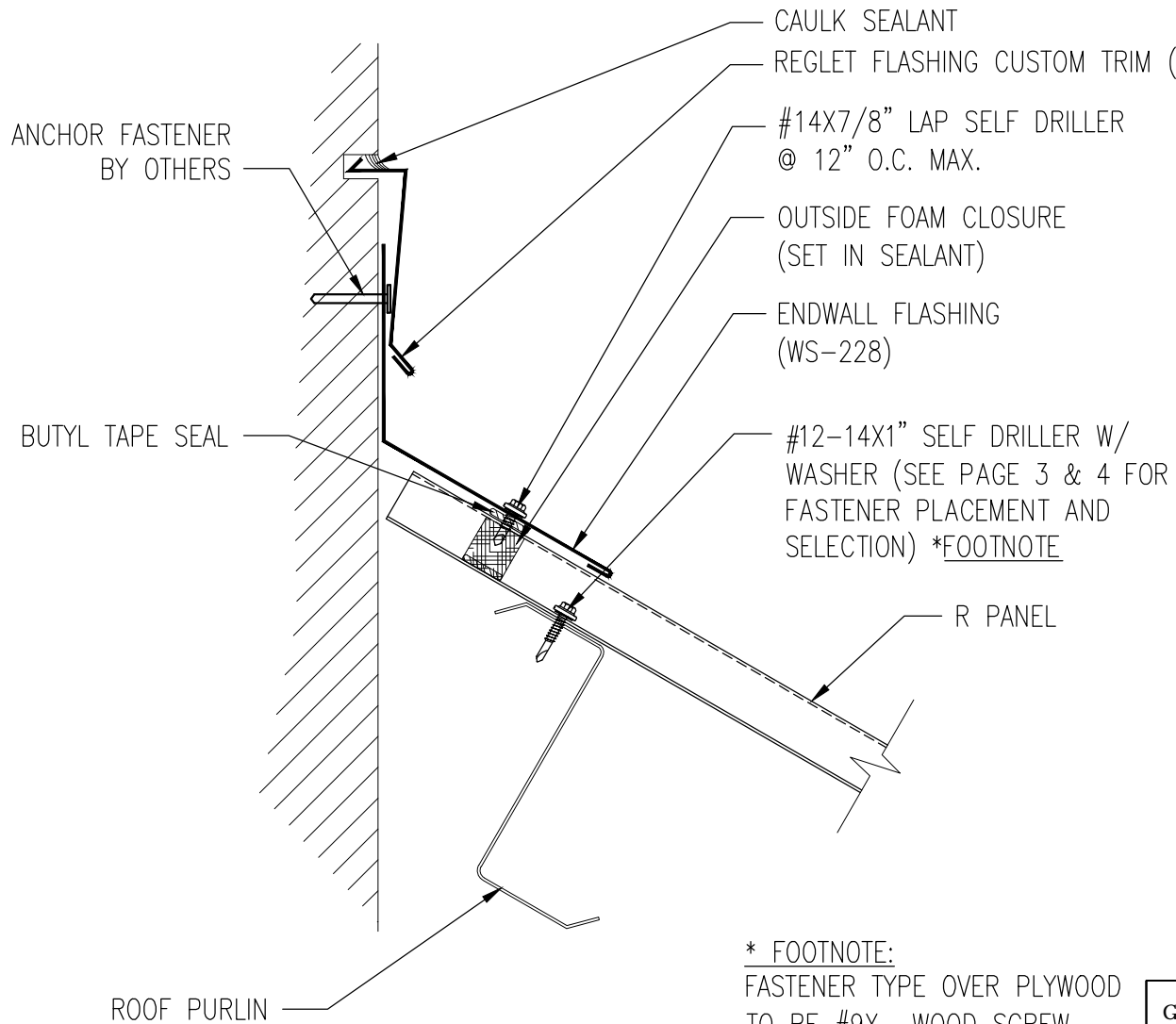
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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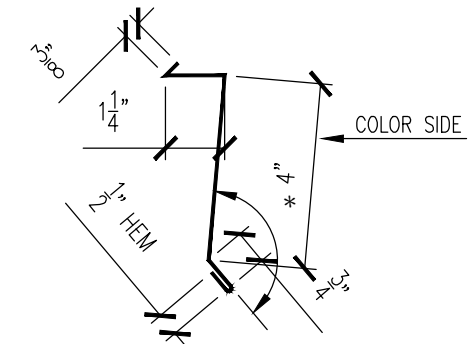
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PITCH BREAK LOW TO HIGH DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE:  R-Panel	REV:	DATE:
	DETAIL #: WSD-PB9	



ENDWALL  
(WS-228)

\* DENOTES ANGLE



REGLET FLASHING CUSTOM TRIM  
(WS-229)

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

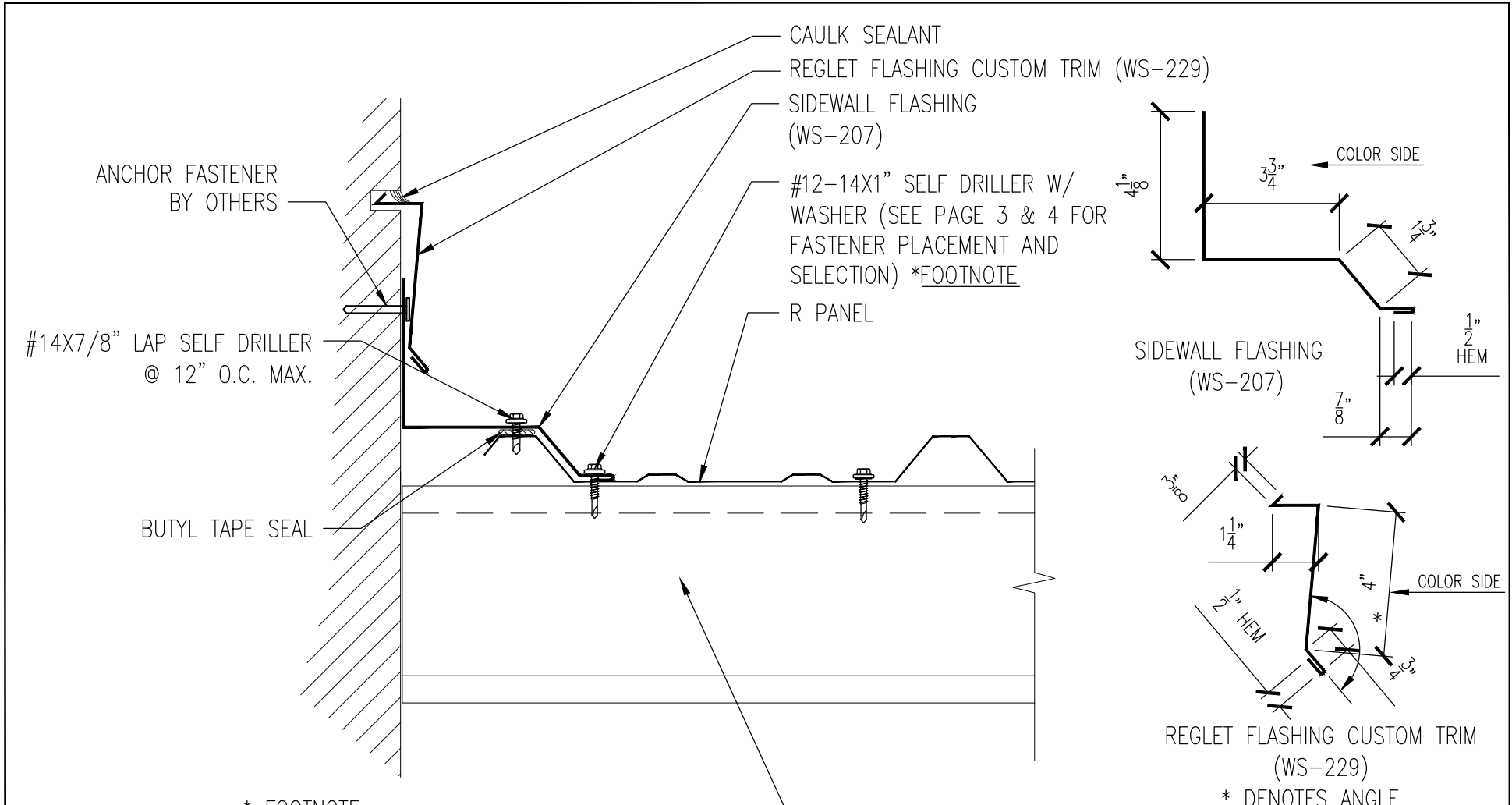
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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CHIMNEY FLASHING DETAILS	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-CF10</b>	



\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

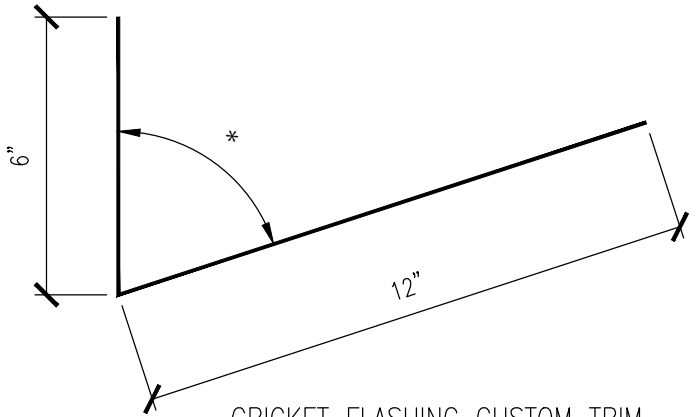
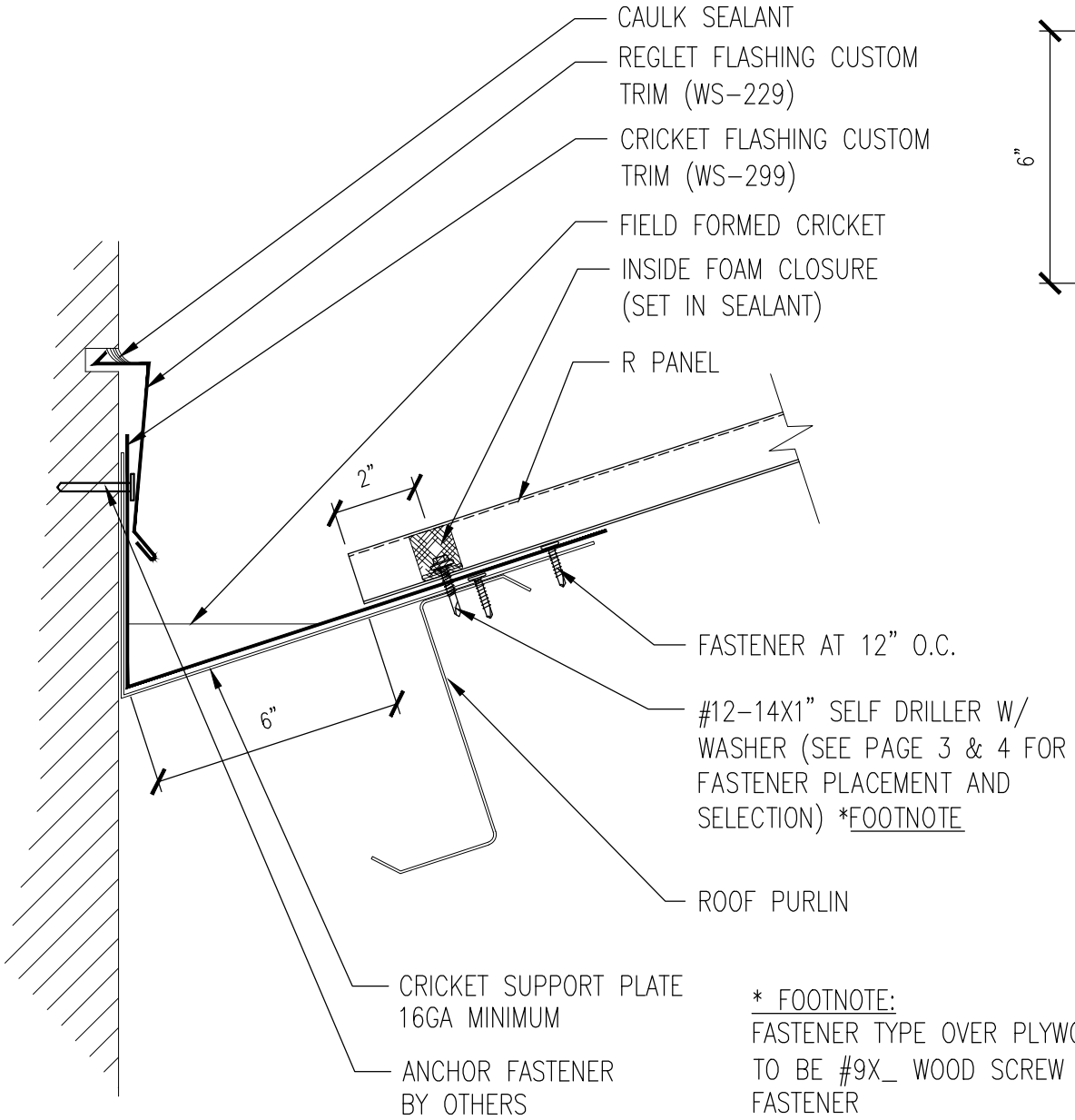
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

CHIMNEY FLASHING DETAILS	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-CF11</b>	

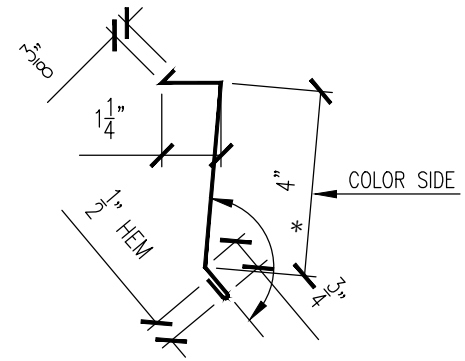
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\* DENOTES ANGLE



\* DENOTES ANGLE

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD TO BE #9X\_ WOOD SCREW FASTENER

GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

# Western States Metal Roofing

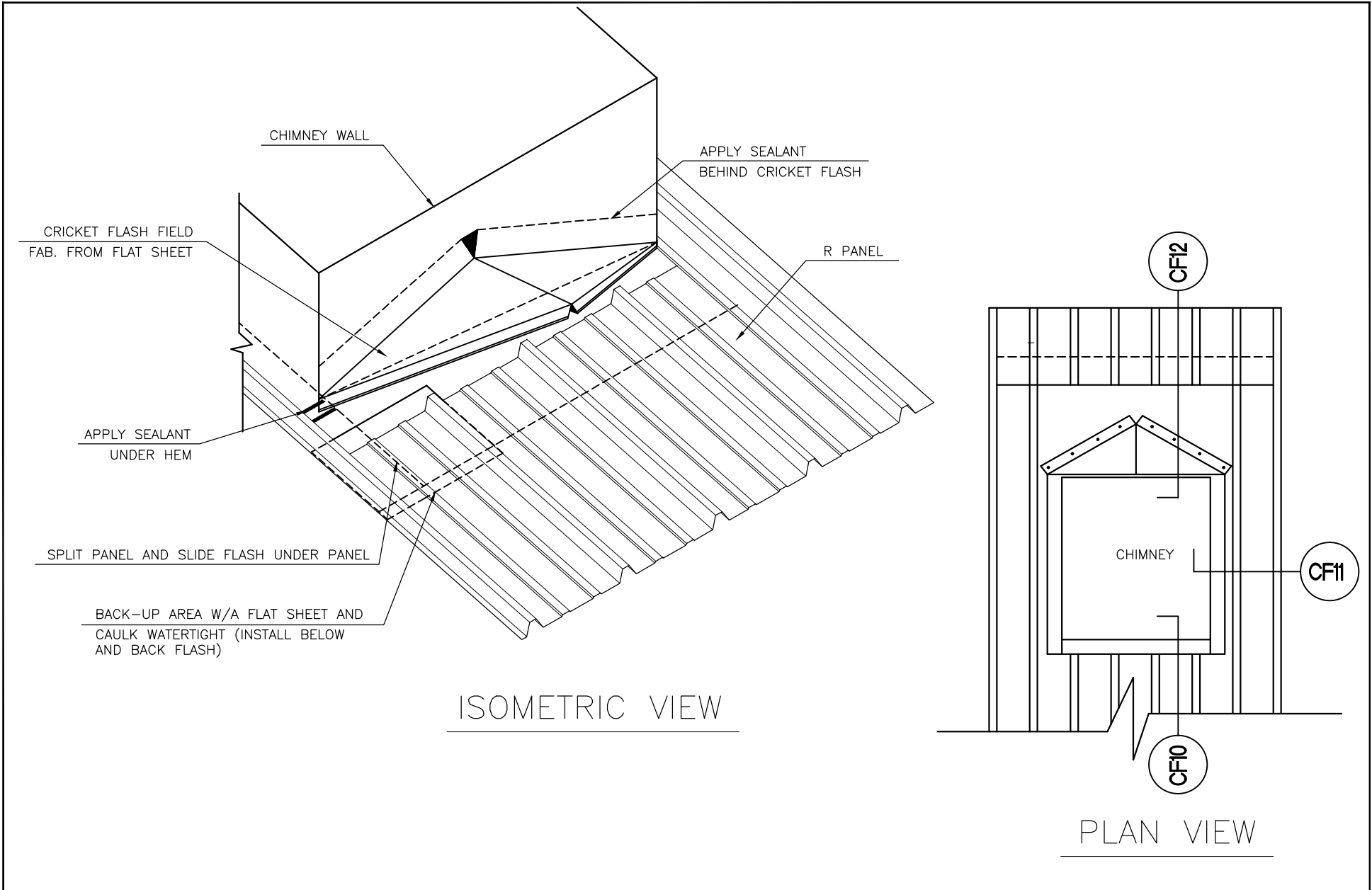
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## CHIMNEY FLASHING DETAILS

PANEL TYPE:  
**R-Panel**

B	01-14-13
A	06-18-12
REV:	DATE:
DETAIL #: <b>WSD-CF12</b>	



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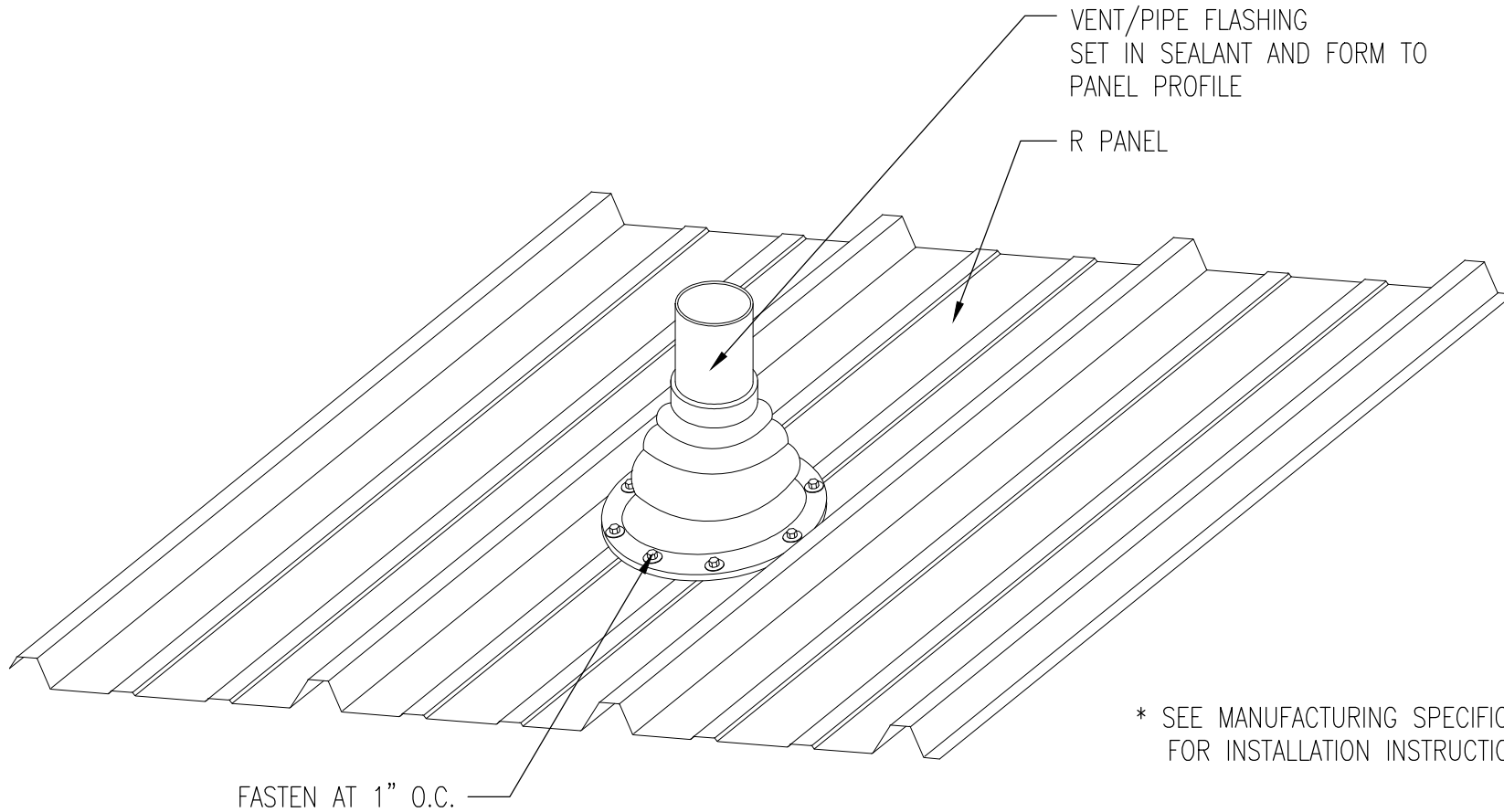
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## ISOMETRIC CRICKET DETAIL @ CHIMNEY

PANEL TYPE:

R-Panel

B	01-14-13
A	06-18-12
REV:	DATE:
DETAIL #:	
WSD-CF13	



\* SEE MANUFACTURING SPECIFICATIONS FOR INSTALLATION INSTRUCTIONS

GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

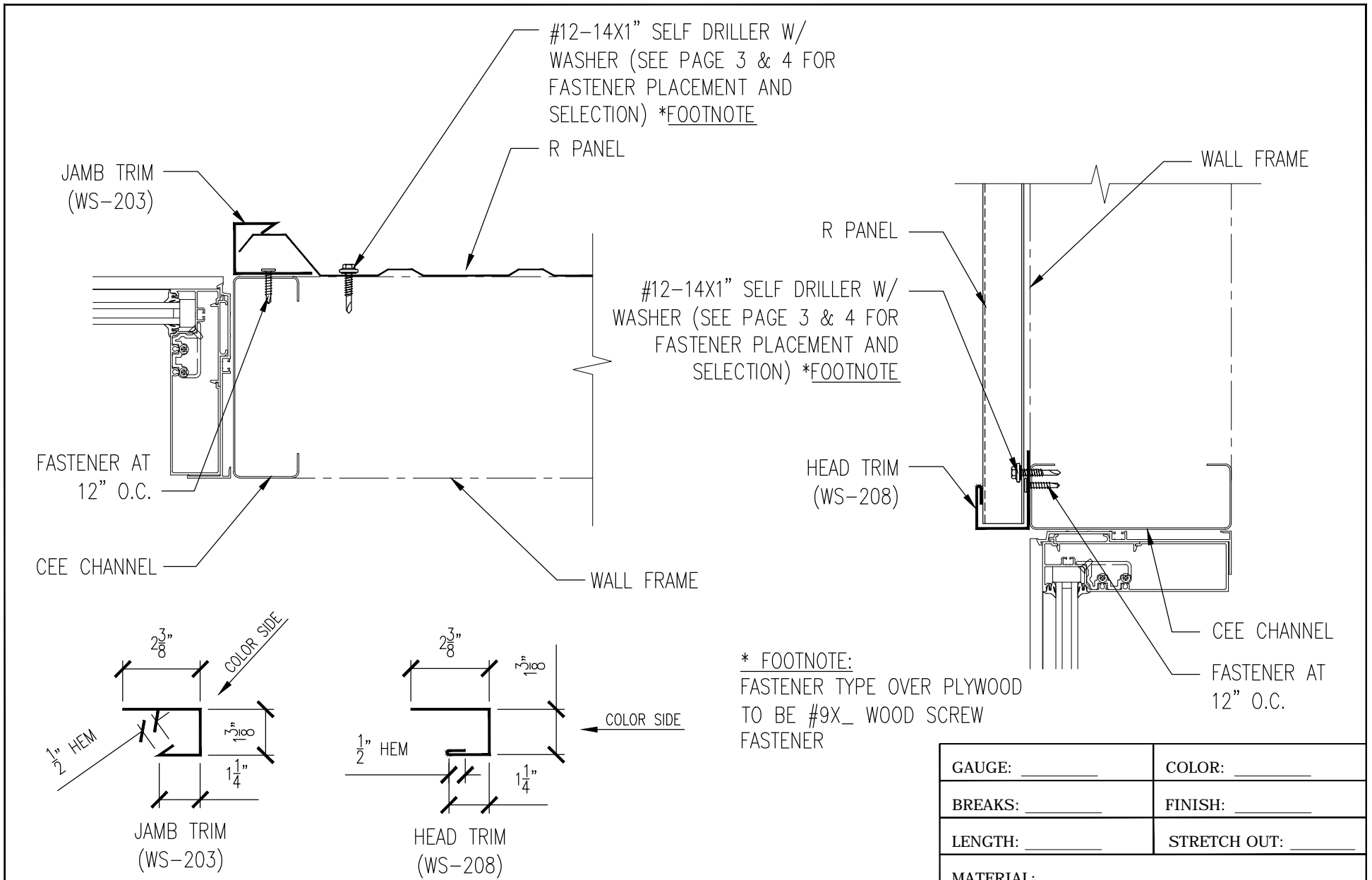
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<b>PIPE FLASHING DETAIL</b>	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-PF14</b>	



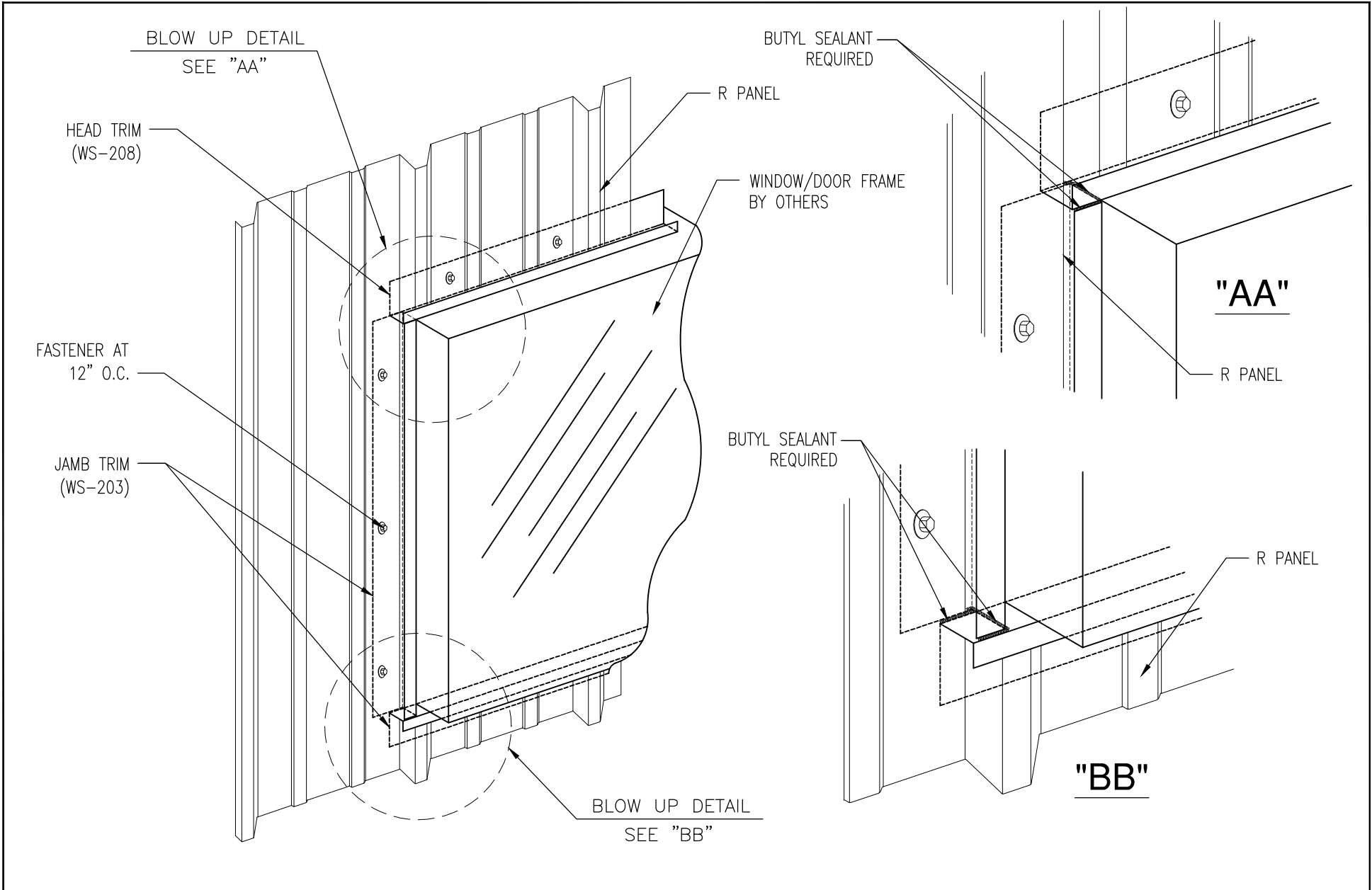


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GAUGE: _____	COLOR: _____	
BREAKS: _____	FINISH: _____	
LENGTH: _____	STRETCH OUT: _____	
MATERIAL: _____		
HEAD AND JAMB DETAILS	B	01-14-13
	A	06-18-12
PANEL TYPE:  R-Panel	REV:	DATE:
	DETAIL #: WSD-W15	

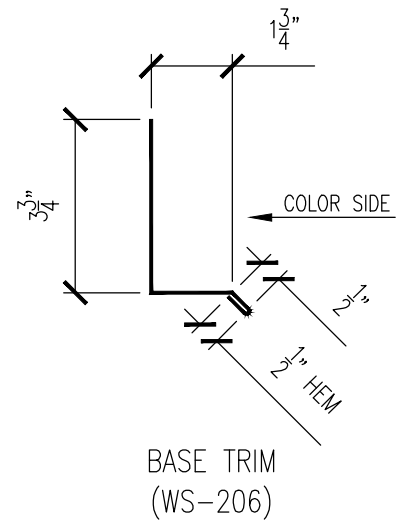
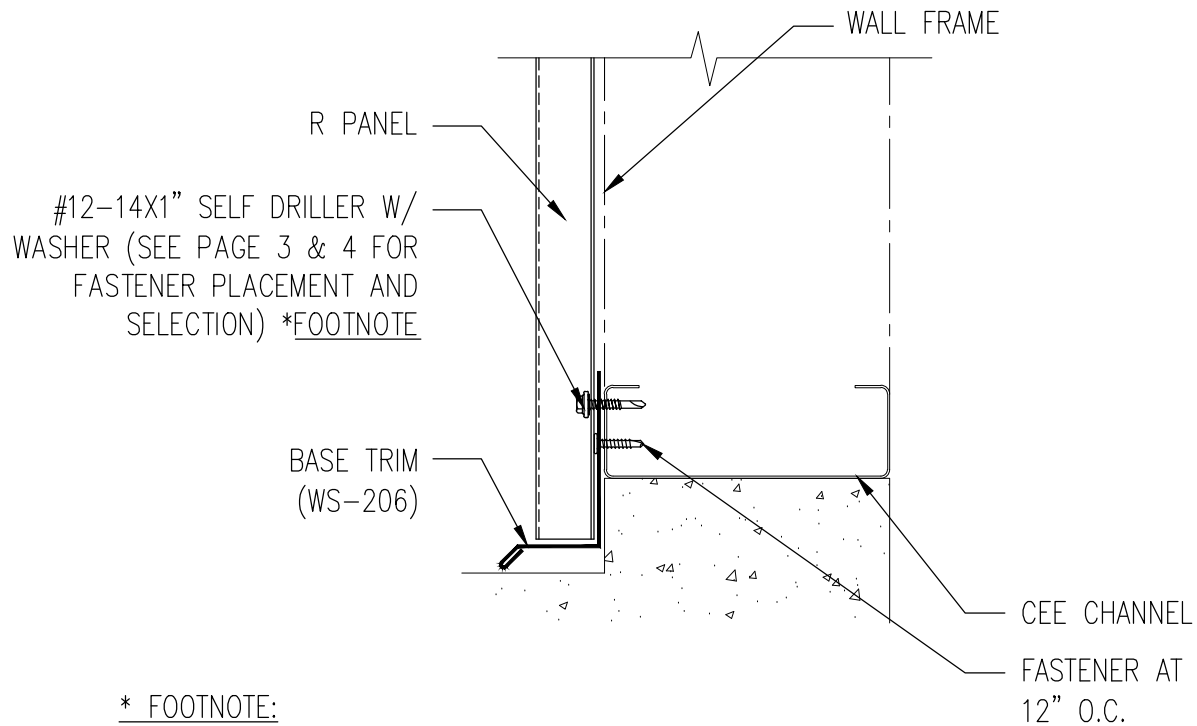


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<b>ISOMETRIC WALL DETAIL</b>	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-W16</b>	



\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

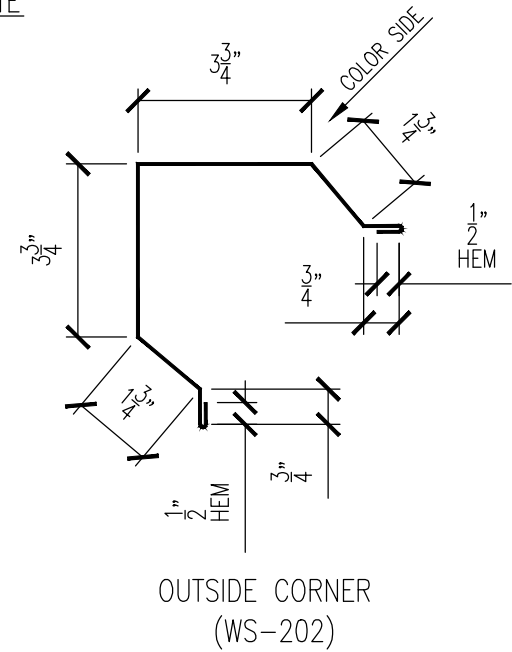
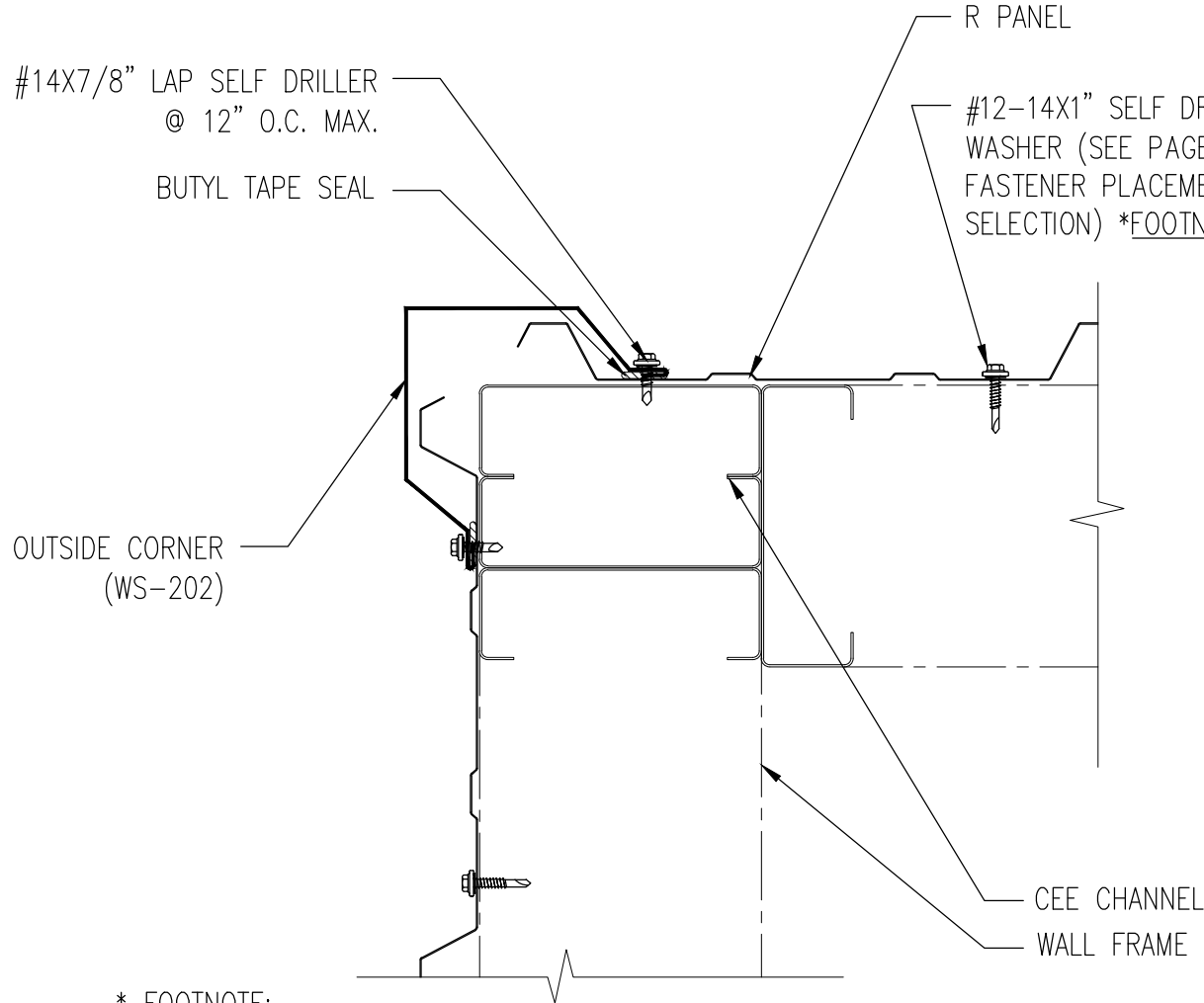
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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BASE DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #:	<b>WSD-W17</b>



\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

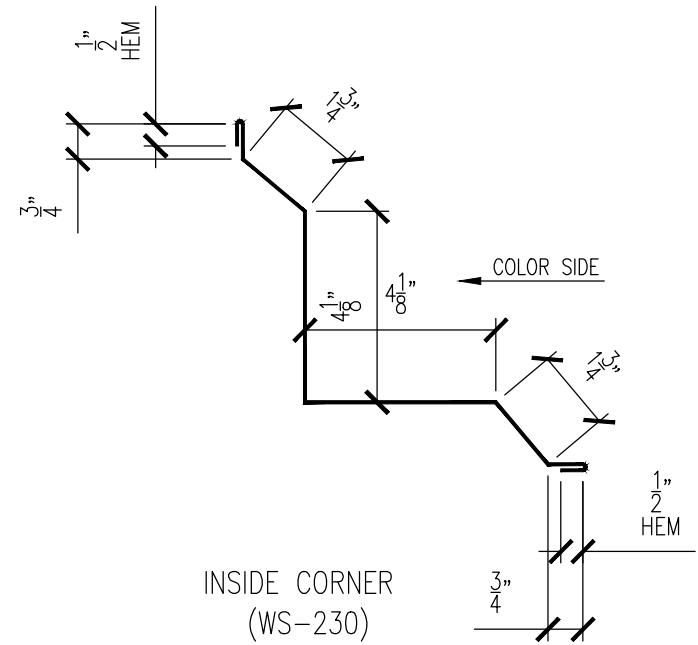
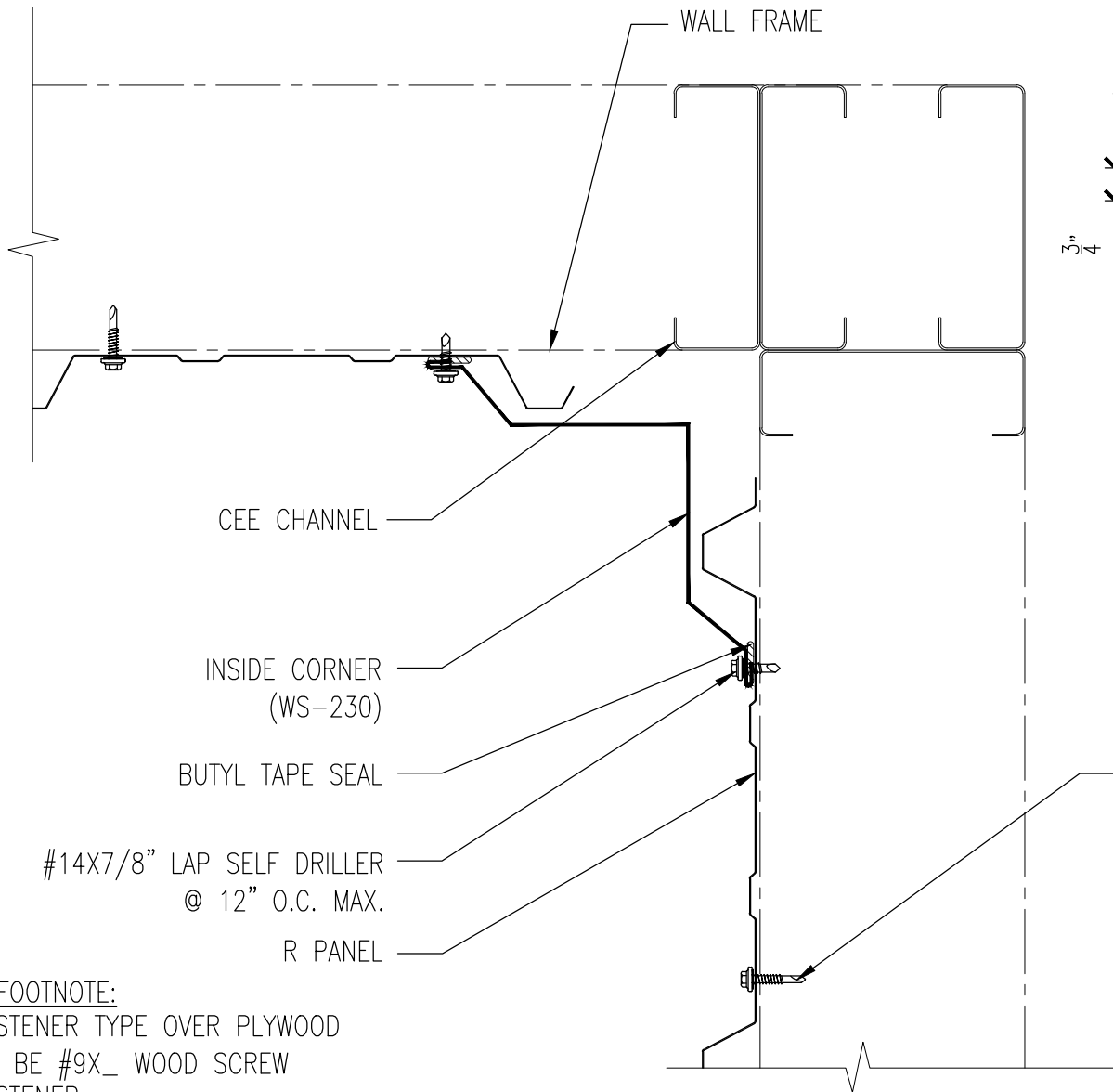
GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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OUTSIDE CORNER WALL DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-W18</b>	



#12-14X1" SELF DRILLER W/  
WASHER (SEE PAGE 3 & 4 FOR  
FASTENER PLACEMENT AND  
SELECTION) \*FOOTNOTE

\* FOOTNOTE:  
FASTENER TYPE OVER PLYWOOD  
TO BE #9X\_ WOOD SCREW  
FASTENER

GAUGE: _____	COLOR: _____
BREAKS: _____	FINISH: _____
LENGTH: _____	STRETCH OUT: _____
MATERIAL: _____	

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INSIDE CORNER WALL DETAIL	B	01-14-13
	A	06-18-12
PANEL TYPE: <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-W19</b>	



# CUSTOM TRIM

GAUGE: _____	COLOR: _____	
BREAKS: _____	FINISH: _____	
LENGTH: _____	STRETCH OUT: _____	
MATERIAL: _____		
CUSTOM TRIM NAME: _____	B	01-14-13
	A	06-18-12
PANEL TYPE:  <b>R-Panel</b>	REV:	DATE:
	DETAIL #: <b>WSD-CT20</b>	

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## Western States “R” 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 “R” panel is 36”. However depending on the finish selected and the required coil feed, it may be necessary for WSDI to shorten the width of the panel. 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 resources 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](http://www.metaldeck.com) or [Rustedroofing.com](http://Rustedroofing.com)





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