Contoured PBR Roof Panel - Perimeter Trim Reference
Northern (Endwall)

3" Wall Panel

RAKE

SHEETED

OPEN

RAKE ANGLE + (see chart)

MASONRY

RAKE ANGLE + (see chart)

STANDARD - F2373 - F2374 - F2374R - F2374L - F52 - F2378
End Cap - F2202L + F2380
Slide Flashing - F215 - F675 - F679

EXTRA LARGE - F2461 - F2462 - F2462R - F2462L - F52 - F2466
End Cap - F2265L + F2380
Slide Flashing - F215 - F675 - F679

Soffit

8" - 10" - 12"

RAKE Eave Strut Depth

HIGH SIDE

SHEETED

OPEN

RAKE ANGLE + (see chart)

MASONRY

RAKE ANGLE + (see chart)

STANDARD - F2654 - F2654R - F2654L

EXTRA LARGE - F2680 - F2680R - F2680L

RAKE

Eave Strut Depth

Soffit Depth

8" - 8½" 10" 12"

NONE & 1½" F2906 F2919 F2932

1" F2907 F2920 F2933

¾" F2908 F2921 F2934

MASONRY F2946 F2948 F2950

HIGH SIDE

Eave Strut Depth

Soffit Depth

8" - 8½" 10" 12"

NONE F2909 F2922 F2935

¾" , 1½" F2910 F2923 F2936

MASONRY F2947 F2949 F2951
<table>
<thead>
<tr>
<th>Trim</th>
<th>Maximum Length</th>
<th>Lap</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eave Gutter</td>
<td>20’−2”</td>
<td>2”</td>
<td>Length of eave + 12&quot; per miter, minus 8’ per miter = L, L divided by 20’ = Quantity + Remainder(R&lt;0.5 = 0.5 or R&gt;0.5 = 1) = (Q) quantity of 20’−2” pieces (Rounded up to whole number).</td>
</tr>
<tr>
<td>Simple Eave</td>
<td>20’−2”</td>
<td>2”</td>
<td>Length of eave divided by 20’ = Quality + Remainder(R&lt;0.5 = 0.5 or R&gt;0.5 = 1) = (Q) quantity of 20’−2” pieces (Rounded up to whole number).</td>
</tr>
<tr>
<td>Rake Trim</td>
<td>20’−2”</td>
<td>2”</td>
<td>Length of eave + 12” per miter, minus 8’ per miter = L, L divided by 20’ = Quantity + Remainder(R&lt;0.5 = 0.5 or R&gt;0.5 = 1) = (Q) quantity of 20’−2” pieces (Rounded up to whole number).</td>
</tr>
<tr>
<td>Rake Trim</td>
<td>20’−2”</td>
<td>2”</td>
<td>Length of eave + 12” per miter, minus 8’ per miter = L, L divided by 20’ = Quantity + Remainder(R&lt;0.5 = 0.5 or R&gt;0.5 = 1) = (Q) quantity of 20’−2” pieces (Rounded up to whole number).</td>
</tr>
<tr>
<td>Ridge Flashing</td>
<td>20’−2”</td>
<td>2”</td>
<td>Length of eave divided by 20’ = Quality + Remainder(R&lt;0.5 = 0.5 or R&gt;0.5 = 1) = (Q) quantity of 20’−2” pieces (Rounded up to whole number).</td>
</tr>
</tbody>
</table>

All miter R/L pieces length = 8’−2"
The minimum horizontal distance between roof curbs is the curb base plus 6'-0".

**Horizontal Clearance**

**Curb Clearances**
The minimum horizontal edge distance clearance from the rake line is 6’-0”.

**Horizontal Edge Distance Clearance**

Section A
Minimum Roof Curb End Clearance
PBR Roof Panels

1'-0" min.

Special End Skirt

Roof Curb at Eave

6'-0" min.

Roof panel must span a min. of 2 purlin spaces

Roof Curb at Eave Greater than 1'-0"

6'-0" min.

Roof panel must span a min. of 2 support spaces

Roof Curbs End to End
Minimum Roof Curb Clearances at Highside Eave and Ridge Line
PBR Roof Panels

**Roof Curb at Highside Eave**

**Roof Curb at Ridge Line**

**Roof Curb to the Ridge Line**
Minimum Roof Curb Clearances Past Highside Eave and Ridge Line
PBR Roof Panels

Roof Curb Past Highside Eave

Roof Curb Past Ridge Line

Roof panel must span a min. of 2 purlin spaces

PBR Roof Panel

Curb Support Framing

Purlin

Highside Eave Strut

6'-0" min.

1'-4"

RL
The following guidelines are to be used for determining thermal expansion provisions for the PBR roof system. These guidelines are based on a 100 degree Fahrenheit temperature differential and have been developed based on observed roof behavior for the PBR roof systems. For other specific temperature changes the relationship would be linear. Specific applications may require departure from these limits (i.e.: panel, color climate). Special care should be taken at perimeter flashing to ensure weather-tight applications.

**TRANSVERSE: DIRECTION OF MOVEMENT ACROSS BUILDING WIDTH**

<table>
<thead>
<tr>
<th>Transverse Expansion Limits</th>
<th>Exterior Wall Condition</th>
<th>Roof Framing Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 100’ max. of single roof surface</td>
<td>Metal walls</td>
<td>Cold Form Zee/Cee Purlins</td>
</tr>
<tr>
<td>* 75’ max. of single roof surface</td>
<td>Hardwalls</td>
<td></td>
</tr>
<tr>
<td>Above 150’ to 300’ requires Roof Step Transition</td>
<td>Metal walls</td>
<td></td>
</tr>
<tr>
<td>Above 125’ to 250’ requires Roof Step Transition</td>
<td>Hardwalls</td>
<td></td>
</tr>
<tr>
<td>50’ max. of single roof surface</td>
<td>Metal walls</td>
<td>Long Bay Purlins</td>
</tr>
<tr>
<td></td>
<td>Hardwalls</td>
<td></td>
</tr>
</tbody>
</table>

PBR panel is not permitted on SJI roof joists
Consult with Design for Roof Step Transition
* Consult with Design for applications that exceed these limits

**LONGITUDINAL: DIRECTION OF MOVEMENT ALONG BUILDING LENGTH**

<table>
<thead>
<tr>
<th>Longitudinal Expansion Limits</th>
<th>Exterior Wall Condition</th>
<th>Roof Framing Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural expansion required. See Design</td>
<td>Metal walls</td>
<td>Cold Form Zee/Cee Long Bay Purlins</td>
</tr>
<tr>
<td>600’ max. of Building Length</td>
<td>Metal walls</td>
<td>Cold Form Zee/Cee Long Bay Purlins</td>
</tr>
<tr>
<td>* 500’ max. of Building Length</td>
<td>Hardwalls</td>
<td></td>
</tr>
</tbody>
</table>

* Consult with Design for applications that exceed these limits

**LONGITUDINAL TRIM EXPANSION JOINTS ALONG BUILDING LENGTH (RIDGE AND EAVE)**

<table>
<thead>
<tr>
<th>Transverse Expansion Limits</th>
<th>Exterior Wall Condition</th>
<th>Roof Framing Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Expansion Ridge Trim/Gutter Lap is required</td>
<td>Metal walls</td>
<td>Cold Form</td>
</tr>
<tr>
<td>Above 100’ to 150’ of single roof surface</td>
<td>Hardwalls</td>
<td>Zee/Cee Purlins</td>
</tr>
<tr>
<td>Above 75’ to 125’ of single roof surface</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* An Expansion Ridge lap is required for building lengths over 100’ and at max. intervals of 100’.

See GPR05000, GPR06001, GPR06002 and GPR06005. This expansion lap is only for the expansion ridge trim. This is not a Transverse Expansion Joint.

(Note: Expansion Ridge Trim is required for gable building with a roof slope > 2 1/2:12)

* Eave Gutter Expansion Lap is required for building length over 100’ and at max. intervals of 100’.

This expansion lap is only for the eave gutter and not the eave trim. This is not a Longitudinal Expansion Joint.

**TRANSVERSE TRIM REQUIREMENTS ACROSS BUILDING WIDTH (RAKE)**

<table>
<thead>
<tr>
<th>Rake Slide is Required</th>
<th>Exterior Wall Condition</th>
<th>Roof Framing Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 100’ of single roof surface</td>
<td>Metal walls</td>
<td>Cold Form</td>
</tr>
<tr>
<td>Above 75’ of single roof surface</td>
<td>Hardwalls</td>
<td>Zee/Cee Purlins</td>
</tr>
</tbody>
</table>
PBR Roof Panel
Longitudinal Expansion
Cap Detail

Longitudinal Expansion Cap F630

1" Wide Tape Sealer HW506

Fastener #3 At 12" O.C.

Expansion Trim F338

SA3 (7/8" X 2 1/2" X 16GA.)

Fastener #12A 2 per Purlin

Frame

Expansion Side

Fixed Side

Nov '14
Expansion Side

Edge of 1" Taper Sealer

2" 3\(\frac{1}{2}\)" 3\(\frac{1}{2}\)"

6"

Fixed Side

Longitudinal Expansion Cap F630

End Cap

Expansion Ridge Flashing F675

Expansion Trim F338

1" Wide Taper Sealer HW506

Fastener #3 at 12" O.C.
Note: 7'-0" of 1" wide tape sealer (HW506) required at expansion ridge.

Required Material
30" DekStrip (12" Wide).
(18 3/4")-2" x 24Ga. Strapping
52 Fasteners #4
One Tube Urethane Sealant.
(See 82-10-11 for DekStrip)
1. Field cut the opening for longitudinal Expansion Cap trim in the side of the Ridge Cover. Allow 3/4" for Expansion Cap movement on all sides.
2. Install (2) Support Cleats with (4) fasteners #14 at each corner of the Ridge Cover. Raise Cover 1" above Ridge Flashing.
3. Install End Caps F678 R and L with Fasteners #14.
Gutter Expansion Joints will be located so as to divide the gutter into equal segments no longer than 100'-0" between gutter expansion joints.
PBR Roof Panel
Rake Angle

RAKE ANGLE (RA1)

FASTENER #1B
ONE EACH PURLIN

EAVE STRUT

RAKE ANGLE (RA1)

PURLIN

DATE
01/26/2009
PBR Roof Panel Length

*Peak Purlin:
Without Ridge Vent ............. 4"
With 9"x10'0" ridge vent .... 7"
With 12"x10'=0" ridge vent .. 4"
With "Vented Ridge" ............. 7"
With Expansion Ridge ............ 7"

- BLDG. PEAK
W
X
Y
Z

Low Eave Overhang:
1. Eave Gutter w/ Eave Strut
   a.) Fixed: 1 3/4" + slope of wall panel depth

2. Simple Eave Trim w/ Eave Strut
   a.) 1 3/4" + slope of wall panel depth

3. Sculptured Eave Trim w/ Eave Strut
   a.) See 85–25–11 for Overhang

4. Parapet Gutter w/ Eave Strut
   a.) 2" + slope of wall panel depth

5. Valley Gutter w/ Eave Strut
   a.) 1" + slope of wall panel depth

NOTES:
1. Round sheet length to nearest 1/2".
2. With 5'–0" or less EAVE LINE CANOPY, eave sheet should be one piece for building and canopy.
**PBR Roof Panel Lengths and Fasteners**

**Low Side Eave Trim with Eave Strut**

**Classic Trim**

<table>
<thead>
<tr>
<th>ROOF SLOPE</th>
<th>OVERHANG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 : 12</td>
<td>3 3/16&quot; + WD</td>
</tr>
<tr>
<td>1 : 12</td>
<td>3 7/16&quot; + WD</td>
</tr>
<tr>
<td>2 : 12</td>
<td>3 15/16&quot; + WD</td>
</tr>
<tr>
<td>3 : 12</td>
<td>4 7/16&quot; + WD</td>
</tr>
<tr>
<td>4 : 12</td>
<td>4 15/16&quot; + WD</td>
</tr>
<tr>
<td>5 : 12</td>
<td>5 7/16&quot; + WD</td>
</tr>
<tr>
<td>6 : 12</td>
<td>5 15/16&quot; + WD</td>
</tr>
</tbody>
</table>

**Contoured Trim**

<table>
<thead>
<tr>
<th>ROOF SLOPE</th>
<th>OVERHANG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 : 12</td>
<td>3 1/4&quot; + WD</td>
</tr>
<tr>
<td>thru 6 to 12</td>
<td>3 1/4&quot; + WD</td>
</tr>
</tbody>
</table>

**Signature Trim**

<table>
<thead>
<tr>
<th>ROOF SLOPE</th>
<th>OVERHANG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 : 12</td>
<td>3 1/4&quot; + WD</td>
</tr>
<tr>
<td>1 : 12</td>
<td>3 1/2&quot; + WD</td>
</tr>
<tr>
<td>2 : 12</td>
<td>4&quot; + WD</td>
</tr>
<tr>
<td>3 : 12</td>
<td>4 1/2&quot; + WD</td>
</tr>
<tr>
<td>4 : 12</td>
<td>5&quot; + WD</td>
</tr>
<tr>
<td>5 : 12</td>
<td>5 1/2&quot; + WD</td>
</tr>
<tr>
<td>6 : 12</td>
<td>6&quot; + WD</td>
</tr>
</tbody>
</table>

**Cascading Trim**

<table>
<thead>
<tr>
<th>ROOF SLOPE</th>
<th>OVERHANG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 : 12</td>
<td>3 5/8&quot; + WD</td>
</tr>
<tr>
<td>1 : 12</td>
<td>3 15/16&quot; + WD</td>
</tr>
<tr>
<td>2 : 12</td>
<td>4 5/16&quot; + WD</td>
</tr>
<tr>
<td>3 : 12</td>
<td>4 7/8&quot; + WD</td>
</tr>
<tr>
<td>4 : 12</td>
<td>5 5/16&quot; + WD</td>
</tr>
<tr>
<td>5 : 12</td>
<td>5 7/8&quot; + WD</td>
</tr>
<tr>
<td>6 : 12</td>
<td>6 3/8&quot; + WD</td>
</tr>
</tbody>
</table>

\[ WD = \text{slope of wall panel depth} \]
TWO CONTINUOUS LAYERS
TAPE SEALANT 1\" X 3/8\"
HW507

FASTENER #3
(SEE BELOW)

FASTENER #3

FASTENER #4

At 1'-8 O.C.

Note:
Screw Pattern Shown Satisfy
U.L. 90 Requirements For Roof.

Sheeting Direction

At Eave Strut, Panel End Lap, and Peak Purlin

Sheeting Direction
Inside Closure (HW455) w/ Continuous Tape Sealant (HW506) Top and Bottom

Roof Panel End Lap

Note:
Screw Pattern Shown Satisfy U.L. 90 Requirements For Roof.

All Roof Members Except As Noted Below

Panel End Lap, and Peak Purlin

At Low Eave Only

FASTENER #3
Fastener #4 at 20" O.C.

FASTENER #3
Fastener #4 at 20" O.C.

FASTENER #3

Fastener #4 At 4" O.C. for 5'-0" Starting at Eave, then 20" O.C.
(6) Fastener #3 per panel inside closure (HW455) with tape sealer (HW506) top and bottom

(6) Fastener #3 per panel tape sealer (HW507) two continuous layers

(9) Fastener #3 per panel inside closure (HW455) with tape sealer (HW506) top and bottom

(6) Fastener #3 per panel continuous tape sealer (HW506)
* See Panel Overhang Documentation.

FASTENER #3
AT 5", 7", 5"

INSIDE CLOSURE WITH CONTINUOUS 1" WIDE TAPE SEALER HW506 TOP AND BOTTOM

FASTENER #14
5’-0” O.C.

FLAT EAVE TRIM (see note)

FASTENER #14
36” ON CENTER

SHEETED WALL

** EAVE COVER TRIM

or wall panel depth at partial open wall

NOTE:
F2955 for 1½"/1½” wall panel
F2973 for 3” wall panel

<table>
<thead>
<tr>
<th>Wall Depth</th>
<th>Soffit Depth</th>
<th>8”-8½”</th>
<th>10”</th>
<th>12”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1½”</td>
<td>NONE</td>
<td>F2901</td>
<td>F2914</td>
<td>F2927</td>
</tr>
<tr>
<td>3”</td>
<td>NONE</td>
<td>F2906</td>
<td>F2919</td>
<td>F2932</td>
</tr>
</tbody>
</table>

** Eave Cover Trim Mark

OPEN WALL (Or Exposed Rafter Canopy)

* See Panel Overhang Documentation.

FASTENER #3
AT 5", 7", 5"

INSIDE CLOSURE WITH CONTINUOUS 1” WIDE TAPE SEALER HW506 TOP AND BOTTOM

FASTENER #14
5’-0” O.C.

FLAT EAVE TRIM (see note)

FASTENER #14
36” ON CENTER

** MASONRY TRIM

MASONRY Anchor NOT BY METAL BUILDING MANUFACTURER

MASONRY WALL

NOTE:
F2955 for 1½"/1½” wall panel
F2973 for 3” wall panel

<table>
<thead>
<tr>
<th>Wall Depth</th>
<th>Soffit Depth</th>
<th>8”-8½”</th>
<th>10”</th>
<th>12”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1½”</td>
<td>F2940</td>
<td>F2942</td>
<td>F2944</td>
<td></td>
</tr>
<tr>
<td>3”</td>
<td>F2946</td>
<td>F2948</td>
<td>F2950</td>
<td></td>
</tr>
</tbody>
</table>

** Masonry Trim Mark
SLOPE OF 1½"

FLAT EAVE TRIM (see note)

FASTENER #3
12–14 x 1¼"

INSIDE CLOSURE WITH CONTINUOUS 1" WIDE TAPE SEALER HW506 TOP AND BOTTOM

FASTENER #14A
6" x 3¾"
5’–0” O.C.

FASTENER #17A
12–14 x 1¼"
24” O.C.

** EAVE COVER TRIM (SEE BELOW)

FASTENER #14 (With Soffit)
6" x 3¾"

FASTENER #17A (No Soffit)
12–14 x 1¼"
12” O.C.

CANOPY PROJECTION

NOTE:
F2955 for 1½”/1½” wall panel
F2973 for 3” wall panel

LOW EAVE WITH GUTTER

RCC 8 1/2” CHANNEL

<table>
<thead>
<tr>
<th>SOFFIT PANEL DEPTH</th>
<th>Part Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>F2957</td>
</tr>
<tr>
<td>3/8”</td>
<td>F2958</td>
</tr>
<tr>
<td>1”</td>
<td>F2959</td>
</tr>
<tr>
<td>1¼”</td>
<td>F2960</td>
</tr>
</tbody>
</table>

RCC 10” CHANNEL

<table>
<thead>
<tr>
<th>SOFFIT PANEL DEPTH</th>
<th>Part Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>F2961</td>
</tr>
<tr>
<td>3/8”</td>
<td>F2962</td>
</tr>
<tr>
<td>1”</td>
<td>F2963</td>
</tr>
<tr>
<td>1¼”</td>
<td>F2964</td>
</tr>
</tbody>
</table>
Gutter Support F893
1.) At 3'-0" O.C. when design ground snow load is < 20 PSF
2.) At 2'-0" O.C. when design ground snow load is > or = 20 PSF

Fastener #4 1/4-14 x 5/8"

1.) At 3'-0" O.C. when design ground snow load is < 20 PSF
2.) At 2'-0" O.C. when design ground snow load is > or = 20 PSF

Fastener #4 1/4-14 x 5/8" each 1'-0" O.C.

Standard Gutter

See Division Standard perimeter trim reference for piece marks.

A = Wall panel depth
A = 1 3/8" at Open Wall

Standard Large Gutter

See Division Standard perimeter trim reference for piece marks.

A = Wall panel depth
A = 1 3/8" at Open Wall
PBR Roof Panel
Low Eave - Northern and Northern Large Gutter

See Division Standards Perimeter Trim Reference for piece marks.

**Northern Gutter**

- **FASTENER #4**
  - \( \frac{1}{4} - 14 \times \frac{7}{8} \) in
  - \( 1’-0 \) O.C.

(1) **FASTENER #4**
- \( \frac{1}{4} - 14 \times \frac{7}{8} \)

**GUTTER SUPPORT**
- F2111 or F312 <= 1:12
- F550 > 1:12

**STANDARD EAVE:**
- \( A = \) WALL PANEL DEPTH
- \( A = 1\frac{3}{4}” \) AT OPEN WALL

**Northern Large Gutter**

- **FASTENER #4**
  - \( \frac{1}{4} - 14 \times \frac{7}{8} \) in
  - 6” O.C.

(1) **FASTENER #4**
- \( \frac{1}{4} - 14 \times \frac{7}{8} \)

**GUTTER HANGER HW2992**

**STANDARD EAVE:**
- \( A = \) WALL PANEL DEPTH
- \( A = 1\frac{3}{4}” \) AT OPEN WALL
PBR Roof Panel
Low Eave
Without Gutter

* See Panel Overhang Documentation.

LOW SIDE SCULPTURED EAVE TRIM
See Division Standards Perimeter Trim Reference for piece marks.

FASTENER #3
AT 5", 7", 5"

INSIDE CLOSURE WITH CONTINUOUS 1" WIDE TAPE SEALER HW506 TOP AND BOTTOM

FASTENER #14A
5'–0" ON CENTER

FASTENER #4
12" ON CENTER

MASONRY WALL

** MASONRY TRIM
MASONRY ANCHOR NOT BY METAL BUILDING MANUFACTURER

OPEN WALL (Or Exposed Rafter Canopy)

** EAVE COVER TRIM

FASTENER #3
AT 5", 7", 5"

INSIDE CLOSURE WITH CONTINUOUS 1" WIDE TAPE SEALER HW506 TOP AND BOTTOM

FASTENER #14A
5'–0" ON CENTER

FASTENER #17A
24" ON CENTER

FASTENER #17A
12" ON CENTER

14" or wall panel depth at partial open wall

Eave Strut Depth

Wall Depth | Soffit Depth | 8"–8½" | 10" | 12"
--- | --- | --- | --- | ---
1½" | NONE | F2901 | F2914 | F2927
3" | NONE | F2906 | F2919 | F2932

1½", 1½", 1½" | F2902 | F2915 | F2928
3", 1½", 1½", 1½" | F2907 | F2920 | F2933

MASONRY WALL

** Masonry Trim Mark

SHEETED WALL

* See Panel Overhang Documentation.

LOW SIDE SCULPTURED EAVE TRIM
See Division Standards Perimeter Trim Reference for piece marks.

FASTENER #3
AT 5", 7", 5"

INSIDE CLOSURE WITH CONTINUOUS 1" WIDE TAPE SEALER HW506 TOP AND BOTTOM

FASTENER #14A
5'–0" ON CENTER

FASTENER #4
12" ON CENTER

** EAVE COVER TRIM

FASTENER #17A
24" ON CENTER

1½" or wall panel depth at partial open wall

Eave Strut Depth

Wall Depth | Soffit Depth | 8"–8½" | 10" | 12"
--- | --- | --- | --- | ---
1½" | NONE | F2940 | F2942 | F2944
3" | NONE | F2946 | F2948 | F2950

1½", 1½", 1½", 1½" | F2941 | F2943 | F2945
3", 1½", 1½", 1½", 1½" | F2947 | F2949 | F2951

** Masonry Trim Mark
** Canopy Cover Trim (see 85-30-11)
** Canopy Projection

** Canopy Cover Trim (see 85-30-11)
** Canopy Projection

* See Panel Overhang Documentation.

Low Side Sculptured Eave Trim
See Division Standards Perimeter Trim Reference for piece marks.

** Canopy Cover Trim (see 85-30-11)
Fastener #3
At 5", 7", 5"

Inside Closure With
Continuous 1" Wide Taper
Sealer HW506
Top And Bottom

Simple Eave Trim
F2955

"Optional" Outside Panel Closure
HW456 - PBR
HW460 - PBU
HW465 - PBA/Vistashadow

Fastener #4A
(12" On Center)

Sheeted Wall
### Wall Anchor Options

**RAKE SOFFIT TRIM**

<table>
<thead>
<tr>
<th>Wall Depth</th>
<th>Soffit Depth</th>
<th>8''–8(\frac{1}{2}'')</th>
<th>10''</th>
<th>12''</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE &amp; 1(\frac{1}{4}'')</td>
<td>F2901</td>
<td>F2914</td>
<td>F2927</td>
<td></td>
</tr>
<tr>
<td>1''</td>
<td>F2902</td>
<td>F2915</td>
<td>F2928</td>
<td></td>
</tr>
<tr>
<td>(\frac{3}{4}'')</td>
<td>F2903</td>
<td>F2916</td>
<td>F2929</td>
<td></td>
</tr>
</tbody>
</table>

### Roof Anchor Options

**RAKE ANGLE**

<table>
<thead>
<tr>
<th>Wall Depth</th>
<th>Soffit Depth</th>
<th>8''–8(\frac{1}{2}'')</th>
<th>10''</th>
<th>12''</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE &amp; 1(\frac{1}{4}'')</td>
<td>F2906</td>
<td>F2919</td>
<td>F2932</td>
<td></td>
</tr>
<tr>
<td>1''</td>
<td>F2907</td>
<td>F2920</td>
<td>F2933</td>
<td></td>
</tr>
<tr>
<td>(\frac{3}{4}'')</td>
<td>F2908</td>
<td>F2921</td>
<td>F2934</td>
<td></td>
</tr>
</tbody>
</table>

**Fastener #17A**

### Additional Notes

- 24'' ON CENTER
- OPEN WALL OR PURLIN EXTENSION
- OPEN FOR MASONRY
**PBR Roof Panel**

**Rake Trim Conditions**

* See Division Standards Perimeter Trim Reference for piece marks.

---

1" WIDE TAPE SEALER HW506

FASTENER #4

12" ON CENTER

* RAKE TRIM

---

RAKE SLIDE FLASHING (F215)

FASTENER #4

12" ON CENTER

(see Alternate)

---

A = 1 1/4" at sidewall open full height.

A = Wall panel depth at sheeted wall not fully sheeted for its entire length

---

NOTE: Termination Trim will be provided only if the building length is "OFF MODULE". That is, if the length of the area to be covered is not divisible by the panel coverage width.

A = 1 1/4" at sidewall open full height.

A = Wall panel depth at sheeted wall not fully sheeted for its entire length
Less Than or Equal 4"

WALL PANEL

SHEETING ANGLE RA3

FASTENER #17A (2) PER PURLIN

PARAPET RAKE TRIM F852

FASTENER #4 6" ON CENTER

ROOF PANEL

1" WIDE TAPE SEALER HW506

RAKE AND SUPPORT TRIM
Fastener #3
12-14 x 1\(\frac{1}{4}\)"

CONTINUOUS 1" WIDE TAPE
SEALER HW506

FORMED RIDGE CAP
F52
(\(\frac{1}{2}\) thru 2\(\frac{1}{2}\):12 Roof Slope)

\(\pm\) Sym. Abt.

PANEL ATTACHMENT
PBR Roof Panel
High Side
Ridge Detail

FASTENER #4
6" ON CENTER

1" WIDE TAPE SEALER HW506

EXPANSION RIDGE FLASHING (F675)

Note: 1’-3” Peak purlin space over 4 to 12 will required a special Ridge Flashing

EXPANSION RIDGE

FASTENER #3
3 PER CLOSURE
OUTSIDE METAL CLOSURE (HW4041 or HW4040) WITH 1" WIDE TAPE SEALER HW506 TOP AND BOTTOM

BACK-UP PLATE HW2998

FASTENER #3 AT 5", 7", 5"
OUTSIDE CLOSURE WITH CONTINUOUS 1" WIDE TAPE SEALER HW506 TOP AND BOTTOM

FASTENER #3 AT 5", 7", 5"

CLOSURE
PBR Roof Panel
High Side
Single Slope

FASTENER #4
12” ON CENTER

* HIGH SIDE EAVE TRIM

FASTENER #4
12” ON CENTER

SHEETED WALL

FASTENER #4
12” ON CENTER

* HIGH SIDE EAVE TRIM

** EAVE COVER TRIM

FASTENER #17A
24” ON CENTER

FASTENER #17A
12” ON CENTER

OPEN WALL (Or Exposed Rafter Canopy)

FASTENER #4
12” ON CENTER

* HIGH SIDE EAVE TRIM

** EAVE COVER TRIM

FASTENER #4
12” ON CENTER

FASTENER #17A
24” ON CENTER

MASONRY TRIM

MASONRY ANCHOR NOT
BY METAL BUILDING
MANUFACTURER

** Masonry Trim Mark

Eave Strut Depth
Wall Depth | Soffit Depth | 8”–8½” | 10” | 12”
--- | --- | --- | --- | ---
1¾” | NONE | F2904 | F2917 | F2930
¾”, 1”, 1½” | F2905 | F2918 | F2931
3” | NONE | F2909 | F2922 | F2935
¾”, 1”, 1½” | F2910 | F2923 | F2936

Eave Strut Depth
Wall Depth | 8”–8½” | 10” | 12”
--- | --- | --- | ---
1¾” | F2941 | F2943 | F2945
3” | F2947 | F2949 | F2951

** Masonry Trim Mark
PBR Roof Panel
RCC High Side Canopy

FASTENER #3
(5”-7”-5”)

1” WIDE TAPE SEALER
HW506 TOP AND BOTTOM
OF CLOSURE

FASTENER #17A
24” ON CENTER

FASTENER #14
(With Soffit)

FASTENER #17A
(No Soffit)

12” ON CENTER

INSIDE PANEL CLOSURE
HW455

EAVE COVER
(SEE BELOW)

CANOPY PROJECTION

HIGH EAVE

RCC 8 1/2” CHANNEL

<table>
<thead>
<tr>
<th>SOFFIT PANEL DEPTH</th>
<th>F2965</th>
<th>F2966</th>
<th>F2967</th>
<th>F2968</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/8”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 1/8”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RCC 10” CHANNEL

<table>
<thead>
<tr>
<th>SOFFIT PANEL DEPTH</th>
<th>F2969</th>
<th>F2970</th>
<th>F2971</th>
<th>F2972</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/8”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 1/8”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**PBR Roof Panel - High Side**

**Canopy Soffit Attachment**

---

**PBR Soffit**

- Fastener #4A: 1/4" x 3/16" at 12" O.C.
- Soffit Trim: F48

**Soffit Length = Slope**

(CANOPY PROJECTION - WALL PANEL DEPTH)

---

**Artisan Soffit**

- Fastener #4A: 1/4" x 3/16" at 12" O.C.
- Soffit Trim: F502

**Soffit Length = Slope**

(CANOPY PROJECTION - WALL PANEL DEPTH)

---

**PBU Soffit**

- Fastener #4A: 1/4" x 3/16" at 12" O.C.
- Soffit Trim: F502

**Soffit Length = Slope**

(CANOPY PROJECTION - WALL PANEL DEPTH)
HIP PLATE CALCULATION:

Hip Run Length + 12” + Rise of half plate width

HIP PLATE LAP

Field Notch for Lap

FASTENER #12A
4” ON CENTER

FASTENER #12A
(2 PER PURLIN)

FIELD NOTCH FOR PURLIN

HIP PLATE AT EAVE

TAPE SEALANT
HW507

HIP PLATE IS FIELD CUT

EAVE STRUT

HIP PLATE P141
Field trim to fit major rib.

1" Wide Tape Sealer (HW506) top and bottom of F570.

Fastener #4 1/4"-14 x 7/8" at 12" O.C.

Fastener #3 12-14 x 1 1/4" at 4" O.C.

Hip Plate P141

Field bevel roof panel at hip.

12 x 1" Pancake Hd SD (2) Per Conn. at Each Purlin.
VALLEY PLATE CALCULATION:
Valley Run Length + 12”
+ Rise of half plate width

VALLEY PLATE AND ANGLES

VALLEY PLATE LAP

VALLEY PLATE AT EAVE
INSIDE CLOSURE WITH CONTINUOUS 1" WIDE TAPE SEALER HW506 ON TOP AND SIDES

CONTINUOUS TRIPLE BEAD TAPE SEALER HW502

FASTENER #3 AT 4" ON CENTER

VALLEY TRIM F711

Fastener #12A
12 x 1" P.H. DP3 5'-0" O.C.

~Fastener
#12A
12 X 1" P.H. DP3
5'-0" O.C.
Do not step on roof overhang

Fastener #4
1/4-14 X 7/8"
at 6" O.C.
1" Wide Taper Sealer
HW506
Outside Metal Closure
HW4041
1" Wide Taper Sealer
HW506
Fastener #3
12-14 X 1 1/4"
at 5", 7", 5"
HW506

Transverse Expansion Trim
F350

Purlin

Inside Closure with
1" Wide Taper Sealer
HW506 on top and bottom

Fastener #3
12-14 X 1 1/4"
at 5", 7", 5"
1. Tape Sealer must be applied to the Transverse Expansion Trim under the membrane (DekStrip) to ensure a water seal.

2. Fastener #4 (¼-14 x ¾" LL SD W/Washer Lap Tek) will be used to attach the membrane to the roof and wall.

3. A flat Metal Strip (2" Wide) must be used on top of the membrane when attaching the sides.
DO NOT ATTACH RAKE COVER TO HIGH OR LOW ROOF RAKE TRIM

1. Install the membrane to the roof and wall.
2. Install the rake trim. Add end caps to the rake trim. Field cut rake trim slide kickout only where the Rake Cover overlaps the rake trim.
3. Attach Rake Cover to the wall only. Do not allow a fastener to penetrate, the rake trim or roof panel.

<table>
<thead>
<tr>
<th>Wall Depth</th>
<th>Step Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 3/4&quot;</td>
<td>Standard Large F2284</td>
</tr>
<tr>
<td></td>
<td>Northern Large F2459</td>
</tr>
<tr>
<td>3&quot;</td>
<td>Standard Large F2289</td>
</tr>
<tr>
<td></td>
<td>Northern Large F2465</td>
</tr>
</tbody>
</table>
PBR Roof Panel
Step Expansion
Stepped Expansion Trim End Closure

Section 1

View From Roof Side
1 1/4", 1 1/2" and 3" Wall Panel

**STANDARD GUTTER**
- SHEETED: F2955
- OPEN: F2955 + (see chart)
- MASONRY: F2955 + (see chart)

**EAVE TRIM**
- SHEETED: F2134
  - WITH OR WITHOUT EAVE CAP: F2133
- OPEN: F2134 + (see chart)
- MASONRY: F2134 + (see chart)

**SIMPLE EAVE**
- SHEETED: F2955
- OPEN: F2955 + (see chart)
- MASONRY: F2955 + (see chart)

**MASONRY**
- SHEETED: F2955
- OPEN: F2955 + (see chart)
- MASONRY: F2955 + (see chart)

**Open Eave Strut Depth**

<table>
<thead>
<tr>
<th>Wall Depth</th>
<th>Soffit Depth</th>
<th>8&quot;-8 1/2&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/4&quot;, 1 1/2&quot;</td>
<td>NONE</td>
<td>F2901</td>
<td>F2914</td>
<td>F2927</td>
</tr>
<tr>
<td>3&quot;</td>
<td>3/4&quot;, 1&quot;, 1 1/2&quot;</td>
<td>F2902</td>
<td>F2915</td>
<td>F2928</td>
</tr>
</tbody>
</table>

**Masonry Eave Strut Depth**

<table>
<thead>
<tr>
<th>Wall Depth</th>
<th>8&quot;-8 1/2&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/4&quot;, 1 1/2&quot;</td>
<td>F2940</td>
<td>F2942</td>
<td>F2944</td>
</tr>
<tr>
<td>3&quot;</td>
<td>F2946</td>
<td>F2948</td>
<td>F2950</td>
</tr>
</tbody>
</table>
1 1/4" and 1 1/2" Wall Panel

**Sheeted Rake**

- Standard - F2216
- Large - F2281
- End Cap - F2202L
- Slide Flashing - F215 - F675 - F679
- Slide Flashing - F215 - F675 - F679

**Open Rake Angle** + (see chart)

**Masonry Rake Angle** + (see chart)

**High Side**

- Standard - F2603
- Large - F2627
- End Cap - F2265L
- Slide Flashing - F215 - F675 - F679

**Rake Eave Strut Depth**

<table>
<thead>
<tr>
<th>Soffit Depth</th>
<th>8&quot;–8 1/2&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE &amp; 1 1/4&quot;</td>
<td>F2901</td>
<td>F2914</td>
<td>F2927</td>
</tr>
<tr>
<td>1&quot;</td>
<td>F2902</td>
<td>F2915</td>
<td>F2928</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>F2903</td>
<td>F2916</td>
<td>F2929</td>
</tr>
<tr>
<td>Masonry</td>
<td>F2940</td>
<td>F2942</td>
<td>F2944</td>
</tr>
</tbody>
</table>

**High Side Eave Strut Depth**

<table>
<thead>
<tr>
<th>Soffit Depth</th>
<th>8&quot;–8 1/2&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>F2904</td>
<td>F2917</td>
<td>F2930</td>
</tr>
<tr>
<td>3/4&quot;, 1&quot;, 1 1/4&quot;</td>
<td>F2905</td>
<td>F2918</td>
<td>F2931</td>
</tr>
<tr>
<td>Masonry</td>
<td>F2941</td>
<td>F2943</td>
<td>F2945</td>
</tr>
</tbody>
</table>
Contoured PBR Roof Panel
Perimeter Trim Reference - Standard and Large (Endwall)

3" Wall Panel

RAKE

SHEETED

OPEN

RAKE ANGLE + (see chart)

MASONRY

RAKE ANGLE + (see chart)

STANDARD — F2220 — F2220R — F2220L — F52 — F2223
End Cap — F2202L
Slide Flashing — F215 — F675 — F679

LARGE — F2286 — F2286R — F2286L — F52 — F2290
End Cap — F2265L
Slide Flashing — F215 — F675 — F679

STANDARD — F2604 — F2604R — F2604L

LARGE — F2628 — F2628R — F2628L

RAKE Eave Strut Depth

<table>
<thead>
<tr>
<th>Soffit Depth</th>
<th>8&quot;—8 1/2&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE &amp; 1 1/4&quot;</td>
<td>F2906</td>
<td>F2919</td>
<td>F2932</td>
</tr>
<tr>
<td>1&quot;</td>
<td>F2907</td>
<td>F2920</td>
<td>F2933</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>F2908</td>
<td>F2921</td>
<td>F2934</td>
</tr>
<tr>
<td>MASONRY</td>
<td>F2946</td>
<td>F2948</td>
<td>F2950</td>
</tr>
</tbody>
</table>

HIGH SIDE

RAKE Eave Strut Depth

<table>
<thead>
<tr>
<th>Soffit Depth</th>
<th>8&quot;—8 1/2&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>F2909</td>
<td>F2922</td>
<td>F2935</td>
</tr>
<tr>
<td>3/4&quot;,1&quot;,1 1/4&quot;</td>
<td>F2910</td>
<td>F2923</td>
<td>F2936</td>
</tr>
<tr>
<td>MASONRY</td>
<td>F2947</td>
<td>F2949</td>
<td>F2951</td>
</tr>
</tbody>
</table>
1 1/4", 1 1/2" and 3" Wall Panel

- **STANDARD GUTTER**
  - SHEETED
    - F2955
  - OPEN
    - F2955 + (see chart)
  - MASONRY
    - F2955 + (see chart)

- **OPEN GUTTER**
  - STANDARD — F2061 — F2061R — F2061L
  - Gutter Clip — F2111
  - End Cap — F2062
  - Exp Cover — F2063+F2064

- **EXTRA LARGE**
  - F2108 — F2108R — F2108L
  - Gutter Clip — F319+HW2992
  - End Cap — F2109
  - Exp Cover — F2110+F629

### Open Eave Strut Depth Table

<table>
<thead>
<tr>
<th>Wall Depth</th>
<th>Soffit Depth</th>
<th>8&quot;–8½&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1¼&quot;, 1½&quot;</td>
<td>NONE</td>
<td>F2901</td>
<td>F2914</td>
<td>F2927</td>
</tr>
<tr>
<td></td>
<td>¼&quot;, 1&quot;, 1½&quot;</td>
<td>F2902</td>
<td>F2915</td>
<td>F2928</td>
</tr>
<tr>
<td>3&quot;</td>
<td>NONE</td>
<td>F2906</td>
<td>F2919</td>
<td>F2932</td>
</tr>
<tr>
<td></td>
<td>¼&quot;, 1&quot;, 1½&quot;</td>
<td>F2907</td>
<td>F2920</td>
<td>F2933</td>
</tr>
</tbody>
</table>

### Masonry Eave Strut Depth Table

<table>
<thead>
<tr>
<th>Wall Depth</th>
<th>8&quot;–8½&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1¼&quot;, 1½&quot;</td>
<td>F2940</td>
<td>F2942</td>
<td>F2944</td>
</tr>
<tr>
<td>3&quot;</td>
<td>F2946</td>
<td>F2948</td>
<td>F2950</td>
</tr>
</tbody>
</table>
Contoured PBR Roof Panel - Perimeter Trim Reference
Northern (Endwall)

1 1/4" and 1 1/2" Wall Panel

SHEETED

RAKE ANGLE + (see chart)

MASONRY

RAKE ANGLE + (see chart)

STANDARD -- F2367

End Cap - F2202L+F2379

Slide Flashing -- F215 -- F675 -- F679

EXTRA LARGE -- F2455

Start End Cap -- F2265L+F2379

Slide Flashing -- F215 -- F675 -- F679

SHEETED

STANDARD -- F2653 -- F2653R -- F2653L

EXTRA LARGE -- F2679 -- F2679R -- F2679L

RAKE Eave Strut Depth

<table>
<thead>
<tr>
<th>Soffit Depth</th>
<th>8&quot;–8½&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE &amp; 1 1/8&quot; F2901</td>
<td>F2914</td>
<td>F2927</td>
<td></td>
</tr>
<tr>
<td>1&quot; F2902</td>
<td>F2915</td>
<td>F2928</td>
<td></td>
</tr>
<tr>
<td>3/4&quot; F2903</td>
<td>F2916</td>
<td>F2929</td>
<td></td>
</tr>
<tr>
<td>MASONRY F2940</td>
<td>F2942</td>
<td>F2944</td>
<td></td>
</tr>
</tbody>
</table>

HIGH SIDE Eave Strut Depth

<table>
<thead>
<tr>
<th>Soffit Depth</th>
<th>8&quot;–8½&quot;</th>
<th>10&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>F2904</td>
<td>F2917</td>
<td>F2930</td>
</tr>
<tr>
<td>3/8&quot;, 1&quot;, 1 1/8&quot; F2905</td>
<td>F2918</td>
<td>F2931</td>
<td></td>
</tr>
<tr>
<td>MASONRY F2941</td>
<td>F2943</td>
<td>F2945</td>
<td></td>
</tr>
</tbody>
</table>