7/8" CORRUGATED

INSTALLATION GUIDE
WITH TRIM, FLASHINGS AND DETAILS
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes to Designer / Installers</td>
<td>1</td>
</tr>
<tr>
<td>Fastener Placement and Selection</td>
<td>2-3</td>
</tr>
<tr>
<td>Key Roof Plan</td>
<td>4</td>
</tr>
<tr>
<td>Key Flashing / Trims</td>
<td>5-6-7-8</td>
</tr>
<tr>
<td>Eave Detail</td>
<td>9</td>
</tr>
<tr>
<td>Mini Eave Detail</td>
<td>10</td>
</tr>
<tr>
<td>Eave Pre Hung Gutter</td>
<td>11</td>
</tr>
<tr>
<td>Eave Post Hung Gutter</td>
<td>12</td>
</tr>
<tr>
<td>Gutter Splice</td>
<td>13</td>
</tr>
<tr>
<td>Gable Flashing</td>
<td>14</td>
</tr>
<tr>
<td>Mini Gable Flashing</td>
<td>15</td>
</tr>
<tr>
<td>Peak/ High Eave</td>
<td>16</td>
</tr>
<tr>
<td>Sidewall</td>
<td>17</td>
</tr>
<tr>
<td>Endwall</td>
<td>18</td>
</tr>
<tr>
<td>Formed Ridge</td>
<td>19</td>
</tr>
<tr>
<td>Hip and Ridge</td>
<td>20</td>
</tr>
<tr>
<td>Valley</td>
<td>21</td>
</tr>
<tr>
<td>Pitch Break High to Low</td>
<td>22</td>
</tr>
<tr>
<td>Pitch Break Low to High</td>
<td>23</td>
</tr>
<tr>
<td>Chimney</td>
<td>24-25</td>
</tr>
<tr>
<td>Pipe Flashing</td>
<td>26</td>
</tr>
<tr>
<td>Head &amp; Jamb Details</td>
<td>27</td>
</tr>
<tr>
<td>Wall Detail Isometric</td>
<td>28</td>
</tr>
<tr>
<td>Wall Base trim</td>
<td>29</td>
</tr>
<tr>
<td>Outside Corner</td>
<td>30</td>
</tr>
<tr>
<td>Inside Corner</td>
<td>31</td>
</tr>
<tr>
<td>Notes</td>
<td>32</td>
</tr>
<tr>
<td>Custom Trim Form</td>
<td>33</td>
</tr>
<tr>
<td>Special Design Considerations</td>
<td>34</td>
</tr>
</tbody>
</table>
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

7/8" Corrugated 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 wood substrates.

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 7/8" Corrugated 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 resources for working with sheet metal.

Technical Assistance

Contact your WSDI sales or technical representative for any additional information or assistance.
Western States 7/8” Corrugated Panel
Installation, Flashings & Shop Drawing Detail Guide

Fastener Placement and Selection

7/8” Corrugated WALL Application (34 2/3” Coverage)

Notes to Installers:

• Fastener Selection will vary depending on type and thickness of substrate.
• Space panel lap screws 12” minimum -18” 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.

Proper Installation of Gasketed Fasteners

Correctly Driven

Under Driven

Over Driven
## Fastener Selection

<table>
<thead>
<tr>
<th>Description</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>#9 x1” Wood Drillers</td>
<td>Used to attach panels to dimensional Lumber and plywood</td>
</tr>
<tr>
<td>#9 x 1.5” Wood Drillers</td>
<td></td>
</tr>
<tr>
<td>#9 x2” Wood Drillers</td>
<td></td>
</tr>
<tr>
<td>#12-14 x 1” SD</td>
<td>Used to attach panels to Purlins and other metal substrates</td>
</tr>
<tr>
<td>#12- 14 x1.5” SD</td>
<td></td>
</tr>
<tr>
<td>#12- 14 x 2” SD</td>
<td></td>
</tr>
<tr>
<td>#12-24 x1.25”sd</td>
<td></td>
</tr>
<tr>
<td>#14 x 7/8” Lap Self tap</td>
<td>Used to attach Trims and panel side laps. Stainless to be used with A606-4 Steel</td>
</tr>
<tr>
<td>#14 x7/8 Lap Stainless</td>
<td></td>
</tr>
<tr>
<td>#10-12 x1” Pancake Wood</td>
<td>Used to secure trims to substrates. Also available in Stainless Steel.</td>
</tr>
<tr>
<td>#10-12 x 1” SD Self Driller</td>
<td></td>
</tr>
<tr>
<td>1/8” Stainless Rivets</td>
<td>Used for Trim to Trim attachment or trim to wall panels.</td>
</tr>
<tr>
<td>Stainless Screws</td>
<td>Used for panel attachment for panels made with A606-4 Steel</td>
</tr>
<tr>
<td>#10 x 1” Wood Driller</td>
<td></td>
</tr>
<tr>
<td>#10 x 1.5 Wood Driller</td>
<td></td>
</tr>
<tr>
<td>#10 x 2” Wood Driller</td>
<td></td>
</tr>
</tbody>
</table>

* The table above shows the panel Fasteners provided by WSD. Special order screws are available.
<table>
<thead>
<tr>
<th>Details</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAVE FLASHING WS-4</td>
<td><img src="image1" alt="Diagram" /></td>
</tr>
<tr>
<td>MINI EAVE FLASHING WS-40</td>
<td><img src="image2" alt="Diagram" /></td>
</tr>
<tr>
<td>PITCH BREAK HIGH TO LOW WS-36</td>
<td><img src="image3" alt="Diagram" /></td>
</tr>
<tr>
<td>PITCH BREAK LOW TO HIGH WS-37</td>
<td><img src="image4" alt="Diagram" /></td>
</tr>
<tr>
<td>CUSTOM TRIM REGLET FLASHING WS-29</td>
<td><img src="image5" alt="Diagram" /></td>
</tr>
<tr>
<td>GABLE FLASHING WS-16-UGF</td>
<td><img src="image6" alt="Diagram" /></td>
</tr>
<tr>
<td>MINI GABLE FLASHING WS-41</td>
<td><img src="image7" alt="Diagram" /></td>
</tr>
<tr>
<td>PEAK/HIGH EAVE FLASHING WS-19</td>
<td><img src="image8" alt="Diagram" /></td>
</tr>
<tr>
<td>ENDWALL FLASHING WS-28</td>
<td><img src="image9" alt="Diagram" /></td>
</tr>
<tr>
<td>OVERSIZED VALLEY WS-23</td>
<td><img src="image10" alt="Diagram" /></td>
</tr>
<tr>
<td>STANDARD VALLEY WS-24</td>
<td><img src="image11" alt="Diagram" /></td>
</tr>
<tr>
<td>EXTENDED VALLEY WS-25</td>
<td><img src="image12" alt="Diagram" /></td>
</tr>
</tbody>
</table>

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)

STANDARD TRIM
| B | 01-14-13 |
| A | 06-01-12 |

DETAIL #: WSD-ST5

7/8" Corrugated
<table>
<thead>
<tr>
<th>RIDGE/HIP CAP WS-20H</th>
<th>DIE FORMED RIDGE CAP WS-21</th>
<th>GUTTER STRAP WS-12</th>
<th>BOX GUTTER END CAP WS-14</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
<td><img src="image3" alt="Diagram" /></td>
<td><img src="image4" alt="Diagram" /></td>
</tr>
<tr>
<td>* DENOTES ANGLE</td>
<td>* 5/12 PITCH WAX</td>
<td>5/8” HEM</td>
<td>3/8” HEM</td>
</tr>
<tr>
<td>10”</td>
<td>AVAILABLE IN 24Ga. GRAY</td>
<td>1/2”</td>
<td>8”</td>
</tr>
<tr>
<td>1/2” HEM</td>
<td></td>
<td>1/4”</td>
<td>1” TABS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCULPTURE PRE-HUNG GUTTER WS-1</th>
<th>BOX GUTTER PRE-HUNG WS-10</th>
<th>BOX GUTTER POST-HUNG WS-15</th>
<th>SCULPTURE POST-HUNG GUTTER WS-17</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5" alt="Diagram" /></td>
<td><img src="image6" alt="Diagram" /></td>
<td><img src="image7" alt="Diagram" /></td>
<td><img src="image8" alt="Diagram" /></td>
</tr>
<tr>
<td>* DENOTES ANGLE</td>
<td>* DENOTES ANGLE</td>
<td>* DENOTES ANGLE</td>
<td>* DENOTES ANGLE</td>
</tr>
<tr>
<td>4 1/4”</td>
<td>4 3/4”</td>
<td>4 3/4”</td>
<td>4 3/4”</td>
</tr>
<tr>
<td>COLOR SIDE</td>
<td>COLOR SIDE</td>
<td>COLOR SIDE</td>
<td>COLOR SIDE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPLICE WS-13 FOR BOX GUTTER</th>
<th>SPLICE WS-60 FOR SCULPTURE GUTTER</th>
<th>DOWNSPOUT STRAIGHT WS-26</th>
<th>DOWNSPOUT WITH KICKOUT WS-27</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image9" alt="Diagram" /></td>
<td><img src="image10" alt="Diagram" /></td>
<td><img src="image11" alt="Diagram" /></td>
<td><img src="image12" alt="Diagram" /></td>
</tr>
<tr>
<td>* 12” LONG</td>
<td>* 12” LONG</td>
<td>3”</td>
<td>3”</td>
</tr>
<tr>
<td>COLOR SIDE</td>
<td>COLOR SIDE</td>
<td>COLOR SIDE</td>
<td>COLOR SIDE</td>
</tr>
</tbody>
</table>

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
877-PURLINS (787-5467)
www.RustedRoofing.com
www.MetalDeck.com

STANDARD TRIM
7/8” Corrugated

<table>
<thead>
<tr>
<th>PANEL TYPE:</th>
<th>REV:</th>
<th>DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; Corrugated</td>
<td>B</td>
<td>01-14-13</td>
</tr>
<tr>
<td>A</td>
<td>06-01-12</td>
<td></td>
</tr>
<tr>
<td>DETAIL #:</td>
<td>WSD-ST7</td>
<td></td>
</tr>
<tr>
<td>DOWNSPOUT ELBOW WS-43</td>
<td>DOWNSPOUT OUTLET WS-75</td>
<td>DOWNSPOUT STRAP WS-42</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td><img src="image1" alt="Diagram of DOWNSPOUT ELBOW WS-43" /></td>
<td><img src="image2" alt="Diagram of DOWNSPOUT OUTLET WS-75" /></td>
<td><img src="image3" alt="Diagram of DOWNSPOUT STRAP WS-42" /></td>
</tr>
</tbody>
</table>

**Western States Metal Roofing**

901 W. Watkins St.  
Phoenix, AZ 85007

www.MetalForRoofing.com  
877-PURLINS (787-5467)

www.RustedRoofing.com  
www.MetalDeck.com

**STANDARD TRIM**

<table>
<thead>
<tr>
<th>PANEL TYPE:</th>
<th>REV:</th>
<th>DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; Corrugated</td>
<td>A</td>
<td>06-01-12</td>
</tr>
<tr>
<td>B</td>
<td>01-14-13</td>
<td></td>
</tr>
</tbody>
</table>
NOTE:
FOR HIGH SNOW AREA THE OVERHANG SHOULD BE 1" MAX.

7/8" CORRUGATED PANEL
INSIDE FOAM CLOSURE (SET IN SEALANT)

#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *FOOTNOTE

EAVE FLASHING (WS-4)

BLOCKING/FASCIA

* FOOTNOTE:
FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

EAVE FLASHING (WS-4)
* DENOTES ANGLE

APPROPRIATE UNDERLAYERMENT
WOOD DECKING
ROOF RAFTER

FASTENER AT 12" O.C.

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)
www.RustedRoofing.com
www.MetalDeck.com

GAUGE: ________  COLOR: ________
BREAKS: ________  FINISH: ________
LENGTH: ________  STRETCH OUT: ________
MATERIAL: _______________________

EAVE DETAIL
B 01-14-13
A 06-01-12
DETAIL #: WSD-E1
NOTE:
FOR HIGH SNOW AREA THE OVERHANG SHOULD BE 1” MAX.

7/8” CORRUGATED PANEL
INSIDE FOAM CLOSURE (SET IN SEALANT)

#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *FOOTNOTE

MINI EAVE FLASHING (WS-40)

BLOCKING/FASCIA

* FOOTNOTE:
FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
Phone: (602) 495-0048
Fax: (602) 261-7726
www.MetalForRoofing.com
877-PURLINS (787-5467)
www.RustedRoofing.com
www.MetalDeck.com
**APPRIATITE UNDERLAYMENT**

**WOOD DECKING**

**ROOF Rafter**

**FASTENER AT 12” O.C.**

**BLOCKING/FASCIA**

**7/8” CORRUGATED PANEL**

**INSIDE FOAM CLOSURE**

*SET IN SEALANT*

**#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *FOOTNOTE**

**(WS-12) GUTTER STRAP AT 36” O.C**

**MAX. FASTEN STRAP TO GUTTER W/(2) #14X7/8” LAP SELF DRILLER**

**BREAKS:**

**FINISH:**

**MATERIAL:**

**GAUGE:**

**COLOR:**

**BREAKS:**

**FINISH:**

**LENGTH:**

**STRETCH OUT:**

**MATERIAL:**

---

**Western States Metal Roofing**

901 W. Watkins St.  
Phoenix, AZ 85007  
www.MetalForRoofing.com  
www.RustedRoofing.com  
www.MetalDeck.com

Phone: (602) 495-0048  
Fax: (602) 261-7726  
877-PURLINS (787-5467)
**APPROPRIATE UNDERLAYMENT**
**WOOD DECKING**
**ROOF RAFTER**

**BLOCKING/FASCIA**

---

**7/8” CORRUGATED PANEL**
INSIDE FOAM CLOSURE (SET IN SEALANT)

**#9X_ WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *FOOTNOTE**

(WS-12) GUTTER STRAP AT 36” O.C MAX. FASTEN STRAP TO GUTTER W/(2) #14X7/8” LAP SELF DRILLER

---

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

---

**GUTTER END CAP (WS-14)**
**GUTTER STRAP (WS-12)**
**BOX GUTTER POST-HUNG (WS-15)**

---

**FOOTNOTE:**
FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

---

**Western States Metal Roofing**
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)

**GUTTER DETAIL**
**POST HUNG**
**EAVE DETAIL**

**PANEL TYPE:**
7/8” Corrugated

**DETAIL #:**
WSD-EG2

**GAUGE:**
**COLOR:**

**BREAKS:**
**FINISH:**

**LENGTH:**
**STRETCH OUT:**

**MATERIAL:**

---

**REV:**
01-14-13
**DATE:**
06-01-12
POP RIVET ONE SIDE AS REQUIRED

*GUTTER SPLICE (WS—___)

APPLY NON-CURING BUTYL SEALANT ON BOTH SIDES OF GUTTER

NOTE:
GUTTER SPLICE TO BE INSTALLED ON OUTSIDE OF GUTTER

BOX GUTTER

FOR POST/PRE-HUNG GUTTER

WESTERN STATES METAL ROOFING
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
877-PURLINS (787-5467)
www.RustedRoofing.com
www.MetalDeck.com

WSD-EG37/8" Corrugated
Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)

#14x7/8" LAP SELF DRILLER
@ 12" O.C. MAX.

BUTYL TAPE SEAL

GABLE FLASHING
(WS-16-UGF)

#9x WOOD SCREW TBD HEX HEAD
(SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) * FOOTNOTE

7/8" CORRUGATED PANEL

APPROPRIATE UNDERLAYMENT

WOOD DECKING

ROOF RAFTER

* FOOTNOTE:
FASTENER TYPE OVER PURLINS
TO BE #12X SELF DRILLER FASTENER

#9x WOOD SCREW TBD HEX HEAD

GABLE FLASHING
(WS-16-UGF)

GAUGE: ________  COLOR: ________

BREAKS: ________  FINISH: ________

LENGTH: ________  STRETCH OUT: ________

MATERIAL: ________

GABLE FLASHING
DETAIL

7/8" Corrugated

DETAIL #: WSD-GF1

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)
#14x7/8" LAP SELF DRILLER
@ 12" O.C. MAX.

BUTYL TAPE SEAL

MINI GABLE FLASHING
(WS-41)

#9X_ WOOD SCREW TBD HEX HEAD
HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *

7/8" CORRUGATED PANEL

COLOR SIDE

WOOD DECKING

ROOF RAFTER

APPROPRIATE UNDERLAYERMENT

* FOOTNOTE:
FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)

MINI GABLE FLASHING DETAIL
7/8" Corrugated

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

B 01-14-13
A 06-01-12

REV: DATE:
WSD-MGF2
DETAIL #:

PANEL TYPE:

REV: DATE:

A

PEAK FLASHING/HIGH EAVE DETAIL

WSD-PK3

16

16

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

OUTSIDE FOAM CLOSURE
(SET IN SEALANT)

7/8" CORRUGATED PANEL

#9X WOOD SCREW TBD HEX
HEAD (SEE PAGE 3 & 4 FOR
FASTENER PLACEMENT AND
SELECTION) * FOOTNOTE

5" (VARIES)
COLOR SIDE

2" HEM

7/8" HEM

2" HEM

B

01-14-13

A

06-01-12

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
Phone: (602) 495-0048
Fax: (602) 261-7726
www.MetalForRoofing.com
877-PURLINS (787-5467)
www.RustedRoofing.com
www.MetalDeck.com

#9X WOOD SCREW TBD HEX
HEAD

BLOCKING/FASCIA

APPROPRIATE UNDERLAYMENT

WOOD DECKING

ROOF RAFTER

* FOOTNOTE:
FASTENER TYPE OVER PURLINS
TO BE #12X SELF DRILLER
FASTENER

GAUGE: ________ COLOR: ________

BREAKS: ________ FINISH: ________

LENGTH: ________ STRETCH OUT: ________

MATERIAL: ________________

PEAK FLASHING/HIGH EAVE DETAIL

7/8" Corrugated

DETAIL #: WSD-PK3
**DETAIL #:**

**PANEL TYPE:** SIDEWALL FLASHING DETAIL

**REV:** 06-01-12  
**DATE:** 01-14-13

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

**BUTYL TAPE SEAL**

**2X BLOCKING**

**FASTENER AT 12” O.C.**

**WALL PANEL**

**SIDEWALL FLASHING**  
(WS-7-78U)

**#9X_ WOOD SCREW TBD HEX HEAD**  
(SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION)  
* FOOTNOTE

**7/8” CORRUGATED PANEL**

**APPROPRIATE UNDERLayment**

**WOOD DECKING**

**ROOF RAFTER**

**SIDEWALL FLASHING**  
(WS-7-78U)

---

**COLOR SIDE**

**6”**

**1/2” HEM**

---

**WESTERN STATES METAL ROOFING**

901 W. Watkins St.  
Phoenix, AZ 85007

Phone: (602) 495-0048  
Fax: (602) 261-7726

www.MetalForRoofing.com  
877-PURLINS (787-5467)

www.RustedRoofing.com  
www.MetalDeck.com

---

**SIDEWALL FLASHING DETAIL**

**GUAGE:** _______  
**COLOR:** _______

**BREAKS:** _______  
**FINISH:** _______

**LENGTH:** _______  
**STRETCH OUT:** _______

**MATERIAL:** _______

---

**DETAIL #:** WSD-SW4

**REV:** B 01-14-13  
**DATE:** A 06-01-12

**PANEL TYPE:** 7/8” Corrugated
FASTENER AT 12" O.C.

WALL PANEL

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

OUTSIDE FOAM CLOSURE (SET IN SEALANT)

ENDWALL FLASHING (WS-28)

7/8" CORRUGATED PANEL

#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *FOOTNOTE

ENDWALL FLASHING (WS-28)

* DENOTES ANGLE

2X BLOCKING

APPROPRIATE UNDERLAYMENT

WOOD DECKING

ROOF RAFTER

* FOOTNOTE:
FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
Phone: (602) 495-0048
Fax: (602) 261-7726
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

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

ENDWALL FLASHING DETAIL

7/8" Corrugated

DETAIL #: WSD-EW5
**FORMED RIDGE DETAIL**

**7/8" Corrugated**

**DETAIL #:** WSD-FR6

---

**Panel Type:**

- **Material:**
  - **Gauge:**
  - **Color:**
  - **Breaks:**
  - **Finish:**
  - **Length:**
  - **Stretch Out:**

**Western States Metal Roofing**

901 W. Watkins St. Phoenix, AZ 85007

Phone: (602) 495-0048 Fax: (602) 261-7726


---

**Footnote:**

- Fastener type over purlins to be #12X self driller fastener.
RIDGE/HIP CAP (WS-___)

2X BLOCKING

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

BUTYL TAPE SEAL

WOOD DECKING

ROOF RAFTER

APPROPRIATE UNDERLAYMENT

*FOOTNOTE:

FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

OUTSIDE FOAM CLOSURE (SET IN SEALANT)

7/8" CORRUGATED PANEL

#9X__ WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *FOOTNOTE

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)
*VALLEY FLASHING
(WS-23, WS-24, WS-25)
* DENOTES ANGLE

#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) * FOOTNOTE

NOTE:
ICE AND WATER SHIELD 3' EACH SIDE
AVALANCHE VALLEY FOR HIGH SNOW AND ICE AREAS

* FOOTNOTE:
FASTENER TYPE OVER PURLINS TO BE
#12X SELF DRILLER FASTENER

16GA VALLEY SUPPORT PLATE REQUIRED WHEN INSTALLED OVER PURLINS

INSIDE FOAM CLOSURE (SET IN SEALANT)
7/8" CORRUGATED PANEL
*VALLEY FLASHING (WS—__)

FASTENER AT 12" O.C.

APPROPRIATE UNDERLAYMENT
WOOD DECKING
ROOF RAFTER

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
Phone: (602) 495-0048
Fax: (602) 261-7726
www.MetalForRoofing.com
877-PURLINS (787-5467)

VALLEY DETAIL
7/8" Corrugated
DETAIL #: WSD-V7

GAUGE: ________  COLOR: ________
BREAKS: ________  FINISH: ________
LENGTH: ________  STRETCH OUT: ________
MATERIAL: ________
DETAIL #:

PANEL TYPE: 

REV: DATE:

A 06-01-12

B 01-14-13

PITCH BREAK HIGH TO LOW (WS-36)

#9x_ WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *

PITCH BREAK HIGH TO LOW (WS-36)

* FOOTNOTE:

FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
877-PURLINS (787-5467)
www.RustedRoofing.com
www.MetalDeck.com

B 06-01-12

REVISION #:

DETAIL #:

PITCH BREAK HIGH TO LOW DETAIL

7/8" Corrugated

WSD-PB8
#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *FOOTNOTE

PITCH BREAK LOW TO HIGH

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

BUTYL TAPE SEAL

OUTSIDE FOAM CLOSURE
(SET IN SEALANT)

7/8" CORRUGATED PANEL

* FOOTNOTE:
FASTENER TYPE OVER PURLINS
TO BE #12X SELF DRILLER
FASTENER

2 ROWS OF BUTYL TAPE SEAL

APPROPRIATE UNDERLAYMENT

WOOD DECKING

ROOF RAFTER

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)
www.RustedRoofing.com
www.MetalDeck.com

PITCH BREAK LOW TO HIGH DETAIL

COLOR: ________
GAUGE: ________
STRETCH OUT: ________
FINISH: ________
LENGTH: ________
MATERIAL: ________

PITCH BREAK LOW TO HIGH DETAIL

7/8" Corrugated

DETAIL #: WSD-PB9

01-14-13
A 06-01-12
CHIMNEY FLASHING DETAILS

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
Phone: (602) 495-0048
Fax: (602) 261-7726
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

7/8" Corrugated

DETAIL #:

PANEL TYPE:

REV: DATE:

A

06-01-12

B

01-14-13

COLOR SIDE

COLOR SIDE

BUTYL TAPE SEAL

ANCHOR FASTENER BY OTHERS

2X BLOCKING

APPROPRIATE UNDERLAYMENT

WOOD DECKING

ROOF RAFTER

CAULK SEALANT

REGLET FLASHING CUSTOM TRIM (WS-29)

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

OUTSIDE FOAM CLOSURE (SET IN SEALANT)

ENDWALL FLASHING
(WS-28)

7/8" CORRUGATED PANEL

#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) * FOOTNOTE

* FOOTNOTE:
FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

MATERIAL:

LENGTH:

STRETCH OUT:

FINISH:

BREAKS:

GUAGE:

COLOR:

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
Phone: (602) 495-0048
Fax: (602) 261-7726
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

CHIMNEY FLASHING DETAILS

DETAIL #:

PANEL TYPE:

REV: DATE:

A

06-01-12

B

01-14-13

COLOR SIDE

COLOR SIDE

BUTYL TAPE SEAL

ANCHOR FASTENER BY OTHERS

2X BLOCKING

APPROPRIATE UNDERLAYMENT

WOOD DECKING

ROOF RAFTER

CAULK SEALANT

REGLET FLASHING CUSTOM TRIM (WS-29)

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

OUTSIDE FOAM CLOSURE (SET IN SEALANT)

ENDWALL FLASHING
(WS-28)

7/8" CORRUGATED PANEL

#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) * FOOTNOTE

* FOOTNOTE:
FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

MATERIAL:

LENGTH:

STRETCH OUT:

FINISH:

BREAKS:

GUAGE:

COLOR:

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
Phone: (602) 495-0048
Fax: (602) 261-7726
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

CHIMNEY FLASHING DETAILS

DETAIL #:

PANEL TYPE:

REV: DATE:

A

06-01-12

B

01-14-13

COLOR SIDE

COLOR SIDE

BUTYL TAPE SEAL

ANCHOR FASTENER BY OTHERS

2X BLOCKING

APPROPRIATE UNDERLAYMENT

WOOD DECKING

ROOF RAFTER

CAULK SEALANT

REGLET FLASHING CUSTOM TRIM (WS-29)

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

OUTSIDE FOAM CLOSURE (SET IN SEALANT)

ENDWALL FLASHING
(WS-28)

7/8" CORRUGATED PANEL

#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) * FOOTNOTE

* FOOTNOTE:
FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

MATERIAL:

LENGTH:

STRETCH OUT:

FINISH:

BREAKS:

GUAGE:
ANCHOR FASTENER BY OTHERS

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

BUTYL TAPE SEAL

2X BLOCKING

CAULK SEALANT

REGLET FLASHING CUSTOM TRIM (WS-29)

SIDEWALL FLASHING
(WS-7-78U)

#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) * FOOTNOTE

7/8" CORRUGATED PANEL

APPROPRIATE UNDERLayment

WOOD DECKING

ROOF RAFTER

* FOOTNOTE:
FASTENER TYPE OVER PURLINS
TO BE #12X SELF DRILLER FASTENER

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)

www.RustedRoofing.com
www.MetalDeck.com

CHIMNEY FLASHING DETAILS

7/8" Corrugated

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

B 01-14-13
A 06-01-12

REVIEW: DATE:

DETAIL #: WSD-CF11
VENT/PIPE FLASHING
SET IN SEALANT AND FORM TO PANEL PROFILE

7/8" CORRUGATED PANEL

FASTEN AT 1" O.C.

* SEE MANUFACTURING SPECIFICATIONS FOR INSTALLATION INSTRUCTIONS

<table>
<thead>
<tr>
<th>GAUGE:</th>
<th>COLOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BREAKS:</th>
<th>FINISH:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LENGTH:</th>
<th>STRETCH OUT:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MATERIAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

Phone: (602) 495-0048
Fax: (602) 261-7726
877-PURLINS (787-5467)
**Base Detail: 7/8" Corrugated**

- **Panel Type:** 7/8" Corrugated
- **Material:** Corrugated Metal
- **Finish:** Color Coated
- **Material:** WNEX W157/8"
- **Gauge:** 29
- **Length:** 12" O.C.
- **Breaks:** 2X Blocking
- **Finish:** Color Side
- **Footnote:** Fastener type over purlins to be #12x self drill fastener

**Specifications:**
- **Wood Decking:** Appropriate underlayment
- **Wall Frame:**
- **Base Trim:** (WS-6-78U)
- **#9x Wood Screw TBD Hex Head (see page 3 & 4 for fastener placement and selection) *FOOTNOTE**

**Contact:**
Western States Metal Roofing
901 W. Watkins St.     Phone: (602) 495-0048
Phoenix, AZ 85007        Fax: (602) 261-7726
www.MetalForRoofing.com 877-PURLINS (787-5467)

**Details:**
- B 01-14-13
- A 06-01-12
- REV: DATE:
#14X7/8" LAP SELF DRILLER
@ 12" O.C. MAX.

BUTYL TAPE SEAL

*OUTSIDE CORNER (WS-___-UOC)

#9X WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) *FOOTNOTE

7/8" CORRUGATED WALL PANEL

*FOOTNOTE:
FASTENER TYPE OVER PURLINS
TO BE #12X SELF DRILLER FASTENER

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
Phone: (602) 495-0048
Fax: (602) 261-7726
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com

A 06-01-12

OUTSIDE CORNER WALL DETAIL

7/8" Corrugated

B 01-14-13

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

DETAIL #: WSD-W16
#9X_ WOOD SCREW TBD HEX HEAD (SEE PAGE 3 & 4 FOR FASTENER PLACEMENT AND SELECTION) * FOOTNOTE

BUTYL TAPE SEAL

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

INSIDE CORNER (WS-56-UIC)

7/8" CORRUGATED WALL PANEL

APPROPRIATE UNDERLAYERMENT

WOOD DECKING

WALL FRAME

* FOOTNOTE:
FASTENER TYPE OVER PURLINS TO BE #12X SELF DRILLER FASTENER

COLOR SIDE

3/8" HEM

1" HEM

*INSIDE CORNER (WS-46-UIC)

COLOR SIDE

5"

1/2" HEM

7"

*INSIDE CORNER (WS-56-UIC)

COLOR SIDE

7" 1/2" HEM

*INSIDE CORNER (WS-77-UIC)

Western States Metal Roofing
901 W. Watkins St.
Phoenix, AZ 85007
Phone: (602) 495-0048
Fax: (602) 261-7726
www.MetalForRoofing.com
877-PURLINS (787-5467)
www.RustedRoofing.com
www.MetalDeck.com

INSIDE CORNER WALL DETAIL

B 01-14-13
A 06-01-12
DETAIL #: WSD-W17

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

7/8" Corrugated
<table>
<thead>
<tr>
<th>GAUGE:</th>
<th>COLOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BREAKS:</th>
<th>FINISH:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LENGTH:</th>
<th>STRETCH OUT:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CUSTOM TRIM NAME:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PANEL TYPE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; Corrugated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DETAIL #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSD-CT19</td>
</tr>
</tbody>
</table>

Western States Metal Roofing
901 W. Watkins St.  Phone: (602) 495-0048
Phoenix, AZ 85007  Fax: (602) 261-7726
www.MetalForRoofing.com
www.RustedRoofing.com
www.MetalDeck.com
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 7/8” corrugated panel is 36”. However depending on the finish selected and the required coil feed, it may be necessary for WSD 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 or Rustedroofing.com