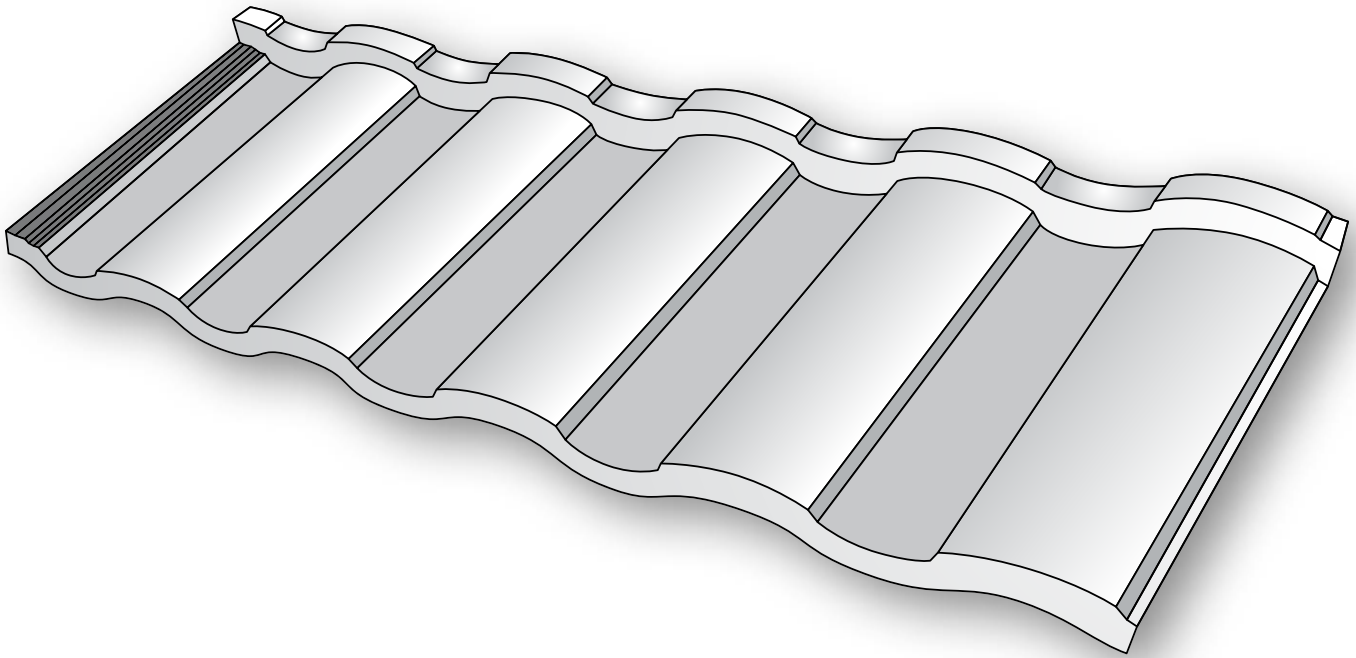# MetroROMAN®
Batten-less Installation Details

Issued December 29, 2005 | Revised July 13, 2013

INSTALLATION WARNING!

These install details are provided to demonstrate a recommended installation method for Metro Roof panels and accessories.

The Details and information in this document reflect current roofing practices used in the United States. Installers of Metro Roof panels and accessories should have knowledge of roof structures, an understanding of how to work with stone-coated steel panels and accessories, and be experienced at working on sloped roofs.

Metro recommends installers of MetroROMAN®products use a Metro Cutter, and have completed a 'SMART-Start On Site installer Training Orientation Program' (located at http://www.metroroofs.com/SmartStartTraining.cfm) for each profile installed. Metro does not consider its products to be "do-it-yourself" (D.I.Y.) mainly due to specialized cutting & bending tools used during installation.

INTRODUCTION

Installation Tools:
- Metro Installation Kit - 150lbs (68.1kg)
  - CUTTER - 40lbs (18.16kg)
  - FULL PANEL BENDER attachment - 62lbs (28.1kg)
  - FOOT BENDER - 48lbs (21.8kg)
- Hand Tools
  - Impact Driver
  - Red & Green Snips
  - 3" Hand Seamers

Other Tools:
- Nail Gun
- Hammer
- Tape Measure
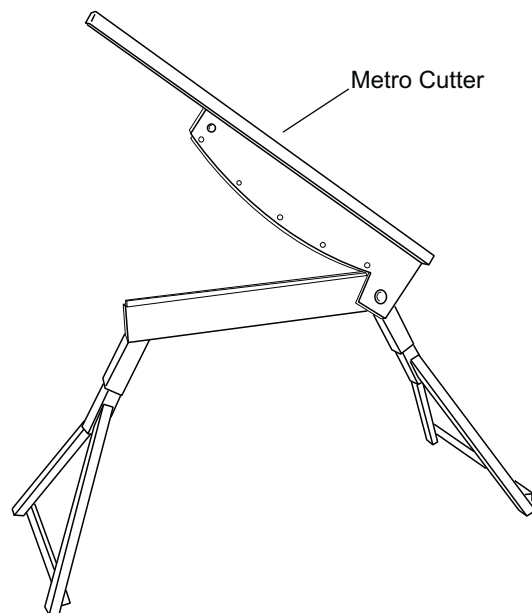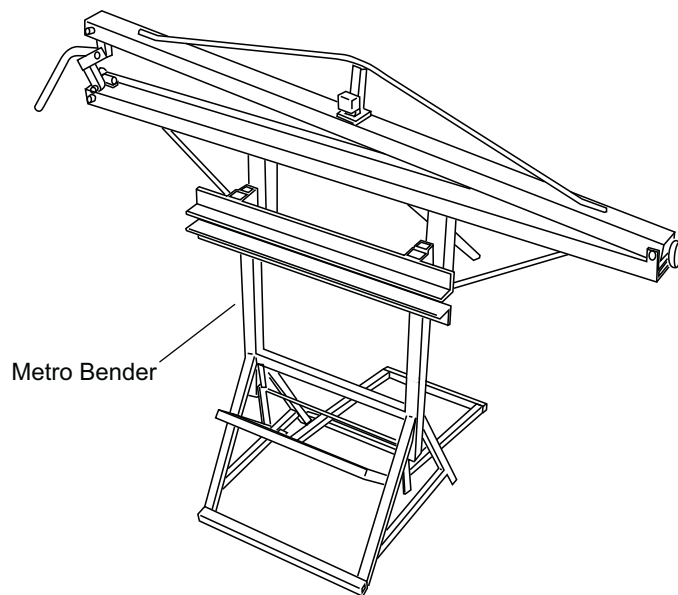- Caulking Gun
- String-Line
- Soap Stone (used to mark panels)

General:

These install details are designed to be used in conjunction with Metro's SMART-Start On-Site Installer Training Program. A certificate of completion is given to installers that complete the Metro SMART-Start On-Site Training Program for each Metro profile.

Metro Batten-Less install methods ensure the simplest application. Starting with the perimeter, flashing metals are installed, followed by the field panels, fitted from right to left, across the roof and up towards the ridge. Panels are measured and cut to fit areas around the perimeter of the roof; i.e. ridges, hips and valleys. Trim caps are then installed, followed by an overall quality reveiw of the entire roof.
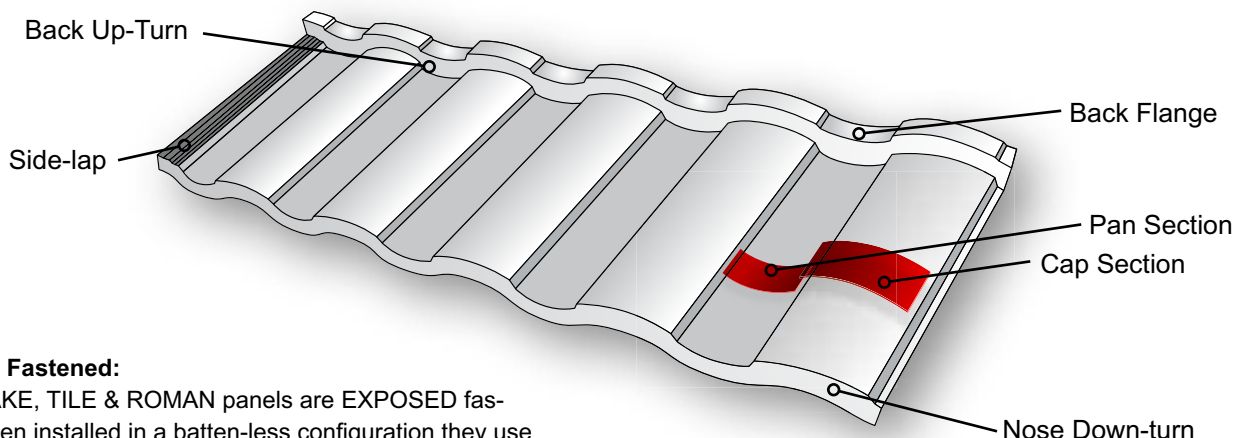
⚠ *In cold climate zones with Cathedral Ceilings a Counter-Batten and Batten grid system is suggested to help prevent ice-damming.*

Metro Bender

Metro Cutter

MetroROMAN®
Batten-less Installation Details

Back Up-Turn

Side-lap

Back Flange

Pan Section

Cap Section

Nose Down-turn

EXPOSED Fastened:

Metro SHAKE, TILE & ROMAN panels are EXPOSED fastened. When installed in a batten-less configuration they use vertically positioned fasteners across the back flange, and angled fasteners across the nose down turn. The dimensions are as follows:

Overall Length Range:	50-1/2" (1283mm)
Pitch (Course Cover):	14-7/16" (367mm)
Side-Lap:	2" (50mm)
Back Flange:	1" (25mm)
Back Up-Turn:	1" (25mm)
Front Nose Downturn:	1" (25mm)
Panel Cover:	49-1/2" (1258mm)
Panels Per Sq. (100-Sq.ft.):21-pcs (0.442 panels per Sq. M)	
Panels per Pallet: 400-pcs	

Materials:

Metro panels are produced from AZ-50, Aluminum-zinc alloy coated steel complying with ASTM A792.

Packing and Storage:

A pallet of Metro panels contains approximately 20 squares. (186sq mm) Care should be taken to store panels under a weather-proof cover or inside in an area free from moisture.

Roofing felt

Unless local conditions require otherwise, either one layer of type 30, or two layers of Type 15 lb. roofing felt or equivalent should be used with Metro panels.

Sealant/Caulking

Only exterior grade urethane or (non-acidic) silicone caulking should be used for sealant.

Fasteners:

All fasteners (Nails or Screws) used on a Metro roof shall meet or exceed the corrosion resistant standard as defined in ASTM B-117, (1,000-hr minimum Salt Spray Corrosion Resistance).

For HVHZ (High Velocity Hurricane Zone) areas refer to local code requirements and/or Metro website (www.metroroofs. com) for details.

Testing:

Metro panels have been tested in accordance with local, national & international building codes. Testing has been conducted to evaluate fire, wind, penetration, water infiltration, and durability resistance. Information regarding specific tests and approvals can be obtained from Metro Roof Products.

Ventilation:

Ensure proper attic ventilation as prescribed per local codes. Either Smart Vents or Ridge venting can be installed to achieve adequate ventilation.

Warranty:

Metro panels carry a limited warranty for fifty years. This limited warranty is transferable and does not cover damage due to improper handling or installation.

Dissimilar Metals:

To avoid adverse corrosion effects caused by dissimilar metals, COPPER and LEAD flashings should not be used with Metro roof products and accessories. (refer to Metro SMARTbrief #02004)

Finish coating

Minor scuffing of the Metro stone-coated finish can be repaired with a Metro Touch-Up Kit. Use the Metro base-coat acrylic supplied in the kit (not caulking) for repairs. Unfinished flashing material can be painted with durable acrylic aerosol paints. Colored aerosol paints should never be used as 'touch-up' on stone-coated products.

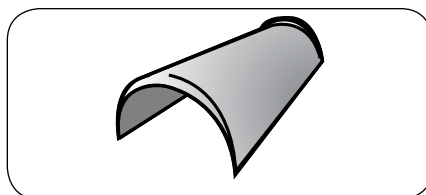*Colored areosol paints should never be sprayed on stone-coated panels & accessories*
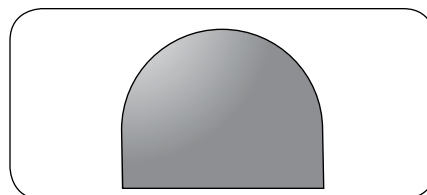
STONE-COATED ITEMS
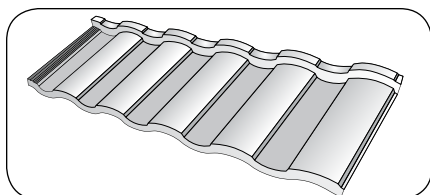
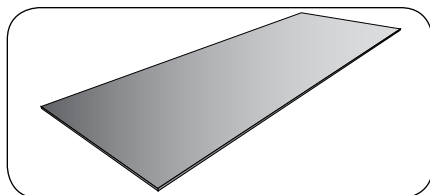**MetroROMAN®**
50-1/2" X14-7/16" (1283 X 367mm)
5.5 lbs. (2.5 Kg)

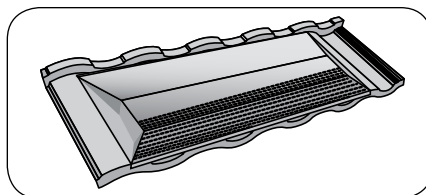**Barrel Trim Cap**
14-1/2" x 6" (368 X 150mm)
1-lbs (0.45 Kg)

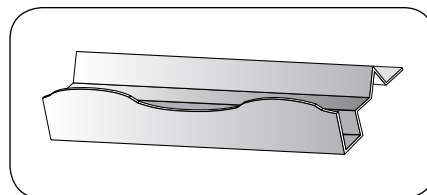**Barrel End Disc**
6" x 4" (150 X 100mm)
0.15 lbs (0.06 Kg)

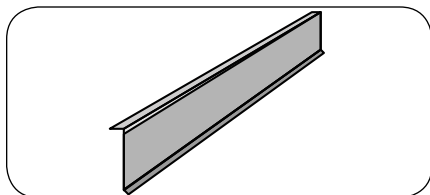**Flat-Stock Sheets**
52" X 18" (1321 X 457mm) 5.7 lbs
(2.59 Kg)

MetroROMAN® SMART-Vent
50-1/2" X 14-7/16" X 3" (1283 X 367
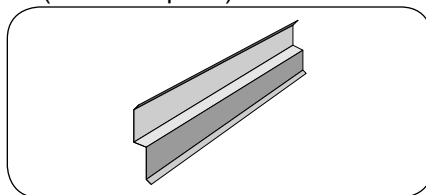X 76mm) 11 lbs (5 Kg) NFVA-82 Sq
in. (52.906 Sq mm)

Roman Bird-Stop V-Bat Riser
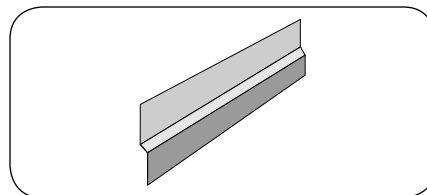76-3/16" x 2-3/4" (1930 X 68mm)
3.75 lbs (1.7 Kg)

Fascia - Counter Flashing
79" X 3-1/2" X 3/4" (2006 X 89 X
19mm) 2.50 lbs (1.14 Kg)

Z-Bar (Small)
79" X1-3/8" X 1/2 X 1-3/8" (2006 X
35 X 13 X 35mm) 2 lbs (.90Kg)

Z-Bar (Large)
79" X 2-1/4" X 1" X 2-1/4" (2006 X
57 X 25 X 57mm) 2.5 lbs (1.14 Kg)
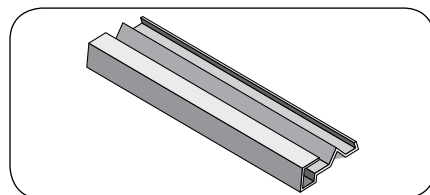
Rake Channel Shake
79" X 2" X 1" (2006 X 50 X 25mm)
3-lbs (1.36 Kg)
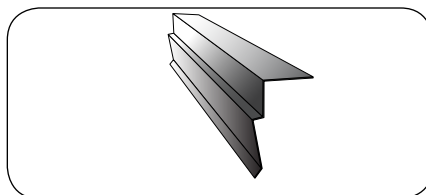
TRIM CAP Rake Metal
79" X 2" X 1-3/4" X 3/8" (2006 X 50
X 45 X 10mm) 3.5 lbs (1.60 Kg)
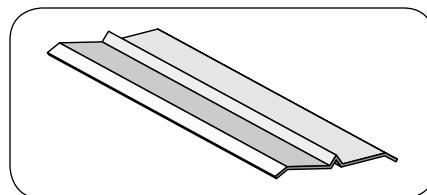
Valley Center Cover
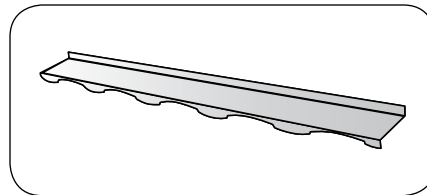79" X 4" (2006 X 100mm) 3.5 lbs
(1.60 Kg)
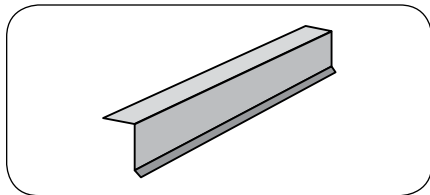
FL Drip Edge
79" X 2" X 3-1/4" 3.3lbs.
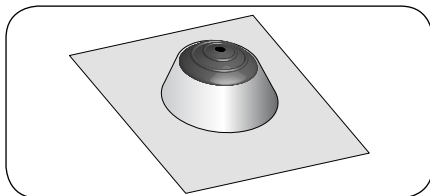3.5 lbs (1.6 Kg)
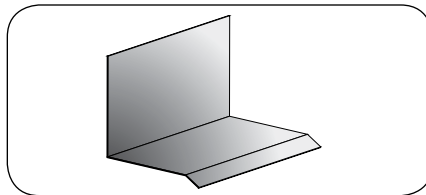
2.5" Head-Wall-Side-Wall
79" X 2-1/2" (2006 X 64mm) 3.3lbs
(1.50Kg)

Roman Top-Course
76-3/16" x 4-1/2" (1930 X
114mm)

Metro Roof Products

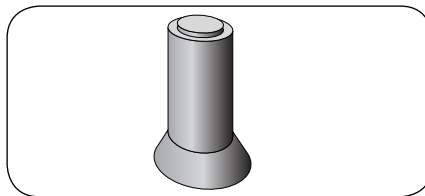## STONE-COATED ITEMS

SMART-jack (2-Pipe-sizes SMALL base)
3-N-1 for 3-Inch Pipes (75mm)
12" X 16" (300 X 407mm) 1 lbs (0.45Kg)
3-N-4 for 4-Inch Pipes (100mm)
12" X 16" (300 X 407mm) 1 lbs (0.45Kg)
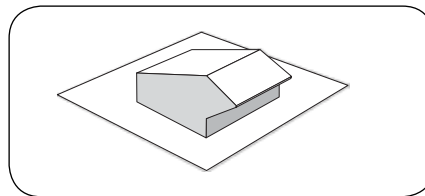**SMART-Jack (2-Pipe Sizes - LARGE Base**
3-N-1 for 3-Inch Pipes (75mm)
18" X 18" (457 X 457mm) 1.4 lbs (0.64Kg)
3-N-4 for 4-Inch Pipes (100mm)
18" X 18" (457 X 457mm) 1.4 lbs (0.64Kg)

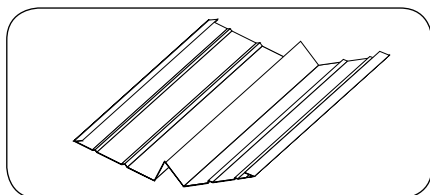

SMART-Sleeve (Pipe Cover)
16" X 4" (407 X 100mm) 1.65 lbs (0.75 Kg)

SMART-Box Vent (2-Sizes)
Small 3-4-Inch (75-100mm) 2 lbs (0.95Kg)
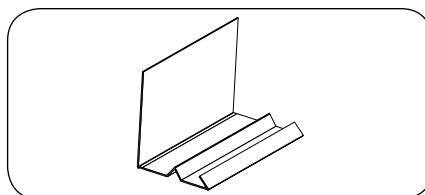Large 8-10-Inch (200-254mm) 5 lbs (2.27Kg)

PAINTED OR BARE METAL ACCESSORIES

DOUBLE V-VALLEY
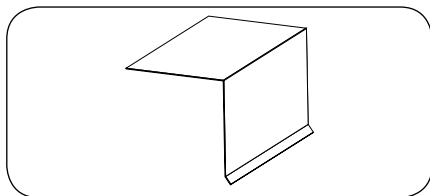120" X 20" (3048 X 508mm) 12.5 lbs (5.68 Kg)
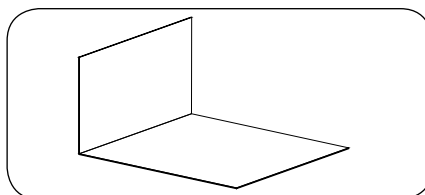
CHIMNEY SADDLE (Two Sizes)
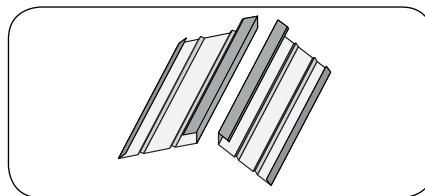120" or 60" X 18" X 4" (3048 or 1524 X 457 X 100mm) 13.5 or 6.75 lbs (6.13 or 3 Kg)

SIDE-WALL UNDER-PAN
120" X 3-1/2" X 4" (3048 X 89 X 100mm) 5 lbs (2.27 Kg)

DRIP EDGE
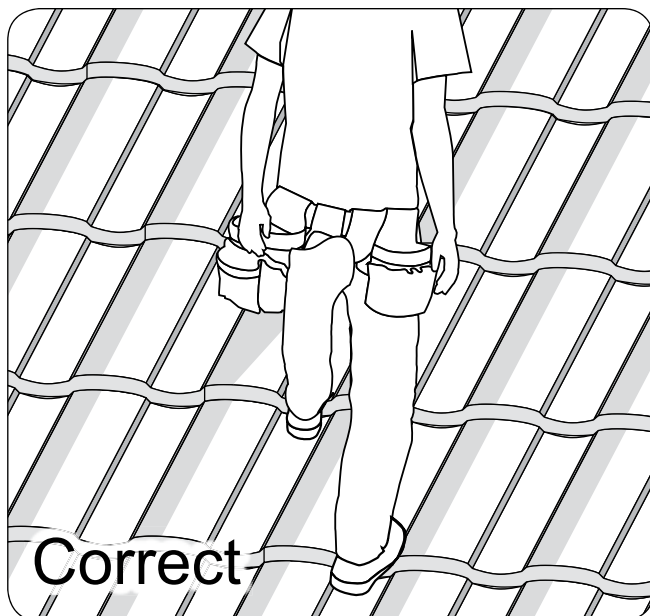120" X 1-1/2" X 1-1/2" (3048 X 38 X 38mm) 1.6 lbs (0.72 Kg)

SMART-Valley (2 Pcs Reqd.)
120" X 9-1/4" X 1-1/2" X 1-1/2" (3048 X 235 X 38 X 38mm) 7.35 lbs (3.3 Kg)
* Requires Valley Center Cover & sealant tape.

Metro Roof Products

WALKING ON YOUR METRO ROOF

Correct

Incorrect

General Information

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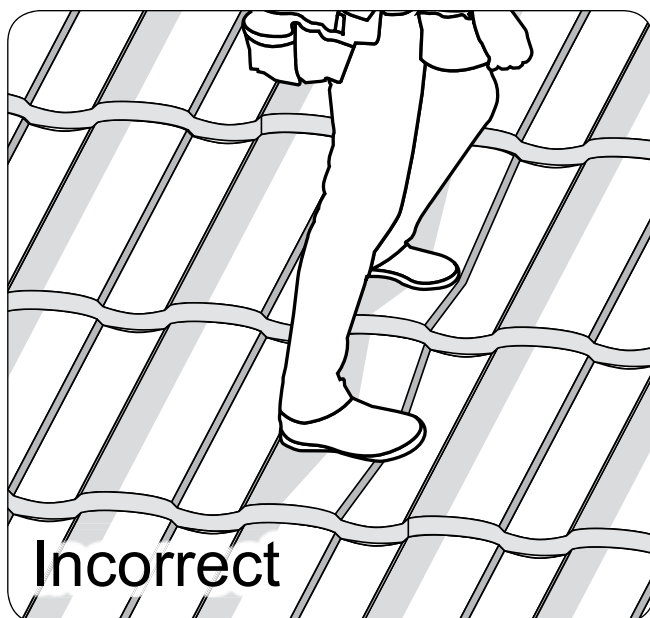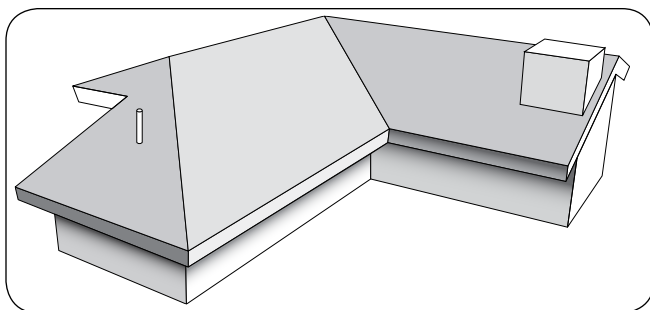
MetroROMAN®

When walking on MetroROMAN® your feet should be positioned over the nose or front downturn of the panels. Light weight, soft-soled shoes are recommended fro good grip and feel.
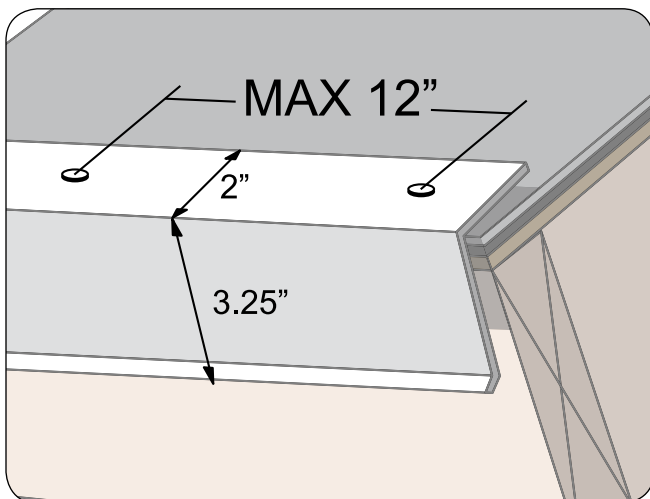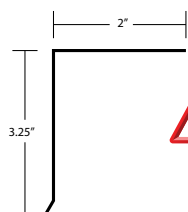

GENERAL

Metro Batten-less Roman panels are Installed on new or existing roofs pitched a minimum of 2-½:12 (12 degrees). An underlayment is to be installed as per local code and manufacturers instructions.
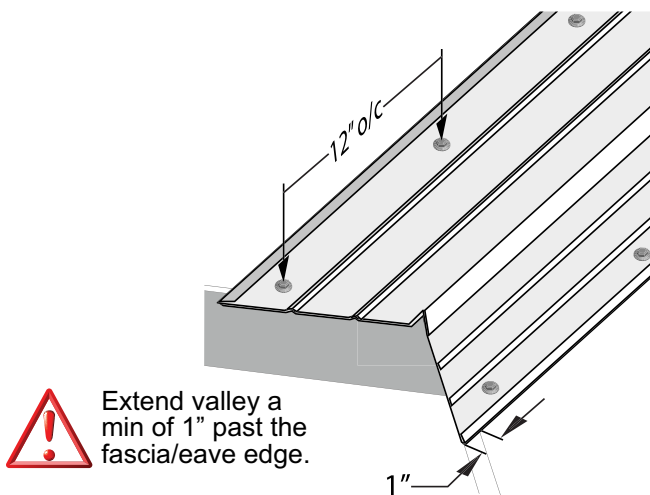
DRIP EDGE

MAX 12"

2"

3.25"

Install Drip Edge Metal across fascia.

2"

3.25"

⚠️ *Florida and other high wind areas use the Metro FL-FASCIA Stone-Coated metal.*

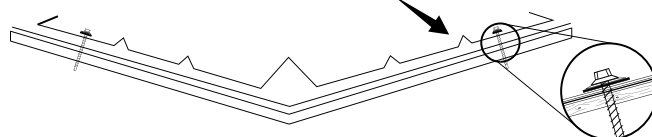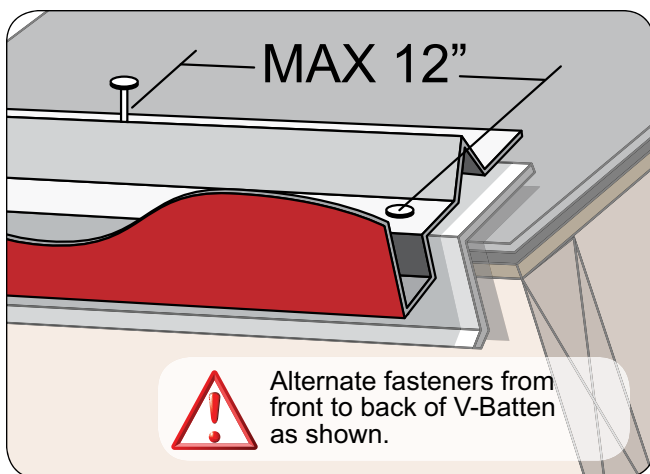For HVHZ (High Velocity Hurricane Zone) areas, perimeter flashings are fastened per local code

20" DOUBLE 'V' VALLEY

12" o/c

⚠️ Extend valley a min of 1" past the fascia/eave edge.

1"

Install 20" (508mm) Double 'V' Valley metal overlapping a min. of 4" (100mm). Valleys are attached with site fabricated clips as shown. Washer and Rubber Grommet screws are acceptable at the outside locations, as shown.

This valley metal allows for either an "Open" or "Closed" valley detail.

#10- X 1-1/2" HWH w/Rubber Washer

Metro Roof Products

BIRD-STOP METAL

MAX 12"

⚠️ Alternate fasteners from front to back of V-Batten as shown.

Roman panels use the "V-batten Bird-stop" which incorporates an integral 'V' batten to provide panel support at the fascia. The 'Bird-Stop' riser metal creates a 3/4" off-set from the fascia. The use of this 'Bird-stop' requires standard Drip-Edge , or Metro FL-FASCIA metal to be installed onto the roof deck first.

⚠️ *When positioning Bird-Stop at the rake edge cut 3" off the Bird-Stop piece allowing easier fitting & bending of the rake edge panel cuts.*

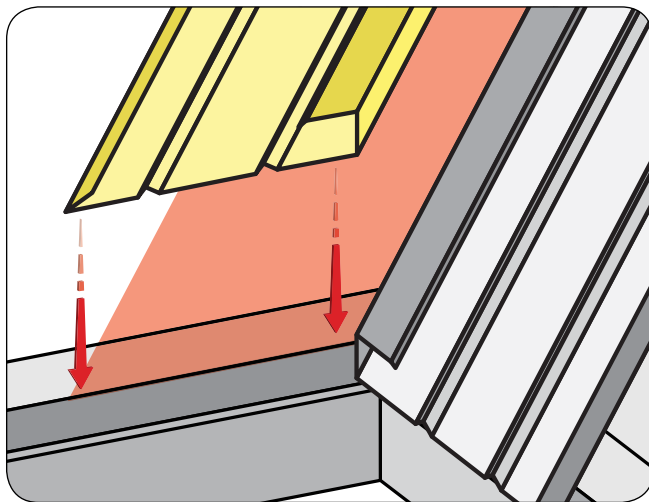## BIRD-STOP METAL - VALLEY METAL INTERSECTION

1

90°

2

⚠️ *Bird-stop metal extends into valleys as shown.*
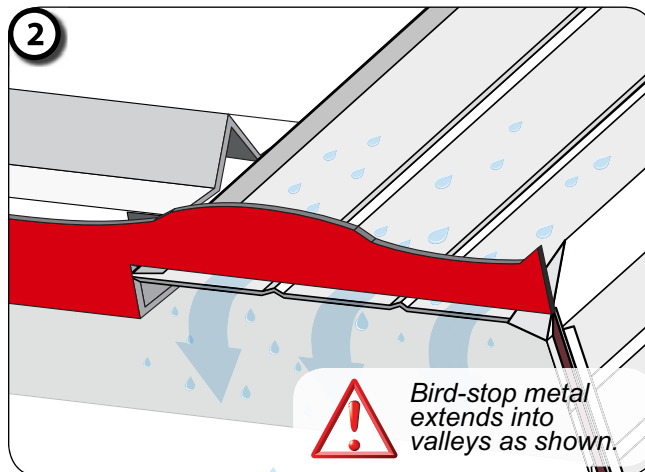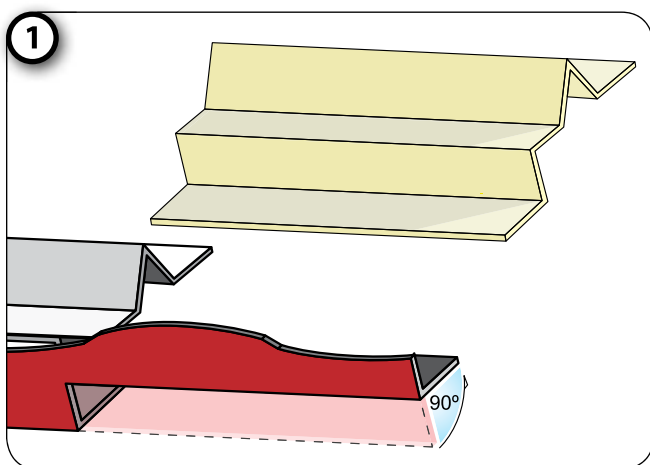
INTERNAL VALLEY CORNER NOTCHING DETAIL

3

4
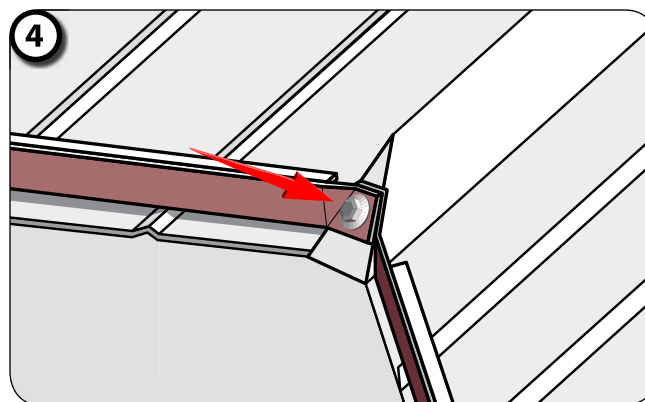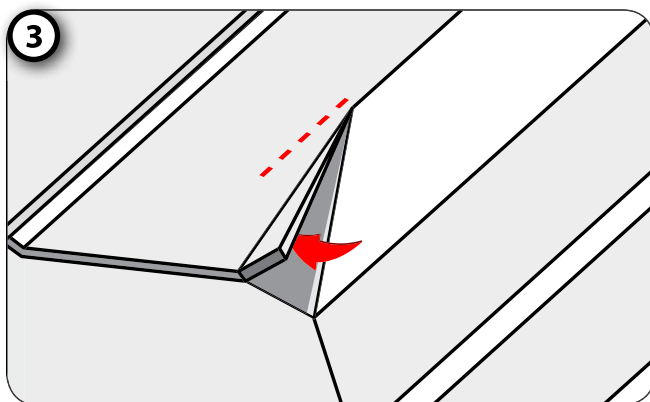
Stitch screw Bird-Stop to Valley center flap as shown.

SMART-VALLEY


Metro SMART-Valley consists of,
a) 1-pc SMART-Valley (Use on left side)
b) 1-pc SMART-Valley (Use on right side)
c) 1-pc Valley Cover (Sold separately)

Metro SMART-Valley uses 2-pieces per each 10-foot (3.05m) length of valley.

Estimating formula: Lin-ft of Valley divided by 9.75 X 2 = # of SMART-Valley required.

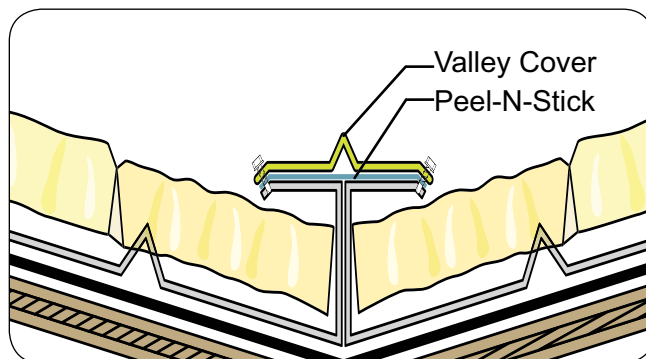Install each side of the SMART-Valley as shown, fastening as you normally do for a valley pan. Make sure the center is tightly butted together as shown below.

Metro Valley Cover
Peel-N-Stick Material
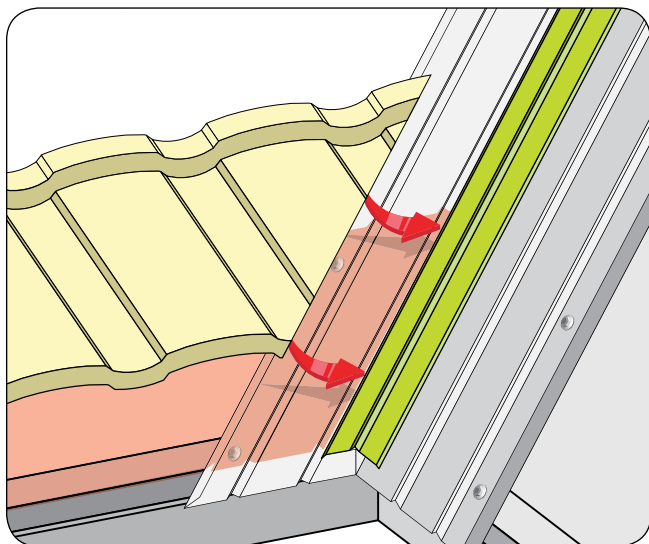Metro SMART-Valley Pan
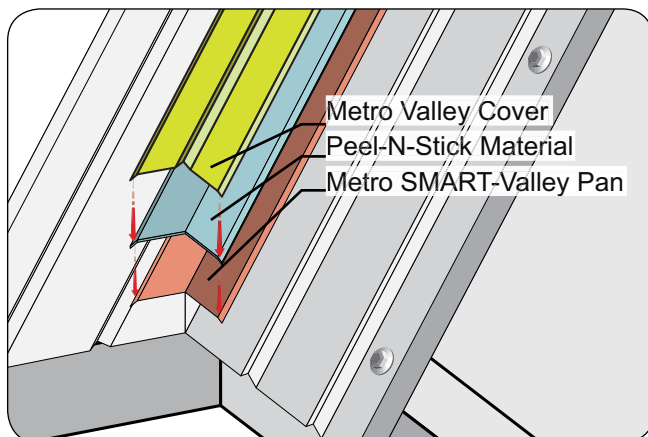
Install a strip (Min 4-in (100mm) wide) of Peel-N-Stick type material down the entire length of the valley over the center seam as shown. Install Metro Valley Cover over the center seam and stitch screw into position centered down the valley. Vertical laps for both the Peel-N-Stick and the Valley Cover are a min of 4-in (100mm).

Mitre cut the Metro panels to the angle of the valley and install them into the trough created by the SMART-Valley section beneath the previously installed valley cover.
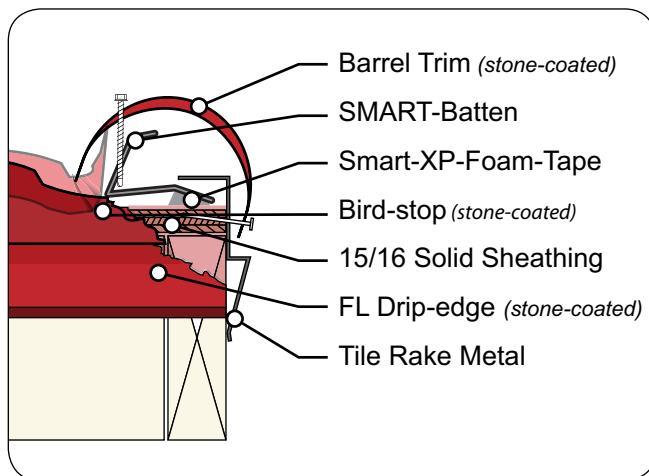
IMPORTANT NOTE:
When using the SMART-Valley with Metro Roman Tile it may be necessary to paint the inside of each valley pan section to prevent the inside surface from shining when viewing the roof from certain angles.


Valley Cover
Peel-N-Stick

MetroROMAN® Batten-less Install Details

⚠ *Indicates critical areas of installation*

Rev 7/13/13   Page 9

Metro Roof Products

RAKE METAL

Barrel Trim *(stone-coated)*
SMART-Batten
Smart-XP-Foam-Tape
Bird-stop *(stone-coated)*
15/16 Solid Sheathing
FL Drip-edge *(stone-coated)*
Tile Rake Metal

MetroTile Rake metal is installed along the rake edges as shown. This metal edging aids in positioning Metro Trim caps. Tile Rake metal is placed on the wood build-up. The Metro trim Caps cover battens and folded up Metro panel, as shown.

Fasten

Fasten
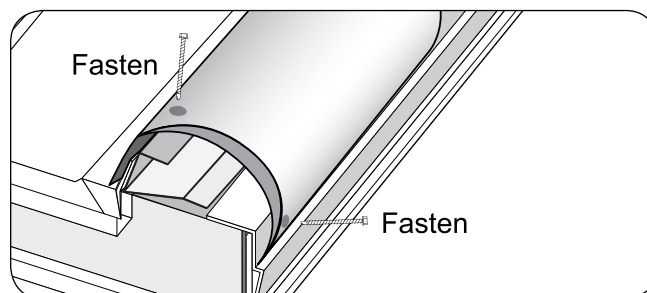
⚠ *2" X 1-3/4" X 1-1/2"*
Metro Tile Rake Metal is now available in stone-coat finish.

SMART Batten
SMART-XP-Foam-Tape
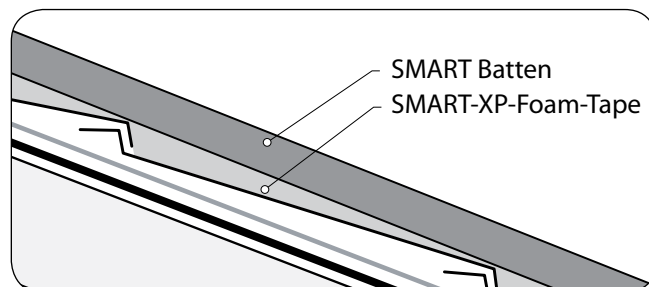
HIP & RIDGE BATTEN (ALTERNATIVE)

5"
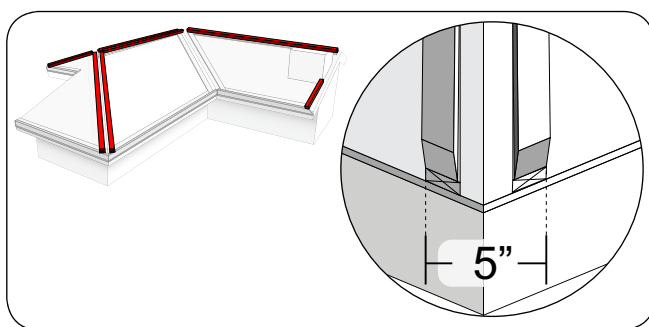
2X2 ridge battens are used to provide approximately 2" of build-up height for hip and ridge pcs. Hip battens are installed directly on top of a 1x2" spacer batten to allow cut and bent panels to be nested against the battens.

⚠ *Space Ridge / Hip battens 5-inches apart.*

RIDGE

5"
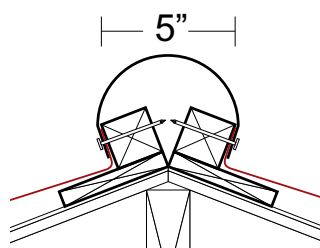
2-Trim cap fasteners in each side of cap as shown, spaced 14 ½" or on every trim cap.
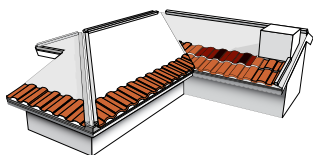
HIP

(127mm)
5"
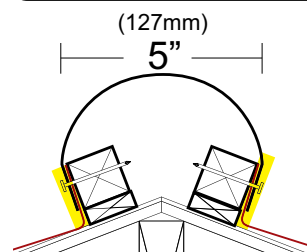
⚠ *Support battens for HIP must be flush with 2X2 battens.*

Two (2) Trim cap fasteners in each side of cap as shown, spaced 14 ½" or every trim cap. Align 2X2 battens flush with 1X2 ripped spacer battens. Support battens must be flush as shown and ripped to fit the 5" width of hip build-up.
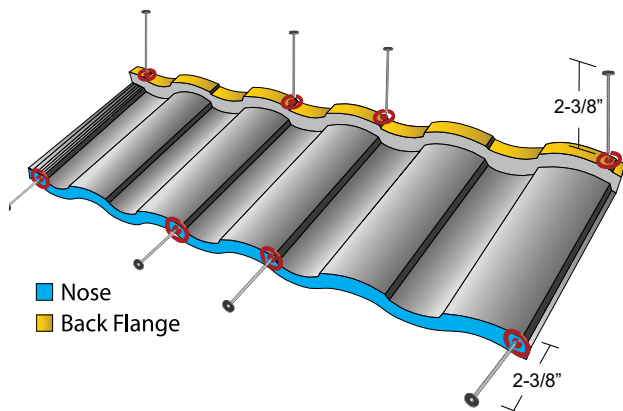
PANEL LAYOUT

Full panels are laid from the bottom (1st full course from the fascia) up to the ridge. Batten-less Roman panels are laid from RIGHT to LEFT.

Each Batten-Less Roman panel laid in a stagger pattern by two pan sections and is fastened with a minimum of four (4) .131" dia. X 2-3/8"" long corrosion resistant ring shank nails, or #-10 X 2-1/2" Hex headed screws through the nose and four (4) nails or Hex headed screws through the back-flange.

Always stagger Batten-less Roman panels 1-2 "pan' modules to eliminate negative visual effects of continuous side-laps.

NAILS

2-3/8"

- Nose
- Back Flange

2-3/8"

SCREWS

2"

- Nose
- Back Flange

2½"
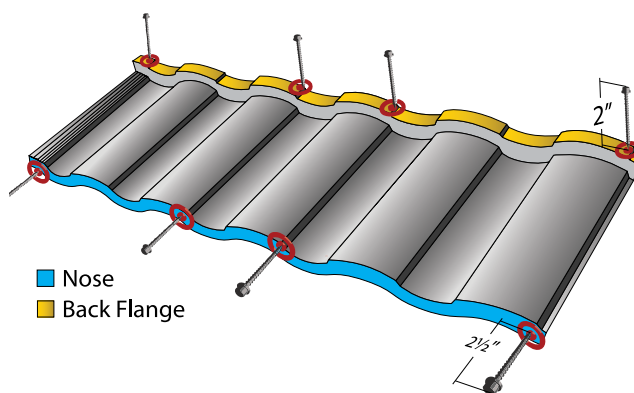
PANEL LAYOUT - TIP - TOP COURSE CALCULATION

MetroROMAN(R) panels have a profiled Top-Course accessory that can be used across the top row on either side of the ridge to eliminate the need to Bend, Cut & Install a small short course row.

After fitting the Fascia drip edge & 'Bird-Stop' metals, measure from the outside edge of the bird-Stop to the outside edge of the ridge batten where the last course or Top-Course will fold up against. For every 72-inches (1829mm) = 5-panel courses. This will allow a quick reference to see if Top-Course accessory metal is required. Roman course spacing is 14-7/16" (366.71mm)

FASTENING SEQUENCE
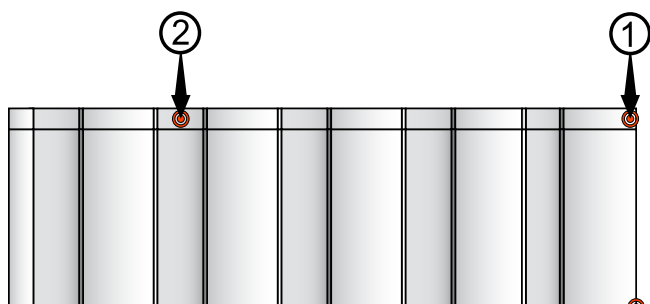
⚠ *To maintain course alignment follow only step (1) of the fastening pattern shown below. Each course of panels fastens together across the roof then install the balance of fasteners as shown in steps (3) & (4) for the rest of the roof field.*

It's critical to the overall panel layout and fastening to follow the sequence shown in steps 1-3 below. Failure to do so may result in panels not being aligned or side-laps and courses not fitting correctly.

For a standard installation, four (4) fasteners (.131" x 2-3/8" ring shank nails or #10 x 2-1/2" HH screws) in the 'Back Flange and four (4) fasteners in the 'Front Nose Downturn' of each panel is required.

HIGH VELOCITY HURRICANE ZONE areas Field, perimeter and Corners install = Six (6) #10 x 2" HH Screws in the 'Back Flange' and Six (6) #10 X 2-1/2" HH Screws in the 'Front Nose Downturn' of each panel.

PANEL COURSE ALIGNMENT
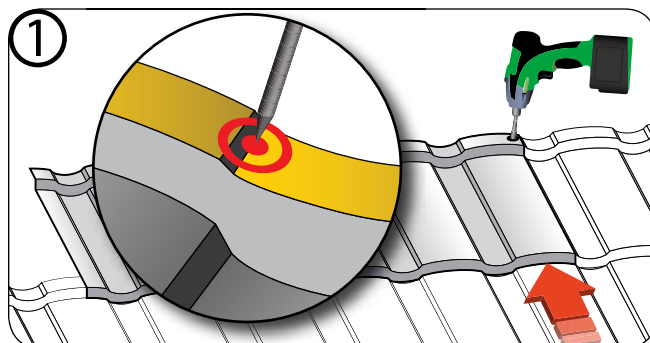
The 1st panel fastener is placed in the 'Back Flange' in the top right-hand side as shown.
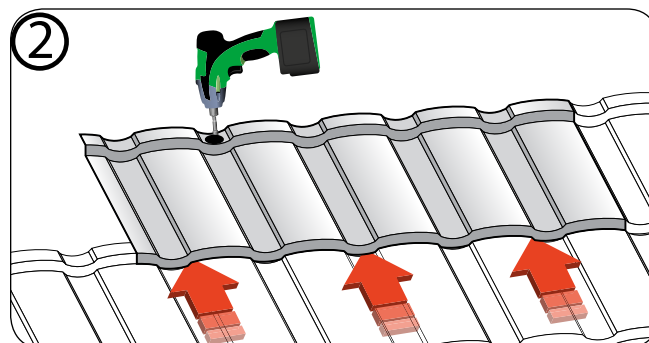
Place the 2nd panel fastener through the 'Back Flange' at the 2nd 'Under-pan' module as shown.
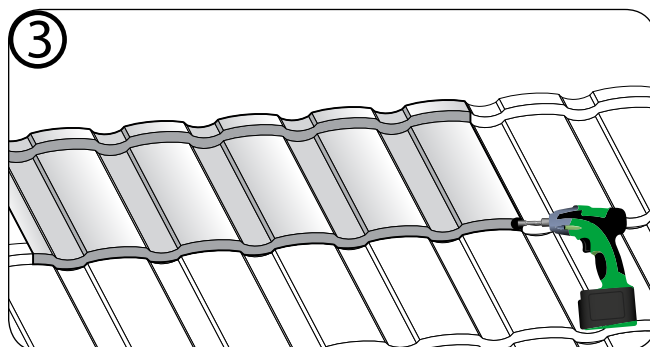
Align the overall panel and apply force as necessary to ensure the side-lap interlocks correctly, and then fasten through the 'Front Nose Downturn' on the far right-hand side of the panel as shown.

Nose
Back Flange

2"

2½"

⚠ *Metro Roman Batten-less panels installed direct-to-deck require front nose fasteners to be #10 x 2 ½" long Hex Head Screws.*
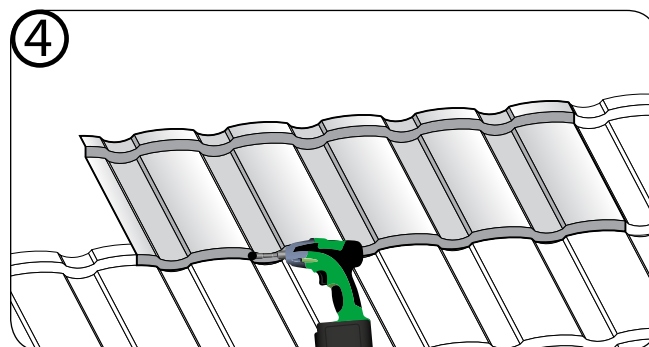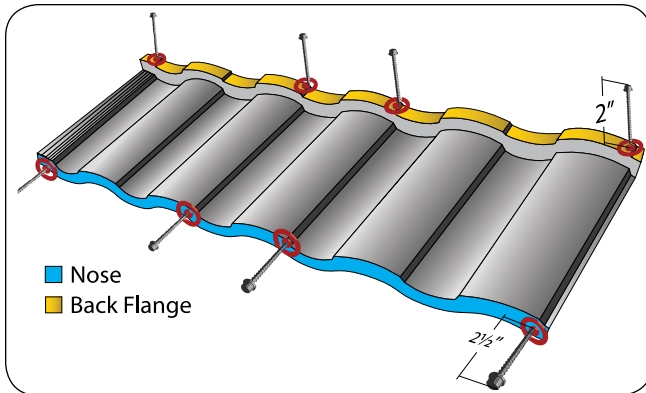
Standard fastening pattern for Metro Roman Batten-Less uses four (4) fasteners across the back flange and four (4) across the front down turned nose of each panel. For 'Standard' installations using screws, Metro recommends a #10 X 2" inch ¼"-Hex Head screw in the Back Flange and a #10 X 2-1/2" inch ¼"-Hex Head screw in the Nose).

This sheet shows 'Standard' fastening pattern using screws. Refer to Metro's High Velocity Hurricane Zone (HVHZ) fastening details found in Metro's Florida Building Code HVHZ Approval FL-6710 for details.

FASTENING BATTEN-LESS ROMAN PANELS - *SCREWS*

1
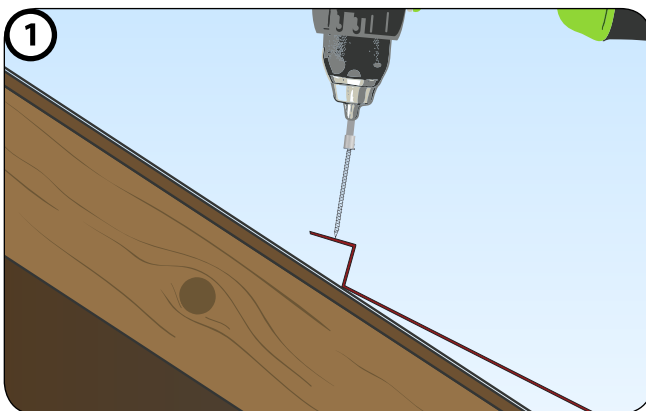
Panel back flange is fastened vertically into roof deck as shown.

2
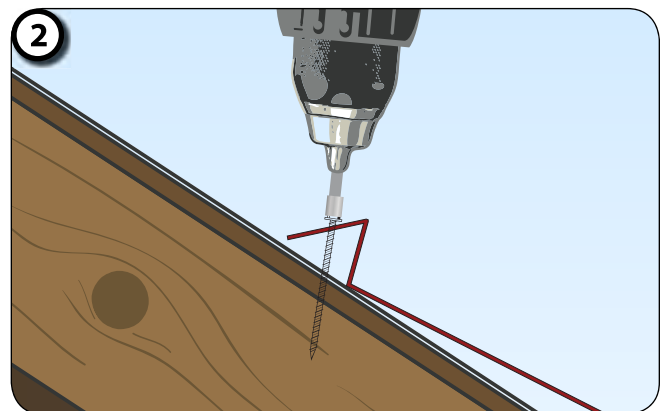
Panel back flange is 'seated' down onto roof deck.

3

90°
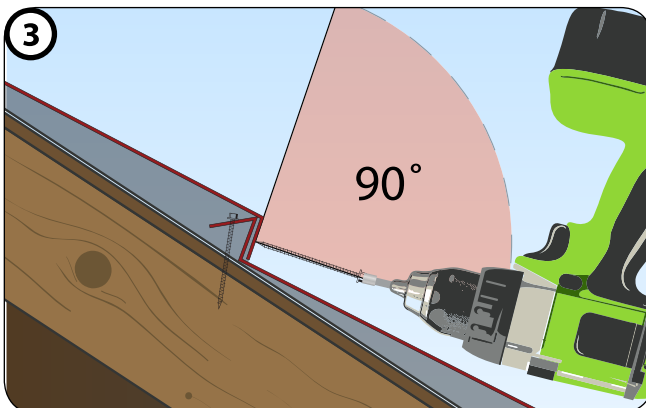
Start fastener at a 90° angle to the panel as shown.

4
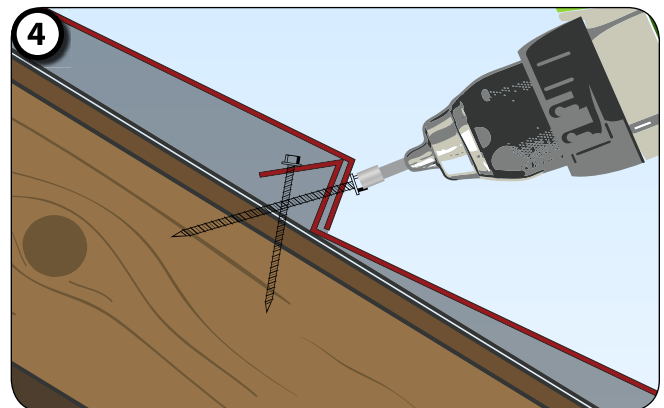
Once fastener has penetrated the nose, angle the screw to penetrate the back up-stand of the panel beneath and into the decking as shown.

Metro Roof Products

FASTENING THE FIRST COURSE

3
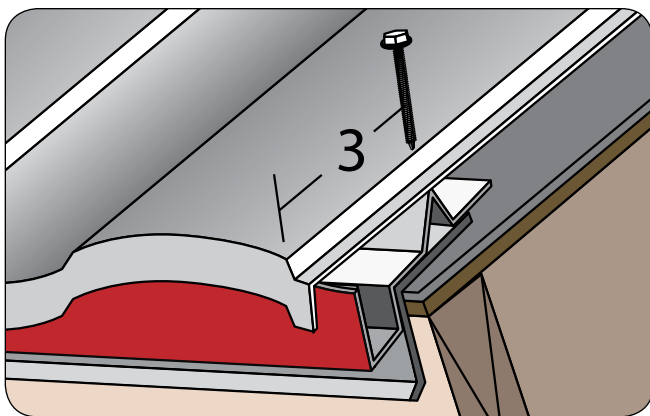
Fasten the First course up from the fascia through the top of the panel as shown. Top panel fastening is also acceptable behind Metro SMART-Vents, Chimneys and Skylights as necessary. Use fasteners with self-sealing rubber washers covered by a dome cap or seal fasteners then cover with Metro touch-up kit.

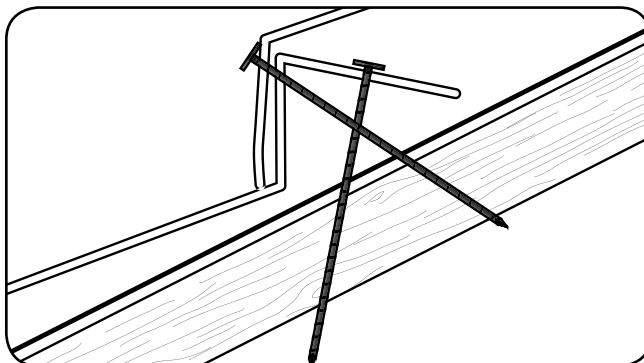⚠️ *Use the Metro "Touch-up" kit to cover each top nose fastener at the fascia.*

THE 'X' PATTERN

SCREWS
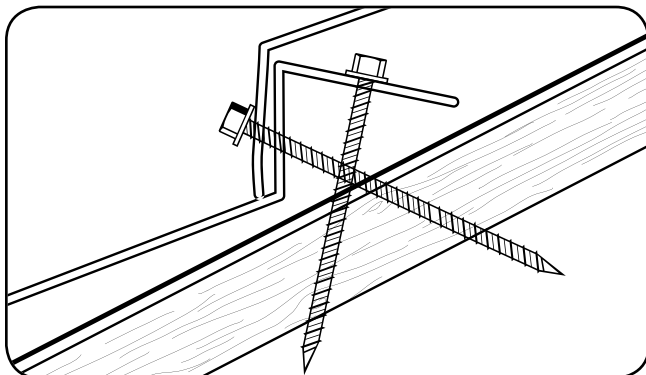
Due to the back flange and nose fastener angles, the "X" pattern provides exceptional uplift resistance.

NAILS

Due to the back flange and nose fastener angles, the "X" pattern provides exceptional uplift resistance.

Metro Roof Products

VALLEY PANELS

①

Cut off corner to prevent valley overflow
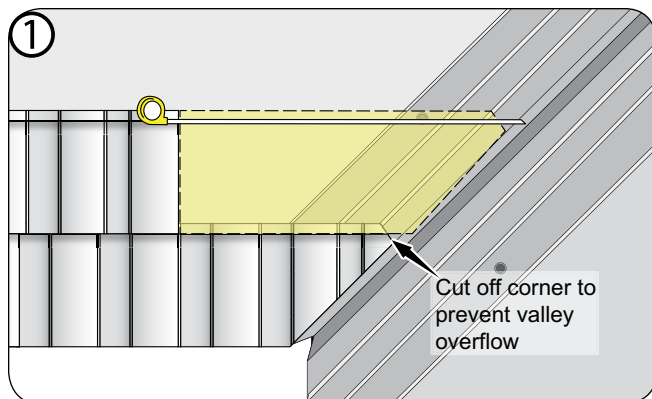
Measure, mark and cut panels to fit tightly against valley center (reverse 'V'). Fasten valley section panels to roof decking similar to the other panels without penetrating valley flashing.

②
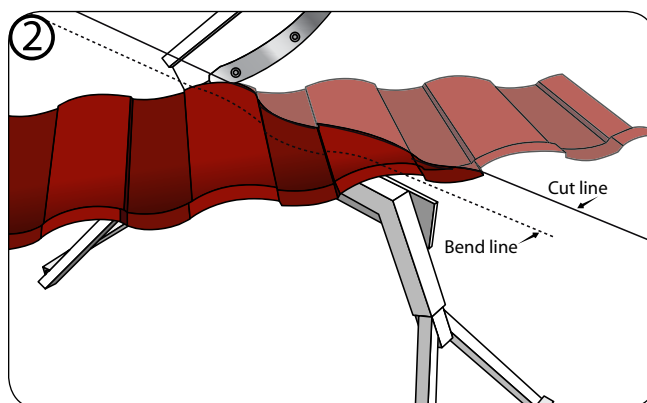
Cut line

Bend line

Mark the bend line 1½" in from the cut line.

③
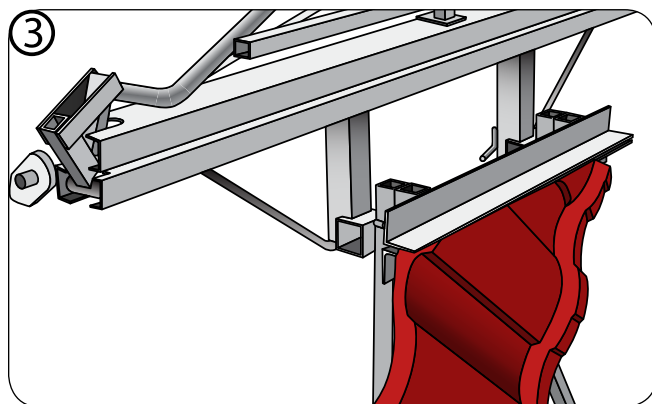
Bend panel down to fit into valley metal

CLOSED VALLEY

Sticth Screw
Panel
Valley Metal
Decking
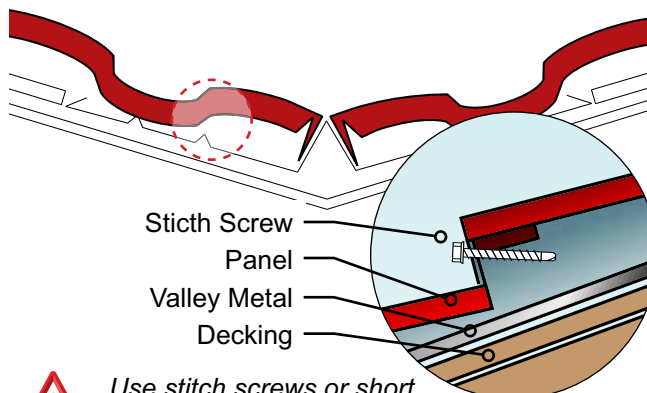
⚠ *Use stitch screws or short fasteners to prevent penetration of the valley pan.*

HIP PANELS

Bend line → ← Cut line

2"
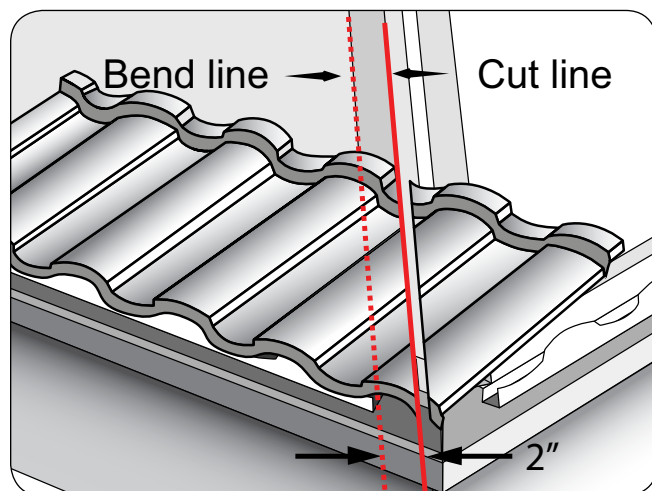
Hip cuts are measured, cut and bent in similarly to valleys. Each hip panel is bent up a min of 1½" and fastened against the hip board.

Bend Line   Cut line
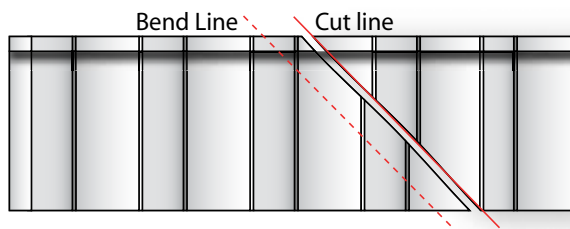
⚠ *¼" is deducted from actual measurement when making hip cuts.*

RAKE PANELS
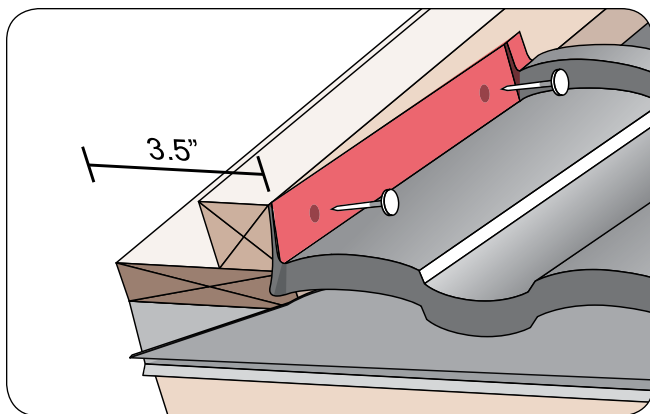
Measure, Cut & Bend-Up all rake panels against the rake build-up.

3.5"

CHIMNEYSADDLE PREPARATION
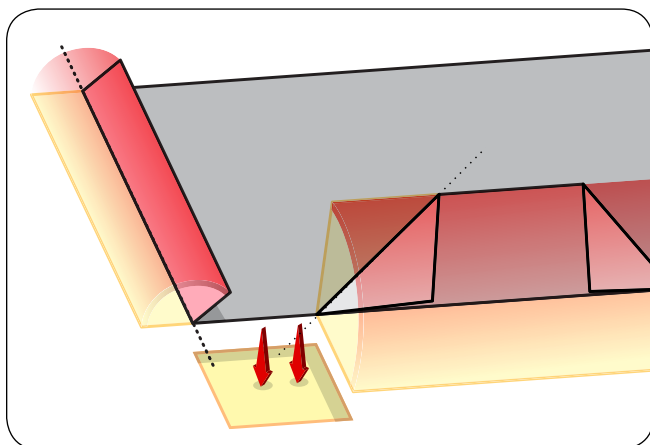
On the sides of the Chimney Saddle create side-hems to deflect water down the sides of the chimney.

CHIMNEY FLAT-STOCK PREPARATION
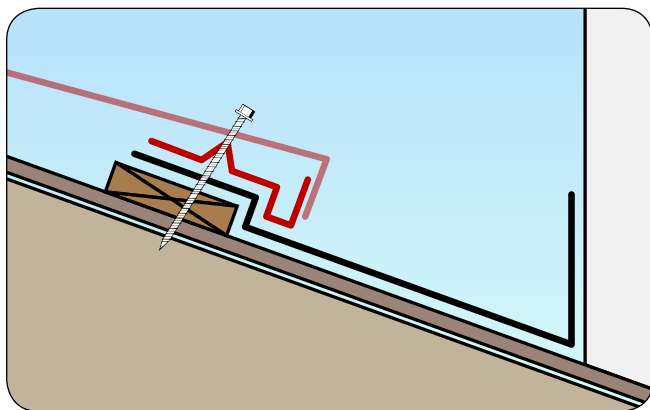
Use a V-Bat Riser Metal piece as shown to elevate the panel to the correct roof plane height. Fasten as shown with the panel nose being fastened into the V-Bat Riser.

CHIMNEY FLAT-STOCK W/ FOAM CLOSURE
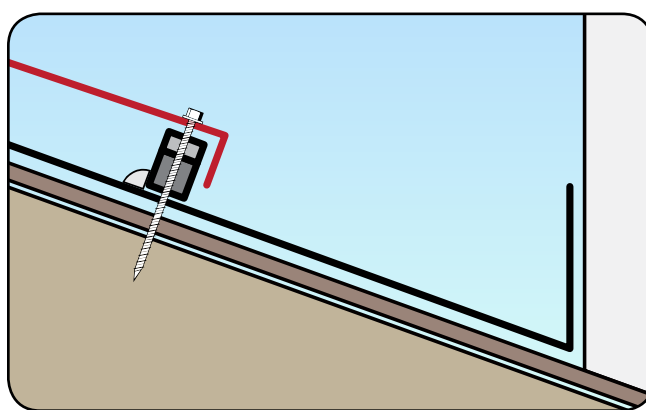
"Position the Metro XP-Foam tape and fasten as shown above.

⚠ *Metro Touch-Up-Kits can be used to cosmetically coat the panel top fasteners, touch-up kit should not be used as the primary sealant.*

SIDE-HEAD WALL/CHIMNEY/SKYLIGHT

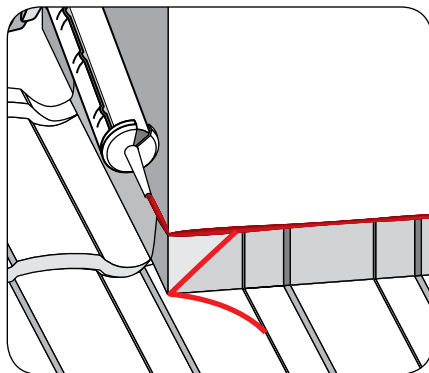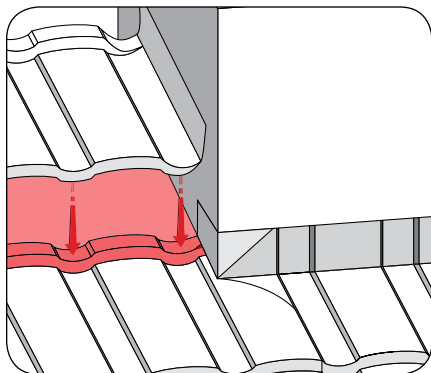The following details apply to any square cornered protrusion through roof.
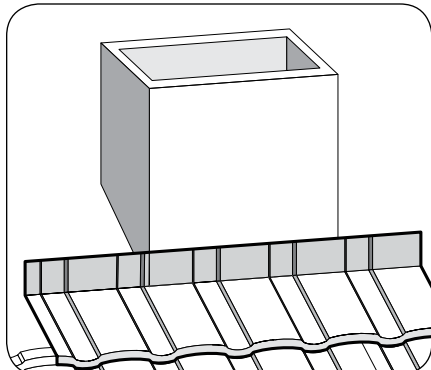
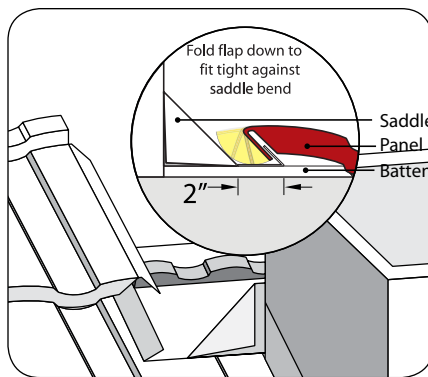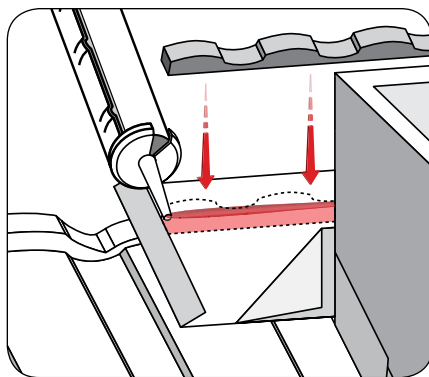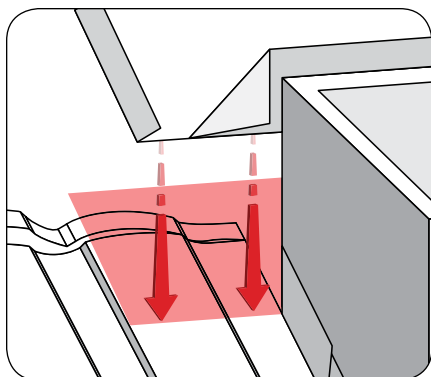Measure, cut, and fold up panel 2" from the back of the panel to the front of protrusion.
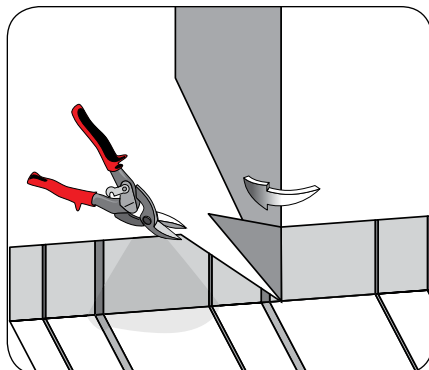
Cut a 45 degree angle as shown and fold tabs around protrusion.
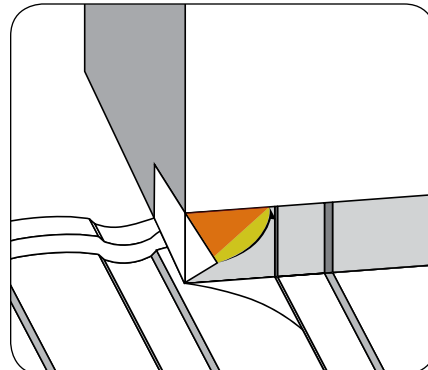
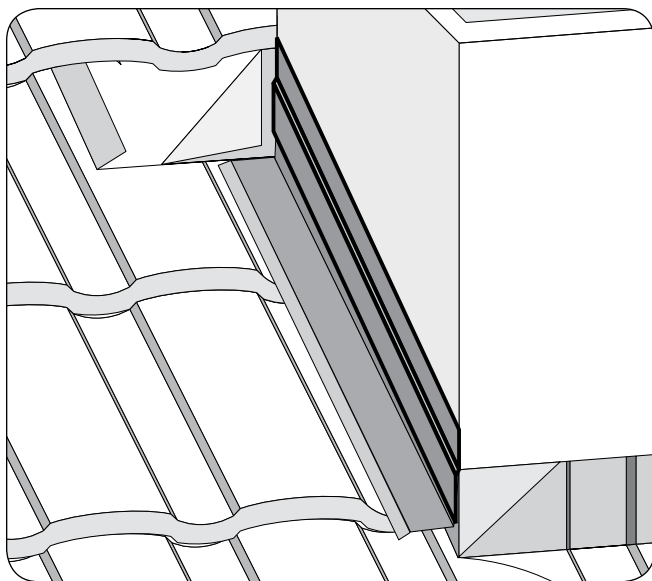Cut and fold up panels 2" at sides of protrusion as shown.
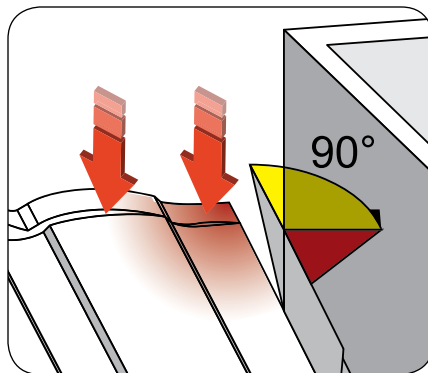
Flatten the back flange of the panel intersecting the top of the protrusion.


For added protection install a foam weather block as shown to seat the panel onto.

Fold flap down to fit tight against saddle bend

Saddle
Panel
Batten

2"

'Z'-BAR FLASHING DETAIL

Side-wall Under-pan metal is covered with counter flashing or standard Z-bar.

Panel front down-turn is 'Flared' out to allow Under-pan to exit onto panel below.

Wall Sheathing
'Z' bar
Head-Wall
Side-Wall
Side-wall Underpan
Panel
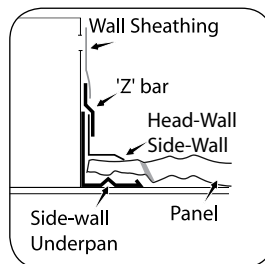
⚠ *Fold up nose of panel where under-pan metal exits on top of panels below.*

⚠ *Always start from the bottom of the item being flashed to ensure correct weather protection.*

Counter Flashing metal or Z-bar covers bent up edges of panels.

When Small or Flush-Mounted Z-Bar is used. Seal the top edge of bend-up's where they meet the wall before installing the Z-Bar. Use the 'Reglet' top-angle to run a final bead of sealant around the item being flashed.

SMART-VENT - BATTEN-LESS ROMAN-TILE
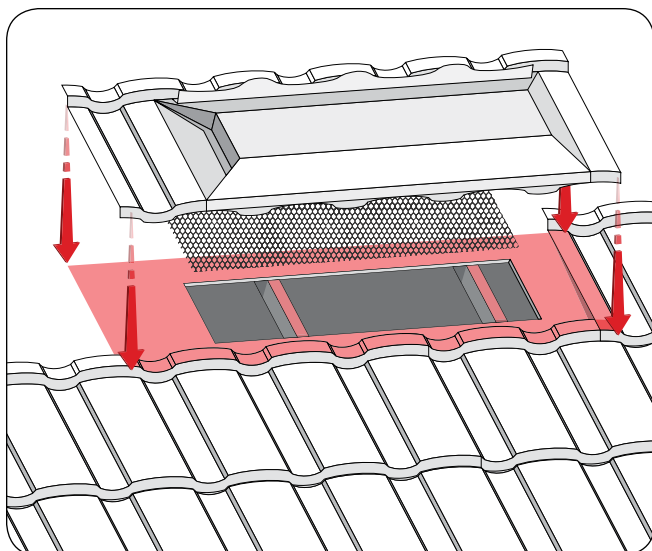
⚠ *To prevent rodents and other vermin from entering attic space, the roof deck ventilation hole should be covered with 1/4" wire mesh.*

Metro Roman-Tile SMART-vents are used in place of regular panels where ventilation is required. The vents are installed similar to panels after cutting ventilation hole in decking (approximately 8" x 30"). A Metro Roman-Tile SMART-vent provides approximately 82sq inches of Net Free Vent Area (NFVA). Care should be taken to adequately ventilate the building. Building codes require a minimum NFVA of 1/300 the area of the space to be ventilated (attic).

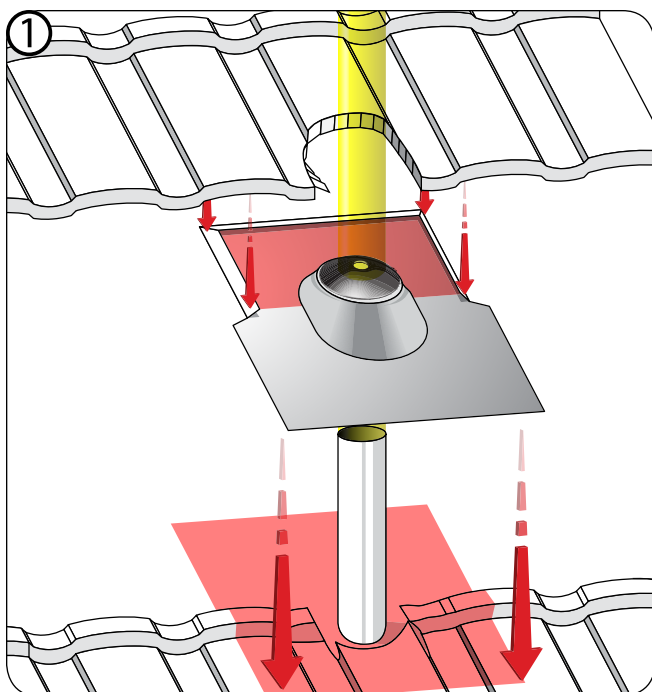⚠ *Seal Back up-turn prior the course below vent.*

⚠ *Secure SMART-vent with screws (#10X2-1/2" HH)(63.5mm)*
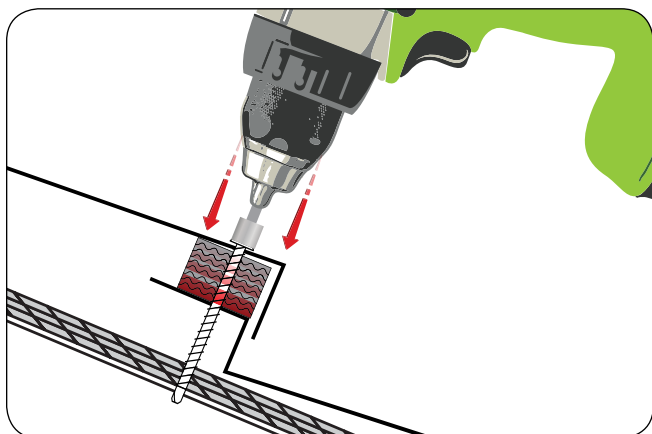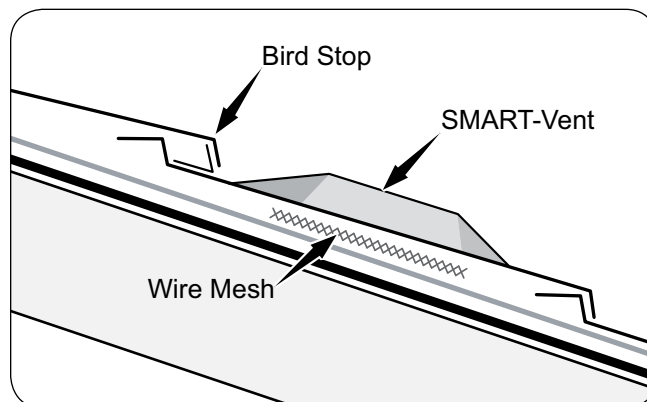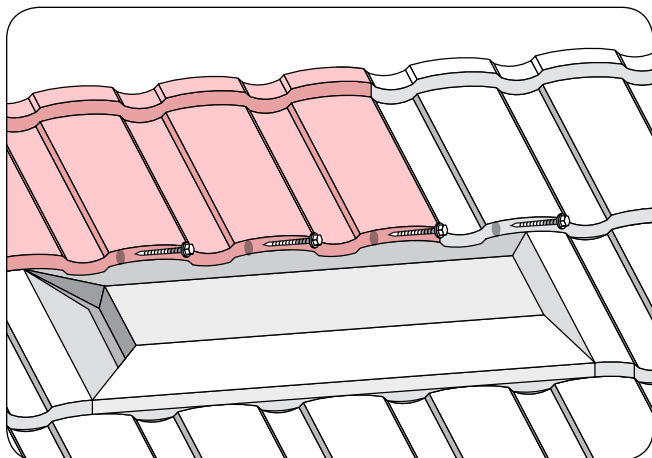
Use Metro SMART-XP-Foam tape or sealant directly beneath the area where fasteners penetrate panel.
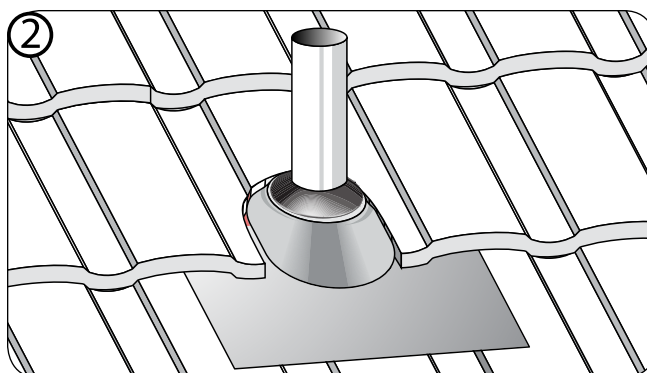
SMART-JACK & SMART-SLEEVE

①

Cut panel tight to pipe and flatten the 'back-flange' portion of underlaying panel where highlighted in red above. Then seal and create a 1/2" hem around the perimeter of the SMART-Jack on the section above the pipe as shown.

Install a support block (1X4) behind the protrusion to support the back of the SMARTjack.


45°

1"
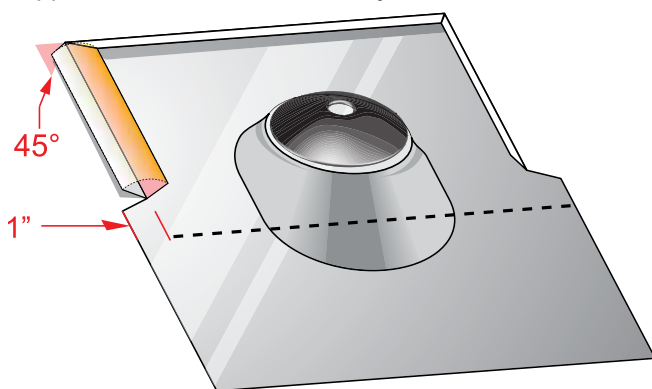
To maintain good weather protection the edges of the SMART-Jack flashing should be folded/bent up as shown to deflect any moisture onto the flashing and out onto the panel below.

②

Mark, measure and cut roman panels to cover back section of SMART- jacks. Seal around flashing.

③

No Fasten Zone
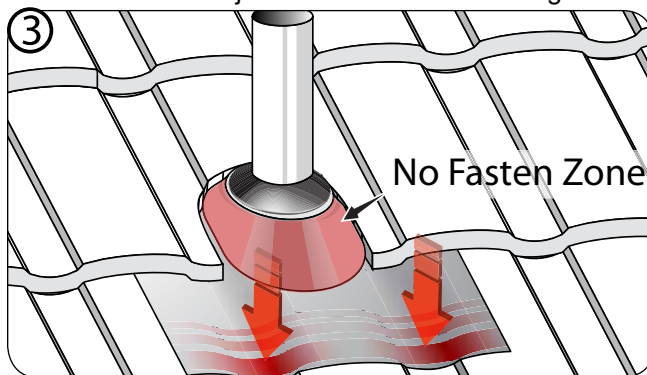
Slide the SMART-jack into place. Mold base of SMART-jack to conform with panel.

④

Fasten here in the back through the pipe
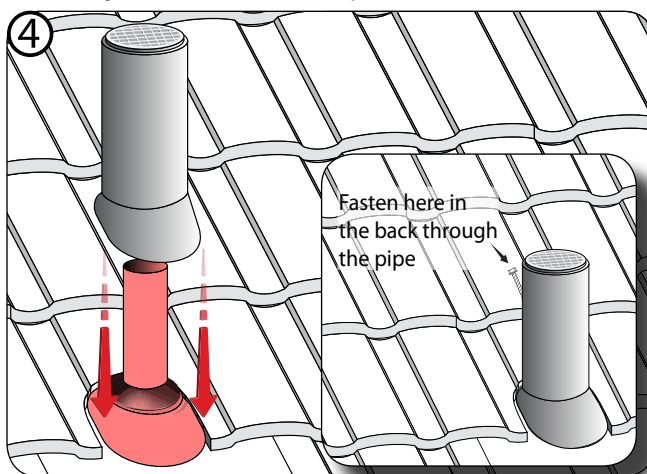
For added protection and appearance, SMART-sleeves are cut to conform to the panels and are installed over pipes. SMART-sleeves are fastened with a screw through the back of the smart sleeve into the pipe.
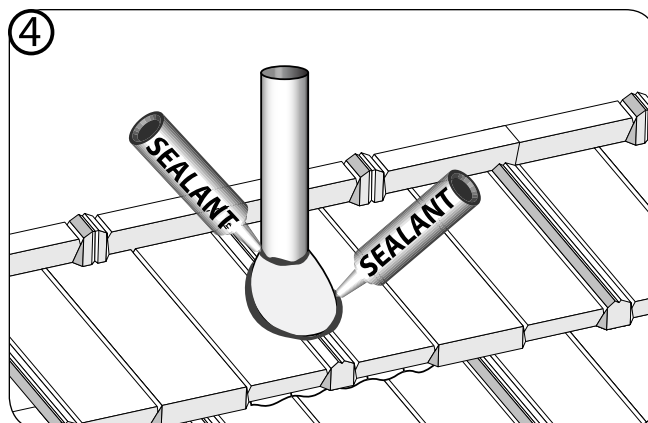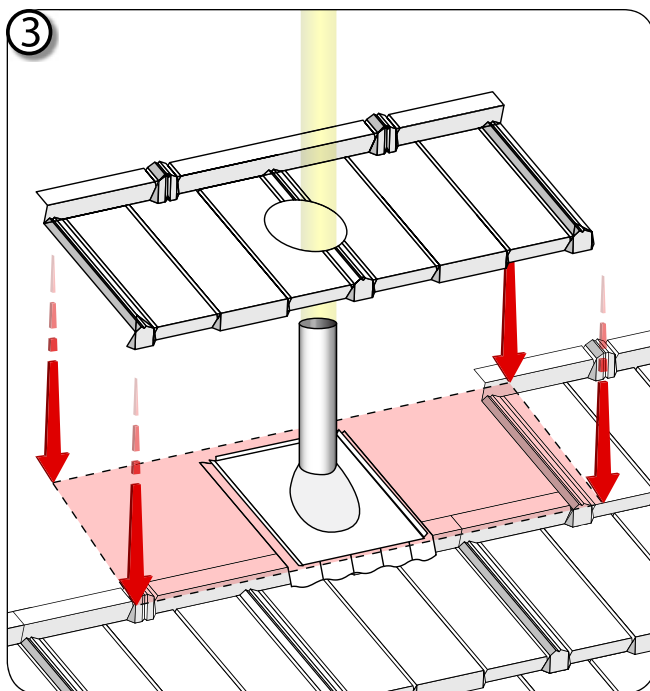
Metro Roof Products

PIPE FLASHING - UNDERPAN SANDWICH METHOD - SMART-JACK
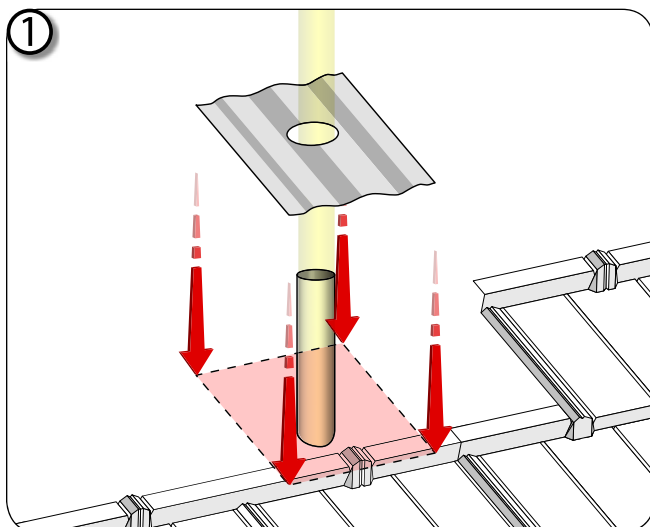
①

Cut 'Under-Pan' flashing around Vent Pipe as shown. Bend front edge of 'Under-Pan' over rear of under lapping panel.
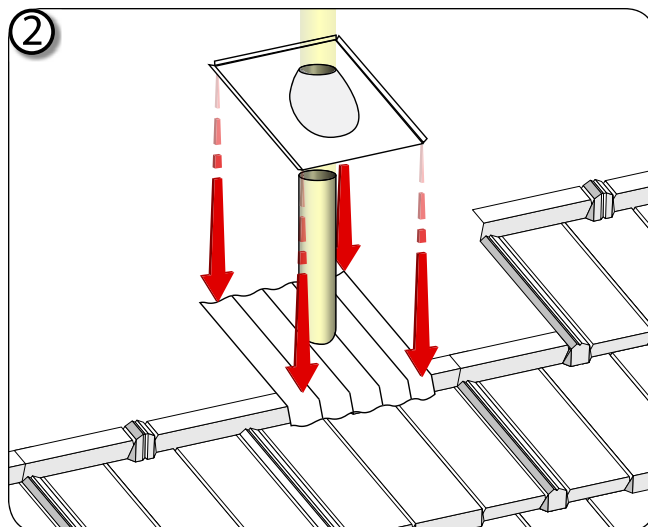
②

Install pipe flashing over 'Under-Pan'.

③

④ SEALANT SEALANT

Seal Vent Pipe around bottom of cone and around pipe flashing as shown.

Pipe
SMARTjack
Panel
Underpan
Underlayment
Decking

Dissimilar Metals

⚠ *To avoid adverse corrosion effects caused by dissimilar metals, COPPER and LEAD flashings should not be used with Metro roof products and accessories*
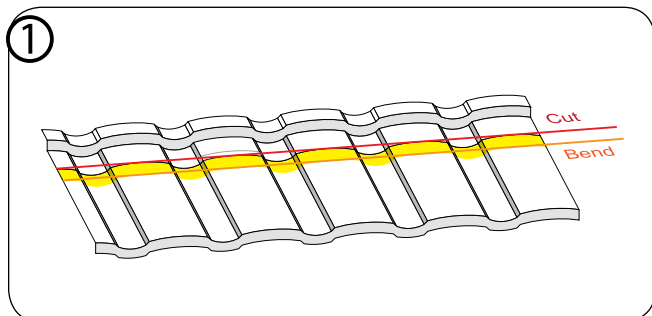
Metro Roof Products
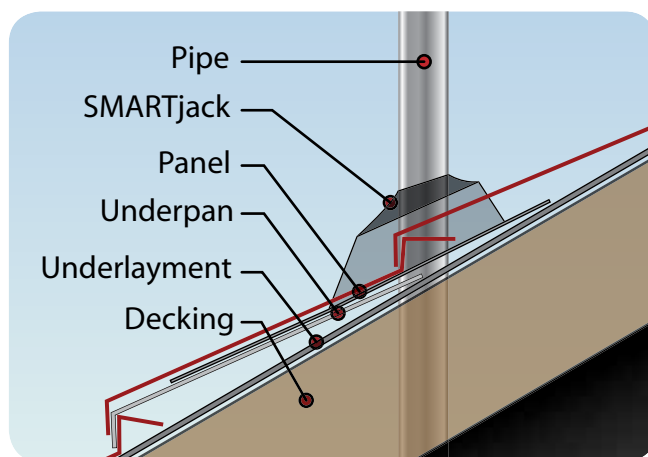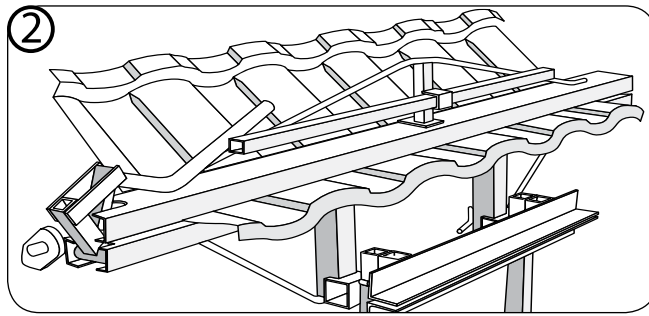
PREPARE AND CUT RIDGE PANELS

The following steps should be followed to ensure a weather tight installation along the ridge.

The top course of panels requires a cut and bent panel to complete the ridge line.
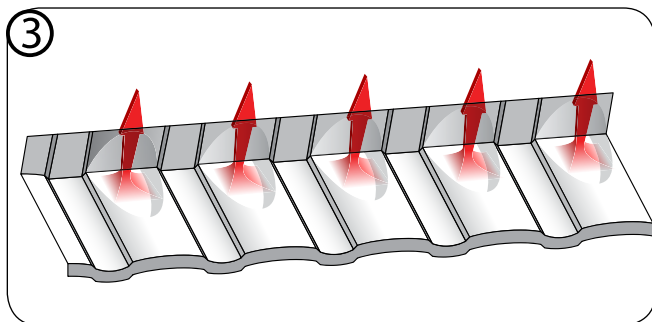
Bend all ridge panels using Metro's top bender.

①

Ridge cut line is 1 " above and parallel to bend-line to allow for bend up on ridge battens.

②

Always bend the ridge panels before cutting. Deduct 1/4" from measurements. Mark both "bend" and "cut" lines for each panel prior to cutting or bending.
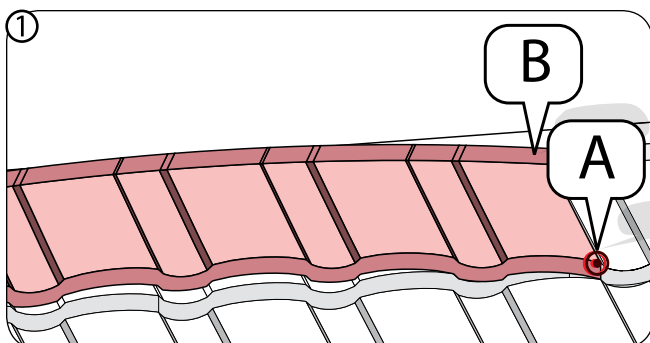
③

⚠️ *Indentations created through ridge panel bending process should be 'popped out' by using a rubber mallet on the under side of the panel.*
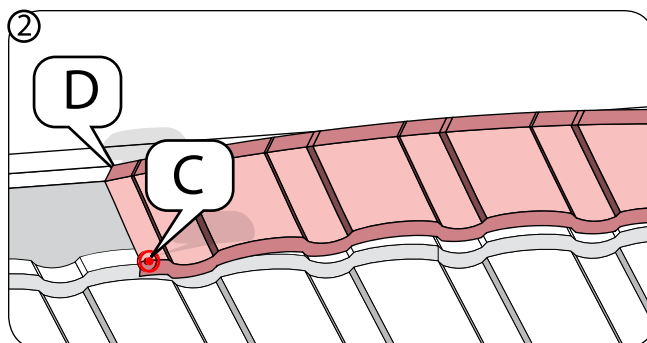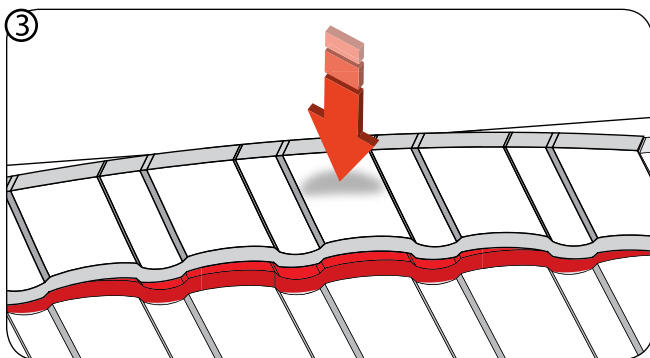
④
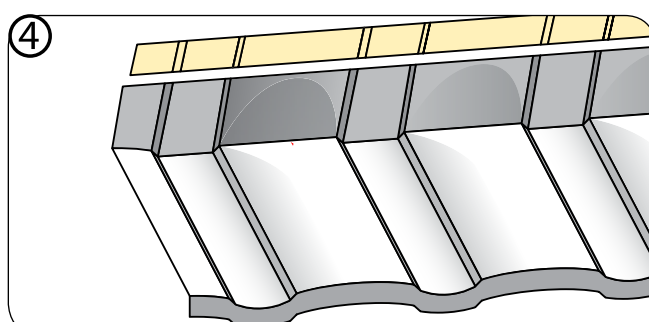
Cut panel at pre-drawn 'cutline'.
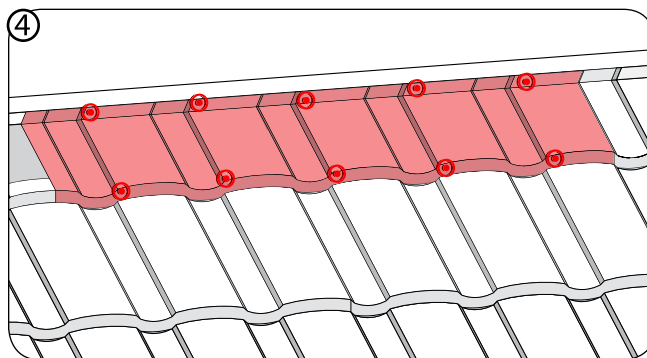
INSTALL RIDGE PANELS

(A) Fasten first at bottom right corner, then at top-right corner (B) as shown.

Then fasten (C) at bottom left corner and top-right corner (D) as shown. Panels are then pushed down to fit coursing properly.
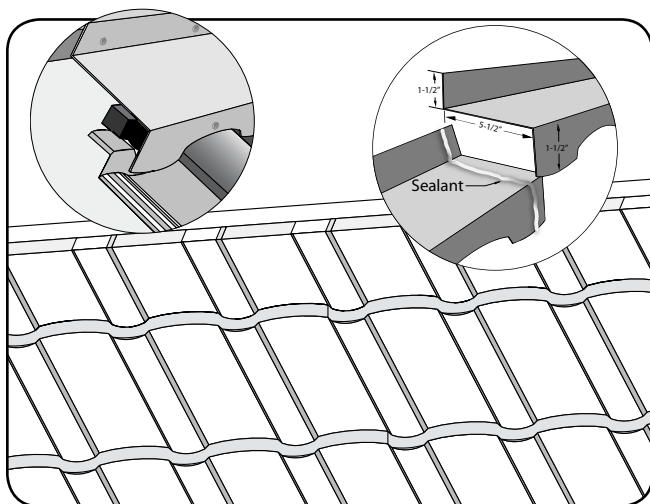

Force back of panel into position against ridge batten before fastening

Additional fasteners are applied as necessary.

TOP COURSE

Roman Top Course metal may be used to avoid bending and cutting full panels at the ridge when the 'Top course' is 4-1/2" or smaller

NOTE: Roman Top-Course can also be used at the front of Chimeys - Skylights and Roof-to-Wall as a 'Head-Wall' flashing for Roman panels.

Apply a bead of sealant between two overlapping top course pieces. The Roman top-course side-lap is approximatley 6".
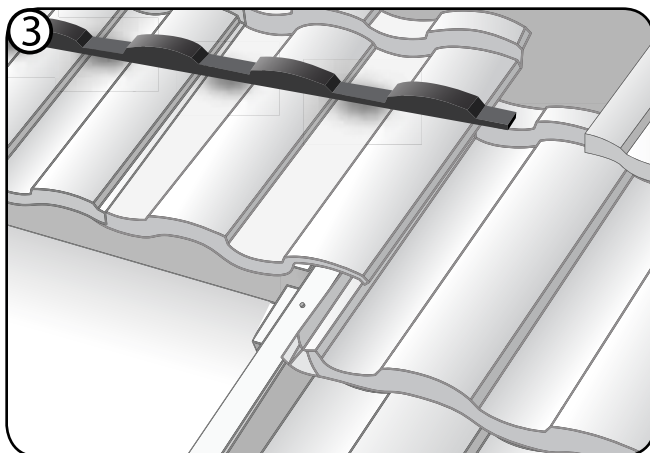
SHORT COURSE

This detail is caused by the fascia/eave stepping out from the main roof course line.

①
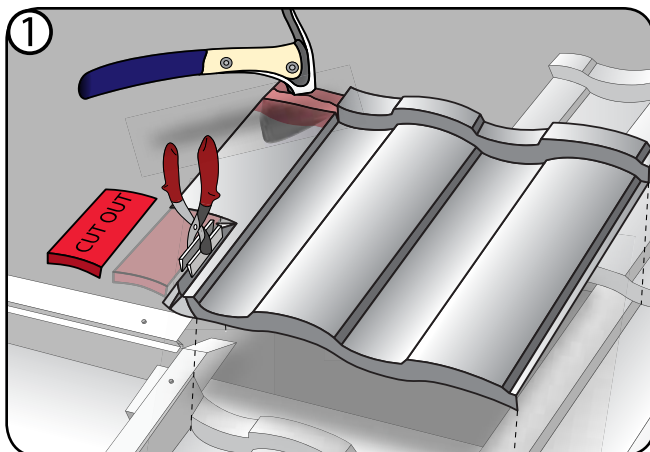
Where panels intersect with stepped fascia, stop panel battens approximately 6" from new fascia line. If necessary notch, cut, and flatten panel at this intersection as shown.

②

Cut out →
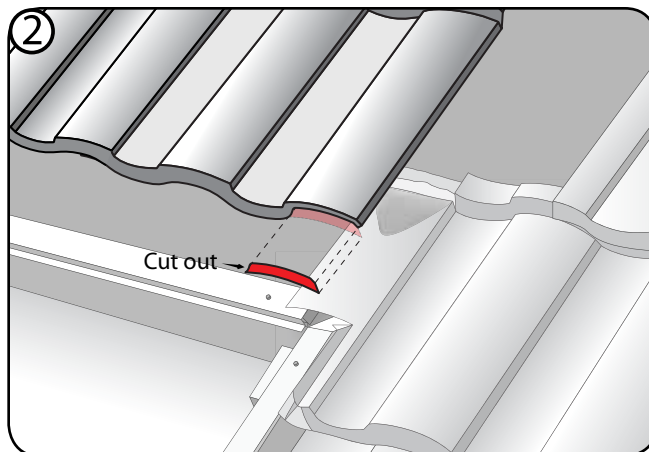
The 1st full panel "Short Course" piece is notched and fitted as shown.

③

Place Metro Roman FOAM closure strip in line with main coursing row. Use sealant to secure.
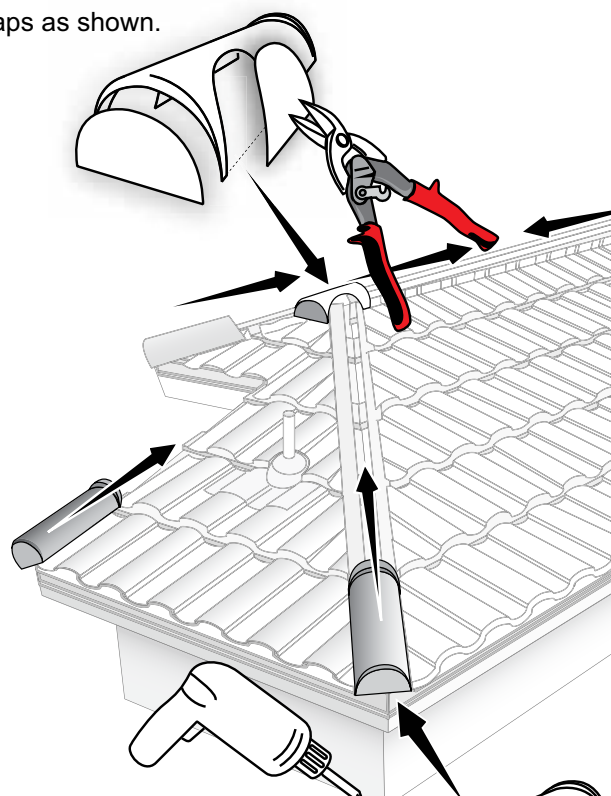
④

Roman Foam Closure Strip
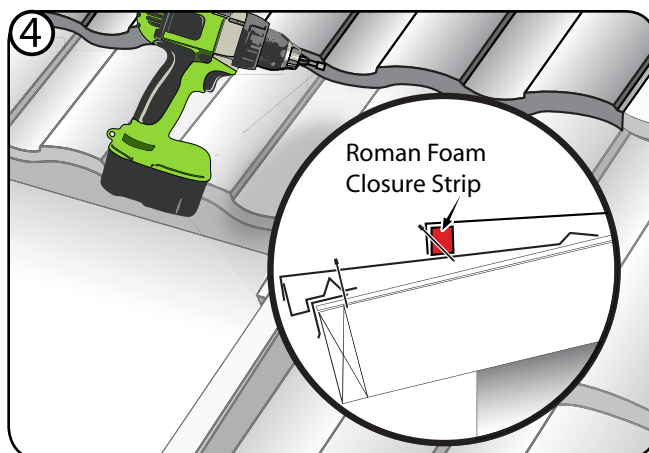
Install full panels aligned with main courses. Fasten with screws, through top panel nose through the FOAM closure strip, and into bottom panel as shown.
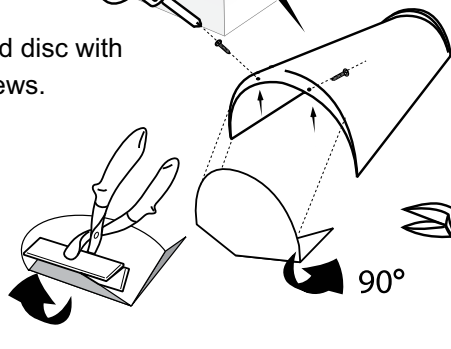
TRIM CAP DETAILS

HIP/RIDGE INTERSECTION
Install hip caps from the bottom using 2 fasteners per trim cap. Overlap trimcaps at hip/ridge intersection. Cut and fit the ridge cap over both intersecting hip caps as shown.

RIDGE CENTER CAP
At the center of a ridge line, a small/ short ridge cap as shown can be made where cap pieces arrive from different directions.

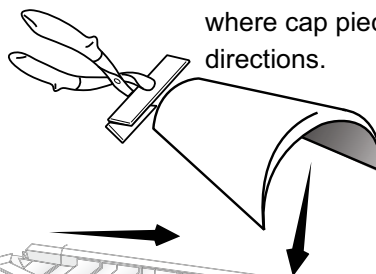Attach end disc with stitch screws.

90°

HIP CORNER
Notch & fold the end disc as shown to form a closed 3-dimensional end cap. Fit end disc to bottom hip corner with stitch screws. Install trim caps up the hip from the fitted hip-end piece. fasten trim caps on both sides of hip battens.
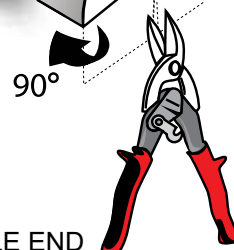
90°

RIDGE/GABLE END
Where the ridge intersects with a gable end (rake), cut and fold the end disc as shown to follow the Rake Channel sections previously installed.

⚠ *After installing trimcaps at intersections, seal cut edges and apply Metro basecoat and stone chip to provide a complete stone coat finish.*