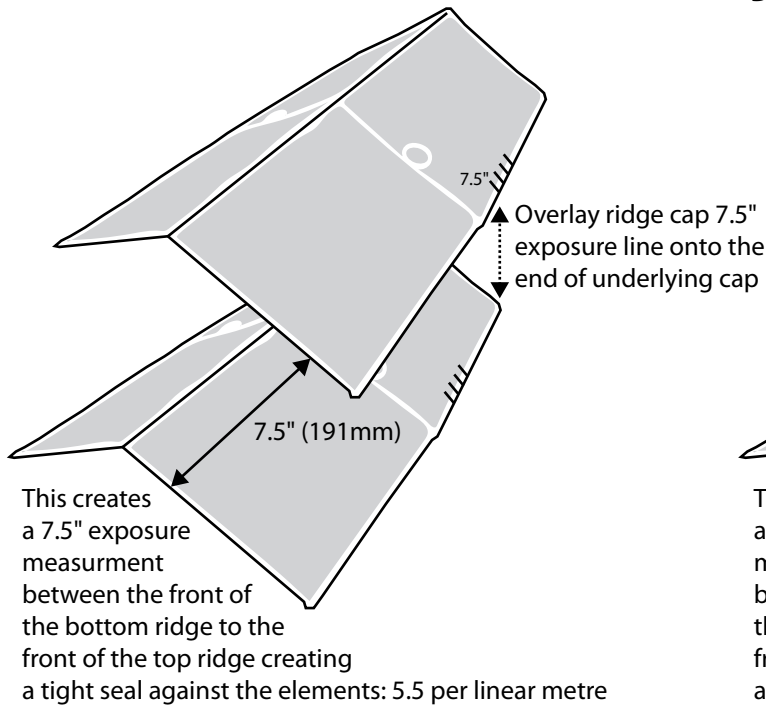


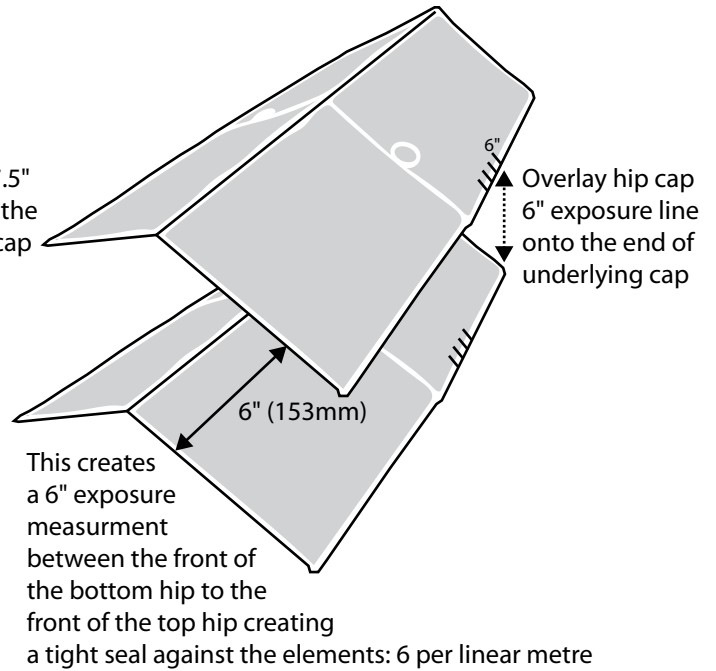
Fixing TapcoSlate Ridge/Hip Caps

Just like our slate tiles, our ridge and hip caps have an exposure guide embossed onto them. Caps on the ridge must be fitted at a maximum of 7.5" exposure, we recommend the minimum exposure of 6" for high-wind/driving rain exposed areas. Caps on the hips **must** be fitted at a 6" exposure. All caps should be nailed/screwed through the one below, similar to the tile layout, and must be secured in the indicated spaces provided using two fixings – once completed this gives four fixing points on all but the last end cap. Do not over-expose the caps. The minimum number of caps per linear meter is 5.5 (at a 7.5" exposure). The maximum number of caps per linear meter is 6 (at a 6" exposure).

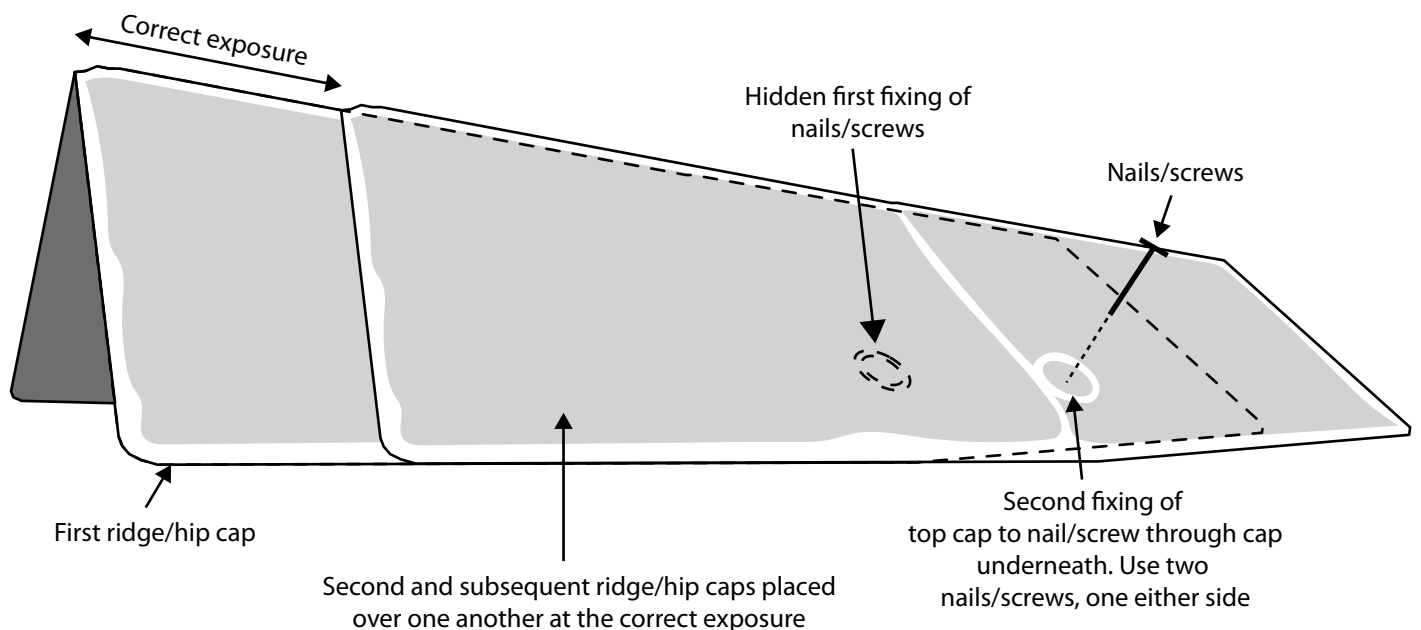
Maximum Classic Ridge Cap Exposure (7.5")



Minimum Classic Ridge Cap Exposure and Definitive Classic Hip Cap Exposure (6")



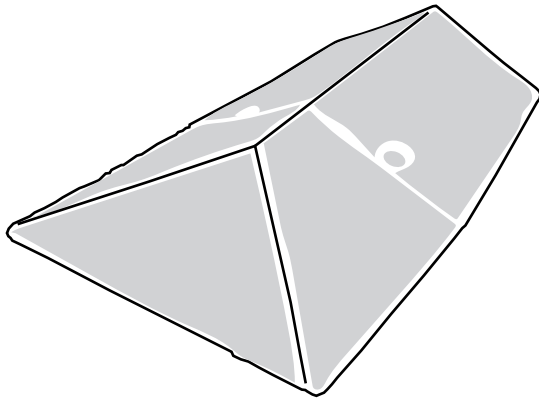
Ridge and Hip Cap Fixing



Ridge/Hip Cap Finishing

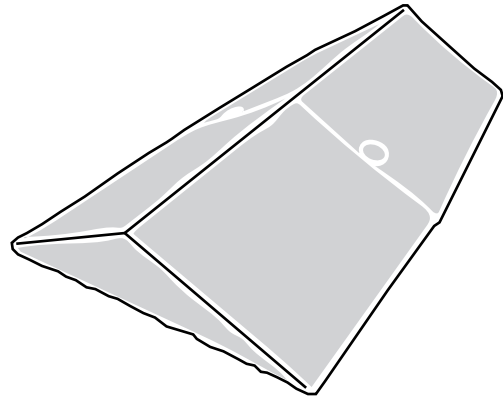
Tapco Roofing Products produces pre-formed TapcoSlate Classic Angled Ridge-to-Hip Junctions and TapcoSlate Classic Ridge 90° End Caps for the following roof pitches:

Classic Angled Ridge-to-Hip Junction



Available in:
14 to 17°
18 to 23°
24 to 30°
Roof Pitches

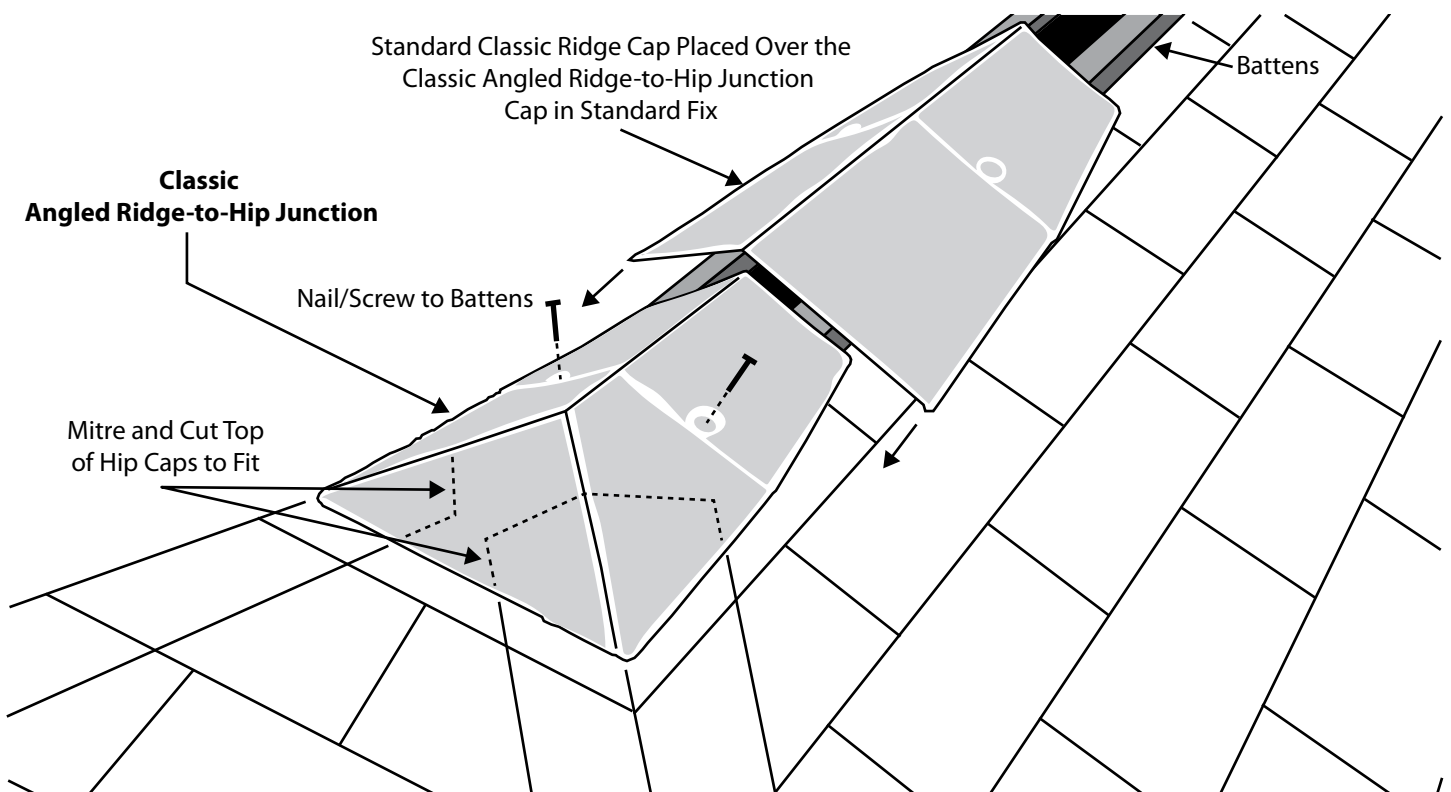
Classic Ridge 90° End Cap



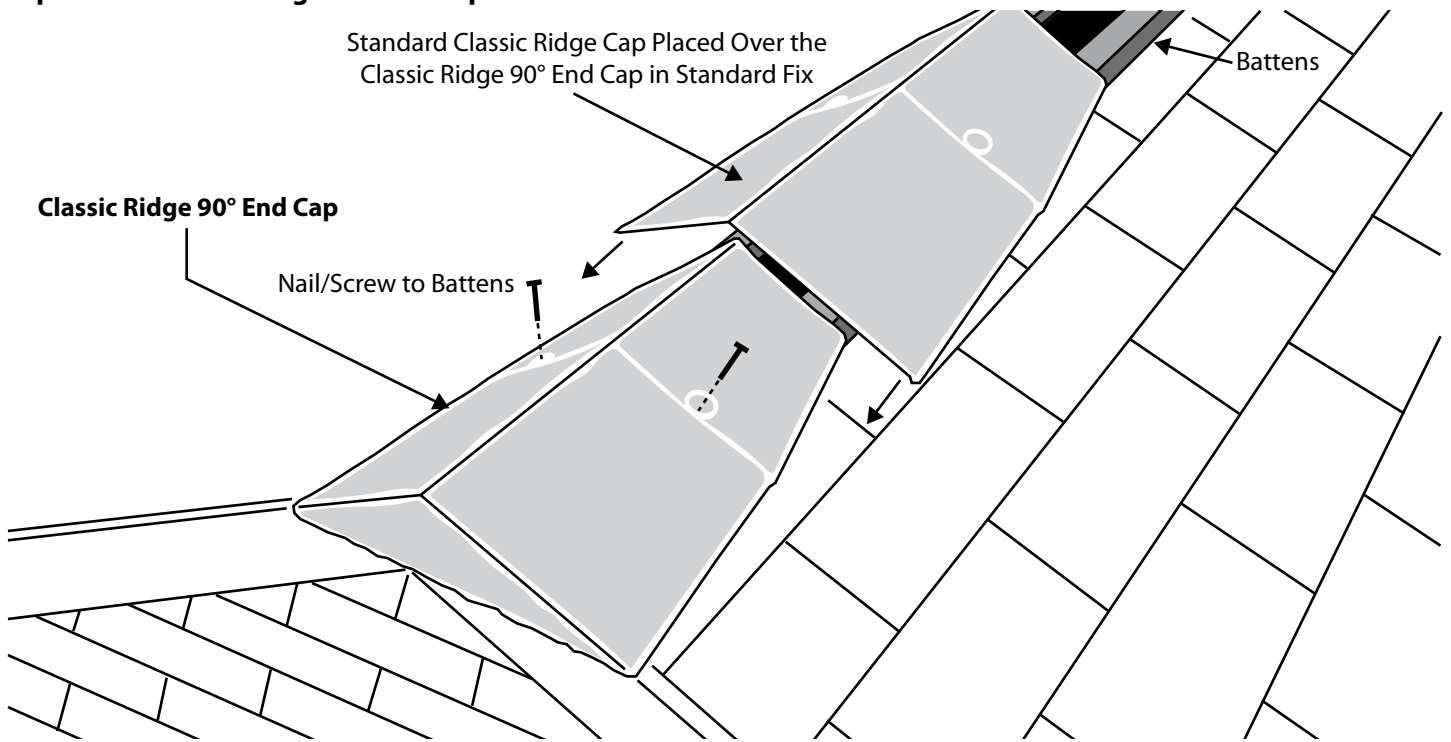
Available in:
25 to 29°
30 to 34°
35 to 40°
Roof Pitches

The TapcoSlate Classic Angled Ridge-to-Hip Junctions and TapcoSlate Classic Ridge 90° End Caps are fixed in place the same way as standard hip and ridge caps, two 3" (76mm) galvanised or stainless steel clout nails or outdoor Phillips Bugle screws. Care should be taken to store and transport these units safely. If a unit is to be used at both ends, the last unit can be cut in half and sculpted using a sharp craft knife to mimic the notched look of a cut slate: nails and screws in the top surface can be disguised by painting the heads in bitumen, or alternatively a colour-matched screw cap can be used or black tacks.

TapcoSlate Classic Angled Ridge-to-Hip Junction (Also 3-Way for Edwardian Conservatories)



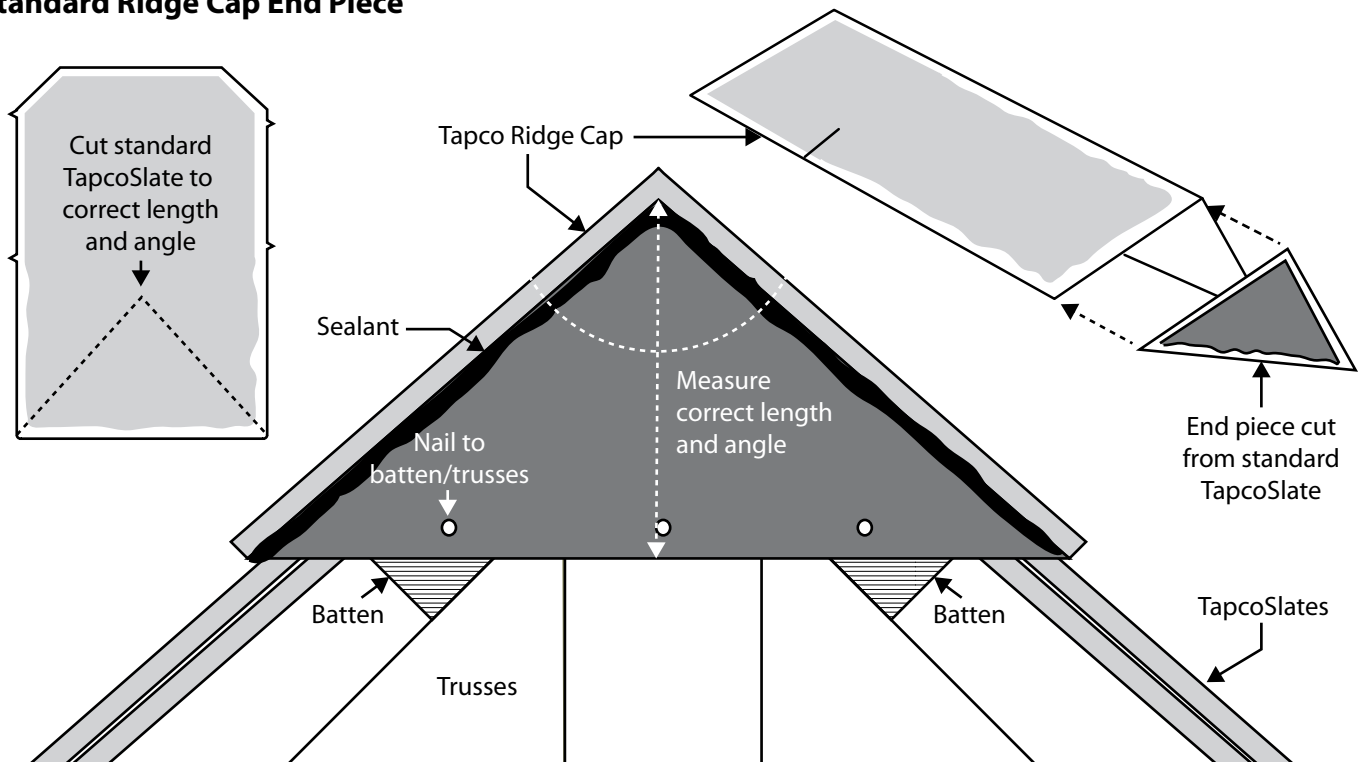
TapcoSlate Classic Ridge 90° End Cap



Alternate Ridge/Hip Cap Finishing

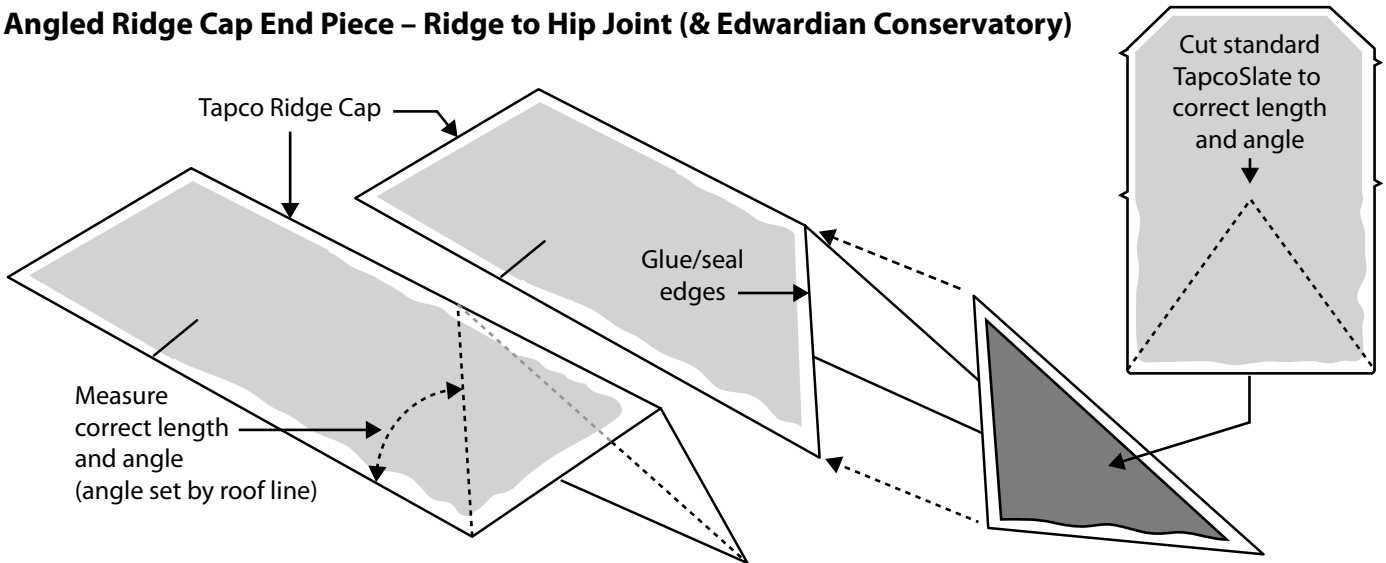
If you cannot use the pre-formed accessories mentioned due to pitch fitment or if you prefer to make your own the following is a guide on how to make similar finishes. Tapco Ridge Caps can be finished by cutting a standard TapcoSlate at the end of the ridge into a triangle or diamond shape of the right size to cover the end gap. The resulting material should then be nailed in place into the end-battens and/or truss. The material can be sealed by using a good quality butyl or bitumen sealant (do not use silicone as this will not adhere and may invalidate your warranty). Alternatively, the material can be joined to the Ridge Cap by using a strong epoxy glue (adhering to the manufacturers instructions). Nail heads should be disguised with coloured sealant or paint.

Standard Ridge Cap End Piece



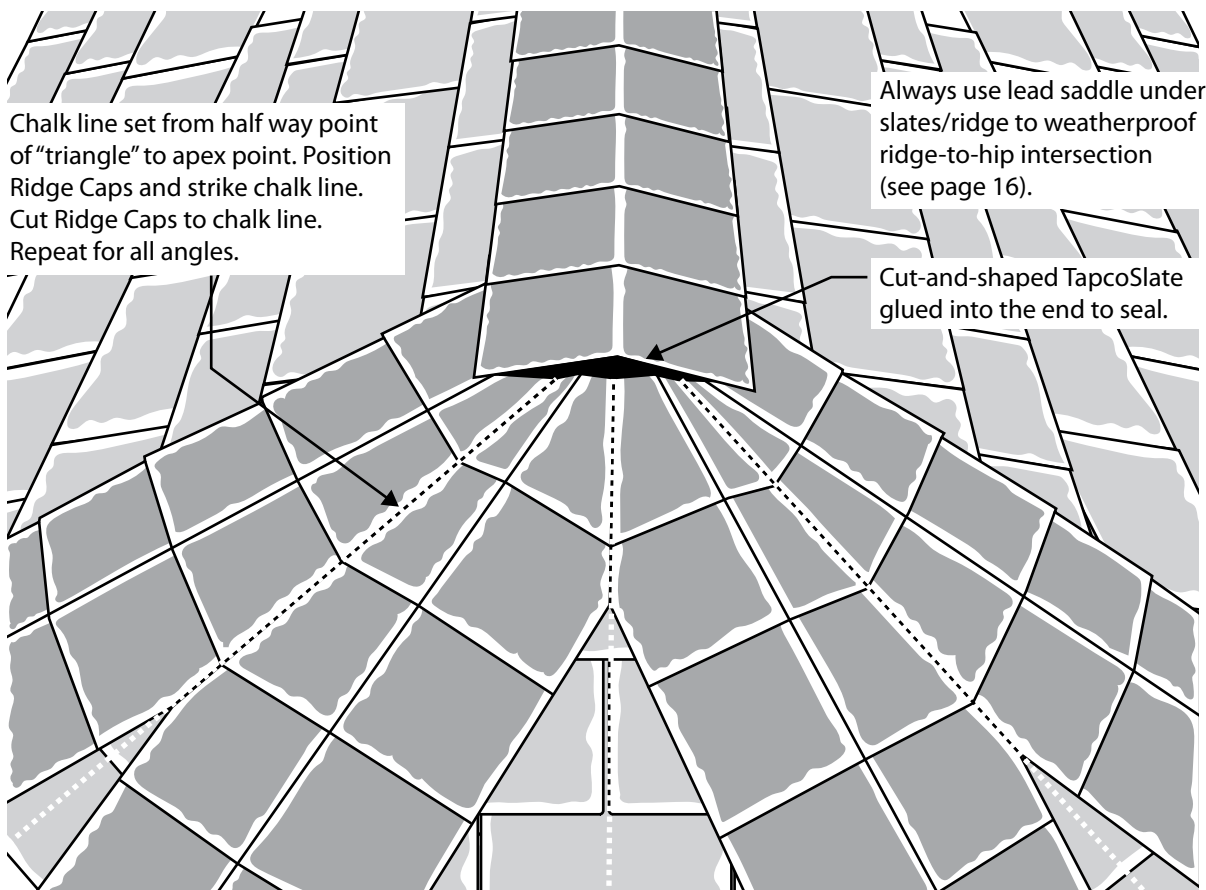
The same principle for finishing Tapco Ridge Caps can be applied to an angular finish roof by measuring the roof angle and cutting a Tapco Ridge Cap to suit. A similar measurement can be applied to a standard TapcoSlate to cut the right size and angle to cover the end hole in the Ridge Cap. Note that with an angular finish the material may have to be joined by using a strong epoxy glue (adhering to the manufacturer's instructions), unless there is enough batten/truss material to nail to.

Angled Ridge Cap End Piece – Ridge to Hip Joint (& Edwardian Conservatory)



The 5-way ridge-to-hip intersection can be formed by setting chalk lines from the centre point of the three, flat triangular shapes created to the point (apex) of the roof. By placing TapcoSlate ridge caps under these lines and then striking the chalk line onto the caps, the Hip Caps can be cut to form the shapes similar to the above diagram. The Ridge Caps should be set as normal (no cutting necessary) and a cut-and-formed piece of TapcoSlate can be glued in place to fill the front edge. Please note, it is recommended to use a lead saddle at the ridge/hip joint to add another layer of weatherproofing (see page 16).

5-way Ridge to Hip Joint (Victorian Conservatory)

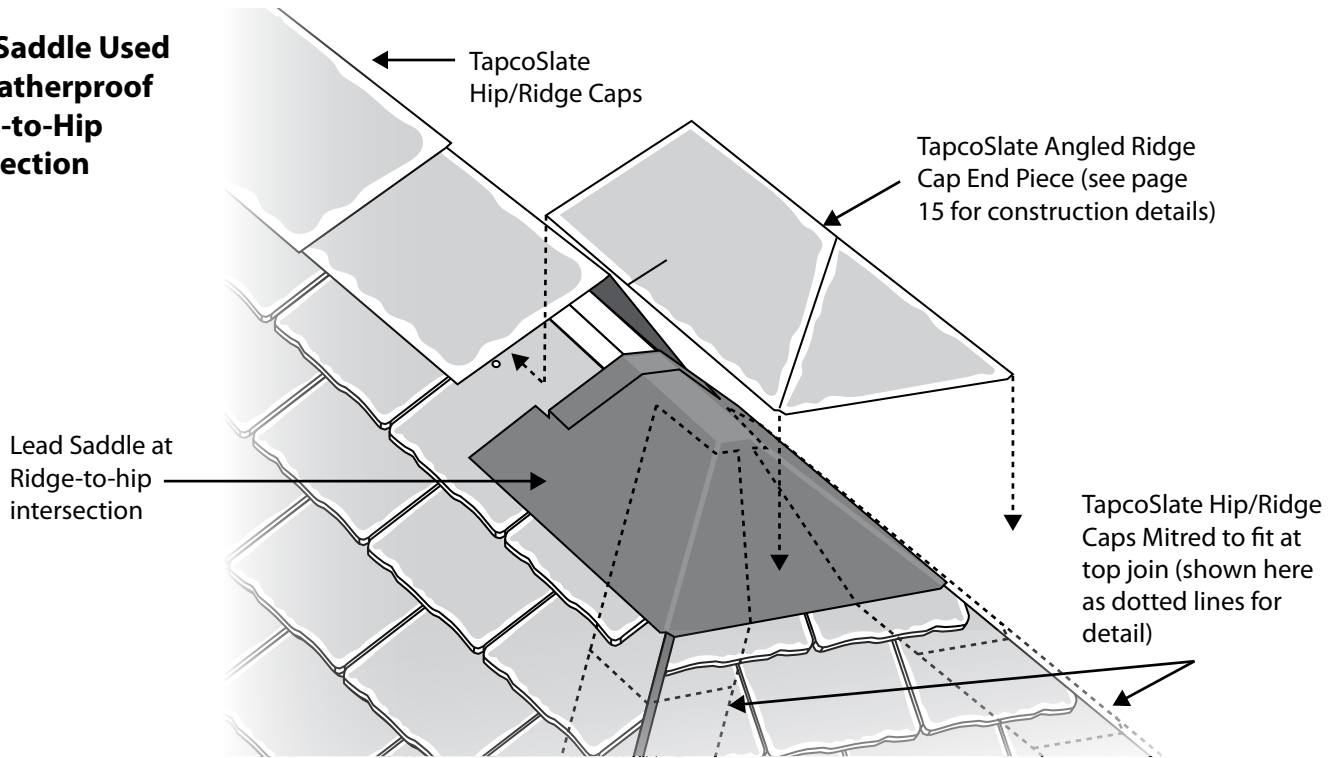


Weatherproofing the Ridge-to-Hip Intersection

When making your own ridge-to-hip intersections and/or ridge end caps it will be necessary to weatherproof this intersection (not needed when using TapcoSlate pre-formed accessories). A lead saddle should be fitted to cover the intersection between the ridge tile and the mitred hip tiles. TapcoSlate hip tiles cut easily without splintering or cracking to effect a tidy mitred joint.

This principal can be utilised for any sized or shaped intersection.

Lead Saddle Used to Weatherproof Ridge-to-Hip Intersection

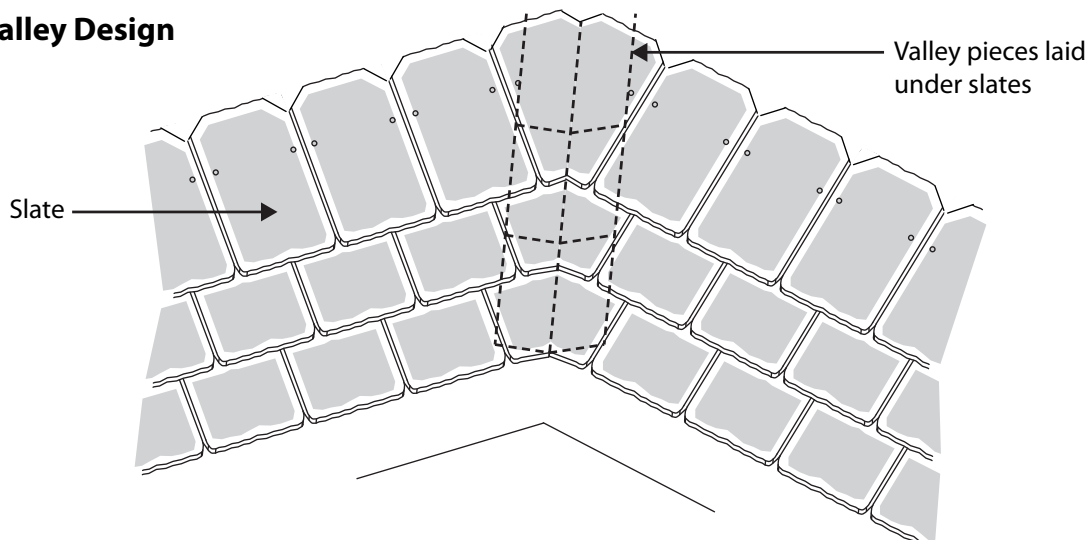


Valleys

Closed Valley Design

Closed valleys are formed by laying slates tight to the valley line and placing valley pieces under the slates. The length of the slate and the slope of the adjoining roof section determine the size of the valley. Valley material should extend 2" (51mm) above the top of the slate course that it will be applied to so that it may be fastened directly to the roof deck. Each valley piece should lap the piece below by at least 3" (76mm) and set in back of the butt edge of the slate above in order to be concealed. Each valley piece should be wide enough to extend 7" (178mm) from the centre of the valley to the roof surface. With a closed valley design, cut the slates in a straight line to fit no closer than 3/8" (10mm) against slate of adjoining roof slope.

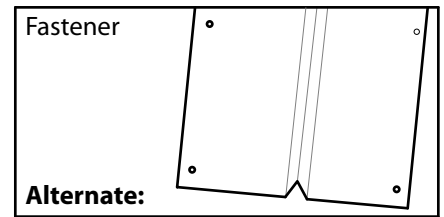
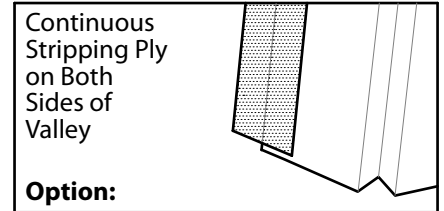
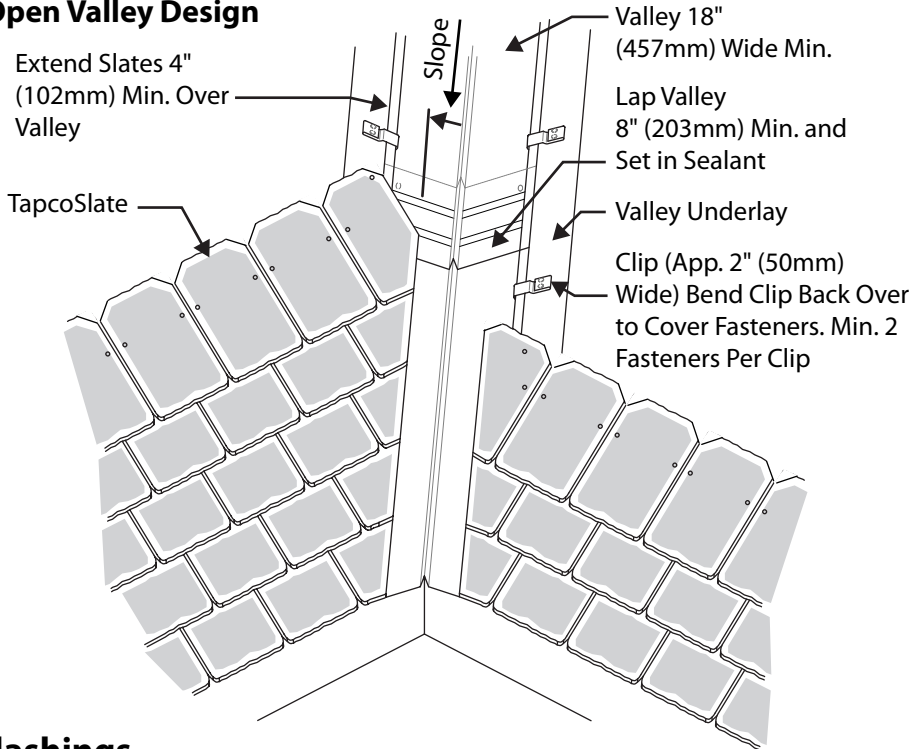
Closed Valley Design



Open Valley Design

1. Install minimum 18" (457mm) wide "W" valley or "I" seam valley.
2. Fasten the valley every 2' (0.6m) using metal cleats.
3. Slate over valley by covering flashing by a minimum of 4" (102mm). Make sure not to drive fasteners from slate into the valley flashing.

Open Valley Design



Flashings

Flashings should be used around all roof penetrations such as walls, chimneys, dormers, parapets, vent pipes, skylights, etc.

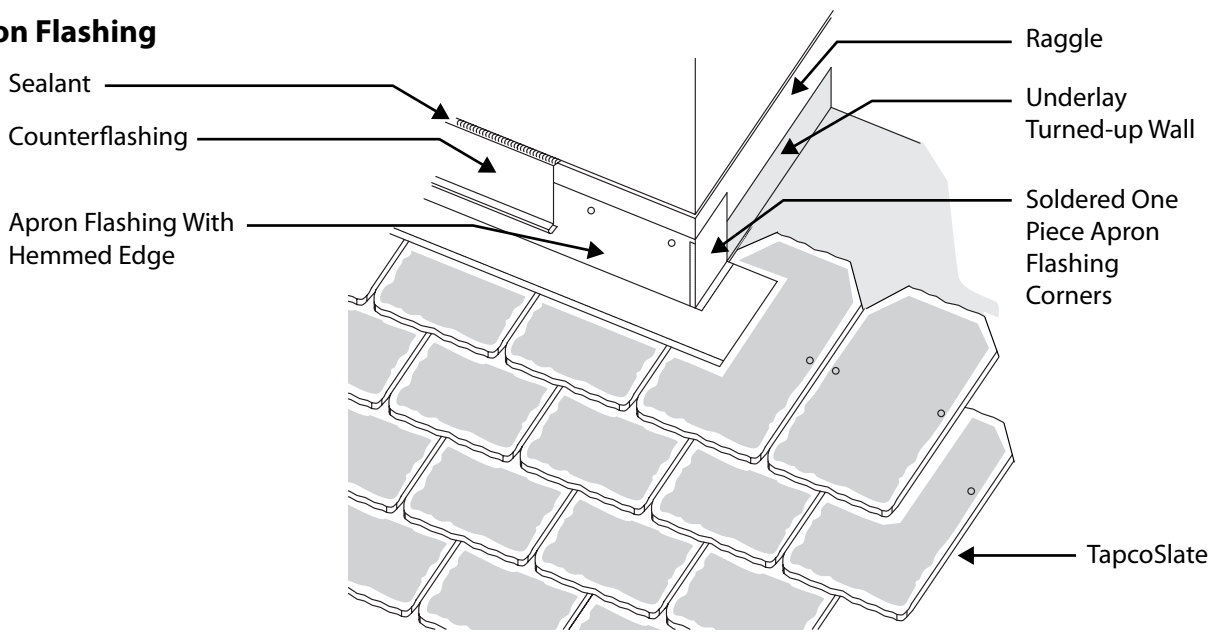
NOTE: When dissimilar metals are placed in contact with one another, galvanic corrosion will result which can cause electropositive metals to deteriorate. One way this can be avoided is by placing strips of sheet lead between the two metals.

When using lead insure that a coat of patination oil is applied. Tapco does not warrant metal components and accessories.

Apron (Roof to Wall) Flashing

Apron flashing is used when a roof terminates to a wall causing a course to be cut and face nailed. It is installed over the slates and behind siding or counter/cap flashing or dressed into brickwork/stonework, etc.

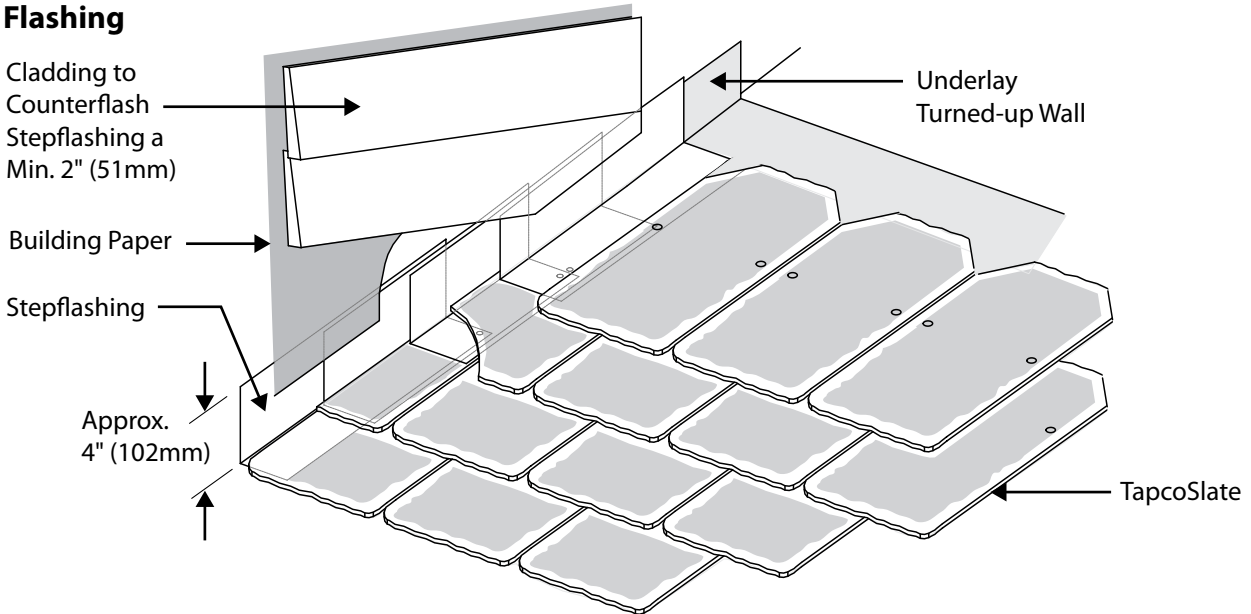
Apron Flashing



Step Flashings

Step flashings are used over or under the roof coverings and are turned up on the vertical surface. Step flashings should extend under the uppermost row of the roof slate the full depth of the roof slate or at least 4" (102mm) over the roof slate immediately below the flashing. The vertical leg of the flashing should be turned up a minimum of 4" (102mm) and extend 4" (102mm) on the roof slate with a 3/4" (19mm) hem. Flashings should have a minimum length of 9" (229mm) and must overlap a minimum of 2" (51mm).

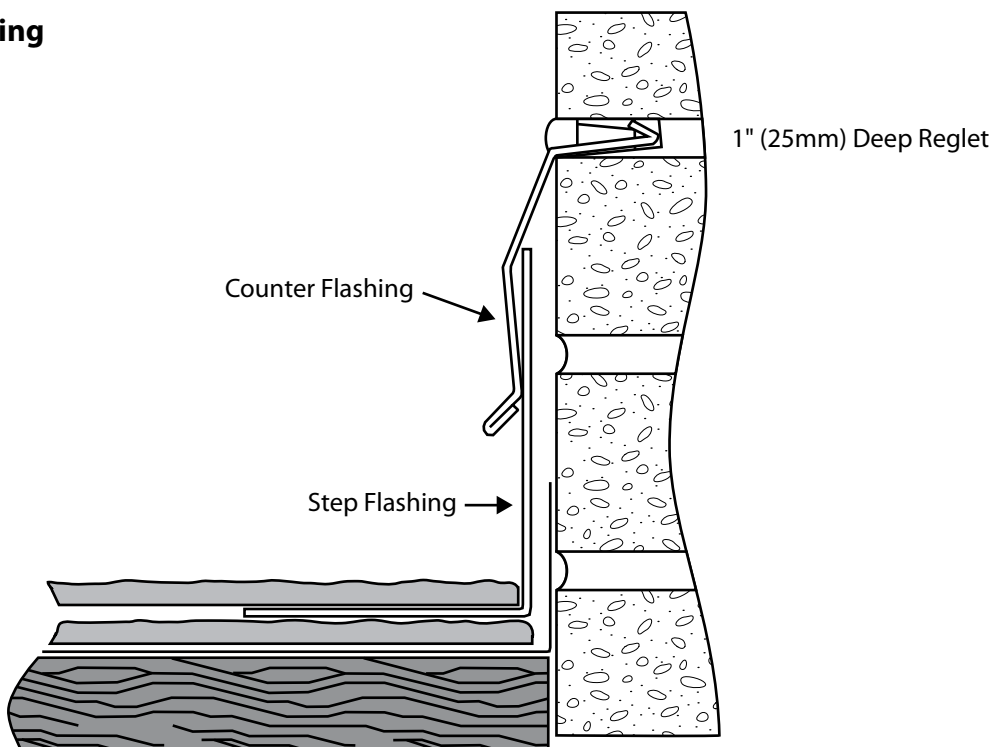
Step Flashing



Counter Flashing

1. Cut a minimum 1" (25mm) deep reglet into the masonry material.
2. Custom bend the counter flashing to fit into the reglet.
3. Start by installing lowest piece first and work upwards for proper water runoff.
4. Fasten the counter using either expandable anchors or masonry screws.

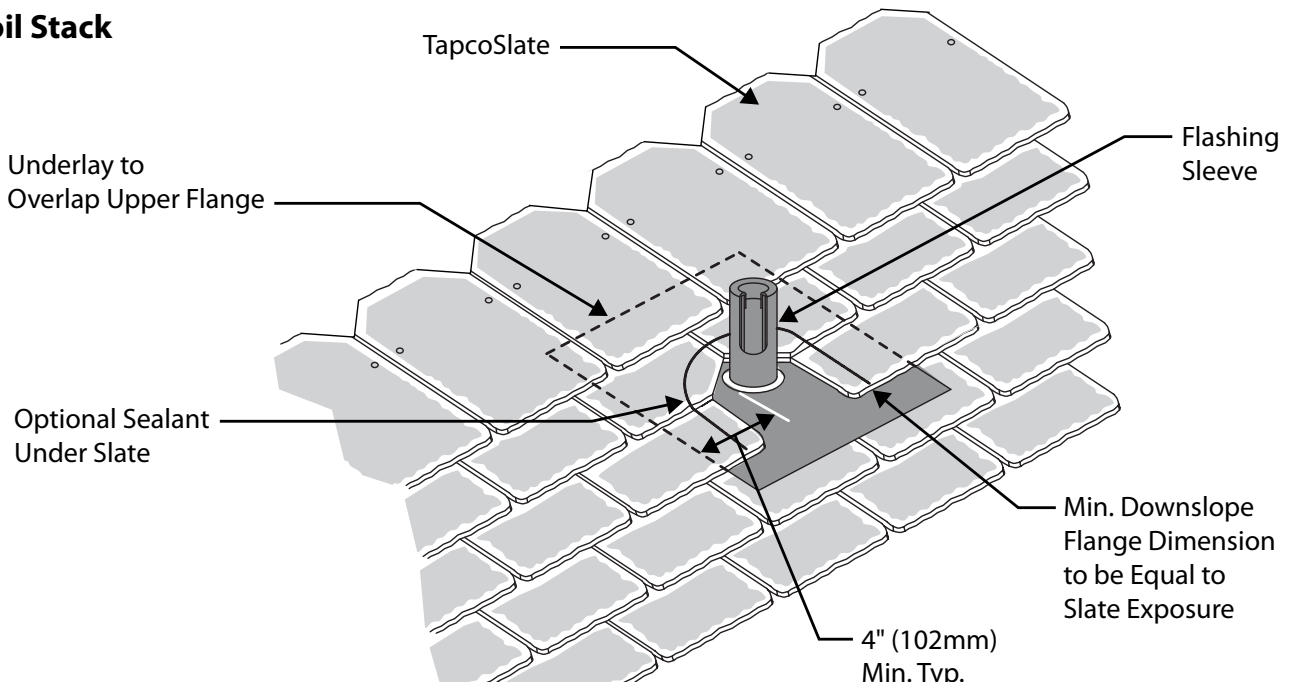
Counter Flashing



Vent Flashings

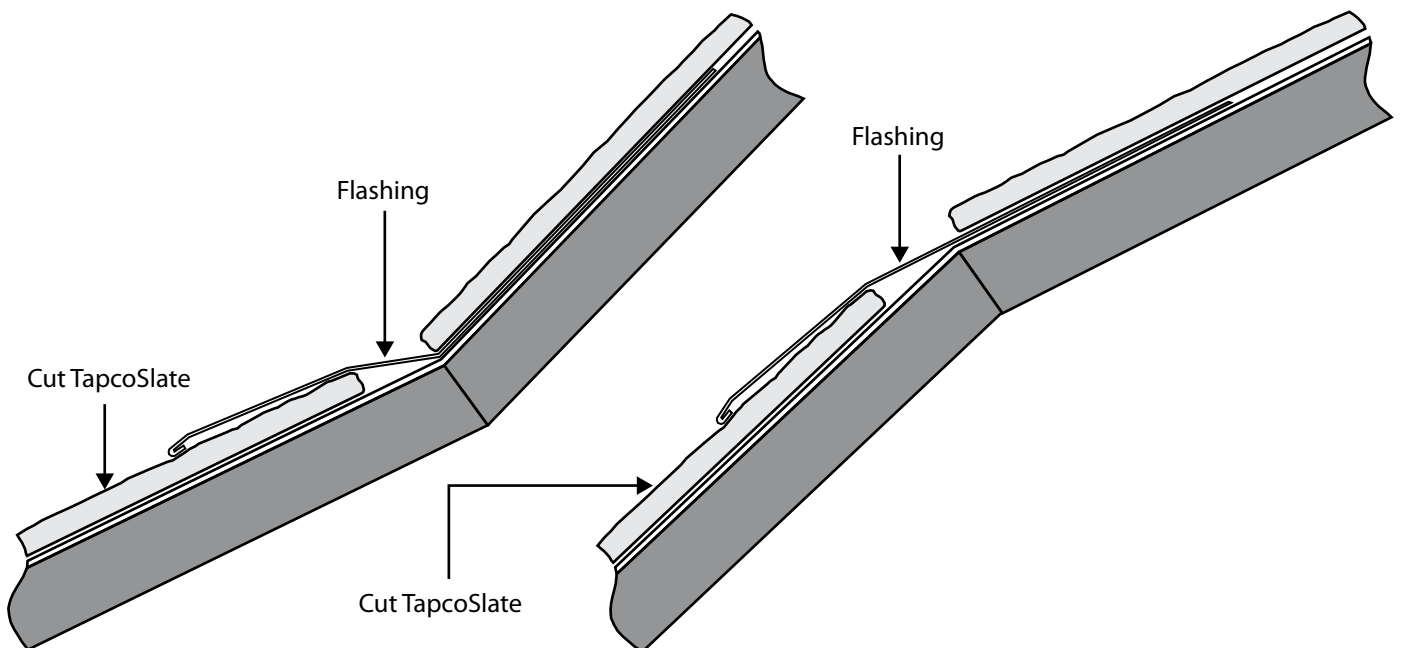
Normal type of roof vents or flashings can be used. Extended-life materials should always be used.

Soil Stack



Pitch changes

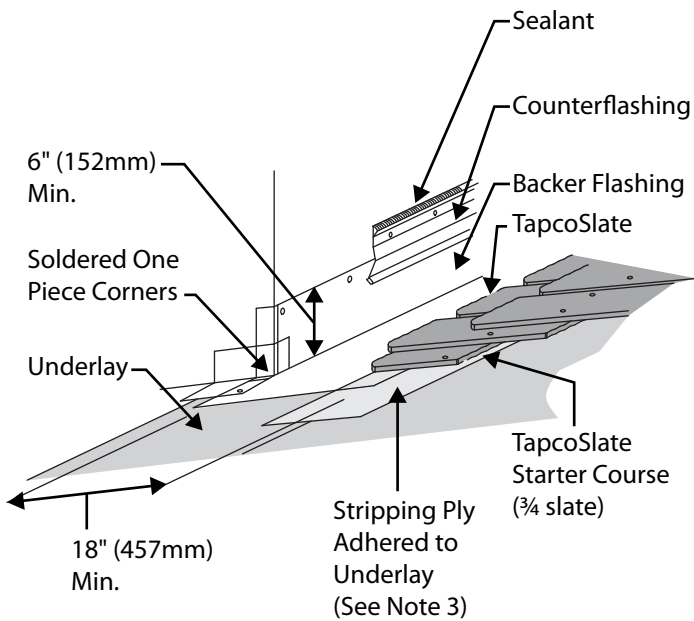
TapcoSlates can be installed onto rolling roofs with a gradual pitch change. Some roof designs, however, have drastic pitch changes where the use of flashing is necessary.



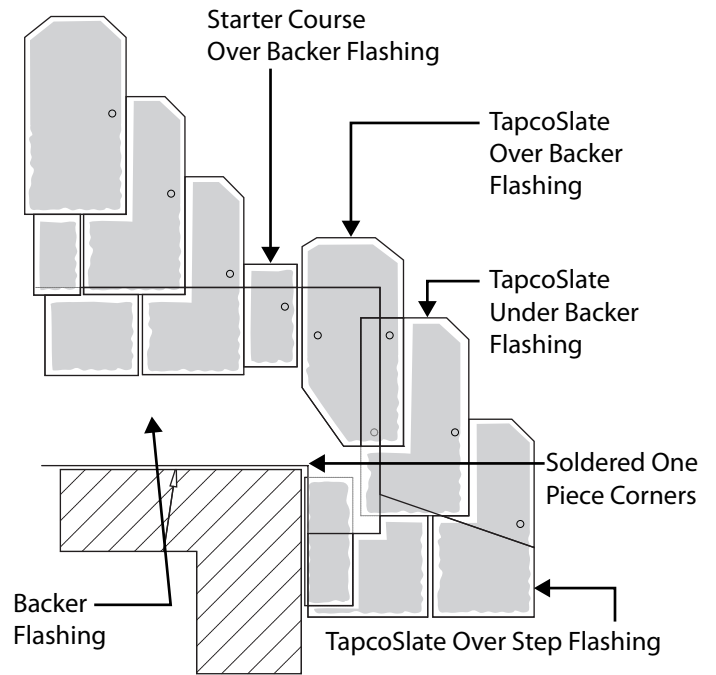
Chimney Saddles

With chimneys more than 2' (0.6m) wide it is recommended that a saddle be installed to divert water from the back of the chimney. With chimneys less than 2' (0.6m) may only require a simple pan flashing.

Pan Flashing View 1



Pan Flashing View 2

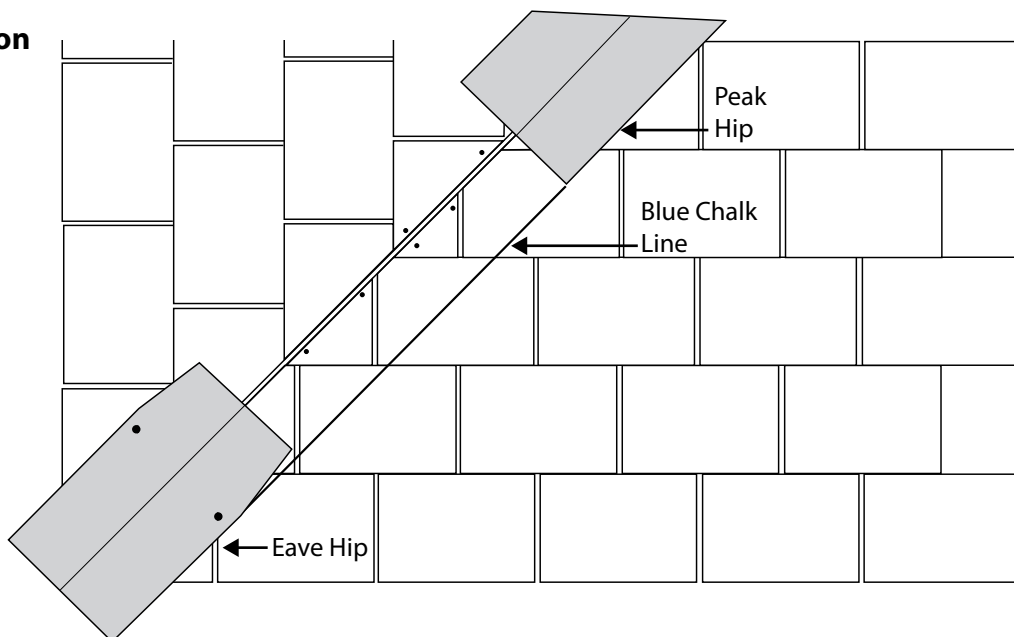


Hip & Ridge Detail on a Boarded Roof

When pre-formed hip & ridge slates are used, place nail at fastener guide targets. Fasten hip slates with 2 nails (one on each side). Maintain a 6" (152mm) exposure.

1. Hip & Ridge Slate installation requires the slate to be nailed or screwed in place.
 - a) Chalk a straight line by placing one piece of hip at the eave and one near the peak, hold the chalk line at the edge of the slate on the top and bottom pieces. This will help keep the hip straight in the event of a crooked hip.
 - b) Cover heads of fasteners with a butyl-based adhesive sealant compatible with the roof slate in any case of exposure.
 - c) Preformed Ridge Slates require 6" (152mm) exposure and require 2" (51mm) length fasteners (3" (76mm) when using vent ridge).
 - d) Fastener deck penetration must be a minimum of 3/4" (19mm).
 - e) Ridge end closure can be effected by cutting a triangular section from a slate and nailing to the ridge batten, or in the case of a boarded roof, to a timber fillet.

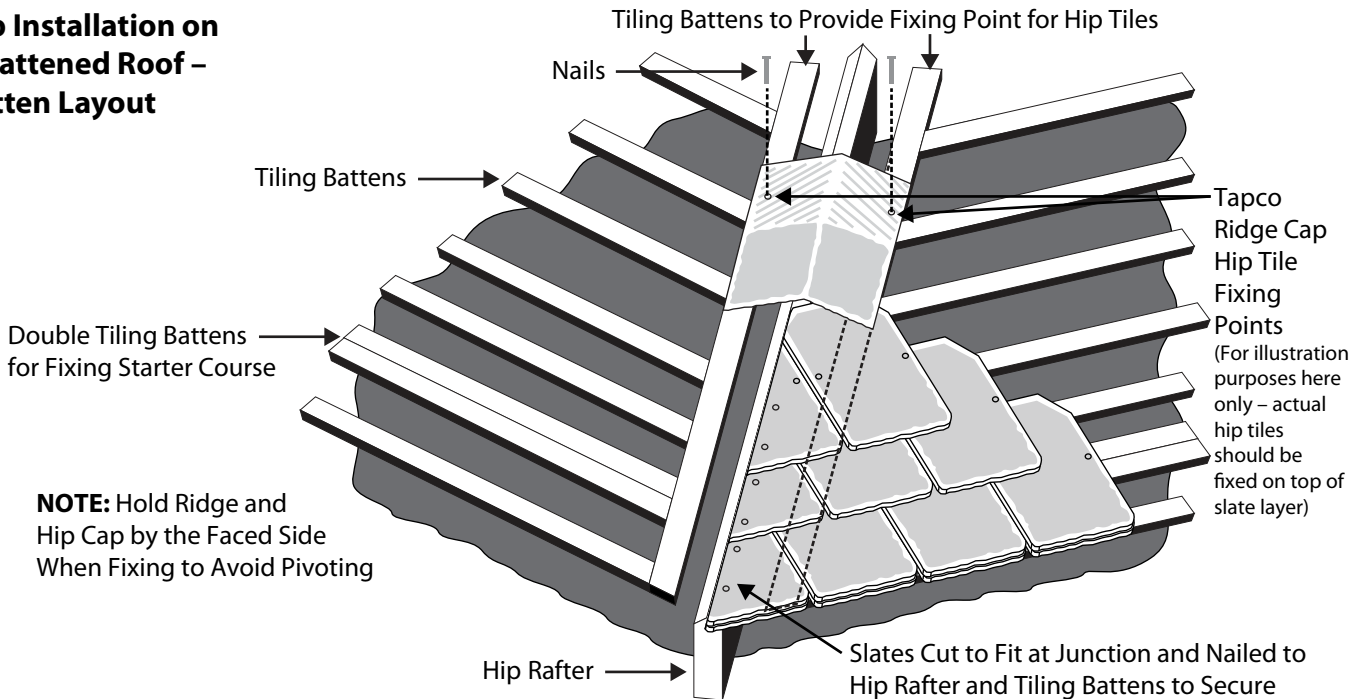
Hip Installation on a Boarded Roof



Hip & Ridge Detail on a Felt & Batten Roof

Felt & batten roofs need the addition of extra tiling battens to secure the hip tiles.

Hip Installation on a Battened Roof – Batten Layout



NOTE: Hold Ridge and Hip Cap by the Faced Side When Fixing to Avoid Pivoting

1. Cover the length of the hip with 24" (600mm) underlay from eave to ridge, overlapping the standard underlay on either side of the hip.
2. Position a hip tile in situ and mark the nailing points at the top and bottom of the hip.
3. Using these marks, secure a length of tiling batten either side of the hip to provide a fixing point for the hip tiles.
4. The slating battens should be fitted flush to these hip battens.
5. Cut slates to fit at junction.
6. Affix hip tiles using a minimum of 2" (51mm) nails or screws.
7. Finish at the eaves with a cut-to-size-and-shape TapcoSlate Classic hip tile.

Hip Installation on a Battened Roof – Tile Layout

