

Decra Plus Tile

Installation Instructions (March 2015)

Decra®
Roof Systems



Our Contact Details

If there is anything in this guide that you do not understand or that is unclear to you please do not hesitate to contact us on;

Tel: 0161 8654444

Fax: 0161 8642616

Web: www.decra.co.uk

Email: technical@decra.co.uk

1. Safety

These instructions are illustrative only. For the sake of clarity, access equipment, which should always be erected in accordance with safety regulations, has been omitted, as have safety helmets, roofing felt and sarking boards.

2. You Need

Pencil.

Tape measure or ruler.

Tin snips.

Decra hand nails or Decra Screws.

i You must only use fixing nails and screws supplied by Decra, OTHERWISE the Decra guarantee is invalidated.

Decra roofing felt or breather membranes.

Soft soled safety shoes.

Safety helmet.

3. You Also Need

To cut the tiles and accessories you need;

A reciprocating saw or jigsaw (fitted with an appropriate Decra Cutting Blade).

i DO NOT USE angle grinders or disk cutting equipment.

To form edge details to the perimeters of the roof you need

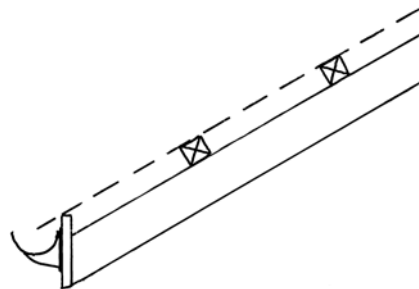
Decra Tile Bender.

IMPORTANT - Operatives are reminded to take all due care when handling sharp edges and using tools.

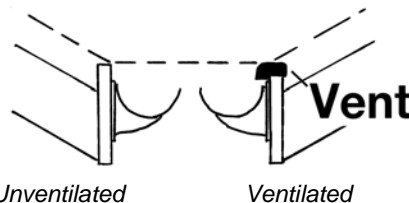
4. Setting Out The Fascia Board At Eaves

The positioning of the fascia board at the eaves is crucial to the success of the installation

The fascia board must be set at the right height, set too low the tiles will dive, set too high the tiles will kick up at the wrong angle. The top edge of the fascia board should be set at the same height as the tile battens.



However if you are installing fascia mounted eave ventilators or Decra Eaves Guard the fascia board may need to be set lower (refer to the instructions supplied in the Decra Ventilation pack & Decra Eaves Guard pack).



5. Battening

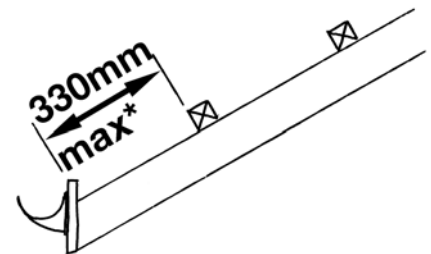
The most crucial factor in laying tiles is the accurate setting out of the tile battens, if you are not accurate then the tiles won't fit together properly.

Time spent taking extra care when battening is time saved when tiling.

Batten Sizes	
Rafter Centres	Batten Size (recommended)
450mm	38mm x 25mm
600mm	50mm x 25mm
900mm	50mm x 50mm
1200mm	50mm x 50mm

6. Setting Out The Battens At Eaves

The positioning of the first batten at the eaves is crucial to the success of the installation.



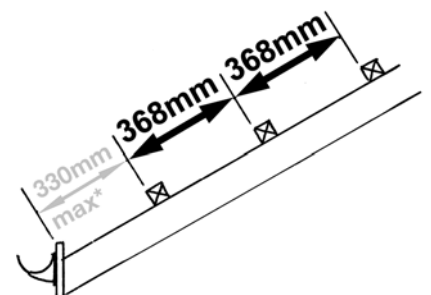
* The first tile batten should be placed in a position to suit the roof pitch and/or type of gutter, typically this is 330mm from the front edge of the fascia board to the front edge of the first tile batten.

However if you are installing fascia mounted eave ventilators refer to the instruction supplied in the Decra Ventilation pack.

7. Battening The Roof

Then fix the other battens working from the bottom of the rafter.

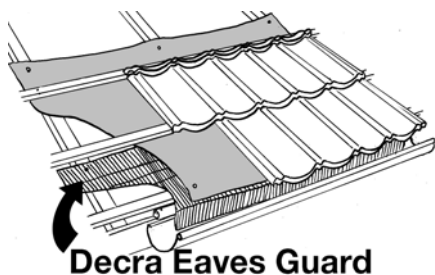
At 368mm spacings from front lower face of batten to front lower face of batten.



Care should be taken to be accurate when installing the battens. Time spent taking extra care when battening is time saved when tiling.

8. Decra Eaves Guards

Decra Eaves Guard is an eave protection system which is installed underneath the roofing underlay providing support for the underlay at eaves.



Decra Eaves Guard

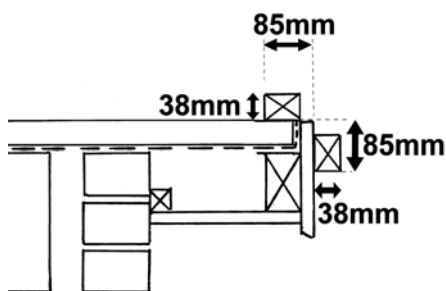
The installation procedure for the Decra Eaves Guard varies according to roof pitch and rafter spacing.

If you are installing the Decra Eaves Guard refer to the instruction supplied in Decra Eaves Guard pack.

9. Setting Out Gables

Fix the barge boards in a position where they are level with the tops of the tile battens.

Underlay should turn up against the edge of bargeboard by 38mm.

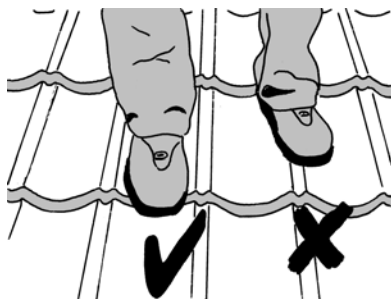


On top of the tile battens nail additional gable runner battens up the slope of the roof and along the vertical face of the bargeboard. These battens should be set 85mm from the outer top edge of the bargeboard (see drawing above).

10. Walking On The Tiles

When walking on the roof it is strongly recommended that installers should wear soft soled safety shoes to avoid any possible abrasion to the surface coating.

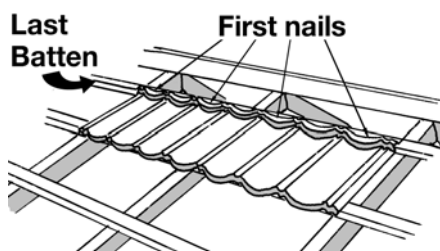
Your weight should be concentrated over the front edge and in the pan of tiles, as this is the area supported by battens. Weight should not be applied to the raised crown of the profile on the middle of tiles.



If you have managed to dent a tile refer to the tips section in the back of this guide.

11. Start Laying The Tiles

Lay the tiles starting at the batten below the ridge.



When putting your first nails in take care not to puncture the underlay below.

Q Why lay from the top?

A Although this is the opposite of traditional tiling practice, by laying from the top the tiles interlock tighter and it is actually quicker to lay the Decra tiles this way.

Q Do I lay the tiles straight Bond or Staggered Bond?

A The choice is yours, If you are roofing a straight forward gable to gable roof then straight bond is the quickest way to do it, but for best appearance lay the laps away from the principle line of site of the building.

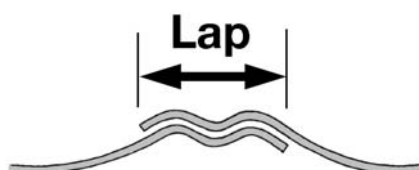
If you are roofing a hipped or valley roof then you will find that it's quicker to lay the tiles broken bond, working away from the hip and valley.

Q Starting from a gable end?

A Then don't forget you may need to allow for an appropriate upstand at the gable end of the tile (see gable sections).

Q How much side lap?

A



Q Which direction should I lap the tiles?

A Decra Plus Tiles can be laid from left to right or right to left but for best appearance lay laps away from the principle line of sight.

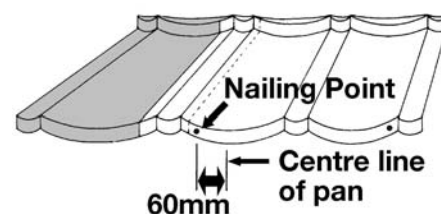
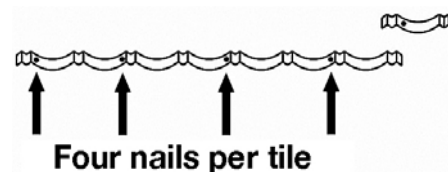
12. When You Have Laid Several Courses

Decra Plus Tiles are twice the thickness of standard Decra Tiles, so a nail punch is needed to get you started.

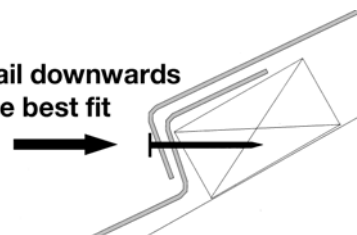


When you have laid several courses (laying them one under the other, by lifting the nose of a tile and tucking the next tile under) start pre-punching the tiles using a nail punch and then nail with Decra Plus nails, 4 per tile, laps and every other pan.

Nail tiles through the nose as shown in the sketches, leaving bottom course loose until more tiles are laid.



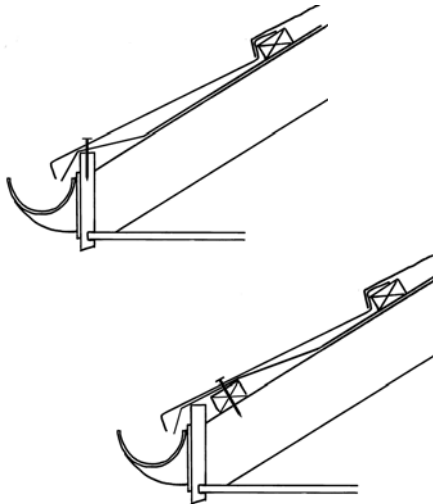
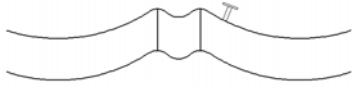
Tilt nail downwards for the best fit



i You must only use fixing nails and screws supplied by Decra, OTHERWISE the Decra guarantee is invalidated.

13. Nail The Eaves Course

Nail the eaves course 10mm from the high point of the pan into the top of fascia or eaves batten (if eaves ventilation is being fitted, see ventilation pack for nail positions).



Use 7 nails per each tile.

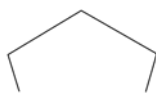
After completion of roof cover these nail heads with Decra finishing kit.

14. Gables

The gable detail is finished using a Decra D Box Barge Cap. The D Box Barge Cap is similar to the D Ridge in appearance but the angle is much steeper (see below).



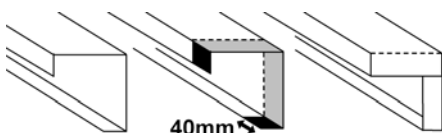
D Box Barge Cap



D Ridge

Decra tiles to be cut and bent forming an upstand against a gable runner batten.

Before installing the first D Box Barge Cap it is necessary to trim and fold the ends to form a blocked end at the eaves. Mark out a line 40mm from the bottom edge of D Box Barge Cap. Cut away areas shaded black on image below. Fold vertical flap 90° in on itself, fold horizontal flap down by 90°.



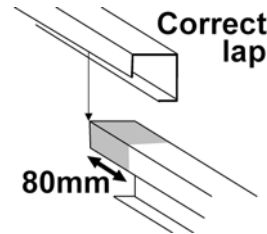
Step 1

Step 2

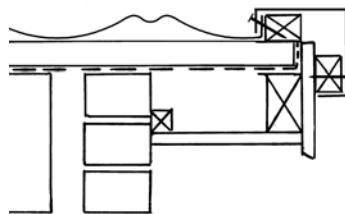
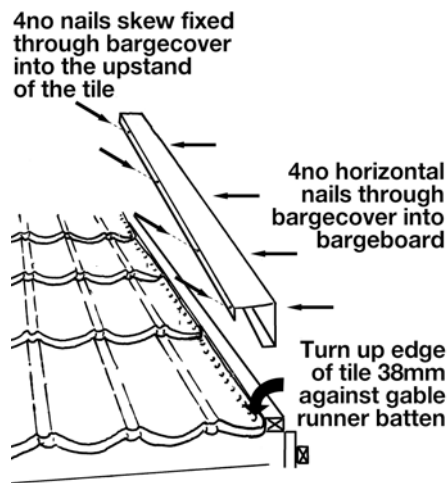
Step 3

Decra Plus Tile Installation Instructions (March 2015)

The D Box Barge Caps have a slight taper in their design. Place the wider end of the D Box Barge Cap over the narrower top end of the D Box Barge Cap beneath creating an 80mm overlap.



Nail D Box Barge Cap into position using 4 nails skew fixed down the inner face of the D Box Barge Cap into the upstand of the tile and 4 horizontally (see images below). Care should be taken to ensure D Box Barge Cap are correctly lapped.



15. Ridge Course D Ridge

The correct way to install the top course of tiles and the ridge tiles is determined by whether you are trying to achieve an unventilated or ventilated ridge detail.

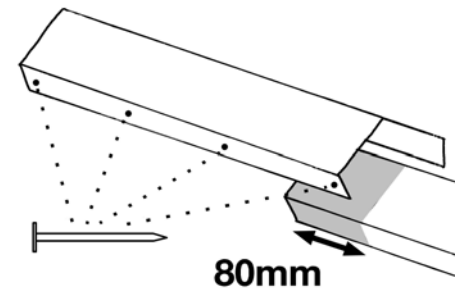


Universal ridge ventilator

16. Ridge Course Nailing & Lapping D Ridges

The ridge caps have a slight taper in their design. Place the wider end of the ridge over the narrower end of the ridge beneath creating an 80mm overlap.

Each ridge should be secured with 4 nails on each side of the ridge cap.

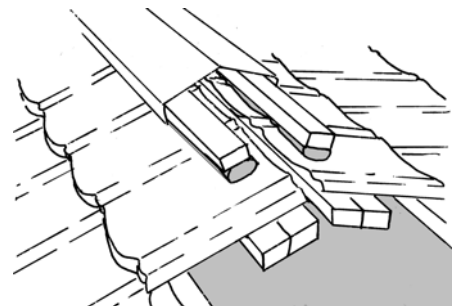


17. Ridge Course D Ridge (Unventilated)

Fit two tile battens either side of ridge.

Cut top tiles to suit (leaving a 10mm gap between the top cut edge of the tile and the top cut edge of the tile on the other side of the ridgeline).

Fix additional 50mm x 25mm batten to suit D Ridge on top of the tiles, taking care to sandwich the D Ridge Sealing Strip between the batten and the tile.

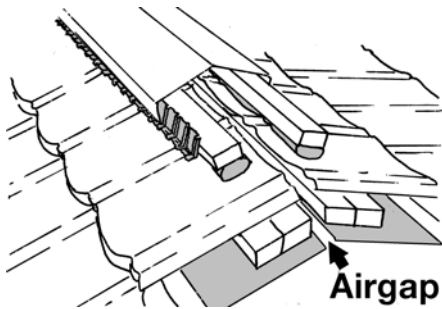


For tips on cutting tiles, see back of this guide

18. Ridge Course D Ridge With Universal D Ridge Vent



Universal ridge ventilator



Cut underlay short of ridge line and fit two tile battens either side of ridge, leaving a sufficient gap for ventilation. Fit two tile battens either side of ridge.

Cut top tiles to suit (leaving a 10mm gap between the top cut edge of the tile and the top cut edge of the tile on the other side of the ridgeline).

Fix additional 50mm x 25mm batten to suit D Ridge on top of the tiles, taking care to sandwich the D Ridge Sealing Strip between the batten and the tile.

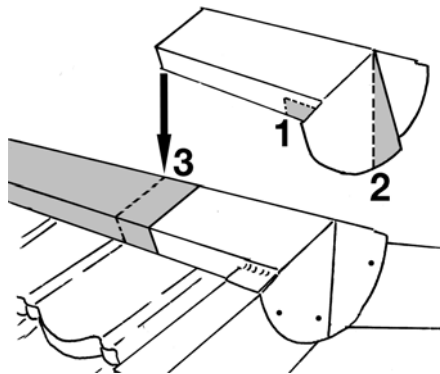
Place ridge cap into position over the top batten and the upstand edge of tile. Pull bottom edge of ridge cap away from the upstand edge of tiles and slip Universal 'D' ridge/hip ventilators into position on each side of the 'D' ridge cap. Ventilators should run continuously along each side of the ridge cap.

The ridge cap and ventilator to be nailed through the downturn of the ridge cap into the face of the batten, using four Decra fixing nails on each side.

i For tips on cutting tiles, see back of this guide

19. D Ridge Ends Caps

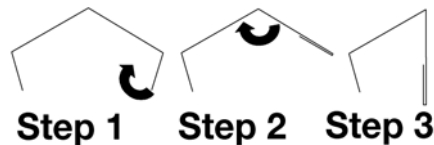
(available in standard 0.43mm guage only)



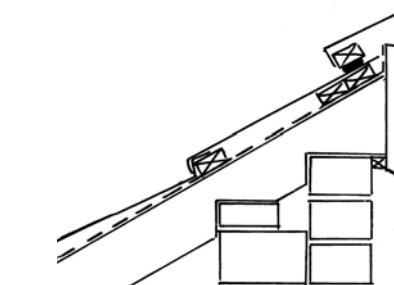
1. Snip and fold out flap to suit barge cover.
2. Trim edge of flap to create a vertical plumbline when fitted.
3. Install D Ridges over end of D Ridge End Cap ensuring good tight lap occurs. Then nail D Ridge End Cap into position (Fix vertical end of D Ridge End Cap first).

20. Mono-Pitch D Ridge

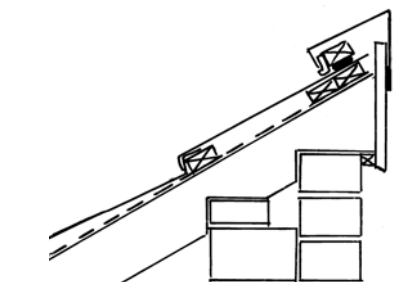
Mono-pitch ridge caps can be formed by adjusting the angles of Decra's standard 0.43mm D Ridge cap.



The procedure for installing the monopitch ridge is essentially the same as the detail for the ridges (please refer to ridge instruction shown earlier in this guide).



Unvented



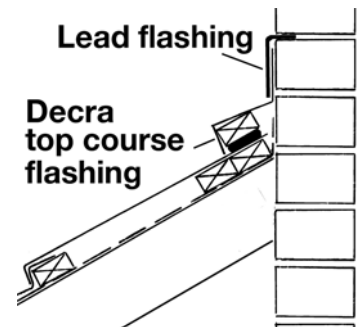
Vented using a Universal D Ridge Vent*

*When fitting the two tile battens at the top remember to leave a sufficient gap for ventilation.

* When fitting the D ridge ensure that a gap of at least 5mm is maintained between the underside of the ridge and the topmost batten.

i For tips on cutting tiles, see back of this guide

21. Top Edge Abutment

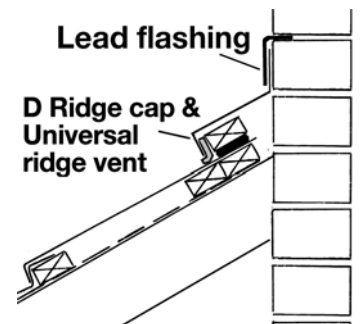


Unvented

Turn roofing underlay 75mm up the abutment wall.

Cut top tiles to suit. Fix additional 50mm x 25mm batten to suit Decra Top Course flashing on top of the tiles, taking care to sandwich the sealing strip between the batten and the tile.

Cover over with a lead flashing



Vented with a Universal D Ridge Vent Filler

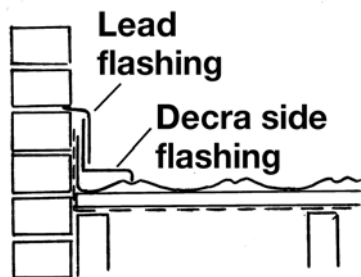
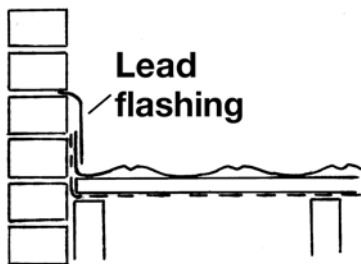
An appropriate top course flashing for use with Decra's Universal D ridge ventilator can be formed using a Decra Top Course flashing (by adjusting its downturned edge) or alternatively by adjusting the angles of a standard Decra D Ridge cap. When fitting the top course flashing ensure that a gap of at least 5mm is maintained between the underside of the top course flashing and the topmost batten.

(When fitting the two tile battens at the top remember to leave a sufficient gap for ventilation)

i For tips on cutting tiles, see back of this guide

22. Side Edge Abutment

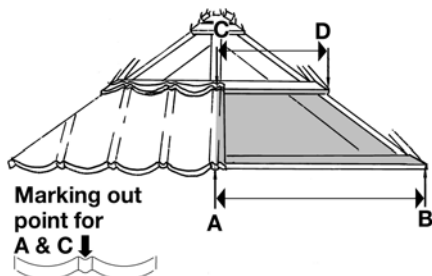
Turn the tile and roofing underlay 75mm up the abutment wall and cover over with a lead flashing



i For tips on cutting and bending tiles, see back of this guide

23. Hips

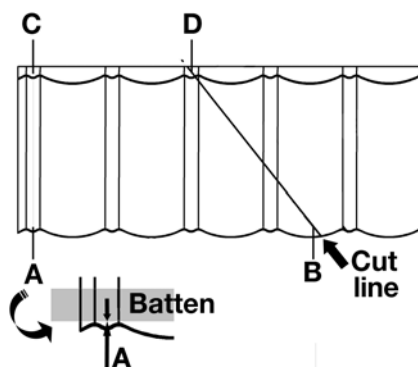
Install tile battens to suit gauge of tiles, ensure that tile battens project to centre line of hip tree.



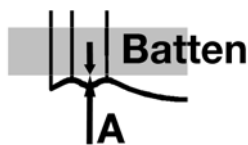
Step 1, Measuring for the Hip Tile

Measure from point (A) to (B). Measure from point (C) to (D), write down these measurements minus 5mm off both distances, this will be the set distance to make your cut at.

Step 2, Marking Out Your Hip Tile



Markout the same measurement (A) to (B) & (C) to (D) on to a tile. When transferring measurements to tile ensure measurements correspond with the position of the underlying tile batten (see batten intersection drawing below).



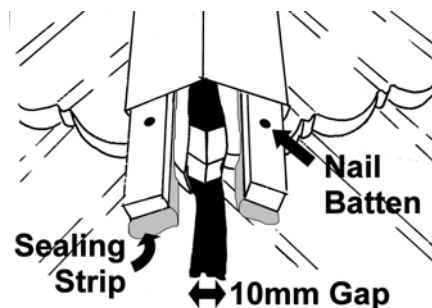
Scribe a line from (B) to (D), this will be the cutting point for your hip tile.

Step 3, Cut your hip tile

See tips on cutting tiles at back of this guide.

Step 4, Install ridge cap to hip

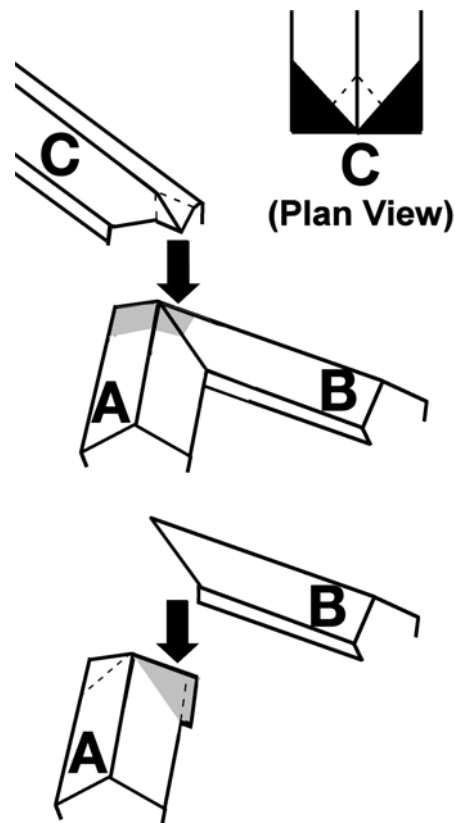
The methods for installing Decra D Ridges with or without Universal D ridge ventilators is the same in principle as shown for the ridge detailing earlier in this guide.



NOTE: When installing the Decra D Ridge/hip Sealing Strip make a neat incision at each intersection of the sealing strip with the nose of the tile to allow the sealing strip to dress fully into the step between each course of the tiles.

i For tips on cutting tiles, see back of this guide

24. Forming A Three Way Intersection At Hips

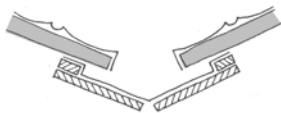


To form a three way intersection using D Ridges cut and fold tabs and flaps in ridge tiles as shown ridge sections A, B & C above. Install ridge section A followed by ridge section B then C on top. Nail ridge caps into position and touch up with Decra finishing kit.

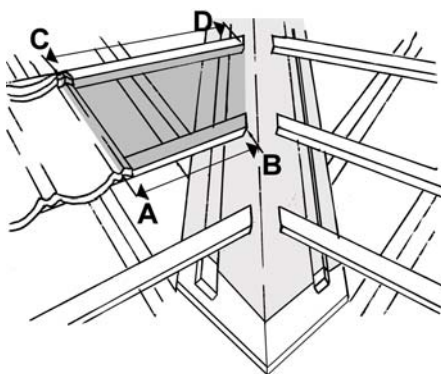
25. Valleys

Lay valley boards flush with rafter level and install valley runner batten to each side of valley.

If needed install an additional packer batten, parallel to side of valley runner batten, so as to support sweep of tile batten.



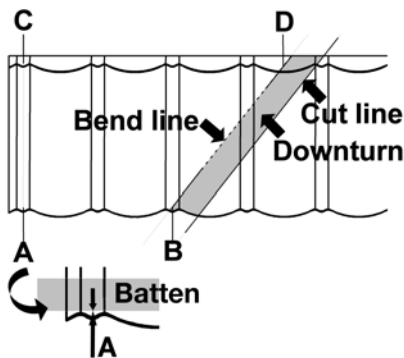
Install tile battens to suit gauge of tiles, ensure that tile battens sweep up and over valley runner batten. Cut battens to rake projecting over valley to 65mm short of centre line of valley.



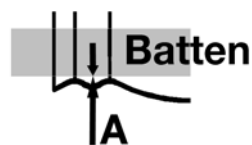
Step 1, Measuring for the Valley Tile

Measure from point (A) to (B), Measure from point (C) to (D), write down these measurements as this will be the set distance to make your bend at

Step 2, Marking Out Your Valley Tile



Markout the same measurement (A), (B), (C) and (D) to a tile. When transferring measurements to tile ensure measurement correspond with the position underlying tile batten (see batten intersection drawing below).



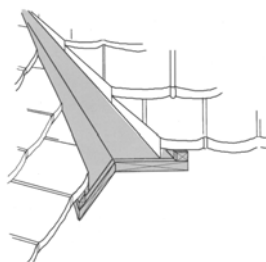
Scribe a line from (B) to (D), this will be the bending point for your valley tile.

Scribe an additional cut line on to the tile to allow for a tile downturn at the valley.

NOTE: When forming a downturn in the tile take a measurement from top of leading edge of tile batten to valley surface and allow for tolerance in fit to avoid the downturned edge of the tile making any contact with valley surface.

Step 3, Cut and bend your valley tile

Cut and bend the valley tile and fix into position (see tips on cutting and bending tiles at back of this guide)



i For tips on cutting and bending tiles, see back of this guide