

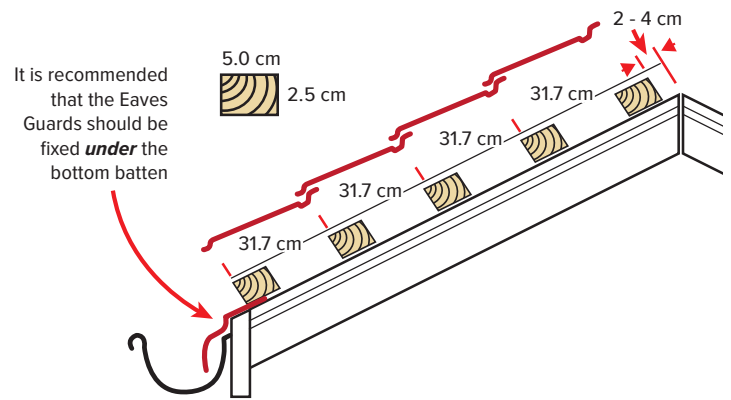
INSTALLATION GUIDELINES

Lightweight Tiles are a screw-fix system, designed to be easy to fit and can be installed by anyone with basic DIY knowledge with just a few tools. Due to every roof being unique, these steps are to be used as a guide but following them should enable a simple installation.

THE BATTENS

Recommended batten size: 2" x 1" (2" part to be flat).
Batten distance/spacing: 31.7cm/12.5" (Tolerance: +/- 0.5-1cm).
Top & bottom battens: To be fixed 2-4cm from the edge of the roof.
Waterproof/Breathable Membrane: To be installed underneath battens if required.

TIP: Always take 2 tiles and connect them together to make sure your batten spacing will be correct.



Please take all relevant safety precautions when working on roofs and wear gloves/goggles where appropriate.

TOOLS REQUIRED:

- HAND-HELD DISC CUTTER or HAND SAW
- ELECTRIC SCREWDRIVER

USE **3** PER TILE

FIT TILES FROM BOTTOM UP

Example showing tiles being laid horizontally with alternating overlaps to maintain a consistent level.

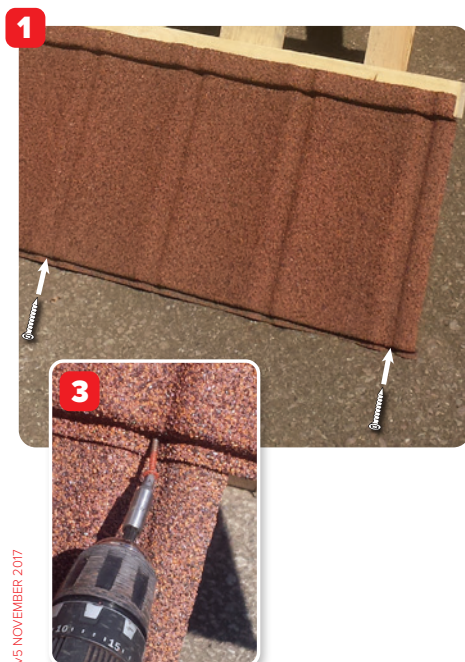


Tiles may be staggered to avoid repetition of overlaps and uniform lines. This is shown in the below example. The degree of the stagger is discretionary.



1. FITTING THE TILES

TIP: It is recommended that the tiles are fitted from the bottom upwards. However, they can also be installed top to bottom; fitting from the bottom allows the ridge tile to cover sawn edges on the top tiles. Screws go into the lips of the tiles, but they can also be used anywhere on the surface of the tile.



1 Using three screws per tile, position your first tile against the batten and screw through the bottom lip into the batten from below.

2 Continue laying tiles horizontally.

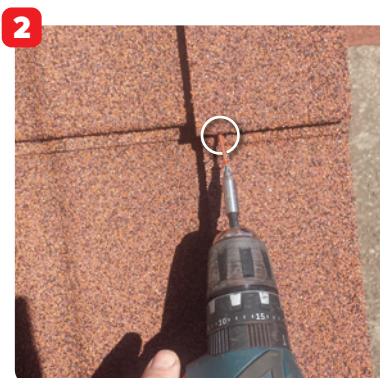
3 Next, neatly overlap the next row of tiles vertically and screw through both tiles (the top of the bottom tile, the bottom of the next tile up), again, into the side of the batten. Continue to the end of the roof.

2. FITTING THE DRY VERGE



NOTE: The dry verge comes in a right-hand and left-hand fitment.

1 Offer up the dry verge to the edge of the tiles, making sure it will fit neatly and that all overlaps are aligned.



2 Screw through the dry verge into the battens as pictured. Three in each tile overlap and two on the front edge, ensuring the screws penetrate the framework.

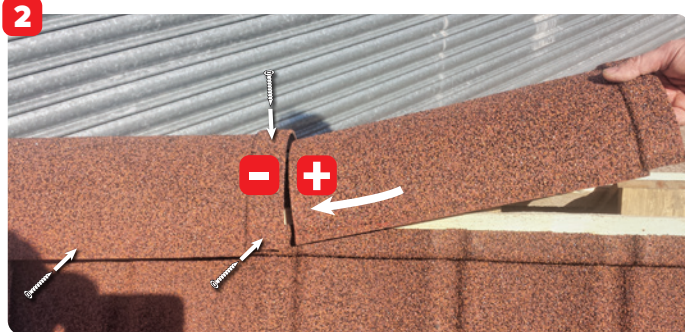
TIP: Always insert the screws into the overlap.

3. FITTING THE RIDGE TILES

USE
3
PER RIDGE
TILE, PER SIDE

TIP: Measure the length of ridge tiles required before fixing. If you need to cut down a ridge tile, cut away the female end (-). The ridge tiles are screwed into place above their lower lip, through the top tile and into the batten. The ridge tile may also be screwed through the top and into the woodwork.

- 1 Before fixing the ridge tiles, you may wish to address the void that is underneath. Suggested fillers include Expanding Foam or Expanding Foam Tape.



- 2 Set the first ridge tile into place, ensuring a neat overlap of the tile below. Interlock the **male** end (+) of the ridge tile into the **female** end (-) of the first ridge tile, and screw into the woodwork.



- 3 Continue adding the ridge tiles in the same way until the length is completed. The end cap fits onto the **male** end of the ridge tile, so you may need to make a spacer using another cut ridge tile.

4. JOINING HIPPS TO THE RIDGE

Please follow the steps, as above, for fitting the ridge tiles.

TIP: Carefully cut the ridge tile and hips (Mitre) to create a watertight joint. To ensure the joint is sealed, fill any gaps with either Flexim Roof Putty or other roofing sealant. (Additional stone granulate may be purchased for an improved aesthetic finish)

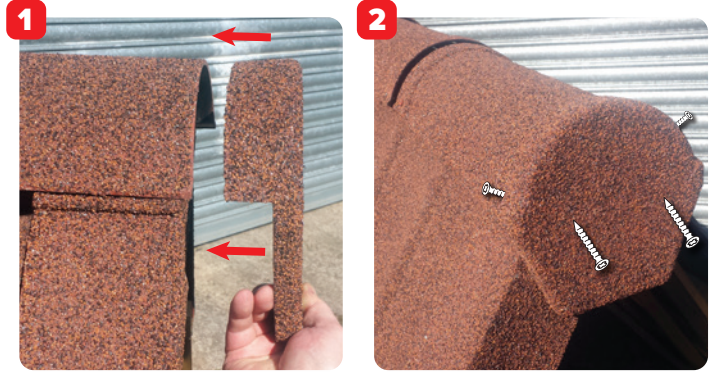
The picture below shows 3 hips being joined to a ridge tile with mitring.



In some cases, Lead or a Lead Alternative such as Ubiflex can be used to create a water-tight seal (Cap).



5. FITTING THE END CAPS



- 1 Offer up the end cap to the male end of the ridge tile, making sure it is aligned neatly.
- 2 Screw through the end cap AND ridge tile into the batten. Optionally, screw through the face of the end cap, through the dry verge and into the batten.

6. ...AND TO FINISH OFF

TIP: The Flexim Roof Putty is an ideal gap filler for our Lightweight Roofs. However, it is not to be used for adhesion of the ridge tiles. We recommend that the areas to be filled are masked off as shown below.

- 1 Mask off an area to be filled with sealing putty, as shown below. This will prevent unwanted residue being left on the areas surrounding the gap.



- 2 Press the putty into the gap, removing any excess with a trowel. The void underneath the ridge should have already been filled (See point (1) from **Fitting the Ridge Tiles**); this should then mean the Flexim will have something to press against.
- 3 Finally, peel away the masking tape and smooth off using a trowel. Flexim takes approximately one week to harden and will remain tacky for a while.



TIP: If the Flexim sticks to an area that it is not required, use a ball of Flexim to unstick the unwanted Flexim (like a ball of Blu Tack).