

Here to help

VENTILATED DRY HIP SYSTEM

The Marley dry hip system has been developed to provide a mechanically fixed, weathertight and maintenance-free system for hipped roofs without the need for mortar bedding. It is suitable for use with all Marley concrete plain tiles and concrete interlocking tiles and is designed for use with third round and modern hip tiles.

Tell me more

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Or visit marley.co.uk

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December 2018

- 24 Place purpose-made apex cap suitable for roof pitch, over uppermost ridge/hip tiles, and mark position of two cut out slots at lower edges. Remove cap and cut a small corresponding slot in hip/ridge tile, maximum 5mm deep (Fig. 12).
- 25 Obtain the three hip/ridge unions suitable for the hip/ridge profile, and break off three central spacers on underside with pincers or other suitable tools. Do not break off the two location lugs remaining.
- 26 Secure legs of apex junction cap with hip/ridge unions ensuring that location lugs align with slot at sides of cap, and are fully clipped to circular beads of dry hip and dry ridge batten sections (Fig. 13). The foam gasket on the underside of the hip/ridge union must be retained.

- 27 Where universal dry hip system does not terminate at a conventional three-way intersection (or as an alternative to a PVC apex cap), the hip/ridge junction can be weathered with a Code 4 or 5 lead saddle with edges secured in above manner.

Note: Where special roof groundwork is encountered e.g. rigid insulation boards laid above the roof structure, please consult Technical Advisory Service for advice concerning the suitability of fixings.

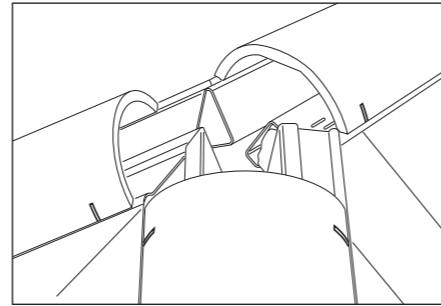


Fig. 12 – Slots cut in ridge/hip tiles

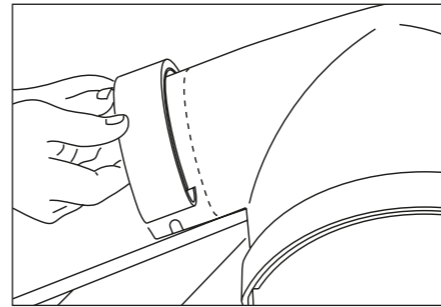
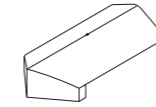
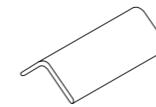


Fig. 13 – Secure apex junction cap with unions

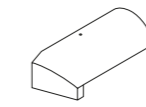
Components



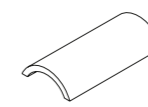
Modern block end hip tile (code 292)



Modern ridge/hip tile (code 209)



Third round block end hip tile (code 291)



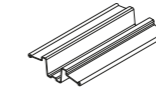
Third round hip tile (code 289)



Modern ridge/hip union (code 4140*)



Third round hip union (code 4350*)



Dry hip batten section (code 43300)



Modern hip apex cap units:
15°-24° (code 4381*)
25°-35° (code 4382*)
36°-45° (code 4383*)



Third round hip apex cap units:
15°-24° (code 4371*)
25°-35° (code 4372*)
36°-45° (code 4373*)

Tile tail clip pack (20 clips) (code 43602)

Dry hip system fixing kit (code 54360)**

* Suffix with colour code 01 Grey, 03 Brown, 04 Terracotta

** Kits contain: 2 No. 3m lengths of closed-cell rubber foam strips, 5 No. PVCu fixing/ expansion blocks, 12 No. head clips, 2 No. PVCu 'H' section clips, 18 No. tail clips, 7 No. 75mm x 10g s/s drive screws, 1 No block end hip bracket and set screw with sealing washer.



FIXING INSTRUCTIONS

Ventilated Dry Hip System

Marley

Installation

- 1 Felt and batten roof in normal manner, ensuring ends of the tiling battens are cut neatly to a mitre and nailed to hip tree or rafter.

Note: In situations where counter-battens and/or rigid sarking have been fixed to adjacent roof slopes, an additional timber batten of equivalent depth, must be securely fixed to top of hip rafter.

- 2 Lay roof tiles in normal manner and fix in accordance with specification.

- 3 If using low profile tiles with depth from rafters to top of tile of <85mm, the battens need to be cut back to the width of 110mm and the hip batten section screwed directly to the roof structure (Fig 1a).

If using high profile tiles with overall depth >85mm, the batten section needs to be screwed through the battens or an additional piece of packing timber needs to be used, sized 15-25mm to suit (or standard 50x25mm batten will suffice) (see Fig 1b).

- 4 Secure any small cut pieces of tile* to adjacent large tile by means of the special head clip (supplied in the fixing kit) and ensure they are fully supported at hip intersection. Ensure orientation of clip is such that end of throat is flush with cut tile (Figs. 2 and 3).

- 5 In addition, prevent any small cut pieces of tile from slipping down the roof slope by using tail clip (supplied in fixing kit), which is simply bent over back of tile below and fitted over front edge of the cut tile.

In areas of high exposure raking cut tiles or slates may be bonded to adjacent fully fixed tiles or slates using an appropriate epoxy resin adhesive. This will minimise risk of smaller cut pieces of tile or slate becoming dislodged.

Note: When using Plain tiles, ensure that tile-and-a-half-tiles are used on all courses adjacent to the hip, in order to minimise small cut pieces adjacent to the hip.

* The use of half tiles with interlocking tiles will also reduce small cut pieces.

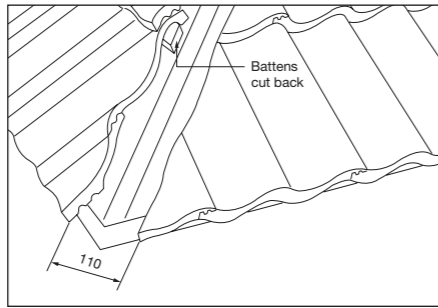


Fig. 1a - If using low profile tiles (depth <85mm) form a gap of 110mm at hip

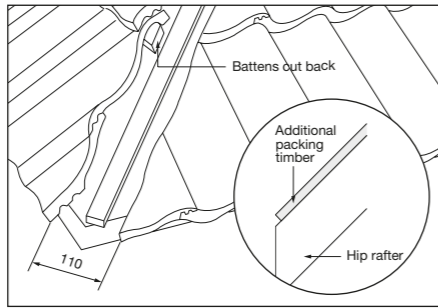


Fig. 1b - If using low profile tiles (depth <85mm) form a gap of 110mm at hip

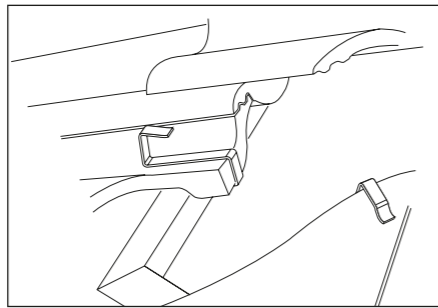


Fig. 2

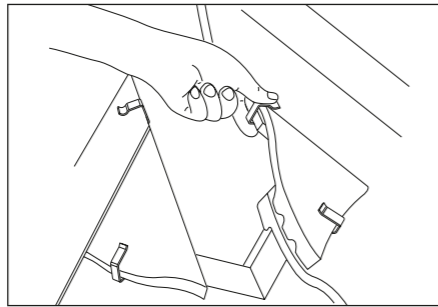


Fig. 3

- 6 Insert the closed cell foam rubber strip (supplied in fixing kit), into recesses on each side of PVCu extruded dry hip batten section (Fig. 4).

- 7 Trim top flanges of batten section to maintain angle of external corner of hip. If necessary, make a horizontal cut in walls of batten section, to enable it to fit over fascia upstand (Fig. 5).

- 8 Locate batten section assembly into gap between cut tiles up length of hip. Two or more lengths may be joined together up hip, ensuring that closed cell foam rubber strip from each section abuts tightly to prevent water ingress (Fig. 6).

- 9 Fit small 'H' section PVCu clips (included in fixing kit), onto top flange of batten section each side of butt joint to provide added support.

- 10 Locate PVCu fixing/expansion blocks inside the dry hip batten section and fix to hip tree or rafter using the 75mm x 10g stainless steel drive screws (supplied in fixing kit) (Fig. 7).

- 11 Position first expansion block at eaves, a maximum 185mm from mitred end of batten section. Note the orientation of the fixing/expansion block (as shown in Fig. 8).

- 12 Position remaining fixing/expansion blocks at approximately 565mm centres from first block.

- 13 Screw firmly into position, so that as they reach base of dry hip batten section, they expand sides of section and form a weathertight seal between closed cell foam rubber strip and raking cut roof tiles.

- 14 Fit last block over junction of two lengths of dry hip batten section to firmly secure both ends.

- 15 Fix uppermost fixing/expansion block as close to apex as possible.

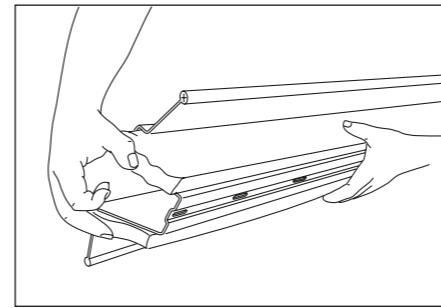


Fig. 4 - Fit foam rubber strip to each side of batten section

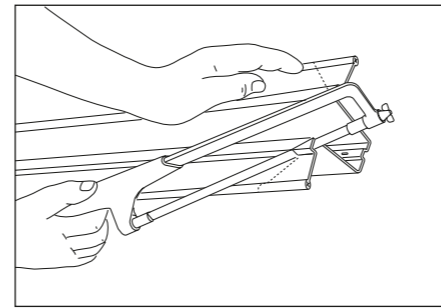


Fig. 5 - Make angled cut, if required

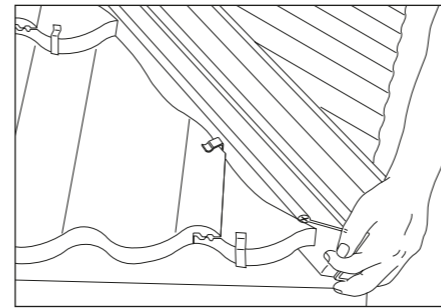


Fig. 6 - Locate hip batten section between cut tiles

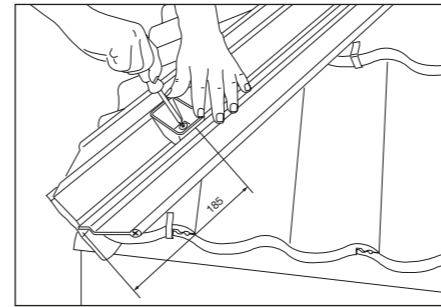


Fig. 7

- 16 Commence laying hip tiles from eaves using block end hip tile. Ensure that downstand at end does not foul eaves gutter, and trim if necessary, using a disc cutter.

- 17 Secure block end hip bracket to underside of block end hip tile by assembling set screw and sealing washer through hole in tile to captive nut on bracket (supplied in the fixing kit).

- 18 Locate block end hip tile and assembly onto top of circular beads of dry hip batten section, and fix end of bracket to hip rafter using two 75mm x 10g stainless steel drive screws (Fig. 9).

- 19 Firmly secure block end hip tile with a PVCu hip/ridge union fitted over end of tile and clip to the circular beads of dry hip batten section.

- 20 Break off locating lugs on underside of hip/ridge union with pincers or other suitable tool before fitting. Make two small cuts (max. 5mm deep) at either side of block end hip tile to allow side of hip ridge union to clip onto bead of batten section (Fig. 10).

- 21 Lay remaining hip tiles up length of hip, with each leg seated on top of circular bead. Leave gap of approximately 3mm between each hip tile to allow clearance for locating lugs of the PVCu hip/ridge unions.

- 22 Secure each hip tile by clipping ends of PVCu hip/ridge union over circular beads of dry hip batten section. Fix any cut hip tiles adjacent to end hip tiles, which must be full tiles (Fig. 13).

- 23 At hip apex, mitre dry hip batten sections together as closely as possible. When forming a junction with the Marley ventilated dry ridge system, ensure the closed cell foam rubber strip 100mm longer than required, and insert into dry ridge batten sections to ensure a watertight seal (Fig. 11).

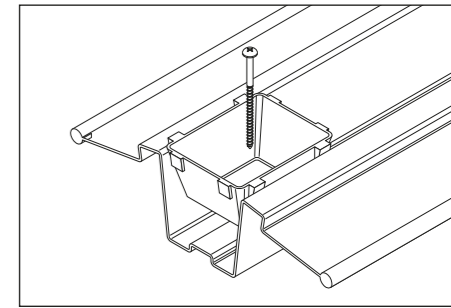


Fig. 8

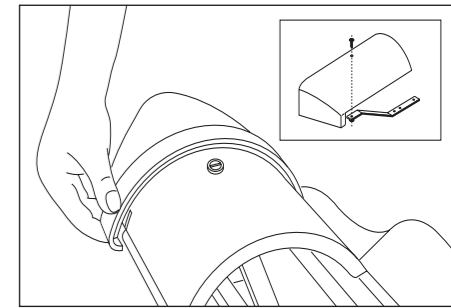


Fig. 9

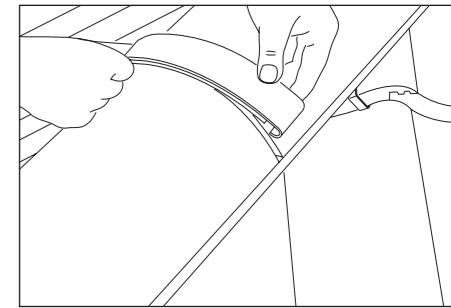


Fig. 10 - Fit ridge unions

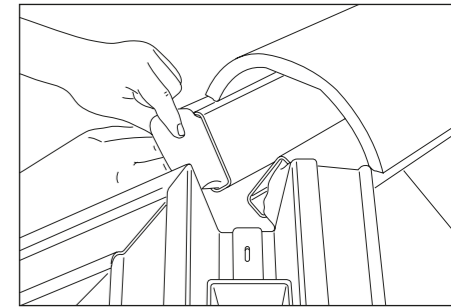


Fig. 11 - Insert closed cell foam rubber strip