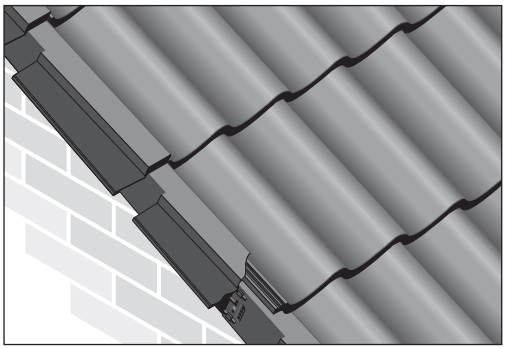
6 Dry fix systems

UNIVERSAL Dry verge system



The Marley Eternit universal dry verge system provides a strong, weathertight and maintenance-free verge. Individual verge units retain the stepped appearance of a traditional mortar bedded verge while mechanically fixing the verge tiles.

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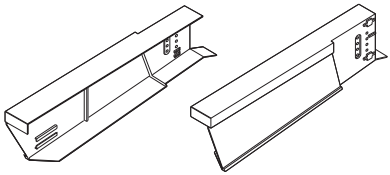
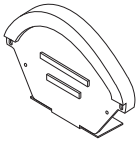
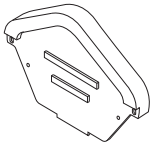
Components



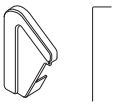
Universal dry verge unit
(LH code 391)
(RH code 392)



Segmental ridge end cap
(code 395)

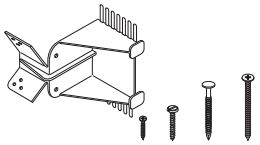


Modern ridge end cap
(code 394)



Modern mono-ridge end cap and wire hook
(LH code 396)
(RH code 397)

Segmental mono-ridge end cap and wire hook
(code 395)



Universal dry verge fixing kit (code 39300)
28 No. 40mm x 3 mm aluminium alloy A.R.S. Nails

2 No. 25mm x 8g stainless steel screws

2 No. starter inserts

2 No. 30mm x 8g stainless steel, pozidrive-headed screws

4 No. 6 x 20mm stainless steel screws

*Suitable for use with Marley Eternit roofing products and those of other manufacturers

UNIVERSAL Dry verge system

Installation

1 Set out eaves course of roof tiles in normal manner, ensuring that wherever possible full tiles complete verge overhangs or that highest section of tile profile is cut to finish at edge.

Note: see page 59 for details of verges for Duo Modern and Duo Edgemere.

2 Saw tiling battens off square to overhang bargeboard or brickwork by 50mm and nail within a maximum of 500mm from ends (Fig 1).

3 Position top course tiling battens to suit roof pitch and lap at a maximum of 85mm from roof apex.

4 Place first eaves roof tile in position overhanging the verge.

5 Slide starter insert into internal fixing channels of dry verge unit, and position assembly for fixing over the eaves verge tile. The verge unit should be sitting tightly against the top of the verge tile while the starter insert rests against the end and face of the fascia board (Fig 2).

6 Secure the lower flange of the starter unit to the front of the fascia board using two no.6 x 20mm stainless steel screws (supplied). If necessary, the upper flange can be trimmed to avoid interfering with the underside of the eave tile (Fig 3).

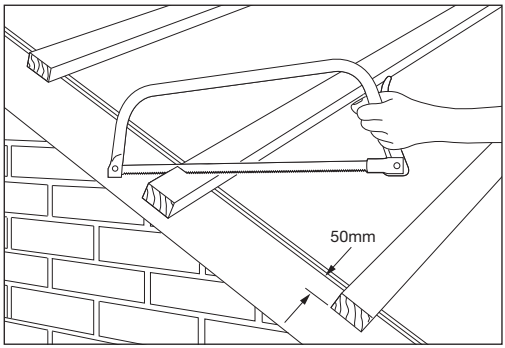


Fig 1 Position top course tiling battens

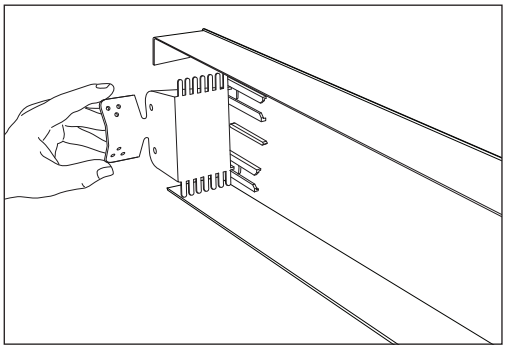


Fig 2 Locate starter insert in dry verge unit

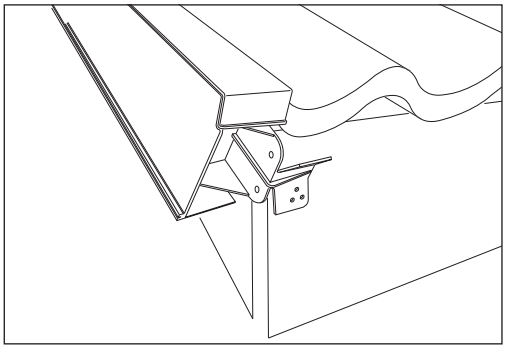


Fig 3 Mechanically fix starter unit

UNIVERSAL Dry verge system

7 Nail the verge unit to the tiling batten using the appropriate hole (nearest to the centre of the tiling batten) with 40mm x 3.35mm annular ring shank nail provided in the fixing kit (Fig 4).

8 Fix subsequent dry verge units as tiling proceeds, or in a single operation after completion of roof tiling. Ensure that the verge tiles are fully inserted into verge units.

9 Successive dry verge units are interlocked together by sliding upwards against unit below, ensuring that lugs on outside of verge unit fit into internal locating slots (Fig 5).

IMPORTANT: Verge units can be slid together at two different height positions dependent on the roof tile profile and therefore it is important that the underside of the top flange of each verge unit is in contact with the top surface of the roof tile and slid upwards to engage in the correct height position.

All verge tiles should be mechanically fixed in accordance with BS 5534 in addition to the use of the Universal Dry Verge units i.e. by nailing, clipping or screwing as appropriate.

Use with dry ridge system battens

10 At apex of roof, where battens are located, retain top course dry verge unit by securing a 30mm long pozidrive head screw (supplied) into second series of holes in verge unit and locate it behind nib section of dry ridge batten (Fig 6).

11 If required, trim flange of ridge and cap to fit between top course verge units. (Figs 9 and 10). Screw ridge end cap to end of dry ridge batten by locating 25mm x 8g stainless steel screws into end of circular beads on upper flange (Fig 7).

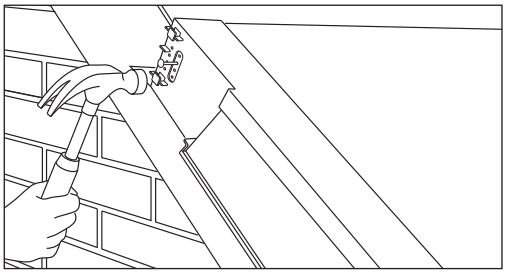


Fig 4 Nail fix verge unit

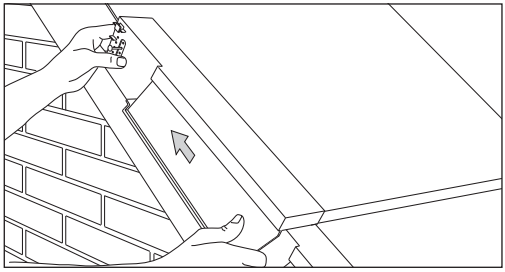


Fig 5 Slide up each unit to interlock

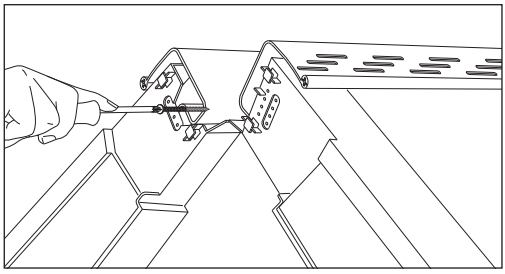


Fig 6 Screw verge units at apex of verge

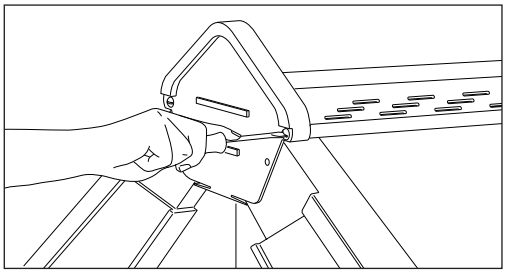


Fig 7 Screw fix ridge end cap

UNIVERSAL Dry verge system

Using bedded ridges and RidgeFast dry ridge

12 Screw ridge end cap through top course verge unit, to end of top course tiling batten. Locate 25mm x 8g stainless steel screws through lower, partly formed fixing holes (Fig 8).

13 If required, trim flange of ridge end cap to fit between top course verge units. (Figs 9 and 10). Top course verge unit is secured to end of top course tiling batten in normal manner.

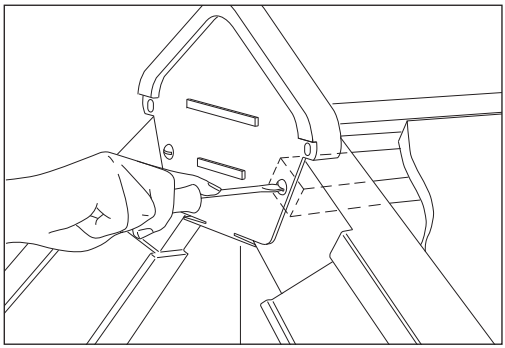


Fig 8 Screw ridge end cap

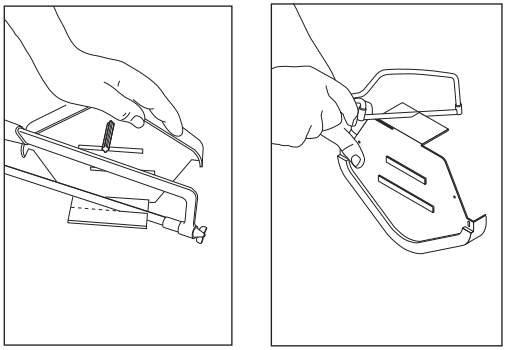
Mono-ridge end cap fixing wire

14 Construct dry verge units as before up to the roof apex.

15 Prior to fixing the gable end Mono-ridge tile, push the security wire through the outside face of the Mono-ridge tile (using the same fixing hole for screwing the Mono-ridge tile to the wall) and bend through 90° (Fig 11)

16 Feed the free end of the wire through the hole in the Mono-ridge end cap. Push the end cap tightly against the Mono-ridge tile and bend the wire protruding through the end cap downwards flush with the vertical face.

17 This assembly can now be placed into position, securing the Mono-ridge tile with the stainless steel screws provided. The leading edge of the end cap is secured to the dry ridge batten section (or end of top tiling batten for mortar bedded ridges) using a 25mm x 8g stainless steel screw supplied in the fixing kit.



Figs 9 and 10 Cutting end cap flange

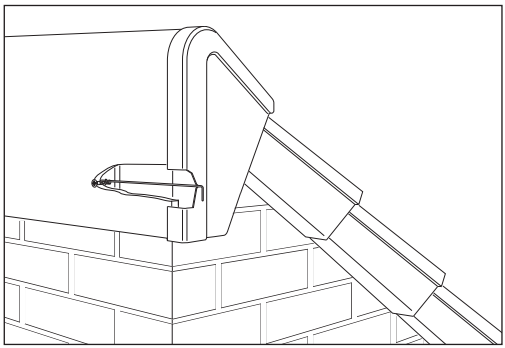
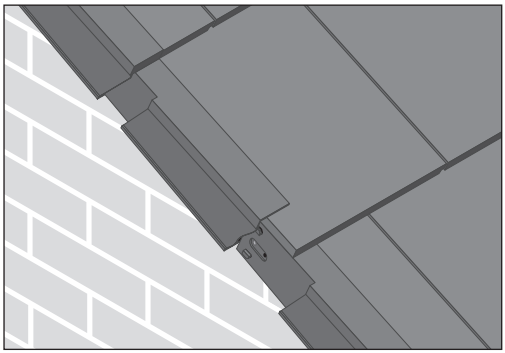


Fig 11 Mono-ridge end cap

Edgemere Dry Verge System



The Edgemere dry verge system provides a strong, weathertight and maintenance-free verge. Individual verge units retain the stepped appearance of a traditional mortar bedded verge while mechanically fixing the verge tiles.

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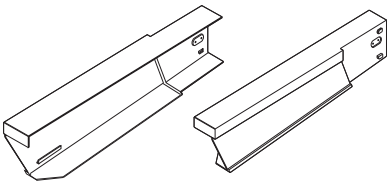
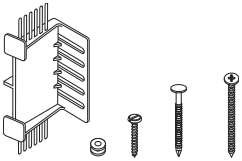


Edgemere dry verge units
(LH code 381)
(RH code 382)



Edgemere dry verge fixing kit (code 38300)
2 No. wire hooks
(mono-ridge end cap fixings)

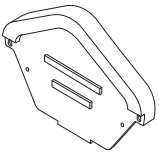
28 No. 40mm x 3 mm aluminium alloy A.R.S. Nails

2 No. 25mm x 8g stainless steel screws

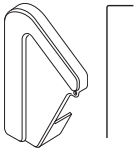
2 No. starter inserts

2 No. 30mm x 8g stainless steel, pozidrive-headed screws

2 No. Nylon spacers



Edgemere ridge end cap
(code 384)



Modern mono-ridge end cap and wire hook
(LH code 396)
(RH code 397)

Edgemere Dry Verge System

Installation

1 Set out eaves course of roof tiles in normal manner, ensuring that wherever possible full tiles complete verge overhangs.

2 Saw tiling battens off square to overhang bargeboard or brickwork by 50mm and nail within a maximum of 500mm from ends (Fig 1).

3 Position top course tiling battens to suit roof pitch and lap at a maximum of 85mm from roof apex.

4 Place first eaves roof tile in position overhanging the verge.

5 Slide starter insert into internal fixing channels of dry verge unit, and position assembly over eaves roof tile into position at which it will be fixed (Fig 2).

6 Mark location of a suitable fixing position against gable wall or bargeboard through one of the slots in starter insert.

7 Remove roof tile and dry verge unit and slide out starter insert.

8 Once removed, re-locate starter insert in marked position and mechanically fix through spacer supplied, trapping between starter insert and gable wall or bargeboard (Fig 3).

Note: Where brickwork is encountered, starter inserts should be drilled and plugged to ensure secure fixing.

For non-standard eaves/verge constructions, contact the Technical Advisory Service for advice on fixing.

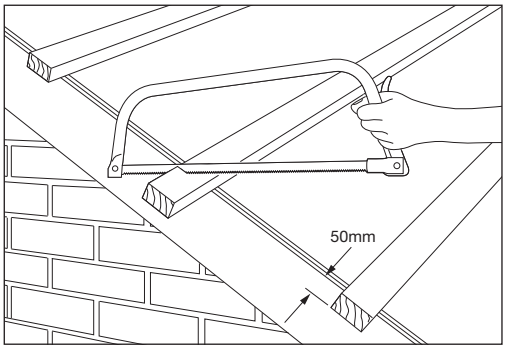


Fig 1 Position top course tiling battens

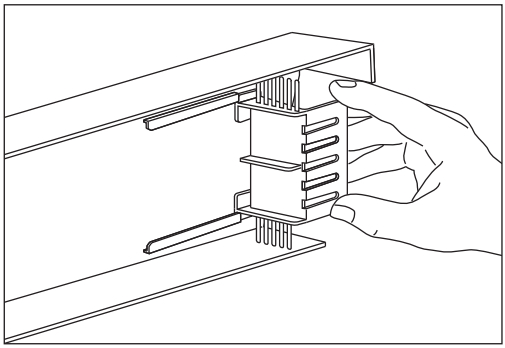


Fig 2 Locate starter insert in dry verge unit

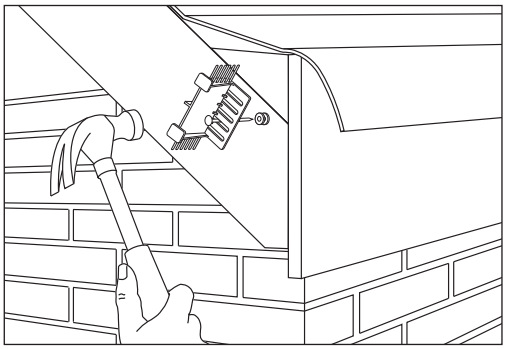


Fig 3 Mechanically fix starter unit

Edgemere Dry Verge System

9 Engage eaves course dry verge unit with lugs of the starter insert.

10 After sliding eaves roof tile downwards into position, nail verge unit using appropriate hole (i.e. nearest to the centre of tiling batten) with 40mm x 3.35mm annular ring shank nail provided in fixing kit (Fig 4).

Note: Ensure that nail head fits flush into moulded recess around the nail hole and does not interfere with fitting of next verge unit.

11 Fix subsequent dry verge units as tiling proceeds, or in a single operation after completion of roof tiling. Ensure that verge tiles are fully inserted into verge units.

12 Successive dry verge units are interlocked together by sliding upwards against unit below, ensuring that lugs on outside of verge unit fit into internal locating slots (Fig 5).

IMPORTANT: All verge tiles should be mechanically fixed in accordance with BS 5534 in addition to the use of the Edgemere Dry Verge units i.e. by nailing, clipping or screwing as appropriate.

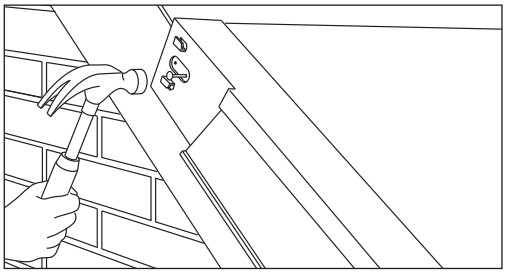


Fig 4 Nail fix verge unit

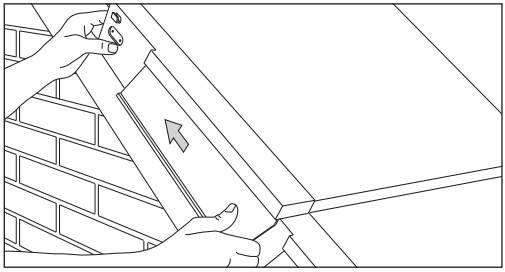


Fig 5 Slide up each unit to interlock

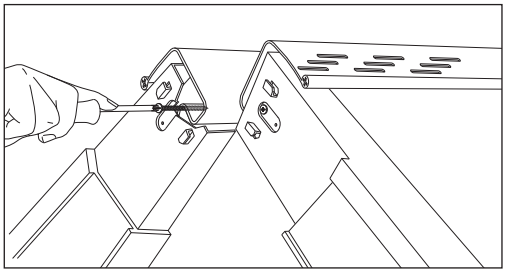


Fig 6 Screw verge units at apex of verge

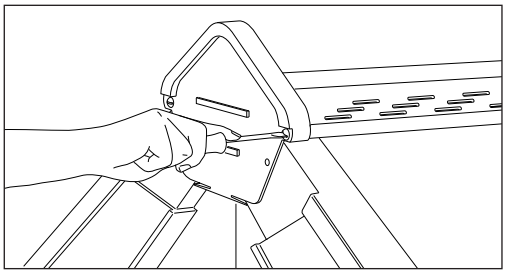


Fig 7 Screw fix ridge end cap

Use with dry ridge system battens

13 At apex of roof, where battens are located, retain top course dry verge unit by securing a 30mm long pozidrive head screw (supplied) into second series of holes in verge unit and locate it behind nib section of dry ridge batten (Fig 6).

14 If required, trim flange of Ridge End Cap to fit between top course verge units (Figs 9 and 10). Screw ridge end cap to end of dry ridge batten locating 25mm x 8g stainless steel screws into end of circular beads on upper flange (Fig 7).

Edgemere Dry Verge System

Use with bedded ridges and RidgeFast dry ridge

15 Top course verge unit is secured to end of top course tiling batten in normal manner.

16 If required, trim flange of Ridge End Cap to fit between top course verge units (Figs 9 and 10). Screw ridge end cap to top course verge unit, locating stainless steel screws through lower, partly formed fixing holes (Fig 8).

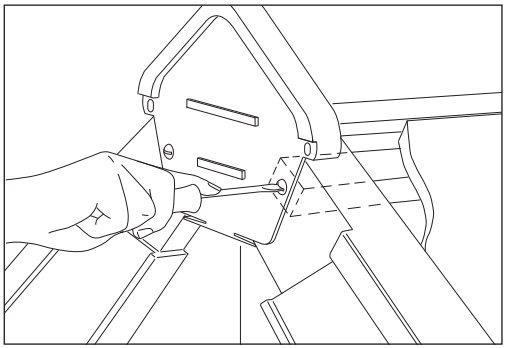


Fig 8 Screw ridge end cap

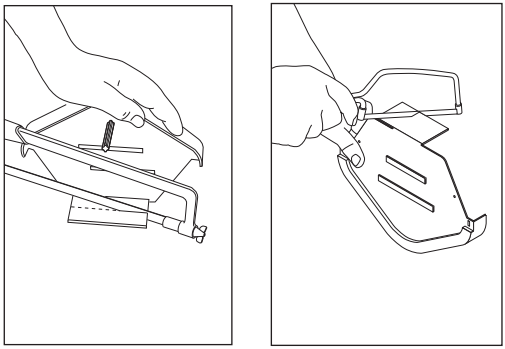
Mono-ridge end cap fixing wire

14 Construct dry verge units as before up to the roof apex.

15 Prior to fixing the gable end monoridge tile push the security wire through the outside face of the monoridge tile (using the same fixing hole for screwing the monoridge tile to the wall) and bend through 90°. (Fig 11)

16 Feed the free end of the wire through the hole in the monoridge end cap. Push the end cap tightly against the monoridge tile and bend the wire protruding through the end cap downwards flush with the vertical face.

17 This assembly can now be placed into position, securing the monoridge tile with the stainless steel screws provided. The leading edge of the end cap is secured to the dry ridge batten section (or end of top tiling batten for mortar bedded ridges) using a 25mm x 8g stainless steel screw supplied in the fixing kit.



Figs 9 and 10 Cutting end cap flange

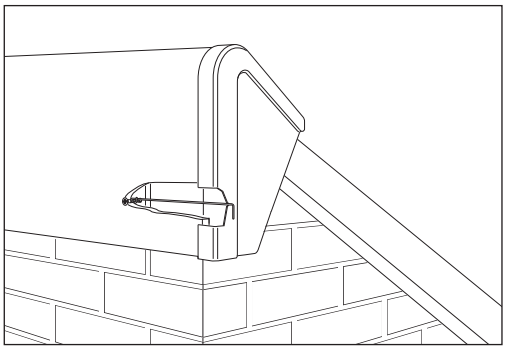
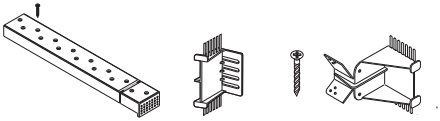


Fig 11 Mono-ridge end cap

UNIVERSAL Dry verge refurbishment kit

Components



Dry verge refurbishment fixing kit (code 35800)

24 No. batten extension units

100 No. 6 x 20mm countersunk stainless steel screws

2 No. starter inserts

The Dry Verge refurbishment kit facilitates the application of Universal Dry Verge systems to existing tiled roofs, where mortar bedded verges require replacement.

Installation

1 Rake out and carefully remove all mortar bedding at verge and ridge ends.

2 Remove one row of existing roof tiles and end ridge tiles immediately adjacent to verge. Replace any damaged tiles with matching product.

3 Remove any mortar adhering to these tiles in the area where they engage on tiling batten and at headlap.

4 Remove undercloak (fibre cement strip or tile), verge clips (if used) and check that visible parts of tiling battens are in good condition.

5 Fit batten extension units onto the ends of tiling battens, using line moulded into top of unit as guide, so that they overhang gable end by 50mm (Fig 1).

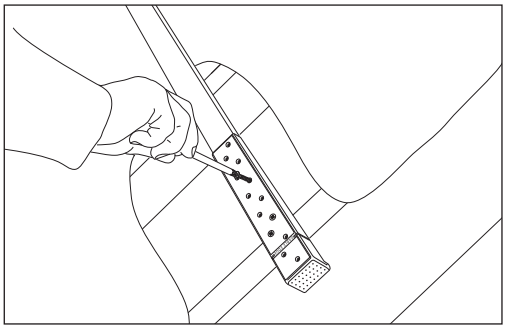


Fig 1 Fit batten extension unit using line moulded into top of unit as a guide

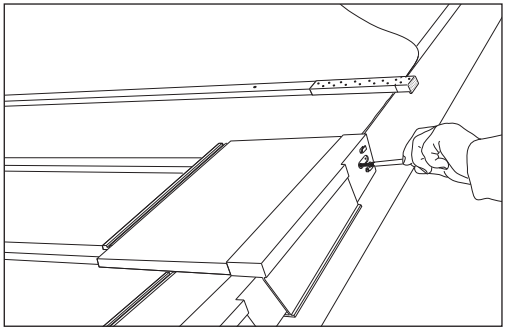


Fig 2 Commence installation of dry verge units in normal manner

*Suitable for use with Marley Eternit roofing products and those of other manufacturers

UNIVERSAL Dry verge refurbishment kit

6 Fix batten extension units to ends of tiling battens using 3 x No. 6 screws (supplied), ensuring 'ridge side' face is in contact with back face of batten.

Note: If any battens are damaged or rotten, cut back to good timber prior to fixing batten extension units. Where extensive damage has occurred, replace affected batten by a new section, (min 1200mm long) cut to overhang gable end by 50mm. Fixing flange of batten extension unit can be cut off to leave a continuous U-shaped channel and can be used as a bridging piece between new and old batten ends, avoiding need to remove additional roof tiles.

7 Commence installation of dry verge units in normal manner, by aligning an appropriate hole in verge unit with a suitable hole in the end flange of batten extension unit (Fig 2). (See Universal and Edgemere dry verge fixing, pages 114-121).

8 Secure each verge unit using one of the screws provided (No 6 x 20mm).

9 Subsequent dry verge units can be fixed either during tiling operation or after tiles have been laid.

10 End ridge tiles should be re-bedded and mechanically fixed in accordance with BS 5534 and finished by ridge end cap.

Slate dry verge system

The slate dry verge system has been developed to provide the benefits of a dry verge system for Melbourn and Eternit fibre cement slates.

The system can be used with or without bargeboard but is not suitable for raking verges.

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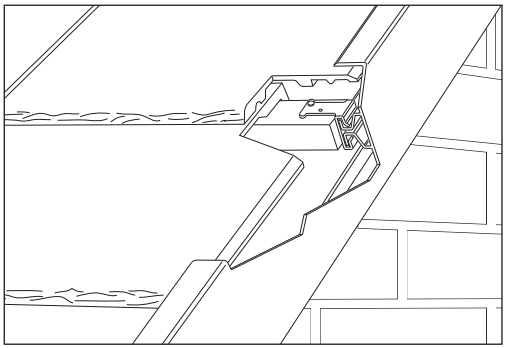
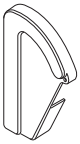


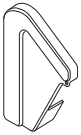
Components

Segmental ridge end cap
code 395

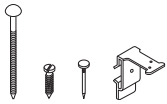
Modern ridge end cap
code 394



Segmental mono-ridge end cap LH code 427
Segmental mono-ridge end cap RH code 428

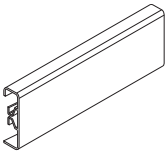


Mono-ridge end cap
LH code 408
RH code 409

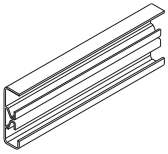


Fixing kit
code 42200

1 Polytop Nail
2 No. 25mm
x 8g stainless
steel screws
20 Nails
20 uPVC cleats



uPVC verge
Section
5m long
code 42201



uPVC verge
Section
(seen from inside)

uPVC verge
Union
code 42205

Slate dry verge system

Installation

1 Nail tiling battens in the normal way and cut flush with either gable end or bargeboard. (Fig 1).

2 Before fixing any lengths of section, remove a piece of lower gutter channel for a length of 50mm to 75mm. This is to ensure that upper channel can discharge into eaves gutter.

An extra cleat can also be positioned to prevent ingress of birds and vermin.

3 Screw a cleat to verge section to correspond with first slate batten at eaves, but its position must be ascertained and then screw driven home before nailing down (Fig 2).

Note: When using double-lap slates, under eaves course must be trimmed around cleat on the first slate batten.

4 Fix each piece of verge section with a screwed cleat at or near lowest point, so that any expansion takes place up the roof slope.

5 Where a union is required to join two lengths of section, fit a screwed cleat either side so that expansion can take place in both directions away from union.

6 Under these circumstances, it is recommended that the shorter length is fitted at lower parts of roof so that the longer section can expand towards ridge.

7 Feed sufficient cleats onto the gutter channels from top end, ensuring they are correct way round.

8 Nail cleats to each batten using nails provided in fixing kit (Fig 3).

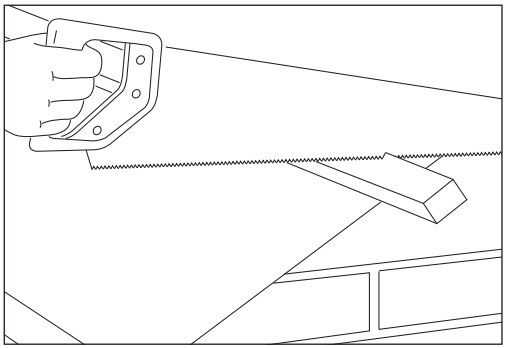


Fig 1 Cut battens flush

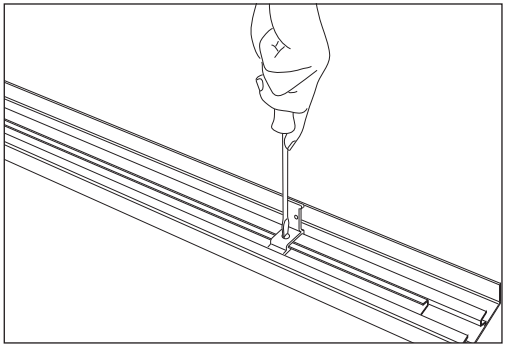


Fig 2 Screw lowest cleat to verge section

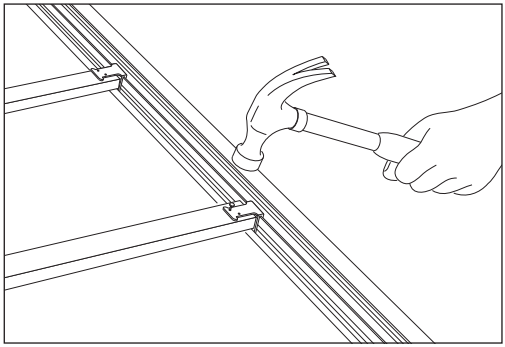


Fig 3 Nail cleats to battens

Slate dry verge system

9 When joining two lengths of section, slide purpose made union over fixed lower section and insert upper section into it before nailing down. Observe direction of fall indicated by arrow on top flange of union, as incorrect fitting will cause a leak (Fig 4).

10 Nail top most cleat to top batten and screw cleat to eaves course batten.

11 Slide remaining cleats into position and nail to their respective battens, ensuring that section is truly vertical and positioned snugly against gable wall or bargeboard.

12 When using double-lap slates, cleat should always be positioned near top edge of batten (Fig 5).

13 Use a spare cleat as a bird stop at eaves by positioning cleat over the fascia and inserting stop cleat with its nailing flange between gutter channels until it clicks into place.

14 Nail fascia cleat to top of fascia board to complete fixing (Fig 6).

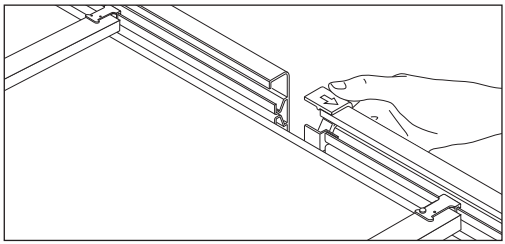


Fig 4 Observe direction of fall

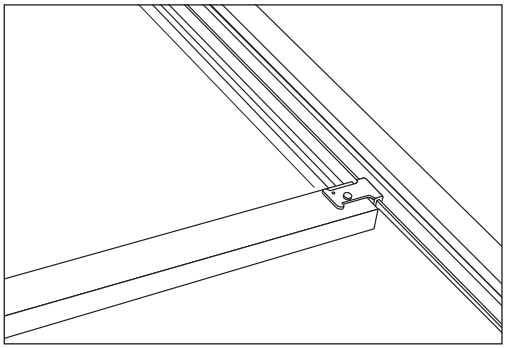


Fig 5 Position cleat at top edge of batten

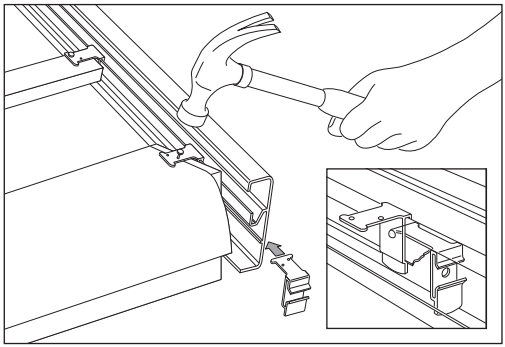


Fig 6 Nail fascia cleat

Slate dry verge system

15 At apex, trim unfixed ends of verge section leaving a gap to allow each section to expand by 25mm without hindrance.

16 Where dry ridge is used, batten section should overhang brickwork or bargeboard by not more than 30mm, and should be cut as shown to allow free movement of verge section under top flange (Fig 7).

17 Use a standard dry verge end cap to suit ridge. Lower flange may be cut to suit roof pitch and verge overhang (Figs 8 and 9).

18 Secure end cap by either, fixing with screws to dry ridge batten sections, or by drilling a hole to coincide with a piece of timber nailed to apex and driving in a plastic headed nail (provided in the fixing kit) (Figs 10 and 11).

19 Slating should be completed in the normal manner, ensuring that slates which make up the verge are nailed and correctly inserted into the verge section so that the outside face is vertical (Fig 12).

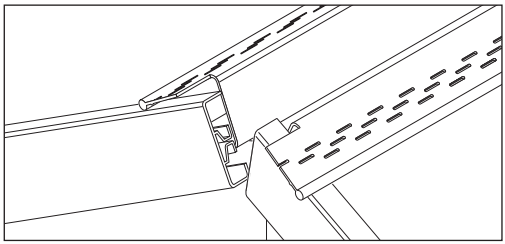
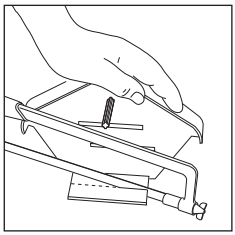
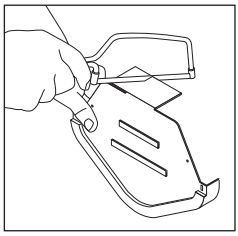
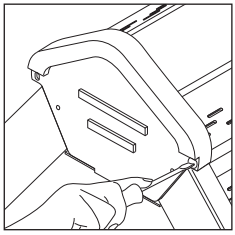


Fig 7 Cut batten section to allow verge section movement





Figs 8 and 9 Cutting end cap flange



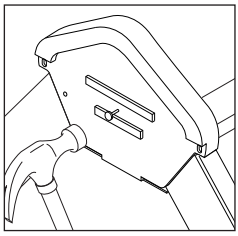


Fig 10 and 11 Secure end cap

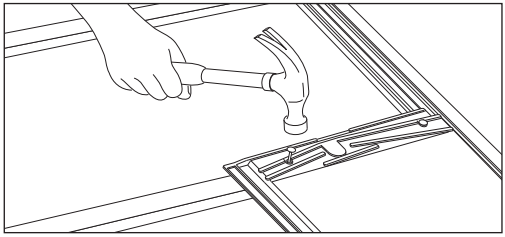


Fig 12 Mechanically fixing Melbourn slates at verge

Slate dry verge system

Mono-ridge

1 Verge is constructed in normal manner with slate dry verge and top of verge secured with a cleat before fitting Modern Mono-ridge End Cap (LH or RH). (Fig 1).

2 Prior to fixing the gable end monoridge tile push the security wire through the outside face of the monoridge tile (using the same fixing hole for screwing the monoridge tile to the wall) and bend through 90°, (Fig.11, page 117).

3 Feed the free end of the wire through the hole in the monoridge end cap. Push the end cap tightly against the monoridge tile and bend the wire protruding through the end cap downwards flush with the vertical face.

4 This assembly can now be placed into position, securing the monoridge tile with the stainless steel screws provided. The leading edge of the end cap is secured to the dry ridge batten section (or end of top tiling batten for mortar bedded ridges) using a 25mm x 8g stainless steel screw supplied in the fixing kit.

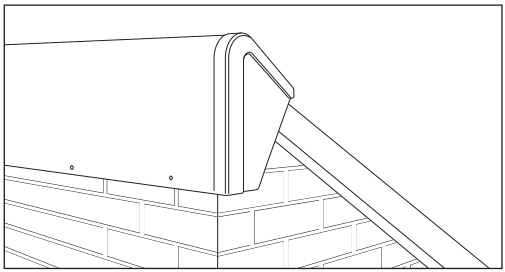


Fig 13 Mono-pitch end cap

Fibre cement verge closer

Fibre cement verge closers are purpose-made fibre cement components designed to integrate with fibre cement slates, giving a totally dry fixed method of weathering the verges of slated roofs.

Installation

1 Where necessary, bed the fibre cement undercloak on a 10mm mortar bed flush with, and parallel to, the tops of the rafters (not shown).

2 Dress the underlay over the cavity closer and approximately 30mm over the verge edge.

3 When using 25mm thick battens, stop off 135mm from the face of the brickwork. Fix a 38mm x 19mm timber runner along the ends of the slate battens running from eaves to ridge.

4 Where necessary, notch the corner of the fascia and tilting fillet to enable the horizontal leg of the closure unit to sit flush with the verge batten.

5 Locate the first verge closer unit at the eaves to oversail the fascia or tilting fillet to reflect the eaves course setting out. Screw-fix into the runner using four galvanised counter-sunk screws (25mm x 10 swg).

6 Locate and fix subsequent verge closer units up to the ridge, reducing the length of the final unit as necessary with a mitred cut on the vertical wing.

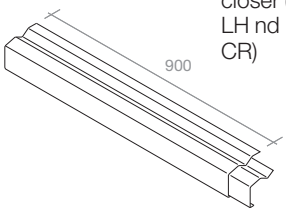
7 Sockets should be sealed with a 6mm diameter bead of butyl strip (alkali-resisting, non-oil based).

8 Fix slating over the tops of the units as per the standard fixing method.

9 At apex, mitre top edges of verge closers and complete using stop end, fibre cement ridge cappings or concrete stop end ridge tiles. Mechanically fix all ridge stop end cappings or ridge tiles as per recommendations.

Components

Fibre cement verge closer (with return) LH nd RH (code BB CR)



Note: verge closers are handed viewed from the gable end.

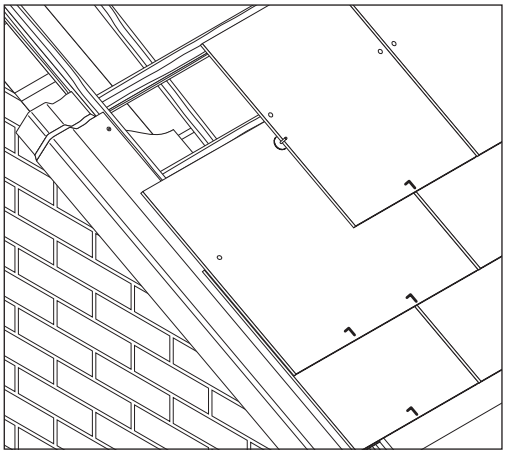
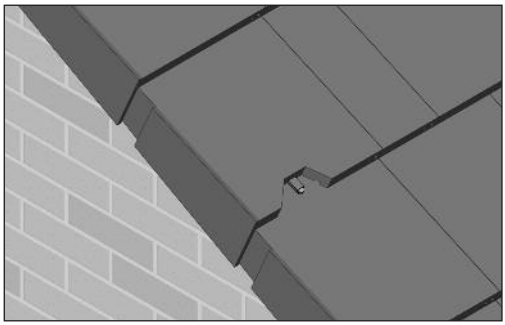


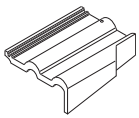
Fig 1 Purpose-made verge closers (RH shown)

Interlocking tile cloak verge system

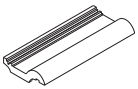
Marley Eternit cloak verge systems consist of simply installed composite concrete tile and verge units designed to eliminate the need for mortar bedding. They provide a mechanically fixed, durable and maintenance-free finish to the roof verge.



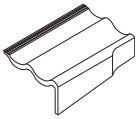
Components



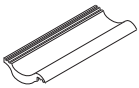
Double Roman tile
(LH code 265)
(RH code 266)



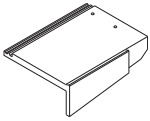
Double Roman half tile
(Code 102)



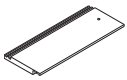
Mendip verge tile
(LH code 245)
(RH code 246)



Mendip half tile
(Code 247)



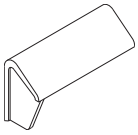
Modern cloak
verge tiles
(RH code 370)
(LH code 371)



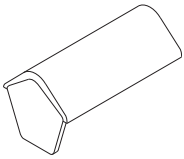
Modern cloak verge
half tile (code 372)

Fixing kit for Mendip
& Double Roman
(code 42520)

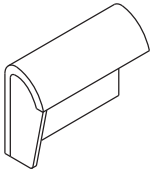
Fixing kit for Modern
(code 37300)



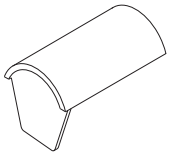
Modern mono-ridge
block end
(RH code 375)
(LH code 376)



Modern block
end ridge (code 374)



Segmental mono
block end ridge
(LH code 189)
(RH code 190)



Segmental block end
ridge (code 191)

Interlocking tile cloak verge system

Installation

1 Install roof underlay and tiling battens in normal manner, allow underlay to overhang verge by approximately 50mm.

Note: Maximum gauge 345mm (75mm lap), minimum gauge 305mm (115mm gap).

2 Saw ends of tiling battens off flush with gable wall or bargeboard and nail within a maximum of 500mm from end (Fig 1).

3 For rafter pitches over 30°, where it is not possible to gain a firm fixing for ends of tiling battens, use a double course of battens across a complete rafter span (two fixings minimum), to increase rigidity of system (Fig 2).

4 If, during setting out, vertical leg of cloak verge unit cannot be closely fitted with brickwork or bargeboard, fix fibre cement undercloak strip beneath tiling battens, to prevent ingress of birds and vermin (Fig 2).

Note: Maximum overhang using this method must not exceed 50mm, measured to outside of verge unit.

5 Position cloak verge unit at eaves and mark position where embedded PVC channel on underside rests on fascia or tilting fillet.

6 Remove cloak verge unit and nail comb filler, or cut filler as applicable to top of fascia (excluding Modern).

7 Drive the stainless steel a.r.s. nail with nylon spacer unit (supplied in Fixing Kit) into top of fascia or tilting fillet to coincide with position of embedded PVC channel.

8 Ensure nail and spacer assembly is fitted to align with the pitch of roof.

9 Leave a small amount of play to allow cloak verge unit to slide down and engage spacer unit (Fig 3).

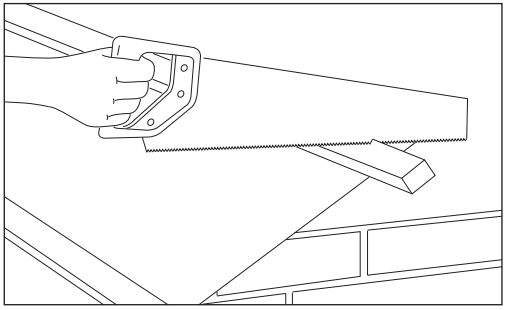


Fig 1 Saw fixing battens flush

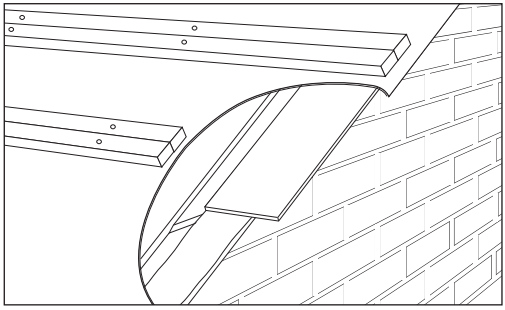


Fig 2 Double course of battens increase rigidity

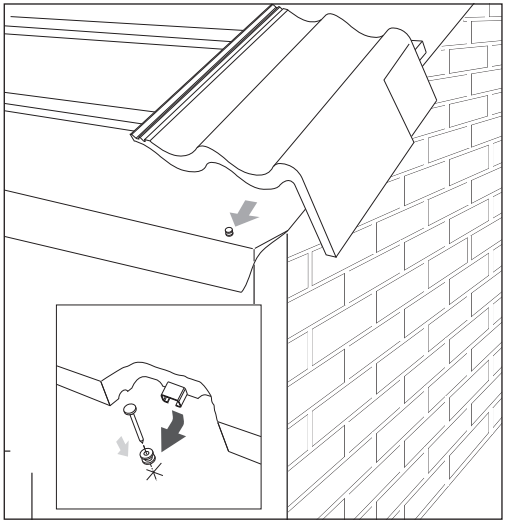


Fig 3 Allow play for verge unit to slide down

Interlocking tile cloak verge system

10 Ensure nibs of cloak verge unit are correctly located against top edge of tiling batten.

11 Drive aluminium nail with spacer unit assembly, through cloak verge nail hole, leaving a degree of free play (Fig 4).

12 Lay next cloak verge unit in a similar manner, by sliding it down so that embedded PVC channel locates over nylon spacer unit and tile nibs are in contact with tiling battens (Fig 5).

Note: Nail holes in cloak verge half tiles should be sealed with mastic, when used on roof pitches below 25° and should be clip fixed where required. (See tile fixing specification).

13 Install remaining cloak verge units in a similar manner and tile roof in normal way.

14 Fit half tiles, if required, either next to cloak tiles or elsewhere in tiling, ensuring that bond is maintained throughout. Fix by either nail and/or clip fixing.

Lay Modern cloak verge half tiles in alternate courses adjacent to cloak verge units to maintain broken bond of roof tiles (Fig 6).

15 When installing cloak verge tiles with Marley Eternit dry ridge system for both left hand and right hand top course cloak verge tiles, cut away embedded PVC channel at rear for a distance of 20mm. This allows nylon spacer to cloak verge tile below to locate into the channel.

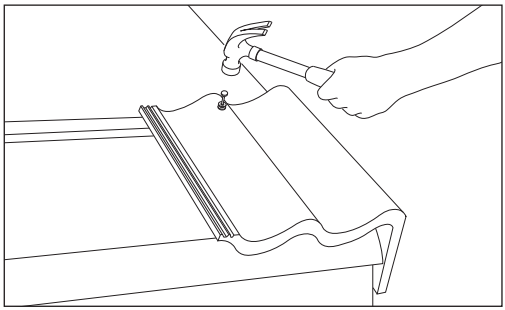


Fig 4 Mechanically fix verge unit

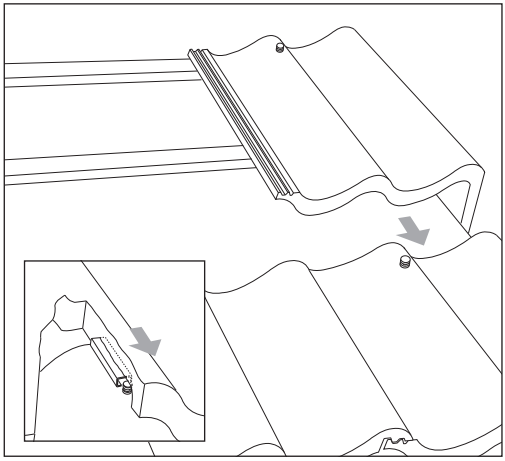


Fig 5 Slide next unit down

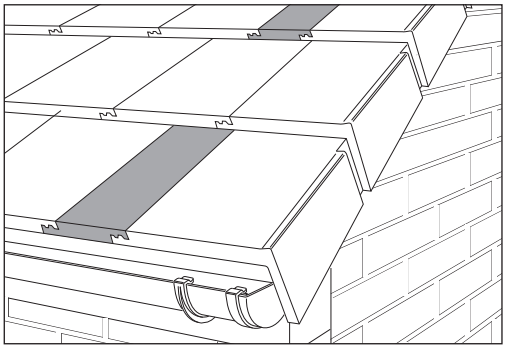


Fig 6 Maintain broken bond with half tiles for Modern Cloak Verge

Interlocking tile cloak verge system

16 Push cloak verge tile upwards and fit into dry ridge batten section (Fig 7).

17 Install Segmental or Modern block end ridge by either bedding in mortar, or mechanically fixing using Marley Eternit Dry Ridge System or Universal RidgeFast. Mono-ridge block end tiles are available for mono-pitch roofs (Figs 8 and 9).

Note: Segmental mono-ridge tiles should be used with Marley Eternit Dry Mono-ridge system. When using the Marley Eternit Dry Ridge System, the block end ridge tile should be fixed using a supplementary ridge union fitted over the top of the ridge tile near to the end of the ridge

18 When using the Marley Eternit Dry Ridge System, the block end ridge tile should be fixed using a supplementary ridge union fitted over the top of the ridge tile near to the end of the ridge.

A maximum 5mm cut should be made in the base of the ridge tile to accommodate the 'claw' of the ridge union. The lugs on the underside of the union should be broken off.

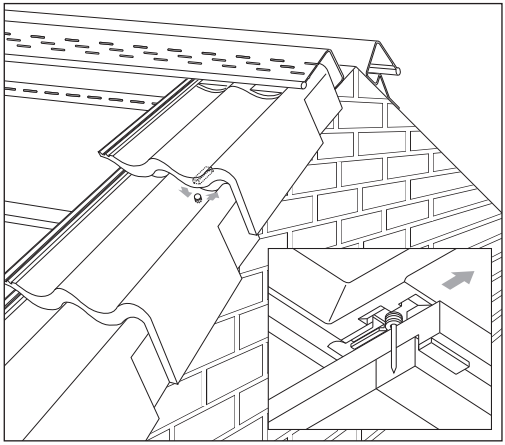


Fig 7 Engage nylon spacer with nail into channel of verge unit

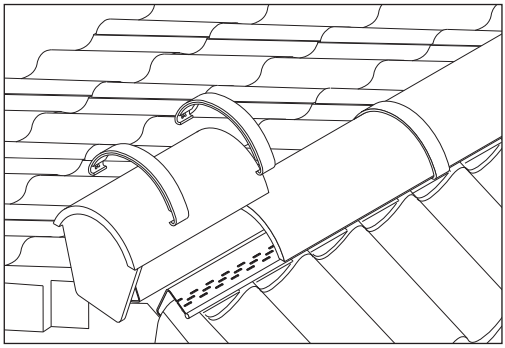


Fig 8 Completion at ridge

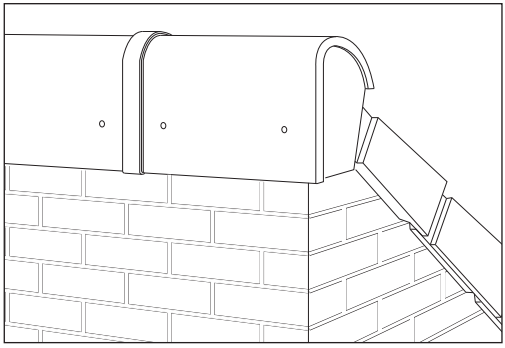
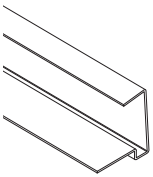


Fig 9 Completion at mono ridge

Ashmore dry verge

Components



Ashmore dry verge (3m length) (code 38501)

Ashmore dry verge fixing kit (code 38510)

1 No. Connector unit
15 No. 35mm x 2.65mm ARS stainless steel nails
2 No. 25mm x 10g stainless steel screws

Modern ridge end cap (code 394)

Segmental ridge end cap (code 395)

The Ashmore Dry Verge System comprises a dark grey extruded PVCu verge section, 3m long which is fitted under the bottom edge of the tiling battens at the gable end, and provides a weatherproof cover to Ashmore verge tiles.

Installation

1 Ensure the gable end is reasonably level and free from projections. The roofing underlay and tiling battens should be laid across the cavity/ gable ladder and the battens finished flush with the outer wall or outer edge of the bargeboard (Fig 1). The verge extrusion is fitted prior to tiling.

2 Square cut the ends of the verge extrusion to the desired length. A connector unit is available to join lengths of extrusion. At the eaves, cut away a length of horizontal flange to accommodate the tilting fillet or support tray (Fig 2).

3 At the ridge apex, allow a 10mm expansion gap at the mitred joint between the verge extrusions. Cut away the top flange and 20mm depth of the side wall (Fig 00) to accommodate the ridge tile (and dry ridge batten section, if appropriate).

4 The horizontal flange of the extrusion is pushed between the top of the wall (or gable ladder) and tiling battens along its whole length. Ensure the bottom end lines up with the leading edge of the eaves tiling course (Fig 3).

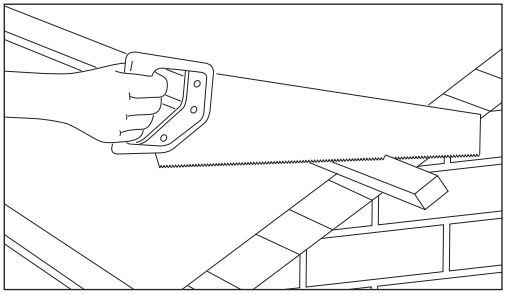


Fig 1 Preparing gable end

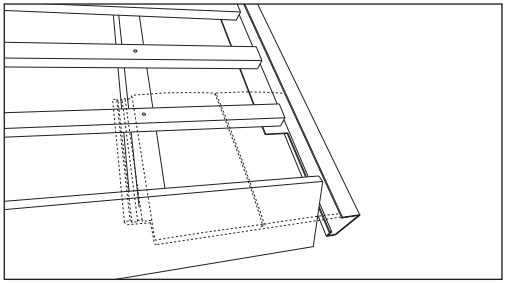


Fig 2 Lining up at eaves

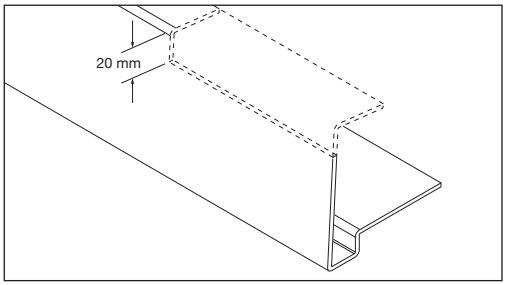


Fig 3 Cut away section at ridge

Ashmore dry verge

5 Where necessary, a connector unit is fitted at joints between extrusions (Fig 4).

6 Secure the verge extrusion by driving the annular ring shank nails provided through each tiling batten (40mm from the end) into the extrusion (Fig 5).

7 Lay Ashmore tiles in the usual manner, ensuring the verge tiles are fully inserted into the verge extrusion and head nailed and clipped (where required) (Fig 6).

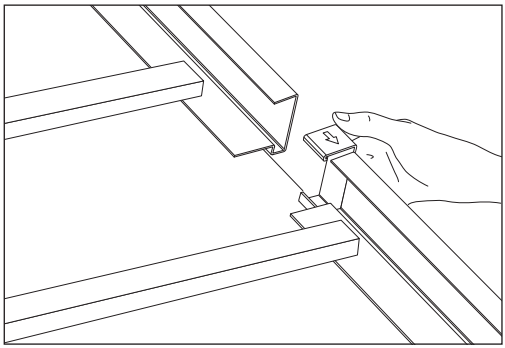


Fig 4 Connector units

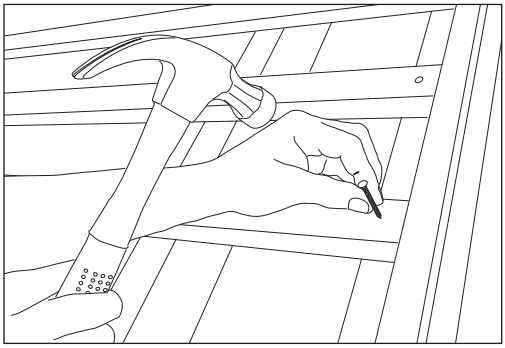


Fig 5 Nailing verge units

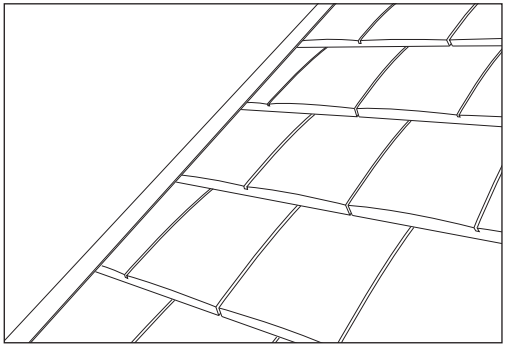


Fig 6 Inserting verge tiles

Ashmore dry verge

Fixing at ridge

1 When used with the Marley Eternit Dry Ridge system the low profile batten sections should extend 15mm beyond the outer wall or outer edge of the bargeboard (Fig 7).

2 When using a ridge end cap with either the Marley Eternit Dry Ridge or RidgeFast systems, the bottom flange of the cap will need to be reduced to 25mm overall depth (Fig 8).

Fix the ridge end cap using the 2 No. 25mm x 10g stainless steel screws provided in the fixing kit.

3 When using a bedded ridge and/or Block End Ridge tile, the verge extrusion will need to be cut away to accommodate the internal rib of the tile and provide a close fit to the outer face of the verge extrusion (Fig 9).

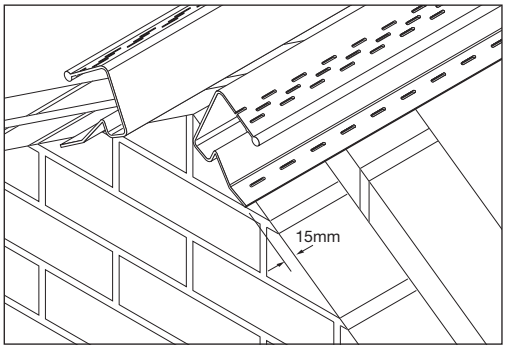


Fig 7 Detail at ridge

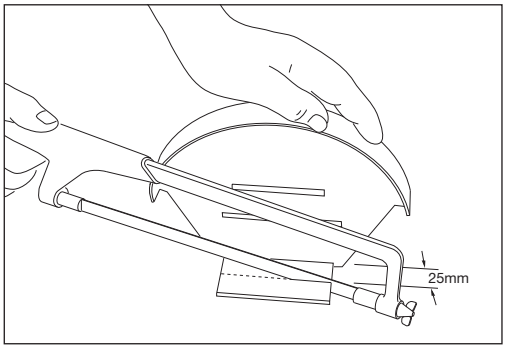


Fig 8 Trimming the ridge cap

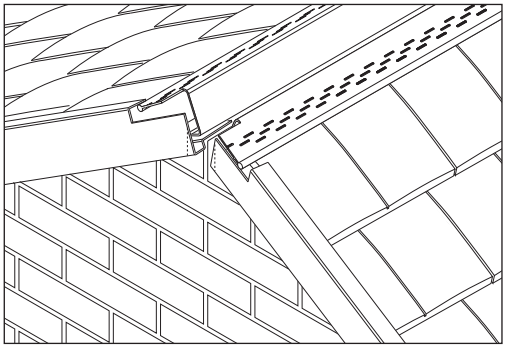


Fig 9 rim units for block end ridge fitting

Clay Plain tile cloak verge system

Clay cloak verge tiles provide a weatherproof and mortar free finish to the roof verge. They are available in right and left hand units in colours to match the main roof tiles, twice nailed for maximum security. The apex of the roof is finished with matching stop-end ridge tiles.

Installation

1 Felt and batten the roof in the normal manner, allowing the ends of the tiling battens to over sail the gable wall or bargeboard by 50mm.

2 Where possible, set out the tiling so that the leg of the cloak verge fits flush with the brickwork or bargeboard. If so, cut the ends of the battens flush with the outer edge of the gable wall or bargeboard (Fig. 1).

Where setting out dictates, the cloak verge tiles can be laid to a maximum 50mm overhang, a fibre cement strip should be inserted beneath the tiling battens and the top of the wall or bargeboard to prevent the ingress of birds or vermin (Fig. 2).

3 Commence laying an under eaves course of tiles using a standard eaves tile or a cloak verge tile cut down to size (Fig. 3, page 138). Where possible use a standard eaves tile, but establish what will be required for the top course at the roof apex, to ensure that the same unit is provided on both sides of the apex. In this way, opposite gable ends can be constructed with cloak verge tiles in different courses, but will still maintain a balanced appearance when viewed from the ground.

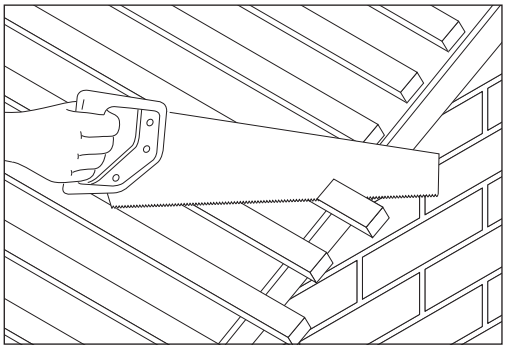


Fig 1 Saw battens flush

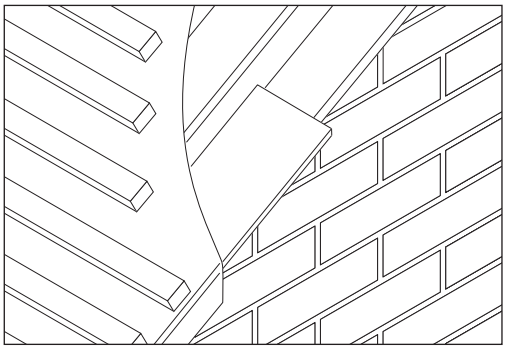


Fig 2 Fibre cement strip inserted under tiling battens for 50mm overhang

Clay Plain tile cloak verge system

4 Nail the eaves cloak verge tile with 2 No. 38mm x 3.35mm aluminium or stainless steel ring shank nails to both top and end of the tiling batten using the holes in the top and vertical leg. Alternatively, if the verge construction allows, a timber batten can be secured to the outer edge of the bargeboard or gable wall to assist nailing the vertical leg of the cloak verge tile (Fig. 3).

5 Each alternate course should contain a normal plain tile to break bond, which should be twice nailed using standard 38mm x 2.65mm aluminium or stainless steel nails (Fig. 4).

6 The remainder of the verge is completed using successive cloak verge and plain tiles until the apex is reached. The top course may be either a tops/eaves tile or a cloak verge tile cut to size, with nail holes drilled to suit, and fixed as required. If necessary, trim the vertical legs of the cloak verge tiles where steep pitch roofs are encountered.

7 Complete the apex closure of the two top course cloak verge tiles by fitting a Stop End Ridge Tile and a tile-and-a-half/gable tile, cut to fit between the vertical legs of the top course cloak verge tiles. Drill and nail cut tile to timber groundwork (Fig. 5).

8 Mortar bed end ridge tile and mechanically fix or use the Marley Eternit Clay Ventilated Dry Fix Ridge system.

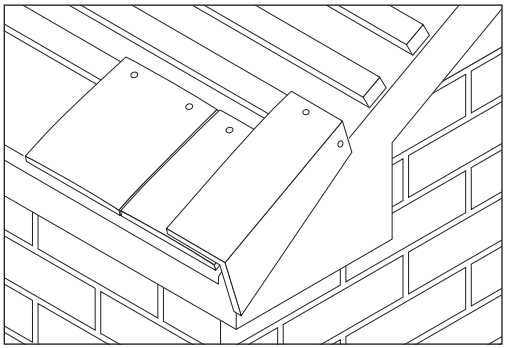


Fig 3 Eaves course

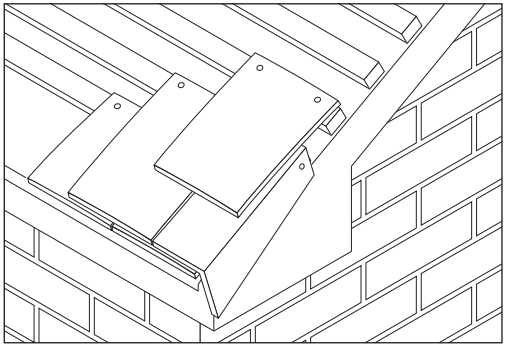


Fig 4 Standard tile used to break bond

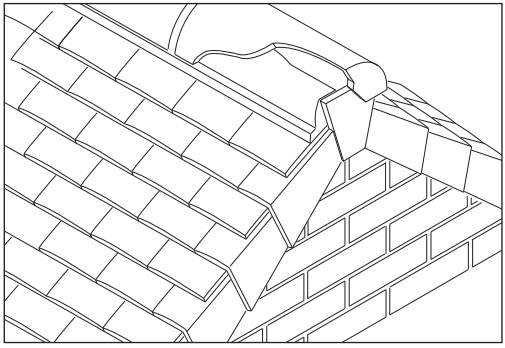


Fig 5 Stop end ridge tile used to finish cloak verge at ridge

Concrete Plain tile cloak verge system

Concrete cloak verge tiles provide a weatherproof and mortar free finish to the roof verge. They are available in right and left hand units in colours to match the main roof tiles, twice nailed for maximum security. The apex of the roof is finished with matching block-end ridge tiles.

Installation

1 Felt and batten the roof in normal way.

2 Where possible, set out tiling so that cloak verge tile fits flush with brickwork or bargeboard (Fig 1).

3 Where cloak verge tiles are laid to maximum 50mm overhang, it is recommended that a strip of fibre cement board is fitted between tiling battens and wall or bargeboard to prevent ingress of birds (Fig 2).

4 Fix under-eaves course using either a normal eaves tile or cloak tile cut down to size. Where possible, use standard eaves tiles, but establish what will be required at top course, and ensure that same finish is provided on both sides of apex. In this way, opposite gable ends can be constructed with cloak verge tiles in different courses but still maintain an even appearance when viewed from ground level.

5 Fix the eaves cloak verge tile with 2 No. 38mm x 2.65mm aluminium nails (Fig 3).

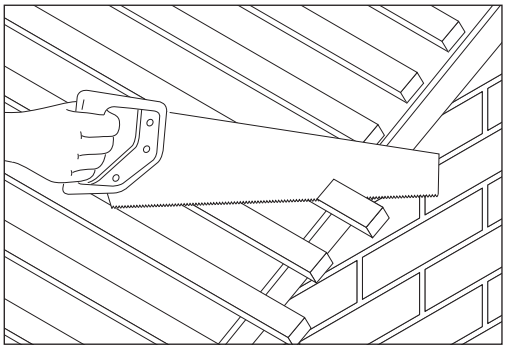


Fig 1 Saw battens flush

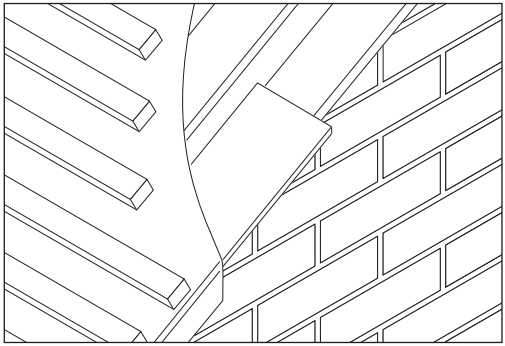


Fig 2 Fibre cement board to prevent bird ingress

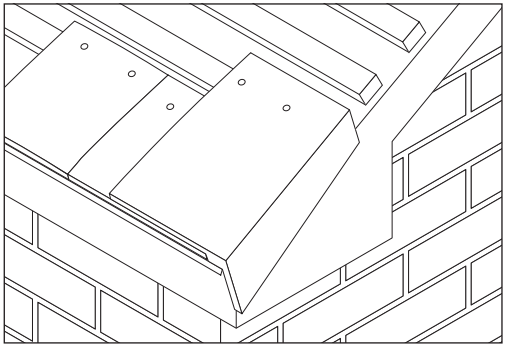


Fig 3 Eaves course

Concrete Plain tile cloak verge system

6 Each alternate course should contain a tile-and-a-half to break bond and must be twice nailed (Fig 4).

7 Build up verges with successive cloak verge and tile-and-a-half tiles until apex is reached. The top course may be either a tops or eaves tile or a cloak verge tile cut to size with nail holes drilled to suit as required.

8 Mechanically fix these or install with Marley Eternit Dry Ridge System (Fig 5).

9 Lay special block end segmental ridge either bedded in mortar or mechanically fixed by use of Marley Eternit Dry Ridge System (Fig 6).

10 When using the Marley Eternit dry ridge system, the block end ridge tile should be fixed using a supplementary ridge union fitted over the top of the ridge tile near to the end of the ridge. A maximum 5mm cut should be made in the base of the ridge tile to accommodate the 'claw' of the ridge union. The lugs on the underside of the union should be broken off.

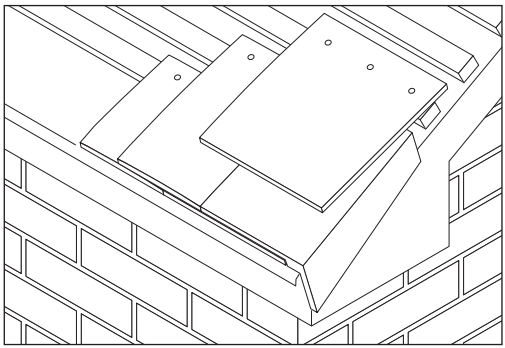


Fig 4 Tile-and-a-half used to break bond

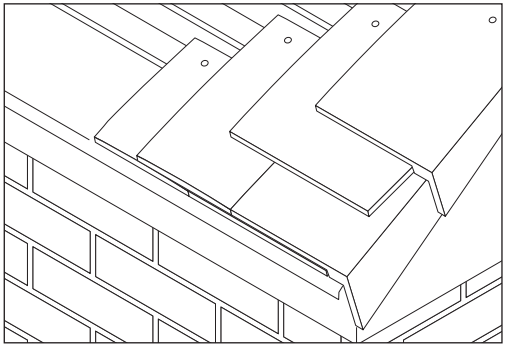


Fig 5 Successive courses

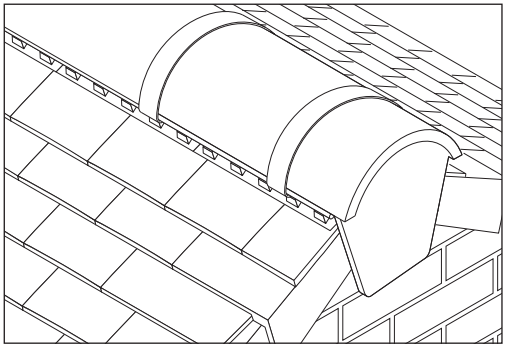
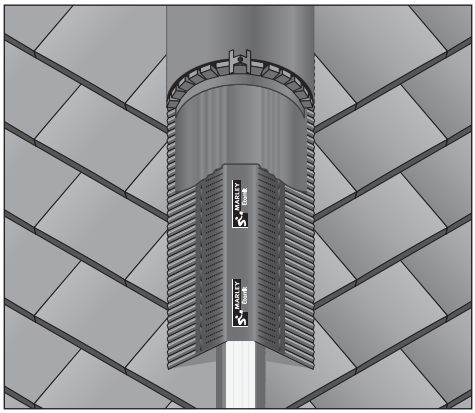


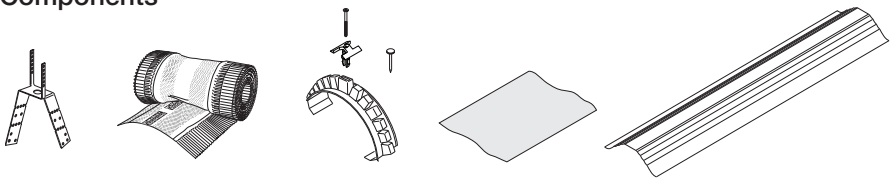
Fig 6 Lay special block end ridge

UNIVERSAL HipFast system

HipFast is a simple and rapidly installed, dry fixed hip system suited to all Marley Eternit tiles and slates, as well as those of other manufacturers.



Components



Universal HipFast system - 6m (code 34000)

1 No. 6m length Hip Roll
11 No. Batten Brackets
6 No. 1m length Hip Support Trays
13 No. Unions and Clamps
1 No. HipFast Apex Flashing (0.5 x 0.5m)

Fixing Materials
16 No. 75mm x 4.8mm s/s screws
3 No. Washers
72 No. 25mm x 3.35mm s/s ARS nails
24 No. Tile Head C Clips
36 No. Tile Tail Clips

Also available:
Ridgefast/Hipfast Union Pack (Code 33003)

*Suitable for use with Marley Eternit roofing products and those of other manufacturers

UNIVERSAL HipFast system

Installation

1 Lay roof underlay and battens in the normal manner, leaving a 5mm continuous gap in underlay either side of hip rafter if roof void is to be ventilated to recommendations of BS 5250. Mitre cut the ends of tiling battens and support on hip rafter (Fig 1).

If rigid sarking is used, finish the board at side of hip rafter (allow a 5mm continuous gap either side of the hip rafter if the roof void is to be ventilated).

2 Tile roof leaving a gap of 80mm between raking cut tiles laid adjacent to hip rafter (Fig 2). Ensure all raking cut tiles and slates are fully supported on the battens and if not, provide suitable packers to prevent tiles from rocking.

3 Ensure that all raking cut roof tiles along the length of hip are secured using the head 'C' clips and tail clips provided (Figs 3 and 4, and 5).

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 the risk of smaller cut pieces of tile or slate becoming dislodged. (Details of suitable adhesives can be obtained from the Technical Advisory Service).

Note: When using Plain Tiles and Melbourn interlocking slates, ensure that tile-and-a-half and/or slate-and-a-half or double slates are used on all courses adjacent to the hip, in order to minimise small cut pieces.

The use of half-tiles with interlocking tiles will also reduce small cut pieces adjacent to the hip.

4 When using Melbourn slates, secure the double slates to the right hand of the hip by using the special tail clip fitted over the interlock and the adjacent slate (Fig 5).

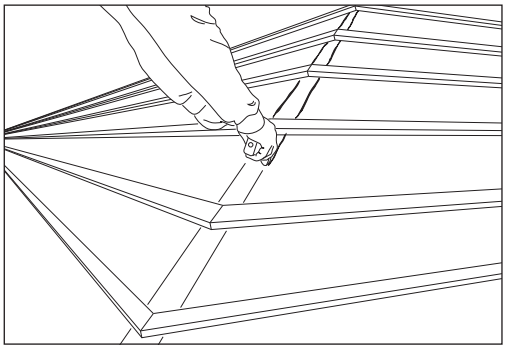


Fig 1 Neatly mitre battens

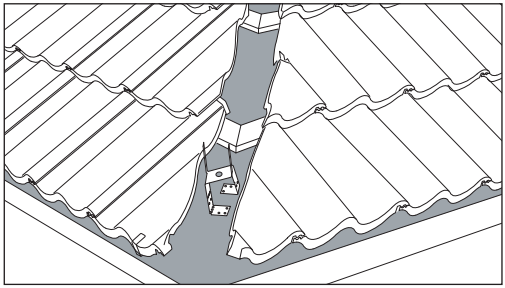
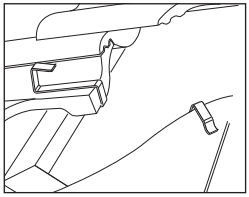
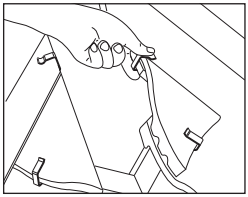
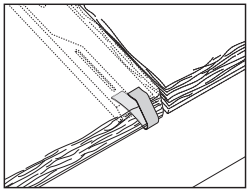


Fig 2 Lay tile to hip with raking cut





Figs 3 and 4 – Clip all small pieces of tile along hip



Figs 5 Use tail clip for raking cut Melbourn slates

UNIVERSAL HipFast system

5 Fix Hip Batten Brackets to hip rafter using nails provided (4 No. per bracket) at approx. 550mm centres.

Ensure first Bracket is fixed as close as possible to base of the hip rafter and topmost Bracket no more than 100mm from hip/ridge apex (When fixing with Plain tiles, tiling battens will require trimming back from hip rafter, locally, to provide space for fitting hip brackets) (Fig 6). Support any batten ends with noggins.

Batten Brackets can be fitted at a choice of two heights achieved by bending bracket legs inwards along the appropriate diagonal line of holes, (see table on page 147).

6 Secure either one or two thicknesses of 50mm x 25mm tiling batten to the top of Batten Brackets, parallel to hip rafter, by folding over Batten Bracket arms and nailing through perforations into the battens using nails provided (Fig 7).

Where two battens are needed, ensure lowest is screwed to upper batten before locating into Batten Brackets, with any joints in hip battens made over Batten Brackets to ensure both ends are fixed.

Note: To establish if one or two batten thicknesses are required, place a hip tile over the hip junction at the highest point of the tiling and assess the space remaining between the top of the batten bracket and the underside of the hip tile. Install two battens where two battens locate without fouling the hip tile.

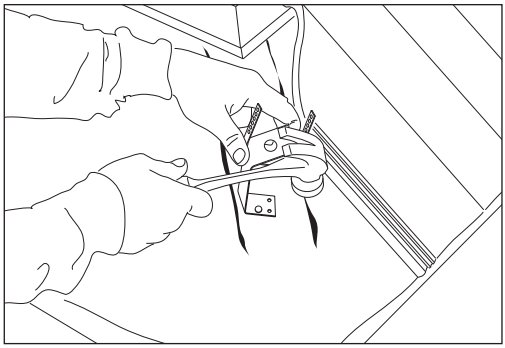


Fig 6 Fixing hip batten brackets

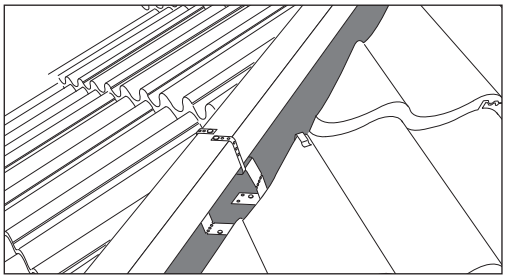


Fig 7 Fixing hip batten

UNIVERSAL HipFast system

7 Starting from eaves, roll out HipFast roll centrally over hip rafter battens, and secure in position using well spaced felt nails, leaving a distance of 100mm to oversail the hip/ridge apex. Joints along hip should be lapped by 100mm to drain water down roof (Fig 8).

8 Remove backing tape covering both mastic strips from underside of the roll (Fig 263). Press adhesive strips on both sides of hip firmly onto tiles below to ensure a continuous seal along length of both sides of hip. Both sides should be dressed down together to ensure edge of roll is kept aligned. Avoid stretching HipFast Roll during fitting.

Wash off any surface dust on the raking cut tiles with a brush and water and allow to dry thoroughly prior to sticking down the HipFast Roll.

9 Cut a HipFast Hip Support Tray to suit angle and overhang of tiles at eaves, and fix centrally over hip rafter battens using the nails provided (Fig 9).

Continue to nail HipFast Support Trays up hip, ensuring a 100mm lap over top of tray already fixed. Where two hips meet at ridge mitre each tray at internal angle.

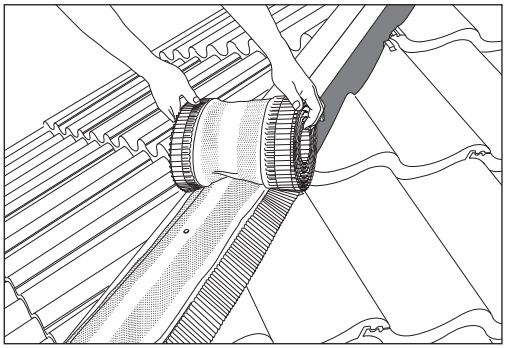


Fig 8 Roll out HipFast roll

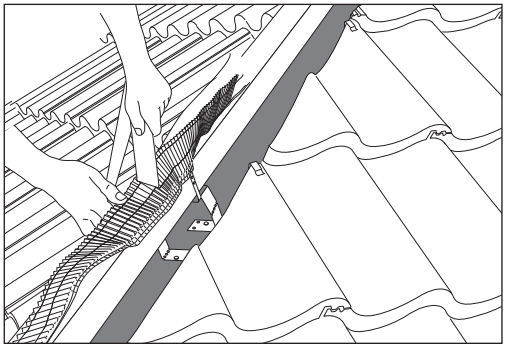


Fig 9 Remove backing tape

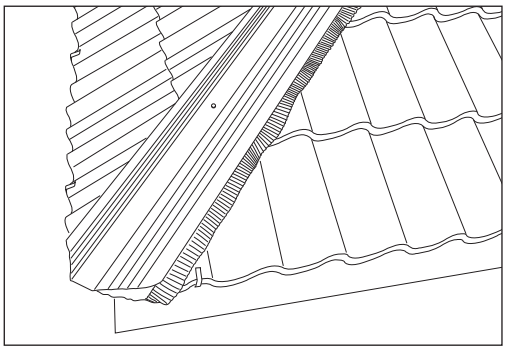


Fig 10 HipFast support tray cut at eaves

UNIVERSAL HipFast system

10 Fit a purpose designed Block End Hip tile tight against eaves tiles and trim the Block End if required. Fix Block End Hip tile through HipFast Hip Support Tray to hip batten using 75mm x 4.8mm screw and sealing washer provided. Tighten securely to ensure a firm seal (Fig 11).

11 Select a hip union, union clamp and 75mm x 4.8mm screw. Fit a union clamp into the central slot in the hip union and offer up the assembly into the open end of the hip tile so that it is trapped between the clamp and the union flange. Where the ends on the union overlap the edges of the hip tile, cut off or fold inward the excess length along the crease lines at either end (Fig 12).

When the union clamp is fully engaged in the hip union, it may create an interference fit with the sub-structure. In this case, the protruding length of the clamp can be snapped off below the hip union flange

12 Position next Hip tile into open side of Hip Union and Clamp assembly. Continue process of laying the Hip tiles, unions and clamps towards the apex, ensuring that tiles are aligned. Secure unions through Union Clamp to hip batten using the screws provided. Ensure screws are tightened well and the edges of the Hip tiles sit evenly on Hip Support Trays (Fig 13).

13 At apex, ensure final Hip tile is a full length unit, with any adjustments to suit the length of hip taken up by cutting the adjacent one or two Hip tiles.

Top Hip tile should be mitred into other Hip and Ridge tiles.

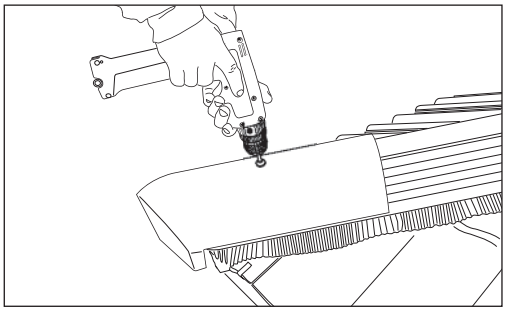


Fig 11 Fixing Block End Hip tile

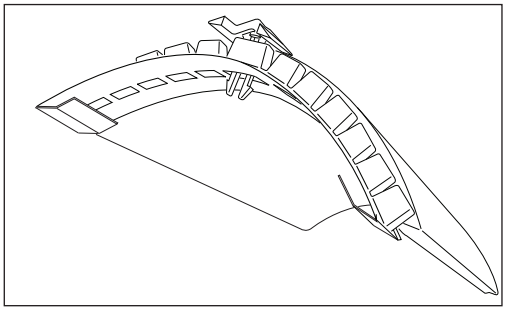


Fig 12 Fold in union tabs to suit capping

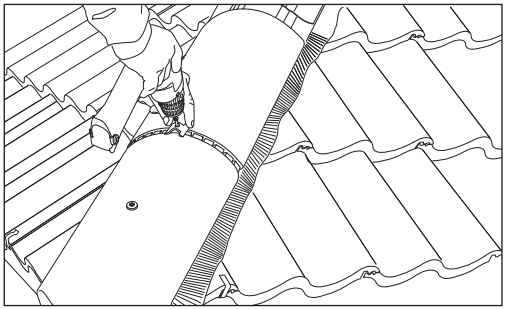


Fig 13 Fixing Hip Unions

UNIVERSAL HipFast system

14 The HipFast Apex Soaker can be used as either a soaker or flashing. As a soaker, it is adhered directly to the HipRoll/RidgeRoll to weather the hip apex junction, and trimmed to suit (Fig 14). As a flashing, it is fitted over the apex tiles and trimmed to the base of the tile edges (Fig 15).

To apply the Apex Soaker, peel off the release paper and drape over the HipRoll/RidgeRoll or hip/ridge mitred junction, pressing firmly into place. Trim excess material to suit using a sharp knife. (When the release paper has been removed, take care to avoid the mastic sticking to itself).

Ensure the tiles to be covered are both thoroughly dry and dust free before fitting.

15 Secure the mitred end of the top Hip tile by drilling a 6mm dia. hole centrally through the tile, approx. 125mm down from the apex, using a masonry drill. Fix the Hip tile to the hip battens using a screw with washer provided.

Note: When using the Marley Eternit Universal HipFast system with the Marley Eternit Universal RidgeFast system, the mitred end of the Ridge tile should be secured to the ridge batten by drilling and screwing in the manner described above.

When using the Marley Eternit Universal HipFast system with alternative ridges, valley and abutment details, a Code 4 lead saddle may be used to weather the junction.

16 Where Marley Eternit RidgeFast is also being used and the hip tiles are the same as the ridge tiles, a Tapered Filler unit must be fitted beneath both edges of the end ridge tile to ensure a close fitting mitre can be achieved at the apex.

When using flat tiles or slates, the Fillers are trapped between the RidgeRoll and the bottom edges of the ridge tile, with the deeper end toward the hip. With profiled tiles, a 500mm length of HipFast Support Tray must be nailed centrally to the ridge batten through the RidgeRoll to act as a bearer for the Tapered Fillers and end ridge tile (Fig 15).

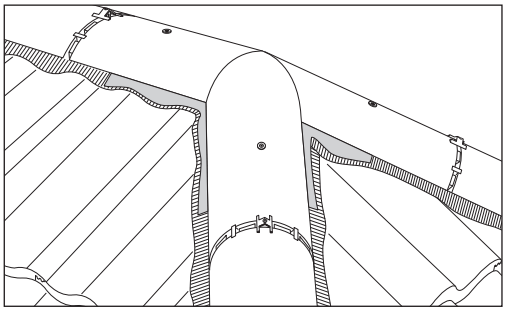


Fig 14 Weathering of hip/ridge junction with soaker

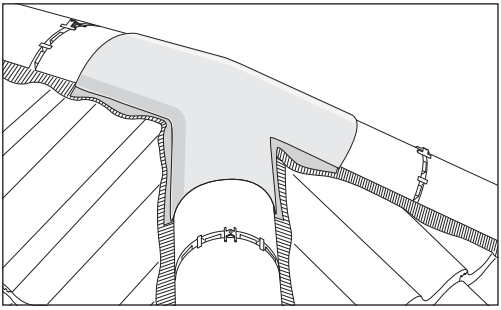


Fig 15 Weathering of hip/ridge junction with flashing

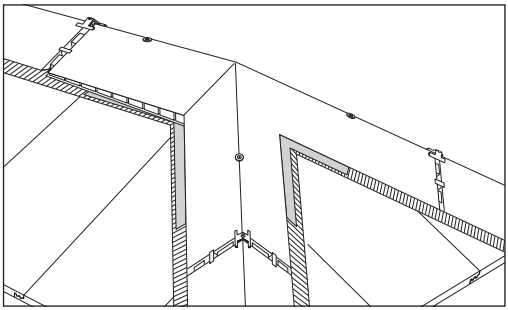


Fig 16 Weathering of hip/ridge junction with soaker

UNIVERSAL HipFast system

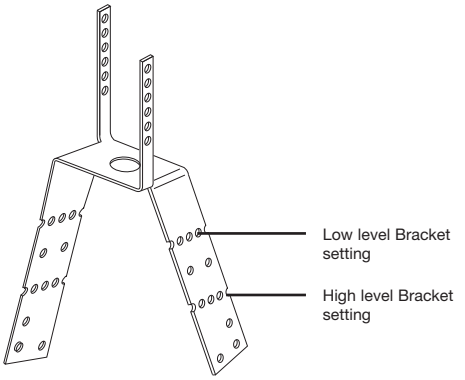


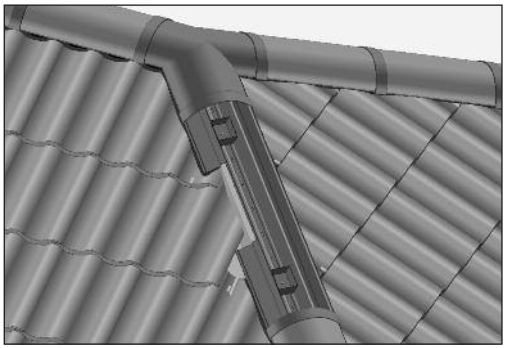
Fig 17 Batten Bracket settings

HipFast batten bracket setting table For Marley Eternit roof tiles* (see Fig 17)
Low level Batten Bracket Setting (bend along top row of diagonal holes)
Melbourn
Edgemere (above 25° pitch)
Duo Edgemere (above 25° pitch)
Ashmore
Plain / Heritage
Ludlow Plus
Ludlow Major (above 32.5° pitch)
High level Batten Bracket Setting (bend along bottom row of diagonal holes)
Edgemere (17.5° to 25° pitch)
Duo Edgemere (17.5° to 25° pitch)
Modern
Duo Modern
Ludlow Major (22.5° to 32.5° pitch)
Double Roman
Mendip
Malvern
Wessex
Anglia

*Apply same settings for equivalent tile profiles from other manufacturers

Dry hip system

The Marley Eternit 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 Eternit Plain Tiles, Concrete Interlocking Tiles and Slates and is designed for use with Third Round and Modern hip tiles.



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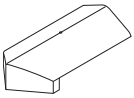
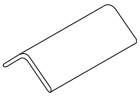
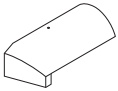
Components



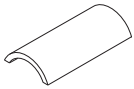
Modern block end hip tile (code 292)



Modern ridge/hip tile (code 209)



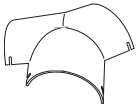
Third round block end hip tile (code 291)



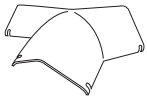
Third round hip tile (code 289)

Modern ridge/ hip union (code 4140*)

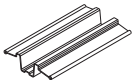
Third round hip union (code 4350*)



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

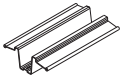


Third round hip apex cap units:
15°-24° (code 4371)*
25°-35° (code 4372)*
36°-45° (code 4373)*



Dry hip batten section (low profile) (code 43300)

For Modern/Duo Modern/ Ludlow Plus/Double Roman/ Ludlow Major/ Edgemere/ Duo Edgemere/Ashmore/ Melbourn/Plain tiles



Dry hip batten section (high profile) (code 43400)

For Mendip/Malvern/ Wessex/Anglia

Tile Tail Clip Pack (20 clips) (code 43602)

Melbourn RH hip tail clip pack (12 clips) (code 43604)

Low profile fixing kit (code 43601),

High profile fixing kit (code 43611)

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 & set screw with sealing washer

Dry hip system

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
a) When using Melbourn slates, cut back tiling battens to allow the low profile dry hip batten section to be fixed directly to hip tree or rafter. Ensure that ends of tiling battens are fully supported and fixed to timber noggins or boards.

b) 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 Mark and cut tiles accurately, abutting either side of hip rafter in a straight line, to form a gap of 110mm width (Fig 1). Ensure all raking cut tiles and slates are fully supported on the battens and if not, provide suitable packers to prevent tiles from rocking.

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 the risk of smaller cut pieces of tile or slate becoming dislodged. (Details of suitable adhesives can be obtained from the Technical Advisory Service).

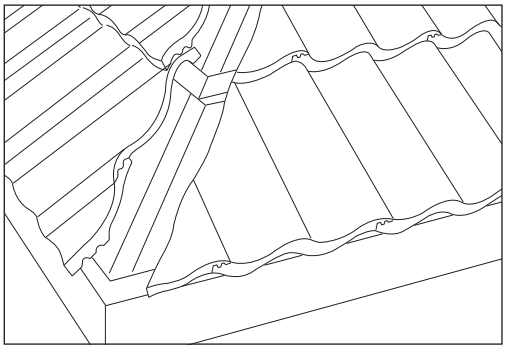


Fig 1

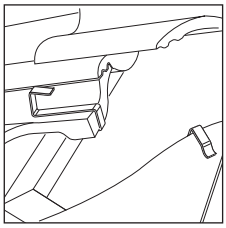


Fig 2

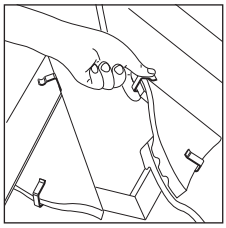


Fig 3

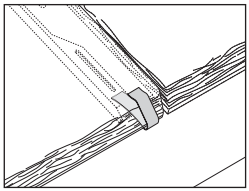


Fig 4 Use tile clip for raking cut Melbourn slates

Note: When using Plain tiles and Melbourn interlocking slates, ensure that tile-and-a-half and/or slate-and-a-half or double slates 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.

6 When using Melbourn slates, secure the double slates to the right hand of the hip by using the special tail clip fitted over the interlock and the adjacent slate (Fig 4).

Dry hip system

7 Insert the closed cell foam rubber strip (supplied in fixing kit), into recesses on each side of PVCu extruded dry hip batten section (Fig 5).

8 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 6).

9 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 7).

10 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.

11 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 8).

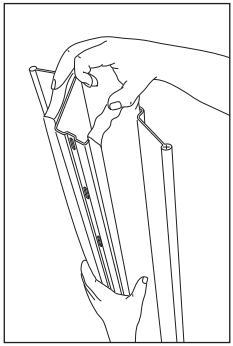


Fig 5 Fit foam rubber strip to each side of batten section

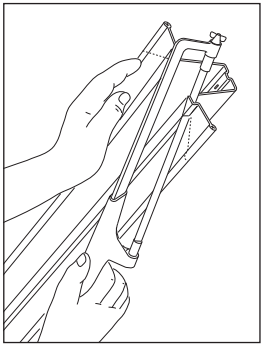


Fig 6 Make angled cut, if required

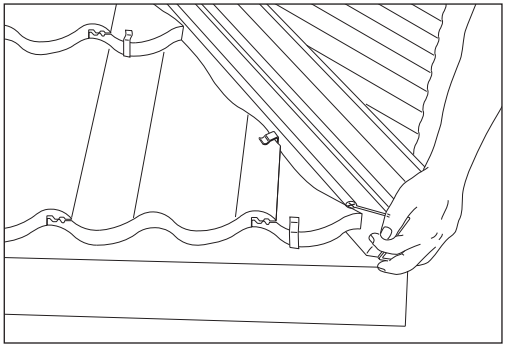


Fig 7 Locate Hip Batten Section between cut tiles

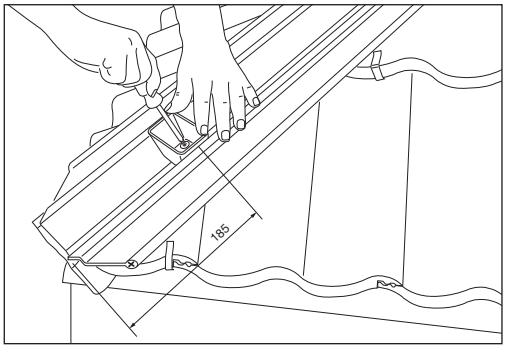


Fig 8 Locate fixing blocks

Dry hip system

12 Position first expansion block at eaves, a maximum 185mm from mitred end of batten section.

Note: When using Melbourn slates, the orientation of the fixing/ expansion block should be as shown in Fig 9. For all other tiles, orientation should be as Fig 10.

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

14 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.

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

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

17 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.

18 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) .

19 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 11).

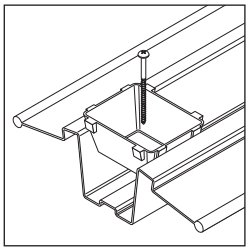


Fig 9

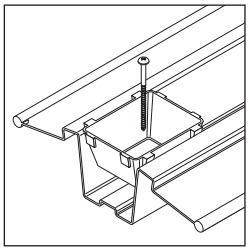


Fig 10

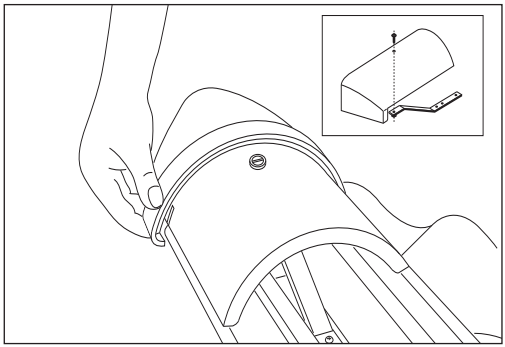


Fig 11

Dry hip system

20 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.

21 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 claws of hip ridge union to clip onto bead of batten section (Fig 12).

22 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 15, page 157).

23 At hip apex, mitre dry hip batten sections together as closely as possible. When forming a junction with the Marley Eternit 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 13).

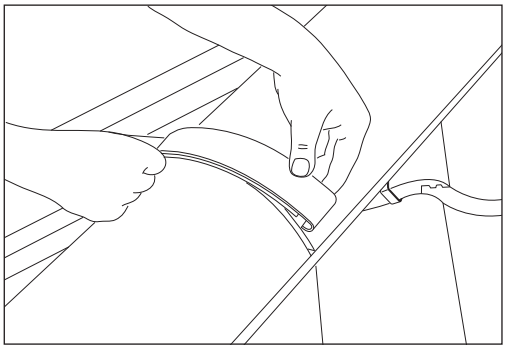


Fig 12 Fit ridge unions

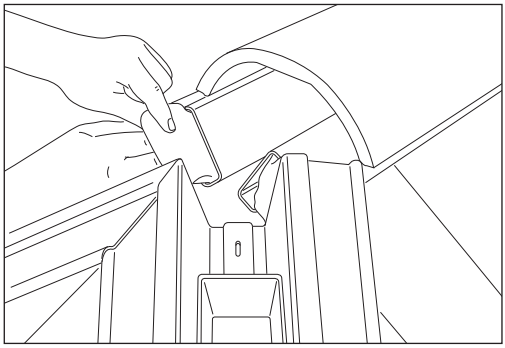


Fig 13 Insert closed cell foam rubber slip

Dry hip system

24 Place purpose-made Styrosun® PVC 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 14).

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 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 15). 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.

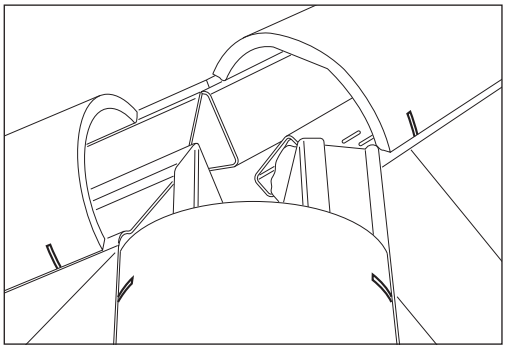


Fig 14 Slots cut in ridge/hip tiles

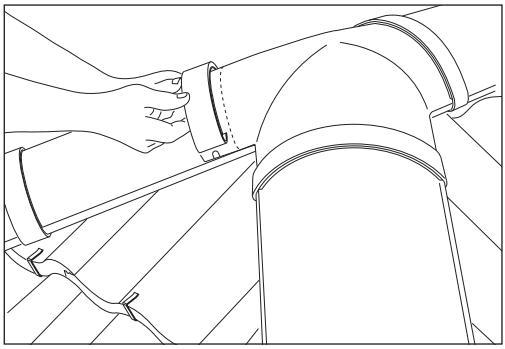
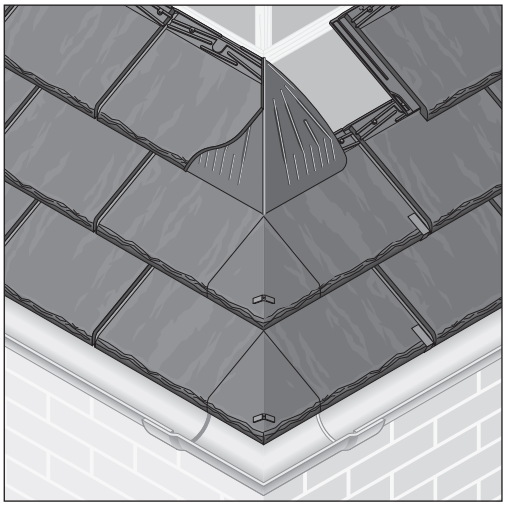


Fig 15 Secure apex junction cap with hip/ridge unions

Interlocking slate mitred hip system

The Marley Eternit mitred hip system has been developed to enable designers to replicate the appearance of the traditional clean-cut and uncovered hip mitre, using Melbourn interlocking slates.



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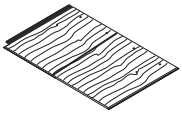
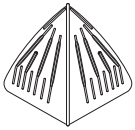
Components



Melbourn double slate (code ME600325K)



Mitred hip soaker pack 22.5° - 60° (code 42453)

10 No. 90 x 3.35 mm stainless steel annular ring shank nails

10 No. butterfly clips

Interlocking slate mitred hip system

Installation

1 Fix underlay and battens in normal way.

Note: Prior to laying underlay, secure timber noggins to the sides of the hip tree to support the batten ends

2 Neatly mitre battens and abut to hip rafter or supplementary batten (Fig 1).

3 Set out roof slating to take account of verges and abutments to reduce unnecessary cutting.

4 Where two hips meet at ridge, as at a hipped end, ensure that top course will finish with a double slate for cutting both sides (Fig 2). (See 9 (b) below).

5 Cut double slates, adjacent to hip tree to a close mitre to ensure a 5-6m gap with a net finish at hip intersection.

6 By laying RH doubles, a string line can be used to achieve an accurate cut.

7 Remove RH slates and lay LH double slates in same way ensuring bond is maintained on each course.

8 With the string line in exactly the same position, repeat the procedure.

9 To allow enough width of double slate to cut to hip:

a) For roof pitches of 22.5° - 35° inclusive hip should be set out so that 2 No. double slates finish in top course (Fig 3).

b) Where roof pitch is more than 35°, set hip end out so that only 1 No. double slate will be fitted in top course and 2 No. doubles in course below as shown (Fig 4).

10 With RH cut slate in position, but unfixed, locate soaker so that it rests on batten and extends to corner of slate.

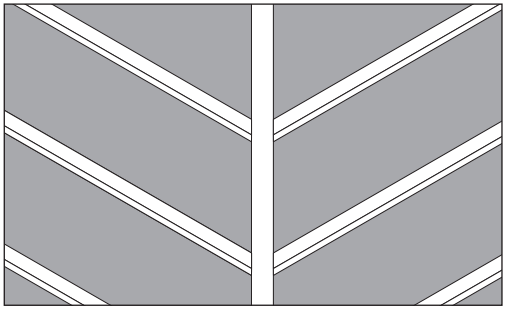


Fig 1 Neatly abut battens to hip rafter

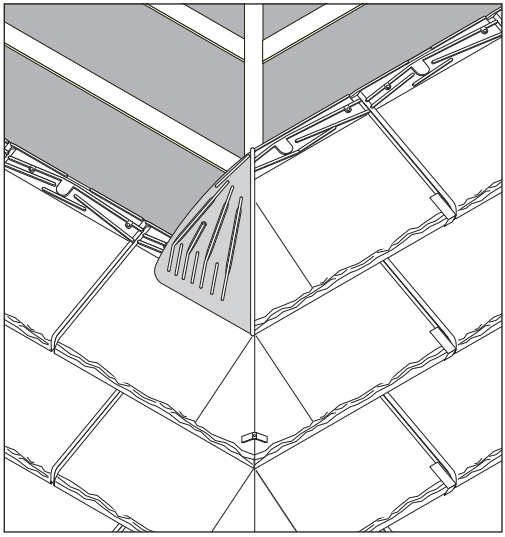


Fig 2 Ensure courses end in double slate

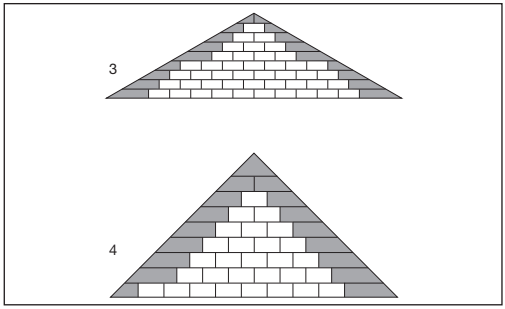


Fig 3 and 4 Setting out

Interlocking slate mitred hip system

11 Nail soaker to batten as indicated (Fig 5).

12 Remove cut slate and nail RH side ensuring that soaker does not move position.

13 Fix LH cut double slate in position and secure front edges of slates with a butterfly clip and s/s nail (Fig 6) approx 50mm from front edge of slates.

14 Repeat operations 9-12, thus fixing next course soaker in position (Fig 7).

15 Slide blackened 'C' tail clip over right hand edge of double slate, clamping it to lock of adjacent slate (see Fig 8 inset).

16 Continue until the apex is reached.

17 Trim and lap top soakers if required, and fix top slate in same way as before.

Note: All raking cut double slates must be fixed at three positions. Where additional holes are required a (3mm diameter) hole should be drilled on site.

18 When used with the Marley Eternit dry ridge system, overlap soakers and trim if necessary so that apex junction is properly weathered.

19 In exposed areas, top course soakers may be substituted with a lead saddle for extra protection.

20 A dry ridge end cap should be trimmed to fit and secured to the batten sections in the normal manner (Fig 9).

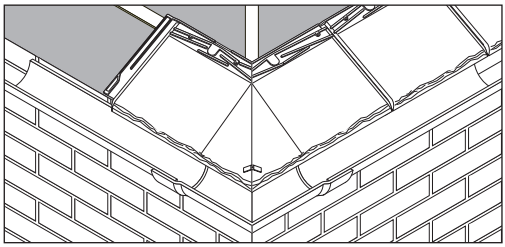


Fig 6 Secure hip slates with butterfly clips

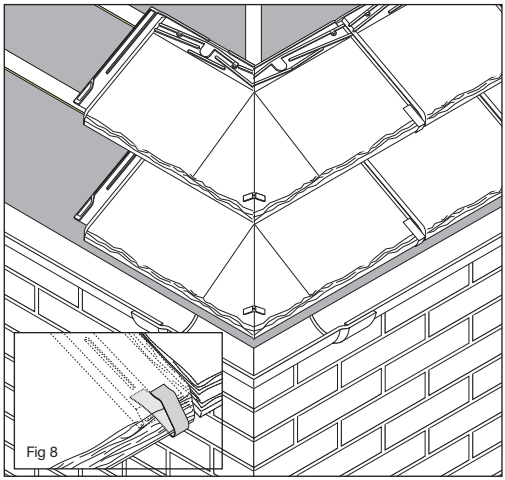


Fig 7

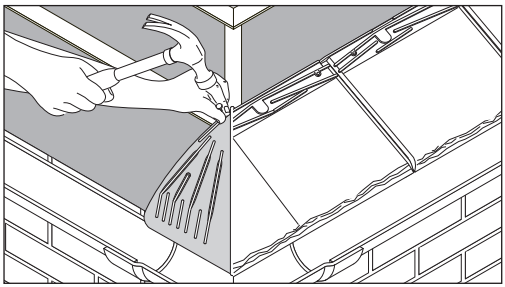


Fig 5 Nail soaker to batten

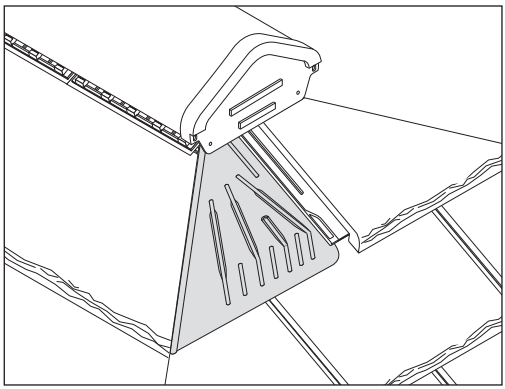
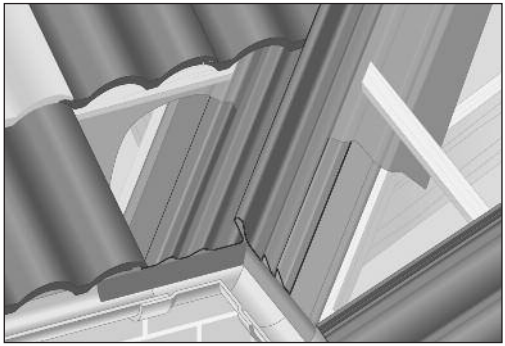


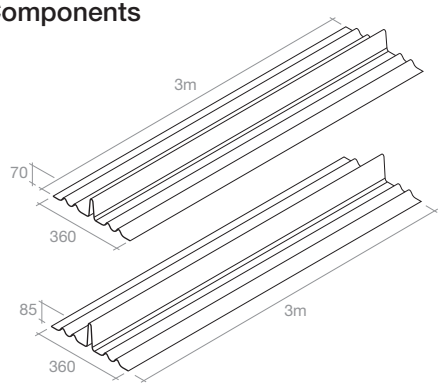
Fig 9 Trim dry ridge end cap to finish hip

UNIVERSAL Dry valley system

Developed to allow the designer freedom to specify a completely mortar-free roof, this system utilises the latest grp technology. The advanced and unique gutter section improves discharge rates and gives the appearance of a close-cut finish.



Components



Low profile GRP valley (30422) (top)
High profile GRP valley (30421)

GRP dry valley trough suitability

Tile	High profile	Low profile
Ludlow Plus	•	
Ludlow Major	•	
Malvern	•	
Mendip	•	
Double Roman	•	
Anglia	•	
Wessex	•	
Modern/Duo Modern		•
Edgemere/ Duo Edgemere		•
Ashmore/Plain		•

*Suitable for use with Marley Eternit roofing products and those of other manufacturers

UNIVERSAL Dry valley system

1 In all cases valley boards should be fitted. Valley boards may be inset or continuous over the rafters. Where they are inset, they should be a maximum of 12mm thick and supported on bearers or noggings of 50 x 25mm or similar and set at a depth to suit the thickness of the Valley Board (Fig 1).

2 Continuous overlaid boards should be minimum of 6mm thick plywood and only butt jointed over a supporting rafter (Fig 2).

3 The width of the valley boards should extend by a minimum of 50mm beyond the edge of the valley trough. For overlaid boards on rafter spacings above 450mm, it is recommended that support noggins of 75 x 50mm are fixed under the outer edge of the valley board between the rafters (Fig 3).

The fascia or barge board may be trimmed to allow the valley trough to pass through without flattening the profile, or alternatively a lead soaker may be used if required.

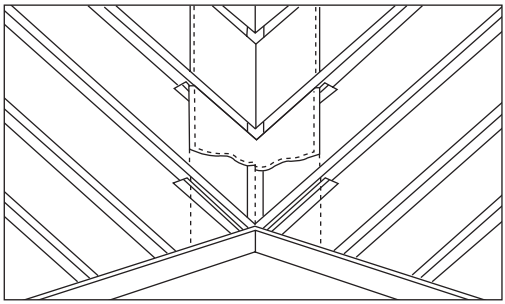


Fig 1 - Construction of valley boards

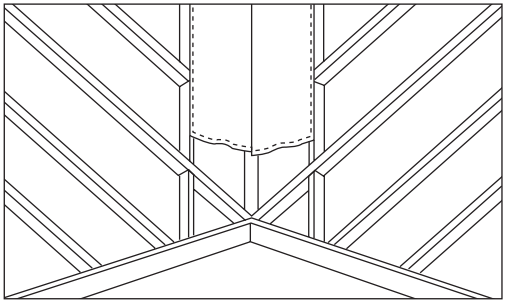


Fig 2 - Butt joint valley boards over supporting rafters

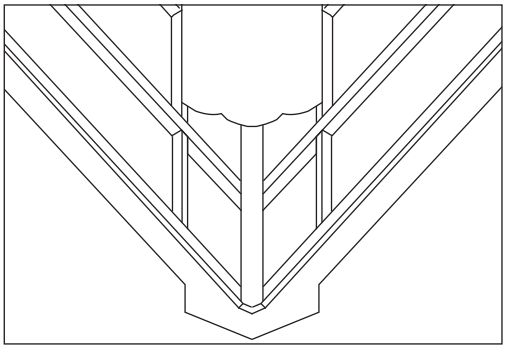


Fig 3 - Use of support noggins

UNIVERSAL Dry valley system

Lining the valley

4 A single strip of roofing underlay, at least the full width (500mm) of the valley boards, should be laid up the centre and directly on top of the boards allowing for an overlap beyond the fascia line where appropriate and which may be trimmed later (Fig 4).

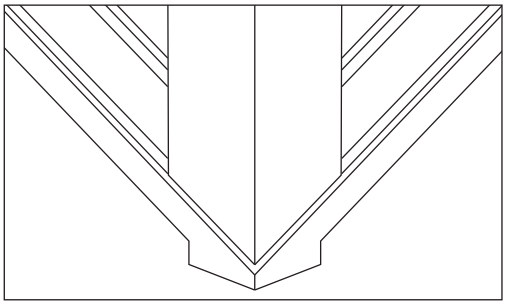


Fig 4 - Lining the valley

Fixing the valley trough

5 Fix dry valley trough by nailing outer welts to supporting timbers at 500mm max, centres, and overlapping lead (code 4) apron by a minimum of 150 - 200mm (Fig. 5).

Lay roof underlay to overlap valley trough and trim between outer and inner welts. Trim tiling. Battens to lap on to outer welt and nail to supporting timbers.

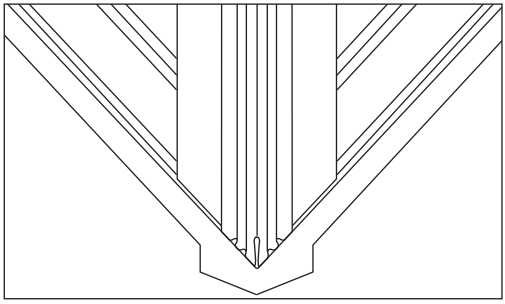


Fig 5 - Fixing the valley trough

6 Where a lead soaker is to be used at the foot of the valley, i.e. where the Dry Valley terminates above eaves level or where an eaves intersects with a verge or it is not appropriate to notch the fascia boards, the soaker should be welted at the edge and supported with suitable timber work. The valley trough should be trimmed to suit before fixing if necessary.

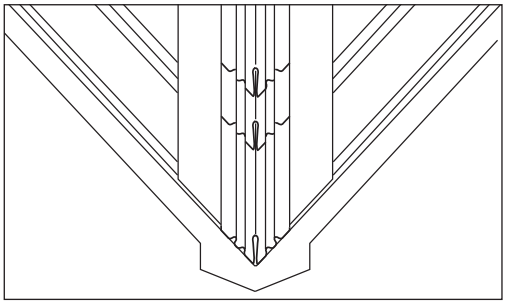


Fig 6 - Valleys terminating above eaves level

UNIVERSAL Dry valley system

Laying raking cut tiles to valley trough

7 Cut raking tiles neatly to butt closely to central upstand of valley trough and secure all small raking cut tiles with tail clips or, where appropriate, use tile and a half tiles to avoid small cut pieces.

8 Fill any small voids in the upstand of the valley trough with a suitable mastic.

Valley intersections

9 Where a section of Dry Valley intersects with another section of Dry Valley e.g. at the roof apex of a dormer roof or where one or more sections intersect with the ridge of a roof, it is necessary to mark the angle of intersection and cut the valley trough prior to fixing.

A minimum code 4-lead saddle should then be dressed over the mitred sections of the Dry Valley(s) and ridge if necessary. The length of the overlap of the saddle onto the Dry Valley should be in accordance with LSA guidance. Alternatively the lead saddle may be dressed over the slates or tiles.

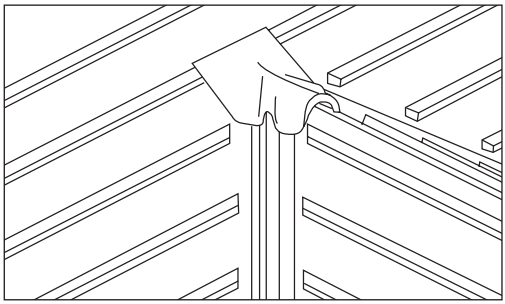


Fig 7 - Mid-slope valley intersection

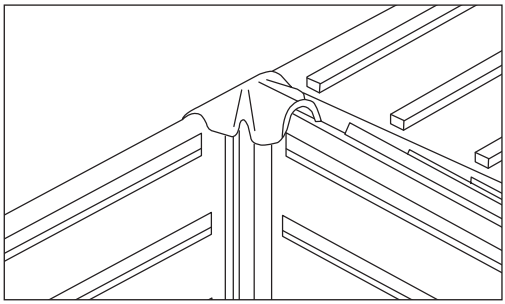


Fig 8 - Roof apex level valley intersection

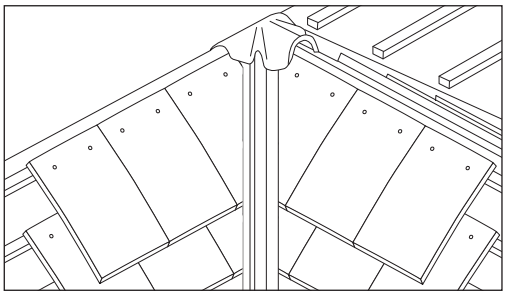
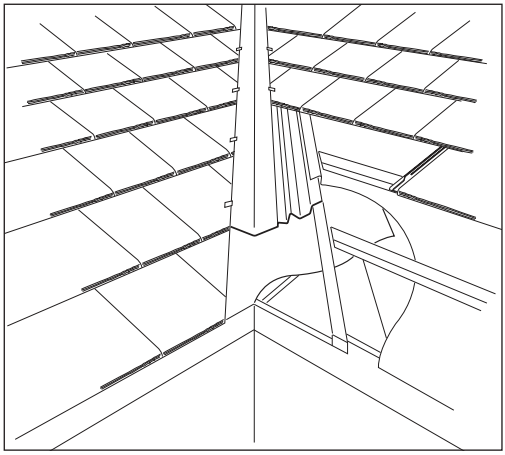


Fig 9 - Cut tiles to rake of valley

GRP Slate dry valley system

Developed to allow the designer freedom to specify a completely mortar-free roof, this system utilises the latest GRP technology. The advanced and unique parabolic gutter section improves discharge rates without added gutter depth.



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Installation

1 The valley trough may be fixed directly onto counter battens either to existing or new valley boards.

2 The valley should first be lined with an approved underlay one metre wide.

3 Counter battens of the same depth as the tiling battens should be nailed onto the valley boards over the underlay.

4 The lengths of the valley trough should be firmly pressed down on to the valley board to support the base and nailed, through pre-drilled holes at a maximum of 500mm centres, to the counter battens.

5 The roof tile underlay should then be laid and dressed over the counter battens.

6 The fascia board should be cut to allow the GRP valley trough to pass through and discharge into the gutter without flattening out. The end should be trimmed to the approximate centre line of the gutter.

7 At the head of the valley, a lead saddle should be fixed to lap over the valley trough.