



▲ EDEN TRADITIONAL CLAY PANTILES



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 We've
rewritten
the book
on clay
pantiles

▲ Originating in the Netherlands over five hundred years ago, clay pantiles have come to dominate the UK's East Coast roofing landscape.

However, our policy of continual product innovation and in consultation with industry experts and our customers, has led us to develop a technically-advanced clay pantile that not only looks as good as the original, but offers superior benefits to those that specify and install them.



▲ The Eden tile is a joy to lay and very consistently manufactured, but not so much that takes away the tile's character.

Matt Timby, Timby Traditional Roofing



The new Eden tile is true to the traditional profile of heritage pantile roofs, with subtle but significant improvements. Eden is a pantile that allows faster, better and easier installation, while retaining the beautiful appearance of traditional clay roofs.

We've rewritten the book on clay pantiles.



Why choose Eden Traditional Clay Pantiles?

FEATURES	BENEFITS
Three colours	Offer traditional, weathered and heritage look
Thin leading edge	Tiles sit low on the roof giving strong aesthetics
Sweeping curve design	Traditional and elegant look
Uniform, consistent design	Simple and fast to install
Low pitch	Suitable for roofs down to 22.5°
Factory-integrated tile features	Channel cut out for Solofix clips – ensuring two point fixing to BS 5534 Large nib – secure fit to batten and no slipping Flat back on rear – sit square much easier to lay than other pantiles Four locator nibs – for positive location and fast installation
Range of clay fittings and accessories	Complete design flexibility
Full, 15 year system guarantee	Full integration with Marley dry fix systems and clay accessories giving peace of mind and standards compliance

EDEN

TRADITIONAL CLAY PANTILES

The newest, exciting addition to our classic clay range combines carefully considered design with a traditional feel and beautiful look of a clay pantile. Eden takes the hassle out of guesswork and intensive labour out of laying clay pantiles. The low minimum pitch offers versatility and our Solofix clips provide an easier fit and compliance with BS 5534. New design features improve on the quirks of a classic pantile.

The advanced design of the Eden Pantile makes laying of this true traditional pantile quicker and easier than ever before whilst preserving the charm and character of a traditional clay pantile.

TECHNICAL TOOLKIT

Marley provides a comprehensive technical service and a range of online tools to ensure design performance and compliance to the latest British Standards and NHBC technical guidelines. These services include:

- ▲ Fixing specifications: marley.co.uk/tilefix
- ▲ NBS clauses: marley.co.uk/specrite
- ▲ CAD details: marley.co.uk/cad
- ▲ BIM models: marley.co.uk/bim

For more information on the recent update to the British Standard for Slating and Tiling (BS 5534) and how it might affect your project, please visit marley.co.uk/BS5534



COLOUR AVAILABILITY

See pages 10-11 for more detailed colour panels.



Key (V) Variable finish (S) Smooth finish

TECHNICAL DATA

Size of tile	342 x 247mm
Minimum pitch*	22.5° (72mm headlap)
Maximum pitch	75°
Minimum headlap	72mm
Fixed gauge	270mm
Cover width	215mm (nominal)
Covering capacity (net)	17.2 tiles/m ² at 72mm headlap
Weight of tiling (approx.)	40.42 kg/m ² at 72mm headlap (loading 39.65N/m ²)
Battens required	3.7 lin.m/m ² at 72mm headlap (net)
Batten size (fixed to BS 5534) recommended	38 x 25mm for rafters/supports not exceeding 450mm centres 50 x 25mm for rafters/supports not exceeding 600mm centres
Tile nails	45 x 3.35mm
Fixing clips	Eaves, verge and tile clips
Authority	BS EN 1304

* The minimum recommended pitch and lap may be influenced by special circumstances, please contact the Technical Advisory Service.



EDEN RUSTIC RED
VARIABLE FINISH



EDEN NATURAL RED
SMOOTH FINISH

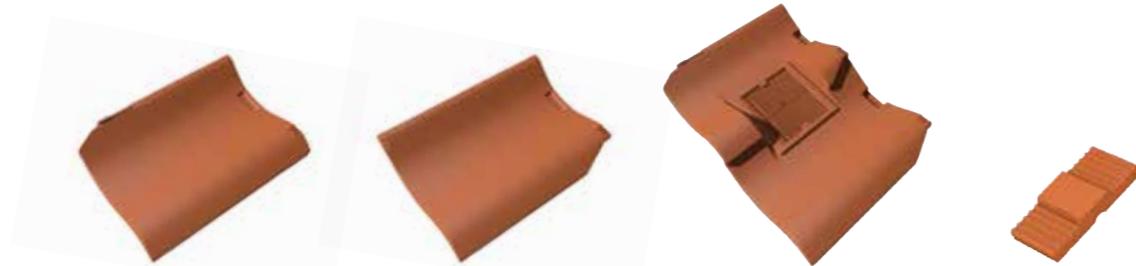


EDEN MATT BLACK
SMOOTH FINISH



FITTINGS & ACCESSORIES FOR EDEN TRADITIONAL CLAY PANTILES

All products can be installed in line with the latest BS 5534 'Code of Practice for Slating and Tiling' and NHBC Technical Standards.



Description	Right hand finishing tile	Left hand finishing tile	Ventilation tile	Dentil slip
Rustic Red	✓	✓	✓	✓ (Dark Red)
Natural Red	✓	✓	✓	✓
Matt Black	✓	✓	✓	✓ (Black)



Description	Clay interlocking 375mm half round ridge	Clay interlocking 375mm half round block end ridge	Clay interlocking 375mm third round hip	Clay interlocking 375mm third round hip end
Rustic Red	✓	✓	✓	✓
Natural Red	✓	✓	✓	✓
Matt Black	✓	✓	✓	✓

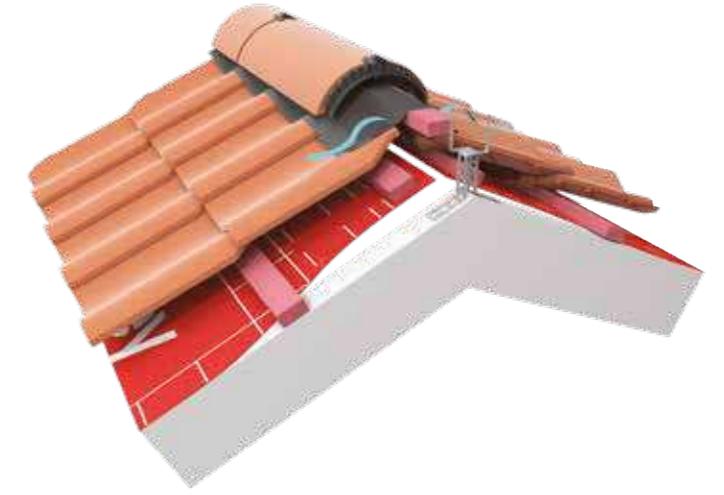
MINIMUM BANDED QUANTITIES

	No. per band	Bands per pallet	Quantity per pallet
Eden pantile	4	104	416
Half round ridge	2	16	32
Half round block end ridge	1	n/a	n/a
Third round hip	3	27	81
Third round hip end	1	n/a	n/a



MORTAR BEDDED SECURITY FIXING FOR RIDGES AND HIPS

Under BS 5534, the use of mortar as a sole means of fixing roof tiles and fittings is insufficient. Not only should careful consideration be given to the creation of a suitable roof mortar through the correct sand and cement mix, but tiles or fittings bedded with this mortar must also be accompanied by a mechanical fix.



DRY FIX AND VENTILATION SOLUTIONS

Avoiding mortar with its associated risks and maintenance will always be best practice. Marley offers a range of high performance dry fix solutions, including ridge and hip systems that are able to contribute towards ventilation to meet the requirements of BS 5250.

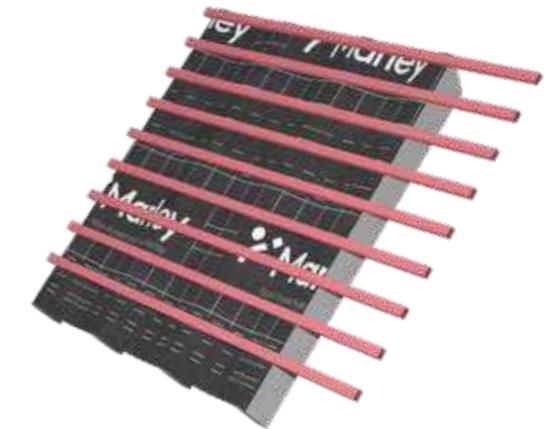
Our website contains further information about dry fix and ventilation solutions, including the Universal range, which not only works with our roof tiles but those of other manufacturers too: marley.co.uk/dryfix



UNIVERSAL UNDERLAYS

Marley Universal underlays are lightweight, high performance membranes for pitched roofs.

Supplied with integrated tape for sealing laps, Universal Underlays are fully compliant to BS 5534 and suitable for all UK wind zones 1-5.



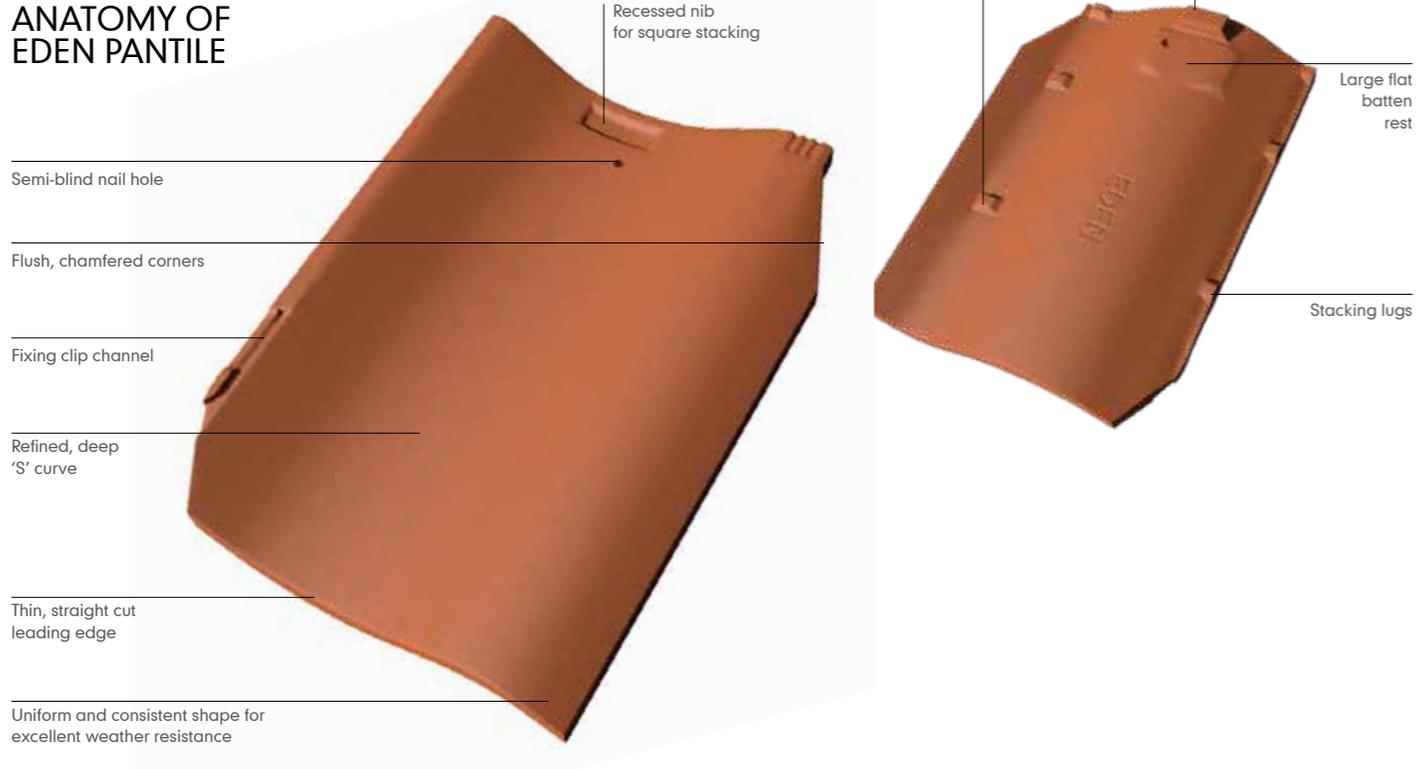
JB RED BATTENS

JB Red is a high quality roofing batten and the first fully pre-graded batten available to the roofing industry.

JB Red completely meets the NHBC requirements for fully graded roofing battens. Its RED colour means that it is highly visible on site, therefore Local Authority Building Control, NHBC and other inspectors can see that high quality, pre-graded and compliant battens have been used.

PROPERTIES & PERFORMANCE

ANATOMY OF EDEN PANTILE



FEATURES OF EDEN PANTILES

- ▲ Low pitch options down to 22.5°
- ▲ BES 6001 Certified 'Excellent'
- ▲ Can achieve A+ in the BRE Green Guide
- ▲ 100% recyclable

AUTHORITY

Marley clay tiles are manufactured to BS EN 1304 'Clay roofing tiles for discontinuous laying – Product definitions and specifications', operating a quality management system meeting the requirements of BS EN ISO 9001 'Quality Management Systems – requirements'.

Additionally, the manufacturing plant operates an environmental management system, in line with BS EN ISO 14001 'Environmental management systems – Specification with guidance for use' and Health and Safety Standard OHSAS 18001.

Marley clay tiles are CE marked in line with the Construction Product Regulation (marley.co.uk/ce). They are also rated 'Excellent' in the BES 6001 Framework Standard for the Responsible Sourcing of Construction Products.

RECYCLABILITY

At end of life, clay tiles can be reused or crushed and used as aggregate without the need for further processing. As a natural product, no special disposal considerations are required.

COMPOSITION AND MANUFACTURE

The tiles are machine moulded, dried and fired in gas fired tunnel kilns, using an advanced computer controlled system. This ensures that the products are made to exact tolerances in shape, size, colour and strength.

PERFORMANCE

Marley clay tiles are tested for resistance to wind driven rain and meet the requirements of BS 5534 'Code of practice for slating and tiling (including shingles)' with respect to wind loading, when fixed in accordance with our recommendations.

STRENGTH AND DURABILITY

Marley clay tiles are well vitrified and do not delaminate on weathering. They are also extremely strong, with a transverse strength well in excess of the 600N minimum requirement in BS EN 1304.

FIRE RESISTANCE

Marley clay tiles are non-combustible and meet the requirements for external fire performance without the need for further testing in accordance with Class B roof of BS EN 13501-5 using data from external exposure to fire roof tests (BS 476-3) as defined in ENV 1187. There are no restrictions on their use under the Building Regulations and are designated AA in Table A5 of Appendix A, Approved Document B, 'Fire Safety'.

ENVIRONMENTAL EFFECTS

THERMAL

Unaffected by extremes of temperature. Tiles should be laid with a slight gap (1-5mm) to accommodate any movement induced by changes in temperature.

The thermal resistance (R) of Marley clay tiles when dry is 0.013m²K/W.

For the purpose of thermal transmittance calculations, the preceding 'R' values should be substituted by a figure of 0.12m²K/W which includes the roof covering and the airspace behind the tiles or slates. An 'R' value of 0.020m²K/W should be added for the roof underlay.

FROST

Unaffected by frost, and meets the requirements of BS EN 1304 Annex A when tested to EN 539-2 in accordance with national requirements.

SUNLIGHT

Clay tiles do not fade and are unaffected by prolonged exposure to UV and sunlight.

ATMOSPHERIC POLLUTION

Suitable for all rural, marine and normal industrial environments. Avoid discharge of gases or liquids from chemical processes onto the surface of the tiles. Resistant to all but the most highly polluted atmospheres, where sulphur dioxide levels exceed 70 micrograms/m³ of air.

ELECTRICITY

Marley clay tiles are electronically insulating. Reference should be made to BS 6651 for recommendations on the protection of buildings against lightning strikes.

BIOLOGICAL EFFECTS

BIRDS AND RODENTS

Not affected or degraded by birds, rodents or insects.

MOSSES AND LICHENS

Water absorption of Marley clay tiles is very low, making their surface less likely to support growth of mosses and lichens, unless promoted by local environmental factors such as overhanging trees. Removal may only be required if growth is sufficient to restrict the drainage of water from the roof.

HEALTH AND SAFETY

When cutting tiles using an angle grinder, measures to reduce the effect of dust should be taken in accordance with the HSE Guidance Note EH 40 'Occupational Exposure Limits', EH 44 'Dust in the workplace: general principles of protection' and HSE Guidance Note EH59/2 (Respiratory Crystalline Silica). For a copy of the Marley clay tiles Safety datasheet, visit marley.co.uk/about/HealthandSafety

APPEARANCE

To avoid the risk of colour patching and bands of different shades, tiles should be randomly selected from at least three separate pallets from the same production batch. Ensure there are sufficient quantities of mixed tiles to complete each roof elevation.

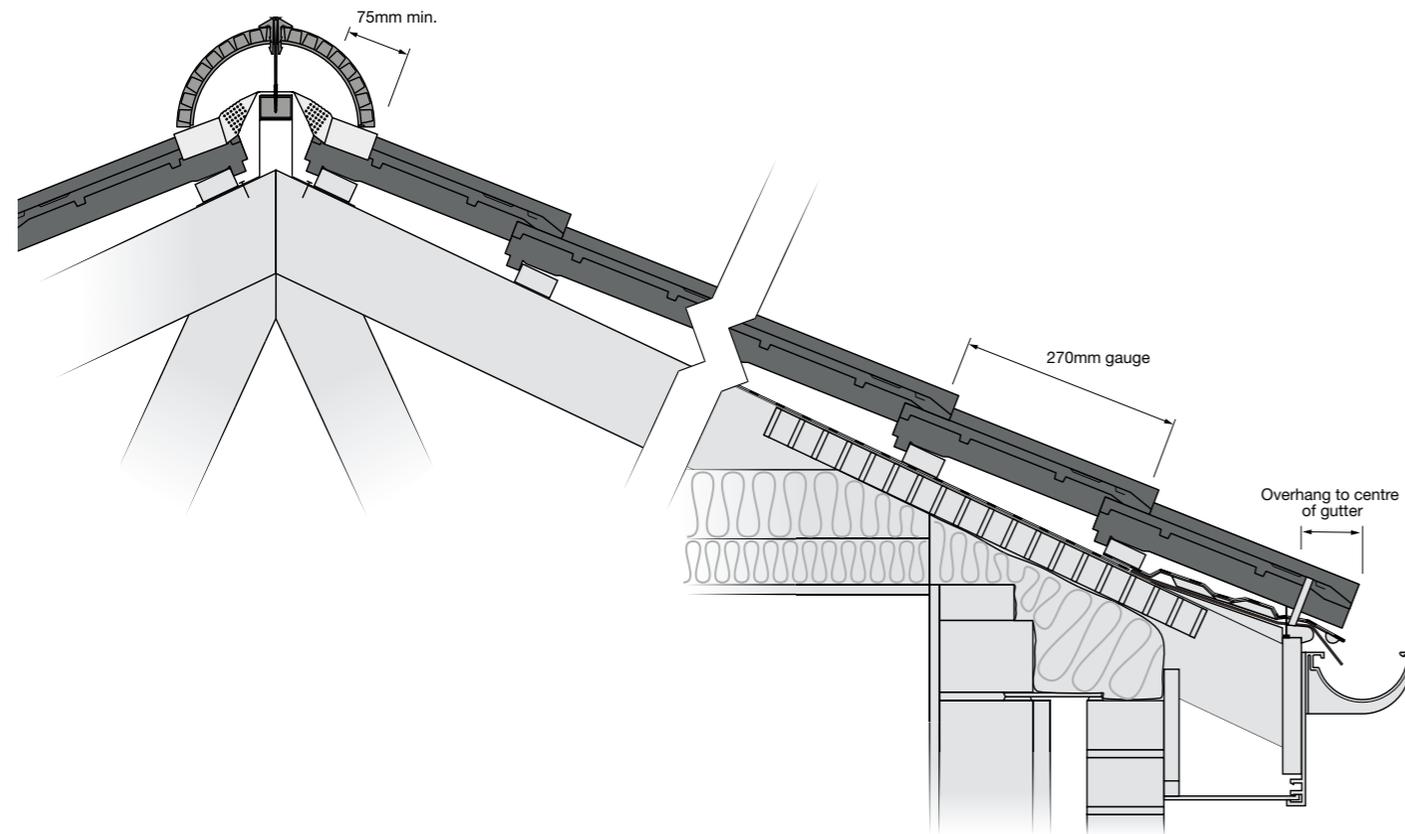
FIXING SPECIFICATION

Tiles should be fixed in accordance with the recommendations of BS 5534. The Marley Technical Advisory Service can provide a fixing specification applicable for every roof design, given the relevant criteria relating to type of roof tile, site location, topography, and building/roof dimensions. Fixing specifications can also be completed online at marley.co.uk/tilefix

EDEN DESIGN DETAILS

SETTING OUT

EAVES TO RIDGE

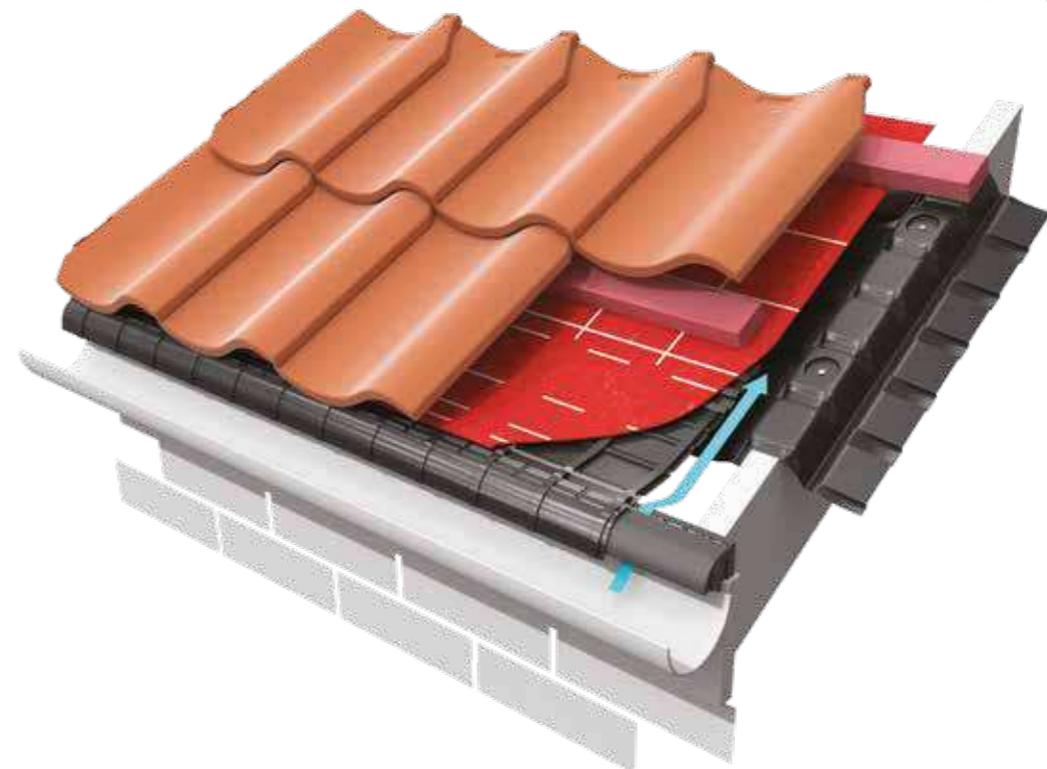
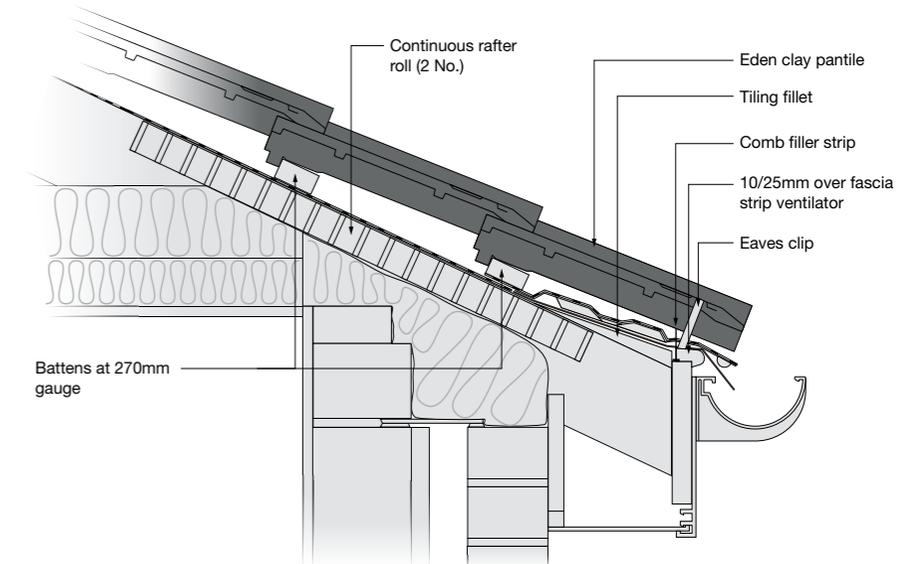


EDEN DESIGN DETAILS

EAVES

UNIVERSAL EAVES VENT SYSTEM

- ▲ eaves ventilation to satisfy 10mm or 25mm conditions
- ▲ eaves to ridge ventilation for pitches of 17.5°-70°
- ▲ continuous rafter roll compresses insulation to allow free air passage (use two rolls to compress deep insulation)
- ▲ strip ventilator has discreet ventilation grille and is nailed to fascia or timber fillet
- ▲ suitable with or without soffit board
- ▲ use comb filler strip with deep profiled tiles
- ▲ mechanically fix all tiles at eaves



TECHNICAL TOOLKIT

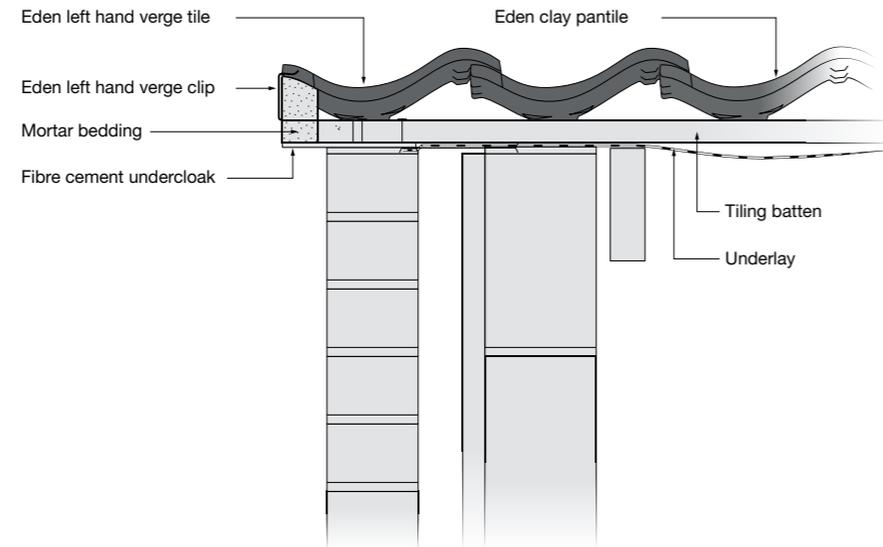
Marley provides a comprehensive technical service and a range of online tools to ensure design performance and compliance to the latest Building Regulations and NHBC Technical Standards. These services include:

- ▲ Fixing specifications marley.co.uk/tilefix
- ▲ NBS clauses marley.co.uk/specrite
- ▲ CAD details marley.co.uk/cad
- ▲ BIM models marley.co.uk/bim

EDEN DESIGN DETAILS VERGES

BEDDED VERGES

- ▲ ensure undercloak does not tilt towards gable
- ▲ verge overhang should be a maximum of 50mm
- ▲ use Eden left hand verge tile for left hand verges
- ▲ use Eden right hand verge tile for right hand verges
- ▲ twice mechanically fix all verge tiles in accordance with BS 5534



EDEN DESIGN DETAILS HIPS

UNIVERSAL HIPFAST SYSTEM

- ▲ provides additional ventilation to the roof void when a 5mm gap in the underlay is used in conjunction with either eaves or ridge ventilated systems or ventilation tiles
- ▲ use one or two thicknesses of 50mm x 25mm batten to fit batten brackets
- ▲ use hip end hip tile at eaves
- ▲ mechanically fix each hip tile via hip unions and clamps
- ▲ complete hip at ridge with soaker flashing



MORTAR BEDDED HIPS

- ▲ fix hip units to hip tree using ridge clamp and 100mm stainless steel screw
- ▲ complete hip at ridge apex with three way mitre
- ▲ use suitable flashing to ensure weathertight junctions

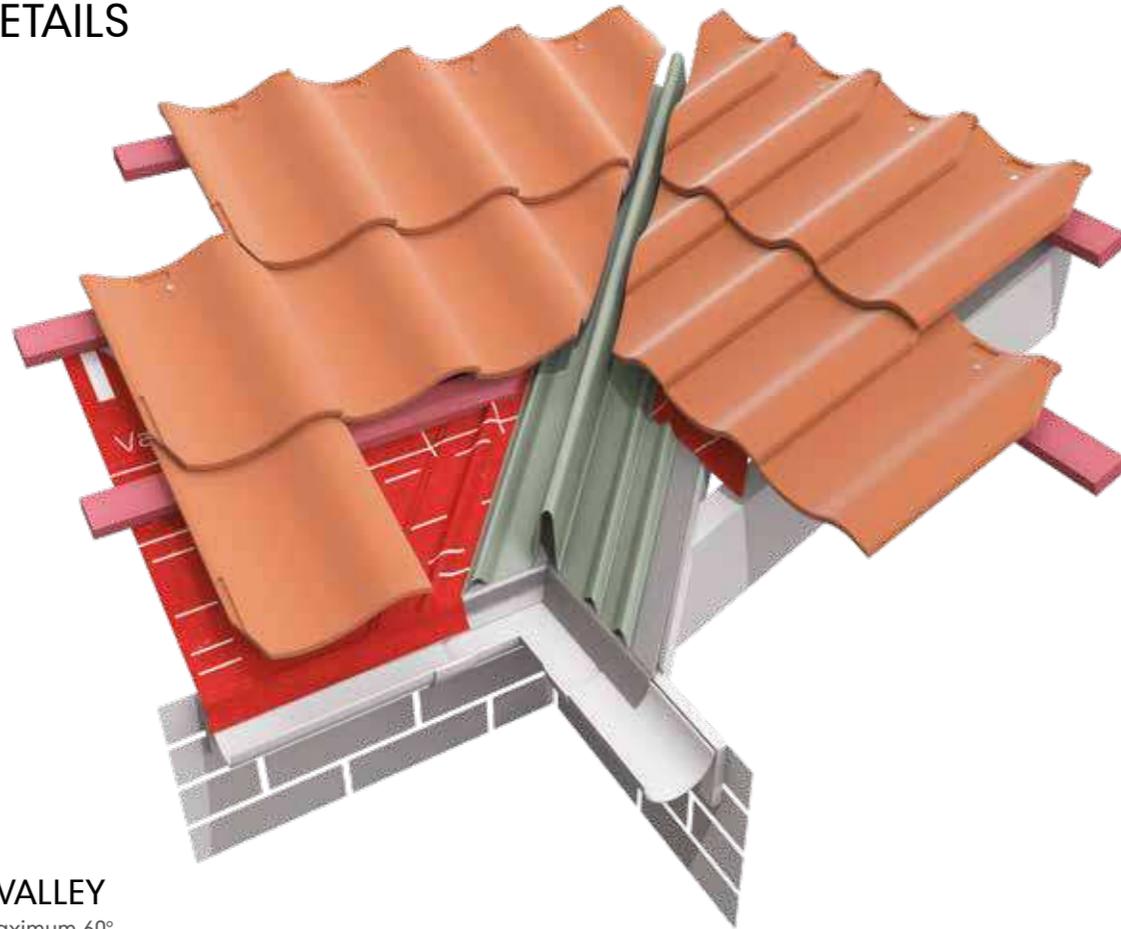


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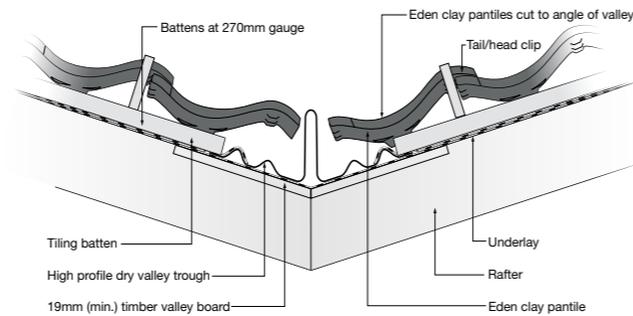
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EDEN DESIGN DETAILS VALLEYS



UNIVERSAL GRP DRY VALLEY

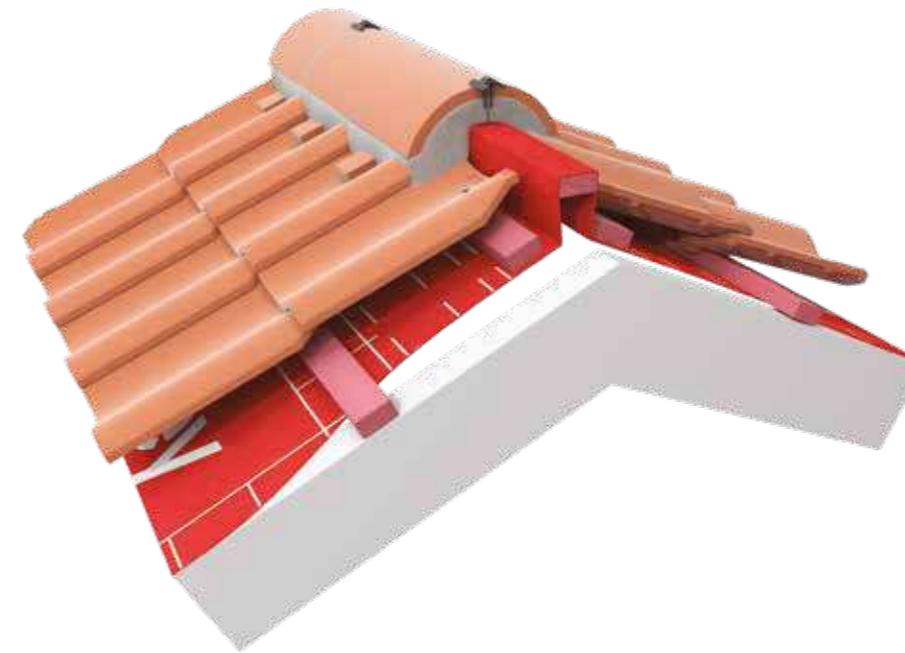
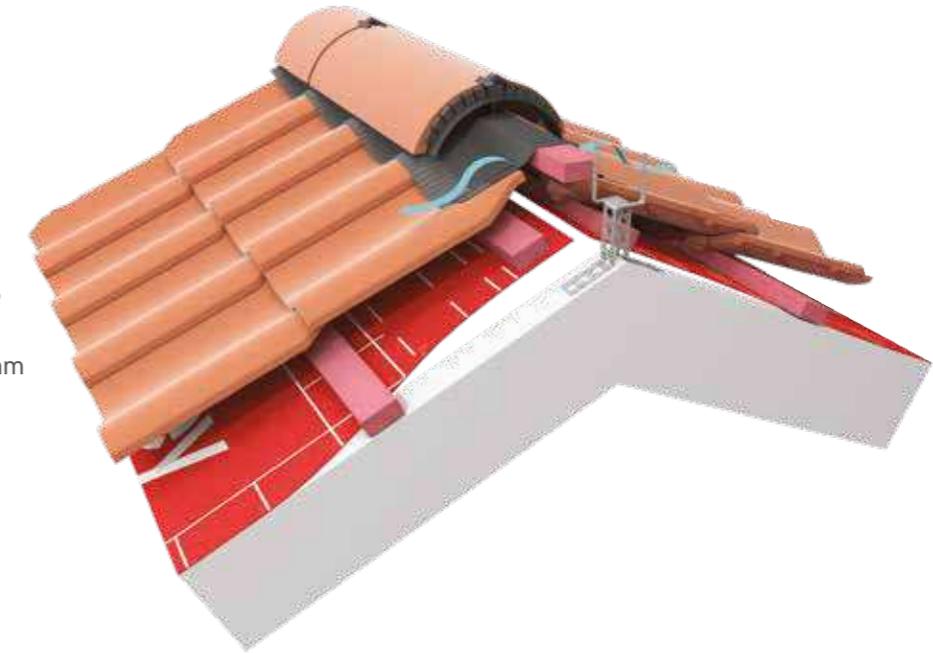
- ▲ minimum rafter pitch 17.5°, maximum 60°
- ▲ maximum valley length 8m
- ▲ suitable for all plan angles and where the pitch either side of the valley varies by a maximum of 20°
- ▲ provide continuous support for valley trough using 18-20mm ply boards on timber supports or overlaid on the rafters
- ▲ tightly butt tiles or slates to central upstand of valley units to prevent ingress of birds or vermin
- ▲ provide metal apron at foot of valley and dress into gutter at eaves. For rafter pitches below 25° cut fascia board to maintain valley pitch
- ▲ nail or clip adjacent tiles to the valley
- ▲ complete top of valley with a lead saddle



EDEN DESIGN DETAILS RIDGES

UNIVERSAL RIDGEFAST SYSTEM

- ▲ provides 5,000mm²/m free vent area at ridge apex
- ▲ ensure gap is provided in roof underlay to vent roof void
- ▲ use one or two thicknesses of 50mm x 25mm batten to fit batten brackets
- ▲ mechanically fix all top course tiles
- ▲ use ridge end tile



MORTAR BEDDED RIDGES

- ▲ security ridge fixing kits are available for clay interlocking ridges
- ▲ fix ridge units to ridge batten using ridge clamp and 100mm stainless steel screw
- ▲ mechanically fixes ridge tile in line with BS 5534 fixing guidelines
- ▲ use suitable flashing to ensure weathertight junctions

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- ▲ CAD details marley.co.uk/cad
- ▲ BIM models marley.co.uk/bim



Here to help

Getting our knowledge to you and your project smoothly and efficiently

▲ CUSTOMER SERVICES

Marley is committed to providing outstanding customer care and is staffed by experienced personnel: **Tel 01283 722588** or **e-mail info@marley.co.uk**

To find your nearest stockist, please visit: **marley.co.uk/stockists**

▲ TECHNICAL ADVISORY SERVICE

Specifiers require prompt, knowledgeable and detailed responses to a vast range of enquiries covering everything from the embodied energy of a typical roof tile, to the different ventilation options available.

Our Technical Advisory Service is staffed by a qualified team with specialist knowledge not only of all Marley products, but also crucially, how those systems integrate with other roofing components and comply with Building Regulations, Health and Safety, environmental and other critical roofing criteria.

Tel 01283 722588, **E-mail info@marley.co.uk** or visit **marley.co.uk/resources**

▲ ACTING RESPONSIBLY AND DELIVERING SUSTAINABLE QUALITY

BES 6001

Demonstrating our commitment to sustainable building, all our roofing products are certified under the BES 6001 standard for responsible sourcing and therefore contribute to extra credits under BREEAM and The Code for Sustainable Homes.

QUALITY STANDARD

All our factories in the UK are ISO 9001, 14001 and ISO OHSAS 18001 accredited. They achieve the highest standards in quality, health & safety and the environment.

CE MARKING

All of our products covered by EN Standard carry an appropriate CE Mark. This means that our products meet the required safety standards and have a guaranteed level of quality.

▲ TOOLS

Tools and assets that make design and specification as straightforward as possible.

SPECRITE

Produce instant NBS clauses that meet the recommendations of British Standards and Codes of Practice: **marley.co.uk/specrite**

TILEFIX

Tool to create fixing specifications based on the geographical location and building dimensions of specific roofing projects: **marley.co.uk/tilefix**

ROOFING ESTIMATOR

Create a complete bill of materials for your project based on a wide range of building and roof types: **marley.co.uk/estimator**

BIM

BIM Space is a set of free-to-download Building Information Modelling (BIM) objects that provide a standard range of build ups for all of our products: **marley.co.uk/bim**

CAD DETAILS

Access to over 2,000 CAD drawings illustrating how specific tile and slate details can be formed: **marley.co.uk/cad**

ROOF SYSTEM SELECTOR

Easy-to-use and comprehensive system finder delivering results from choice of pitch, material or tile type: **marley.co.uk/productselector**

▲ RESOURCES AND TRAINING

SAMPLES

Samples of clay and concrete interlocking and plain tiles are available on request. **Call 01283 722588** or visit **marley.co.uk/samples**

FIXING INSTRUCTIONS AND LITERATURE

Comprehensive sitework, fixing and installation literature and videos: **marley.co.uk/resources**
All current product and technical literature can be downloaded: **marley.co.uk/downloads**

CPDS

A range of Continuous Professional Development roofing seminars accredited by the RIBA CPD Certification Service. For more information or to make a booking: **marley.co.uk/cpd**

TRAINING

Theoretical, practical, engaging and informative training available at three locations nationwide. **marley.co.uk/training**

This publication is based on the latest data available at the time of printing. Due to product changes, improvements and other factors, the Company reserves the right to change or withdraw information contained herein without prior notice. For specific applications users should refer to the Technical Advisory Service and relevant Standards and Codes of Practice for guidance. The photography shown in the document should not necessarily be taken as recommendations of good practice. The printing process restricts the exact representation of colours. For true colour reference, please request product samples.



Tell me more

Call 01283 722588

Email info@marley.co.uk

Or visit marley.co.uk

Marley, Lichfield Road, Branston, Burton upon Trent, DE14 3HD

