



# clay plain tiles



# clay is beautiful

## **Clay is a natural, durable and beautiful roofing material.**

Plain tiles made from clay have been used to cover roofs in Britain for over eight hundred years and they form much of the character of the roofs seen in the South East of England and the Midlands, where the largest deposits of suitable clay are located.

Clay tiles are popular as a roof covering because of their extreme versatility; almost any detail can be reliably formed by a skilled craftsman using a good plain tile.



## Contents

- 4 Innovation in clay
- 6 Ashdowne handcrafted
- 14 Hawkins
- 26 Acme double camber
- 36 Acme single camber
- 53 Ventilation and dry fix
- 54 Fittings and accessories
- 56 Design details
- 68 Technical advice and customer support



# innovation in clay

Marley Eternit is the UK's leading manufacturer of clay plain tiles and fittings, which are ideal for roofing or vertical hanging on both new and refurbishment projects.

Marley Eternit clay plain tiles are manufactured from the highest quality Etruria Marl, generally accepted as the finest clay for strength and durability. Our extensive range contains colour, texture and camber options which meet the aesthetic and performance demands of all types of roofing applications, with dry fix and ventilation systems allowing rapid, weathertight installation and compliance with Building Regulations.

Advances in our clay technology mean beautiful clay roofs are now more affordable than ever, making them a real option for any roofing project.



## Embodied carbon



Independently assessed embodied carbon rates for all our clay products are shown in this brochure. Our commitment to clarity for sustainability allows specifiers to make informed decisions about roof design and product choice.

## BES 6001 'Very Good'



Marley Eternit's clay plain tiles have achieved a 'very good' rating for BES 6001 'Responsible Sourcing of Construction Products'. This means not only the assurance that our products are responsibly sourced all the way through the supply chain, but that buildings with our clay plain tile roofs or tile hung walls can achieve the maximum points for BREEAM or the Code for Sustainable Homes.

## A+ environmental credentials



Marley Eternit's clay plain tiles can achieve an A+ rating\* in the Building Research Establishment's (BRE) Green Guide to Specification.

\* based on generic rating for UK produced clay plain tiles - Element Ref: 812410006

## Highest quality assurance



All Marley Eternit's factories in the UK are ISO 9001, 14001 and ISO OHSAS 18001 accredited. All our clay roof tiles are manufactured to BS EN 1304.





# Ashdowne

Ashdowne handcrafted clay plain tiles offer all the warmth and mellow appearance of traditional handmade tiles, with a granular texture and slight random irregularities that make each tile unique.





## technical data:

Size of tile	265mm x 165mm	
Minimum pitch*	35°	
Maximum pitch	90°	
Minimum headlap	65mm (roof)	37.5mm (vertical)
Maximum gauge	100mm (roof)	115mm (vertical)
Cover width	165mm (nominal)	
Covering capacity (net)	60 tiles/m <sup>2</sup> at 100mm gauge (roof)	
	53 tiles/m <sup>2</sup> at 115mm gauge (vertical)	
Weight of tiling (approx.)	75kg/m <sup>2</sup> (0.74 kN/m <sup>2</sup> ) at 100mm gauge (roof)	
	66kg/m <sup>2</sup> (0.65 kN/m <sup>2</sup> ) at 115mm gauge (vertical)	
Battens required (net)	10.0 lin.m/m <sup>2</sup> at 100mm gauge (roof)	
	8.7 lin.m/m <sup>2</sup> at 115mm gauge (vertical)	
Batten size recommended	38 x 25mm for rafters/supports not exceeding 600mm centres (fixed to BS 5534)	
Tile nails	38mm x 2.65mm	

\* Minimum recommended pitch and lap may be influenced by special circumstances, please refer to the Technical Advisory Service.



### → more information

Tel 01283 722588 or  
visit [www.marleyeternit.co.uk/clay](http://www.marleyeternit.co.uk/clay)

### → samples

Tel 01283 722588 or  
visit [www.marleyeternit.co.uk/samples](http://www.marleyeternit.co.uk/samples)

### → fittings

See pages 54-55

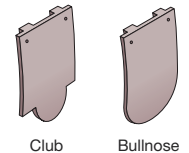


# Ashdownne

These unique tiles have all the aesthetics of traditional handmade tiles and are the perfect choice for bringing character and warmth to both refurbishment and new build projects.

## feature tiles

Available in a range of colours. For advice on the use of feature tiles in main roof areas, contact the Technical Advisory Service.



## technical toolkit

Marley Eternit provides a comprehensive technical service and a range of tools to help you create CAD drawings, NBS clauses and fixing specifications.

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- For fixing specifications visit [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)

# Ashdowne: Ashurst



Sanded finish

10 Ashdowne handcrafted

# Ashdowne: Aylesham Mix



Sanded finish



→ Find more case studies  
Visit [www.marleyeternit.co.uk/clay-inspiration](http://www.marleyeternit.co.uk/clay-inspiration)

## Green Dragon Lane

This prestige housing development features a wealth of traditional plain tile detailing. Ashdowne handcrafted in Ashurst is used on the main roofs and Aylesham Mix on the vertical elevations, with Winchester cut tiles on the front facing gables.

Application: Housing development

Location: North London

Architect: Parkway Developments

Contractor: Avonside Roofing

12 Ashdowne handcrafted





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## Ludlow Farm Shop

Approximately 40,000 handcrafted clay plain tiles from Marley Eternit's Ashdowne Ashurst range were used to harmonise with the surroundings and listed buildings in close proximity to The Earl of Plymouth Estate farm shop and barns.

Application: Retail/Commercial

Location: Ludlow

Architect: Andrew Hale

Contractor: Roof-Right Ltd



# Hawkins

The name 'Hawkins' has been synonymous with quality roofs throughout the Midlands and Staffordshire for 150 years. This heritage, combined with the beauty and performance of the tile, has seen it successfully and extensively specified throughout the UK.







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→ fittings

See pages 54-55



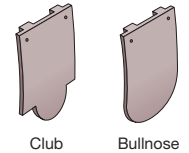
For roof pitches  
down to 30°

# Hawkins

Inspired by nature, Hawkins offers a unique range of brindled colours and traditional Staffordshire blues. Over time, more colours and textures have been added – such as Fired Sienna and Smooth Blue – broadening the range and its appeal across all sectors.

## feature tiles

Available in a range of colours. For advice on the use of feature tiles in main roof areas, contact the Technical Advisory Service.



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- For fixing specifications visit [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)

## technical data:

Size of tile	265mm x 165mm	
Minimum pitch*	30°	
Maximum pitch	90°	
Minimum headlap	65mm (roof)	37.5mm (vertical)
Maximum gauge	100mm (roof)	115mm (vertical)
Cover width	165mm (nominal)	
Covering capacity (net)	60 tiles/m <sup>2</sup> at 100mm gauge (roof) 53 tiles/m <sup>2</sup> at 115mm gauge (vertical)	
Weight of tiling (approx.)	64kg/m <sup>2</sup> (0.74 kN/m <sup>2</sup> ) at 100mm gauge (roof) 56kg/m <sup>2</sup> (0.65 kN/m <sup>2</sup> ) at 115mm gauge (vertical)	
Battens required (net)	10.0 lin.m/m <sup>2</sup> at 100mm gauge (roof) 8.7 lin.m/m <sup>2</sup> at 115mm gauge (vertical)	
Batten size recommended	38 x 25mm for rafters/supports not exceeding 600mm centres (fixed to BS 5534)	
Tile nails	38mm x 2.65mm	

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# Hawkins: Dark Heather



Fine sanded finish



# Hawkins: Staffordshire Mixture



Fine sanded finish

# Hawkins: Staffordshire Blue



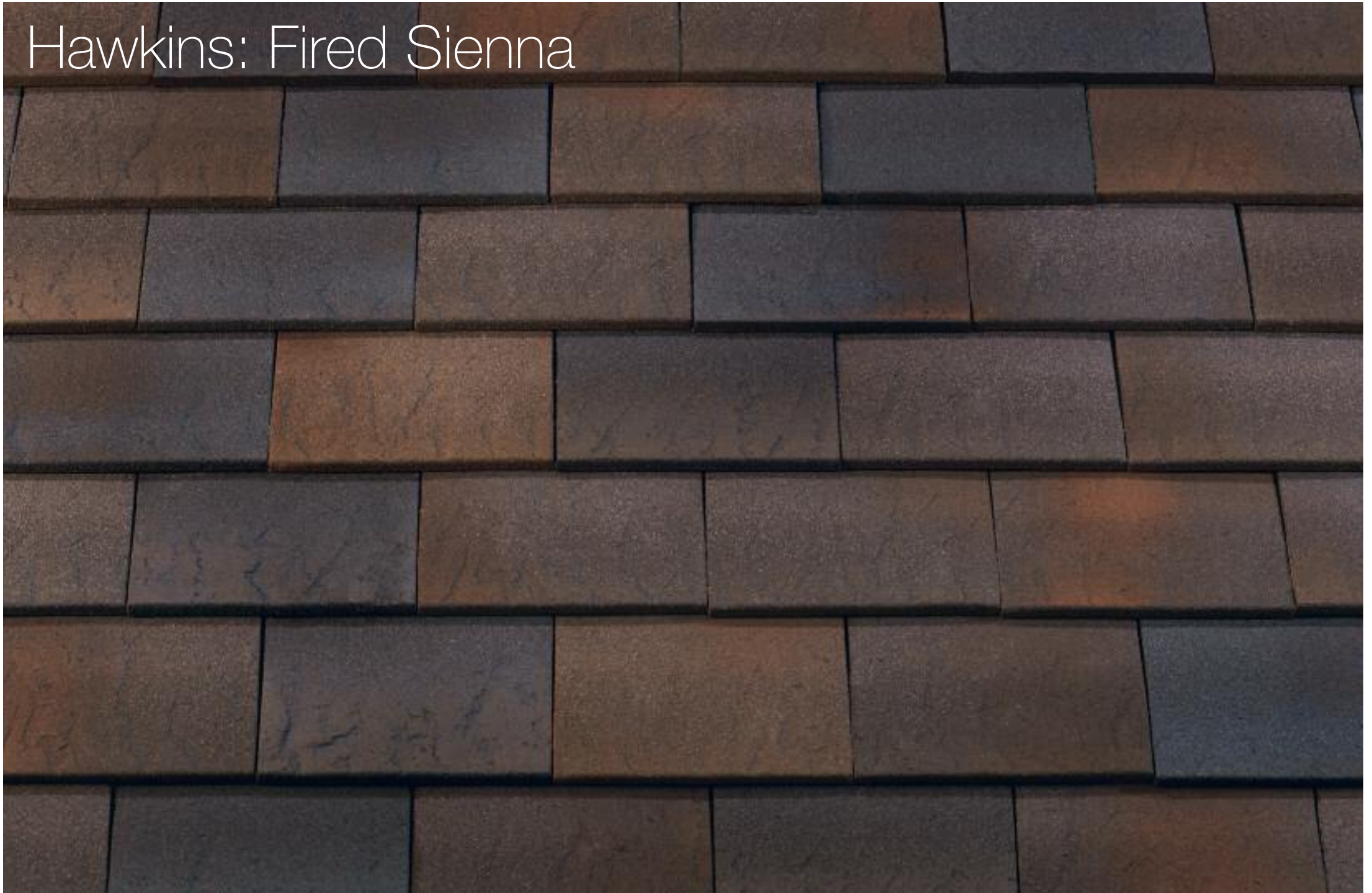
Fine sanded finish

# Hawkins: Blue Smooth



Smooth finish

# Hawkins: Fired Sienna



Fine sanded and textured finish



# Malvern Baptist Church

The unique weathered texture was the deciding factor in the specification of Fired Sienna for this renovation in Malvern. The Baptist Church wanted to keep a reclaimed look about the finished roof whilst ensuring the roof would last for years to come.

Application: Refurbishment

Location: Malvern

Architect: Nick Joyce

Contractor: Miller Heritage





→ Find more case studies  
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## The Triangle

Haboakus, spearheaded by Kevin McCloud of Channel 4's Grand Designs, wanted to develop a social housing eco village and provide sustainable homes for all – using our Hawkins tiles in an imaginative patterned mix comprising of Blue Smooth, Staffordshire Blue and Staffordshire Mixture to create unusual and interesting roofscapes.

Application: Social Housing

Location: Swindon

Architect: Haboakus

Contractor: Glenn Howells Architects



# Acme double camber

Acme double camber clay plain tiles have both a longitudinal and latitudinal camber, able to create highly textured roofscapes with accentuated light and shade.





## technical data:

Size of tile	265mm x 165mm	
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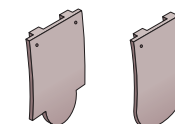
# Acme

## double camber

The tiles are available in a range of brindled and weathered colours. Uniquely manufactured by Marley Eternit with a double camber, they lend a distinctive appearance and add charm and character to buildings of every sector.

### feature tiles

Available in a range of colours. For advice on the use of feature tiles in main roof areas, contact the Technical Advisory Service.



Club Bullnose

### technical toolkit

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#### → fittings

See pages 54-55



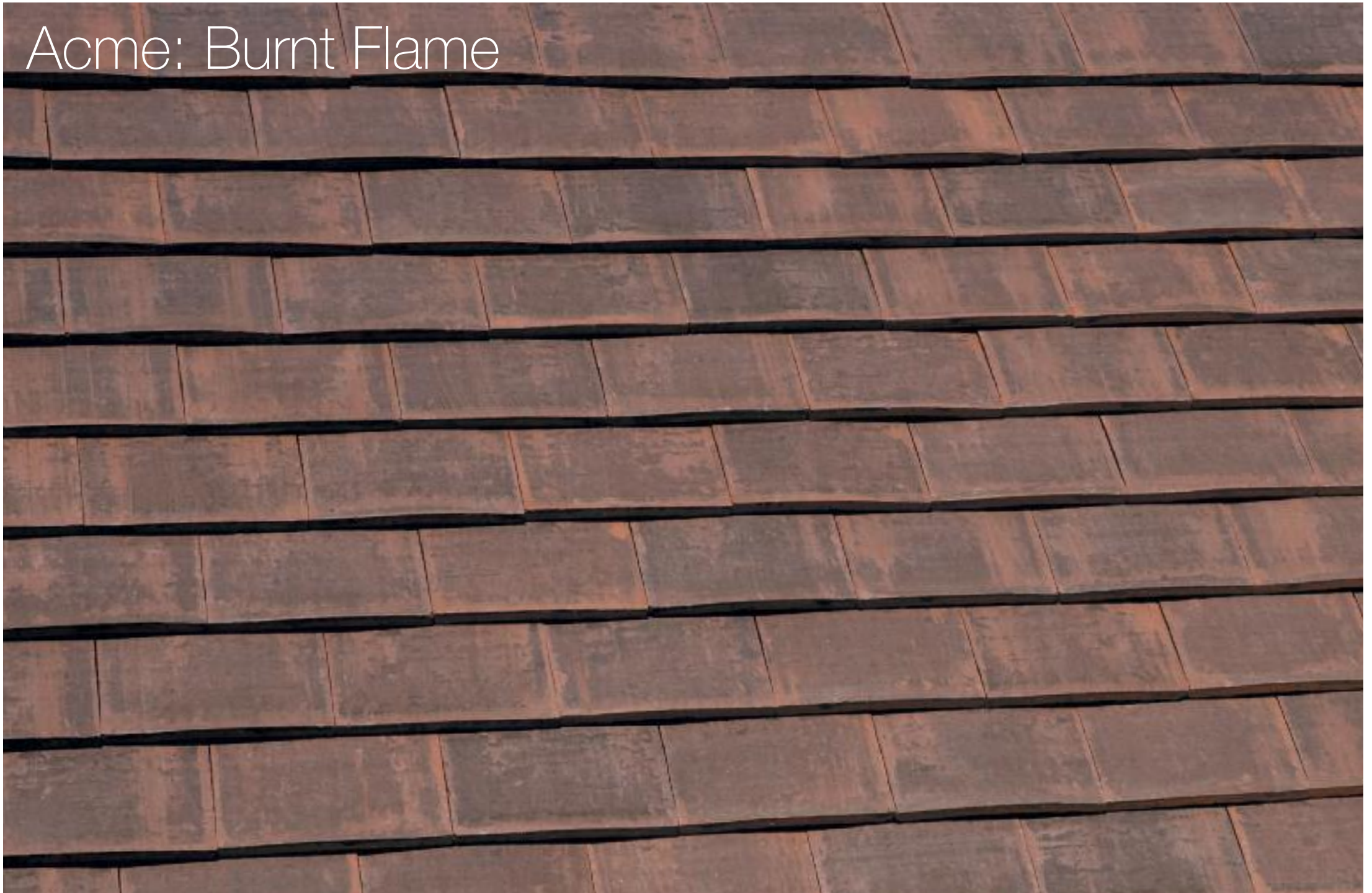
# Acme: Antique



Semi-sanded finish

30 Acme double camber

# Acme: Burnt Flame



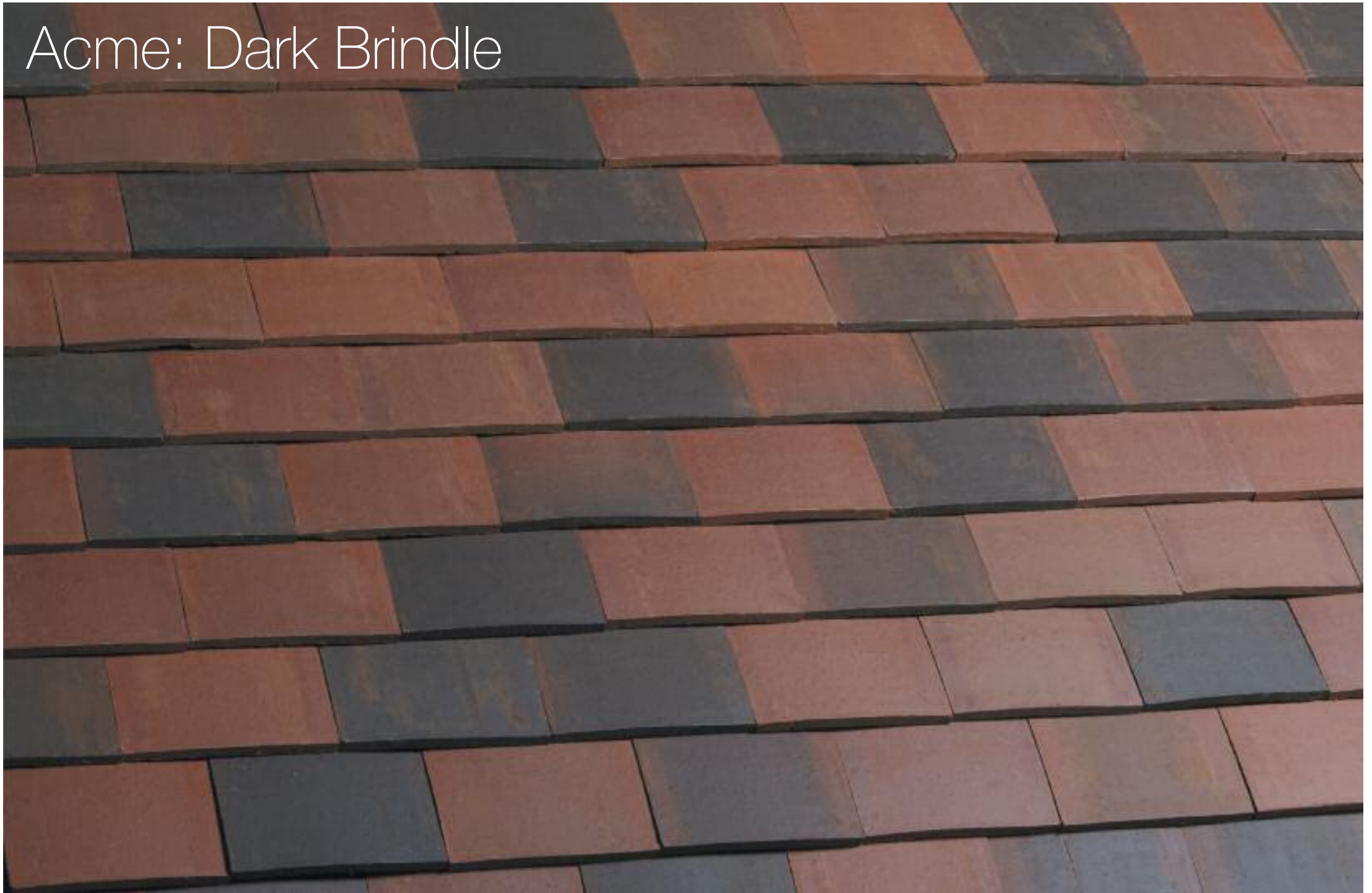
Smooth finish

# Acme: Smooth Brindle



Smooth finish

# Acme: Dark Brindle



Smooth finish



→ Find more case studies  
Visit [www.marleyeternit.co.uk/clay-inspiration](http://www.marleyeternit.co.uk/clay-inspiration)

# Cromwell Court

The largest private residence to be built in the county for over 50 years, features a total of 56,000 tiles in Smooth Brindle double camber on the main house, with an additional 14,000 used on the large outbuildings adjacent to it.

Application: Residential  
Architect: JIG Architects

Location: Cheshire  
Contractor: Roofing Services (Hartford) Ltd

34 Acme double camber





→ Find more case studies  
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## The Turner Home

150,000 Acme double camber clay plain tiles in Dark Brindle, covering 2,500m<sup>2</sup> of roof, have been used to restore the roof of a 19th century Grade II listed building in Liverpool to its former glory.

Application: Residential  
Architect: Andrew Smith

Location: Liverpool  
Contractor: T. Sloyan



# Acme single camber

The Acme single camber clay plain tile allows the creation of contemporary low pitch roof designs with the warmth and character of clay.







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→ fittings

See pages 54-55



For roof pitches  
down to 30°

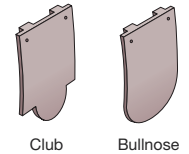
# Acme

## single camber

Manufactured since the 1930s, Acme is the market leader with one of the widest ranges of clay tiles available. Ongoing investment in new technology means that single camber clay plain tiles are an affordable option for housing projects and are also suited to refurbishment and new build commercial projects alike.

### feature tiles

Available in a range of colours. For advice on the use of feature tiles in main roof areas, contact the Technical Advisory Service.



Club

Bullnose

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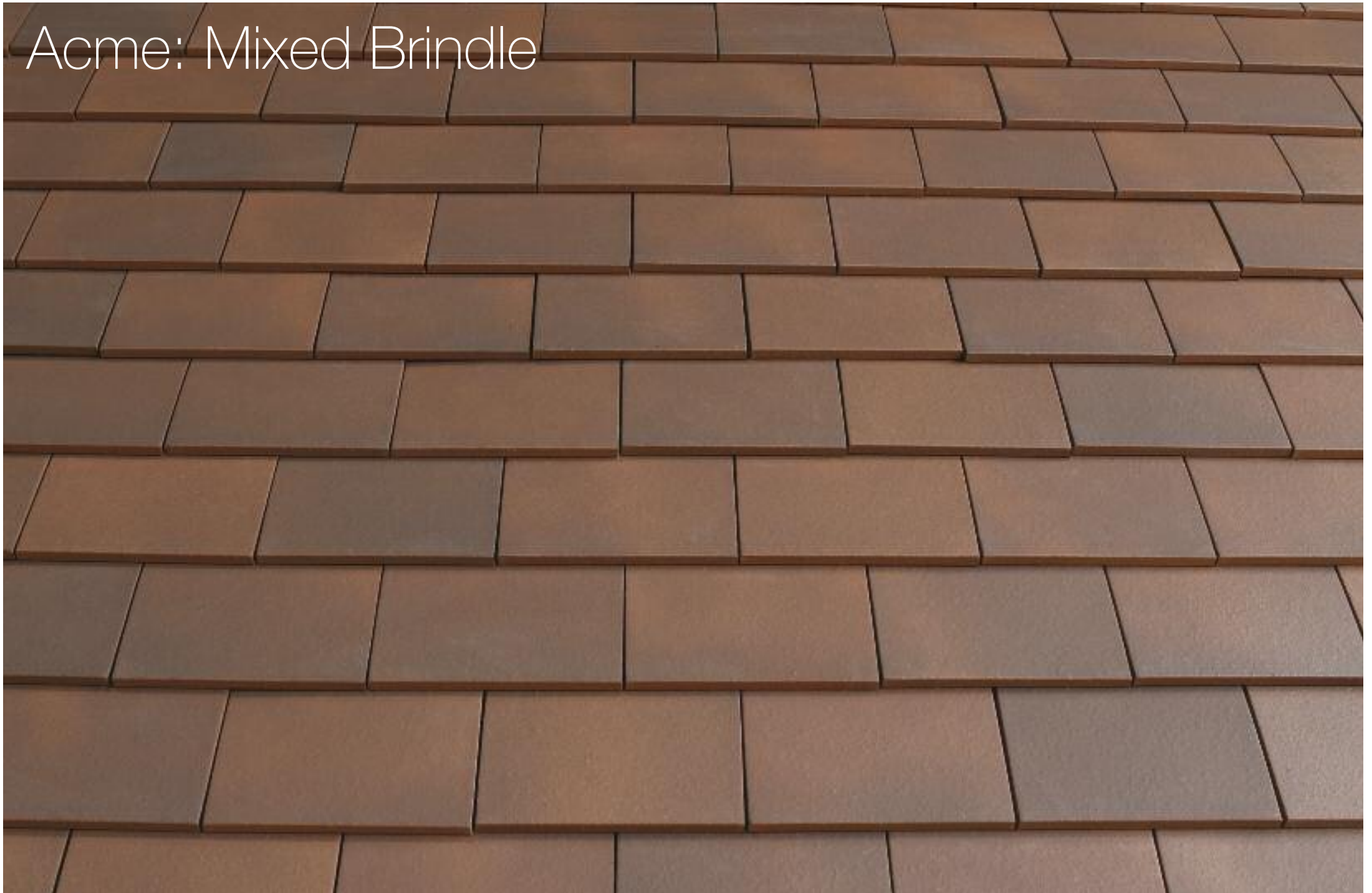
# Acme: Red Smooth



Smooth finish

40 Acme single camber

# Acme: Mixed Brindle



Smooth finish

# Acme: Century



Smooth finish

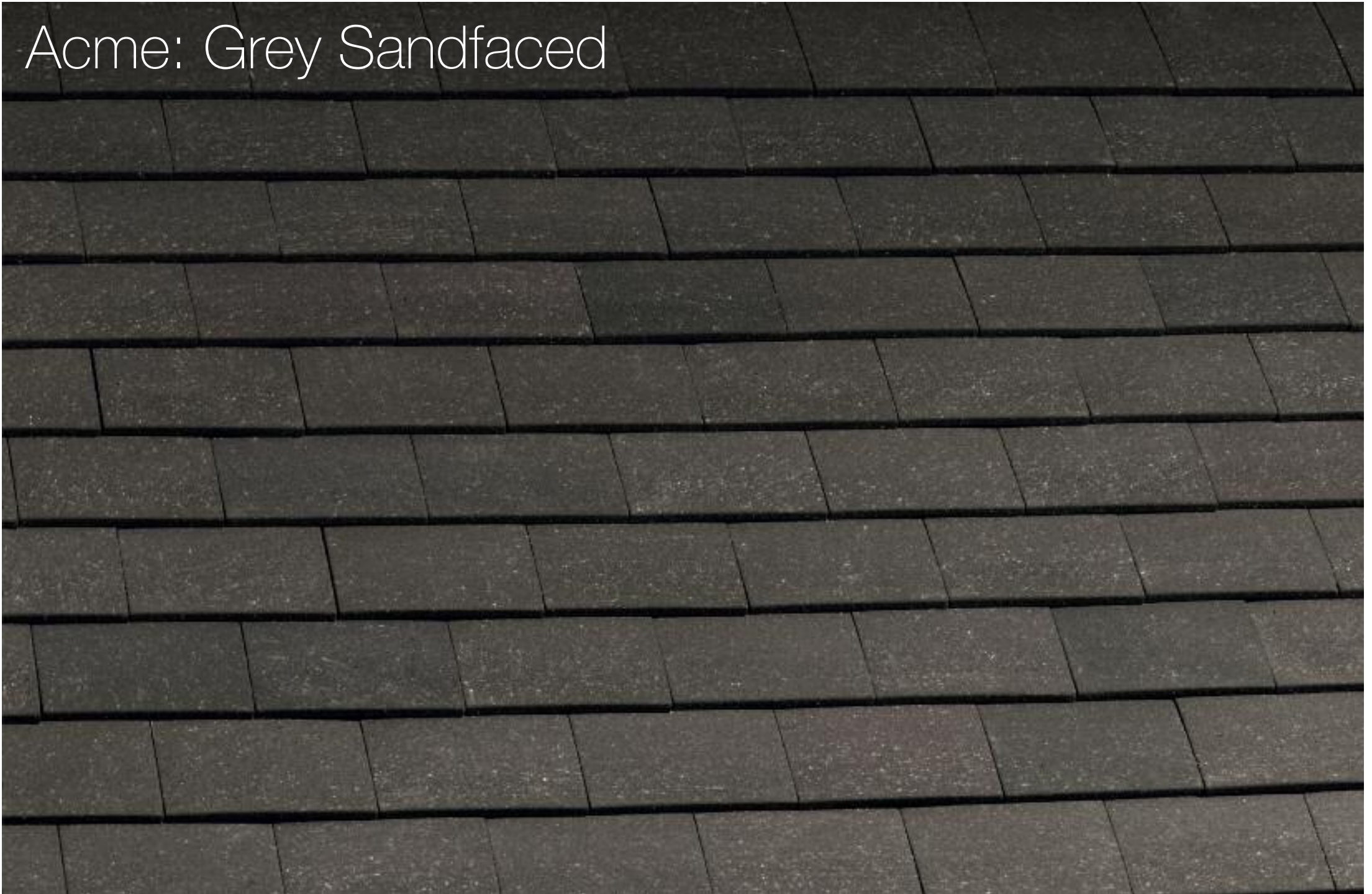
42 Acme single camber

# Acme: Red Sandfaced



Fine sanded finish

# Acme: Grey Sandfaced



Fine sanded finish



Acme Single Camber Grey Sandfaced

# Acme: Heather Blend



Fine sanded finish

46 Acme single camber



# Acme: Farmhouse Brown Sandfaced



Fine sanded finish

48 Acme single camber

# Acme: Heather Sandfaced



Fine sanded finish



→ Find more case studies  
Visit [www.marleyeternit.co.uk/clay-inspiration](http://www.marleyeternit.co.uk/clay-inspiration)

## East 8 apartments

A large refurbishment in a conservation area consisting of 50% Red Sandfaced, 25% Heather Blend and 25% Farmhouse Brown Sandfaced Acme single camber tiles.

Application: Residential

Location: Hackney, London

Architect: Paul Mitchell Architects

Contractor: Anglian Brickwork

50 Acme single camber





→ Find more case studies  
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## The Dogs Trust

Acme Single Camber clay plain tiles in Heather Blend were specified following recommendations from local planners. The project is one of 17 purpose built centres across the UK and was awarded the BREEAM Design Stage 'Outstanding' certificate from the BRE.

Application: Commercial

Location: Shropshire

Architect: McPhillips (Wellington)

Contractor: RG Hinds Roofing



# Ventilation and dry fix systems

Marley Eternit offers a full range of ventilated and dry fix systems for use with clay plain tiles for eaves, ridge, hip and general roof slopes.

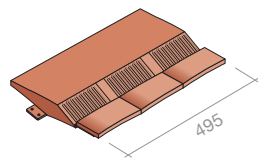
## UNIVERSAL Plain tile vent

Ventilation area of 10,000mm<sup>2</sup> (high impact UV-stabilized polyethylene in Terracotta, Grey, Brown, Clay Brown and Clay Red).

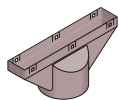
[www.whydryfix.co.uk/tilevents](http://www.whydryfix.co.uk/tilevents)

## In-line clay tile vent

Available in a range of bases with real clay tile slips on the visible edge (3 tiles wide) to match tile colours. The clay tile vent provides a net ventilation area of 7,500mm<sup>2</sup> per vent. It should be installed at 1.5m centres to achieve a ventilation area of 5,000mm<sup>2</sup>/m at high level or at 0.75m centres to achieve a ventilation area of 10,000mm<sup>2</sup>/m at low level. Suitable for natural, mechanical or soil pipe ventilation.



In-line clay tile vent



In-line tile vent adaptor



Flexible pipe



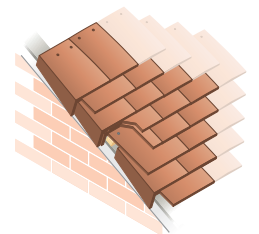
UNIVERSAL RidgeFast system\*  
[www.whydryfix.co.uk/ridges](http://www.whydryfix.co.uk/ridges)



UNIVERSAL HipFast system\*  
[www.whydryfix.co.uk/hips](http://www.whydryfix.co.uk/hips)



UNIVERSAL 10mm/25mm eaves vent systems  
[www.whydryfix.co.uk/eaves](http://www.whydryfix.co.uk/eaves)



Plain tile cloak verge system  
[www.whydryfix.co.uk/verges](http://www.whydryfix.co.uk/verges)

\* subject to ridge/hip tile angle

## → More about our dry fix systems

Our dedicated website contains further information about dry fix and ventilation solutions, including the Universal range which not only works with our roof tile range but with those of other manufacturers too.

[www.whydryfix.co.uk](http://www.whydryfix.co.uk)

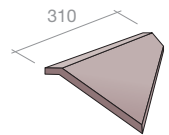
# Fittings and accessories

In addition to the products shown on these pages, special fittings, shapes and angles can also be made to your exact project requirements\*. Please contact Customer Services for further information.

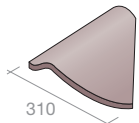
\* Subject to lead times and minimum order quantity.

## Ridges, hips and valleys

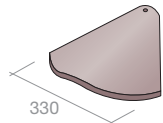
Available in a range of colours and angles. Security fixing packs are also available for hips and ridges (see pages 59 and 62). For details of the full range of hips and valleys, please contact the Technical Advisory Service.



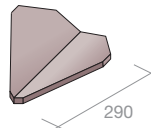
**Arris hip<sup>2</sup>**  
30-45° pitch  
130, 135, 145° angles



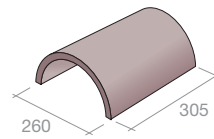
**Granny bonnet hip**  
40-60° pitch



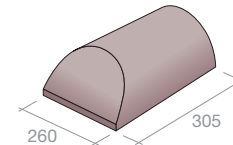
**Semi-bonnet hip**  
30-40° pitch



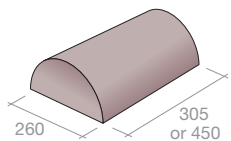
**Valley<sup>2</sup>**  
30-50° pitch  
130-150° angles



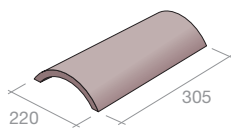
**Half round ridge**  
30-50° pitch



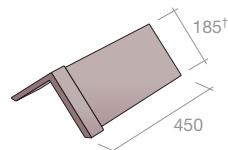
**Half round ridge hip end<sup>1</sup>**  
30-50° pitch



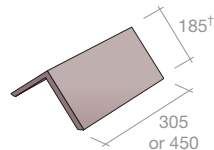
**Half round ridge stop end<sup>1</sup>**  
30-50° pitch



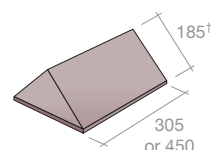
**Third round hip<sup>2</sup>**  
30-45° pitch



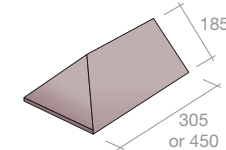
**450mm capped angular ridge<sup>3</sup>**  
75-135° angles  
(Red Smooth and Slate Black only)



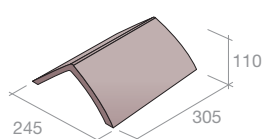
**Angular ridge**  
305mm 90-105°  
(All colours)<sup>2</sup>  
450mm 75-135°  
(Red Smooth and Slate Black)



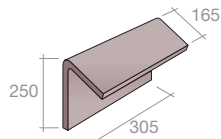
**Angular ridge stop end<sup>1</sup>**  
75-135° angles



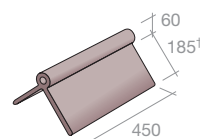
**Angular ridge hip end<sup>1</sup>**  
75-135° angles



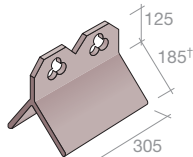
**Hogs back ridge<sup>2</sup>**  
30-45° pitch



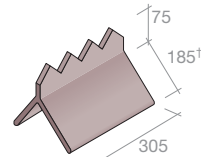
**Mono ridge<sup>1</sup>**  
30-45° pitch



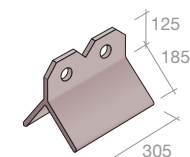
**Plain roll top<sup>2</sup>**  
75-135° angles  
(Red Smooth and Slate Black)



**Club crested ridge**  
90° and 105° angles  
(Red Smooth)



**Cocks comb crested ridge**  
90° and 105° angles  
(Red Smooth)



**Two hole crested ridge**  
90° and 105° angles  
(Red Smooth)

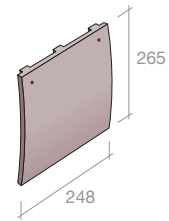
**Important note:**  
All of the fittings shown on this page can be used with all Clay plain tiles, but should not be used on a rafter pitch below 35° with Acme double camber and Ashdowne clay plain tiles.

- 1 Made to order (subject to minimum order quantities)
- 2 Some colours and angles made to order (subject to minimum order quantities)
- 3 Staffordshire Blue available to order

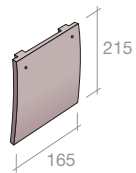
† Angle ridge wing length will vary depending on ridge angle

## Plain tile fittings

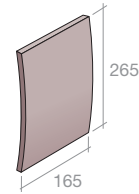
Available in a range of colours.



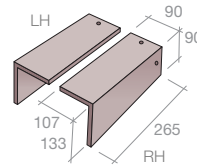
Tile-and-a-half



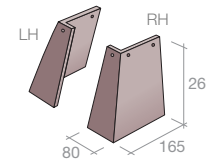
Eaves/top tile



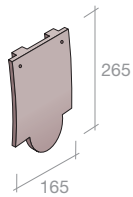
Creasing tile



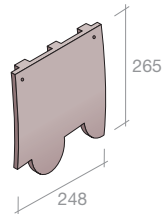
Left and right  
cloaked verge tiles <sup>1</sup>



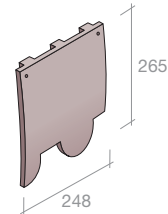
90° external angle tiles  
(135° also available<sup>1</sup>)



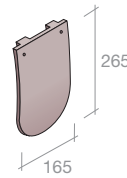
Club feature tile <sup>1</sup>



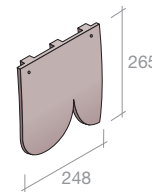
RH club tile-and-a-half <sup>1</sup>



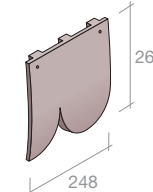
LH club tile-and-a-half <sup>1</sup>



Bullnose feature tile <sup>1</sup>



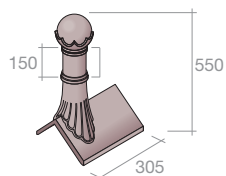
RH bullnose tile-and-a-half <sup>1</sup>



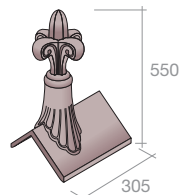
LH bullnose tile-and-a-half <sup>1</sup>

## Finials

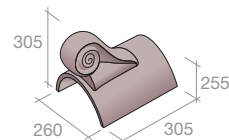
Available in a range of colours.



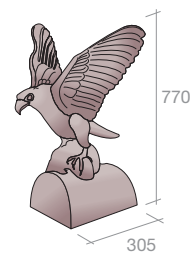
Ball top finial <sup>1</sup>  
Half round and plain angle  
bases available



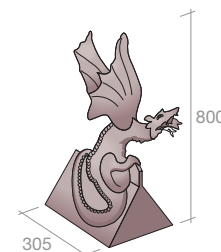
Fleur-de-Lys gable <sup>1</sup>  
Half round and plain angle  
bases available



Scroll finial <sup>1</sup>  
Half round and plain angle  
bases available



Falcon finial <sup>1</sup>  
Half round and plain angle bases  
available in 75°, 90° and 105° only



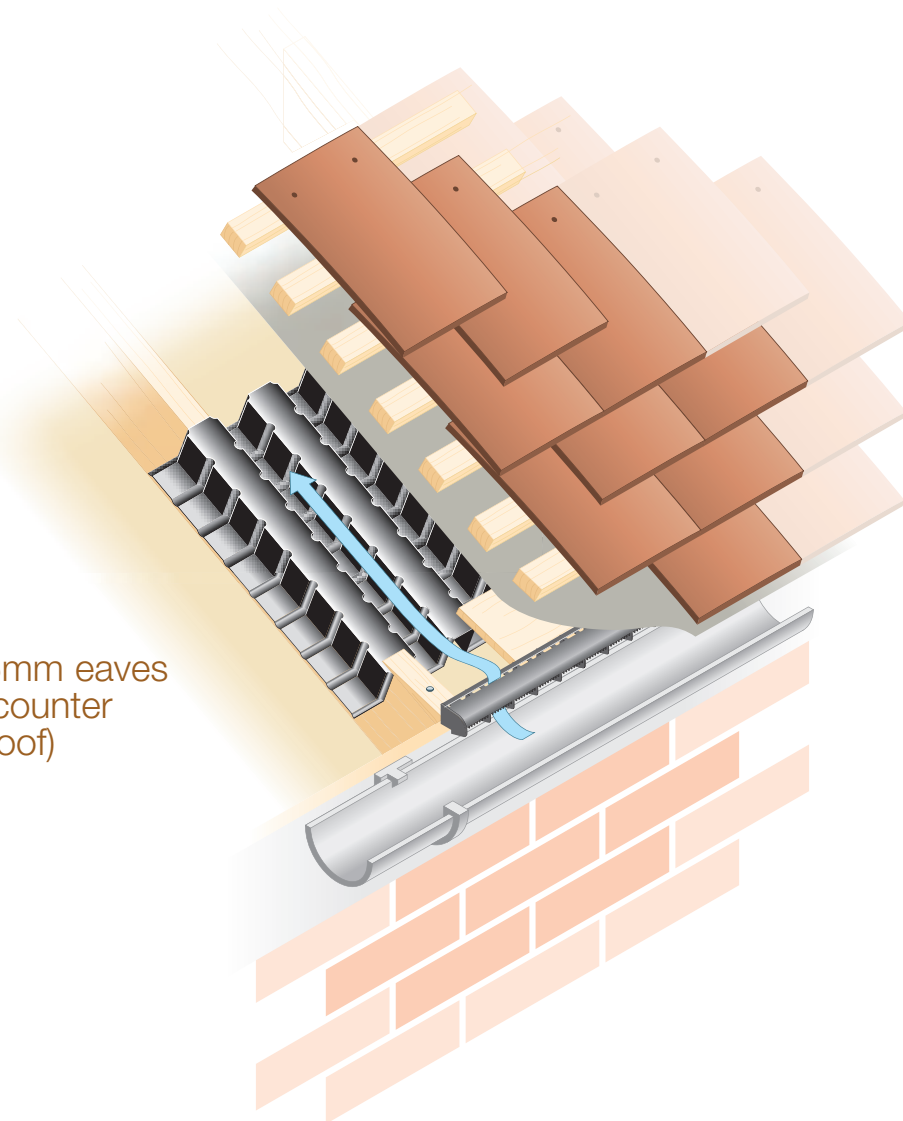
Dragon finial <sup>1</sup>  
75° and 90°  
Plain angle bases only

### Important note:

All of the finials and feature tiles shown on this page can be used with all Clay plain tiles, but should not be used on a rafter pitch below 35° with Acme double camber and Ashdowne clay plain tiles.

<sup>1</sup> Made to order (subject to minimum order quantities)

# Eaves details



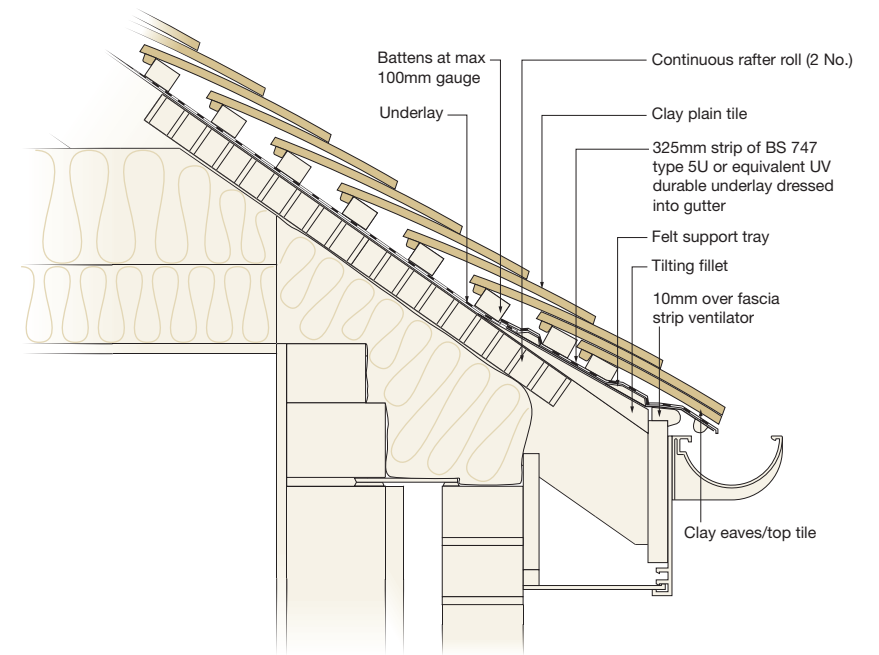
**UNIVERSAL** 25mm eaves ventilation with counter battens (warm roof)

## → technical toolkit

Access our on-line library of CAD drawings at: [www.marleyeternit.co.uk/cad](http://www.marleyeternit.co.uk/cad)  
 Create a fixing specification for your project at: [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)  
 Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)

## → more information

For further information about dry fix systems visit: [www.whydryfix.co.uk](http://www.whydryfix.co.uk)



## **UNIVERSAL** 10mm eaves vent system

- eaves ventilation to satisfy 10mm or 25mm conditions
- 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
- mechanically fix all tiles at eaves

# Verge details

## → technical toolkit

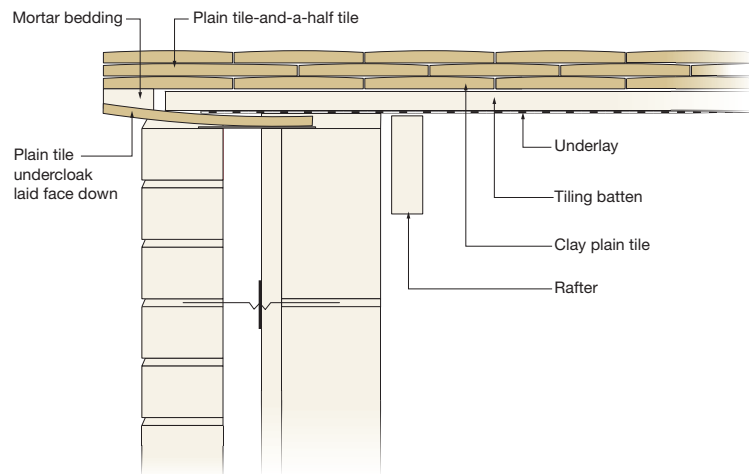
Access our on-line library of CAD drawings at: [www.marleyeternit.co.uk/cad](http://www.marleyeternit.co.uk/cad)

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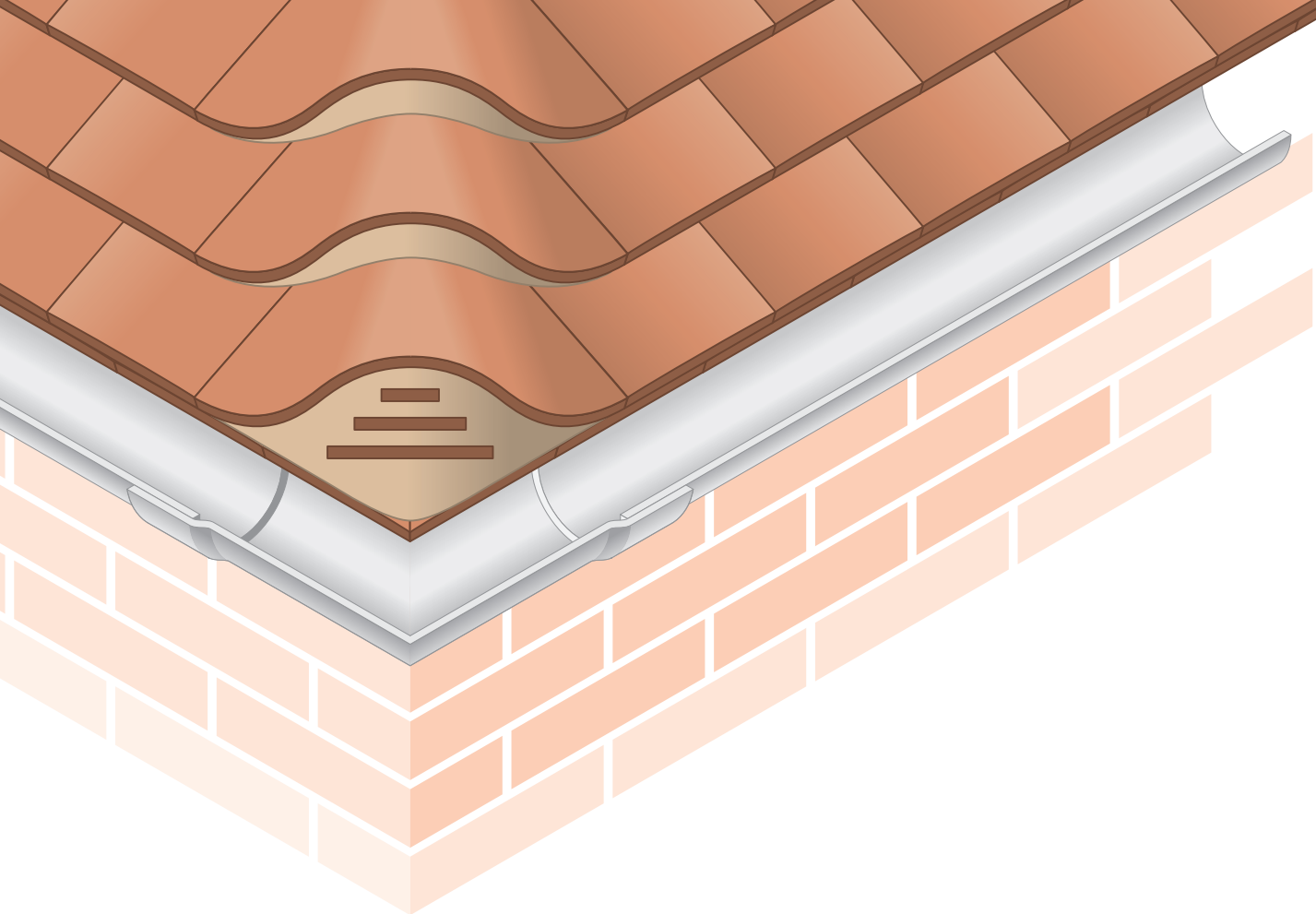
## Bedded verge

- form using tile and tile-and-a-half tiles in alternate courses
- use undercloak of either fibre cement laid with slope away from outer wall or plain tiles laid face down and overhanging wall
- verge overhang to be 38mm-50mm
- fully nail all tiles at verge where possible
- mortar bedding to comply with tensile board strength in BS 5534



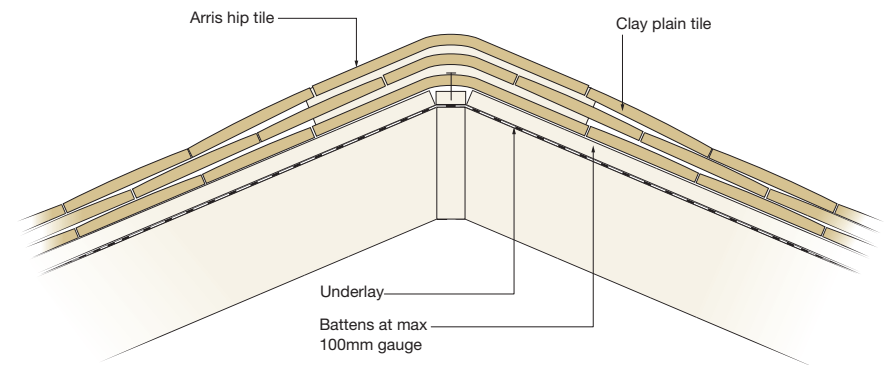
## Plain tile cloak verge

- maximum pitch for duo-pitch and mono-pitch roofs is 55° (mitre top cloak verge tiles if required)
- not suitable for raking verges
- finish tiling battens flush with edge of bargeboard or brickwork
- complete verge using cloak verge tiles in alternate courses with tile and a half tiles
- fix all tiles with 2 No. 38mm x 2.65mm aluminium nails
- at apex of roof/verge fit block end ridge tile



## Granny bonnet hip

- maximum rafter pitch 60°
- use on hips with plan angle of 90° and equal pitches on adjacent roof slopes
- fix to hip batten using 70mm x 3.35mm aluminium nail
- bed and point with 3:1 sand/cement mortar to BS 5534
- complete hip at ridge or top abutment with lead saddle



## Arris hip

- maximum rafter pitch 50°
- use on hips with plan angle of 90° and equal pitches on adjacent roof slopes
- fix to hip batten using 65mm x 3.35mm aluminium nail
- bed top of tiles with 3:1 sand/cement mortar to BS 5534
- complete hip at ridge or top abutment with lead saddle

# Hip details

### → technical toolkit

Access our on-line library of CAD drawings at: [www.marleyeternit.co.uk/cad](http://www.marleyeternit.co.uk/cad)

Create a fixing specification for your project at: [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)

Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)

### → more information

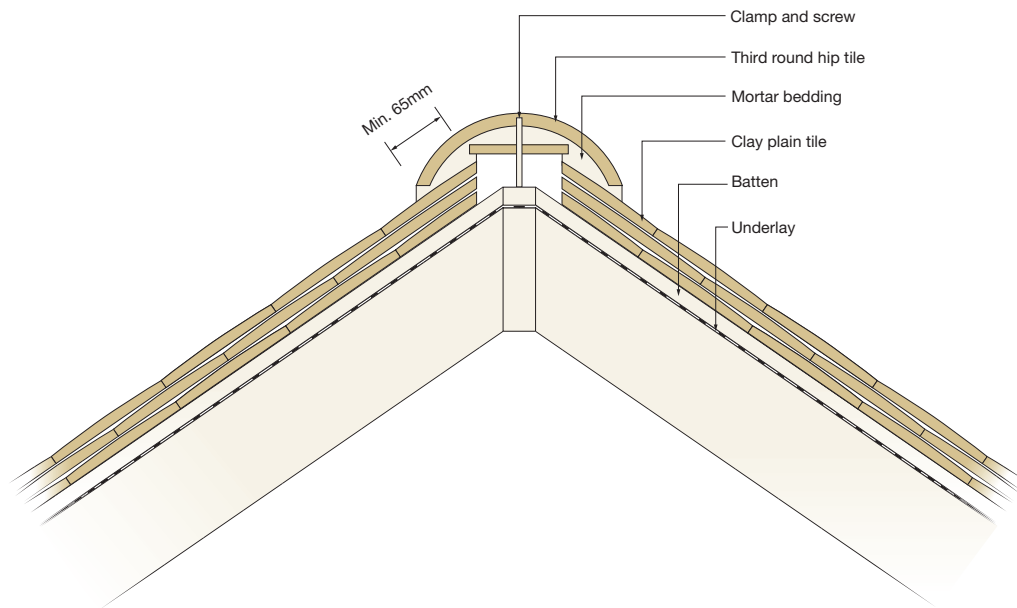
For further information about dry fix systems visit: [www.whydryfix.co.uk](http://www.whydryfix.co.uk)

### → technical toolkit

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Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)

### → more information

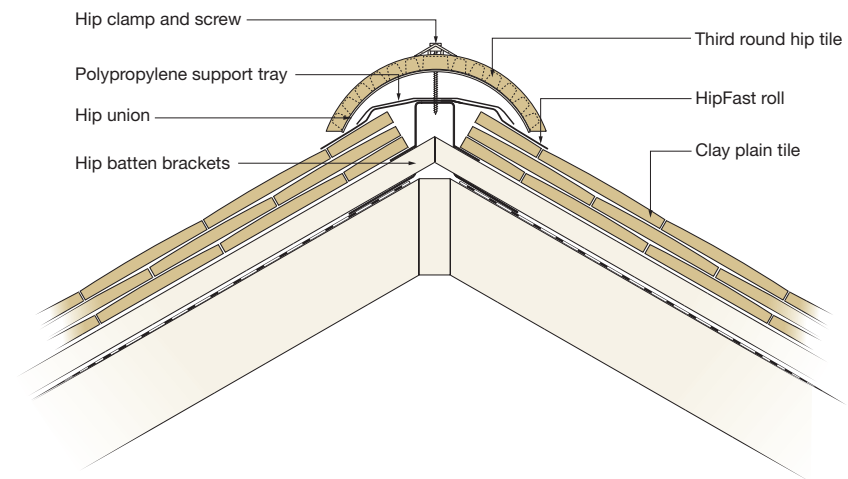
For further information about dry fix systems visit: [www.whydryfix.co.uk](http://www.whydryfix.co.uk)



## Bedded security hip

- maximum rafter pitch 45°
- fix galvanised hip iron at base of hip
- edge bed hip tiles onto close mitred tiles with 3:1 sand/cement mortar to BS 5534
- complete hip at ridge apex with three way mitre or half round ridge hip end

Watch a quick video on mortar bedded mechanical fixing at [www.marleyeternit.co.uk/securityhip](http://www.marleyeternit.co.uk/securityhip) or scan the QR code below



## UNIVERSAL HipFast dry hip system

Provides additional ventilation to the roof void when a 5mm gap is provided in the underlay and is used in conjunction with either eaves or ridge ventilation systems, or vent tiles.

- maximum rafter pitch 60°
- 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 block end hip tile at eaves
- mechanically fixes each hip tile via hip unions and clamps
- complete hip at ridge with lead soaker/saddle

# Valley details

## → technical toolkit

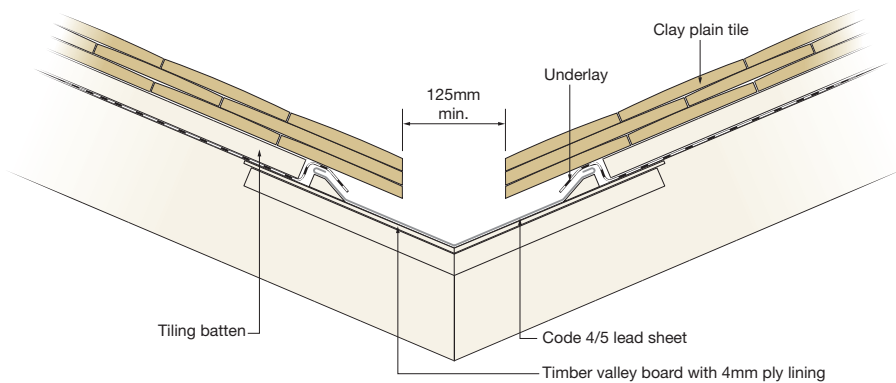
Access our on-line library of CAD drawings at: [www.marleyeternit.co.uk/cad](http://www.marleyeternit.co.uk/cad)

Create a fixing specification for your project at: [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)

Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)

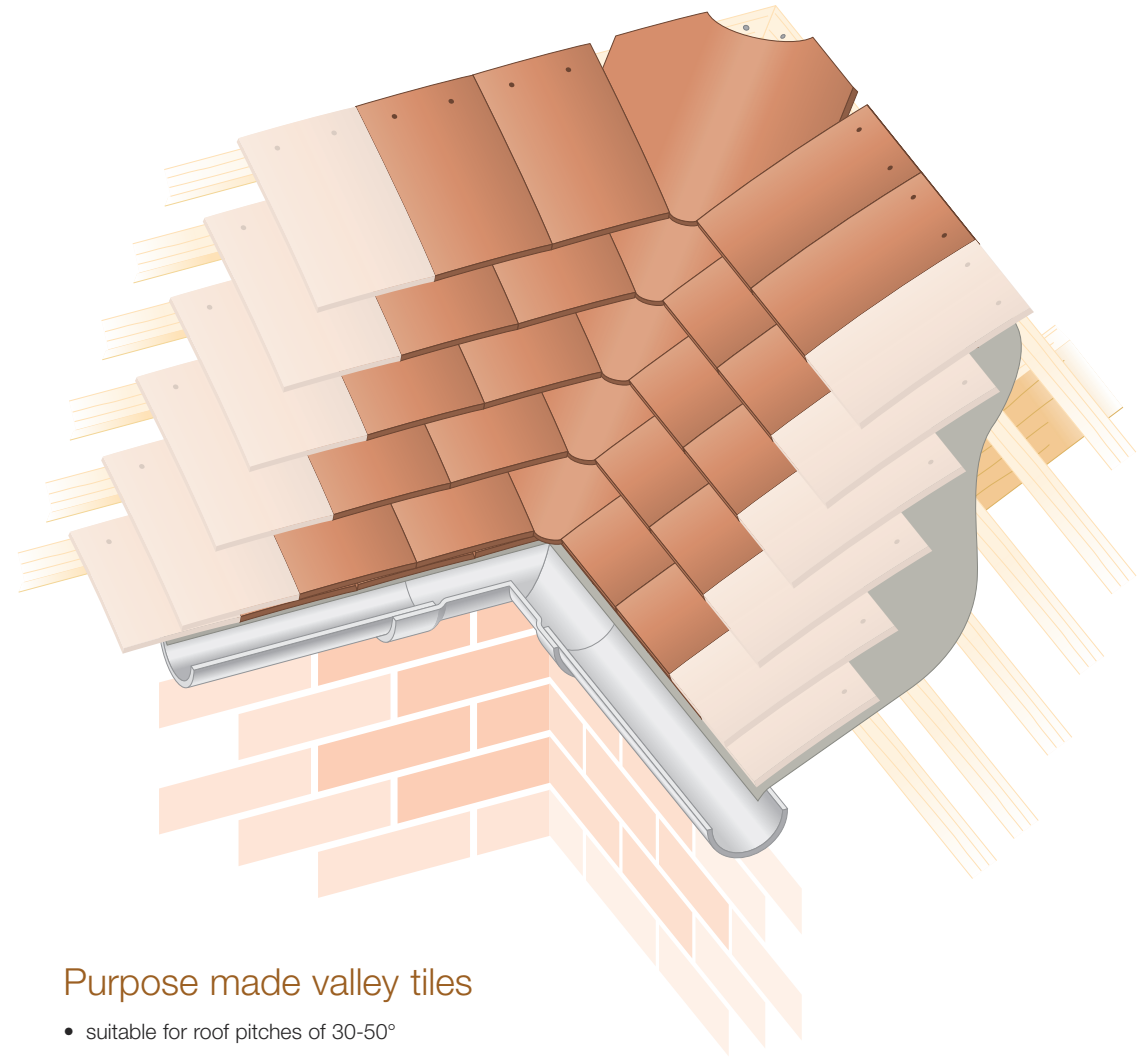
## → more information

For further information about dry fix systems visit: [www.whydryfix.co.uk](http://www.whydryfix.co.uk)



## Sheet metal valley

- minimum rafter pitch 35°
- suitable for all plan angles and where the pitch either side of the valley varies
- provide continuous support for metal valley lining using timber lay boards inset between rafters with 4mm ply lining board over
- form 125mm minimum gap between raking cut tiles
- carry metal lining into gutter at eaves
- use tile-and-a-half tiles to minimise small cut tiles
- nail all adjacent tiles to the valley
- complete top of valley with a lead saddle



## Purpose made valley tiles

- suitable for roof pitches of 30-50°
- a range of valley tiles are available to suit roof pitch
- suitable for a plan angle of 90° only and equal pitches either side of the valley
- provide continuous support for valley tile using timber lay boards or battens inset between rafters
- use tile-and-a-half tiles adjacent to valley tile to avoid small cuts
- complete top of valley with a lead saddle

# Abutment details

## → technical toolkit

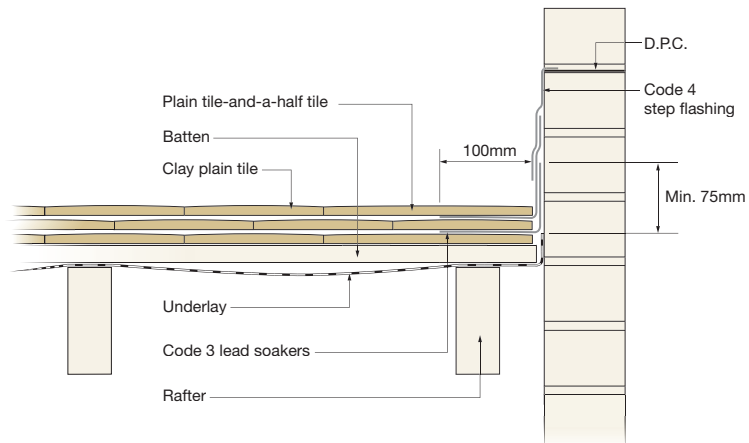
Access our on-line library of CAD drawings at: [www.marleyeternit.co.uk/cad](http://www.marleyeternit.co.uk/cad)

Create a fixing specification for your project at: [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)

Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)

## → more information

For further information about dry fix systems visit: [www.whydryfix.co.uk](http://www.whydryfix.co.uk)



## Side abutment

- bring tiles as close to abutment as possible
- use Code 3 lead soakers and Code 4 lead cover flashing



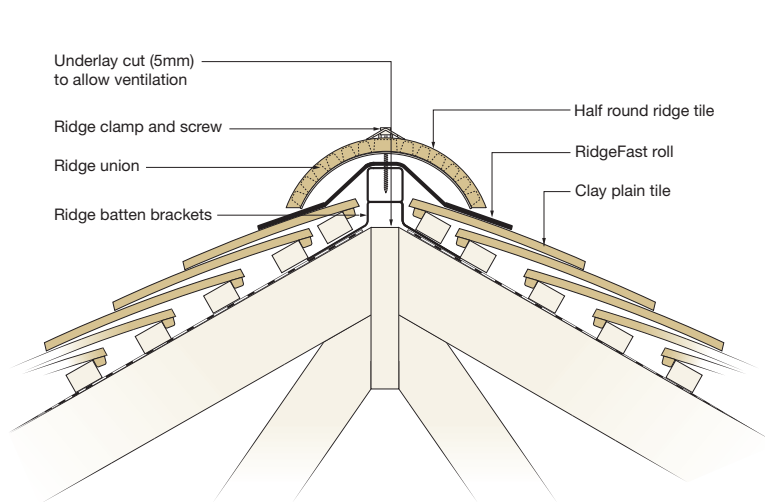
# Ridge details

## → technical toolkit

Access our on-line library of CAD drawings at: [www.marleyeternit.co.uk/cad](http://www.marleyeternit.co.uk/cad)  
Create a fixing specification for your project at: [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)  
Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)

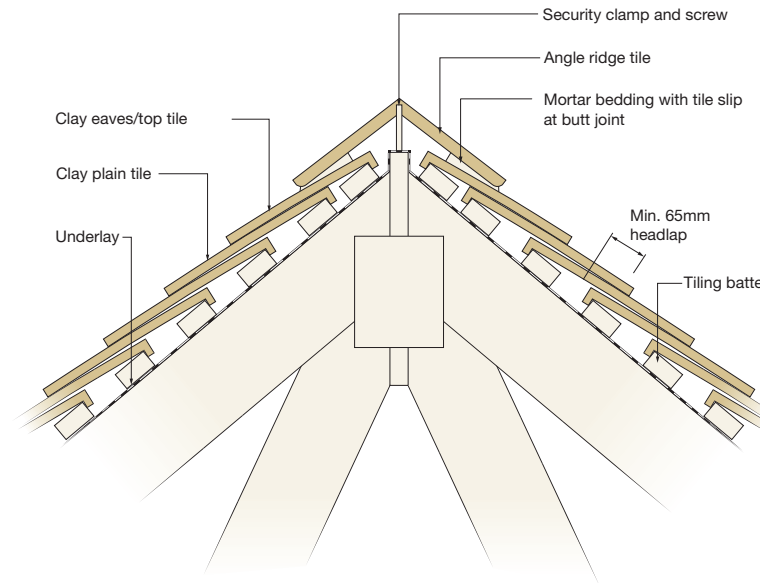
## → more information

For further information about dry fix systems visit: [www.whydryfix.co.uk](http://www.whydryfix.co.uk)



## UNIVERSAL RidgeFast ventilated dry ridge system

- maximum rafter pitch 60°
- provides 5,000mm<sup>2</sup>/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 block end ridge tile at ridge end



## Bedded security ridge

- security ridge packs are available on request for all angle, half round, third round, hog's back, capped angular, baby and decorative ridge tiles
- maximum rafter pitch 60°
- fix security clamp and screw to supplementary batten
- mechanically fixes ridge tile in line with BS 5534 fixing guidelines

Watch a quick video on mortar bedded mechanical fixing at [www.marleyeternit.co.uk/securityridge](http://www.marleyeternit.co.uk/securityridge) or scan the QR code below



# Roof slope details

## → technical toolkit

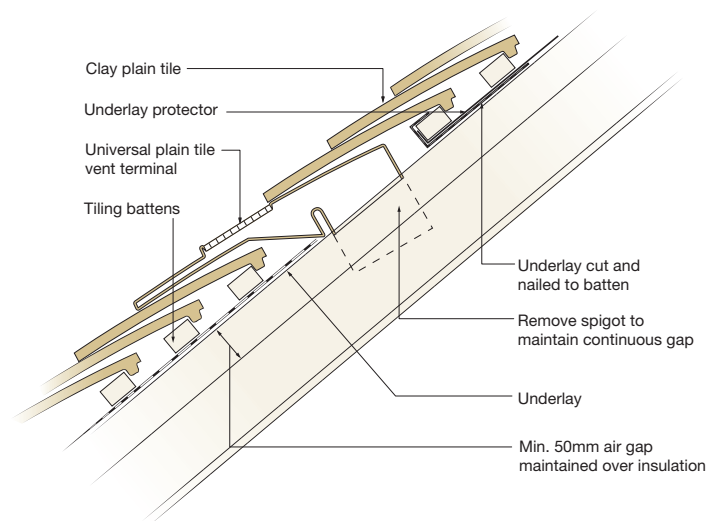
Access our on-line library of CAD drawings at: [www.marleyeternit.co.uk/cad](http://www.marleyeternit.co.uk/cad)

Create a fixing specification for your project at: [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)

Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)

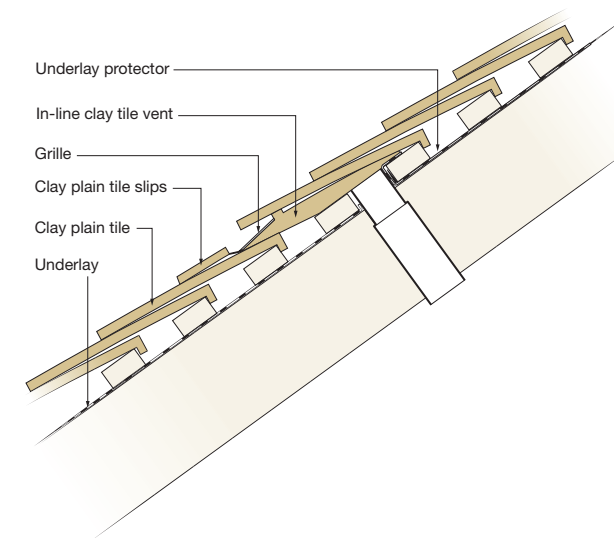
## → more information

For further information about dry fix systems visit: [www.whydryfix.co.uk](http://www.whydryfix.co.uk)



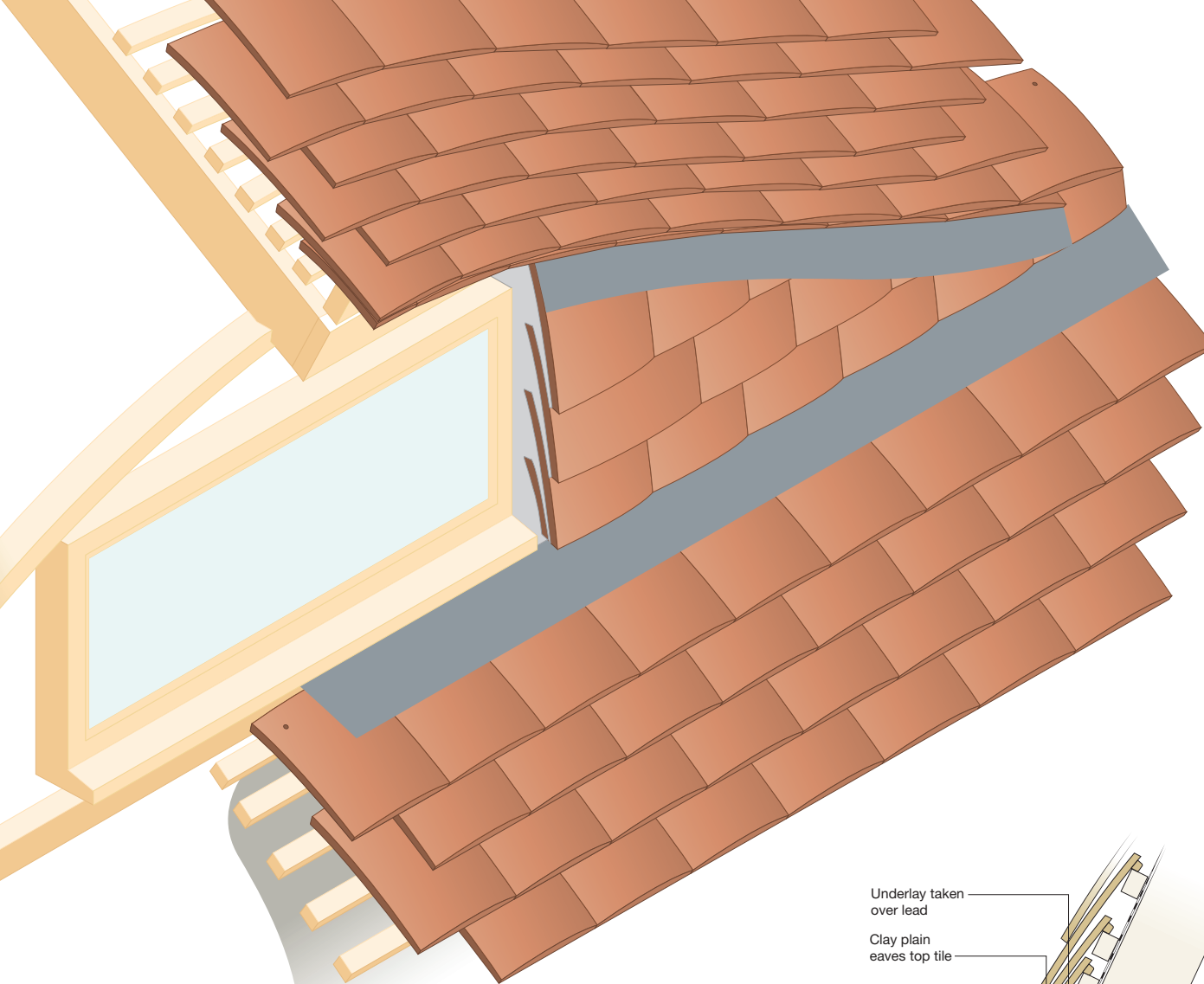
## UNIVERSAL plain tile vent terminal

- locate clear of rafters
- use soaker tray to weather hole in underlay
- locate at 2.0m centres for 5,000mm<sup>2</sup>/lin.m ventilation and 1.0m centres for 10,000mm<sup>2</sup>/lin.m ventilation
- suitable for roof space ventilation, mechanical extract and soil vent pipe
- use flexible pipe for connection to 110mm dia. pipework as termination to mechanical extract or soil vent pipe
- do not use as exhaust for hot flue gases
- when used as extract for soil vent pipes, keep minimum 900mm above any opening into building within 3m of vent terminal

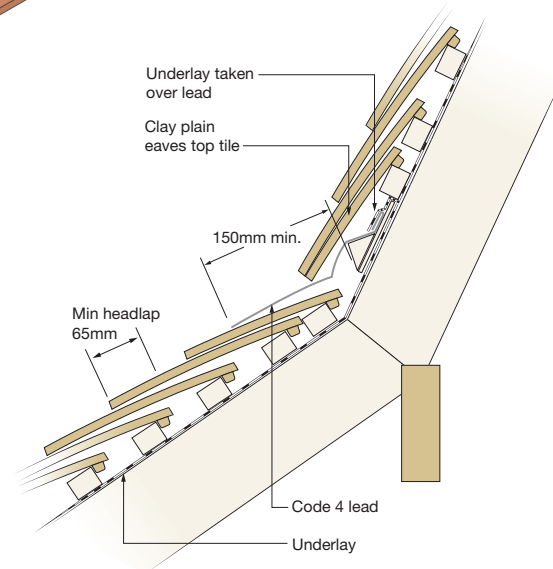


## In-line clay tile vent terminal

- locate clear of rafters.
- use soaker tray to weather hole in underlay for spigot
- locate at 1.5m centres for 5,000mm<sup>2</sup>/lin.m ventilation and 0.75m centres for 10,000mm<sup>2</sup>/lin.m ventilation
- use tile vent adaptor and flexible pipe for connection to 110mm dia. pipework as termination to mechanical extract or soil vent pipe
- do not use as exhaust for hot flue gases
- when used as extract for soil vent pipes, keep minimum 900mm above any opening into building within 3m of vent terminal



## Other details



## Eye-brow dormers

This form of curved roof using clay tiles has been derived from thatched roofs, where the thatch was swept over dormer windows providing daylight to the habitable roof void.

When designed for the application of clay tiles, they have the effect of parting the courses horizontally, but the final shape of the eyebrow is dictated by structural considerations and the ability of the design to be weathertight.

The following points should be noted when designing an eyebrow dormer:

- best formed in roofs of 55° pitch or above
- pitch of eyebrow should not be less than 35° in moderate exposure
- the transition curve of the eave should be as smooth as possible with the actual span of the total transition not more than 10 units for each unit of height of the window opening (measured from top tile below to the eaves tile at the centre of the eyebrow)
- the two central rafters should intersect with the roof slope a minimum of 1m down from the ridge
- use metal soakers with tiles on the eyebrow where the roof pitch is below 55°
- the bond of the tiles should be set out from the two sides towards the centre to give an increased side lap on the lower side
- provide special groundwork for the battens, which should be scarfed to fit the swept profile of the roof timbers
- allow at least 900mm of regular tiling to follow from the sweep of the eyebrow

## Change of pitch

- provide timber layboard and fillet for lead flashing
- maintain continuous lap of underlay at junction of two pitches
- extend upper course of tiles over lead to conceal flashing
- allow minimum 150mm lap of flashing onto lower course of tiles

### → technical toolkit

Access our on-line library of CAD drawings at: [www.marleyeternit.co.uk/cad](http://www.marleyeternit.co.uk/cad)  
 Create a fixing specification for your project at: [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)  
 Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)

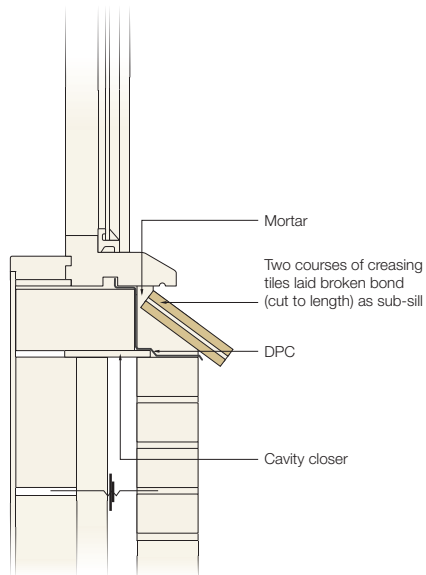
## Curved and conical roofs

Curved roofs can be designed with either horizontal or vertical curves, or a combination of both to form a dome. Double-lap plain tiles are the most suitable covering as they are relatively thin and are easily tapered to accommodate the radius of the roof. Designers should, however, be aware of the limitations of using tiles on curved roofs, as the shape and pitch may compromise their function as a weatherproof roof covering. In these circumstances, the tiles are decorative and a suitable weatherproof sub-roof should be provided.

Conical roofs can be formed as a complete circle on plan, as in the case of a turret or can also be segmental as in an apse end.

The following points should be considered when designing a curved or conical roof:

- maintain a steep roof pitch – 55° and above. (At pitches below this, extensive use of tile-and-a-half tiles may be required to maintain the necessary side laps below).
- consider the maximum and minimum radii of the curve – this will dictate the available taper in the tile and the side-lap that can be achieved. Plain tiles require a minimum side lap of 55mm (35-55° rafter pitch), and 45mm (56° rafter pitch and over) in moderate exposure.
- keep spacing of the rafters at 450mm or less.
- provide two or three layers of plywood boards (min. thickness 4.5mm) or softwood boards (min. thickness 15mm) with counter layers laid diagonally around radius of the roof as groundwork for battens or for direct nailing of tiles.



## Creasing tiles

Creasing tiles are nibless clay plain tiles and can be used for cappings or copings to walls and sills. Their decorative and crisp lines can also be used in corbelling, arches, chimneys and decorative quoins and their weatherproof properties make them ideal for use as damp proof coursing. Available in Red Smooth (see page 40).

### → technical toolkit

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# Other details

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Access our on-line library of CAD drawings at: [www.marleyeternit.co.uk/cad](http://www.marleyeternit.co.uk/cad)

Create a fixing specification for your project at: [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)

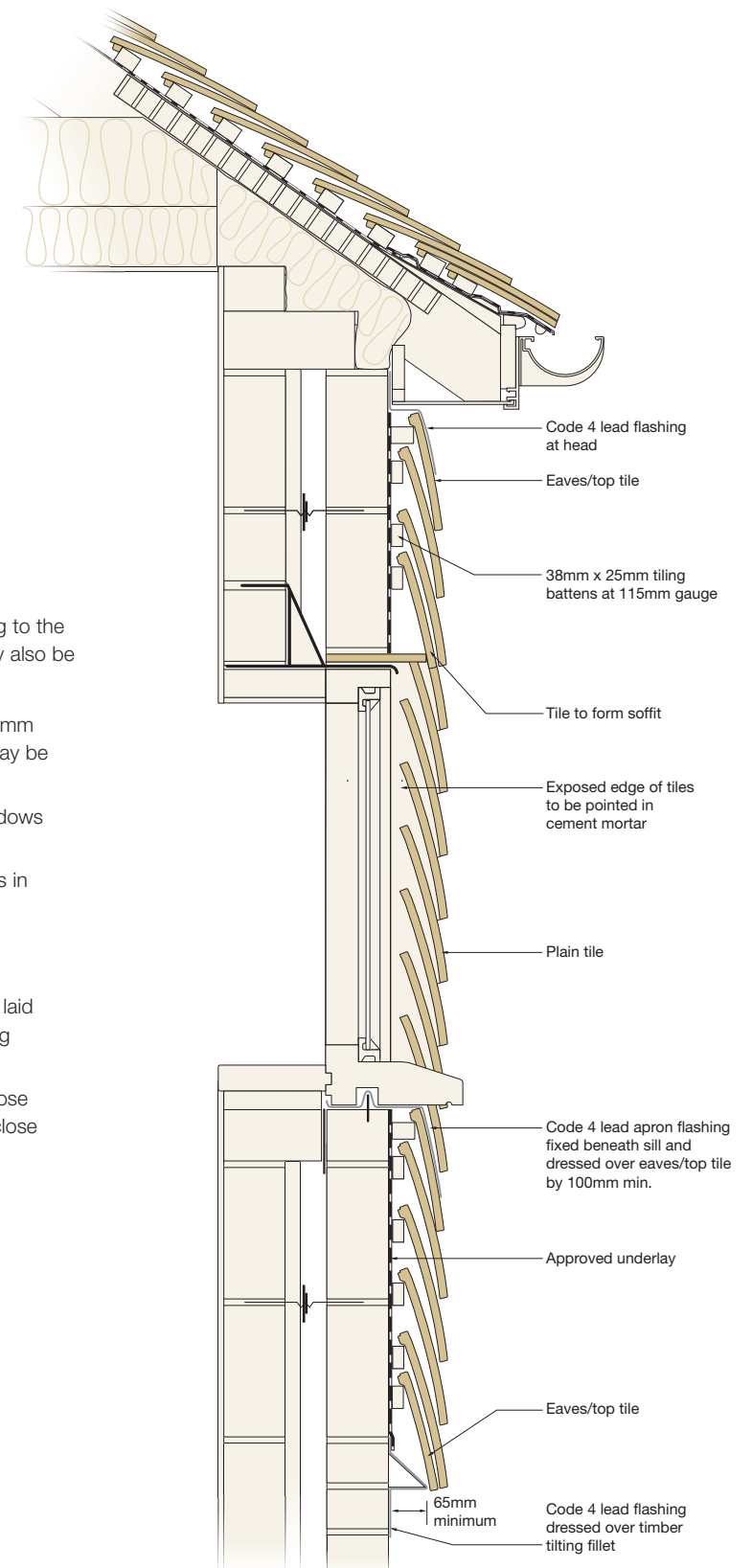
Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)



## Vertical tiling

Plain tiling is an excellent, weatherproof and attractive cladding to the vertical walls of any building. Feature and ornamental tiles may also be used with clay plain tiles to create decorative patterns.

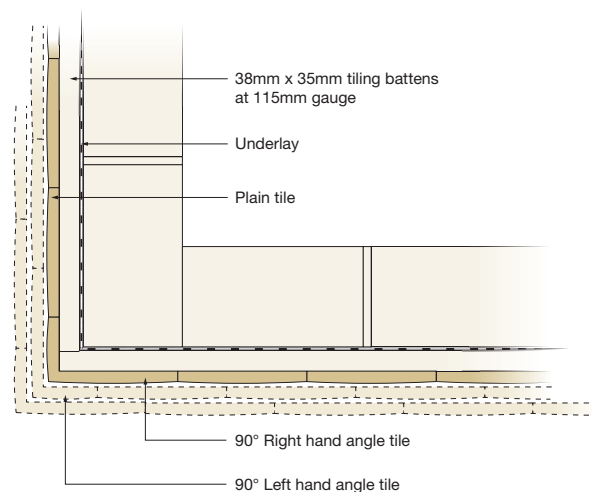
- use counterbattens over masonry construction (38mm x 25mm minimum) to reduce direct fixing. Special masonry fixings may be required
- ensure tiling details do not interfere with the opening of windows and doors
- lead flashings and soakers should be used around openings in accordance with Lead Sheet Association details
- use double course of tiles at eaves, by laying first course of eaves/tops tiles with course of full tiles over
- at top of wall or under a sill, use a course of eaves/tops tile laid over a course of full tiles. Dress a Code 4 lead cover flashing over by 100mm
- use internal and external angle tiles at all 90° corners. Purpose made 135° angle tiles are also available. For other angles, close mitre tiles and use Code 3 lead soakers
- all tiles should be twice nailed



## 90° external angle tiles

Vertical angle tiles are available in left and right handed formats to fit 90° and 135° angle external corners of wall elements and are designed to bond with standard plain tiles. The following guidance notes apply to this detail:

- counter-battens, where used, should be fixed 20mm in from the end of the tiling battens at the corner, to prevent the end nail or screw fixing from splitting the tile batten
- cut ends of the tiling battens should be alternated to coincide with the short leg of the external angle tiles
- fix left and right handed external angle tiles in alternate courses up the external corner to fit with the adjacent standard plain tiles
- avoid cutting the angle tiles to fit with the adjacent tiles
- secure each vertical angle tile by twice nailing



## Winchester cut

This gable end detail avoids the use of small triangular pieces of tile by providing a secure fixing of a tile-and-a-half against the rake of the gable.

- best suited for roof pitches of 40° and above
- fix batten parallel with rake of verge and level with vertical tiling battens
- use tile-and-a-half at end of each course and cut to rake (all tiles should be of uniform cut)
- cut adjacent tile to raking cut tile-and-a-half
- use Code 3 lead soakers (200mm x 200mm) where side laps are less than 55mm
- at apex use a tile-and-a-half turned through 45° and cut to shape



### → technical toolkit

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Create a fixing specification for your project at: [www.marleyeternit.co.uk/tilefix](http://www.marleyeternit.co.uk/tilefix)  
Download NBS clauses at: [www.marleyeternit.co.uk/specrite](http://www.marleyeternit.co.uk/specrite)

### → more information

For a copy of the Clay Roof Tile Council's Guide to Vertical Tiling, please contact customer services on 08705 626400 or email [info@marleyeternit.co.uk](mailto:info@marleyeternit.co.uk)







Let **M&E** lighten your load...

**People and tools to support your needs.**

At times roofing and cladding specification can be complex and heavy going. That's why we're on hand to offer practical, experienced support in a host of useful ways. From creating bespoke NBS, BIM or CAD details to answering questions on any aspect of your roofing or cladding project. We will deliver urgent samples where and when they're needed and provide products that help you achieve an A+ rating. We're always happy to take the weight off your shoulders.

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# Technical toolkit

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

## CAD details

Access to over 2,000 CAD drawings illustrating how specific tile details can be formed.

[marleyeternit.co.uk/cad](http://marleyeternit.co.uk/cad)

## System selector

Easy-to-use and comprehensive clay tiles and fittings system finder delivering results from choice of pitch, material or specific tile type.

[marleyeternit.co.uk/selector](http://marleyeternit.co.uk/selector)

## Tilefix

Tool to create fixing specifications based on the geographical location and building dimensions of specific roofing projects.

[marleyeternit.co.uk/tilefix](http://marleyeternit.co.uk/tilefix)

## NBS specs

A tool to produce instant NBS clauses that meet the recommendations of British Standards and Codes of Practice.

[marleyeternit.co.uk/specrite](http://marleyeternit.co.uk/specrite)

## Estimator

Tool designed to create a complete bill of materials for your roofing project, based on a wide range of roof shapes.

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## CPD

A range of Continuous Professional Development roofing seminars accredited by the RIBA CPD Certification Service. For more information or to make a booking, visit:

[marleyeternit.co.uk/cpd](http://marleyeternit.co.uk/cpd)

# Resources

We are on hand to help whenever you need us, with advice and expertise at every stage of your project.

## Technical advice

Our Technical Advisory Service is staffed by a qualified team with specialist knowledge.

Tel 01283 722588

E-mail [info@marleyeternit.co.uk](mailto:info@marleyeternit.co.uk)

## Customer services

Knowledgeable and friendly staff are available to offer quotations, expert advice, deal with orders and all other enquiries.

Tel 08705 626400

E-mail [info@marleyeternit.co.uk](mailto:info@marleyeternit.co.uk)

## Samples

Samples of clay plain tiles, fibre cement slates and concrete tiles are available on request.

Tel 01283 722588

[marleyeternit.co.uk/samples](http://marleyeternit.co.uk/samples)

## Literature

All product and technical literature can be requested or downloaded.

Tel 01283 722588

[marleyeternit.co.uk/downloads](http://marleyeternit.co.uk/downloads)

## Stockist information

To find details for stockists of Marley Eternit products, visit:

[marleyeternit.co.uk/stockists](http://marleyeternit.co.uk/stockists)

## Fixing instructions

Comprehensive sitework, fixing and installation guidance for all Marley Eternit ranges and project types.

[marleyeternit.co.uk/resources](http://marleyeternit.co.uk/resources)

## Training centre

We have a purpose-built training centre where we are able to impart our expertise through a range of practical and classroom courses. To find out more about our courses, visit:

[marleyeternit.co.uk/training](http://marleyeternit.co.uk/training)

## Sales support

Our Area Sales Managers have in depth knowledge of your local area. They are available to visit your site to carry out a roof survey, and to offer specific solutions for both new build and refurb projects.

[marleyeternit.co.uk/localcontacts](http://marleyeternit.co.uk/localcontacts)

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