



SLATE RANGE

TAKE A CLOSER **LOOK**

NATURALLY REDLAND

“At Redland it is our aim to deliver high-quality roofs that are easy to specify, buy, install and own.”

Redland is a brand of the worldwide Braas Monier Building Group (BMBG).

With operations in 36 countries and over 100 production sites, BMBG is the leading worldwide supplier of pitched roofing materials. Our goal is to deliver high-quality roofing solutions that perfectly meet our customers' expectations.

Redland draws on the expertise and experience gathered from nearly 100 years as an industry leader. Our range of tiles, slates, renewable energy systems, fittings and accessories, combined with market-leading technical support services, enable us to deliver total pitched roofing solutions you can rely on.



Cambrian Slate, Slate Grey,
Ystradgynlais Community Hospital, Powys, Wales

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For further information on Redland:
Visit www.redland.co.uk or telephone our
Customer Service Hotline on 03705 601000

INDUSTRY SUPPORT AND TRAINING



Chances are you know someone who has been on one of our courses.

REDLAND TECHNICAL SOLUTIONS SERVICE

SpecMaster is a free guaranteed roof specification service that provides NBS-based specification clauses. Easily integrated into your own working document, a SpecMaster specification will save you time, and comes with the added reassurance of a comprehensive 15-year design liability guarantee.

REDLAND TECHNICAL SOLUTIONS HOTLINE

Staffed by industry experts with both the technical and real world knowledge of designing with Redland systems, our Technical Solutions team's service will help you bring your project to fruition with industry-leading knowledge every step of the way.







CPD AND TRAINING

Redland has a purpose-built national Training & Resource Centre at South Cerney in Gloucestershire where Redland personnel, customers, suppliers and specifiers regularly undertake in-depth classroom and practical training. Since it was established in 1983, more than 40,000 people have been trained at the Centre.

As a member of the RIBA CPD Providers Network, we are also able to deliver training sessions, using accredited materials, at customers' own premises.



As well as an unrivalled range of roof tiles and systems, Redland has developed a comprehensive range of free technical services to save you time and provide complete peace of mind in your roofing project.

- 
SpecMaster
 Complete guaranteed roof specification service with NBS-based clauses
- 
QuantMaster
 Redland's bespoke roof materials quantity estimating service
- 
DesignMaster
 Comprehensive CAD library of over 4,000 quality roofing drawings
- 
ViewMaster
 The online visualisation software that enables you to 'try before you buy'
- 
FixMaster
 Fixing specification service tailored to each customer's needs
- 
EcoMaster
 Guaranteed specification service for projects using renewable energy systems

Visit www.redland.co.uk/services for further information on these services



THE ENDURING QUALITY OF REDLAND SLATES

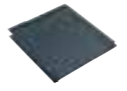
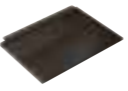
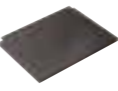



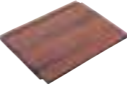
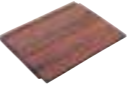
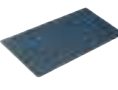
SLATE RANGE

The slate range delivers the simple beauty of a slated roof with precision manufacturing that ensures a durable and weathertight construction.

Abundant and durable, slate was for centuries the signature roofing material of Wales, the South West, the North West and Scotland. Only with the arrival of the railways in the nineteenth century did it spread across the rest of the country to satisfy the insatiable demand from Britain's newly industrialised cities.

Today, Redland's extensive slate and slate appearance tile range allows specifiers to preserve those regional traditions while creating roofs that are even stronger and more durable than the originals they are replacing.



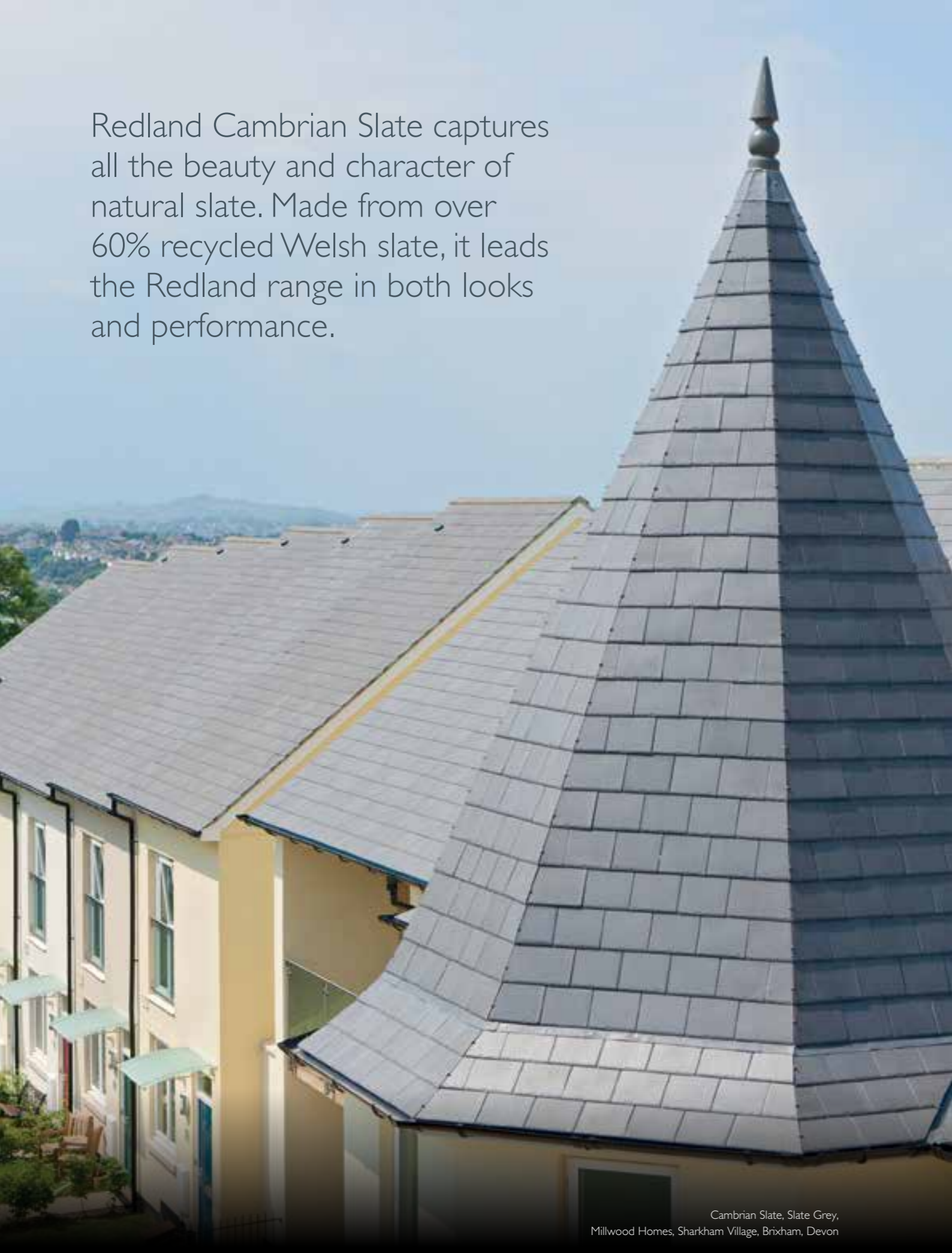
	CAMBRIAN SLATE	LANDMARK 10 SLATE	SAXON 10 SLATE
			
Page No.	6-11	12-15	16-19
Min. Pitch	15°	17.5°	17.5°
Weight	17kg/m ²	46kg/m ²	45kg/m ²
Cover	13.3 slates/m ²	9.7 slates/m ²	9.7 slates/m ²
	RICHMOND 10 SLATE	MOCKBOND RICHMOND 10	STONEWOLD II
			
Page No.	20-27	28-33	34-39
Min. Pitch	17.5°	17.5°	17.5°
Weight	45kg/m ²	45kg/m ²	49kg/m ²
Cover	9.7 slates/m ²	9.7 slates/m ²	8.2 slates/m ²
	MINI STONEWOLD	MOCKBOND MINI STONEWOLD	NATURAL SLATE
			
Page No.	40-49	50-57	58-61
Min. Pitch	17.5°	17.5°	25°
Weight	50kg/m ²	50kg/m ²	39kg/m ²
Cover	9.9 slates/m ²	9.9 slates/m ²	20.5 slates/m ²

The slate range is priced according to colour and surface finish; slates are designated as Traditional, Heritage, Premier and Premier Plus. Note that this classification does not apply to natural slate.

Colour Key

-  Natural Slate
-  Traditional
-  Heritage
-  Premier
-  Premier Plus

Redland Cambrian Slate captures all the beauty and character of natural slate. Made from over 60% recycled Welsh slate, it leads the Redland range in both looks and performance.

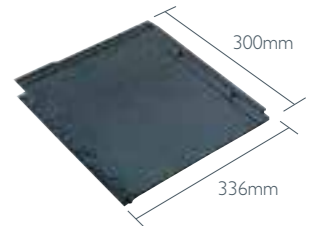


Cambrian Slate, Slate Grey,
Millwood Homes, Sharkham Village, Brixham, Devon



CAMBRIAN SLATE

Cambrian Slate has a proven track record even on pitches as low as 15° and, while light in weight, its unique three-point fixing makes it suitable for even the most exposed sites.



KEY ADVANTAGES

- Interlocking, reconstituted slate
- Riven surface and dressed edges
- Weathers like natural slate
- Four classic colours and finishes
- 60-year guarantee

TECHNICAL DATA

Size (overall)	300 x 336mm
Minimum Pitch and Headlap	15° at 75mm headlap / 25° at 50mm headlap <small>(The minimum pitch is based on a maximum rafter length of 10 metres. For rafter lengths greater than this, please contact the Technical Solutions Hotline on 03708 702595)</small>
Maximum Pitch (subject to fire resistance requirements above 69°)	90°
Minimum Headlap	50mm
Maximum Headlap	90mm
Minimum Gauge/Batten Spacing	210mm
Maximum Gauge/Batten Spacing	below 25° 225mm / 25° and over 250mm
Hanging Length (approx)	294mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	300mm
Covering capacity at max gauge	13.3 slates/m ²
Weight (at max. gauge approx.)*	17kg/m ²
per pallet, including pallet (approx.)	0.76 tonnes
per 1000	1.24 tonnes
Battens Required (at max. gauge)	4.0m/m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Fixing Clips	Eaves, Verge & Slate Clips
Nail Size for Slates #	30 x 2.65mm (S/S)
Pallet Quantities	Slates per pallet 600 / Slates per pack 10 / Packs per pallet 60

*All weights nominal # (S/S) Stainless Steel Annular ring shanked

FITTINGS & ACCESSORIES

Verge	Ambi-Dry Verge
Hip	Universal Angle Hip Dry Hip Rapid Hip Mitred Hip
Valley	Cambrian GRP Valley Dry Valley
Ridge	Universal Angle Ridge Universal Angle Monoridge
Ventilation Systems	RedVent EavesVent RedVent 25 Over-Fascia Vent Rapid EavesVent Top Edge Abutment Ventilation DryVent Ridge Rapid Vented Ridge Uni-Vent Rapid Ridge/Hip DryVent Monoridge 4.5k ThruVent Tile

ORNAMENTAL RIDGES AND FINIALS

Please refer to page 63.



COLOURS

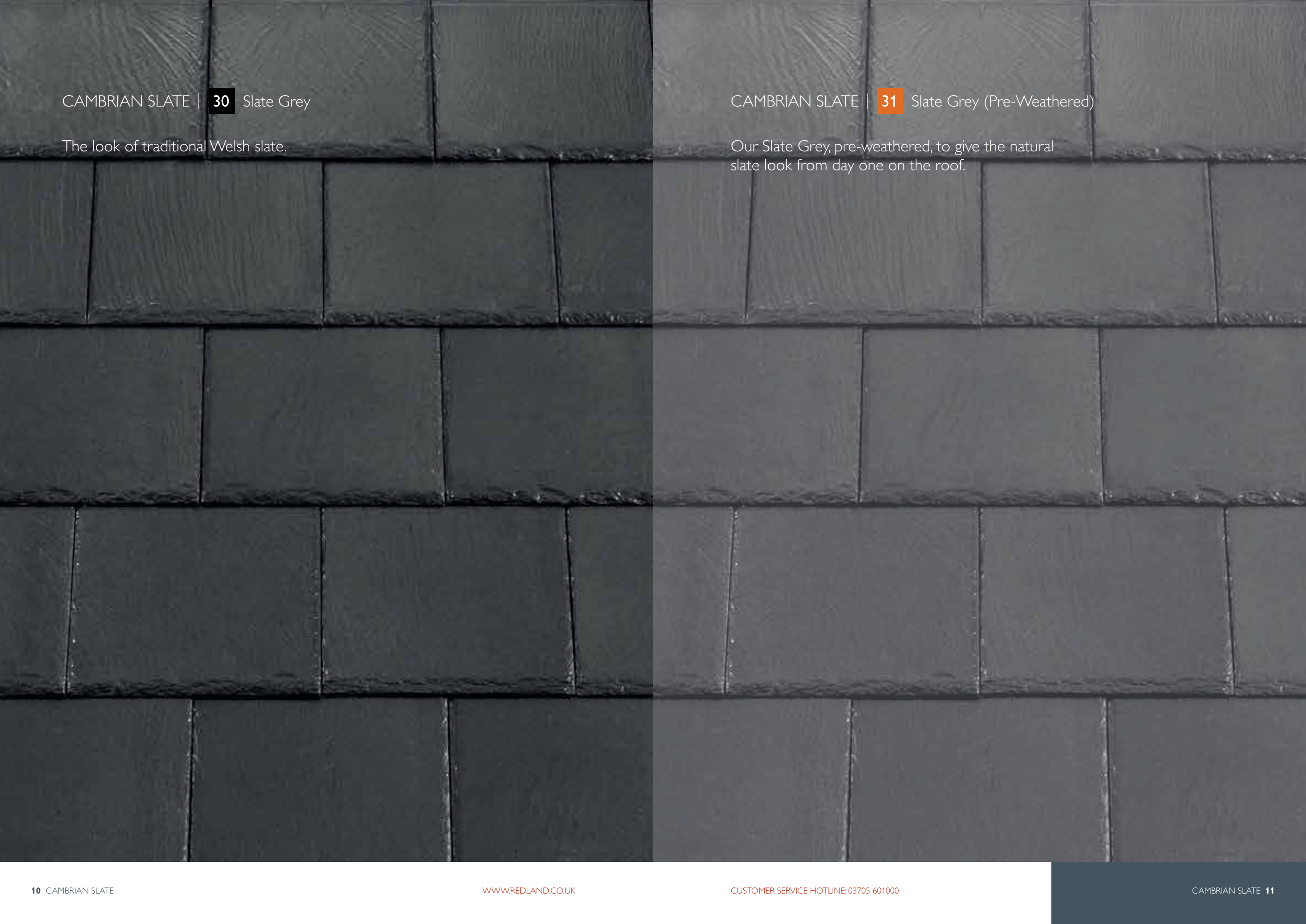


CAMBRIAN SLATE | 28 Heather

A classic slate grey, set off by a deep purple hue, characteristic of certain regional Welsh slates.

CAMBRIAN SLATE | 29 Langdale Green

A green-toned slate, much the same as the slates traditionally quarried in the Lake District.



CAMBRIAN SLATE | **30** Slate Grey

The look of traditional Welsh slate.

CAMBRIAN SLATE | **31** Slate Grey (Pre-Weathered)

Our Slate Grey, pre-weathered, to give the natural slate look from day one on the roof.

With their clean lines and natural, long-lasting colour, Landmark 10 Slates capture all the appeal of one of Britain's dominant roofing materials.

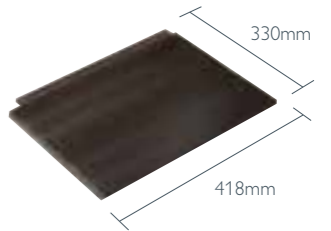


Landmark 10 Slate, Brecon Grey, Barratt Homes, York, North Yorkshire



LANDMARK 10 SLATE

Each tile incorporates subtle colour differences to replicate the variations typical of natural slate while offering low minimum pitch for maximum flexibility and performance.



KEY ADVANTAGES

- Redland ColourFusion™ process ensures tiles keep their colour over long periods
- Thin leading edge, low profile tile with hidden interlock

TECHNICAL DATA

Size (overall)	418 x 330mm
Minimum Pitch and Headlap	17.5° at 100mm headlap / 22.5° at 75mm headlap <small>(The minimum pitch is based on a maximum rafter length of 10 metres. For rafter lengths greater than this, please contact the Technical Solutions Hotline on 03708 702595)</small>
Maximum Pitch (subject to fixing specification)	90°
Minimum Headlap	75mm
Maximum Headlap	125mm
Minimum Gauge/Batten Spacing	293mm
Maximum Gauge/Batten Spacing	below 22.5° 318mm / 22.5° and over 343mm
Hanging Length (approx.)	395mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	300mm
Covering capacity at max gauge	9.7 slates/m ²
Weight (at max. gauge approx.)*	46kg/m ²
per pallet, including pallet (approx.)	1.00 tonnes
per 1000	4.7 tonnes
Battens Required (at max. gauge)	2.92m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Fixing Clips	Eaves, Verge & Slate Clips
Nail Size for Slates#	45 x 3mm (A/A) 45 x 3.35mm (S/S)
Pallet Quantities	Slates per pallet 210 / Slates per pack 35 / Packs per pallet 6

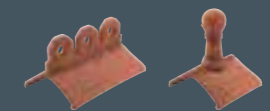
*All weights nominal # (S/S) Stainless Steel Annular ring shanked (A/A) Aluminium Alloy

FITTINGS & ACCESSORIES

Verge	DryVerge
Hip	Universal Angle Hip Dry Hip Rapid Hip
Valley	125 GRP Valley Dry Valley
Ridge	Universal Angle Ridge Universal Angle Monoridge
Ventilation Systems	RedVent EavesVent RedVent 25 Over-Fascia Vent Rapid EavesVent Top Edge Abutment Ventilation DryVent Ridge Rapid Vented Ridge Uni-Vent Rapid Ridge/Hip DryVent Monoridge RedLine Ventilation Tile 8.8k ThruVent Tile

ORNAMENTAL RIDGES AND FINIALS

Please refer to page 63.



COLOURS



47 Brecon Grey (ColourFusion™)

LANDMARK 10 SLATE | 47 Brecon Grey (ColourFusion™)

Rich dark grey tones, made to simulate traditional dark natural slates, using the special Redland Landmark finish to ensure a colour that lasts.



Landmark roof tiles keep their colour and weather naturally.

Landmark 10 Slate, Brecon Grey,
Barratt Homes, York, North Yorkshire

Riven surfaces, chamfered side edges and a thin front edge combine in our Saxon 10 concrete slate to mimic features found on natural quarried products.

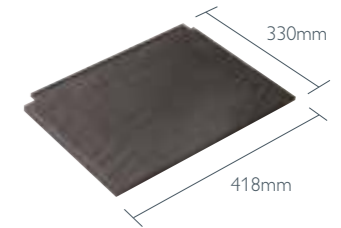


Saxon 10 Slate, Black,
Virginia, County Cavan, Republic of Ireland



SAXON 10 SLATE

With minimum pitches as low as 17.5° design flexibility is maximised, while the strong colours produce roofs of quality and distinction.



KEY ADVANTAGES

- Riven surface, chamfered side edges
- Thin front edge replicates features of natural products

TECHNICAL DATA

Size (overall)	418 x 330mm
Minimum Pitch and Headlap	17.5° at 100mm headlap / 22.5° at 75mm headlap <small>(The minimum pitch is based on a maximum rafter length of 10 metres. For rafter lengths greater than this, please contact the Technical Solutions Hotline on 03708 702595)</small>
Maximum Pitch (subject to fixing specification)	90°
Minimum Headlap	75mm
Maximum Headlap	125mm
Minimum Gauge/Batten Spacing	293mm
Maximum Gauge/Batten Spacing	below 22.5° 318mm / 22.5° and over 343mm
Hanging Length (approx.)	395mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	300mm
Covering capacity at max gauge	9.7 slates/m ²
Weight (at max. gauge approx.)*	45kg/m ²
per pallet, including pallet (approx.)	0.98 tonnes
per 1000	4.60 tonnes
Battens Required (at max. gauge)	2.92m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Fixing Clips	Eaves, Verge & Slate Clips
Nail Size for Slates#	45 x 3mm (A/A) 45 x 3.35mm (S/S)
Pallet Quantities	Slates per pallet 210 / Slates per pack 35 / Packs per pallet 6

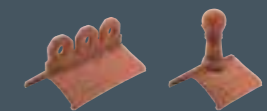
*All weights nominal # (S/S) Stainless Steel Annular ring shanked (A/A) Aluminium Alloy

FITTINGS & ACCESSORIES

Verge	DryVerge
Hip	Universal Angle Hip Dry Hip Rapid Hip
Valley	125 GRP Valley Dry Valley
Ridge	Universal Angle Ridge Universal Angle Monoridge
Ventilation Systems	RedVent EavesVent RedVent 25 Over-Fascia Vent Rapid EavesVent Top Edge Abutment Ventilation DryVent Ridge Rapid Vented Ridge Uni-Vent Rapid Ridge/Hip DryVent Monoridge RedLine Ventilation Tile 8.8k ThruVent Tile

ORNAMENTAL RIDGES AND FINIALS

Please refer to page 63.



COLOURS





SAXON 10 SLATE | 63 Black (Coated)

Our very darkest tile set off by a subtle sheen finish.



SAXON 10 SLATE | 64 Blue (Coated)

An intense dark blue-grey in a burnished finish.



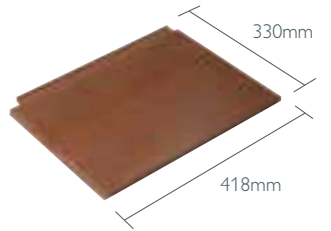
Richmond 10 Slate is the ideal choice for cost-effective roofing with an authentic slate appearance.

Richmond 10 Slate, Slate Grey, St Aidans School, Harrogate, North Yorkshire



RICHMOND 10 SLATE

Its unique design offers a thin leading edge and hidden interlock with no compromise in strength, durability and weathertightness.



KEY ADVANTAGES

- Clean, bold roof aesthetics
- Value roofing solution with no trade-off in quality
- For pitches as low as 17.5°

TECHNICAL DATA

Size (overall)	418 x 330mm
Minimum Pitch and Headlap	17.5° at 100mm headlap / 22.5° at 75mm headlap <small>(The minimum pitch is based on a maximum rafter length of 10 metres. For rafter lengths greater than this, please contact the Technical Solutions Hotline on 03708 702595)</small>
Maximum Pitch (subject to fixing specification)	90°
Minimum Headlap	75mm
Maximum Headlap	125mm
Minimum Gauge/Batten Spacing	293mm
Maximum Gauge/Batten Spacing	below 22.5° 318mm / 22.5° and over 343mm
Hanging Length (approx.)	395mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	300mm
Covering capacity at max gauge	9.7 slates/m ²
Weight (at max. gauge approx.)*	45kg/m ²
per pallet, including pallet (approx.)	1.02 tonnes
per 1000	4.60 tonnes
Battens Required (at max. gauge)	2.92m/m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Fixing Clips	Eaves, Verge & Slate Clips
Nail Size for Slates#	45 x 3mm (A/A) 45 x 3.35mm (S/S)
Pallet Quantities	Slates per pallet 210 / Slates per pack 35 / Packs per pallet 6

*All weights nominal # (S/S) Stainless Steel Annular ring shanked (A/A) Aluminium Alloy

COLOURS

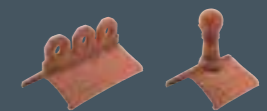


FITTINGS & ACCESSORIES

Verge	Dry Verge
Hip	Universal Angle Hip Dry Hip Rapid Hip
Valley	125 GRP Valley Dry Valley
Ridge	Universal Angle Ridge Universal Angle Monoridge
Ventilation Systems	RedVent EavesVent RedVent 25 Over-Fascia Vent Rapid EavesVent Top Edge Abutment Ventilation DryVent Ridge Rapid Vented Ridge Uni-Vent Rapid Ridge/Hip DryVent Monoridge RedLine Ventilation Tile 8.8k ThruVent Tile

ORNAMENTAL RIDGES AND FINIALS

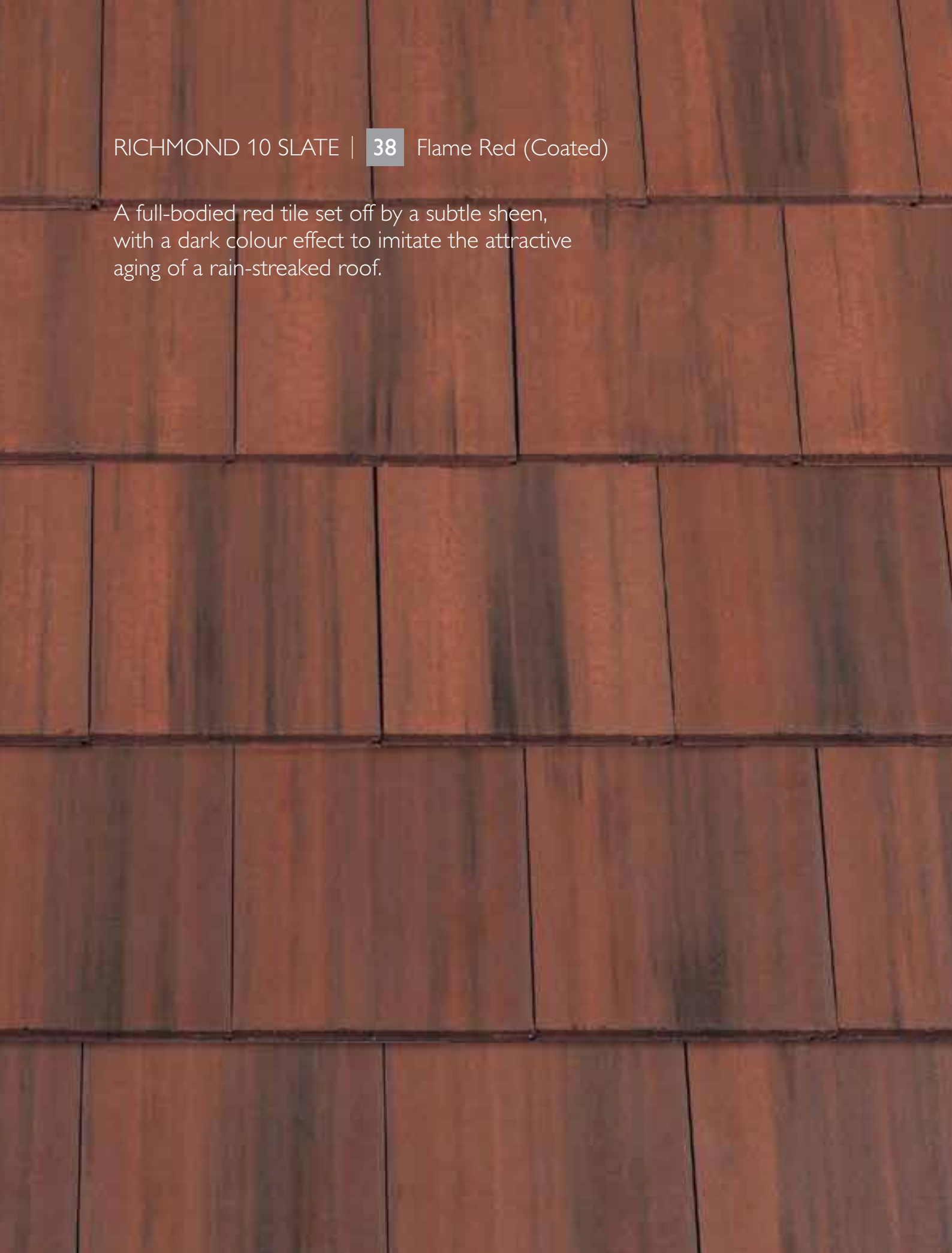
Please refer to page 63.





RICHMOND 10 SLATE | **30** Slate Grey

A popular grey colour, inspired by the appearance of natural slate.



RICHMOND 10 SLATE | **38** Flame Red (Coated)

A full-bodied red tile set off by a subtle sheen, with a dark colour effect to imitate the attractive aging of a rain-streaked roof.



RICHMOND 10 SLATE | 40 Rustic Brown (Coated)

A homely brown tile, with a particular colour effect to feign a pleasantly aged roof, and set off by a subtle sheen.



RICHMOND 10 SLATE | 63 Black (Coated)

Our very darkest tile set off by a subtle sheen finish.

RICHMOND 10 SLATE | 64 Blue (Coated)

An intense dark blue-grey in a burnished finish.



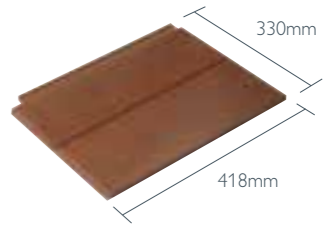
A cost-effective roofing solution
with no trade-off in quality.

Richmond 10 Slate, Slate Grey,
Bryant Homes, Bramley Green, Hampshire



Performance and aesthetics come together, with an imitation bond line to create the impression of a smaller slate.

MockBond Richmond 10 Slate, Black, South Cerney, Gloucestershire



MOCKBOND RICHMOND 10 SLATE

Lower minimum pitches and small slate appearance make this one of the most versatile roofing tiles you can specify.

KEY ADVANTAGES

- Small slate appearance, but with speed and ease of larger format installation
- Low minimum pitch adds versatility

TECHNICAL DATA

Size (overall)	418 x 330mm
Minimum Pitch and Headlap	17.5° at 100mm headlap / 27.5° at 75mm headlap <small>(The minimum pitch is based on a maximum rafter length of 10 metres. For rafter lengths greater than this, please contact the Technical Solutions Hotline on 03708 702595)</small>
Maximum Pitch (subject to fixing specification)	90°
Minimum Headlap	75mm
Maximum Headlap	125mm
Minimum Gauge/Batten Spacing	293mm
Maximum Gauge/Batten Spacing	below 27.5° 318mm / 27.5° and over 343mm
Hanging Length (approx.)	395mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	300mm
Covering capacity at max gauge	9.7 slates/m ²
Weight (at max. gauge approx.)*	45kg/m ²
per pallet, including pallet (approx.)	1.02 tonnes
per 1000	4.60 tonnes
Battens Required (at max. gauge)	2.92m/m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Fixing Clips	Eaves, Verge & Slate Clips
Nail Size for Slates#	45 x 3mm (A/A) 45 x 3.35mm (S/S)
Pallet Quantities	Slates per pallet 210 / Slates per pack 35 / Packs per pallet 6

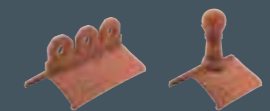
*All weights nominal # (S/S) Stainless Steel Annular ring shanked (A/A) Aluminium Alloy

FITTINGS & ACCESSORIES

Verge	Dry Verge
Hip	Universal Angle Hip Dry Hip Rapid Hip
Valley	125 GRP Valley Dry Valley
Ridge	Universal Angle Ridge Universal Angle Monoridge
Ventilation Systems	RedVent EavesVent RedVent 25 Over-Fascia Vent Rapid EavesVent Top Edge Abutment Ventilation DryVent Ridge Rapid Vented Ridge Uni-Vent Rapid Ridge/Hip DryVent Monoridge RedLine Ventilation Tile 8.8k ThruVent Tile

ORNAMENTAL RIDGES AND FINIALS

Please refer to page 63.



COLOURS



MOCKBOND RICHMOND 10 SLATE | **30** Slate Grey

A popular grey colour, inspired by the appearance of natural slate.


MOCKBOND RICHMOND 10 SLATE | **38** Flame Red (Coated)

A full-bodied red tile set off by a subtle sheen, with a dark colour effect to imitate the attractive aging of a rain-streaked roof.



MOCKBOND RICHMOND 10 SLATE | **40** Rustic Brown (Coated)

A homely brown tile, with a particular colour effect to feign a pleasantly aged roof, and set off by a subtle sheen.



MOCKBOND RICHMOND 10 SLATE | **63** Black (Coated)

Our very darkest tile set off by a subtle sheen finish.

Stonewold II is the original large format interlocking slate used on thousands of roofs across the country.

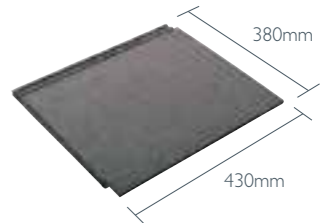


Stonewold II, Tudor Brown, Boumemouth Learning Centre, Dorset



STONEWOLD II

With its imperial size and proven track record, Stonewold II is quick to install and is particularly suited to larger roofs.



KEY ADVANTAGES

- Imperial size large format tile
- Proven track record in wide range of applications
- Particularly well suited to large area roofs

TECHNICAL DATA

Size (overall)	430 x 380mm
Minimum Pitch and Headlap	17.5° at 75mm headlap <small>(The minimum pitch is based on a maximum rafter length of 10 metres. For rafter lengths greater than this, please contact the Technical Solutions Hotline on 03708 702595)</small>
Maximum Pitch (subject to fixing specification)	44°
Minimum Headlap	75mm
Maximum Headlap	125mm
Minimum Gauge/Batten Spacing	305mm
Maximum Gauge/Batten Spacing	355mm
Hanging Length (approx.)	379mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	343mm
Covering capacity at max gauge	8.2 slates/m ²
Weight (at max. gauge approx.)*	49kg/m ²
per pallet, including pallet (approx.)	0.84 tonnes
per 1000	6.00 tonnes
Battens Required (at max. gauge)	2.82m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Fixing Clips	Eaves, Verge, Slate & Double Battening Clips
Pallet Quantities	Slates per pallet 132 / Slates per pack 22 / Packs per pallet 6

*All weights nominal

FITTINGS & ACCESSORIES

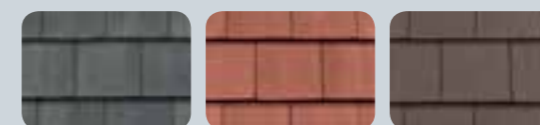
Verge	Ambi-Dry Verge
Hip	Universal Angle Hip Dry Hip Rapid Hip
Valley	125 GRP Valley Dry Valley
Ridge	Universal Angle Ridge Universal Angle Monoridge
Ventilation Systems	RedVent EavesVent RedVent 25 Over-Fascia Vent Rapid EavesVent Top Edge Abutment Ventilation DryVent Ridge Rapid Vented Ridge Uni-Vent Rapid Ridge/Hip DryVent Monoridge 8.8k ThruVent Tile

ORNAMENTAL RIDGES AND FINIALS

Please refer to page 63.



COLOURS



30 Slate Grey 34 Terracotta 36 Tudor Brown

STONEWOLD II | **30** Slate Grey

A popular grey colour, inspired by the appearance of natural slate.

STONEWOLD II | **34** Terracotta

The traditional fired-clay red of terracotta tiles.

STONEWOLD II | 36 Tudor Brown

A traditional period brown.

Stonewold II is particularly well suited to large area roofs.

Stonewold II, Tudor Brown,
Bournemouth Learning Centre, Bournemouth, Dorset



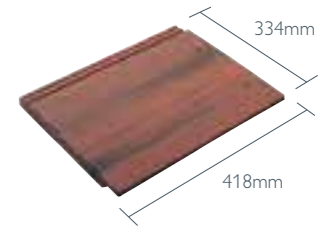
One of our most flexible and economical concrete slate products, featuring interlocking edges for simple construction.

Mini Stonewold, Slate Grey,
Hungry Horse Pub, Brislington, Bristol



MINI STONEWOLD

A flat concrete slate that can be laid at pitches as low as 17.5° in both new build and reroofing projects.



KEY ADVANTAGES

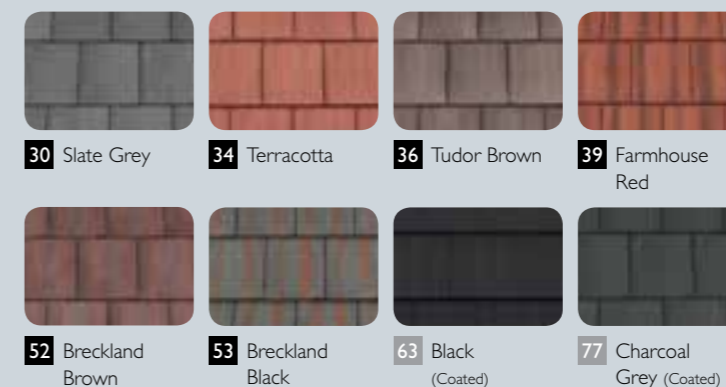
- Low pitch capability
- Quick, simple installation reduces laid costs
- Range of eight natural colours

TECHNICAL DATA

Size (overall)	418 x 334mm
Minimum Pitch and Headlap	17.5° at 100mm headlap / 22.5° at 75mm headlap <small>(The minimum pitch is based on a maximum rafter length of 10 metres. For rafter lengths greater than this, please contact the Technical Solutions Hotline on 03708 702595)</small>
Maximum Pitch (subject to fixing specification)	90°
Minimum Headlap	75mm
Maximum Headlap	125mm
Minimum Gauge/Batten Spacing	293mm
Maximum Gauge/Batten Spacing	below 22.5° 318mm / 22.5° and over 343mm
Hanging Length (approx.)	397mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	294mm
Covering capacity at max gauge	9.9 slates/m ²
Weight (at max. gauge approx.)*	50kg/m ²
per pallet, including pallet (approx.)	1.16 tonnes
per 1000	5.10 tonnes
Battens Required (at max. gauge)	2.92m/m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Fixing Clips	Eaves, Verge, Valley & Slate Clips
Nail Size for Slates*	50 x 3.35mm (A/A)
Pallet Quantities	Slates per pallet 216 / Slates per pack 36 / Packs per pallet 6

*All weights nominal (A/A) Aluminium Alloy

COLOURS



FITTINGS & ACCESSORIES

Verge	Ambi-Dry Verge Rapid Verge
Hip	Universal Angle Hip Dry Hip Rapid Hip
Valley	125 GRP Valley Dry Valley
Ridge	Universal Angle Ridge Universal Angle Monoridge
Ventilation Systems	RedVent EavesVent RedVent 25 Over-Fascia Vent Rapid EavesVent Top Edge Abutment Ventilation DryVent Ridge Rapid Vented Ridge Uni-Vent Rapid Ridge/Hip DryVent Monoridge RedLine Ventilation Tile Rapid RoofVent 8.8k ThruVent Tile

ORNAMENTAL RIDGES AND FINIALS

Please refer to page 63.



MINI STONEWOLD | **30** Slate Grey

A popular grey colour, inspired by the appearance of natural slate.

MINI STONEWOLD | **34** Terracotta

The traditional fired-clay red of terracotta tiles.

MINI STONEWOLD | **36** Tudor Brown

A traditional period brown.

MINI STONEWOLD | **39** Farmhouse Red

A popular terracotta red with a dark colour effect to imitate the attractive aging of a rain-streaked roof.

MINI STONEWOLD | **52** Breckland Brown

A traditional brown tile with a red-tinged streaking effect to simulate a weathered roof.

MINI STONEWOLD | **53** Breckland Black

A slate-like grey tile with a red-tinged streaking effect to simulate a weathered roof.

MINI STONEWOLD | 63 Black (Coated)

Our very darkest tile set off by a subtle sheen finish.

MINI STONEWOLD | 77 Charcoal Grey (Coated)

A rich dark colour set off by a subtle sheen, particularly favoured in the North of England and Scotland.



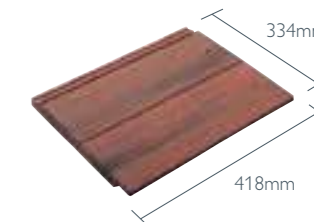
Modelled on the Mini Stonewold, this MockBond variant features an imitation bond line down its centre, creating the impression of two smaller slates.

MockBond Mini Stonewold, Farmhouse Red, Wynbrook Homes, Beeston, Nottinghamshire



MOCKBOND MINI STONEWOLD

A full-size slate which suggests the appearance of a small-format slate when laid. It is available in five through-coloured options to suit any and every roofing environment.



KEY ADVANTAGES

- Small tile roof appearance, but with speed and ease of larger format installation
- Economical to buy and install
- Available in five attractive colours

TECHNICAL DATA

Size (overall)	418 x 334mm
Minimum Pitch and Headlap	17.5° at 100mm headlap / 22.5° at 75mm headlap <small>(The minimum pitch is based on a maximum rafter length of 10 metres. For rafter lengths greater than this, please contact the Technical Solutions Hotline on 03708 702595)</small>
Maximum Pitch (subject to fixing specification)	90°
Minimum Headlap	75mm
Maximum Headlap	125mm
Minimum Gauge/Batten Spacing	293mm
Maximum Gauge/Batten Spacing	below 22.5° 318mm / 22.5° and over 343mm
Hanging Length (approx.)	397mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	294mm
Covering capacity at max gauge	9.9 slates/m ²
Weight (at max. gauge approx.)*	50kg/m ²
per pallet, including pallet (approx.)	1.16 tonnes
per 1000	5.10 tonnes
Battens Required (at max. gauge)	2.92m/m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Fixing Clips	Eaves, Verge, Valley & Slate Clips
Nail Size for Slates#	50 x 3.35mm (A/A)
Pallet Quantities	Slates per pallet 216 / Slates per pack 36 / Packs per pallet 6

*All weights nominal (A/A) Aluminium Alloy

COLOURS

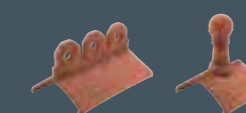


FITTINGS & ACCESSORIES

Verge	Ambi-Dry Verge Rapid Verge
Hip	Universal Angle Hip Dry Hip Rapid Hip
Valley	125 GRP Valley Dry Valley
Ridge	Universal Angle Ridge Universal Angle Monoridge
Ventilation Systems	RedVent EavesVent RedVent 25 Over-Fascia Vent Rapid EavesVent Top Edge Abutment Ventilation DryVent Ridge Rapid Vented Ridge Uni-Vent Rapid Ridge/Hip DryVent Monoridge RedLine Ventilation Tile Rapid RoofVent 8.8k ThruVent Tile

ORNAMENTAL RIDGES AND FINIALS

Please refer to page 63.



MOCKBOND MINI STONEWOLD | 30 Slate Grey

A popular grey colour, inspired by the appearance of natural slate.



Redland's most economical slate with interlocking edges for simple construction

MockBond Mini Stonewold, Slate Grey,
Wynbrook Homes, Beeston, Nottinghamshire

MOCKBOND MINI STONEWOLD | **34** Terracotta

The traditional fired-clay red of terracotta tiles.

MOCKBOND MINI STONEWOLD | **39** Farmhouse Red

A popular terracotta red with a dark colour effect to imitate the attractive aging of a rain-streaked roof.



MOCKBOND MINI STONEWOLD | **52** Breckland Brown

A traditional brown tile with a red-tinged streaking effect to simulate a weathered roof.



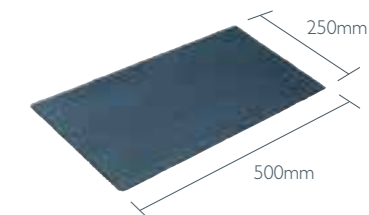
MOCKBOND MINI STONEWOLD | **77** Charcoal Grey (Coated)

A rich dark colour set off by a subtle sheen, particularly favoured in the North of England and Scotland.



Premium quality Del Carmen® Ultra slate is sourced exclusively from select quarries in Spain using modern extraction techniques.

Natural Slate – Del Carmen® Ultra, Grey/Blue, Apartments and Retail Development, Thames Edge, Staines-upon-Thames, Surrey



NATURAL SLATE

Natural slate is known for its durability and high performance in extreme weather conditions, and for its appealing, natural good looks that continue to improve with age.

KEY ADVANTAGES

- Genuine natural slate
- Will not rust, delaminate or lighten with age
- Full provenance and traceability

TECHNICAL DATA

Size (overall)	500 x 250mm
Minimum Pitch and Headlap	25° (moderate exposure) [#] <small>(Redland Del Carmen® Ultra are supplied pre-holed at a gauge of 195mm from head of slate.)</small>
Maximum Pitch (subject to fixing specification)	90°
Cover (all figures are net and do not allow for wastage) Covering capacity at 110mm headlap*	20.5 slates/m ²
Weight (per m ² at 110mm headlap)	39kg/m ²
Batten Size Rafters centres up to 600mm	50 x 25mm
Nail Size for Slates	30 x 3mm (Smooth copper nails)
Number of Tiles/Pallet	740

[#]Headlap will vary dependent on pitch and exposure at the standard holing gauge, please contact the Technical Solutions Hotline on 03708 702595

*For high exposure pitch requirements, please contact the Technical Solutions Hotline on 03708 702595

FITTINGS & ACCESSORIES

Verge	Continuous DryVerge
Hip	Universal Angle Hip Dry Hip Rapid Hip
Valley	Slate GRP Valley Dry Valley
Ridge	Universal Angle Ridge Universal Angle Monoridge
Ventilation Systems	RedVent EavesVent RedVent 25 Over-Fascia Vent Rapid EavesVent Top Edge Abutment Ventilation DryVent Ridge Rapid Vented Ridge Uni-Vent Rapid Ridge/Hip DryVent Monoridge Slate Vent Tile

ORNAMENTAL RIDGES AND FINIALS

Please refer to page 63.



COLOURS



01 Grey/Blue



NATURAL SLATE | **01** Grey/Blue

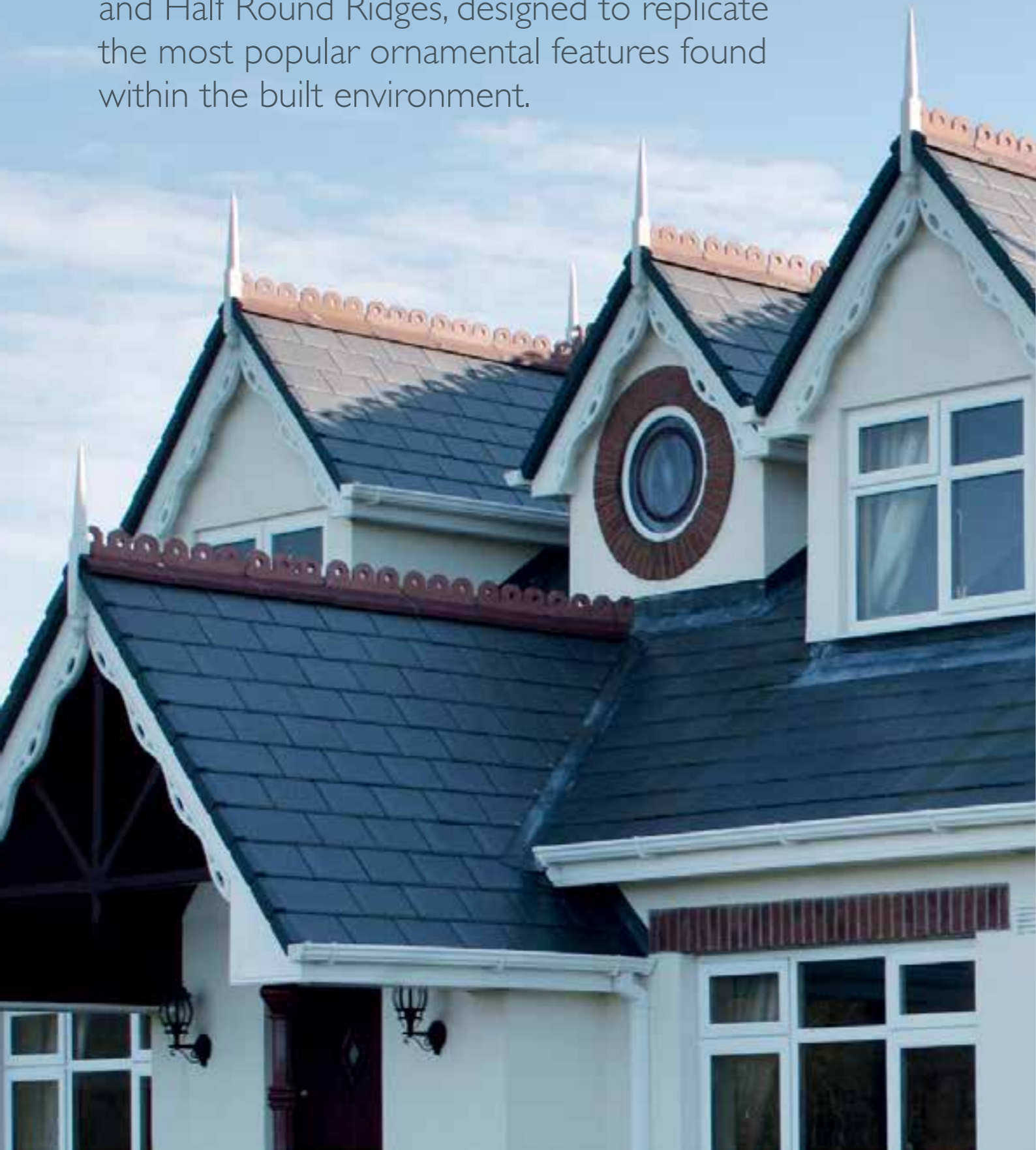
The traditional grey blue of natural slate.



A natural slate will not rust,
delaminate or lighten with age.

Natural Slate – Del Carmen® Ultra, Grey/Blue,
Private Houses

Redland offers three concrete ornamental ridges and four finials for both Universal Angle and Half Round Ridges, designed to replicate the most popular ornamental features found within the built environment.










ORNAMENTAL RIDGES AND FINIALS

Our concrete Ornamental Ridges and Finials are compatible with mortar bedding, dry fix and ventilated systems, enabling a complete roof to be achieved easily without compromising good looks.

KEY ADVANTAGES

- Ornamental Ridges and Finials are fully compatible with all our ridge fixing systems
- Range of popular styles

ORNAMENTAL RIDGES	Product Codes	Overall Size (L x W x H mm)	Height of Crest (mm)	Weight (kg)
	Cockscomb Ridge			
	Universal Angle Ridge Universal Angle Ridge Block-End	7468 7538	450 x 259 x 206 450 x 259 x 330	100 100
	Three Hole Crested Ridge			
	Universal Angle Ridge Universal Angle Ridge Block-End	7462 7558	450 x 259 x 256 450 x 259 x 380	150 150
	Fleur-de-Lys Ridge			
	Universal Angle Ridge Universal Angle Ridge Block-End	7467 7568	450 x 259 x 256 450 x 259 x 380	150 150
FINIALS	Product Codes	Overall Size (L x W x H mm)	Height of Finial (mm)	Weight (kg)
	Scroll			
	Universal Angle Ridge Universal Angle Ridge Block-End	7529 7530	300 x 259 x 306 300 x 259 x 430	200 200
	Short Ball Top			
	Universal Angle Ridge Universal Angle Ridge Block-End	7485 7487	300 x 259 x 376 300 x 259 x 500	270 270
	Tall Ball Top			
	Universal Angle Ridge Universal Angle Ridge Block-End	7486 7488	300 x 259 x 476 300 x 259 x 600	370 370
	Fleur-de-Lys			
	Universal Angle Ridge Universal Angle Ridge Block-End	7491 7492	300 x 259 x 526 300 x 259 x 650	420 420

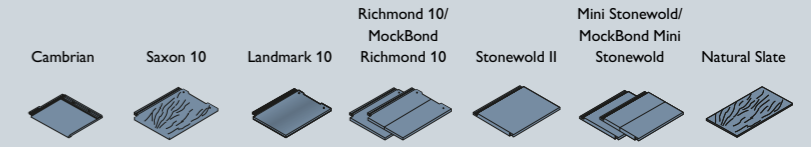
Guidance Notes: Fixings – all Ornamental Ridges and Finials should be fixed using 100mm stainless steel woodscrews

FITTINGS COLOUR RANGE

	11 Red	30 Slate Grey	34 Terracotta	35 Rustic Brown	36 Tudor Brown	47 Brecon Grey	63 Black	64 Blue	77 Charcoal Grey
Universal Angle Hip	•	•	•	•	•	•	•	•	•
Universal Angle Block-End Hip	•	•	•	•	•	•	•	•	•
Universal Angle Mitred Hip Block-End	-	•	•	-	-	-	-	-	-
Universal Angle Ridge	•	•	•	•	•	•	•	•	•
Universal Angle Block-End Ridge	•	•	•	•	•	•	•	•	•
Universal Angle Ridge Vent Terminal	•	•	•	•	•	•	•	•	•
Universal Angle Gas Flue Ridge Terminal	-	•	•	-	•	-	-	-	-
Universal Angle Cockscomb Ridge	-	-	•	-	-	-	-	-	-
Universal Angle Cockscomb Block-End Ridge	-	-	•	-	-	-	-	-	-
Universal Angle 3-Hole Crested Ridge	-	-	•	-	-	-	-	-	-
Universal Angle 3-Hole Crested Block-End Ridge	-	-	•	-	-	-	-	-	-
Universal Angle Fleur-de-Lys Ridge	-	-	•	-	-	-	-	-	-
Universal Angle Fleur-de-Lys Block-End Ridge	-	-	•	-	-	-	-	-	-
Universal Angle Scroll Finial	-	-	•	-	-	-	-	-	-
Universal Angle Block-End Scroll Finial	-	-	•	-	-	-	-	-	-
Universal Angle Short Ball Top Finial	-	-	•	-	-	-	-	-	-
Universal Angle Block-End Short Ball Top Finial	-	-	•	-	-	-	-	-	-
Universal Angle Tall Ball Top Finial	-	-	•	-	-	-	-	-	-
Universal Angle Block-End Tall Ball Top Finial	-	-	•	-	-	-	-	-	-
Universal Angle Fleur-de-Lys Finial	-	-	•	-	-	-	-	-	-
Universal Angle Block-End Fleur-de-Lys Finial	-	-	•	-	-	-	-	-	-
Universal Angle Monoridge	•	•	•	•	•	•	•	•	•
Universal Angle Block-End Monoridge LH	•	•	•	•	•	•	•	•	•
Universal Angle Block-End Monoridge RH	•	•	•	•	•	•	•	•	•
Hi-Pitch Universal Angle Ridge	-	•	•	-	•	-	-	-	-
Plain Angle Ridge/Hip	-	•	•	-	•	-	-	-	-
Valley Trough Tile	-	•	-	-	-	-	-	-	-

PRODUCT CODES

Product codes are given with dimensions below in small text. All dimensions are in mm (unless stated) in the order: length, width and height (where applicable).
For fittings colour range availability refer to table on page 64.



	Cambrian	Saxon 10	Landmark 10	Richmond 10/ MockBond Richmond 10	Stonewold II	Mini Stonewold/ MockBond Mini Stonewold	Natural Slate
SLATE							
Standard Slate (shown above)	4701 300 x 336	4991 418 x 330	4671 418 x 330	4871/4881 418 x 330	4161 430 x 380	4261/4271 418 x 334	1811 500 x 250
Cambrian Slate-and-a-Half	4702 300 x 486	-	-	-	-	-	-
Cambrian Left-hand Verge Slate	4703 300 x 300	-	-	-	-	-	-
Cambrian Left-hand Verge Slate-and-a-Half	4704 300 x 450	-	-	-	-	-	-
Cambrian Double Slate	4705 300 x 636	-	-	-	-	-	-
Half Slate Pair (left-hand) (right-hand)	-	4992 418 x 149 418 x 179	4672 418 x 149 418 x 179	4872 418 x 149 418 x 179	4164 430 x 171 430 x 208	4263 418 x 146 418 x 186	-
UNDERLAYS							
Spiritech 400 2S vapour permeable underlay	9202 50m x 1.5m	9202 50m x 1.5m	9202 50m x 1.5m	9202 50m x 1.5m	9202 50m x 1.5m	9202 50m x 1.5m	9202 50m x 1.5m
EAVES SYSTEMS							
	RedVent EavesVent System for 350-450mm	9189	9189	9189	9189	9189	9189
	RedVent EavesVent System for 450-600mm	9190	9190	9190	9190	9190	9190
	Extension Trays 350-450mm	9498	9498	9498	9498	9498	9498
	Extension Trays 450-600mm	9499	9499	9499	9499	9499	9499
	Rapid EavesVent 2-in-1 Tray	9988	9988	9988	9988	9988	9988
	Rapid EavesVent Rafter Roll	9984	9984	9984	9984	9984	9984
	RedVent 25 Over-Fascia Vent Underlay Support Tray	9593 9076	9593 9076	9593 9076	9593 9076	9593 9076	9593 9076
VERGE SYSTEMS							
	Ambi-Dry Verge System	9570	-	-	-	9576	9550
	Slate 10 Dry Verge System	-	9603/9604	9603/9604	9603/9604	-	-
	Ambi-Dry Eaves/Ridge	9491	-	-	-	9495	9552
	Slate 10 Eaves/Ridge	-	9605	9605	9605	-	-
	Continuous Dry Verge	-	-	-	-	-	9412
	Rapid Verge	-	-	-	-	-	9601
	Rapid Verge Eaves/Ridge	-	-	-	-	-	9602
HIP SYSTEMS							
Cambrian Mitred Hip System	9504	-	-	-	-	-	-
	Dry Hip System	9048	9047	9047	9047	9046	9048
	Rapid Hip	9503	9524	9524	9524	9028	9503
	Uni-Vent Rapid Ridge/Hip System	9313	9313	9313	9313	9313	9313
	Rapid Hip Support Tray	9069	9069	9069	9069	9069	9069
	Universal Angle Hip/Ridge Junction	9520	9520	9520	9520	9520	9520
	Universal Angle Hip without nail holes	7777	7777	8322	7777	7777	7777
	Universal Angle Hip with nail holes	7778 450 x 226 x 75	7778 450 x 226 x 75	8321 450 x 226 x 75	7778 450 x 226 x 75	7778 450 x 226 x 75	7778 450 x 226 x 75
	Hip Iron	9258	9258	9258	9258	9258	9258
Universal Angle Block-End Hip	7779 50 x 226 x 75	7779 50 x 226 x 75	7779 50 x 226 x 75	7779 50 x 226 x 75	7779 50 x 226 x 75	7779 50 x 226 x 75	7779 50 x 226 x 75
VALLEY SYSTEMS							
	Cambrian GRP Valley	9553	-	-	-	-	-
	125 GRP Valley	-	9595	9595	9595	9595	-
	Natural Slate GRP Valley	-	-	-	-	-	9413
	Dry Valley	9575	9575	9575	9575	9575	9575

PRODUCT CODES

Product codes are given with dimensions below in small text. All dimensions are in mm (unless stated) in the order: length, width and height (where applicable).

For fittings colour range availability refer to table on page 64.



ABUTMENT SYSTEMS

	Top Edge Abutment Ventilation System	9548	9548	9548	9548	9548	9548	9548
	Wakaflex Rapid Flashing (5m/10m x 280mm)	9955/9956	9955/9956	9955/9956	9955/9956	9955/9956	9955/9956	9955/9956
	Wakaflex Rapid Flashing (5m x 370mm)	9957	9957	9957	9957	9957	9957	9957
	Wakaflex Rapid Flashing (5m x 180mm)	9960	9960	9960	9960	9960	9960	9960
	Wakaflex Rapid Flashing (5m x 560mm)	9959	9959	9959	9959	9959	9959	9959
	Wakaflex Rapid Flashing (5m x 140mm)	9953	9953	9953	9953	9953	9953	9953
	Wakaflex Rapid Flashing Strip	9998	9998	9998	9998	9998	9998	9998
	Wakaflex Rapid Flashing Sealant	9995	9995	9995	9995	9995	9995	9995
	Abutment GRP Secret Gutter Bonding Gutter	9596 9580	9596 9580	9596 9580	9596 9580	9596 9580	9596 9580	9596 9580

RIDGE SYSTEMS

	DryVent Ridge System	9059	9059	9059	9059	9059	9059	9059
	Uni-Vent Rapid Ridge/Hip System	9313	9313	9313	9313	9313	9313	9313
	Rapid Vented Ridge	9308	9308	9308	9308	9308	9308	9308
	Ridge Vent Terminal	7254	7254	8330	7254	7254	7254	7254
	Terminal Adaptor	450 x 259 x 140 9175	450 x 259 x 140 9175	450 x 259 x 140 9175	450 x 259 x 140 9175	450 x 259 x 140 9175	450 x 259 x 140 9175	450 x 259 x 140 9175
	Flexible Pipe (100 to 100)	9172	9172	9172	9172	9172	9172	9172
	Gas Flue Ridge Terminal	7272	7272	8329	7272	7272	7272	7272
	Gas Flue Extension Adaptor	450 x 259 x 172 9143	450 x 259 x 172 9143	450 x 259 x 172 9143	450 x 259 x 172 9143	450 x 259 x 172 9143	450 x 259 x 172 9143	450 x 259 x 172 9143
	Gas Flue Blanking Plates	9099	9099	9099	9099	9099	9099	9099
	Universal Angle Ridge	7146	7146	8319	7146	7146	7146	7146
	Hi-Pitch Universal Angle Ridge	450 x 259 x 106 335 x 255 x 153 7151	450 x 259 x 106 335 x 255 x 153 7151	- - -	450 x 259 x 106 335 x 255 x 153 7151	- - -	450 x 259 x 106 335 x 255 x 153 7151	450 x 259 x 106 335 x 255 x 153 7151
	Universal Angle Block-End Ridge	7518	7518	8320	7518	7518	7518	7518
	DryVent Monoridge System	9084	9084	9084	9084	9084	9084	9084
	Universal Angle Monoridge	7148	7148	8324	7148	7148	7148	7148
	Universal Angle Block-End Monoridge Left-hand	7297	7297	8325	7297	7297	7297	7297
	Universal Angle Block-End Monoridge Right-hand	7298	7298	8326	7298	7298	7298	7298



VENTILATION TILES

	RedLine Vent Tile with Underlay Seal	-	9141	9141	9141	-	9118	-
	RedLine Vent Flexible Pipe	-	9172	9172	9172	-	9172	-
	Natural Slate Standard Vent Tile	-	-	-	-	-	-	9414
	4.5k ThruVent Tile with Underlay Seal	7705	-	-	-	-	-	-
	Flexible Pipe (75 to 100)	9188	-	-	-	-	-	9188
	8.8k ThruVent Tile with Underlay Seal	-	7944	7945	7943	7934	7935	-
	Rapid Roof Vent	-	-	-	-	-	9124	-
	Rapid Roof Vent Adaptor	-	-	-	-	-	9791	-
	Natural Slate Hi-Capacity Vent Tile	-	-	-	-	-	-	9416
	Hi-Flow ThruVent Tile with Underlay Seal	7349	-	-	-	-	-	-

FIXING

	Slate Nails (Alum.Alloy)	-	9334 45 x 3	9334 45 x 3	9334 45 x 3	-	9338 50 x 3.35	-		
	Slate Nails (Stainless Steel)	-	9350 45 x 3.35*	9350 45 x 3.35*	9350 45 x 3.35*	-	-	-		
	Natural Slate Nails (Copper)	-	-	-	-	-	-	9417 30 x 3		
	Eaves Clip	9192 [#] (inc. nails)	9293	9293	9293	9296	9186	-		
	Eaves Clip Nails (Alum.Alloy)	-	9338 50 x 3.35	9338 50 x 3.35	9338 50 x 3.35	9338 50 x 3.35	9338 50 x 3.35	-		
	Slate Clip (Alum.Alloy)	9196 [#] (inc. nails)	9294 (inc. nails)	9294 (inc. nails)	9294 (inc. nails)	9240 (inc. nails)	9185 (inc. nails)	-		
		Verge Clip (Stainless Steel)	9193 [#] (inc. nails)	9481	9481	9481	9297	9529	-	
			Double Battening Clip (Alum.Alloy)	-	-	-	-	9204 40 x 2.65	-	
				Storm Clip	-	-	-	-	9530	-

BEDDED HIP AND RIDGE MECHANICAL FIXING

	Stainless Steel Batten Straps	9447	9447	9447	9447	9447	9447	9447
	Universal Angle Clamping Plates	9567	9567	9567	9567	9567	9567	9567
	Woodscrews (100 x 4) & Washers	9584	9584	9584	9584	9584	9584	9584

OTHER ACCESSORIES

	Rapid Roof Putty	9155	9155	9155	9155	9155	9155	9155
	Rapid Roof Paint	-	9232	-	9232	-	9232	-

* Stainless Steel ring shanked

PERFORMANCE AND APPEARANCE

Authority

All concrete slate range tiles conform to BS EN 490:2011: Concrete roofing tiles and fittings for roof covering and wall cladding – Product specifications. Redland Natural Slates have been tested in accordance with BS EN 12326-1:2014: Slate and stone products for discontinuous roofing and external cladding. Specifications for slate and carbonate slate. As there is no British Standard for Cambrian Slate, it has been designed to meet the relevant performance requirements of BS 5534:2014: Slating and tiling for pitched roofs and vertical cladding – Code of Practice and has been awarded British Board of Agrément certificate No. 87/1907.

Sustainability

As members of the Roof Tile Association, data supplied for our concrete tiles enabled the BRE Green Guide to Specification to award the highest A+ rating for generic concrete tiles. Redland Cambrian Slates are the most eco-friendly resin slates available; the Green Guide to Specification awards generic resin slates an A rating when part of standard roof constructions based upon data provided by Monier Redland Ltd, the same as for UK produced natural slates.

Guarantees

All of our products are designed and tested to work together. So when specified by Redland as part of a HouseBuilder or SpecMaster project not only is every product guaranteed weathertight, all the junctions between them are similarly guaranteed under the terms and conditions of the relevant guarantee. Redland offers either 10 or 15 year guarantees depending upon the project specification including the products chosen as well as the nature of the project.



If any Redland product fails during the guarantee period, we will not only replace it, we will also pay for the cost of labour and associated materials. Please consult Redland Technical Solutions for more information.

Besides guaranteeing the slates and tiles, this guarantee includes all our fittings and accessories. A complete Redland roof is a completely guaranteed roof.

Composition and Manufacture

Concrete slates are manufactured by a high-pressure extrusion and compaction process.

Redland Del Carmen® Ultra natural slate is quarried in the Cabrera Mountains in north-western Spain. Cambrian Slates are manufactured from crushed Welsh natural slate (minimum content over 60%), stone, resin and glass-fibre reinforcement.

Performance

All slates and tiles have been rigorously tested in our wind tunnel where combinations of high wind and driving rain are used to determine the products' performance with respect to wind loading and weathertightness. Slates and tiles will meet the requirements of BS 5534:2014: Code of practice for slating and tiling, providing our fixing recommendations are complied with.

The information contained in this Guide is based on a maximum rafter length of 10 metres at the minimum pitch relevant for the product. For rafter lengths greater than this, telephone the Technical Solutions Hotline on 03708 702595 for advice.

The minimum pitch and maximum rafter length may be affected by roof features such as valleys, dormers, roof windows and chimneys. For advice on the inclusion of such features in a roof slope contact the Technical Solutions Hotline.

Movement

Designed vertical and horizontal laying tolerances will accommodate normal thermal and other movements.

Fire Resistance

Cambrian Slates are classified as follows: EX.T.S.A.A. when tested for fire protection to BS 476-3:2004: Fire tests on building materials and structures – Classification and method of test for external fire exposure to roofs. Class 2 when tested for surface spread of flame to BS 476-7:1997: Fire tests on building materials and structures – Method of test to determine the classification of the surface spread of flame of products. Fire propagation index 12.3 when tested to BS 476-6:2009: Fire tests on building materials and structures – Method of test for fire propagation for products.

Under the Building Regulations there are no restrictions on the use of Cambrian Slates as a roofing material but for mansards above 69° or vertical slating, it is essential to comply with Approved Document B. All other slates and tiles are non-combustible and are classified S.A.A. when tested for fire protection and spread of flame to BS 476-3:2004: Fire tests on building materials and structures. There are no restrictions on their use under the Building Regulations.

Strength and Durability

Slates and tiles do not delaminate and despite having high strength properties, are easy to cut. All Redland concrete slate range tiles exceed the minimum strength requirements as laid down in BS EN 490. Redland Natural Slates exhibit high flexural strength and are tested in accordance with BS EN 12326-1:2014.

Environmental Effects

Frost: unaffected by frost action.

Heat: unaffected by temperature extremes.

Sunlight: unaffected by prolonged exposure to ultraviolet light and sunlight.

Atmospheric pollution: suitable for all rural, marine and normal industrial environments. Resistant to all but the most highly polluted atmospheres, where sulphur dioxide levels exceed 70 microgrammes/m³ of air. Redland Natural Slates are classified S1 under BS 12326-1 for resistance to pollution.

Biological Effects

Birds and rodents: slates are not attacked, or degraded by birds, rodents or insects. Mosses and lichens: slate durability is not affected by the growth of lichens and mosses. However, the removal of growths may be necessary when the flow of rainwater off the roof is impeded and valleys, gutters or downpipes become blocked.

Health & Safety

Material Safety Data Sheets covering properties, storage and safe use of our products are available for download from our website www.redland.co.uk. When cutting slates using an angle grinder which generates large concentrations of dust, the measures defined in the Health and Safety Executive, Guidance Note EH 40 must be followed.

Appearance

Under normal production conditions colour variation may occur in slates, tiles and fittings. Natural weathering may also cause changes in colour and appearance. In both cases this is acceptable under BS EN 490. Scratches and abrasions caused by packing, loading and transportation are also permissible as long as the overall slate/tile quality is not affected.

Cambrian Slates can be pre-weathered during manufacture if required. After installation slight lightening may occur due to natural weathering. Landmark 10 Slates are designed to change over time, just as natural slate mellows and develops character. With the exception of Landmark, efflorescence, which is a surface phenomenon associated with concrete products, may result in a temporary lightening of the surface colour. This will be removed by weathering.

Natural Slates are devoid of artificial pigments but some natural colour variation, variability in grain and inclusions can occur. Redland Natural Slate products attain a T1 classification in BS EN 12326-1 and therefore oxidation, change of appearance and colour changes which may affect the structure or form runs of discolouration are unlikely to occur.

For the best visual effect on the roof, slates and tiles must be selected randomly from a minimum of three different pallets. When laying slates and tiles in prominent areas it is advisable to ensure that there are sufficient stocks of mixed tiles available to complete the elevation. Slates of the same colour or profile, which are manufactured at different plants, must not be mixed on the same roof area.

Fixing Specification

Every Redland Del Carmen® Ultra slate must be fixed with either copper or stainless steel nails or stainless steel hooks. There is only one recommended fixing specification for Cambrian Slates – they must be twice nailed and clipped using Redland proprietary nails and clips. In addition, verge clips are required for every verge, raking valley cut and rooflight abutment. For information on how to obtain recommended fixing specifications for all other Redland slates and tiles, go to www.redland.co.uk/fixmaster

All mortar bedded hips and ridges must be mechanically fixed.

Timber Sarking

Roofing practice in Scotland includes the use of timber sarking and counterbattens. Insulation board is also widely used as rigid sarking throughout the UK. The presence of sarking board in either of these forms will affect many of our standard details. It must be noted that the combined thickness of the sarking and counterbatten chosen may alter details slightly. For insulation board, advice on the size and fixing of the counterbattens should be obtained from the specific insulation manufacturer.

General Guidance

Special Notes on laying Natural Slates

- All slates must be sorted into a minimum of three thicknesses prior to laying.
- Thick slates should be laid at the eaves with the thinnest used on upper roof sections using slates of consistent thickness in any one course.
- Fix each slate with two nails through prepared holes.
- At all eaves, a double course of slates is required.
- All slates should be laid broken (1/2) bond and double lapped.
- Form verges by using Standard Slates and Slate-and-a-Halves in alternate courses.
- At ridges and top edge abutments, a shouldered slate should be used in the course below the top course to enable the short top course slates to be nailed directly to the batten.
- At hips and valleys, care should be taken to preserve an adequate bond by using Slate-and-a-Halves.
- When used with mechanically fixed ridge or top edge abutment systems, further fixing may be required. Please contact Technical Solutions.
- Please contact Redland Technical Solutions for use on Vertical or on Curved Roofs.

Special Notes on laying Cambrian Slates and Concrete Slate Range Tiles

- With the exception of MockBond Mini Stonewold and MockBond Richmond 10 all slates and tiles must be laid broken (1/2) bonded, normally from right to left. MockBond Mini Stonewold and MockBond Richmond 10 should be laid with a 3/4 tile offset, as opposed to standard 1/2 tile offset. In the case of MockBond Richmond 10 the interlock of each slate in the course above should not coincide with the nail hole of each slate in the course below.
- At right hand verges for Cambrian Slates use Standard Slates and Slate-and-a-Halves in alternate courses. For all other slates except MockBond Mini Stonewold and MockBond Richmond 10 use Standard Slates and Right-hand Half Slates in alternate courses. For MockBond Mini Stonewold at the right hand verge use Standard Slates (with interlocks removed) or Right-hand Half Slates and 3/4 width slates in alternate courses. For MockBond Richmond 10 at the right hand verge start with a full slate in the eaves course, and 3/4 slate, 1/2 slate and 1/4 slate respectively in subsequent courses up the verge to maintain correct laying pattern. Repeat full slate, 3/4 slate, 1/2 slate and 1/4 slate sequence up the right hand verge as required.
- At left hand verges for Cambrian Slates, use Left-hand Verge Slates and Left-hand Verge Slate-and-a-Halves in alternate courses. For all other slates except MockBond Mini Stonewold and MockBond Richmond 10 use Standard Slates (with interlocks removed), and Left-hand Half Slates in alternate courses. For MockBond Mini Stonewold use Standard Slates (with interlocks removed) or Left-hand Half Slates and 3/4 width slates in alternate courses. For MockBond Richmond 10 use the full slate, 3/4 slate, 1/2 slate and 1/4 slate sequence respectively at the left hand verge as required to maintain the correct laying pattern.
- 3/4 and 1/4 slates should be cut on site from full slates, while 1/2 slates should be cut from Half Slate Pairs. All cut slates should be appropriately handed.
- At side abutments, allow for cover flashing and secret gutter.

Additional Notes when laying Cambrian Slates

- For rafter pitches below 45° with mitred hip, Double Slates will be required on all courses either side of the hip. At pitches greater than this Slate-and-a-Halves can be used.
- For rafter pitches below 25° for valleys, dry and mechanically fixed bedded hips, Double Slates will be required on all courses either side of the valley or hip. At pitches greater than this Slate-and-a-Halves can be used.
- For advice on the replacement of individual slates, contact the Technical Solutions Hotline.

Where standards are referenced, compliance is always with the latest version. Drawings shown are diagrammatic and should not be scaled. Refer to CAD drawings in DesignMaster CAD library for specific dimensions. The limitations of printing may mean a slight variation in colour. Please refer to a sample tile for best colour reference. We are committed to continually enhancing and improving our product range. We reserve the right to change product specifications. For the latest information please contact our Customer Service Hotline.

Project photographs should not be used as a guide to installation.

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