

February 2009

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Redland

GUIDE TO ROOFING SYSTEMS

PAGES 18-31



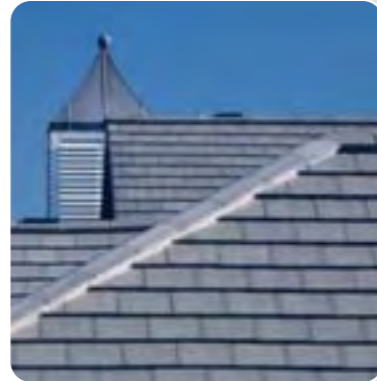
MONIER

For more information on Redland visit www.barbourproductsearch.info

SLATE RANGE

The Redland range now includes two high quality, single source natural slates. The Redland Del Carmen and Redland Riverstone slates are sourced exclusively from select quarries in Spain and Argentina and are characterised by high performance properties and appealing aesthetics.

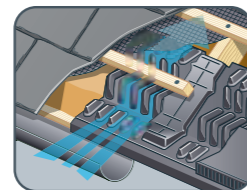
Our flagship Cambrian Slate is made using over 60% recycled Welsh slate. It is light in weight and gives the visual appearance and surface variation of quarried slate. Landmark Slate is an attractive, cost-effective alternative to natural slate, with a special surface finish that gives a long-lasting colour. The authentic look of Saxon and Richmond Slates is enhanced by a thin leading edge, whilst Mini Stonewold offers an extremely cost-effective slating solution.



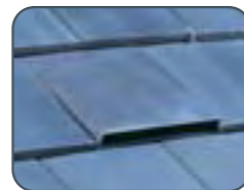
The slate range delivers the simple beauty of a slated roof, underwritten by the comprehensive Redland 15 Year Roof System Guarantee for total peace of mind.

HOW ARE YOU VENTILATING YOUR ROOF?

Eaves Ventilation Systems	72 - 73
Ridge Ventilation Systems	90 - 95, 98
Top Edge Abutment Ventilation System	87
Ventilation Tiles	100, 104



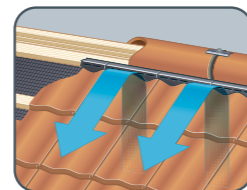
RedVent Eaves Ventilation System see page 72



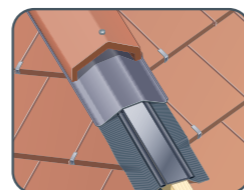
RedLine Ventilation Tile see page 100

HOW ARE YOU PREVENTING STORM DAMAGE?

Verge System	76
Hip Systems	78 - 83
Abutment Systems	86 - 88
Ridge Systems	90 - 99
Eaves, Verge and Tile Clips	110 - 117



DryVent Ridge System see page 90



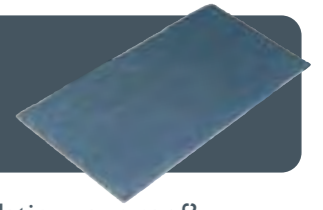
Rapid Hip System see page 80



	Natural Slate	Cambrian Slate	Landmark Slate	Saxon	Richmond	Stonewold II	Mini Stonewold	MockBond Mini Stonewold
Page No.	20	22	24	26	28	29	30	31
Min. Pitch	From 25°	15°	22.5°	25°	22.5°	17.5°	17.5°	17.5°
Weight*	35.7 – 55.4 kg/m ²	17kg/m ²	52kg/m ²	50kg/m ²	49kg/m ²	50kg/m ²	49kg/m ²	49kg/m ²
Cover	18.8 – 30.8 slates/m ²	13.3 slates/m ²	11.1 slates/m ²	11.1 slates/m ²	11.1 slates/m ²	8.2 slates/m ²	9.9 slates/m ²	9.9 slates/m ²
Appearance	Premium quality single source natural slates	Authentic slate look with minimum 60% recycled slate content	Rich, long lasting colours on a thin leading edge slate	Thin leading edge slate with a distinctive riven surface	Thin leading edge slate	Large format interlocking slate	Standard format interlocking slate	Small format look from a standard interlocking slate

Weight and cover based on maximum gauge. Minimum pitches are based on maximum rafter lengths of 10m. For rafter lengths greater than this please contact our Technical Solutions Hotline on 08708 702595. All slates must be laid broken bonded, normally from right to left.
* All weights nominal.

NATURAL SLATE



The premium quality Redland Del Carmen Ultra and Redland Riverstone Ultra slates are sourced exclusively from select quarries in Spain and Argentina. Both are characterised by high performance properties and appealing aesthetics. Both come with the added benefit of the Redland 15 Year Roof System Guarantee.

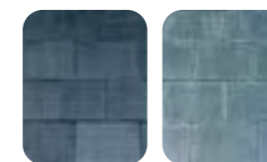


Del Carmen – Apartments and retail development, Thames Edge, Staines

Riverstone Apartments, Budleigh Salterton, Devon

Riverstone was selected for its distinctive grey/green colour and a dressed edge finish. Riverstone is mined from the long-established San Luis quarry in Argentina's La Florida region using the latest extraction techniques.

Redland Del Carmen and Redland Riverstone are sold by Redland through a partnership agreement with slate specialists SSQ Group.



Del Carmen Riverstone




How are you ventilating your roof?

Vapour Permeable Underlays	70 - 71
Eaves Ventilation Systems	72 - 73
Ridge Ventilation Systems	90 - 95, 98
Top Edge Abutment Ventilation System	87
Ventilation Tiles	112

How are you preventing storm damage?

Verge System	110
Hip Systems	78 - 81
Abutment Systems	86 - 88
Ridge Systems	90 - 99
Fixing Nails	112

Specification Support

-  **GUARANTEED ROOF SPECIFICATION**
www.redland.co.uk/specmaster or call 08708 702595
-  **PRODUCT VISUALISER**
www.redland.co.uk/viewmaster
-  **SAMPLES**
www.redland.co.uk/samples or call 08705 601000

Technical Data

DEL CARMEN		
Grade	Ultra	Ultra
Thickness	Standard 5-6mm	Heavy 7-9mm
Size	500 x 250mm	400 x 200mm
Minimum Pitch (moderate exposure)*	25°	30°
Holing Gauge (from head of slate)	195	152
Cover		
Covering capacity at 80mm headlap*	18.8 slates/m ²	30.8 slates/m ²
Weight (approx.)		
single slate	1.9kg	1.8kg
per m ² at 80mm headlap*	35.7kg	55.4kg
Number of Slates/Pallet (average)	740	780

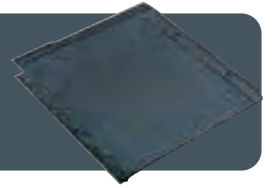
RIVERSTONE	
Grade	Ultra
Thickness	Standard 4-7mm
Size	400 x 250mm
Minimum Pitch (moderate exposure)*	30°
Holing Gauge (from head of slate)	152mm
Cover	
Covering capacity at 80mm headlap*	24.7 slates/m ²
Weight (approx.)	
single slate	1.5kg
per m ² at 80mm headlap*	37.1kg
Number of Slates/Pallet (average)	680

For high exposure pitch requirements please contact Technical Solutions.
* Headlap will vary dependent on pitch and slate size at the standard holing gauge. Please contact Technical Solutions.



Product Codes 110 - 112

CAMBRIAN SLATES



Cambrian Slates embody the beauty and character of natural slate. Made in Wales from over 60% recycled Welsh Slate, Cambrian tops the range in both looks and performance and has a proven track record even on pitches as low as 15°. Whilst light in weight, Cambrian's unique three-point fixing makes it suitable for even the most exposed sites.



How are you ventilating your roof?

Vapour Permeable Underlays	70 - 71
Eaves Ventilation Systems	72 - 73
Ridge Ventilation Systems	90 - 95, 98
Top Edge Abutment Ventilation System	87
Ventilation Tiles	104

How are you preventing storm damage?

Verge System	76
Hip Systems	78 - 83
Abutment Systems	86 - 88
Ridge Systems	90 - 99
Eaves, Verge and Tile Clips	112

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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 08708 702595)</small>	
Maximum Pitch (subject to fire resistance requirements above 69°)	90°
Maximum Headlap	90mm
Minimum Gauge/Batten Spacing	210mm
Maximum Gauge/Batten Spacing	
below 25°	225mm
25° and over	250mm
Hanging Length (approx.)	294mm
Cover	
Linear cover of 1 slate	300mm
Covering capacity at maximum gauge	13.3 slates/m ²
<small>(all figures are net and do not allow for wastage)</small>	
Weight per 1000*	1.24 tonnes
at max. gauge (approx.)	17kg/m ²
per pallet, including pallet (approx.)	0.76 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
Nail Size for Slates	30 x 2.65mm [#]
Number of Slates/Pallet	600
Slates/Pack	10
Packs/Pallet	60

* All weights nominal
Annular ring-shanked nail

Because of its high slate content, Cambrian weathers like natural slate

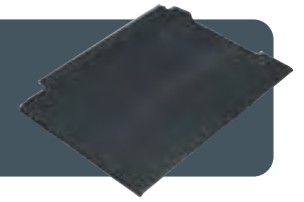


Cambrian, Slate Grey Library, Bournemouth University

Saunders Architects selected Cambrian Slates for the new library at Bournemouth University because it is a high building located on an exposed site close to the sea. Cambrian's high natural slate content ensures even weathering which will help to blend the roof into the environment. The three point fixing guarantees minimal maintenance.



LANDMARK SLATE



Landmark Slate is an attractive, cost-effective alternative to natural slate. For a fraction more than the price of a standard concrete slate, Landmark will give you a good-looking roof with looks that will last over three times as long. Landmark Slate's special surface finish gives you a roof with an authentic slate aesthetic which will weather in sympathy with the building but won't break the bank.

How are you ventilating your roof?

Vapour Permeable Underlays	70 - 71
Eaves Ventilation Systems	72 - 73
Ridge Ventilation Systems	90 - 95, 98
Top Edge Abutment Ventilation System	87
Ventilation Tiles	100, 104

How are you preventing storm damage?

Verge System	76
Hip Systems	78 - 81
Abutment Systems	86 - 88
Ridge Systems	90 - 99
Eaves, Verge and Tile Clips	112

Specification Support

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Technical Data

Size (overall)	412 x 334mm
Minimum Pitch	22.5°
<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 08708 702595)</small>	
Maximum Pitch (subject to fixing specification)	90°
Minimum Headlap	112mm
Maximum Headlap	159mm
Minimum Gauge/Batten Spacing	253mm
Maximum Gauge/Batten Spacing	300mm
Hanging Length (approx.)	392mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	301mm
Covering capacity at max. gauge	11.1 slates/m ²
Weight per 1000*	4.70 tonnes
at max. gauge (approx.)	52kg/m ²
per pallet, including pallet (approx.)	1.00 tonne
Battens Required	
at max. gauge	3.33m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Nail Size for Slates	50 x 3mm
Number of Slates/Pallet	210
Slates/Pack	35
Packs/Pallet	6

* All weights nominal



Product Codes

110 - 112

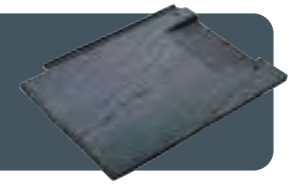
The Ambi-Dry Verge System (see page 76) provides a neat, maintenance-free finish to the verge

Landmark Slate, Brecon Grey Private houses, St Mary's Island, Chatham, Kent

The classic look and long-lasting colour of Landmark Slates adds to the vernacular style of these modern homes at a Countryside Properties' development in Chatham, designed to reflect the spirit of a traditional Kent fishing village.



SAXON



Designed with a riven surface and chamfered edge to give the appearance of authentic quarried slate, Saxon matches this visual appeal with the convenience and performance of a machine-made, interlocking slate. With a minimum pitch of 25°, Saxon offers even more design flexibility to produce roofscapes of quality and distinction.

How are you ventilating your roof?

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Top Edge Abutment Ventilation System	87
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How are you preventing storm damage?

Verge System	76
Hip Systems	78 - 81
Abutment Systems	86 - 88
Ridge Systems	90 - 99
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-  **SAMPLES**
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Technical Data

Size (overall)	412 x 334mm
Minimum Pitch	25°
<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 08708 702595)</small>	
Maximum Pitch (subject to fixing specification)	90°
Minimum Headlap	112mm
Maximum Headlap	159mm
Minimum Gauge/Batten Spacing	253mm
Maximum Gauge/Batten Spacing	300mm
Hanging Length (approx.)	386mm
Cover (all figures are net and do not allow for wastage)	
Linear cover of 1 slate	300mm
Covering capacity at max. gauge	11.1 slates/m ²
Weight per 1000*	4.68 tonnes
at max. gauge (approx.)	50kg/m ²
per pallet, including pallet (approx.)	1.14 tonnes
Battens Required	
at max. gauge	3.33m/m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Nail Size for Slates	50 x 3mm
Number of Slates/Pallet	240
Slates/Packs	40
Packs/Pallet	6

* All weights nominal



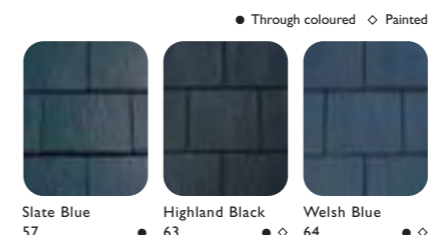
Product Codes

110 - 112

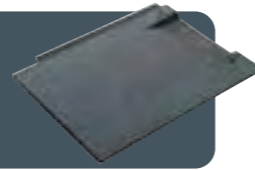
Saxon with its riven surface and chamfered edge gives the appearance of quarried slate

Saxon, Slate Blue
Apartments,
Poole, Dorset

Saxon's riven slate appearance adds character to the intricate roofscape of this prestigious housing development on the Dorset coast. Dry Hip, Dry Verge and Dry Ridge Systems were used to ensure the long-term durability of the vulnerable roof perimeters at this exposed site.



RICHMOND



Technical Data

Size (overall)	412 x 334mm
Minimum Pitch	22.5°
<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 08708 702595)</small>	
Maximum Pitch (subject to fixing specification)	90°
Minimum Headlap	112mm
Maximum Headlap	159mm
Minimum Gauge/Batten Spacing	253mm
Maximum Gauge/Batten Spacing	300mm
Hanging Length (approx.)	390mm
Cover	
Linear cover of 1 slate	300mm
Covering capacity at max. gauge <small>(all figures are net and do not allow for wastage)</small>	11.1 slates/m ²
Weight per 1000*	4.58 tonnes
at max. gauge (approx.)	49kg/m ²
per pallet, including pallet (approx.)	1.11 tonnes
Battens Required	
at max. gauge	3.33m/m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
Rafter centres up to 600mm	50 x 25mm
Nail Size for Slates	50 x 3mm
Number of Slates/Pallet	240
Slates/Pack	40
Packs/Pallet	6

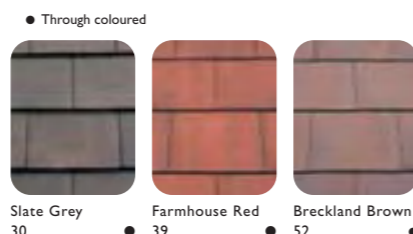
* All weights nominal



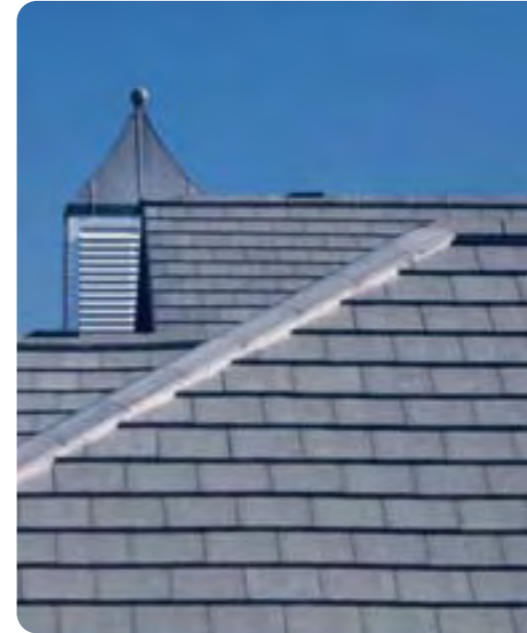
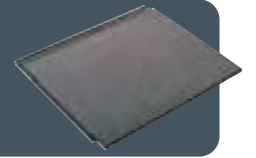
Product Codes

110 - 112

Richmond provides a cost effective roofing solution where an authentic slate appearance is called for. Its unique design offers a thin leading edge and hidden interlock without compromising strength, durability and weathertightness.



STONEWOLD II



How are you ventilating your roof?

Vapour Permeable Underlays	70 - 71
Eaves Ventilation Systems	72 - 73
Ridge Ventilation Systems	90 - 95, 98
Top Edge Abutment Ventilation System	87
Ventilation Tiles	100, 104

How are you preventing storm damage?

Verge System	76
Hip Systems	78 - 81
Abutment Systems	86 - 88
Ridge Systems	90 - 99
Eaves, Verge and Tile Clips	112

Specification Support

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-  **SAMPLES**
www.redland.co.uk/samples or call 08705 601000

Technical Data

Size (overall)	430 x 380mm
Minimum Pitch	17.5°
<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 08708 702595)</small>	
Maximum Pitch	44°
Minimum Headlap	75mm
Maximum Headlap	125mm
Minimum Gauge/Batten Spacing	305mm
Maximum Gauge/Batten Spacing	355mm
Hanging Length (approx.)	379mm
Cover	
Linear cover of 1 slate	343mm
Covering capacity at max. gauge <small>(all figures are net and do not allow for wastage)</small>	8.2 slates/m ²
Weight per 1000*	6.34 tonnes
at max. gauge (approx.)	50kg/m ²
per pallet, including pallet (approx.)	1.23 tonnes
Battens Required	
at max. gauge	2.82m/m ²
Batten Size	
Rafter centres up to 450mm	38 x 25mm
after centres up to 600mm	50 x 25mm
Number of Slates/Pallet	192
Slates/Pack	32
Packs/Pallet	6

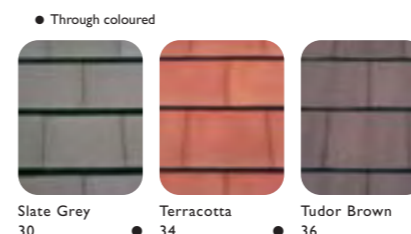
* All weights nominal



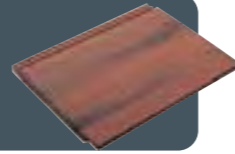
Product Codes

110 - 112

The original interlocking concrete roofing slate, that makes the roof easy to build even at pitches as low as 17.5°. It provides a cost-effective slated roof effect.



MINI STONEWOLD



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 08708 702595)</small>	
Maximum Pitch (subject to fixing specification)	90°
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	
Linear cover of 1 slate	294mm
Covering capacity at maximum gauge	9.9 slates/m ²
<small>(all figures are net and do not allow for wastage)</small>	
Weight per 1000*	5.10 tonnes
at max. gauge (approx.)	49kg/m ²
per pallet, including pallet (approx.)	1.12 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
Nail Size for Slates	50 x 3.35mm
Number of Slates/Pallet	216
Slates/Pack	36
Packs/Pallet	6

* All weights nominal

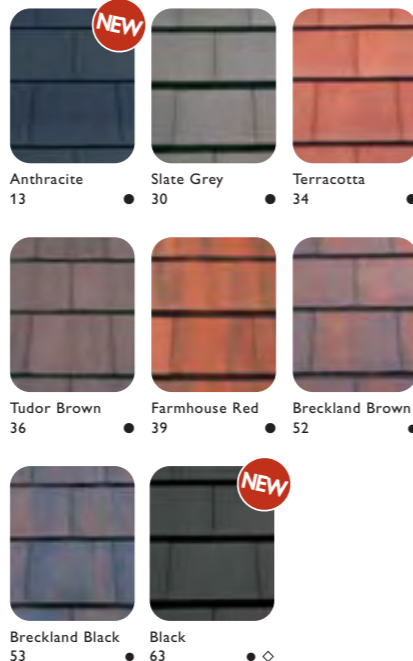


Product Codes

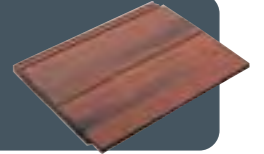
110 - 112

A flat concrete slate which can be laid at pitches as low as 17.5°, for new build or re-roofing applications. Our most economical concrete slate with interlocking edges for simple construction.

● Through coloured ◇ Painted

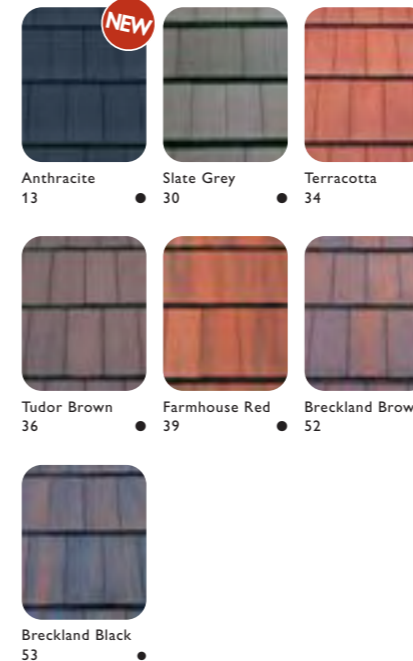


MOCKBOND MINI STONEWOLD



Based on the Mini Stonewold slate the MockBond variant has a dummy bond line down its centre. This creates the impression of two small units suggesting the appearance of a small format slate when laid.

● Through coloured



How are you ventilating your roof?

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Top Edge Abutment Ventilation System	87
Ventilation Tiles	100, 104

How are you preventing storm damage?

Verge System	76
Hip Systems	78 - 81
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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 08708 702595)</small>	
Maximum Pitch (subject to fixing specification)	90°
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	
Linear cover of 1 slate	294mm
Covering capacity at maximum gauge	9.9 slates/m ²
<small>(all figures are net and do not allow for wastage)</small>	
Weight per 1000*	5.10 tonnes
at max. gauge (approx.)	49kg/m ²
per pallet, including pallet (approx.)	1.12 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
Nail Size for Slates	50 x 3.35mm
Number of Slates/Pallet	216
Slates/Pack	36
Packs/Pallet	6

* All weights nominal



Product Codes

110 - 112