

Cambrian

**CAN NATURAL
SLATE BE
ENGINEERED
TO BE EVEN
BETTER?
IT CAN WITH
CAMBRIAN.**

Lochwinnoch Primary School, Renfrewshire, Cambrian Slate Grey

A beautifully engineered slate roofing system



Delivering the perfect fit

Cambrian Slate blends the beauty of natural, responsibly reclaimed Welsh slate with the engineered advantages of a full BMI Redland system – all to meet the challenges of modern construction from start to finish.

Over the following pages, discover how Cambrian delivers a sustainable solution that's not just beautiful, but beautifully engineered – and take a closer look at how it can make installation easier and faster.

You'll also find a selection of case studies giving you proof of the positive impact Cambrian has already made on the iconic and heritage slate roofscapes of the UK.

For the full Cambrian story and handy technical data, visit bmigroup.com/uk/cambrian

Burgh Island Apartments, Devon, Cambrian Slate Grey



BMI Redland at a glance

3

From proven heritage to future focus, BMI Redland is built on our experience as both a leading manufacturer of pitched roofing systems and a steadfast partner to our customers.

This experience, gained over 100 years, gives us the ability to pioneer new technologies and innovations – like our Cambrian Slate system – as well as deliver the reliability you'd expect from the UK's first concrete roof tile manufacturer and home of established trusted names like Rosemary and Redland 49.

Lochgelly High School, Fife, Cambrian Slate Grey



As part of the BMI Group - one of the world's largest manufacturers of both pitched and flat roofing and waterproofing solutions - in the UK, we share a commitment to designing high-performance solutions for tomorrow's roofscapes while delivering technical excellence at every stage. And that's just for starters...

■ **Over 100 years of pitched roofing**

BMI Redland has been driving the future of pitched roofing for over 100 years by delivering the benefits of the perfect fit.

■ **Proven systems. Exceptional performance**

You can always count on our proven systems to protect buildings and businesses with exceptional performance.

■ **Evolving Britain's roofscape**

We continue to evolve, adapt and improve in everything we do – reimagining systems, reframing challenges, and finding smarter ways to work across Britain's roofscape.

■ **Outstanding technical support**

Our technical teams and specification tools provide you with outstanding support at every stage of your project.

■ **Industry-leading testing**

We have world-leading testing facilities which go above and beyond national standards, and specifically focus on meeting the unique challenges of the UK climate.

■ **Training the industry**

We're committed to training and development for all our partners - from roofers to specifiers, local authorities to housebuilders - whether that's online, on-site or through the BMI Academy. It's all to help drive roofing excellence across the UK.

Butterfly House Hospice, South Buckinghamshire, Cambrian Slate Grey

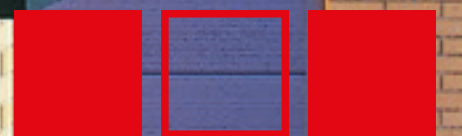


Beautifully engineered

While natural slate has a timeless beauty that will always be in demand, looks alone are not enough in the fast-changing world of construction.

Slate needs to be sustainable and responsible. Easy to specify and install, yet lighter and hardwearing. And it needs to deliver a long lifespan of lower maintenance.

Bournemouth University Library, Cambrian Slate Grey



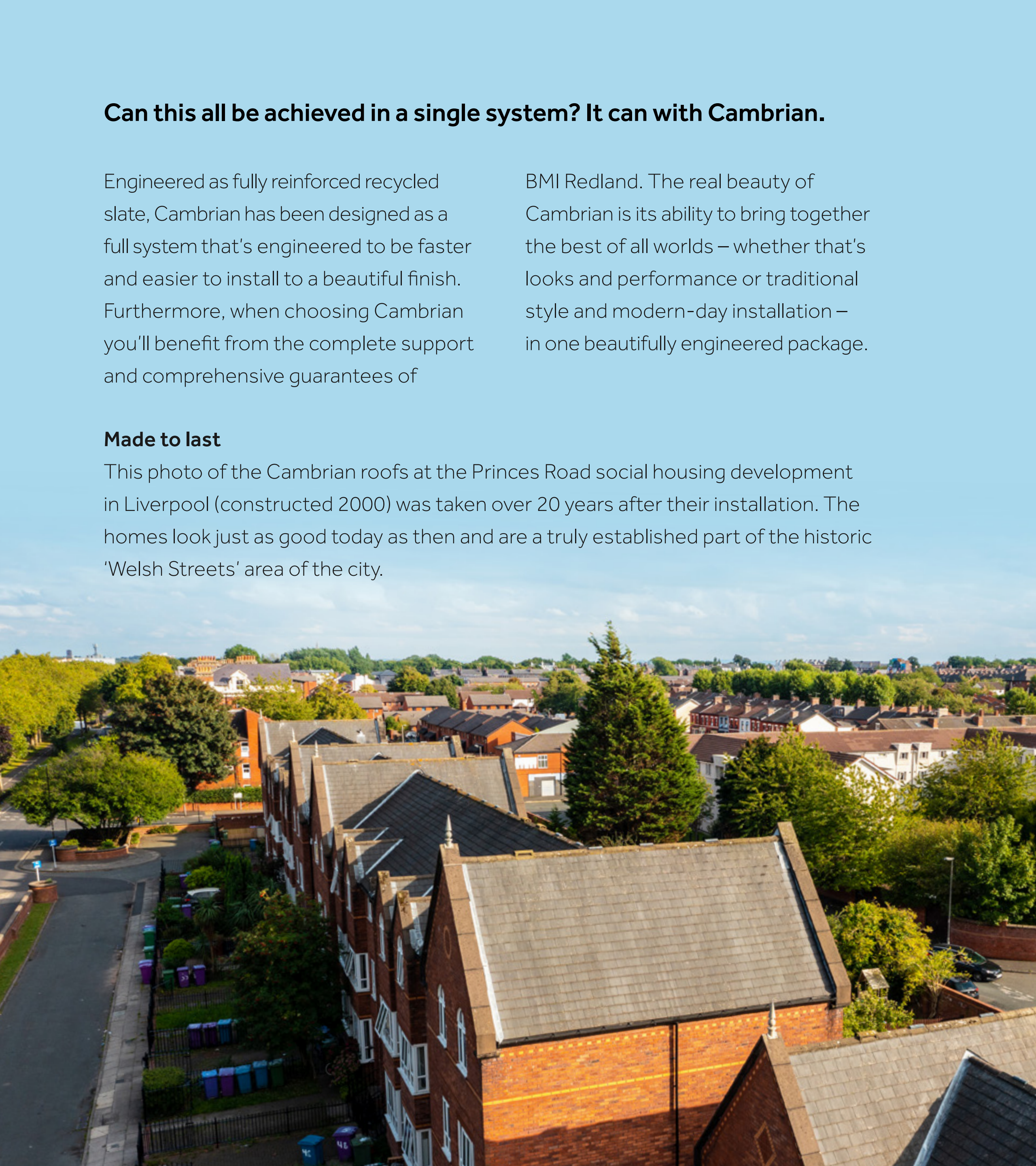
Can this all be achieved in a single system? It can with Cambrian.

Engineered as fully reinforced recycled slate, Cambrian has been designed as a full system that's engineered to be faster and easier to install to a beautiful finish. Furthermore, when choosing Cambrian you'll benefit from the complete support and comprehensive guarantees of

BMI Redland. The real beauty of Cambrian is its ability to bring together the best of all worlds – whether that's looks and performance or traditional style and modern-day installation – in one beautifully engineered package.

Made to last

This photo of the Cambrian roofs at the Princes Road social housing development in Liverpool (constructed 2000) was taken over 20 years after their installation. The homes look just as good today as then and are a truly established part of the historic 'Welsh Streets' area of the city.



CAMBRIAN OFFERS A COMPLETE SOLUTION:



Specially engineered full system components and fittings.



BBA certified.
Cert No. 87/1907



Precision-engineered performance for ease of installation.



60-year product guarantee.



Made in Wales using over 60% recycled natural Ffestiniog slate that would otherwise go to waste.



15-year weathertightness, durability and design liability guarantee when used with a SpecMaster specification.



An award-winning approach

When Cambrian was introduced in 1984, it represented a whole new approach to recycling and intelligent design - recognised by the Queen's Award for Technological Achievement in 1991. Turning slate waste into an attractive, durable slate tile showed that there's always a way to be more responsible in roofing.



Our range

Our Cambrian Slate system benefits from the complete support and comprehensive guarantees of BMI Redland. This tile brings the best of old and new - of slate and sustainability, of natural and synthetic, of looks and performance - into one package, for complete simplicity.



National Star College, Gloucestershire, Cambrian Heather

Shown in front, a roof still covered in the original fibre cement tiles that Cambrian was specified to replace.



Slate Grey



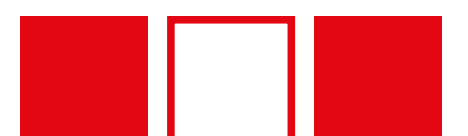
Slate Grey (Pre-Weathered)



Heather

Cambrian Slates weather to an authentic matt finish after approximately 18 months on the roof. The Pre-Weathered option is offered for projects where an aged slate appearance is required from day one. The slates go through a manufacturing process to "weather" the tiles, similar to the effect produced by 18 months on the roof. This removes some of the "Cambrian sheen" you will notice on a new tile and makes it no less durable.

To request a free sample of Cambrian visit our website here:

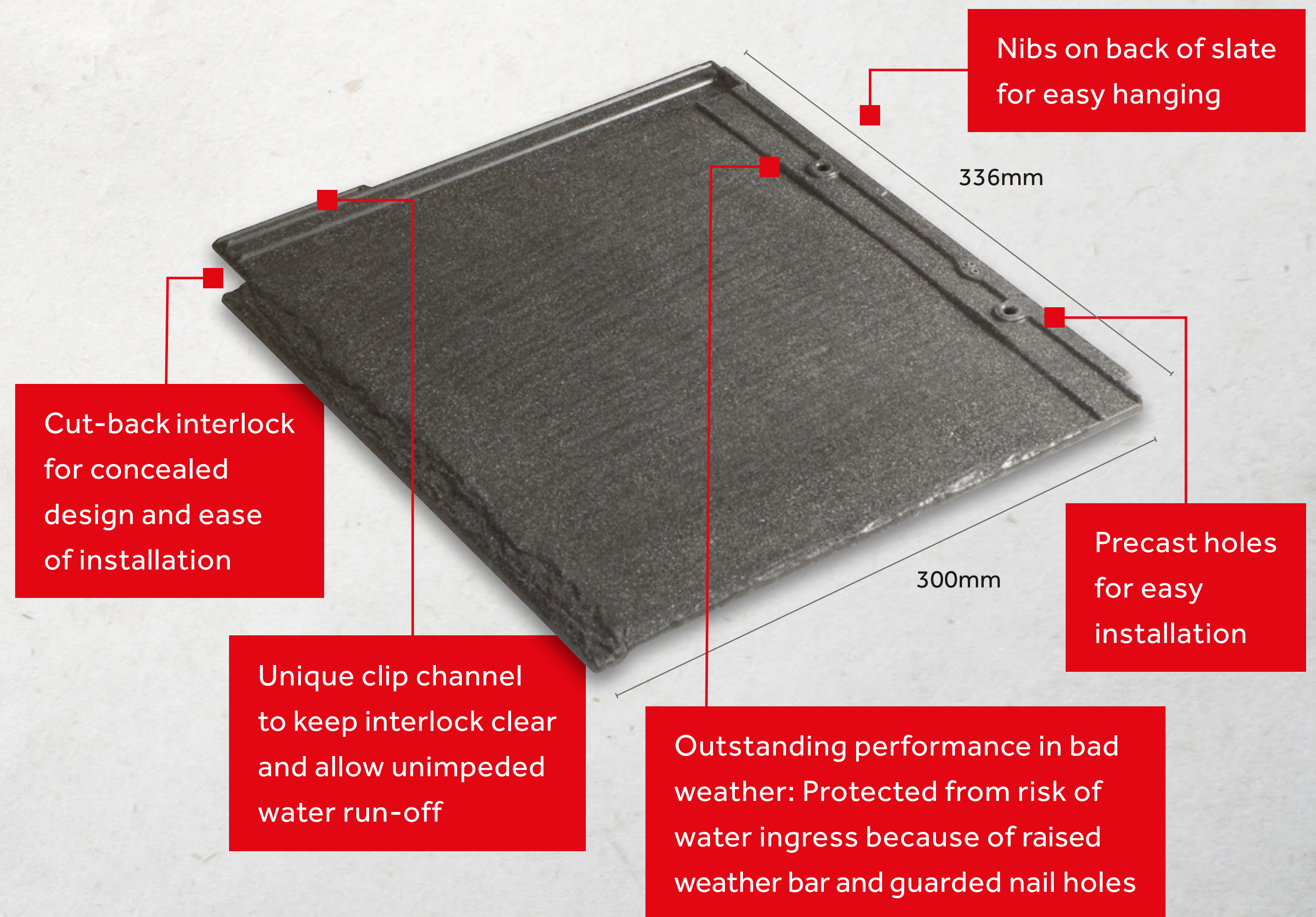


Precision manufactured

Roofing excellence is about achieving the perfect fit. Our comprehensive range of roofing components, fittings and accessories are designed to fit perfectly with our roof tiles to look seamless and create a weathertight system to complete your roof.

In addition to the Cambrian standard slate, we provide the full system to complete your roof, including specifically designed Cambrian accessories.

- Slate-and-a-half
- Double Slate
- Left-hand-verge slate
- Left-hand verge slate-and-a-half
- Dry systems for ridges, hips, verges & valleys, including Cambrian Mitred Hip System, Cambrian Dry Hip System, Cambrian GRP Valley, Cambrian 4.5k ThruVent Tile
- Bespoke concealed stainless steel fixings



Formed using moulds taken from natural slates to create a natural appearance of classic slate with thin leading edge and riven surface

13.3 slates/m² at 250mm gauge | 14.8 slates/m² at 225mm gauge
Variable gauge from 210mm up to 250mm (225mm below 25°)

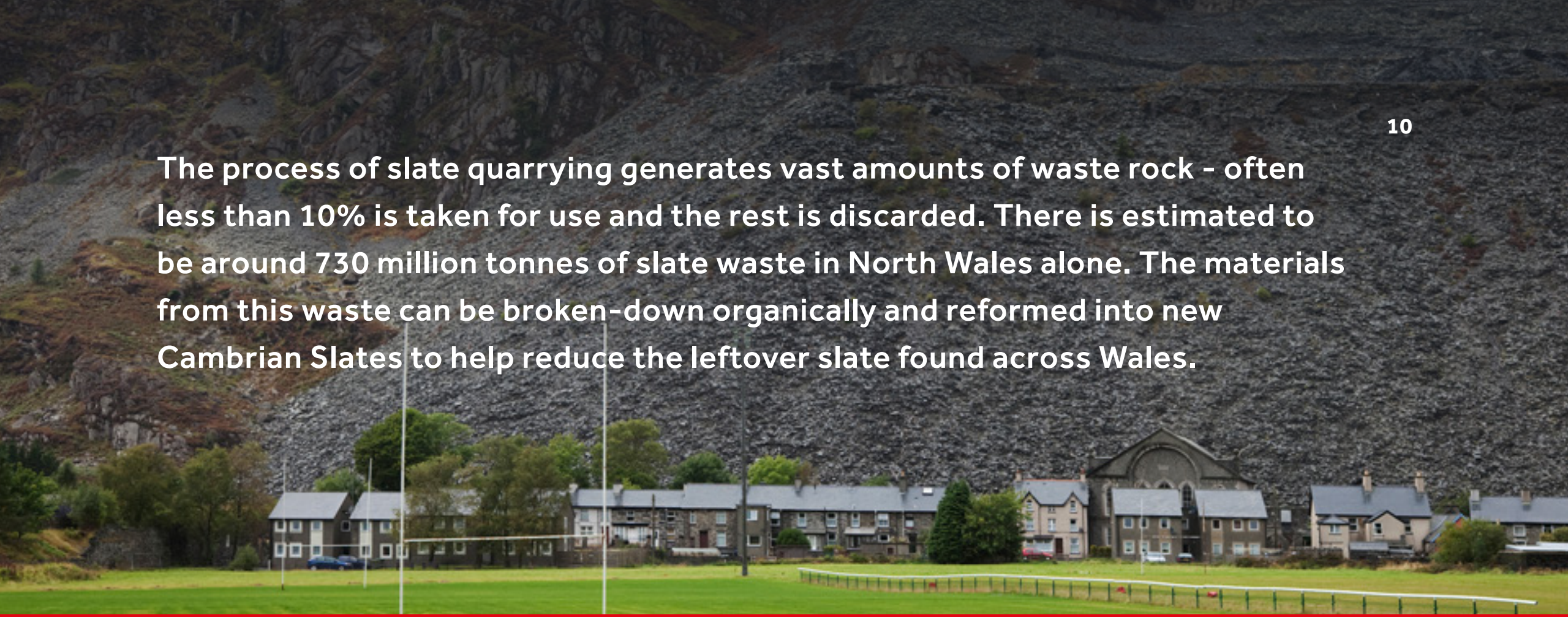


Our protection doesn't end with the roof

At BMI Redland, we're committed to setting the standard for sustainable manufacturing, which is why Cambrian is made from over 60% recycled Welsh slate - doing our bit to help local areas mitigate the impact of slate waste.

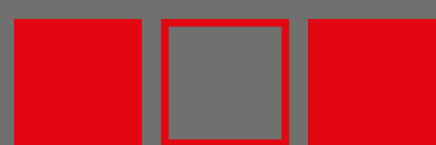
Abberton Reservoir Nature Discovery Park Visitors Centre,
Essex, Cambrian Slate Grey





The process of slate quarrying generates vast amounts of waste rock - often less than 10% is taken for use and the rest is discarded. There is estimated to be around 730 million tonnes of slate waste in North Wales alone. The materials from this waste can be broken-down organically and reformed into new Cambrian Slates to help reduce the leftover slate found across Wales.

- We have committed to replacing the small amount of glass fibre used in our slates to strands of **recycled glass**, reclaimed from sheet glass cut-offs that would otherwise go to waste.
- Our scrap tiles and mix are crushed, **recycled and repurposed as aggregate**.
- We are **committed to maintaining our certifications for quality management** with ISO 9001 and our environmental management systems with ISO 14001.
- In keeping with our **BBA certification**, we continually inspect, test and certify our products as safe and fit for purpose.
- Acheives an **'A' rating** in the BRE Green Guide to Specification.
- Cambrian Slates are **made primarily with reclaimed crushed natural slate waste** from Wales, manufactured at our plant in Wales, therefore **minimising unnecessary CO₂ emissions** from transport.
- You can also be confident that we meet good codes of labour practices and that opting for Cambrian meets the fundamentals of **responsible purchasing**.
- Every member of our team at the Cambrian plant has to complete **Environmental Awareness Training**.
- Responsible production with **less than 1% total waste** from the Cambrian plant going to landfill.



Outstanding performance

Simplicity, flexibility and uniformity are just three of the benefits that come from using the Cambrian Slate system.

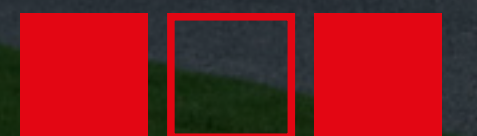
OTHER BENEFITS INCLUDE:

- Can be laid at **pitches as low as 15°**
- **Lighter** than natural slate and some fibre cement tiles
- **Unique three-point fixing system** secures slates even on the most exposed sites in the UK
- **Classified as air-open** which removes the cost and complexity of needing to ventilate the batten space
- **Doesn't need to be graded** or holed on site
- Easy and **quick to lay**
- Excellent **longevity and durability**
- Can be used as part of BMI Redland SpecMaster specification – providing **15-year whole roof guarantee** and additional support
- Specifically-designed **full Cambrian system**



Twenty Ten Club House, Celtic Manor, Wales, Cambrian Slate Grey

Cambrian Slates have been approved and used for numerous projects in Conservation Areas, natural slate regions and for historic and Listed properties. We are always happy to assist in providing samples, case studies, customer testimonials, or technical expertise to demonstrate Cambrian's suitability when addressing planning approvals or other decision-making.



Why you can with Cambrian

	CAMBRIAN SLATE	NATURAL SLATE	FIBRE CEMENT	INTERLOCKING FLAT CONCRETE TILE
SUITABLE FOR A WIDE RANGE OF PROJECT STYLES				
Low pitch capability to 15°	✓	✗	✓	✗
Lightweight: Only 17.5kg/m²	✓	✗	✓	✗
Premium natural slate appearance	✓	✓	✗	✗
No need to ventilate the batten space (classified as air-open)	✓	✓	✗	✓
EASY TO WORK WITH				
Simple and quick to install	✓	✗	✗	✓
Consistent quality and thickness (no holing or sorting required and no risk of cockers)	✓	✗	✓	✓
Lightweight and robust: Helps with manual handling, transport, storage and off-site construction	✓	✗	✗	✗
Interlocked single-lap tile with double-lapped appearance	✓	✗	✗	✓
MADE TO LAST				
No risk of “invisible defects” [such as oxidising pyrite, brittleness or pre-existing delamination, poor tile formation, nibs nailholes]	✓	✗	✓	✗
No risk of delamination, flaking or curling over time	✓	✗	✗	✓
60-year product guarantee	✓	✓	✗	✗
Available with SpecMaster: 15-year Redland whole roof guarantee available (when used as part of a Redland SpecMaster specified roof system)	✓	✗	✗	✓

*A number of natural slate, fibre cement and concrete tile products have been considered for the analysis reflected in this table however exceptions may exist and therefore some statements may not be accurate for all and every product on the market.



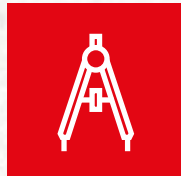
Above and beyond as standard

With over 100 years of experience under our toolbelts, we understand what it takes to ensure all our customers can deliver the perfect fit at the first time of asking.

Assistance any time, anywhere

At BMI Redland, we go beyond supplying roofing systems - we also give you the support you need to achieve the perfect fit. Our technical team is always available to guide, advise and answer any questions you have, online, on email and over the phone.

Key to this is providing a comprehensive range of supporting services that includes:



Technical guidance

All the online technical data and BIM files you'll ever need, plus access to the NBS Source library of building product manufacturer details linked to clause guidance in the National Building Specification.



Skills and training

We offer on-site training for customers looking to expand their knowledge, as well as a range of practical and theory-based classes at the BMI Academy.



Tools

BMI Redland also offers a range of free technical tools to save you time and provide complete peace of mind for your roofing projects:



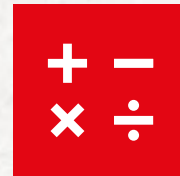
FixMaster Online

Our free-of-charge, online fixing specification service for roofing contractors and any customers fixing BMI Redland slates and tiles.



SpecMaster

A complete guaranteed custom roof specification with NBS-based clauses. Because no roofing project is exactly the same.



QuantMaster

Our bespoke pitched roof materials quantity estimating service



DesignMaster

A comprehensive CAD library of over 4,000 quality roofing drawings



BIM (Building Information Modelling)

Redland tiles and components available as BIM Objects to download



More peace of mind

SpecMaster is our free-of-charge, time-saving roof specification service designed to relieve architects and specifiers of writing complex roof specifications. In addition to Cambrian Slate, SpecMaster covers all Redland tiles, fittings, accessories, fixings, ventilation, and underlay, all provided in NBS-based format for seamless integration into the building specification. What's more, roofs designed and built in accordance with SpecMaster are covered by our whole roof 15-year guarantee; alongside end-to-end technical support, complete specification tools, and a dedicated manager offering guidance throughout the entire process.



15 YEAR REDLAND WHOLE ROOF GUARANTEE



Redland Technical Specification Manager advising on installation as part of the SpecMaster support at Parbrook Court Housing Care, Bristol



Hopewood Park Hospital

Sunderland

PROJECT

Award-winning new hospital

ARCHITECT

Medical Architecture

PRODUCT

Cambrian Slate in Slate Grey

THE CHALLENGE

The £40million Hopewood Park facility was designed to create a relaxing and non-clinical environment for patients and visitors. The design concept took inspiration from a riven valley cutting through the landscape to the sea, specifying natural and calming materials, and a focus on enjoying the natural setting. A key consideration for the architect when specifying the roof on the hospital was finding a solution that would save time by eliminating the need for scaffolding.



THE SOLUTION

Cambrian Slate was chosen for its lightweight and classic natural slate aesthetic, as well as the fact that, as a full system, it could be built at ground level and craned into place without the need for scaffolding. This both reduced disruption and also made installation simple, ensuring that project schedules were rigidly stuck to. The slates had to be lightweight to make the process of vertical tiling as easy as possible and provide substantial wind and driving-rain resistance due to the site's exposed North Sea location.

16

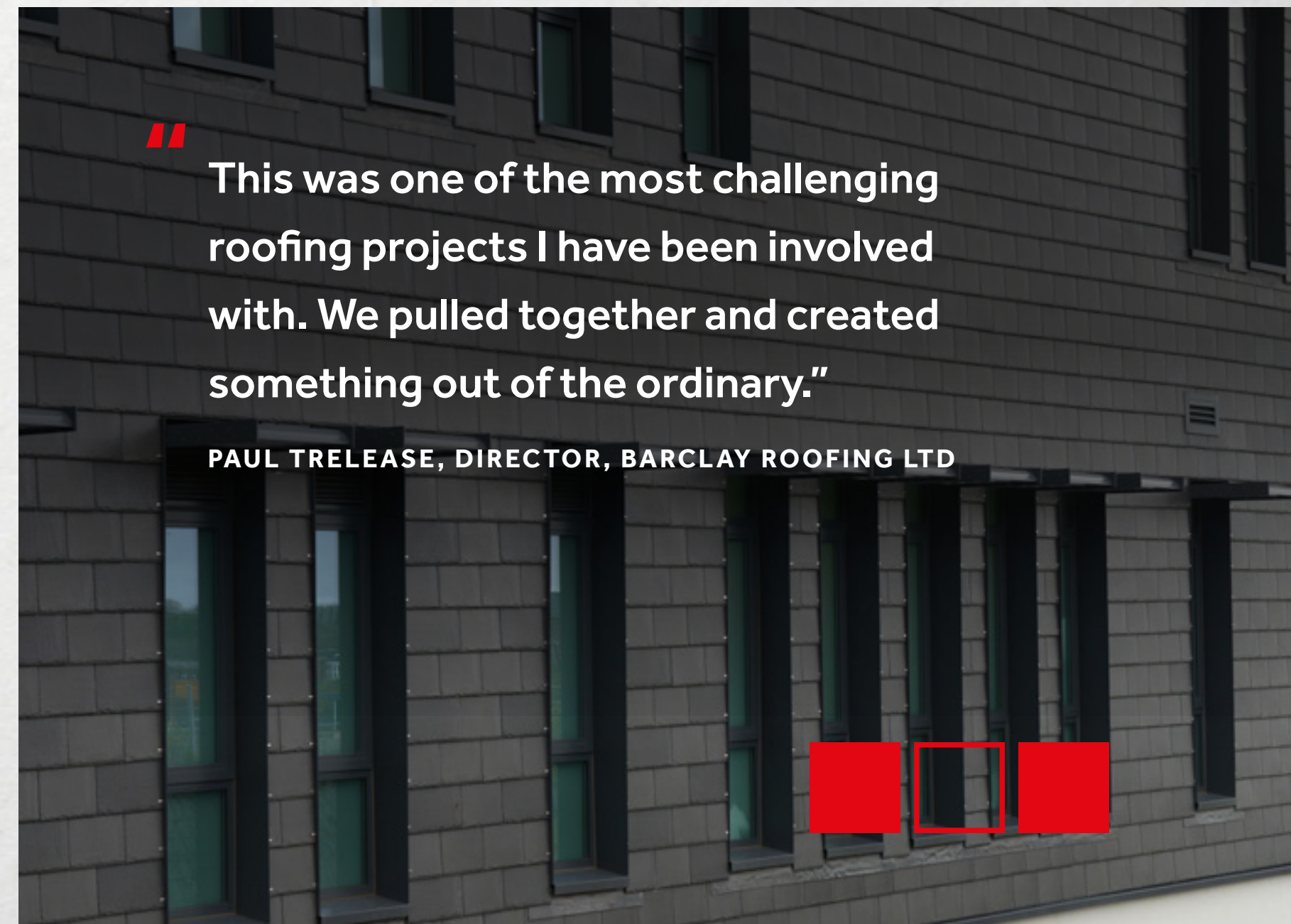


THE RESULT

The state-of-the-art hospital is a feat of ingenuity and engineering, and the Cambrian roof design represents a major step forward in modern building methods. The roofing has a contemporary yet timeless aesthetic in keeping with the exceptional quality of the entire building. Since completion, Hopewood Park has won multiple awards, including a 2015 RIBA Award and an Environmental Best Practice Gold Award.

“ This was one of the most challenging roofing projects I have been involved with. We pulled together and created something out of the ordinary.”

PAUL TRELEASE, DIRECTOR, BARCLAY ROOFING LTD



Lochwinnoch Primary School

Renfrewshire

PROJECT

111-year-old school roof replacement

ARCHITECT

James Grant, Renfrewshire Council

PRODUCT

Cambrian Slate in Slate Grey

THE CHALLENGE

Lochwinnoch Primary School sits nestled in a rural village in the central lowlands of Scotland and falls within the Lochwinnoch Conservation Area, as an area of special architectural importance for planning and environment purposes, administered by the local authority. Originally slated using Scotch slate, the 111-year-old roof on the school was at the end of its lifespan, with rain penetration an increasingly major issue. The challenge was to retain the school's traditional appearance – complete with complex details such as hips, valleys and skews – and deliver modern capabilities for longevity, all within the tight timescale of the school holiday period.



THE SOLUTION

Cambrian Slate was chosen for the project following a full BMI Redland SpecMaster roof specification, as it offered the performance and ease of use of a modern tile while providing an aesthetic that was sympathetic to the natural slate appearance of the original roof. Cambrian also offered the flexibility required to achieve the traditional details demanded by the local council.

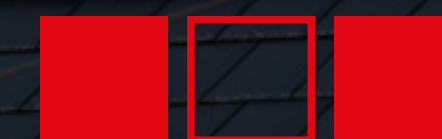


THE RESULT

All work was completed on time and carried out in compliance with BS 5534 and BS 5250, ensuring that high and low-level ventilation was provided. The premium finish was met with great approval by the council, as it delivered the traditional aesthetic desired, with a modern and sustainable solution that would last for many terms – and years – to come.

“Cambrian was the ideal choice for this project, offering the performance and ease of use of a modern tile, while providing a roof that was sympathetic to the naturally-tiled appearance of the original building,”

JAMES GRANT, PROJECT ARCHITECT, RENFREWSHIRE COUNCIL



Cambrian

Order your Cambrian sample here:



Beautifully engineered

Cambrian Slate blends the beauty of natural, responsibly reclaimed Welsh slate with the engineered advantages of a full BMI Redland system.

Visit our website here:

Contact our Technical Services Team about your project today:

0330 123 4585

technical.redland@bmigroup.com

Contact Customer Services:

0370 560 1000

sales.redland@bmigroup.com



RED_CD_2301_01CAMBRIA

