

ARMOURED SLATE

The ideal offsite slate roofing solution.

Low pitch
Lightweight
Fire-rated
Flexible
Natural slate

As low as 10° BS EN 13501-5 B_{ROOF} (t4) BRE weather tested - High performance

MAYAN
ROOFING SYSTEMS

Low Pitch Slate Roofing

As low as
10°

High Performance

The ArmouredSlate system dramatically improves the performance of a slate roof and allows very low pitches to be achieved.

Low pitch slate roofing is now a solution for extensions and the commercial market, meaning there is no compromise on performance or the aesthetic appeal, with natural slate which can be matched to the surrounding area or local buildings.

Ready-to-install 'slate tile' units.

ArmouredSlate is a unique system for mounting natural roofing slates in a single lap format. By using our patented Armoured GRP plate, we have dramatically improved the performance of a standard slate roof, whilst maintaining the appearance that is so important.

The lightweight, high performance ArmouredSlate system will allow natural roofing slates to be used on many projects where it was not previously possible.



Quick & easy

See our installation guide:
www.mayanroofingsystems.com/resources

The ingenious curved design simply hooks over the batten as one pre-formed unit, with the slates already attached.

The single lap use of 48% less slate means our smaller slates are lighter, safer and easier for roofers to handle.

20% less batten required.

ArmouredSlate tiles can be conveniently stacked and hooked over the batten whilst the roof is being installed.



Lightweight Slate Roofing

Our Single Lap
System uses

48%
less slate

(average)

Below 20kg/m²

Weight depending on slate choice

At below 20 kg/m² (as low as 15.4kg/m²) the ArmouredSlate roof can be used on applications where previously synthetic slates were the only suitable weight alternative to natural slate. ArmouredSlate now allows real slate to be used in lightweight or low pitch applications, with all of the of the long life, weathering performance and aesthetic benefits.

A lighter roof means that ArmouredSlate is ideal for:

- Conservatory roofs
- Extensions / lean-to roofs
- Timber frame
- Industrial applications
- Mobile homes / chalets

Traditional

Appearance



Indistinguishable from
a traditionally laid
slate roof



HOW DOES IT WORK?



ArmouredSlate tiles are manufactured from natural slate that is permanently bonded to our specially designed, high performance patented GRP plate, to form a ready-to-install slate tile. The ArmouredSlate GRP has a unique upper curve and secondary weather seal system, to prevent wind driven rain or capillary driven moisture from tracking over the head of the slate. The fire-rated GRP plate replaces the need for double lapped slates, providing a resilient and completely waterproof layer beneath the slates and offering total protection against the very worst of the elements.

Our specially sourced, low profile A4 stainless steel SlateFix screws fix perfectly flush under the system into the predrilled holes, for the most secure fixing.



The ArmouredSlate GRP plate is accurately colour matched to the slate to be invisible and blend discreetly into the roof.



Highly durable EDPM tape is pre-installed on each GRP sidelap, for a flush seal and a further barrier to prevent water ingress through capillary action. The BRE testing has proven its excellent performance.



FIRE TESTED LOW PITCH SLATE SYSTEM

ARMOURED
slate

Mayan ArmouredSlate achieves $B_{ROOF}(t4)$ fire status

Following the Grenfell reports, changes to building regulations have reinforced the importance of using fire tested products.

The ArmouredSlate system was recently tested at the BRE where it achieved a $B_{ROOF}(t4)$ classification. The test has proven that our innovative application of GRP to enable low pitch slate roofing can be used on all applications, whilst providing the ultimate in lightweight and high-performance benefits.

The $B_{ROOF}(t4)$ classification indicates the highest performance classification achievable by a roof construction when subjected to external fire exposure, in accordance with BS EN 13501-5. $B_{ROOF}(t4)$ enables use right up to the boundary.



Achieves $B_{ROOF}(t4)$ classification



Weather resistance tested with high performance

Best BRE Performance

Wind Driven Rain Test

We tested the ArmouredSlate system under the PD CEN/TR 15601:2012 standard and compared it to a traditionally installed double lap slate roof.

Traditional slate roofs only remain waterproof on a pitch above 25°, whereas the ArmouredSlate system allows natural slate roofs to be installed, fully waterproofed, as low as 10°.

Our tests at the BRE have shown that a riven surface as well as things like capillary action in traditional slate roofing means wind driven rain will penetrate slate roofs at low pitches. It is essential that roofs perform to modern building requirements and are durable and watertight.

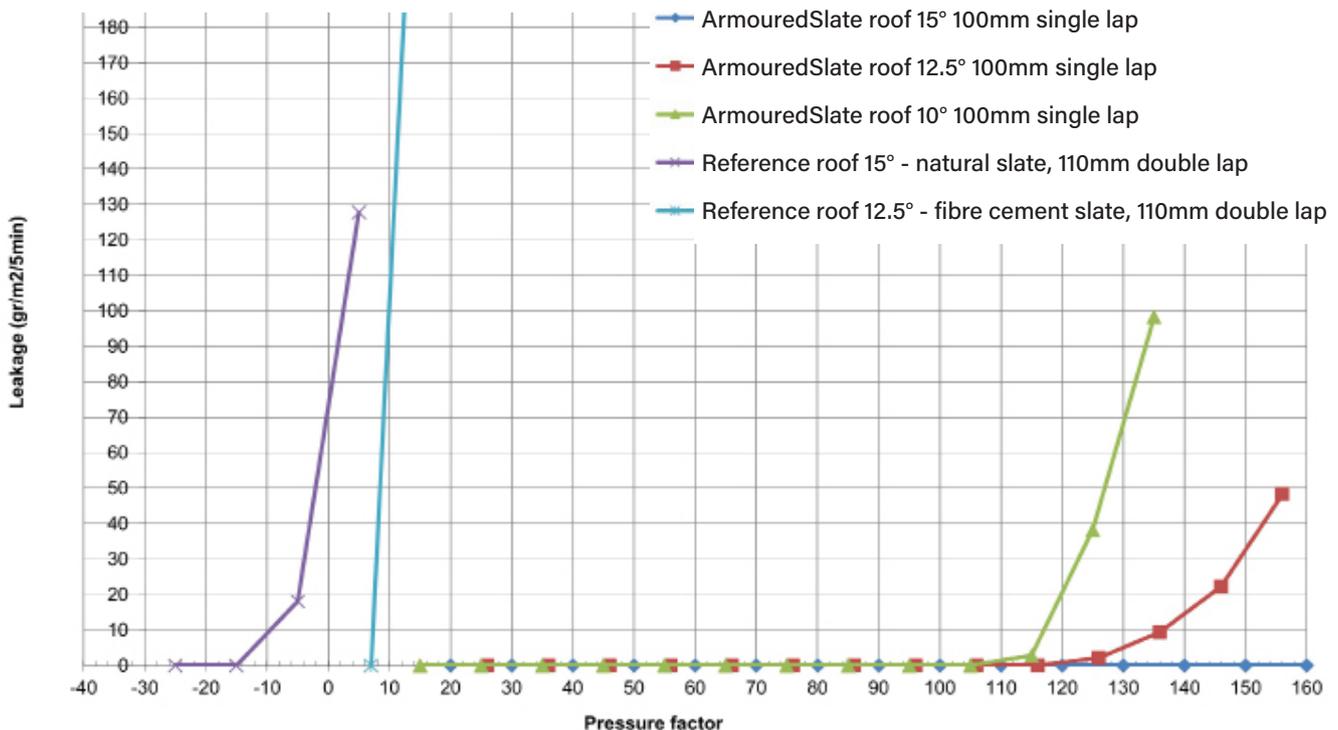


The Mayan ArmouredSlate roofing system dramatically improves the overall performance of a natural slate roof. Our system is watertight and durable down to 10 degrees.

The ArmouredSlate system was tested against extreme weather conditions (maximum rainfall and high rainfall with high wind speed) at various roof pitches to establish the performance.

The graph below shows the difference in leakage between the ArmouredSlate roof measured at 15°, 12.5° and 10°, which dramatically outperforms a standard slate roof and fibre cement roof when installed at low pitches.

Leakage factors of the ArmouredSlate roof vs a standard slate roof at various pitches.



The BRE wrote a case study about our impressive testing results - read it here!

<https://www.bregroup.com/case-studies/mayan-roofing-boosts-product-confidence-with-comprehensive-bre-testing>

Finish in style

with



Angles available: 75°, 90°, 105°, 120°, 135°, 150°

All-in-one

Slate ridge



Block end



Hip end



Overlap

Slate ridge



Block end



Hip end



Ridge cap



Classic

Slate ridge



Block end



Hip end



PRODUCT SPECIFICATION

ArmouredSlate Tiles - Slate tile unit pre-bonded to UV stable GRP preformed sheeting

Slate:	Variety of slate sizes and colours
Colour (GRP):	Blue grey RAL 7015
Length:	as slate length
Thickness:	1mm
Finish:	Matt finish
Resistance:	Resistant to infestation and degradation

Armoured Tape - EDPM adhesive foam tape

Colour:	Black
Size:	2mm x 20mm

Pre-applied to ArmouredSlate component

FIXINGS

SlateFix Screws - A4 Stainless steel screw

For a secure double fixing at the head of the slate.

Stainless steel A4 wafer head T20 cleat screw.

Size:	4.9 x 24mm
Material:	Grade 316 stainless steel



ANCILLARIES

ArmouredFlashing - Aluminium sheet on self-adhesive butyl

Roll size:	250mm wide 6m long rolls
Thickness:	1.77mm

ARMOURIED SLATE

Find out more about our full range of products:

 REAL Verge

 REAL RIDGE

The patented ArmouredSlate Roofing system has been designed by:

Roofing, reinvented.

MAYAN
ROOFING SYSTEMS

See our website for fitting guides, technical data sheets and all other information for ArmouredSlate and RealRidge. Please get in touch for any technical enquires.

➔ www.mayanroofingsystems.com/resources

Calculate your full roof material list

NEW Try our new online slate roofing quantity calculator - add your roof measurements to work out your roof planning data and full list of materials for your slate roof.

www.mayanroofingsystems.com