



ARMOURED STONE

*Modern, heritage
stone roofing.*

MAYAN
ROOFING SYSTEMS

*Picture shows an example of historical stone roofing.

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The ArmouredStone roofing system brings stone roofing up to date.

Stone is one of the oldest and most revered forms of roofing in the UK. Stone has been used for roofing throughout England for millennia, with a very strong traditional presence in the Cotswold's, Peak and Lake Districts, the Yorkshire Moors and many other areas around the UK.

The demand for a real stone roof is growing although the traditional methods of installing a stone roof mean that they are heavy, and our testing has shown that they allow water ingress at lower pitches and therefore should not be installed on roofs below 35°. The traditional installation of stone is highly skilled and expensive.

Real stone offers a visually stunning roof that cannot be matched for its long life or appearance. The ArmouredStone system can be used with either real sandstone or reclaimed natural stone and offers a better performing and more aesthetically pleasing alternative to concrete.

The ArmouredStone roofing system can be used with new or re-claimed stone.



This image shows how seamlessly our 'ArmouredStone new' system integrates with 100 year old re-claimed stone using our 'ArmouredStone Reclaimed' system.



Our system uses

43% less stone
compared to traditional stone roofing

No need for a Structural Roof

43% lighter means ArmouredStone does not need a reinforced roof.

At only 67kg/m² the ArmouredStone roof is similar in weight to a clay plain tiled roof.

This provides huge savings on drawings and expensive calculations, extra timber and steel beams as well as labour, potentially saving thousands of pounds.

Quick and easy to install

The ArmouredStone system comes complete with a mounting rail pre-installed into our natural stone slates, that allows them to simply hook over the batten.

The single lap use of 43% less stone means there is no longer any need for huge and heavy, back breaking stone that is difficult to move and install. Our smaller stone slates are much lighter, easier and safer for roofers to handle.

ArmouredStone is now as quick and easy to install as roofing tiles, with improved performance.

Low Pitch Stone Roofing

The ArmouredStone system dramatically improves the performance of a stone roof and allows very low pitches to be achieved. Low pitch stone roofing is now a solution for extensions and the commercial market, meaning there is no compromise on performance or the aesthetic appeal of a low pitch roof, which can be matched to the surrounding area or local buildings.

Low pitch provides cost savings on stone, batten and ply boarding.

Best BRE Performance

As low as
17.5°

We tested the ArmouredStone system under the BS PD CEN/TR 15601 standard and compared it to a traditionally installed double lap stone roof.

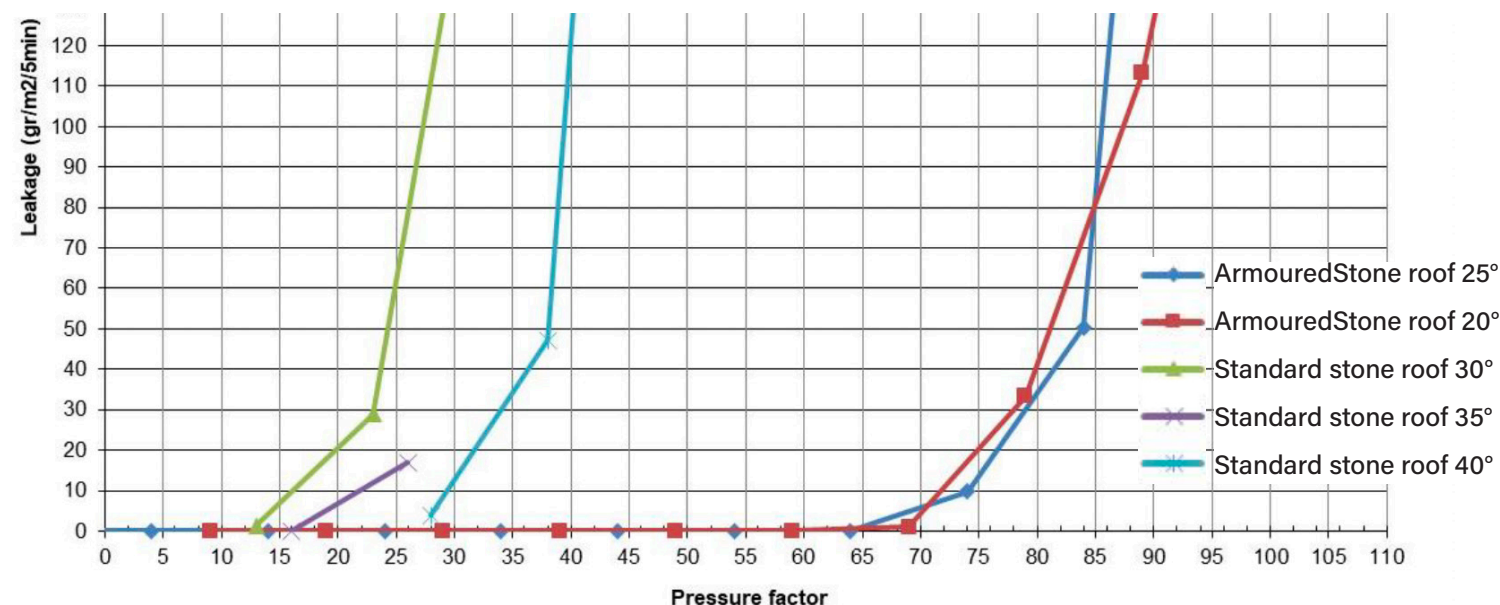
Traditional stone roofs only remain waterproof on a pitch above 35°, whereas the ArmouredStone system allows stone roofs to be installed, fully waterproofed, as low as 17.5°.

Our tests at the BRE have shown that the riven surface and gaps in traditional stone roofing means it performs very badly to wind driven rain and is open for improvement. It is essential that roofs perform to the requirements used in buildings must be durable and watertight.

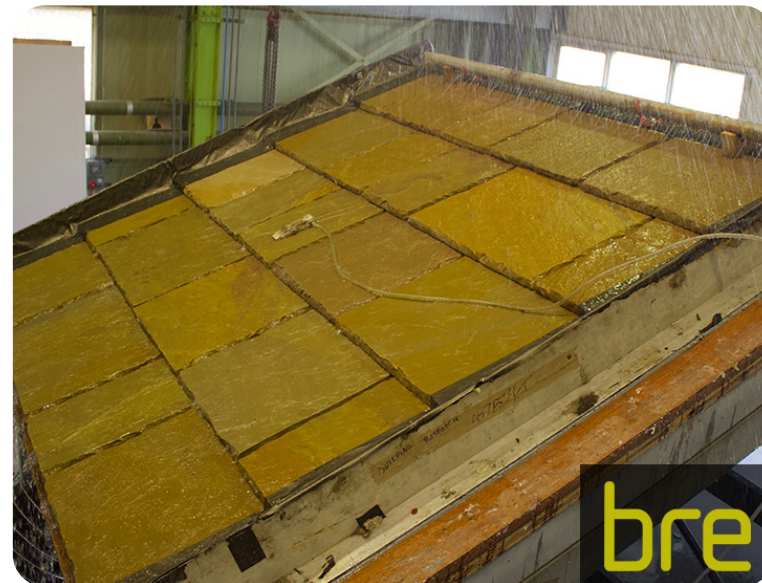
The ArmouredStone system was tested against extreme weather conditions (maximum rainfall and high rainfall with high wind speed) at various roof pitches to establish the performance.

The graph below shows the difference in leakage between the ArmouredStone roof measured at 20° and 25°, which dramatically outperforms a standard roof at 30°, 35°, and 40°.

Leakage factors of the ArmouredStone roof vs a standard stone 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>



The Mayan ArmouredStone roofing system dramatically improves the overall performance of a natural stone roof. Our system is watertight and durable down to 17.5 degrees.

Traditional appearance



An easy-to-use combination of 9 stone sizes creates the authentic appearance of the random and diminishing application.

Careful attention has been paid to ensure that the adjustments made to greatly simplify the installation method have not changed the overall appearance of the finished roof.

Every element of the system has been designed to allow for all aspects of the modern roof.

The full ArmouredStone roofing system is supplied by TrueStone, based in Yorkshire. It incorporates numerous colour options, either naturally occurring or enhanced, as well as bespoke colouring to suit your specific project.

The exciting colour range available is an extremely attractive prospect for specification and can be used to faithfully match the surrounding area, or as a real addition to the kerbside appeal that developers and home buyers are looking for.



Natural, high quality stone

This unique application of natural stone gives the appearance of a traditional stone roof with a unique authenticity and longer life that cannot be replicated using concrete alternatives. ArmouredStone meets the modern requirements of planners and building control.



HOW DOES IT WORK?

The ArmouredStone system utilises a specially formed, high performance GRP plate to replace the lower double lapped stone layers. It is positioned just below the stone slates to provide a resilient and completely waterproof layer, offering total protection against the very worst of the elements. This ingenious single lap system reduces the weight of the roof significantly, it removes the need for extremely expensive structural roof design and manufacture.



The heavy duty mounting rail is pre-installed into the stone slates, allowing them to be easily placed onto the curve of the ArmouredStone in our single lap format.

This improves the installation time as well as saving 43% of the amount of stone that is normally required.

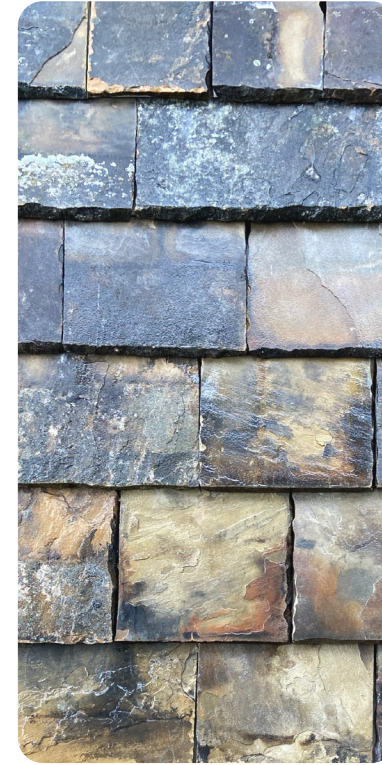
Indistinguishable from a traditionally laid stone roof. ArmouredStone is accurately colour matched to the stone, making it inconspicuous and blend discreetly into the roof on the roof.



Highly durable EDPM tape is used on the underside of the lower edge of the ArmouredStone plate to prevent water creeping up the roof by capillary action. The BRE testing has proven its excellent performance.

A high performance, factory fitted adhesive tape ensures a watertight seal where the ArmouredStone plates overlap.

RECLAIMED



The versatile ArmouredStone can be used with recycled stone to provide high performance at low pitch, that is indistinguishable from a traditional stone roof. The reclaimed ArmouredStone system uses the same principles as the new stone application, to ensure long life, high performance and ease of installation. Using ArmouredStone Reclaimed ensures the stone roof will instantly blend into the surrounding area with modern performance to last for decades. Reclaimed stone slates can be purchased pre-cut in the easy-to-install combination of 4 stone lengths.

The reclaimed stone solution also means re-roofs can be completed without the need to re-source and match stone slates. The roof can be stripped and re-laid recycling the stone and using the ArmouredStone system, which requires 43% less stone.

StoneFix

Using our extensive roofing experience, we work closely with the best stainless steel screw manufacturers to produce the perfect screw for the ArmouredStone Reclaimed system.

VERSATILE

The versatile ArmouredStone system can be used with calibrated stone slates for a stunning modern look, or with reclaimed stone slabs to provide a cost effective, lightweight, traditional stone roofing solution.

Our stone can be aged in a variety of shades to replicate the appearance of a long standing heritage roof.



PRODUCT DATA SPECIFICATION

Stone Slates

The natural stone slates are available in 3 widths and 3 lengths for new stone and 4 lengths (varied widths) for reclaimed stone. New stone is available in a large variety of colours or bespoke to suit site or customer requirements.

	New Stone	Reclaimed Stone
Sizes (width x length) :	300/450/600 x 480mm (12"/18"/24" x 19") 300/450/600 x 430mm (12"/18"/24" x 17") 300/450/600 x 380mm (12"/18"/24" x 15")	Stone lengths: 370/420/470/570mm (14.5"/16.5"/18.5"/ 22.5") Varied widths
Thickness:	22mm	Varying thickness
Weight of ArmouredStone system	70 kg/m ² (average) for the full system	Vary due to thickness

ArmouredStone- UV stable GRP preformed sheeting



Colour:	Grey beige RAL 1019
Length:	1500mm
Hanging lengths available:	15" / 17" / 19" / (23" - for reclaimed only)
Thickness:	1mm
Weight:	2kg/m
Finish:	Matt finish
Resistance:	Resistant to infestation and degradation
Fire rating:	SAB, Class 3 to BS476 parts 3 & 7

RealRidge Stone- Natural stone ridge and hip system



Colour:	Various - natural stone
Cover length x ridge length	200mm x 750mm (Overall width varies according to angle)
Thickness:	22mm
Weight:	19.8 kg (average)
Vent:	5mm continuous
Angles:	90° ; 105° ; 120° ; 135°

ArmouredFlashing- Aluminium sheet on self-adhesive butyl

Roll size:	250mm wide x 6m long roll
Thickness:	1.77mm

StoneFix Screws- Stainless steel screw for reclaimed stone



Size:	4.8 x 38mm 4.8 x 50mm 4.8 x 60mm
Type:	Low profile, TX20 drive, pan head, A2 stainless steel

*Full technical data sheets are available at www.mayanroofingsystems.com

The ArmouredStone system is supplied by:



www.truestoneroofing.com

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