

# ARMOURED STONE

**Lightweight**

**Natural Stone**

**Low pitch**

**Easy, simple and  
fast installation**

**Fire-rated**

**Cost effective**

- Natural Stone down to 17.5°
  - BS EN 13501-5 B<sub>ROOF</sub> (t4)
- BRE weather tested - high performance

[www.mayanroofingsystems.com](http://www.mayanroofingsystems.com)

# Modern, Heritage Stone Roofing.

Stone roofing is one of the oldest and most respected roofing traditions in the UK. For centuries, natural stone has been used across England, with a strong heritage in the Cotswolds, the Peak District, Yorkshire Moors, the Lake District, as well as locally in Dorset and many other regions.

Today, demand for authentic stone roofs continues to grow. However, traditional methods of installation have limitations: they create heavy roofs, require highly skilled (and costly) craftsmanship, and testing has shown they can allow water ingress at lower pitches. As a result, conventional stone roofs are not recommended for pitches below 35°.

Despite these challenges, real stone remains unmatched for its timeless beauty and exceptional lifespan. The Mayan ArmouredStone system preserves this heritage while overcoming the drawbacks. Using the same natural stone installed on premium, skilled builds and re-roofs throughout the UK, we deliver the authentic look of traditional roofing in a lighter, easier-to-install, higher-performing and more cost-effective system—an elegant and natural alternative to concrete.



## PRODUCT INFORMATION

The Armoured Stone roofing system comes complete as a kit, comprising of 3 widths and one consistent length, with fixing screws included.

The 1m<sup>2</sup> roofing packs provide just under 1m<sup>2</sup> (between 945mm<sup>2</sup> - 999mm<sup>2</sup>). We recommend adding an overage to ensure you have sufficient coverage based on your m<sup>2</sup> :

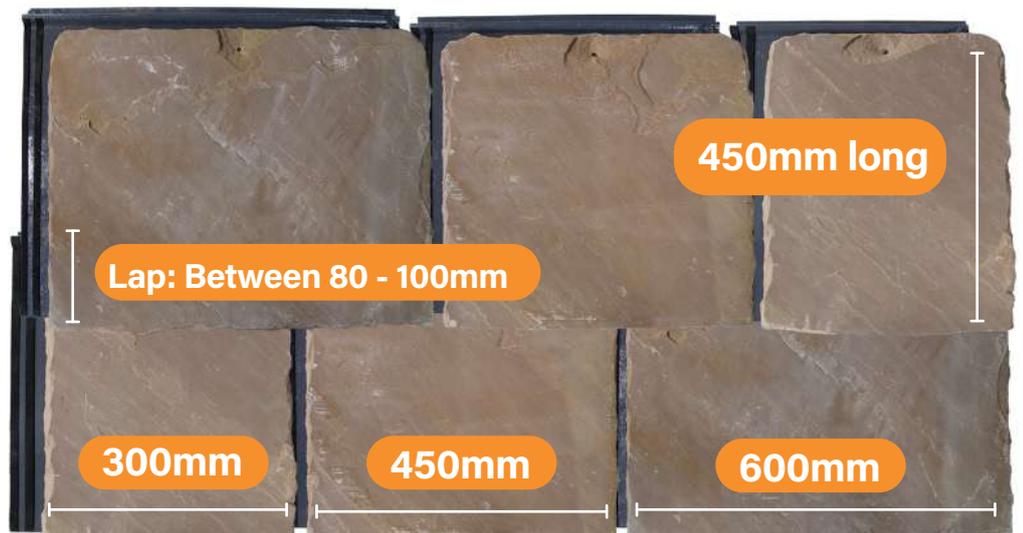
**Above 30 degrees pitch:** 80mm minimum lap / 370mm gauge - ADD 5% more stone

**Below 30 degrees pitch:** 100mm minimum lap / 350mm gauge - ADD 10% more stone

ArmouredStone has an adjustable gauge and the various sizes can be installed in random combinations or however required. **The adjustable gauge allows for easy setting out and makes it simple to achieve a diminishing appearance.**

### 1m<sup>2</sup> Roofing Pack

W: 300mm x 2  
450mm x 2  
600mm x 2  
H: 450mm



# Lightweight Natural Stone Roofing

Our single lap  
system uses

**48%**  
Less stone

## No need for a Structural Roof

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

At only 67kg/m<sup>2</sup> 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.

## Highly cost effective

ArmouredStone makes natural stone roofing viable on projects where it was previously impossible due to pitch, weight, or cost.

1/3 of the price of traditional stone roofing, plus:

- Significant labour saving
- Increased performance benefits

## Low Pitch Stone Roofing

The ArmouredStone system significantly enhances 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.

As low as

**17.5°**



# Perfect for: Extension roofs Heritage roof replacements Beautiful new homes

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 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.



## 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.

# HOW DOES IT WORK?



ArmouredStone tiles are manufactured from natural stone that is permanently bonded to our specially designed, high performance patented GRP plate, to form a ready-to-install stone tile. We have simplified the process of stone roofing with our easy to install system, consisting of three widths with an adjustable gauge.

**Fire-rated GRP plate** provides a resilient and completely waterproof layer beneath the stone slates. Extending across each side lap, the lower plate replaces the need for double lapping the stone, offering total protection against the very worst of the elements. GRP has a proven life in excess of 40 years.

**Unique upper curve** prevents wind driven rain and capillary driven moisture from tracking over the head of the stone courses. The lower 'S' curve then adds a second barrier, preventing any moisture from penetrating through to the roof.

**Secondary weather seal system** - highly durable EPDM tape pre-installed at each side-lap. Tape on the underside creates a flush seal to the next slate, further preventing water ingress through capillary action.

Our BRE testing has proven its excellent performance.



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

**StoneFix**



# Fire Rated

Achieves

$B_{ROOF}(t4)$  classification

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

$B_{ROOF}(t4)$  enables use right up to the boundary. Subject to project-specific requirements.

The ArmouredSlate system was recently tested at the British Research Establishment 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.

## Traditional appearance



The above image shows how seamlessly our ArmouredStone system integrates with 100 year old reclaimed stone. Our new stone weathers into the roof in no time, or you can request colouring.

# 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 modern building requirements and are durable and watertight.

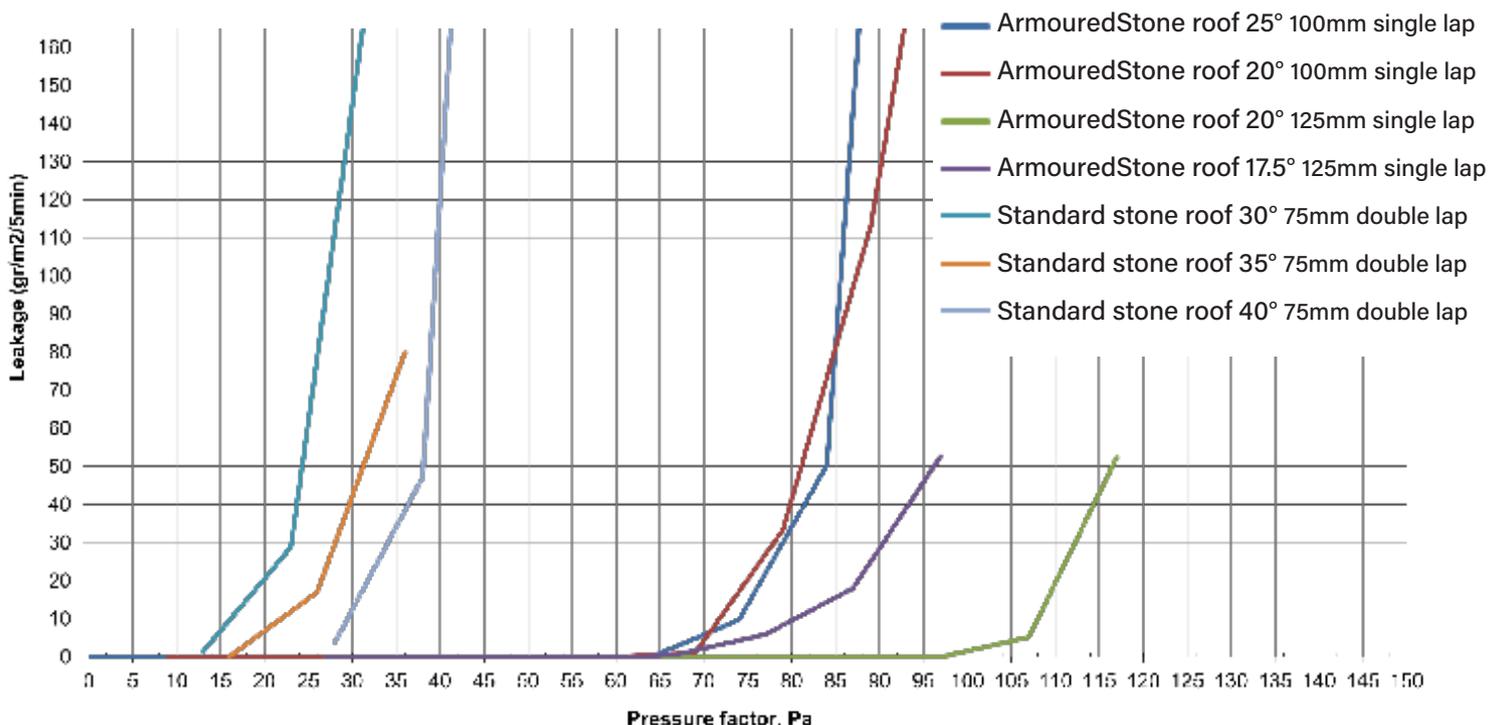
The ArmouredStone system was tested against extreme weather conditions (maximum rainfall and high rainfall with high wind speed) at various roof pitches to establish the performance.

The graph below shows the difference in leakage between the ArmouredStone roof measured at 25°, 20° and 17.5°, which dramatically outperforms a standard reference stone roof at 30°, 35°, and 40°.



**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.**

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>

# ARMOUR STONE

Matching stone ridge

Find out more about our other products:

## REAL RIDGE®



### Dry Stone Ridge system

Natural Stone bonded angled ridge, with our built-in ridge connector and ventilation. To be installed quickly and easily.  
750mm long.  
200mm wings.



### Classic Ridge system

Classic matching angled ridge for traditional bedding.  
750mm long.  
200mm wings.

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