

Riverstone Phyllite product information

Background

SSQ owns and operates the Riverstone quarry in La Represa, deep in central Argentina, situated between the Pampas and the Andes mountain range.

It is the only source of this type of its kind locally, and there are only a few sources of phyllite stone available worldwide.

Riverstone natural phyllite has a slightly coarser grain and a unique satin-like luster, making it the choice of the most discriminating architects across the world.

SSQ has been supplying the Riverstone product for the global slate and phyllite market for over 20 years.

A geologist's perspective

In order for SSQ to demonstrate the quality of the Riverstone slate, an independent geologist was commissioned to perform a comparison between the Riverstone, Ultra grade, slate, and its closest indigenous equivalent - Delabole slate.

A [summary](#) of his findings established that both slates are similar aesthetically, and that technically the Riverstone can be considered to be stronger and provide better longevity as a roof covering material.

Riverstone is technically speaking a “phyllite” slate formed within a *precambrian* rock sequence between 560-640 million years old.

Phyllite marks a culmination – it is what happens when the geological forces that form slate are permitted to continue. With each step – from sediment to shale, shale to slate and slate to phyllite slate – the stone becomes harder, denser and stronger.

This extra length of time in the ground has evolved the original slate structure in such a way that that its technical credentials – in particular water absorption and durability – are second to none.

Moreover, the prolonged heat and pressure exposure as well as sustained metamorphosis has allowed it to develop a distinct phyllitic sheen (the mica content on the surface in particular is quite pronounced), which is a key differentiating feature of the stone.



Life expectancy of Riverstone & the SSQ guarantee

The Riverstone slate has been tested to the ASTM C406 standard, and has achieved an S1 rating. An S1 rating means that the slate is likely to last for a minimum of 75 years.

On the basis of this result, and its performance on a suite of other tests, SSQ offers a lifetime 100- year guarantee covering fitness for purpose as a roof covering material, as well as aesthetic deterioration (namely discolouration).

There are several historic examples of roofs local to the production facility affirming the results of these tests, and its predicted life span.

References in the UK

Riverstone has a track record of proven performance with the first roof in the UK installed over 25 years ago. Many of the buildings where the slate has been used are grade II, or lie in conservation areas.

A reference list highlighting some of the more notable projects can be found on this [link](#) or as part of the information pack enclosed.

Analysis of iron oxides

As per the British Standard (BS EN 12326), the thermal cycle test is used to determine the reactivity of visible iron oxides (commonly referred to as pyrites within industry circles).

The Riverstone achieves a “T1” classification, and based on this classification, these iron oxides (wherever present) are unlikely to react and leach down the slates.

In any event, the occurrence of these pyrites is minimal in this slate, and based on the performance on this test, and a history of use in the UK environment, our lifetime 100 year guarantee covers discoloration and the leaching of pyrites down the slates.

We believe this guarantee to be the most comprehensive in the industry.

For more information on iron oxide and general pyrites, please refer to one of our newsletters available on this [link](#) or as part of the enclosed information pack.



Summary

Riverstone is a product which has not suffered a recorded failure, since it was first introduced to the UK market 20 years ago.

Harder, denser and stronger than slate, phyllite is a perfect stone for any design challenge or artistic feature. Its fitness for purpose is proved by its test results, and we are happy to bear all the risk and guarantee your Riverstone roof for 100 years.

With only a handful of sources known worldwide, commercially accessible phyllite stone is rare. Riverstone is one of very few top quality phyllite slates available.

Riverstone's medium grey colour with the slightest hint of green will make your roof as breath taking as it is rare.

Its quality and exclusivity explains why it is used in the most prestigious projects, not just in the UK, but worldwide.

If you are looking for the absolute best – that something special for your roofing, cladding or architectural project – then you won't go wrong by choosing Riverstone.

Appendix

For your convenience, below is a list of documents ([download here](#)) referenced in the synopsis above:

- CE and ASTM certification
- Geological comparison against Cornish indigenous slate
- 100 year guarantee specimen
- Reference list of projects
- Geology report for the quarry
- SSQ Company brochure
- SSQ Riverstone brochure
- Newsletter on iron oxides

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