

# Frequently asked questions

## What is quarry sap?

Quarry sap is the moisture that can be found in stone that is newly quarried. Quarry sap generally takes between 12 months to 3 years to dry out. Once this has dried out, limestone is at its hardest and most weather resilient.

## How do I store my limestone during winter?

Stone is very susceptible to weather damage until it's laid. If your stone is being delivered during the colder months please ensure it is protected from the weather during storage. A minimum of two layers of insulating material covered by strong polythene or tarpaulin should be used. This will protect it from freezing weathers and frosts, and keep water out.

Part-built walls should be covered with at least two layers of heavy sacking material and an outer layer of robust polythene or tarpaulin so that water doesn't get in.

## How much wastage should I allow for when placing an order?

An additional 10% of the area/areas should be sufficient, but do feel free to ask us for advice.

## Do I need to protect my stone from rising damp?

Where limestone is laid on the ground, for example, as garden step rises, you will need to use a plastic membrane to protect the stones from rising damp. Please see our 'Working with Limestone - Good Building Practice' for further information.

## What sort of mortar to do I use with natural stone?

All stone absorbs a certain amount of moisture in wet weather, and in order to dry out again it must be able to breath freely through the mass in every direction. Unless this can happen some types of stone will fail, and can be adversely affected. Very hard non-porous joints impede this aeration and are therefore wrong.

A good working mixture for most purposes is ten parts of clean sand to two or three parts lime, beaten up with water, with the addition of no more than one part ordinary Portland cement.

The object of adding more cement is to help the mortar to harden, and no more should be added than is sufficient to make sure of that, nor should any be added until just before the mixture is going to be used.

On exposed sites and with harder stones, a slightly harder proportion of cement is sometimes acceptable. For historic buildings on the other hand, Portland cement is never right and is no longer used by the department of the environment. *Source: 'English stone building' (Alec Clifton Taylor & A.S Ireson)*

**Hydraulic Lime:** When re-pointing, alterations or repair of a historic building is required, it may be necessary to use hydraulic lime.

**Hydrated Lime:** Hydrated lime or 'air lime' is the type of lime most widely used as a component in mortars and renders. This is because it does not react with the water in the mix to form a 'set'. Instead, it reacts with carbon dioxide from the air in order to harden (carbonation).

**White Cement:** The use of white cement can be more aesthetically pleasing than grey cement. White cement, however, is around 33% stronger than grey which should be allowed for within the mortar mix.

*For further information on lime mortar please see [The Lime Mortar Guide](#) from Conserv.*

## Should I use chemical treatments?

Chemical treatments are widely available to help protect your limestone from the elements, which also allow the stone to breathe and prevents trapped moisture. Because stone is a natural material, please do seek specialist advice before you buy any manmade products. Cotswold Natural Stone will not accept any responsibility in circumstances where failure occurs due to the use of chemicals applied to our stone products.

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## How do I stop water saturation?

Most limestone stays structurally sound with one or two faces to the weather, so long as there are no other forces at work, such as rising damp or water soaking from the rear or above. The main reason for the failure of some limestone is water saturation due to poor building practice which, in turn, causes frost damage.

A common cause is the hard landscaping of the adjacent ground surface. A drainage gap should be provided for rainwater to drain. Where this is not possible, for example where you have steps, a 'fall away' from the stone face is essential.

Stone failure due to water saturation can also be caused by an insufficient coping stone. Copings require a sufficient overhang (minimum 50mm), and drip grooves, to help stop rainwater penetrating the stone.

## Can I use your flooring with underfloor heating?

Stone is a fantastic conductor of heat. For this reason, around 90% of our flooring products can be used with under floor heating.

## How often should I reseal a limestone floor?

If sealed correctly when laid and maintained according to our guidelines, your floor should not need resealing for around 3 years or more, however this will depend on the amount of traffic and the products you use.

*Please see our guides 'Working with Limestone – Good Building Practice' and 'Caring for your limestone' for further information.*