

# **A GUIDE TO INSTALLING NATURAL STONE PAVING**



## WHAT YOU'LL NEED

### TOOLS

- Mixer
- Vibrating Plate
- Drill and Mixing Paddle
- Wheelbarrow
- Powered Cut Off Saw
- Diamond Cutting Blade
- Shovel
- Rake
- Trowel
- Rubber Mallet
- String Line
- Spirit Level
- Broom & Brush
- Pointing Iron or Grouting Tool
- Bucket/s
- Sponge
- Tape Measure
- Pegs
- Wide Paint Brush
- Facemask (FFP3), Gloves, Ear & Eye Protection and Protective Footwear

### MATERIALS

- MOT Type 1 (General Sub-Base) Stone
- Sharp Sand\*
- Cement
- Pavestone Priming Slurry
- Jointing Compound

### BEFORE STARTING

Once your paving has been delivered to site, check it thoroughly for any breakages. Any damaged slabs should be put to one side as these can be used later for 'in fill' cuts.

Make sure you are happy with the colours before you start laying. If possible, roughly lay a few of the slabs where your proposed patio will be. This will also make it easier to check for any damages.

*\* Sand varies across the UK. Ask your local builders merchant for the type they recommend.*

### DIGGING OUT

First mark out the area to be excavated using string lines and pegs and allowing for a 150-200mm margin for edging or haunching should the patio edge not adjoin a solid construction i.e. house or garden wall.

You will need to dig out a total depth of at least 160mm below the proposed patio height to facilitate: 100mm (minimum) of compacted MOT Type 1 (General Sub-Base) material, 40mm (minimum) of bedding mortar and the thickness of the natural stone paving, which is generally around 20mm. Dig out more, if your paving choice is thicker.

Building Regulations stipulate that the paving surface must also be at least 150mm below any damp-proof course (DPC) so as to protect your property from damp. Your patio will also need to have a fall, to facilitate water drainage, of circa 15mm for every 1000mm. Set up a string line along the edge of the area to ensure that the whole project has the correct falls.

### SUB-BASE

A MOT Type 1 (General Sub-Base) aggregate is required to give foundation strength and stability to your patio. Rake out the aggregate to create an even layer roughly 30mm below the string line. Using a vibrating plate compactor, consolidate the aggregate to a compressed height of 60mm below the string line.

### BEDDING MORTAR

Using a mixer, make your bedding mortar using 5 parts of Sharp Sand\* to 1 part of Cement. The mortar be a smooth consistency, able to hold its own shape. Not dry/crumblly and not wet/runny.

Spread enough mortar to allow some of the bed to blend into the bed of the next slab. This ensures that the beds will knit or tie into each other.



# PAVESTONE

## A GUIDE TO INSTALLING NATURAL STONE

### BEDDING MORTAR (continued)

Using a shovel or trowel, apply the mortar to the sub-base, levelling it out to about 15mm below the string line. Ripple or roughen up the surface of the bed to allow for compression of the paving tile during final placing and only spread enough mortar for one flag at a time. The bed must be full with no voids.

### PRIMING THE PAVING

Some types of natural stone have a low water absorption value. This means, the slab draws little moisture from the bedding mortar and will not form a strong, sustainable bond. In order to create a good bond, we recommend that each slab is primed with a priming slurry.



Use Pavestone Priming Slurry to ensure a good adhesion between the paving and the mortar. The Primer is powder-based and only requires water to easily make a slurry paste. Mix to the consistency of a thick soup.

The slurry primer paste is then applied to the underside of the paving using a wide brush until an even coat is achieved, just before placing the slab onto the bedding mortar. Ensure that the primer covers all of the slab, going right up to the edges.

### LAYING THE PAVING

Gently tamp down the 'wet primed' natural stone paving onto the mortar bed using the rubber mallet. Adjustment will be necessary to ensure that the paving is fully supported, does not rock or move and use a straight edge with a spirit level repeatedly to check that each slab achieves the desired level and fall as per the string line.

Immediately wipe off any slurry primer that may have unintentionally found itself on the face of any of the paving as you will not be able to remove this once it has set.

When laying more than one pack of paving, lay slabs from different packs to eliminate colour banding and to obtain the best colour blend.

Maintain a regular joint width between the slabs. **NEVER** butt joint the paving. *(Please check the recommended joint width of your chosen paving)*

Do not walk on the paving for at least 24 hours.

### CUTTING

Pavestone products come in a variety of shapes and sizes alleviating the amount of cutting required. However, if your project does involve a lot of cutting, we advise the hire of a powered cutting tool with a diamond tipped blade (advise the hire shop of what you are intending to cut, and ensure that a suitable diamond tipped blade is selected).

This will ensure clean and accurate cuts. Make sure that the hire shop issues you with full instructions and relevant safety equipment including goggles, ear protection and a dust mask (FFP3 standard).



# PAVESTONE

## A GUIDE TO INSTALLING NATURAL STONE

### JOINTING

Joints should then be pointed as soon as possible unless rain or snow is forecast.

Joints can be pointed using a wet (but not sloppy) cement mortar mix providing a permanent waterproof finish.

Never leave un-pointed for more than a few days.

Do not mix the mortar too wet and ensure any spillage is immediately removed with a clean damp cloth or sponge.

You must not attempt to brush the mix across the surfaces of the slabs as any cement left on the slab can result in unsightly staining. If this does occur, small stains may be removed using Pavestone Cement & Grout Residue Remover, however large areas could mean a complete renewal of products.

Compact joints using a special jointing tool (available from builder's merchants) or with a suitably rounded piece of wood, to just below the adjoining paving surface.



Alternatively, to create quick and professional looking joints with a good bond, use Pavestone Pointfix. A superior epoxy jointing and repair compound for fast jointing of sandstone paving.

1 x 12kg tub will point up to 7.5m<sup>2</sup> of paving.

For full coverage information please visit [www.pavestone.co.uk/installation/jointing-compounds/pointfix-jointing-compound/](http://www.pavestone.co.uk/installation/jointing-compounds/pointfix-jointing-compound/)

### Available in 5 colours



MUSHROOM BUFF BROWN GREY BLACK



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**PLEASE NOTE:** this is a simple guide to installing a Pavestone natural stone patio and should be used solely for guidance. The internet is a good source for this research and in particular there are several YouTube videos that demonstrate good practice and the website [www.pavingexpert.com](http://www.pavingexpert.com) also offers good advice and instruction.

### SEALING

You may wish to seal your patio when completed. Sealing with Pavestone Natural Finish Stone Sealer protects all types of natural stone and has minimal change to the original character of the stone. However, if you want to enhance the colours in the paving use Pavestone Colour Enhancing Stone Sealer. This will deepen the colour and will also intensify the beautiful, individual characteristics of the natural stone.

Ensure the paving is thoroughly cleaned and dry before sealing. We recommend using Pavestone Patio Cleaner, which conditions the paving and opens up the pores in the stone, to help facilitate the sealer.

Before you start sealing, always test in a small inconspicuous area prior to general use.

