

BESWICK STONE

CIRENCESTER

EXTERNAL PORCELAIN INSTALLATION – information on our outdoor porcelain pavers and best practices.

Outdoor porcelain installation will likely fall into 2 main types:

- Standard patio base which is made up of MOT TYPE 1 or similar (this is a loose, hardcore material that gets compacted to 100mm for patio installs)
- Concrete base / cement screed – often used when levels need to be exact

Installing onto MOT:

- All our porcelain outdoor pavers can be installed onto an MOT base using a normal GREY cement & sharp sand wet mortar mix 40mm thick – 1 part cement to 5 parts sand.
- SBR (Styrene Butadiene Rubber) can be added into the sand & cement mortar mix to give the mix more flexibility, adhesive strength, water resistance and resistance to freezing when installing onto MOT. The only drawback with SBR is that it reduces the working time for the mortar to around 10-15 minutes, so it needs to be used quickly. 200ml per kg of cement or 5litres per 25kg bag.
- Apply a coat of slurry primer to the back of every slab, right to the edges, before laying immediately e.g. Pavestones' 'Priming Slurry'.
- For large format porcelain pavers, levelling clips are strongly recommended to ensure a level finish between each paver and across the whole patio.
- Treat each paver before & after grouting with a good quality porcelain pre-grout protector to protect the pavers against staining from cement, grout, jointing material and organic matter.

Installing onto concrete base / cement screed:

- All our porcelain outdoor pavers can be installed onto a concrete or screed base using an external grade S1 flexible GREY tile adhesive - maximum adhesive bed of 20mm.
- Apply a thin coat of the tile adhesive to the back of each paver – AKA buttering the tile – to prime the back before laying immediately. Cover the paver right up to the edges.
- For large format porcelain pavers, levelling clips are strongly recommended to ensure a level finish between each paver and across the whole patio.
- Treat each paver before & after grouting with a good quality porcelain pre-grout protector to protect the pavers against staining from cement, grout, jointing material and organic matter.

Finished Patio Height:

It is best practice that the finish height of the patio is well below the damp proof course (DPC) of the property. This should be at least 2bricks or 150mm below the DPC. Therefore, you need to calculate the total overall combined thickness of the sub-base, mortar/adhesive and the stone paver to work out the total depth of excavation. For a 20mm thick paver on MOT for example you have 100mm of MOT base, 40mm of fixing mortar and the 20mm paver making a total of 160mm to excavate.

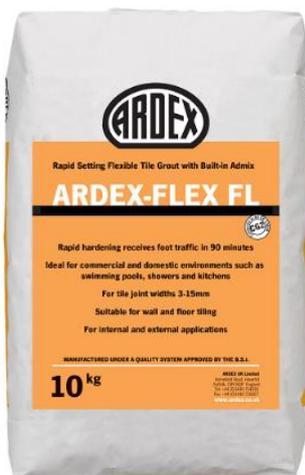
It is also best practice to install a 'fall' onto any outdoor patio. A fall is when the sub-base is installed with a gentle gradient sloping away from the property to prevent standing water. The industry standard ratio for the fall is 1:80 (for a textured paver) and 1:60 for a non-textured paver however, this could differ depending on your project.

Grouting & Pointing:

There are various options for grouting or pointing outdoor porcelain pavers.

Mortar:

Mortar Pointing is the traditional way of pointing patios when installed on an MOT base. On porcelain however, joints are often narrow (3-5mm is quite common), making traditional mortar pointing quite a hassle. We would therefore recommend using an exterior grade flexible, anti-mould grout or a jointing compound.



Grout:

Our Ardex FL grout (for joints from 3mm to 15mm wide) can be used on either installation method. A grout calculator can be found on the Ardex.co.uk website to assist you in determining quantity required. Available in an array of colours, the most popular ones for our paler outdoor porcelain pavers include Natural Almond & Floating Driftwood, for our darker pavers Dove Grey & Cast Iron are often favoured.

Our Rocatex Ultimate Eco grout (for joints 1mm to 20mm wide) can also be used on either installation method. This grout offers a range of colours very popular for external porcelain pavers. The Limestone colour is often the favoured choice for many of our outdoor porcelains.



Jointing Compounds:

Many landscapers are now using brush-in jointing compounds that are very quick to use which is great for large areas and economy. Pavestone produce a product called Pointfix often available at builders' merchants and Toolstation stock a range made by Sika in various colours. Both products have been recommended to us by installers who have used them though we have no direct experience of use.

Pre-Grout Porcelain Protection:

For the absolute best performance of your outdoor porcelain, it should be treated before & after grouting with a good quality protector that will protect the pavers against staining from cement, grout, jointing material and organic matter. (A further coat is recommended after grouting to give the porcelain the best possible protection.) We recommend Rocatex Pre Grout Porcelain Tile Protector and a full technical data sheet on this product can be downloaded in PDF form from each of our external porcelain product pages on our website.

