

EXTERIOR INSTALLATION

Please note these are very general guidelines and not definitive instructions. The issuer of these guidelines cannot be held responsible for installation. It is always recommended that a qualified and professional tiler should take responsibility for the installation of all stone and tile products. We recommend that your installer has adequate understanding of how to install our artisanal materials to ensure the best results.

These are brief guidelines for working with natural stones and man-made paving. This general guidance does not imply any guarantee by Ca' Pietra.

We always recommend that a qualified and professional installer should take responsibility for the specification and installation of all stone and tile products.

Current and appropriate industry standards and codes of practice should be observed in all instances. However, if you do decide to install the stone or tiles yourself, we strongly recommend that you do plenty of research into materials and methods, and seek the best advice on how to carry out the installation.

On receipt of your order

When you receive your order, check that you have all of your tiles and that they are in good condition as any discrepancies cannot be resolved after installation.

When you take delivery of your order

Check that you have all your slabs and that they're in good condition. Remember, with natural or handcrafted products there will always be some variations in colour tone, veining, surface texture and natural characteristics.

Tip: Keep the tiles on a level, stable surface, stored vertically to avoid any risk of cracking.

Before you install

Tips:

- Wipe both sides of the tile clean with a sponge and clean water before installation to remove dust. This will ensure good adhesion.
- Don't install slabs in freezing or cold conditions.
- Give yourself a dry run by laying your slabs or tiles as they will eventually be laid. This enables you to check you have the correct number and size of slabs and colour blending.

- When installing a flagstone, it is important to ensure it is laid the right way up (one way to identify the top, is to look at the sides of the slab – which usually taper inwards, so that the top is slightly wider than the underside). If in doubt it's always best to ask a stone expert.
- With natural stones, randomly select and mix tiles from the different boxes or crates you receive to ensure a tonal blend across the entirety of the new surface and avoid any colour banding.

General preparation

The golden rule is: tiles must always be 'solid bedded' – in other words, avoid any cavities underneath the material.

The bed should support the full slab, not just the corners or in dots/dabs. Do not 'spot' bed as this can cause 'through bed staining' and will weaken the integrity of the paving. (Please note that precise standards, falls, bed thicknesses and other specifications may vary dependent on the actual application. You should always refer to appropriate and current standards and codes of practice.)

Cutting tiles

Tiles can be cut using a diamond tipped blade – ideally a water-cooled machine for the cleanest cutting. There are different blades for natural stone and for porcelain so it's important to have the correct one.

Levelling your tiles

Thin tiles (up to 1cm) should be levelled using hand pressure only. A rubber mallet hammer can be used for thicker, more robust slabs.

Substrate preparation and installing the tiles

There are several different methods of installation for external paving.

The two most common methods are:

Option 1: If the external works are a continuation of the internal tiling – lay a structural concrete screed, to the appropriate current standards, with the required sub-base. Ensure that adequate falls, cross falls and intersections are accurately created in the screed to fine tolerances, for good levels of drainage. The tiles can then be installed using a flexible thick-bed floor tile adhesive (suitable for external use) following the same tiling standards as internal flooring.

A 10mm notched trowel will provide a 5mm finished adhesive-bed thickness. Leave 6mm wide expansion joints in accordance with current BSEN requirements and at changes of plane. You should fill these joints with exterior grade mastic, matched to the grout/joint colouration.

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Option 2: If you are laying external works as 'slab paving' rather than tiling – the appropriate sub-base should be laid and well compacted. For good stability this is usually an even 10cm-thick, compacted layer of type 1 granular aggregate (40mm to dust). For most domestic applications a sub-base of 10cm should be sufficient. However, the paving design must be based on ground conditions as well as type and frequency of anticipated loads.

As previously described, falls, cross-falls and intersections must be carefully formed. You should incorporate a minimum fall of 1.25% (1 in 80) and crossfall of 2.5% (1 in 40) in the sub-layer construction to provide adequate surface-water run-off. Use a ratio between 4:1 and 6:1 of sharp sand, cement and plasticiser (to BSEN requirements). Prepare a base of mortar beneath the slabs – normally around 30-50mm thick.

