

Technical Features

Our robust porcelain products are put through a series of rigorous tests to make sure they're everything we say they are. We offer sturdy, slip-resistant flooring products that are extremely difficult to damage, and we're determined to make good on that promise. With this in mind, here are the technical features of our porcelain paving:

Water Absorbtion Test (UNI EN ISO 10545/3)

The test requirement for water absorption is expressed as less than or equal to 0.5% our tiles and paving achieves a figure of 0.05%.

There is negligible water absorption with our porcelain which means that the dimensional stability, resistance to frost, resistance to temperature fluctuations and structural integrity of the material are not compromised by changes in moisture content.

Bending Strength Test (UNI EN ISO 10545/4)

Resistance to breaking under a constant load.

The test requirement for breaking strength states that a tile must withstand a force of at least 1300 Newtons (which is equivalent to 132.6Kg force). This is measured for the length of the tile on the centreline of the tile. Our tiles and paving achieves a breaking strength of 13671 Newtons (which is equivalent to 1394Kg force). Our tiles and paving's resistance to breaking under a constant pressure exceeds the ISO test requirements at least tenfold.

Impact Resistance Test (UNI EN ISO 0545/5)

This test is carried out on tiles fixed to a solid base with a resin adhesive, with a 19mm diameter chromed steel ball dropping from a height of 1m. Our tiles and paving achieves a rating of 0.73 in this test.

Static Loading Test (EN 12825)

This test is carried out on the material sitting on pedestals and is only applicable for raised paving. A 25mm steel cube is pressed onto the tile with an increasing force and the pressure at which the tile breaks is recorded. The test is repeated in three locations and the results for our tiles and paving are as follows:

Centre

6.4kN (which is equivalent to 652.6Kg force)

Centre point of edge

7.43kN (which is equivalent to 757.6Kg force)

Diagonal

4.14kN (which is equivalent to 422.2Kg force)

Deep Abrasion Resistance Test (UNI EN ISO 10545/6)

The ISO test data requires a value of less than or equal to 175mm³. Achieves a far better value of 139mm³.

Temperature

Our tiles and paving experiences negligible thermal expansion and hence is very dimensionally stable. Frost resistance is very closely related to water absorption and as such our tiles and paving is completely frost proof. In the thermal shock resistance testing our tiles and paving shows no visible sign of defects resulting from sudden extreme changes in temperature. Our tiles and paving is suitable for all external climate conditions.

Deep Abrasion Resistance Test (UNI EN ISO 10545/6)

Testing is carried out using a variety of chemicals including chemicals for household use and swimming pool additives. Our tiles and paving complies with the requirements of the testing as being resistant to chemical attack.

Stain Resistance

Because our material is non-porous all spillages remain on the surface and do not soak into the product. All spillages can simply be mopped up leaving no visible staining.

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Slip Resistance

PrimaPorcelain provides a wide range of finishes, from polished or smooth (best for interiors), through fine textured (for either indoors or out) to textured or grip (primarily for outside use) to comfortably accommodate any application you require.

Each product is awarded a GRIP FACTOR from 1 (low slip resistance) to 5 (best slip resistance). Our website, www.primaporcelain.co.uk, clearly states alongside each product its GRIP FACTOR to help you choose the right textured flooring for your project.

EXAMPLES: Polished tiles, with a GRIP FACTOR of 1, are ideal for indoors but should never be used outdoors, whereas PrimaPorcelain's 2cm paving range holds a minimum GRIP FACTOR of 4, with many rated 5, enabling regular use all the year around, whatever the weather.

For PrimaPorcelain products to be recommended for outdoor use, they must either be textured or have a GRIP coating applied to ensure good slip resistance.

This essential process produces a very slight variance in the shade of the porcelain between indoor tiling and outdoor paving, an effect minimised in situ by the impact of artificial and natural light as matching flooring moves from indoors to outside.

Fire

Our material Achieves Class A1 Fire Rating, and is completely resistant to fire and the surface spread of flame.