The major **difference between porcelain tile** and **ceramic tile is** how it's made. Both **tiles** are made from a clay mixture that's fired **in a** kiln, but **porcelain tile is** made from more refined clay and it's fired at higher temperatures. This makes it denser and more durable than **ceramic tile**.

Known as the most durable type of **tile** on the market, **porcelain** is harder, denser, tougher, and less porous than **ceramic tile**. It also has a very low absorption rate, meaning it's virtually impervious to water damage, even after prolonged exposure.

As tile enthusiasts, it is important to us to make sure we share our tile knowledge with you at home. There are many reasons why a certain tile will be more suited to one person's home or particular room than another. A specific question we often get asked surrounds the difference between porcelain and ceramic. Therefore, we are going to put them head to head for you today.

PORCELAIN VS CERAMIC

When choosing a tile for your project, it's important to consider the substrate you're tiling on to, the condition of your room and also what the end use will be as these all play a role in choosing the right material for your home. We'll take you through some of the key factors to enable you to decipher the difference between porcelain and ceramic.

- How they are made
- Durability
- Maintenance
- Water and slip resistance
- Cost

1. HOW THEY ARE MADE

By looking at the tiles you wouldn't know, but the main difference is that they are crafted differently. Both formed with a clay mixture, but when fired in a kiln, porcelain is fired at higher temperatures and greater pressures than ceramic tiles. This reduces the void and cavities in the tile, making them less porous and stronger providing more durability long term.

Porcelain: <u>Regal Ash Matt tile</u> 2. DURABILITY As mentioned, porcelain is definitely the more durable tile when considering the difference between ceramic and porcelain tiles. This doesn't then label ceramic as delicate, they are still extremely tough and longwearing.

In situations of high traffic, perhaps the hallway or kitchen that see lots of footfall throughout the day, a porcelain tile is likely the better choice. The porcelain tile can be relied on for longevity as it can even take on heavy furnishings while remaining difficult to crack. It also works well with underfloor heating systems keeping your living spaces cosy all year round.

Porcelain: Inara Cloud 3. MAINTENANCE

In any home maintenance is an important factor, even more important for those with small children and pets. Keeping your floor clean with ease is very high of the list of priorities for most.

So, which is easiest to keep clean, porcelain or ceramic tiles? Again, porcelain takes the crown! Most porcelain tiles are nano-sealed during manufacturing which means their surface is kept protected for longer. They simply need a quick clean with neutral PH cleaner and buffed dry to keep them looking brand new.

Ceramic tiles are still easy to clean and maintain but some will need resealing, particularly if you've opted for a crackle design. For a further dive into tips on keeping your tiles clean, we have an article all about this in our <u>knowledge base</u>.

Ceramic: Brixton tile 4. WATER RESISTANCE

Either ceramic or porcelain are excellent options for a room that is seeing a lot of moisture, like a bathroom or wet room. On this occasion the question of whether to chose a porcelain or ceramic tile falls down to what aesthetic you like, the water resistance won't let you down for either material.

For bathroom floors, it's ideal to chose a tile that has a high slip resistance so it's safe when wet. For this trait, porcelain is the one to choose. Just check the tile's individual rating before making your final decision. When tiling outdoor areas, using porcelain is essential. Its low water absorption means that water doesn't seep into the tile so it won't freeze and then crack in the colder weather unlike ceramic.

Ceramic: <u>Bistro Hexagon tiles</u> **5. COST**

Finally, to compare the cost of ceramic vs porcelain and like everything the costs will still vary.

However, it is likely that ceramic will be the more affordable option. Not only will the tile itself be a more budget friendly decision, the installation will too. Porcelain is a high-quality tile, that weighs a significant amount and is more time consuming to install therefore the cost is generally higher.

If you're really on a budget then consider your laying pattern, the least complicated design will take less time making it more economical to be fitted. When budgeting for your project, don't just consider the tile cost but remember that the substrate, adhesive and grout have to be spot on too.

PORCELAIN v s CERAMIC

Ceramics is a class of material which is semicrystalline, amorphous and inorganic in nature.

Ceramics do not undergo a full vitrification process most of the time and remains porous if not glazed.

Ceramics has a lower level of kaolin in it.

Ceramics has a higher water absorption rate.

Ceramic is less expensive.

Ceramics is less durable when compared to porcelain.

Ceramics is less dense when compared to porcelain and, therefore, ceramic tiles are easier to cut. Porcelain is a type of ceramic made by the fusion of clays.

Porcelain is completely vitrified and is impermeable even before glazing.

Porcelain has a higher percentage of kaolin.

Porcelain has a higher water absorption rate.

Porcelain is more expensive.

Porcelain has higher durability.

Porcelain is heavier than ceramics, and their tiles are more difficult to be cut.

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