## Outdoor Porcelain Installation Advice

With the right materials and preparation, you can easily install your own outdoor porcelain tiles. Follow these simple steps to create your own stunning outdoor space Installing your own outdoor porcelain tiles is both rewarding and satisfying but before you begin, be sure you have the correct tools and the appropriate protective equipment. Always wear gloves and safety footwear when working with outdoor porcelain tiles. Handle your tiles with care to avoid breakages and seek assistance when lifting or carrying.

## How to install a porcelain patio on wet mortar



Step One
Firstly, mark out the area where you want your patio to be with posts and string. Measure the length and width of your area and multiply these values together to calculate the square meterage If your area is not a straight forward square or rectangle, break each area down into smaller rectangles. Calculate each rectangle, then add these values together. Once you've calculated the total square meterage, muttiply this number by 1.1. This adds $10 \%$ extra on to your total to allow for cuts and wastage.


Step Five
Add a layer of mortar on top of the compressed hardcore. We recommend 4 parts sand to 1 part cement.


Step Two
Although outdoor porcelain tiles don't need to be sealed to protect them from water penetration, you may find the installation process easier if you coat the tiles before installation with a Tile Protector. This prevents mortar and slurry from becoming ingrained in the surface of the tiles and makes cleaning up after installation even easier. Apply to the surface of the tile with a foam roller, taking care not to coat the edges as this can prevent the grout from bonding.


## Step Six

Place 7 litres of clean water in a suitable container. Add slurry primer powder slowly and mix for 3 to 5 minutes to create a smooth lumpfree slurry. Coat the underside of the first tile with priming slurry. Using priming slurry is an essential step to ensure that your tiles bond to the mortar bed.


Step Three
Before you lay your tiles, you will need to prepare the ground, by digging to a depth of around $150-200 \mathrm{~mm}$. Your ground should have a slight slope to allow for drainage. If you're tiling up to the edge of a house or wall, the slope should run away from the structure.


## Step Seven

Place the tile into position, using a corner as a starting point - for example next to a wall or house. Press into place and use a rubber mallet and spirit level to secure and adjust the level remembering to take drainage into consideration Continue to lay tiles in this way leaving a $3-5 \mathrm{~mm}$ gap between each one. Use a bucket of water and sponge to clean up any mortar or slurry as you go.


Step Four
Fill with hardcore (gravel and crushed hard rock) to a depth of $100-150 \mathrm{~mm}$ and use a rake to distribute the mixture. Compress the hardcore using a whacker power plate, building up in ayers. Remember to check that your ground still
has a slight slope. has a slight slope.


Step Eight
Avoid walking on your newly laid patio for a minimum of 24-48 hours to allow it to dry and strengthen. If you wish to infill any joint gaps, we recommend using a brush-in grout designed for outdoor porcelain tiles. Use a brush to mix over the joints, gradually and evenly filling them all in Once the joints are filled, use a pointing trowel of firm the grout into place. Add more grout if needed to create a clean and level finish.

## How to create a raised patio with pedestals



Step One
Pedestals are a great way to create a patio area without the need for lots of messy equipment or tools. They can be laid on top of any solid surface such as existing patios, tarmac driveways or even balconies. It's a good idea to place a layer of weed membrane down under the pedestals so that you don't get weeds growing up through the gaps. If your sub-surface is completely solid such as a concrete slab or balcony, you can skip this step. If you don't already have a solid sub-base, you will need to create one before you begin installation.


Step Five
Continue to lay your tiles, adjusting the height and level as you go by inserting the adjustment key between the tile joints and twisting. Once the whole pedestal patio area is complete, review the level again and adjust if needed.


Step Two
Before you begin, you will need to calculate how many pedestals you need. The easiest way to do this, is to measure and sketch out your patio plans. The spacer tabs in the top of the pedestal head hold up to four tile corners in place. For the edges, you will need to remove two of the space tabs, and for corners you will need to remove all of the spacer tabs so that the tile sits flush on top. For larger tiles you may wish to place an additional pedestal without spacer tabs in the centre for extra support.


Step Six
If you need to create a step front, measure and cut your tile to the correct height. Temporarily remove any tiles from the main patio area that lay on top of an edge or corner and prepare the edging clips by laying one piece underneath the pedestal, and one piece on top. The top piece should slot on top of the spacer tabs.


Step Three
repare your pedestals for the edges and corners. For the edges, cut along the base line o remove one side. For the corners, cut along an additional base line to remove two sides and create a right angle. To remove the tabs, simply snap and pull with your fingers or pliers.


Step Seven
Place the cut tile piece in between the clips to hold it in place. If you wish, you can secure the edging clips with silicone or glue but this is not essential. Repeat this process for the corner clips until your step front is completed.


Step Four
use a corner as a starting point such as next to a wall, house or fence, and place the first pedestal lace three more pedestals in a grid layout to fit the measurements of your tile. Twist the pedestal by hand or with the adjustment key to alter the height. Align the pedestal head so that the cross shaped keyhole is at a right angle to the tile corner. Place the tile on top of the pedestals ensuring that the corners sit flush into the tabs.


Step Eight
Place your tiles back in place on top of the pedestals to complete the look.

## How to cut outdoor porcelain tiles



Step One
Outdoor porcelain tiles are super strong and cannot be cut using traditional hand tools. In order to minimise breakages and spoiled cuts, we recommend using a water fed cutter with a diamond blade. This will also help to minimise dust. Always wear gloves, safety footwear, goggles \& respiratory protection when using cutting equipment. Handle your tiles with care to avoid breakages and seek assistance when lifting


Step Two
Measure and mark a line where you would like out the tile. Cut from the top surface with the bade running at half-revs. Bring the blade into contact with the tile. As the blade bites the tile, increase the revs if necessary and progress along the marked line. Ensure the blade is water ed throughout and remains evenly balanced. Do not attempt to plunge the blade through the tile in one go - progress steadily and repeat the process until the tile is cut.

## Aftercare



## Clean \& Protect

Maintaining your porcelain tiles is easy, simply sweep away any loose dirt regularly, and brush with warm soapy water for an extra clean as and when needed. Outdoor porcelain tiles do not require sealing, however you may wish to apply porcelain tile protector after grouting to protect your tiles against the dirt of everyday living.


Stains \& Residues
For any mild stains and residues, dilute 1 part porcelain residue remover in 4 parts water. Dampen a cloth or sponge and wipe thoroughly For tougher stains and residues, dilute 1 part porcelain residue remover with 1 part water Apply liberally over the surface of the tile and agitate with a scrubbing brush. Leave fo -10 minutes before rinsing with clean water. For extremely stubborn stains, use undiluted porcelain residue remover and agitate with a crubbing brush. Always rinse the surface with clean water afterwards.

## How to lay stepping stones or staggered patios



## Step One

It's easy to create walkways and staggered patios by loose laying your outdoor tiles. If your surface is solid and secure, outdoor porcelain tiles can be simply placed on the ground. If the ground is soft or uneven in any way, you will need to make the surface stable.


## Step Two

To make a stable surface, create a base with a layer of sharp sand or fine gravel, then place your tile on top. If you're laying your tiles on to grass, you may wish to cut away a square of turf and dig down slightly so that the tile lays flush with the surface.

