

BLOCK PAVING GUIDANCE

We would advise to read the <https://www.gov.uk/government/publications/permeable-surfacing-of-front-gardens-guidance>. As of 2008 new regulations have changed so you need to apply for planning permission.

Before we begin - checklist

Tools, you'll need;

- Trowel
- Rake
- Wheelbarrow
- Shovel or Spade
- Rubber mallet
- Spirit level
- Compactor or Whacker plate (can hire)
- Stone cutter (diamond blade for granite)
- Sharp sand
- Kiln sand
- Tape measure
- Cement mixer (optional)
- String line and pegs (optional)
- Outdoor broom or brush
- Screed rail or lats (optional)
- Drainage

Materials, you'll need;

- Cement
- Sub-base (Mot Type 1)
- Sharp Sand
- Kiln Sand
- Block paving stones

The method for block paving installation for a driveway is a similar process and method to installing paving stone with some differences.

1. Excavation

To allow the new block paving to be installed correctly, a certain amount of excavation may be required prior to installation beginning. The depth of this excavation will depend upon the thickness of the required sub-base plus the sand and/or mortar, in addition to the block paving thickness.

Excavate to a depth of 230 (mm) to 250 (mm) below the finished surface level.

A minimum of 150mm below the damp proof course (DPC) to prevent problems with rising damp in the structure.

If you do need to install a drainage flow system, we would advise to get some technical help with this. These are sometimes located at the front of the driveway, the middle or back of the driveway depending on the size of the area. You may need to use more than one in some cases. If the area your excavating is flat, then we recommend digging a gradual slope to allow the water to run off. This is imperative as the water needs to flow somewhere or you just going to create problems down the line.

Top Tip: If your driveway is downward sloping, then put a drainage system at the bottom into a runoff area. If your driveway is upward sloping, then a drainage at the top of the driveway into a runoff area. If you have a flat driveway then create a gradual slope.

Tools required - shovel, wheelbarrow, rake, string line and pegs (optional for use as markers), draining system.

2. Edge restraints

The edge restraints are important to this process when laying block paving. Besides when you buying a picture frame you need to make sure the picture fits inside the frame right? The key is to lay a full bed of cement on the edges of the area of the driveway, creating a square ring.

The general rule is 4:1 ratio of sand and cement is used to create your mortar, this will be increased depending on the size of the area.

The mortar bedding should be laid to give a thickness between 15mm and 30mm; however, some adjustment may be necessary to ensure that the blocks are fully supported and do not rock or move. Use the mallet to lightly the blocks into position.

The screed rails are in place and ready to remove them back filling as you go along where necessary with sharp sand.

Tools required – cement mixer or vessel, sand, trowel, rubber mallet.

3. Sub-base

Add **Mot type 1** hardcore is a mixture of granite, limestone and basalt materials which measure no more than 40mm in thickness. The material which then needs to be compacted from 100mm to 150mm. For best results we recommend splitting this into two separate layers of 75mm each. We recommend using a compactor or whacker plate, and repeat applying another 75mm layer. Ensuring this will reduce or prevent soil movement.

Poorly compacted will result in soil movement which will result in sunken or raised paving overtime.

Tools required – rake, compactor or whacker plate, spirit level.

Top Tip: If you're not sure about the land on which you're laying pavers, it can be a good idea to use a membrane that will stop the hardcore going into the sub-soil.

4. Sharp Sand

The British standard way is to use 30mm damp sharp sand base and then compact again. This will create a more stable bed for which to lay the block paving on. If you find the sand can be rolled into a ball and doesn't fall apart, it's suitable to use.

Using more 50mm or more sharp sand will not compact as well, resulting in sinking.

Tools required – rake, compactor or whacker plate, spirit level.

5. Screed rails or lats

So, you have laid the edge restraints, creating your square.

These screed rails or lats are metal long rods. They are there to help you create the finished level where the blocks will sit. Once you've found the right level, remove your lats and backfill the void with some more sand and screed it in the entire way along. You are now ready to go.

Tools required – rake, compactor or whacker plate, spirit level, screed rails or lats.

We will not be responsible for any issues arising with poor drainage that has been installed incorrectly.

6. Stone Safety

Block paving can come in all shapes and sizes and varying thickness. Pavevolution's block paving is available in the following sizes, 150x150, 150x250, 150x350 which are all 50mm thick. We believe this thickness will distribute a heavy vehicle load weight more evenly allowing for some flexibility of movement.

The individual blocks will vary in weight from 5kg to 30kg and more depending on the size and weight selected. Handle them with care, as there are so many it will get a bit repetitive.

We highly recommend that when handling or lifting the blocks it is advised you seek assistance if required. The blocks are small but as some blocks are slightly bigger, they can weigh more. Follow the normal rules of bending to adequately support yourself as to not injure yourself. Pavevolution will not be held responsible for any injury you sustain or failing to adhere to these rules.

We recommend if your covering a large area and if you have access to, use a wheelbarrow to move blocks to the nearest point.

Tools required – wheelbarrow (if you're on your own)

7. Laying the blocks

The preferred starting point is one of the corners at the bottom of the slope or if you don't have a slope start from the straight edge of the border. If your driveway slopes upwards still start at the bottom of one of the corners.

We want to avoid any gaps between the block pavers. Lay the pavers one by one, making sure that the blocks straight against the face of the block you're running from. Do this at least halfway up, making a connection and then running it straight down into place.

DO NOT place the block paving directly into the sand and push up against the next block pavers. This will not only create gaping it won't sit properly when we compact it later.

Some of the blocks will need cutting to complete the area. We advise to mark the blocks to create a straight line for cutting.

Tools required – rubber mallet

8. Final stage

Nearly there, we just need to apply the finishing touches. All the blocks have all been laid. Then open a bag(s) of Kiln sand and pour the sand over the block pavers and brush the sand into the joints. Make sure to fill the joints. Then using the compactor or whacker plate, go over the pavers to compact. Repeat this process until all the joints have been filled. This will bed all the blocks into the sand firmly.

Tools required – kiln sand, broom or brush, compactor.

We will not be responsible for any issues arising with paving that has been installed incorrectly.

Pavevolution Ltd Team