

## BRETT INSTALLATION PATIO

Brett Approved Installers are experienced in the craft of installing our products. But some of our customers prefer to realise their ideas by installing our products themselves. We want you to get the best experience from our products, so if you are planning to DIY, here's a helping hand to get you started.

### How to lay a patio

Brett products are beautiful materials, crafted to create your perfect patio. But like any design project, especially involving heavy products, you should consider a number of important factors before you begin. Here, are some examples of the steps required to cover the most basic patio paving installation, but if you require any further support, contact your Brett Customer Service team

#### Before you start

Draw a simple plan of your home and garden, sketching where you would like areas to be paved. Once your plan has been finalised, lay out lengths of string to mark out the dimensions of your purposed patio in position. Once you're satisfied with your layout, you can begin.

#### Step 1 : Site Preparation [patio](#)

Mark the pegs beforehand to indicate the depth and remember to allow for a gradual slope away from your property. Using a tape measure, mark out the patio area. Check the corners, using a builder's square. Removing topsoil is easily done using an edging iron and cutting the turf into manageable squares. Simply scoop with a spade and remove using a wheelbarrow and skip.

The excavated depth should be 150mm or 6 inches from the finished patio level. Measure the final depth of excavation using the pegs and strings.

Check the depth at the edge using a tape measure. Compact the soil with the Vibrating Plate Compactor and re-check the overall depths and slope of the area using the pegs and spirit level.

If you find soft spots in the soil, further excavation may be required. These spots can then be filled and consolidated with sub-base material.

Check all 90° corners and depths thoroughly before putting down the sub-base material.

**IMPORTANT!** When using excavation machinery, always follow the manufacturer's guidelines, including the acceptable levels of exposure and, in particular, the recommended use of ear protection.

## Step 2 : The Sub-base

Having tipped the sub-base material into the laying area, rake into position to a consistent depth of 100mm or 4 inches.

Once the area is covered, check the depth using a spirit level, pegs and string line.

Compact the area using a Vibrating Plate Compactor, making sure the entire area has been compressed at least twice. Check again for any sinking areas. If this occurs, an extra depth of sub-base material should be considered.

Once the sub-base is smooth, flat and to the appropriate level, check the drainage slope with a straight edge and spirit level.

**IMPORTANT! When using the vibrating plate machinery, always follow the manufacturer's guidelines, including the acceptable levels of exposure and, in particular, the recommended use of ear protection.**

## Step 3: Preparing the mix and Laying Paving Flags

When preparing the cement mix, please avoid direct handling of cement, always wear the correct gloves to protect your skin.

Either using the cement mixer or wheelbarrow and shovel, prepare a mortar mix of 5 parts sharp sand, 1-part cement and add water to create a plastic consistency.

To check this is correct, use the 'snow ball' test, pick up a handful of mortar mix and squeeze into a ball, when you let go the mix will retain its shape without oozing water or falling apart.

Starting in the corner, trowel a bed of mortar to cover the area intended for the first paving flag. The depth of the mortar bed should be approximately 35-40mm. Level off but ensure the mortar is not compact as you want the flag to sit within the mix about 10-15mm deep.

Remember, when lifting and carrying paving units, always consider the weight before attempting to lift. If it is heavy, sought the help of an extra pair of hands. Take care not to trap fingers whilst handling paving units.

Lower the first paving flag into position, holding it diagonally will make it easier to lower it. Settle it cleanly into the mortar, without sliding it about, so that a good bond forms between the mortar and paving flag.

Line up the paving flag with the string lines and gently tap it into the mortar using the rubber mallet.

Repeat the process, continuously checking against the string line. Also, use the spirit level to check the surface is at the correct level.

To check that the edges aren't standing proud, simply run your hand over the joints. Ensure gaps are consistent, ideally there should be 10-15mm between the slabs.

Leave the slabs for at least 24 hours so that the sand and cement mix can set.

## Step 4: Pointing

You can either buy ready-mix compound or, using the shovel and trowel, prepare a jointing mix of 5 parts building sand, 1-part cement and water to a damp, semi-dry consistency.

Firm it into the joints using the trowel and finish with the pointing iron, compacting the mix into the gaps and producing neat grooves.

Carefully remove any excess pointing material using the trowel and yard broom, ensuring no residue is left on the slab surface.

## Materials and Tools Checklist

### Materials

- Sub-base material (MOT Type 1)
- Brett building sand
- Cement
- Paving flags

### Tools

- Trowel
- Pointing iron
- String line and pegs
- Edging iron
- Rubber mallet
- Builders square
- Rake
- Shovel
- Spirit level
- Skip
- Wheelbarrow
- Pick axe
- Tape measure
- Yard broom
- Vibrating plate compactor
- Diamond disc cutter (Optional)

**You will also need essential personal protection equipment;**

**Gloves, Safety Goggles, Dust Mask, Ear Defenders, Knee Pads and Safety Shoes.**