

## LAYING CLAY PAVING BRICKS



## **INSTRUCTIONS**

This guide is intended to assist the homeowner or do-it-yourself enthusiast in tackling various Clay Brick paving projects around the home, such as internal courtyards, garden paths, entertainment areas, etc. It is recommended for more ambitious projects, like driveways, to be tackled by a specialist paving contractor to ensure success in the long term.

1. The area to be paved must be correctly prepared to receive the brick paving.

First, excavate the ground to 85mm-90mm below the required paving level. This excavated area must then be thoroughly raked and loosened, and then re-compacted to provide a firm base for the brick paving. It is important for the compacted ground to be sloped slightly away from existing buildings, to allow for surface drainage.

2. To prevent weeds and grasses growing through joints in the brick paving, it is recommended that a proprietary weed killing agent be sprinkled over the compacted ground prior to spreading the bedding sand.

3. A 25mm layer of clean, sharp, river sand must now be spread on to this prepared area to act as a bedding layer between the compacted sub-base and the brick paving. This bedding layer must be levelled using a straight edge.

4. The Clay Brick pavers are then laid on to the sand bedding layer in the required pattern. Cutting of Clay Pavers can generally be done satisfactorily using a bricklayers' bolster, but where a particularly neat job is required it is preferable to use a Carborundum wheel for this operation.

5. There are two basic methods for laying Clay Pavers:

- a) **Cement Grouted Brick Paving**

Pavers are laid with an 8mm-10mm cement mortar joint. Normally used in formal areas, such as pool surrounds.

- b) **Sand Grouted Brick Paving**

Pavers are laid close together with brushing sand between them. Normally used in informal areas, such as pathways.

All brick paving must be suitably restrained at the edges either by existing structures or by the use of a pre-cast concrete kerbstone or by fixing into position, with cement mortar, a brick-on edge course. It is important that such edge restraint contains not only the brick paving but also the sand bedding layer beneath in order to avoid subsidence of the paved area.

A well laid Clay Brick paved area will give years of trouble-free use and will blend harmoniously with any outdoor setting.

## A. CEMENT GROUTED CLAY BRICK PAVING

- i. Lay the Clay Pavers in the required pattern leaving an 8mm-10mm gap all around to receive the cement grout. Work forward from the completed paving so as not to disturb the sand bedding layer. Planks may be used to work from to prevent dislodging the paving.
- ii. Mix a mortar comprising 4 parts clean, sharp, well graded fine river sand and 1 part cement by volume.
- iii. Work this dry mortar mix with a broom into the gaps between the pavers approximately 15mm-20mm deep.
- iv. The residue from the dry mix on the paving is then washed into the joints with a slow running hose. This mix should be allowed to set for 1-2 hours to hold the pavers in position. The balance of the mix is then placed on to the paving and is washed into the joints with the help of a squeegee. The area will now look totally cement stained.

To clean the paving, a slow running hose is held very low over the surface. A small amount of the cement grout will be washed out of the joints but this will not be excessive if the hose is held at the correct angle. Any pavers that are too high may be tamped down into the bedding sand with a rubber mallet. Pavers must be examined to ensure that they are straight and have not been dislodged during grouting.

- v. Should cement smear still be present on the pavers, they should be cleaned as follows:
  - Flood the area to be cleaned with clean water to ensure that the mortar removing agent works only on the surface of the pavers.
  - Apply a diluted solution of 1 part mortar removing agent and 10 parts clean water to the brick paving in small areas of  $\pm 2\text{m}^2$  and scrub vigorously with a bristle brush.
  - It is important that this diluted solution remains on the pavers for no longer than 10 minutes and under no circumstances must it be allowed to dry on the surface.
  - Immediately wash this area with clean water and repeat the process on the next  $2\text{m}^2$  and so on until the entire cleaning operation has been completed

## B. CEMENT GROUTED CLAY BRICK PAVING

- i. Lay the Clay pavers on the sand bedding layer in the required pattern with all adjacent brick edges touching to form what is called a "close butt joint". When laying, be sure to work forward from the completed brick surface so as not to disturb the sand bedding layer.
- ii. Once all the pavers have been laid, the surface of the brick paving should then be vibrated using a plate vibrator to bed the pavers down in the bedding layer. Alternatively, the pavers may be bedded down using a rubber mallet.
- iii. Thereafter, a fine sharp plaster sand should be swept into the cracks and crevices between the pavers.
- iv. This process of vibrating and sweeping should be continued until the sand between the pavers is level with the top surface of the brick paving. This will seal the joints and prevent movement of individual pavers relative to their neighbours.

Any queries regarding the suitability of clay pavers for different uses, information on laying patterns, or any other technical information on Clay Brick paving, please contact ClayBrick.org or the nearest ClayBrick member in your area.