PAVER BLOCK INSTALLATION

The following guideline is an overview of the proper steps involved when installing interlocking concrete paver blocks where no special circumstances are present.
(Reference Standard: IS 16777:2019 Laying of Paver Blocks — Code of Practice)

CONTRACTOR: We recommend that an experienced contractor installs thePaver Blocks. To achieve the best results from your pavers it is recommended that your base preparation, bedding layer and grouting be specified by a qualified engineer. The paving installation should be done by a Paving Contractor who is familiar with the installation of Paver Blocks.

It is important to consider the following steps to ensure a successful outcome:

1. **BASE PREPARATION:**
   It is critical to the long-lasting stability of your paving that the supporting base for your paver blocks be properly constructed.The four main aspects of the base preparation are:
   - **a) Drainage**: Good drainage prevents the accumulation of sub-surface water underneath the paved area known assub-surface ponding.
     - The excavated surface should have a fall (minimum 1:50) so that any moisture will flow to a drainage point.
     - It is recommended that the top of the paving is a minimum of 75mm below the damp proof course of the building.
     - Place a plastic membrane against any exposed foundation.
   - **b) Sub-grade**: The sub-grade is the upper part of the soil, natural or constructed, which supports the loads transmitted by the overlying paving.
     - All vegetation and topsoil must be removed.
     - Must be well drained and compacted.
   - **c) Base-course**: The base-course is the foundation for the paver blocks.
     - The base-course should be made from gravel or G5 and can be stabilized using cement.
     - Varies in thickness between 50mm and 120mmdepending on the type of sub-grade and whether the paved area is for a footpath or driveway.
     - Footpath paver blocks can be laid without a base-coursewhere the sub-grade material is compact and uniform.
     - The compacted surface should be tight or close knit toprevent migration downwards of the bedding course material.
   - **d) Bedding Course**: The layer that the paver blocks rest on. Well graded, washed river sand is used as a bedding coursematerial for paving.
     - Between 20mm and 25mm thick.
     - Carefully screened (level) with a straight edge.
     - Must be moist when the pavers are placed.
     - Cement may be added to the base-course to further stabilize this layer.

2. **SETTING OUT:**
   This is ensuring that your paving pattern stays aligned.
   - Use setting out lines (this is a grid of string/nylon linesspaced at exact intervals).

- Constantly re-check your lines in all directions whileinstalling the paver blocks.
- Popular Laying Options**:**

3. PRODUCT HANDLING:

It is important to minimize damage to paver blocks during transport.

- Transport in an upright position.
- Carry paver blocks by hand to the laying area, underside to underside.
- Cobbles should be transported in a wheelbarrow and be packed and unpacked individually by hand.

4. PAVER BLOCK LAYING:

Paver blocks are designed to resemble natural stone and do have variances in dimensions and colour.

- Product must be drawn from different consignments to ensure blending of different batches.
- Uneven pavers should be rotated to match adjoining pavers or replaced and used for cutting.
- Concrete is brittle. Consequently, it can be expected that up to 5% of the product may bechipped when delivered. This is normally allowed for by the planner when ordering. Chipped products should be used for cutting where possible.

5. CUTTING:

If necessary, paver blocks can be cut to size to fit within constraints:

- With a brick cutting machine, or
- With an angle grinder (with a diamond tipped blade).

6. EDGE RESTRAINTS:

It is very important to restrain the perimeter of the paving being laid to prevent lateralmovement of the pavers under load and the washing out of the bedding sand which will cause subsidence of the pavers on the edge. Good edge restraints are:

- Reinforced concrete
- Kerb stones
- Edge pavers bedded in a concrete base.

7. JOINT FILLING:

There are two types of paving installations, namely rigid and flexible paving. With the rigid installation method, the spaces between the pavers are filled with a wet slurry mix known as grouting. With the flexible installation method dry sand is swept in between the pavers to secure them in place.Please see details on the joint filling material and their respective installation techniques below:

a) Grouting for a Rigid Installation:

- Products are porous and must be thoroughly wet prior to the application of the slurry to avoid cement staining.
- A 1:3 cement / plaster sand slurry mix is strongly recommended.
- When a slurry is used, ensure that excess grouting is washed off the textured surface with a fine hose spray, or with a sponge immediately.
- Rinse sponge frequently in clean water. Any residue willresult in cement staining.

- Freshly grouted paver blocks should not be trafficked.
- Cordoning off the new paving for 7 days, with no pedestrian or vehicle traffic, is recommended.
- Cure the grouting by wetting the paving and joints with a fine spray for a few days after grouting. Keeping the grouting moist will prevent cracks. Beware not to wash the grouting out.

b) Jointing Sand for a Flexible Installation:

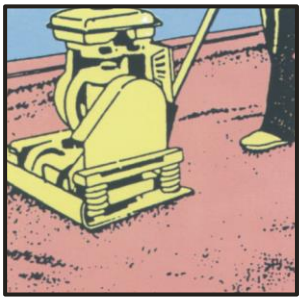
- Alternatively, fine plaster sand or building sand may be used to fill the joints between cobbles and paver blocks in driveway applications.

8. COMPACTION OF PAVING

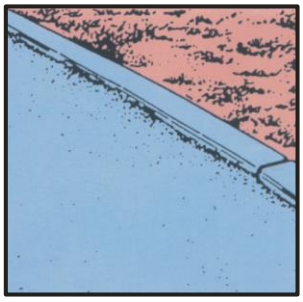
It is recommended that newly laid pavers must be compacted by:

- A light roller compactor with the vibrator switched off. This is the method used for cobbles and pavers.
- A rubber mallet. This is the method used for flagstones.

PICTORIAL REPRESENTATION OF PAVER BLOCK INSTALLATION PROCESS:



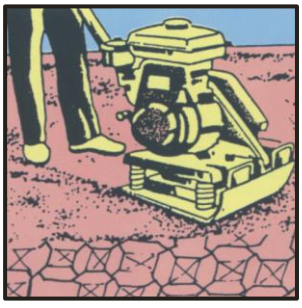
Prepare Sub-base



Fix Kerbstones on the Sides of Paving Area

Evenly Spread the Layer of Sand over the Sub-base

Lay and Interlock Paver Blocks



Vibrate the Laid Surface with Fine River Sand

Remove Excess Sand