

Basic Installation & Design Guidance



Technical Characteristics and Properties to BS EN 1344 : 2002. Individual product information available in Paver Index.

Laying

The sub-grade and the sub-base.

The sub-grade should be prepared to the engineer's required specification and the sub-base should normally be a well compacted Type 1 to the designed thickness taking into account traffic loadings and suitability of the subgrade.



Edge restraint

It is imperative that solid edge restraints are provided along the perimeter of all paved areas to restrict lateral movement (creep) resulting from the action of deceleration and turning forces. They should be adequate to prevent the escape of the bedding course material beneath the paver surface.

Cutting clay paving

Clay paving should be cut using a multi bladed mechanical paver splitter or bench mounted water cooled power saw to achieve the best finish. Clay paving should not be cut to less than a quarter of the original size along the length of the paver and never cut across the width – when required complimentary fittings and inboard cutting should be used.

Successful detailing



Detailing around manhole Soldier course



Laying pattern at edge

Soldier course

Drainage

Sufficient cross-fall should be provided to prevent standing water on all block paved surfaces.

Unpacking the pavers

In order to obtain the correct blend of colour, mix from a minimum of 3 packs. The paver packs require unpacking vertically - not horizontally, layer-by-layer. This will equally distribute minor size variations of the pavers over the entire pavement, and will help to maintain the correct bond pattern. Damaged or broken pavers must not be used although they can be used as cut pieces for infilling.

Bedding course and paving

Bedding course material should be washed naturally occurring silica sand and should be selected in accordance with the recommendations given in BS7533 : Part 3 : 2005 – Code of Practice for Laying Precast Concrete Paving Blocks and Clay Pavers for Flexible Pavements.

Bedding sand is both the strength and weakness of a flexible clay pavement as it provides the interlock that ensures that pavers can accommodate extreme loading.

Bedding course material to be 25-40mm compacted thickness over the specified thickness of sub base. The use of a geotextile below bedding course to prevent migration of sand may be advisable if the sub-base is open textured. Pavers should be laid in the designated bond pattern working from an edge restraint or existing laying face edge. Mechanical force should not be used to bring pavers into intimate contact and should be laid such that a joint width of 2 to 5mm forms between each paver with a target joint width of 3mm thus ensuring there is no point contact between units. The laying of any clay paver, with or without nibs, will require the opening or closing up of joints to maintain good lines throughout the work due to the tolerances of a natural clay product.

Compaction of pavers

When a sufficient area of pavers has been laid - and before starting the vibration - a fine kiln dried silica jointing sand must be brushed into the joints. The pavers are compacted onto the sand bed using a vibrating plate compactor with a rubber sole-plate to any avoid damage to the surface.

After compaction, any damaged pavers must be immediately removed and replaced. Any unevenness or differences in height must be re-adjusted.

Joint-filling

After compaction, a further application of fine kiln dried silica sand is brushed into the joints until all joints are entirely full. Failure to ensure joints are full before opening up the area to traffic may cause movement and loosening of the paved surface. Upon satisfactory completion traffic may be permitted to use the pavement. Do not use high powered suction cleaners on newly laid areas of flexible paving.

Maintenance

Baksteen clay pavers are resistant to chemicals and cleaning fluids. Pavements using clay pavers can be cleaned using biodegradable detergents. Mechanical or high water pressure cleansing operations will require resanding of the joints.

For further information please contact the www.baksteen.co.uk