

Safely-laid paving clinkers

Safely-laid paving clinkers paving clinker must comply with DIN 18 503 quality requirements. They have high resistance to wear, resist attack by acid, and do not deteriorate in adverse weather.

There are F and E type Paving clinkers; F for laying with joints of approx. 8 mm to 10 mm width, and E for laying with a narrow joint, approx. 3 mm, to accommodate jointing material with a 0-2 mm particle size.

A paving clinker is always only as good as what lies underneath it.

Bedding:

3 cm to a maximum of 5 cm thick in compacted condition, sand with particle size 0-4 mm, fine-particle gravel or chippings with 1-3 mm particles, or a mix of chippings and broken sand with a 0-5 mm particle size. Any oversize particle should not exceed 8 mm. To ensure good stability, good-quality particle gradation should be ensured.

Note:

protect the surfaces of the bricks against being marked by the binding agent.

The base:

Depending on the requirements, one or more water-permeable sub-bases should be installed under the bedding, as what is known as the superstructure, which forms the sub-base for the bedding and the paving clinkers. The thickness and the composition of the layers of the base must be dimensioned in accordance with RStO (German guidelines for standardising superstructure for roadways).

The layers are to be installed and compacted in individual layers. Particle mixes with a lot of hollow space must be formed into a closed surface before the bedding is applied, through vibrating or washing in sand.

Water run-off:

surface water run-off must be ensured through an adequate incline on the brickwork surface, of at least 2.5% (2.5 cm/m). The slope - generally a 3% incline, and at most 6% - should already be incorporated in the base for the bedding. Run-off water must be channelled away safely. The brickwork paving must in its final position be approx. 1 cm higher than the level which takes the water off.

Laying bricks:

lay the bricks from several packs which have been mixed together, according to the plan and onto the bedding which has been levelled and pre-compacted, taking note of the bond and starting from edges which have already been fixed in place.

Ensure that the correct joint width is maintained. To secure the assembled bricks in position, immediately infill the laid area with the jointing material. Before using the vibration plate, sprinkle the jointing material, sweep it in position and wash in.

Pointing joints:

Safely-laid paving clinkers The bonding of the brickwork is achieved through the infilling of the joints, and therefore a jointing material which forms as strong a bond as possible should be used.

For narrow joints, material with a particle size of 0-2 mm should be used. As a rule, the joints are closed by sweeping in natural sand, broken sand or chippings completely into the joints. Remove excess material and then compact using a vibration plate with a rubber shoe or a neoprene protective plate.

Use vibration plates with low unbalance, always starting from the fixed edge and working towards the centre.

Afterwards, again fully fill the joints with jointing material and wash in by adding water, checking that there is no softening of the bedding.

General advice:

the fully compacted surfaces should then be sprinkled several times with sand, so that the system of joints formed for the ultimate stability of the surface can be consolidated. It is recommended that the surface is allowed to rest for a few days before being used. The recommended joint widths must be respected to avoid edges lifting. Dutch bricks should not be washed in using sealing materials containing cement or lime.

Otherwise there is a risk of marking!

To prevent later discolouration or marking of the brick surfaces, please ensure that the materials for the bedding, the superstructure and the joints are free of materials which could develop a bloom. For surfaces not exposed to the weather (covered areas, niches and areas under projecting roofs), impregnation is recommended.