

## PAVING STONES' INSTALLATION GUIDE

Stones brought to the construction site must be released from the transport wrapping as soon as possible to reduce the risk of efflorescence (frost). Footing with the stones must be stored on a level surface.

When marking the boundaries of a future site or road, follow the construction drawing. The part of the site under the kerbstones must remain within the boundaries of the site or road.

The soil is scarified by the thickness of the paving stone, the placement layer, base layers and, if necessary, the support layer. Care must be taken to ensure that there are no materials under the base layer that could cause decay: mulch, peat, roots, sawdust, construction debris.

The necessary slopes can be given to the site when levelling the subsoil. It is advisable to draw as detailed a drawing as possible of the utilities and lines (water, gas, electricity, sewerage, telephone or other communication) under the site.

The construction of support and base layer is always based on the soil properties, the load-bearing capacity of the aggregate used, and the intended use of the future road or site. The minimum slope shall be 10 mm per linear metre of the site. In the case of a previously uniformly loaded subsoil, the support layer does not have to be built (unless this conflicts with the construction drawings). In the case of a previously unevenly loaded subsoil (e.g. garage driveways as dirt roads), a support layer made of crushed stones and of sufficient thickness must be constructed.

Crushed stones with a fractionation of 32–64 mm are used as the support layer. The base layer is made of crushed stones with a fractionation of 16–32 mm (or coarse gravel), with a layer thickness of 150–400 mm. Vibratory equipment of appropriate power must be used for compacting the crushed stones. Compact the site layer by layer. When the support and base layers are laid and levelled, the result is checked with a measuring instrument. Even the most beautiful paving stones cannot mask a poorly laid base layer!

Sunken kerbstones are set in place with semi-dry or dry sand or waterproof construction concrete.

Laying stones without a drainage layer directly on overwrapping or concrete is not allowed. For the placement layer, use crushed stone screenings or finer sand (0–5 mm fractionation). The placement layer, up to 50 mm thick, is carefully levelled and, if necessary, further compacted. It is not advisable to walk on a completely finished base.

The stones are laid tightly side-by-side in a row or cut by cut, with a joint between the stones forming a protruding joint. For stones that are laid without a gap, the joint width is 2–3 mm.

When working, use stronger leather work gloves! The sharp edges of the stones could injure your hands!

For coloured stones, figurative and circular flooring, follow the pattern provided.

The area around objects (e.g. rainwater gutters, wells, posts) in the pavement is paved with solid stones; if the next stone does not fit, the area is initially left empty. During the final stages of the work, the empty spaces are filled with cut stones. If the cut looks complicated, prepare a template.

Stones can be cut with a stone guillotine or a disc cutter. NB! Make sure to use safety goggles and a dust mask when mechanically processing stones!

Once the pavement is in place, the joints are immediately filled with fine, dry sand. A broom or a street brush can be used for this purpose. The sand binds the stones and prevents them from sinking at an angle.

The finished flooring is now levelled and compacted using a suitably powered vibratory plate. The flatness of the finished surface is checked with a levelling board.

When installing adhesive kerbstones with hot mix asphalt concrete, use the tools and protective equipment intended for the job!

Finally, the pavement is again sprinkled with fine, dry sand and the joints are finally filled. After rain or washing the site, check that the joints are filled with sand, if necessary, fill the joints throughout the serviceable life of the site.