

INSTALLATION GUIDE FOR INTERLOCK AND GRANIX™

GENERAL GUIDELINES

Step one: Before any work starts, have the engineer in charge check for underground pipes and wires. Stake out location and depth of pipes and wires.

Step two: Excavate the area to provide a stable base on which to begin the paver installation. Excavate all unsuitable, unstable, or unconsolidated sub-grade material. When estimating the depth of excavation, add the height of the paver unit, the depth of bedding sand, and the thickness of the compacted road base material to get an estimate of total needed depth.

The amount of base material is often determined by a soil engineer and depends on the propensity of the soil to expand, saturate, or hold water which might then cause the pavers to move. Base thickness normally ranges from 150 mm - 300 mm. A base for vehicular traffic is typically 250 mm - 300 mm. In extreme soil or other conditions, the base can be up to 450 mm deep. These are just general guidelines, please refer to the relevant standard for preparation of the base according to actual site requirements.

Make sure all waterproofing and underground services are completed before proceeding to step three.

Step three: Fill the excavated site with the appropriate amount of road base material and compact using a vibrating plate compactor. The base material itself should be a granular type that compacts easily and must be well compacted and level to provide a smooth, even surface on which to lay the bedding sand. Make sure to account for drainage. In some cases where a concrete base is available, no compaction is required.

Step four: Install edge restraints. Lay the border edge restraints on the base material and secure with steel spikes to hold the edge restraints in place. Edge restraints are an important part of interlocking concrete pavements. By providing lateral resistance to loads, they prevent the interlocking units from separating.

Step five: Spread the setting bed. For sand beds, use 25 mm - 35 mm sand or single size gravel (3 mm - 5 mm) and spread on top of the compacted base material. For mortar beds, apply a 50 mm thick 1:5 sand/cement mortar.

Step six: Install your pavers in the desired pattern making sure to place pavers flat on the sand bed. Pavers should be taken from several pallets or bundles at a time to ensure an even color mix. Do not disturb the level of the bedding sand. When a row or pattern is in place, use them as a guide for subsequent pavers. Interlocking pavers have built-in spacer nibs on their edges to provide an automatic 2 mm joint spacing. When laying concrete tiles such as Granix™, use a rubber hammer to adjust the level. Because tiles do not have in-built spacer nibs, maintain a minimum of 3 mm - 5 mm gap joint between tiles. We recommend using our Granix™ PaveSpacers to guarantee a uniform joint spacing. For more information on Granix™ PaveSpacers, please refer to page 69.

Cutting any pavers should be done either with a diamond disc cutting machine (wet type) or a manual grinder fitted with a diamond disc.

Step seven: After all the pavers and respective borders have been placed, if a sand bed base is used, spread and sweep a light layer of fine black or dune sand over the top of the pavers. Pass over the pavers once using a vibrating plate compactor. This single pass will help set the pavers into the bedding sand and cause some sand to move up between the joints of the pavers, beginning the interlocking process. Add more sand on top and repeat. You will generally need to run the vibrating plate compactor over the pavers 2 or 3 times, or until the pavers no longer settle into the sand bedding. Sweep any remaining sand into the joints until they are completely filled. For Granix™ tiles, make sure that there is an additional cushioning layer between the tile and the vibrating compactor to prevent and protect against surface scratches.

If a mortar base bed is used, use grout matching the pavers as specified to fill the joints. No vibration compaction will be needed. Make sure to apply a little water for the next two days to provide enough moisture as the mortar cures.