PEACOCKPAVERS™
HANDCRAFTED CONCRETE PAVERS

Installation Guide for Sand Set Concrete Pavers and Tiles

This guide is for use by installation personnel and anyone else looking for knowledge on the installation of concrete pavers and tiles. No matter how much experience you have with installing concrete pavers and tiles, we strongly recommend that you read this guide prior to receiving and installing the products. Please note that this guide does not cover every scenario that could be experienced when installing our products, so if there is any question or concern that may arise, please contact our office for assistance in that matter.

PAVER STORAGE:

Once you have received your delivery, store the pavers in a covered, dry location prior to installation and sealing. Remove shipping covers while in storage. Note: If the pavers are subject to precipitation prior to installation and sealing, streaking and efflorescence may occur. Please refer to our cleaning guide should this occur. Do not pressure wash the pavers as this may damage the finish of the paver. Additionally, do not use any type of acid-based cleaning products as they may stain the tile causing discoloration.

EXCAVATION AND BEDDING:

Excavation must be deep enough to for the bedding material layer, sand setting layer, and the thickness of the paver used. Follow the architectural plans for layout and material types. Typical bedding layers for pedestrian applications are a minimum of 6” deep up to or exceeding 12”, depending on the soil type and water table level. Pavers for driveways or vehicle traffic should have a minimum of 12” bedding material or exceeding 12”, depending on the soil type and water table level. Bedding layer should be crushed rock, something like ¾ minus gravel or road grade base gravel. Material availability will vary depending on location, so the contractor should verify that the bedding material chosen will be suitable for the application. The excavation base and bedding layer should all be compacted using a mechanical plate compacting device. Dampening the material will help with compaction. Thicker bedding levels may require compaction in layers. The contractor should follow local building code requirements to meet proper compaction. Driveway type applications should be compacted to 95% Proctor density per ASTM D698, or per local building code requirements. Drainage should be installed per design drawings and contract documents, or per local building code requirements. Proper drainage is essential for allowing water to properly drain from the bedding materials, otherwise, if water remains in the bedding materials for long periods of time, it will be absorbed into the pavers, causing them to look wet or discolored.

SAND LAYER:

Sand used should be a concrete type of sand, fine grained. Again, due to the material availability by location, the contractor should choose a material that has been successfully used for paver setting. The sand topping layer should be ¾”-1” thick. The sand layer should all be compacted using a mechanical plate compacting device. Dampening the material will help with compaction. The layer should also be screeded to ensure a uniform bedding surface for the pavers.

FILTER FABRIC:

Peacock Pavers recommends using a filter fabric between the excavation base and the bedding layer to help keep the bedding layer from washing into the ground over time. Check local building code requirements, as they may require additional steps and methods.

GEOGRID:

Geogrids may be used along with the bedding layer. These are typically used on sloped installations and keep the bedding materials from eroding. If using a geogrid, the sand layer needs to go over the top of the geogrid so that the pavers can be properly leveled.

EDGE RESTRAINTS:

Edge restraints should be the size and type as specified per the design drawings and contract documents. If nothing was specified, the contractor should consult local building code requirements. Edge restraints keep the bedding materials from eroding which will cause the pavers to buckle and settle at varying rates.

PAVER INSTALLATION:

Install the pavers per the design drawings and patterns required. The pavers can be set butted together or with joints as per the design drawings and contract documents and per the type of pavers purchased. The pavers should be massaged into the sand so that they are installed level with the surrounding pavers. Using a lightweight (1.5 pound or less) rubber mallet is also permissible. Any pavers that need to be cut for the installation should be cut using a concrete wet saw. After cutting, the paver should be rinsed with clean water.

JOINTS:

The joints (if applicable) can be filled with paver sand, polymeric paver sand, grout, or sanded grout. This should be specified in the design drawings and contract documents. Please note, when sanding the joints, the pavers and sand setting layer should be dry. Simple sand joints are applied by continually sweeping sand over the paver joints until the joint is full. This type of joint will be prone to losing material and will require re-filling several times per year. Polymeric sand is a paver sand that is blended with special additives, that when put in contact with water, will form a strong bond, like concrete. Polymeric sand is installed the same as regular sand, and then wet after the installation to cause the bonding reaction. Please note that the pavers should be swept free of any residual polymeric sand before wetting the sand. Non-sanded grout shall be used for joints up to 1/8" wide, and sanded grout shall be used for joints over 1/8" wide. Peacock Pavers recommends that all grout joints be installed using a grout bag, and do not recommend floating the joints with a trowel. Floating the joints with a trowel can fill the pours and voids in the tile surface and create a haze look on the product. Using a grout bag protects the pours and voids on the surface and minimizes any haze on the tile. Completely fill the joint with grout and then smooth it out with a damp sponge or other grout joint finishing tool. The best practice is to clean as you go, cleaning the edge areas of the tile after the grout is smoothed. Use clean water and a damp cloth or sponge to clean up the excess grout. Do not allow mortar or grout to set up on the surface of the tiles. While the mortar and grout are curing, the tiles should be protected from materials and spills that can damage or stain the tiles.

SEALING OF PAVERS:

Please refer to and follow the manufacturer's recommendations for the sealer type chosen. Peacock Pavers recommends and can supply Enhance Architectural Products Water and Stain Repellent. Apply the sealer with a hand pump type garden sprayer rated for 15-25 psi. An optional method is to use a power roller with a 1" nap. The sealer should cover the flooring and should take a minimum of one minute to fully penetrate the tile. If there is no sealer present in less than one minute, add more sealer. After 5-10 minutes maximum, the remaining sealer should be blotted up using clean cloths. Do not allow any sealer pooled on the top of the tiles to dry. The sealer should be dry to touch in 1-2 hours. Avoid any type of foot traffic during this time. Water repellant properties typically develop after 72 hours of application. Sealed surfaces will shed water and have a water beading effect. Depending on the substrate and application, the sealed surface may have a slightly darker shade.

ADDITIONAL NOTES AND RECOMMENDATIONS:

Test Before You Commit:

Peacock Pavers' best practice and recommendation is to test it before you commit. When grouting the joints, the installer should run a small test area in an inconspicuous location, i.e., an out of the way corner or a location that will be covered by some sort of furniture. They can also use leftover cut sections from the installation. Certain color pigments in the grout may have a reaction with the color pigments in the concrete, so the installer should evaluate the cleaning time needed to keep the paver from showing signs of discoloration. Additionally, this is a good time to make a grout color change if needed or desired. When cleaning with something other than water, test the cleaner on an inconspicuous location or with leftover cut sections to judge the reaction and cleaning time needed. Some cleaning solutions such as acid-based cleaners and detergents, can cause permanent color change to the pavers. Follow the recommendations supplied by the cleaning solution manufacturer. Use only rags, sponges, or soft bristle brushes to clean the pavers.

Do's:

- Use clean water and either rags, sponges, or soft bristle brushes to clean the pavers. Refer to the cleaning guide for additional cleaning information.
- Use a grout bag to install grout joints.
- Work and clean in small areas at a time to ensure the best installation.

Do Not's:

- As previously mentioned, do not use acid-based cleaning products on the pavers.
- Apply any type of tape to the pavers. The glues in the tape can penetrate the pours of the paver and can cause discoloration and be very difficult to remove.
- Pressure wash pavers, this can damage the surface of the tile.
- Use hard bristle or metal bristle brushes as they can cause damage to the surface of the paver.

FINAL NOTE: This guide is intended to anticipate many of the questions that might present themselves during storage and installation. Whenever in doubt, do not proceed. Please contact our office at (251) 368-2072 for guidance.