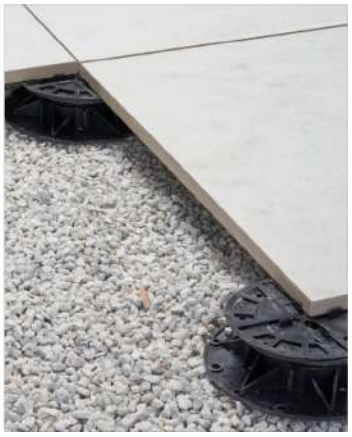
OUTDOOR PORCELAIN PAVER
INSTALLATION GUIDE

DRY INSTALLATION
ON GRASS

DRY INSTALLATION
ON GRAVEL

MORTAR
INSTALLATION



RAISED PEDESTAL
INSTALLATION

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WELCOME TO THE OUTDOOR PORCELAIN PAVER INSTALLATION GUIDE

- The following installation details are meant as a general guide. If you have questions regarding materials, installation, site conditions, or any situations beyond what is presented here, please contact a professional contractor to help you.
- Different geographies and climates will have different base thicknesses for installations. We are presenting a typical base thickness for installation in this guide, but your contractor should install base thickness indicated by your specific location.
- Please protect yourself, others, and your surroundings when performing any installation or construction associated with these products.

INSTALLATION INFORMATION

- IMPORTANT: Installing porcelain pavers requires the bedding course sand to be pre-compacted and then struck off with a screed to the required thickness as shown in the detail drawings. The porcelain pavers are not compacted and therefore the sand layer beneath them requires pre-compaction. Do not compact dry sand, but ensure the sand has a 5 to 6% moisture content so that it will compact cohesively and allow for a smooth strike off finish.
- NEVER compact porcelain pavers with a plate compactor.
- ALWAYS pre-compact and strike off your sand leveling course before installing your porcelain pavers in sand set installations.
- Porcelain pavers should only be wet cut with a tile saw equipped with a wet cut porcelain blade.
- NEVER install porcelain pavers without the required 3/16” (4mm) spacing between them. The porcelain pavers should never be installed with a porcelain-to-porcelain contact.

JOINT INFILLING INFORMATION

When porcelain pavers are installed as sand set installations, you may fill the 3/16” (4mm) paver joints with:

- **Sand**
  Dry traditional sand is swept into the open joints until they are filled. Excess sand should be swept off the pavement. Keep in mind that sand joint may in time have to be re-sanded as wind and rain can cause some erosion.
- **Cement Blended Sand**
  Dry cement blended sand (typical 3 parts sand to 1 part cement) is swept into the open joints until they are filled. Excess cement blended sand is swept off the pavement. It is extremely important that all the excess sand and dust be swept from the surface Blowers can be used for final dust removal, as any residual dust or sand can stain the surface.

After joints are full and the surface is clean, the pavement is misted with water to activate the cement and the curing of the mixture.

- **Polymeric Sand**
  Polymeric sand is a manufactured sand that is blended with polymers which hardens when subjected to moisture. The sand is swept into the open joints until they are filled. Like cement blended sand, it is extremely important that all excess sand and dust be swept from the surface, as any residual dust or sand can stain the surface. After joints are full and the surface is clean, the pavement is misted with water to activate the polymer and curing of the mixture.

TYPES OF USE & INSTALLATION OPTIONS:

1. **Sand Set over Compacted Road Base Installation – Page 4**
   This common installation method is the most popular for areas where pavers are installed close together to create a fully paved effect. Only good for pedestrian foot traffic.

2. **Dry Installation on Gravel – Page 5**
   Also known as **Permeable Over Open Graded Aggregate Installation**, this common installation method is another popular option for areas where pavers are installed close together to create a fully paved effect but also offers more drainage. Only good for pedestrian foot traffic.

3. **Dry Installation on Grass – Page 6**
   This steppingstone is perfect for adding pavers in grassy or landscaped areas where a walkway is needed. Only good for pedestrian foot traffic.

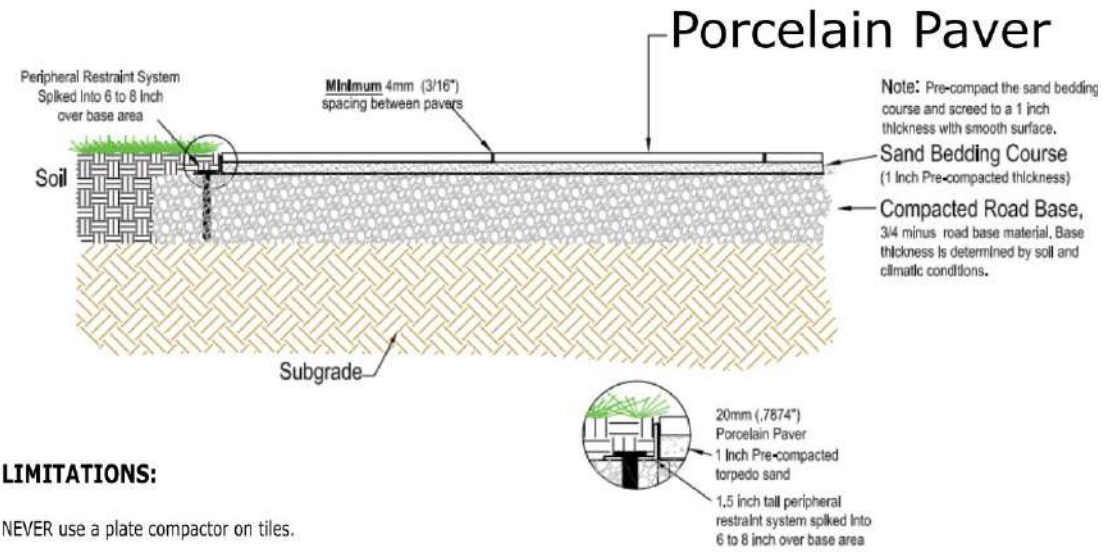
4. **Mortar Installation – Page 7**
   Also known as **Cementitious Adhesive Overlay, Concrete Base Installation**, this installation method is preferred when there is heavier pedestrian traffic or you do not want to worry about tiles moving or shifting. You can also combine this installation method with a reinforced concrete slab and the right setting materials to handle light vehicle traffic.

5. **Pedestal Installation – Page 8**
   This installation method requires the use of a pedestal system over a concrete or similarly structured slab but is a versatile option for hiding systems and working to correct slopes and changes in level. Only good for Pedestrian Foot Traffic.

1. Sand Set over Compacted Road Base Installation (Pedestrian Foot Traffic)

INSTALLATION NOTES:

- Follow the detail drawing below.
- Base material is to be over based 6 to 8 inches beyond the edge of the pavement.
- Compacted road base (4”) and sand bed (1”).
- The required edge restraint system is a low-profile edge restraint with a vertical height of 1 ½ inches as shown in the drawing.
- Ensure that pavement is constructed with a 1 ½ to 2-degree slope that it is pitched away from any building.
- Ensure the plastic 3/16” (4mm) spacers are installed at all corners of the installed pavers.



LIMITATIONS:

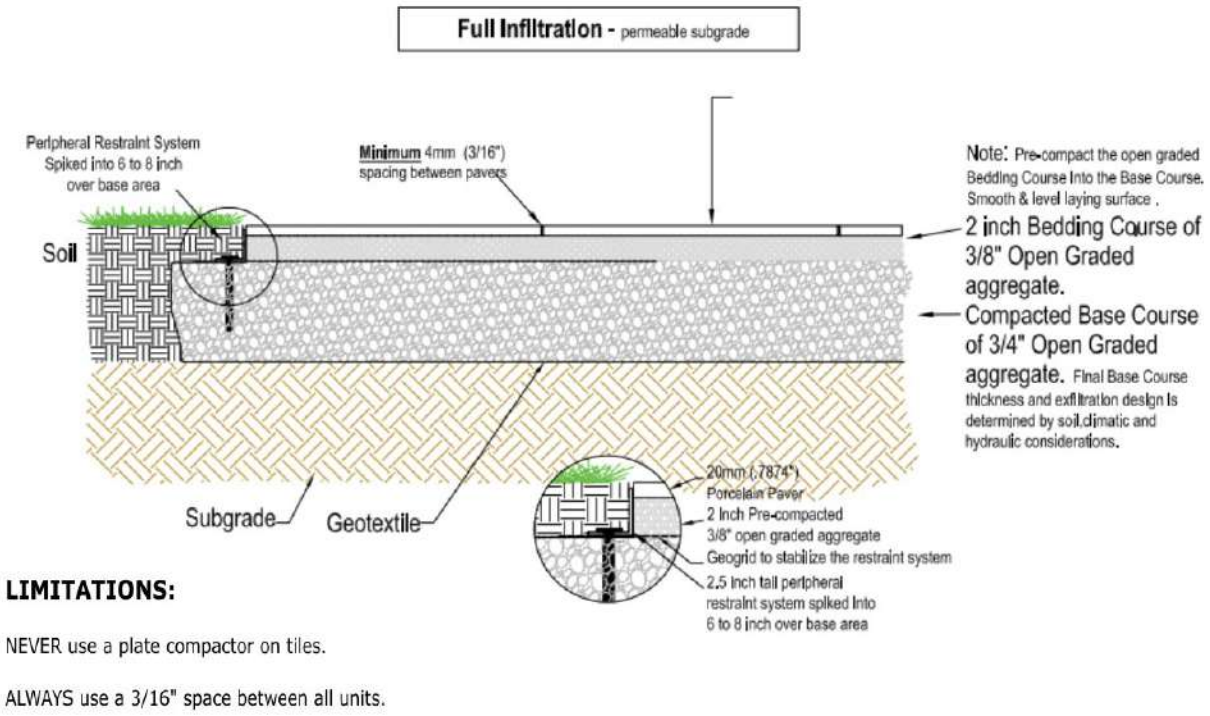
NEVER use a plate compactor on tiles.

ALWAYS use a 3/16" space between all units.

2. Dry Installation on Gravel or Permeable Over Open Graded Aggregate Installation (Pedestrian Foot Traffic)

INSTALLATION NOTES:

- Follow the detail drawing below.
- The required edge restraint system for this installation has a vertical height of 2 ½ inches as shown in the drawing. Follow the edge restraint manufacturer's recommendations for the use of their product in permeable applications regarding geogrid usage and placement to maintain the performance of their edging.
- Ensure that pavement is constructed with a 2-degree pitch and that it is pitched away from any building.
- Insure the 3/16" (4mm) spacers are installed between all pavers.



LIMITATIONS:

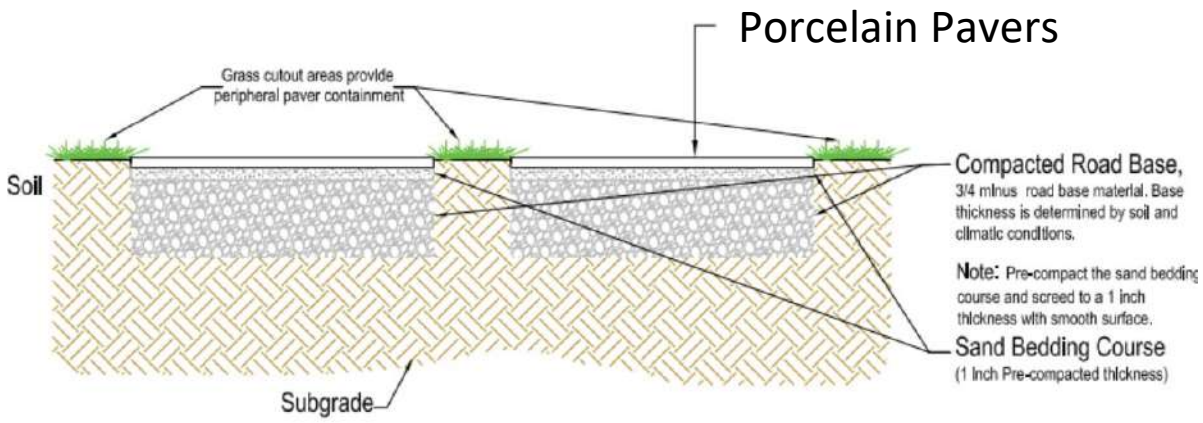
NEVER use a plate compactor on tiles.

ALWAYS use a 3/16" space between all units.

3. Dry Installation on Grass or Steppingstone Sand Set on Compacted Road Base Installation (Pedestrian Foot Traffic)

INSTALLATION NOTES:

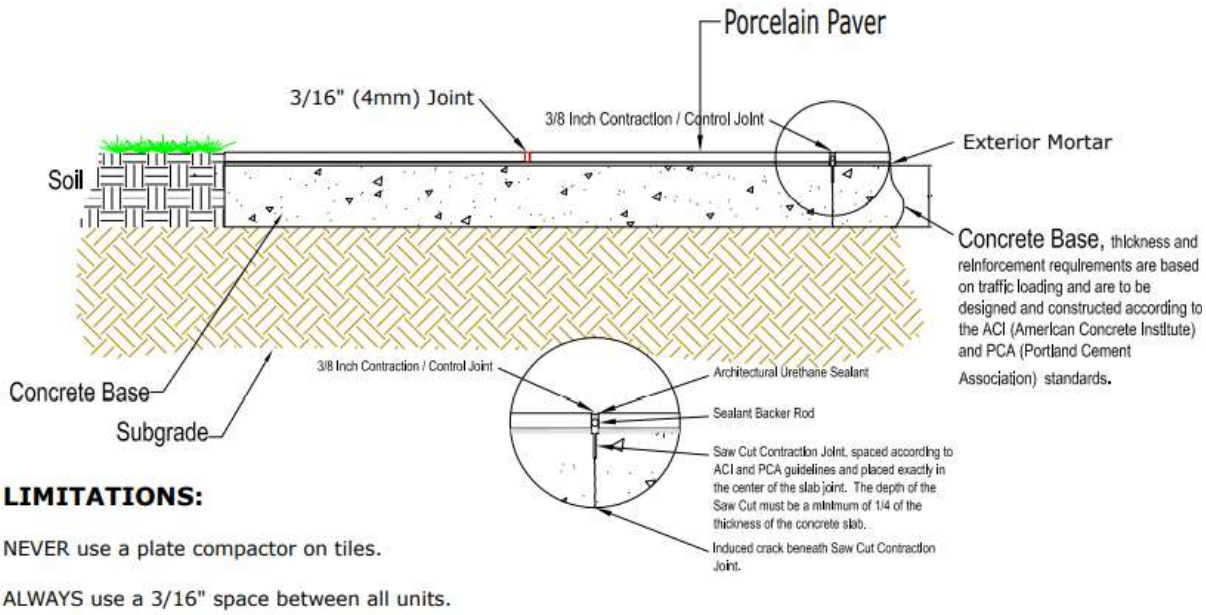
- Follow the detail drawing below.
- Cut out grass for the paver area
- Compacted road base (4”) and sand bed (1”).
- The edge restraint system or grout is NOT needed for this installation.



4. Mortar Installation or Cementitious Adhesive Overlay, Concrete Base Installation (Light Vehicle Traffic)

INSTALLATION NOTES:

- Follow the detail drawing below.
- Ensure that pavement is constructed with a 2 degree pitch and that it is pitched away from any building.
- For concrete foundation slabs that are not large enough to require contraction / control joints, a minimum 3/16" (4mm) grout joint is acceptable, but for larger concrete foundation slabs that do require contraction / control joints, the joint width should be a 3/8". All contraction / control joints should be located in the joint line of installed porcelain pavers and not beneath a paver. *CAUTION: If a Porcelain Paver is installed over a control joint, the paver will reflectively crack along the contraction / control joint beneath it.*



5. Pedestal Installation – (Pedestrian Foot Traffic)

INSTALLATION NOTES:

- Follow the detail drawing below.
- Ensure that concrete slab is smooth, even across the surface and is constructed with a 2 degree pitch and that it is pitched away from any building.
- Ensure the plastic pedestal support are installed at all corners of the installed pavers**.** The Pedestal system may need more support in places other than the corners. Follow pedestal directions.
- *Structural engineered should be consulted before installation.
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