



TRAVERCORE™

Installation Guide

General Information

Safety

During the construction process, safety procedures and safe working practices should be executed at all times, alongside the necessary protective equipment.

Tools

A wet cut tile saw equipped with a diamond blade. The saw should be designed to safely cut a porcelain paver.

To make holes in the slabs, use diamond drill bits for porcelain stoneware.

You must use 3/16" spacers when installing Travercore pavers.

A paver clamp for easy handling, which can be used to both install and remove pavers.

Notched trowels and grout float tools for cementitious adhesive and grout installation. Please refer to the adhesive and grout manufacturer's recommendations for appropriate tool selection.

Handling

To install and remove the slabs, it is advisable to use paver lifting clamps.

The use of gloves is highly recommended while handling and installing Travercore pavers.

Installation

Never use a plate compactor on porcelain pavers.

Always pre-compact and strike off your sand leveling course before installing your porcelain pavers in sand set installations.

Always install Travercore pavers using the recommended 3/16" spacing between them.

Joint Infilling

Always use polymeric sand that is suitable for use with porcelain pavers. Follow the polymeric sand manufacturer's instructions to ensure that no surface staining occurs.

Sweep and compress the polymeric sand into the open joints until they are completely filled. If there are any exposed or hungry joints, extra polymeric sand can be swept over them to ensure a compact and full joint. It is extremely important that all excess sand and dust be swept from the surface (blowers can be used for dust removal), as any residual dust or sand can stain the surface of the pavers. After the joints are full and the surface is clean, the pavement needs to be misted with water to activate the polymer and curing of the mixture.

To easily help the polymeric sand into the joint, one option is to form slurry by adding water, which allows the jointing material to easily flow into the joint.

For cementitious adhesive and grout installation, refer to the manufacturer's technical instructions and specifically as they relate to outdoor installations.

ALWAYS WORK WITH A PROFESSIONAL AND CERTIFIED INSTALLER

General Information

Spacers Between Pavers

When laying pavers directly onto the material, they must never be butt-jointed, as this would increase the risk of chipping caused by micro-movements while the pavers are settling.

Always use plastic spacers for the 3/16" joints. Be sure to use appropriate spacers for installation. Some joint spacers are designed specifically for a dry or wet lay application.

Material

Level and compact base material before laying pavers.

Lay geotextile on top of the material to stabilize it and limit any washing away along the joints. This will also minimize the growth of weeds and nesting of insects.

Never Use a Plate Compactor After Laying

To avoid chipping, never use a metal plate compactor once the pavers have been laid: we recommend use of a rubber roller compactor.

Edge Restraints

When laying pavers on draining sand or gravel, always use an edge restraint system to hold the material in place and prevent any washing away of sand or gravel. Below are examples of restraint systems:

- invisible edging, lower than the combined thickness of the slab plus the base; this must be suitably fixed to the ground.
- visible edging, with a strip of concrete, stone, porcelain stoneware, or other material.

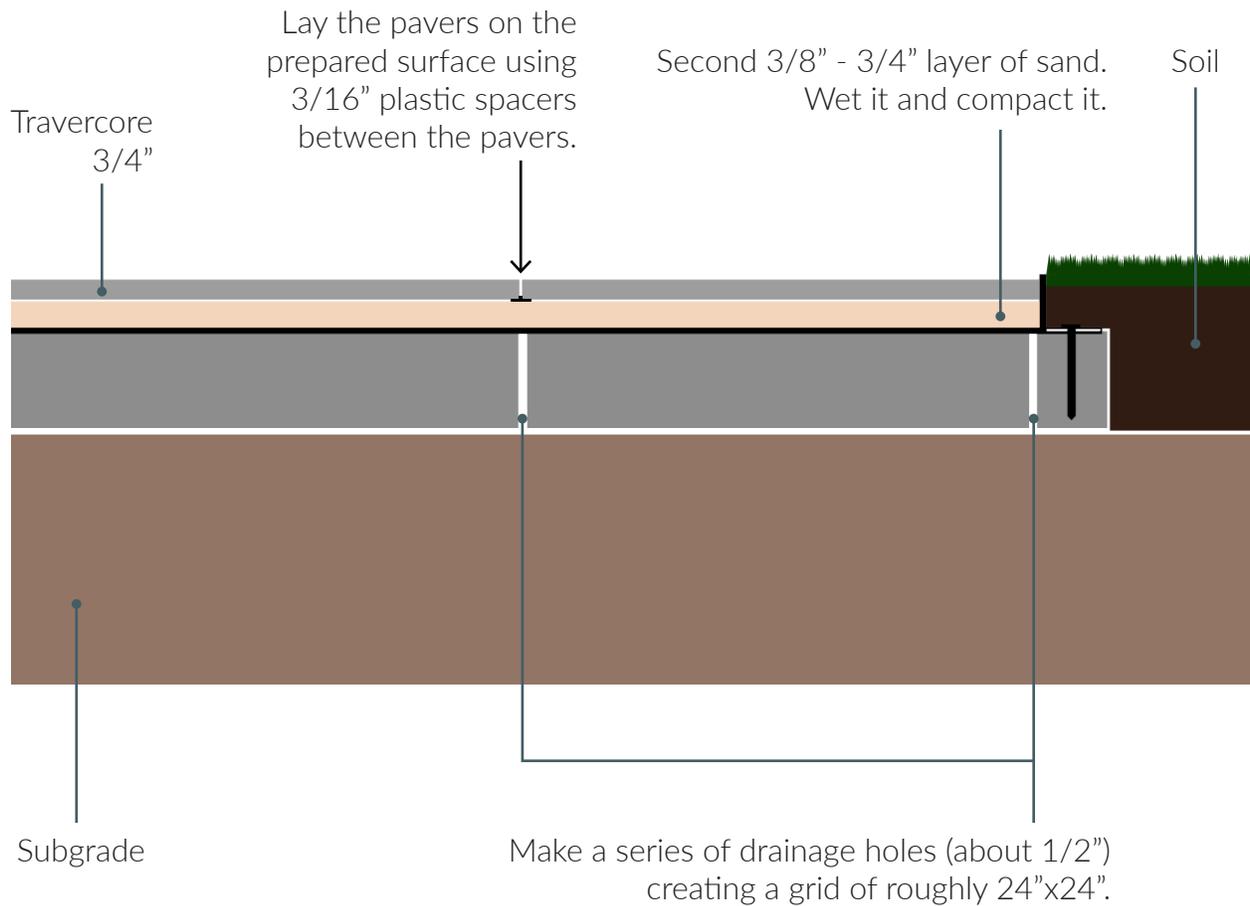
Slopes and Distances from Buildings

In order to keep water from collecting and to help drainage, the surface should have a slope of about 2°.

We recommend leaving a drainage gap between the paved areas and any building wall.

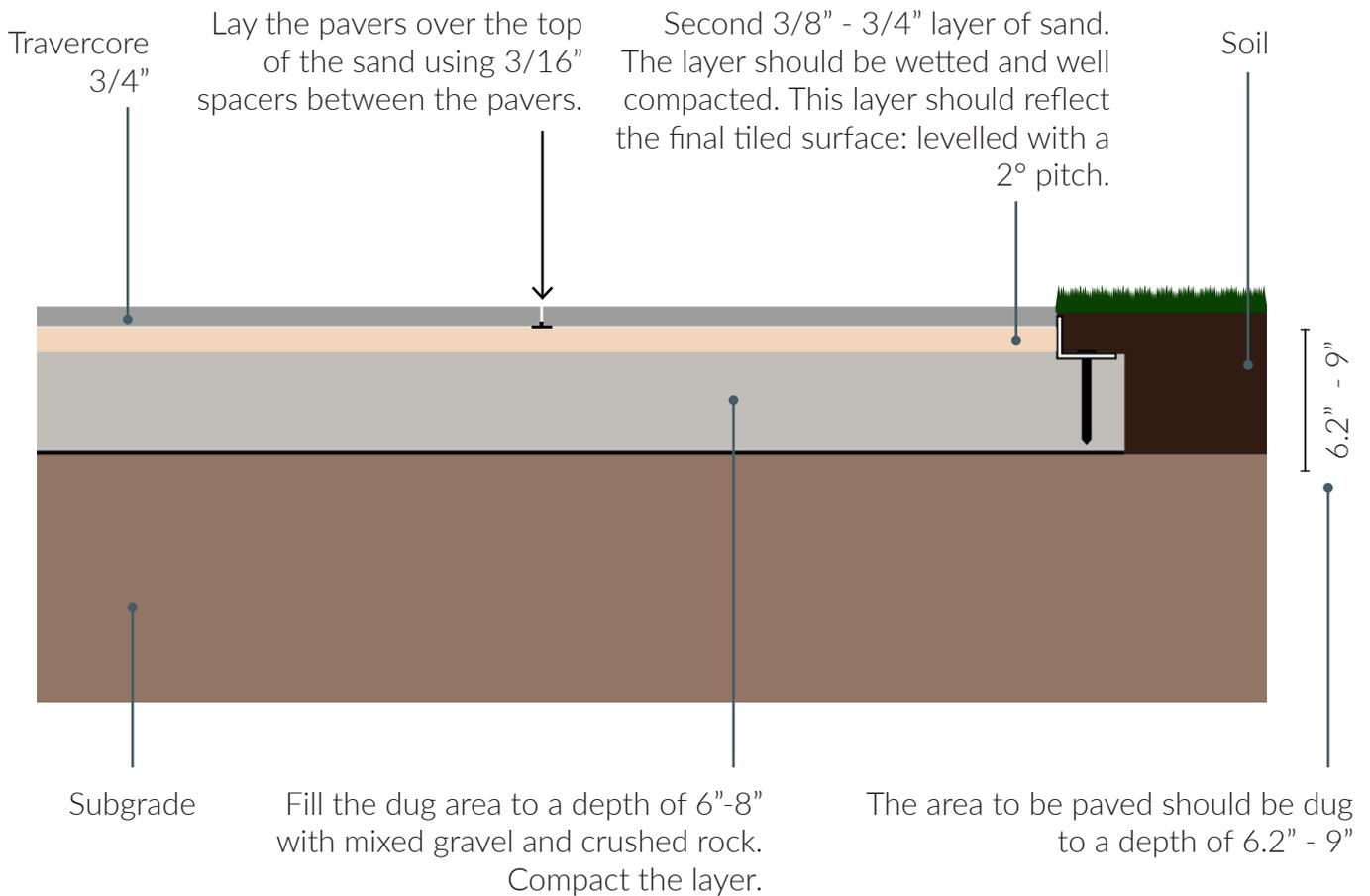
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Dry Laying on a Concrete Pad



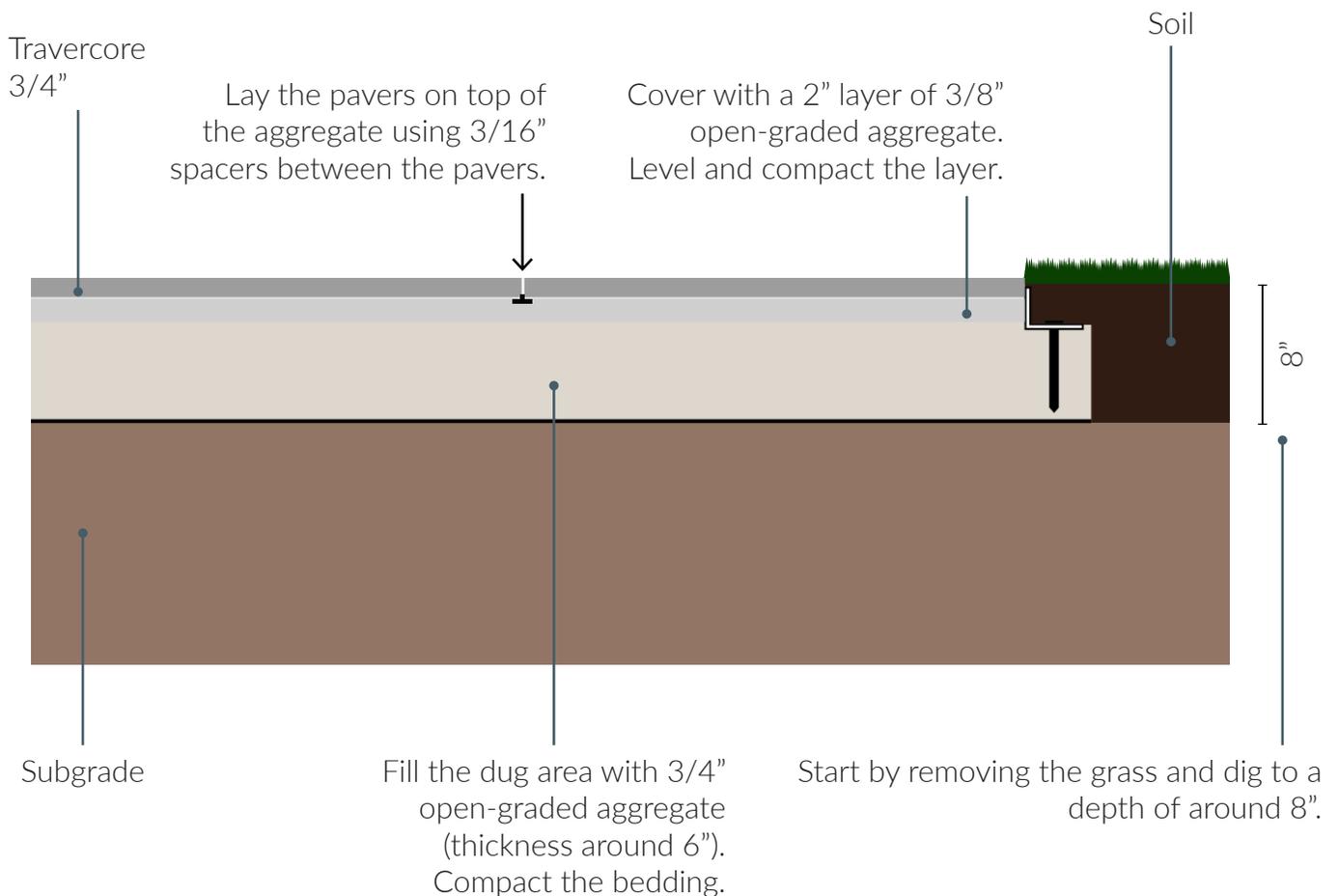
1. Make sure that there are no cracks in the concrete surface that would compromise its stability. We recommend an upper surface slope of 2°.
2. Make a series of drainage holes (about 1/2") creating a grid of roughly 24"x24".
3. Install an edge restraint of a suitable height, fixing it to the material.
4. Spread a 3/8" to 3/4" thick layer of sand, wet it, and compact it.
5. Always use plastic spacers for the 3/16" joints between the pavers, inserting T-shaped spacers around the edges. 3/16" spacers are to be placed underneath the pavers, not on top of them.

Dry Laying on Sand/Compacted Base



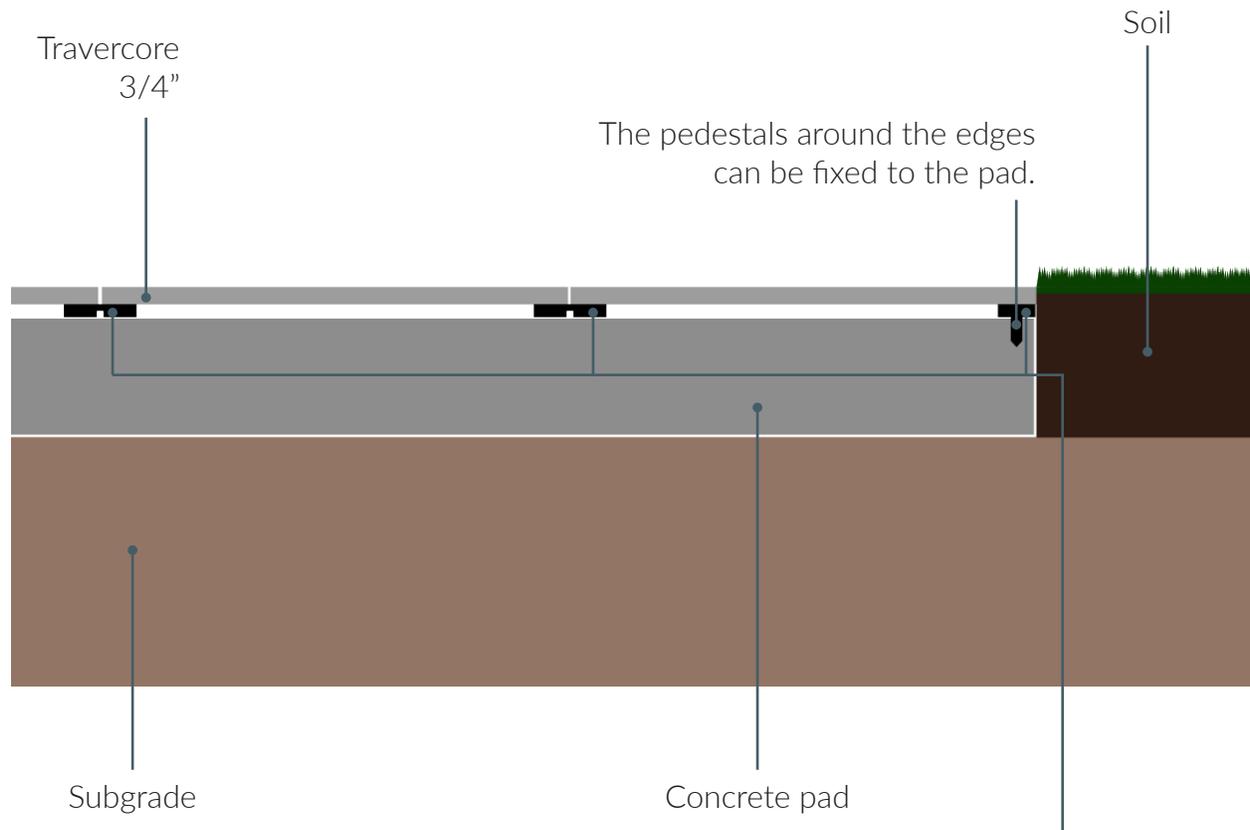
1. Prepare a material base that's about 8" to 10" wider than the paved area. The paved area must remain at a distance from any buildings.
2. Compact the material.
3. Fill the dug area to a depth of 6"-8" with mixed gravel and crushed rock. Compact the layer.
4. Always insert an edge restraint, fixing it suitably to the material.
5. Add a second 3/8" - 3/4" layer of sand or a 2" layer of 3/8" open-graded aggregate. The layer of sand should be wetted, well compacted and levelled with a 2° pitch.
6. Lay the pavers over the top of the sand using 3/16" spacers between the pavers. 3/16" spacers are to be placed underneath the pavers, not on top of them.
7. The joint between slabs may be left open or filled with polymeric sand. (See General Information for more details on polymeric sand)

Dry Laying on a Draining Material



1. Prepare a material base that's about 8" to 10" wider than the paved area. The paved area must remain at a distance from any buildings.
2. Compact the material.
3. Fill the dug area to a depth of 6"-8" with mixed gravel and crushed rock. Compact the layer.
4. Always insert an edge restraint, fixing it suitably to the material.
5. Add a second 3/8" - 3/4" layer of sand or a 2" layer of 3/8" open-graded aggregate. The layer of sand should be wetted, well compacted and levelled with a 2° pitch.
6. Lay the pavers over the top of the sand using 3/16" spacers between the pavers. 3/16" spacers are to be placed underneath the pavers, not on top of them.
7. The joint between slabs may be left open or filled with polymeric sand. (See General Information for more details on polymeric sand)

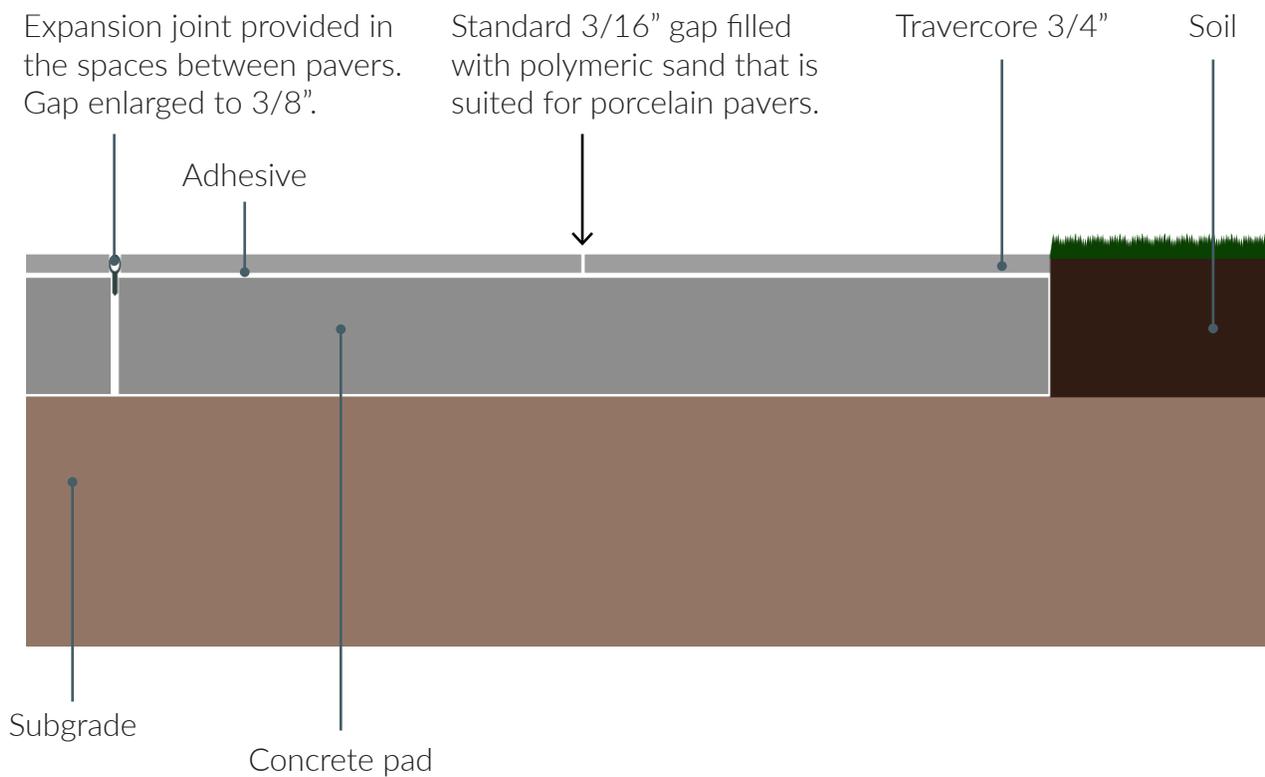
Dry Laying with Pedestals



Fixed height support pads (1/2" to 1" high).
The pedestals can be taken apart.

1. Make sure the concrete surface is stable and flat with a 2° degree slope.
2. Make sure that the plastic pedestal supports are installed on all four corners of the installed pavers.
3. When laying pavers over concrete, fixed-height support pads (1/2" to 1" high) with built-in spacer tabs should always be used.
4. It is recommended that the area to be paved be surrounded by low retaining walls to restrict any movement of the pavers.
5. Alternatively, fix or glue the edge supports to the substrate.

Wet Laying on a Concrete Pad



1. Ensure that the concrete pad is built to a high standard of workmanship and structured adequately in relation to the specific features of the site.
2. Depending on the size of the paved area, expansion joints may need to be provided in the underlying screed. It is essential for the screed joints to be created in correspondence with the joints of the ceramic slabs.
3. For cementitious adhesive and grout installation, refer to the manufacturer's technical instructions and specifically as they relate to outdoor installations.
4. Spread the adhesive or mortar evenly to ensure the pavers will lie flat.
5. Always use plastic spacers for the 3/16" joints, inserting T-shaped spacers around the edges. 3/16" spacers are to be placed underneath the pavers, not on top of them.
6. For the spaces between pavers corresponding with the expansion joints, gaps up to 3/8" wide may be necessary.
7. Carry out careful cleaning after laying in order to remove all adhesive and any joint-filling material from the surface of the pavers.

Tech Specs

CHARACTERISTIC	ASTM METHOD	INDUSTRY STANDARD	EN METHOD	ISO METHOD	INDUSTRY STANDARD	
> 0.60 wet > 0.60 dry	ASTM C 499	-		ISO 10545-2	-	3/4"
Weight	-	-			-	9 lb/ft ²
Water Absorbtion	ASTM C 373-88	≤ 0.5%		ISO 10545-3	E ≤ 0.5%	≤ 0.1%
Certified Porcelain Tile	ASTM C 373	0.5%				Meeting the water absorption criteria of the American national standard PTCA
Breaking strength	ASTM 1505	2,000 lbf		ISO 10545-4	Sp > / = 7.5mm S > / = 1,300 N	> 2,500 lbf
Moduls of rupture	-	-		ISO 10545-4		> 7,000 psi
Static load capacity (24"x24" pavers)	-	-	EN 12825		Center side center diagonal	> 1,700 lbf > 1,200 lbf > 1,500 lbf
Dynamic load capacity - hand object impact test	-	-	EN 12825		-	Test not passed
Dynamic load capacity - soft object impact test	-	-	EN 12825		-	Test passed
Bending strength	-	-	EN 1339		Kn 14.38	Class 14
Impact resistance	-	-		ISO 10545-5	-	> 0.55
Resistance to abrasion	ASTM C 1243-93	Surface wear-resistance properties of glazed vitreous and porcelain tiles		ISO 10545-6	< 175 mm ²	Conforms
Frost resistant	ASTM C1026	A tile sample is subjected to repeated processes of freezing and thawing. Sample must show no visible defects.		ISO 10545-12	Requested	Resistant
Resistance to thermal shock	ASTM C 484	Requested		ISO 10545-9	Requested	Resistant
Resistance to chemicals	ASTM C 650	A tile sample is placed in continuous contact with a variety of chemicals for 24 hours. Sample must show no visible defects		ISO10545-13	UB min	UA
Resistance to acids and alkalis	-	-		ISO 10545-13	-	ULA/UHA
Resistance to staining	ASTM C 1378	Surfaces are exposed to staining agents for 24 hours followed by four cleaning procedures. Results are recorded post cleaning.		ISO 10545-14	-	Class 5
Fire resistance	-	-	EN 3501-1		-	A1-A1 FL
Barefoot ramp test	ASNI A 326.3	-		DIN 51097	-	A+B+C
Shod ramp test	-	-		DIN 51130	-	R11
Dynamic coefficient of friction	ANSI A137 / ASTM A326.3	-		BOT 3,000	-	> 0.60 wet > 0.60 dry
Slip resistance	-	-		DM 236/89 B.C.R.A	-	> 0.40