Tile Tech Porce-Pave™

Paving America one step at a time!

ULTRA-THIN = 2 cm

MANUFACTURER OF PORCELAIN DECK PAVERS
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Architectural Porcelain Pavers

Until recently, porcelain tiles have mostly been used for traditional interior tiling purposes on both floors and walls. But with advances in manufacturing techniques and new technology, it is now possible to make porcelain paver tiles in a much greater thickness and size, enabling the tiles to be used for exterior structural paving applications.

Tile Tech’s Porce-Pave™ porcelain paver tiles boasts an outstanding combination of qualities unmatched by any other floor coverings. High-tech manufacturing processes involving use of specialized clays, high temperatures and pressures resulting in a product of unique strength and hardness, extremely resistant to external abrasion and is even resistant to scratching with steel tools.

In addition to its technical and aesthetic properties, our porcelain paver range can meet a number of important safety requirements for floor coverings in public places, combining an anti-slip surface with extreme wear resistance.

Ideal for both major commercial and residential projects alike, suitable for roof terrace balconies, plazas, walkways, and swimming pool areas.

Porce-Pave™ pavers are comprised of a 20mm single layer of load-bearing porcelain designed for use in conjunction with raised pedestals and support pad systems as well as other dry installation and traditional fixing methods allowing total flexibility in design applications.
**EASY TO CLEAN**
With or without use of pressure washers.

**EASY TO INSTALL**
Rectified and single work-size.

**EASY TO REMOVE, INSPECT AND REINSTALL**
Only 36 lb per slab 24x24.

**LOAD BEARING**
20mm single layer Structural porcelain.

**VERSATILE INSTALLATION**
Various installation methods including pedestal set, mortar set and sand set.

**ANTI-SLIP**
Surface finish

**LIGHT WEIGHT**
Only 9 lb per sqft.

**LOAD BEARING**
20mm single layer Structural porcelain.

**VERSATILE INSTALLATION**
Various installation methods including pedestal set, mortar set and sand set.

**ANTI-SLIP**
Surface finish

**EASY TO CLEAN**
With or without use of pressure washers.

**NO SPECIAL TREATMENTS REQUIRED**

**OUTDOOR APPLICATION + COORDINATED INDOORS**
Available in standard thickness for indoor use.
Wood-Plank Effect

Made from 100% fired porcelain, Porce-Plank™ offers a high-tech alternative to both natural and composite wood & timber decking products.

The fusion of porcelain paver technology with the natural characteristics of timber, has produced a material with all the benefits and beauty of timber without the disadvantages; Porce-Plank™ is fire proof; needs no maintenance; will not stain; will not change colors or fade; and is extremely resistant to abrasion -offering massive over-life savings.

Extremely high slip resistance and zero maintenance make it the perfect choice for outside dining; roof terraces and balconies; walkways and swimming pool areas.
Porce-Plank™ pavers are ideal for high traffic applications where the look of wood is preferred but where low maintenance and a consistent appearance, year after year is essential.

Completely nonporous, they will not stain and require no sealing. They will remain looking as good as the day they were installed! Extremely high slip resistance for all finishes, ensures a safe floor area wet or dry.

Porce-Plank™ is available in a grooved finish simulating deck board grooving, ideal for exterior applications where additional grip is preferred and they are available in 3 different color choices.
The Porce-Plank™ pavers have simulated slats, giving the appearance of individual timber decking slats but on a continual anti-slip surface – the aesthetics of timber without color fade or maintenance.

Porce-Plank™ offers the classic look of natural wood without the disadvantages:

- High Load bearing
- Fire proof
- Frost proof
- Cost effective
- Non porous
- Highly stain resistant
- Highly slip resistant
- Installation over single ply membranes
- Light weight -9 lb /SqFt
- Hidden services w/ easy access

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Rustic-Wood Effect

Tile Tech’s range of porcelain pavers features not only simulated timber plank finishes but also a unique range of simulated weathered wood finishes which replicates the appearance and features of natural reclaimed wood but without the disadvantages of fading, twisting, warping, decay, and poor fire resistance inherent in natural wood.

These versatile porcelain pavers can be easily used to resurface existing concrete areas by simply laying them directly over the existing concrete using short support pedestals at corner of each paver to compensate for uneven sub-surface conditions. Alternatively the pavers can be laid on a bed of either compacted sand or compacted gravel.
Porce-Rustica™ series porcelain pavers provide a high-tech alternative to reclaimed natural wood resulting in a skillful coupling of porcelain tile technology with the timeless elegance and beauty of reclaimed wood, creating a durable, fade resistant paving material with a unique rustic wood grain finish. The pattern of the wood grain differs in every tile, just like random pieces of natural reclaimed wood.

This versatile material can be installed in a sand-set, thin-set cement-set or pedestal-set application and will transform any space, commercial or residential, right before your eyes!
Tile Tech’s range of porcelain pavers are particularly useful for exterior raised decking when used in conjunction with our Hybrid Adjustable Pedestal System, for constructing a durable, attractive deck surface over existing utilities or to create perfectly level rooftop decks.

Due to their lightweight characteristics, porcelain pavers are much easier to transport and install, especially in high-rise building applications where they can be easily transported in service elevators. And because of their fire resistance, they can be an ideal alternative to natural wood decking in areas where local fire regulations will not permit the use of wood as a decking material for rooftops. And being essentially maintenance-free, the pavers will maintain their attractive appearance year after year, even in high traffic applications.
Our Porce-Stone™ range offers the beauty and aesthetics of stone, without the maintenance and upkeep required for natural stone materials. Completely nonporous, they will not stain and require no sealing. They will remain looking as good as the day they were installed! Extremely high slip resistance for all finishes, ensures a safe floor area wet or dry.

These architectural porcelain pavers have been designed for both commercial and residential applications and can transform plaza decks, roof decks, pool decks, terraces, patios, walkways & streetscapes into virtual works of art.
Whilst natural stone pavers have traditionally been used in such projects, porcelain pavers have a significant number of advantages over natural stone. Porcelain pavers have a water absorption of less than 0.1%, not only it is exceptionally stain resistant, but water cannot penetrate, so it avoids issues of freeze thaw cracking which can be a problem in certain climatic zones with natural stone paving.

Because porcelain is manufactured at an extremely high temperature and is very dense, porcelain slabs of ¾” thickness have sufficient strength to be used with pedestal support systems for building exterior elevated decks and roof decks, not only for residential applications, but also for high pedestrian traffic commercial applications.
The Tile Tech Porce-Pave™ system is the pinnacle of external raised flooring technology, enabling architects to specify lightweight, slip resistant and attractive raised flooring solutions, which combine incredible technical properties with uncompromised aesthetics, making them the ideal choice for commercial and residential use alike.

High load and impact resistance; extreme wear and scratch resistance; frost and fireproof; colour fast and extremely resistant to staining; resistance to mould and algae growth—these qualities ensure an extremely low maintenance and trouble free flooring solution.
Porce-Plank™

Natural-Plank
Teak-Plank
Mocha-Plank

Porce-Rustica™

Rustic-Maple
Rustic-Oak
Rustic-Gray

Porce-Stone™

Sand-Stone
Gray-Stone
Black-Stone
### DIMENSIONAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Size - L x W</th>
<th>Thickness</th>
<th>Weight / SqFt</th>
<th>Weight / Unit</th>
<th>Units / Pallet</th>
<th>Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.50” x 23.50” 600 x 600mm</td>
<td>3/4” 20mm</td>
<td>9-lb</td>
<td>36lb</td>
<td>30pcs</td>
<td>• • •</td>
</tr>
<tr>
<td>23.75” x 47.75” 600 x 1200mm</td>
<td>3/4” 20mm</td>
<td>9-lb</td>
<td>72lb</td>
<td>30pcs</td>
<td>•</td>
</tr>
</tbody>
</table>

### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Test Method</th>
<th>Test Results</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bending Strength ASTM C-648 ISO 10545-4</td>
<td>3,300lb</td>
<td>Tests the tiles resistance to heavy loads. The flexural / breaking strength is the force needed to break the tile.</td>
</tr>
<tr>
<td>Distributed Load ASTM (N/A) EN 12825</td>
<td>2,500lb</td>
<td></td>
</tr>
<tr>
<td>Concentrated Load ASTM (N/A) EN 12825</td>
<td>Center 2,160lb Center of sides 1,460lb Diagonal 1,840lb</td>
<td>This standard tests the anti-slip properties by determining the coefficient of friction between the paver and a body with a rubber surface.</td>
</tr>
<tr>
<td>Coefficient of Friction ASTM C-1028 ISO (N/A)</td>
<td>Wet &gt;0.60 Dry &gt;0.60</td>
<td></td>
</tr>
<tr>
<td>Water Absorption ASTM C-373 ISO 10545-3</td>
<td>Max 0.05%</td>
<td>Absorption is the product capacity for water penetration. Porcelain pavers are impervious, very dense product with a very low absorbency rate.</td>
</tr>
<tr>
<td>Frost Resistance ASTM C-1026 ISO 10545-12</td>
<td>RESISTANT</td>
<td>Frost resistance is directly related to water absorption. If tiles absorb water and freeze the tile may fracture as the tile expands. Tiles may be rated as frost resistant or not.</td>
</tr>
<tr>
<td>Abrasion Resistance ASTM C-1027 ISO 10545-6</td>
<td>RESISTANT - Class 5</td>
<td>Abrasion resistance is the capacity of the surface to resist the wear caused by foot traffic or the abrasion caused by mechanical equipment.</td>
</tr>
<tr>
<td>Stain Resistance ASTM C-1378 ISO 10545-14</td>
<td>RESISTANT - Class 5</td>
<td>Method applicable to all working surface of ceramic tiles to determine their resistance to stains. Each staining agent must remain on at least 5 testing samples, for at least 24 hours.</td>
</tr>
<tr>
<td>Chemical Resistance ASTM C-650 ISO 10545-13</td>
<td>RESISTANT - UA ULA UHA</td>
<td>Resistant against household chemicals, swimming pool salts, acids and alkalis at low and high concentrations.</td>
</tr>
</tbody>
</table>
The Tile Tech Pedestal System is designed for Porce-Pave™ pavers to lay level over a built up roof. The substrate can be either concrete or wood structure, with a roof membrane over the top.

Our new Hybrid Pedestal™ System consists of 7 standard components and off-the-shelf, 4.215” diameter SDR-35 PVC pipe. The PVC pipe allows the pedestal system to vary in height up to 22+ inches and is cut to the desired height using 12” chop saw. The Uni-Base is then “press fit” on to one end of the PVC pipe and a Uni-Collar on to the other end and requires no gluing or other attachments. Either 3/4” or 1-1/2” Uni-Insert is then screwed in to the Uni-Collar allowing for fine height adjustments. The assembly is completed by aligning and locking the Uni-Cap with the Uni-Insert. The Uni-Cap features include built-in self-leveling and removable 1/8” spacer tabs for proper paver spacing and joint alignment.

Stackable caps allow for minor height adjustments from 1/2” up to 12” and can compensate for slopes of 0% to 3% by aligning the built-in slope compensator of one cap relative to another. Simple, easy and affordable!

Single model design allows for all height applications from low as 1/2” and as high as 22” resulting in reduced labor and material cost. Eliminates leftover parts and pieces!

PVC pipe adjustment allows the pedestal system to vary in heights up to 22+ inches by using off-the-shelf 4” SDR-35 PVC pipe available everywhere. Eliminates material & shipping cost!

Screw adjustment allows for quick and easy fine height tuning for an additional 3/4” or 1-1/2” depending on model size of UNI-INSERT™ used. Eliminates having to cut pipe exactly!

Self-Leveling head allows for slope compensation of 0% to 4% in any direction. Allen or Hex key will allow for leveling while loaded with pavers. Eliminates having to remove pavers to make adjustments!
### Pedestal System - Components

<table>
<thead>
<tr>
<th>PEDESTAL DETAILS</th>
<th>Component</th>
<th>Function</th>
<th>Assembly Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNI-SHIM™</strong></td>
<td>1/8” &amp; 1/16”</td>
<td>Allow for fine tuning of individual pavers. Can be broken in to quarters or halves and stacked on top or bottom of pedestals.</td>
<td></td>
</tr>
<tr>
<td><strong>UNI-CAP™</strong></td>
<td></td>
<td>Align and lock on to UNI-INSERT and allows for self-leveling in any direction from 0% to 4% slope.</td>
<td></td>
</tr>
<tr>
<td><strong>UNI-INSERT™</strong></td>
<td>3/4”</td>
<td>Screw in to UNI-COLLAR and allows for additional height adjustment of either 3/4”.</td>
<td></td>
</tr>
<tr>
<td><strong>UNI-INSERT™</strong></td>
<td>1-1/2”</td>
<td>Screw in to UNI-COLLAR and allows for additional height adjustment of 1-1/2”.</td>
<td></td>
</tr>
<tr>
<td><strong>UNI-COLLAR™</strong></td>
<td></td>
<td>Compression fits on to end of 4&quot;ø SDR-35 PVC pipe and allowing UNI-INSERT to screw in to the system.</td>
<td></td>
</tr>
<tr>
<td><strong>UNI-BASE™</strong></td>
<td></td>
<td>Compression fits on to end of 4&quot;ø SDR35 PVC pipe or can be used with UNI-INSERT alone.</td>
<td></td>
</tr>
<tr>
<td><strong>BUFFER PAD™</strong></td>
<td>(Mandatory)</td>
<td>Used under base to provide slip resistance, noise dampening &amp; membrane protection.</td>
<td></td>
</tr>
<tr>
<td><strong>STACK-CAPS™</strong></td>
<td></td>
<td>Used of low height requirements. Rotate and stack caps for slope &amp; height adjustment. Can also be used with PVC pipe to reach 12” max.</td>
<td></td>
</tr>
</tbody>
</table>

### Pedestal Properties

<table>
<thead>
<tr>
<th>PEDESTAL PROPERTIES</th>
<th>TEST METHOD</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>ASTM C-638</td>
<td>6,300 psi Minimum</td>
</tr>
<tr>
<td>Flexural Modulus</td>
<td>ASTM C-790</td>
<td>35,000 psi Minimum</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>ASTM C-790</td>
<td>10,500 psi Minimum</td>
</tr>
<tr>
<td>Softening Point</td>
<td>ASTM C-1525</td>
<td>226° F</td>
</tr>
<tr>
<td>Freeze-Thaw</td>
<td>ASTM C-</td>
<td>Unaffected</td>
</tr>
<tr>
<td>Material</td>
<td>HDPP - High Density Polypropylene *</td>
<td>Resistant to oils, acids, alkalis, bitumen, mold and algae.</td>
</tr>
</tbody>
</table>

*For complete material & installation specifications, please visit our website or contact us.*
PART ONE- GENERAL
1.2 SUMMARY
A. Scope of work
1. Porce-Pave™ Pavers
2. Adjustable Pedestals

1.4 SUBMITTALS
A. Product Data Sheet
1. Including preparation instructions, Installation methods, storage and handling requirements.

B. Samples
1. Submit two sets of standard color chips of manufacturer’s full range.

1.5 QUALITY ASSURANCE
A. Manufacturer
1. Minimum of 5 years experience manufacturing precast pavers.
2. Supply a written installation procedure manual.

B. Installation Contractor
1. Minimum of 1 year experience installing precast pavers on projects of similar size.
2. Installation contractor must meet all local & state licensing & bonding requirements.

1.8 WARRANTY
A. Manufacturer
1. Shall warrant installed pavers for a period of 5 year from date of substantial completion against failure of materials.

B. Installation Contractor
1. Shall warrant installed pavers for a period of 3 year from date of substantial completion against failure of workmanship.

PART TWO - PRODUCTS
2.1 MANUFACTURER
A. Tile Tech Pavers Inc.
Tel........................213-380-5560
Fax.......................213-380-5561
Toll Free.............888-380-5575
Web.....................tiletechpavers.com

2.2 MATERIALS
A. Porcelain Pavers (Porce-Pave™)
1. Design: Porce-Plank™
Porce-Rustica™
Porce-Stone™
2. Size: 24x24x3/4”

B. Uni-Just Pedestal System
1. Uni-Base
2. Uni-Cap
3. Uni-Collar
4. Uni-Insert: Model 3/4” or 1-1/2”
5. Uni-Shim: Model 1/16” and 1/8”
6. Uni-Spacer
7. Uni-Buffer Pad
8. SDR-35 PVC Pipe (4.215” OD)
User supplied and cut to desired height.

C. Stack-Cap Pedestal System
1. Stack-Cap
2. Uni-Shim: Model 1/16” and 1/8”
3. Uni-Spacer
4. Uni-Buffer Pad
5. SDR-35 PVC Pipe (4.215” OD)
User supplied and cut to desired height.

3.1 EXAMINATION
A. Examine area to receive Porce-Pave™ & Pedestal system and verify:
1. Substrate surface are smooth, sound, clean and free of irregularities.
2. Related work penetrating the plane of roof is completed.
3. Verify that the roof deck will sustain the weight of the Porce-Pave™ System.
4. Do not commence porcelain paver application until unsatisfactory conditions are satisfied.

3.2 PREPARATION
A. Broom deck surface clean.

3.3 INSTALLATION
A. Install in accordance with Tile Tech Pavers and other contributing manufacturer’s instructions.

B. First, determine a starting point; this will be largely dependent on where less than full size porcelain paver are to be used.

C. Establish a grid pattern for the pedestals using chalk lines.

D. Use a laser leveling device or a mason’s line to determine finished elevation of the deck surface and height of PVC Pipe to be cut. Assemble Adjustable Pedestal System components and place at grid line intersections.

E. Install Porce-Pave™ pavers on top of pedestals. Fine tune adjustments to the tile surface can be made by using the pedestal shims.

For complete material & installation specifications, please contact Tile Tech Pavers