



2CM PORCELAIN PAVERS & COPINGS

DreamScapes™

Installation Guide

How to lay DreamScapes™ pavers on grass, on gravel or sand, on pedestals, and over concrete with adhesive, how to care for them, and the technical data you need to specify them.

Made in the USA · Color-Body Porcelain · Rectified · 2cm

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01 PERFORMANCE

Built for the outdoors

DreamScapes™ is 2cm color-body porcelain made for the outdoors. Here is what that means on the job.



Easy to lift, inspect, and reuse



Color stays stable over time



Easy to install



Easy to clean



Frost-resistant



Slip-resistant: wet DCOF > 0.42, R11



Carries heavy loads: 2,800 lbf breaking strength



Resistant to salt



Resistant to stains, acids, and chemical agents



Resistant to thermal shock



Takes light vehicle traffic when bonded over concrete

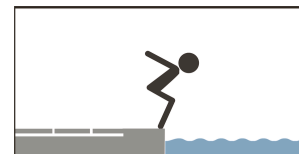
02 INTENDED USES

Where it works

Durable and simple to install, DreamScapes™ 2cm pavers suit exterior floors in residential and public settings, including the ones below.



Walkways



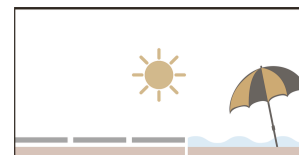
Garden paths and pool decks



Terraces



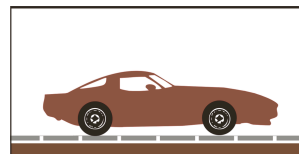
Public parks and gardens



Bathing facilities



Urban spaces



Driveways, bonded over concrete

COMMERCIAL PROJECTS

On commercial projects, DreamScapes™ floors are for light commercial use only.

03 INSTALLATION

Choosing a method

DreamScapes™ 2cm pavers install three ways: dry-laid on grass, dry-laid on gravel or sand, or bonded to concrete with adhesive. Choose by how the surface will be used. Pedestals are a fourth, conditional option, covered below.



DRY-LAID ON GRASS

Easy to lay, adjust, and move

Ideal for public parks and private gardens

For foot traffic

Section 03.1, page 4



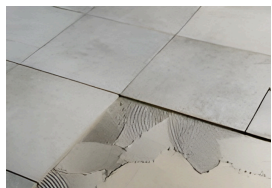
DRY-LAID ON GRAVEL OR SAND

Easy to lay, adjust, and move

A clean look that suits contemporary architecture

For foot traffic

Section 03.2, page 5



ADHESIVE ON CONCRETE

The method for driveways: light vehicles only

Carries one surface from interior to exterior

Section 03.4, pages 7–8



Before you start

Inspect and blend. Check every piece for shade, caliber, and visible defects before you set it. Shade variation runs V2 to V4 by color, so pull from several boxes and blend as you go.

Lift with care. Pavers weigh from about 36 lb (24" × 24") to 71 lb (24" × 48"). Use lifting tongs, and have two people handle the large formats.

Cut wet. Use a wet saw with a diamond blade made for porcelain. Never dry-cut with power tools: the dust contains crystalline silica. Wear eye, hand, and respiratory protection.

Plan the pattern. Offsets greater than one third are not recommended (ANSI A108 and TCNA guidelines).

Plan the drainage. Slope every finished surface so water runs off: at least 1.5% (about 3/16" per foot) on adhesive installations, 1–2% on dry-laid ones.

Work to the standards. Follow the TCNA Handbook; ANSI A108, A118, and A137.1; TCNA EJ171 for movement joints; and your local codes.

RAISED PEDESTAL SYSTEMS

DreamScapes™ pavers can be raised on pedestals for foot traffic, under the conditions in section 03.3, page 6. There is no accepted industry standard for pedestal tile installations, and Pera Tile extends no warranty as to pedestal installation. Follow the pedestal maker's guidelines in full, and engage a qualified installer.

WIND AND DRY-LAID PAVERS

On exterior dry-laid installations, wind can lift pavers in certain applications and locations. The professional installer should always confirm that the chosen system suits the installation and meets local regulations.

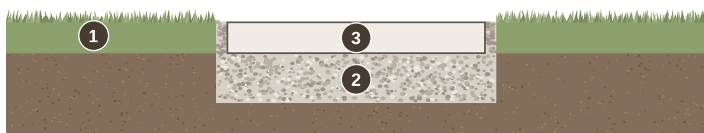
Failure to follow these recommendations may result in misuse of the product and cause injury to persons or damage to property.

03.1 INSTALLATION

Dry-laid on grass

LAYING STEPPING STONES

Start by deciding how many steps the path needs, then set the pavers out at equal distances. For the most stable result, dig out about 2" (5 cm) of soil, or deeper in cold or wet climates, and lay a bed of fine gravel. Compact the base and set the paver. Finish with the paver surface level with the turf, so a mower passes over it without damage.



- 1 Turf
- 2 Fine gravel bed, 4–8 mm grain
- 3 DreamScapes™ 2cm porcelain paver

What you need: shovel, fine gravel (4–8 mm grain), square-tip trowel, rubber mallet, work gloves, and lifting tongs.



Lay the pavers out on the ground to settle their positions, keeping the spacing equal.



Mark the outline of each paver in the soil with a spade.



Remove the turf and dig out about 2" (5 cm) of soil.



Build a stable, even base of fine gravel (4–8 mm grain).



Set the paver so it sits about 3/16" (0.5 cm) above the ground.



Tap the edges down with a rubber mallet until the paver is level with the grass.



The build-ups shown are indicative and are meant only to explain a correct installation. Always follow the codes and regulations that apply to your project, and the instructions of the design team.

03.2 INSTALLATION

Dry-laid on gravel or sand



On the prepared base, build a stable, even bed of fine gravel (4–8 mm grain) or sand.

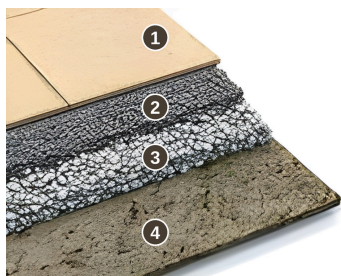


Level the bed with a metal straightedge.



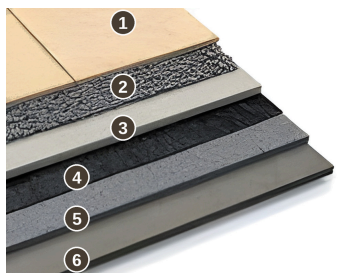
Set the paver and compact along its edges to settle it evenly on the bed. Leave a joint of at least 1/4" (6 mm) so water drains well.

OVER GROUND OR SOIL



- 1 DreamScapes™ 2cm porcelain paver
- 2 Ballast: about 2"–2½" (5–6 cm) of fine gravel, 4–8 mm grain, or sand
- 3 Draining layer
- 4 Ground

OVER A FLAT, HARD SURFACE



- 1 DreamScapes™ 2cm porcelain paver
- 2 Ballast: about 2"–2½" (5–6 cm) of gravel, 4–8 mm grain, or sand
- 3 Separation layer (drainage membrane)
- 4 Waterproof layer
- 5 Sloped screed
- 6 Floor base



PREPARE THE BASE ON SOIL

- 1 Excavate at least 4" (10 cm), and deeper in cold or wet climates.
- 2 Compact the soil and slope it at least 2% so water cannot stand.
- 3 Optional: lay geotextile to keep the stone from sinking into the soil.
- 4 Place and compact the draining layer, then spread and level the ballast.
- 5 Finish with a slight slope, 1–2%, so the surface drains.

EDGES AND JOINTS

Restrain the edges. Fit a curb or edge restraint around the perimeter wherever the paving does not meet a wall or rigid paving. Install it before the bedding layer.

Use spacers. Pavers should never touch: edges that touch can chip.

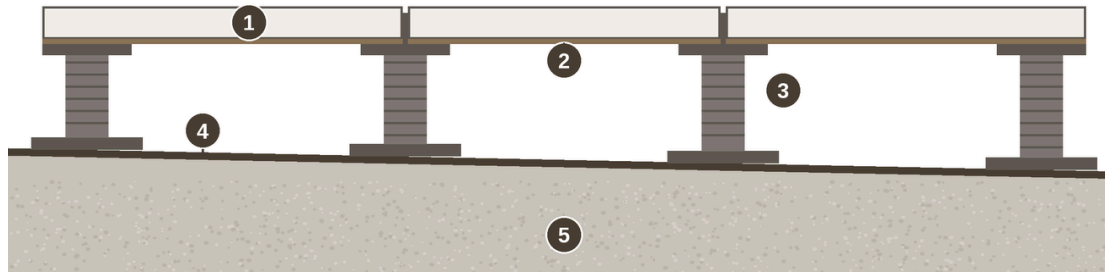
Fill or leave open. Joints can stay open, or take fine sand or a polymeric sand made for porcelain pavers and rated for the joint width.

No plate compactor. Tap pavers level with a rubber mallet. Never run a compactor over them.

Build-ups shown are indicative. Always follow the codes that apply to your project and the design team's instructions.

03.3 INSTALLATION

Raised pedestal systems



- | | |
|------------------------------------|--|
| 1 DreamScapes™ 2cm porcelain paver | 2 Anti-fracture backing, at 4" and above |
| 3 Pedestal with spacer tabs | 4 Waterproofing membrane |
| 5 Structural slab, sloped to drain | |

DreamScapes™ pavers can be raised on pedestals for foot traffic, under the conditions on this page. A pedestal floor is an engineered system: the pedestal maker's instructions and the project's design professional govern the installation.

WARRANTY AND RESPONSIBILITY

Pera Tile extends no warranties, express or implied, as to pedestal installation of its pavers. Ask the pedestal system provider to confirm that its system suits DreamScapes™ pavers. The pedestal system, the supporting structure, wind resistance, and workmanship rest with the pedestal maker, the design professional, and the installer.

CONDITIONS

Foot traffic only. Balconies, terraces, and roof decks. No vehicles.

Enough supports. At least four pedestals under a 24" × 24" paver and six under a 24" × 36" or 24" × 48", no more than 24" apart. Add a center pedestal in public or heavily loaded areas.

Wind. No standard governs wind uplift on raised pavers. The design professional must assess it for the site, including building height, parapets, and exposure.

A sound, sloped base. A structural slab or deck that carries the dead and live loads, waterproofed and sloped at least 1.5% to drain.

Backing at height. At 4" and above, every paver needs an anti-fracture backing: an adhesive membrane, mesh, or a galvanized tray.

Impact. A paver can crack if a heavy object is dropped on it. Replace a cracked paver immediately.

A purpose-made system. Use pedestals made for porcelain pavers, and follow their maker's layout, height limits, and instructions in full.

Joints and edges. The pedestal maker's spacer tab sets the joint width. Never butt pavers edge to edge. Restrain the perimeter where no wall holds it, and leave room for movement.

Design sign-off. Have an architect or engineer review and approve every pedestal project for its static and dynamic loads before work starts.

03.4 INSTALLATION

Adhesive installation on concrete

Pavers bonded with adhesive to a sloped cement screed (mortar bed) over the ground or over a floor slab.



1 Clean the substrate thoroughly before you begin.



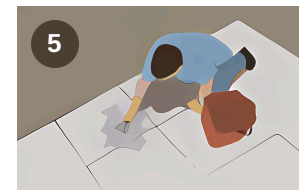
2 Spread the adhesive in an even, uniform layer and back-butter each paver. An even bed is what gives a flat finished surface.



3 Check flatness as you set each paver.



4 Grout once all pavers are set. Wait as the grout maker directs before light foot traffic.



5 Clean off grout, cement, and lime residue when you finish. This step is mandatory.

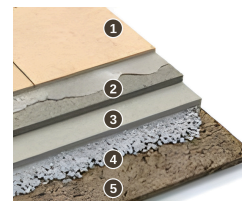
SUBSTRATE AND SETTING MATERIALS

Substrate	Sound, fully cured concrete or screed, clean and dry, sloped at least 1.5% (about 3/16" per foot) so water runs off.
Mortar	Polymer-modified thin-set mortar meeting ANSI A118.4 or A118.15, rated for exterior use and for large, heavy tile.
Coverage	Back-butter every paver. ANSI A108.5 calls for at least 95% mortar contact on exterior work.
Grout	Cement grout meeting ANSI A118.7, in joints at least 3/16" (5 mm) wide.
Conditions	Work within the temperature range on the mortar data sheet, typically 50–95°F, and keep fresh work dry.

Next page: expansion and perimeter joints, cure times, and vehicle areas.

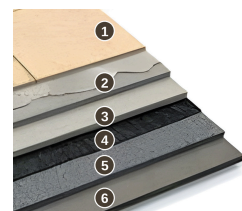
Build-ups shown are indicative. Always follow the codes that apply to your project and the design team's instructions.

OVER GROUND



- 1 DreamScapes™ 2cm porcelain paver
- 2 Sloped screed (mortar bed), min. 1.5%, with welded wire mesh if needed
- 3 Leveling layer
- 4 Stabilized gravel with lean concrete
- 5 Ground

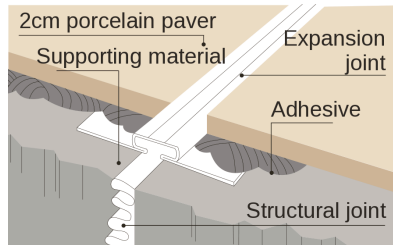
OVER A FLAT FLOOR BASE



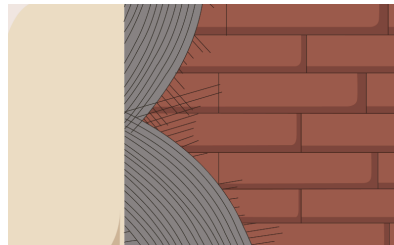
- 1 DreamScapes™ 2cm porcelain paver
- 2 Sloped screed (mortar bed), min. 1.5%, with welded wire mesh if needed
- 3 Separation layer
- 4 Waterproof layer
- 5 Screed
- 6 Ground

03.4 ADHESIVE INSTALLATION, CONTINUED

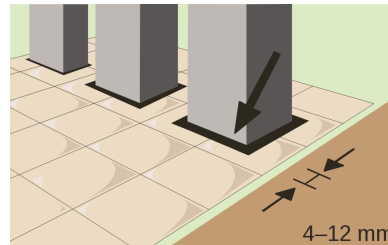
Joints, cure times, and vehicle areas



Where the screed or slab has a structural or dividing joint, an expansion joint is mandatory, at least as wide as the existing joint.



Where two different surfaces meet, such as reinforced concrete and another paving, an expansion joint is mandatory.



Around fixed elements such as walls, steps, and columns, perimeter joints 4–12 mm (about 3/16"–1/2") wide are mandatory.

JOINT RULES

Grout joints: at least 3/16" (5 mm) wide on exterior adhesive installations.

Expansion joints: their size and position must be set by the installation supervisor. They must be 4–12 mm wide (about 3/16"–1/2") and divide the surface into regular fields of 3 × 3 m to 4 × 2.5 m (about 10' × 10' to 13' × 8').

Lay out movement joints to TCNA EJ171.

CURE AND TRAFFIC

24 hours

Do not step on the pavers

72 hours

No traffic

7 days

No heavy traffic or vehicles

Typical times after setting. The mortar and grout makers' data sheets govern.

04 MAINTENANCE

Care and winter

AFTER INSTALLATION

Clean off grout, cement, and lime residue as soon as the grout allows. This first clean is mandatory, and haze left to dry is hard to remove. Use a cleaner made for cement residue, test it on a small area first, and rinse well.

ROUTINE CLEANING

Sweep, then wash with a neutral detergent and water. A pressure washer on a moderate setting is fine; on dry-laid areas, top up the joint sand afterward. No sealer is needed. Avoid waxes, oily soaps, and topical sealers, and never use hydrofluoric acid.

WINTER

DreamScapes™ is frost-resistant and resistant to salt. Rock salt (sodium chloride) is suitable for de-icing; below about 14°F, use calcium chloride. Clear snow with a plastic or rubber-edged shovel, and set blowers and plows to ride at least 1/4" above the surface.

05 TRIM

Copings and custom profiles

Finish the edges in the same porcelain as the field. Every DreamScapes™ coping is made to order in California, and our in-house fabrication cuts pavers and copings to the sizes, shapes, and profiles your project calls for.

STANDARD MADE-TO-ORDER COPINGS

COPING	LENGTHS
Unglazed bullnose, 12" wide	24", 36", 48"
Mitered L-shape, 2" drop, 12" wide	24", 36", 48"

Lead time 1–5 weeks. Lengths vary by color: see the DreamScapes™ line sheet for what is offered in each.

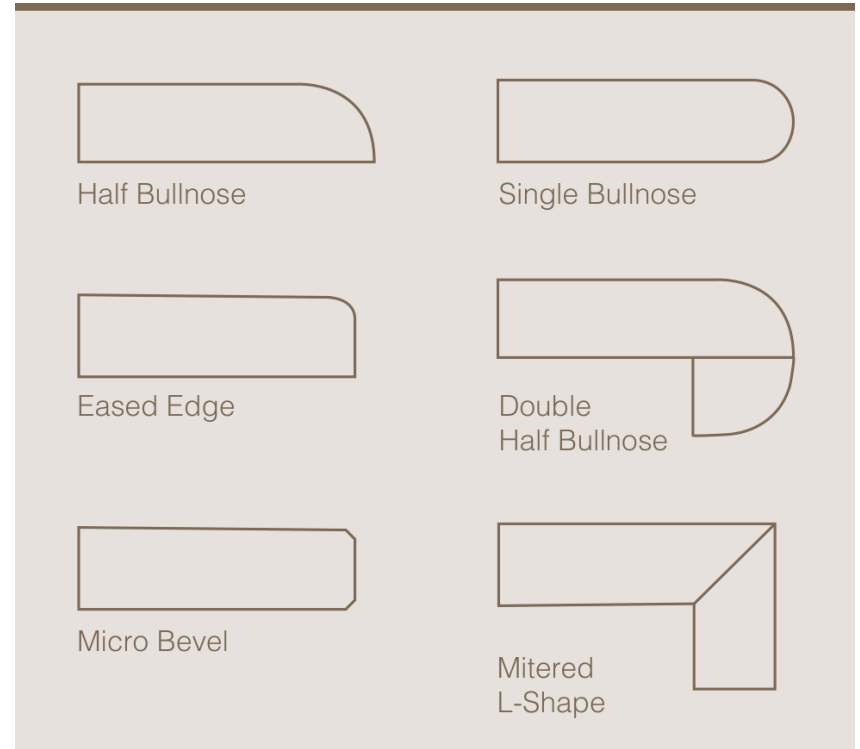
CUSTOM PROFILES

Custom copings, wall caps, and end caps are a special order in any of the six profiles shown, along multiple edges and at inside and outside corners. All six profiles come in standard 24", 36", and 48" lengths, and other custom sizes are available. Half bullnose and micro bevel are quoted on request. Lead time 2–4 weeks.

HOW TO ORDER

Add the profile suffix to the color's coping code. Ivory Travertine shown; every color has its own base code.

285101	12" × 24" bullnose coping (the base code)
285101-L	Mitered L-shape, 2" drop
285101-DHBN	Double half bullnose
285101-EE-12	Eased edge
285101-EE-12+	Eased edge, custom width 12"–24"



CUT-TO-ORDER PAVERS

Seventeen sizes, from 4" to 18" wide and up to 48" long, in 2–3 weeks. Versailles, Roman, and Manor pattern sets in 2–4 weeks; Running Bond in 2–3 weeks. Sizes and item codes are in the DreamScapes™ line sheet.

06 SPECIFICATIONS

Technical data

Made in the USA · Color-Body Porcelain · Rectified · 2cm (3/4")

Water absorption	≤ 0.5%
Slip resistance	DCOF > 0.42 · R11 · Exterior, Wet (EW) per ANSI A326.3
PEI rating	3
Frost resistance	Resistant
Scratch resistance	7 Mohs
Breaking strength	2,800 lbf
Chemical resistance	Resistant
Stain resistance	Resistant
Shade variation	V2–V4 · V2 Nextone and Limestone, V3 Travertine, V4 Quartz
Minimum grout joint	3/16" on a concrete base · 1/4" on sand
Breaking strength tested to ASTM C648. Chemical and stain resistance tested to ASTM C650 / C1378.	

SIZES AND PACKAGING

Paver, 3/4" thick	Sq ft / piece	Lb / piece	Pieces / box	Sq ft / box	Boxes / pallet	Sq ft / pallet	Lb / pallet
24" × 24"	3.9	36.4	2	7.8	36	280.8	2,671
24" × 36"	5.84	52.7	1	5.84	45	262.8	2,422
24" × 48"	7.65	71.2	1	7.65	40	306	2,896

Values are given in good faith as accurate and typical of normal production. Raw materials and manufacturing vary naturally, so values for the product on a given project may differ.

Not every flooring product suits wet areas, specialized applications, or commercial use. See ANSI A137.1 for usage and installation information.

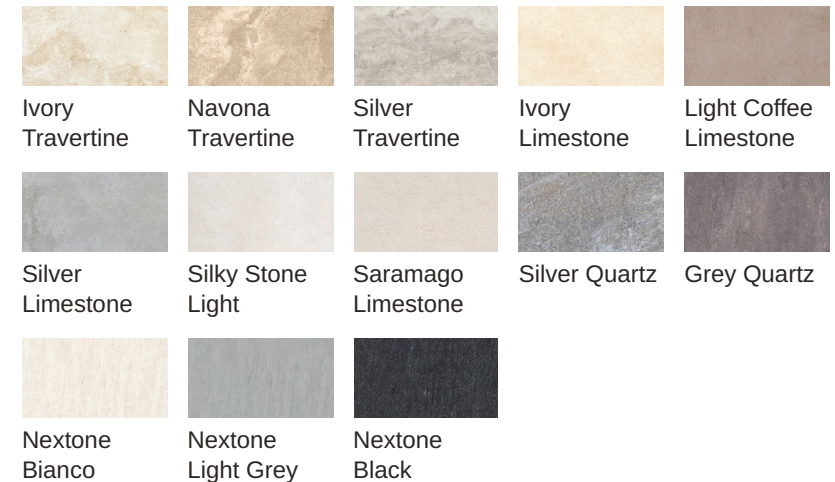
Variations in color, texture, and finish are natural to the product, and printed colors may differ from the tile itself. Make final selections from actual samples.

APPLICATIONS

Residential: floors, walls, shower floors and walls, and submerged pool and spa surfaces, interior and exterior.

Commercial: the same uses, with floors limited to light commercial traffic.

COLORS



GREEN BUILDING

DreamScapes™ pavers contribute to USGBC LEED® points and to ANSI®-approved NAHB® Green Building points.