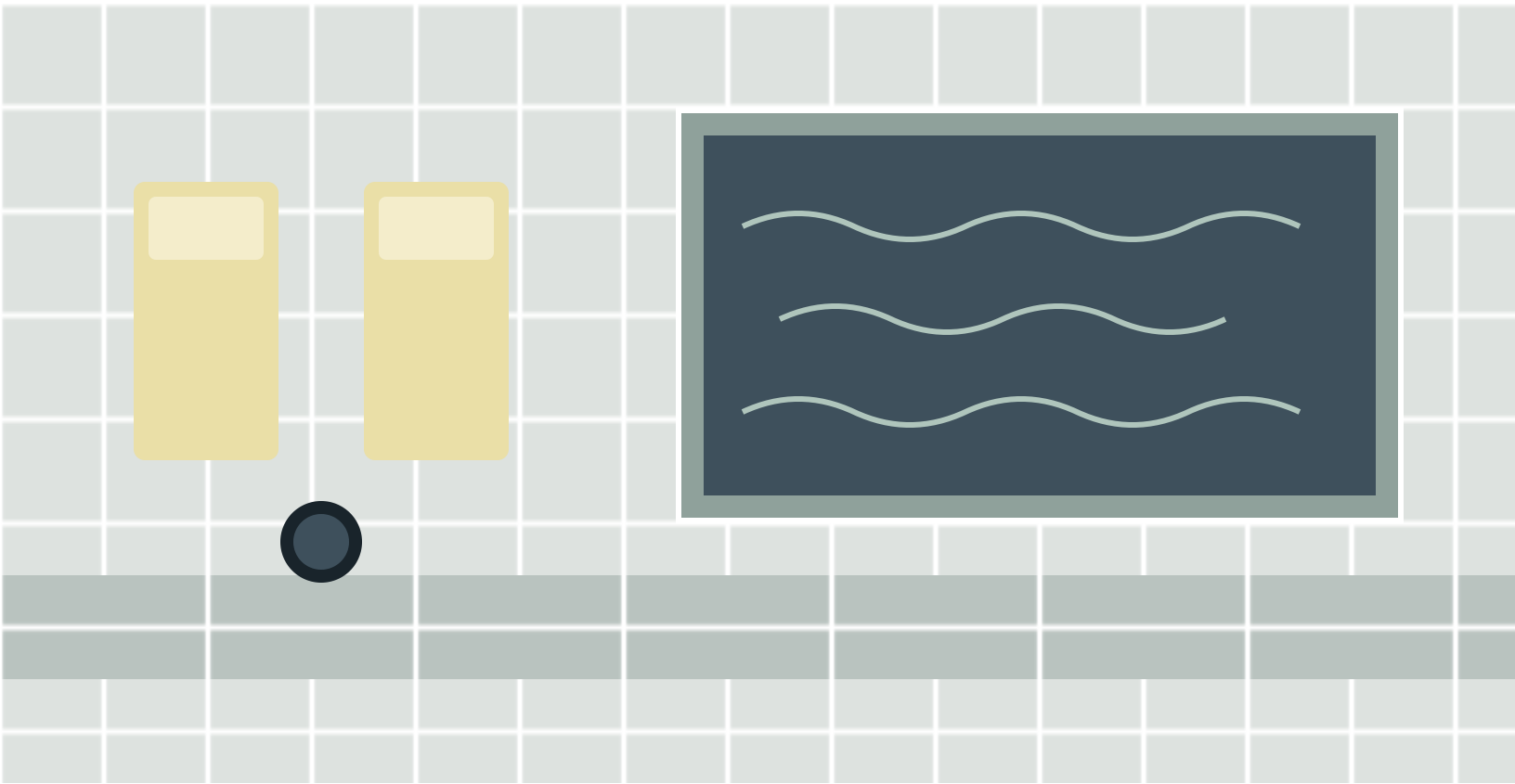




OUTDOOR PORCELAIN PAVERS · 2CM (3/4")

INSTALLATION GUIDE

A job-site reference for patios, pool decks, walkways, roof decks and driveways. Four ways to set 24×24, 24×36 and 24×48 porcelain pavers, plus joints, curing, care and specs.

Frost resistant	R11 slip rated
Pool and spa rated	Never needs sealing

INSIDE

Meet the paver	2
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01

THE PRODUCT MEET THE PAVER

These are 3/4" (2cm) porcelain pavers made for outdoor floors. They look like travertine, limestone, quartz and concrete, but they don't stain, fade or need sealing the way natural stone does. Here is what that buys you on the job.



Freeze-thaw proof

Frost resistant, so it won't spall in cold climates.



Grippy when wet

R11 surface for pool decks and wet walkways.



No sealing, ever

Absorbs almost no water, so spills sit on top.



Color that lasts

UV stable: the look won't fade in full sun.



Shrugs off stains

Resists stains, acids, pool chemicals and salt.



Strong

About 2,800 lbf breaking strength.



Heat to cold

Resists thermal shock from sun to sprinkler.



Lift and relay

Dry-laid pavers pull up for access, then go back down.

WHERE TO USE IT

- **Patios and terraces** on grass, gravel, sand or concrete
- **Pool decks and spa surrounds**
- **Walkways and garden paths**, including stepping stones
- **Roof decks and balconies**, raised on pedestals
- **Driveways**, bonded over a concrete slab, light vehicles only
- **Courtyards and shared outdoor areas**

Commercial jobs: rated for light commercial floors only. Heavy commercial and public vehicle areas need a different product.

THE LOOKS



Beige Travertine



Silver Travertine



Walnut Travertine



Light Grey Limestone



Valongo Limestone



Bliss Light



Light Grey Quartz



Off-White Concrete



Grey Concrete



Black Concrete

Chips are a rough guide. Pick final colors from real pieces.

02 BEFORE YOU DIG PLAN THE JOB

HOW MUCH TO ORDER

Size	Sq ft / pc	Pcs / box	Sq ft / box	Lb / pc*
24" × 24"	3.9	2	7.8	36
24" × 36"	5.84	4	23.36	53
24" × 48"	7.65	2	15.3	71

*Approximate weight per piece.

THE BOX FORMULA

Area × 1.10 ÷ sq ft per box = boxes

Round up. Use 1.15 for diagonal layouts or lots of cuts.

Example: a 400 sq ft patio in 24×24 is $400 \times 1.10 \div 7.8 = 56.4$, so order **57 boxes**.

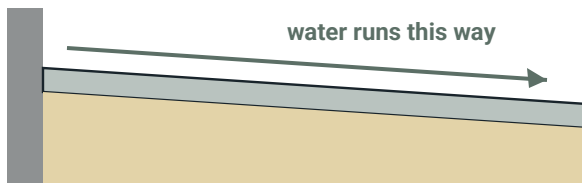
TRUCK CHECKLIST

- ☐ Wet saw with a porcelain diamond blade
- ☐ Paver tongs or suction lifters
- ☐ Rubber mallet
- ☐ 4 ft level, straightedge, string line
- ☐ Joint spacers
- ☐ Safety glasses, gloves, dust mask

FIVE RULES BEFORE THE FIRST PIECE

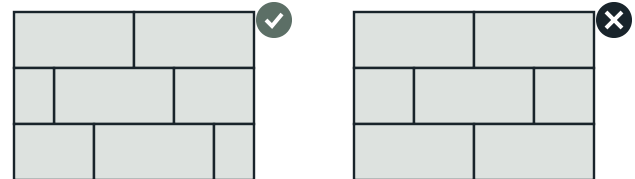
- 1 Open several boxes and mix.** Shade and pattern vary from piece to piece by design. Check every piece and set aside any damage before it goes down.
- 2 Two people on the big ones.** A 24×48 weighs about 71 lb. Carry pieces on edge and use lifters.
- 3 Only cut wet.** Dry cutting porcelain throws crystalline silica dust. Wear eye, hand and breathing protection.
- 4 Build in fall.** Water has to run off. See the slope sketch below.
- 5 Work to the book.** TCNA Handbook; ANSI A108, A118 and A137.1; TCNA EJ171 for movement joints; and local code.

SLOPE



Bonded to concrete: at least 1.5%, about 3/16" per foot. **Dry-laid:** 1–2%. Always fall away from the house and the pool.

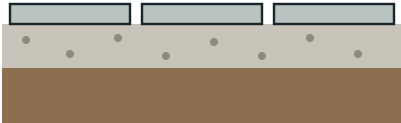
OFFSETS



Keep offsets to one third or less on 24×36 and 24×48 pieces. A half offset can leave lippage at the joints (ANSI A108, TCNA).

03 INSTALLATION PICK YOUR BASE

There are four ways to put these pavers down. What sits under the paver, and what will drive or walk on top of it, decides which one you use.

BUILD-UP	METHOD AND BEST USE	TRAFFIC
	STEPPING STONES IN A LAWN Garden paths and yard crossings. Fast, cheap and easy to move later. Page 5	Foot
	FLOATING ON GRAVEL OR SAND Patios and walkways on soil, or over a flat hard surface. Clean modern look, no mortar. Page 6	Foot
	RAISED ON PEDESTALS Roof decks, balconies and terraces over a waterproofed slab. Levels uneven decks and hides drains. Page 7	Foot
	BONDED TO CONCRETE Driveways, pool decks and indoor-to-outdoor floors. The only method for vehicles. Pages 8–9	Foot + light vehicles

QUICK PICKER

Cars or trucks will drive on it
 It sits over a roof or membrane
 Patio or path on soil
 A few steps across grass
 Floor runs in from the house

Concrete
Pedestals
Gravel or sand
Lawn
Concrete

WIND WARNING

Wind can lift dry-laid and raised pavers on exposed or high sites. The installer must confirm that the method suits the location and meets local code.

USE IT AS DIRECTED

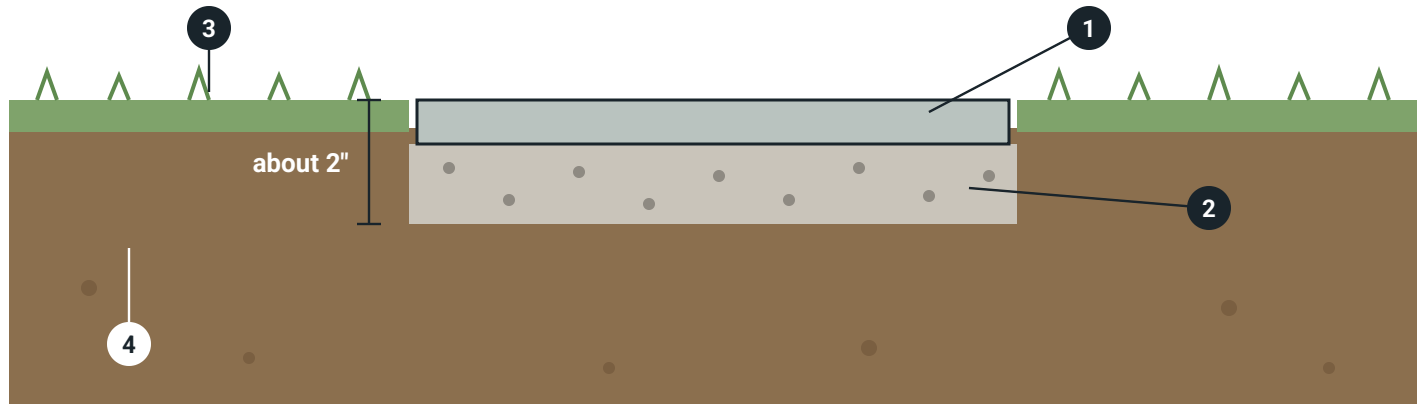
Ignoring this guide can lead to failures, injury or property damage. When in doubt, ask the project's designer or engineer.

3.1

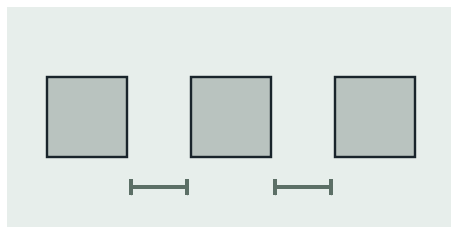
METHOD A · FOOT TRAFFIC

STEPPING STONES IN A LAWN

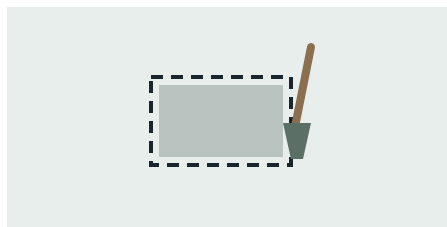
The quickest install in this guide. Each paver sits on its own small gravel pad, flush with the grass, so the mower rolls right over it. Walk the route first and mark where your feet land: that sets a comfortable stride.



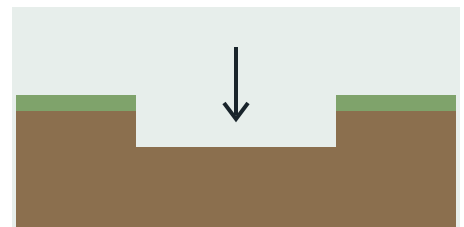
1 Porcelain paver, top flush with the turf 2 Compacted fine gravel pad, 4–8 mm stone 3 Turf 4 Native soil



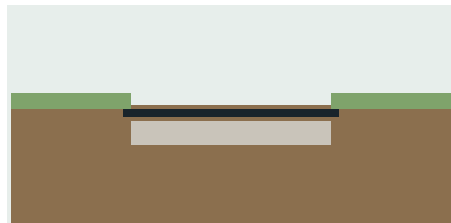
1 Set the pavers on the grass and space them evenly.



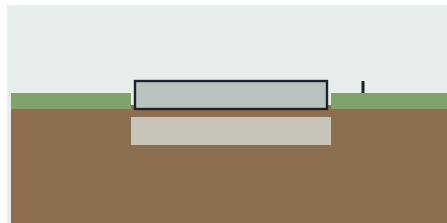
2 Score around each one with a flat spade.



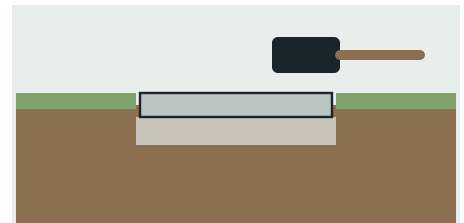
3 Lift the turf and dig about 2" down. Go deeper in cold or wet ground.



4 Fill with fine gravel (4–8 mm), tamp it firm and screed it flat.



5 Lay the paver so it starts about 3/16" proud of the grass.



6 Tap the edges with a rubber mallet until it sits flush with the turf.

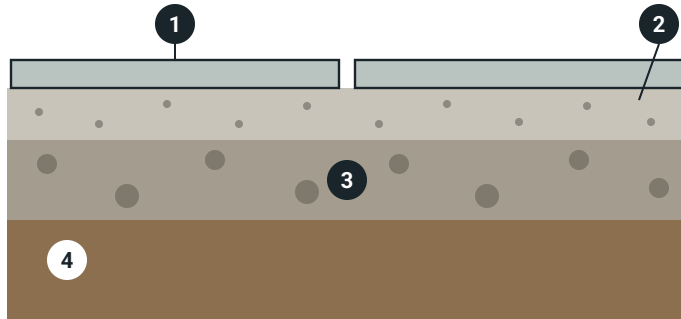
Bring: flat spade, fine gravel (4–8 mm), hand tamper, square trowel, rubber mallet, gloves and paver lifters.

Build-ups are illustrations of good practice. Local code and the project designer's details come first.

3.2 METHOD B · FOOT TRAFFIC FLOATING ON GRAVEL OR SAND

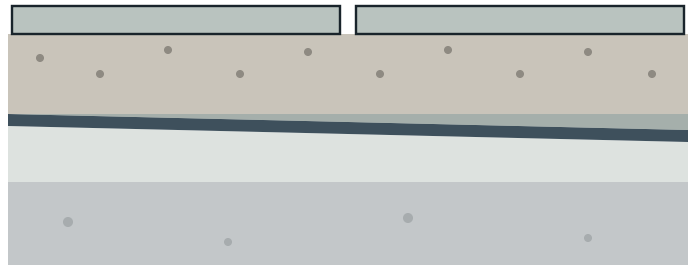
No mortar and no cure time. The pavers rest on a screeded bed of fine gravel or sand, held in by an edge restraint. Build it over prepared soil, or over a flat, waterproofed hard surface.

OVER SOIL



- 1 Porcelain paver
- 2 Bed of fine gravel (4–8 mm) or sand, 2–2½"
- 3 Compacted drainage stone
- 4 Compacted ground, sloped to drain

OVER A FLAT HARD SURFACE



- 1 Porcelain paver
- 2 Bed of gravel (4–8 mm) or sand, 2–2½"
- 3 Drainage and separation mat
- 4 Waterproofing membrane
- 5 Screed sloped to drain, on the structural base

PREP THE GROUND

- 1 Dig out at least 4". Go deeper where the ground freezes or stays wet.
- 2 Compact the subgrade and slope it at least 2% so water can't pond.
- 3 Optional: roll out geotextile so the stone doesn't sink into the soil.
- 4 Fit the edge restraint, then place and compact the drainage stone.

BED AND SET

- 5 Spread the gravel or sand bed and pull it level with a metal straightedge.
- 6 Keep a finished fall of 1–2% so the surface sheds water.
- 7 Set each paver with spacers and tap it down evenly with a rubber mallet.
- 8 Leave joints of at least 1/4" (6 mm) for drainage.

Hold the edges

Use a curb or edge restraint anywhere the paving doesn't meet a wall or rigid paving.

Never edge to edge

Pavers that touch can chip. Fill joints with fine or polymeric sand rated for porcelain, or leave them open.

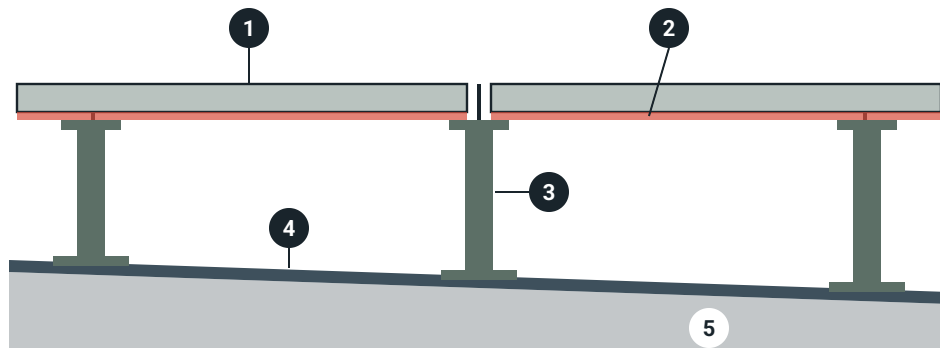
No plate compactor

Never run a compactor over porcelain. Level by hand with a rubber mallet.

3.3 METHOD C · FOOT TRAFFIC

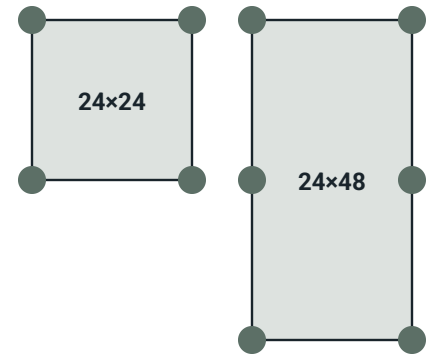
RAISED ON PEDESTALS

Adjustable pedestals lift the pavers off a waterproofed roof or slab. You get a dead-level deck over a sloped base, with drains and membrane hidden but reachable. A pedestal deck is an engineered system: the pedestal maker's instructions and the project designer govern every job.



1 Porcelain paver 2 Anti-fracture backing (4"+ height)
3 Pedestal with spacer tab 4 Waterproofing 5 Slab sloped to drain

SUPPORT LAYOUT



Max. 24" between supports

JOB CONDITIONS

Feet only. Roof decks, balconies and terraces. No vehicles of any kind.

Right hardware. Pedestals made for porcelain pavers, installed to their maker's layout and height limits.

Backing when high. At 4" and taller, back every paver with an anti-fracture membrane, mesh or galvanized tray.

Wind. No standard covers uplift on raised pavers. The designer must check it for the site's height, parapets and exposure.

Solid, sloped base. A structural slab or deck rated for the loads, waterproofed and falling at least 1.5% to drains.

Enough supports. Four under each 24x24, six under each 24x36 or 24x48, no more than 24" apart. Add a center pedestal in busy or public areas.

Gaps and edges. The spacer tab sets the joint; never butt pavers. Restrain open perimeters and leave room for movement.

Drops. A heavy object dropped on a raised paver can crack it. Swap out any cracked piece right away.

SIGN-OFF AND WARRANTY

Have an architect or engineer approve every pedestal project for static and dynamic loads before work starts. TilePoint makes no warranty, express or implied, for pedestal installations. The pedestal system, the structure, wind design and workmanship are the responsibility of the pedestal maker, the designer and the installer.

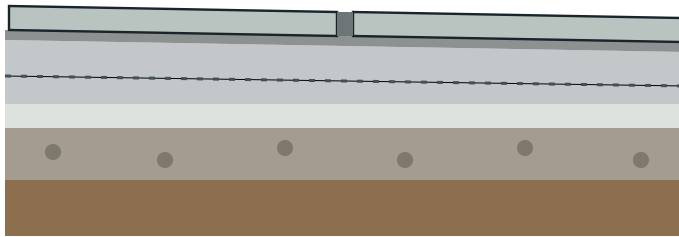
3.4

METHOD D • FOOT AND LIGHT VEHICLES

BONDED TO CONCRETE

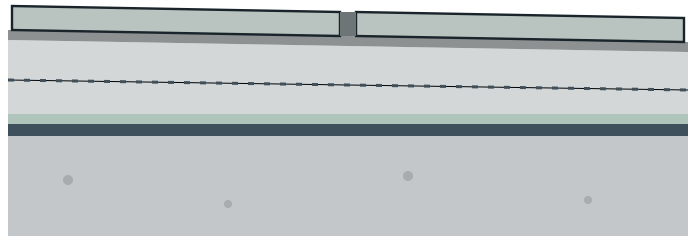
Thin-set the pavers to a sloped concrete slab or mortar bed. It is the most permanent install, the one to use for driveways and pool decks, and the way to run one floor from inside the house to the patio.

ON GRADE



- 1 Paver, thin-set and grout joint
- 2 Mortar bed sloped 1.5% min., wire mesh as needed
- 3 Leveling course
- 4 Stabilized gravel base with lean concrete
- 5 Compacted ground

OVER A STRUCTURAL SLAB



- 1 Paver, thin-set and grout joint
- 2 Mortar bed sloped 1.5% min., wire mesh as needed
- 3 Separation layer
- 4 Waterproofing
- 5 Structural slab

SET IT IN FIVE MOVES

- 1 Clean.** Scrape and wash the slab. Dust, curing compounds and oil kill the bond.
- 2 Comb and butter.** Trowel thin-set in straight, even ridges, then back-butter every paver. Full, flat coverage is what keeps the surface flat.
- 3 Check as you go.** Lay a straightedge across each new paver and its neighbors. Lift one now and then to confirm coverage.
- 4 Grout.** When the field is set and the thin-set allows, fill the joints. Keep traffic off for the time the grout maker states.
- 5 Wash off the haze.** Remove grout, cement and lime film before it hardens. Don't skip it.

SPEC SHEET

Base: sound, fully cured concrete or mortar bed, clean, dry, sloped 1.5% (about 3/16"/ft)

Thin-set: polymer-modified, ANSI A118.4 or A118.15, exterior and large-heavy-tile rated

Coverage: 95% minimum mortar contact outdoors (ANSI A108.5)

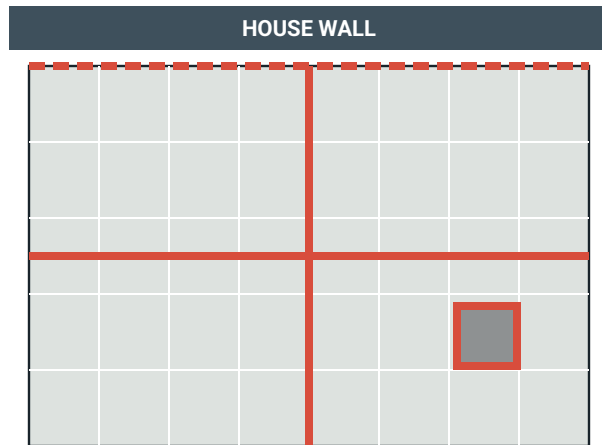
Grout: cement grout to ANSI A118.7, joints 3/16" (5 mm) or wider

Weather: stay inside the thin-set's temperature range, often 50–95°F, and protect fresh work from rain

Movement joints, cure times and vehicle areas continue on page 9. Build-ups are illustrations of good practice; local code and the designer's details come first.

04 BONDED INSTALLS, CONTINUED

JOINTS, CURE AND POOL DECKS



- Field movement joint
- - - Perimeter joint at walls, steps, columns

MOVEMENT JOINTS ARE NOT OPTIONAL

Over every slab joint. Carry each structural or control joint up through the paving, at least as wide as the joint below.

Where materials change. Put a joint wherever the pavers meet a different surface, such as concrete or another paving.

Around fixed objects. Leave a 3/16–1/2" (4–12 mm) perimeter joint at walls, steps, columns and drains.

Across the field. Joints 4–12 mm wide, splitting the paving into panels of about 10' × 10' up to 13' × 8'. The installation supervisor sets the exact layout, following TCNA EJ171.

Grout joints: 3/16" (5 mm) minimum on bonded exterior work. Fill movement joints with a flexible sealant, never grout.

HANDS OFF WHILE IT CURES

24 hrs

Don't walk on it

72 hrs

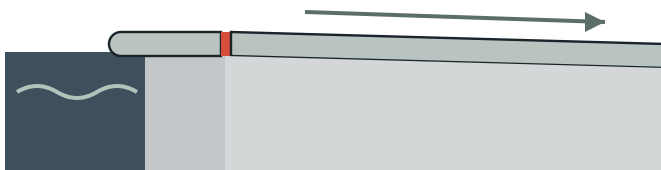
No traffic of any kind

7 days

No vehicles or heavy loads

Typical times after setting. The thin-set and grout data sheets always win.

POOL DECKS AND EDGES



Slope the deck away from the water. Leave a sealant-filled soft joint between coping and deck. Set coping in a full mortar bed to the pool builder's detail.

DRIVEWAYS AND VEHICLES

Light vehicles only, and only on pavers fully bonded to a concrete slab designed for the load. Have the project engineer sign off on the slab.

Never drive on lawn, gravel, sand or pedestal installs. Those are foot traffic only.

05 AFTER THE JOB CARE, WINTER AND SPECS



FIRST CLEAN

Required on bonded jobs. As soon as the grout allows, remove grout, cement and lime haze with a cleaner made for cement residue. Test a small spot, then rinse well. Dried haze is hard to remove.



EVERYDAY

Sweep, then wash with a neutral cleaner and water. A pressure washer on a moderate setting is fine; top up joint sand on dry-laid areas afterward. No sealer needed. Skip waxes, oily soaps, topical sealers and hydrofluoric acid.



SNOW AND ICE

Rock salt is fine for de-icing; below about 14°F switch to calcium chloride. Use a plastic or rubber-edged shovel, and set plows and blowers to ride at least 1/4" above the surface.

TECHNICAL DATA

Typical values for our USA-made 2cm pavers and copings. For imported lines, see the product page.

Made in	USA (imported lines: see product page)
Thickness	3/4" (2cm), rectified edges
Water absorption	≤ 0.5% (porcelain)
Slip resistance	R11 · wet DCOF > 0.42
Breaking strength	2,800 lbf (ASTM C648)
Frost	Resistant
Scratch / wear	Mohs 7 · PEI 3
Chemicals and stains	Resistant (ASTM C650 / C1378)
Minimum joint	3/16" bonded · 1/4" on gravel or sand
Uses	Residential exterior floors, pool decks and spa surrounds; light commercial floors

NEED A HAND?

Questions on quantities, freight or a tricky detail? Call us before you cut.

888-404-5664

tilepoint.com

Samples first. Order a sample to see the real color and texture before you commit.

Values are typical of normal production and given in good faith. Raw materials and firing vary, so results on a given job can differ.

Shade, texture and finish vary naturally, and printed colors may not match the product. Choose from actual pieces. See ANSI A137.1 for usage and installation guidance; not every product suits every wet, specialty or commercial use.