Archatrak

T30 PORCELAIN PAVERS

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www.archatrak.com

EXTRA STRENGTH PORCELAIN PAVERS

With almost three times the breaking strength of T20 porcelain pavers, Archatrak T30 porcelain pavers offer a superior solution for building raised decks in high traffic commercial spaces including rooftop restaurants, bars, terraces, swimming pools and other communal areas.

For landscape paving and on-grade paving of pedestrian plazas, shopping centers, convention centers and locations with low volume vehicular traffic,T30 pavers provide a stylish and elegant alternative to concrete pavers.

- Stronger than stone, lighter than concrete
- Rich, deep, colors with highlights, contrasts, tonal variation and subtle texturing.
- Highly resistant to staining and growth of moss and algae.
- Free from freeze/thaw cracking.
- Scuff and scratch resistant.
- Exceptionally low maintenance.

01 ON-GRADE PAVING

01.01 LANDSCAPE PAVING

A low maintenance, stain resistant alternative to stone, brick or concrete for broad area landscaping including plazas, pedestrian walkways and commercial courtyards.

Cemento Smoke

Classico Contro

Cemento Smoke

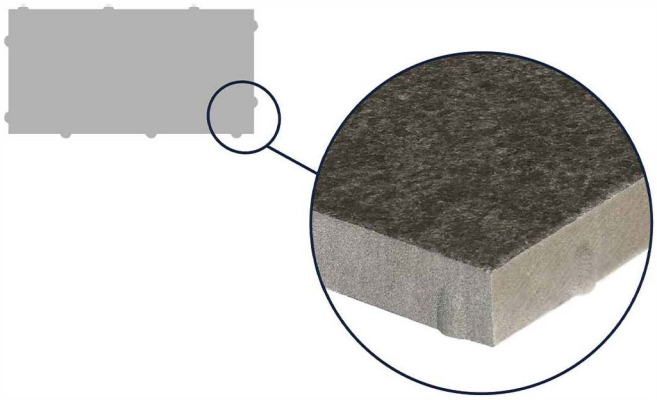
Grigioni

Pietra Basalto

01.02 PERMEABLE PAVING

A limited range of T30 porcelain pavers in four colors and a single size of 6” x 12” are available with nibs molded on all four sides, ensuring free passage of water, precise paver spacing without the need for add-in spacers and reduced laying times.

A similar range of porcelain pavers for permeable paving applications are also available in 5cm thickness (Archa-trak T50 pavers) in sizes 4” x 4”, 4” x 8” and 8” x 8”. T50 porcelain pavers feature a breaking strength over 4 times that of typical 2cm porcelain pavers. Recommended for extra heavy-duty applications including roadway paving.



COLORS:

BASALTO

SCORI GREY BLUE

LAVICA SAND

PORFIDO

01.03 DRIVEWAY PAVING

For driveways, parking areas and roadways subject to light vehicular traffic. A highly stain and frost-resistant alternative to concrete or brick pavers.

Archatrak T30 porcelain pavers can either be laid over a concrete base as with T20 pavers, or depending on the anticipated traffic and loading, laid over a well compacted gravel base.

Pietra di Bagnolo

Cemento Smoke

Pietra Grigioni

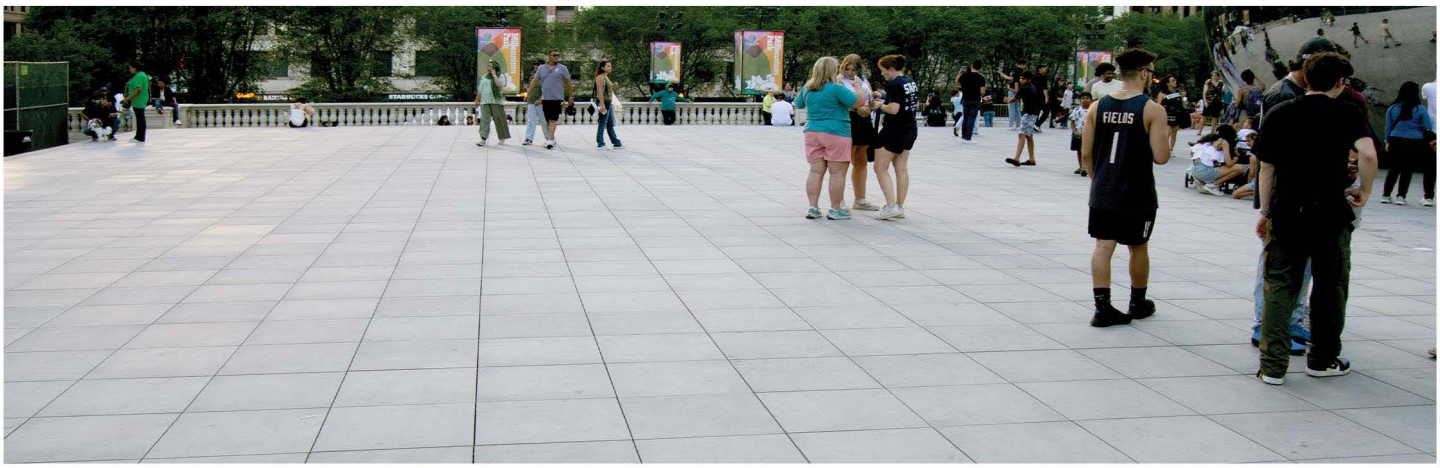
02 ROOF DECKS & TERRACES

Heavy duty Archatrak T30 porcelain pavers supported by adjustable height pedestals provide the opportunity to extend high traffic rooftop bars, restaurants, outdoor lounges and other social gathering spaces to the outdoors. For maximum protection against accidental damage or wind uplift, combine with Archatrak 'SpanSafe' steel protection plates or 'SpanTrak' FRP grating panels.

Cemento Taupe

02.01 PEDESTAL SUPPORTED DECKS

T30 Porcelain pavers are supported by height adjustable pedestals placed at each corner of the pavers. For pavers larger than 24" x 24", additional pedestals are placed in the center and along the sides. Stackable rubber pads are typically used at lowest deck heights. For commercial applications, Archatrak 'ShockControl' fiberglass sheets or 'SpanSafe' steel plates should be installed under the pavers to provide maximum safety.

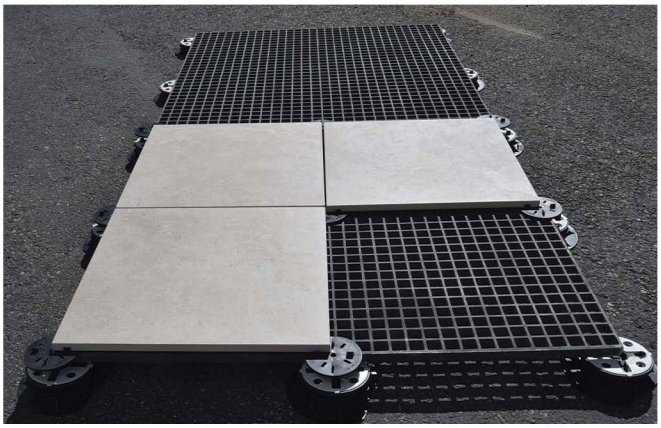


Moov Grey

02.02 FRP GRATING SUPPORTED DECKING

For commercial elevated deck applications subject to high pedestrian traffic where safety is of critical importance, T30 pavers can be installed over 8' x 4' FRP grating panels supported by Archatrak 'Prime' adjustable height pedestals.

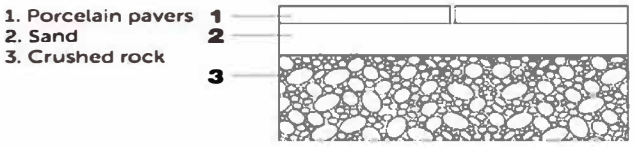
The porcelain pavers are laid over Archatrak 'SpanTrak' FRP grating with Archatrak ¼" thick rubber support pads laid between the pavers and the grating panels to ensure precise spacing between pavers and to minimize noise transmission.



03 INSTALLATION OPTIONS

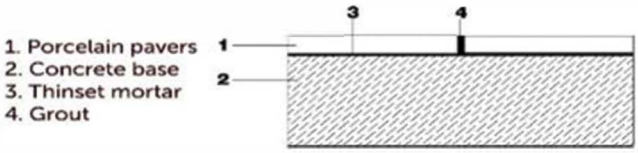
DRY INSTALLATION ON SAND/GRAVEL BEDS

- Dry installation on sand/gravel beds
  For broad area landscaping, plazas, terraces.
- Pavers are laid directly over a well compacted base of crushed rock and sand



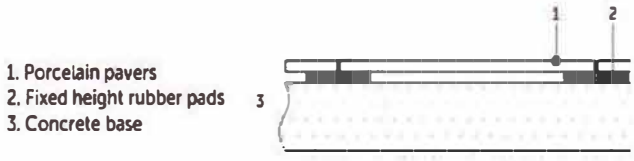
THINSET & GROUT OVER CONCRETE SLABS

- Thinset & grout over concrete slabs
  For high traffic on-grade landscaping, walkways and vehicular use.
- Pavers are laid with mortar or approved adhesive over a reinforced concrete base and grouted.



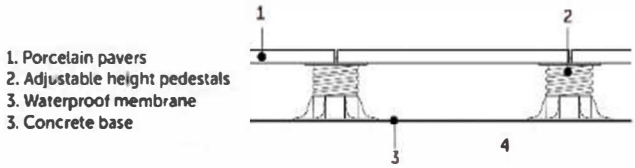
ELEVATED ON ADJUSTABLE HEIGHT PEDESTALS

- For elevated decks on rooftops and other hard, stable surfaces with deck heights generally not exceeding 30”.
- Adjustable height pedestals are placed under each corner of the pavers and sides where lengths exceed 24”.



ELEVATED ON FIXED HEIGHT RUBBER PADS

- Elevated on fixed height rubber pads
  Over existing concrete surfaces at elevations less than 1.5”.
- Pads are placed under each corner of the pavers and stacked as required to ensure a level surface.
- Shims provide minor height adjustment and prevent rocking.
- Transition to adjustable height pedestals at heights exceeding 1.5”.



04 SITE SPECIFIC SOLUTIONS

04.01 WIND UPLIFT

Any elevated paving laid without adhesives or other secure fixing to the substrate will be subject to the force of wind, with the risk in some cases of the pavers becoming airborne.

Although T30 pavers weigh 13 lb/sq.ft., there may still be a need to provide enhanced wind uplift protection. With the Archatrak wind uplift mitigation system for T30 pavers, a small semi-circular kerf is first cut in each corner of the paver to accept a custom-made steel hold-down washer. A screw is inserted through the washer into the tapped head of "Incendio" steel pedestals. The corners of 4 pavers can then be secured tightly to the "Incendio" steel pedestals.

Testing in accordance with ASTM E330 showed that the Archatrak wind uplift mitigation system for T30 porcelain pavers can provide wind uplift resistance up to 137 psf.

04.02 SHOCK PROTECTION

While Archatrak T30 porcelain pavers are exceptionally durable, dense and rigid, they can nevertheless suffer damage due to mishandling or careless treatment. In elevated decking installations, and especially in commercial applications with high pedestrian traffic or popular public venues, the shock resistance of porcelain pavers must always be taken into consideration. If heavy objects are dropped on the T30 pavers from a significant height, chips, scratches, surface damage and/or cracking and breakage may occur.

In installations where hard, heavy objects are likely to be in use or where floor heights exceed 4", especially in high traffic commercial locations, protection sheets or panels should be installed on the underside of the pavers to mitigate the risk of damage or injury, should any cracking or breakage of pavers occur. Archatrak offers several solutions for installing under T20 pavers depending on the application.

'SHOCK CONTROL 2.0'

A flexible, self-adhesive, fiberglass reinforced sheet, pre-cut to cover the underside of the pavers is adhered to the underside of the T30 pavers.

After peeling off the protective backing, the sheet is pressed onto the underside of a dry paver

‘SPANSAFE’ STEEL SHEETS

Galvanized steel sheets are laid over the pedestals before installing the T30 pavers. Plates used with Archatrak ‘Prime’ pedestals have lobes at each corner with cutouts for the spacer tabs on the pedestal heads, providing an extra level of security against movement of the plates if paver breakage occurs. 1/16” thick rubber shims can be placed under the corners of the pavers to minimize noise transmittance.

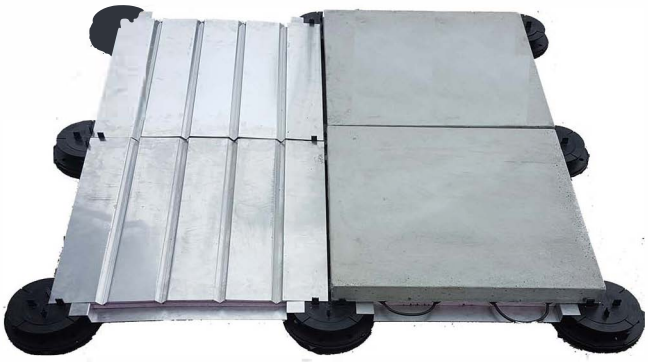
‘SPANTRAK’ FRP GRATING PANELS

FRP mesh grating laid on pedestals. The porcelain pavers are typically laid over ¼” thick rubber pads with inbuilt spacer tabs to provide the required paver spacing and minimize noise transmittance.

04.03 SNOW MELT

The Archatrak ‘Heatizon’ snow melt system simply and efficiently maintains a snow free surface on pedestal supported T30 porcelain paver installations – commercial or residential.

Insulated electrical heating cables are run along V-shaped channels pressed into aluminum panels which are installed under the pavers. A sheet of polyurethane foam attached to the underside of the aluminum sheets minimizes heat loss under the system.



The ‘Heatizon’ snow melt system requires only 1 3/4” min. clearance under the pavers for the panels, insulation and drainage.

Heating can be restricted to single pavers or even part of a paver and the area can be as large as required, subject only to the electrical supply connection.

05 SPECIFICATIONS

Archatrak T30 porcelain pavers are manufactured in several locations. Technical characteristics typical of production across manufacturing facilities in which Archatrak porcelain pavers are produced, are provided below.

Please contact us for technical information on any specific colors or sizes.

TECHNICAL FEATURE	CHARACTERISTIC	STANDARD	ESTABLISHED LIMITS		VALUE
Regularity	Length & width	ISO 10545-2	± 0.6 %	± 2 mm	Complies
	Thickness	ISO 10545-2	± 5.0 %	± 0.5 mm	Complies
	Rectangularity	ISO 10545-2	± 0.5 %	± 2 mm	Complies
	Straightness of sides	ISO 10545-2	± 0.5 %	± 1.5 mm	Complies
	Surface flatness	ISO 10545-2	± 0.5 %	± 2 mm	Complies
Structural	Water absorption	ISO 10545-3	≤ 0.5 %		Complies
	Breaking strength	ISO 10545-4	≥ 1300 N		> 29000 N
	Modulus of rupture	ISO 10545-4	≥ 35 N/mm2		≥ 50 N/mm2
	Breaking load class	EN1339	Value declared		U30**
Thermal	Linear thermal expansion	ISO 10545-8	Value declared		α ≤ 9 ⊠ 10-6 °C
	Thermal shock resistance	ISO 10545-9	Test passed		Complies
	Frost resistance	ISO 10545-12	Test passed		Complies
	Reaction to fire	EN 14411	Test passed		A1 FL / A1
Chemical	Resistance to chemicals	ISO 10545-13	UB minimum		A HA LA
	(Acids, bases & salts)	DIN 51130			R11
Safety	Slip resistance	ASTM C 1028 C.O.F.	≥ 0,60		Complies
		ANSI A137.1	≥ 0,42		Complies
		BCRA	≥ 0,40		Complies

**Value referred to is 60x60x3 cm, 40x80x3 cm U14

BREAKING LOAD CLASS		T11	U14	U25	U30**
Flexural strength	T 0.95 N/mm2	40	50	50	50
Breaking load	P 0.95 N	11000	14000	25000	30000
Laying on sand or cement		Vehicles with wheel load <2.5 t		Vehicles with wheel load <6.5 t	
		Occasional and low-speed traffic	Normal traffic.	Occasional and low-speed traffic.	Normal traffic.

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