

ICON TRAVERTINE | Pearl

VEIN CUT
ITALIAN



3/4" thickness

V2
slight
variation



US7943
23½"x47½" rectified
60x120 cm



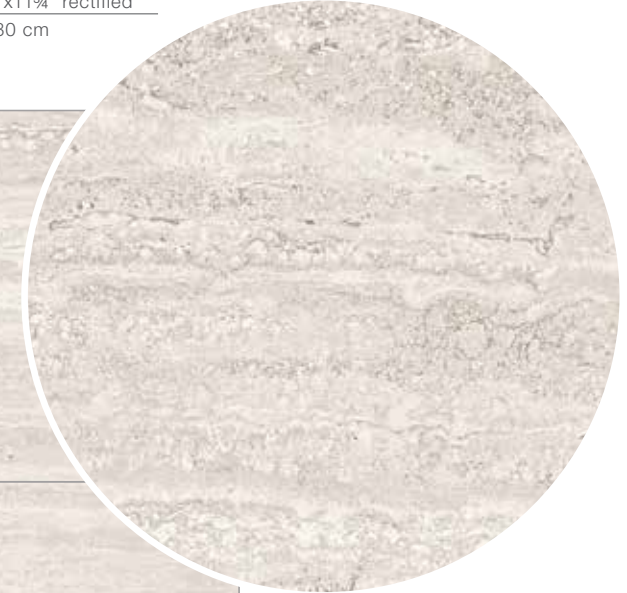
US7908
23½"x 23½" rectified
60x60 cm



1100015
11¾"x 23½" rectified
30x60 cm



US7944
11¾"x11¾" rectified
30x30 cm



An italian porcelain paver made in USA

CENTURA

ICON TRAVERTINE | *River*

VEIN CUT
ITALIAN



3/4" thickness

V2
slight
variation



US7945
23 1/2" x 47 1/6" rectified
60 x 120 cm



US7909
23 1/2" x 23 1/2" rectified
60 x 60 cm



1100016
11 3/4" x 23 1/2" rectified
30 x 60 cm



US7942
11 3/4" x 11 3/4" rectified
30 x 30 cm



An italian porcelain paver made in USA

LAYING INSTRUCTION |

Laying 2 cm - 3/4" in outdoor

Consequently, the size and nature of the porcelain stoneware slabs, due to the pronounced anti-slip surface (which always retains a thin layer of water), special attention should be given to the slope and inclination %, that the customer wants to give to the floor plan and direction laying of the slab stoneware. The % of slope and slope of the floor must meet the architectural choices of the project and the needs for natural runoff of rainwater. These vary according to the geographical area, orientation and exposure of the affected area, if it is completely bare, etc. etc.

By way of example, not binding, of the Swiss office UPI, recommends slopes not less than 1, 5% per linear meter.

Cutting

To cut 2 cm - 3/4" make the measurements needed and mark the part to be removed on the piece, then cut with an electric tool or water-cooled circular construction saw.

The Doghe (grout staves) POPA 2.0 and "TEX/TIMBER surfaces" 60x60 - 23½"x23½" (1 cm - 0.39")

Consequently the special structure (bas-relief grooves) which reproduces a wood grooves effect the exterior staves dimensions of each piece may have subtle differences from inner staves. This due to the caliber of production that can have significant dimensional variations to each production. Unfortunately this affects the outside slats only.

For this reason the products concerned must have a minimum aesthetic tolerances, to improve then we may recommend the following countermeasures:

1. To use pedestals with crosses of at least 4 mm - 0.15" in order to have the same size for the joint (POPA 2.0). In the traditional installation use crosses to 4 mm - 0.15" (the aim is repeating the same internal dimensioning leakage per piece).
2. To lay down the material following always the same production (verifiable from the back of the slab).
3. Adopt the basket diagram laying.

Thermal expansions effects on surfaces

The strong thermal excursions (-15° + 70°) which are subjected the FLAT ROOFS, involve the need to consider the effects on building materials.

Materials that often have among their different COEFFICIENT of dilatation.

The regulations provide for the establishment of special ELASTIC expansion JOINTS in building structures, in the perimeter and in the fractionation of insoles.

Our Flooring as well as having its own THERMAL EXPANSION COEFFICIENT and their dynamic behavior, they lay down and are installed on foundations and structures that move.

They contract and dilate in measure also important depending on the size even for some cm.

The effect that you might encounter in relation to the use of dry flooring is a misalignment of joints in release of raised floor or uncoupling the plastic module. If they would be glued flooring instead, they might break and deteriorate.

It is therefore essential to avoid or limiting the occurrence of these flaws, making a large perimeter joints and avoiding, where possible, the stationing of heavy weights/structures that inhibit the correct movement of the flooring. It is necessary to split up the flooring area in the case of plastic module also at the slope change of the base.

To do this, it is advisable to use the accessories provided in the catalog and elastic joints/shackles available normally at specialty retailers.

Temperature

The product gets hot in the sun.

Darker color more than lighter color.

For more information contact us.

Recommendations for POPA2.0 on elevated installation

The Monolithic product POPA 2.0 self-carrying 2.0 is definitely suitable for external use for support and elevated installation. There is no specific legislation for outdoor products in porcelain in elevation, the closest to our product is relating to the cement slabs (concrete).

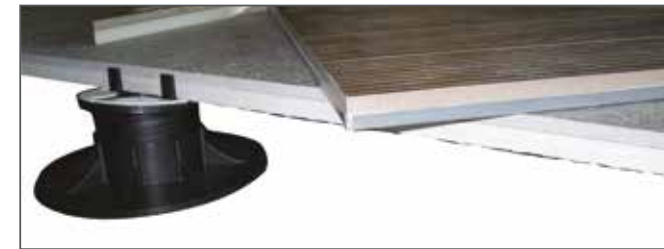
To this legislation our POPA 2.0 RESPONDS IMPROVEMENT on all comparative tests, e.g. resists more than 1400 kg per slab (test result as per EN 1339 KN 14 >).

This means, according to the adopted standard, the material is suitable for "COLLECTIVE and public use without LIMITATION of the height of the pedestals or sleepers".

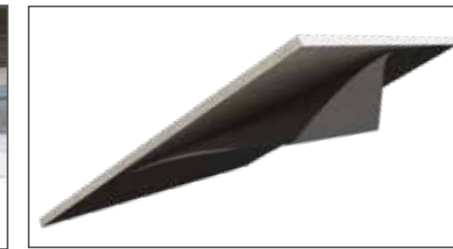
While Kronos USA porcelain pavers are exceptionally durable, dense and rigid, they can nevertheless suffer damage due to mishandling, careless treatment or accidental impact. If tools, heavy furniture or other hard objects are dropped on the pavers from a significant height, chips, scratches, surface damage and/or cracking and breakage may occur.

Shock CONTROL or Metal Tray should be installed in all situations where hard objects could accidentally drop on the floor from a significant height, as well as in high traffic commercial installations or where deck heights are greater than 4".

metal tray



SHOCK CONTROL® protective layer



These applications do not increase the floor weight capacity, but they are just a guarantee against breakage and limit the risk of accidents. Their structure prevents pavers from collapsing. Shock Control is primarily intended to hold together pieces of any broken paver and provide temporary support, should a person be standing on a paver at the time of breakage, while metal trays are double folded to empower the underside of the 3/4" thick pavers and grant them an extra strength.

Wind Uplift

When Kronos Porcelain pavers single slab are installed on a pedestal system, they essentially rely on gravity, its own weight equal to 35lb, tight spacing between the pavers and tight containment around the perimeter to keep the pavers in place without movement. The open joint space between pavers allows wind to flow above, below and around the deck surface, which tends to reduce uplift forces somewhat and restricts movement of the pavers.

It should not however be inferred that uplifting of the pavers by wind will never occur as it is difficult, if not impossible, to test for every contingency or circumstance where wind uplift may be possible.

The Saffir-Simpson Hurricane Wind Scale defines wind speeds over 74 mph to be hurricane velocity, where for example it is stated that a Category 1 (74-95mph) storm means: 'Very dangerous winds will produce some damage: Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters.' Furthermore, It is generally accepted that the average person standing on the open ground will be rocked around at wind speeds of 35-40mph; it's difficult to stand up and you would stumble frequently.

The only wind uplift test for roofing products known to Kronos is the Florida Building Code 2007 TAS 108 Test Procedure for testing air permeable rigid discontinuous roof systems. Whilst this test procedure may have some relevance to pavers installed in 'floating' deck applications, Kronos engaged the Florida International University International Hurricane Research Center to devise a series of tests to evaluate the resistance of porcelain pavers to wind uplift using the FIU's Wall of Wind facility. Variables incorporated in the test program included different wind angles, pedestal height and type, parapet wall height, paver layout and the use of locking devices along the parapet walls.

This report is intended to provide additional information about wind uplift where ¾" single slab porcelain pavers as supplied by Kronos are installed on fixed or adjustable height pedestals. It should not be construed as a guarantee or warranty of any kind, including but not limited to warranties of merchantability or fitness of porcelain pavers for a specific purpose. None of the information contained in this report is intended to substitute for the engineer's, specifier's, architect's, builder's or contractor's own analysis, investigation, and due diligence regarding the appropriate choice, application and installation of ¾" single slab porcelain pavers on fixed or adjustable height pedestals in any particular location or application, which is not the responsibility of Kronos.

The test report is available on request from Kronos on the strict understanding that it is provided for the exclusive use of the recipient. No reproduction or transmission by facsimile, email or other electronic means is permitted without Kronos specific permission.



PACKAGING

2.0 MONOLITHIC RECTIFIED CERAMIC TILE	Thickness	Unit / Box	SqFt / Box	Boxes / Pallet	SqFt / Pallet	Weight / Box	Weight / M ²	Weight / SqFt	Weight / Pallet	Pallet Size
231/2"x471/8"	3/4" - 20mm	2	15,50	16	248,00	133,77 lb	91,80 lb	8,53 lb	2182 lb	29"x49"
113/4"x471/8"	3/4" - 20mm	4	15,50	16	248,00	138,42 lb	91,80 lb	8,53 lb	2256 lb	29"x49"
231/2"x231/2"	3/4" - 20mm	2	7,75	36	279,00	66,10 lb	91,80 lb	8,53 lb	2421 lb	42"x42"
113/4"x231/2"	3/4" - 20mm	4	7,75	40	310,00	65,79 lb	91,80 lb	8,53 lb	2673 lb	42"x42"
113/4"x113/4"	3/4" - 20mm	5	4,85	45	218,25	41,50 lb	91,80 lb	8,53 lb	1910 lb	42"x42"

SHADE VARIATION



TECHNICAL CHARACTERISTICS

CHARACTERISTIC	ASTM METHOD	INDUSTRY STANDARD	EN METHOD	ISO METHOD	INDUSTRY STANDARD	
Thickness	ASTM C 499	-		ISO 10545-2	-	3/4"
Weight	-	-			-	9 lb/sq. ft
Water absorption	ASTM C 373-88	≤ 0,5%		ISO 10545-3	E ≤ 0,5%	≤ 0.1%
	ASTM C 373	0,5%				Meeting the water absorption criteria of the American national standard PTCA
Breaking strenght	ASTM 1505	2000 lbf (10.9 kN)		ISO 10545-4	Sp > / = 7,5mm S > / = 1300 N	> 2500 lbf
Moduls of rupture	-	-		ISO 10545-4		> 7000 psi
Static load capacity (24"x24" pavers)	-	-	EN 12825		center side center diagonal	> 1700 lbf > 1200 lbf > 1500 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 strenght	-	-	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 porcesses 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. No sample show visible defects.		ISO 10545-13	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 recirdedpost cleaning		ISO 10545-14	-	Class 5
Fire resistance	-	-	EN 3501-1		-	A1-A1 FL
Barefoot ramp test	ANSI A 326.3	-		DIN 51097	-	A+B+C
Shod ramp test	-	-		DIN 51130	-	R11
Dynamic coefficient of friction	ANSI A137 / ASTM A326.3	-		BOT 3000	-	> 0.60 wet > 0.60 dry
Slip resistance	-	-		DM 236/89 B.C.R.A.	-	> 0.40