

SKYCONCRETE[®] OUTDOOR

Low thickness for outdoor

DESCRIPTION

Skyconcrete[®] Outdoor Isoplam[®] is a system composed of Skybond Isoplam[®], a concentrated water-based polymeric binder, formulated to be mixed with Plam Hardening Isoplam[®] to obtain continuous decorative smoothing on existing external substrates.

With a thickness of only 2-3 mm, it allows to renew deteriorated floors, transforming them into unique surfaces, with a high aesthetic impact and at the same time non-slip.

FIELDS OF USE

Surfaces in Skyconcrete[®] Outdoor Isoplam[®] are suitable for renovating:

- outdoor flooring for civil and commercial use;
- tiled, sand-cement and marble flooring;
- concrete flooring.

ADVANTAGES

Surfaces in Skyconcrete[®] Outdoor Isoplam[®]:

- have a high resistance to slipping;
- they are solutions with low environmental impact and the products that compose them are free from formaldehyde;
- they are recommended for situations where there are limits in thickness and weight;
- allow to create continuous surfaces (the joints, if any, must however be respected);
- they are customizable, given the various colors available and the finishes that can be obtained;
- have excellent abrasion resistance;
- they have excellent resistance to cracking and freezing and thawing cycles;
- have good water resistance.

TECHNICAL FEATURES

The Skyconcrete[®] Outdoor Isoplam[®] system complies with UNI EN 13813: 2004.

<i>Performance characteristic</i>	<i>Test method</i>	<i>Product performance</i>
Mechanical resistance to compression	UNI EN 13892-2:2005	C60
Mechanical resistance to bending	UNI EN 13892-2:2005	F7
Mechanical resistance to wear	UNI EN 13892-4:2005	AR0,5
Dynamic impact resistance (rapid deformation)	UNI EN ISO 6272-1:2013	iR 27,2 N·m Intact sample after impact
Adhesion strength	UNI EN 13892-8:2004	B1,5
Permeability to water vapor (diffusion resistance coefficient μ) - with RH 50% at 23°C - with RH 93% at 23°C	UNI EN ISO 12086:2013	216±21 116±12
Reaction to fire	UNI EN 13501-1:2009	A2 _{FL} - s ₁
Thermal conductivity λ	UNI EN 12664:2002	1,35 [W/(m · K)]
VOC Emissions	UNI EN ISO 16000-9:2006	A+

Sound insulation	-	NPD
Sound absorption	-	NPD
Slip resistance	DIN 51130:2014	R13
Resistance to severe chemical attack		
Pool water: changes at the end of the exposure(24 hours)	UNI EN 14617-10	No color variation
Sodium hydroxide in solution after 8 hours	UNI EN 14617-10	C4
Hydrochloric acid in solution after 8 hours	UNI EN 14617-10	C4
Red Wine: changes at the end of exposure(24 hours)	UNI EN 14617-10	No color variation
Vinegar: changes at the end of exposure (24 hours)	UNI EN 14617-10	Darker color
Lemon: changes at the end of exposure (24 hours)	UNI EN 14617-10	No color variation
Fruit juice: changes at the end of exposure (24 hours)	UNI EN 14617-10	No color variation
Acetone: changes at the end of exposure (24 hours)	UNI EN 14617-10	Removal of the coating
Tomato sauce: changes at the end of exposure(24 hours)	UNI EN 14617-10	No color variation
Olive oil: changes at the end of exposure(24 hours)	UNI EN 14617-10	No color variation
Floor cleaner: changes at the end of exposure (24 hours)	UNI EN 14617-10	No color variation
Coffee: changes at the end of exposure(24 hours)	UNI EN 14617-10	No color variation
Black ink: changes at the end of exposure(24 hours)	UNI EN 14617-10	Darker color
Coke : changes at the end of exposure (24 hours)	UNI EN 14617-10	No color variation
Ammonia in aqueous solution 25% V/V: changes at the end of exposure (24 ore)	UNI EN 14617-10	No color variation
Ketchup: changes at the end of exposure (24 hours)	UNI EN 14617-10	No color variation

SUBSTRATE PREPARATION

- On existing and mature concrete or sand-cement screeds, smooth and, if necessary, shot peening. Then apply two coats of Isoplam® Vapor Barrier with interposed mesh.
- On new concrete or sand-cement substrates, take care to leave the surface rough and porous in order to allow better adhesion of the primer. Let the surface cure for at least 28 days before proceeding with the application. Then apply two coats of Isoplam® Vapor Barrier with interposed mesh.
- On existing ceramic surfaces (tiles), smooth and grout the joints. Then apply two coats of Isoplam® Vapor Barrier with interposed mesh.
- Repair parts that should be damaged and deteriorated by using Ipm Epoxy Kit Isoplam®. Any cracks, holes, shallow concavities, any splinters and joints must be previously filled. Remove all residues of dirt, oil, grease, paint, etc. Then apply two coats of Isoplam® Vapor Barrier with interposed mesh.

In all the above cases, then apply a coat of two-component epoxy Skyprimer Isoplam® to be dusted with Isoplam® quartz (washed and dried in grain size 0,6-1,2).

APPLICATION

The temperatures of use must be between 10°C and 30°C. Do not use in extreme temperatures or in strong wind conditions.

Skybond Isoplam® must be kept in a cool place. It is important to mix the product thoroughly a few minutes before use. The Pot Life of the Skybond Plam Hardening blend is approximately 30 minutes at 20°C.

Application of the first coat.

Indicative dosage: 6 Lt of Skybond (possibly, depending on the temperature, previously diluted with 1 Lt of water)
+25 Kg of Plam Hardening = yield approx. 17 sq. m.

Mix thoroughly Skybond if necessary diluted and then slowly add Plam Hardening, mixing for a couple of minutes to get rid of lumps.

Within 30 minutes (at an average temperature of about 20°C) apply the compound smoothing it evenly on the surface with Isoplam® Steel Trowel or with Isoplam® Squeegee until a maximum thickness of 1.5 mm is obtained.

Application of the second coat.

After 15-30 minutes, depending on the ambient temperatures and in any case before the first coat is completely dry, apply the second coat.

Indicative dosage: 6 Lt of Skybond (possibly, depending on the temperature, previously diluted with 1 Lt of water)
+25 Kg of Plam Hardening = yield about 17 sq. m.

Thoroughly mix any diluted Skybond and then slowly add Plam Hardening, mixing for a couple of minutes to remove lumps.

Take care to walk on the surface with spiked shoes. Spread the mixture evenly with Isoplam® trowel or with Isoplam® Squeegee.

The next day proceed with sanding with a floor machine with 120 grit abrasive disc.

All equipment must be kept constantly clean (keep clean water at hand).

RESIN COATING

The application of a protective cycle is recommended: after at least 7 days, apply a coat of Idrorep/S; once dry, apply a coat of Plam Sealing.

In any case, it is recommended to always contact the Isoplam® Technical Office to choose the most suitable product.

RIPENING

The surface made of Skyconcrete® Outdoor Isoplam® can be walked on at least after 24 hours.

Being a cement-based product, the package made of Skyconcrete® requires a curing time of about 28 days: therefore, be very careful, during this period, not to subject the surface to significant stresses that could ruin it.

CONSUMPTION

First coat:

Skybond: approx. 0,35 Lt/sq. m. (to be diluted with a little clean water if necessary)

Plam Hardening: approx. 1,45 Kg/sq. m.

Second coat:

Skybond: about 0,35 Lt/sq. m. (to be diluted with a little clean water if necessary)

Plam Hardening: about 1,45 Kg/ sq. m.

COLORS

The color is determined by Plam Hardening which is available in the colors available in the Isoplam® Color Chart.

Note: Individual jobs must be performed with a single production batch. Otherwise Isoplam Srl is not liable for any discrepancies in color.

PACKAGING



Skybond is available in 18 Lt plastic pots.
Plam Hardening is available in 25 Kg plastic pots.

STORAGE, EXPIRY, WARRANTY AND SECURITY

Store in a cool and safe place at temperatures between 10°C and 30°C.
Keep containers tightly sealed.
The shelf life of Skybond and Plam Hardening is 12 months, protected from moisture and in the original sealed packaging.
The packaging date is shown on the package (the lot number indicates, in sequence, year/week/day).
Consult the Safety Data Sheet of the products before use.

IMPORTANT:

The products of the Skyconcrete® Outdoor Isoplam® System are intended for the use as indicated above.
Adding any other product will impair the final result.
All information contained herein is based on the best practical experiences and laboratory research. It is the customer's responsibility to determine whether the product is suitable for the intended application. The manufacturer declines all responsibility on the results due to incorrect application of its products. The product shall always be tested on a small area before full scale application. This data sheet replaces all previous data sheets.
ISOPLAM reserves the right to change the data on the data sheet at any time. Skyconcrete® Outdoor Isoplam® is intended for professional use only.
ISOPLAM provides frequent and on demand trainings for its customers. The use of ISOPLAM products without receiving the proper certification will be at the customer's own risk.