

SYSTEM DESCRIPTION

porviva® synthetic system

The porviva® synthetic system is a multilayer surface system designed for interior and exterior applications. With a total system thickness of approximately 1.5–2.5 mm, it combines high durability and low maintenance requirements with permanent anti-slip properties and a long-lasting cooling effect.

Primer – porfil.® PLUS X

Solvent-free, patented primer with water-blocking properties. It acts as an adhesion promoter, binds loose particles, and stabilizes the substrate.

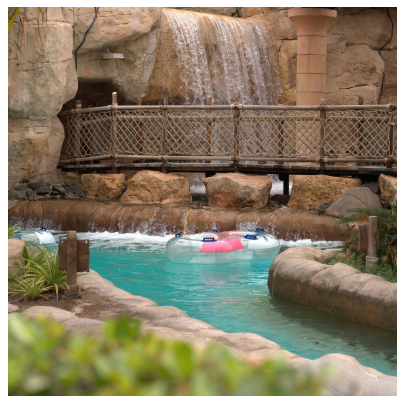
Surface Layer – particles porbits® synthetic

UV-stable, patented particles providing anti-slip and cooling effects. They form the functional and visual surface of the system.

Top Coat – players. WB800®

Transparent protective finishing coat, available in matt or gloss, with high scratch resistance. It provides an easy-to-clean, durable surface and enhances UV and weather resistance.

The result is a durable, low-maintenance surface with long-lasting functional and visual performance.



porviva® synthetic system

1

primer:
porfil.® PLUS X



10,00 kg unit
(8,00 kg A/ 2,00 kg B)

Patented, solvent-free primer with water-blocking properties, providing reliable adhesion and substrate stabilization.

2

particles:
porbits®synthetic



S: 25,00 kg unit
M: 20,00 kg unit

Patented, UV-stable particles providing permanent anti-slip properties and a long-lasting cooling effect. Various color blends and gradients are available for individual design options.

3

top coat:
players. WB800®



10,00 kg unit
(8,34 kg A/ 1,66 kg B)

Transparent protective top coat, available in matt or gloss. It provides high scratch resistance, an easy-to-clean finish and enhanced resistance to UV exposure and weathering.

porviva® synthetic system

3 layer

3.1 top coat: pleyers. WB800®

Transparent protective top coat, available in matt or gloss. It provides high scratch resistance, an easy-to-clean finish and enhanced resistance to UV exposure and weathering.

2 layer

2.2 particles: porbits® synthetic

Patented, UV-stable particles providing permanent anti-slip properties and a long-lasting cooling effect.

2.1 primer: porfil.® PLUS X

Patented, solvent-free primer and binder with water-blocking properties. It provides reliable adhesion between the system layers and contributes to substrate stabilization.

1 layer

1.2 particles: porbits® synthetic

Patented, UV-stable particles providing permanent anti-slip properties and a long-lasting cooling effect.

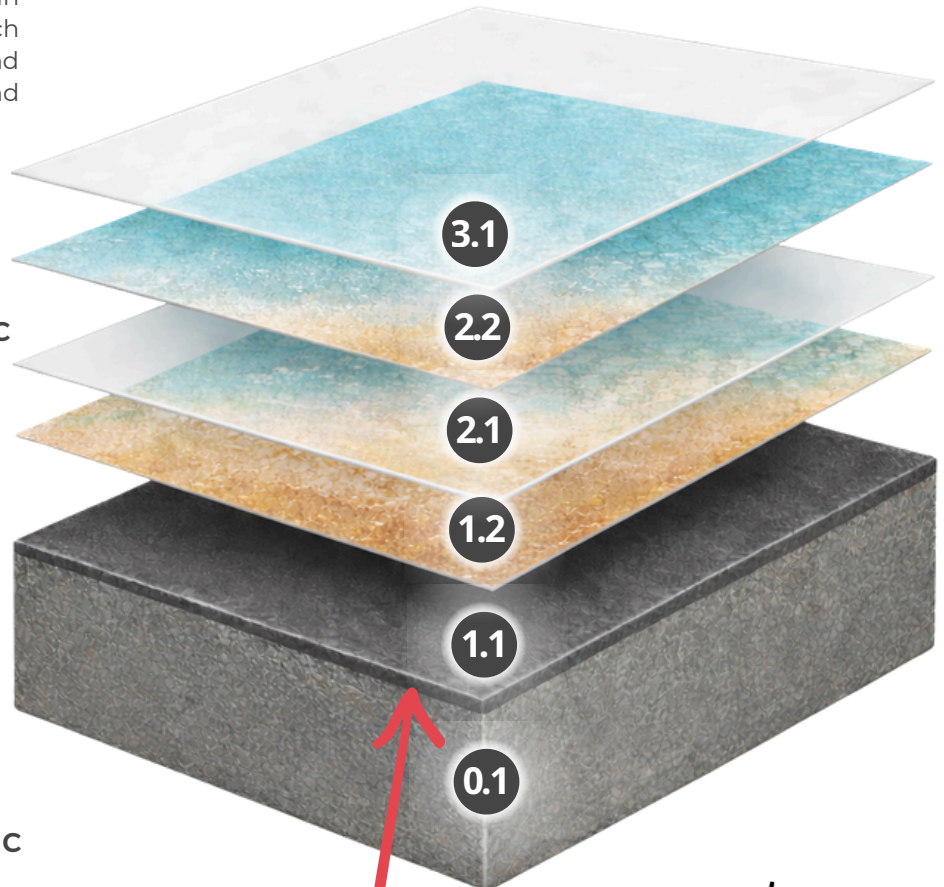
1.1 primer: porfil.® PLUS X

Patented, solvent-free primer with water-blocking properties, providing reliable adhesion and substrate stabilization.

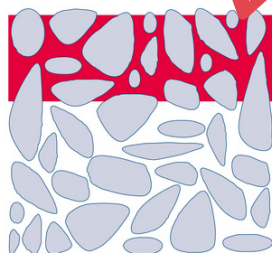
0 base

0.1 Concrete/ paver/ screed

Concrete, paver, screed or other suitable absorbent substrates according to the specification and approval of porviva GmbH.



porfil.® method: Pore-filling

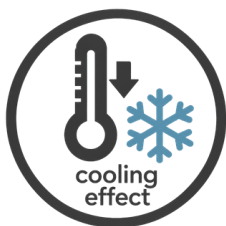


- excellent mechanical resistance
- suitable for application on fresh (green) concrete
- reliable adhesion
- no blistering (prevents osmotic issues)
- low material consumption

» outstanding protection



porviva® synthetic system benefits



cooling effect



permanent
anti-slip



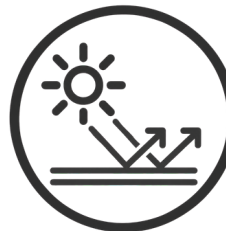
easy to clean
& repair



natural-looking
color variations



endless color
options



UV- & light-stable



solvent-free



indoor &
outdoor use



minimal
build-up height

FIELDS OF APPLICATION

porviva® synthetic system

FIELDS OF APPLICATION EXAMPLES

porviva® surface systems offer versatile solutions for a wide range of applications – from water parks, theme parks and leisure environments to hospitality, retail and public spaces. Each surface can be individually adapted to the design, performance and functional requirements of the project.

Depending on the selected system, key benefits include:

- cooling effect with porviva synthetic®
- permanent anti-slip properties
- high mechanical resistance
- minimal build-up height
- suitable for indoor & outdoor use
- application on new and existing concrete
- extensive color and design options
- easy to clean & repair



COOLING EFFECT & ANTI-SLIP

porviva® synthetic system

ONE SURFACE. DOUBLE BENEFIT. COOLER FEET. LONGER SAFETY.

THE PORBITS® CARD-HOUSE EFFECT

PATENTED

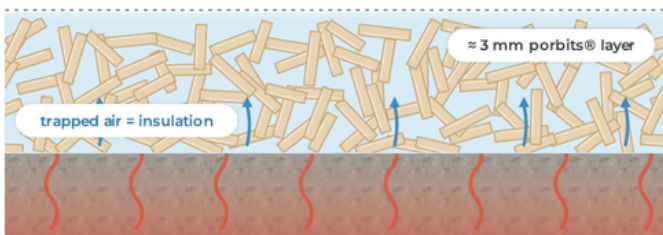
COOLING

INSULATING AIR-LAYER EFFECT

3D porbits® + trapped air → thermal insulation → cooler feet

AT THE FOOT

contact temperature
≈ 40 °C / 104 °F



HOT SUBSTRATE surface temperature > 55 °C / 131 °F

The irregular 3D porbits® card-house structure creates air-filled voids within the approx. 3 mm layer. Air is a poor heat conductor – the trapped air acts as an insulating layer and reduces heat transfer from the hot substrate to bare feet. The foot mainly touches the upper porbits® tips, not a hot, solid surface.

Temperature values shown as an example.

PATENT PENDING

LONG-LASTING ANTISLIP

CONTINUOUS MICRO-ROUGHNESS

3D porbits® + continuously exposed micro-roughness → long-lasting wet grip



Each porbit® has a micro-rough surface. As the surface wears, new micro-rough faces and edges are continuously exposed. The 3D structure also creates macro-roughness with edges, voids and drainage channels – for reliable slip resistance, wet or dry.

Micro-roughness is maintained until the last porbits® are worn away.

14
YEARS IN A
WATER PARK

- Still above 60 PTV after 14 years of daily water park operation
- 11 months per year in operation ≈ 28 years for a typical US park (season of 5.5 months per year)
- Reference: Wild Wadi Water Park, Dubai
- PTV acc. to ASTM E303
- ≥ 55 PTV = low slip potential (UKSRG)

cooler surfaces

barefoot friendly

high slip resistance

durable performance

sustainable solution

porviva® synthetic system

theme
parks

water
parks

hotels &
resorts

landscaping

indoor &
outdoor
areas

stairs &
ramps &
bridges

walkways &
terraces &
pool decks

F&B areas &
kitchens &
restaurants

wet &
shower
areas

changing &
locker
rooms

water
slides

pools &
rivers

water
features

splash &
kids' areas

retail &
commercial
areas

sports &
leisure
areas

spa &
wellness
areas

entrance &
queue
areas

parking
areas &
garages

service &
staff areas