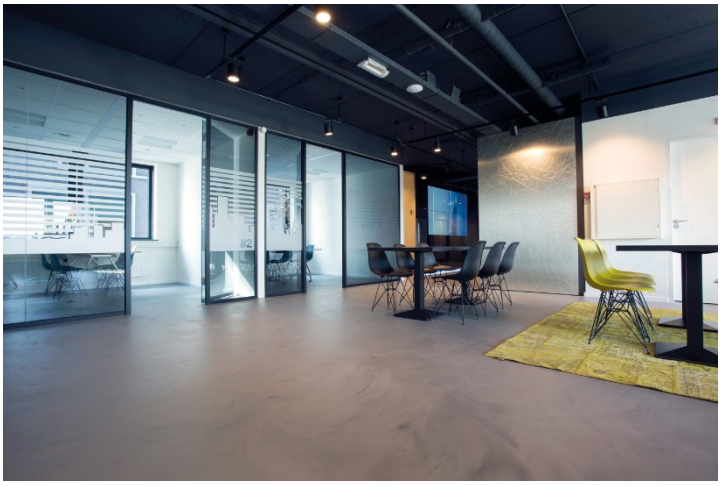
Corestone
Nature SL



Product description

EPI Corestone Nature SL is a very low-emission, water-borne, synthetic-reinforced 4-component poured floor based on epoxy resin. EPI Corestone Nature SL is a unique, seamless and robust floor that combines the natural look of concrete with the strong qualities of a hard poured floor. The flooring system provides a wear-resistant surface with natural slip resistance, making it ideal for environments, where a robust floor with a beautiful aesthetic concrete appearance is desired.

Product features

- Seamless
- Damp-open (icw Penetrator AQ-N)
- Increased UV-stability
- Wear resistant
- Solvent-free and environmentally friendly
- Resistant to increased foot traffic
- Easy to clean and maintain

Application areas

- Retail shops & showrooms
- Office spaces
- Hotels
- Lobby's
- Musea
- Living spaces

Technical information

Thickness	3 mm
Density	~ 1,67 g/cm^3
Impact resistance	> 4 Nm
Pull-off strength	≥ 1.5 N/mm^2
Hardness Shore	~ D 80 ± 5
Wear resistance Taber CS^{10}	≤ 40 mg
VOC content, EU-limit, cat. A/j	≤ 140 g/l
Giscode	RE 30
Fire resistance	B_{fl}-S^1
Solids	~ 90 %
General application conditions	Material-, substrate-, and ambient temperatures between 18° and 25°C and minimum 3°C above dewpoint.
Relative humidity	Maximum 60% RH
Application time	Approx. 20 minutes at 20°C
Foot traffic	After approx. 16 hrs at 20°C and 60% RH.
Overlayment	After approx. 48 hrs at 20°C and 60% RH, next layer within 72 hrs
Mechanical loads	After 72 hrs at 20°C and 60% RH
Fully loadable	After 7 days at 20°C and 60% RH

Note: The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens. All sample preparation and testing is conducted in a laboratory environment, values obtained on field applied materials may vary.

Corestone
Nature SL

Colors

EPI Corestone Nature SL is available in a special color collection consisting of earth tones in a solid color and a blend mix.

For blend, color 1 is referred to as 1/2 and color 2 is referred to as 2/2. Due to the decorative nature of the EPI Corestone Nature SL, it is advisable to review the blend structure with the customer in the initial blends before starting so that a uniform appearance is obtained.

Packaging

EPI Corestone Nature SL is available in the following packaging units;

EPI Corestone Nature SL, set 15 kg

- EPI Corestone Nature SL comp. A : 3.75 kg
- EPI Corestone Nature SL comp. B : 0.75 kg
- EPI Corestone Nature SL comp. C : 10.25 kg
- EPI Corestone Nature SL comp. D : 0.25 kg

EPI Corestone Nature SL, set 25 kg

- EPI Corestone Nature SL comp. A : 6.25 kg
- EPI Corestone Nature SL comp. B : 1.25 kg
- EPI Corestone Nature SL comp. C : 17.10 kg
- EPI Corestone Nature SL comp. D : 0.4 kg

Theoretical coverage

EPI Corestone Nature SL
Usage: approx. 1,67 kg/m^2/mm thickness,
apply minimum 4,5 – 5 kg/m^2.

Example build-up floor system (vaporproof):

- Penetrator AQ-N : 0,15 - 0,25 kg/m^2
- Primer 400 POX : 0,7 - 1,5 kg/m^2
- Corestone Nature SL : 4,5 - 5,0 kg/m^2
- Corestone Sealcoat T (2 x) : 0,06 -0,08 kg/m^2

Substrate Preparation

In General, the substrate must fulfil the relevant standards with special reference to flatness, gradients, thickness, load bearing capacity and water permeability. Substrates to be coated have to be firm, dry, clean and free of loose and brittle particles and substances that impact the adhesion such as oils, grease, paint or other contaminations.

Concrete substrates must be dry and a require a minimum cohesion strength of 1,5 N/mm^2 and a minimum compressive strength of 25 N/mm^2 at time of installation. Existing joints in the concrete surface must be performed with a joint profile. The dimensions and details of these joints will need to be determined based on the function of the expected movements of the concrete floor. Depending on the substrate a mechanical preparation (milling and/or vacuum blasting) is recommended for a good adhesion.

Residual Moisture tolerance

Prior to installation, mineral substrates must always be provided with a vapor barrier and must not exceed 4 % decreasing residual moisture content measured by the Calcium Carbide method, which corresponds to maximum 75% relative humidity according to ASTM F2170. If using the calcium chloride test, the maximum allowable vapor emissions is 4.0 lbs. as per ASTM F1869. For anhydrite substrates must not exceed 0,3% decreasing residual moisture content measure by the Carbide method.

Limit processing conditions

No rising moisture in accordance with ASTM (polyethylene foil). The temperature of the substrate and not cured material must be at least 3°C higher than the dew point to prevent the risk of condensation, white discoloration or sticking of the floor finishing layer. At temperatures <10°C, the exothermal reaction will greatly slow down and exposed to changed humidity % RH for a longer period, which can cause white discoloration and carbamate formation.

Work Safety Precautions

Before using the products, the user must read the associated, current Material Safety Data Sheets (MSDS). The MSDS provides information and instructions for the safe use, handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety related data. Please refer to the Material Safety Data Sheets for detailed safety instructions on the use of personal protective equipment during processing of the materials. For components A and B, the safety data sheet EPI Corestone Nature SL is applicable. This sheet has been prepared in accordance with the latest European legislation.

Corestone
Nature SL

Application Corestone Nature SL
General:

- Before installation, always check all relevant documentation and check that all components are present in the required quantities.
- Large temperature differences should be avoided as this can adversely affect the end result.
- The area must be wind and watertight: avoid drafts and penetration of moisture, dust, water, etc..
- Preferably remove doors that have no free space. Protect walls, columns and walls from splashes.
- Retain the floating character of floating screeds.

For the correct processing of the EPI Corestone Nature SL, we refer you to the EPI installation guideline. These are available on request from EPI Synthetic Surface Materials B.V., please contact your local representative.

System options:

Crack-bridging properties:

If the overall system needs to be static crack-bridging, please contact the EPI technical service department to discuss the possibilities.

For specific questions and/or details, please contact one of our consultants or EPI technical service department.

Application primer / scratch coat

Prior to the application of the EPI Corestone Nature SL, the substrate must be primed with a primer / scratch coat. EPI Corestone Penetrator AQ-N in combination with EPI primer 400 POX can be used for this purpose. If necessary, broadcast with quartz sand. For a vapor permeable system consult advice. See the product data sheet for these products for more information.

Application Corestone Nature SL / Solid

EPI Corestone Nature SL is a 4 component material. For larger projects, it is possible to make the component A factory color. It would then be a 3-component 3-component product, because then component D (color paste) is already added to component A.

- Always mix whole packages!
- If application time, project size and mixing equipment allows, double sets may be used.
- Step 1: Mix component A and D together carefully for about 1 minute with a suitable mixer until a uniform color is achieved (if 4-component version).
- Step 2: Then add component B to the mixture and carefully mix together for about 1 minute until a homogeneous uniform mix. When mixing, pay attention to the bottom and edges as well.
- Pour the mixture into a clean container and mix again for 1 minute.
- Step 3: Then gradually add component C and mix for about 1 minute until a homogeneous mixture is obtained. Be careful, if component C is added too quickly, lumping may occur!
- Step 4: Immediately after mixing, distribute the material on the substrate. The material can be applied in the appropriate layer thickness using a suitable flat trowel.
- Use clean spike shoes if necessary.

Note: It is recommended to clean mixing and application tools regularly so that no contamination from previously mixed product and/or chip dripping into the floor can cause staining.

Application Corestone Nature SL / Blend

- Always mix whole packages!
- If application time, project size and mixing equipment allows, double sets may be used.
- Always mix whole packages!
- Step 1: First mix all components of color 1 as described and then create color mixture 2.
- Step 2: Add the 2 colors together and mix a few strokes with e.g. a hand spatula. Note: too many strokes can change mixing of colors to uni color (solid).
- Step 3: Immediately after mixing, distribute the material on the substrate. The material can be applied with a suitable flat trowel in the appropriate layer thickness.

Note: It is advisable to have both colors mixed by 2 separate persons so that both colors are ready to merge at the same time. When this is done by 1 person, one color is left standing longer than the other, which can cause an increased exothermic reaction that can adversely affect application.

Corestone
Nature SL

Recommendations

EPI Corestone Nature SL is a water-containing product. If the moisture that escapes during the curing process of the EPI Corestone materials condenses on the floor, this can lead to an irregular permanent white discoloration of the floor.
We recommend the following additional measures to prevent this white discoloration.

- The temperature of both the floor and the materials to be processed must be *at least 18°C* and relative humidity < 60%.
- Switch off floor cooling well before and during application and up to 7 days after application.
- During and after the application ensure sufficient air exchange, air flow; this can only be done by aiming fans at ceiling in combination with opened windows and doors (e.g. windows tilt open). If in doubt, place sufficient air dryers.
- After application, do not cover the floor finish for 7 days, if covering is necessary then temporarily cover with vapor-open covering materials. Remove coverings immediately after handling, in any case within one hour.
- Do not allow dense objects to stand on the floor for long periods; moisture must be able to escape evenly.

Top coat finish

After sufficient curing (approx. 48 hours) of EPI Corestone Nature SL, the surface should be sealed with EPI Corestone Sealcoat T in 2 coats of approx. 60 - 80 g/m^2 each. Refer to the EPI Corestone Sealcoat T product data sheet for more information.

Transport and storage conditions

Store all components in closed packaging, away from the ground. Temperature between +15°C and 25°C.

Dry room, avoid direct sunlight. Protect liquid components against frost (also during transport).

Shelf life

Component A : 6 months from production date.
Component B : 6 months from production date.
Component C : 6 months from production date.
Component D : 6 months from production date.

Cleaning and maintenance

In order to maintain an optimal skid resistance, regular cleaning is required.

Waste

Attention! Too much residual material in the packaging can become hot due to an exothermic reaction and cause smoke nuisance. Therefore never leave more than 100 grams of mixed product in the packaging and place the packaging in a safe and well-ventilated place. If there is more residual material, add a generous amount of sand to inhibit the exothermic reaction.

CE-marking

The harmonized European standard EN-13813:2002 applies to this synthetic resin flooring material, please refer to the Declaration of Performance for more information.

VOC / Directive 2004/42/EC

EU limit value for the product (category A/j - Type WB) in ready-to-use condition: max. 140 g/l (2010) This product contains <140 g/l VOC.