



**Product innovation!**

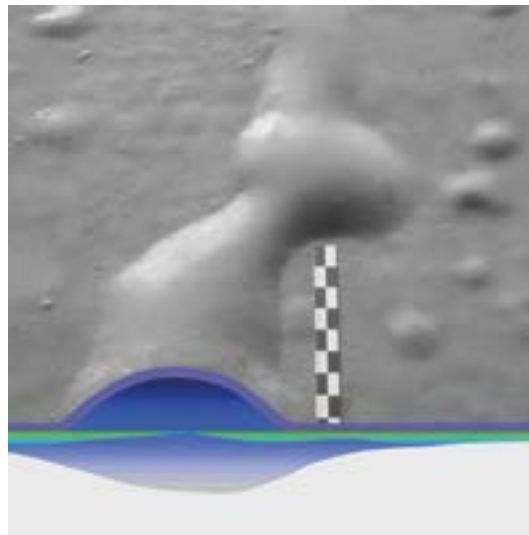
## **Epoxy hybrid floor coating**

No more bubbles despite  
a moist substrate

# Epoxy hybrid prevents bubble formation

Coating moist substrates is no longer a problem

Moisture in a substrate can lead to osmotic bubble formation on water impermeable floor coatings on an epoxy or polyurethane resin base. These bubbles not only look unsightly, they also impair the floor coating's functionality. This can be caused, for example, by substrates with either increased residual moisture or where moisture penetrates from the rear, but also where green concrete and cement screed surfaces have been coated too early due to tight deadlines. In order to counteract this problem, a fresh, moist concrete substrate or a substrate with moisture penetration from the rear requires an intermediate layer, which can be promptly reworked with the final coating after fast curing.



Osmotic bubble filled with fluid under an epoxy resin coating.

StoCretec offers a new solution for these requirements: an epoxy hybrid coating. This solution uses an advanced technology that combines the benefits of copolymers and epoxy resins in a self-levelling, water-based, cementitious system. The decisive advantage over conventional ECC coatings is their fast curing. The new hybrid coating can already be reworked after approx. four hours.

## Advantages of the StoCretec epoxy hybrids

- Coating of moist substrates, or where moisture penetrates from the rear, and of green concrete
- Very fast curing (coating after 4 hours possible)
- Excellent flow due to low viscosity
- Outstanding ventilation
- Non-porous after curing also on a porous substrate
- No additional primer required when overcoating with StoCretec epoxy resins
- Very good adhesion of StoCretec's epoxy resin products
- Fillable with quartz sand
- Can be used in both interiors and where exposed to weathering
- Liquid water tight but water vapour permeable

## StoCretec epoxy hybrid coating systems

System build-up	For horizontal surfaces	For vertical surfaces	Properties
Prime coating	StoCryl EH 100	StoCryl EH 100	<ul style="list-style-type: none"> <li>• Single-component</li> <li>• For concrete and cementitious screed</li> <li>• Ready-to-use</li> <li>• Over-coatable after 30 to 90 min</li> </ul>
Coating	StoCrete EH 200	StoCrete EH 280	<ul style="list-style-type: none"> <li>• 2-component</li> <li>• Non-combustible A2fl-s1, d0</li> <li>• Over-coatable: at 23 °C after approx. 4 h</li> <li>• Resistant to salt and frost</li> <li>• Complies with EN 13813 and 1504-2</li> </ul>

### The epoxy hybrid principle

A hybrid comes from crossing different type of things. A plant hybrid, for example, originates from crossing different plant species (e.g. grapefruit from orange and pomelo). Different animal species can be crossed to produce an animal hybrid (e.g. a mule from a donkey and horse). And this term is particularly common in technology. Cars with hybrid technology combine different drive technologies (e.g. petrol-operated and electrical engines).

StoCretec's new epoxy hybrid system consists of a powder and a liquid component. When they are mixed, two curing mechanisms take place parallel to each other:

- hydration of cement and water
- polyaddition reaction of epoxy resin with an amine hardener

The epoxy resin accumulates in the pores of the cement matrix and constricts them. This results in a liquid waterproof yet water vapour permeable layer, which prevents osmotic bubble formation in the subsequent floor coating.

### Areas of application

- As a moisture barrier (DPM = Damp Proof Membrane) under reaction resin coatings (moist substrates or those with moisture penetration from the rear)
- In combination with a fast top coat layer as a 1-day coating
- As a levelling coat under reaction resin coatings for substrate with high roughness depths
- As a wear-resistant surface for non-basement, moist substrates with low aesthetic requirements
- As a scattered skid resistant coating in multi-storey car parks



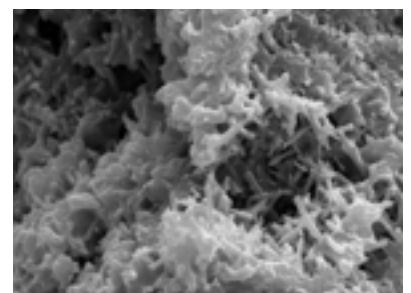
Application of primer  
StoCryl EH 100



StoCrete EH 200 is applied  
with a squeegee ...



... and de-aired using a  
spiked roller.



StoCrete EH 200 under  
a scanning electron  
microscope.

StoCrete EH 200  
guarantees a  
bubble-free floor  
despite moisture  
from the rear.

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