



StoCretec

Building with conscience.

StoCryl V 700

Dry and protected concrete

**Concrete repair
and concrete
protection**



Surface protection

Over time, weather, harmful substances, or other exterior influences alter the appearance of concrete and can damage it. The StoCryl V 700 coating with Dryonic Technology ensures rapid drying of concrete surfaces and thus maintains the building structure.

Long-lasting protection thanks to quick-drying properties

The intelligent StoCryl V 700 coating

Almost every concrete structure is exposed to environmental effects that will cause damage to the concrete or steel sooner or later. Water has a major role to play in this.

Concrete attacked by frost:

The concrete in all external parts of buildings suffers from frost attacks, caused by rain and starting at the facade. In structures that are part of traffic infrastructure, frost has an even more significant impact in areas affected by spraying and splashing water.

Reinforcement corrosion:

Aside from water, chlorides are the most significant perpetrators of reinforcement corrosion. Water acts as a conduit for de-icing salt and thus contributes significantly to corrosion, especially in traffic structures.

If the surface of a structure is constantly wet because of rain, condensation, or permanent shading from trees or shrubs, for example, then microorganisms will settle on it. Even if they are unlikely to be an indirect cause of damage, they can still have a negative impact on the structure's appearance.

The Dryonic Technology used in StoCryl V 700 ensures that dew and rainwater drain off fast and the concrete surface dries in record time. Even in cases of indirect shading from trees or shrubs, StoCryl V 700 helps damp surfaces to dry quickly. The concrete surface remains visually appealing because microorganisms cannot grow on dry substrates.



Photo left + cover:
„Fuchsbau“,
residential and
commercial
building,
Munich, DE

Building owner:
homeowner associa-
tion represented by
Hammele & Partner
mbH

StoCretec expertise:
StoConcrete Protect V
700, StoFloor Balcony
Flexible EA

Photos: Isabell Munk



Modelled on nature

A very special shell on its back

Biomimetics is a relatively young scientific discipline. It studies phenomena such as biological principles that have developed and proven to be successful throughout evolution. The findings are transferred into technological applications. The StoCryl V 700 coating with Dryonic Technology is based on the microtexture of the fog-basking beetle. The shell on the back of this insect is covered in countless microscopic bumps, which quickly turn the desert's morning fog into liquid.

How it works

The principle is simple: while the hydrophilic tips let the water condense, the depressions in-between are hydrophobic. Using the shell on its back, the beetle can collect, drain, and take in up to 40 per cent of its body weight in water.

StoCretec GmbH has translated this powerful drainage technique into an innovative concrete protection system.

Integrated solar protection

StoCryl V 700 S with SunBlock Technology

In addition to environmental effects such as weather conditions, concrete structures are often exposed to strong solar radiation. The SunBlock Technology in StoCryl V 700 S protects paint against aggressive UV radiation and keeps even intense colour shades looking radiant. The colour coating remains just as bright as it did on the day it was applied – so there's no need to spend money on repainting.

Dryonic Technology also keeps the concrete structure dry and clean for a long time. StoCryl V 700 S offers maximum whiteness and is very opaque in its colour shade variety.

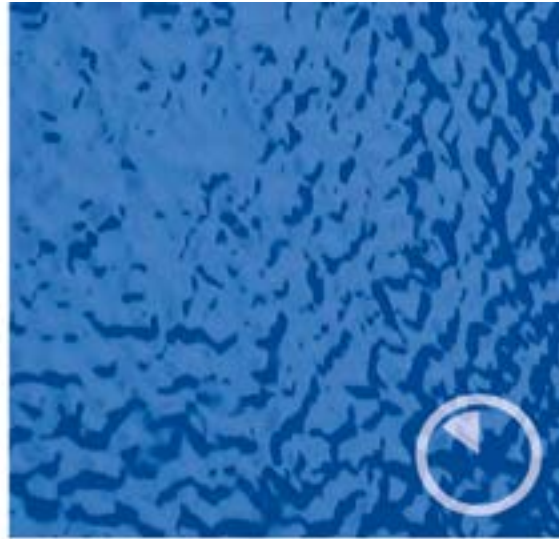
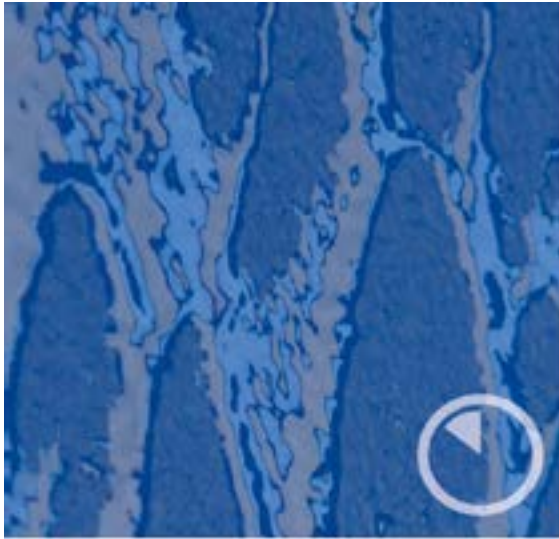
StoCryl V 700 / StoCryl V 700 S coating

Properties	StoCryl V 700*	StoCryl V 700 S*
Tintability	■■	■■■■
Colour stability	■■	■■■■
Mechanical durability	■	■
Cleanability	■■■■**	■■■■**
CO ₂ resistance	■■■■	■■■■
Water vapour permeability	■■■■	■■■■
Freeze-thaw cycling with de-icing salt immersion	■■	■■
Prevents algae and fungal attack without biocides	■■■■	■■■■
Curing coat***	■■	■■

*OS 4 tested system **Without brush *** Note: outside controlled area
■ = good ■■ = very good ■■■ = excellent



**Residential estate,
Esslingen, DE**
StoCretec expertise:
StoConcrete Protect
V 700



Comparison test:
StoCryl V 700/
standard coating



StoCryl V 700

Standard coating

At a glance

Benefits:

- Fastest drying after rain or dew, thanks to a bionic-inspired mechanism
- Prevents the penetration of water and harmful substances dissolved in water
- Regulates the moisture balance
- Increases electrical resistivity
- Good carbon dioxide impermeability (S_d value $\text{CO}_2 > 50 \text{ m}$)
- Good water vapour diffusion permeability (S_d value $\text{H}_2\text{O} < 4 \text{ m}$)
- Minimal extender material breakdown (not easily scuffed)
- Matt look
- Highest whiteness
- Wide colour shade variety and high level of colour stability
- Without biocidal film protection

Areas of application:

- Exposed to weathering
- Functional coating based on a bionic principle, designed specifically for concrete structures
- For the protection and colour design of concrete structures

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