

StoColor Dryonic® family

Facade paints with Dryonic® Technology

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Facade

Facade coatings

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Facade paints

StoColor Dryonic[®] facade paints with Intelligent Technology offer a wide range of design possibilities as well as optimum durability, colour stability, and sustainability. The innovative formulation designed in accordance with the biomimetic principle ensures environmentally friendly protection against algae and fungal attack - and without biocidal film protection.

Tinting strength is just one of the strengths Sto has to offer.

Building with conscience means helping to shape the world responsibly. This is also true for the colour design of facades. Facade paints with Dryonic[®] Technology combine supreme performance with intelligent technology – for optimum resistance to weathering and protection against algae and fungi.

When it comes to facade paint, aesthetic appeal is what counts. However, achieving a successful facade design is not simply about choosing the right colour. As facade paints are constantly exposed to weathering and therefore run the risk of fading or being attacked by unpleasant microorganisms, they have to be able to do much more.

This is exactly what we strive for at Sto. In order to offer facade paints with high levels of performance and innovative properties, we focus on research and develop new technologies. One particularly pioneering field here is biomimetics, which we have been working on for over 20 years: the Dryonic[®] family too is based on a biomimetic active principle.

Our inspiration was the fog-basking beetle. It lives in the Namib desert and has adapted to the conditions that prevail there perfectly. For this beetle, constant drought is no problem, as it can turn fog into drinking water.

So what is its secret? Its shell is covered in countless microscopic bumps. Thanks to this unique surface texture, the beetle is able to turn fog into liquid fast: while the hydrophilic tips let the water condense, the hydrophobic depressions in between divert the water away. We took this observation from nature and transferred it into our top-performing facade paints. The paint's special surface texture ensures that dew and rain on the facade dry in record time, depriving algae and fungi of the nutrients they need to grow. Additional technologies prevent the paint from fading and heating in the sun – even when used on timber facades. As a result, facade paints with Dryonic® Technology guarantee bright and gleaming facades on virtually any substrates year in, year out.

Cover photo: Student residence, Münster, DE Design: Kresings Architektur GmbH, Munster, DE

Foto: Guido Erbring, Köln, DE

Image on right: **Residential building, Lörrach, DE** Execution: GÖRING GmbH, Maulburg, DE Sto expertise: StoColor Dryonic®, Stolit® K 2

Photo: Martin Baitinger, Böblingen, DE



Image below: Macro shot of a StoColor Dryonic[®] surface – the new biomimetic solution from Sto uses the principle of the fog-basking beetle to produce dry facades.



The Dryonic[®] family

StoColor Dryonic[®], StoColor Dryonic[®] S and StoColor Dryonic[®] Wood

High-performance facade paints with Intelligent Technology for an extremely wide range of substrates and requirements.

StoColor Dryonic®

We have transferred the technique of the fog-basking beetle to our Dryonic[®] Technology: thanks to an innovative formulation with a clever architecture of binding agent and extender, a microtexture forms on the surface. The result is extremely quick drying after rain, fog, and dew. And the facade has an environmentally friendly and long-term safeguard against algae and fungal attack. The Fraunhofer Institute for Structural Durability and System Reliability LBF tested five facade paints with regard to their drying properties. The result: StoColor Dryonic[®] excelled with the fastest drying times.

StoColor Dryonic[®] S

With integrated SunBlock Technology, StoColor Dryonic[®] S also protects the facade from fading in the sun due to UV rays. Even intense colours with sensitive pigments are retained over the long term. The paint therefore exudes a radiant appearance that lasts and offers the widest possible range of colours.

All highly pigmented tints are also available with X-black Technology. As dark surfaces heat up to over 80 °C when exposed to direct solar radiation, X-black Technology ensures that temperature peaks are kept reliably below 65 °C. It therefore removes virtually all thermal limits when it comes to the colour design of buildings and reliably prevents hot facades or crack formation resulting from high temperatures.

StoColor Dryonic® Wood

To meet the high demands of timber, we have developed StoColor Dryonic[®] Wood for this substrate. This member of the Dryonic[®] family contains both SunBlock and X-black Technology in all colour variants. It also has an isolating effect against many wood constituents, keeping the facade free from discolouration.

Irrespective of the choice of colour shade, the composition of the substrate, or the prevailing weather conditions, facade paints with Dryonic[®] Technology ensure dry, beautiful, and radiant facades that last.



StoColor Dryonic® comparison test Left: Standard fassade paint Right: StoColor Dryonic® excelled. The smallest amount of condensate formed on its surface following condensation, it absorbed the least amount of water into its film, and it dried the fastest.

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StoColor Dryonic®

The reliable facade paint for virtually all substrates

Whether it's render, concrete, brick, metal facades, or plastic: StoColor Dryonic[®] can be used on virtually all conventional substrates. The facade paint provides excellent protection against attack from microorganisms and is environmentally friendly thanks to the lack of biocidal film protection.

Product advantages

- Biomimetic principle for fastest drying after rain or dew
- Highest whiteness
- Wide colour shade variety and high level of colour stability
- · Optionally available with heat shield against

- solar heating (X-black Technology)
- Minimal extender material breakdown (not easily scuffed)
- Very high mechanical resistance
- Texture-retaining
- Pure acrylate binding agent
- CO_2 diffusion: class C1 in accordance with EN 1062-1
- Excellent hiding power
- Water vapour permeable
- Alkali-resistant
- Very good adhesion to all substrates commonly used in construction
- Without biocidal film protection

Retirement home,

Schwabmünchen, DE Building owner: Arbeiterwohlfahrt AWO, Stadtbergen, DE Design: Höss Amberg + Partner Architekten mbB, Munich, DE Sto expertise: StoColor Dryonic®

Photo: Martin Baitinger, Böblingen, DE



StoColor Dryonic[®] S

The radiant facade paint with integrated solar protection

No matter how much weathering and sunshine a facade is exposed to, StoColor Dryonic[®] S with SunBlock Technology ensures that even intense facade colour shades retain a radiance that lasts. The facade paint offers free choice from a wide range of colours. Here too, Dryonic[®] Technology keeps the facade dry and clean in a sustainable manner.

Product advantages

- Biomimetic principle for fastest drying after rain or dew
- Extremely wide colour shade variety and high level of colour stability thanks to SunBlock technology
- Optionally available with heat shield against

- solar heating (X-black Technology)
- Minimal extender material breakdown (not easily scuffed)
- Very high mechanical resistance
- Texture-retaining
- Pure acrylate binding agent
- \cdot CO_2 diffusion: class C1 in accordance with EN 1062-1
- Excellent hiding power
- Water vapour permeable
- Alkali-resistant
- Very good adhesion to all substrates commonly used in construction
- Without biocidal film protection

Detached house,

Dettingen/Teck, DE Execution: A. Baumann & Sohn GmbH Co. KG, Heubach, DE Sto expertise: StoTherm Classic®, Stolit® K 3, StoColor Dryonic® S

Photo: Martin Baitinger, Böblingen, DE



StoColor Dryonic[®] Wood

The protective facade paint for demanding wooden substrates

Timber facades in humid areas are particularly susceptible to algae and fungal attack. With StoColor Dryonic[®] Wood, these too can be beautifully designed to last. The integrated Sun-Block Technology protects against aggressive UV radiation while X-black Technology prevents the facade from heating up. The paint also isolates surfaces from many wood constituents, keeping the facade free from discolouration.

Product advantages

- Biomimetic principle for fastest drying after rain or dew
- X-black Technology reliably keeps the temperature below +65 °C
- Extremely wide colour shade variety and high level of colour stability thanks to SunBlock technology
- Highly weather-resistant
- Very high mechanical resistance
- Pure acrylate binding agent
- Excellent hiding power
- Water vapour permeable
- Non-drip
- With encapsulated film protection
- Retains the texture of the wood
- Isolating effect against many wood constituents

Johann Ender hall, Mäder, AT

Building owner: Mader municipality, DE Design: be architects Holding AG, Lustenau, AT Execution: Winkler painting contractor, Koblach, AT Sto expertise: StoColor Dryonic® Wood

Foto: Christian Schellander, AT



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