



StoColor Dryonic®
Intelligent paint for dry facades

StoColor Dryonic®

The new bionic solution for dry facades

Bionics is a relatively young scientific discipline which studies very old phenomena in great detail: biological principles that have developed and proven to be successful throughout evolution. The findings are transferred into technological applications. This has resulted in many surprising and functional solutions modelled on nature. The model for StoColor Dryonic® – our new bionic solution for dry facades – was a beetle from the world's oldest desert: the Namib.

Modelled after a beetle

It is small, black, and inconspicuous: the fog-basking beetle. The only thing that initially attracts attention is its long hind legs. And there is a good reason for those. They allow it to keep its distance from the hot sand as well as assist it in collecting water. When the fog from the nearby ocean travels over the sand dunes in the early morning, the beetle crawls up to the ridge of a dune, lowers its head, and raises its rear. This allows the fog condensing in small droplets on its back to run directly into its mouth. But another element is required for this headstand trick to work so well. And this only becomes evident on closer inspection:

A very special shell on its back.

The covering wings of the fog-basking beetle are not as smooth as on other beetles. They are covered in countless microscopic bumps.





It is this unique surface texture that allows the beetle to turn the fog into liquid so fast. The principle is as simple as it is ingenious: while the hydrophilic tips let the water condense, the depressions in between are hydrophobic. Using its shell, the beetle can collect, drain, and take in up to 40 per cent of its body weight in water. We have translated this high-performing drainage technique into our new facade paint.

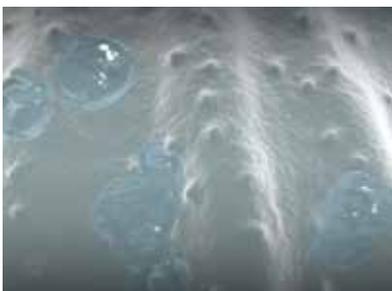
StoColor Dryonic®: beautifully dry, come what may.

Dry facades modelled on nature.

How do you turn a paint into a facade paint with Dryonic Technology? The permanent microtexture of the surface is made up of a clever architecture of binding agent and filler material, providing extremely fast water repellency. With this innovative formulation, the principle of the fog-basking beetle could be translated into a product for the first time with StoColor Dryonic®: targeted water drainage and fast drying after rain, fog, and dew. Together this provides truly dry and permanently attractive facades that can be enjoyed for a long time.

Climate-neutral: StoColor Dryonic® is

Germany's first CO₂ neutral facade paint. An important contribution to protecting the climate and our environment is climate-neutral production. After consistently converting our factories to renewable energies (100 % hydroelectric power) we are now taking the next step towards climate-neutral production. This is the step we are taking with StoColor Dryonic®. How does it work? Based on an Environmental Product Declaration (EPD), we calculate the CO₂ emissions generated during production and balance these with CO₂ emission certificates. These then benefit a climate protection project in Indonesia. The support for this project allows at least 180 tons of CO₂ to be saved each year. The additional CO₂ emission certificates now make StoColor Dryonic® an all-round climate-neutral product. A sustainability data sheet for StoColor Dryonic® is available online at www.sto.de.



Shell surface



StoColor Dryonic® surface



**Klimaneutrale
Fassadenfarbe**
powered by ClimatePartner®

Facade paints with Dryonic technology

Beautifully dry, come what may

Don't we all want our new facades to remain attractive for as long as possible? But algae and fungi can quickly become apparent if there are bodies of water, agricultural spaces, trees, and shrubs in the surrounding area, or if the entire building is located in a natural depression. The microorganisms settle when the facade is permanently wet, for example from rain, dew, or fog.

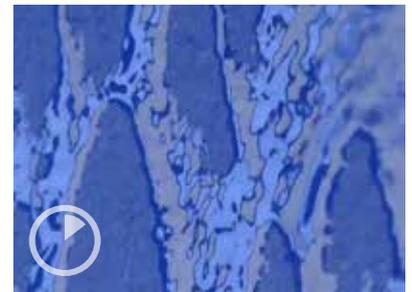
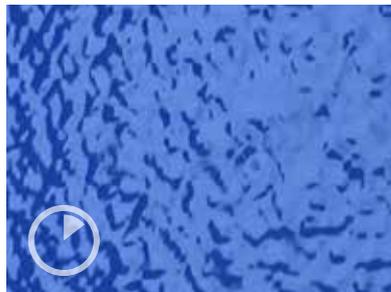
Natural protection against algae and fungi.

With StoColor Dryonic®, facades dry in record time in any weather and in any climate. Similar to the fog-basking beetle, this is achieved by the drainage effect from the combination of a water-repellent surface and a special microtexture. This Dryonic Technology ensures that dew or rainwater drains off in record time so that the facade can dry as quickly as possible. And the facade remains naturally clean and attractive because microorganisms cannot grow on dry surfaces.

StoColor Dryonic®: Fraunhofer Institute confirms protection from moisture

For facades to stay looking attractive long-term, water needs to be able to run off the surface fast. Fraunhofer Institute tested 5 facade paints with regard to their drying properties. The result: 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. In other words, facades painted with StoColor Dryonic® are the ones that are soonest dry. Algae and fungi don't stand a chance.

StoColor Dryonic® comparison test: absolutely impressive.



Standard facade paint

StoColor Dryonic®

One paint for all substrates

StoColor Dryonic® is an all-purpose product

Many different surfaces can come together in one project, particularly in the field of building refurbishment. That requires a great deal of know-how: which facade paint works best on which surface? StoColor Dryonic® makes everything easier. That's also true for application: StoColor Dryonic® is compatible with the most commonly used application methods.

One facade paint for all substrates.

Whether it's render, concrete, clinker brick, metal facades, plastic, or facade cladding: StoColor Dryonic® can be used on all conventional substrates. The paint can be applied using a paint brush, roller, or airless spray. This even protects gutters, pipes, panels, or garage doors against microorganisms. The intelligent paint is suitable for buildings erected in the classic monolithic construction type, as well as those which are fitted with an external wall insulation system (EWIS). The intelligent facade paint even works on inclined surfaces – StoColor Dryonic® always ensures that facades dry more quickly and remain clean for a long time.



Design possibilities with StoColor Dryonic®

Dream facades come true

Architect or building owner: anyone refurbishing a house or planning a new build wants more than just a permanently clean and attractive facade. The building should also feature an expressive design to be truly individual. Facade design primarily means colour design. StoColor Dryonic® opens up completely new options in this regard.

One paint in all colours

With StoColor Dryonic®, facades do not just look attractive for longer. They also look exactly as the planner envisioned. For the new facade paint is available in virtually all colour shades. The large colour shade variety renders any colour design possible. Whether clean white, soft pastels, or dark, intense shades with a high level of colour stability: everything is possible.

It is therefore hardly surprising that StoColor Dryonic® is part of iQ – Intelligent Technology, the paint generation of the future. The intelligent facade paints can do more than just conventional paints. iQ – Intelligent Technology means improved function through optimised product properties. The result: more protection, durability, colour stability, and sustainability.



Facade paints for the future

Greater benefits through more functionality

Sto has set a milestone in the development of progressive facade coatings with its new iQ – Intelligent Technology generation of paints. The special formulation matrix can achieve functions which offer significant benefits to building owners, applicators, and architects.

StoColor Dryonic® is the latest innovation.



As a technology leader in the sustainable design of living spaces tailored to human needs, Sto has been conducting intensive research in the field of bionics for many years. The result: facade paints with iQ – Intelligent Technology where the innovative surface functions provide clear added value.



StoColor Dryonic® StoColor Dryonic® G

Beautifully dry, come what may.
The new facade paint with Dryonic Technology for facades that dry quicker

At a glance:

- Fastest possible drying after rain and dew formation
- Bionic principle for dry facades, inhibiting algae and fungal attack
- Without biocide film protection
- Extremely wide colour shade variety and high level of colour stability
- Minimal filler material breakdown, not easily scuffed
- Can be applied to all conventional construction substrates
- StoColor Dryonic G is available with encapsulated film protection

Classes in accordance with EN 1062-1:

- Water vapour diffusion: V2 (average)
- Water permeability: W3 (low)
- CO₂ permeability: class C1 (inhibiting)



StoColor X-black

Strong colours for cool facades
The facade paint with X-black Technology for especially intensely-coloured and cool facades.

At a glance:

- Reflects the near-infrared spectral region of solar energy
- Wide colour shade variety and high level of colour stability
- Especially for dark colour shades

Classes in accordance with EN 1062-1:

- Water vapour diffusion: V2 (average)
- Water permeability: W3 (low)



Lotusan®/Lotusan® G

Dirt runs off with the rain.
The tried-and-tested facade paint with patented Lotus-Effect® Technology for surfaces that stay clean for longer.

At a glance:

- Maximum resistance to soiling
- Natural protection against algae and fungal attack
- Without biocide film protection
- Lotusan® G is available with encapsulated film protection

Classes in accordance with EN 1062-1:

- Water vapour diffusion: V1 (high)
- Water permeability: W3 (low)



StoColor Photosan

A clever solution for clean air.
The facade paint with patented VLC Technology (visible light catalyst) for reduced particulates and cleaner air.

At a glance:

- Reduces the formation of particulates
- High degradation of harmful substances such as nitrogen oxides and ozone
- Maximum resistance to soiling

Classes in accordance with EN 1062-1:

- Water vapour diffusion: V1 (high)
- Water permeability: W3 (low)

Subsidiaries abroad

Austria
Sto Ges.m.b.H.
 9500 Villach
 Phone +43 4242 33133-0
 www.sto.at

Belgium
Sto nv/sa
 1730 Asse
 Phone +32 2 4530110
 www.sto.be

China
Shanghai Sto Ltd.
 201201 Shanghai
 Phone +86 2158 972295
 www.sto.com.cn

Czech Republic
Sto s.r.o.
 251 70 Dobřejovice
 Phone +420 225 996 311
 www.sto.cz

Denmark
Sto Danmark A/S
 2650 Hvidovre
 Phone +45 702 70143
 www.stodanmark.dk

Finland
Sto Finexter Oy
 01730 Vantaa
 Phone +358 207 659191
 www.stofi.fi

France
Sto S.A.S.
 95870 Bezons
 Phone +33 1 34345700
 www.sto.fr

Hungary
Sto Építőanyag Kft.
 2330 Dunaharaszti
 Phone +36 24 510210
 www.sto.hu

Ireland
Sto Ltd.
 Dublin 12
 Phone +353 1460 2305
 www.sto.ie

Italy
Sto Italia Srl
 50053 Empoli (FI)
 Phone +39 0571 94701
 www.stoitalia.it

Malaysia
Sto SEA Sdn Bhd
 Kota Damansara
 47810 Petaling Jaya, Selangor
 Phone +60 3 61 56 61 33
 www.sto-sea.com

Netherlands
Sto Isoned bv
 4004 LH Tiel
 Phone +31 344 620666
 www.sto.nl

Norway
Sto Norge AS
 0175 Oslo
 Phone +47 6681 3500
 www.sto.no

Poland
Sto Sp. z o.o.
 03-872 Warszawa
 Phone +48 22 5116-102
 www.sto.pl

Russia
OOO Sto
 119180 Moskva
 Phone +7495 974 1584
 www.sto.ru

Singapore
Sto SEA Pte Ltd
 Singapore 575625
 Phone +65 64 533080
 www.sto-sea.com

Slovakia
Sto s.r.o.
organizačná zložka
 83104 Bratislava 3
 Phone +421 2 44648142
 www.sto.sk

Slovenia
Sto Ges.m.b.H.
Podružnica Ljubljana
 1000 Ljubljana
 Phone +386 1 4303 525
 www.sto.com/si

Spain
Sto SDF Ibérica S.L.U.
 08302 Mataró (Barcelona)
 Phone +34 93 7415972
 www.sto.es

Sweden
Sto Scandinavia AB
 581 10 Linköping
 Phone +46 13 377100
 www.sto.se

Switzerland
Sto AG
 8172 Niederglatt (ZH)
 Phone +41 44 8515353
 www.stoag.ch

Turkey
Sto Yapı Sistemleri
San. ve Tic. A.Ş.
 Yakut Sok. No: 8, A.Hisari
 34815 Beykoz, İstanbul
 Phone +90 216 330 51 00
 www.sto.com.tr

United Kingdom
Sto Ltd.
 Glasgow G52 4TG
 Phone +44 141 404 9000
 www.sto.co.uk

USA
Sto Corp.
 Atlanta, GA 30331
 Phone +1 404 3463666
 www.stocorp.com

Head office

Sto SE & Co. KGaA

Ehrenbachstrasse 1
 79780 Stuehlingen
 Germany
 Phone +49 7744 57-0
 Fax +49 7744 57-2178
 infoservice@sto.com
 www.sto.com

