



**StoArmat Miral Render System**  
EPS / ICF / Polystyrene block  
construction

# StoArmat Miral Render System

## EPS / ICF / Polystyrene block construction

StoArmat Render Systems provide the perfect reinforcing render to ensure maximum system reliability for EPS / ICF / Polystyrene block construction. StoArmat, an organic, cement-free and breathable, high-impact render, with a crack resistance six times higher than that of standard cement-based plasters, ensure maximum system reliability for your building facade. Finished in a choice of seven different Stolit coloured finishing renders and StoColor for a complete weather tight solution.

At Sto, we aim to offer our customers maximum quality and protection; that is why we continually optimise our systems, utilising the latest building technology providing an innovative edge. Take a look at a facade solution that works as promised, demonstrably better.



# Sto, an international brand

Selected with confidence worldwide

## Growth from a solid foundation

Establishment in 1835, Sto has undergone an astonishing course of development, from a simple German lime and cement works into one of the leading suppliers of facade insulated systems; a manufacturer of high-quality exterior and interior render systems and coatings worldwide.

Sto encompasses subsidiaries and distribution partners in over 50 countries across the globe. This focused presence provides Sto with a precise understanding of local climatic conditions, architectural styles, building practices, standards and tastes.

As the authorised partner of Sto for Australasia, Stoanz Ltd is committed to the Sto philosophy, "Building with conscience". Today, having developed a full range of Sto Render Systems that have been tested and certified by BRANZ for the market, Sto is recognised as a leader in the rendered facade and cladding market.

## People and architecture; Sto provides the link

Architecture plays an important role in our lives; lending urban and rural landscapes character, whilst ideally preserving an intact environment. For Sto, "Building with conscience", means enhancing functionality and aesthetics on a sustainable basis and creating an environment in which people feel at one with their surroundings.



**Sto Head Office,  
Research &  
Development,  
Production Centre  
Wiezen, Germany**



### **We always respect nature and look after your interests**

In order to define and implement its ecological targets, Sto has developed a system of environmental management which conforms to international standards. This relates to the entire process chain - from the procurement of raw products, to production, packaging and logistics. Sto makes a clear contribution towards improving and preserving the quality of the environment.



### **Combined values of different construction methods**

EPS / ICF / Polystyrene block construction is a snap together hollow block, constructed for a reinforced concrete mass masonry core that is pored into the supported EPS / ICF block walls. An established method in the New Zealand construction industry, combining the values and properties of diverse materials. EPS / ICF blocks are light, quick and easy in their installation, giving the designer the ability to form straight and curved walls with exceptional insulation and acoustic properties.

# StoArmat benefits

A perfect formula of modern technology

**StoArmat reinforcement render with Stolit finishing renders are manufactured in Germany for guaranteed quality and application consistency. Sto organic, cement-free renders have evolved over 50 years with a successful global history covering over 100 million square metres plus.**

**The added security of a StoArmat 20+ Year Warranty with StoService Assurance define StoArmat Render Systems as the industry benchmark.**

### Flexible and crack resistant

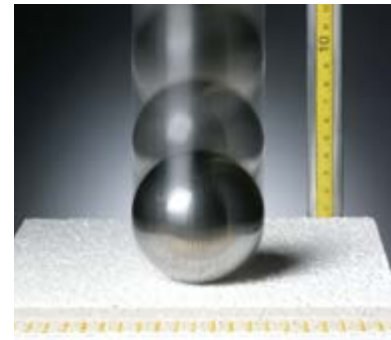
The impact of climate conditions and seismic activity can seriously threaten your property's facade. StoArmat reinforcement promises a crack resistance *six times* higher than that of standard cement-based plaster, durability against mechanical and seismic stresses, plus impact resistance; ensuring maximum system reliability and longevity for your building facade.

### Vapour permeable

StoArmat with Stolit finishing renders promotes breathability and water vapour permeability, preventing moisture from being trapped between the render and substrate. Water retention behind the cladding is thus avoided, whereas with elastomeric plaster or paint, water can build up behind the coating, eventually leading to blistering.

### Weather resistant

StoArmat with Stolit finishing renders also guard against the weather and changing climate conditions to prevent and protect buildings from water damage. All Sto cement-free renders are polymeric, allowing them to repel water far better than traditional thick-coat plasters.



**A bend test demonstrating extraordinary flexibility and an impact test proving high fracture resistance of StoArmat renders.**



**StoArmat Render System**



**Blistered coating**

Water vapour molecules pass through Sto renders and coatings while still promoting maximum weather tight properties. Elastomeric plasters or paints can lead to facade blistering and distortion as water vapour molecules become trapped.



**BRANZ Appraised**  
BRANZ appraisal no. 515



**StoArmat 20+ Year Warranty**  
with StoService Assurance

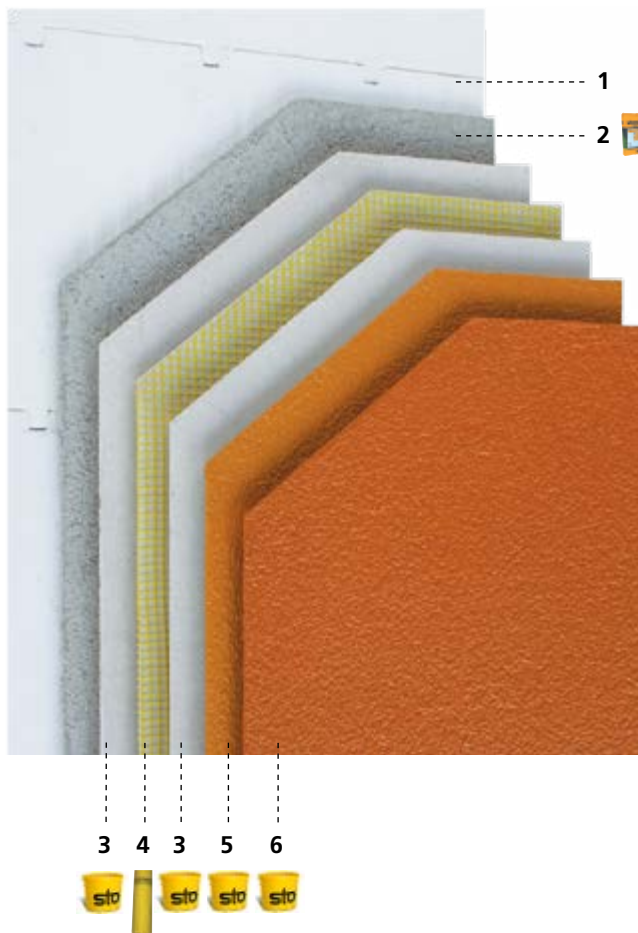
**A cost-effective approach, providing the latest technology with an innovative edge, creating systems that promise longevity and investment value from a recognised leader - Sto.**

### **StoArmat Miral Render System on EPS / ICF Polystyrene block**

Application includes a basecoat with LevelLite render to straighten any irregularities, Followed by StoArmat render and glass fibre mesh, providing engineered reinforcement to reliably dissipate tensile, seismic and shear stress.

Finished with perfectly interlocking components: Stolit fibre-reinforced coloured finishing render plus StoColor; creating a 4mm weather tight reinforcement system for reliability and protection that surpasses the facade durability requirements.

Installations are carried out by a Sto Registered Licensed Building Practitioner with the added protection of a StoArmat 15 or 20+ Year Warranty and StoService Assurance, guaranteeing building code compliant materials are used and application meets building code standards, including a service plan for long-term security.



### **Perfect interaction**

#### **1. Substrate:**

EPS / ICF / Polystyrene block.

#### **2 Basecoat: LevelLite Mineral Render**

Lightweight EPS bead mineral plaster with good build properties, water retention agents and machine application properties.

#### **3. Reinforcement Render: StoArmat**

German manufactured, organic, flexible, crack-resistance render to combat stress and seismic activity.

#### **4. Mesh: StoMesh**

Easy-to-install European mesh meets the highest requirements for crack, stress and alkalinity resistance.

#### **5. Coloured Finishing Renders: Stolit Range**

Sto manufactured, organically bound, strong, hard-wearing, impact-resistant, pre-coloured finishing renders.

#### **6. Facade Paint: StoColor**

StoColor coating based on IQ Net Technology for functional facades.

# Stolit: Coloured finishing renders

Providing your facade with optimum protection

**Stolit organic finishing renders are manufactured in Germany incorporating the latest technology; certified globally and successfully applied to rendered substrates in every climatic zone for over 50 years.**

The Stolit range provides the perfect combination of properties: durable, strong, hard-wearing, impact-resistant, malleable, weather-resistant, colour-stable and highly resistant to microorganisms. In addition, its vapour permeability allows your building to breathe while still repelling water.

Whichever finishing render is chosen, each one is part of a tested and approved system, providing optimum protection and durability; This makes it indispensable in today's construction industry.

## Benefits at a glance

- Available in the full spectrum of colours.
- Extremely low water absorption.
- Optimum surface adhesion.
- Shock-proof and highly resistant to cracks.
- Exceptional resistance to mechanical stress.
- Outstanding colour stability and product stability process – does not require an equalisation coat.
- Excellent application properties.



**Stolit MP**



**Stolit MP Natural**







All Stolit renders are easy to apply and can be tinted using the StoColor System or matched to the colour of your choice using the Sto Spectrometer.



Stolit K 1.0mm



Stolit K 1.5mm



Stolit K 2.0mm



Stolit K 3.0mm



Stolit renders are polymeric, allowing them to repel water and breathe, providing extra long-term protection superior to traditional, painted plaster systems.



Stolit Milano

# The perfect finish

Facades as individual as you and your project

The StoColor finish, a serviceable coating embodying intelligent technology for a range of surface functions to compliment the architectural structure and design. The StoColor System, with 800 shades or matched to any colour using the Sto Spectrometer, provides a clear framework and systematic approach to colour based on integrated layers, combining texture and colour for aesthetic appeal.

## Tested protection and quality

Sto paints establish easy-to-maintain surfaces and an outer layer of the Sto protection system, fulfilling all-important physical building requirements in terms of serviceability and functionality. StoColor facade paint is based on Sto intelligent technology, inspiring an innovative range of surface functions.



Sto has been conducting intensive research in the field of bionics for many years. The result: facade paint with iQ – Intelligent Technology where innovative surface functions provide clear added value.

New StoColor X-black	StoColor Lotusan®	StoColor Maxicryl	StoColor Lastic
<p>Strong colours for cool facades. A facade paint with X-black technology for dark-coloured facades.</p>	<p>Dirt runs off with the rain. A tried-and-tested facade paint with patented Lotus-Effect® technology for facades that stay cleaner for longer.</p>	<p>A natural looking, matt acrylate facade dispersion paint with high covering power and colour fastness. Suitable for masonry, brick/blockwork and all Sto rendered substrates.</p>	<p>Durable elastomeric facade paint that bridges cracks in the underlying substrate, for a waterproof solution.</p>
<p>At a glance:</p> <ul style="list-style-type: none"> <li>• Reflects the near-infrared spectral region of solar energy.</li> <li>• Wide variety of colours and shades, a high level of colour stability.</li> <li>• Especially suited to dark colour shades.</li> <li>• Natural matt finish.</li> </ul> 	<p>At a glance:</p> <ul style="list-style-type: none"> <li>• Maximum resistance to atmospheric soiling.</li> <li>• Natural protection against algae and fungal attack.</li> <li>• Full colour selection.</li> <li>• Lotusan® is available with additional film protection.</li> <li>• Natural matt finish.</li> </ul> 	<p>At a glance:</p> <ul style="list-style-type: none"> <li>• Excellent hiding power.</li> <li>• Full colour selection.</li> <li>• Easy, simple application.</li> <li>• Natural matt finish.</li> </ul>	<p>At a glance:</p> <ul style="list-style-type: none"> <li>• Elastomeric dispersion paint.</li> <li>• Water-vapour permeable.</li> <li>• Excellent hiding power.</li> <li>• Ideal refurbishment coating.</li> <li>• Full colour selection.</li> <li>• Low-sheen satin finish.</li> </ul>

# Well advised

Let yourself be inspired

**Individual customer consultation and project support is the basis of a successful business relationship at Sto. Whether on the telephone, in the sales centre or on the construction site – the Sto team will be pleased to provide you with advice, assistance and creative ideas.**

### Sto customer service

Service at Sto goes far beyond the development and sale of high-quality products. Ultimately, any product is only as good as its application. This is why Sto places great emphasis on service and consultation. The Sto team are here for their customers, providing comprehensive information and tips on the practical use of new products and relaying detailed knowledge from the Sto technical department.

### Smart and sustainable

Sto's impact on performance is big, but the footprint on the environment is small. All Sto products are vapour permeable, easy to apply, safe and non-toxic with low VOCs. Sto incorporates sustainable practices throughout its operations, earning ISO 9001 for quality assurance and 14001 certification for their environmental management system. Many Sto products help reduce the environmental impact of construction by providing insulation, reducing maintenance requirements and extending the life cycle of building facades.

**For contact details of your nearest Consultant, please see the reverse side of this brochure.**



BRANZ Appraised



QUALITY ASSURED



EN ISO 14001

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