



**StoPoren Brick Veneer
Construction System**
Autoclaved aerated concrete
ventilated-cavity brick system

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.



**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.



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.

**Cover and above:
Terry Clegg Builders, Show Home
New Plymouth**

StoPoren Brick

This easy to use versatile building material has gained popularity as a durable energy efficient system with the aerated composition providing insulation, fire protection and sound absorbent properties.

StoPoren Brick

Aerated autoclaved concrete, consists of sand, cement, lime, gypsum, water and an expansion agent. When processed this expands up to five times to achieve a weight 20% of concrete with an air content of 70-80% depending on density required. Unlike concrete, AAC is produced using aggregates no larger than sand which when processed are placed into an autoclave chamber and pressurised at 8 – 12 bars. Simultaneously, the product is heated at temperatures of up to 190 degrees Celsius to trigger the quartz sands reaction with the calcium hydroxide to form calcium silica hydrate that imparts the inherent strength of the material.

Developed in Europe, the technology became commercially viable in the 1930's and is now available world wide. Currently, there are over one hundred major factories in production, producing precast panels and masonry bricks for use in the construction industry. This easy to use versatile building material has gained popularity as a durable energy efficient system with the aerated composition providing insulation, fire protection and sound absorbent properties that are necessary in residential and commercial construction.





Green build for a healthier environment

The manufacture of AAC is highly efficient, using materials derived from naturally occurring resources which are abundantly available, coupled with a process that expands their volume by up to five times. This is energy efficient, emits no pollutants, has zero toxic waste and recycles any manufacturing waste back into the mixing process. The finished products are breathable, inert and contain no toxic ingredients. On site building waste is minimal, due to the ease of cutting to size and re using the off cuts.



Design & Build with StoPoren Brick

Building with masonry brick veneer provides opportunity for designers to offer clients exterior rendered facades over durable, solid substrates that are incombustible, sound absorbing and thermally stable. The materials are easily cut allowing the designer freedom to create clean straight lines.

StoPoren Brick Veneer Construction System

An economical system based on traditional brick construction

StoPoren Brick Veneer Construction

The StoPoren Brick Veneer System is based on traditional brick construction, using 600 x 200 x 75mm StoPoren Bricks with reinforced lintels. The StoPoren Render and flashings provide a seamless masonry brick veneer.

Using modern technology engineered with lightweight concrete materials, this rendered brick system provides a strong, durable and economical solution for the property owners Investment.

Construction

- Ventilated-Cavity Design - which eliminates soffit venting and building wrap rattle
- 75mm thick reveals to give substance to the facade
- Large lightweight bricks result in fast track construction
- Cost efficient building system for the residential market
- Reinforced lintels for openings
- Breathable light weight concrete matrix for vapour permeability
- StoPoren coloured render system specifically designed and tested on lightweight brick
- BRANZ Appraised for NZ Building Code



Easy to cut



Economy of big bricks

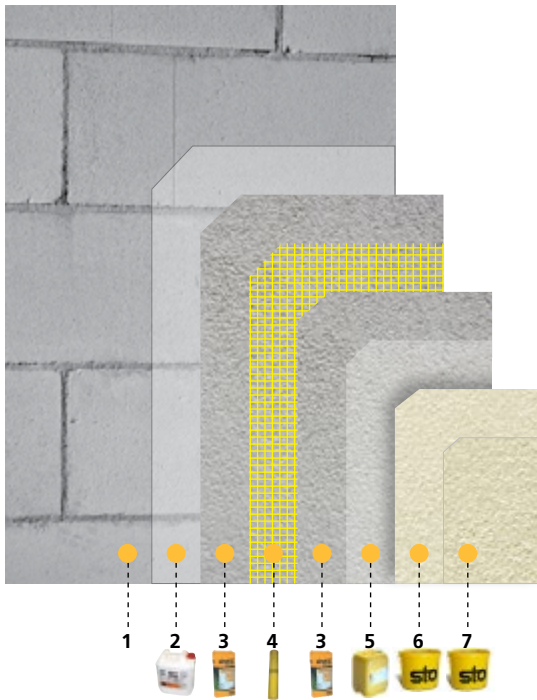


Tested mortar for strength



BRANZ Appraised
Appraisal No. 739 [2012]

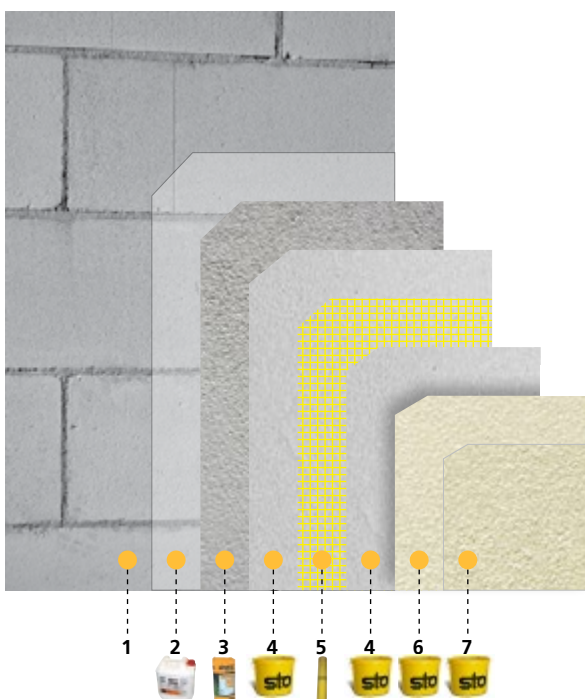
StoPoren Render System: Standard Spec SS505



Perfect interaction

- 1 StoPoren Brick**
A large lightweight Concrete Building Brick.
- 2 Sealer: S-Protect WS205 Silane**
Stay-dry sealer for AAC materials.
- 3 Render: Poren Render 4/5 mm**
Mineral render with good adhesion properties, water retention agents and machine application properties.
- 4 Mesh: Sto Glass Fibre Mesh**
Easy to install, meets the highest requirements for crack, stress and alkalinity resistance.
- 5 Sealer: StoPlex W Sealer**
Water-based, siloxane-enhanced sealer with water repellent and stability properties.
- 6 Coloured Finishing Renders: Stolit Renders**
Organically bound, highly weather resistant, strong, hard-wearing, impact-resistant, pre-coloured finishing renders.
- 7 Facade Paint: StoColor**
StoColor coating based on IQ Net Technology for functional facades.

StoArmat Poren Render System: Standard Spec SS506



Perfect interaction

- 1 StoPoren Brick**
A large lightweight Concrete Building Brick.
- 2 Sealer: S-Protect WS205 Silane**
Stay-dry sealer for AAC materials
- 3 Basecoat: LevelLite or Poren Basecoat Render**
Lightweight mineral render with good build properties, water retention agents and machine application properties.
- 4 Reinforcement Render: StoArmat Render**
An organic, weather resistant, cement-free and breathable, high impact render, with a crack resistance six times higher than that of standard cement-based plasters.
- 5 Mesh: Sto Glass Fibre Mesh**
Easy to install, meets the highest requirements for crack, stress and alkalinity resistance.
- 6 Coloured Finishing Renders: Stolit Renders**
Organically bound, highly weather resistant, strong, hard-wearing, impact-resistant, pre-coloured finishing renders.
- 7 Facade Paint: StoColor**
StoColor coating based on IQ Net Technology for functional facades.

Stolit: Coloured finishing renders

Providing your facade with optimum protection

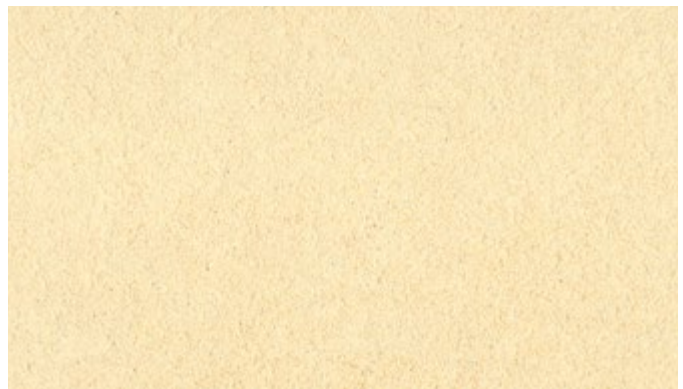
Stolit organic finishing renders are manufactured in Germany incorporating the latest technology; certified globally and successfully applied to rendered substrates in every climatic zone for over 50 years.

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 cracking.
- 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.



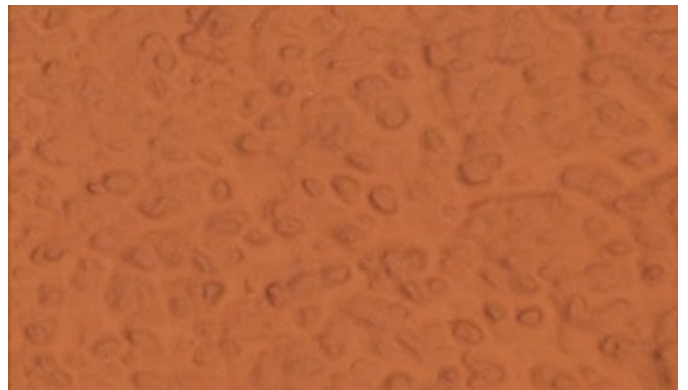
Stolit K 1.0mm



Stolit K 1.5mm



Stolit K 2.0mm



Stolit K 3.0mm



Stolit renders are polymeric, allowing them to repel water and breathe, providing 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 complement 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.

StoColor X-black	StoColor Lotusan®	StoColor Maxicryl	StoColor Lastic Satin
<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, precast 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"> • Reflects the near-infrared spectral region of solar energy. • Wide variety of colours and shades, a high level of colour stability. • Especially suited to dark colour shades. • Natural matt finish. 	<p>At a glance:</p> <ul style="list-style-type: none"> • Maximum resistance to atmospheric soiling. • Natural protection against algae and fungal attack. • Full colour selection. • Lotusan® is available with additional film protection. • Natural matt finish. 	<p>At a glance:</p> <ul style="list-style-type: none"> • Excellent hiding power. • Full colour selection. • Easy, simple application. • Natural matt finish. 	<p>At a glance:</p> <ul style="list-style-type: none"> • Elastomeric dispersion paint. • Water-vapour permeable. • Excellent hiding power. • Ideal refurbishment coating. • Good colour selection. • Low-sheen satin finish.
			

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 are 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 focused on 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 its 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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