



StoPoren

StoPoren Panel Cladding &
StoPoren Block Veneer Systems
for Residential Construction

Sto the international brand

Selected with confidence worldwide

Growth on a solid foundation: Since its 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 systems high-quality exterior and interior plaster systems and coatings. Sto with subsidiaries and distribution partners in over 50 countries worldwide has a precise understanding of local climate conditions, architectural styles, building practices, standards and cultural differences. As the authorized partner of Sto for Australasia, Stoanz Ltd is committed to the Sto philosophy. Today having developed a full range of Sto plaster cladding systems that have been tested and certified by BRANZ for the market, Sto is recognized as a leading supplier of quality plaster systems.

People and architecture, Sto provides the link

Architecture plays an important role in our lives. It lends urban and rural landscapes character, and should ideally be embedded in an intact environment. For us, "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.

Apart from researching, developing and marketing Sto products, systems and services, we also attach great importance to optimising the value added process for trades people, architects and building owners alike.





We respect the interests of people and nature at all times

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



StoPoren Cladding Systems

A solid economical systems based on traditional construction methods

Sto Poren Panel & Block Construction

Aerated autoclaved concrete consists of sand, cement, lime, gypsum, water and an expansion agent that when processed expands up to five times to achieve a weight 20% of concrete and air content of 70-80% depending on density required. Unlike concrete AAC is produced using aggregates no larger than sand that when formed is placed into autoclave chamber and pressurised at 8 – 12 bars while being steamed 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 with over a100 major factories in production producing precast panel and masonry block 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

With materials derived from naturally occurring raw resources that are abundantly available coupled with a manufacturing process that expands their volume by up to five times this is an unusually resource efficient process. The manufacturing

process is energy efficient, emitting no pollutants, zero toxic waste and recycling any manufacturing waste back into the mixing process. The finished products are breathable, inert, contain no toxic ingredients or gases and on site building waste is minimal due to the ability to easily cut to size and re use the off cuts.



Design & Build with Sto Poren

Whether building a masonry block veneer or panel cladding framing these solid materials provide opportunities for designers to offer clients exterior plastered facades over durable, solid, load bearing substrates that are incombustible, sound absorbing and thermally stable. The

materials are easily cut with conventional wood working tools ensuring placement is simple, fast and accurate allowing the designer freedom to create clean straight lines.

StoPoren Panel Cladding System

A solid economical system based on traditional panel construction methods

StoPoren Panel Cladding System

The StoPoren Panel Cladding System uses Reinforced Autoclaved Aerated Concrete (AAC) panel which is a solid, inert, lightweight masonry material that is suitable for residential and commercial building. The cladding system is based on cavity construction using 2200 x 600 x 50mm StoPoren Panels laid horizontally, to build a solid permanent home finished in StoPlaster with interlocking flashings to provide a seamless cladding system.



Using modern technology with enhanced and well engineered materials this plastered cladding system provides a strong durable and economical solution for the Homeowners Investment.

Solid Panel Veneer Construction

- Dry Cavity Design
- Time efficient construction programme
- 50mm reveals to set joinery back
- Cost efficient building system for the residential market
- Breathable light weight concrete for vapour permeability
- European breathable coloured plaster systems designed and tested for New Zealand.



Easy to cut



Easy to detail

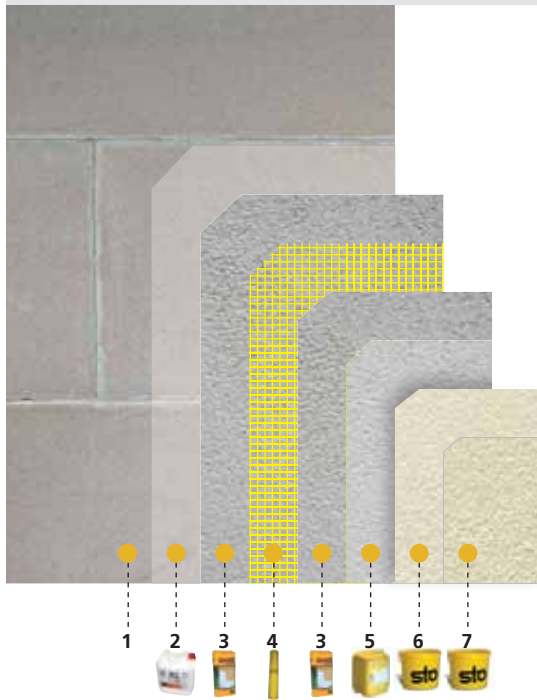


Tested mortar for strength



Economy of panels

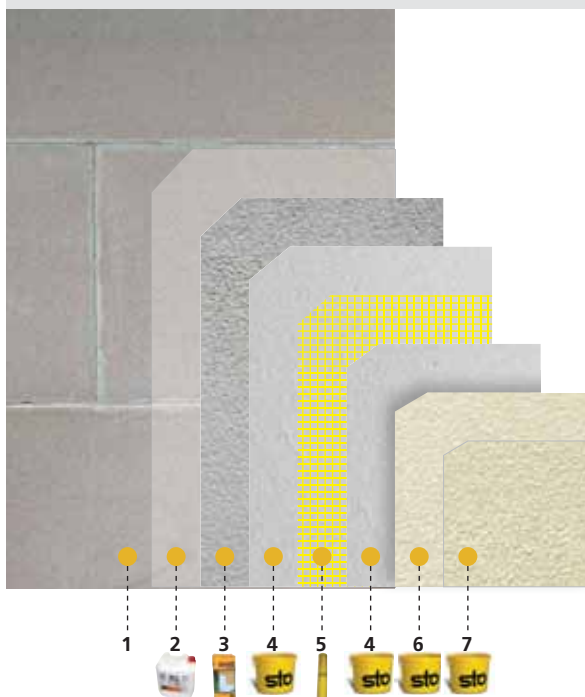
StoPoren Plaster System: Standard Spec SS500



Perfect interaction

- 1 StoPoren Panel**
A solid reinforced lightweight concrete panel.
- 2 S-Protect WS205 Silane**
European silane sealer with water repellent and stability properties.
- 3 Poren Plaster 4/5 mm**
Mineral plaster with good adhesion properties, water retention agents and machine application properties.
- 4 Plus: Sto European Mesh 4/7mm**
Easy to install, meets the highest requirements for crack, stress and alkalinity resistance.
- 5 StoPlex W Sealer**
Sto consolidating primer with siloxane additives. Deep penetration for adhesion with absorbency regulating and water repellent properties.
- 6 StoLit K & MP Coloured Finishing Renders**
Sto manufactured organically bound, strong, hard wearing, impact resistant, pre coloured finishing renders. (No cement).
- 7 StoColor Maxicryl** - Matt facade paint.
StoLastic Colour - Satin matt facade paint.
European manufactured and certified durable facade paints available in a full range of colours.

StoArmat Miral Plaster System: Standard Spec SS501



Perfect interaction

- 1 StoPoren Panel**
A solid reinforced lightweight concrete panel.
- 2 S-Protect WS205 Silane**
European silane sealer with water repellent and stability properties.
- 3 LevelLite or Poren Basecoat Plaster**
Lightweight mineral plaster with good build properties, water retention agents and machine application properties.
- 4 StoArmat Classic: Reinforcement Plaster**
European manufactured and certified, strong, flexible, impact resistant, white reinforcing plaster in a pail. Contains a calibration grain ensuring correct mesh coat thickness. (No cement).
- 5 Plus: Sto European Mesh**
Easy to install, meets the highest requirements for crack, stress and alkalinity resistance.
- 6 StoLit K & MP Coloured Finishing Renders**
Sto manufactured organically bound, strong, hard wearing, impact resistant, pre coloured finishing renders. (No cement).
- 7 StoColor Maxicryl** - Matt facade paint.
StoLastic Colour - Satin matt facade paint.
European manufactured and certified durable facade paints available in a full range of colours.

StoPoren Block Veneer Construction

A economical system based on traditional brick construction

StoPoren Block Veneer Construction

The StoPoren Block Veneer System is based on traditional brick construction, using 600 x 200 x 75mm StoPoren Blocks with reinforced lintels, providing strength and a lego like build finished in StoPoren plaster and flashings to provide a seamless masonry block veneer.

Using modern technology engineered with lightweight concrete materials this plastered brick system provides a strong durable and economical solution for the Homeowners Investment.

Construction

- Dry Cavity Design - which eliminates soffit venting and building wrap rattle
- 75mm thick reveals to give substance to the facade
- Large lightweight blocks 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 plaster system specifically designed and tested on lightweight block
- BRANZ Appraised for NZ Building Code



Easy to cut



Economy of big blocks

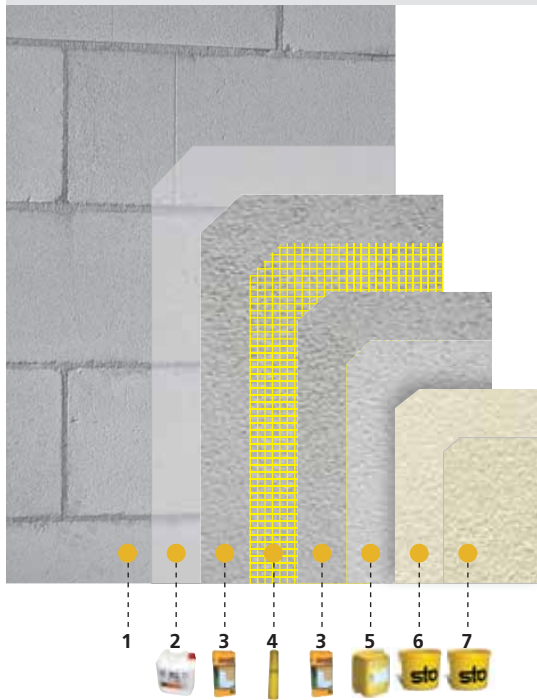


Tested mortar for strength



BRANZ Appraised
Appraisal No.739 [2012]

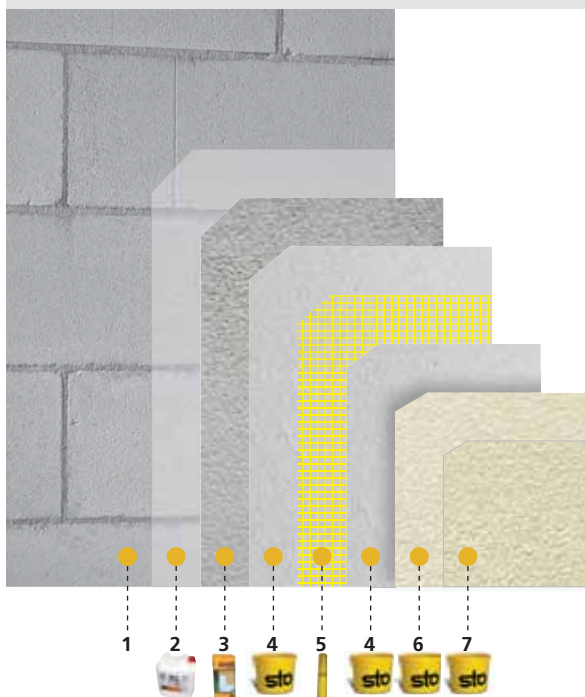
StoPoren Plaster System: Standard Spec SS505



Perfect interaction

- 1 StoPoren Block**
A large lightweight Concrete Building Block.
- 2 S-Protect WS205 Silane**
European silane sealer with water repellent and stability properties.
- 3 Poren Plaster 4/5 mm**
Mineral plaster with good adhesion properties, water retention agents and machine application properties.
- 4 Plus: Sto European Mesh 4/7mm**
Easy to install, meets the highest requirements for crack, stress and alkalinity resistance.
- 5 StoPlex W Sealer**
Sto consolidating primer with siloxane additives. Deep penetration for adhesion with absorbency regulating and water repellent properties.
- 6 StoLit K & MP Coloured Finishing Renders**
Sto manufactured organically bound, strong, hard wearing, impact resistant, pre coloured finishing renders. (No cement).
- 7 StoColor Maxicryl** - Matt facade paint.
StoLastic Colour - Satin matt facade paint.
European manufactured and certified durable facade paints available in a full range of colours.

StoArmat Miral Plaster System: Standard Spec SS506



Perfect interaction

- 1 StoPoren Block**
A large lightweight Concrete Building Block.
- 2 S-Protect WS205 Silane**
European silane sealer with water repellent and stability properties.
- 3 LevelLite or Poren Basecoat Plaster**
Lightweight mineral plaster with good build properties, water retention agents and machine application properties.
- 4 StoArmat Classic: Reinforcement Plaster**
European manufactured and certified, strong, flexible, impact resistant, white reinforcing plaster in a pail. Contains a calibration grain ensuring correct mesh coat thickness. (No cement)
- 5 Plus: Sto European Mesh**
Easy to install, meets the highest requirements for crack, stress and alkalinity resistance.
- 6 StoLit K & MP Coloured Finishing Renders**
Sto manufactured organically bound, strong, hard wearing, impact resistant, pre coloured finishing renders. (No cement).
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StoLastic Colour - Satin matt facade paint.
European manufactured and certified durable facade paints available in a full range of colours..

StoLit: Coloured Finishing Renders

Provide your facade with optimum protection

The Sto Spectrometer Colour System can match virtually any colour with accuracy.



StoLit: Organic Coloured Finishing Render

StoLit organic finishing renders are manufactured in Europe and certified around the world. They have been in successful use for over 50 years on a variety of different substrates. Undergoing a continual process of optimization, during this time to incorporate the latest technology

The perfect combination of properties: durable, strong, hard wearing, impact resistant, malleable, weather resistant, colour stable and highly resistant to micro-organism. They are designed with good vapour permeability to allow the building to breathe while still repelling liquid water. All renders are easy to apply and can be tinted from the StoColor System or matched to the colour of your choice, using the Sto spectrometer system. Whichever finishing render is chosen, it will be part of the tested and approved system and will provide optimum protection and durability.



StoLit K 1.0mm



StoLit K 1.5mm



StoLit MP



StoLit K 2.0mm



StoLit MP Natural



StoLit K 3.0mm



The Perfect Finish: Competence in Colour

Give your facade the look it deserves



StoColor Maxicryl Facade Paint

European manufactured and certified, hard, durable, matt, acrylic facade paint for a natural look. Available in a full range of colours.



StoLastic Color Facade Paint

European manufactured and certified, elastic, durable, dirt resistant and vapour permeable satin matt facade paint for added durability. Available in a full range of colours.



StoLotusan Color Facade Paint

European manufactured and certified, self cleaning mineral silicone resin paint with a breathable structure in a full range of colours.

The use of colour in a manner which complements the architecture requires specific planning.



The StoColor System

The StoColor System is a structured system offering great variety in a unique planning instrument for the use of colour. A total of 800 different colours establish a sound foundation for creative and pioneering colour concepts. The StoColor System is built from primary ability of human perception of colour. It is based primarily on the colours, yellow, orange, red, violet, blue and green. These six sections are then mixed to form the 24 basic tones which correspond to the 24-part colour wheel. Each basic tone is assigned five colour rows which embody the principle of the same-colour triangle. This ensures the StoColor System's high degree of functionality

The Sto Spectrometer Colour System can match virtually any colour with accuracy.

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