

StoTherm Mineral

The System

StoTherm Mineral is a tough, highly durable externally insulated mineral based facade system with proven performance in extreme climates around the globe since 1963, available with rendered finishes in a vast colour choice or with brick slip, tiled or stone style finishes for virtually unlimited design freedom.

The Benefits

- Insulation thicknesses of up to 200mm mean that very low U-values can be easily achieved.
- No additional expansion joints are required.
- Faster, lower cost single-leaf construction can be used creating additional internal space with improved thermal performance.
- Mineral fibre insulation boards are non-combustible.
- Unique track system suitable for non load-bearing, friable substrates also enables uneven and out of line substrates to be corrected.
- Maintenance free finishes are through coloured and offer complete protection from driving rain, but remain vapour permeable.
- Sto's through coloured decorative finish renders are available in a choice of 800 colours and do not require over-painting to maintain their weather-proof qualities.
- Unique QS (Quick Set) grade materials offer frost resistance and wash off protection from +1°C, helping projects to be completed on-schedule.

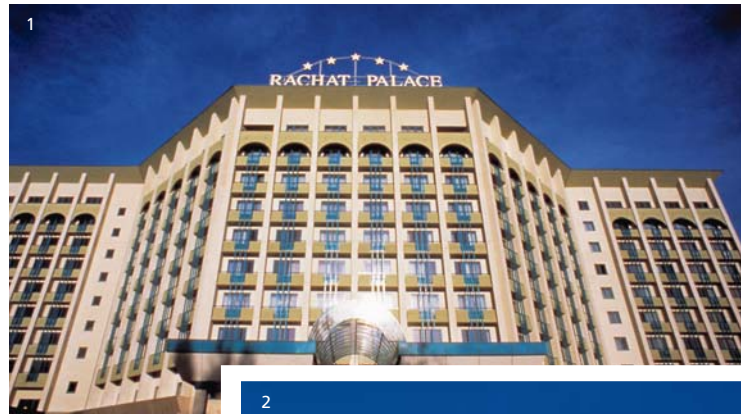


Sto now offer* a unique insurance backed warranty covering:

- 10 years against cracking
- 10 years against latent defects in the render including adhesion, weather-proofing and fade resistance.
- Extended period available

StoTherm Mineral
Complete peace of mind – guaranteed.

*Additional charge.



- 1: Rachat Palace Hotel, USSR
Architect: E. Cakman
- 2: Macdonald's Building, Munich, Germany
Architect: Vierkötter & Stadlinger
- 3: London School of Economics
Architect: McCormac Jamieson Pritchard.

System Description

1. Fixing System

Either (1a) adhesive fix with dowels or (1b) mechanically fixed track system.

2. Insulation Boards

Non-combustible 140kg/m³ mineral fibre insulation boards. Thicknesses from 20mm to 200mm

3. Reinforcing Coat

Sto mineral reinforcing coat. Application thickness: Max. 4mm.
Drying time: 24 – 48 hours*

4. Reinforcing Mesh

Sto Glass Fibre Mesh A specially developed reinforcing mesh which is embedded in the reinforcing plaster whilst still wet to provide additional crack resistance.

Performance: 3.5% expansion at 2200N/50mm

5. Intermediate coat

Sto-Primer – acrylic based intermediate coat
Drying time: May be over-coated after 8 hrs*

6. Decorative Finish Renders

Sto through coloured, weather-proof, low maintenance decorative renders.

Use either:

Stolit acrylic resin render

Performance: Water absorption; w24 0.04kg/m².h0.5. Vapour permeability; sd0.24m.

or

StoSilco silicone resin render

Performance : Water absorption; w24 0.116kg/m².h0.5. Vapour permeability; sd0.18m.

Drying time: May be over-coated after 24 – 72 hours

Thicknesses: As per Sto Render Guidelines.

Use QS grades below +5°C

Brick slips, tiles and other finishes are also available - see leaflet on Sto Decorative Renders for more details.

For a detailed specification, please contact Sto Ltd.

Stolit /StoSilco
'Stippled' finish



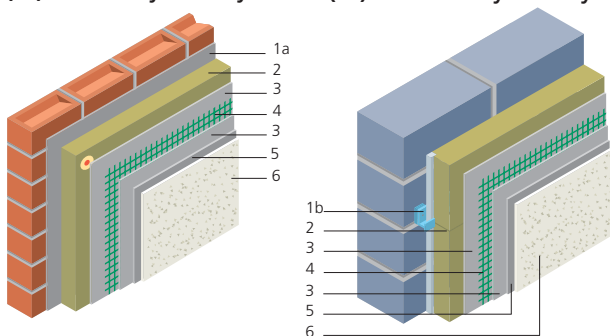
Stolit /StoSilco
'Rilled' finish



Stolit MP/StoSilco
MP finish



(1a) Adhesively fixed System (1b) Mechanically fixed System



1a: Adhesive fix 1b: Mechanically fixed track system 2: Sto-mineral fibre insulation board
3: Sto-mineral reinforcing render 4: Sto Glass Fibre Mesh 5: Sto-Primer 6: Sto decorative finish

Surface Preparation

Adhesively Fixed System

Existing substrates should be clean, dry and free of loose coatings or dirt etc. Make good as necessary.

Preparation Treatments (if required)

StoPrim Fungal – fungicidal wash should be used where algae or fungus are present. Do not wash off after application.

StoPrim Micro – deeply penetrating, siloxane based primer, which forms a water repellent layer in the substrate. Reduces the absorbency of porous substrates and helps consolidate the surface.

StoPrep Contact – acrylic based adhesion intermediary for silicised bricks, ceramic tiles or other low absorbency backgrounds.

N.B. If extensive substrate preparation is required, it may be more cost effective to use the mechanically fixed system

Mechanically Fixed System

No substrate preparation necessary.

If in doubt, please consult Sto for advice on the use of primers. Other primers are available for substrates requiring special treatment.

Technical Guidelines

Application

StoTherm Systems use specialist materials applied by trained, registered applicators.

Details

Detail drawings are available for most standard details. Please contact us for further information.

Stop / Expansion Joint / Corner Beads

Use Sto Proprietary Beads.

Winter Working

Selected Sto finishes are available in QS (quick set) grades which are unique to Sto. These special materials can be used down to +1°C / 95% r.h. and are wash off and frost resistant after 9 hours. This performance is unequalled for water based materials. No solvents are used, protecting the environment.

*Drying Times

Drying times are based on 20°C/65%r.h. Drying will be prolonged by cooler temperatures or higher humidity.



Special detailing around openings provides reliable weather-proofing.



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