



## StoTherm Mineral

### The mineral-based external wall insulation system

Fire protection is becoming more and more crucial in the planning stages of new or existing buildings. Masonry External Wall Insulation Systems, which are used for high-rise or public buildings are recommended to consist of non-combustible components.

A recent addition for Sto New Zealand and the StoTherm family. StoTherm Mineral Insulation is a reliable non-combustible system for unrivalled fire protection, that offers a broad range of design options and is suitable for virtually any type of masonry substrate.

# StoTherm Mineral External Wall Insulation System

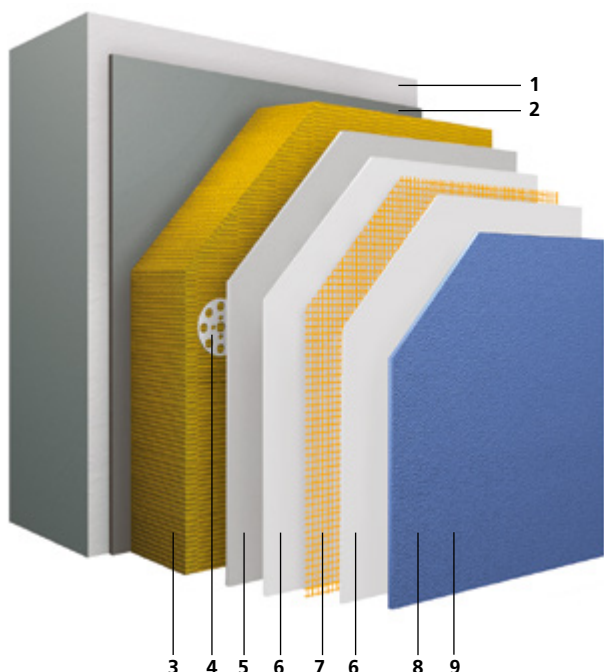
A non-combustible, mineral-wool insulation system for masonry construction

The StoTherm Mineral Insulation System is based upon the traditional benefits of the StoTherm family, with similar R-values, but provides a naturally resourced mineral-wool board with four main attributes; non-combustibility for fire resistance, high insulation values for energy-efficiency, moisture management through high vapour permeability and water tightness and good acoustics properties.

The StoTherm Mineral Board at the core of the system consists of mineral-wool insulation. Uniquely manufactured from molten rocks, similar to lava, that is then spun with binders and agents into fibres as it re-solidifies. A process that creates a non-combustible slab, which is then cut into mineral-wool boards.

## Benefits at a glance

- Non-combustible for fire resistance
- Highly effective thermal insulant
- Highly Water tight and Permeable to CO<sub>2</sub> and water vapour
- Good acoustics values
- Crack resistant
- Combats mechanical and seismic stress
- Refurbishment and new buildings up to high-rise level
- StoWarranty with StoService Assurance



Above: Residential house, The Crescent in Wiltshire, Great Britain  
Architect: Ken Shuttleworth, Sir Norman Foster

Cover: Schlump ONE, Humburg, Germany  
Architect: J. Mayer H. Architects

## Perfect interaction

### 1. Substrate: Solid masonry

Such as concrete blocks, pre-cast, brick & insitu concrete.

### 2. Adhesive: Gluecoat Mortar

### 3. Insulation (Mineral-wool): StoTherm Mineral Boards

80mm insulation boards made from stone mineral-wool, providing non-combustibility, insulation, acoustic and moisture management.

### 4. Fixing: StoTherm Masonry Anchors

Drill, install, countersunk and capped with an ST Insulation Cap to avoid thermal bridging.

### 5. Basecoat: StoLevel Nov

Lightweight mineral render with good build properties, water retention agents.

### 6. 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.

### 7. Mesh: Sto Glass Fibre Mesh

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

### 8. Coloured Finishing Renders: Stolit Renders

Organically bound, highly weather resistant, strong, hard-wearing, impact-resistant, pre-coloured finishing renders.

### 9. Facade Coating: StoColor or StoClear

StoColor coating based on IQ Net Technology for functional facades or a StoClear sealer.

