



## **StoVentec Glass Mosaic**

The ventilated rainscreen cladding system featuring glass mosaic designs

# An art form with a long history

Mosaics – a source of fascination over the millennia.

Mosaic represents one of the very oldest artistic techniques. In ancient times, stones were crushed into small cubes and placed in a mortar course while it was still soft.

The oldest mosaics to be discovered originate from Mesopotamia. Clay cone mosaics from the 3rd century B.C. adorned walls and columns. The earliest known Greek pebble mosaics from the 5th century B.C. are generally in black and white and feature figurative depictions for the first time. These were followed by coloured pebbles and finally by laboriously ground stones which were primarily polygonal in shape – so-called tessera.

The Romans decorated walls and above all the floors of Roman baths and private homes. In the 1st century A.D. the compositions were generally black and white and usually featured geometric patterns. The pinnacle of early Christian mosaic art is to be found in the Italian city of Ravenna. A new aspect here was the use of light-reflecting glass tesserae, known as smalts, which enabled a vast choice of different colours. The Byzantine mosaic art characterised by scenes presented against golden backgrounds experienced its heyday in the 12th and 13th centuries.

After losing the limelight to painting until the 17th century the art of mosaics began to regain importance by virtue of its greater durability and vividness of colour. Mosaics became established as a school of art in its own right at the beginning of the 20th century, thanks to the founding of numerous workshops and research into historical art forms which was inspired by the school of historicism. Since the middle of the last century, the industrial production of glass blocks has simplified the design of decorative surfaces. Mosaic art has been adopted into the world of architecture in large-scale facade embellishments.



◀◀ Left  
The Alexander Mosaic in Pompeii is one of the most significant examples of early Roman mosaic art, demonstrating its first golden era.

◀ Right  
Floor mosaic in a Roman villa dating from the 2nd century B.C. It depicts Dionysus's head framed by ornaments. Corinthian Archaeological Museum, Greece.

## Glass tiles with depth effect

StoVentec Glass Mosaic – designed to enchant.



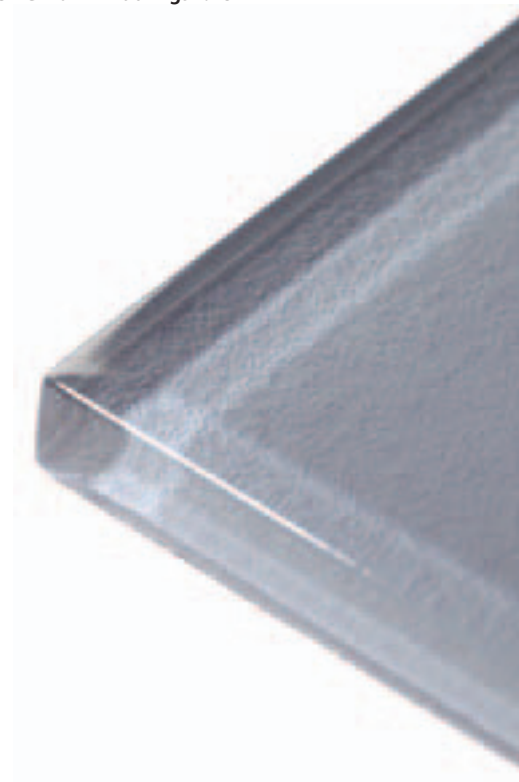
Glass mosaics combine fascination and durability to perfection throughout the world: at a Vienna underground railway station (top left), on a residential house in Zurich (top right), on the service centre of GEWOGE, LUWOG E BASF GmbH in Ludwigshafen (bottom left) and on a carpark in Austin, Texas (bottom centre)

Glass mosaics are brought to life by their incomparable brilliance and their play of light and colour. The very best materials and colourings are essential in order to exploit these attributes to the full.

### **Crystal clear, radiant, hard and smooth**

Colouring pigments are melted into the glass tiles from the rear, ensuring colour permanence and a homogeneous colour effect. In contrast to ceramic tiles, whose lustre derives solely from the glaze on their surface, glass tiles feature enchanting light reflections and the fascinating depth effect of the glass body.

Properties such as high breaking resistance, exact dimensioning, resistance to frost, acids, alkalis and temperature changes make Sto products the best solution when it comes to creating multi-faceted glass facades. The glass tiles lend facades a distinctive character while also ensuring the required durability. Sto applies variety and perfection to create fascinating results with a very special allure.



# Colour, form and function in perfect combination

An enticing symbiosis of technology and style.

There is a growing desire among architects and investors to lend their buildings special aesthetic appeal through unique design, featuring the perfect integration of colour, form and function.

The exceptional properties of the StoVentec carrier board make it ideal as a base for glass mosaic surfaces. StoVentec Glass Mosaic opens up fresh scope for your creativity. This symbiosis of StoVentec as a functional carrier system and fascinating glass tiles allows for countless compositions from a choice of 40 different colours.

Make a show of elegance in black or bathe your home in shimmering blue. Brilliant yellows and oranges will lend your facade a special radiance. Earthy brown shades, exquisite violet or subtle pink - a clear white, rich green or fiery red - we have the right colours to suit every taste and every type of building, from striking patterns and motifs to stylish restraint.



Subtly chased, small-format glass tiles reveal many-faceted reflections in the light.



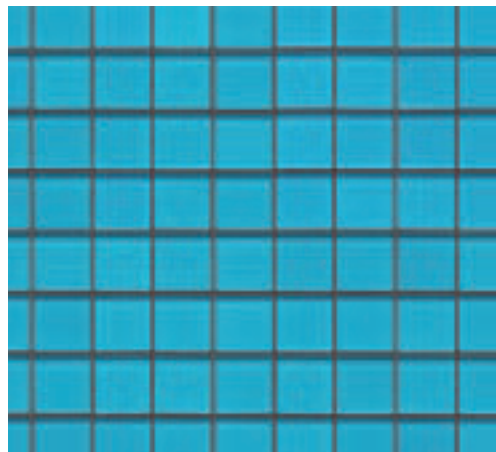
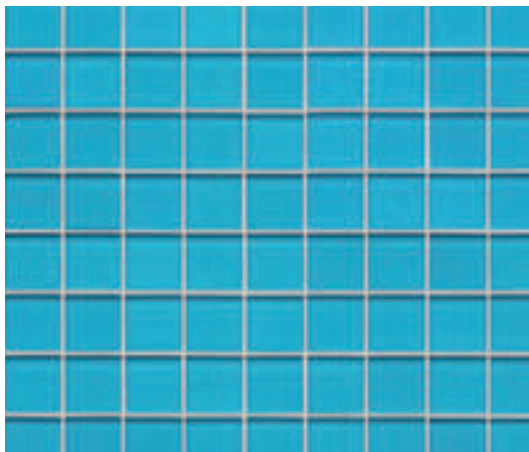
0007 Chocolate  
0035 Champagne  
0001 Bright White  
0024 Clear Grey

0017 Turquoise  
0029 Burgundy  
0046 Lemon Grass  
0009 Black



These colour combinations of StoVentec Glass Mosaics are fully in line with the latest trends.

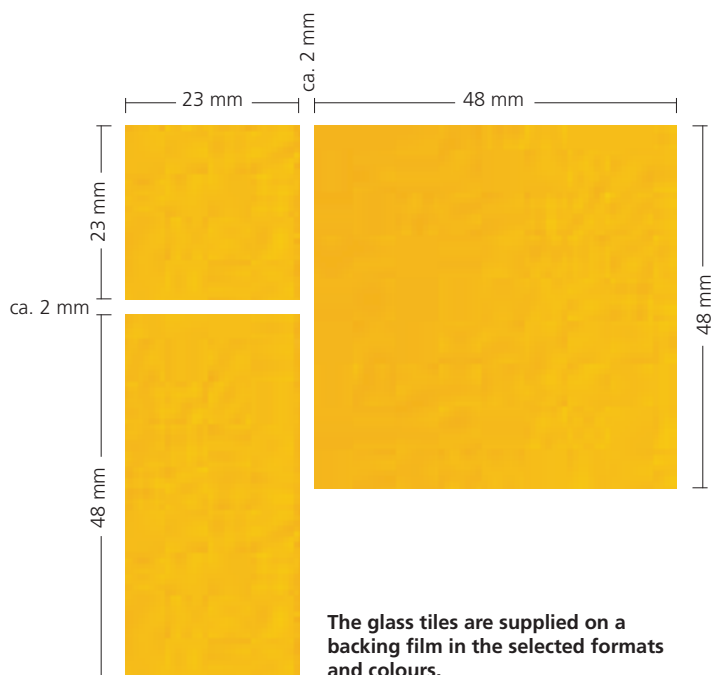




The joint material which is visible through the tile provides for added depth.

**Design variety with mosaics**

StoVentec Glass Mosaic covers all design needs, combining a wealth of brilliant tile colours with a variety of joint colourings. The latter enhance the colour effect of the glass tiles, as the joint material is visible through the sides of the glass body, thus reinforcing the depth effect. Various tile sizes also offer additional scope for individual design with regard to the geometric structure of the mosaic.



The glass tiles are supplied on a backing film in the selected formats and colours.



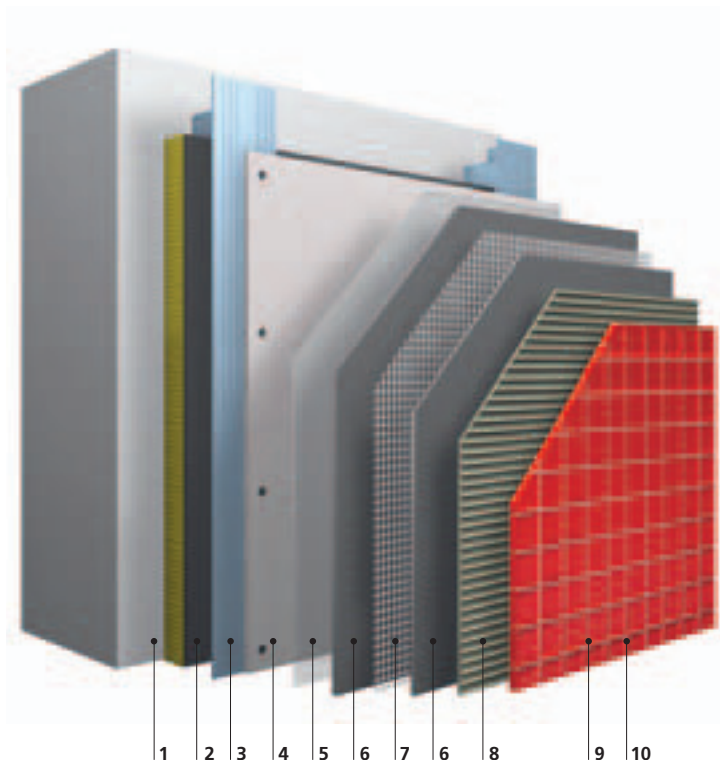
# The systematic design formula

Versatile high-tech solutions.

Thermal insulation is now firmly established as a mainstream topic. Energy resources are diminishing, heating and cooling costs are rising and ecological constraints on building projects are becoming ever more stringent. Architects and investors seek to address this situation by means of an energy-efficient approach. Their key priorities for a facade insulation system are economic efficiency, functionality and design. The StoVentec ventilated rainscreen-cladding system combines particularly good efficiency with broad scope for individual design. The building

physical properties of this system make it the ideal solution for existing and new buildings. Its core element is the carrier board made of expanded glass granulate, a form of recycled glass offering properties such as low thermal expansion, weather resistance and low weight which are appreciated throughout the world. StoVentec offers crucial advantages when it comes to buildings with increased moisture levels, such as breweries or swimming baths. Air circulates continuously in the cavity between the insulation layer and the carrier board, thus ensuring that

moisture is extracted. The adjustable sub-construction permits variable spacing between wall and carrier board. This provides for vertical surfaces, even in case of extreme unevenness. StoVentec is more than „just a facade“ – and Sto quality goes more than just skin-deep. Without the intricate workings of the individual system components and the perfection with which they interact, even the most head-turning facade would be a short-lived affair. Reliability, durability and added value are the watchwords for Sto.



## The perfected modular principle

### 1 Anchorage substrate

### 2 Insulation:

Sto Mineral Fibre Board; RCS mineral wool thermal insulation board, application type W, non-combustible, thickness variable according to thermal insulation requirements.

### 3 Sub-construction:

Sub-construction consisting of wall brackets and aluminium profiles to fix the carrier boards in place. Anchored in the substrate with dowels approved for construction use.

### 4 StoVerotec Carrier Board:

Carrier board made of recycled glass (expanded glass granulate), with mesh reinforcement on both sides, thickness 12 mm, format 1.20 x 0.80 m and 1.20 x 2.40 m; low weight of approx. 6 kg/m<sup>2</sup>, of limited combustibility, frost-resistant.

### 5 Priming paint coat:

Sto Primer; organic priming paint coat

### 6 Reinforcing mortar:

StoLevell Uni; mineral bonding and reinforcing mortar

### 7 Reinforcing mesh:

Sto Glass Fibre Mesh; Alkali-resistant reinforcing mesh, non-shifting with optimised capacity to absorb forces

### 8 Adhesive mortar

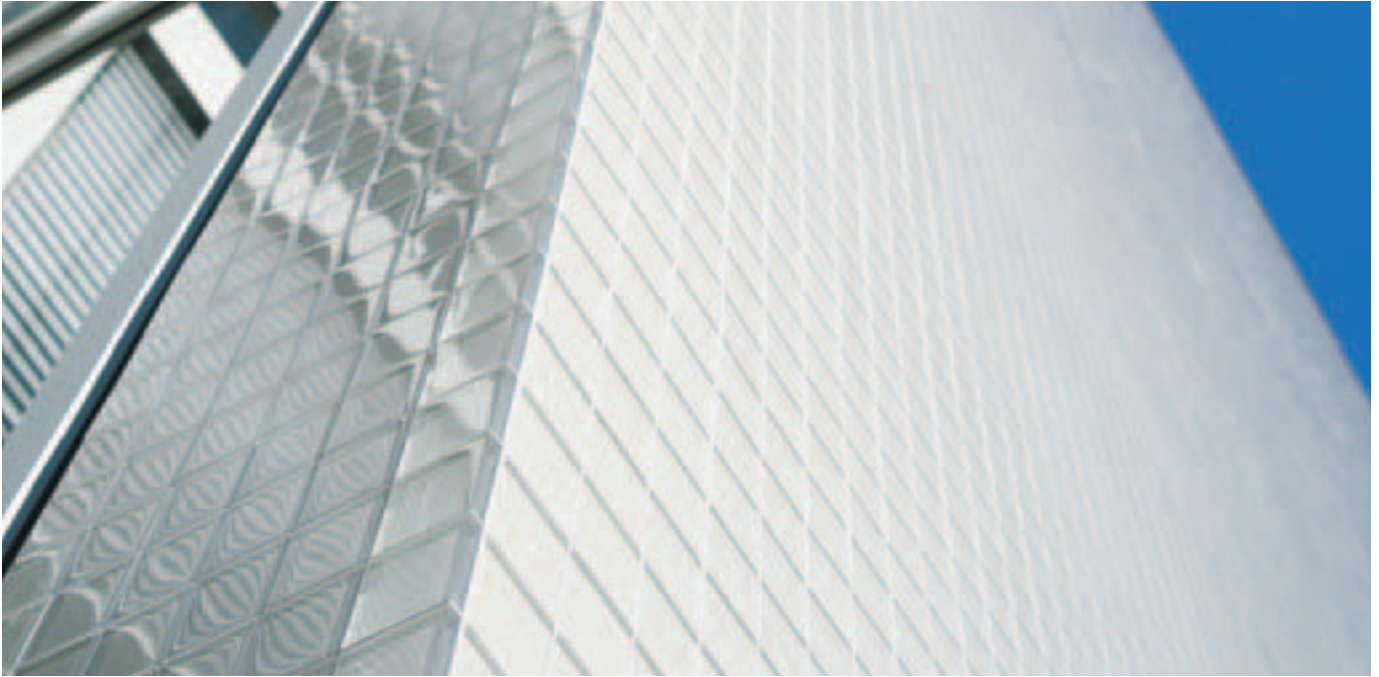
StoColl KM; mineral, flexible thin-bed mortar

### 9 Sto Glass Mosaic:

Rough rear surface coating for optimum bonding of adhesive mortar, melted-in pigments for colour permanence, light-resistant, frost-proof, high fracture resistance, surface resistant to alkalis and acids

### 10 Pointing mortar:

StoColl FM-S; available in white and various shades of grey

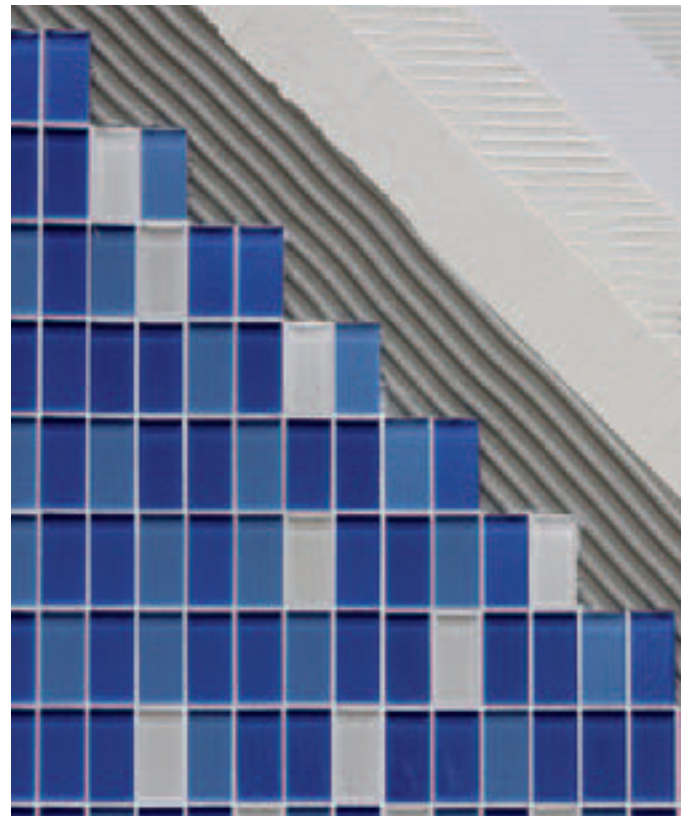


Munich-based architects Allmann Sattler Wappner have realised unusual mirror effects on the award-winning facade which adorns the service centre of GEWOGE, LUWOGЕ BASF GmbH in Ludwigshafen, Germany.

## StoVentec Glass Mosaic

### Ventilated rainscreen cladding system

<b>Area of application</b>	<ul style="list-style-type: none"> <li>• Old and new builds</li> <li>• All types of wall structures: Masonry (concrete, lime sandstone block, brick, porous concrete), fair-faced masonry, panel constructions</li> </ul>
<b>Properties</b>	<ul style="list-style-type: none"> <li>• Levels unevenness by means of a flexible sub-construction</li> <li>• Improvement of up to 10 dB in the airborne sound insulation index</li> <li>• Mechanically resistant</li> <li>• Highly effective thermal insulant</li> <li>• Weather-resistant</li> <li>• Limited combustibility</li> <li>• Frost-resistant</li> </ul>
<b>Appearance</b>	<ul style="list-style-type: none"> <li>• Colour variety: 40 colours</li> <li>• Glass mosaic</li> <li>• Pointing mortar in white and various shades of grey</li> </ul>
<b>Application</b>	<ul style="list-style-type: none"> <li>• Prefabricated mosaic pieces (300 x 300 mm) supplied on backing film</li> <li>• Applied on site with adhesive mortar</li> </ul>
<b>Approvals</b>	<ul style="list-style-type: none"> <li>• The relevant European and/or national approvals apply</li> </ul>



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