![sto — Building with conscience.]

StoDeco

3D facade elements and profiles
Standard and customised possibilities

Verolith® – the lightweight mineral construction material used to make our StoDeco facade elements – opens up new possibilities in three-dimensional facade design. Using modern CNC methods, we can precisely replicate your designs in three dimensions. With the addition of coatings and colour, you can create extraordinary facades.

Boutique Hotel Briig, Split, HR
Planning: STUDIO 180 d.o.o., Zagreb, HR
Sto expertise: StoVentec R
Photo: Robert Les, Zagreb, HR

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**Make an impression:
our facade materials**

StoDeco: mineral-based and three-dimensional

We produce StoDeco elements based on the planner's specifications. These three-dimensional elements can be used to create flat, textured, or accent facades, depending on your design.

Material knowledge
A natural weathering process transforms the volcanic rock obsidian into perlite. We use a purely thermal expansion method to turn this raw material into Verolith® in granulate form. From this material, we apply pressure and heat to create blank workpieces for the three-dimensional facade elements.

Blanks
Our patented Verolith® blanks are available in dimensions of up to 2400 mm long, 1200 mm wide, and 100 mm thick. We can also produce larger dimensions by joining blanks and producing hollow bodies.
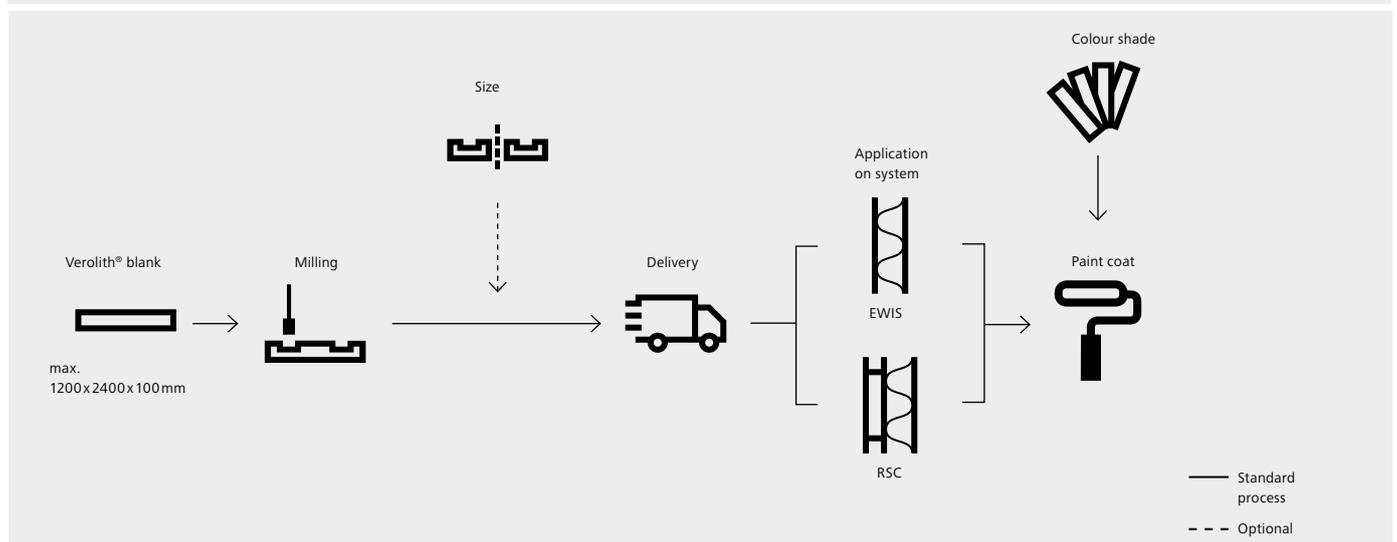
Individual design
At the next stage of production, the blanks are machined to produce the required design. Our 5-axis CNC milling machine

Application
After delivery, the precision-manufactured Verolith® elements are affixed to the facade in line with the plan. Once the three-layer coating is in place, colour can be applied to the elements as required. Thanks to X-black Technology, it is possible to achieve intense colours with lightness reference values < 15.

Image on right:
The raw material for our Verolith® is the volcanic rock obsidian.

Manufacturing and application of StoDeco

Colour shade

Size

Application on system

Verolith® blank

Milling

Delivery

Paint coat

max. 1200 x 2400 x 100 mm

EWIS

RSC

Standard process

– – – Optional
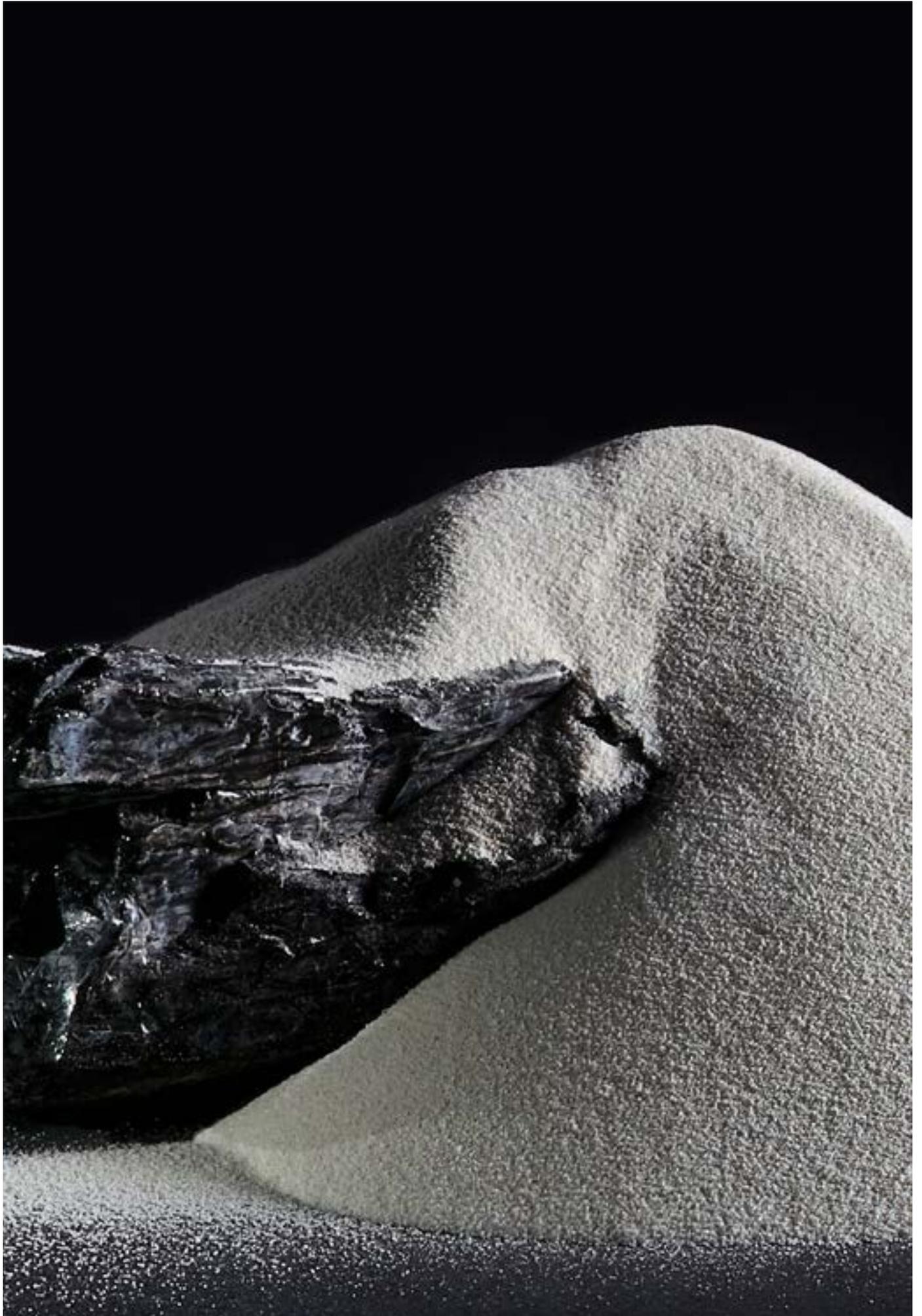
StoDeco: harmonious design

In Jena, a new hotel building fits seamlessly into an ensemble of historic buildings. Elegantly rounded corners, the light rendered facade, and expressive StoDeco elements give the building a playful sense of lightness. In 2017, the project won the Jena Facade Prize.

In Jena's historic old town, a new building has been added to a restaurant and hotel. The corner building needed to look contemporary and unique, yet still blend in harmoniously with the historic townhouses surrounding it. The building also had to provide vehicle access to the internal courtyard and have a solid fire wall on the southern facade. With this brief as a starting point, architect Sabine Walther created a four-storey flat-roof building with a classic modern design. The design draws you in with its gently rounded south-east-facing corners and sweeping windows. Inspired by the architecture of the New Objectivity movement, the curves of the new building connect it to its surroundings.

The light and playful character of the design is emphasised by the light-coloured render facade above the windows and the exposed concrete of the ground floor. The integration of accents in a different tone and the three-dimensional design elements between the windows create a neat horizontal division across the space. The wavy texture of the facade elements mirrors the folds in the curtains hanging behind the windows, visually extending the ribbon windows along the facade. On the south-facing fire wall, the decorative pattern is deliberately continued to soften the aesthetic of the windowless surface and to link it back to the welcoming east facade.

The sections between the windows, which are accentuated with soft waves repeated as a style theme throughout the building, required special attention during the planning phase. To create these areas, the architect first designed a repeatable pattern of the three-dimensional wave structure she had envisaged. Based on this template, the Sto factory then machined precision-manufactured StoDeco elements in mineral-based material Verolith®. Thanks to their A2-s1, d0 fire performance classification, these StoDeco elements could also be used on the windowless south-facing fire wall to soften the overall design.

On site, the finished elements were affixed to the StoTherm Classic® EWIS and the StoTherm Classic® S1 fire wall with optimised fire protection. The three-layer coating was then applied in the desired colour. The surrounding rendered area was finished in StoSignature in two shades of grey in the texture Rough 1. With this simple combination of three-dimensional StoDeco elements and render on the EWIS, the architect was able to sensitively integrate the new building into its historic surroundings while also achieving higher levels of fire protection.

Unterlauengasse 2, Jena, DE
Building owner: Unternehmen Zwei GmbH & Co KG, Ms Jahn, Jena, DE
Planning: Sabine Walther, Jena, DE
Execution: Neubauer Maler-Fußboden GmbH, Bad Berka, DE
Sto expertise: Sto Therm Classic®; StoTherm Classic S1; StoDeco Panel; StoSignature, Texture: Rough 1
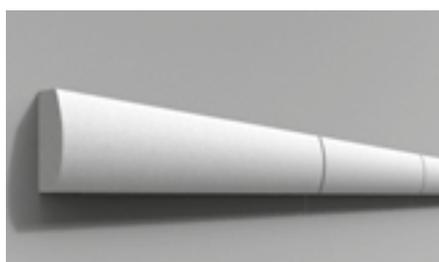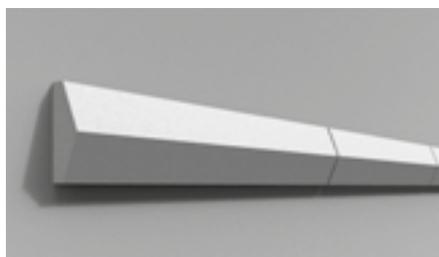**Photo**: Christian Günther Bilderwerke, Leipzig, DE

StoDeco: configuration options

StoDeco element variants

Object	Mouldings & sills	Panels

Design parameters

Object and dimensions

· Object
· Moulding & sill
· Panel
· Max. dimensions: 2400 x 1200 x 10 mm

Colour shade

Coating in any colour, with LRV < 15 thanks to X-black Technology

Application

Most common applications:

1 — window edging
2 — ribbon windows / panels
3 — cornices
4 — window sills

For more information on these and other applications, please see the case studies on the following pages.

Whether for objects, mouldings & sill, or panels – our Verolith® blanks can be formed into a variety of three-dimensional designs tailored precisely to your facade.

Use these examples as initial inspiration for your design. You can find more ideas and guidance in our handbook.

StoDeco:
tried and tested

Kraftwerksschule apartment building, Essen, DE
Building owner: Kraftwerkschule e.V., Essen, DE
Planning: bgs architekten GbR, Düsseldorf, DE
Execution: Lurvink GmbH, Bocholt, DE
Sto expertise: StoTherm Classic®, StoColor X-black
Photo: Guido Erbring, Cologne, DE

Sonnenweg, Hannover, DE
Building owner: Behrens und Fiedler, Entenfang, Hannover, DE
Planning: Brandenburg und Tebarth, Hannover, DE
Execution: temps GmbH Malereibetriebe, Neustadt, DE
Sto expertise: StoTherm Mineral; StoSignature, Texture: Linear 10, and Fine 40; StoColor X-black; StoDeco Line; StoBrick, custom surface
Photo: Christoph Gebler

Kleiner Ritter residential house and studio, Frankfurt, DE
Building owner: Rothenberger Anshin GmbH, Bad Homburg, DE
Planning: Franken Architekten GmbH, Frankfurt, DE
Execution: Helmut Lindt Malerfachbetrieb GmbH, Frankfurt, DE
Sto expertise: StoTherm Vario; StoDeco Panel
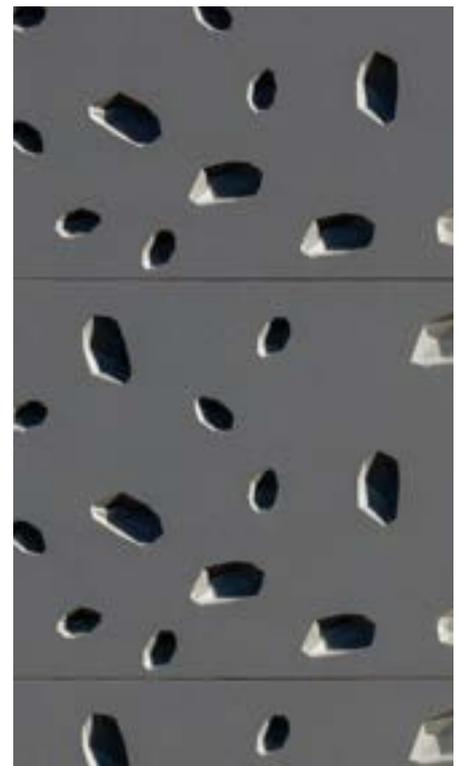**Photo:** Axel Stephan, Frankfurt, DE

Evangelical Lutheran regional church office, Munich, DE
Building owner: Regional church office of the Evangelical Lutheran Church in Bavaria, Munich, DE
Planning: Wandel Lorch Architekten, Saarbrücken, DE
Execution: Haslreiter GmbH, Ortenburg, DE
Sto expertise: StoTherm Vario; StoDeco Panel
Photo: Gerhard Hagen Fotografie, Bamberg, DE

Boarding House FIT, Lupburg, DE
Building owner: FIT AG, Lupburg, DE
Planning: Berschneider + Berschneider GmbH, Pilsach, DE
Execution: Max Mauderer, Neumarkt, DE
Sto expertise: StoTherm Mineral; StoDeco Panel; StoColor Dryonic S with X-black Technology
Photo: Gerhard Hagen Fotografie, Bamberg, DE

The specific technical specifications and information on the products contained in the Technical Data Sheets and system descriptions/approvals must be observed.

Wohnen am Burggarten, Hannover, DE
Building owner: WGH-Herrenhausen eG,
Hannover, DE
Planning: pk nord, Hannover, DE
Execution: GEBOtherm GmbH, Hildesheim, DE
Sto expertise: StoTherm Mineral; StoDeco Line;
StoSignature, Texture: Rough 1
Photo: Christoph Gebler, Hamburg, DE

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