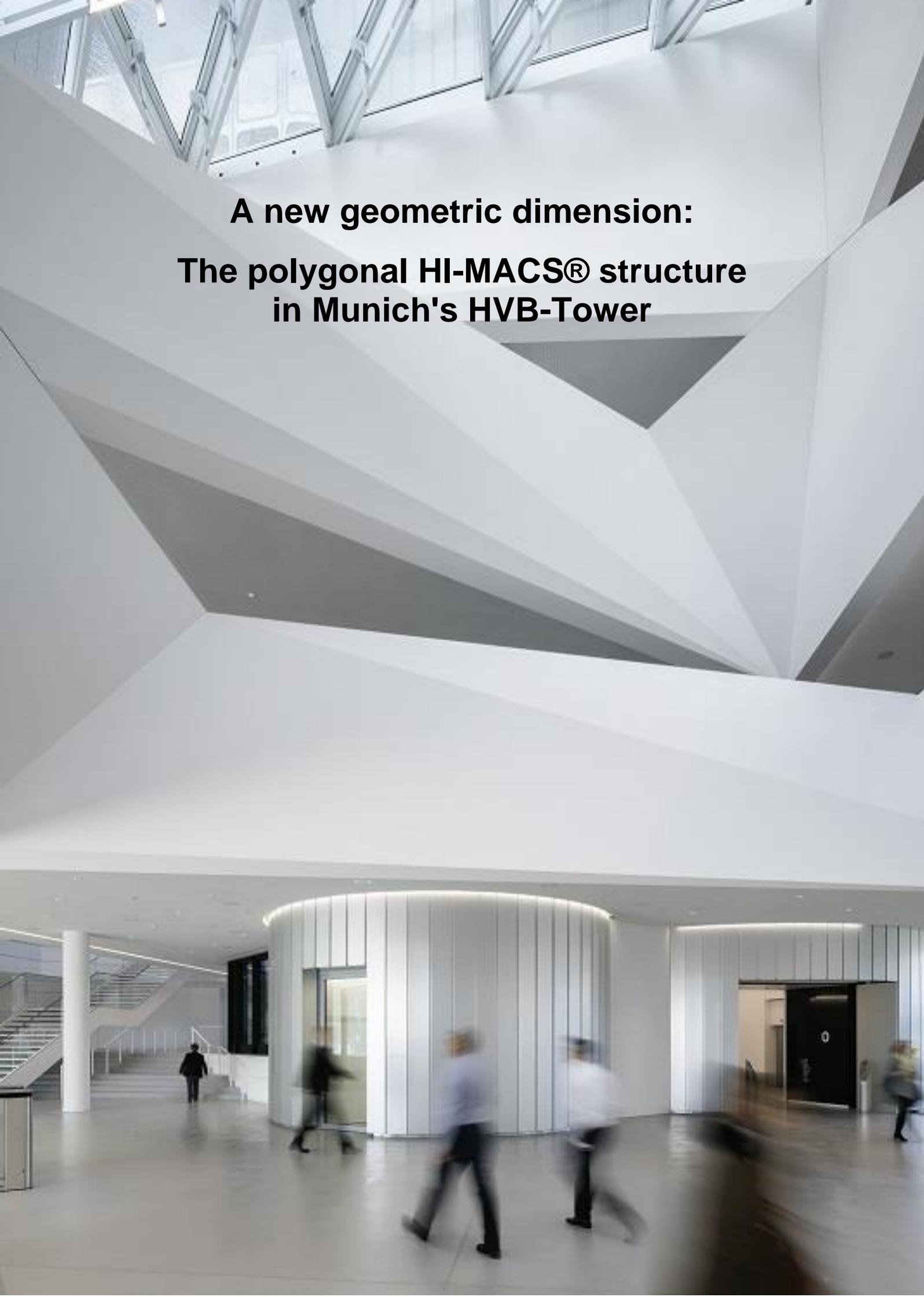
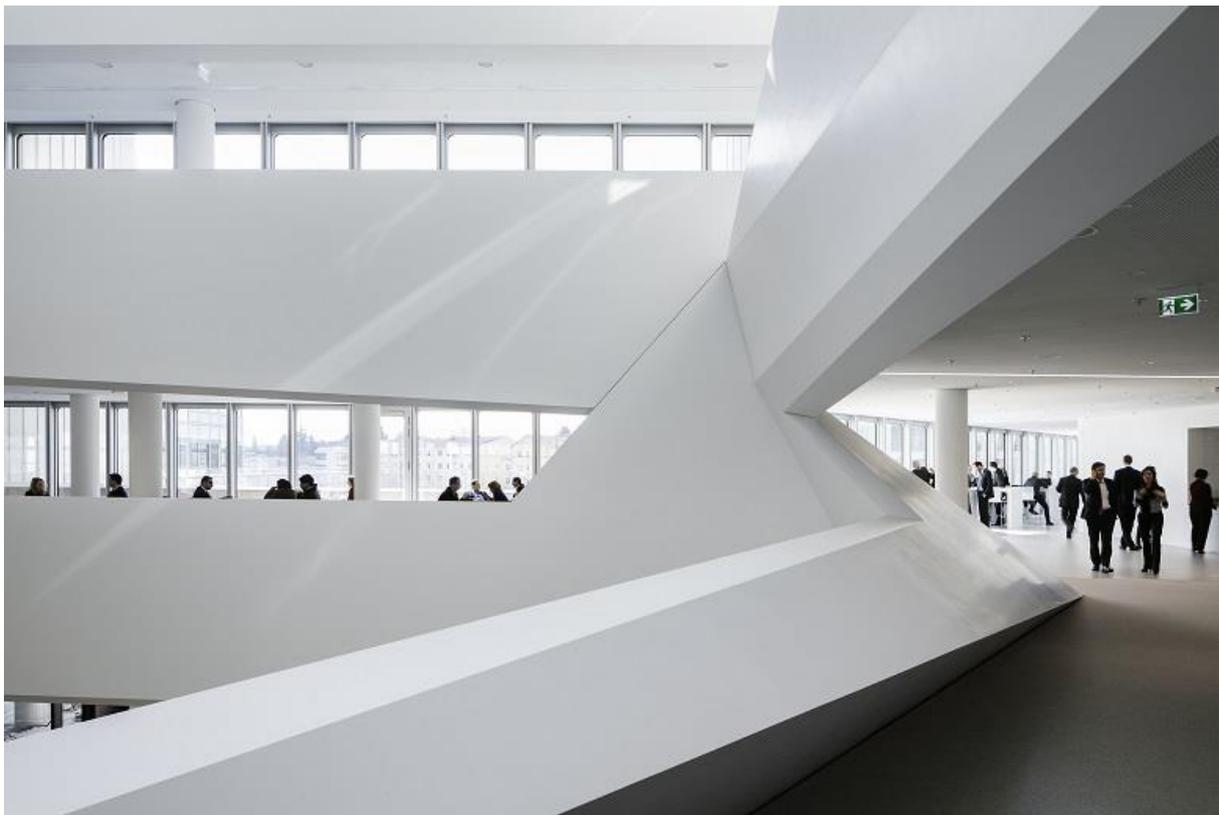


**A new geometric dimension:
The polygonal HI-MACS® structure
in Munich's HVB-Tower**



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Square, triangle, diamond – these terms just don't do justice to the pearl white HI-MACS® interior design found in the entrance hall of the HVB-Tower of HypoVereinsbank. Acute angles, sharp or soft corners and tilted surfaces of various inclines are all combined to form a polygonal structure, resembling a crystal. It serves as a parapet, stretching across three floors and creating a spatial boundary to the atrium. Using this crystal shape, Munich-based HENN architects made the DNA of the building visible for everyone, following the brief by the owner. At the same time, they created a new geometrical dimension. Its impressive effect could not have been achieved without the solid surface material HI-MACS® which can be bonded seamlessly, giving the crystalline body extending across rooms a flawless, smooth appearance.

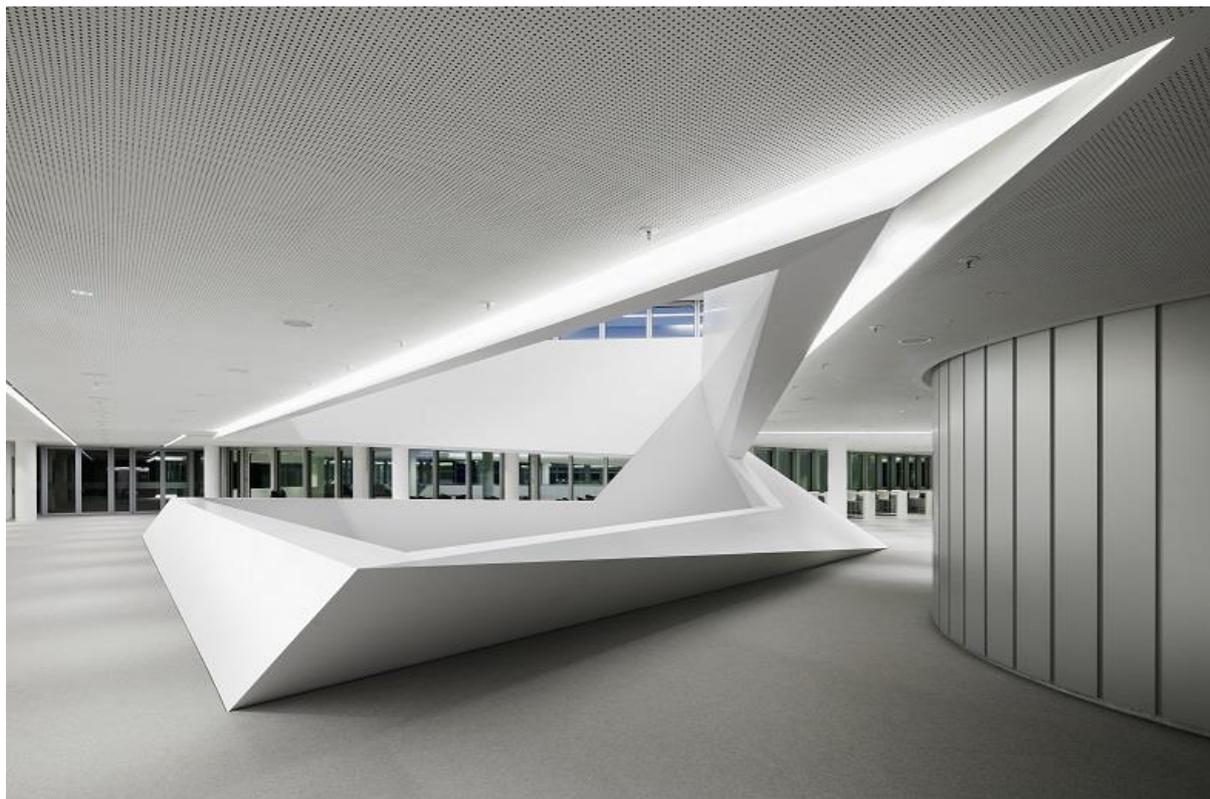


The designers' request for "seamlessness" led to the conscious decision to use the solid surface material. At the same time, it posed a challenge for the partners 5D Engineering and Arnold AG who were tasked with implementation planning. In order to meet the requirements, Arnold AG developed a two-part substructure that absorbs the movement of the cladding: the primary substructure transfers all loads to the building, while a secondary one, flexibly fixed to the primary substructure, follows the HI-MACS® surface on the inside. This allows for slight

movements caused by thermal expansion of the solid surface material to be absorbed. Any necessary cladding joints were placed in optical corners, making them nearly invisible.

850 square metres – 500 individual components – 36 tonnes

Today, this installation, challenging even for solid surface material experts Rosskopf+Partner, is no longer visible in the seemingly weightless (despite an actual weight of 36 tonnes) crystal. Close to 850 square metres of HI-MACS®, supplied as 500 different individual components, were assembled, screwed together, bonded and smoothed on site with millimetre precision – all across three floors.



Despite its impressive size and shape, the smooth, non-porous HI-MACS® surface, its superior look and warm feel create a welcoming friendly atmosphere in the soothingly white entrance hall. The solid surface material is ideal for use in heavy traffic areas such as offices and work spaces: it is extremely hygienic, low maintenance and robust. Minor signs of wear and tear can be polished away easily. It complies with fire safety regulations and is flame retardant according to DIN 4102-1 B1.

The HVB-Tower is equipped with an attractive "smart working" concept that meets the bank's request for flexible and interactive work spaces appropriate to the digital age. HENN converted this listed high-rise building into a "green building" offering savings in heating energy, electricity and water. Even though the monocoque façade was completely removed and replaced by a double-skin structure, parts of the original façade were able to be preserved. Around 6,000 of the original aluminium panels at the front of the building were cleaned and reinstalled in the new façade. This resulted in a visually similar façade, enabling the architects to combine the old and the new into a contemporary design.





PROJECT INFORMATION:

PROJECT: Modernisation and redesign HVB-Tower

LOCATION: Munich, Germany

BUILDER: HVB Immobilien AG

DESIGN: HENN GmbH, Munich,
<http://www.henn.com/en>

CONSTRUCTION YEAR: 1981

CONSTRUCTION PERIOD: 2012-2015

IMPLEMENTATION PLANNING "KRISTALL":

5D Engineering, Dresden, www.5d-engineering.com
and

Arnold AG, Friedrichsdorf, www.arnold.de

**PRODUCTION AND INSTALLATION SECONDARY
SUBSTRUCTURE AND CLADDING:**

Roskopf+Partner AG, Obermehler,
www.roskopf-partner.de

CONSTRUCTION MODEL AND PRODUCTION

DATA INDIVIDUAL COMPONENTS:

designtoproduction,
Stuttgart, www.designtoproduction.com

MATERIAL:

HI-MACS®, www.himacs.eu

PHOTOS:

HGEschPhotography

HI-MACS® by LG Hausys

www.himacs.eu

HI-MACS® is a solid surface material that can be moulded into any shape. It is widely used for architectural and interior applications, such as sculptural and high performance wall-cladding or kitchen, bathroom and furniture surfaces, in commercial, residential and public space projects. It is composed of acrylic, natural minerals and pigments that come together to provide a smooth, non-porous and visually seamless surface which meets the highest standards for aesthetics, fabrication, functionality and hygiene – offering manifold advantages over conventional materials.

HI-MACS® provides limitless possibilities for surfacing solutions and inspires creative minds from all over the world. **Zaha Hadid, Jean Nouvel, Rafael Moneo, Karim Rashid** and **David Chipperfield**, among others, have completed fabulous projects using HI-MACS®, from kitchens to bathrooms, including decorative items, in hotels as well as in museums, shopping centres and on external façades.

LG Hausys' HI-MACS® uses a simple heating process to give three-dimensional thermoplastic forming capabilities, allows visually seamless designs, offers a virtually limitless range of colours and – for some shades - exhibits a special translucency when exposed to light. Although HI-MACS® is almost as robust as stone, it can be worked in a similar way as wood: it can be sawn, routed, drilled or sanded.

HI-MACS® is manufactured using a new generation technology, the **thermal cure**. The temperature reached during the manufacturing process sets HI-MACS® apart from other solid surfaces and creates a denser, even more homogeneous, sturdy, durable surface – with a better resistance and superior thermoforming performance.

As regards hygiene, HI-MACS® does not absorb humidity, is highly resistant to stains, and is easy to clean, maintain and repair.

Countless internationally recognized certificates attest to the quality of HI-MACS® in terms of ecological commitment, hygiene and fire resistance – being the first Solid Surface in the market to receive the official **European Technical Approval (ETA) for façades** – for Alpine White S728 colour.

HI-MACS® offers the longest warranty on the solid surface market with a 15-year warranty for products fabricated by a Quality Club Member.



HI-MACS®. Because Quality Wins.

For more information and to stay connected, visit our [website](#) and our [newsroom](#).

Let's connect!



* HI-MACS® is designed and produced by **LG HAUSYS**, a world leader in the technology sector belonging to LG Group, and distributed by **LG HAUSYS EUROPE** based in Frankfurt (Germany).