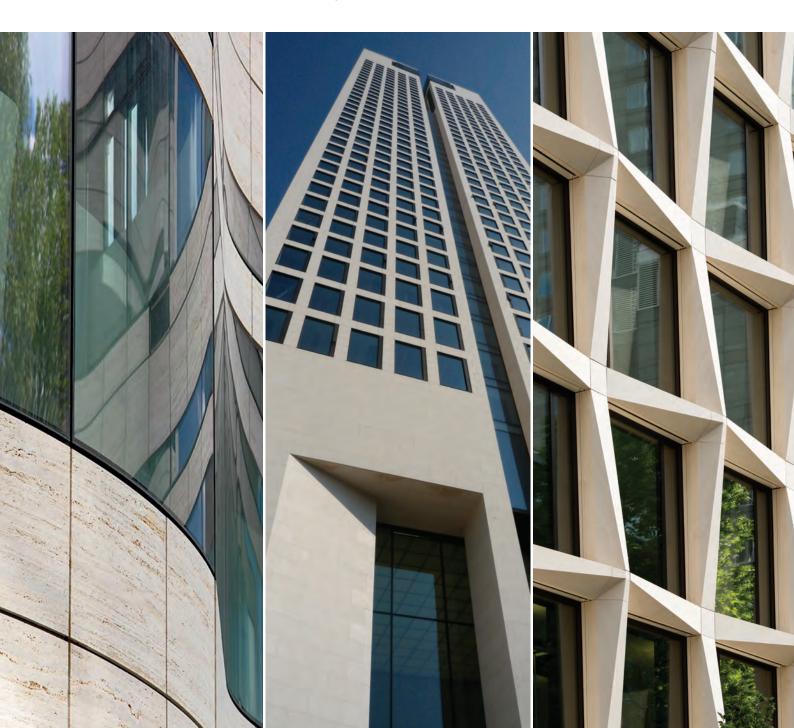
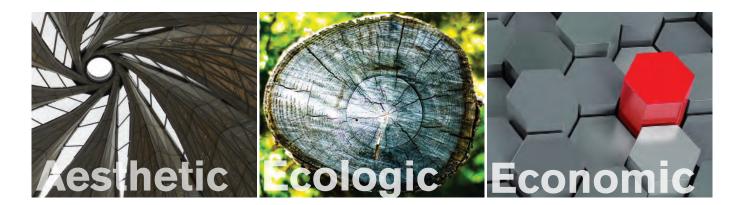


CURTAIN WALL STONE FAÇADE SYSTEMS





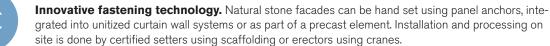
BENEFITS OF BUILDING WITH NATURAL STONE



No limits for contemporary architecture. Natural stone has been the first choice of master builders since the classic ages. Based on this tradition this timeless material is experiencing a renaissance among contemporary architects. Innovative cutting-edge forms, shapes and sizes previously impossible or unaffordable are now feasible due to innovations in computer aided manufacturing and processing technology.

Natural Diversity. Natural stone is a 100% natural material. The earth's entire crust is made of it. A enormous diversity of colors and textures goes with it.

Flexible applications. Natural stone can be used for large scale facades as well as dimensional elements such, roofs, structural elements and floors. Post-tensioning can be used to further enhance its bearing capacity.



site is done by certified setters using scatfolding or erectors using cranes.

High durability. Natural stone ages beautifully and even after decades in use still looks good. Other than architectural precast concrete and glass fiber reinforced concrete natural stone will not change its color and surface over time. Natural stone can also be easily cleaned using waterjet or sandblasting.

Optimal level of protection. Natural Stone façade protect a building against bad weather, heavy rain and temperature cycles. It is totally fire resistant and is classified as fire protection class A 1 as non-combustible material. With certain modifications if provides high levels force protection against blast, ballistics, forced entry and impact.

Maximum sustainability. HOFMANN STONE has set itself the highest standards in the protection of the environment. Multiple of our projects have received LEED Gold and Platinum ratings from the Green Building Council. The Environmental Product Declaration EPD provides detailed figures on the eco- balance of natural stone.

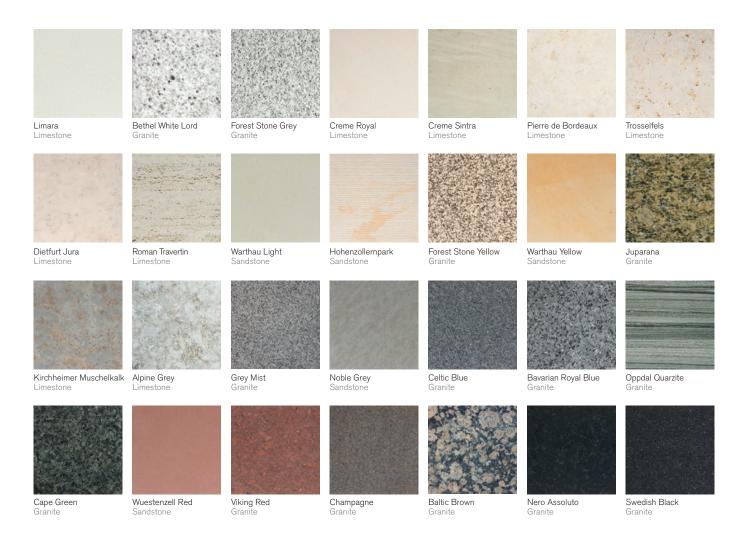
Most economic product lifecycle cost. Natural stone is much more economic than glass, metal, concrete or wood facades that either cost more upfront or will create enormous cost maintaining it.

High energy savings. Natural stone also helps to dramatically lower the energy a building consumes. As part of the building envelope it cools in the summer and keeps the heat in the winter. A study by thinkstep has recently proven a reduction of 40% of energy consumption compared to a transparent glass facade.



A SELECTION OF OUR STONE PORTFOLIO

Each stone comes from a specific location and quarry. Within the quarry there are beds and ledges that characterize the specific composition of each material. Depending on layer in the the quarry the color and density may slightly vary. This geological diversity makes each stone panel and facade element a unique one of a kind piece reflecting the beauty and breadth of nature. Additional materials available upon request.

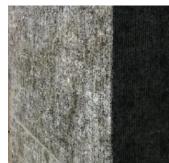


A SELECTION OF OUR SURFACE FINISHES

Each stone color can be obtained in three or more surface finishes: honed, thermal, water jet, aquapower, bush hammered, hand split, polished, etc. HOFMANN STONE has the ability to manufacture all common as well as innovative surface finishes.



Aquapower Creme Sintra Limestone



Handsplit Cape Green Granite



Chiseled Wuestenzell Red Sandstone



Classic Grooves Trosselfels Limestone



NOTABLE REFERENCES



Koebogen, Duesseldorf, Roman Travertin, Limestone, Architect Daniel Libeskind, New York



Opera Tower, Frankfurt, Crème Royal, Limestone, Architect Prof. Christoph Mäckler, Frankfurt



IG Metall, Frankfurt, Wuestenzell Red, Sandstone, Gruber + Kleine-Kraneburg Architects, Frankfurt



NOTABLE REFERENCES



British Embassy, Berlin, Warthau Yellow, Sandstone, Architect Michael Wilford, London



High-Rise Complex Hagenholzstrasse, Zurich, Cape Green, Granit, Architect Max Dudler, Zuerich



Steigenberger Hotel, Berlin, Kirchheimer Muschelkalk, Limestone, Ortner & Ortner Architects, Berlin



NATURAL STONE FACADE ANCHOR AND SUPPORT SYSTEMS

Natural Stone facades consist of stone panels, insulation and stainless steel anchors. When hand set stone panels are either fastended by single anchor to the superstructure or to a stainless steel or aluminum substrucure. If preassembled stone panels are either integrated in a unitized curtain wall system, precast stone veneer or strong back system at factory and erected on site by crane.



Stainless steel single anchor

system: Stone Panels are handset on site using stainless steel anchors which are connected to the concrete superstructure using grouting or welding.



Stainless steel single anchor, IBM Zürich



Metal substructure support system:

Stainless steel anchors are connected to a steel or aluminum substructure which serves as support system and is either connected directly to the building superstructure or the glazing support system. Screws or welding are common connections.



Metal substructure support, Roche Rotkreuz



Unitized curtain wall system:

Multiple stone panels are integrated at factory into a curtain wall system element consisting of a glazing, insulation, aluminum profile. Kerfs, back cut anchors or own vertical horizontal pin anchors are common connections. Fischer Anchors are not recommended as they do not provide enough play for the stone and tolerances.



Precast stone veneer system: Stainless steel ancors cut into the backside of the stone are connected to the reinforcement cage of a precast substructure. Stone panels are inserted into the formwork prior to castingt the precast concrete panel. A similar approach is used for UHPC Stone Veneer which is only 40% of the thickness and weight of regular precast. The entire assembly is directly connected to the building superstructure.



Unitized curtain wall, Taunus Tower Frankurt



Precast stone veneer, ML 47 Frankfurt



OUR PHILOSOPHY – ALL-FROM-ONE-SOURCE

HOFMANN STONE is a globally active fabricator and installer of complex exterior stone façade systems and curtain walls. The company was founded in 1945 and is headquartered in Germany.

Following an all -from-one-source approach we offer comprehensive turn key solutions . With around 100 large-scale projects annually for renowned architects, clients and developers we have been providing our contribution to contemporary architecture over more than seven decades.

Thanks to full vertical integration and availability of strong in-house expertise and specialist resources, our customers can expect timely completion and precision workmanship on even their most challenging projects meeting the highest requirements and thoughest specifications.

For over 70 years the name HOFMANN STONE stands for outstanding quality, high integrity, technical excellence, complete reliability and ongoing innovation.



OUR MISSION – SUPPORTING SUSTAINABLE ARCHITECTURE

Today we make a lasting contribution to contemporary architecture and the environment by supplying distinctive natural stone buildings that support responsible urban development and sustainable architecture worldwide while permanently increasing the use of renewable energy sources for all of our processes to achieve the lowest carbon footprint possible.

Looking forward we strive to become the world most sustainable construction material company by relying solely on renewable energy sources for all processes and producing zero waste and zero emissions.

OUR SERVICES – MINDFUL OF YOUR BUILDING LIFECYCLE



Preconstruction Services

- Digital design-detail library
- Stone selection/geology
- Sample service
- Pre-dimensioning of stone formats
- Budget prices
- Support with preparation of tender invitations
- Mock-up facades
- Stone Consulting

Engineering Services

- Technical expertise Production & installation planning
- Façade technology Anchoring technology
- Slab and anchor structural engineering
- CAD 3D modelling Laboratory testing of
- stone · Expertise in international norms and

standards for stone

Stone Mining

- Geologist and stone mining experts
- Extraction in
- our own quarries
- Quarry operations Quality control in
- quarries
- Block storage
- Block transport

Production & Assembly

- Processing in our own
- plants State of the art production lines
- Sculpting department In-plant production
- monitoring (IPM) acc. to EN 1469
- In-house quality assurance system (QA)
- Prefabrication of unitized curtain walls in our factories
- Storage capacities for large-scale projects

Installation

- Site management
- Installation of natural stonefaçades, insulation and anchoring
- Transport & logistics management
- QA expertise
- Project management

Facade Management

- Façade monitoring Façades rejuvenation
- Replacement during operations
- Maintenance/ cleaning
- Blaast proofing as retrofit
- Subsequent explosion protection

Integrated Turnkey Solution

own & third party



CATEGORY EXPERTISE



Public Space

- Government Buildings
- Embassies
- Museums
- Universities & **Research Facilities**
- Castles, Churches & Restoration
- Infrastructure



Commercial

- High Rises Corporate Office & .
- Administrative Buildings
- Conference Centers
- Hotels
- High End Retail & Shopping Centers



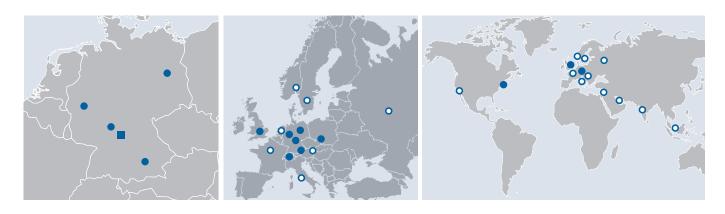
Residential Towers

- Apartment Buildings
- Private Villas



- Dimensional Stone
- Post-Tensioned Stone
- Force/Blast Protection
- Stone Roofs
 - 3D-Replicas
 - UHPC Precast Stone Veneer

REGIONAL PRESENCE



Domestic Branch Offices

- Gamburg (Headquaters)
- Berlin
- Frankfurt
- Cologne
- Munich

International **Branch Offices**

- Zurich, Switzerland
- Kraków, Poland
- London, Great Britain
- New York, USA

European Representatives

- Wienna, Austria
 - Amsterdam, The Netherlands
 - Paris, France
 - Rome, Italy
 - Stockholm, Sweden
 - Oslo, Norway

International **Representatives**

- Tel Aviv, Israel
- Moscow, Russia
- HongKong
- Qatar, UAE
- Los Angeles, USA
- Mumbai, India

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