

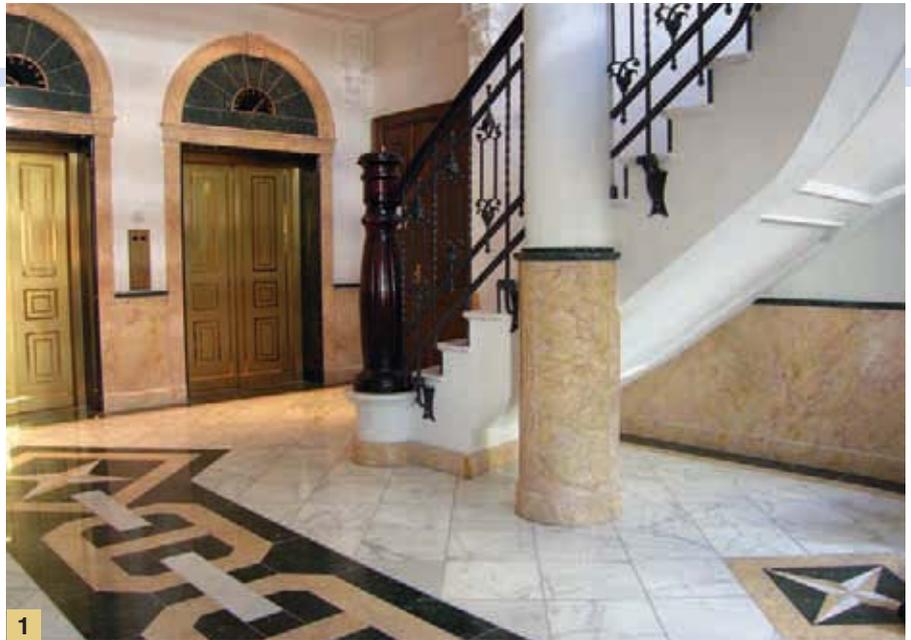


STÖRTEBEKER-HAUS HAMBURG

**Stylish architecture and materials inspired
by tradition for a prestigious building in Hamburg**

Photo 1.
The staircases sport precious natural stones as floor and stair coverings.

Photo 2.
In the elevators natural stones were bonded on the floors with Keralastic, while wall coverings were laid with Granirapid.



The "Störtebeker-Haus" is situated in the Süderstraße, close to Hamburg downtown. This is an office and commercial building, which was opened in 2006 and due to its remarkable architecture looks more like a building of the early nineteenth century than a contemporary construction.

The owner, a very successful Hamburg businessman, wished to erect a building fitting in the history and traditional architecture of the Free Hanseatic City (so is Hamburg commonly called in Germany) and appealing to the population. The result is very attractive: a high-level building with different architectural styles, constructed with precious building materials. It impressively shows the various scopes for design which are made possible by natural stone, as well as the beauty and variety of this natural building material and the excellence of local stonemason tradition.

This is evident both outside, in the façade combining sandstone with fired clinker, and inside, where various kinds of natural stones, together with high-quality stucco works, lend their character especially to the four staircases and lobbies.

Reminding the City's Historical Past

Besides the architecture, the name "Das Störtebeker-Haus" also demonstrates the close relation between the building and the city of Hamburg. Klaus Störtebeker was a buccaneer who, together with the pirate Goedeke Michels and his followers, ambushed the merchant ships by the end of the 14th century in the North Sea, thus inflicting serious losses to the traders of the Hanseatic League. Hamburg seamen put a stop to these illegal actions in the year 1400 (or 1401, according to some historians), when Störtebeker

and his followers were overpowered in the North Sea, nearby the island of Helgoland, and executed by beheading on the 21st October of the same year. The tales describing the boldness of his struggle in the course of his arrest in the North Sea are probably the reason why many anecdotes and legends have grown up around the person of Klaus Störtebeker. Among others, a legend had he run past eleven of his followers after his beheading, until the hangman tripped him up. In the tower of the new building there is a carillon with a musical clock, which at 12.00 a.m. every day reminds of the execution of the pirate captain and his followers.

Elegance in Stone

The interior decoration is essentially characterized by a design artfully combining different types of natural stones which give the staircases, the corridors, the halls and the floors a special touch of elegance. A fine demonstration of the excellent use of natural stone as a building and decoration material is the star in the main entrance hall, completed with masterly handicraft. The stone types Azul Cielo (blue marble), Nero Belga (black limestone), Estremoz (light-coloured marble) and Rojo Alicante (red limestone) came into use here. The star faces north and features an integrated wind rose. It is made up of 8 large-format elements, which were separately prepared and, after calibration by laser technology, installed on the floor.

For the remaining sections of the floorings on the ground floor and for the stairs the following stones were chosen: Mugla White (light-coloured marble), Verde Guatemala (green serpentinite), Crema Valencia (yellow marble).



Slabs of Verde Guatemala serpentinite, Mugla White and Crema Valencia marble were instead laid on the step treads.

In the elevators natural stones of the Juparana Colombo (red migmatite), Verde Guatemala and Crema Valencia types were installed on the floors. The above-mentioned green serpentinite and yellow marble, together with Port Laurent black limestone, were chosen for the elevators' external walls and the remaining walls on the first floor.

A Perfect Installation

Natural stones (sandstone and fired clinker) were mechanically anchored to the facades of the Störtebeker-Haus and Shanxi black (black granite) slabs were similarly fixed on the outside pillars.

As for the laying of stone materials inside the building, the most important requirements on the installation products were the securing of excellent and durable adhesion of the covering, a good resistance to the loads which the surfaces would have to bear, and the prevention of changes of the

stone colours after the installation. Thanks to very intensive Research & Development activities guaranteeing a specialised knowledge of materials, Mapei was able to offer a complete product system which has proved successful for more than 15 years in a lot of challenging building projects involving stone material sensible to deformation and stain formation. As for laying the star on the floors, after intensive cleaning of the support, the screed was prepared with the fast setting hydraulic binder MAPECEM*. It perfectly bonded to the substrate thanks to the bonding slurry made of

PLANICRETE*, water and MAPECEM*, previously applied on the surface. After application of the white version of the two-component cementitious adhesive GRANIRAPID* on the whole laying surface and back-buttering of the element slabs, the natural stone elements were installed under pressure and utmost care. GRANIRAPID* was also used to lay the natural stone slabs on the other sections of the floors and on the walls of the ground floor, after properly cleaning the substrate. The adhesive's white shade was chosen for the light-coloured slabs, while the grey version was used in all

the remaining cases. On the elevators' external walls the natural stone slabs were bonded with MAPESTONE 1* fast hardening and drying mortar (a product distributed in the German, Austrian and Swiss markets by Mapei's local subsidiaries) or else with GRANIRAPID*. In the elevators, the floor slabs, which reproduce the Hamburg blazon, were bonded with KERALASTIC* high performance two-component polyurethane adhesive, while the inside wall covering was installed with grey GRANIRAPID*. On the step treads, screeds were formed with MAPECEM* before laying the Mugla White marble slabs with GRANIRAPID*. Serpentine and yellow marble were instead bonded with MAPESTONE 1*. As the stair construction is embedded in the shear walls, the installation of a high-quality sound insulating system was necessary to avoid the propagation of the subsonic noise to the adjoining offices and the neighbouring business building. This was ensured by using Mapei's MAPEFONIC SYSTEM* featuring the necessary insu-



3



4



5



6

Photo 3.
Before laying the star-shaped floor design, a screed was prepared with Mapecem on a substrate treated with a Planicrete-based bonding slurry.

Photos 4, 5 and 6.
The natural stone slabs forming the star were installed with the white version of Granirapid. This adhesive was applied on both the substrate and the slabs back.

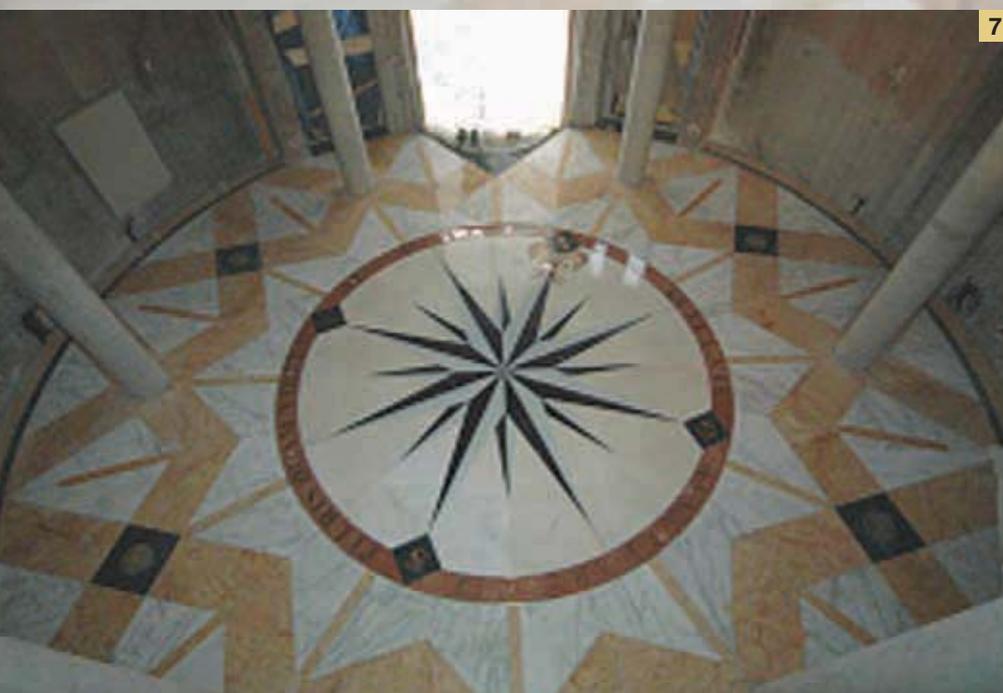
Photo 7.
View of the star pattern on the floors after completion of the works.

Photo 8
Applying the sound isolating Mapefonic System on the stairs.

Photos 9 and 10.
Laying natural stone slabs on the stairs rises and treads with Mapestone 1.

Photo 11.
On the step treads white marble was bonded with Granirapid, green serpentine and yellow marble with Mapestone 1.

Photo 12.
View of the stairs and step treads after completion of the works.



7

lating characteristics and rigidity. It includes bitumen filled acoustic tiles (with a thickness of only 10 mm) with fibreglass reinforcing and a backing consisting of a composite cushion. The use of MAPEFONIC SYSTEM* guarantees a noise reduction of 17.6 dB in line with current standards. MAPESTONE 1* was used to lay stone material slabs on the stairs risers and treads, as well as on the skirtings of the stair walls.

For grouting the joints of all the mentioned surfaces ULTRACOLOR fast setting and drying grout was first chosen. This product was then replaced by

ULTRACOLOR PLUS*, a further developed version which has been available for many years in several countries and was launched on the German market just during those times. The new formula allowed the perfect completion of the grouting operations, since it is anti-efflorescence, water-repellent and antimold thanks to the DropEffect® and Bioblock® technologies.

This article was taken from issue n. 5 of "Realta Mapei", the in-house magazine published by Mapei's Austrian, German and Swiss subsidiaries which we would like to thank.

***Mapei Products:**

the products referred to in this article belong to the "Products for Ceramic Tiles and Stone Materials" range. The technical data sheets are available on the "Mapei Global Infonet" DVD or at the web site: www.mapei.com.

Mapei's adhesives and grouts conform to EN 12004, EN 12002 and EN 13888 standards.

Granirapid (C2F, S1): high performance, deformable, fast setting and hydration two-component cementitious adhesive for ceramic tiles and stone material.

Keralastic (R2): high performance two-component polyurethane adhesive for ceramic tiles and stone material.

Mapefonic System: minimal thickness sound control system designed to isolate impact noise when installed under ceramic tiles and stone material.

Mapecem: special fast setting hydraulic binder for the preparation of fast-drying screeds (24 hours) with controlled shrinkage.

Mapestone 1 (C2F): fast hardening and drying mortar for small and medium laying beds.

N.B. This product is distributed on the German, Austrian and Swiss markets by Mapei's local subsidiaries.

Planicrete: synthetic-rubber latex for cementitious mixes.

Ultracolor Plus (CG2): fast setting and drying, high performance, anti-efflorescence, polymer modified grout, for joints from 2 to 20 mm. Water-repellent with DropEffect® and antimold with Bioblock® technology.



TECHNICAL DATA

Störtebeker-Haus, Hamburg, Germany
Work: preparing screeds for the inside floors; laying natural stone covering on the walls and floors of several halls, in the elevators and on the stairs; applying a sound isolating system on the stairs
Years: 2004-2006
Customer: Achim Becker, Hamburg
Project: Architektenteam Tipke, Buchholz
Works Management: Hans Joachim Mehmcke
Installation Company: Granit Sp. z.o.o., Hamburg
Mapei Distributor: Hansa Keramik, Hamburg
Mapei Co-ordinator: Walter Mauer, Mapei GmbH (Germany)