



Villeroy & Boch
1748

STAIRS AND STAIRCASES









Stairs and staircases are not defined by their functionality alone. These practical units are also interesting from a design perspective as well-appointed stairs are today a defining feature in houses, rooms or hallways.

Safety is always the number-one priority. In addition to slip resistance in compliance with the applicable standards, ceramic tiles made of *vibostone* porcelain stoneware offer particular durability and also easy-care properties.

Stair tiles by Villeroy & Boch are available in different designs and colours. As high-quality branded tiles, they meet the technical requirements of different standards for the production of stairs. The comprehensive concepts comprising basic, décor and functional tiles can be used for a durable and aesthetically pleasing design of the entire stair area.

The easy-care, durable stair treads have milled grooves at the rounded front edge; as a result, the edge of the tiles is more visible and there is less risk of slipping.

The stair tiles on all stairs have markings to ensure the greatest possible safety. Alternatively, in compliance with accessible standard 18040-1/-2, only the first and last step have a marking at the edge.

In addition to normal wear and tear, the walls of staircases and hallways in particular are subject to a great deal of stress during removals and when moving furniture. Here, ceramic wall coverings ensure optimum protection against dirt and signs of wear. Staircases look good for longer, and this can reduce the amount of renovation work required.





Installation methods

Classical installation

The installation of tiles should be taken into account as early as at the structural-planning stage. The finished heights of the floors in staircases, the stair treads and the entire construction in terms of thermal insulation and/or soundproofing, as well as the thickness of the screed, are determined during this phase.

Prefabricated staircases are manufactured with great dimensional accuracy so an additional levelling course on the stair treads is not required, or only to a limited extent.

In contrast, cast-in-situ concrete stairs are formed in shells created at the building site. For this reason, the concrete structure might not be as exact as a factory-made prefabricated staircase. As a rule, levelling courses have to be applied to the concrete steps.

In the case of cast-in-situ concrete stairs without sound insulation, suitable insulation panels can be installed below the tile covering in order to reduce noise.



Installation methods

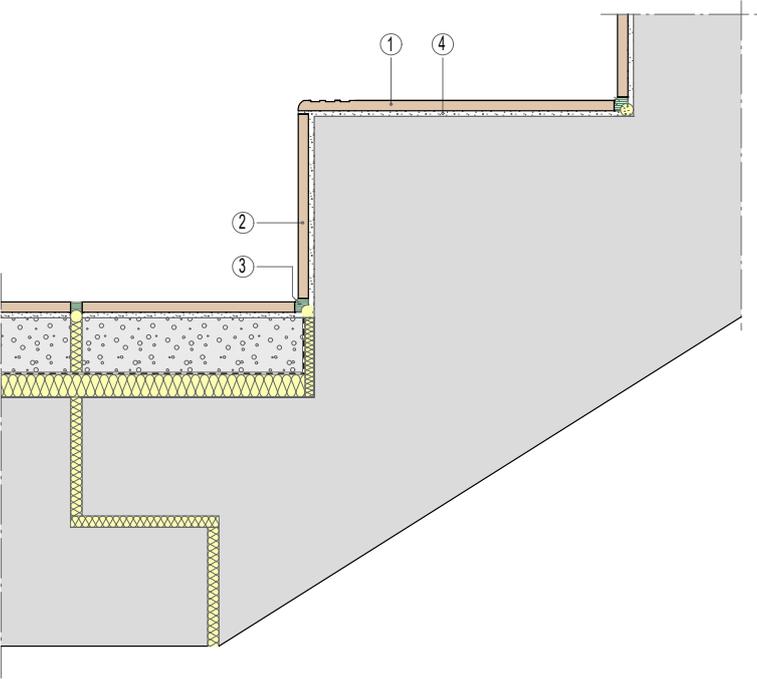


Fig. 1: Prefabricated stairs with bearing surface insulated to reduce impact sound

- ① Stair tread tile
- ② Stair riser
- ③ Elastic joint
- ④ Thin-bed mortar

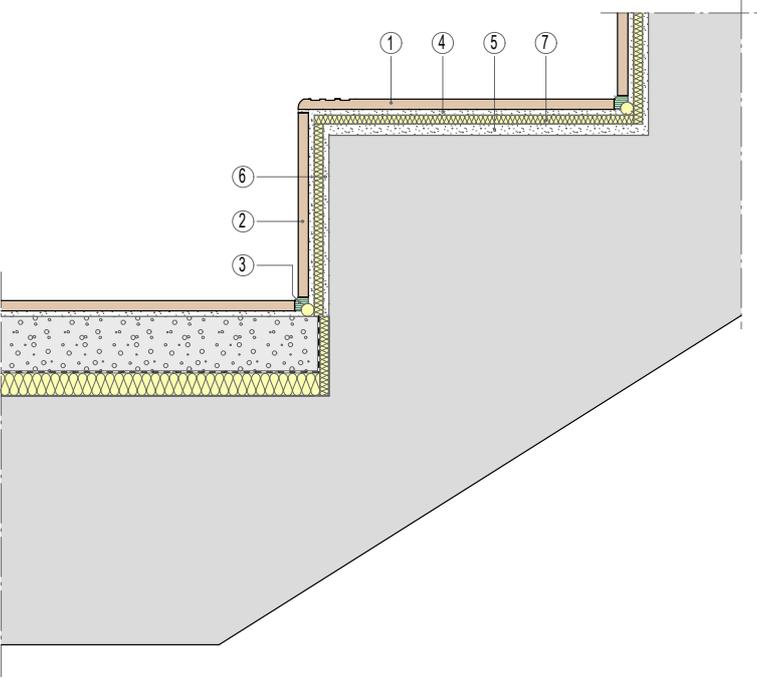


Fig. 2: Cast-in-place concrete stairs with stairs insulated to reduce impact sound

- ① Stair tread tile
- ② Stair riser
- ③ Elastic joint
- ④ Thin-bed mortar
- ⑤ Thin-bed and self-levelling mortar
- ⑥ Thin-bed mortar with self-levelling mortar where appropriate
- ⑦ Impact-sound insulation

Installation methods

Accessible installation

In accessible areas in particular, Villeroy & Boch tiles offer design solutions in compliance with the relevant standards. For people with visual impairments, the individual elements of the stairs must be easily recognisable.

In the case of one to three individual steps and stairs that start or end in the room, each step has to have a marking in compliance with DIN 18040-1/-2. In staircases with longer flights of stairs, a marking is only required on the first and last stair, although it is preferable for all stairs to have this.

All stairtreads by Villeroy & Boch have this edge marking. It is created by three milled grooves, about 1mm deep. The contrast is the difference in colour between the surface finish and the ceramic mass below. This can be very obvious or also more subtle, for example, with lighter colours.

Example:

If the luminance contrast between the grooves and the surface of the tile is less than 0.4, the stair edgings of the first and last step in a staircase can be executed in different colours. In this case, the required contrast is created by means of a strip in a darker or lighter tile colour. The stairs between are completely covered in the stairtread tiles in the desired colour (see figure 3).

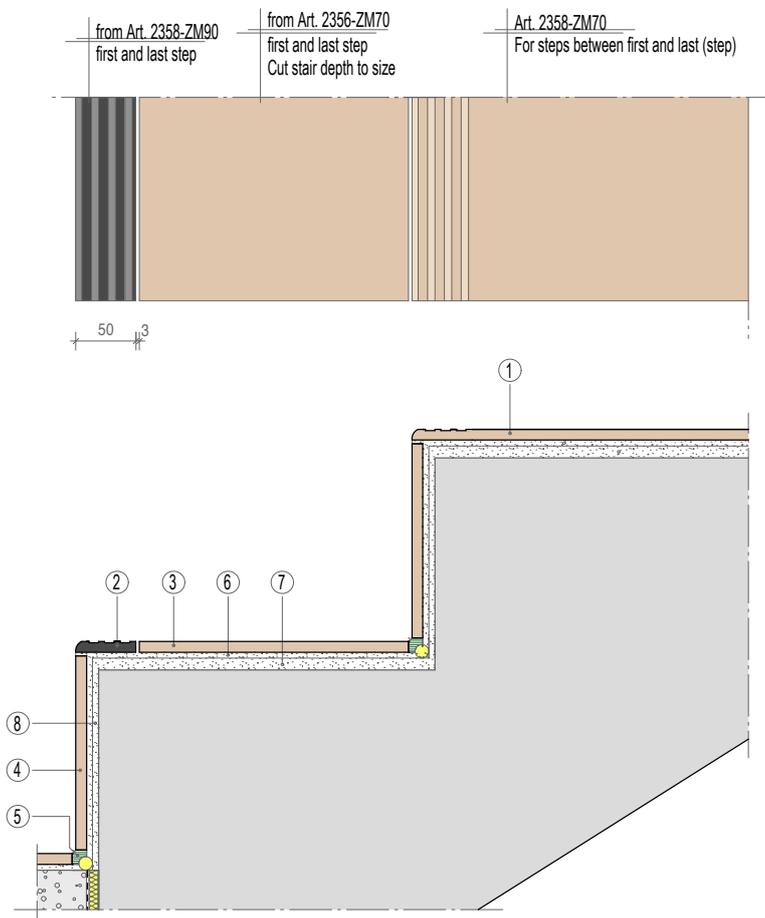


Fig. 3: Accessible solution in compliance with DIN 18040 Part 1 and 2 "Accessible buildings"

- ① Stair tread tile
- ② Contrasting stripes
- ③ Porcelain stoneware tile
- ④ Stair riser
- ⑤ Elastic joint
- ⑥ Thin-bed mortar
- ⑦ Self-levelling mortar
- ⑧ Self-levelling mortar



Installation methods



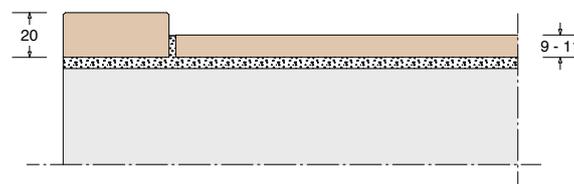
Installation methods



Edge solution using 20-mm-thick porcelain stoneware tiles

It is a good idea to add narrow upturned edges made of 20-mm-thick OUTDOOR TILES from the Villeroy & Boch range at the lateral edges of stairs that are free-standing at one or both ends. This attractive solution, optionally available in a uniform or contrasting design, keeps cleaning water from running along the stringers and soiling them. This also counteracts lateral slippage of walking aids, adding even more safety to accessible areas.

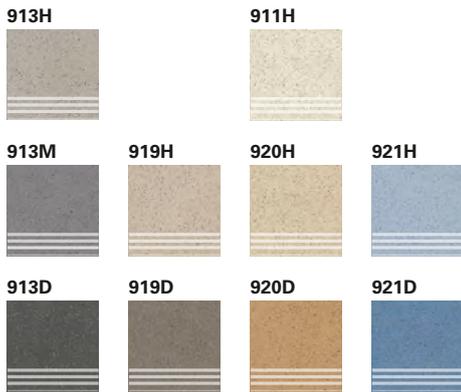
Fig. 4: Raised stair edge design (cut tiles from OUTDOOR TILES) to prevent walking aids from slipping on stair wells and open sided stairs in compliance with DIN 18040-1 and 2.



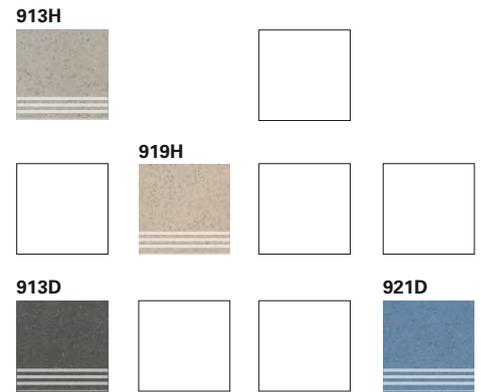
Overview of products

Stair tread | 30 x 30 cm

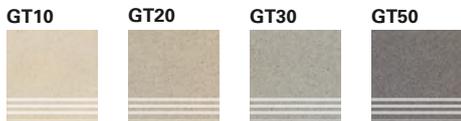
GRANIFLOOR
Art. 2234
☒ ☒ R10 ☒ A



GRANIFLOOR
Art. 2123
☒ ☒ R11 ☒ B



UNIT THREE
Art. 2008
☒ ☒ R10 ☒ A

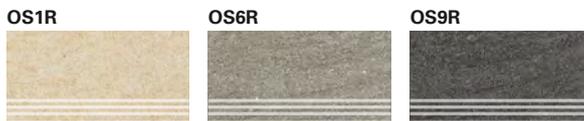


Stair tread | 30 x 60 cm

CROSSOVER
Art. 2623
☒ ☒ R9



CROSSOVER
Art. 2624
☒ ☒ R11 ☒ B



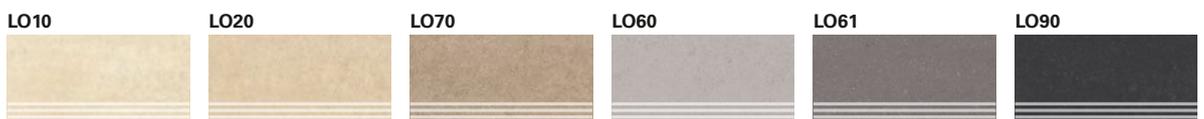
EAST END
Art. 2307
☒ ☒ R9



HOUSTON
Art. 2874
☒ ☒ R10 ☒ A



LOBBY
Art. 2874
☒ ☒ R10 ☒ A



Overview of products

Stair tread | 30 x 60 cm

PLACE

Art. 2488

   R9

SL10



SL60



SL90



PLACE

Art. 2489

   R10  B

SL60



SL90



UNIT FOUR

Art. 2874

   R10  A

CT10



CT70



CT80



CT60



CT61



CT62



XENTRIC

Art. 2831

   R9

XI20



XI80



XI60



XI90



Stair tread | 30 x 120 cm

ASPEN

Art. 2744

   R9

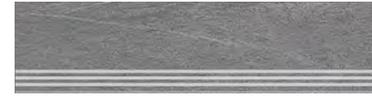
VQ1M



VQ6M



VQ9M



BERNINA

Art. 2732

   R9

RT1M



RT5M



RT7M



RT4M



RT2M



COSMO VISION

Art. 2756

RB10



RB70



RB90



Overview of products

Stair tread | 30 x 120 cm

OUTSTANDING Art. 2732

   R10

TZ10



TZ60



TZ80



TZ90



PURE LINE Art. 2698

   R10

PL01



PL06



PL81



PL10



PL60



PL91



PL11



PL61



PL80



PL90



WAREHOUSE Art. 2732

   R9

IN10



IN60



IN90



X-PLANE Art. 2358

   R10

ZM10



ZM20



ZM70



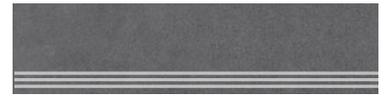
ZM00



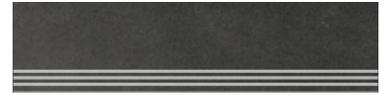
ZM60



ZM90



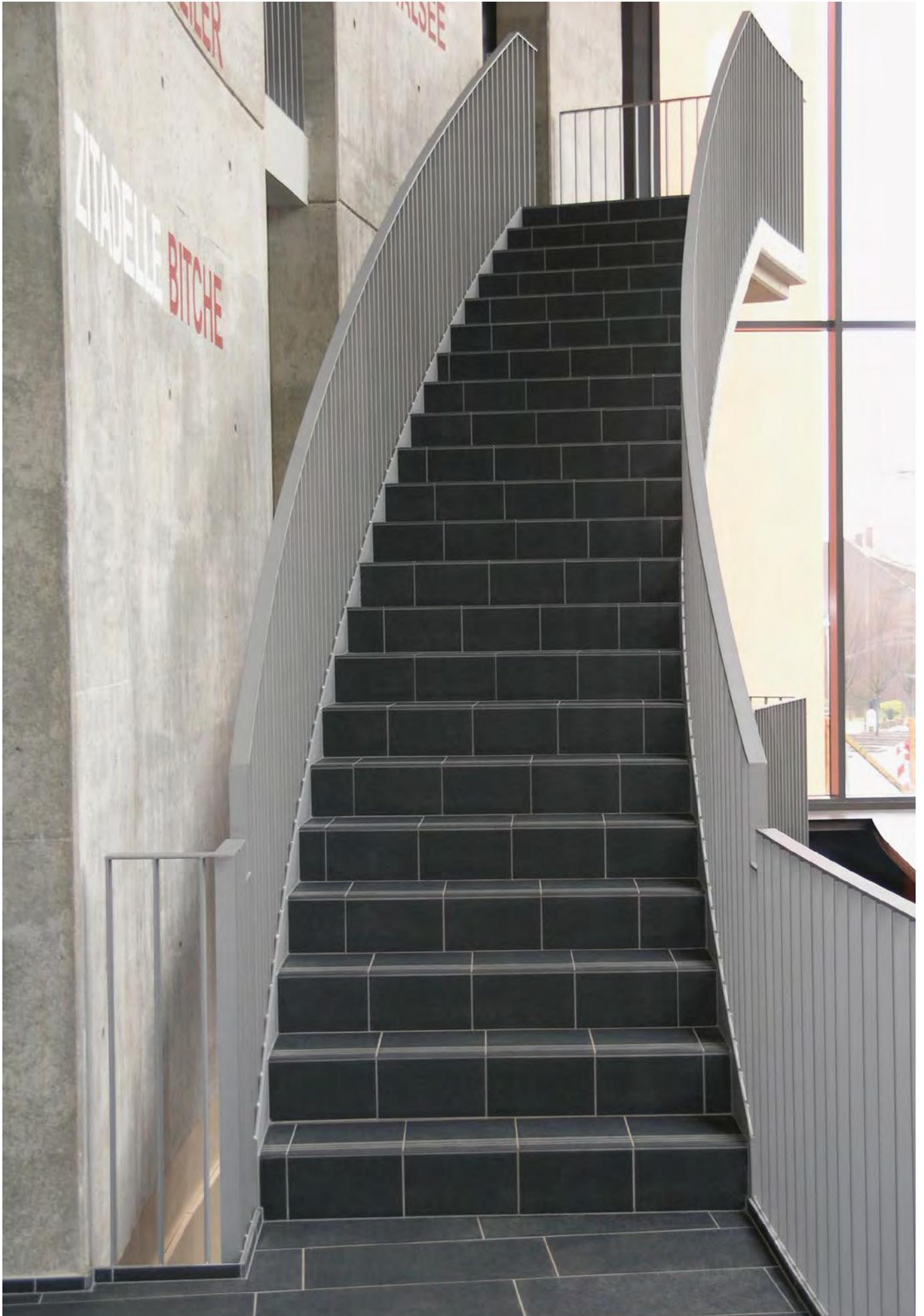
ZM91



References



References



"Haus des Gastes," Weiskirchen

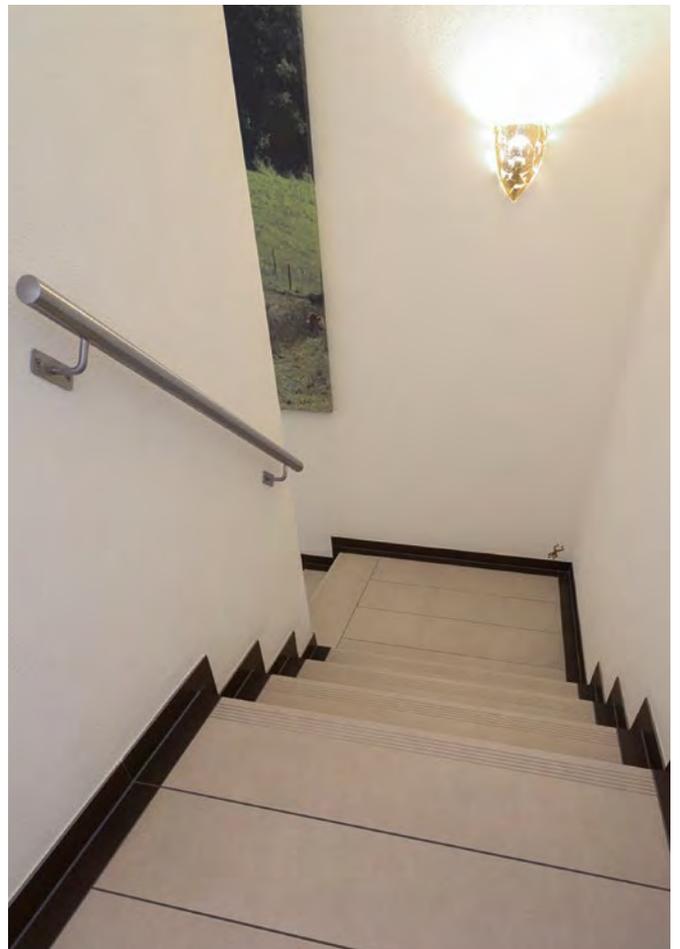
References



“Hofkontor im Speicherquartier”; Lüneburg | Tiles X-PLANE



“Hofkontor im Speicherquartier”; Lüneburg | Tiles X-PLANE



“Hochwälder Wohlfühlhotel”; Losheim | Tiles X-PLANE

Advantages of ceramic tiles

Ceramic is a fascinating and inspiring material that has been popular for thousands of years and that is increasingly used in modern interior design. Hardly any other housing material combines so many positive properties at the same time

as providing inspiration for countless creative living ideas for a beautiful home. Tiles from Villeroy & Boch meet high technical and aesthetic standards and offer advantages in terms of a healthy home environment and energy savings.



Good for health

Ceramic tiles are simply ideal for a healthy living environment. Whether glazed or unglazed, their surfaces are highly impervious. Mites and other microorganisms that cause a large number of allergies don't stand a chance. Ceramic itself does not give off any vapours or smells and, for this reason, is also recommended in terms of building biology.



Energy-efficiency saves costs

For underfloor heating there is no better covering than ceramic, which boasts good thermal conductivity and heat storage capacity and is also anti-static. A pleasant and efficient side effect: on hot summer days, tiles also help to keep things cool.



Barrier-free living and design

Today, bathrooms in particular should not have any unnecessary thresholds. Tiles and mosaics are perfect for barrier-free, walk-in and wheelchair-friendly showers and baths. Provided with non-slip surfaces, tiles also ensure a secure footing.



Safety underfoot

Vilbostone porcelain stoneware tiles make ideal floor coverings for both indoors and outdoors. It is precisely here that the non-slip properties of tiles come into their own, offering a secure foothold, even when it's wet.



Frost resistance

Vilbostone porcelain stoneware tiles are frost-proof and weather-resistant when laid professionally and therefore also suitable for use in outdoor areas.

Advantages of ceramic tiles



Environmentally-friendly and natural

The high quality of Villeroy & Boch tiles in terms of both workmanship and product concept ensures the necessary durability and sustainability. They are made of natural components that occur naturally in almost unlimited quantities. They are also manufactured by means of environment-friendly processes and a large proportion of the production waste is recycled. Tiles can also be disposed of in an environmentally safe manner.



Easy care

Tiles are naturally hygienic and easy to clean. The cleaning methods and cleaning agents must thus be adapted to the type of floor and local conditions.



Colour-fastness

Tiles are colour- and lightfast and their appearance will not even be affected by exposure to direct sunlight.



Their good looks are undiminished over time

Tiles from Villeroy & Boch are durable and do not wear down, even after decades of use. They are largely scratch- and crack-resistant. Falling embers from open fires, stoves or cigarettes that will cause lasting damage to other floor coverings can be removed without a trace from tiles.



Aesthetic selection available to cover all tastes

There are an unlimited number of colours, designs and finishes. As design media, they offer solutions for every style and taste. Tiles cannot be considered in isolation here, but form an integral part of the overall design scenario and are of crucial importance to the room concept and a harmonious interior.

Sustainable building

Tiles by Villeroy & Boch meet every aspect of the international parameters required for “sustainable building”.

All over the world, our tiles feature in architectural projects that are classified by the German DGNB, the American LEED and the British BREEAM. The closed manufacturing processes that include both traditional and state-of-the-art technologies, such as digital print, meet the very highest environmental standards. All raw materials used in the ceramic mass, glazes and pastes, as well as for packaging the tiles, are evaluated according to strict ecological principles.

The entire manufacturing process avoids emissions into the water, soil and air that would have a detrimental effect on the environment. Heat recovery and continuous energy-efficiency measures, as well as environmentally aware waste management, are testimony to the environmental

compatibility of our production. At least 85% of the waste produced is recycled. The waste water generated by the manufacturing process and the solids it contains are almost entirely re-used. Thanks to heat recovery, CO₂-emissions can be reduced by about 3000 tons per year.

Not only manufacturing considerations but also the lasting quality of the designs of our tiles earn them the “sustainable building” accolade at international level. Both manufacture and the products themselves are continuously assessed in accordance with the latest independent system and product certifications.

For further information about projects and certifications, as well as videos and brochures about our environmental management, please go to www.respecting-nature.com

Certification – DIN EN ISO 9001

The DIN EN ISO 9001 quality management system has been documenting the ongoing optimisation of work processes throughout the company since 1995.

Certification – DIN EN ISO 14001

Based on the plan-do-check-act cycle and ongoing improvement in environmental performance, DIN EN ISO 14001 specifies the main requirements for identification, monitoring and supervision of direct and indirect environmental aspects in the company.

All certifications are carried out by Bureau Veritas.



Sustainable building

EMAS validation

V&B Fliesen GmbH was the first German tile manufacturer to participate in the EMAS (Eco-Management and Audit Scheme), currently the strictest test system for environmental criteria, at Merzig and La Ferté-Gaucher. It calls for a continuous, performance-oriented and regularly measurable optimisation process in which employees must also be involved.

In 2016, V&B Fliesen GmbH was certified for another three years by an external environmental auditor.

CE mark

The CE mark indicates that the product complies with the requirements of the corresponding EU directive – in particular with regard to health protection and the safety of users and consumers – and may thus be freely circulated on the Community market.

At www.villeroy-boch.com/ce you will find information on compliance with requirements for the CE mark by porcelain stoneware, glazed vitreous and nonvitreous products from Villeroy & Boch Tiles.

Ecological, environmentally friendly production

V&B Fliesen GmbH has been awarded the Environmental Product Declaration (EPD) label by the IBU (Institut für Bauen und Umwelt e.V.). The Environmental Product Declaration provides relevant, verifiable and comparable information on the environmental impact of products. This certification allows architects and planners to utilise our products in all properties that have been certified as satisfying the BREEAM, LEED, DGNB or other comparable international requirements for sustainable building.

The IBU, as the administrator of the German EPD program, is part of the ECO PLATFORM, through which it works to promote the harmonisation of national EPD programmes at the European level.

Declaration of Performance in accordance with the Construction Products Regulation [BauPVO] 305/2011 (EU) dated 9 March 2011:

The Declaration of Performance specifies the characteristics that are applicable in accordance with the product standard DIN EN 14411 for which our compliance is obligatory. In our company this applies to the following product groups:

- Porcelain stoneware (Group BIa)
- Vitreous stoneware (Group BIb)
- Nonvitreous stoneware (Group BIll)

This can be viewed and downloaded from our homepage at www.villeroy-boch.com/pvo.



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Shades and dimensions subject to the usual tolerances. We reserve the right to make technical modifications to the range and alter colours.

