



About this Product

weber.floor 4635 Design Grinded Stone is a cement-based pumpable screed material with dark hard aggregate granules added to the compound. After curing the top surface can be abraded and polished to a high gloss by using HTC (or similar) diamond grinding equipment. The abrading is performed until 1-3 mm dark granules appear in the lighter background. The background colour can be pigmented. The finished surface resembles polished natural stone.

Field of Application

weber.floor 4635 Design Grinded Stone is primarily dedicated for use in localities with foot traffic such as shops, exhibitions halls, light industry etc. The substrate is concrete or similar material. After installation, grinding and impregnation, the material forms a joint free easily maintained floor, friendly to walk on.

Technical Data

Material consumption	1.9 kg/mm and m ² Swedish GBR-method
Waiting time between the working parts	1-3 day between application and grinding (abrading).
Recommended layer thickness	10-12 mm
Compressive strength class	C30 EN 13813
Compressive strength: 28 day	Mean value 35 MPa EN 13892-2
Flexural strength class	F7 En 13813
Flexural strength: 28 day	Mean value 9 MPa EN 13892-2
shrinkage: 28 day	<0.50 mm/m EN 13454-2
Flow rate according to: maxit standard	190-200 mm maxit standard method 99:03 (ring 68 x 35 mm)
Release of corrosive substances	CT
Reaction to fire	A2fl - s1 EN 13501-1



weber.floor 4635



weber.floor 4716

Working Instructions

Light ventilation in the work area is necessary but windows and openings must be closed sufficiently to avoid draughts during and after application. Indoor and floor temperature must exceed +10°C during and after application and one week after that. The relative humidity of the concrete floor must not exceed 95%. Dehumidifiers must not be used for the first two days.

Working instructions (Pre-treatment)

For treating and cleaning flat substrates grinding with HTC (or equal approved) diamond grinding equipment is recommended. With this equipment the substrate is cleaned and smoothed (levelled). When cleaning uneven substrates alternative methods such as scrubbing, vacuum blasting or high pressure cleaning can be used. For levelling and smoothing at smaller levelling requirements **weber.floor 4610 Flow-Rapid** is recommended. For thicker levelling requirements **weber.floor 4602 Industry Base-extra** or **weber.floor 4655 Base Flow-Rapid** is recommended. Weak substrates are compensated for by stabilizing the substrate under the Design Grinded-Stone. A reinforcement grid with steel 5 mm steel rods and 150 mm mesh which is installed on the substrate. The grid is covered with 15-20 mm levelling compound **weber.floor 4602 Industry-Base** or **weber.floor 4655 Industrial Flow-Rapid**. Priming: A fully covering primer (**weber.floor 4716**) film is wanted. The priming is done in two steps;

Step 1: Dilution 1:10 The primer is spread liberally, the excess primer is however scraped away by a rubber scraper or a soft brush.

Step 2. Dilution 1:3 The surface is moistened over the whole surface with a short haired mop, rubber scraper or soft brush. The temperature of the substrate must be at least 10 degree celcius.

Substrate

The screed is meant to be applied to concrete substrate or similar material. The surface strength shall be at least 1,5 MPa. Attention needs to be paid to movement joints and cracks in the substrate. For example if there is an expansion joint in the substrate, the same must be arranged for the screed. Uneven substrates shall always be levelled. The substrate of the screed shall both be flat and even. It is not enough for the substrate to be flat, it must also be "even" enough to accept a precision layer of +1 mm.

Preparation and priming

The substrate should be clean, free from dust, cement, grease or other impurities that might prevent adhesion. The substrate should be primed twice using **weber.floor 4716**. The first priming should be diluted 1:5, the second 1:3 (on **weber.floor 4602 Industry-Base**, 1:10, 1:3). The primer should be dry and have formed a film before laying with **weber.floor 4650 Design-Colour**. The temperature of the substrate during application should exceed +10°C.

Mixing

The assessment of the viscosities correctness must be done before the start of installation. Always have sufficient containers to dispose of 'failed' material. Equip the hose with a static postmixer at the end of the hose. The room temperature shall be >10°C and <25°C. Massan is installed in strips in the same way as an ordinary levelling compound. The compound must have high viscosity (flowrate 190-200 mm with the ring 35 x 68 mm according to maxit standard). During the installation the compound is raked with a leaf rake with soft strokes perpendicular to the laying strips, in order to distribute the hard aggregate as evenly as possible. A screed layer thickness of 10-12 mm is recommended. At the right water content the top surface is flat but has a rough structure from the hard aggregate granules. If the compound is installed with too high a water content, this not only means a lower strength but will result in having to grind away more material to reach the hard aggregate. The concentration of fine material and polymer will also make the material more difficult to grind.

Mixing equipment

Mixing and pumping equipment should preferably be Mtec Duomix 2000 with 40 m hose length, hose diameter 32 mm (or similar approved). The hose shall always be well lubricated before the pumping and shall always use a cleaning ball when the residue compound is flushed out of the hose during cleaning procedure. The fresh compound must not come in direct contact with the cleaning water. The cleaning water can wash out fine material out of the compound and remaining coarse aggregate may form agglomerates that plug the hose.

After treatment

At room temperature of 20°C the grinding of the top surface can be started 24 hours after the compound is pumped into place. At 10°C - 3 days to cure.

Drying time

- Foot traffic 3-5 hours
- Forklift wheeled traffic after 24 hours
- Full traffic after 7 days
- The floor coating/sealer can be installed after 24 hours depending on the layer thickness, drying conditions and product to be used.

Storage and shelf life

Storage time in dry conditions and closed packages is 6 months. For deliveries in bulk the store time is 3 months.

Health and Safety

Hazardous – contains cement, which is alkaline when wet and can cause skin irritation. Use eye protection, gloves and barrier cream and avoid prolonged skin contact. Avoid inhalation of dust. Wash skin contamination away with warm, soapy water. Remove splashes to the eyes by prolonged irrigation and consult a doctor. Do not ingest. Refer to Health and Safety Data Sheet.

Technical Data

Weber has a team of experienced advisors available to provide technical support.

Technical helpline: 0860 27 28 29 or visit www.weber-tylon.co.za