

Floor 4635 Duro Stone

Product description

Floor 46 35 DuroStone is a pump able cementitious screed material from maxit with dark hard aggregate granules added to the compound. After curing the topsurface can be grinded and polished to a high gloss by using HTC diamond grinding equipment. The grinding is performed until 1 - 3 mm dark granules appear to a lighter background. The background colour can be pigmented. The finished surface resembles to grinded and polished natural stone.

Field of application

Floor 4635 DuroStone primarily dedicated to be used in localities with foot traffic as shops, exhibitions halls, light industry etc. The substrate is concrete or similar material. After installation, grinding and impregnation, the material forms a jointfree easily maintained floor, friendly to walk on.

Substrate

The screed is meant to be applied to concrete substrate or similar material. The surface strength shall be at least 1,5 MPa. Be observant on movement joints, cracks in the substrate. For example is there an dilatation joint in the substrate, the same must be arranged for in the screed. Uneven substrates shall always be levelled. The substrate of the screed shall both be flat and even in detail. It is not enough that the substrate is flat, it must be so even in detail that it is possible during the installation to control the thickness with a precision of + - 1 mm

Pre-treatment

For treating and cleaning flat substrates grinding with HTC diamond grinding equipment is recommended. With this equipment the substrate is cleaned and smoothed (levelled). When cleaning uneven substrates alternative methods as scrabbling, vacuum blasting or high pressure cleaning can be used. For levelling and smoothing at smaller levelling requirements Floor 4160 Fine Flow Rapid is recommended. For greater levelling requirements Floor 4600 Duro Base or Floor 4360 Base Flow Rapid is recommended. Weak substrates is compensated by stabilizing the substrate under ste DuroStone. A reinforcement net with steel 5 mm steel rods and 150 mm mesh which is installed on the substrate. The net is covered with 15 - 20 mm levelling compound Floor 4600 Duro Base or Floor 4360 Base Flow Rapid. Priming: A fully covering thin primer film is wanted. The priming is done in two steps.

Step 1: dilution 1 : 10 The primer is spread affluently, the excess primer is scraped away by a rubber scrape or a soft brush.

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

Mixing

The assessment of correct consistency(correct watercontent) must be done before the start of installation. Do always have sufficient containers to dispose failed material. Equip the hose with a static postmixer at the end of the hose. The room temperature shall not lie under 10 and not above 25 degree celsius. Massan is installed in strips in the same way as an ordinary levelling compound. The compound have very little flow (flowrate 190 - 200 mm with the ring 35 x 68 according to maxit standard). During the installation the compound is raked with leafrake

with soft strokes perpendicular to the laying strips in order to distribute the hard aggregate as evenly as possible. The screed layer thickness (10 -12 mm is recommended) is controlled continually during the installation with a folding rule. At the right water content the topsurface is flat but has a rough structure from the hard aggregate granules. If the compound is installed with too a high water content, this not only means a lower strength but one have to grind away more material to reach the hard aggregate. The floor als becomes mor difficult to grind. The concentration of fine material and polymer make the material difficult to grind

Mixing equipment

Mixing and pumping equipment i under consideration. Here is the latest experience recorded. Static post mixer, leafrake, specific pumptruck. The hose shall always be well lubricated before the pumping and shall always use a cleaning ball when the recidue compound is pressed out of the hose at the cleaning procedure after the pumping. 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 20 degree celsius the grinding of the topsurface can be started 24 hours after the installation of compound. At 10 degree one have to calculate with a curing time of 3 days.

Product Specification

Material consumption	1.9 kg/mm and m ² Swedish GBR-method
Waiting time between the working parts	1 - 3 day between application an grinding
Recommended layer thickness	10-12 mm
Compressive strength	
Compressive strength class	C30 EN 13813
28 day	Mean value 35 MPa EN 13892-2
Flexural strength	
Flexural strength class	F7 EN 13813
28 day	Mean value 9 MPa EN 13892-2
Shrinkage	
28 days	< 0.50 mm/m EN 13454-2
Flow rate according to	
maxit standard	190-200 mm maxit Standard method 99:03 (ring 68x35 mm)
Release of corrosive substances	CT

Product Specification

Physical requirements

Reaction to fire	A2fl -s1 EN 13501-1
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