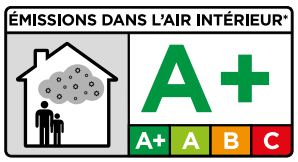
MULTIPLAN-50 FI

Fibre reinforced rapid setting cement based self-levelling compound

- Fibre reinforced, suitable on plywood overlay
- Suitable on underfloor heating
- Fast curing, foot traffic after 2-3 hours*
- Flexible, polymer modified
- Low emission
- Easy to process, can be pump applied
- For layers 3-50 mm thick
- For interior application only
- EN 13813 CT C30 – F7 A1 fl
- CE

NEW FORMULA, MORE FLUID, LONG LASTING



AREAS OF APPLICATION:

MULTIPLAN-50 FI is used for smoothening and levelling in layers of 3-50 mm thick. Suitable substrates are concrete floors in accordance with DIN 1045, heated and unheated cement based screeds and non in accordance with DIN 18560, old, well bonded tile finishes and rapid cement based screeds. MULTIPLAN-50 FI is also suitable for use on plywood overlay, on chipboard and on old wooden floorboards as well.

- On timber floor boards;
- On old substrates with bonded adhesive and levelling compound residues;
- For the restoration and repair of wooden floors and additionally for screeds and substrates in old and new construction;
- For producing flat, absorbent, high strength installation surfaces for textile and elastic floor finishes as well as for ceramic tiles;
- Suitable for use on heated substrates.

TECHNICAL ASSISTANCE

INSURANCE GUARANTEE

TECHNICAL MEETINGS

PROFESSIONAL USE

CONTRACT ITEM SPECIFICATIONS:

The cementitious screed will become homogeneous with the application of a self-levelling cementitious mortar, fibrereinforced and polymer-modified; applicable in thickness from 3 to 50 mm, as MULTIPLAN-50 FI by Benfer.

METHOD OF USE:
SUBSTRATE PREPARATION:
The substrate must be dry, load bearing, sound, have a good key and be free from substances which act as a separating layer. Separating and laitance layers and similar are to be mechanically removed by suitable means e,g, blasting or scabbling. With cement-based bonded or floating screeds the readiness to receive an application of MULTIPLAN-50 FI is to be tested with a carbide hygrometer (see advice section), in order to exclude possible further deformation of the screed slab due to shrinkage processes. The temperature of the air, material and substrate may not drop below +5°C during application and the week after.
Clean and abrade well bonded ceramic tiles, prime with epoxy primer blinded with 0.5–1.0 mm quartz sand. Remove excess by vacuum once cured. Wooden substrates must be clean, dry and load-bearing. Replace damaged floor boards. Secure loose, springy or squeaking boards or sheets with screws. Chipboard must be laid with staggered joints, screwed and glued.
Follow the product information for the application of products to be used.
The readiness of substrates to receive MULTIPLAN-50 FI is to be tested by the carbide method. The carbide hygrometer (CM device) may not exceed for:
Cement-based screeds 2.0 CM%
Calcium sulfate screeds without underfloor heating 0.5 CM%
Calcium sulfate screeds with underfloor heating 0.3 CM%.

PRODUCT PREPARATION:

Prime substrates with STARPRIM and allow to dry.
Place 4.4 - 4.8 litres of clean water into a clean bucket and sprinkle in 20 kg MULTIPLAN-50 FI and mix to a homogenous fluid consistency. Occasionally scrape a trowel around the edges of the mixing vessel to feed unmixed material stuck to the sides back into the mix. Subsequently stir through once again. It is recommended that a mixer with an approx. speed of 500-700 rpm is used.

PRODUCT APPLICATION:

Pour MULTIPLAN-50 FI on to the primed substrate and evenly spread with a suitable tool within the pot life (surface rake, toothed rake, long handled rake). It has been shown to be advantageous that by setting level points, the desired depth can be controlled whilst in the wet state. The required thickness should be applied in one operation. De-aerate the liquid layer with a spiked roller (or other suitable tool) and encourage to flow. The surface finish and level is much improved.
Protect the setting MULTIPLAN-50 FI from too rapid water loss e.g. from high room temperatures, direct sunlight and draughts. The interior and floor temperature must be a minimum of +5°C during application and for a week afterwards.

ADVICE:

- Before installing finishes, the levelling compound must be fully dry. We recommend that moisture measurements are carried out with a carbide hygrometer.
- Ventilation on site is necessary. However avoid draughts during the application and curing process as well as direct sunlight. The floor and interior temperature must be at least +5°C during application and for the week after. Dehumidifiers may only be used after the first 3 days.
- The subfloor construction of wooden floors must be permanently dry in order to prevent moisture damage from decay or mould formation.
- There is a risk of cracking through rapid water loss in heated rooms or highly absorbent substrates.
- Essential to the success of floor levelling is the condition of the substrate. Absorbent substrates negatively alter the flow performance of the compound. Therefore thoroughly prepare the substrate, clean and prime.
- Completely remove sulphite lye adhesives
- As far as possible, mechanically remove small quantities of dispersion-based flooring adhesives, clean and prime with epoxy primer blinding to excess with 0.5 – 1.0 mm quartz sand. Remove excess by vacuum once cured.
- Watch the water addition. Adding too much water produces separation together with a weak surface. This causes increased cracking and hollow areas. Such weak surfaces are to be mechanically removed.
- Perimeter, bay, structural and intermediate movement joints are to be brought through or incorporated as designed and blocked off with a suitable material.
- Substrates with a coarse texture lead to greater material consumption.
- High temperatures accelerate and low temperatures retard the setting process.
- Observe the relevant current regulations. E.g. DIN 18157 DIN 18365 DIN 18352 DIN 18560 DIN EN 13813 DIN 1055
- Use only clean tools and clean water.

CLEANING: The cleaning of tools has to be done with water before the product starts gripping.
CONSUMPTION: 1,65 kg/m²/mm thickness.
PACKAGING: MULTIPLAN-50 FI is available in 20 kg poly-lined bags.
STORAGE: In the original closed package in a cool dry place.
SHELF LIFE: 12 months.

PRODUCT TECHNICAL DATA	
Classification EN 13813:	CT C30 – F7 A1 fl
Basis:	Premixed in powder
Colour:	Grey
Storage and Duration :	12 months in the original closed package in a cool dry place
Danger of harm:	Possible irritation of the eyes and skin upon contact
Flammability:	No
Apparent mass volume:	1.300 kg/m^3
Mixture ratio:	4,4 – 4,8 liters of water for 20 kg bag
Mixing time:	3-5 min
Mixture consistency:	Fluid mortar
Mass volume of paste:	1800 kg/m³
Application temperature:	From + 5° C to + 35° C
Pot life:	30 minutes
Thickness of relative humidity:	From 3 mm to 50 mm
Maximum grain size of relative humidity:	0,5 mm
Foot traffic:	After approx. 2-3 hour*
Ceramic tiles laying (subject to residual humidity check < 4%):	All thickness: After 24 hours
Marble and stable natural stone laying (subject to residual humidity check < 3%):	Thickness < 6 mm: After 24 hours Thickness > 6 mm: After 48 hours
Wood and resilient laying (subject to residual humidity check < 2%):	Thickness < 6 mm: After 24 hours Thickness > 6 mm: After 72 hours
Final hardening:	7 days

Final performance:	
Compression strength after 24 hours, 7 days, 28 days:	14 N/mm², 28 N/mm², 30 N/mm²
flexural strength after 24 hours, 7 days, 28 days:	3 N/mm², 7 N/mm², 7 N/mm²
Temperature resistance:	From -30°C to +90°C

* Data references taken on floating screeds with thickness ≤ 5 cm at 23°C and 50% relative humidity

PLEASE NOTE: The information given in this chart is based on our best experience and indicative only. It must in any event be verified by the end user, who assumes all liabilities deriving from utilization of the product.