

Floor 4320 Fibre Flow Rapid

1, 10/01/2007

To replace ABS 317

Product description

Floor 4320 FibreFlow Rapid is a self-levelling, fast setting, rapid drying floor screed formulated from special cements, aggregate, supplementary binders and chemical admixtures. It is fibre reinforced and designed specially for high speed renovation of existing floors. It is supplied as a pre-blended dry powder designed for application as a bonded screed at thickness between 4-50mm when pump applied. For special applications further information is available from the Technical Department of maxit UK.

Field of application

Floor 4320 is designed for the refurbishment of a wide range of existing floor surfaces where speed of application and drying is essential. It will give a finished surface ready for final covering and is suitable for use in commercial and retail operations, hospital, food preparation and storage areas as a bonded, unbonded or floating floor. Floor 4320 is casein and protein free and resistant to alkaline moisture.

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 should exceed +10C during and after application and for one week after that. The relative humidity of the ambient air must not exceed 70% to allow efficient drying of the primer. Insufficient drying time or poor film formation due to low temperature and/or high humidity may result in pinholes in the levelling layer.

Substrate

The substrate should be clean, free from grease, weak surface layers and dust. Floor 4320 is designed primarily for use on concrete substrates; wood and chipboard flooring, gypsum board, stone/ceramics, light weight concrete and homogenous PVC floors. The substrate should have a surface tensile strength of at least 1N/mm² (pull off strength)

Preparation and Priming

The substrate should be mechanically prepared to remove impurities that might prevent adhesion. Holes and leaks in the substrate should be sealed. The surface adhesion of the substrate should be >0.5 MPa. Floor drains etc. should be protected with lids and separated with stop ends. The surface should be vacuumed cleaned and primed with Floor 4716 Primer according to the instructions on the data sheet. After application and whilst the primer is still fresh, it should be lightly brushed to ensure a complete uniform film has been applied. The



function of the primer is to improve adhesion to the substrate, to prevent air bubbles and to prevent de-watering of the floor compound before hardening.

Mixing

Floor 4320 can be applied using a mixer pump approved by maxit. The material is mixed with 18-19% water, which corresponds to 4.5-4.75 litres per 25Kg bag. Do not use excessive water. While mixing, the water content should be checked continuously by the flow ring test. Ensure that the material is correctly mixed and free from separation. It is important to add the stipulated amount of water as excess water will reduce strength, increase shrinkage and encourage segregation. Conversely reduced water content increases viscosity. The temperature of the mix should ideally be between +15°C and +20°C

Application

The maximum width of the pumpable area varies from 6-8m, depending upon pump capacity and application thickness. Wider areas can be temporarily divided with stop ends. Pumping is carried out in sections so as to maintain a wet edge. A wide steel trowel is used to assist the self levelling process. When Floor 4945 glass fibre mesh is used, the minimum layer thickness is 10mm

Overlay

Floor 4320 must be covered with a floor finish such as ceramic tiles, carpet, vinyl sheet and tiles, linoleum, ceramic tile, wood blocks or cork.

Practical advice

The finished floor must not be painted or used without a floor finish.

Package

- 25 Kg bags on plastic wrapped pallet
- Big bags

Drying time

The screed can receive foot traffic after a drying time of 2-4 hours at an ambient temperature of +20C; the floor covering can be installed after 3 days depending on the layer thickness and drying conditions. High humidity of the substrate and poor drying conditions prolong the setting time. For moisture sensitive coverings, e.g. wooden floors, the manufacturer's instructions should be followed.

Environmental advice

- Low alkalinity
- Recyclable raw materials
- Low emissions
- Casein free
- Low natural emissions

Safety instruction

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.

Certificate ISO 9001	Certificate ISO 9001
Maximum thickness	50 mm (20 mm lightweight concrete)
Minimum thickness	4 mm (6 mm lightweight concrete), 10mm (unbonded), 25mm (floating)
Water demand	4.5-4.75 litres per 25 kg bag(18-19%)
Compressive strength class	C30
Compressive strength (28 day)	Mean value 33 N/mm ²
Flexural strength class	F7
Flexural strength (28 day)	Mean value 8 N/mm ²
Shrinkage (28 days)	<0.05 %
Flow rate according to (maxit standard)	220-235 mm

Flow rate according to (Flow ring 50 x 22 mm) 135-145 mm

Hardening time (before foot traffic) 2-4 hours

Transverse tensile strength >1,5 N/mm²

Physical requirements (Reaction to fire) A2fl-s1

Chemical requirements (of cured material) pH 10,5-11,0

Pot life 15-20 minutes (after adding water)

Wear resistance (RWA Class) RWFC 250 (thickness 4-50 mm)

Material consumption,
 1mm = 1.75Kg
 5mm = 8.75Kg
 10mm = 17.50kg

nbsPlus Stamp

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