

# Floor 4655 Duro Flow Rapid

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## To replace ABS 500

### Product description

Floor 4655 Duro Flow Rapid is a cement based pumpable self-levelling screed for use as a surface layer on industrial flooring applications. It is supplied as a pre-blended, dry powder for application of a thickness of between 4-15 mm.

### Field of application

Floor 4655 Duro Flow Rapid is designed as a rapid drying, levelling layer which is also suitable for the application of epoxy and polyurethane coatings in industrial applications on both new and old concrete for new and refurbishment projects. It can be used to level and smooth a wide range of substrates, including in-situ and pre-cast concrete.

### 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 +10C during and after application and for 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

### Substrate

Floor 4655 Duro Flow Rapid is designed primarily for use on concrete substrates. If the substrate is suitably dry, the resin finish can be laid after 24 hours (for a 10 mm layer in good drying conditions). The substrate should have a surface tensile strength of at least 1.5 N/mm<sup>2</sup>.

### Preparation and Priming

The surface to be treated must be hard, sound and free from surface contamination. Laitance, old coatings and contaminants should be removed mechanically, by enclosed shot blasting as scarification. All dust and debris should be vacuumed from the surface. Shrinkage in newly cast concrete should have stopped, as reflective cracking could otherwise occur. Floor 4716 Primer should be applied to the prepared surface using a soft brush or a primer pump, avoiding ponding, and allowed to become touch dry (3 - 4 hours under good conditions or overnight dependent upon conditions). 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 sub-floor, to prevent air bubbles and to prevent de-watering of the floor compound before hardening. For more details see separate data sheet for Floor 4716 Primer.



### Mixing

Floor 4655 should be applied using a mixer pump approved by maxit. The material is mixed with 21% water, which corresponds to approx. 5.25 litres per 25 kg bag. Do not use excessive water, because the strength of the underlayment will be reduced. Ensure that the material is correctly mixed and free from separation. The temperature of the mix should ideally be between +15°C and +20°C. When the screed is pumped, the coverage area should not be wider than 6 - 8 metres. If the total area is wider, stop-ends must be used. For hand application, mix the material thoroughly for 1 - 2 minutes using a powerful mixer tool.

### Application

The maximum width of the pumpable area varies from 6-8 metres depending on the pump capacity and application thickness. Wider areas can be temporarily divided with stop-ends. Pumping is carried out in sections so that a new section is pumped as quickly as possible in order to maintain a wet edge. A wide spatula or spiked roller should be used to assist the self levelling process.

### Storage

Storage time in dry conditions and closed packages is 6 months. For deliveries in bulk the store time is 3 months; longer times may have an impact on the levelling properties.

### Package

- 25 Kg bags on plastic wrapped pallet
- Big bags

### Drying time

The screed can receive foot traffic after a drying time of 1-2 hours at an ambient temperature of +20C; The floor covering can be installed after 24 hours depending on the layer thickness and drying conditions. High humidity of the substrate and poor drying conditions prolong the setting time.

## 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** 15 mm

**Minimum thickness** 4 mm

**Recommended layer thickness** 6 - 8 mm

**Water demand** 5.25 litres per 25 kg (21 %)

**Compressive strength class** C25

**Compressive strength (28 day)** Mean value 32 N/mm<sup>2</sup>

**Flexural strength class** F7

**Flexural strength (28 day)** Mean value 9 N/mm<sup>2</sup>

**Shrinkage (28 days)** < 0.1 %

**Flow rate according to (maxit standard)** 240-255 mm

**Flow rate according to (Flow ring 50 x 22 mm)** 155-165 mm

**Hardening time (before foot traffic)** 1- 2 hours

**Transverse tensile strength** >1.0 MPa after 28 days

**Physical requirements (Reaction to fire)** A2fl -s1

**Density (Loose bulk density)** 1600 kg/m<sup>3</sup>

**Chemical requirements (of cured material)** approx. 11

**Pot life** 15-20 minutes (after adding water)

**Material consumption,**  
1mm = 1.6Kg  
5mm = 8.0Kg  
10mm = 16.0kg

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