

# Floor 4610 DuroTop

1, 10/01/2007

## To replace ABS 410

### Product description

Floor 4610 Duro Top is a pumpable, rapid hardening, self-levelling screed intended for use as a surface layer on industrial flooring. The material is especially suitable where renovation time is limited, DuroTop is ready for normal traffic loading without further finishing; but may be coated with a suitable resin should this be required.

### Field of application

Floor 4610 Duro Top is designed for use in industrial environments on both new floors and renovation projects. It is used for levelling and smoothing of floors subject to heavy traffic and abrasion, such as factories, production areas and warehouses. Floor 4610 is used as a wearing surface applied directly to the substrate or on top of Floor 4600 and Floor 4602

### 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 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 4610 is designed primarily for use on concrete substrates. Surface tensile strength of the substrate should be a minimum 1.5 N/mm<sup>2</sup>. Any shrinking in newly cast concrete should have ceased otherwise reflective cracking may occur. Weaker or uneven substrates should be smoothed using Floor 4610 Duro Base, or Floor 4602 Duro Base Extra. Weak (less than 1.0N/mm<sup>2</sup>) or softer substrates, such as asphalt flooring must be removed. During application the temperature of the substrate should be above +10°C.

### Preparation and Priming

The substrate should be clean, free from dust, grease or other impurities that might prevent adhesion. Holes and leaks in the substrate should be sealed. Floor drains etc. should be protected with lids and separated with stop ends. Large irregularities (>30 mm) should be filled in. The infill should be left to harden before the next application. The substrate should be mechanically prepared, vacuum 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 4610 should be applied using a mixer pump approved by maxit. The material is mixed with 21% water, which corresponds to 5.25 litres per 25Kg bag. Do not use excessive water. While mixing, the water content should be checked continuously by the flow ring test. Also 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 +15C and +20C.

### 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.

### 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; will receive Forklift wheeled traffic after 24 hours and full traffic after 7 days. 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.

<b>Application temperature</b>	+10 to +30 °C
<b>Maximum thickness</b>	15 mm
<b>Minimum thickness</b>	4 mm
<b>Recommended layer thickness</b>	6-8 mm
<b>Water demand</b>	5.25 litres per 25 kg bag (21 %)
<b>Compressive strength class</b>	C35
<b>Compressive strength (28 day)</b>	Mean value 40 N/mm <sup>2</sup>
<b>Flexural strength class</b>	F10
<b>Flexural strength (28 day)</b>	Mean value 12 N/mm <sup>2</sup>
<b>Shrinkage (28 days)</b>	< 0.07 %
<b>Flow rate according to (maxit standard)</b>	230-250 mm
<b>Flow rate according to (Flow ring 50 x 22 mm)</b>	155-160 mm
<b>Hardening time (before foot traffic)</b>	2-4 hours

<b>Hardening time (before light traffic)</b>	24 hours
<b>Hardening time (before common traffic)</b>	Approx. 1 week
<b>Transverse tensile strength</b>	> 3.0 N/mm <sup>2</sup> after 28 days
<b>Physical requirements (Reaction to fire)</b>	A2fl -s1
<b>Density (Loose bulk density)</b>	1700 kg/m <sup>3</sup>
<b>Chemical requirements (pH)</b>	approx. 11
<b>Pot life</b>	15-20 minutes (after adding water)
<b>Wear resistance (Steel-wheel, Class)</b>	Strength properties after storage in regulated conditions +23°C and 50% RH with 21% admixed water. Wear resistance-BCA class AR 0,5.
<b>Wear resistance (RW (defined) class)</b>	RWA 100
<b>Durability (against freeze-thaw)</b>	Floor 4610 DuroTop has similar chemical resistance to sealed concrete. Floors which are subject to constant loading in the form of common chemicals, oils, cutting or cleaning fluids etc, require surface protection. Examples of industries where this is necessary are the food industry, abattoirs, dairies, fish processing and similar.
<b>Material consumption,</b>	1mm = 1.7Kg 5mm = 8.5Kg 10mm = 17.0kg

nbsPlus Stamp