

FOX MULTIDECK SYSTEM

FOX PROCRETE® 8240 MF Medium Traffic FLOOR COATING SYSTEM TECHNICAL SPECIFICATIONS

Polyurethane Based 4.0-4.5 mm High Performance Industrial Flooring System

1. Surface Quality

Concrete Criteria

Before the concrete is poured, the soil or filled soil should be compacted with compactors until it reaches sufficient compaction values, and the necessary drainage systems should be placed. Since the water coming from the floor will cause the coating to lift and swell, a polyethylene cover, etc., which will act as a water and moisture barrier between the compacted floor and the concrete to be poured. covers should be laid. In order to reduce the consistency of the concrete to be used, no additional water should be added on the field. Excess water in the concrete can evaporate and cause shrinkage cracks. Concrete leveling should be done using vibratory screed and helicopter finishing. Dilatations and control joints in field concrete must be designed in accordance with the structural design of the building. Cracks and collapses may occur over time on floors without control joints. After a minimum of 24 hours following the concrete casting, the control joints are cut to be at least 1/3 of the concrete pavement height.

2. Watch Points

Concrete surfaces to be covered must be at least 28 days old. Concrete compressive strength should be at least **25 N/mm²** (C20 class) and breaking strength should be at least 1.5 N/mm². The amount of water and moisture in 2 cm concrete depth should be below 4%. Test method: C-Aquameter, CM-Device, Darr Method.

Also, there should be no rising moisture from all concrete floor coverings, old or new. Ground water rises and is carried to the surface due to the capillary property of the concrete. This situation causes the coatings made on the floor to separate from the floor and rise and swell. This effect is detected with a simple polyethylene cover test. A transparent polyethylene (nylon) cover is adhered to the concrete surface with polyurethane mastic in such a way that it does not pass moisture from its edges. Moisture from the ground accumulates under the polyethylene cover and appears as droplets, under these conditions, floor covering should not be done. If moisture is not observed when the cover is checked 24 hours after it is adhered, it is appropriate to apply the coating.

The roof, walls, doors and windows of the building must be made, and the ambient and surface temperature must be minimum +10°C and maximum +30°C. In order to increase the applicability of the products in cold weather, the packages should be kept at +20/+25°C and made ready for use. Rain, dust, wind, animals and insects should be prevented from entering the building when the coating is fresh. Consumptions are given for conditions where ambient and surface temperature is assumed to be 20°C. Actual consumption may vary depending on the surface structure. It should not be forgotten that consumption will increase on uneven surfaces. Solvent, thinner, etc., which will be contrary to the usage instructions during the application. thinners should not be added to the products. Pot life and curing times in resin-based systems are affected by ambient temperature, floor temperature and humidity in the air. Curing slows down at low temperatures, which extends pot life, cover time and working time. Curing is accelerated at high temperatures, which shortens pot life, cover time and working time. In order for the entire product to complete its curing, the ambient and ground temperature must not be lowered below the minimum temperature levels given. After the application is completed, the coating should be protected from direct water contact for at least 24 hours. If there is water contact, there will be softening and swelling on the coating, which will cause the coating to lose its properties. If such a situation is encountered, the coating should be completely removed and redone.

3. APPLICATION PROCEDURE

3.1. Surface Preparation:

Concrete substrates on which the floor covering will be made should be prepared using abrasive equipment (shot blasting, milling, diamond grinding) to remove the cement slurry and obtain an open porous surface. Weak concrete pieces should be removed from the surface, small gaps and holes should be made completely open. The resulting dust should be cleaned with the help of industrial vacuum cleaner. The gaps, cracks and broken concrete on the sub-surface should be filled and surface smoothness should be ensured. For surface repairs, filling gaps and smoothing the surface, 60-70 AFS (0.1-0.3 mm) quartz sand should be mixed with **FOX PROCRETE® PRIMER** depending on the condition of the area to be repaired. **FOX PROCRETE® MF** can tensile/stretch within itself due to its general structure. To prevent this, 8-10 mm thick joints should be opened on the column edges and on the floor (at least every 4-5 meters for the floor) and the joint gaps should be cleaned with the help of an industrial vacuum cleaner. These gaps should be filled with **FOX PROCRETE® MF** after the application of **FOX PROCRETE® PRIMER**.



Primer Application

Product Description

FOX PROCRETE® PRIMER, It is a solvent-free, three-component primer specially designed for industrial floors, obtained as a result of modification of polyurethane-based resins with special additives and chemicals.

Technical Data

Density		1,15 g/cm ³
Color		Whitish
Shear Strength by breaking the concrete		>3,60 N/mm ²
Application Surface Temperature		+8°C / +30°C
Workability Time		30 minutes
Coating Time		Min.24 – Max.72
Final Drying Time		24 hours
Application Surface Temperature		+10°C / +30°C

The above values are given at +23°C and 50% relative humidity. High temperatures shorten the time, low temperatures lengthen the time.

Application

FOX PROCRETE® PRIMER three components, it is important to obtain a homogeneous mixture. For this reason, mixing with the **COLLOMIX CX 22** mixer is highly recommended. A component **FOX PROCRETE® PRIMER** is put into a polyethylene mixing bucket. After adding the B component product to the A component product completely, mix for 1 minute until a homogeneous mixture is obtained. After adding the C component product to the A+B component mixture completely, mix for 3 minutes until a homogeneous mixture is obtained. Avoid over-mixing to minimize air entrainment.

Prepared **FOX PROCRETE® PRIMER** is applied to the surface with a consumption of 300-500 gr/m² with a roller, trowel or zero-tipped trowel. Make sure that the application is made on the entire surface without gaps.

Technical Data :

Density		1,72 g/cm ³
Color		Red, Yellow, Blue, Orange, Green, Grey, Cream
Compression Strength	28 days	55 N/mm ²
Flexural Strength	Concrete	> 3,60 N/mm ²
Tensile Strength		10 N/mm ²
Flexural Strength		22 N/mm ²
Application Thickness		3-6 mm
Temperature Resistance 6mm		-25°C / +80°C
Application Floor Temperature		+8°C / +30°C
Workability Time		25 minutes
Light Traffic		24 hours
Full Cure Time		48 hours

The above values are given at +23°C and 50% relative humidity. High temperatures shorten the time, low temperatures lengthen the time.

Application

FOX PROCRETE® MF 3 components, it is important to obtain a homogeneous mixture and to avoid air bubbles and surface defects after the application. For this reason, mixing with the **COLLOMIX XM 2** mixer is highly recommended. After the A and B components are completely added to the **FOX PROCRETE® MF** Collomix XM 2 mixer, the C component powder is added onto the A+B component. It is mixed for a maximum of 3 minutes until a homogeneous mixture is obtained.

Prepared **FOX PROCRETE® MF** is poured onto the surface with a consumption of **7.0-7.5 kg/m²** and is applied smoothly with a notched trowel. When the coating reaches the appropriate consistency, a spiked roller should be applied and its air should be removed. Hedgehog roller traces may remain on the surface in case of being late for the spiked roller application.

Lining and consumption in the systems are given as a foresight. According to the ground condition and ambient conditions; lining and consumables may vary.

