

Manual of use and maintenance

concrete floors with MFC Cobet 100 surface treatment.

INTRODUCTION

This manual states the manner of use, maintenance and repairs of concrete floors with MFC Cobet 100 surface treatment.

DESCRIPTION OF THE SURFACE

Concrete floors with the MFC Cobet 100 surface treatment are monolithic constructions for which the surface treatment is performed immediately after the placement of the concrete mixture and is a firm part of the construction of the floor. The surface of the floors is smooth, without dust with decreased absorption and a high resistance to abrasion.

MECHANICAL RESISTANCE

In the first 3-4 weeks from the production of the floor it is necessary to protect the surface against excessive stress and mechanical damage, e.g. by covering the area with textiles, etc. During the following use the surface of the floor can be damaged mainly by shocks and by heavy and sharp items (working tools, tubes, steel boxes, etc.). The shifting of heavy loads with sharp edges may cause damage to the surface.

CHEMICAL RESISTANCE

The surface of the floor has a decreased absorption capacity compared with standard concrete. However, chemical resistance is practically the same as for common concrete. It is necessary to prevent long-term affecting of chemical substances (acid, as well as alkali) with a concentration higher than 5%. Otherwise, there can be a change to the colouring of the surface or its breaking.

FIRE RESISTANCE

The surface of the floor is fireproof, it resists for a short period to temperatures up to 100 °C. It is not permitted to weld on the floor; in the case of performing this work it is necessary to prevent the falling of iron scales on the floor. Otherwise, there can be change in the colouring of the surface or its breaking.

APPLICATION OF FURTHER LAYERS

In the case that the surface of the floor does not suit the respective purposes of use, it is possible to add a further layer, e.g. suitable impregnation, coat or levelling layer (e.g. MFC Ekopox 630, 640 or 650). We recommend performing an adherence test of these newly applied layers with the base. Particularly the remainders of sealing sprays which are applied on the surface due to proportional maturing of the concrete can negatively influence the adhesive capacity. In this case it is necessary to clean the surface by means of high-pressure cleaners, blasting, grinding, milling.

MAINTENANCE AND CLEANING

For regular cleaning of floors it is necessary to select a suitable method and manner of cleaning, including the first treatment. Cleaning detergents must not break the natural environment of the concrete (recommended pH of cleaning

detergents 12 – 13.5), must not contain organic solvents, dye and acids with a high concentration. The washing machine must be equipped with soft mops and active suction. Before the commencement of work it is necessary to remove any course dirt by sweeping, suction, scraping, etc. Spots from tyres and rubber can be removed by means of fine brush and a de-greasing agent. The removing of the other dirt, including grease, oils and earth is performed by means of a de-greasing agent with subsequent flushing by water.

According to the type of stressing, intensity of operation and the manner of cleaning of the floor, it is recommended to renew the primary treatment of the surface in regular intervals.

REPAIR OF DAMAGED SURFACE

Despite the fact that floors with surface treatment by MFC Cobet 100 report high resistance, there can be damage by the influence of extreme stressing. It is not possible to perform repairs with the same technology as in the case of its production and repaired areas are always visible on the surface.

1. Chipping-off the part of the surface

A frequent cause of damage to the surface is cutting-off the surface layer with part of the foundation concrete due to the falling of heavy items on the floor. With the following operation and cleaning there is in these areas the creation of dust and other breaking of the surface and foundation concrete. We recommend to cut the damaged areas into a regular shape, cut them to a depth of 4 mm and fill with self-levelling MFC Final 410 industrial penetration or MFC Ekopox 670 epoxy binder filled with MFC siliceous sand in the ratio of 3:1 (sand: binder).

2. Cracks in the floor

In the case of industrial floors which are the subject of wearing by heavy trucks with wheels, it is necessary to repair all cracks wider than 0.2 mm to prevent the origination of the abrasion of the edges of these cracks. The manner of repair is selected with respect to their width:

cracks 0.2 - 2 mm – filling by MFC Ekopox 670 epoxy binder will be performed (with the possibility of adding a thickening agent).

cracks 2 mm width – casting by MFC Ekopox 670 epoxy binder filled with MFC siliceous sand in the ratio of 3:1 (sand: binder) or casting by a self-levelling coat for levelling of the roughness by MFC Level 300.



Manual of use and maintenance

concrete floors with MFC Cobet 100 surface treatment.

NOTIFICATION!

All information contained in this application manual is based on long-term experience acquired during the production and application of these materials. It is always necessary to consider the suitability of the product for planned use. Due to the different conditions during the implementation, it is necessary to select a suitable composition and technological procedure.

MFC - MORFICO s.r.o. is not liable for defects or any damages originated due to incorrect use or processing of the product.

MFC - MORFICO s.r.o.

Olbrachtova 1758 666 03 Tišnov Tel.: +420 549 410 141 Fax: +420 549 410 089 e-mail: morfico@morfico.cz www.morfico.cz

> Issued on: 8/2007 Number of version: 02

