

Bodenberg 500 - Resin-based mortar floor

Description

Here the mortar floor can protect the substrate, meet the application requirements and have the aesthetic function. The work ability is good to form homogeneous, smooth and thin surface layer with strong adhesion, less deformation and non-cracking.

Components

It is made of synthetic resin binder, fine aggregate and admixture with defined mixing ratio. The synthetic resin binders can be epoxy resin or vinyl ester resin.

Requirements for the concrete substrate

The substrate must be solid and compact; the strength must be tested and meet the design requirements, with minimum compressive strength 30 MPa. Both penetration of under-water and uneven sedimentation is forbidden. There should be no exposed sand, de-bonding, cracking and voids and pits. The surface should be flat, with less than 3mm height difference in 2 m . The substrate must be dry and free of dust and contaminants such as oil and grease. The substrate should have minimum peel strength of 1.5 MPa. The residue moisture content must not exceed 6%. The slope of the substrate must be tested and meet the design requirements, and the possible deviation not more than 0.2% of the slope length, or maximum 30mm in value.

Substrate treatment

The substrate must be clean. It can be cleaned with brushes, compressed air or industrial vacuum cleaner. Surface contaminated by oil, grease and chemicals must be treated. If the surface is scratched with cement screed, the surface must be pressed and smoothed, and rough treated later. The curing scratching layer should not include any defects like cracking, exposed sand, de-bonding, voids and pits.

Installation of resin mortar floor

1. If there is no sealing layer on the substrate, the treated substrate should be coated with primer; after curing of the primer, the substrate should be repaired with resin mortar to form flat surface. Then primed again and splashed with fine aggregate in size of 0.7-1.2 mm. After curing can the resin mortar floor installation start.
2. If there is sealing layer on the substrate, the installation of resin mortar floor can be executed directly above.
3. Before spreading of the resin mortar, resin primer should be coated on the working surface. The spreaded thickness should be controlled. The spreaded resin mortar should be pressed and floated immediately.
4. There should be no installation cracks for the integral floor of the resin mortar. If an installation crack is a must, it should be an oblique. During the following installation, the oblique should be treated clean, then comes the resin primer coating and resin mortar spreading.
5. If top resin is requested, the top coating or thin mortar should be installed homogeneously.

Field of application

Places where chemicals appear, such as chemical industry, metallurgy industry.

Design for corrosion protection

Check list for corrosion protection is very important. The chemical stress, thermal stress, mechanical stress and other stresses are the preconditions for the correct recommendation. Following the operating conditions by the customers can guarantee the long-term service.

Cases



1. Warehouse floor for chemicals



2. Chemistry laboratory floor

Reference

Standard of China GB 50212 -2002 <<Norm of application and inspection for anticorrosion construction>>

Zhang Yamei, Sun Daosheng, Qin Honggen. <<Materials for civil engineering>>, 4th edition. Southeast Press, Nanjing China, 2013.