HIGH BUILD EPOXY SCREED

INFORMATION ON USAGE

Name
HIGH BUILD EPOXY SCREED

Description
High build, continuous coating for floors. Waterproof, spreadable consistency, solvent free. High mechanical strength and extremely resistant to wear from heavy, concentrated traffic, dragging and impact

Principal application
Indoors
- *food and beverage industries*
- *textile and paper mills*
- *chemical and pharmaceutical industries*
- *electrical and electronic engineering*
- *mechanical engineering and industrial warehouses*

Suitability of the substrate (concrete)
Residual moisture content: ‹ *5%*
Compressive strength: › *220 kg/cm²*
Surface resistance to tearing: › *1.5 MPa*

Total thickness of coating
Between 6 mm and 8 mm

CHARACTERISTICS

Application components

Primer:	*Epoxy Bond*
Wear Layer:	*Epoxy Bond mortar*
Grouting:	*Epoxy Bond or Epoxy Paint HT*
Finish:	*Epoxy Paint HT*

(See product technical information sheet)

SUBSTRATE PREPARATION

Specific tools and preparation techniques are applied according to the underlying substrate (new or old) and its physical format (concrete, stoneware, klinker, etc.)

Proper analysis of the substrate is essential to selecting the right preparation method from among those available

- *Non destructive preparation of the surfaces using a special triple-head sander with silicon-carbide tools or a sanding machine. This involves removing any loose parts of the surface and, where possible, eliminating surface roughness, thus preparing the substrate for subsequent coating*

- *Dry blasting of the surface with metal shot of various dimensions, by means of dust trap systems, to decontaminate the substrate and make it ready for subsequent treatment. This treatment also directly removes all those parts of the substrate that are poorly adhering and/or loose*

- *Scarification using mechanical equipment with widia tools to remove those parts of the concrete that are poorly adhering and/or loose or to abrade ceramic enamel*

After completing the last two preparation operations and before the finishing application, general skimming is required to render the surfaces uniform and increase their mechanical resistance.
Depending on the thickness of the substrate removed and/or abraded, proceed with:

Intermediate layer (approximately 24 hours after the substrate has stabilised)

- Preparation of an intermediate layer (approx. thickness. 1 mm) by applying Epoxy Fondo mortar, obtained by mixing Epoxy Fondo with graded quartz extender Quarzo 06 in a ratio of 1 : 0.7 (Epoxy Fondo 1 kg : Quarzo 06 0.7 kg). While applying the product, remove all air with a bubble-buster roller.
Recommended use: 1.6 - 1.8 kg/m²/mm of thickness

- Prepare the intermediate layer (minimum thickness 1 mm; maximum thickness 10 mm), in a single step, by applying the fast-setting, self-levelling mortar Towlevel (TOWER), obtained by mixing 24-25% water at a rate of 6-6.25 l of water for every 25 Kg of Towlevel (TOWER). Once the mortar has been mixed with a slow speed electric mixer, apply it using a metal trowel or blade.
Recommended use: 1.6 kg/m²/mm of thickness

(See product technical information sheet)

APPLICATION

Stabiliser / Primer

- *Apply the epoxy primer, Epoxy Fondo, with a roller; the quantity must be adequate to the function*
  Recommended use: from 150 to 250 g/m² depending on the absorption capacity of the substrate on which it is applied

Primer (approximately 24 hours after stabiliser / primer)

- *Application of Epoxy Bond as bonding bridge*
  Recommended use: 350 g/m²

Grouting (while *Epoxy Bond* is still wet)

- *Prepare the resin / aggregate mixture in a ratio of 1:10 (Epoxy Bond 190 g/mm/m² : Quarzo 04 1900 g/mm/m²)*
- *Apply the previously mixed Epoxy Bond mortar, using metal rules as reference for the thickness to be achieved and as support for the levelling bar.*
  The product is applied by screeding and then smoothed with trowels or a special vibrating compactor (helicopter). With this method of application, once the surface has dried, it will be uniform and compact
  Recommended use: 2 Kg/ m²/mm of thickness.

Since the resulting flooring is porous, it can be dabbed and waterproofed with trowel application of adequately extended Epoxy Bond or Epoxy Paint HT at a rate of 500 g/m²

Finish (approximately 24 hours after grouting)

- *Roller application of Epoxy Paint HT at a rate of approximately 250 g/m²*

EPOXY BOND MORTAR: PHYSICAL / MECHANICAL PROPERTIES

Specific gravity

2.1 ± 0.05 kg/l (aggregates included)

Curing time at +23°C

- *Walkability:* *24 hours*
- *Full curing time:* *7 days*

Mechanical properties after 7 days at +23°C

- *Compressive strength:* *› 90 MPa*
- *Bending strength:* *› 29 MPa*
- *Dry concrete adhesion:* *› 2.5 MPa*

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