

# THICK FILM EPOXY APPLICATION



# **INFORMATION ON USAGE**

#### Name

THICK FILM EPOXY APPLICATION

## **Description**

Modified epoxy resin based floor coating. Pigmented, waterproof, dustproof, antiskid, solvent free. High wear resistance and high surface strength, applicable to concrete substrates intended to withstand particularly heavy traffic of medium-heavy wheeled vehicles

# Principal application

#### **Indoors**

- food industries
- chemical and pharmaceutical industries
- mechanical engineering
- electrical and electronic engineering
- garages and covered car parks
- industrial warehouses

# Suitability of the substrate (concrete)

Residual moisture content: < 5%
Compressive strength: > 22 MPa
Surface resistance to tearing: > 1.5 MPa

# **CHARACTERISTICS**

#### **Application components**

Stabiliser / Primer: Epoxy Fondo Wear Layer: 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

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 o6 in a ratio of 1: 0.7 (Epoxy Fondo 1 kg: Quarzo o6 o.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 specific 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

# Wear layer (approximately 24 hours after application of the intermediate layer)

• Finishing application of two-pack formulation, Epoxy Paint HT Recommended use (with one coat): 250-300 g/m²

# **EPOXY PAINT HT: PHYSICAL / MECHANICAL PROPERTIES**

Specific gravity

1.5 ± 0.05 kg/l

**Solids content** 98 + 2%

Viscosity at +23° C approx.

2300cP

Application temperature

Between +10℃ and +35℃

Curing time at +23°C approx.

Dust dry: 8 hours
Touch dry: 24 hours
Walkable with caution: 48 hours
Full curing time: 7 days

# Mechanical properties after 7 days at +23°C approx.

• Surface hardness approx. 70 Shore D

• Concrete adhesion > 1,5 MPa

# **EPOXY PAINT HT: CHEMICAL RESISTANCE**

Immersed in:	MAX % Resistant
Hydrochloric acid	20 YES
Sulphuric acid	20 Moderately
Phosphoric acid	10 Moderately
Acetic acid	3 YES
Lactic acid	3 Moderately
Sodium hydroxide	50 YES
Soda	SATURATED YES
Magnesium chloride	SATURATED YES
Magnesium phosphate	SATURATED YES
Calcium chloride	SATURATED YES
Calcium hydroxide	SATURATED YES
Seawater	YES
Water	YES
Ammonia	10 YES

Gasoline	YES
Hydraulic oil	YES
Kerosene	YES
Propanol	Moderately
Mek	Moderately
Toluene	Moderately
Xylene	Moderately

N.B. This Technical Information Sheet is compiled to the best of our technical/scientific knowledge.

Nevertheless, it is not binding and does not imply that we are responsible, as the conditions of use are outside our control. It is recommended that the product is always checked as being suitable for the specific application.