

HYPERFLOOR-2K

Two component Self-Levelling, Flexible Polyurethane Flooring Resin

DESCRIPTION

HYPERFLOOR-2K is a two component, self-levelling solvent free polyurethane material that upon curing produces a strong, flexible film with excellent adhesion to various surfaces.

The product is based on pure hydrophobic polyurethane resin plus special inorganic fillers that provide the material with excellent abrasion and chemical resistance.

HYPERFLOOR-2K may be offered in a non-combustible version **HYPERFLOOR-2K MARINE** (product certified for ship metal decks according to IMO Resolution MSC.307(88) – Fire Testing Procedures Code (2010 FTP Code)– Annex 1 – Part 5).

COMPLIANCE – CERTIFICATION

CE certified acc. EN 13813

APPLICATIONS

- Industrial Floors
- Ship Decks
- Food, Chemical and Pharmaceutical Industries
- Refrigeration cells
- Secondary containment
- Asphalt floors
- Tanks

FEATURES & BENEFITS

- Solvent free
- Long pot life
- Temperature Resistance from -40°C up to 90°C.
- Excellent mechanical properties, high tensile and tear strength, abrasion resistance.
- Crack bridging

APPLICATION

Concrete substrate conditions (standard):

- Hardness: $R_{28} = 15$ MPa

Certified quality, environmental and occupational health & safety management systems:

ISO 9001/14001 & ISO 45001.

- Humidity: $W < 10\%$
- Temperature: from 5 °C - 35 °C
- Relative humidity: $< 85\%$

Clean the surface, using jet water if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, curing membranes must be removed. Fill surface irregularities with adequate products.

Primer must be applied on relatively fresh concrete or in case where negative pressure may cause the material to bubble. In these cases, either apply several coats of **AQUASMART®-DUR** (our water based epoxy primer) or **EPOXY RESIN-21 CLEAR** (our 100% solids epoxy primer). Both can be charged with sand as described in the respective technical data sheets. For substrates that need to be made stronger, the one component penetrating primer **MICROSEALER-50** should be used.

MIXING:

Use a low speed (300rpm) electric drill.

APPLICATION:

Apply undiluted with a notched trowel, squeegee or roller. As soon as the material is applied, use a spiked roller to remove entrapped air.

TOP COAT:

HYPERFLOOR-2K is an aromatic polyurethane system and therefore will discolor when exposed to UV. For color protection, traffic/abrasion resistance as well as providing an easy clean final satin finish, the use of **AQUASMART®-TC-2K-FLOOR PROTECT** pigmented is recommended. Alternative topcoat (APPLIED PIGMENTED) selections are:

HYPERDESMO® ADY-2K

HYPERDESMO® ADY-100

HYPERFLOOR-2K

PACKAGING

Comp. A: 4.5 kg + Comp. B: 15.5 kg (20 Kg)
 Comp. A: 1.125 kg + Comp. B: 3.875 kg (5 Kg)

SHELF LIFE

HYPERFLOOR-2K can be kept for minimum 12 months in the original unopened pails at a temperature of 5 °C - 25 °C in dry places.

TECHNICAL SPECIFICATIONS OF HYPERFLOOR-2K

The Liquid product:

PROPERTY	UNITS	METHOD	SPECIFICATION
-Pot Life (25°C) & 55% RH	Min.	Internal Method	20-30
-Viscosity (BROOKFIELD) upon mixing	cP	ASTM D2196-86, at 25°C	1,500-2,500
- Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, at 20°C	Component A (hardener): 1.20-1.30 Component B (resin): 1.25-1.35
-Tack free time, at 77deg F (25°C) & 55% RH	hours	-	2-3

The Film:

PROPERTY	UNITS	METHOD	SPECIFICATION
-Service temperature	°C	-	-40 to 80
-Max. temperature short time (shock)	°C	-	200
-Hardness	Shore D	ASTM D2240 / DIN 53505 / ISO R868	>60
-Tensile Strength at break at 23 °C	N/mm ²	ASTM D412 / EN-ISO-527-3	>13
-Percent Elongation at 25 °C	%	ASTM D412	>70
-Abrasion Resistance	Mg loss	ASTM D6040, CS17 WHEELS, 1000 REVS, 1000 GR	60
-Water Vapour Transmission	gr/m ² .hr	ASTM E96 (Water Method)	0,8

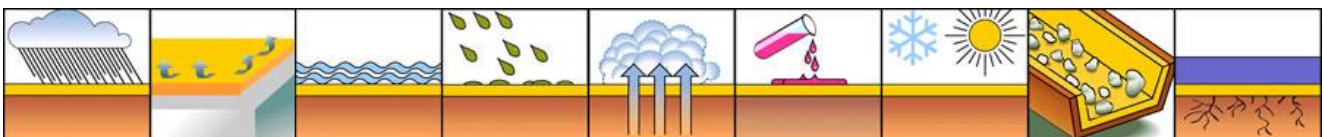
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 ISO 9001/14001 & ISO 45001.

HYPERFLOOR-2K

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ALCHIMICA S.A. 7 Lampsakou, Athens-GREECE
459-3-206/30.06.2015
EN 13813 2032 HYPERFLOOR-2K Protection of floors subject to heavy traffic, abrasion and chemical resistance for indoor applications
www.alchimica.com

ESSENTIAL CHARACTERISTICS	PERFORMANCE	TEST STANDARD	HARMONISED TECHNICAL SPECIFICATION
ABRASION RESISTANCE	60 mg loss (c17s/1000/1000)	ASTM D6040	EN 13813
REACTION TO FIRE	CLASS F	EN 13813	
AGGRESSIVE SUBSTANCES	NO	EN 13813	
CAPILLARY ABSORPTION AND PERMEABILITY TO WATER	$W=0.03 \text{ Kg}/\{\text{m}^2 \text{ xh}^{0,5}\}$	EN 1062-3	
ADHESION STRENGTH BY PULL OFF TEST	$>3,5 \text{ N/mm}^2$	EN 13892-8:2002	

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