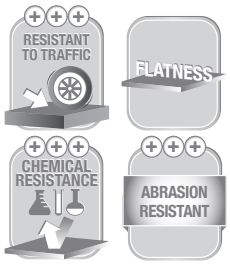
DRACOFLOOR HD SYSTEM

HIGH PERFORMANCE, SELF LEVELLING FLOORING SYSTEM. GREATER FLATNESS AND EXCELLENT CHEMICAL AND MECHANICAL RESISTANCE

DRACOFLOOR HD is a self-levelling system for floor coating with superior chemical and mechanical resistance. The **DRACOFLOOR HD** system is characterised by the greater thickness of the coating and superior resistance to impact, abrasion and chemical attack, thus ensuring the greater durability and reduced maintenance of the installation.



Products used: EPOFONDO 3K - PRIMER E - EPOLEVEL - POLIPLATE TRASPARENTE LUCIDO

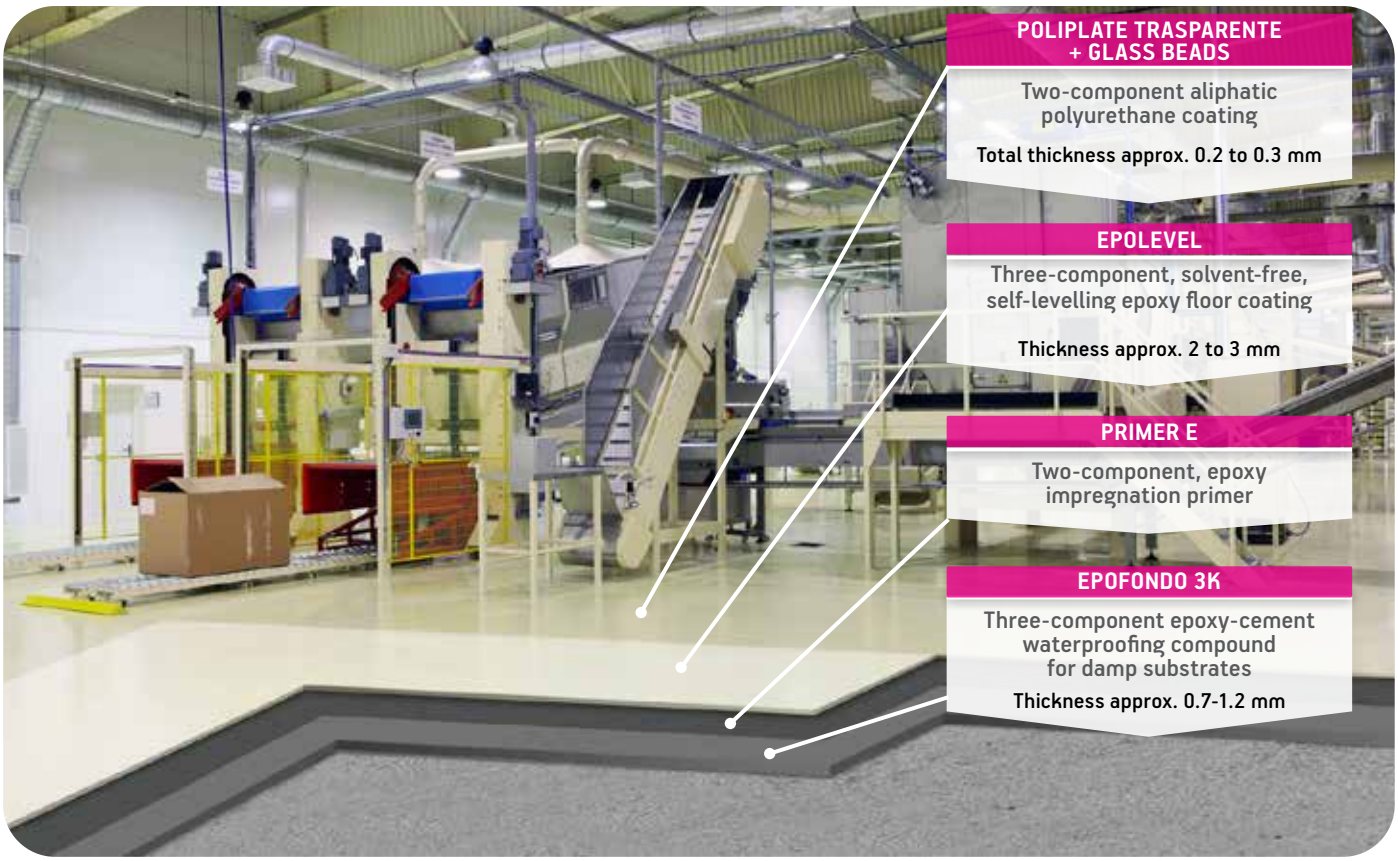
BENEFITS

- ✓ The specific characteristics of the product are:
- ✓ **High resistance to traffic**
- ✓ **Easy to clean**
- ✓ **Customisable non slip effect**
- ✓ **Impact resistance**
- ✓ **High chemical resistance**
- ✓ **Greater flatness**

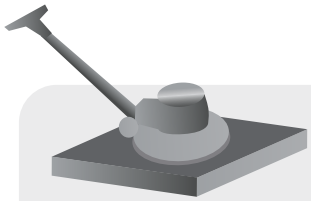
IDEAL FOR

Creating high performance industrial flooring:

- ✓ **Processing units, food industries, dairy processing plants, wineries**
- ✓ **Laboratories, operating theatres and sterile areas**
- ✓ **Chemical and pharmaceutical industries**
- ✓ **Automated warehouses, refrigerating rooms, high design commercial areas**



DRACO Italiana SpA - Via Monte Grappa 11 D-E, I-20067 Tribiano, Milan, Italy - Tel. +39 0290632917 - info@draco-edilizia.it



SUBSTRATE PREPARATION

CONCRETE SUBSTRATE

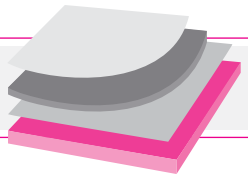
The substrate must be sound, with compressive strength of at least 25 MPa and pull-off resistance of at least 1.5 MPa.It must be clean and free of oils, detergents, powders and other substances that may cause any de-bonding of the coating to be applied. The substrate must also be absorbent to enhance the bonding of the rising damp tie coat. We further recommend the removal of any residual resin and the creation of an "open" substrate by shotblasting or sanding.

SAND-CEMENT SCREED

The screed should be properly cured, with a compressive strength of at least 25 MPa and pull-off resistance of at least 1.5 MPa. Do not apply to anhydrite or gypsum screed. The laying surface must therefore be clean, oil-free and previously prepared to be absorbent either by shotblasting or sanding. The surface must be completely dust-free.

DRACOFLOOR HD SYSTEM

STEP 1

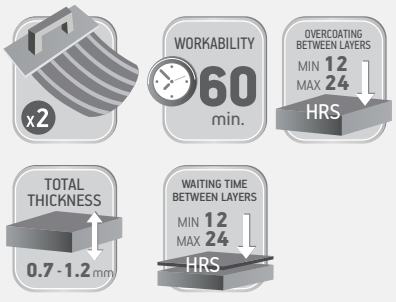


APPLICATION OF THE RISING DAMP BARRIER AND ADHESION PROMOTER EPOFONDO 3K

In order to ensure the attachment of the successive layers of resin and the absence of rising moisture and saltpeter will apply **EPOFONDO 3K** by means of a metal spatula in two hands for a total consumption of 0.7 - 1.1 kg/ m^2. **EPOFONDO 3K** also acts as a hook for the subsequent application of the coating.
If the bottom is subject to significant rising phenomena of moisture and salts it is recommended to use AQUASTOP T 100 (see data sheet).

- IT RESTORES
- IT REFURBISHES
- IT PREPARES FOR THE RESIN

APPLICATION DATA:



The workability and overcoating times may vary depending on ambient conditions.
The times shown are calculated at a temperature of 20 ° c and relative humidity of 65%.

PRODUCT USED:

EPOFONDO 3K

THREE-COMPONENT EPOXY-CEMENT WATERPROOFING COMPOUND FOR DAMP SUBSTRATES

Ideal for waterproofing and smoothing damp substrates before resin coating cycles.

Consumption: 0.3-0.6 kg/m^2 per coat

CE EN 1504-2 · QUICK DRYING FLOORING REPAIRS · DRACO USABILITY PROGRAM

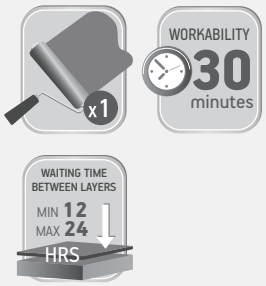
DRACO Italiana SpA - Via Monte Grappa 11 D-E, I-20067 Tribiano, Milan, Italy - Tel. +39 0290632917 - info@draco-edilizia.it

STEP 2 PRIMING OF THE SURFACE

Before applying the epoxy coating EPOPLATE we recommend sanding the surface previously prepared with EPOFONDO 3K, in order to remove any of the more obvious irregularities caused by the use of a spatula for application. Remove all dust and then use a roller to apply a coat of the two-component, impregnating epoxy primer for adhesion promotion **PRIMER E** at a coverage rate of approx. 0.3 to 0.5 kg/m².

IT CONSOLIDATES THE SUPPORT AND ENHANCES ADHESION OF THE COATING

APPLICATION DATA:



The workability and overcoating times may vary depending on ambient conditions.
The times shown are calculated at a temperature of 20 ° c and relative humidity of 65%.

PRODUCT USED:

PRIMER E

TWO-COMPONENT, SOLVENT-FREE EPOXY PRIMER FOR IMPREGNATION

Ideal for use as an adhesion promoter for the application of all the epoxy and epoxy polyurethane cycles.

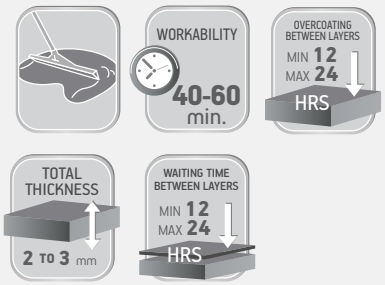
Consumption: approx. 0.3 - 0.5 kg/m² per layer

STEP 3 APPLICATION OF THE SELF LEVELLING EPOXY COATING

When PRIMER E has hardened, but no later than 24 hours after its application, spread a single coat of **EPOLEVEL** to a thickness of 2 - 3 mm, using a toothed spatula or a V-notched squeegee with spacer. The coverage rate will be between 3.5 - 5 kg/m². Immediately after the application of **EPOLEVEL** remove any air that may have been entrapped during mixing or spreading of the product, using a spiked roller moved in two perpendicular directions.

HIGH RESISTANCE SELF LEVELLING COATING

APPLICATION DATA:



The workability and overcoating times may vary depending on ambient conditions.
The times shown are calculated at a temperature of 20°C and relative humidity of 65%.

PRODUCT USED:

EPOLEVEL

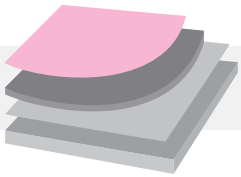
THREE-COMPONENT, SOLVENT-FREE, SELF-LEVELLING EPOXY FLOOR COATING

Three-component, self-levelling epoxy floor coating to create protective coatings for continuous, jointless surfaces with high chemical, physical and mechanical resistance and a layer thickness between 2 to 3 mm. It is used on both industrial and design floorings.

Consumption: 3,5 to 5 kg/m² per coat

DRACO Italiana SpA - Via Monte Grappa 11 D-E, I-20067 Tribiano, Milan, Italy - Tel. +39 0290632917 - info@draco-edilizia.it

STEP 4

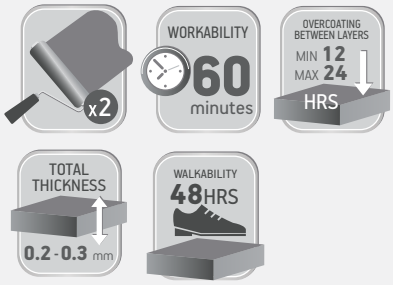


APPLICATION OF THE FINISHING COAT

Once the second coat of EPOPLATE has hardened, apply the scratch-resistant, UV-resistant finishing coat **POLIPLATE TRASPARENTE LUCIDO**. **Apply two coats with a short nap roller for a total thickness of approx. 160 - 240 g/m².** The second coat must be applied when the first has hardened but no later than 24 hours after its application. In order to obtain a slight non slip effect you should add the GLASS BEADS (100 µM) at a ratio of 3-5% by weight, obtaining a total thickness of approx. 0.2-0.3 mm.

PROTECTIVE, ABRASION RESISTANT NON SLIP, FINISH

APPLICATION DATA:



The workability and overcoating times may vary depending on ambient conditions. The times shown are calculated at a temperature of 20° c and relative humidity of 65%.

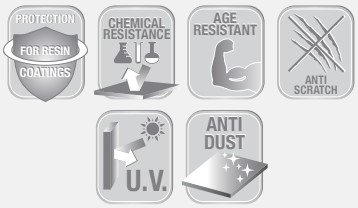
POLIPLATE TRASPARENTE LUCIDO is also available in matt version.

PRODUCT USED:

POLIPLATE TRASPARENTE LUCIDO

TWO-COMPONENT ALIPHATIC POLYURETHANE COATING IN SOLVENT PHASE FOR THE PROTECTION OF RESIN COATINGS

Consumption: approx. 0.08 -0.12 kg/m² per coat



SEALING JOINTS

Any joints that will be present on the surface must be thoroughly cleaned of dust and debris, treated with the polyurethane primer PRIMER PS30 after the insertion of the expanded polyethylene profile DRAFIL and filled with the chemical-resistant sealant DRACOFLEX P. The latter ensures water-tightness, flexibility and elastic recovery if subjected to movement during work, as well as resistance to chemical cleaning agents and aging. The correct treatment of the joints improves the quality and the durability of the flooring because it protects the joints, while facilitating cleaning operations and avoiding the accumulation of dirt and the proliferation of bacteria.

DRACO Italiana SpA - Via Monte Grappa 11 D-E, I-20067 Tribiano, Milan, Italy - Tel. +39 0290632917 - info@draco-edilizia.it

SUMMARY OF CYCLE

EPOFONDO 3K

CONSUMPTION:
0.7 ÷ 1.1 kg/m²
in two coats

THICKNESS:
approx. 0.7÷1.2 mm

PRIMER E

CONSUMPTION:
approx. 0.3 ÷ 0.5 kg/m²
per coat

EPOLEVEL

CONSUMPTION:
approx. 3.5÷5 kg/m²

THICKNESS:
approx. 2÷3 mm

POLIPLATE TRASPARENTE LUCIDO

CONSUMPTION:
approx. 160÷240 g/m²
in two coats

THICKNESS:
approx. 0.2÷0.3 mm

DRACOFLOOR HD SYSTEM

TOTAL THICKNESS:
approx. 2.9 ÷ 4.5 mm.

The cover rate for the application cycle is indicative and may vary depending on ambient conditions.
These data refer to the indicative consumption for each product at a temperature between 15 and 25°C, relative humidity approx. 50%, on a sound substrate that has been adequately prepared.

TECHNICAL CHARACTERISTICS (23°C – 50% RH)

ADHESION (DIN ISO 4624) N/mm²	> 1.5
ABRASION RESISTANCE (TABER Mola CS 17 – 1000 rotations – 1000 g weight) mg	105
COMPRESSIVE STRENGTH (DIN EN 196) N/mm²	85
FLEXURAL STRENGTH (DIN 1048) N/mm²	30
THERMAL EXPANSION COEFFICIENT (DIN 53752) °K	$16x10^{-5}$
MODULUS OF ELASTICITY (DIN 1048) N/mm²	6500
RESISTANCE TO TEMPERATURE (AIR)	–20 ± 65

FINAL PERFORMANCE OF THE SYSTEM

IMPACT RESISTANCE	+++
NON SLIP EFFECTIVENESS	+++
CHEMICAL RESISTANCE	+++
ABRASION RESISTANCE	+++
RESISTANCE TO TRAFFIC	++++
UV RESISTANCE	+++
CLEANABILITY	+++

Legend
++++ EXCELLENT
+++ GOOD
++ MEDIUM
+ MEDIUM-LOW

DRACO Italiana SpA - Via Monte Grappa 11 D-E, I-20067 Tribiano, Milan, Italy - Tel. +39 0290632917 - info@draco-edilizia.it

CHEMICAL RESISTANCE

CHEMICAL SUBSTANCES	DRACOFLOOR HD
PETROL	+
DIESEL	+
AVIATION FUEL	+
ENGINE OIL	+
TOLUENE	+
ETHER GLYCOL	=
METHANOL	=
TRICHLORETHYLENE	-
DICHLOROMETHANE	-
ETHYL ACETATE	=
FORMALDEHYDE SOLUTION (40%)	=
ACETIC ACID (10%)	+
HYDROCHLORIC ACID (10%)	+
FORMIC ACID (10%)	+
LACTIC ACID	-
NITRIC ACID	=
SULFURIC ACID (30%)	+
TANNIC ACID (10%)	+
AMMONIA (10%)	+
SODIUM HYDROXIDE (50%)	+
SODIUM CHLORIDE (100%)	+
SODA ASH (100%)	+
ETHYL ETHER	=

FOOD SUBSTANCES	DRACOFLOOR HD
WHITE VINEGAR	+
VINEGAR RED	+
BEER	+
COCA COLA	+
OLIVE OIL	+
ORANGE JUICE	+
LEMON JUICE	+
MILK	+
PIG'S BLOOD	+
WINE	+
WHISKY	=

Legend

\+ No change even if exposure is prolonged.

= Possible superficial colour discoloration– we advise removing the substance within 24 h.

\- The substance alters the surface when in contact for more than 8 hours.

DRACO Italiana SpA - Via Monte Grappa 11 D-E, I-20067 Tribiano, Milan, Italy - Tel. +39 0290632917 - info@draco-edilizia.it