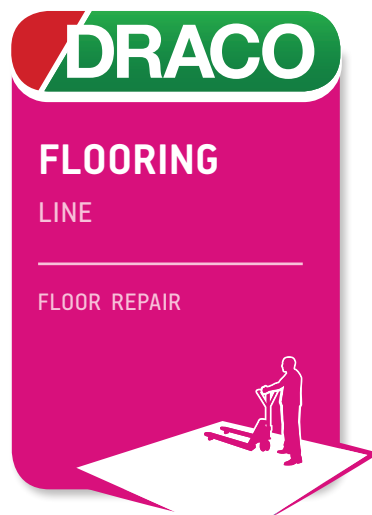


DRACOLEVEL

FAST-DRYING SELF-LEVELLING CEMENT MORTAR

Ideal for high abrasion resistant floors
with thickness from 5 to 40 mm



DRACOLEVEL is a one-component polymer-modified cement mortar based on hydraulic binders. It is self-levelling, fast-drying, ultra rapid hardening, very resistant, and ideal for 5 to 40mm thick applications. **DRACOLEVEL** can be used as repair smoothing mortar for deteriorated surfaces and/or as base layer for resin coating applications where it also acts as vapour barrier. It has been specially formulated to ensure rapid hardening, excellent bonding and resistance to positive and negative water pressure.

ADVANTAGES

DRACOLEVEL is a self-levelling, fluid cement mortar for smoothing and levelling new or existing concrete or ceramic industrial floors subject to high traffic. The product has the following characteristics:

- ✓ **FAST APPLICATION:** DRACOLEVEL is easy and fast to apply even at low temperatures (-5°C) thanks to rapid hardening.
- ✓ **RAPID OVERCOATING TIME:** DRACOFLOOR and DURAFLOOR resin coatings can be applied on DRACOLEVEL 24 to 48 hours from application.
- ✓ **HIGH ABRASION RESISTANCE:** DRACOLEVEL features high resistance to abrasion and impacts, which makes it ideal for repairing industrial flooring.
- ✓ **HIGH INITIAL AND FINAL MECHANICAL STRENGTH:** DRACOLEVEL develops high compressive strength both in fast and slow curing.
- ✓ **'FINISHED FLOOR' EFFECT:** DRACOLEVEL can be left as it is thanks to its excellent mechanical strength and abrasion resistance.



USES

DRACOLEVEL is a fast-drying, self-levelling, polymer-modified cement mortar particularly suited to the following applications:

- ✓ creating high-resistance floors in both residential and industrial environments;
- ✓ levelling new or existing concrete, ceramic or natural stone substrates;
- ✓ repairing concrete floors, using it as smoothing and priming layer for DRACOFLOOR and DURAFLOOR resin coating cycles;
- ✓ creating flooring of shops, restaurants, showrooms, supermarkets;
- ✓ creating high-resistant floors in food-processing, chemical, textile industry.

SUBSTRATE PREPARATION

CLEANING

- ▶ **Remove all loose parts** of concrete, including cement laitance and mortars containing lime, from the area to be treated until the aggregate or brickwork is exposed.
- ▶ **Remove spots, efflorescence or soaked-in stains** of oil, grease, paint, dust, dirt or other residues which may cause the coating to come off.

PREPARATION

- ▶ **Concrete: roughen the surface** by milling or shot-blasting with mechanical means until reaching the sound and mechanically resistant substrate to ensure proper bonding.
- ▶ **Ceramic substrates:** remove the vitrified surface layer by sanding or shot-blasting. The type of mechanical roughening shall be chosen based on coating type and condition.
- ▶ Before applying **DRACOLEVEL**, prime the concrete or ceramic substrate with **PRIMER E** and broadcast with quartz sand. If the substrate is particularly friable or porous, apply a second coat of primer.
- ▶ **Expansion joints:** expansion joints shall always be designed and recut, if existing. Joints shall be cut within 24 hours from application of **DRACOLEVEL** and sealed with the sealant **DRACOFLEX P** (refer to the specific data sheet for application instructions). For applications in residential buildings, expansion joints are required at door sills or in case of volumetric variations.

MIX PREPARATION

DRACOLEVEL is a one-component product which shall be mixed with about 18-20% of water (4.5-5 litres every 25 kg bag). Mixing shall be done using a low-speed drill with mixing paddle to avoid air entrapment. Mix the whole amount of a 25 kg bag of **DRACOLEVEL** with about 80% of water until achieving a uniform, lump-free consistency. Add the remaining water and mix for a few minutes until obtaining a homogeneous mix. For correct use of **DRACOLEVEL**, respect the recommended mixing ratio. **DRACOLEVEL** dries rapidly; mix the amount of product you shall use 15 minutes before application at a temperature of approx 20°C. Environmental conditions and temperature affect workability. If the product is applied with a mortar pump, a mixer shall be used to ensure continuous casting.

APPLICATION

APPLICATION PROCEDURE

Apply a 5 to 40 mm thick coat of **DRACOLEVEL** by hand or using a mortar pump and spread it by means of a squeegee. Spread the product evenly to prevent hollows, uneven areas and differences in colour. Application temperature should not be less than +5°C. If the flooring has to be polished, a thickness of at least 10 mm is required.

- EXPOSED FINISH

If you opt to leave **DRACOLEVEL** as it is, protect the surface with a finish coat, depending on the effect and resistance required, which otherwise would be absorbent. Apply the finish coat approx. 3 days after application of **DRACOLEVEL**.

Before laying a **DURAFLOOR** or **DRACOFLOOR** resin coating, roughen the surface by shot-blasting.

- POLISHED FINISH

The floor created with **DRACOLEVEL** can also be polished: treatment shall be carried out 2-3 days after application using diamond tools to obtain a smooth, polished surface with a stone-like finish. This treatment creates some micropores on the surface which shall be properly filled and sealed. Finishing can be made using the non-absorbing water-repellent treatment **WEPOX FINITURA**.

RECOMMENDATIONS

Application temperature is +5°C to +35°C. For application at temperatures below 20°C, it is recommended to keep the product in a warm environment and use heated water.

PACKAGING AND STORAGE

DRACOLEVEL is supplied in 25 kg bags.

If stored in original, unopened packaging in dry conditions, the product maintains its properties for one year.

PRODUCT CHARACTERISTICS

APPEARANCE	Powder
COLOUR	Grey
MAXIMUM GRAIN SIZE OF AGGREGATES - EN 1015-1	0.6 mm
SHELF LIFE	12 months

APPLICATION SPECIFICATIONS 20°C

MIX COLOUR	Grey
MIXING WATER	Self-levelling: 18-20%
BULK DENSITY OF THE MIX	2000-2200 kg/m ³
APPLICATION TEMPERATURE	-5°C to +35°C
WORKABILITY	approx. 15 minutes
SETTING TIME	approx. 60 minutes
RESIN COATING WAITING TIME/OVERCOATING	24 hours for DURAFLOOR systems 48 hours for DRACOFLOOR systems
OVERLAY TIME AND RESIDUAL HUMIDITY	24 hours: < 6% 48 hours: < 4%
RE-OPENING TO TRAFFIC	Pedestrian traffic: 4 hours Normal traffic: 24 hours
APPLICATION THICKNESS	5-40 mm
CONSUMPTION	approx. 1.8 kg/m ² per mm of thickness

Times vary depending on substrate temperature and ambient temperature and humidity.
The values indicated herein are calculated at a temperature of 20°C and relative humidity of 65%.

PERFORMANCE CHARACTERISTICS according to EN 13813

CHARACTERISTIC	TEST METHOD	MINIMUM REQUIREMENTS EN 13813	PERFORMANCE
ADHESION TO CONCRETE MC 0.40 substrate (UNI EN 1766)	UNI EN 13892-8	Classes (MPa): B0.5 ...B2.0	B > 2.0
* DRACOFLOOR systems applied over DRACOLEVEL after 48 h curing (MC (0.40) substrate - UNI EN 1766)	UNI EN 13892-8	Classes (MPa): B0.5 ...B2.0	B > 2.0
** DURAFLOOR systems applied over DRACOLEVEL after 24 h curing (MC (0.40) substrate - UNI EN 1766)	UNI EN 13892-8	Classes (MPa): B0.5 ...B2.0	B > 2.0
COMPRESSIVE STRENGTH	UNI EN 13892-2	Classes (MPa): C5,C10...C80	C16 MPa 24 hours C40 MPa 28 days
LIQUID WATER PERMEABILITY expressed as capillary absorption	UNI EN 1062-3	$w < 0.1 \text{ kg/m}^2 \times h^{0.5}$	$w < 0.1 \text{ kg/m}^2 \times h^{0.5}$
WATER VAPOUR PERMEABILITY -equivalent air layer thickness S_d :	UNI EN 12086	$S_d = \mu \cdot s$ μ = water vapour diffusion coefficient, s = thickness	$S_d < 0.6 \text{ m} / \text{cm}$
FLEXURAL STRENGTH	UNI EN ISO 178	Classes (MPa): F1...F50	F10
WEAR RESISTANCE	UNI EN 13892-4	Classes: AR6 ...A2,A1,AR0.5	AR0.5
RESISTANCE TO POSITIVE WATER PRESSURE (500 kPa for 72 hours)	UNI EN 12390-8	-	no permeation
RESISTANCE TO NEGATIVE WATER PRESSURE (250 kPa for 72 hours)	UNI 8298-8	-	no permeation

Legal notes - SLCMP version of 01.03.2017

Draco Italiana s.p.a. has adopted the parameters indicated in this data sheet and the related standards for the calculation of the values and technical data contained herein.

Customers shall verify that this data sheet and the values indicated herein apply to their product batch and have not been superseded by later editions. If in doubt, verify that the sheet corresponds to the one available on the website www.draco-edilizia.it at the time the sales contract was executed and/or by previously contacting the Technical Department.

Any suggestions on the use of the Products provided by our personnel either orally or in writing upon the Customer's request do not constitute additional obligations to the purchase contract and do not imply a contractual obligation for the company. They are based on our experience and limited to the current state of practical and/or scientific knowledge. They are not binding for the client or for the installer. It is the Customer's responsibility to test our products and verify they are suitable for the type of application and use envisaged.