

AQUAFLOOR Eco

Water based two component transparent polyurethane coating.

Water based, two component, polyurethane and transparent coating for the protection of many kind of surfaces. It creates a low thickness finish, with a high resistance to abrasion and it allows leaving visible the texture of the product to be coated. The product is developed to protect epoxy or acrylic resin coatings, it is suitable to coat bathroom tiles and to protect the concrete microtopping system *Decorkrete*, the light weight thermal screed *Diathonite Screed* or the cork based finish *Diathonite Cork Render*.

BENEFITS

- Excellent resistance to abrasion and to pounding water.
- It protects the texture of the product to be coated.
- Suitable for the protection of the lightweight thermal screed *Diathonite Screed*, of the cork based finish *Diathonite Cork Render* and of the concrete microtopping system *Decorkrete*.
- Easy to clean.
- High resistance to freeze / thaw cycles and UV rays.
- Easy and quick to apply.
- Multipurpose.

YIELD

Total yield: 0.20 kg/m² (0.04 lb/ft²).
depending on the absorbency degree of the substrate.
1 gallon covers about 407.58 ft².
The product must be applied in three coats.

COLOR

Transparent. It is available in mat or gloss type.

PACKAGING

Part A – 5 kg (11.02 lb) plastic bucket.
Part B (catalyst) – 1 kg (2.20 lb) plastic bucket.
Pallet: - part A – 80 buckets (400 kg – 881.85 lb);
- Part B – 4 boxes (20 pieces each – 80 kg - 881.85 lb).

APPLICATION FIELD

The product is suitable to protect many kind of coatings, both indoor and outdoor. *Aquafloor Eco* improves the abrasion resistance and makes the surface walkable. It allows to leave visible the texture of the product to be coated.

Suitable to coat:

- resin floors;
- the concrete microtopping system *Decorkrete*;
- acrylic or epoxy coatings such as *Epokoat Epoxy Paint*, *Floorgum Paint*, *Floorgum Tyre Mono*;
- bathroom pavements (tiles);
- the thermal light-weight screed *Diathonite Screed*;
- the cork based finish *Diathonite Cork Render*.

STORAGE

The product must be stored in the perfectly enclosed original containers, in well-ventilated areas, protected from sunlight, water and frost, at temperatures between +5°C (41°F) and +35°C (95°F).

Storage time: 12 months.



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14
EN 1504-2
Products and systems for the protection and repair of
concrete -
Part 2: Surface protection systems for concrete

Water vapour permeability: $\mu = 1932$.



For application videos, product page, safety data sheets and other information.

Coatings - polyurethane

Whereas all indications and recommendations supplied herein are stated to the best of our experience and knowledge, they should be considered as indicative only and should be confirmed by exhaustive practical applications. Diasen doesn't know the peculiarity of the processing, or the characteristics of the support. Therefore the applicator should carry out preliminary tests, in order to verify the suitability to the foreseen application, and in any case he will take the responsibility of the intended use. In case of uncertainties or doubts, please contact the company's technical department, provided that this is only a simple assistance for the applicator: he should have the appropriate capabilities and experience in order to determine the more suitable solution. Always respect the latest update of the technical sheet available on www.diasen.com.



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Technical Data		
Features		Units
Yield	0.20 kg/m ² (0.04 lb/ft ²) depending on the absorbency degree of the substrate.	kg/m ² (lb/ft ²)
Aspect	semi-liquid	-
Colour	transparent	-
Dilution	dilute the first coat with 30% clean water	-
Application time (pot life) T= 23°C (73.4°F), R.H. 50%	2	hours
Waiting time between 1st and 2nd coat (T=23°C – 73.4°F; R.H. 50%)	1-2	hours
Application temperature	+10 /+30 (+50/+86)	°C (°F)
Drying time (T=23°C – 73.4°F; R.H. 50%)	2	hours
Walkable after	24	hours
Storage	12 months in original containers and in dry place	months
Packaging	Part A – 5 kg (11.02 lb) plastic bucket. Part B – 1 kg (2.20 lb) plastic bucket.	kg (lb)

Final performances		Units	Regulations	Results
Resistance to accelerated aging cycles (Weathering Test)	1680 hours (10 years*)	hours/ years	ISO 11507	-
Resistance to bases (undiluted ammonia)	24	hours	-	good
Resistance to undiluted neutral detergent	24	hours	-	excellent
Substrate adhesion on <i>Decorkrete</i> (pull off)	1,0	MPa	EN ISO 4624	cohesive crack on <i>Decorkrete</i>
Abrasion resistance system <i>Decorkrete</i> + <i>Aquafloor Eco</i> glossy version (Taber Wear Index)	181	-	ASTM D4060	-
Abrasion resistance system <i>Decorkrete</i> + <i>Aquafloor Eco</i> opaque version (Taber Wear Index)	73	-	ASTM D4060	-
Abrasion resistance system <i>Decork</i> + <i>Aquafloor Eco</i> glossy version (Taber Wear Index)	70	-	ASTM D4060	-
Abrasion resistance system <i>Decork</i> + <i>Aquafloor Eco</i> opaque version (Taber Wear Index)	55	-	ASTM D4060	-
Water vapour permeability	μ = 1932	-	EN ISO 7783	-

*The above data, even if carried out according to regulated tests are indicative and they may be change when specific site condition vary.

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PREPARATION OF SUPPORT

The surface must be completely consolidated and resistant. The surface must be thoroughly clean, dry, well consolidated, without debris or detaching parts, standing water and it has to be perfectly leveled. Remove dust, greases and oils.

Before application, cover any area that must not be covered.

Cracks must be restored before product application.

If *Aquafloor Eco* is applied to cover *Diathonite Screed*, *Diathonite Cork Render* or *Decorkrete*, sand the surface with sandpaper.

Relative humidity level of the substrate must be less than 4%. The possible presence of water or residual moisture makes the installation difficult, affects the aesthetic effect, the adhesion and makes worse performances.

MIXING

Aquafloor Eco is a two component product, use the whole catalyst (part B) to allow a complete reaction and a perfect drying.

Perfectly mix the two components (A+B) of *Aquafloor Eco* with a professional mixer. Lumps can develop while mixing, but they will dissolve while you keep on mixing. Continue with this process until the mixture is homogeneous and without lumps. Once mixed, the product must be applied within two hours. After this time it could deteriorate quickly.

The first coat of product should be diluted with water at 30%, the subsequent layers should not be diluted. Never add extraneous substances to the mixture.

APPLICATION

1. Apply *Aquafloor Eco* in three coats.
2. Apply a first layer of product (diluted up to 30% with clean water) above the perfectly leveled support with a short hair roller.
3. Apply a second and a third coat of unhydrated *Aquafloor Eco*. Wait for the previous layer to dry completely before applying the next one. For a better result and a homogeneous coating it is recommended to cross the layers. In case of rain on a product that is not perfectly dry, carefully check the suitability for subsequent covering.

DRYING TIME

At +20°C (+68°F) and 40% of relative humidity level, the product dries on average in 2 hours, and it becomes walkable after 24 hours.

- Protect *Aquafloor eco* from water and detergents for at least 5-7 days after the application.
- Drying time is influenced by relative humidity level and by temperature and may change significantly.
- If applied with greater yield than recommended, the drying time may increase significantly.

SUGGESTIONS

- Do not apply at support or environmental temperatures lower than +10°C (+50°F) or higher than +30°C (+86°F), and with relative humidity of the support higher than 4%.
- During summer season apply the product in the cooler hours of the day, sheltered from the sun.
- Do not apply the product in warmer hours, in the case of fog or relative humidity above 70%.
- Verify the presence of adequate slopes to allow the water flowing.
- Do not use water to clean the surface before applying *Aquafloor Eco*.
- Before applying the product, it is recommended to cover any item that should not be coated.

CLEANING

Wash tools with water before product hardening. After drying time the product is resistant to water cleaning.

SAFETY

While handling use means of protection and see product safety data sheet.

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For stockist information and full technical support for your project, please contact Ecological Building Systems or visit www.EcologicalBuildingSystems.com

