

# AQUAFLOOR ECO

Water based two component transparent polyurethane coating

Water based, two component, polyurethane and transparent coating for the protection of many kinds 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 micro topping system *Decorkrete*, the light weight thermal screed *Diathonite Screed* or the cork-based finish *Decork Façade*.

## 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 *Decork Façade* and of the concrete micro topping 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/m<sup>2</sup> depending on the absorbency degree of the substrate.

1 gallon covers about 205 ft<sup>2</sup>.

The product must be applied in three coats.

## COLOUR

Transparent. It is available in matte or gloss type.

## PACKAGING

Part A – 5 kg (1.32 gal) plastic bucket.

Part B (catalyst) – 1 kg (0.26 gal) plastic bucket.

Pallet:

- part A – 80 buckets (400 kg – 105.67 gal);
- Part B – 4 boxes (20 pieces each – 80 kg – 21.13 gal).

## APPLICATION FIELDS

The product is suitable to protect several types 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 cover resin floors, concrete micro topping system (such as *Decorkrete*) and acrylic or epoxy coatings such as *Epokoat Epoxy Paint*, *Floorgum Paint*, *Floorgum Tyre Mono*; it is also ideal to cover bathroom tiled pavement. *Aquafloor Eco* is designed to cover Diasen thermal light-weight screed namely *Diathonite Screed* and the cork-based finish *Decork Façade*.

## STORAGE

Store the product in its original containers tightly closed, away from sun, water and frost, and kept at temperature between +5°C (+41°F) and +35°C (+95°F). Storage time: 12 months.

## PREPARATION OF THE 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.

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If *Aquafloor Eco* is applied to cover *Diathonite Screed*, *Decork Façade* or *Decorkrete*, smooth 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

The product has to be applied in three coats.

1. Apply a first layer of product (diluted up to 30% with clean water) above the perfectly levelled support with a short hair roller.
2. Once the first layer of product as dried out, proceed applying a second and a third coat of *Aquafloor Eco*.
3. 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 a temperature of 23 ° C and relative humidity of 50% the product dries completely in 2 hours, and it becomes walkable after 24 hours.

## COATINGS – polyurethane

- Drying times are affected by relative humidity and temperature of the environment, and can also vary significantly.
- Protect *Aquafloor Eco* from water and detergents for at least 5-7 days after the application.
- If applied with greater yield than recommended, the drying time may increase significantly.

## SUGGESTIONS

- Do not apply at environmental temperature or at support temperature lower than +5°C (34°F) and higher than +35°C (95°F).
- During summer season, apply the product in the cooler hours of the day, away from sunlight.
- Do not apply with imminent threat of rain or frost, in conditions of strong fog or with relative humidity higher than 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

The equipment used can be washed with water before hardening of the product. Please note that after the product has dried out, it is resistant to water cleaning.

## SAFETY

While handling, always use personal protective equipment (PPE) and respect the instructions described in product safety data sheet.

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\* These data, even if carried out according to regulated tests are indicative and they may change when specific site conditions vary.

Technical Data*				
Features				Unit
Yield	0.20 kg/m <sup>2</sup> 1 gallon covers about 205 ft <sup>2</sup>			kg/m <sup>2</sup>
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 the 1 <sup>st</sup> and 2 <sup>nd</sup> coat (T=23°C ≈ 73.4 °F; R.H. 50%)	1 – 2			hours
Application temperature	+10 / +30			°C
	+50 / + 86			°F
Drying time (T=23°C ≈ 73.4 °F; R.H. 50%)	3			hours
Resistant to pedestrian	After 24 hours			hours
Storage	12 months in original container and in dry places			months
Packaging	Part A	5 kg	Plastic buckets	kg
		1.32 gal		gal
	Part B (catalyst)	1 kg	Plastic buckets	kg
		0.26 gal		gal

\*\* 1680 hours of accelerated ageing corresponds to approximately 10 years. This correspondence is purely indicative and may vary considerably depending on the climatic conditions of the place where the product is used.

Final performances		Units	Regulations	Results	
Weathering Test**	1680 (>10 years**)	hours/years	UNI 11507:2007	-	
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	hours	UNI 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> matte version		73	-	ASTM D4060	-

## 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, 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 to determine the more suitable solution. Always respect the latest update of the technical sheet available on [www.diasen.com](http://www.diasen.com)

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Abrasion resistance system <i>Decork + Aquafloor Eco</i> glossy version	<b>Taber Wear Index</b>	70	-	ASTM D4060	-
Abrasion resistance system <i>Decork + Aquafloor Eco</i> matte version		55	-	ASTM D4060	-
Water vapour permeability		$\mu = 1932$	-	EN ISO 7783	-



## COATINGS – polyurethane

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