Epoxy-cement waterproofing coating (water barrier)

Three component epoxy resin to waterproof in negative and positive thrust, to use as osmotic on underground wall, to encapsulate rising damp and to realize a vapour barrier over wet substrate. The product is formulated with a special epoxy resin (Part A), a catalyst (Part B) and special cement (Part C).

## **ADVANTAGES**

• Multipurpose solution

• Resistant up to 9.5 Atm of positive and negative pressure (counterthrust)

• Excellent adhesion to the most common surface used in construction

• Ageing resistant and it does not need maintenance

• Solvent free

• If applied by spatula it must be applied in just one coat

• If applied by roll or brush it must be applied in one or two coats depending on the coverage

## **APPLICATION FIELD**

Product suitable as:

- Steam barrier and adhesion primer;

- Osmotic coating for the restoration of surfaces affected by humidity;

- Waterproofing both with positive pressure and counterthrust (up to 9,5 Atm ), when it is not possible to intervene at the origin of infiltration (tunnels, cellars, garages, underground rooms, walls in direct contact with the ground, elevator shafts);

- Encapsulation for rising damp and saltpetre in *Diasen Dehumidifying System*.

Once *WATstop* in dry it can be coated with plasters, skim coats, resins, glues, coatings, tiles or paints, because it also acts as an adhesion coadjuvant.

Suitable inside and outside.

## **YIELD**

0,3 kg/m<sup>2</sup> as primer 0,6 kg/m<sup>2</sup> as steam barrier 1,0 kg/m<sup>2</sup> as osmotic or in *Diasen Dehumidifying System* 2,0 kg/m<sup>2</sup> as waterproofing in counterthrust

## **COLOUR**

Black

# NDORA



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

## Waterproofing - Liquid

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#### PACKAGING 5 kg plastic bucket.

10 kg plastic bucket.

Pallet: - n° 84 buckets 5 kg each one (tot. 420 kg);

- n° 48 buckets 10 kg each one (tot 480 kg). Each bucket contains the 3 components (A+B+C) already dosed, to be mixed.

## **STORAGE**

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

## **PREPARATION OF SUPPORT**

- The support must be completely hardened, dry and resistant enough.
- The surface must be thoroughly clean, well consolidated, without debris or detaching parts and perfectly levelled.
- Substrate temperature must be between +5°C and +35°C.
- In presence of new realised cement substrate, this must be sufficiently dry and cured.
- Old ceramic pavements must be attached to the substrate and must not present any debris or detaching parts such as greases, waxes, oils, etc.



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Technical Data						
Features		Unità di misura				
Yield	0,3 kg/m <sup>2</sup> as primer 0,6 kg/m <sup>2</sup> as steam barrier 1,0 kg/m <sup>2</sup> as osmotic or in <i>Diasen Dehumidifying System</i> 2,0 kg/m <sup>2</sup> as waterproofing in counterthrust	kg/m²				
Aspect	semidense	-				
Colour	black	-				
Mixing water	30 - 40% of its weight is applied by brush 10 - 20% of its weight if applied by spatula	-				
Mixture consistency	liquid	-				
Pot life at 20°C, R.H. 40%	2	hours				
Waiting time between 1st and 2nd coat (T=20°C; R.H. 40%)	From 5 to 24 hours	hours				
Application temperature	+5 /+35	°C				
Drying time (T=20°C; R.H. 40%)	24	hours				
Working temperature	-15 /+40	°C				
Storage	12 months in original containers and in dry place	months				
Packaging	5 kg or 10 kg plastic bucket	kg				

Final performances		Unit	Regulation	Result
Waterproofing with positive pressure	9,5	atm	UNI EN 12390-8	Waterproofing
Waterproofing with water counterthrust	9,5	atm	-	-
Weathering Test resistance	2000	ore	UNI 11507	resistant
Resistance after 50 freeze-thaw cycles (-15°C/+15°C)	Unchanged	-	UNI EN 202	Unchanged
Adhesion to cementicious surface Adhesion test – pull off	2,5	N/mm <sup>2</sup>	UNI EN ISO 4624	good
Adhesion to tuff Adhesion test – pull off	3,0	N/mm <sup>2</sup>	UNI EN ISO 4624	good
Adhesion to chipping floor Adhesion test – pull off	1,5	N/mm <sup>2</sup>	UNI EN ISO 4624	good
Adhesion to polyurethane foam Adhesion test – pull off	1,25	N/mm <sup>2</sup>	UNI EN ISO 4624	good
Adhesion to EPS Adhesion test – pull off	1,5	N/mm <sup>2</sup>	UNI EN ISO 4624	good

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Final performances		Unit	Regulation	Result
Adhesion to glazed ceramic tile Adhesion test – pull off	2,5	N/mm <sup>2</sup>	UNI EN ISO 4624	good
Adhesion of the system WATstop + Acriflex Winter to PVC Adhesion test – pull off	> 7,0	N/mm <sup>2</sup>	UNI EN ISO 4624	excellent
Adhesion of the system WATstop + Acriflex Winter to polyurethane foam Adhesion test – pull off	1,83	N/mm <sup>2</sup>	UNI EN ISO 4624	good
Salt resistance	-	-	-	Excellent
Solvent resistance	-	-	-	Non resistant
Organic acid resistance	-	-	-	Non resistant
Inorganic acid resistance (5% concentration)	-	-	-	Not good

\* The above data, even if carried out according to regulated test methods are indicative and may change varying the specific site conditions.

## MIXING

- **1.** Open the epoxy mortar (part A) and pour it into the bigger bucket.
- 2. Open the cement (part C), pour it into the bucket and mix.
- **3.** Open the catalyst (part B), pour it into the bucket and mix perfectly all the three components (A+B+C) until obtaining a homogeneous paste, without lumps. Use a professional drill mixer.
- 4. Add water in the percentage of:
- 10 20% of the weight of the product used if applied by plasterer's trowel;
- 30 40% of the weight of the product used, if applied by brush or roll.

Adding a higher percentage of water could comprise the effectiveness of the product.

Never add antifrost products, cement or any other aggregates.

## **APPLICATION**

**1.** Apply one coat of *WATstop* by brush, roll or spatula, taking care that the surface is completely covered. In case of rain over non perfectly dry product carefully verify the suitability of the successive layer.

**2.** If applied by spatula, apply the product in one coat.

- **3.** If applied by roll or brush, apply:
  - one coat with a coverage of 0,3 or 0,60 kg/m<sup>2</sup>;
  - max two coats with a coverage of 1,0 or 2,0  $\mbox{kg/m}^2.$

Wait at max 24 hours between one application and the other.

**4**.Eventual successive coat (smoothers, regularizations, plasters, paints, etc...) must be applied within 48 hours.

## Deumidification from the inside of an underground wall

- **1.** Take off completely the damaged surface until brick or stone.
- **2.** If the wall is very irregular, level it with a coat of *Diathonite Regularization* (see technical data sheet).
- **3.** Apply *WATstop* (coverage 1,0 kg/m<sup>2</sup>) on a completely dry wall as consolidating.
- **4.** Once *WATstop* is completely dry (within 48 hours), apply *Diathonite Deumix* dehumidifying plaster (see technical data sheet), by hand or pump with a minimum thickness of 2,0 cm.

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#### Deumidification from the inside of a semiunderground wall

- **1.** Take off completely the damaged surface until brick or stone.
- **2.** If the wall is very irregular, level it with a coat of *Diathonite Regularization* (see technical data sheet).
- **3.** Apply *WATstop* (coverage 1,0 kg/m<sup>2</sup>) on a completely dry wall until ground level.
- **4.** Once *WATstop* is completely dry (within 48 hours), apply *Diathonite Regularization* (see technical data sheet) up to 30 cm over ground level by trowel or spray, with a minimum thickness of 1,0 cm to create an antisalt barrier.
- **5.** Wait until *Diathonite Regularization* is dry, wet it and apply *Diathonite Deumix* dehumidifying plaster (see technical data sheet) by hand or pump with a minimum thickness of 2,0 cm.

## **DRYING TIME**

At 20°C and 40% of relative humidity level, the product

drying time is 24 hours.

- Drying time is influenced by relative humidity level and by temperature and may change significantly.

## **SUGGESTIONS**

- Do not apply at temperatures lower than +5°C or higher than +35°C.
- During summer season apply the product in the cooler hours of the day, away from sun.
- Do not apply with imminent threat of rainwater or ice, in case of strong fog or relative humidity level higher than 70%.
- If applied as osmotic, the surface to be treated must be 70 cm higher than the level of maximum humidity.

## **CLEANING**

Wash tools with water before product hardening.

## SAFETY

For the handling, see product safety sheet.



Waterproofing - Liquid

