MELZI edilizia e restauro

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FLOOR SYSTEMS:
Substrates Preparations (Water)

DUALENE EPX IMC W
(three-component system)

Technical Data Sheet

DESCRIPTION AND FIELDS OF APPLICATION

Two-component, water-based epoxy resin varnish, to which add cement to obtain a three-component base coat. The mix can be used for preliminary treatment of damp substrates, masonry, floors and cement surfaces in general, also as a preparation coat before applying finishing cycles (self-levelling, paints, multilayer).
Wet substrates treated with this primer, with a thickness proportionate to the amount of counter-pressure water present, can be finished with impermeable finishes.
The three-component mixture loaded with quartz sand of a suitable grain size curve makes it possible to obtain mortars for levelling and filling.

MAIN FEATURES

High adhesion even on damp supports and unseasoned concrete. Applied at a suitable thickness, it enables the treatment of structures subject to counter-pressure water. It can be over-applied with different types of products and the absence of solvents makes it easy to use even in poorly ventilated areas. Loaded with quartz, it can be used to make shrinkage-free mortar for laying, even thickly, reinforced with mesh if required.

APPLICATION DATA

The substrate must be solid, clean, free from substances that impede the adhesion of the product (waxes, silicones, oily traces) and from detaching parts. To promote adhesion, very smooth surfaces must first be roughened by means of suitable mechanical intervention (shot-peening, scraping, sandblasting, etc.). Use on damp substrates is not permitted in the presence of exuded water.
Base product and hardener must be mixed thoroughly for a few minutes, if possible mechanically. Add the cement while stirring to prevent lumps forming and continue mixing for a few minutes.

For **1 kg** (A+B), product add **1.9 kg** of cement (white/grey).

The mixing ratio must be carefully observed to avoid loss of performances. Adjust the fluidity with 3 - 5 % max. by volume of water (100-150 cc/2.9 kg of varnish/cement mixture), do not dilute too much so as not to alter the hydration ratios of the hydraulic binder. The application is carried out with a smooth roller, respecting the minimum consumption. The treated surface may have a slightly " textured " appearance, the intensity of which varies according to the dilution and the quantity applied; if a thin layer paint is applied, the texture may be transferred to the finish.
To make mortar, add **1.6 kg** of quartz sand with a grain size of 01 - 05 mm to the previous mixture; for thicknesses of more than 1.5 mm, provide for layering with reinforcing mesh.
The mortar is applied by trowel.

For surfaces that are not very humid (moisture content < 2%, e.g. not completely seasoned screeds), a single coat of at least 250-300 microns, obtained by applying approx. 500-550 g/m2 of three-component primer with a roller is sufficient.
For damp and/or surfaces with counter-pressure water, apply a first coat of unfilled and undiluted epoxy system by roller, apply a layer at least 2 mm thick of varnish/cement/sand mortar, then apply a further coat of pure epoxy system by roller. Apply the layers at intervals of max. 24 hours under normal conditions.
As the effective counter-pressure of water is difficult to evaluate, when treating damp substrates, always check the humidity on the treated surface after 48 hours by hygrometric measurement.
Wait 24/48 hours before overcoating with finishing products.
If the mix is used to treat masonry surfaces, provide for further smoothing with high adhesion mortars.
Operate at temperatures between 10-35°C (use below 10°C does not allow the catalysis reaction), even of the substrate, avoiding application in full sun during the summer season. Wash tools with water immediately after use.
If the primer is used before acrylate-isocyanate finishes of the DUALENE AIC W series, allow it to dry completely for at least 48 hours before applying the next product; short overlapping times may cause interaction between the amine of the epoxy hardener of the primer and the isocyanate of the finish with partial degradation of the latter and loss of the performance.

YIELD

The yield depends on the method of use, dilution with water and the absorption rate of the substrate.
Three-component mixture: on average, 500 - 550 g/m^2 of varnish/cement mixture is applied, corresponding to approx. 170-180 g of varnish.
Mortar: on average, 1.9 kg/m^2 of varnish/cement/sand mortar is applied per mm of thickness, corresponding to approx. 400 g of varnish.

TECHNICAL DATA

Mixing ratio	1/1
Density	1.04 kg/L
Dry residue by weight	40%
Pot-life at 22°C (time is reduced with increasing quantity) approx.	1 h
Varnish/concrete mixture ratio (weight)	1/1.9
Density	1.65 kg/L
Dry residue by weight	95%.
Varnish/cement/sand mixture ratio (weight)	1/1.9/1.6
Density	1.9 kg/L
Dry residue by weight	98%.
Storage (store frost protected)	5-30°C
Stability in original packaging	6 months

VERSION 18/12. Product for professional use.
The user must assess whether the product is suitable for use in terms of type and method of use, on which the final performance depends.
This sheet replaces and cancels the previous ones

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