

DUOPRIMER-PRO

Two-component, solvent-free epoxy primer

Description

DUOPRIMER-PRO is a two-component, solvent-free epoxy primer, offering high hardness and abrasion resistance. It is resistant to acids, alkalis, petroleum products and salt solutions. Certified according to EN 13813 and classified as SR-B2,0-AR0,5-IR4. CE marked.

Fields of application

- Priming of cementitious surfaces to be covered with products from the DUOFLOOR range.
- Preparation of resin mortars.
- Preparation of material for repairing cracks or smoothing substrates before applying flooring layers.

Technical data

Basis:	2-component epoxy resin
Color:	off-white
Viscosity:	1,000 mPa·s at +23°C
Density (A+B):	1.49 kg/l
Mixing ratio (A:B):	100:18 by weight
Pot life:	~ 45 min at +20°C
Minimum hardening temperature:	+8°C
SHORE D hardness:	82
Walkability:	after 20 h at +23°C
Overcoat time:	after 20 h at +23°C
Final strength:	after 7 days at +23°C
Compressive strength: (EN 196-1)	≥ 45 N/mm ²
Flexural strength: (EN 196-1)	≥ 15 N/mm ²
Adhesion strength:	≥ 3 N/mm ² (concrete failure)
Reaction to fire: (EN 13501-1)	F _{fl}
Cleaning of tools:	
Tools should be cleaned with SM-25 solvent immediately after use.	

Directions for use

1. Substrate

The flooring surface should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease, etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements:

Concrete quality: at least C20/25

Cement screed quality: cement content
350 kg/m³

Age: at least 28 days

Moisture content: < 4%

Depending on the nature of the substrate, it should be prepared by brushing, grinding, sandblasting, water blasting, shot blasting, etc. Following this, the surface should be cleaned from dust with a high-suction vacuum cleaner.

2. Mixing of the components

Components A (resin) and B (hardener) are delivered in premeasured containers with fixed mixing ratio by weight. First, component A must be stirred until fully homogeneous. Then, the entire contents of component B is added to component A. Mixing of the 2 components should take place for about 5 minutes using a low-speed mixer (300 rpm). It is important to stir thoroughly the mixture near the sides and bottom of the container to achieve uniform dispersion of the hardener.

3. Application - Consumption

Depending on the type of application of DUOPRIMER-PRO, there are different cases:

a) Priming

DUOPRIMER-PRO is applied by roller or brush in a single layer.

Consumption: 250-400 g/m².

The application of the selected DUOFLOOR system follows within 24 hours and after the primer has dried.

In case the DUOFLOOR system is to be applied after the first 24 hours from priming, quartz sand with particle size of 0.1-0.4 mm or 0.3-0.8 mm should be spread on the surface while the primer is still fresh to ensure good bonding.

DUOPRIMER-PRO

After hardening of DUOPRIMER-PRO, any loose grains should be removed using a high-suction vacuum cleaner.

b) Resin-mortar

The surface should be primed with DUOPRIMER-PRO.

Consumption: approx. 250-400 g/m².

The mortar is prepared according to the following ratio:

DUOPRIMER-PRO: 1 part by weight
Quartz sand: 2-4 parts by weight

Quartz sand with particle size of 0.1-0.4 mm (or M32) or 0.3-0.8 mm should be used. Mixing should take place using a heavy-duty concrete mixer, adding the quartz sand first and following with the already mixed DUOPRIMER-PRO resin (components A+B). It is important that sand and resin are thoroughly mixed.

The epoxy mortar is applied at a minimum thickness of 8 mm with the help of guides and compacted using a smoothing machine.

Resin mortar consumption: approx. 2 kg/m²/mm of layer thickness.

c) Repairing – Smoothing

Priming with DUOPRIMER-PRO should take place first.

Consumption: approx. 250-400 g/m².

The repair material is prepared according to the following ratio:

DUOPRIMER-PRO: 1 part by weight
Quartz sand: 2-3 parts by weight

Quartz sand with particle size of 0.1-0.4 mm (or M32) or 0.3-0.8 mm, depending on layer thickness, should be added to the already mixed resin (components A+B). It is important that sand and resin be thoroughly mixed.

The repair material is applied on the surface in one layer.

Consumption: approx. 1.8 kg/m²/mm.

Packaging

DUOPRIMER-PRO is supplied in containers (A+B) of 10 kg and 30 kg, with components A and B delivered in premeasured containers with fixed mixing ratio.

Shelf life – Storage

12 months from production date if stored in original sealed packaging, in areas protected from humidity and direct sunlight. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will prolong curing time and temperatures above +30°C will accelerate it. It is recommended to mildly preheat the product in the winter, and store the product in a cool room before application in the summer.
- Bonding between successive layers may be severely affected by moisture or dirt.
- Epoxy layers should be protected from moisture for 4-6 hours after application. Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.
- In case recoat time is longer than expected or in case old floors are to be overlaid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUOPRIMER-PRO is totally safe for health.
- Consult the directions for safe use and precautions written on the packaging before use.

Volatile Organic Compounds (VOCs)

According to Directive 2004/42/EC (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB, is 750 g/l (2010) for the ready-to-use product. The ready-to-use product DUOPRIMER-PRO contains a maximum of 750 g/l VOC.

DUOPRIMER-PRO

CE	CE
ISOMAT S.A. 17 th km Thessaloniki – Ag. Athanasios P.O. BOX 1043, 570 03 Ag Athanasios, Greece DoP No.: DUOPRIMER-PRO/1831-01	
13	13
EN 13813 SR-B2,0-AR0,5-IR4 Synthetic Resin screed material for use internally in buildings	EN 13813 SR-B2,0 Primer
Reaction to fire: F _{fl}	F _{fl}
Release of corrosive substances: SR	SR NPD
Water permeability: NPD	NPD
Wear resistance: AR0,5	NPD
Bond strength: B2,0	B2,0
Impact resistance: IR4	NPD
Sound insulation: NPD	NPD
Sound absorption: NPD	NPD
Thermal resistance: NPD	NPD
Chemical resistance: NPD	NPD

CE
2032
ISOMAT S.A. 17 th km Thessaloniki – Ag. Athanasios P.O. BOX 1043, 570 03 Ag. Athanasios, Greece 21
2032-CPR-10.11 EN 1504-02 DoP No.: DUOPRIMER-PRO / 1881 Surface protection products Coating
Permeability to CO ₂ : Sd > 50m
Water vapor permeability: Class I (permeable)
Capillary absorption: w < 0.1 kg/m ² ·h ^{0.5}
Adhesion: ≥ 2.0 MPa
Reaction to fire: Euroclass F
Dangerous substances comply with 5.3

ISOMAT S.A.
 BUILDING CHEMICALS AND MORTARS
MAIN OFFICES - FACTORY:
 17th km Thessaloniki - Ag. Athanasios Road,
 P.O. BOX 1043, 570 03 Ag. Athanasios, Greece,
 Tel.: +30 2310 576 002, Fax: +30 2310 576 029
www.isomat.eu e-mail: support@isomat.eu