Technical Datasheet

DUROFLOOR-PU

Two-component, UV-stable, roller-applied polyurethane floor coating

Description

DUROFLOOR-PU is a two-component, colored, aliphatic polyurethane system. After its application, it forms a strong and elastic membrane that shows excellent resistance to UV radiation.
It is resistant to abrasion, organic and inorganic acids, alkalis, petroleum products, specific solvents, waste, water, seawater and weather conditions. It is resistant to temperatures ranging from -30°C to +100°C in dry loading and up to +60°C in wet loading.
Certified according to EN 13813 and classified as SR-B2,0-AR0,5-IR5.
Also certified according to EN 1504-2 and classified as coating for surface protection of concrete. Certificate No: 2032-CPR-10.11.
CE marked.

Fields of application

DUROFLOOR-PU is used as a liquid-applied coating on interior and exterior floors requiring high elasticity, mechanical and chemical resistance. Suitable for:

- Cement-based substrates, e.g. concrete, cement mortars or asbestos cement
- Steel or iron surfaces
- Existing epoxy floors
- Cold and freezer rooms, industrial units, warehouses, laboratories, hospitals, wine factories, slaughterhouses, canned food factories, garages, car workshops, etc.

Technical data

Base:	two-component polyurethane resin
Colors:	RAL 7040 (window grey) other colors upon order
Viscosity:	approx. 1,400 mPa·s at +23°C
Density (A+B):	1.35 kg/l
Mixing ratio (A:B):	100:60.8 by weight
Pot life:	~ 40 min at +20°C
Minimum hardening temperature:	+8ºC
Hardness acc. to Shore D:	47
Walkability:	after 24 h at +23°C
Recoat:	after 16 h at +23°C
Final strength:	after 7 days at +23°C
Abrasion resistance: (EN 13892-4)	< 50 μm
Impact resistance: (EN ISO 6272)	5 Nm
Adhesion strength: (EN 13892-8)	> 3.0 N/mm^2
Tensile strength: (EN 527-3)	~ 14 N/mm^2
Elongation at break: (EN 527-3)	~ 40%

Cleaning of tools:
Tools should be cleaned with SM-28 solvent immediately after use.

Directions for use

1. Substrate preparation
The flooring surface should be:

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

It should also meet the following requirements:

a) Cementitious substrates:

Concrete quality:	at least C20/25
Cement screed quality:	cement content 350 kg/m^3
Age:	at least 28 days
Moisture content:	less than 4%

DUROFLOOR-PU

b) Iron or steel surfaces:
Should be free of rust or any corrosion that may hinder bonding.
Depending on substrate type, it should be prepared by brushing, grinding, sandblasting, water blasting, shot blasting, etc.
Then, the surface should be cleaned from dust with a high-suction vacuum cleaner.

2. Priming
Cementitious substrates should be primed with DUROFLOOR-PSF or DUROPRIMER epoxy primers.
Consumption: 200-300 g/m^2.
DUROFLOOR-PU should be applied within 24 h from priming.

After the primer has dried, any existing imperfections (cracks, holes, etc.) should be filled using DUROFLOOR-PSF mixed with quartz sand with 0-0.4 mm particle size (or Q35 quartz sand) at a ratio of 1:2 up to 1:3 by weight.

Alternatively, the water-based epoxy primer EPOXYPRIMER-500, thinned with water up to 30% by weight may be used.
DUROFLOOR-PU should be applied within 24-48 h from priming and as soon as moisture content falls below 4%.

Metal substrates should be primed with EPOXYCOAT-AC anti-corrosion epoxy coating. DUROFLOOR-PU should be applied within 24 h from priming.

In case DUROFLOOR-PU is to be applied after the proposed waiting period, quartz sand with 0.1-0.4 mm or 0.3-0.8 mm particle size should be broadcast over the surface while the primer is still fresh to ensure good bonding. After the primer has hardened, any loose grains should be removed with a high-suction vacuum cleaner.

Wet substrate
If the substrate has a moisture content of > 4% or it is a fresh concrete substrate (3-28 days), then it should be primed with the the two-component polyurethane primer PRIMER-PU 140 or the two-component epoxy primer DUROPRIMER-SG.

3. Mixing of DUROFLOOR-PU
Components A (resin) and B (hardener) are packaged in two separate containers, at the correct predetermined mixing ratio by weight. Before mixing, component A is stirred mechanically for 1 min. Then, all of component B is added to component A and the two components are mixed continuously for about 5 min with a low-speed mixer (300 rpm) until a uniform mix is obtained. It is important to thoroughly stir the mixture near the sides and bottom of the container to achieve uniform dispersion of the hardener. To ensure thorough mixing, the mixture is poured into a clean container and mixed again for at least 1 min until fully homogeneous.

4. Application – Consumption
Depending on the desired finish, there are two application cases:

a) Smooth finish
DUROFLOOR-PU is applied with a roller in two layers. The second layer is applied after the first one has dried but within 24 h.
Consumption: 250-300 g/m^2/layer.

b) Slip-resistant finish
DUROFLOOR-PU is applied by roller in one layer.
Consumption: 250-300 g/m^2.
While the layer is still fresh, quartz sand is broadcast (0.1-0.4 mm or 0.3-0.8 mm particle size, depending on the desired slip resistance).
Consumption of quartz sand: approx. 3 kg/m^2.

After DUROFLOOR-PU has hardened, any loose grains should be removed with a vacuum cleaner.
Finally, a finishing layer of DUROFLOOR-PU is applied.
Consumption: 400-600 g/m^2.

Packaging

DUROFLOOR-PU is supplied in containers (A+B) of 10 kg, with components A and B at a fixed ratio by weight.

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore, the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product. | Edition: 16.02.2026

DUROFLOOR-PU

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 polyurethane materials is affected by temperature. The ideal temperature of application is between +15°C and +25°C, for which the product obtains optimal workability and curing time. Room temperature below +15°C will expand the curing time, while temperatures above +30°C will reduce 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.
- Polyurethane 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 old floors are to be overlaid again, the substrate should be thoroughly cleaned and ground before applying the new layer.
- After hardening, DUROFLOOR-PU is totally safe for health.
- Please consult the safety instructions written on the packaging before use.
- DUROFLOOR-PU is intended for professional use only.

Volatile Organic Compounds (VOCs)

According to Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB, is 500 g/l (2010) for the ready-to-use product.
The ready-to-use product DUROFLOOR-PU contains a maximum of 500 g/l VOC.

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore, the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product. | Edition: 16.02.2026

DUROFLOOR-PU

CE

2032

ISOMAT S.A.
17th km Thessaloniki – Ag. Athanasios
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

21

2032-CPR-10.11

EN 1504-02

DoP No.: DUROFLOOR-PU / 1880

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 strength by pull off test: ≥ 2.0 N/mm^2

Reaction to fire: Euroclass F

Dangerous substances comply with 5.3

CE

ISOMAT S.A.
17th km Thessaloniki – Ag. Athanasios
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

11

EN 13813 SR-B2,0-AR0,5-IR5

DoP No.: DUROFLOOR-PU/1820-01

Synthetic Resin screed material for use internally in buildings

Reaction to fire: F

Release of corrosive substances: SR

Water permeability: NPD

Wear resistance: AR0,5

Bond strength: B2,0

Impact resistance: IR5

Sound insulation: NPD

Sound absorption: NPD

Thermal resistance: NPD

Chemical resistance: NPD

ISOMAT S.A.
BUILDING CHEMICALS, MORTARS & PAINTS
HEADQUARTERS – THESSALONIKI, GREECE
17th km Thessaloniki – Ag. Athanasios Road
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece
T +30 2310 576000
www.isomat.eu e-mail: support@isomat.eu

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore, the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product. | Edition: 16.02.2026