EDITION: SEPTEMBER 2006

POLEPOX FLOOR 874-EL

(former EPOXY ELASTIC THREE COMPONENT FLOOR)

EPOXY-BASED, ELASTIC, SELF-LEVELING FLOORING FOR LOW TEMPERATURE AREAS

GENERAL CHARACTERISTICS

POLEPOX FLOOR 874-EL is epoxy-based, self-leveling, elastic three-component flooring.

- Creates colored, easy-to-clean flooring without joints, not requiring maintenance and meeting **health standards**.
- Provides high elasticity, ideal for areas where temperature is extremely low (down to -28^{o}C) like fridges etc.
- Resistant to acid solutions, alkalis, oil, grease, wastes.
- Prevents floorings from creating dust, strengthening their durability and resistance.
- Resistant to mechanical stresses, wearing from friction and chemical effects.
- It is ideal for covering industrial troweled floorings, mosaics, cement surfaces etc.
- Areas of application: areas with low temperature (e.g. fridges) in food industries, production plants, hospitals for antibacterial use etc.

TECHNICAL DATA

Basis:	two-component epoxy resin, aggregates
Appearance:	viscous liquid
Colors:	available in 12 basic colors and on request from RAL color card for orders more than 300kg
Viscosity(A+B+C):	10500 ± 500 mPa•s at 23^{o}C
Density (A+B+C):	1,66 ± 0,01 gr/cm^{3}
Bulk density (C):	1515 ± 5 gr/lt
Mixing proportion (A:B:C):	38:11:51 by weight
Granulometry (C):	160 μm - 500 μm
Application time:	approx. 60 min at 23^{0}C
Final strength:	after 7 days at 23^{0}C
Minimum bearing temperature after 7 days curing at 23 ^{o}C:	-28^{o}C
Temperature for the application and drying of the material:	15 – 35^{o}C
Hardness according to SHORE D:	75 ± 2

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	Walkability:	after 3 days in thickness of 3mm at 23°C
	Adhesive strength:	3,65 ± 0,2 N/mm² (breaking of concrete)
SUBSTRATE REQUIREMENTS	Concrete quality:	at least C16/20
	Age:	at least 28 days
	Moisture content:	below 4%

PREPARATION - APPLICATION

Applied only on dry surfaces. Protected from arising humidity and free of materials that might prevent bonding e.g. dust, loose particles, grease etc. The success in the application depends on the right preparation of the underlay and use of the material.

- Treatment of the surface with a mosaic machine, with sandblast or rotor machine, depending on the thickness of the final coating.
- **Good, dry** cleaning of the surface from dust and residues with vacuum cleaner and squeegees.
- Priming of the surface with **POLEPOX-PR 824** (former EPOXY PRIMER). In case of troweled surfaces when there is a need for a penetrating material, it is suggested the application of the **POLEPOX-PR 824** (former EPOXY PRIMER), with dilution with 50% **EPOXY SOLVENT 132** for deeper penetration, in two layers. Then, application of another or more layers, with undiluted **POLEPOX-PR 824** (former EPOXY PRIMER), until the surface is saturated and a film is created. Consumption: 250-600 gr/m², depending on the absorption of the underlay.
- After hardening of the primer (2-12 hours depending on the ambient temperature) and within 24 hours, follows the application of **POLEPOX FLOOR 874-EL**.
- Good mixing of components A (resin) & B (hardener) packed into separate containers in fixed weight proportions. Mixing should be performed using a low revolution mixer (300-600 rpm) for 1-2 min. Stirring of the mixture should be performed thoroughly near the sides and bottom of the container in order to achieve uniform dispersion of the hardener. Afterwards, the whole quantity of component C (quartz sand) is gradually added into the mixture under continuous stirring until a uniform epoxy mortar is formed.
- The epoxy mortar is poured on the floor and spread on the desired thickness using a notched trowel or special rolls.
- Following the application of the **POLEPOX FLOOR 874-EL** the self-leveling layer should be rolled using a special spiky-roller in order to ensure even thickness and release any possibly entrapped air avoiding the formation of bubbles. If it is necessary to walk on freshly laid compound, it is recommended use of spiked shoes.
- For the creation of a completely non-slip surface, it is recommended on a still fresh layer the dredging of dry, quartz sand with a particle size 0,1-0,4 mm or 0,4-0,8 mm or 0,8-1,25 mm depending on the desired anti-slipping effect. Consumption of quartz sand: approx. 4 kg/m². After hardening of **POLEPOX FLOOR 874-EL**, any loose grains are being removed using a high suction vacuum cleaner. Finally a finishing layer of **POLEPOX COAT 873-EL** (former EPOXY PAINT ELASTIC) is applied for the creation of an acid proof, easy to clean, non-slip surface. Consumption: 0,7-1 kg/m².

CONSUMPTION

- 1,65 Kg/m²/mm.

APPLICATION TOOLS

Rubber rolls, notched trowel depending the desired thickness. Tools should be cleaned with **EPOXY SOLVENT 132** immediately after use.

PACKAGING

Supplied in packages of 35,25 kg (two drums, one bag). Components A,B and C have the fixed weight proportion.

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STORAGE	One year in unopened containers in dry places with minimum temperature 5°C.
REMARKS	• Application temperature of **POLEPOX FLOOR 874-EL** must be from 15–35°C. • Working time of the material decreases when ambient temperature rises. • It is recommended that the applied material should be exposed to low temperatures after at least seven days of its application, and at that time temperature should be decreased periodically and not instantaneously. • Never attempt to proportion the resin and hardener components. Incorrect mixing ratios or poor mixing can result in irregular hardening or variations in the final finish. • In case old floors are going to be laid or a long period of time interferes between successive layers (twelve hours during summer, twenty four hours during winter) the surface must be thoroughly cleaned and ground prior to application of a new layer. • After hardening, **POLEPOX FLOOR 874-EL** is completely safe for health and meets all requirements for food industries.
CAUTION	The application must take place in well-aired places using protective gloves. Skin or eye contact must be avoided, otherwise wash carefully with soap and water. **For more information consult the material safety data sheet.**

The information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience. However, because of numerous factors affecting results we offer this information without any guarantee and no patent liability is assumed. For additional information or questions, contact the technical department of POLAT S.A.

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