SHIELD-TEC™ 802 F
ANTIMICROBIAL VERSION

Epoxy floor coating for commercial and industrial applications

MIXING RATIO
2A : 1B
by volume

CHARACTERISTICS

- Pre-measured kit of 15 L
- Suitable for service areas exposed to high humidity
- Seamless and easy to clean
- Excellent impact resistance
- Self-leveling
- Meets CFIA requirements

Contact
POLYMÈRES TECHNOLOGIES
for more information:
support@polymerestechnologies.com

DESCRIPTION

SHIELD-TEC™ 802 F is a two-part, 100% solid, low odor epoxy floor coating that provides a colorful, glossy, lightly textured finish. Its finish is durable and easy to clean on concrete and other surfaces subject to high humidity.

This version of SHIELD-TEC™ 801 contains an antimicrobial agent to provide protection against contamination by fungi, mold and mildew growth, helping to reduce odors, discoloration and degradation. Applicable for industrial and medical environments, our products meets the ASTM G21 test specification. This antimicrobial technology is approved by the PMRA (Health Canada), the EPA (United States), and is compliant with the BPR (European Union).

This coating is ideal for applications in food, medical, commercial and industrial plants where frequent cleaning is required. It is waterproof and has good resistance to chemicals, abrasion and ultraviolet rays. Finally, in addition to its great hiding power, its recovery time allows rapid return to service. Ideal for agricultural and industrial buildings.

POSSIBLE APPLICATIONS (non-exhaustive list)

- Agricultural and commercial buildings;
- Municipal buildings (pumping station, arenas, municipal garages);
- Hospitals;
- School buildings;
- Nautical centers;
- Industrial productions areas, mechanical rooms and warehouses;
- Leisure centers.

Given its low viscosity, le SHIELD-TEC™ 802 F is self-leveling and can be used with a smooth or serrated squeegee or with a 6-to-10-mm roller.

INSTRUCTIONS & PREPARATION

The following steps must be scrupulously followed when using SHIELD-TEC™ 802 F :

1. Make sure all necessary tools and materials are ready before you begin mixing.
2. Mix parts A and B thoroughly for at least 10 minutes following the instructions in the DIRECTIONS FOR USE section.
3. Once the mixture is complete, apply immediately to the surface according to the needs of the user's project.

Continue reading for more details on each step.

The surface must be clean, dry and free of any contaminants. We recommend removing sand, dust, dirt, grease, wax, silicone and glue that could affect the adhesion of SHIELD-TEC™ 802 F to the concrete surface.

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INSTRUCTIONS & PREPARATION (continued)

CONCRETE: Mechanical or chemical preparation (muriatic acid). It is very important to remove existing coatings before applying this product. The minimum age of concrete surfaces before application is 28 days, depending on curing and drying conditions. The moisture content of all concrete substrates should not exceed ~4%. This moisture content can be measured with a calibrated moisture meter.

We recommend applying SHIELD-TEC™ 802 F early in the morning or late in the afternoon so that the concrete floor is not too hot. Do not apply on porous surfaces where there would be transmission of water vapor during application.

The installation of this product should be done by qualified and experienced applicators. **We strongly recommend validating the application by performing a test on a 12" x 12" surface before launching production.**

To apply SHIELD-TEC™ 802 F, we recommend an ambient temperature of 22°C (72°F), relative humidity below 70% and both parts A/B at 22°C (72°F). At lower temperatures, the curing time will be extended.

DIRECTIONS FOR USE

Pour the contents of the Part B (small) container into the Part A (large) container. Do not mix by hand, but mechanically with a drill fitted with a mixer. Mix thoroughly for at least 10 minutes, making sure to scrape the sides and bottom of the container regularly. Use a 2" metal spatula to scrape the sides and move the resin toward the center of the container.

Once the mixture is homogeneous, immediately apply to the floor surface and use a roller or straight/notched squeegee to spread the product. **Hazardous situations may be incurred if application of the product after mixing is delayed.** When left en masse in its container, epoxy can exhibit the following dangerous behaviors:

- **Increased temperature:** The temperature of the epoxy resin can increase significantly, creating potential fire and burn hazards.
- **Viscosity change:** The viscosity of epoxy can change unpredictably, making it difficult to handle safely.
- **Abrupt curing:** Under certain circumstances, leaving epoxy resin in bulk can cause it to harden abruptly, potentially causing burns and damage.

IMPORTANT: Failure to follow the mixing process may result in a sticky finish, uncured areas and a slowdown in the curing process, as applicable. Defects in concrete walls (cracks, holes, edges or others) can be rectified with CRACK FILLER™ EP 550.

DEW POINT: It is imperative that the substrate temperature be at least 3°C (5°F) above the dew point in order to reduce the risk of condensation which could greatly reduce the adhesion of the coating. The temperature of the substrates should be between 10°C (50°F) and 30°C (86°F). Moisture can form when the surface temperature is low enough to form condensation from the atmosphere.

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INSTRUCTIONS & PREPARATION (continued)

AGE OF SUBSTRATES: Concrete surfaces must have a minimum of 28 days at 22°C (72°F) before applying the coating. The humidity percentage must not be higher than 4%, the latter having to be measured with a concrete humidity meter.

For more information on the chemical resistance of SHIELD-TEC™ 802 F, contact support@polymerestechnologies.com.

CLEANING PROCEDURE

Collect and contain spills with absorbent material. Dispose of said spills following current regulations. Once hardened, this product can only be removed mechanically. Clean tools and brushes using our POLY CLEANER™ product.

COORDINATES

For any inquiries regarding the safe use of SHIELD-TEC™ 802 F, or in the event of an emergency, contact the appropriate emergency services immediately. For further advice, contact us at support@polymerestechnologies.com.

User safety is paramount. The customer's understanding and cooperation in the responsible use of our products is appreciated.

SPECIAL NOTICE – DECANTATION OF PART A

After prolonged storage, decantation may occur at the bottom of the container of part A. Make sure to mix the materials completely homogeneously before pouring part B. To minimize this phenomenon, upturn the Part A containers regularly, which will reduce this effect and make it easier to mix the two parts.

LIMITATIONS

Please note that only the applicator is responsible for determining the number of liters required to carry out their project. Calculation of the required liters, surface preparation of the substrate, calculation of the humidity percentage of the substrate, accuracy of the mixing ratio, homogeneous mixing of parts A and B, application of the coating using the roller, a serrated squeegee or not as well as the thickness applied remain the entire responsibility of the applicator.

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TECHNICAL SHEET
4

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THEORETICAL COVERAGE OF THE 15L FORMAT						
THICKNESS (IN)	0.006	0.010	0.015	0.020	0.025	0.030
FT²	1063	636	424	318	254	212
THICKNESS (IN)	0.035	0.040	0.045	0.050	0.055	0.060
FT²	182	159	141	127	116	106
THICKNESS (IN)	0.070	0.080	0.090	0.100	0.110	0.125
FT²	91	79	70	63	58	50

TYPICAL PROPERTIES (AT 22 °C/72 °F)		
STRONG CONTENT BY VOLUME	100 %	
STRONG CONTENT BY WEIGHT	100 %	
COLOR	Colored	
MIXING RATIO for a 15L pre-measured unit	2A/1B by volume	
POT LIFE for 200 g	40 minutes	
RECOMMENDED PRIMER	SHIELD-TEC™ 801	
APPLICATION METHOD	Roller, brush or straight/serrated squeegee	
NUMBER OF LAYERS	2 layers	
RECOMMENDED THICKNESS	Topcoat: 10 to 20 inch mils	
GEL TIME	55 minutes	
TIME BEFORE REAPPLICATION	8 to 12 hours, maximum of 24 hours	
CURING TIME	Dry to the touch	6 to 10 hours
	Light traffic	24 hours
	Full cure	7 days
CLEANING SOLUTION	POLY CLEANER™	

PHYSICAL PROPERTIES (SOLID STATE AFTER 7 DAYS AT 22 °C/72 °F)			
TESTS	METHOD	RESULTS	
HARDNESS	ASTM D 785 65	Shore D	84
COMPRESSIVE STRENGTH	ASTM D 695	MPa	105
TENSILE STRENGTH	ASTM D638	MPa	33.5
ELONGATION PERCENTAGE	ASTM D638	%	5.4
ABRASION RESISTANCE	TABER CS-17-1000 GR	0.060	

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PRECAUTIONS

- FOR INDUSTRIAL USE ONLY.
- Consult material safety data sheet prior to use.
- Normal health and safety measures should be observed when handling this product.
- Ensure good ventilation.
- Wear gloves, safety glasses, and protective clothing.
- Do not use part A without its part B, and vice versa. Shake well parts A and B separately before use.
- Once the container is opened, POLYMÈRES TECHNOLOGIES can no longer be held responsible for this product.
- Shelf life of this product in original containers is one (1) year from the date of purchase, under recommended storage conditions.
- Keep from freezing.

For information and advice on the safe handling, storage and disposal of chemicals, users should refer to the most recent safety data sheet. This sheet contains physical, ecological, toxicological and other safety-related data.

It is recommended to follow provincial and federal safety regulations. In case of eye contact, rinse well with water. In case of skin contact, rinse with soap and water. Keep away from children.

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