

PRODUCT DESCRIPTION

PlekoProof E180 is a high-build, solvent-free, protective epoxy coating designed to provide chemical resistance, water impermeability, and a dense, hygienic finish for concrete and metal surfaces. It forms a semi-gloss, ultra-dense surface that prevents microbial growth and is safe for use in contact with food or potable water (subject to local approvals).

USES

PlekoProof E180 is ideally suited for the internal protection of concrete and metal surfaces exposed to aggressive chemical or hygienic conditions. It is commonly used in:

- Potable water tanks and reservoirs
- Food and beverage manufacturing facilities
- Pharmaceutical production and laboratories
- Refineries, hangars, garages, and containment areas
- Medical, industrial, or cleanroom environments

PACKAGING

5 kg / set.

COVERAGE

0.20–0.40 kg/m² per coat. Minimum of two coats recommended.

Total DFT: 400–500 microns

Manufacturer does not warrant square meter coverage, which can vary greatly according to application techniques.

PROPERTIES

- **Solvent-free, high-build epoxy coating**
- **Semi-gloss, ultra-dense and decontaminable finish**
- **High resistance to a broad range of industrial chemicals**
- **Suitable for contact with potable water (subject to approval)**
- **Prevents microbial growth and easy to clean**
- **Excellent adhesion to concrete and steel**
- **Easy application by roller, brush, or spray**

TECHNICAL DATA

Property	Method	Value
Pot Life	@23°C	45 min
Solid content		100%
Density	@23°C	1.5Kg/l
Bond strength	EN 1542	≥ 2.5 MPa
Initial Curing time*	@23°C	24 hrs
Final Curing time*	@23°C	7 Days

*Curing times are approximate and may be affected by surrounding ambient conditions.

CHEMICAL RESISTANCE

PlekoProof E180 provides excellent resistance to a wide range of chemicals including:

- *Formaldehyde 40%*
- *Sulphuric Acid 50%*
- *Hydrochloric Acid 50%*
- *Lactic Acid 50%*
- *Nitric Acid 10%*
- *Sodium Hydroxide 50%*
- *Diesel oil, Vegetable oil, Wine*
- *Sea and brackish water*
- *Aviation hydraulic fluids*

INSTALLATION

MIXING

PlekoProof E180 is supplied in pre-weighed kits. Add the full contents of the hardener (Part B) into the base (Part A) and mix mechanically using a slow-speed drill (300–400 rpm) fitted with a wing-style paddle.

Mix for at least 3 minutes until a uniform, streak-free mixture is obtained. Scrape the sides and bottom of the container to ensure a complete chemical reaction. Do not mix by hand or part-mix kits. Entrapped air must be avoided.

SUBSTRATE PREPARATION

Concrete substrates must be structurally sound with a minimum pull-off strength of 1.5 MPa and moisture content < 4%. Remove all contaminants including oil, grease, dust, laitance, loose particles, and coatings.

Surface preparation must be carried out using abrasive blasting or mechanical scarification to achieve a clean, open-textured profile (medium-grit).

Steel surfaces must be abrasive blasted to SA 2½ or equivalent bright metal finish. Application on oxidized or poorly prepared surfaces is not recommended..

APPLICATION

Apply PlekoProof E180 in two uniform coats using a short nap roller, brush, or airless spray.

Each coat should be applied at a wet film thickness of 200–250 microns to achieve a total dry film thickness (DFT) of 400–500 microns.

Apply the second coat after 12–18 hours at 23°C. If recoating is delayed beyond 24 hours, the previous coat must be mechanically abraded and solvent-wiped to restore adhesion.

For spray applications, use appropriate airless spray equipment (min. 45:1 ratio pump, 9 mm ID hose, and HD tip 19–23 thou).

CLEANING

Uncured PlekoProof E180 should be cleaned from tools and equipment immediately using Xylene. Once the material has fully cured, it can only be removed through mechanical means.

STORAGE

Store **PlekoProof E180** in a covered, well-ventilated area, away from direct sunlight and extreme temperatures. Improper storage conditions may lead to early degradation of the product or its packaging. For detailed storage recommendations, please consult the technical support team.

HEALTH AND SAFETY

As with all chemical-based materials, Apply necessary precautions during handling and storage.

Avoid contact with skin, eyes, mouth, and food items, which may absorb vapors until the product is fully cured.

In case of accidental skin or eye contact, rinse immediately with clean water. If ingested, seek medical attention without delay. Keep the product out of reach of children and animals, and ensure containers are properly sealed after each use.

Attention

This product is intended for use by qualified professional contractors, as a component of a larger construction system and specification. It should be installed in accordance with given instructions and specifications. Information listed above reflects the criteria for our internal quality test and practical experience. Results depend on listed instructions and consumer skills and are therefore out of our responsibility whether expressed or implied. All values are valid for the product when dispatched from the plant. Technical data are generated under laboratory conditions, some variations are expected due to weather, site, and application conditions which are beyond the control of the manufacturer. We reserve the right to change any given specification without notice.