



PRODUCT DATA SHEET

weberdry PU Shield

LOW VOC, ROOT RESISTANCE SINGLE-COMPONENT POLYURETHANE WATERPROOF MEMBRANE

PRODUCT

weberdry PU Shield is a low VOC, root resistance single-component polyurethane waterproofing membrane with moisture-cured high polymer waterproof features. It cures by reaction with the atmospheric moisture in the air and forms a non-toxic, elastomeric, or highly elastic waterproof film. **weberdry PU Shield** is designed as one of the new types of environmentally friendly waterproof coating system.

Uses

- Flat or slope roof and balcony, green roof and garden roof, podium deck and planters.
- Underground constructions such as basement floor, retaining wall, tunnel or pitch.
- Indoor bathroom and kitchen, balcony, swimming pool, water outfall
- Specialize in areas in which ventilation conditions are bad.

Features and Benefits

- Strong adhesion with a substrate such as concrete, steel structure, wood, or hard PU form, etc.
- Excellent elongation of film and tensile strength. Good resistance against settlement of substrate
- Applicable to complex construction or application area
- Tack free time: 3 - 4 hours

PHYSICAL PROPERTIES

No.	ITEMS	TECHNICAL STANDARDS	INDEX
1	Tensile Strength	ASTM D412-16 (2021)	> 2 MPa
2	Elongation	ASTM D412-16 (2021)	> 800%
3	Pull-off Test	ASTM D4541-17	5 MPa
4	Root Resistance	DD CEN/TS 14416	No Penetration
5	VOC content	USEPA Method 24	18 g/L
6	Tear strength, KN/m	ASTM D624-00 (2020)	22.7 kN/m
7	Hardness of rubber & plastic (Durometer Method)	ASTM D2240-15 (2021)	47 kN/m
8	Water Vapour Permeability (g/m ² · 24H)	ASTM E96:2005	≥ 26.5 m ² · 24H

9	Crack Bridging	ASTM C836-18	2 mm
10	Water Permeability	DIN 1048 : Part 5 : 1991	7 bar for 72 hours (No penetration)
11	Puncture Resistance	ASTM D4833-07	Maximum Force: 54.31 N Deflection at Max. Load: 45.28 mm

Unless specified, all technical data are average of values and refer to 28 days curing time.

The above physical data are taken on laboratory tests. In situ, material performance may vary according to environmental & workmanship conditions beyond the manufacturer's control.

Complied Standards

Chinese Standard: GB/T19250-2013

American Standard: ASTM D412-16 (2021), D624-11(2020), D2240-15 (2021), E96:2005, C836

PROCEDURE

Substrate Preparations All Surfaces

Careful surface preparation is essential for optimum finish and durability.

The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25 MPa, and cohesive bond strength at least 1.5 MPa. New concrete structures need to dry for at least 28 days. Old, loose coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothened. Any loose surface pieces and grinding dust need to be thoroughly removed.

Mixing and Installation

Stir well before using. Apply the **weberdry PU Shield** onto the surface by roller or brush, until all surface is covered. In order to achieve the stated performance it is essential that **weberdry PU Shield** is applied in all areas at a minimum thickness of 1.5mm, measured with a wet film thickness gauge, and that full coverage is achieved with a pinhole-free finish.

Vertical applications shall terminate in a 25mm x 25mm recess (unless otherwise approved) in accordance with the manufacturer's technical data.

STORAGE AND PACKING

weberdry PU Shield is delivered in a 25 kg pail. Do not store products exposed to weather and sun. When kept in a cool, dry and protected area, the sealed pail has a 6-month shelf life after the date of production.

ATTENTION

Run it out after opening, the use time is within 30 minutes. Long-term storage will cause the formation of a thin film on the surface. Remove this when applying. It will not cause ineffectiveness.

Before the coating is cured, walking above the waterproof layer is prohibited. Avoid damaging the waterproof layer with heavy and sharp objects.

Keep the construction site well-ventilated. The operator should wear protective equipment such as a safety helmet, gloves, and working shoes in case of skin and eye irritation. The site should keep away from the fire source.

Apply a protective layer after checking and accepting the coating.

The application under snowy and rainy days, sandy day and low temperatures as well as on a substrate that does not meet the requirements is prohibited.

HEALTH AND SAFETY

Highly recommend wearing a full set of NIOSH-approved or equivalent particulate eye protection, face mask & gloves when mixing the material.

The material contains cement, which may produce an allergic effect.

Material may cause irritation to the eyes and skin. In case of contact with eyes, rinse with plenty of clean water and immediately seek medical assistance.

Please refer to the Material Safety Data Sheet (MSDS) for the health, safety and handling of the product.

CLEANING & DISPOSAL OF WASTE

Waste disposal method: Controlled burning method or curing landfill method. The nitrogen oxides from the incinerator are removed by the detergent.

Waste attention: All waste and cleaning methods (landfill or incineration) should follow the state, province, city, and the relevant provisions of the place.

* Note: The information and physical data in this catalogue are given to the best of our knowledge under standard testing methods and a controlled environment. The results may vary with different weather / site conditions, workmanship or substrates. This is beyond our control that we shall not be liable for any faults or consequences arising or associated with this. We suggest comprehensive tests to be conducted before final application. Unless specified, all technical data are average values with a curing time of 28 days. We reserve the right to update or amend the contents in the light of new findings during the course of research and development.