

# Polyproof Ultra

## Self-adhesive, plain finish HDPE waterproofing membrane

Post-applied, single layer self-adhesive membrane for waterproofing applications on retaining walls

### DESCRIPTION

Polyproof Ultra is a self-adhesive, post-applied high-performance HDPE based waterproofing membrane with plain finish and release liner for easy installation.

### CHARACTERISTICS

- Self-adhesive
- Provides a water and moisture barrier
- Cold-applied, easy, and quick to install, no priming required
- Temporarily UV resistant during application and steel works (45 days during hot climate)
- Excellent resistance to chemicals, acids, alkalis, salts, and other corrosive materials
- White solar-reflective surface

### FIELDS OF APPLICATION

Underground concrete structures such as:

- Retaining walls
- Integral component of the Polyproof Ultra FB system for post application alongside Polyproof Ultra Plus

### APPLICATION INSTRUCTIONS

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of Polyproof Ultra is as follows:

#### Surface preparation

All surface imperfections, protrusions, structurally unsound and friable concrete must be removed and repaired with a suitable concrete repair mortar from the Polycrete range of products. Although the surface does not necessarily need to be dry, any standing water should be eliminated prior to the installation of the membrane.

#### Application

The Polyproof Ultra membrane application area is limited to retaining walls with sufficient space available for installation. Take the measurement and cut the membrane to its required length before removing the release liner. Peel off the release film from the self-adhesive side and press it to the surface. Smoothen the membrane from the center to the edges with a sponge surface float to remove entrapped



air. Furthermore, an iron roller shall be used for rolling on top of the applied membrane to ensure a proper and strong adhesion of the membrane with the base surface. Side and end overlaps shall be a minimum of 100mm.

#### Corners

Begin the corner detailing by using a 200mm corner strip of Polyproof Ultra membrane and apply it to the corners. Fold the corner strip to create a 90° angle and apply it on the external/internal corners. Overlap the subsequent membranes with the corner strip and seal the edges with Polyproof Ultra TS tape.

#### Membrane Termination

All membrane edges at the ground level/below ground level are to be terminated using the aluminum flashing method and are to be sealed with the Polyseal 1PU sealant.

#### Repair

In the event of damage occurring on the membrane surface due to site activities, it is advisable to repair the affected area by using a patch of the same membrane followed by sealing of all edges using Polyproof Ultra TS. The patch should extend at least 100mm beyond all sides of the puncture.

## STORAGE & SHELF LIFE

Store Polyproof Ultra in dry and clean conditions and in its original, closed packaging away from sources of chemical contamination, damage, heat and sunlight. In tropical climates, store in air-conditioned rooms. Shelf life is up to 12 months if stored in accordance with the manufacturer's recommendations. Exercise caution when lifting, moving, transporting, storing & handling to avoid puncture and physical damage.

## HEALTH & SAFETY

As with all construction chemical products caution should always be exercised. Protective clothing such as gloves and goggles should be worn. Polyproof Ultra contains an adhesive on the surface which can stick to human skin during application. Such residues can be removed by using a cloth dipped in a suitable cleaner. Seek medical assistance immediately if any accidents occur on site.

## SUPPLY

Polyproof Ultra	20m x 1.5m x 1.2mm, 42kg #
Polyproof Ultra TS	30m x 100mm x 0.35mm, 1.4kg #
Polyseal 1 PU	600ml
#Approximate weight	

## TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Membrane thickness, [mm]	min. 1.2	ASTM D 3767
Tensile strength*, [N/mm <sup>2</sup> ]	>28	ASTM D 412
Elongation at break*, [%]	>730	ASTM D 412
Tear strength, [kN/m]	>130	ASTM D 624
Peel adhesion to cured concrete, [N/mm]	>1.9	ASTM D 903
Lap peel adhesion, [N/mm]	>1.1	ASTM D 1876
Puncture resistance, [N]	>1000	ASTM E 154
Hydrostatic pressure resistance at the joints, [12bar or (120m)]	No leakage	ASTM D 5385
Flexibility at low temperature, [°C]	No crack at -25	ASTM D 1970
Application temperature, [°C]	5 to 45	
Service temperature, [°C]	-25 to 70	

\* Results confirmed for product tested at longitudinal direction

\*All values given are subject to 5-20% tolerance.

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organizations and trade associations as well as the respective standards. The characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require manufacturer's written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of products, is based on the manufacturer's professional experience. As materials and conditions may vary with each intended application, sufficient tests are to be conducted to check the suitability of products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of willful misconduct or gross negligence on the part of the manufacturer. This technical data sheet supersedes all previous editions relevant to this product.



Henkel Polybit Industries Ltd. PO Box: 293  
Umm Al Quwain, UAE. henkelpolybit@henkel.com

Henkel Polybit Industries Ltd. PO Box: 5911  
Dammam, KSA. polybitdammam@henkel.com  
www.henkelpolybit.com

Quality for Professionals