

POLYPLUS P 4180

APP modified torch applied waterproofing membrane

POLYPLUS P 4180 modified bitumen membranes are plastomeric waterproofing membranes, manufactured from a rich mixture of bitumen and selected polymers blended together to obtain good heat and waterproofing properties. The polymerized bitumen is coated on to a dimensionally stable reinforcement core of non woven spun bond polyester fabric to obtain good tensile & tear strengths and puncture resistance.

CHARACTERISTICS

- ▶ High resistance to positive water & vapor pressure
- ▶ Good dimensional stability under tension
- ▶ Good flexibility. Can accommodate structural movements
- ▶ Resists water borne chemicals
- ▶ High heat resistance

FIELDS OF APPLICATION

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POLYPLUS P 4180 is used as a waterproofing / damp proofing membrane for protection of various substrates in wide range of applications which includes the following:

- ▶ Inverted Roofs & parapets
- ▶ Terraces, balconies & patios
- ▶ Sunken slabs
- ▶ Concrete foundations & footings
- ▶ Basements
- ▶ Pile heads

APPLICATION INSTRUCTIONS

Application procedures may vary slightly depending upon site conditions. However below given are the general guidelines for the application of the waterproofing system:

Surface preparation

The surface should be free from dust, dirt, curing compound, oil etc. Clean the surface thoroughly to remove all loosely adhering particles and cement laitance. All surface imperfections and protrusions are to be removed and repaired. Structurally unsound and friable concrete must be removed and repaired with a suitable repair mortar.

Priming

Apply **POLYPRIME SB** @ 4-6 m²/lt. as per ASTM D 41 to a clean smooth and dry surface by brush, roller or spray. Refer primer data sheet for more details. Allow the primer to dry prior to the application of the membrane.

Alignment

Unroll and align **POLYPLUS P 4180** rolls and re-roll correctly before torching. Side and end overlaps should be a minimum of 100 mm.

Torching

Use a gas torch to heat the substrate and the underside of **POLYPLUS P 4180**. When the embossing on the membranes starts to disappear during torching the membrane is ready to adhere. Roll forward and press firmly with a roller against the substrate to bond well.

Caution: Do not over torch as this will expose the reinforcement in the membrane and cause damage to it.

Sealing

Heat both the overlaps and use round tipped trowel to seal the overlap. Excess compound should be smoothed and pressed into the seam using a heated trowel.

Up stand

All angles and abutments should be sealed with extra care to ensure full bonding. Seal the edges well into the grooves and protect with **POLYSEAL PS** or suitable mastic sealant.

STANDARDS

POLYPLUS P 4180 membranes conform to the requirements of UEAtc 2001 and ASTM.

STORAGE & SHELF LIFE

POLYPLUS P 4180 should be stored vertically in a clean covered area. Rolls should not be stacked on top of each other. The shelf life is 12 months if stored as per recommendations. Excessive exposure to sunlight, UV and other sources of heat will result in considerable deterioration of the product and reduce its shelf life.

HEALTH & SAFETY

POLYPLUS P 4180 membranes contain a tacky bitumen compound which when applied can stick to human skin. Such stains can be removed by using a cloth dipped in a suitable cleaner. Any naked flame should be kept well away from the gas cylinders. When ignited the torch should be watched at all times. The torch should not rest on finished roofing. Extreme care should be taken when working near combustible materials or items which might be scorched by the gas flame.

SUPPLY

POLYPLUS P 4180	1 m x 10m,	wt 40Kg#
POLYPRIME SB		20 lt pail & 200 lt drum

Approximate weight

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Thickness, [mm]	4.0	-
Mass per unit area, [kg/m ²]	4.0-4.20	UEAtc
Reinforcement (polyester), [g/m ²]	180	UEAtc
Coating Asphalt	Polymer Modified Asphalt	
Softening Point (R&B), [°C]	> 130	ASTM D 36
Penetration @ 25 °C, [0.1 mm]	12 – 25	ASTM D 5
Tensile Strength (L/T), [N/5cm]	450/300	DIN EN 12311-1
Elongation @ Break (L/T), [%]	25/35	DIN EN 12311-1
Tear Resistance (L/T), [N]	100/120	DIN EN 12310-1
Resistance to static loading	Static : L ₂₅	DIN EN 12730
Hydrostatic pressure @ 5 bar [50m]	No Leakage	BS EN 12390 (Part 8)
Water Absorption (BSP), [%]	< 0.2	ASTM D 5147
Heat Resistance @ 120 °C	No Flow	DIN EN 52 123
Dimensional Stability, [%]	< 1	ASTM D 6222

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

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Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity 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 our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our 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 wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.

Manufactured in G.C.C.

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