DIMAPCHEM POLYURETHANE MEMBRANE FOR WATERPROOFING AND COATING

Single component liquid, polyurethane solvent-based, moisture-cured to form a solid, aromatic, completely adhered to the substrate, seamless, without joints or overlaps, watertight and waterproof membrane to be used on new buildings or refurbishments. It can be applied by short-nap acrylic wool roll, notched trowel, or specific electric equipment.

USES

For application in the following situations:

- Sloped/flat walkable roofs, IRMA, balconies, and overhangs
- Green roof
- Bridge-deck liquid applied waterproofing
- Structural concrete slabs, and concrete walls and foundations
- Swimming pools, artificial lakes, and ponds. Near seawater
- Flat or sloped asbestos roofs, spray polyurethane foam system
- As a protection for SPF

Minimum thickness	**1.5 mm**
Dry time	**5~6 hours**
Tensile strength	**2~3 MPa**
Elongation at break	**±600 %**
Application methods	**By roll, brush or specific "airless" equipment**

YIELD

The recommended minimum thickness is up to 1.5 mm, so the yield will be up to 2.4 kg/sqm (DFT) applied on ONE (maximum thickness per coat 0.7 mm./ 1.2 kg/sqm) or various coats , depending on the application method and application conditions.

STORAGE AND SHELF LIFE

12-months shelf life is stored in original containers in a dry environment at a temperature between 5-35 ºC *(41-95°F)*. Keep away from direct sunlight, extreme heat, cold or moisture. Once the tin has been opened, the product must be used.

APPLICATION TYPOLOGIES

Application by coats (traditional or classical application):

stir it up to homogenize using a mixing with medium-speed mechanical equipment. Extends the first layer using a short nap roller, a maximum thickness of 0.7 mm. (1 kg/sqm). Applying the material without dilution. Wait for complete drying (depend on the weather conditions), about 5~6 hours. Then, apply the next layer, in the same way as above. Repeat this process as many times as necessary to achieve the desired or recommended thickness.

To be used in ceramic substrates, torch and felt, membranes in general, in cracked substrates, or that have contraction or dilation movements. Open the metal tin and stir it up using a mixing with medium-speed mechanical equipment. Extended the first layer using a short nap roller, a maximum thickness of 0.7 mm. (1.2 kg/sqm). Applying the material without dilution. Extent 100 on the wet resin, and push using a dry roll

Single coat application: stir it up using a mixing with medium-speed mechanical equipment Pour **DIMAPCHEM PU** always in the fixed ratio supplied by the manufacturer. Continuous mixing with medium-speed mechanical equipment. Pouring of the material formed directly on the substrate, and spread using Use of trowel, squeegee or rubber lip (a short nap roll can also be used). This process is unique, whereby the desired thickness is obtained in one operation, eliminating intermediate waiting times, ensuring the formation of the membrane without internal bubbles, getting more tensile strength, and reducing the global drying time. The use of a mechanical equipment ("airless").

NOTE: For other types of substrates, weather conditions or final use, consult our technical department.

APPLICATION METHOD

Cement or concrete substrates: Concrete should be completely cured (concrete curing takes 28 days) or, in any case, the maximum level of humidity allowed for the substrate should be verified, depending on the primer used. Concrete must be strong, cohesive and dry, having a correct planimetry, high surface resistance, eliminating laitance, graise, oils or release agents, without excessive irregularities. Therefore, the previous action of sanding, polishing, milling or shot-

TECHNICAL AND CHEMICAL PROPERTIES

PROPERTIES	VALUES
External fire performance	Broof classification (t1)+ (t4)
Fire reaction	Euroclass E
Climatic zone	S (hard weather)
Water vapor resistance	μ=2.455
Water-vapor permeability	14 g/sqm/day
Roof slope	S1~S4, zero slope, ponding water admitted
Temperatures / User loads	P4:TH2// P3:TH4, concrete / P1:TH2,PU (Spray polyurethane foam)
Anti roots certification	PASS

Results performed in the laboratory at 23ºC (73ºF) and 50% RH, under controllable conditions. These values may vary depending on the application, climatology, or substrate conditions.

PROPERTIES	VALUES
Initial tensile strength ASTM D412	593 psi
Final tensile strength G-154 accelerating weathering 500 h	582 psi
Initial tensile strength at 90 days/ 70ºC(158ºF)	695 psi
Tensile strength initial modulus at 100%/200%/300% ASTM D638	567 psi / 262 psi / 180 psi
Initial elongation at break ASTM D412	507 %
Final elogation at breack G-154 accelerating weathering 500 h	486 %
Final elogation at breack 90 days/70ºC(158ºF)	391 %
Hardeness Shore A/D ASTM D2240:2015	86/33
Water absorption (% mass) ASTM D-570	2.7 %
Permeance ASTM E96	1.7 perms
Puncture resistance ASTM D4833	37 lbf
Abrasion resistance (H18 wheel, wear index / H22 wheel, wear index) ASTM D4060	2,477 mg / 1,719 mg
Crack-Bridging ASTM C1305	No cracks after 10 cycles at -26ºC(- 15ºF)
Pull off strength on steel / concrete ASTM D4251	514 psi / 502 psi

Disclaimer and Additional Information

The information presented in this datasheet is for reference purposes only and is subject to change without notice. While every effort has been made to ensure accuracy and completeness, no liability is assumed for any errors or omissions. Users are encouraged to verify the suitability of this data for their specific application. For the most up-to-date information, please contact us directly or visit our official website.

Results performed in the laboratory according to conditions specified in the issued documents.