



PRODUCT	Polyroof P 2000
MISSION	Polyurea resin based waterproofing coating
CHARACTERISTICS	<p>Polyroof P 2000 is a two-component coating based on polyamines and isocyanates free of plasticizers, mineral fillers and solvents (VOC 0). The product is applied using special Hot Spray bi-mixer pumps and in a few seconds forms a film that adapts perfectly to the substrate; Polyroof P 2000, once hardening is complete, offers excellent elasticity, absence of joints, excellent mechanical and chemical resistance. Furthermore, the membrane is also anti-root. Thanks to these characteristics Polyroof P 2000 can be used on most substrates (even with complex geometry), after suitable preparation, thanks to its high adhesion capacity and also being resistant to UV rays it can be left exposed. It is used for waterproofing roofs, floors, hanging gardens, walls in contact with the ground, swimming pools, driveways, protection of concrete structures, sheet metal, steel, wood, etc.</p>
APPEARENCE	Component A: low viscosity yellow liquid (coloured with special paste) Component B: middle-viscosity brown liquid

CHARACTERISTICS OF THE LIQUID PRODUCT

CHARACTERISTICS	VALUE	TOLERANCE	U.M.
Specific weight	1,10	± 0,05	Kg/dm ³
Viscosity Comp. A Comp. B	650 1250	± 200 ± 250	mPas
Dry mass residue	100	± 0,5	%
Mixing ratio by volume	A : B = 1 : 1		

APPLICATION INSTRUCTIONS

TOOLS	THINNING	TYPE OF THINNER	TOOL CLEANING
Bi mixer Hot spray	Ready to use		DIL A1

LAYING SURFACE	<p>The substrates in general must be compact, free of release substances, oils, grease, dust and cracks and have a relative humidity of <4%. Always provide for a mechanical treatment and / or the use of a suitable primer to ensure the best coupling surface for Polyroof P 2000 (contact the technical office of Casali S.p.A.). For cementitious surfaces, a compressive strength of 25 MPa and a tensile strength of at least 1.5 N / mm² are also required. All substrate repair operations must be carried out before applying the product.</p>
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CONSUMPTION	<p>The minimum coverage for Polyroof P 2000 is 2.2 kg/m². It is recommended that the required thickness be achieved in a single coat by applying the product in one continuous application without stopping.</p>
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APPLICATION INSTRUCTIONS	<p>The temperature of the substrate must be between 5 and 40 ° C and the relative humidity of the environment must not exceed 85%. Always apply at a temperature 5 ° C above the dew point to avoid detachment.</p> <p>The hot spray bi mixer machine must have separate feed pumps, have a product flow rate between 2 and 10 l / minute, and must be able to preheat the components and pipes. Furthermore, it must have a variable mixing system, electronically controlled, capable of maintaining the mixture ratio indicated in the technical data sheet unchanged and having the right spray pressure (between 200 and 300 bar). We recommend:</p> <ul style="list-style-type: none">- mount a pneumatic mixer on the lid of component A to make the product uniform- on the cover of component B fit a dehumidifying filter to prevent air infiltration that could cause the component to harden- Comp. A: ±60 °C Comp. B: ±80 °C Piping: ±65 °C pressure: >200 bar
HARDENING AT 23° C	<p>Pot life: 3 – 4 sec Interval between coatings: MAX 3-4 h</p> <p>The times shown are intended for standard laboratory conditions and can vary depending on environmental conditions.</p>

CHARACTERISTICS OF THE DRY PRODUCT

CHARACTERISTICS	CHARACTERISTICS	CHARACTERISTICS	CHARACTERISTICS
Elongation at break	>450	± 10	%
Breaking load	>16	± 0,5	MPa
Elongation at break at -20°C	>114	± 10	%
Breaking load at -20°C	>14.3	± 0,5	MPa
Shore D hardness (after 24 h)	>45	± 1	
Water vapour permeability	Class I		
Capillary absorption and water permeability	$w < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$		
Abrasion resistance (CS10, 1000 rounds, 1 Kg)	>31	± 0,2	mg
Fire resistance (EN 13501 – 5)	$B_{ROOF} - t4$ e $B_{ROOF-t2}$		





LAYING SURFACE ADHESION			
LAYING SURFACE	VALUE	TOLERANCE	U.M.
Concrete (with epoxy primer)	>3	± 0,1	MPa
Plywood (with epoxy primer)	>1,6 (surface breaking)	± 0,1	MPa
Steel (PU primer)	>7	± 0,1	MPa
PU foam 150 Kg/m ³	> 1,5 (surface breaking)	± 0,1	MPa
Fiber cement	>1,4	± 0,1	MPa

CHEMICAL RESISTANCE (0 = awful resistance, 5 = great resistance)	
SUBSTANCE	RESISTANCE
Water (15 days, 80° C)	5
Xilene (7 days, 80° C)	0
Isoporpyl alcohol (7 days 80 ° C)	1
Phosphoric acid 50% (7 days 80 ° C)	0
Ammonia 3% (7 days 80 ° C)	5
3M 9% hydrochloric acid (7 days 80 ° C)	4

PACKAGING INSTRUCTIONS	COLOURS AVAILABLE RAL 7040 and other colours on request	PACKAGING Polyroof P2000 comp. A = 210Kg (white barrel) Polyroof P2000 comp. B = 225Kg (red barrel)
STORAGE INSTRUCTIONS	STORAGE TEMPERATURE MIN 5° C – MAX 35° C	STABILITY IN THE ORIGINAL PACKAGE 12 months
SAFETY STANDARDS	Please read the safety data sheet carefully before using this product.	

WARNINGS	Component B fears humidity and if kept at low temperatures it can become cloudy. If this occurs, simply heat the product. Always keep the drums on pallets and in any case never in contact with the ground.
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