



PRODUCT	Polyroof
MISSION	Thixotropic or self-levelling two-component polyurethane drive-over liquid membrane
CHARACTERISTICS	<p>Polyroof is a solvent-free self-levelling or thixotropic two-component polyurethane liquid waterproofing, obtained from an in situ reaction between a polyol and a isocyanate. The product is highly elastic and therefore adapts to settlement movements caused by thermal and mechanical stress on the deck. Polyroof is used as waterproofing and flooring on concrete or asphalt decks, and may also be used for non-demolitive resurfacing of ceramic or similar flooring. The product is not only impermeable but also has high mechanical and tensile strength; these properties, added to its beautiful finish, make Polyroof an authentic waterproof floor that is perfect in areas subject heavy foot and vehicle traffic. Polyroof is available on request in the thixotropic version, for roller or trowel application on vertical or sloped surfaces. The product has an excellent resistance to root's penetration (tested following EN 13948) but for application where bigger attack is supposed we suggest to add Root Stop Additive for a better protection.</p> <p>At perimeter or expansion joints and in connections between different substrate materials, the use of elastic reinforcement bands from the CasaBand or Acryfelt Band Line selected according to the specific requirement is strongly recommended.</p>
APPEARENCE	<p>Component A: pigmented liquid / thixotropic paste</p> <p>Component B: low-viscosity brown liquid</p>

CHARACTERISTICS OF THE LIQUID PRODUCT

CHARACTERISTICS	VALUE	TOLERANCE	U.M.
Specific weight	1,34	± 0,05	Kg/dm ³
Dry residue	100	± 1	%
Brookfield viscosity (with Brookfield viscometer, rotor no. 4, speed 5)	8500	± 400	mPa.s
Mixing ratio by weight	A : B = 85 : 15		

APPLICATION INSTRUCTIONS

TOOLS	THINNING	TYPE OF THINNER	TOOL CLEANING
Toothed calibrated spatula or roller for self levelling	Ready to use		DIL S1
Smooth metal spatula for the thixotropic version	Ready to use		DIL S1

For spray application please contact the technical office of Casali s.p.a.

APPLICATION TO AIR-LESS

DILUTION	10%		
PUMP MODEL	THOR (LARIUS)	NOZZLE TYPE AND SIZE	TSC 31-60
GUN MODEL	L91X	FILTER MANAGEMENT	Without filters
GUN TUBE DIMENSIONS	3/8" x 15 Mt	PUMP SET PRESSURE	220 BAR





The data reported above are the result of tests carried out by our Technical Office in collaboration with our technical partner Larius, aimed at identifying the ideal equipment and setup for the most correct, easy and effective installation of the product.

In the case of spray applications, the dilution of the product and the preparation may vary depending on the type of pump used.

It is always recommended to carry out preventive tests before using the product with air-less equipment.

LAYING SURFACE	Polyroof should be applied on compact surfaces ensuring that the humidity level is under 3%; if the residual humidity level of the deck is higher, apply a coating of damp-proofing primer. The minimum permitted roughness should under 0.5 mm.
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CONSUMPTION	1,35 Kg/sqm for a thickness of 1 mm; the suggested thickness is at least 2 mm.
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APPLICATION INSTRUCTIONS	Environmental and deck temperature limit during application: MIN 10° C - MAX 30° C Protect the product from ultraviolet radiation with one or two coats of Polytop (evaluate the eventual non-slip effect). On flat steeply sloping surfaces, apply two 1 mm coatings of Polyroof otherwise request the thixotropic version (Polyroof Tixo).
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HARDENING AT 23° C AND 50 % U.R.	Pot life: 30' To touch: 12 h Interval between coatings: within 24 h The times shown are intended for standard laboratory conditions. Drying times are strongly affected by weather conditions; high temperatures and direct sunlight reduce the drying times; areas in shadow, low temperatures and high humidity increase the drying times. In winter the product should be laid in the middle of the day when it is warmer. Ensure that the previous layer has dried properly before applying the next layer.
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CHARACTERISTICS OF THE DRY PRODUCT			
CHARACTERISTICS	VALUE	TOLERANCE	U.M.
Breaking load	5	± 1	N/mm ²
Elongation at break	101	± 10	%
Shore A hardness	92	± 1	
Adhesion (with Epobase S)	> 2,5	± 0,5	N/mm ²
Root's penetration resistance (EN 13948)	Pass		
Fire reaction class (EN 13501 – 1)	B _{fl} – s1		
Water vapor permeability (UNI 1062)	V3 = low		
Water permeability (UNI 1062)	W3 = low		

CERTIFICATIONS	Polyroof contains renewable raw materials for an amount > 20%.
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PACKAGING INSTRUCTIONS	COLOURS AVAILABLE Grey, red on request	PACKAGING A+B = 20 Kg
STORAGE INSTRUCTIONS	STORAGE TEMPERATURE MIN 10° C – MAX 40° C	STABILITY IN THE ORIGINAL PACKAGE 6 months
SAFETY STANDARDS	Please read the safety data sheet carefully before using this product.	



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Products used to protect concrete decks

Polyroof System

Self-levelling two-component polyurethane liquid waterproofing used to protect concrete against penetration; humidity control and improved resistivity

Liquid water permeability	< 0.1 Kg/sq.m. h ^{0,5}
Permeability to carbon dioxide	sd > 50 m
Adhesion to standard traction	> 0.8 MPa
Permeability to water vapour	Class I
Crack bridging ability	Class A4
Freeze-thaw cycles with immersion in thawing salt	no alteration
Hazardous substances	See SDS
Fire reaction class	B _{fl} – s1

