

Garlathane 400



PRODUCT DESCRIPTION

GARLATHANE 400 is a pigmented, colour and UV-stable, highly permanent elastic, cold applied one component aliphatic polyurethane coating, used as a top-coat for protection over exposed, polyurethane waterproofing coatings.

Cures by reaction with ground and air moisture over a unique moisture triggered chemical reaction.

Protects roof waterproofing very efficiently from UV degradation, especially when a dark final colour is desired.

PRODUCT ADVANTAGES

- Simple application (roller or airless spray)
- One component
- Increases the abrasion and wear resistance of the waterproofing membrane underneath
- UV and Colour stable
- Gives a glossy and easy-to-clean surface
- Does not show the chalking effect of aromatic polyurethane coatings.
- Resistant to water, heat and frost
- Maintains its mechanical properties over a temperature span of -40°C to +90°C
- The waterproofed surface can be walked on (domestic pedestrian traffic)

USES

- Waterproofing of Roofs
- Waterproofing of Balconies, Terraces and Verandas
- Waterproofing of Pedestrian traffic decks

Used over GARLATHANE 250 on surfaces, with domestic pedestrian traffic (e.g. Roofs, Terraces, Residential Walkways) that require a glossy, colour-stable and non-chalking finish.

COLOURS

GARLATHANE 400 is supplied in silver grey RAL 7001.

COVERAGE RATES

0.25 kg/m² in one or two layers.

This coverage is based on practical application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature, humidity, application method and finish required can alter consumption.

APPLICATION

Surface Preparation

Careful surface preparation is essential for optimum finish and durability.

The surface needs to be clean, dry and sound, free of any contamination, which will affect the adhesion of the membrane. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa. New concrete structures need to dry for at least 28 days. Old, loose coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothened. Any loose surface pieces and grinding dust need to be thoroughly removed.

WARNING: Do not wash surface with water immediately prior to coating application. If pressure washing the substrate adequate time must be allowed for the surface to completely dry.

Waterproofing membrane

See the GARLATHANE 250 technical data sheet.

Finishing Layer or Top-Coat

Stir GARLATHANE 400 well before using.

Apply the GARLATHANE 400 by roller or airless spray in one or two layers. Allow 3-6 hours (not more than 36 hours) to cure, between the two layers.

For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

WARNING: The GARLATHANE 400 is slippery when wet. In order to avoid slipperiness during wet days, sprinkle suitable aggregates onto the previous GARLANDTHANE 250 wet coating to create an anti-slip surface. Please contact your Garland Regional Technical Manager for more information.

WARNING: Areas on the roof which pond water should be cleaned on regular basis to avoid biological and microbial attack.

PACKAGING

GARLATHANE 400 is supplied in 10kg metal pails.

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Technical Data	Results	Test Method
Elongation at Break	> 289 %	ASTM D 412 / DIN 52455
Tensile Strength	> 3.72 N/ mm ²	ASTM D 412 / DIN 52455
Composition	Pigmented aliphatic moisture triggered polyurethane polymer. Solvent based.	
Elongation at break after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m ²)	372 %	DIN EN ISO 527
Tensile strength after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m ²)	2.68 N/mm ²	DIN EN ISO 527
Resistance to Water Pressure	No Leak (1m water column, 24h)	DIN EN 1928
Gloss retention after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m ²)	Good	DIN 67530
Surface chalking after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m ²)	No chalking observed. Chalking grade 0	DIN EN ISO 4628-6
Adhesion to the GARLATHANE 250	>2 N/mm ²	ASTM D 903
Solar Reflectance (SR) (White Colour)	93.5 %	ASTM E903-96
Hardness (Shore A Scale)	65	ASTM D 2240 (15")
Thermal Resistance (80oC for 100 days)	Passed - No significant changes	EOTA TR-011
UV accelerated ageing, in the presence of moisture	Passed - No significant changes	EOTA TR-010
Hydrolysis (5% KOH, 7days cycle)	No significant elastomeric change	-
Service Temperature	-40°C to +90°C	-
Tack Free Time	1-3 hours	
Light Pedestrian Traffic Time	12 hours	Conditions: 20°C, 50% RH
Final Curing time	7 Days	
Chemical Properties	Good resistance against acidic and alkali solutions (5%), detergents, seawater and oils.	

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