

FLS 104 Fast-curing Liquid Waterproofing

Product Description

FLS 104 Fast-curing Liquid Waterproofing, used in conjunction with FLS 105 Accelerator, is a single application polyurethane liquid applied waterproofing membrane.

It cures with the humidity in the atmosphere to produce a strong, elastic membrane with excellent adhesion to many types of surfaces. FLS 104 is based on a pure elastomeric hydrophobic polyurethane resin with special inorganic fillers resulting in excellent mechanical, chemical, thermal, UV and natural element resistance properties.

FLS 104 Fast-curing Liquid Waterproofing is the primary component in the FLS-Rapid range of Fatra liquid applied waterproofing products.



FLS Rapid: BBA, ISO & CE Certified solution for commercial or domestic projects

FLS 104 Fast-curing Liquid Waterproofing	
Tin size	25 kg
Consumption	1.5 kg per m ²
Coverage rate	Approximately 16.67 m ² per 25 kg tin (Subject to substrate condition and porosity)
Tack free time (with accelerator)	Allow 1 hour
Curing time (with accelerator)	Allow 2 to 3 hours
Shelf life	Store in dry & cool place at 5°C to 25°C, for up to 12 months from production date. Once opened use as soon as possible.

Application

The sequence of works is: **Preparation ▶ Joint sealant ▶ Primer ▶ Reinforcement ▶ Waterproofing**

Ensure all surfaces are clean, dry and free from any debris, dust, dirt, loose particles, or standing water. Clean the surface using a high pressure washer, if possible.

Treat all construction joints, details and surface irregularities with FLS 108 Joint Sealant and apply the appropriate primer.

Pour 1 litre of FLS 105 Accelerator into the 25kg tin of FLS 104 and mix thoroughly using a low speed electric mixer and apply immediately. Apply with a brush, roller or pin rake at a minimum consumption rate of 1.5 kg per m².

Features & Benefits

- Excellent adhesion to almost any type of surface
- Excellent weather and UV resistance. The light grey colour reflects much of the solar energy and so reduces the internal temperature of the buildings
- Excellent thermal resistance, the product never turns soft. Recommended service temperature 90°C, max shock temperature 200°C
- Resistance to cold: The film remains elastic even down to -40°C
- Excellent mechanical properties, high tensile and tear strength, high abrasion resistance
- Good chemical resistance
- Non-toxic after full cure
- Water vapor transmission: The film breathes so there is no accumulation of humidity under the coat.
- Primers available for almost any substrate

Cleaning

Clean tools and equipment first with paper and then using FF860 Solvent Cleaner. Rollers will not be reusable.

Safety Information

FLS 104 contains solvents. Apply in well-ventilated areas, away from naked flames. In enclosed spaces use ventilators and carbon active masks. Refer to MSDS for further information.

Recommended uses

- Felt roof overlays
- Asphalt roof overlays
- Single ply membrane overlays
- Gutter refurbishment
- New build inverted roofs
- New build warm roofs
- Detailing of awkward junctions

Technical specifications

In liquid form (before application):

Property	Units	Method	Specification
Viscosity (Brookfield)	cP	ASTM D2196-86 @ 25 °C	3,000 - 6,000
Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811 @ 20°C	1.35 - 1.45
Flash point	°C	ASTM D93, closed cup	42
Tack free time, @ 77°F (25°C) & 55% RH	hours	-	6
Recoat time	hours	-	6 to 24

In cured form (after application):

Property	Units	Method	Specification
Service temperature	°C	-	-40 to 90
Max. temperature short time (shock)	°C	-	200
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	70
Tensile strength at break @ 23°C	Kg/cm ² (N/mm ²)	ASTM D412 / EN-ISO-527-3	> 80 (> 8)
Elongation @ 23 oC	%	ASTM D412 / EN-ISO-527-3	> 500
Water vapour transmission	gr/m ² .hr	ASTM E96 (Water Method)	0.8
Adhesion to concrete			> 20 (> 2)
Tensile set (after 300% elongation)	%	ASTM D412	< 3%
QUV Accelerated Weathering Test (4hr UV, @ 60°C (UVB Lamps) & 4hr COND @ 50°C)	-	ASTM G53	Passed (2,000 hours)
Hydrolysis (8% KOH, 15 days @ 50°C)	-	-	No significant elastomeric property change
Hydrolysis (H2O, 30 day cycle 60 to 100°C)	-	-	No significant elastomeric property change
HCL (PH=2, 10 days @ RT)	-	-	No significant elastomeric property change
Thermal resistance (100 days @ 80°C)	-	EOTA TR011	passed

BBA & EOTA Classification

Requirement	FLS 104 Fast-curing Liquid	FLS 104 Fast-curing Liquid + FLS 112 Clear Sealcoat
Minimum expected working life	W3 (25 years)	W2 (10 years)
Climatic zone	S (Severe)	
User load	P1	P3
Roof slope	S1-S4	
Minimum surface temperature	TL3 (-20°C)	
Maximum surface temperature	TH4 (90°C)	
Exposure to external fire	Broof (t1, t4)	
Reaction to fire	Class E	