

Solseal Flexible Liquid Membrane

Description:

Solseal Flexible Liquid Membrane (FLM) is an all-weather, single component polyurethane liquid coating that cures by reaction with atmospheric moisture to produce a seamless flexible and elastomeric waterproofing membrane.

Solseal FLM is a rapid curing liquid applied coating which is defect free with excellent adhesion to a variety of substrates. Being liquid applied, the material allows a completely seamless application over an entire area, even if the structure is complex and undulating.

Solseal Flexible Liquid Membrane will accommodate a degree of substrate movement although it is essential that the supporting substrate is sound and stable.

Solseal Flexible Liquid Membrane is not recommended in contact with potable water systems or chemically treated swimming pools.

When designing Type A structures as classified in BS 8102:2009 the product, when applied correctly, is capable of providing levels of protection required for Grades 1, 2, & 3 basements.

Solseal Flexible Liquid Membrane can be applied manually, using a roller or brush or airless spraying. Product yield is 1.5 to 2kg/m² with a thickness of 1.1 to 1.7 mm, applied in one coat, depending on the application method and conditions.

When applied at 2mm thick, Solseal FLM acts as a passive gas prevention barrier against the ingress of Radon into buildings.

Solseal FLM can be applied to:

- Concrete.
- Masonry.
- Ferrous Metal.
- Lead.
- Copper.
- Timber.
- Felt.
- Asphalt / Bitumen.
- Gypsum & Fibrous / Cement Boards.
- Polyurethane Insulation Foams.
- EPDM membranes & Cement Roof Tiles.



Typical Coverage

1.5 - 2.0 kg/m² (Thickness of 1.1mm to 1.7mm)

Packaging

15, 25, & 200 Litre Containers

Compliance:

- Solseal Flexible Liquid Membrane is **CE Marked & EOTA Certified** for 25 years against European Technical Assessment regulation (EU) No. 305/2011.
- **J30 110 & 130** - Liquid Applied Tanking / Damp Proofing, in accordance with NBS Clauses.
- Compliant to **BS EN 13501-5:2016** (Fire Classification of Construction Products).

Application:

- Clean the surface using a high pressure washer if possible. Remove any oil, grease, and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must be removed.
- Fill any surface irregularities with a suitable product.
- Once the above procedure has taken place apply Solseal PU4 primer. Primers should always be used as they seal and adhere FLM to the substrate. Solseal Primer PU4 has a low viscosity, is user friendly, and is a good penetrating primer
- Solseal Primer PU4 is a single component primer that takes 3-4 hours to dry.
- Apply Solseal Flexible Liquid Membrane over this primer. Solseal Primer PU4 can be applied over wet concrete in rainy conditions and the application has no effect on performance.
- Apply the Solseal Flexible Liquid Membrane with a suitable roller or brush in one or two coats. Do not exceed 48 hours between coats. Clean tools and equipment first with paper towels and then wipe using Solco Solklens.

Standard Concrete Substrate:

- Hardness: R28 = 15Mpa.
- Humidity: W < 10%.
- Recommended Temperature: 5°C-35°C. Solseal FLM can be applied at temperatures below this recommendation. However, curing time will drastically increase as the temperature decreases.
- Relative humidity: < 85%.

Technical Data:

Property	Test Method	Value
Property (Liquid Form)		
Viscosity (Brookfield) (At 25°C)	ASTM D2196-86	3500-5500 cP
Specific Weight (At 20°C)	ASTM D1475 / DIN 53217 / ISO 2811	1.3-1.4 g/cm ³
Flash Point	ASTM D93	42°C
Tack-Free Time (At 25°C, 55% RH)		2-3 hours
Recoat Time		6-48 hours
Property (Cured Membrane)		
Service Temperature		-40°C to +80°C
Max. Temperature (Short Time, Shock)		200°C
Hardness (Shore A)	ASTM D2240 / DIN 53505 / ISO R868	70
Tensile Strength at Break (At 23°C)	ASTM D412 / EN-ISO-527-3	65 kg/cm ²
Percent Elongation (At 23°C)	ASTM D412 / EN-ISO-527-3	> 400%
Water Vapour Transmission	ASTM E96	0.8 gr/m ² .hr
Tensile Set (After 300% Elongation)	ASTM D412	< 3%
QUV Accelerated Weathering Test (4hr UV, At 60°C (UVB-Lamps) & 4hr COND, At 50°C)	ASTM G53	Passed (2000 hours)

Precautions:

- Can be kept for a minimum of 12 months in the original unopened pails in dry places and at temperatures of 5°-25°C.
- Once a pail has been opened, use it as soon as possible.
- Contains volatile flammable solvents. Apply in well-ventilated, no smoking areas, away from naked flames.
- In closed spaces use ventilators and carbon active masks. Keep in mind that solvents are heavier than air so sit closer to the floor. The MSDS (Material Safety Data Sheet) is available on request.

Solseal FLM System Accessories

Solcem Solklens	A solvent for cleaning resin products from tools and equipment before the resin has hardened. Also used for removing any residual release agent from the formwork.	Tubs
Soldrain Double	Relieves the hydrostatic pressure by channeling the groundwater away from the structural waterproofing, protecting the structure.	Rolls
Solco HD Protection Board	A tough, reinforced flexible board, used to protect waterproofing membranes against damage by abrasive backfill materials and poured concrete.	Sheets
Solco XL Jointing Tape	A self-adhesive tape used for securing waterproofing membranes at overlaps edge and corner details.	Rolls
Solco Foil Tape	A single-sided tape for securing laps & joints.	Rolls
Solco Double Sided Butyl Tape	A double-sided synthetic butyl mastic tape, used for bonding waterproofing membranes. Also used for bonding SA membranes to DPCs and fixing other accessories.	Rolls
Solco Top Hats	Form an effective seal where a pipe, duct, or service penetrates Solsheet membranes.	Units
Solseal PU4	A single component same-day primer that takes 4 hours to become tack-free.	Tubs

