

SOLSEAL FLM



Flexible Liquid Membrane

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

Benefits

- Excellent UV Resistance.
- 1.5mm Thick, Bubble Free, Single Coat Application.
- Self-Accelerated Curing Time – Resistant to Rain in 1 Hr.
- Bubble & Defect Free Membrane.
- High Tensile & Tear Resistance.
- Good Chemical Resistance.
- High Resistance to Extreme Temperatures of -40° to +80°.
- High Resistance to Abrasion, Very Flexible & High Elasticity.
- Excellent Adhesion to all Substrates (with appropriate Primers).
- Water & Water Vapour Barrier.

Applications

- Internal & External Tanking.
- Sub-structures & Basements.
- Lift Pits.
- Retaining Walls.
- Ground Floor DPM.
- Parapet Wall & Plinths.
- Balconies & Verandas.
- Reservoirs.
- Planters.
- Podium Decks.
- Gutters.
- Water Storage Tanks & Ponds.
- Roofs.



SOLSEAL - Liquid Applied Systems

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Description

Solseal Flexible Liquid Membrane is rapid curing liquid applied coating which cures by reaction with atmospheric moisture to produce a flexible and elastomeric membrane 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. It 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. For other substrates please contact our technical department. 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.

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.

Technical Data			
Property (Liquid Form)	Units	Method	Specification
Viscosity (BROOKFIELD)	cP	ASTM D2196-86, @ 25°C	3500-5500
Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20°C"	1.3-1.4
Flash point	°C	ASTM D93, closed cup	42
Tack free time, @ 77°F (25°C) & 55% RH	hours	-	2-3
Recoat time	hours	-	6-48
Property (Cured Membrane)	Units	Method	Specification
Service temperature	°C	-	-40° to +80°
Max. temp. 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	65 (6,5)
Percent elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	> 400
Water vapour transmission	gr/m ² .hr	ASTM E96 (Water Method)	0.8
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)

Application & Primer Selection (Example shown for Concrete surfaces):

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 a suitable primer from the list below. Primers should always be used as it seals and adheres products to the substrate.

Solseal Primer PU4 is a single component primer that takes 3-4 hours to dry.

You can then 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. It can be applied to concrete, timber, bitumen, metal & most substrates. Solseal Primer PU4 has a low viscosity, is user friendly and is a good penetrating primer.

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%.
- Temperature: 5-35°C
- Relative humidity: < 85%.

Packaging

Solseal Flexible Liquid Membrane is available in 15lt, 25lt and 200lt containers. Solseal PU4 Primer is available in 5lt & 20lt containers

Precautions

Can be kept for minimum 12 months in the original unopened pails in dry places and at temperatures of 5°-25°C. Once a pail has been opened, use 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 they creep on the floor. The MSDS (Material Safety Data Sheet) is available on request

Solseal Waterproof System Ancillaries



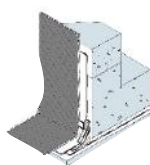
Solcem Solklens is a specially formulated solvent for cleaning resin products from tools and equipment before the resin has hardened, and for removing any residual release agent from formwork. Must not be used as thinners.

Technical Data	
Packaging	5 & 25 Litres



Soldrain Double Soldrain Double can be used as a protective barrier between the structure and the surrounding fill and act as a protective layer to the primary waterproofing membranes. Soldrain Double relieves the hydrostatic pressure by channeling the ground water away from the structural waterproofing, protecting the structure.

Technical Data	
Sheet Size	2.0m x 20m
Sheet Thickness	1mm
Roll Weight	28kg



Solco HD Bitumen Protection Board is a tough, reinforced flexible bitumen modified board for the protection of adhesive waterproofing membrane and other types of waterproofing membranes against damage by abrasive backfill materials and poured concrete

Technical Data	
Sheet Size	1.0m x 2.0m
Thickness	3mm / 6mm
Weight	8kg / 16kg



Solco XL Jointing / Reinforcing Tape is a self adhesive bitumen tape is used as reinforcing / over-banding tape for securing waterproofing and gas protection membranes at overlaps edge and corner details.

Technical Data	
Roll Width(s)	100 / 150 / 300mm
Roll Length	10m
Thickness	1.5mm



Solseal Primer PU4 is a single component same day primer that takes 4 hours to become tack free.

Solseal Primer PU24 is a single component primer that takes 12 hours to dry. Solseal Primer PU24 can be applied over wet concrete, in rainy conditions and after application has no effect on performance.

Technical Data	
Packaging	5 & 20 Litres