TDS 05-04-25

PERMA-FLEX™

Rapid- curing aliphatic polyurethane Waterproofing for flat roofs.

Perma-Flex is a fast-drying, one-component, aliphatic polyurethane waterproofing coating designed specifically for roofs. Perma-Flex dries rapidly, allowing for recoating in just **2 hours**, and facilitates the full completion of the waterproofing system in a single day. It demonstrates resistance to rain within just 30 minutes of application. The coating forms an impermeable membrane that provides high resistance to UV radiation and mechanical stress.

Fields of Application

- ✓ Roofs of concrete, cement tiles, and timber.
- ✓ Walkable roofs.
- ✓ Roofs requiring high resistance to ponding water.
- ✓ On GRP & existing liquid membranes.
- ✓ On Existing bitumen and single-ply membranes.
- ✓ Metal roofs.
- ✓ Fibre cement roofs.

SRS FLAT ROOF SOLUTIONS SINCE 1987

SRS Flat Roof Supplies, Unit A6,
Rose Industrial Estate, Marlow Bottom, Bucks SL7 3ND

01628 476040

info@srsroofsystems.com | **srsroofsystems.com**

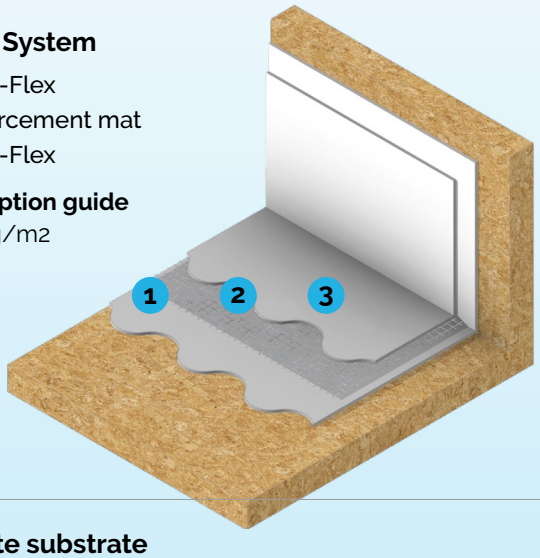
Advantages

- **Fast track installation:** touch dry in as little as 1 hour.
- **Resistant to rain:** 30 minutes from application.*
- High elongation and mechanical strength.
- Excellent resistance to ponding water.
- Ideal solution for walkable roofs.
- Long-lasting resistance to UV radiation.
- Increased hardness and crack-bridging properties.
- Can be applied on a damp surface *(not fully wet)*.
- Ecofriendly & user-friendly, with low VOCs and low odour. Packaging 4kg & 13kg
- No wastage *(stays fluid after opening)*. Graphite grey RAL 7024

20 Year System

1. Perma-Flex
2. Reinforcement mat
3. Perma-Flex

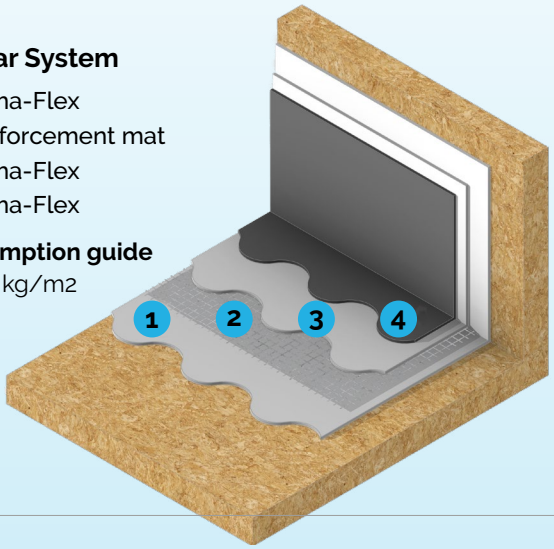
Consumption guide
1.2-1.8 kg/m2



25 Year System

1. Perma-Flex
2. Reinforcement mat
3. Perma-Flex
4. Perma-Flex

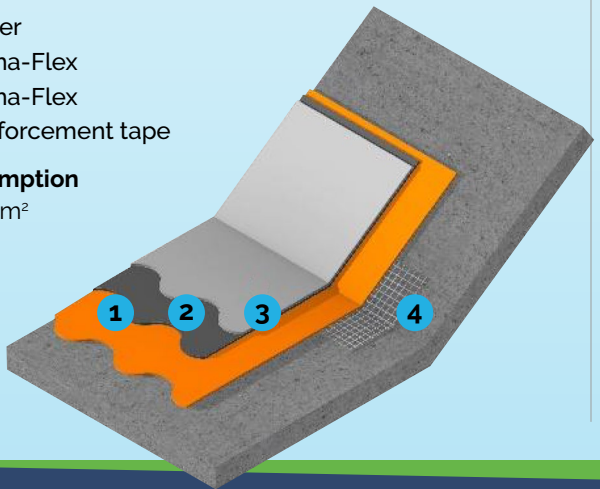
Consumption guide
1.8-2.4 kg/m2



Concrete substrate

1. Primer
2. Perma-Flex
3. Perma-Flex
4. Reinforcement tape

Consumption
1.2 kg/m²

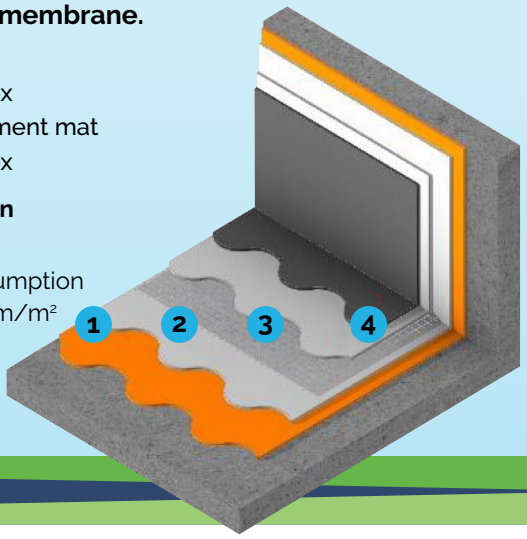


Concrete substrate fully reinforced membrane.

1. Primer
2. Perma-Flex
3. Reinforcement mat
4. Perma-Flex

Consumption
1.8 kg/m²

Primer consumption
150-200 gram/m²



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Application Guidelines

OSB. Plywood substrate, fully reinforced system.

1. Ensure all surfaces to be treated are clean, and free of dust or contaminants.
2. Fix edge trims and use PU mastic to fill any cracks, splits, or wide gaps in boarding (only use Pu mastics not silicone or GP mastics).
3. If brickwork is in good condition, strike a line using tape to coat up to, (ensure the tape is removed once the Perma Flex has been applied and before it cures). If the brickwork is in poor condition a flashing or termination bar will be required.
4. Prepare your matting for detail and the main flat area.
5. Open the Perma Flex and stir thoroughly.
6. Carry out detailing work first to trims- upstands – pipes etc.
7. Apply a coat of Perma Flex to the surface with a roller and lay your matting into it.
8. Without adding further product to the roller, dry roll the mat to draw the product through, then immediately apply another coat of Perma Flex ("wet on wet") ensuring the mat is fully embedded and encapsulated.
9. Matting should be overlapped by 50 mm on all joints, over trims or change of material.
10. Once the detailing has been completed infill the main area using the same procedure.
11. A minimum of 750grm per sqm of Perma Flex should be used per coat, coverage per 13kg drum is approximately 8- sqm dependent on the substrate and applicator.
12. For the 25-year system, allow the membrane to cure then add a further coat of Perm Flex at a minimum 600grm per sqm.
13. Once complete, check that there are no dry areas which need to be overcoated.

Concrete-cementitious substrates

1. The substrate must be stable, clean free of dust, grease, oil and loose material.
2. Prior to the application of Perma Flex SRS primer Pu 1K should be applied at the rate of 150-300grm per sqm dependent on the porosity of the surface.
3. Along the up-stands, intersections, corners, pipes and detail use SRS reinforcing bandage between coats of Perma Flex on a "wet on Wet "procedure.
4. Main area, apply Perma Flex at the minimum rate of 600grm per sqm per coat in two layers, the second being applied in a different direction to the previous one.
5. Additional coats can be applied if required

In cases where projects demand high mechanical resistance and crack bridging it, is recommended that SRS reinforcing mat be used in the whole application surface.

Bitumen/Felt Substrates.

It is recommended to use SRS primer Pu 1k prior to Perma Flex, the benefit of using primer is that it will not only enhance adherence of the Perma Flex but will in addition seal porous surfaces and therefore reduce the amount of Perma Flex that would be required to seal what are normally absorbent materials.

Application Conditions

Substrate Mositure Content	<6%
Relative Air Humidity *(RH)*	<80%
Application Temparture *(Ambient -Substate)*	+5°C / +40°C

Curing details

Drying time *(RH 50%)*	+10°C	100-120 Minutes
	+23°C	45-60 Minutes
	+35°C	20-30 Minutes
Dry to recoat *(RH 50%)*	+10°C	3 Hours
	+23°C	2 Hours
	+35°C	1 Hours
Resistance to early rain *(RH 50%)*	+10°C	40 Minutes
	+23°C	30 Minutes
Resistance to early rain *(RH 70%)*	+35°C	40 Minutes
Full Hardening		-7 Days

*Low temperature and high humidity during application and/or curing prolong the above times, while high temperatures reduce them.
**The above times for drying , recoating and early rain resistance refer to layer application of avg. consumption 600gr/m²

Technical Characteristics

Density *(EN-ISO 2811-1)*	1.50KG/L*(10.1)*
Elongation at break *(ASTM D412)*	350% *(+30)*
Tensile Strength at Break *(ASTM D412)*	2.20MPa*(+0.20)*
Tensile Strength at Break *(Reinforced with Neotextile ASTM D412)*	>4.5,MPa
Adhesion Strength *(EN1542)*	>2.0N/mm²
Hardness Shore A *(ASTM D2240)*	68
Liquid water permeability *(EN 1062-3)*	<0.1kg/m²h$^{0.5}$
Permeability to CO_2 - Diffusion equivalent air-layer thickness 5d *(EN 1062 -6)*	>50M
Water Vapour Permeability - Diffusion Equivalent air-layer thickness 5d *(EN ISO 7783)*	7,8m *(Class II)*
Accelerated UV ageing in presence of moisture *(UVB-313,4h UV @60°C + 4h condensation @50°C, ASTM G154)*	Pass *(>1000 hours)*
Service Temperature	-15°C min/ +80°Cmax
Total Reflectance SR% *(ASTM E408)*	82% *(White)*
Infraed Emittance *(ASTM E408)*	0,96 *(White)*
Solar Reflectance Index SRI *(ASTM E1980-11)*	104 *(White)*

Consumption :1-1.2kg/m² for two layers *(Cementitous surface)*

Cleaning of Tools - Strains removal	By water immediately after application . In case of hardened stains , by mechanical means
Volatile Organic Compounds (V.O.)	V.O.C limit acc. to the E.U. Directive 2004/42/CE for this product of category AcWB: 40g/l *(Limit 1.1.2010)* - V.O.C. content of the ready to use product <40g/l
UFI code	CH 14 -90SV -P002 -53F4
Storage stability	2 years , stored in its original sealed packing, protected from frost, humidity and exposure to sunlight

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