

PRODUCT DATA SHEET

Aquaflex PU is a tough, durable, elastomeric, single pack, liquid applied, moisture curing, cross linking, polyurethane waterproofing membrane grey in colour. Aquaflex Pu forms a tough, flexible, seamless waterproofing membrane designed for both vertical and horizontal surfaces that bonds well to most suitable primed building substrates. Aquaflex PU is formulated as an anti-sag membrane, that although easy to apply by roller or brush, it can be applied on a vertical surfaces without slumping to achieve the required film thicknesses..

Description

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Application

Aquaflex Pu has been designed to waterproof most applications within the building and construction industry including:

- Tiled or covered areas
- Shower recess and wet areas (floors and upturns)
- Decks, balconies, terraces and podiums
- Retaining walls
- Planter Boxes and landscape areas
- Structural Slabs
- Tanks, pits, and water retaining structures
- Roofs covered with pebbles or other toppings

Suitable Surfaces

Surface should be sound, stable, dry, free of dirt, dust and primed

- Concrete, Cement and Cement block work
- FC Sheeting, Plaster Board
- Hebel, Bricks
- Render
- Masonry

Specification

The information contained in this product data sheet is typical but does not constitute a full specification as conditions and specific requirements may vary from project to project. The instructions should be considered as a minimum requirement but the applicator or contractor must use their skill, knowledge and experience to carry out additional works as may be necessary to meet the requirement of the project. Specification for specific projects should be sought from the company in writing.

Precautions

Risk is considered low when properly used but precautions on can, label and or the data sheet should be observed. Do not used in a confined with poor ventilation, if you do wear correct PPE, the product is flammable.

Limitations

In exposed areas, Aquaflex Pu needs to be topped or covered with as its not UV stable

Benefits and Advantages

- Single pack no mixing required
- Fast curing usually 24 hours
- Anti-sag, remains required thickness without slumping on vertical surfaces
- Permanently flexible (test show initial flexibility of >500%)
- Voc's – meets the Greenstar Criteria for VOC
- Suitable for immersion in water
- Will not bleed or stain grout or tiles
- Good Chemical resistance
- High strength and puncture resistant
- Provides seamless membrane (no joints or laps)
- Easily repaired and maintained
- Odorless when cured
- Formulated for long term protection
- Tar free
- Good hydrostatic resistance
- Root resistant due to its inherit tensile strength

Priming and Surface Preparation

Good preparation is essential. Surfaces must be sound, stable, dry, clean and free of dust, loose flaking, Friable material and substances that may diminish adhesion.

Priming: Surfaces should be suitable primed with Aquaflex PU Primer or equivalent polyurethane primer, must apply at no less than 1litre/4m².

Where there is a risk of evaporation of entrapped moisture in the substrate or water vapour transmission, which may cause the membrane to bubble, apply one or two coats of Aquaflex Floseal Epoxy primer, allow to dry for 24 hours and then apply the first coat of membrane.

Metal surfaces must be clean and free of contaminants and then primed with the correct metal primer. If rusted, treat to remove rust, treat with rust converter and then prime with a metal primer. Excessively porous, friable and dusty surfaces may require an additional priming coat.

Corners

Prime as required, apply an adequate flexible polyurethane sealant, in accordance the manufactures instruction and tool off to from a solid covered 45° fillet extending at least 10mm on to the adjacent surfaces. Allow to cure, apply Aquaflex PU directly over the sealant and on adjacent surfaces.

Joins, Gaps and Cracks

General: Joins, gaps and cracks should be suitably filled and sealed with an appropriate elastomeric sealant, preferably a polyurethane sealant and allow to cure. The movement of small cracks should not be underestimated and should be covered with a polyurethane sealant or extra coats of membrane.

Large or Live cracks Large cracks

should be routed out to form a V shape and then filled and sealed with a polyurethane joint sealant as per the manufactures instructions. The sealant should be finished slightly proud of the surface and allowed to cure. After priming as required, apply Aquaflex PU as a base coat, lay a strip of reinforcement tape over the join or crack, apply the membrane directly over the reinforcement tape saturating it, ensuring that the fabric is entirely saturated, covered and allowed to cure. At least a further one or two coats of Aquaflex PU as per MSDS and extending at least 75mm on to the adjacent surfaces.

Joins in CFC Sheeting and Timber Sheeting

The sides of the sheets should be fully coated with a flexible polyurethane waterproof joint sealant prior to butting the sheets together. If not the joins should be suitably filled and sealed with an appropriate elastomeric polyurethane waterproof sealant and finished flush with or preferably slightly proud of the surface and allowed to cure. After priming as required lay a strip of reinforcement tape over the joint, apply Aquaflex PU as described under Large or live cracks.

Waste outlets, Penetration and Angles

Waste outlets, floor wastes and puddle flanges should be rebated on to the floor to allow water to readily drain. Fill all gaps and perimeters with a polyurethane joint sealant.

Plastic or metal angles where required by the Building code such as internal hobs and exterior door barriers and also plastic corner angles under wall boards, they should be securely embedded in to a continuous, gap free bed of polyurethane sealant/ mastic.

Root Resistance

Aquaflex PU inherent tensile strength makes it root resistant for general flowers, lawn and shrubs.

Exposed Areas

Must use Aquaflex PU Grey – UV stable membrane or Aquaflex PU Non exposed but must be topped with a UV stable membrane.

Application

Apply Aquaflex PU by brush, roller, broom and squeegee in a minimum of two coats, usually a day a part so that the minimum dry film thickness in 1.2mm. The minimum wet coat thickness per coat is 0.5mm.

Reinforced System: in areas such as corner and over joins and cracks the membrane should be used in conjunction with a reinforcing fabric or fibreglass matting. This application consists of applying a base coat in to which the reinforcing fabric is laid followed by the application of a saturating coat ensuring that the product is worked well in to the fabric and that no wrinkles or bubbles are present and that fabric is entirely saturate and covered with product. Allow to cure and apply one or two further coats of product.

Coverage

The stated average coverage rate may vary depending upon type, condition, porosity, texture of the surface and application technique.

On average the minimum final coverage of Aquaflex PU is 1.5Ltrs per m² generally applied in two coats. The minimum dry film thickness on vertical surfaces should be 1.0mm and 1.2mm for horizontal surfaces.

Drying and Curing

Drying and curing of the product is affected by type, dryness and porosity of the surface, temperature, humidity, ventilation, climate conditions and application technique and therefore drying and curing and only be given as a guide. Generally Aquaflex PU will be dry to touch within 10 to 12 hours and will fully cure in 24 hours.

Storage

Keep in cool, dry place away from heat, flame or combustible material. Product contains flammable solvents. Class 3 Dangerous Goods must be declared prior to transportation. Available in 15 Lt metal drums.

Shelf life: 6 - 12 months in unopened container but best used within 6 months. As this is a polyurethane some skinning of the product may occur. This should be cut out and removed. Balance of the product will be suitable for use

Clean Up

Avoid spills. They are difficult to clean particularly off porous surfaces. For wet spills use a cloth and Solvent to wipe. Do not clean off carpets as it is better to allow product to cure and then shave the carpet. Equipment should be immediately cleaned with Solvent or will need to be mechanically removed.

Test and Technical Data

Aquaflex PU has been tested by CSIRO [Test Report 6028.4] and passes AS4858:2004 - Wet Area Membranes

Elongation at break: > 900%

Class 111 High Extensibility.

Tiling, Topping or Top Coating

Aquaflex PU is suitable for topping with sand: cement mix at a minimum of 25mm thickness.

Roofs should be covered with Geo-textile and pebbles or top coated with a trafficable UV stable Polyurethane membrane or tiled over a screed.

Tiling: A 350 micron thick adhesion coat of Aquaflex PU should be applied to the freshly cured membrane, then dry builders sand should liberally broadcast into the wet coat to provide a mechanical key. Allow to cure then remove any loose sand. Ensure surface is dry and clean. Acrylic bonding agents can be used in sand and cement mixes for better strength and adhesion. When tiling, it is essential that adequate expansion joints are installed in accordance with good tiling practice and AS3958.1-1991.

Safety Precautions

Aquaflex PU is solvent based. The use of solvent resistant gloves and goggles (against splashes) are recommended.

Spraying:	which is very rare, the use of self-contained breathing apparatus is recommended.
Ingestion:	do not induce vomiting, give plenty of water to drink. Seek urgent medical advice.
Eye Contact:	flush thoroughly with clean water, holding lid open to ensure any trapped product may be flushed away.
Skin Contact:	remove contaminated clothing and wash skin with soap and water.
Inhalation:	unlikely due to viscosity of the product, remove person to fresh air and apply artificial respiration if required and seek urgent medical attention.

Product is flammable when wet. Keep away from all sources of ignition. Ensure adequate ventilation. Vapours may collect in low lying areas.

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Product Disclaimer

This product Data Sheet (PDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this PDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Aquaflex Pty Ltd does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.