

## POLYDEK SUPER P

### HIGH PERFORMANCE POLYURETHANE ACRYLIC WATER-BASED, SINGLE COMPONENT WATERPROOFING MEMBRANE

#### DESCRIPTION

POLYDEK SUPER P is a highly elastic & high performance, liquid-applied waterproofing membrane of polyurethane and acrylic polymer. It consists of a very elastic polymer with the inherent flexibility that allows the membrane to accommodate movements in the substrate. It works as a seamless membrane that performs and adapt to any construction requirements in varied climatic conditions.

POLYDEK SUPER P is especially formulated to seal, waterproof and decorate exterior surfaces & roofs. It seals cracks and joints in old or new roofs/walls and simultaneously leaving a seamless finish to the roof surface provides trafficable membrane.

#### USES

- Fire Walls
- Exposed concrete slab roofs
- New & old roofs / walls
- Car porch roofs
- Tiles roofs
- Fibre cement boards
- Metal surfaces
- Gutters

#### ADVANTAGES

- **Waterproofing** - Prevents further ingress of water in old and new concrete.
- **Durability** - Enforced with fibre glass matt increases film tensile strength and wear resistance.
- **Flexible** - High elastic enable bridging of hairline cracks and accommodates minor joint movements.
- **Weather Resistant** - Excellent UV resistance.
- **Trafficable** - Able to withstand foot traffic.
- **Cost Effective** - Repairs damaged concrete by direct application without additional re-construction.
- **Ease of Application** - Brush, roller or airless spray applied.
- **Solvent Free** - Operators do not need extra respiratory protection.
- **Ease of Maintenance** - Fungus & mold are free on apply surfaces

#### PRODUCT PROPERTIES

Colour	White & Grey
Chemical Base	Polyurethane modified Acrylic
Density	1.25 kg/litre of fresh liquid membrane
Tensile Strength	> 3 N/mm <sup>2</sup> ( ASTM D412)
Elongation At Break	> 400%(ASTM D412)
Crack Bridging (mm)	2 mm No cracks was observed (ASTM C836:2006)
Weather resistance	UV Resistant
Solid content %	>50% (ASTM 2369)

#### COVERAGE

##### Specification for walls and firewalls

The system consists of the following sequence;

1. 1 coat of Greenshield Primer (0.1litre/m<sup>2</sup>)
2. 1 coat of POLYDEK SUPER P (0.3litre/m<sup>2</sup>)
3. 1 coat of POLYDEK SUPER P (0.3litre/m<sup>2</sup>)

##### Specification for concrete and roofs

The system consists of the following sequence;

1. 1 coat of Greenshield Primer (0.1litre/m<sup>2</sup>)
2. 1 coat of POLYDEK SUPER P (0.3litre/m<sup>2</sup>)
3. 1 layer of Fibre mesh
4. 1 coat of POLYDEK SUPER P (0.3litre/m<sup>2</sup>)
5. Final 1 coat of POLYDEK SUPER P (0.3litre/m<sup>2</sup>)

**NOTE:**

\* 3 hours is needed for the drying of each coat of POLYDEK SUPER P before the application of the next coat.

Greenseal Fibre Mesh

GS Fibre Mesh is a non-woven fibre mesh fabric used as reinforcement in the application of liquid waterproofing where substantial movement is anticipated. It is designed so as to allow POLYDEK SUPER P to pass through; thereby forming a compact reinforced sandwich membrane upon application problem between the top and bottom layers should a high force be applied on it.

Application for using Greenseal Fibre Mesh is as follows:

- Where a layer of polyester fibre mesh is used as reinforcement for better tensile strength of membrane. It shall be laid onto the 1<sup>st</sup> coat of POLYDEK SUPER P before it is totally dry to enable it to adhere onto the 1<sup>st</sup> coat and leave to dry. The 2<sup>nd</sup> coat POLYDEK SUPER P should apply when is tartly dry.
- For better tensile strength use in conjunction with Greenseal Fibre Mesh.

**APPLICATION INSTRUCTIONS**

**SURFACE PREPARATION**

Ensure all surfaces are clean and free from dirt, oil, grease, efflorescence, fungi growth, loose particles and laitance. As for horizontal surfaces must be cast to fall as POLYDEK SUPER P will be finishing product to avoid ponding on POLYDEK SUPER P surfaces.

Hack off honeycombs to expose concrete. Remove all chipped and loose particles and clean surface before repairing.

Lastly, repair all hacked off areas with Greenseal Injection Grout mortar.

Ensure new concrete is at least 3 days old before application of POLYDEK SUPER P.

**Angle Fillet**

- Form an angle fillet of 25 X 25mm with Greenseal Injection Grout at all junctions between slabs and walls.
- Mix 3 parts of Greenseal Injection Grout to 1 part water and mix thoroughly to a mortar consistency and apply with trowel to form the angle fillet.

**Outlet Pipe Penetration**

- Hack a V groove joint with a depth of 25mm surrounding the outlets and pipes.
- Wash thoroughly the hacked areas to expose the clean concrete surfaces between the outlet pipe and the concrete.
- Mix 3 parts of Greenseal Injection Grout to 1 part water and mix thoroughly to a mortar consistently and apply with a trowel into the hacked V groove and level it to the concrete level.

**PRIMER**

Apply Greenshield Primer to unpainted clean surfaces for better adhesion.

For painted surfaces, remove all flakes of paint before applying Greenshield Primer.

**APPLICATION METHOD**

**Application for 1 coat Greenshield Primer + 2 coats POLYDEK SUPER P**

1. Thoroughly clean concrete surfaces free of oil, grease, paint and loose dust, mud and laitance and hose down concrete surfaces thoroughly.
2. POLYDEK SUPER P shall be applied in minimum 1 coat Greenshield Primer + 2 Coats POLYDEK SUPER P for wall surface.
3. The Greenshield primer coat shall be applied at the rate 0.1litre/m<sup>2</sup> with a proper roller ensuring that all surface of the concrete surface is covered.
4. When the primer coat is dry and can accept foot traffic without lifting up of material when step on. This would at least be 2 to 3 hours after the primer coat application.
5. Over the Primer coat, roll a first coat of POLYDEK SUPER P at the rate of 0.3litre/m<sup>2</sup> on top of the primer coat.
6. Wait for the first coat POLYDEK SUPER P to be dry at least 3 to 4 hours later.
7. Then applied the second coat (top coat) of POLYDEK SUPER P at the rate of 0.3litre/m<sup>2</sup> per coat and then wait for the POLYDEK SUPER P dry.

**Application for 1 coat Greenshield Primer + 3 coats POLYDEK SUPER P Reinforce with Fibre Mesh**

1. Thoroughly clean concrete surfaces free of oil, grease, paint and loose dust, mud and laitance and hose down concrete surfaces thoroughly. POLYDEK SUPER P can be applied by using brush or roller over the entire surfaces.
2. The first coat Greenshield primer shall be applied at the rate 0.1litre/m<sup>2</sup> with a proper roller ensuring that all concrete surfaces are covered.

3. Then applied the first coat of POLYDEK SUPER P at the rate of 0.3litre/m<sup>2</sup> per coat. While the first coat POLYDEK SUPER P still wet, lay the Polyester Fibre Mesh over it and ensuring it all flatten and no ringers occurs.
4. Then wait for the first coat POLYDEK SUPER P to dry at least 3 hours and apply the second coat of POLYDEK SUPER P at 0.3litre/m<sup>2</sup>. It is important roll the second coat with sufficient material to cover the Fibre Mesh.
5. Wait for the second coat POLYDEK SUPER P to be dry at least over night or 3 hours minimum and then only applied the final coat (top coat) of POLYDEK SUPER P at the rate of 0.3litre/m<sup>2</sup> per coat.

#### **MIXING**

No mixing is required.

#### **CURING**

Allow 24 hours between coats. A final curing time of 48 hours is adequate at normal working temperatures. Ensure curing is complete before laying thermal insulation boards, mechanical protect and other coverings.

Low Temperatures and high atmospheric humidity will slow down the curing rate, and vice versa.

#### **CLEANING EQUIPMENT**

Clean equipment with soapy water followed by rinsing with clean water. Flush mineral spirits through the spray equipment to prevent rust.

#### **PACKAGING AND APPEARANCE**

- 20 litre /pail
- Colours – White & Grey (Special color are available through request to Greenseal office.)

#### **STORAGE AND SHELF LIFE**

POLYDEK SUPER P has a shelf life of 24 months. Keep containers tightly closed and away from ignition sources. Do not expose it to direct sunlight or leave it too long in the open air.

#### **PRECAUTION**

Do not apply POLYDEK SUPER P if weather is imminent before the coat is dry thoroughly, or when temperature is expected to drop below 5°C.

Newly applied POLYDEK SUPER P should be protected from rain, extreme heat and moisture during the first few hours.

Please contact Greenseal Products (M) Sdn Bhd for further technical assistance.

#### **HEALTH, SAFETY AND CLEANING**

It is recommended that the applicator wears a safety goggles and gloves. Avoid prolonged contact with exposed skin, and keep away from mouth and eyes. In case of skin contact, wash areas with soap and water. If contact with eyes, rinse thoroughly with clean water. Seek medical attention immediately if irritation persists.

#### **Guarantee**

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. GREENSEAL reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorized by us. Our guarantee covers exclusively the quality of the manufactured product. We will not accept any responsibility exceeding the value of the purchased product.