

**LANKO**



**CHARACTERISTICS**

- **Easy to apply.**
- **Water-based.**
- **Mould and fungus resistant.**
- **UV resistant.**
- **Flexible.**
- **Bridges cracks.**
- **Coloured.**
- **Non-toxic.**

**DESCRIPTION**

451 LANKOROOF is a liquid acrylic waterproofing membrane for roofs and facades. Applied in a thick layer, the paint forms a waterproof, flexible film which adapts to the surface changes caused by tension or expansion.

451 LANKOROOF is designed as a 5-layer fabric reinforced waterproofing system for positive waterproofing of concrete roofs. Fabric reinforcements are incorporated to overcome unevenness of roof surface to build up waterproofing film and thickness. A 2-coat 451 LANKOROOF membrane application forms a microporous surface which is sufficient to protect external surface from water seepage and deterioration due to carbonation, acid or chemical attack or other types of environmental pollution.

**USES**

For waterproofing of roofs, walls, gutters and structures.

Permissible substrate :

- Concrete and mortar.
- Steel and zinc.
- Metal.
- Timber.
- Plastic and asbestos sheets.
- Bituminous surfacing.
- Masonry or brick.

**SPECIFICATIONS**

- Appearance : semi-fluid paste.
- Paste density : 1.3±0.1
- Paste viscosity : 25000 cps
- pH : 9-10
- Flash point : Zero
- Solid content : > 60% by weight  
: > 45% by volume
- Elongation at break : 380%
- Hardness shore A : 70
- Drying time : 12 hours

Performance\*

Tensile strength : ASTM D412-92

4.5 MPa

Adhesion strength : ASTM D4541-93

0.86 MPa

Crack bridging : ASTM C836-89

> 2 mm

Water vapour transmission : ASTM E 96-94

9.4 g/m2/24 hr

QUV accelerated weathering : ASTM G53-93

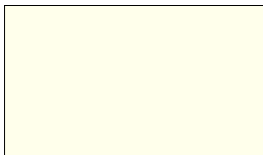
1000 hours : no cracking, grey scale No 5

Fire resistance : AS 1530 part 3

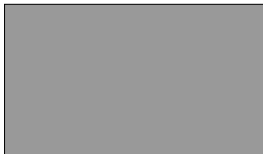
Spread of flame index : Zero

Smoke evolved index : 4

\* average laboratory values provided as a general guide.



**White**



**Grey**



**Brick Red**



**Apple Green**



**Sky Blue**

Shading of the colour samples may be somewhat different from the actual colours.



### COVERAGE

Approx. 0.9 kg/m<sup>2</sup> at thickness 700 micron (Wet film) depending upon site condition.

### PACKAGING

- 4 kg container.
- 20 kg container.

### STORAGE

1 year from date of manufacture if stored in unopened original packing

## WORK INSTRUCTIONS

### Surface preparation

#### General

- Wallboards, flooring grade particleboard and fibre cement sheet must be firmly fixed in accordance with manufacturer's instructions.
- Screw and nail heads must be sealed with epoxy resin.
- The surface must be smooth, sound and free from irregularities, sharp projections, loose particles, oil, grease, coating, moss, mould and any foreign matter. Roofs should have sufficient falls to avoid ponding on the finished membrane surface.
- Any voids, potholes in the substrate must be appropriately filled up with a high strength mortar.
- The entire area must be cleaned to remove dust and dirt. Allow the surface to dry thoroughly.

#### New concrete

- New concrete must be allowed to cure for at least 28 days.
- Concrete slabs should be wood float finished.

#### Old concrete

- Old concrete must be cleaned with a strong detergent or degreaser, then remove all residue with water using a high-pressure hose.
- Allow the surface to dry thoroughly for at least 24 hours.

#### Render

- New rendered surfaces must be allowed to cure for at least 7 days.

#### Metal surfaces

- Ensure that all metal surfaces are totally free of rust.
- Prime the metal surface using etching primer.

#### Lightweight blocks

- Prime the surface with 451 LANKOROOF diluted with 5% of water.

#### Cracks

- Small hairline cracks, which experience no movement, may be filled by the first application of 451 LANKOROOF.
- Structural cracks, which experience movement, must be filled with 603 POLYURETHANE or 612 LANKOCRYL prior to application of 451 LANKOROOF.

#### Timber, fibre cement and particle boards

- Ensure all boards are fixed in accordance with the manufacturer's instructions.

### Product preparation

- Body coat/top coat : stir the product well prior to use.
- Primer : dilute 451 LANKOROOF with 5% of water, stir the mixture well.

### Vertical membrane system

- Apply the priming coat of 451 LANKOROOF diluted with 5% of water using a roller or brush (if required to do so, depending on the substrate conditions). Leave the primer to dry.
- Apply the 1st coat of 451 LANKOROOF direct from the bucket at the rate of 0.7 kg/m<sup>2</sup>.
- Allow a minimum drying time of 4 to 8 hours
- Once the first coat is dry, apply the 2nd coat at the rate of 0.7 kg/m<sup>2</sup>.

### Horizontal membrane system

- Apply the priming coat of 451 LANKOROOF diluted with 5% of water using a roller or brush (if required to do so, depending on the substrate conditions). Leave the primer to dry.
- Apply the 1st coat of 451 LANKOROOF direct from the bucket at the rate of 0.7 kg/m<sup>2</sup>, and whilst it is still wet, roll out the reinforcing matt and press into the wet 451 LANKOROOF. Allow to dry for at least 2 hours.
- Apply the intermediate coat at the rate of 0.7 kg/m<sup>2</sup> to completely fill reinforcing matt.
- Apply the final coat at the rate of 0.7 kg/m<sup>2</sup>. Leave to cure overnight.

## PRECAUTIONS

- Temperature range for use : 10°C to 35°C.
- Do not add sand to the 451 LANKOROOF as this will reduce flexibility and could cause cracking.
- 451 LANKOROOF is not recommended for use in areas of water immersion like swimming pools, spas etc.
- Do not use where negative hydrostatic pressure is evident.
- Surfaces must not allow water to stagnate.
- Clean brushes, rollers and trays with water before product dries.
- Do not apply in full sunlight or on hot substrate.
- Do not apply in damp or freezing conditions.