



# QUICSEAL 109

## Product Name

## Self-Adhesive Waterproofing Membrane

Cold applied, self-adhesive, preformed, waterproofing membrane for structural concrete.

## Description

QUICSEAL 109 waterproofing membrane comprises of a self-adhesive, cold applied SBS modified (Styrene Butadiene Styrene) rubberized bitumen and is protected by a high density, polyethylene film. The excellent mechanical properties of the polyethylene film increases the membrane's resistance to puncture and damage caused by the spillage of chemicals.

## Advantages

- Self-adhesive
  - no seaming tapes needed
- Preformed -factory controlled manufacturing ensures uniformity in thickness.
- Cold applied, fast installation, eliminates hot air or naked flames torching methods
- Easy & safe to install
  - No risk of fire hazards and pollution



## Uses

QUICSEAL 109 is ideal for below-grade waterproofing structural concrete and masonry walls and is excellent choice for waterproofing basements, foundations, retaining walls ground slabs & beams, tunnels, reinforced concrete roofs, lift pits, etc.

## Application Instructions

### 1. Surface Preparation

All surfaces should be sound, clean, dry and free of irregularities, loose particles, laitance, oil or any other contaminants. Concrete must be fully cured before application of QUICSEAL 109. Brickwork shall be flush pointed or rendered to provide a smooth surface before priming.

Optimum adhesion is achieved when work surface is first primed with **QUICSEAL 109 Primer** at a rate of 5 to 8m<sup>2</sup>/ltr. Allow the primer to dry 30 min or until tack free. Areas primed and not covered by membrane in 24 hours must be re-primed. Metal or other dense surfaces do not require priming but must be clean, dry, free of loose paint, rust or other contaminants.

**QUICSEAL CONSTRUCTION CHEMICALS PTE LTD**

*QUICSEAL – the professional's choice of quality products and systems for building construction*

2. Overlaps & Seams

Allow minimum 50 mm overlaps at edges and ends.

3. Sealing Edges & Seams

On vertical applications, QUICSEAL 109 should be applied over the edge of the parallel wall, slab or above the foundation. A groove, ringlet or chase should be used to terminate the membrane on the vertical surface. Alternatively, the membrane may be terminated by using counter flashing to ensure adhesion against the wall.

Extra pressure may be necessary to ensure a proper seal. A compatible mastic bead or sealant should be used for all terminations. The membrane can be fitted generally in conformity with B.S. Code Of Practice CP 82:1999.

4. Application

*Horizontal surface*

For waterproofing of slightly sloped surfaces, the installation must start from the lowest point and the overlapping must be formed in order to shed water.

*Vertical surface*

It is recommended that the membrane be installed in lengths of 2.5m to 3m. If the surface to be covered exceeds this height, install QUICSEAL 109 in several stages, starting from the lowest point and overlapping the joint by minimum 50mm. Where QUICSEAL 109 is to be left temporarily exposed on vertical faces, the membrane may be fixed with batten at the edge to prevent slippage. Remove battening prior to backfilling and cover fully with subsequent layer of QUICSEAL 109.

Unroll membrane and position the adhesive face on the prepared surface and pull off the release paper. Upon proper alignment, press the membrane into position. Any punctures or damaged areas should be cleaned and patched using QUICSEAL 109 with 50mm laps all round.

5. Protection Of Membrane & Backfilling

QUICSEAL 109 membrane should be protected with QUICSEAL 704 Extruded Polystyrene Foam, screed or other suitable materials to avoid damage by other trades prior to commencement of backfilling operations.

Screed or protective topping should be laid as soon as possible, preferably within the same day of membrane application.

Under no circumstances should the membrane be left exposed for longer periods.

## Technical Data

|  |  |                   |
|--|--|-------------------|
| <b>Thickness of bitumen compound</b>   | 1.50 mm  |                   |
| <b>Protective P.E film thickness</b>   | 100 microns                                      |                   |
| <b>Weight</b>                          | 1.6 kg/m <sup>2</sup>                            |                   |
| <b>Tensile strength</b>                |  |                   |
| : Longitudinal                         | >3.20 N/mm <sup>2</sup>                          | ASTM D412         |
| : Transverse                           | >3.10 N/mm <sup>2</sup>                          | ASTM D412         |
| <b>Elongation</b>                      |  |                   |
| : Longitudinal                         | 225%   | ASTM D412         |
| : Transverse                           | 209%   | ASTM D412         |
| <b>Crack Bridging</b>                  |  |                   |
| <b>Extensibility after heat aging</b>  | No cracks or tearing were observed               | ASTMC 836 : 1995  |
| <b>Bursting Strength</b>               | 596 KPa  | ASTM D 751 : 1998 |
| <b>Adhesion to primed concrete</b>     | 0.31 N/mm <sup>2</sup>                           | ASTM 4541 :1995   |
| <b>Resistance to leakage at joints</b> | no leakage at air pressure of 10 kPa for 30 mins | SS 374 : 1994     |
| <b>Vapour transmission rate</b>        | 0.03g/m <sup>2</sup> /hr                         | SS 374 : 1994     |
| <b>Hydrostatic Test</b>                | no leakage at 3 bars for 1 hr                    | SS 374 : 1994     |

## Packaging

QUICSEAL 109 self-adhesive waterproofing membrane is supplied in roll size of 1 x 20 m. Each roll is packed individually in a cardboard box.

## Handling & Storage

Care should be taken in storing QUICSEAL 109 membrane. Rolls should be stored vertically and must never be stacked. Store covered in a dry, shaded area.

## Limitations

Do not apply QUICSEAL 109 at temperatures below 5°C (40 °F).

## Health & Hazard

There are no known hazards associated with these products under normal use.

## Important Notes

The information set forth herein is furnished in good faith and is based on technical data that QUICSEAL considers to be reliable. This information is intended for used by persons having technical skill and at their own discretion and risk. Information contained in this product sheet conforms to the standard detail recommendations and specifications for the installation of QUICSEAL products as of the date of publication of this document. QUICSEAL makes no other warranties and assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To ensure that you are using the latest, most complete information, contact QUICSEAL

Reference No. QS109/270220

**QUICSEAL CONSTRUCTION CHEMICALS PTE LTD**

*QUICSEAL – the professional's choice of quality products and systems for building construction*