



## Triton TT VAPOUR MEMBRANE

### Description

**Triton TT VAPOUR MEMBRANE** is a single pack liquid applied Waterproofing, Damp-proofing and Gas barrier membrane. It provides protection from Radon, Methane and Carbon Dioxide. Independent 3<sup>rd</sup> party gas test data is available. TT Vapour Membrane air dries to form a flexible, elastic and tough seamless film.

### Typical Applications

- Used as a waterproof and/or gas proof membrane to existing concrete, masonry and brick substrates.
- Used as a primary waterproofing barrier on the external faces of below ground structures built with ICF, blockwork, concrete etc.
- Used in conjunction with Triton TGS Gas Barrier sheet membranes for edge, column and penetration detailing.
- Can be applied by airless spray, roller or brush to walls, floors or soffits.
- As an alternative to sheet membranes in new construction.

### Characteristics

- A minimum 0.7mm thick (dry film) coating provides an effective methane barrier when applied to most brick or cement based construction materials (concrete, screed, blockwork etc).
- Also an effective waterproof membrane.
- Excellent adhesion, bonds to porous and non-porous substrates.
- Flexible and elastic.
- Non-toxic.
- Will withstand temporary light trafficking.
- Difficult to puncture as it is fully bonded to the substrate.
- Easily repaired by locally over-coating.
- Can be painted, plastered or screeded over.
- Rapid air drying, in good conditions two coats can be applied in the same day.
- Can be applied by brush, roller or airless spray.
- Can be applied to damp and 'green' substrates if the overall environmental conditions are conducive to drying.

### Technical Data

Components	1
Form	Thixotropic Liquid
Specific Gravity	1.40 (approx)
Application Temp	Plus 4°C
Toxicity	Non – toxic
<b>Cured Properties</b>	
Adhesion to concrete	1.1N/mm <sup>2</sup>
Elongation ASTM D2370 %	>100%
Tensile Strength ASTM D2370	11 N/mm <sup>2</sup>

### Chemical Resistance

**Triton TT VAPOUR MEMBRANE** has good chemical resistance to petrol (temporary exposure), sodium hydroxide, calcium chloride, de-icing salts and effluent.



## Performance Criteria

The performance of **Triton TT VAPOUR MEMBRANE** is illustrated in the following table with the accepted criteria for diffusivity (test work done at 0.2 bar).

Accepted Criteria	Triton TT VAPOUR MEMBRANE
R>50m	R = 357.5m

Where R = air diffusion equivalent for carbon dioxide in metres.

Gas (methane) permeability :

-15

-9

Methane Gas Permeability (K <sub>gas</sub> ) (m/s)	Methane Gas Permeability (K <sub>gas</sub> ) (ml/m <sup>2</sup> /s)
8.527 x 10	8.527 x 10

\*\*This is an independent 3rd party UKAS accredited test - test certificate No. 12811RevB

Date of Test: 16.12.2009

**Note:** The methane gas permeability values gained by this method can also be used for Radon gas permeability values.

## Preparation & Application Guidelines

- Surfaces must be clean, free from dust and loose material, oil, paint, fungal growth, etc.
- Non-structural cracks greater than 0.5mm wide must be filled and left flush.
- Structural cracks must first be repaired and filled.
- The substrate must be sound and even. Any protruding aggregate must be removed or filled over.
- Old repairs must be inspected and re-done if necessary.
- Newly laid concrete should have a clean, lightly textured surface. **Triton TT VAPOUR MEMBRANE** can be applied to concrete or mortar within 24 hours of laying.
- Apply 45° fillets into angles, floor to wall junctions etc, formed using **Triton FILLET SEAL**, where practicable.

## Mixing

**Triton TT VAPOUR MEMBRANE** is supplied ready blended in a tub or pail. The product should be stirred using a slow speed paddle mixer for 5 minutes before use. Re-stir every two hours.

Do not add water.

## Surface Application

- Pre-dampen the substrate before applying the first coat. The substrate should look darker but not shiny wet. No pools or puddles of water should be present.

Interface with other media

- For expansion joints ensure that **Triton TT VAPOUR MEMBRANE** is applied well into the rebate before the expansion media is applied.
- Other gas membranes must be exposed and lapped with **Triton TT VAPOUR MEMBRANE** where present.

Dealing with cracks

- Cracks must be stabilized and filled. Apply the first coat of **Triton TT VAPOUR MEMBRANE** and whilst wet apply plasterers scrim along the line of the crack, apply a further coat of **Triton TT VAPOUR MEMBRANE** to fully cover the scrim; apply the final coat as stated below.
- Reinforcement of the coating at changes of direction or over jointed surfaces such as ICF may be desirable, in such instances use Geotex non-woven textile.

Application of the main coating system

- The product can be applied by brush, roller or airless spray (with a minimum 17 thousands of an inch nozzle). The spray method is especially suitable for less accessible locations, uneven substrates and large areas.



2. The first or priming coat is applied at a rate of at least 0.5lt/m<sup>2</sup> for waterproofing and at least 0.3lt/m<sup>2</sup> for an effective gas proof membrane. Ensure that the coating is applied evenly and that sags and runs are brushed or rolled out. When brushing or rolling, lay-off in one particular direction. Use a circular action when spraying.
3. Allow the first coat to fully dry through before applying the second coat. High humidity and/or cool temperatures will slow down the drying process.
4. Apply the second coat at a rate of at least 0.7lt/m<sup>2</sup> for waterproofing and at least 0.5lt/m<sup>2</sup> for gas proof applications. Apply the second coat at right angles to the first. Again use a circular action when spraying. Apply a third coat if the substrate is jointed or uneven.
5. Do not apply over bitumen.
6. The total application thickness must not exceed 4mm if splitting or cracking is to be avoided.
7. Protect from frost and rain until all of the coats are fully dried through.
8. Only apply when the air and surface temperature is 5°C and rising.
9. Typical total coverage of 1.2 lt/m<sup>2</sup> is the minimum required for waterproofing work.

## Specification

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**NBS:** Clause J30 10,130 – Liquid applied Damp Proofing

Type A Barrier Protection in Accordance with BS8102 (2009).

## Packaging

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Triton TT VAPOUR MEMBRANE is supplied in a 5 litre Tub or 20 litre Pail.

## Colour

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Blue when applied, changing to charcoal black when dry.

## Storage

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Triton TT VAPOUR MEMBRANE must be stored at temperatures above 5°C and below 35°C in dry conditions, off the ground and away from direct sunlight.

The shelf life is 12 months in original unopened packaging when stored correctly.

## Health & Safety

- Protect hands with rubber gloves.
- Avoid contact with skin and eyes. Should this occur flush with plenty of clean water.
- If irritation persists, seek professional medical advice.
- For full information consult the relevant Material Safety Data Sheet.

For further information please contact:

### **Triton Systems**

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Ref: Triton TT Vapour Membrane 08/18