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### Triton TGS-HCM1000

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#### Description and use

Triton TGS-HCM1000 is a specially engineered tri-polymer construction that provides a highly effective barrier against Radon, Methane, Carbon Dioxide and Hydrocarbon gases. Hydrocarbon gases are formed as a by-product of decomposing organic matter and a build-up of these colourless gases are explosive which could have devastating consequences. The membrane is produced from a uniquely formulated blend of polymers to produce outstanding chemical resistance, mechanical properties, dimensional stability and thermal ageing characteristics. The membrane is ideally suited for sites formerly used as coalfields, landfill sites or industrial sites that previously contained volatile liquids – petrol stations for example.

#### Physical Properties

Thickness: 1000 Micron  
Density: 0.925 g/cm<sup>2</sup>  
Colour: Black  
Length: 20M  
Width: 1.3M

#### Features and benefits

- Excellent resistance to chemical and hydrocarbon gases
- Suitable for hot welding
- Very high puncture and tear resistance
- Compatible with vented systems
- Full range of accessories available

#### Storage and handling

Triton TGS-HCM1000 is classified as non-hazardous (Code of Practice CP101 1973). The membrane is chemically inert and will not react with any acidic or alkaline environment it is laid in. It is not recommended that the membrane is exposed to sunlight for long periods of time. Weathering will not occur when installed according to Code of Practice CP102 1973. If being stored for a lengthy period, the rolls should be stored undercover, out of direct sunlight on a flat level surface.

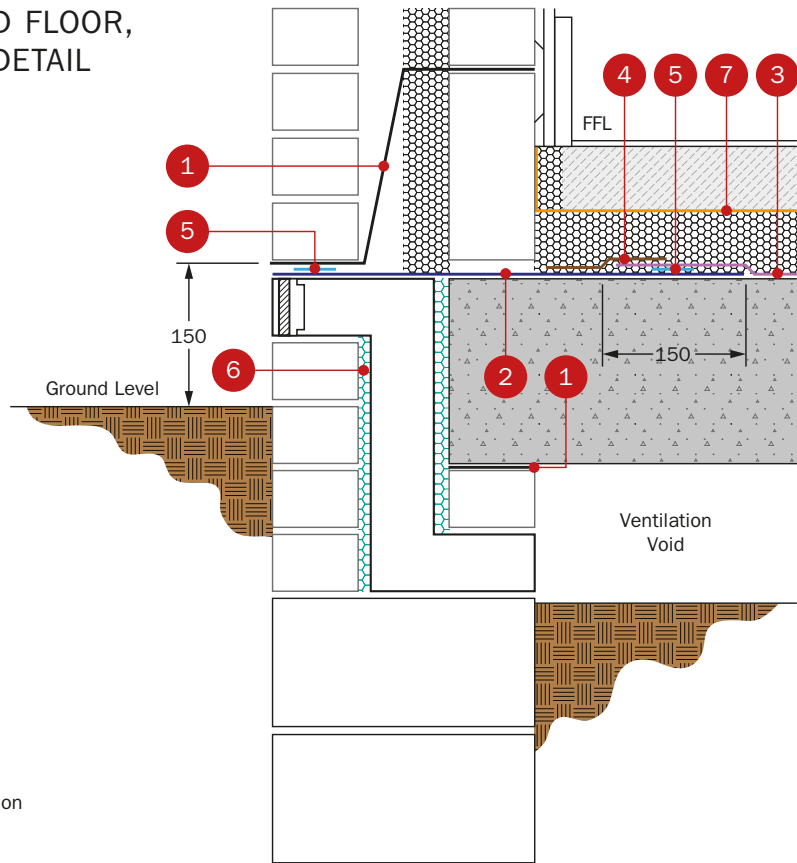
Quality control while laying the membrane is extremely important. The membrane should be protected through the use of temporary boards over the whole area or the immediate laying of the screed. A minimum of 50mm screed is recommended and care should be taken when laying the screed not to stretch, puncture or displace the membrane.

#### Installation

Triton TGS-HCM1000 must be installed in accordance with the guidelines laid out in Building Research establishment BRE No.414 'Protective measures for housing on gas contaminated land', CIRIA C665 'Assessing risks posed by Hazardous ground gases to buildings', NHBC guidelines and CIRIA C682 the VOC Handbook.

Triton TGS-HCM1000 can be used in most common floor constructions and is installed in a similar manner to damp-proof membrane but with greater attention to joint sealing and under wall sealing. Where there is risk of hydrostatic pressure it can be used so long as the jointing is made using the hot weld process and not taped. The membrane should be laid on a smooth surface or sand blinding to prevent puncture.

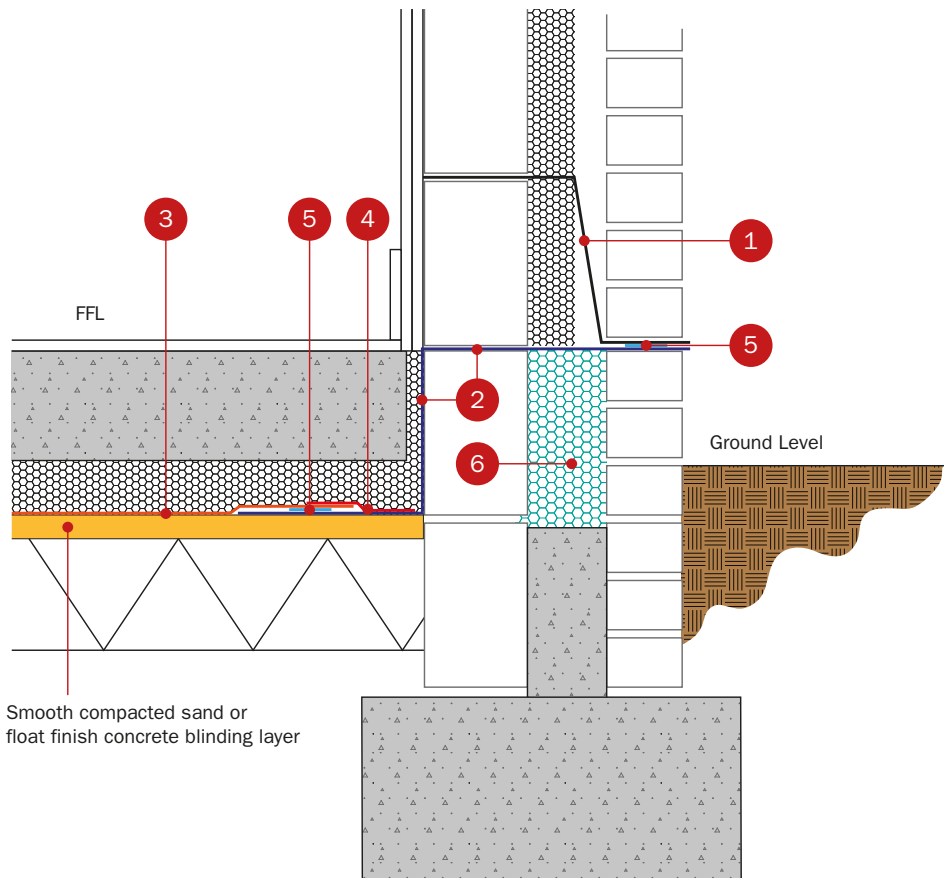
## SUSPENDED SLAB – RAISED FLOOR, TYPICAL GAS PROTECTION DETAIL



### KEY TO MATERIALS

- 1 Triton TGS-HP DPC
- 2 Triton TGS-GR DPC
- 3 Triton TGS-HCM1000
- 4 Triton TGS-HCM1000 Joint Tape
- 5 Triton TGS-HCM1000 DS Tape
- 6 Triton TT Vapour Membrane Insulation
- 7 Insulation

## GROUND BEARING SLAB TYPICAL EDGE DETAIL



### KEY TO MATERIALS

- 1 Triton TGS-HP DPC
- 2 Triton TGS-GR DPC
- 3 Triton TGS-HCM1000
- 4 Triton TGS-HCM1000 Joint Tape
- 5 Triton TGS-HCM1000 DS Tape
- 6 Insulation

## Jointing the Membrane

**1**

Unroll the first membrane, ensure the surface is dry and free from dust or grease. Inspect the membrane to ensure there are no indentations or protrusions. If there are remove and apply sand blinding.



**2**

Apply Triton TGS-HCM1000 DS Tape to the membrane, 50mm from the edge. It is very important that the membrane is dry and free from dust and dirt.



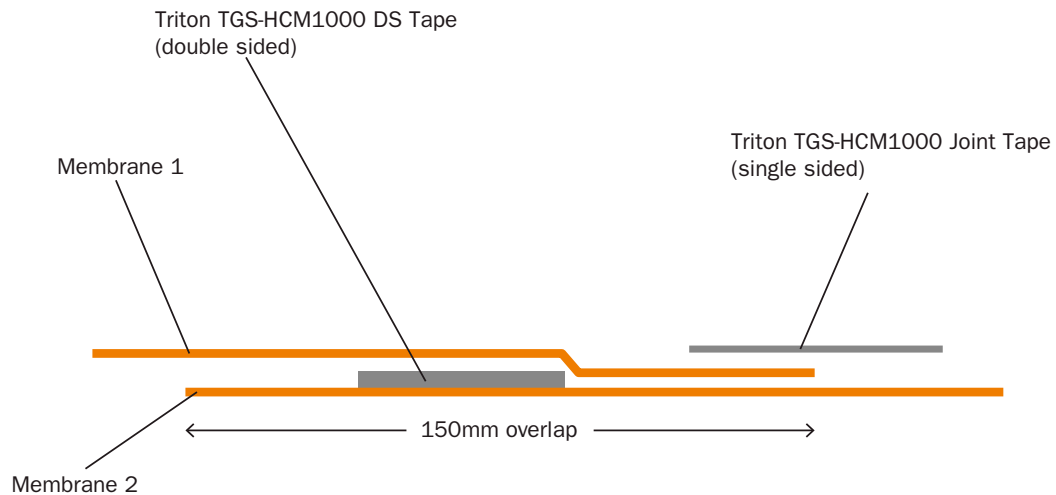
**3**

The second membrane must be unrolled overlapping the first membrane by 150mm. Remove the protective paper from the tape and apply pressure to the membrane while joining the two membranes together.



**4**

Seal the two membranes by installing Triton HCM Joint Tape to the edge. (Ensure that the membrane is completely dry, free from dust and dirt).



All service entry points must have airtight seals. Top hats and corner pre-forms must be sealed Triton TGS-HCM1000 DS Tape.

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