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# Triton TGS-GM500, Triton TGS-HCM1000 and system components

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### General installation guidelines

1. Clean all surfaces and make sure they are clean, dry, free of grease, mortar and any other debris.
2. The jointing of all top hats, DPC, cavity trays and membranes should be done in warm ambient temperatures. Do not attempt to joint below 5°C. Warming may be required if jointing below 10°C.
3. Apply as much pressure as possible to the area being jointed with double sided tape. A standard wallpaper roller makes a great tool for this job.
4. Ensure membrane is protected with a screed or protection board if the installation is to be topped with steel reinforcement.
5. Avoid all traffic on unprotected membrane. Only install the membrane just before the laying of any screed – reducing the amount of unnecessary traffic on the unprotected membrane.
6. Ensure sufficient screed is laid to protect the membrane. Screed should be laid at 55mm thick across all areas of the membrane.
7. If Radon gas resistance is also required as opposed to damp proofing alone, Gas Resistant Foil Tape (75mm x 50M ) should be used for the overlap or alternatively joints can be hot welded.

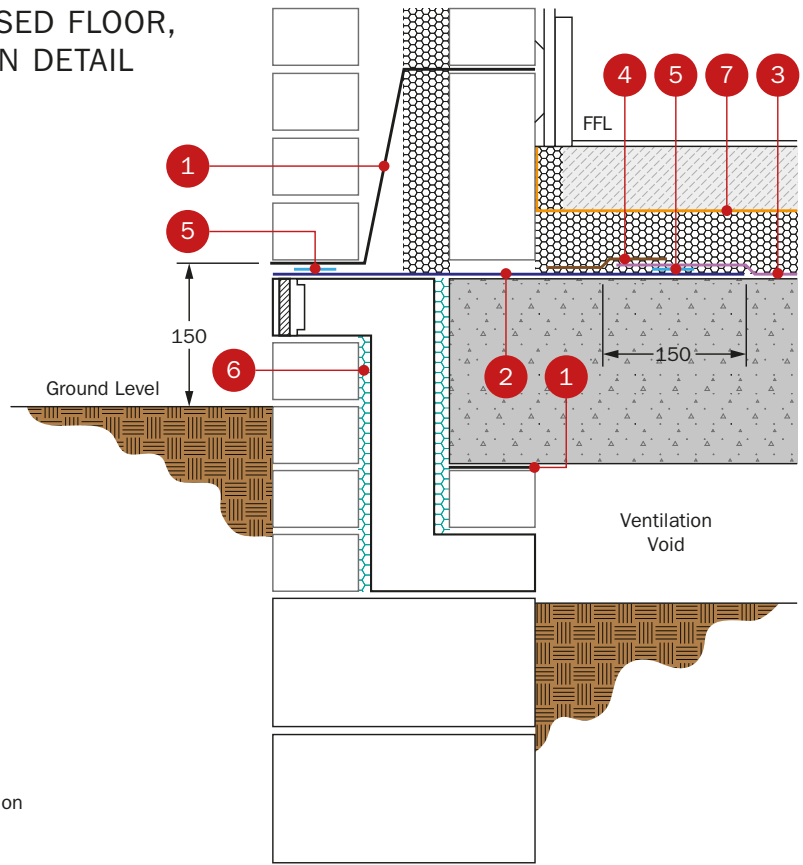
### Installation of Triton TGS-HCM1000

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 so long as the jointing is made using the hot weld process and not taped. The membrane should be laid on smooth surface or sand blinding to prevent puncture.

Please refer to drawings overleaf.

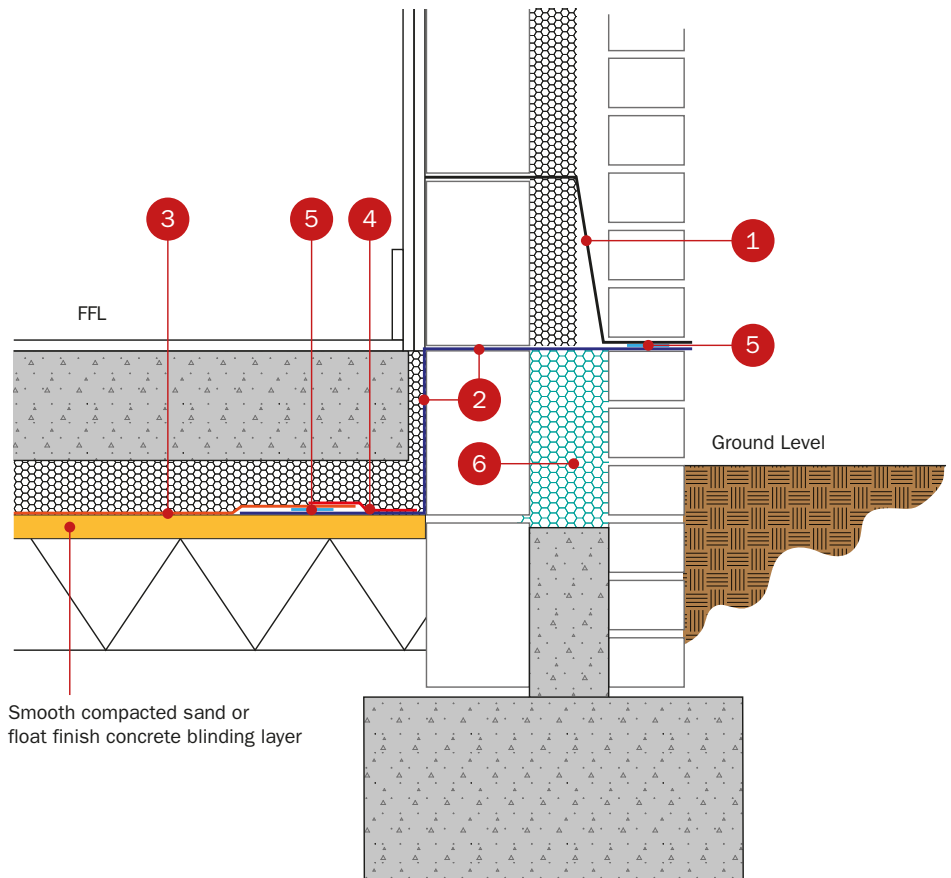
## SUSPENDED SLAB – RAISED FLOOR, TYPICAL GAS PROTECTION DETAIL



### 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



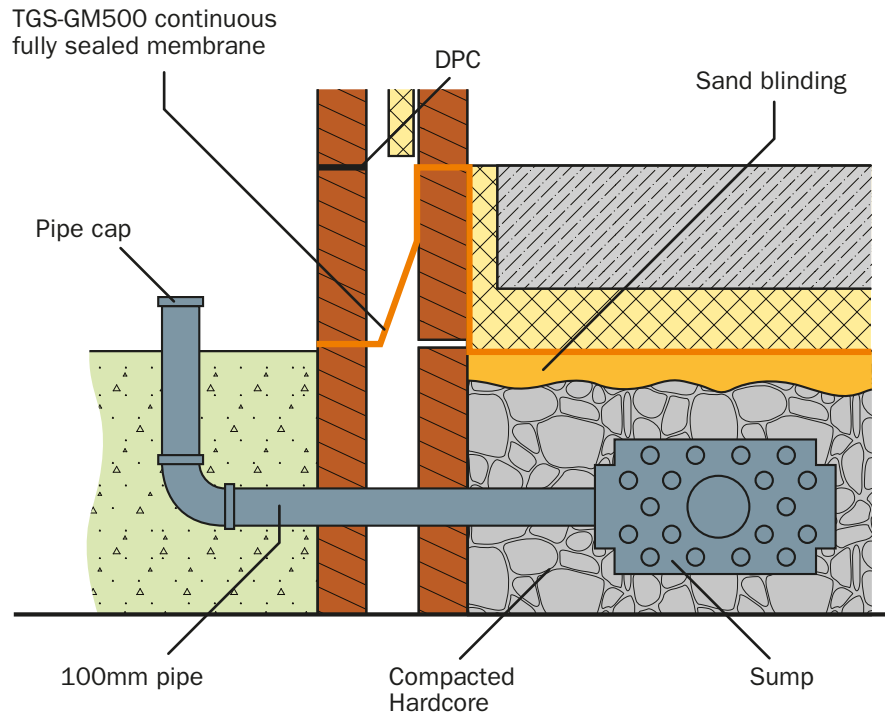
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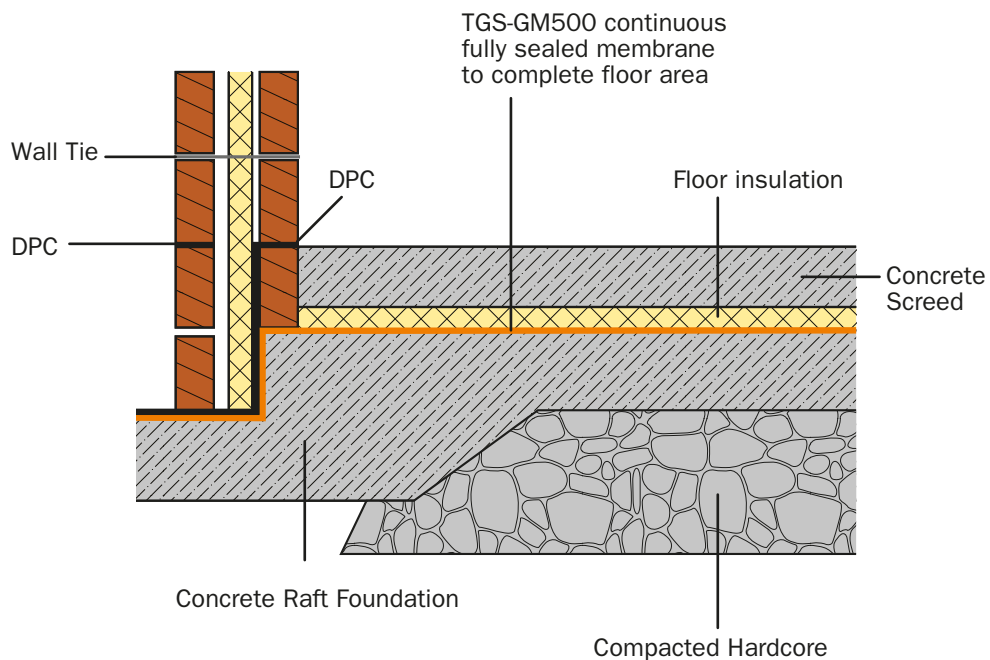
### Installation of Triton TGS-GM500

Triton TGS-GM500 membrane system must be laid in accordance with the Building Research establishment BRE No. 414. "Protective measures for housing on gas contaminated land". Triton TGS-GM500 can be used in most common floor constructions. Triton TGS-GM500 membrane is installed in a similar way to damp proof membranes, but with much greater attention to joint sealing of the gas resisting membrane, under wall sealing and workmanship. If Radon gas resistance is also required as opposed to damp proofing alone, Gas Resistant Foil Tape (75mm x 50M ) should be used for the overlap or alternatively joints can be hot welded. The membrane will also perform the same function as a damp proof membrane. Where there is a risk of hydrostatic pressure this product is not intended for use. Triton TGS-GM500 membrane should be laid on a smooth surface or sand blinding to prevent the membrane from puncture. The membrane must be free from grease and dirt.

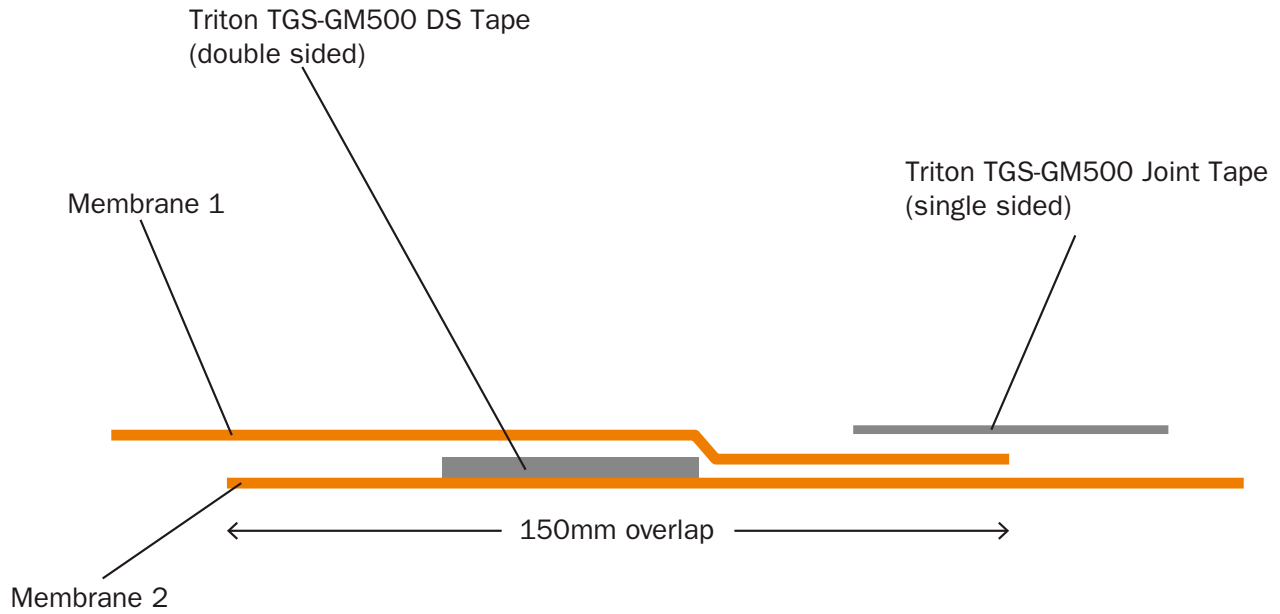
### CAVITY WALL / FLOATING SLAB APPLICATION



### RAFT FOUNDATION



## JOINTING DETAIL



### Jointing of 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 double sided 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 joint tape to the edge. (Ensure that the membrane is completely dry, free from dust and dirt.)

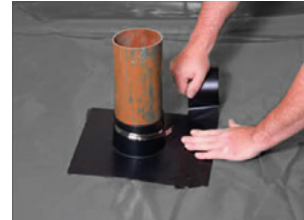
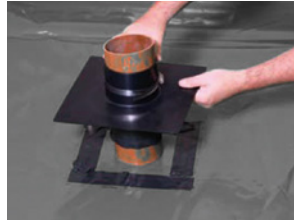
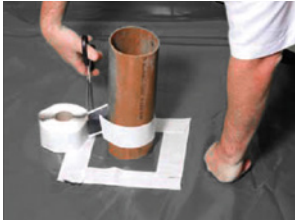


### Making gas-tight seals in waste pipe openings

- 1) Cut a hole in the membrane to expose the pipe, ensure the hole fits the pipe as close as possible.
- 2) When the membrane and pipe is in position, place the top hat over the pipe.
- 3) When the top hat is in place, mark the membrane around the top of the pipe and around the horizontal skirt of the top hat unit.
- 4) Remove the top hat unit and apply 4 lengths of double sided tape to the area marked on the membrane. Ensuring the tape overlaps on the corners.



- 5) Below the point marked on the pipe. Apply one length of the tape around the pipe.
- 6) Remove the protective paper from the double sided tape.
- 7) Replace the top hat unit over the pipe. Ensure that the base of the top hat is free from any dust, dirt or grease. Apply pressure to the top hat and seal the horizontal skirt to the membrane.
- 8) When the top hat unit is in place, using the single sided joint tape, seal the edge of the horizontal skirt to the membrane. Then secure the top hat to the pipe using the jubilee Clip.



### Protecting membranes

Protection boards should be used if the installation of membrane is to be topped by reinforcement of steels. Boards should be loose laid. They can simply be butt jointed where a good straight joint can be achieved. If necessary the joints can be sealed with joint tape. The tape should be applied evenly down the length of the joint. Ensure all joints are dry, clean, grease and debris free before application of tapes.

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