



# GP<sup>®</sup> TITAN Waterproofing, Ground Gas, VOC and Hydrocarbon Proof Membrane

THE ONLY FUTURE PROOFED QUAD ACTION MEMBRANE AVAILABLE.



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# GP®TITAN

## Gas & Waterproofing Membrane

The high achieving membrane has dual performance that provides protection from ground gases including VOCs, Carbon Dioxide, Methane, Radon, Hydrocarbons and protects the structure from water ingress.

**GP®TITAN** Membranes are currently the only single system membranes that provide gas protection (as outlined in BS8485:2015 and C665) and grade 3 waterproofing protection (in accordance with BS8102:2009 as a TYPE A waterproofing membrane).

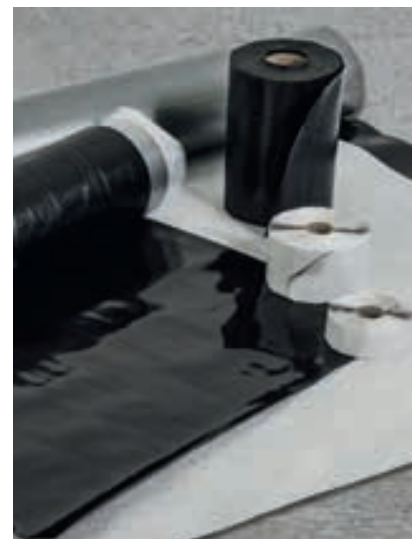
In addition to this, the **GP®TITAN** is fully tested to comply with C682, C716 and C748 for a suite of VOC and Hydrocarbon contaminants.

With the ability to provide a 'cover all' solution for Waterproofing the Structure, and protecting inhabitants from hazardous ground gases such as Radon, Methane, Carbon Dioxide, Hydrocarbons and VOC's the **GP®TITAN** is the future proofed membrane, available today.

Many (if not all) commonly used TYPE A waterproofing membranes (that comply with BS8102:2009) simply do not comply with BS8485:2015 as 'sufficiently impervious' ground gas barriers. The majority would require a bespoke quantifiable site specific risk assessment for each proposed site use to justify a reduction in performance requirements outlined in BS8485:2015.

The **GP®TITAN** gas and waterproof membrane can be installed with the use of either welded or taped joints depending on the specific project requirements.

*The technology exists to produce better, more suitable barriers for use as waterproofing membranes.*



*So the question is why are we as an industry continuing to use outdated materials?*

### Guidance Document

	BRE211/414	NHBC		BS8485:2015	C748	C748	BS8102:2009	BS8102:2009
		AMBER 1	AMBER 2					
	RADON	CO <sub>2</sub> /CH <sub>4</sub>	CO <sub>2</sub> /CH <sub>4</sub>	CO <sub>2</sub> /CH <sub>4</sub>	VOC Vapour Phase	VOC Liquid Phase	Waterproofing (TYPE A) Membrane	Bonded to Structures (Integral)
GP®TITAN	✓	✓	✓	✓	✓	✓	✓	
GP®TITAN BOND	✓	✓	✓	✓	✓	✓	✓	✓
GP®TITAN TANK	✓	✓	✓	✓	✓	✓	✓	✓

# GP®TITAN BOND

## Pre-applied membrane

A pre-applied fully bonded waterproofing membrane incorporating the GP®TITAN membrane and a heavy duty virgin polypropylene geotextile.



### AVAILABLE SIZES

1.9m x 25m

### USES

For all aspects of Gas protection and where Grade 1, 2 and 3 (waterproofing) is required as part of a single or dual system recommended in BS8102:2009.

(Note – BS8102:2009 provides guidance on the consideration of gas resistance of waterproofing systems and durability with consideration to the groundwater regime – including contaminants within)

### ASSOCIATED PRODUCTS

1m x 25m Titan Bond Edging Strip  
Internal & external prefabricated corners  
Prefabricated Top hat  
Titan Tape 100mm x 10m

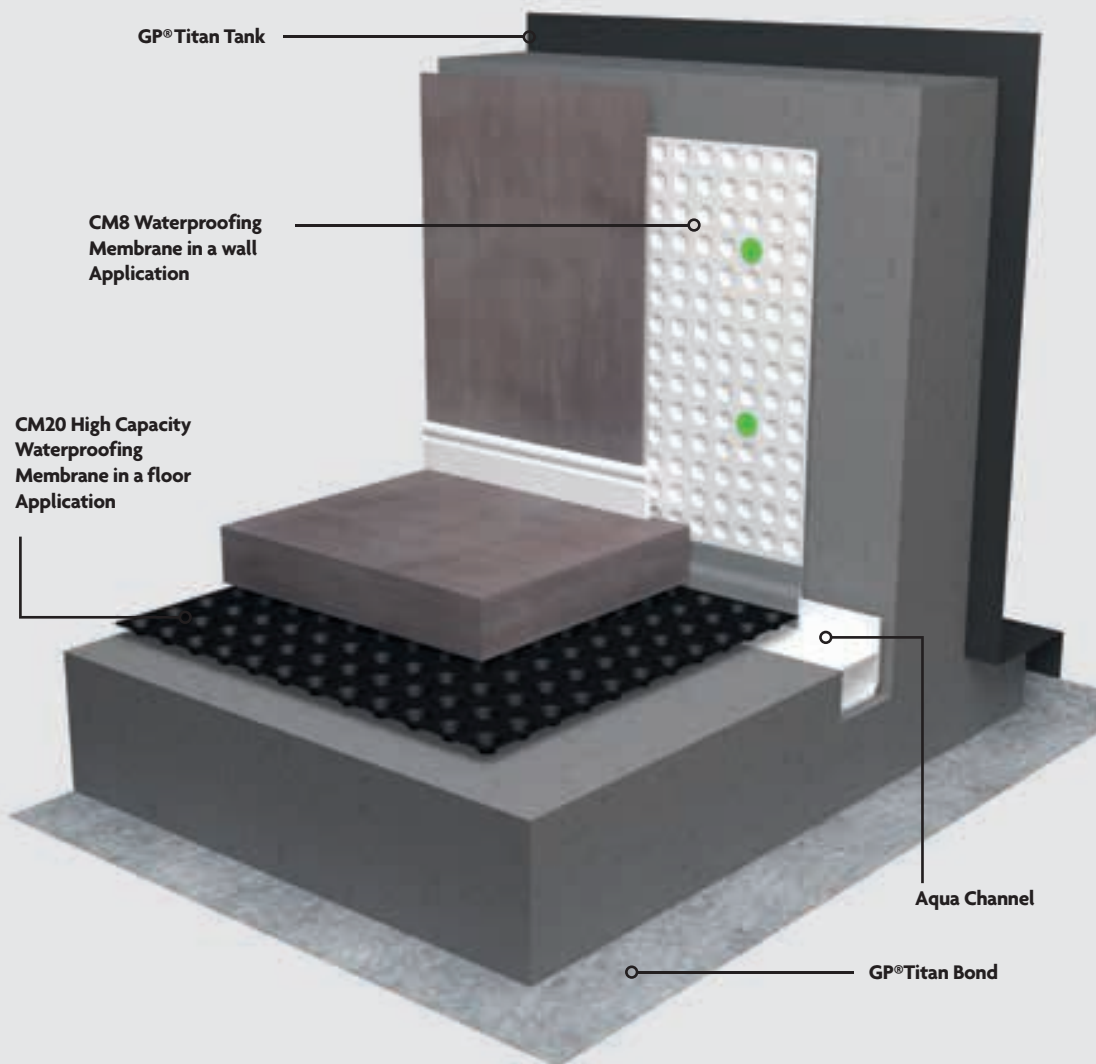
The geotextile is laminated to the membrane to provide a dual function; protecting the membrane from damage, and providing an integrated 'bond' to poured concrete, ensuring a fully bonded waterproofing barrier which has exceptionally high resistance to ground gas and VOCs. GP®TITAN BOND is used for the Gas/waterproofing and tanking of underground structures where harmful ground gases are anticipated.

GP®TITAN membranes are extensively tested and proven to withstand the most aggressive environments and provide confidence to the end user the

product is suitable and fit for purpose for the needs of today, and future proofed for the demands of tomorrow. Providing a robust, durable and flexible membrane, GP®TITAN is the optimal gas and waterproofing barrier.

When compared to the vast majority of existing TYPE A waterproofing membranes, GP®TITAN is on average, TWO THOUSAND times better performing as a ground gas barrier, as well as providing superior durability and longevity over the existing practices and proposals.

- Recognised as an accepted system for ground gas and water protection by NHBC.
- VOC & Hydrocarbon barrier – The first (and currently only) membrane available to fully achieve the requirements of C748 for chemical testing as a bonded type A.
- Full surface contact between the membrane and concrete.
- Quick and easy installation.
- Manufactured to meet the most up to date British Standards and guidance
- Can be installed in all weather conditions.
- Exceptional Chemical Resistance
- High resistance to Ground Gases
- Long Term Durability (performance guaranteed for the lifetime of the building)
- Compatible with all building materials
- Waterproofing barrier (Type A BS8102:2009)
- Gas Barrier (Radon, Methane, Carbon Dioxide - BS8485:2015)
- Hydrocarbon (Liquid and Vapour phase) and VOC barrier (C748)



**Diagram shows a ‘Type A’ waterproofing and Gas proofing application along with a ‘Type C’ maintainable system conforming to NHBC Chapter 5.4 and BS8102**

# GP®TITAN TANK

## Post-applied membrane

GP®TITAN can be used in horizontal or vertical applications and is suitable for all ground floor and basement construction including lift pits, slabs, liner walls, capping beams and service penetrations.



### AVAILABLE SIZES

1m x 20m

### USES

For all aspects of Gas protection and where Grade 1, 2 and 3 (waterproofing) is required as part of a single or dual system recommended in BS8102:2009.

(Note – BS8102:2009 provides guidance on the consideration of gas resistance of waterproofing systems and durability with consideration to the groundwater regime – including contaminants within)

### ASSOCIATED PRODUCTS

300mm x 20m Titan EXT Tape  
GP Tape 50mm x 15m

**GP®TITAN TANK** – Self Adhesive version of the GP®TITAN; composed of self-adhesive SBS polymer modified bitumen with an upper surface finish of GP®TITAN, and a lower surface finish of siliconized polypropylene release film.

**GP®TITAN TANK** is used for the Gasproofing, waterproofing and tanking of underground structures where harmful ground gases are anticipated, as a post-applied fully bonded membrane.

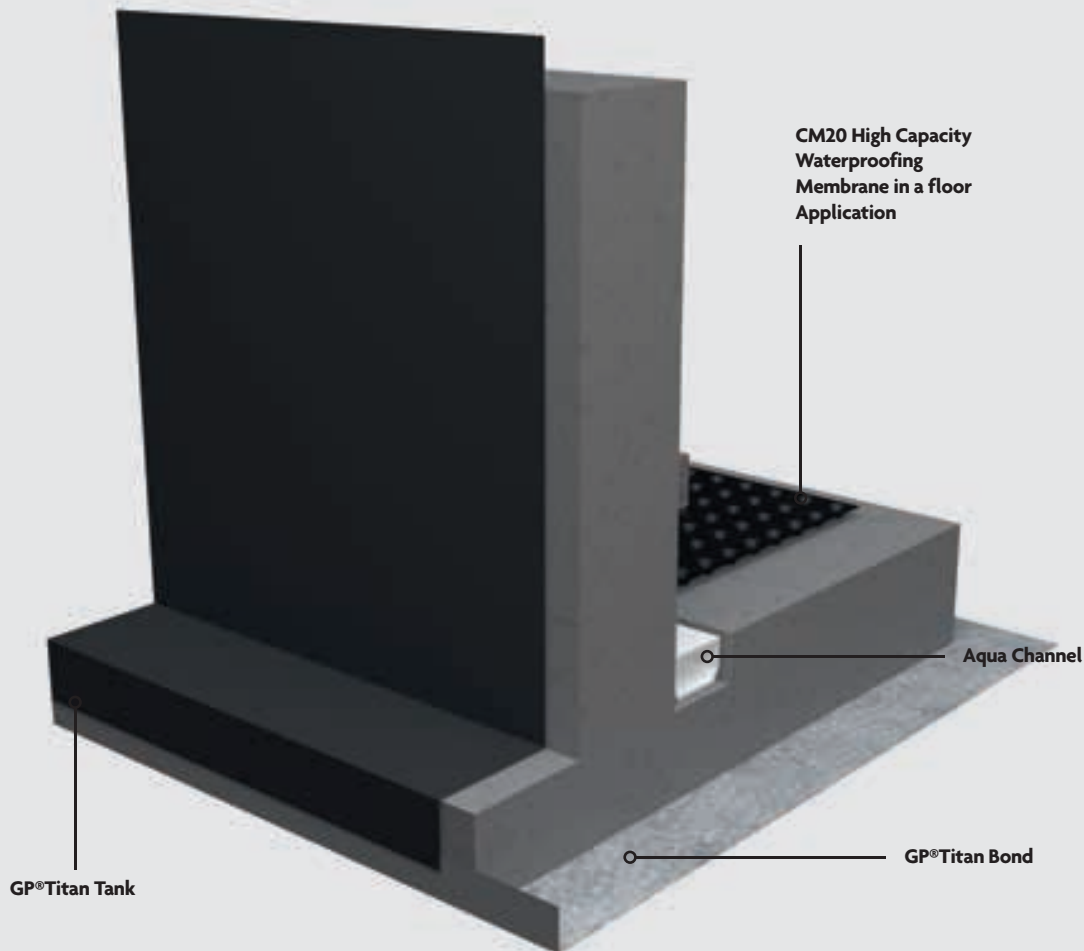
The **GP®TITAN** gas and waterproof membrane can be installed with the use of either welded or taped joints depending on the specific project requirements.

In applications where a dual system is required, as outlined in NHBC Chapter 5.4,

**GP®TITAN BOND** and **GP®TITAN TANK** can be used as a fully BONDED TYPE A barrier alongside either an integrated TYPE B structural Barrier, or an internal TYPE C Cavity Drainage Membrane system.

The benefit of the **GP®TITAN** membrane is that it does not require the TYPE B or TYPE C as part of the gas protective measures, as it is capable of providing sufficient resistance to ground gas alone. In addition, the exceptional durability proven against a range of aggressive yet common contaminants, means that as the primary 'contact barrier' from ground gas and water (when placed externally) the protective elements of the **GP®TITAN** extend to that of the Structure and Cavity Drainage Membrane, increasing the overall durability of both.

- Recognised as an accepted system for ground gas and water protection by NHBC.
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- Full surface contact between the membrane and concrete.
- Quick and easy installation.
- Manufactured to meet the most up to date British Standards and guidance
- Can be installed in all weather conditions.
- Exceptional Chemical Resistance
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- Long Term Durability (performance guaranteed for the lifetime of the building)
- Compatible with all building materials
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**Diagram shows a ‘Type A’ waterproofing and Gas proofing application along with a ‘Type C’ maintainable system conforming to NHBC Chapter 5.4 and BS8102**



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