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Flood Resilience – Existing Build  
in association with Watertight International Limited

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# Outline Specification

## Flood Resilience – Existing Properties Details: Overview

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### 1. Introduction

The outline specification detailed below relates to measures required to improve the flood resilience of existing properties within areas deemed at risk from flooding. The details and products below are part of measures to be taken in conjunction with other measures provided by Watertight International Ltd, such as window and door panels and check valves on service pipe entries to the properties.

The outline specification below is for the minimum measures required where properties are in areas at risk of flooding. Where the property is located in an area at high risk of flooding or where ground seepage (water rising up through the ground in flood plain areas) additional steps may/will be required and these are highlighted in a separate document – *Existing Properties at High Risk*.

It should be noted that ALL properties are different in terms of method of construction and materials used for construction, therefore it is advised that each property is assessed as to its own specific requirements for flood resilience measures. This document and its appendices give general guidance and minimum requirements.

A full assessment of the location and property and its risk of flooding should be taken prior to the installation or application of flood resilience measures. Part of the assessment should include:

- Location
- Type and form of construction
- Materials used
- Existing ground levels
- Existing structural defects
- Detached, semi or terraced property

The details provided below are a summary of each area of application and product use, more detailed specifications and drawings will be provided in separate documents for each section, to comprise a fuller detailed specification package. It should be noted that given the great variation in existing properties it would be impossible to provide an exhaustive list of all measures required to specific properties, therefore following assessment of the existing property a tailored specification can be detailed.

Areas covered within this document include:

- Water resistance to masonry walls
- Floor construction
- Service entries through concrete floors
- Service entries through masonry walls
- Party walls

For new build properties please see separate documents on flood resilience to new build.

All product applications and installations to be carried out by suitably trained and/or approved contractors and strictly in accordance with manufacturers' installation and application guidelines which are attached to and form part of this document.

Detailed below are general guidance and details relating to applications for flood resilience. More detailed application details are provided within the separate information guidelines provided on each section, including typical drawings and methods.

## 2. Water Resilience To Masonry Walls

To improve significantly the water resilience of masonry walls to existing properties built in areas at risk of flooding, the existing walls and pointing should be checked for any defects such as cracks, missing pointing, contaminants and algal or lichen growth.

The walls should be cleaned and dry, if stone walls or soft brick then a first application of a stone strengthener would be required. All loose and friable pointing to be removed, and the area to be re-pointed with suitable sand/cement mortar.

Once the masonry walls have been cleaned and prepared, apply two – three coats of Triproof AQ to the walls at application rate of 0.5 – 2 litres per sq metre (subject to porosity of the substrate). Application should be by way of coarse spray, applying coats wet on wet to maximise penetration to the substrate. Dilution of Triproof AQ should be 1:3 with water to maximise penetration and subsequent deposition of active water repellent.

Subject to the porosity of the substrate and prevailing conditions it is recommended that the application of Triproof AQ be renewed every 3-5 years and/or after each flooding event whichever is the shorter period.

The application of Triproof AQ should be to a height beyond anticipated flood levels or, if this is unknown, to the first floor height of the property.

## 3. Service Penetrations To Walls

All service penetrations through existing walls will require waterproofing and sealing using Triton Trifix epoxy. This should be applied ideally to both internal and external penetration through the wall. This would not always be practical or possible where no other internal measures or works are required for flood resilience to minimise disruption during works. The internal application can be, and would be recommended at, a suitably convenient time in the future during redecoration or refurbishment of the property.

It may be necessary when sealing the penetrating service pipe through the wall to chase out around the service pipe penetration to approximately 15mm in depth and 10mm greater in circumference to ensure adequate application of the Triton Trifix. Application to be in accordance with manufacturers data sheet and separate detail sheet on service penetrations.

## 4. Existing Floors

An assessment would need to be carried out as to the level of risk of water penetration through the existing floor, this will depend on the type and level of risk to flooding in the location of the existing property. Also the type of floor needs to be considered, as some types such as timber floors, brick and or flagstone floors would be very hard to improve their flood resilience without either their removal or the introduction of major works, see later note (a).

Even existing concrete floors would need to undergo some disruptive works to the internal finishes to the floors and also lower part of the walls to include suitable flood resilience measures to be incorporated, and therefore it is important that an assessment of the risk level and type of flooding is carried out. Also it is important that the property owner is made aware of this risk and also the works which may need to be carried out to the floor areas of the property. Again this may be carried out during phases of redecoration or refurbishment to the property.

An existing concrete floor should have all finishes removed, be cleaned and dust free, all large cracks/joints to be detailed using Triton Fillet Seal. Skirtings and wall fabrics should be removed back to existing wall substrate to minimum height of damp proof course. A Fillet Seal detail should be incorporated at the wall floor junction, refer to detail sheet on existing floors and Triton Fillet Seal data sheet. Then apply two coats of Triton TT Vapour Membrane to entire floor area and return up walls to minimum height of the damp proof course.

Suitable floor finishes to be overlaid/replaced, to provide a protective wearing surface to the TT Vapour membrane.

### NOTE (a):

Existing flagstone, brick and even concrete floors may be retained but would need to incorporate an internal membrane system over the top. Subject to the risk level and also the vulnerable wall/floor junction and or the multiple joints within a brick and flagstone floor, a drainage channel detail to be incorporated at the wall floor junction, see attached Triton Aquachannel data sheet. This would need to lead to a suitable discharge point which particularly at times of flooding would need to be a sump and pump system, such as Triton Aquapump system. Over the floor area, Platon Multi membrane should be installed. This will provide a water and vapour barrier to the floor area allowing any number of floor finishes to be reinstated. It will also allow any water penetrating the floor area, wall/floor junction to be drained via the drainage channel detail to the sump system, thus maintaining a dry internal environment. This is a similar system to a Type C drained protection system extensively used in existing basement waterproofing. A typical example is as per attached drawing no. IP002.1, and as detailed in the section on flood resilience to existing floors.

Timber floors are almost impossible to make more flood resilient, and therefore, subject to the assessed risk, removal and reinstatement of a concrete floor would be advised.

Service penetrations through existing floors would need to be suitably sealed. Through concrete floors this would be by chasing approximately 15mm depth and 10mm circumference around the service penetration and sealing using Triton Trifix epoxy.

Service entries through other floor build ups would be detailed along with the recommended measures for flood resilience to the existing floor of the property following a flood risk assessment.

## **5. Party Walls**

Where properties are semi detached, linked to, or part of a terrace of properties, unless all linked properties are part of the flood resilient measures, then consideration must be given to the party walls of the property being made flood resilient.

Given the nature of a party wall any flood resilient work to it would need to be carried out internally within the property. This would involve some disruption to the internal decoration to the walls, and perhaps should be considered, as with the floors above, to be carried out during periods of redecoration or refurbishment to the property.

The internal walls would need to be stripped back to the substrate, and suitable preparation be carried out to the wall. Following preparation, a two coat application of Triton TT Vapour Membrane to be applied to party wall and linked to flood resilient measures to the floor.

Alternatively if the floor flood resilient measures include the use of Triton Aquachannel and Platon membrane, then the membrane can be extended up to a suitable height up the internal party wall, this would need to be returned a minimum of 300mm to the other walls. Alternatively, this system could be considered as the most appropriate method of flood resilience to the property, and a complete internal system be installed.

Prior to any significant works being carried out to the party walls, it is advisable that owners of neighbouring properties are advised that works are to be carried out.

## **6. Summary**

The above outline details, along with the more comprehensive detail sheets for each application given above, are designed to significantly improve the flood resilience to existing properties in areas at risk of flooding.

These are only part of a complete package of measures which include barriers to windows and doors, other openings to the property and suitable check valves within each service pipe to the property.

As there are so many variables to consider when looking at existing properties it is important that each property is assessed fully and each flood resilience package is tailored to the individual property, given its level of risk, type and method of its construction and location.

Other considerations which will significantly impact on the installation of a suitable flood resilient package would be whether the property is detached, semi detached or part of a terrace of properties and whether all occupants are involved in the flood resilient measures for the properties.

Other considerations which need to be taken into account are if the property is listed, is on split level construction, or has high ground levels surrounding it.

In short a full assessment of the risks and suitability of the above flood resilient measures would need to be carried out on each individual property.

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## **TRIPROOF AQ**

**MASONRY WATER REPELLENT CONCENTRATE.**

**DILUTES WITH WATER TO FORM STABLE SOLUTIONS FOR USE ON MINERAL SUBSTRATES**

**TRIPROOF AQ** is a highly effective water repellent based on a blend of Silane and polysiloxane resins. **TRIPROOF AQ** is suitable for use over masonry, brickwork, concrete and renders. Superior performance is obtained on alkaline surfaces such as new renders and concrete.

### **FEATURES**

- High alkaline resistance
- Excellent penetrating power
- Vapour permeable
- Colourless
- Dries to a tack-free finish
- UV resistant
- Water thinnable
- Easy removal of overspray

### **DESCRIPTION**

**TRIPROOF AQ** is supplied as a concentrate for dilution with water before use. For most mineral substrates a dilution ratio of 1: 9 is recommended. When treating dense concrete surfaces dilution ratios of 1: 2 or 1 : 3 can be employed to maximise penetration and subsequent deposition of active water repellent. Treatment of surfaces with **TRIPROOF AQ** reduces water absorption whilst maintaining the appearance of the area treated, also since the product does not block or clog pores and capillaries the vapour permeability of the substrate is maintained. Reducing water absorption prolongs the life of the substrate by reducing the damage caused by water:

#### **FROST DAMAGE AND SPALLING**

Frost damage occurs when pores and capillaries are more than 90% full of water. The expansion of frozen water exerts pressure into the substrate causing splitting, spalling and general disintegration.

#### **SALT EFFLORESCENCE**

Constant evaporation and wetting with water causes salts to move nearer to the surface causing a white bloom or crystal growth at best or splitting and spalling at worst.

#### **BIOLOGICAL GROWTH**

Damp surfaces will support the growth of algae, moss, lichen and moulds. These organisms use acids to digest their food which damages the underlying masonry with time.

#### **CHEMICAL CORROSION**

Water encourages the corrosion of metal fittings and fixtures, and of particular importance, cavity wall ties.

#### **ATMOSPHERIC POLLUTION**

Acid rain accelerates the weathering process by dissolving the binding matrix of the substrate.

## **APPLICATION**

**TRIPROOF AQ** should be applied by a coarse low pressure spray or by flooding after dilution with water. Apply at least two coats, wet on wet, to maximise penetration into the substrate. Apply each subsequent coat when the substrate has absorbed the previous one and is no longer shiny wet. Surfaces to be treated should be dry. The ideal temperature for application are between +10°C and +25°C. Application and dilution rates vary according to the porosity of the substrate to be treated:

### **TRIPROOF AQ**

	<b>Application rate</b>	<b>Dilution ratio</b>
Concrete	0.25 L/m <sup>2</sup>	1:2 or 1:3
Render	0.5-1 L/m <sup>2</sup>	1:9
Brickwork	0.5-2 L/m <sup>2</sup>	1:9

In all cases it is advisable to conduct a small site trial to determine the most appropriate application rate and dilution ratio.

### **DILUTION:**

Half fill mixing container with water, add **TRIPROOF AQ** and stir. Add remaining water and stir thoroughly. Use within a week of mixing.

## **GENERAL INFORMATION**

### **Concentrate**

Density	1.0 g/cm <sup>3</sup>
Shelf life	At least 6 months
Pack size	2.5 Litre (makes 25 Litres)

## **RELATED PRODUCTS**

Triton OH 100 - stone strengthener  
Triproof 290 - solvent borne water repellent solution.

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Ref: 05/04 DATA.TRIPROOF AQ



# TRIFIX ADHESIVE

**DESCRIPTION** TRIFIX is a two component epoxy resin system formulated for use with twin component side by side cartridges using either hand operated or, more normally, air operated guns, using “at the nozzle” static spiral mixer or pot mix for larger applications.

**CHARACTERISTICS** TRIFIX is colour coded for visual assurance that the two components are fully mixed. The product is solvent free, thixotropic i.e., will not readily slump, and cures in cold, damp conditions.

**USES** TRIFIX is formulated as an adhesive for bonding and anchoring most building materials e.g. brick, stone, steel, mortar and timber. Once cured TRIFIX creates a strong stress free joint regardless of the surrounding environment.

\*The colour, but no other ingredient, may be changed at the manufacturers discretion. The change will not affect the cured product in any way.

## **TRIMOL SYSTEM**

PRODUCT	APPEARANCE	DENSITY AT 25°C
TRIFIX RESIN	*Orange	1.7
TRIFIX HARDENER	*Red	1.2

## **INSTRUCTIONS FOR USE**

**PREPARATION** Prior to the application of TRIFIX all surfaces must be free from dust, oil, rust and grease. Any loose materials must be removed back to a sound surface.

**MIXING** When supplied in cartridge form the mixing takes place in a static spiral mixer, which delivers the mixed product to the required surface. When supplied in pots, all of the resin must be mixed with all of the hardener. Under no circumstances should part mixes be used. Mix the two components thoroughly until a consistent, no streaky colour is achieved. When using cartridges, extrude TRIFIX onto a surface until a consistent non-streaky colour is achieved.

**USABLE LIFE** In cartridges TRIFIX has no waste apart from the mixed product in the nozzle, which will stay workable for a minimum of 15 mins. In pot form the mixed product will remain workable for approximately 15 mins. This time can vary depending upon the working temperature.

**CURING** Complete cure: 7 days

**TESTING** Not less than 24 hours after application, the temperature to be 12°C or above.

**WORKING TEMPERATURE** The material is formulated for use at 5°C. to 25°C.: it is seasonably adjusted during manufacture to ensure the flow characteristics of the mixed product are constant.

## **TRIFIX ADHESIVE**

Mechanical properties after curing 21 days at 20°C.

Test temperature: 20°C.

Tensile strength 35 Mpa

ISO/R 527

Flexural strength 30 Mpa

ISO 178

Compressive strength 60 Mpa

**STORAGE** The separate components, stored at 5°C. to 20°C. in dry conditions, have a shelf life of at least 9 months.

**PACKAGING** 400ml side by side cartridge

**CLEANING** The method of application cuts cleaning to a minimum but should it be necessary to clean then TRITON RESIN CLEANER should be employed: cured TRIFIX ADHESIVE will require removal by chipping or other mechanical means.

**CAUTION** TRIFIX ADHESIVE is generally harmless providing that the normal common-sense precautions are taken when handling chemicals are observed. For instance neither the separate components nor the uncured mixture should be allowed to come into contact with foodstuffs or utensils. Measures should also be taken to prevent contact with the skin: wearing rubber or plastic gloves will normally suffice along with eye protection. Thoroughly cleanse the skin at the end of each working period by washing with soap and water. Disposable paper towels are recommended to dry the skin. Precautions are fully discussed in Product Safety Information sheet for TRIFIX ADHESIVE, which is available on request.

The information given in the Data sheet is given in good faith and is based upon knowledge and experience of the materials used. However, since the application of the product is beyond the control of Triton Chemical Manufacturing Company, the Company cannot accept any responsibility for any loss or damage resulting from the use of the product outside the scope of the intended use and precautions set out in the data sheet.

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Ref:09/97DATA.TRIFIX ADHESIVE



# TRITON FILLET SEAL

A pre-packed cement based and polymer modified product for use as a floor to wall junction seal during waterproofing works when using cementitious slurry coatings (T.T.55) and renders. In most circumstances FILLET SEAL need only be mixed with water for use. Where extra adhesion or flexibility are required, TRITON SBR latex and TRITON TANKING MIX ELASTIFIER (T.T.M.E) may be used respectively.

**NOTE:** Where water is leaking or seeping the use of TRITON QUICK SET is advised.

The use of FILLET SEAL helps to ensure a smooth transition between horizontal and vertical surfaces which minimises the risk of leaving gaps or holes unsealed during the water proofing works.

## **PREPARATION**

Situations where the FILLET SEAL will be employed should already have been prepared in accordance with the slurry coating or render specification. In the majority of instances the FILLET SEAL will be applied onto the slurry coated surface as illustrated in FIG. 1 below.

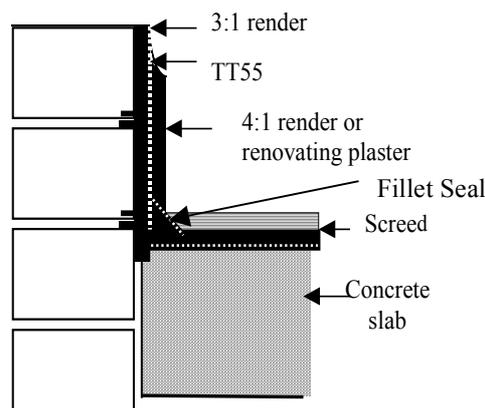


Fig. 1

The FILLET SEAL becomes fully encapsulated within the layers of slurry coating.

## **USAGE**

FILLET SEAL normally needs only mixing with clean water before use. Add sufficient water to make a cohesive, stiff mortar. Ideally the FILLET SEAL should be applied to partly cured (green) slurry coating (T.T.55) surfaces to maximise adhesion. If this is not possible make up the FILLET SEAL using a gauging solution composed of 1 part TRITON SBR to 4 parts water (by volume). Pre-wet the surface with the same solution just before applying the FILLET SEAL. When excessive stress concentrations are expected at floor/wall joints the use of T.T.M.E added to the mix is advised. T.T.M.E increases flexibility and should be added neat to FILLET SEAL until the required consistency is achieved. The slurry coating (T.T.55) under and overcoats should also contain T.T.M.E.

**NOTE:** Only sound substrates suitable to be permanently sealed under a waterproofing system should be treated. Concrete, Brick, Stone, Render and Mortar in poor condition could deteriorate further when sealed inappropriately.

## **CURING**

Avoid rapid drying out, overcoat as soon as set (5-6 hours dependent on conditions) whenever possible. Do not subject to running water until fully hardened (and overcoated).

## **STORAGE AND HANDLING**

Avoid breathing dust.

Wear gloves and eye protection.

Wash hands and exposed skin after use.

Must be stored in dry frost-free conditions.

If bags are stored correctly and unopened they will have shelf life of 12 months.

Packed in 25kg bags.

Minimum application temperature: 5°C

Maximum application temperature: 30°C

## **COVERAGE**

15 – 20Lm (25mm x 25mm triangular fillet) per 25kg approximately.

The information given in this data sheet is given in good faith and is based upon knowledge and experience of the materials used. However, since the application of the product is beyond the control of Triton Chemical Manufacturing Company, the Company cannot accept responsibility for any loss or damage resulting from the use of the product outside the scope of the intended use and precautions set out in the data sheet.

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Ref: 09/02 DATA TRITON FILLET SEAL



# TRITON TT VAPOUR MEMBRANE

## DESCRIPTION

Triton TT Vapour Membrane is a single component acrylic modified coating that once cured, provides a liquid applied waterproof, methane and carbon dioxide barrier.

## TYPICAL APPLICATIONS

1. As a retro applied waterproof and gas proof membrane to concrete, masonry and brick substrates.
2. Can be applied by airless spray, roller or brush to walls, floors or soffits.
3. As an alternative to sheet membranes in new construction.

## CHARACTERISTICS

1. A 0.7mm thick (dry film) coating provides an effective methane barrier when applied to most clay or cementitious-based construction materials.
2. Also an effective waterproof membrane
3. Excellent adhesion, bonds to porous and non-porous substrates.
4. Flexible.
5. Non-toxic.
6. Will withstand temporary light trafficking.
7. Cannot be punctured as fully bonded.
8. Easily repaired by locally over-coating.
9. Can be painted, plastered or screeded over.
10. Rapid drying, in good conditions two coats can be applied in the same day.
11. Can be applied by brush, roller or airless spray.
12. Can be applied to damp and 'green' substrates.

## TECHNICAL DATA

Components	1
Form	Thixotropic Liquid
Specific Gravity	1.40 (approx)
Application Temp	Plus 4 <sup>0</sup> 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 gasoline, 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)

<b>Accepted Criteria</b>	<b>Triton TT Vapour Membrane</b>
R>50m	357.5m

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

Gas (methane) permeability <math>1.40 \times 10^{-10}</math> kg/m<sup>2</sup>/s.

## **APPLICATION GUIDELINES**

1. Surfaces must be clean, free from dust and loose material, oil, paint, fungal growth etc.
2. Non-structural cracks >0.5mm wide must be filled.
3. Structural cracks must first be repaired and filled.
4. The substrate must be sound and ideally present a smooth face.
5. Old repairs must be inspected and re-repaired if necessary.
6. Newly laid concrete should have a clean textured surface; Triton TT Vapour Membrane can be applied to concrete or mortar within 24 hours of laying.
7. Apply 45° fillets into angles formed of Triton Fillet Seal where practicable.

## **MIXING**

Triton TT Vapour Membrane is supplied ready blended in a pail. The product requires agitation using a slow speed paddle mixer. Mix carefully for 5 minutes before use. If containers are stored for more than 2 hours after opening, re-agitate.

Do not add water.

## **SURFACE APPLICATION**

1. Pre-dampen (not wet) the substrate before applying the first coat.

### **Interface with other media**

1. For expansion joints ensure that Triton TT Vapour Membrane is applied well into the rebate before the expansion media is applied.
2. Other gas membranes must be exposed and lapped with Triton TT Vapour Membrane where present.

### **Dealing with cracks**

1. Cracks must be stabilised and filled. Apply the first coat of Triton TT Vapour Membrane and apply plasterers polyurethane 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.

### **Application of the main coating system**

1. The product can be applied by stiff brush, roller or airless spray with a minimum 17 thousands of an inch nozzle. The spray method is especially suitable for less accessible locations and uneven substrates.
2. The first, primer, application is applied at the rate of >0.5lt/m<sup>2</sup> for waterproofing and >0.3lt/m<sup>2</sup> for an effective gas proof membrane. Ensure that the coating is even; use a circular action when spraying.
3. Allow the primer coat to dry before applying the second coat.
4. Apply the second coat at the rate of >0.7lt/m<sup>2</sup> for waterproofing and >0.5lt/m<sup>2</sup> for gas proof applications; for brush application, apply at right angles to the first coat. Again use a circular action when spraying. Application rate will depend on substrate surface.
5. Do not apply over bitumen.
6. The total application thickness must not exceed 4mm if splitting or cracking is to be avoided.

## **PACKAGING**

Triton TT Vapour Membrane is supplied in a 20lt pail.

## **COLOUR**

Mid grey

## **STORAGE**

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.

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Ref: TT Vapour Membrane 06/07



# TRITON AQUACHANNEL

## DESCRIPTION & USE

TRITON AQUACHANNEL is a P.V.C drainage conduit designed for the control of water ingress in below ground situations.

TRITON AQUACHANNEL is fitted around the perimeter of the floor at the vulnerable wall/floor junction.

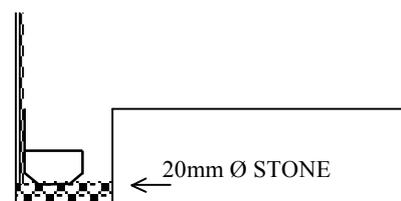
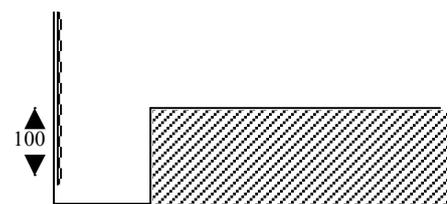
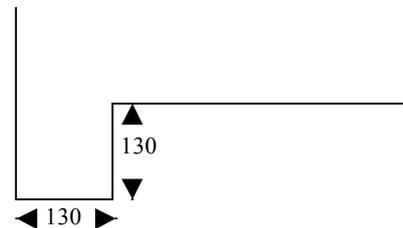
TRITON AQUACHANNEL can be used in most waterproofing situations, and is particularly suited for use in conjunction with Isola Platon Cavity Drain Membrane systems. Water entering the building through the walls is controlled behind the Platon Membrane and diverted to the Aquachannel at the base of the wall. The water enters the Aquachannel through pre-drilled drainage holes and must then be diverted to a suitable drainage point, either natural or a sump and mechanical pump (see Triton Aqua Pump).

In situations where an existing floor slab/screed is solid and showing no signs of water ingress, cracking or de-bonding, the installation of Aquachannel can eliminate the need for Platon Cavity Drain membrane on the floor, proving beneficial in areas of limited headroom.

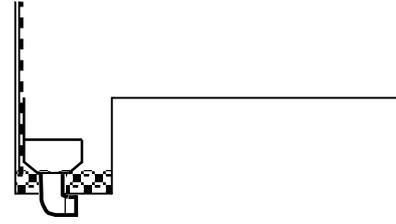
The application of a liquid waterproof coating to the existing floor would be recommended to act as a moisture suppressant.

## INSTALLATION

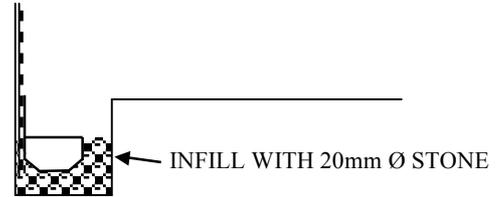
1. Form a trough 130mm deep x 130mm wide in the floor at the wall/floor junction.
2. Apply the waterproof coating or System Platon Cavity Drain Membrane to the wall and finish 100mm minimum below existing floor level.
3. Lay a shallow bed of 20mm stone into the trough. Place the Triton Aquachannel onto the stone with the upstand to the top and flat against the waterproofing/cavity drain membrane to the wall. Lengths of Aquachannel are butt jointed on straight runs and can be mitred in corners. Joints should be sealed with a suitable tape, Platon over tape or builder duck tape, to avoid debris from falling into the channel



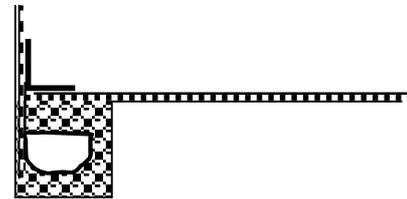
4. Fit the Aquachannel outlet into the Aquachannel at the appropriate location. The Aquachannel outlet requires a 40mm hole in the underside of the Aquachannel. The Aquachannel outlet is solvent welded to the channel using the internal male coupling. A chase should be formed into the floor to accommodate the outlet pipe from the Aquachannel to the sump or drain.



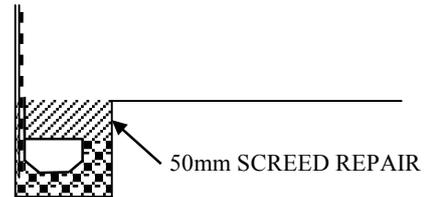
5. Infill the remaining gap between the Aquachannel and the side of the trough with 20mm stone and finish flush with the flat surface of the Aquachannel.



6. When installing Platon membrane over the floor, make good the remaining area with 20mm stone. Lay the membrane over the floor area and seal to the wall membrane using Platon wall/floor junction or Platon Sealing rope.



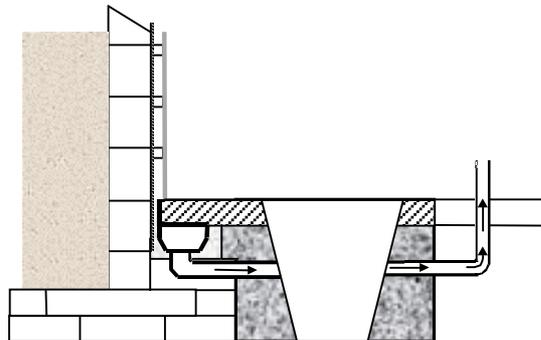
7. When Platon membrane is not going to be installed over the floor, make good the remaining area with approximately 50mm screed.



**MAINTENANCE**

It is recommended that the Triton Aqua channel be jet washed via the jetting ports, which should be incorporated in the channel system, at least once every six months. This should be carried out by the installing contractor (under a maintenance contract) or by the property owner. During this cleaning process the pump/s (if installed) should also be run with water out of the sump chamber to ensure they are fully operational and that the sump chamber be cleaned of any sludge/silt that may have accumulated. In addition to this, the high water level battery alarm box and alarm sensor should also be checked for working order

**TYPICAL INSTALLATION**



For further information please contact:  
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 Triton House, Lyndean Industrial Estate  
 129 Felixstowe Road, Abbey Wood, London SE2 9SG  
 Tel: 020 8310 3929 Fax: 020 8312 0349

Ref : 12/01 DATA. TRITON AQUACHANNEL



# TRITON AQUA PUMP SYSTEM

## DESCRIPTION AND USE

When installing Isola Platon Cavity Drainage membranes careful attention must be given to provide a suitable drainage solution. Natural drainage is not normally possible or convenient in below ground situations, so mechanical drainage must be used.

TRITON AQUA PUMP is a ready to use complete water control system principally designed for use in below ground structures to control water ingress. The system consists of a pre-formed polyethylene sump basin, a mains powered 230v submersible pump, a non-return valve assembly and a battery operated high water level alarm, which is linked to an integral float switch. The TRITON AQUA PUMP system can be linked to TRITON AQUA CHANNEL (see Triton Aqua Channel Data) to manage water ingress from retaining walls and in turn pumping out to a suitable drainage point.

**IMPORTANT NOTE: The Triton Aqua Pump must only be used for pumping ground water. The pump should not be used to pump grey water from; sinks/washing machines/dishwashers/condensing boilers or effluent. Triton Chemical Manufacturing Ltd will not accept responsibility or liability for pump failure or damage caused due to the misuse of the pumping system.**

## COMPONENTS

**SUMP BASIN** – The Sump Basin is a polyethylene pre-formed chamber, measuring 560mm high x 540mm diameter (top) x 460mm diameter (base) and is most commonly located into the floor, finishing flush with the surrounding floor level. The Sump Basin is supplied with a structural foam flat lid, which can accept foot traffic. The lid can be easily removed to allow regular maintenance of the internal submersible pump or pumps.

**SUBMERSIBLE PUMP** – The pump is positioned within the Sump Basin and is controlled by an automatic snap-action float switch. As the water level increases within the sump the float rises and when the pre-set switch level is reached the pump will automatically operate and discharge the water. The Pump is 230v and requires wiring into an independent fused spur outlet within 1.5m of the pump.

## PUMP SPECIFICATION

Discharge Bore	-	38.1mm
Max. Head	-	6m
Max. Capacity	-	220 litres/min @ 1m
Motor Output	-	1/3 Hp
Max. Width	-	214mm
Max. Height	-	258mm
Max Depth	-	270mm
Voltage	-	230v
Fuse rated	-	5.0amp

**NON-RETURN VALVE ASSEMBLY** – To avoid any discharged water backing-up into the sump basin, a non-return valve assembly is provided. This is fitted directly to the submersible pump outlet via flexible couplings and supplied ready to accept a standard 1½” waste pipe.

**HIGH WATER LEVEL ALARM** – The High Water Level Alarm is an essential component within the Aqua Pump system. In the event of mechanical failure of the pump or an unexpected power failure, the water will continue to fill the sump. When the water reaches the level of the alarm float switch, the 80db alarm will sound, giving warning of the failure. The alarm is powered by a 9v battery, which should be positioned in a convenient location such as a kitchen/lounge where it will be easily heard. Once the alarm is heard immediate action must be taken to avoid flooding. Additionally a 12v battery operated pump can be installed offering peace of mind to the client, while investigations are made into the failure. See Triton Battery Back-up Pump System data.

## **PREPARATION AND INSTALLATION**

The site conditions or situation being encountered may well determine the positioning of the Triton Aqua Pump System. However, ideally it should be sighted at the lowest point of the room and or closest to the nearest point where water will be discharged. **The most important thing is to make sure that water can get to the pumping station.** Once the pump position has been established, dig a circular hole to a depth of 650mm and to a width of 650mm .

At the base of the walls of the sump basin, drill 4 holes opposite each other, (12mm dia ), insert two lengths of reinforcing bar ( 660mm long) through drilled holes .These will add additional anchoring for the sump basin in the ground.

Fit the high water level alarm float switch sensor into the pre-cut hole provided within the wall of the sump basin and ensure that the (jaw) of the switch sensor is open and hangs downwards. Bring the two cables with bullet connectors attached back into the sump basin either through one of the holes provide or by drilling a hole and leave ready to be connected to the wires of the water alarm. **NB:** if the water discharge pipe from the pump is to be concealed below the floor, then a 1½” hole will need to be cut through the side of the basin. However, the position of this hole can only be determined once the sump basin has been offered into position, otherwise the discharge pipe can be taken through the lid of the basin.

Lay approx 100mm concrete at the base of the hole and insert the sump basin. Using a spirit level, adjust the top of the basin to the level of the finished floor level. Fill the basin two thirds with water, then infill around sump basin with concrete, ensuring it is well compacted. **NB:** If Platon membrane is being installed over the floor, then the concrete will need to be finished 100m lower than top of sump, drill a number of perforations to edge of sump basin and infill void above concrete with 20mm stone. (drwg no. IP029.1) However, when Platon membrane is not going to be installed over the floor, the concrete should finish flush with top of sump basin.

Insert the Aqua Pump in the base of the sump basin and connect the water discharge pipe to the flexible coupling already attached to the pump. The discharge end of the pipe can be taken through a wall and extended to a gully outlet at ground/street level. Alternatively, the discharge pipe can be connected straight into a soil pipe using a ‘boss’ connection. **Where a double pump installation is being used (Aqua Pump Plus), each pump must be wired into an independent fused spur outlet. One of the Aqua Pumps (the secondary pump) in the double pump kit will have been fitted with 25mm long spacers at the base of the pump so that this pump is raised off the bottom of the sump basin.**

Connect the wires from the float switch sensor to the wires of the water alarm using the bullet connectors provided. Then connect the pump/s power cable into a fused spur outlet (fuse rating 5amp) and test the pump and alarm for working order.

## **MAINTENANCE**

It is recommended that the Triton Aqua Pump System is maintained /serviced at a minimum every six months. This should be carried out by a competent contractor (under a maintenance contract) or by the property owner. During a service all parts of the Aqua Pump kit should be checked to ensure fully operational. The sump should be cleared of any silt/sludge that may have accumulated to avoid potential damage to the pump/s.

The sump must be filled with water to ensure the automatic float switch and pump are fully operational. We recommend renewal of the 9v battery within the alarm and that the alarm float switch checked to ensure the alarm sounds. Any defective parts must be replaced /repaired to avoid failure of the system. Example of suitable sump, pump and drainage schedule can be found in the Isola manual, or downloaded from the Triton website [www.triton-chemicals.com](http://www.triton-chemicals.com)

We recommend records of each service be kept by the property owner.

*For further information please contact:*

**TRITON CHEMICAL MANUFACTURING CO LTD**

Triton House, Lyndean Industrial Estate

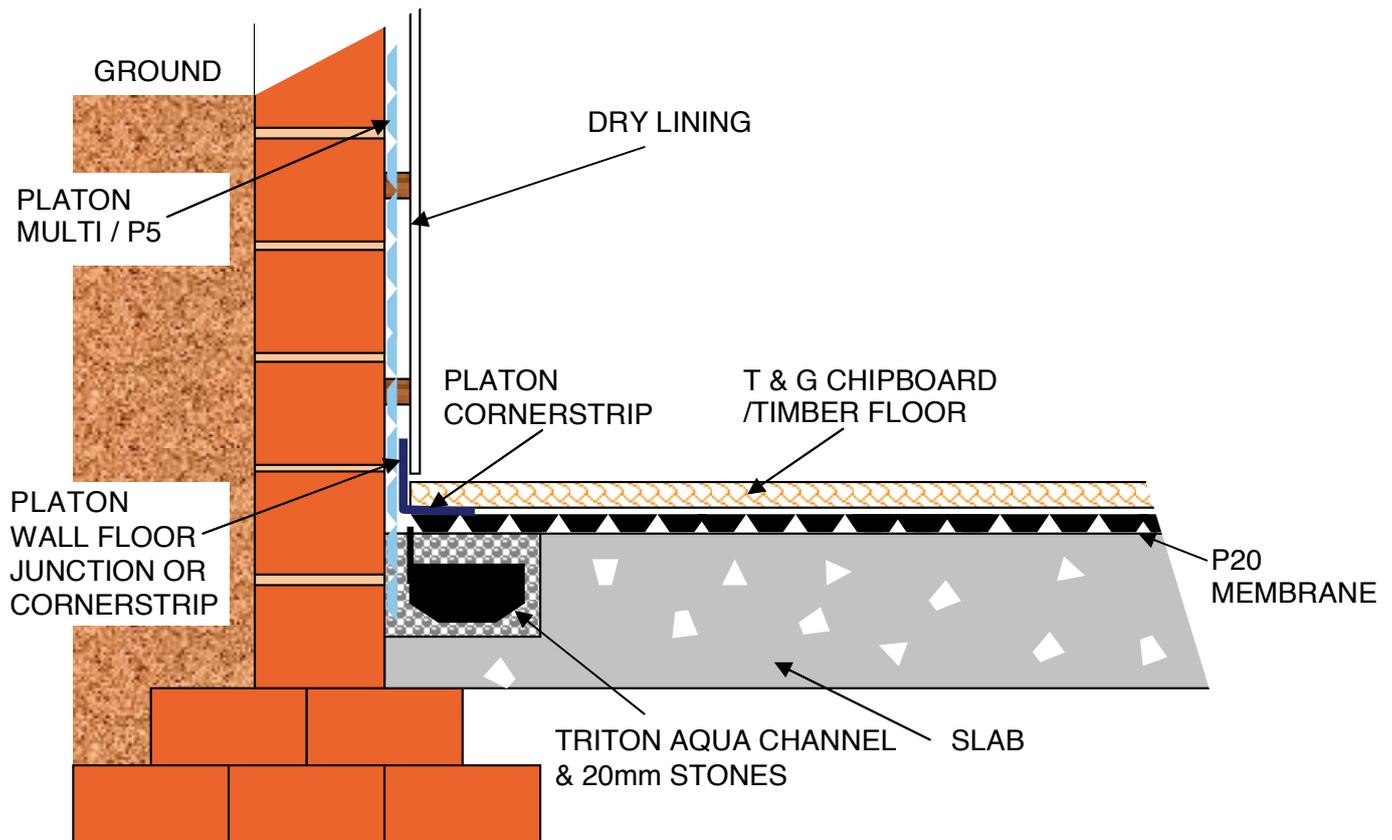
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# Typical wall/floor detail below ground Drawing No. (I P 002.1)



© Triton Chemical Manufacturing Company Limited

All installations to be strictly in accordance with manufacturer's guidelines which are set out in the Isola Manual. For any non-standard details, please contact our technical department on 020 8310 3929



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[www.triton-chemicals.com](http://www.triton-chemicals.com)



## Triton Platon Multi Membrane Data Sheet

### Description

Platon Multi Membrane is manufactured from translucent high-density polypropylene. It is impermeable and resistant to the usual chemicals in building construction.

When Platon Multi is acting as a damp proof membrane, both the product and the wall and floor coverings may be installed independent of the moisture content in the underlying structure and with running water not under pressure in the air gap.

Studs are formed in a regular pattern on one face of the membrane. The studs are round and spaced at 20mm centres. Platon Multi is supplied in rolls 2.05m x 20m.

### Workability

Platon Multi Membrane is tough but pliable and can be bent round corners and projections without risk of breaking even in very low temperatures. The Membrane can be easily cut with a knife and scissors.

### Installation

Detailed installation instructions are set out in the Isola Manual, available on request from Triton or downloadable at [www.triton-chemicals.com](http://www.triton-chemicals.com)

### Storage

Rolls of Platon Multi should be stored upright.

### Technical Data

Dimension:	Roll 2.05m x 20m
Raw Material:	PP (High Density Polypropylene)
Colour:	Translucent
Stud Height:	5mm
Membrane Thickness:	0.5mm
Weight:	480 g/m <sup>2</sup>
Loading Performance:	Defined by floor covering
Water vapour resistance:	Approx. 1800m <sup>2</sup> .s.Gpa/kg or 360n equivalent air layer.
Air Gap Volume:	3.3 l/m <sup>2</sup>
Filling Volume:	1.7 l/m <sup>2</sup>
Biological resistance:	Does not rot or support growth
Chemical resistance:	Resistant to all chemicals in normal building construction
Thermal resistance:	0.10 m <sup>2</sup> .°K/W
Flammability:	B2

### Triton Contact Details:

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[www.triton-chemicals.com](http://www.triton-chemicals.com)



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## Outline Specification

### Flood Resilience – Existing Buildings Details: Masonry and Rendered Walls

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#### **1. Introduction**

All existing masonry walls and pointing should be checked for any defects such as missing pointing, cracks, contaminants, algal and lichen growth. Any plants to walls should be removed or carefully lifted away to allow for full inspection of the existing walls, and for the application of any proposed treatment.

The applications as detailed below should be to a height beyond the anticipated height of flood levels or, where these are unknown, to at least a height of 2m.

#### **2. Masonry Walls**

Once walls have been inspected, any loose pointing should be removed to a depth of approximately 15mm (minimum) and the mortar course be re-pointed using a suitable sand : cement mortar.

Any cracks to the masonry wall should be determined if they are structural, if not then they can be suitably repaired as with loose mortar as detailed above. Where cracks are structural, then these would need to be stitched using Triton's crack stitch repair system.

In summary the mortar beds to be chased out across the crack, minimum every 3rd mortar course. Triton Tribar to be installed to chase and then chase filled using Triton Trigrout Extra as per data sheet attached and as per Triton's crack stitch repair guidelines, which are available from Triton on request.

Before repairing cracks the attached data sheets and application guidelines should be read and understood prior to any application.

Soft friable masonry (and stone) should be strengthened by application of a stone strengthener prior to the application of water resilience coating as detailed below.

Once walls have been cleaned and any repairs have had time to fully cure, a three coat application of Triton Triproof AQ is recommended. The Triproof AQ should be diluted with water at a ratio of 3 parts water : one part Triproof AQ.

Application rate/consumption rate of the Triton Triproof AQ will vary depending on the masonry to which it is being applied. Consumption rates will be in the order of 0.5 – 2 litres per square metre.

The Triproof should be applied in three coats by way of coarse spray, and is applied wet on wet. Each coat to be applied liberally to the wall surface, and once excess has run off and/or penetrated into the surface, the subsequent coats should be applied.

Full details of mixing and application are on the attached data sheet which should be read and understood prior to the application of the product. Please also refer to drawing nos. FR001.1 A, B and C attached.

#### **NOTE:**

Over time and subject to the exposure of the treated walls to the prevailing weather conditions, the Triproof AQ would need to be re-applied periodically. Also after each flooding event the Triproof AQ would also require re-application. We would recommend a minimum period of 5 years between applications or after each flooding event whichever is the shorter period.

### **3. Externally Rendered Walls**

Existing masonry walls which have an existing render applied to them would need to be assessed for any defects and or cracking to the render. Any loose or defective render should be removed from walls, any cracks should be repaired.

If the render is painted with an external masonry paint then this would need to be assessed as to its suitability for water resilience, and could be re-painted. Alternatively the paint would need to be removed prior to any further applications for water resilience measures.

Once preparations and repairs have been made to existing render then Triton Triproof AQ should be applied in a 3 coat application. Triproof AQ to be diluted with water at a ratio of 3 parts water : one part Triproof AQ.

Application rate/consumption rate will vary according to the porosity of the render to which it is being applied. Consumption rates will be in the order of 0.5 – 2 litres per square metre.

Triproof AQ to be applied by way of coarse spray, and is applied wet on wet. Each coat to be applied liberally to the surface and, once absorbed, subsequent coats to be applied.

Full details on mixing and application are on the attached data sheet and should be read and understood prior to application of the product.

Where existing render is to be removed, and also in areas of high risk of flooding, the render should be removed to the height above anticipated flood levels and/or 2m.

Remove any loose friable material from walls, re-point any loose mortar beds using suitable sand cement mortar. Repair any structural cracks as per Triton's crack stitching guidelines. These guidelines are available on request from Triton.

Once surface has been suitably prepared, apply two coats Triton TT Vapour Membrane to the walls from the base of the wall (foundation level) to 2m, as indicated in drawing no. FRO03.1 A & B attached.

Triton TT Vapour Membrane to be applied at rate of 0.7litres per square metre per coat. To provide a suitable mechanical key to the subsequent render coat, cast dry sand into the second coat of TT Vapour Membrane prior to it curing. Additionally use Triton SBR diluted 1:4 with water in gauging liquid for the render.

### **4. Summary**

All product mixing, application, curing and surface preparation of the wall surfaces to be in accordance with the product data sheets and manufacturer's recommendations. If in doubt, please contact Triton's technical department.

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#### **Triton Contact Details:**

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[www.triton-chemicals.com](http://www.triton-chemicals.com)



# **TRIGROUT EXTRA**

## **HIGH PERFORMANCE CEMENT BASED STRUCTURAL GROUT**

TRIGROUT EXTRA has been designed as a structural grout for the bedding and bonding of stainless steel reinforcement bar and wall ties. TRIGROUT EXTRA is shrinkage compensated, non-gassing and thixotropic; it is suitable for application with hand or powered applicators.

### **KEY BENEFITS**

- PRE-PACKED POWDER AND LIQUID
- SIMPLE MIXING
- LONG POT LIFE
- EXCELLENT APPLICATION PROPERTIES

### **DESCRIPTION AND USE**

TRIGROUT EXTRA is composed of Portland cement, quartz aggregates and water retention additives and is mixed with a pre-prepared SBR latex liquid before use. The thixotropic grout produced is placed in slots or holes in masonry walls to bond spiral or helical stainless steel reinforcement bar or wall ties when carrying out crack stitching or masonry reinforcement repairs.

### **PREPARATION**

Cut the slot or hole to the required size; in general there should be a minimum clearance of 2mm all round the component being installed, e.g., for a 6mm bar or tie, a 10mm slot or hole should be cut. Very absorbent substrates may require a larger clearance to be made. The depth cut for a slot will vary with the type of wall, for single skin or cavity construction a depth of 25-35mm is required, for solid walls a depth of 35-45mm should be cut. After slot cutting or drilling, the hole should be flushed clean with water to allow for maximum bond strength to be obtained. Highly absorbent materials may need to be primed to reduce suction.

### **MIXING**

TRIGROUT EXTRA is supplied in plastic buckets containing all the powder and liquid needed to make up the product. No extra water is needed or added. Add the powder to the liquid in the supplied bucket. Mix thoroughly using a powered paddle for at least 2 minutes until a creamy lump free consistency is obtained. **MIX ONLY WHOLE PACKS.** Transfer the mixture into the grout injection gun and inject into the slot or hole in one, smooth, continuous operation, immediately apply the reinforcement bar or tie and apply further grout over the top as necessary. Aim to use up each cartridge load within 5 minutes. The pot life of the mix is typically 45 minutes with re-stirring before loading the injection gun.

### **CURING**

Exposed areas of grout should be protected from the wind and sun to maintain damp conditions for at least 3 days to maximise strength development and shrinkage compensation. A primer may be needed on highly absorbent surfaces. **DO NOT USE** at ambient temperatures above 25°C or at 5°C or below (or if danger of frost).

### **CLEAN-UP**

Clean out injection guns and tools with clean water immediately after use before the grout sets.

## **HEALTH AND SAFETY**

TRIGROUT EXTRA contains Portland cement, which becomes alkaline when wet. Avoid contact with grout powder and the mixed product.

Refer to the product label and the Safety Data Sheet for more detailed information.

## **PACKAGING**

Two pack sizes are available, producing 3 litres and 6 litres.

3 litres: 1 x 5kg TRIGROUT EXTRA powder, 1 x 1ltr Polymer gauging liquid

6 litres: 2 x 5kg TRIGROUT EXTRA powder, 2 x 1ltr Polymer gauging liquid

*The information given in the Data sheet is given in good faith and is based upon knowledge and experience of the materials used. However since the application of the product is beyond the control of Triton Chemical Manufacturing Company, the Company cannot accept any responsibility for any loss or damage resulting from the use of the product outside the scope of the intended use and precautions set out in the Data sheet.*

*For further information contact:*

**Triton Chemical Manufacturing Co. Ltd.**

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Ref:05/03 DATA. TRIGROUT EXTRA



## **TRIPROOF AQ**

**MASONRY WATER REPELLENT CONCENTRATE.**

**DILUTES WITH WATER TO FORM STABLE SOLUTIONS FOR USE ON MINERAL SUBSTRATES**

**TRIPROOF AQ** is a highly effective water repellent based on a blend of Silane and polysiloxane resins. **TRIPROOF AQ** is suitable for use over masonry, brickwork, concrete and renders. Superior performance is obtained on alkaline surfaces such as new renders and concrete.

### **FEATURES**

- High alkaline resistance
- Excellent penetrating power
- Vapour permeable
- Colourless
- Dries to a tack-free finish
- UV resistant
- Water thinnable
- Easy removal of overspray

### **DESCRIPTION**

**TRIPROOF AQ** is supplied as a concentrate for dilution with water before use. For most mineral substrates a dilution ratio of 1: 9 is recommended. When treating dense concrete surfaces dilution ratios of 1: 2 or 1 : 3 can be employed to maximise penetration and subsequent deposition of active water repellent. Treatment of surfaces with **TRIPROOF AQ** reduces water absorption whilst maintaining the appearance of the area treated, also since the product does not block or clog pores and capillaries the vapour permeability of the substrate is maintained. Reducing water absorption prolongs the life of the substrate by reducing the damage caused by water:

#### **FROST DAMAGE AND SPALLING**

Frost damage occurs when pores and capillaries are more than 90% full of water. The expansion of frozen water exerts pressure into the substrate causing splitting, spalling and general disintegration.

#### **SALT EFFLORESCENCE**

Constant evaporation and wetting with water causes salts to move nearer to the surface causing a white bloom or crystal growth at best or splitting and spalling at worst.

#### **BIOLOGICAL GROWTH**

Damp surfaces will support the growth of algae, moss, lichen and moulds. These organisms use acids to digest their food which damages the underlying masonry with time.

#### **CHEMICAL CORROSION**

Water encourages the corrosion of metal fittings and fixtures, and of particular importance, cavity wall ties.

#### **ATMOSPHERIC POLLUTION**

Acid rain accelerates the weathering process by dissolving the binding matrix of the substrate.

## **APPLICATION**

**TRIPROOF AQ** should be applied by a coarse low pressure spray or by flooding after dilution with water. Apply at least two coats, wet on wet, to maximise penetration into the substrate. Apply each subsequent coat when the substrate has absorbed the previous one and is no longer shiny wet. Surfaces to be treated should be dry. The ideal temperature for application are between +10°C and +25°C. Application and dilution rates vary according to the porosity of the substrate to be treated:

### **TRIPROOF AQ**

	<b>Application rate</b>	<b>Dilution ratio</b>
Concrete	0.25 L/m <sup>2</sup>	1:2 or 1:3
Render	0.5-1 L/m <sup>2</sup>	1:9
Brickwork	0.5-2 L/m <sup>2</sup>	1:9

In all cases it is advisable to conduct a small site trial to determine the most appropriate application rate and dilution ratio.

### **DILUTION:**

Half fill mixing container with water, add **TRIPROOF AQ** and stir. Add remaining water and stir thoroughly. Use within a week of mixing.

## **GENERAL INFORMATION**

### **Concentrate**

Density	1.0 g/cm <sup>3</sup>
Shelf life	At least 6 months
Pack size	2.5 Litre (makes 25 Litres)

## **RELATED PRODUCTS**

Triton OH 100 - stone strengthener  
Triton 290 - solvent borne water repellent solution.

*For further information contact:*

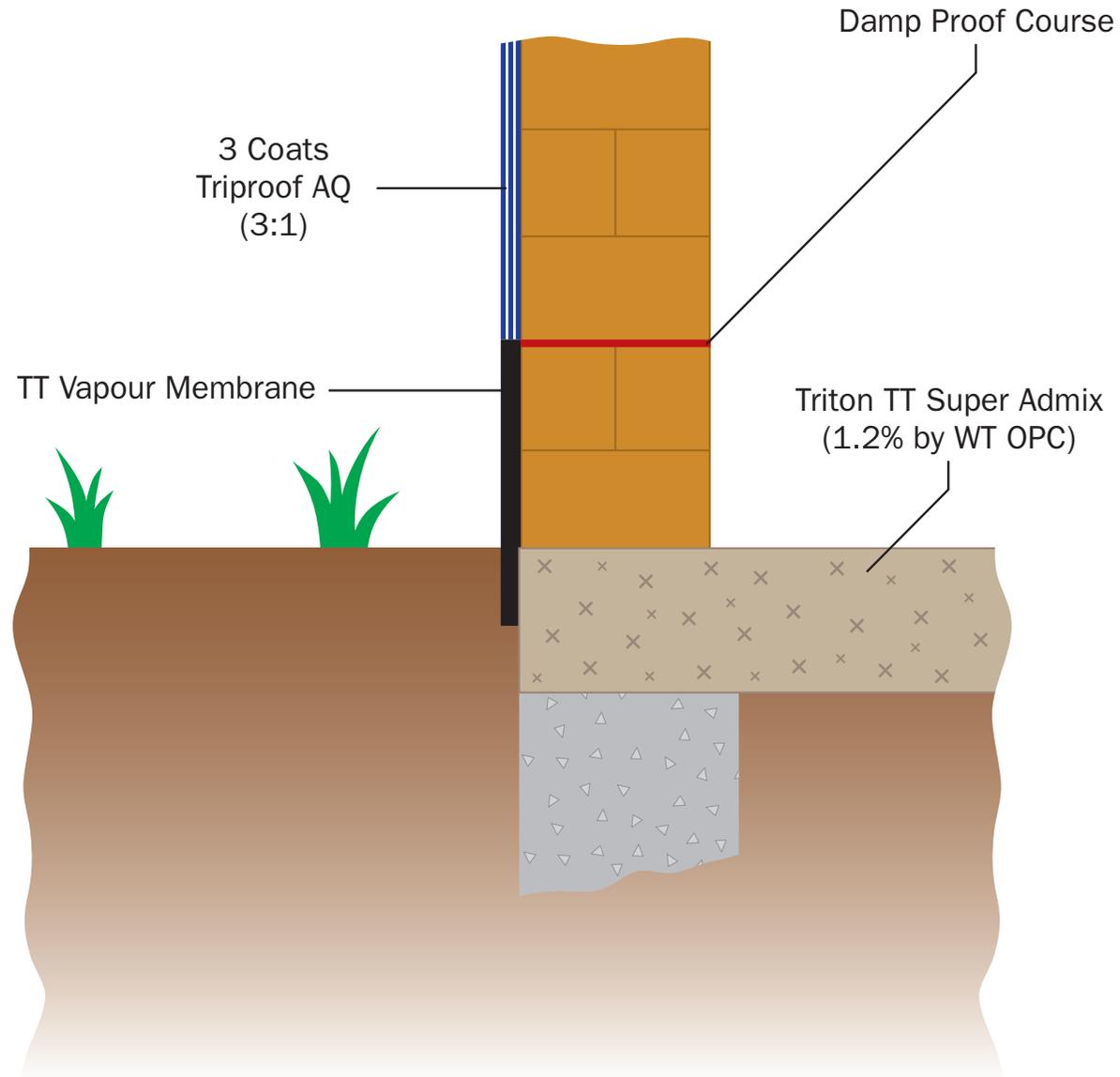
### **Triton Chemical Manufacturing Co Ltd**

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Ref: 05/04 DATA.TRIPROOF AQ

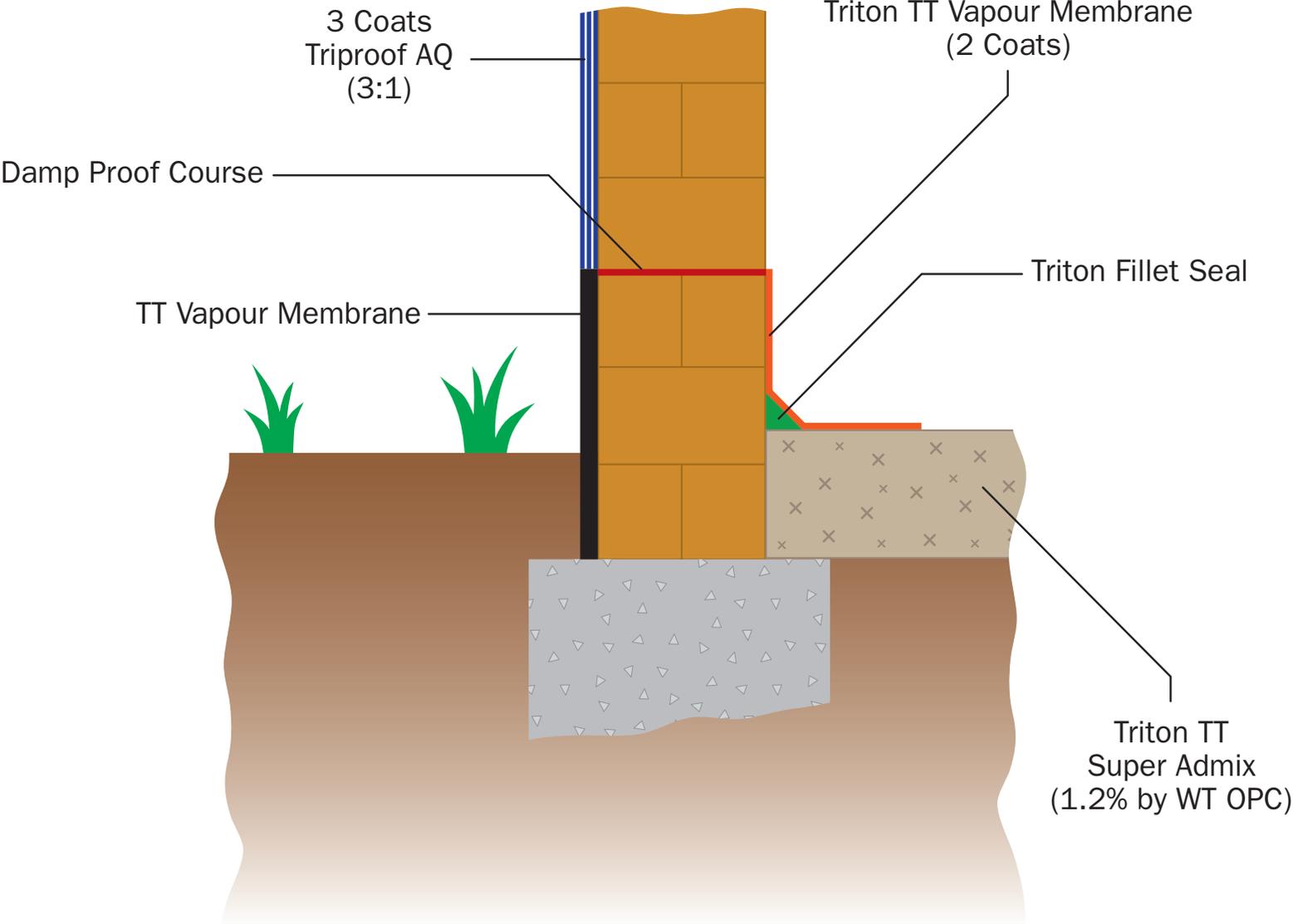
# FR001.1 (A)

## TYPICAL DETAILS – WALL/FLOOR CONSTRUCTION (SOLID & CAVITY WALLS)



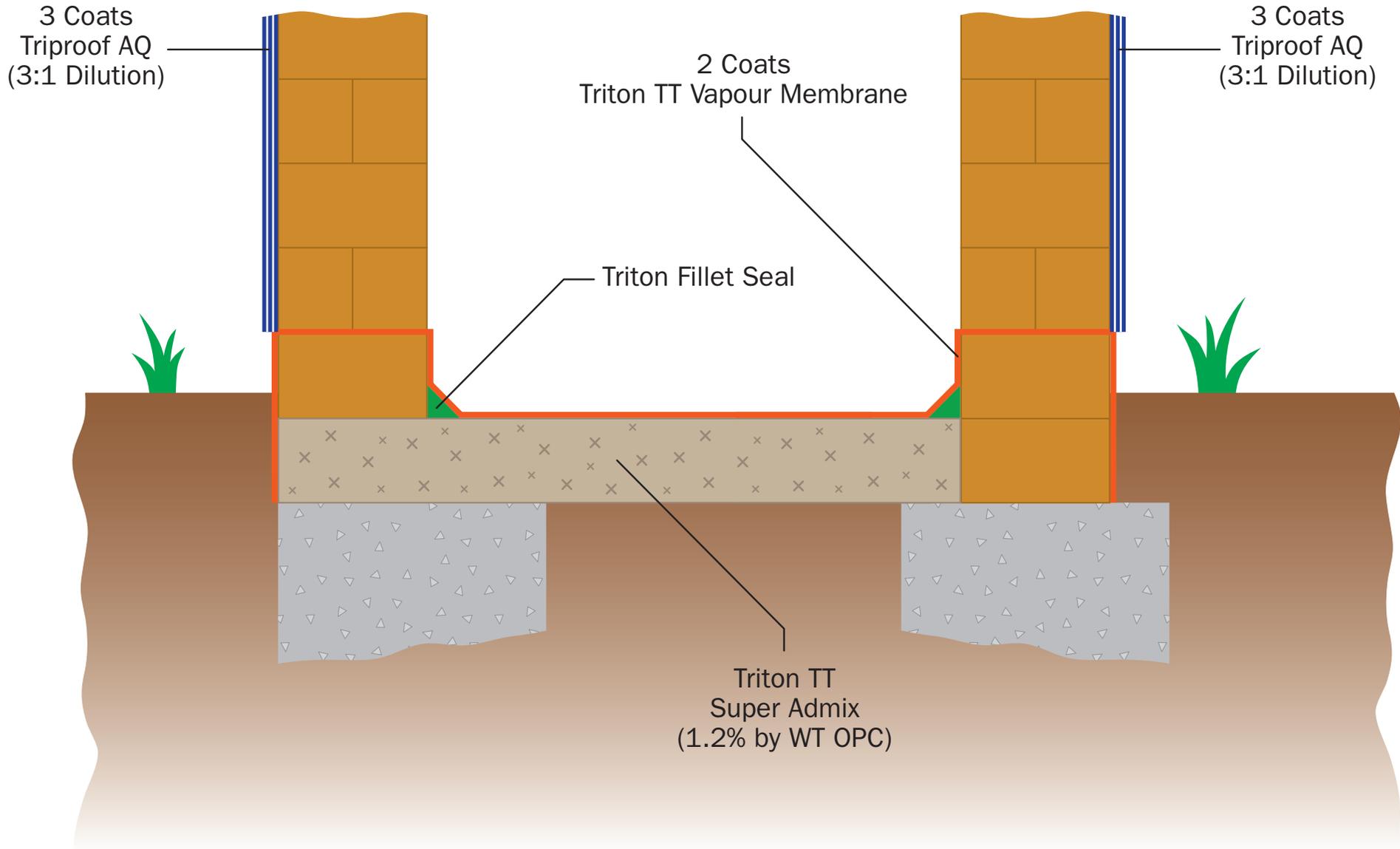
# FR001.1 (B)

## TYPICAL DETAILS – WALL/FLOOR CONSTRUCTION (SOLID & CAVITY WALLS)



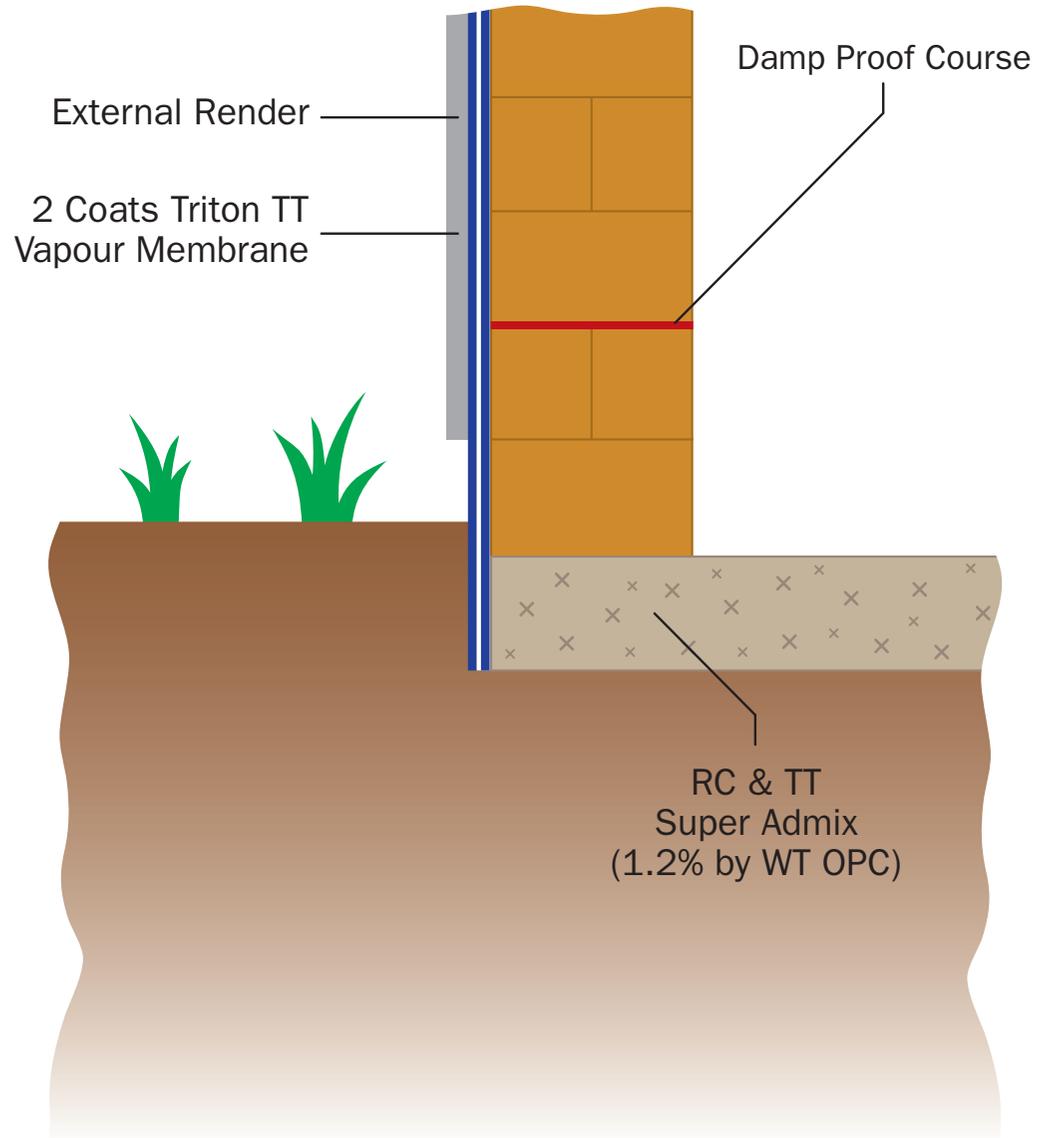
# FR001.1 (C)

## TYPICAL SECTION – HIGH RISK/CONTAMINATED/GROUND SLAB



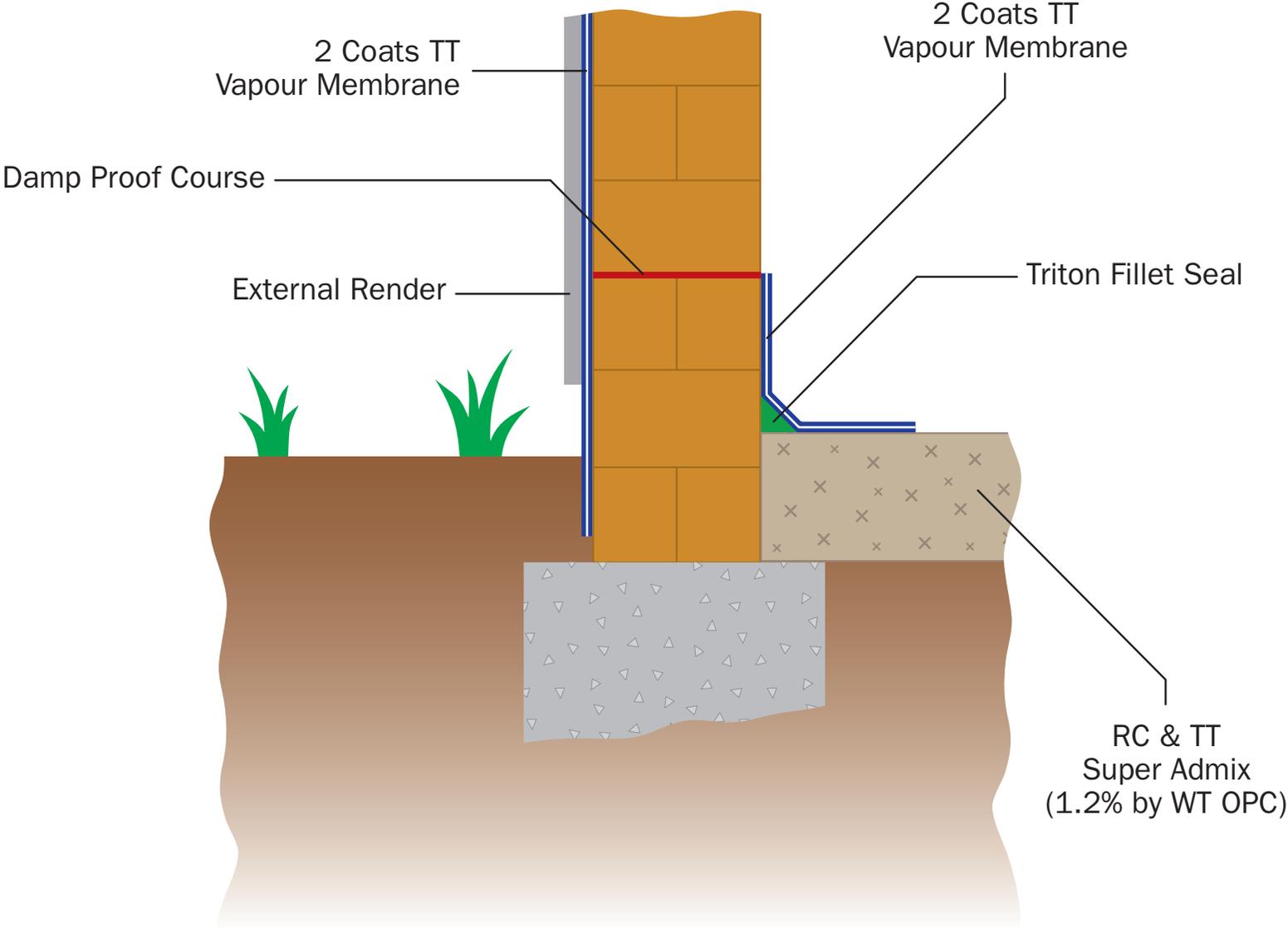
# FR003.1 (A)

## TYPICAL SECTIONS – RENDER EXTERNAL WALLS (SOLID & CAVITY WALLS)



# FR003.1 (B)

## TYPICAL SECTIONS – RENDER EXTERNAL WALLS (SOLID & CAVITY WALLS)





# TRITON TT VAPOUR MEMBRANE

## DESCRIPTION

Triton TT Vapour Membrane is a single component acrylic modified coating that once cured, provides a liquid applied waterproof, methane and carbon dioxide barrier.

## TYPICAL APPLICATIONS

1. As a retro applied waterproof and gas proof membrane to concrete, masonry and brick substrates.
2. Can be applied by airless spray, roller or brush to walls, floors or soffits.
3. As an alternative to sheet membranes in new construction.

## CHARACTERISTICS

1. A 0.7mm thick (dry film) coating provides an effective methane barrier when applied to most clay or cementitious-based construction materials.
2. Also an effective waterproof membrane
3. Excellent adhesion, bonds to porous and non-porous substrates.
4. Flexible.
5. Non-toxic.
6. Will withstand temporary light trafficking.
7. Cannot be punctured as fully bonded.
8. Easily repaired by locally over-coating.
9. Can be painted, plastered or screeded over.
10. Rapid drying, in good conditions two coats can be applied in the same day.
11. Can be applied by brush, roller or airless spray.
12. Can be applied to damp and 'green' substrates.

## TECHNICAL DATA

Components	1
Form	Thixotropic Liquid
Specific Gravity	1.40 (approx)
Application Temp	Plus 4 <sup>0</sup> 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 gasoline, 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)

<b>Accepted Criteria</b>	<b>Triton TT Vapour Membrane</b>
R>50m	357.5m

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

Gas (methane) permeability <math>1.40 \times 10^{-10}</math> kg/m<sup>2</sup>/s.

## **APPLICATION GUIDELINES**

1. Surfaces must be clean, free from dust and loose material, oil, paint, fungal growth etc.
2. Non-structural cracks >0.5mm wide must be filled.
3. Structural cracks must first be repaired and filled.
4. The substrate must be sound and ideally present a smooth face.
5. Old repairs must be inspected and re-repaired if necessary.
6. Newly laid concrete should have a clean textured surface; Triton TT Vapour Membrane can be applied to concrete or mortar within 24 hours of laying.
7. Apply 45° fillets into angles formed of Triton Fillet Seal where practicable.

## **MIXING**

Triton TT Vapour Membrane is supplied ready blended in a pail. The product requires agitation using a slow speed paddle mixer. Mix carefully for 5 minutes before use. If containers are stored for more than 2 hours after opening, re-agitate.

Do not add water.

## **SURFACE APPLICATION**

1. Pre-dampen (not wet) the substrate before applying the first coat.

### **Interface with other media**

1. For expansion joints ensure that Triton TT Vapour Membrane is applied well into the rebate before the expansion media is applied.
2. Other gas membranes must be exposed and lapped with Triton TT Vapour Membrane where present.

### **Dealing with cracks**

1. Cracks must be stabilised and filled. Apply the first coat of Triton TT Vapour Membrane and apply plasterers polyurethane 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.

### **Application of the main coating system**

1. The product can be applied by stiff brush, roller or airless spray with a minimum 17 thousands of an inch nozzle. The spray method is especially suitable for less accessible locations and uneven substrates.
2. The first, primer, application is applied at the rate of >0.5lt/m<sup>2</sup> for waterproofing and >0.3lt/m<sup>2</sup> for an effective gas proof membrane. Ensure that the coating is even; use a circular action when spraying.
3. Allow the primer coat to dry before applying the second coat.
4. Apply the second coat at the rate of >0.7lt/m<sup>2</sup> for waterproofing and >0.5lt/m<sup>2</sup> for gas proof applications; for brush application, apply at right angles to the first coat. Again use a circular action when spraying. Application rate will depend on substrate surface.
5. Do not apply over bitumen.
6. The total application thickness must not exceed 4mm if splitting or cracking is to be avoided.

## **PACKAGING**

Triton TT Vapour Membrane is supplied in a 20lt pail.

## **COLOUR**

Mid grey

## **STORAGE**

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 further information please contact:*

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[info@triton-chemicals.com](mailto:info@triton-chemicals.com)

Ref: TT Vapour Membrane 06/07



# TRITON SBR

SBR Latex admixture for cementitious mixes e.g.; Renders, Screeds, Tile adhesives, Patch repairs and waterproof slurry coatings.

**TRITON SBR** improves the workability and durability of cement mixes. The resultant cured material has the following improved properties over a non latex mix:

- Higher strength, density and water impermeability.
- Increased flexibility and crack resistance.
- Improved adhesive bond allowing thinner layers to be laid.
- Increased chemical resistance.

## **DIRECTIONS FOR USE**

**PREPARATION:** Surfaces to be rendered, screeded etc. must be free from all loose and friable material, dust, dirt, plaster, bitumen, grease etc.

**PRIMING COAT:** The application of a priming coat is normally recommended to obtain maximum adhesion to the substrate. The prepared surface should be thoroughly dampened with water (but with no free standing water). A primer coat consisting of two parts Portland cement mixed with one part of TRITON SBR by volume should be thoroughly worked into the surface by brush or broom. The topping (screed, render etc.) should be applied whilst the primer is still wet.

**MIXING:** Premix the sand and cement. Add 9 - 10litres TRITON SBR for every 50kg of cement used. Add small amounts of water until the desired consistency is achieved. TRITON SBR has a plasticizing/water reducing effect and less water than normal will be required. Do not over-mix.

**APPLICATION:** The thickness of Renders should be restricted to about 7mm per coat to avoid sagging. Multi coats can be applied in relatively quick succession:- 30-60 minutes. Screeds can be placed as normal (priming coat recommended). Avoid over-finishing or rapid drying, if necessary cover with polythene for 24-48 hours after placing.

## **TECHNICAL DATA**

TOTAL SOLIDS	%	44.5
SPECIFIC GRAVITY	g/l	1.01
PH		10.5

## **SAFETY PRECAUTIONS**

- Wear gloves and eye protection.
- Wash hands and exposed skin after use.
- Store in original container in a safe place.

## **PACKAGING**

Available in 5 litre and 25 litre containers

**PROTECT FROM FROST**

*For further information contact:*

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Ref: 04/97 DATA.TRITON.SBR



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## Triton Platon Multi Membrane Data Sheet

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### Description

Platon Multi Membrane is manufactured from translucent high-density polypropylene. It is impermeable and resistant to the usual chemicals in building construction.

When Platon Multi is acting as a damp proof membrane, both the product and the wall and floor coverings may be installed independent of the moisture content in the underlying structure and with running water not under pressure in the air gap.

Studs are formed in a regular pattern on one face of the membrane. The studs are round and spaced at 20mm centres. Platon Multi is supplied in rolls 2.05m x 20m.

### Workability

Platon Multi Membrane is tough but pliable and can be bent round corners and projections without risk of breaking even in very low temperatures. The Membrane can be easily cut with a knife and scissors.

### Installation

Detailed installation instructions are set out in the Isola Manual, available on request from Triton or downloadable at [www.triton-chemicals.com](http://www.triton-chemicals.com)

### Storage

Rolls of Platon Multi should be stored upright.

### Technical Data

Dimension:	Roll 2.05m x 20m
Raw Material:	PP (High Density Polypropylene)
Colour:	Translucent
Stud Height:	5mm
Membrane Thickness:	0.5mm
Weight:	480 g/m <sup>2</sup>
Loading Performance:	Defined by floor covering
Water vapour resistance:	Approx. 1800m <sup>2</sup> .s.Gpa/kg or 360n equivalent air layer.
Air Gap Volume:	3.3 l/m <sup>2</sup>
Filling Volume:	1.7 l/m <sup>2</sup>
Biological resistance:	Does not rot or support growth
Chemical resistance:	Resistant to all chemicals in normal building construction
Thermal resistance:	0.10 m <sup>2</sup> .°K/W
Flammability:	B2

### Triton Contact Details:

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[www.triton-chemicals.com](http://www.triton-chemicals.com)



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## Outline Specification

### Flood Resilience – Existing Properties Details: Floors

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#### **1. Introduction**

Following an assessment of the flood risk level to the property in its location, and assessment of the types of floor construction, the type of flood resilience methods from the details below can be selected.

It should be noted that it is impossible to improve the flood resilience of certain floors, such as timber floors, flagstone floors and brick floors without significant works being carried out and or their replacement.

It is advised that in areas of high risk, timber floors be removed and replaced with concrete floors.

Where property is in an area of high risk and ground seepage through the existing floor is anticipated, then the property owner should be made aware of extensive works which will be required, and these may be deferred until re-decoration and or refurbishment of the property is carried out.

Before any works are carried out to existing floors, the details below along with all relevant data sheets should be read and fully understood. Wherever practical or possible the installation should be carried out by suitably trained site technicians.

#### **2. Existing Concrete Floors**

All floor coverings and finishes to be removed. The floor to be clean and dust free. Skirtings and wall fabrics to the lower part of walls to height of damp proof course to be removed and cleaned.

To the junction between the wall and floor apply a minimum 25mm fillet of Triton Fillet Seal. This to be packed tightly into the joint between wall and floor, application at rate of approximately 1.6kg per linear metre. Application and installation should be in accordance with Triton Fillet Seal data sheet attached and drawing nos. FRO01.1 B & C.

All joints and cracks to the concrete floor to be chased out and repaired using Triton Fillet Seal prior to the application of the Triton TT Vapour Membrane.

Apply two coats of Triton TT Vapour Membrane to the entire floor area, overlapping the Fillet Seal detail and returning up the wall to the minimum height of the damp proof course.

If a screed or floor levelling compound is to be applied to floor area after application of Triton TT Vapour Membrane it is recommended that dry sand be cast into the second coat prior to it curing.

Triton TT Vapour Membrane to be applied in two coats at rate of 0.7 litres per square metre per coat (1.4 litres per square metre for two coats).

Suitable floor finishes to be overlaid over the TT Vapour Membrane to provide a protective wearing surface.

#### **3. Flagstone, Brick Floors and High Risk Areas**

Where ground seepage is anticipated or the floors are constructed with flagstones and bricks, and even concrete floors, it may be more practical and effective to install a suitable cavity membrane detail to the floors rather than remove the existing floor and replace with a new concrete floor.

A drained membrane installation would need to include a perimeter drainage detail to the perimeter of the floor area leading to a suitable discharge point.

To the perimeter of the wall chase out/remove a 100mm x 100mm gully, install a layer of 20mm single size aggregate to the base of the formed gully. Install Triton Aquachannel to gully as per attached data sheet.

Rodding/inspection ports to be incorporated into the Aquachannel at change of direction, to ensure that it can be suitably maintained and also flushed through after periods of flooding with a suitable anti bacterial/sterilizing wash such as Triton X5 Micro Sanitizer.

Aquachannel to lead to a suitable discharge point, this should be an internal sump and pump system such as Triton Aquapump kit, and this should be installed as per Aquapump data sheet and as indicated in drawing no. IP029.1 attached.

Install Platon membrane to floor area and return up walls to minimum of damp proof course. In areas of high risk Platon P20 must be used, in lower risk areas Platon Multi membrane can be considered. Installation to be in accordance with manufacturer's instructions and as indicated in typical drawing no. IP002.1 attached.

All service entry points through the Platon membranes to be sealed as per service sealing details and as indicated on attached drawing no. IP027.1.

The drainage channels and the sumps and pumps must be maintained, the system should also be flushed out after any periods of flooding where flood water has entered the drainage system. This should include flushing with Triton X5 Microsanitizer.

**NOTE:**

Timber floors should be removed and subject to the assessed flood risk to the area either a suitable concrete floor and TT Vapour Membrane detail be incorporated or a concrete floor incorporating a drained cavity system.

#### **4. Summary**

All installations and applications to be strictly in accordance with manufacturer's installation guidelines and data sheets. Before works are started all relevant information should be read and understood. It is recommended that all works be carried out by suitably trained technicians.

All drainage channels and sumps and pumps must be maintained and regularly serviced.

For full installation guidelines on cavity drain membranes and sumps etc please refer to the Isola Installation Manual, contact Triton's technical department for a copy or download copy from [www.triton-chemicals.com](http://www.triton-chemicals.com).

#### **Triton Contact Details:**

---

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[www.triton-chemicals.com](http://www.triton-chemicals.com)



# TRITON FILLET SEAL

A pre-packed cement based and polymer modified product for use as a floor to wall junction seal during waterproofing works when using cementitious slurry coatings (T.T.55) and renders. In most circumstances FILLET SEAL need only be mixed with water for use. Where extra adhesion or flexibility are required, TRITON SBR latex and TRITON TANKING MIX ELASTIFIER (T.T.M.E) may be used respectively.

**NOTE:** Where water is leaking or seeping the use of TRITON QUICK SET is advised.

The use of FILLET SEAL helps to ensure a smooth transition between horizontal and vertical surfaces which minimises the risk of leaving gaps or holes unsealed during the water proofing works.

## **PREPARATION**

Situations where the FILLET SEAL will be employed should already have been prepared in accordance with the slurry coating or render specification. In the majority of instances the FILLET SEAL will be applied onto the slurry coated surface as illustrated in FIG. 1 below.

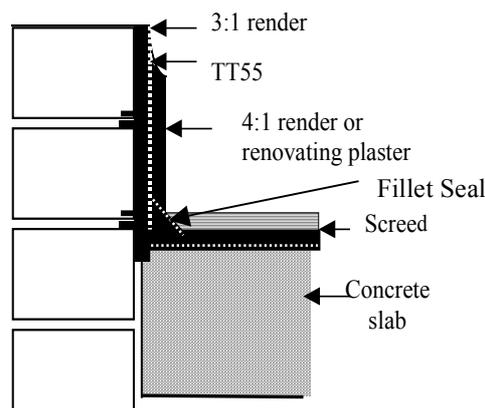


Fig. 1

The FILLET SEAL becomes fully encapsulated within the layers of slurry coating.

## **USAGE**

FILLET SEAL normally needs only mixing with clean water before use. Add sufficient water to make a cohesive, stiff mortar. Ideally the FILLET SEAL should be applied to partly cured (green) slurry coating (T.T.55) surfaces to maximise adhesion. If this is not possible make up the FILLET SEAL using a gauging solution composed of 1 part TRITON SBR to 4 parts water (by volume). Pre-wet the surface with the same solution just before applying the FILLET SEAL. When excessive stress concentrations are expected at floor/wall joints the use of T.T.M.E added to the mix is advised. T.T.M.E increases flexibility and should be added neat to FILLET SEAL until the required consistency is achieved. The slurry coating (T.T.55) under and overcoats should also contain T.T.M.E.

**NOTE:** Only sound substrates suitable to be permanently sealed under a waterproofing system should be treated. Concrete, Brick, Stone, Render and Mortar in poor condition could deteriorate further when sealed inappropriately.

## **CURING**

Avoid rapid drying out, overcoat as soon as set (5-6 hours dependent on conditions) whenever possible. Do not subject to running water until fully hardened (and overcoated).

## **STORAGE AND HANDLING**

Avoid breathing dust.

Wear gloves and eye protection.

Wash hands and exposed skin after use.

Must be stored in dry frost-free conditions.

If bags are stored correctly and unopened they will have shelf life of 12 months.

Packed in 25kg bags.

Minimum application temperature: 5°C

Maximum application temperature: 30°C

## **COVERAGE**

15 – 20Lm (25mm x 25mm triangular fillet) per 25kg approximately.

The information given in this data sheet is given in good faith and is based upon knowledge and experience of the materials used. However, since the application of the product is beyond the control of Triton Chemical Manufacturing Company, the Company cannot accept responsibility for any loss or damage resulting from the use of the product outside the scope of the intended use and precautions set out in the data sheet.

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**Triton Chemical Manufacturing Co. Ltd.**

Unit 5, Lydean Industrial Estate,

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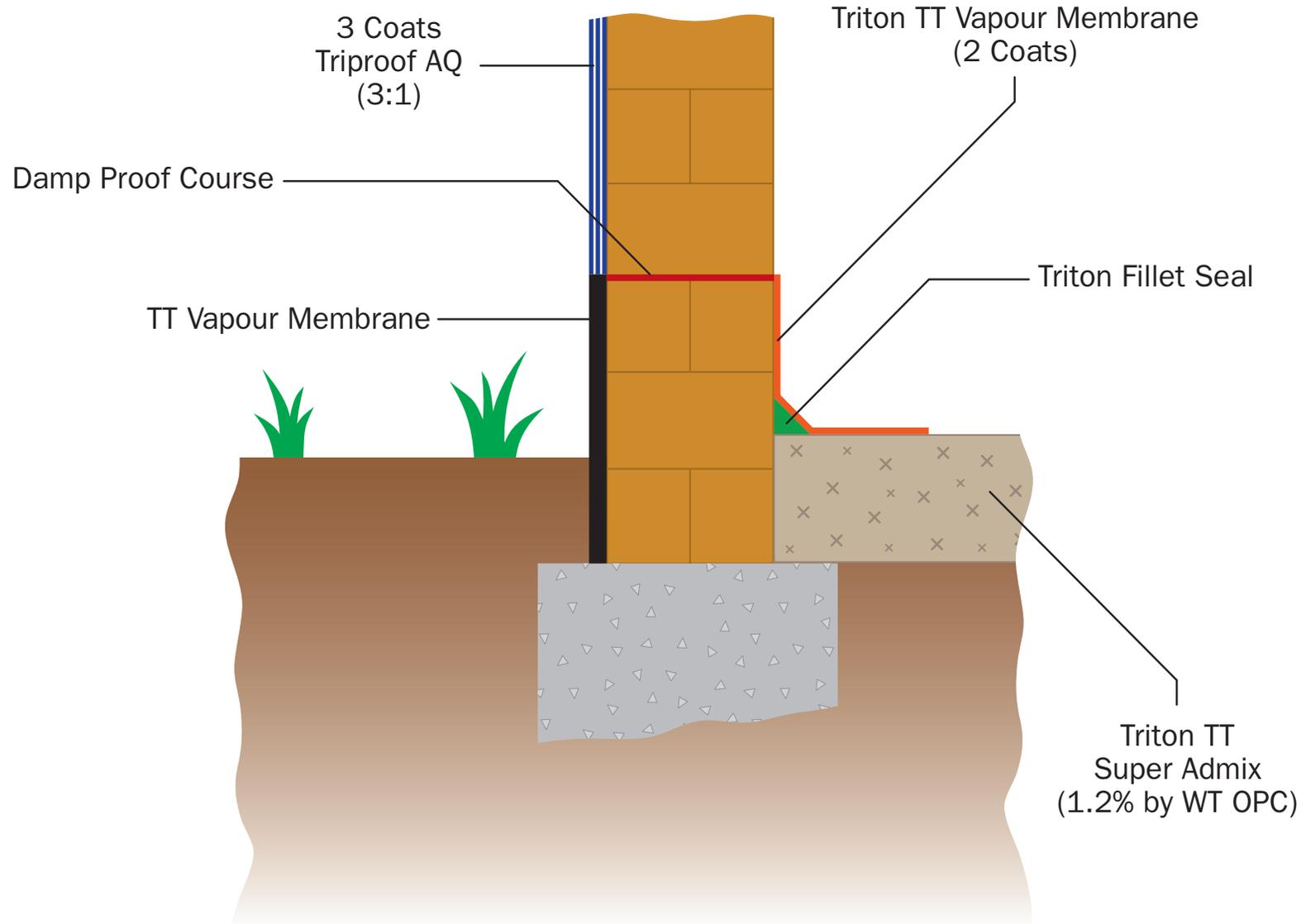
[www.triton-chemicals.com](http://www.triton-chemicals.com)

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Ref: 09/02 DATA TRITON FILLET SEAL

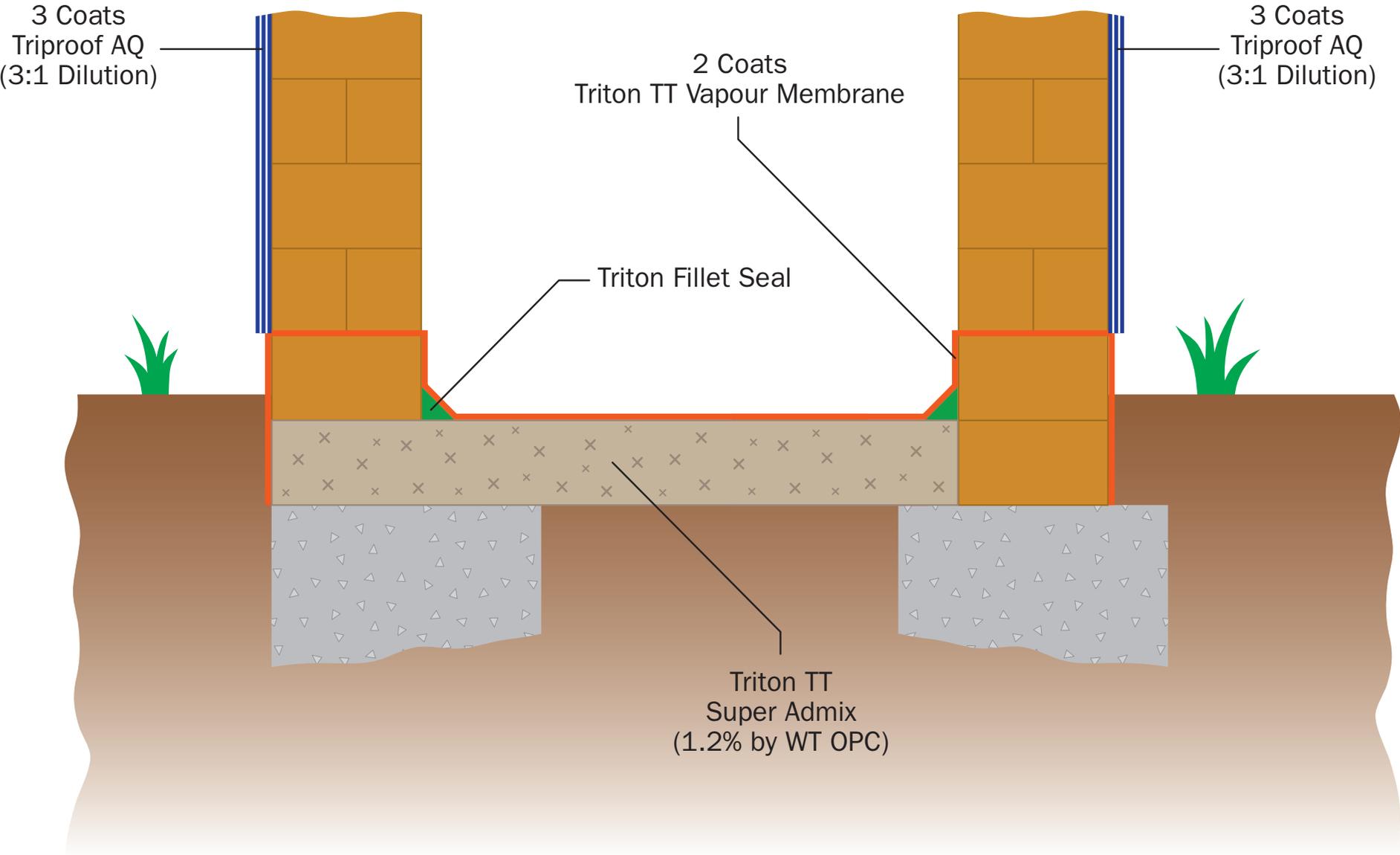
# FR001.1 (B)

## TYPICAL DETAILS – WALL/FLOOR CONSTRUCTION (SOLID & CAVITY WALLS)



# FR001.1 (C)

## TYPICAL SECTION – HIGH RISK/CONTAMINATED/GROUND SLAB





# TRITON TT VAPOUR MEMBRANE

## DESCRIPTION

Triton TT Vapour Membrane is a single component acrylic modified coating that once cured, provides a liquid applied waterproof, methane and carbon dioxide barrier.

## TYPICAL APPLICATIONS

1. As a retro applied waterproof and gas proof membrane to concrete, masonry and brick substrates.
2. Can be applied by airless spray, roller or brush to walls, floors or soffits.
3. As an alternative to sheet membranes in new construction.

## CHARACTERISTICS

1. A 0.7mm thick (dry film) coating provides an effective methane barrier when applied to most clay or cementitious-based construction materials.
2. Also an effective waterproof membrane
3. Excellent adhesion, bonds to porous and non-porous substrates.
4. Flexible.
5. Non-toxic.
6. Will withstand temporary light trafficking.
7. Cannot be punctured as fully bonded.
8. Easily repaired by locally over-coating.
9. Can be painted, plastered or screeded over.
10. Rapid drying, in good conditions two coats can be applied in the same day.
11. Can be applied by brush, roller or airless spray.
12. Can be applied to damp and 'green' substrates.

## TECHNICAL DATA

Components	1
Form	Thixotropic Liquid
Specific Gravity	1.40 (approx)
Application Temp	Plus 4 <sup>0</sup> 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 gasoline, 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)

<b>Accepted Criteria</b>	<b>Triton TT Vapour Membrane</b>
R>50m	357.5m

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

Gas (methane) permeability  $<1.40 \times 10^{-10}$  kg/m<sup>2</sup>/s.

## **APPLICATION GUIDELINES**

1. Surfaces must be clean, free from dust and loose material, oil, paint, fungal growth etc.
2. Non-structural cracks >0.5mm wide must be filled.
3. Structural cracks must first be repaired and filled.
4. The substrate must be sound and ideally present a smooth face.
5. Old repairs must be inspected and re-repaired if necessary.
6. Newly laid concrete should have a clean textured surface; Triton TT Vapour Membrane can be applied to concrete or mortar within 24 hours of laying.
7. Apply 45° fillets into angles formed of Triton Fillet Seal where practicable.

## **MIXING**

Triton TT Vapour Membrane is supplied ready blended in a pail. The product requires agitation using a slow speed paddle mixer. Mix carefully for 5 minutes before use. If containers are stored for more than 2 hours after opening, re-agitate.

Do not add water.

## **SURFACE APPLICATION**

1. Pre-dampen (not wet) the substrate before applying the first coat.

### **Interface with other media**

1. For expansion joints ensure that Triton TT Vapour Membrane is applied well into the rebate before the expansion media is applied.
2. Other gas membranes must be exposed and lapped with Triton TT Vapour Membrane where present.

### **Dealing with cracks**

1. Cracks must be stabilised and filled. Apply the first coat of Triton TT Vapour Membrane and apply plasterers polyurethane 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.

### **Application of the main coating system**

1. The product can be applied by stiff brush, roller or airless spray with a minimum 17 thousands of an inch nozzle. The spray method is especially suitable for less accessible locations and uneven substrates.
2. The first, primer, application is applied at the rate of >0.5lt/m<sup>2</sup> for waterproofing and >0.3lt/m<sup>2</sup> for an effective gas proof membrane. Ensure that the coating is even; use a circular action when spraying.
3. Allow the primer coat to dry before applying the second coat.
4. Apply the second coat at the rate of >0.7lt/m<sup>2</sup> for waterproofing and >0.5lt/m<sup>2</sup> for gas proof applications; for brush application, apply at right angles to the first coat. Again use a circular action when spraying. Application rate will depend on substrate surface.
5. Do not apply over bitumen.
6. The total application thickness must not exceed 4mm if splitting or cracking is to be avoided.

## **PACKAGING**

Triton TT Vapour Membrane is supplied in a 20lt pail.

## **COLOUR**

Mid grey

## **STORAGE**

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 further information please contact:*

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Ref: TT Vapour Membrane 06/07



# TRITON AQUACHANNEL

## DESCRIPTION & USE

TRITON AQUACHANNEL is a P.V.C drainage conduit designed for the control of water ingress in below ground situations.

TRITON AQUACHANNEL is fitted around the perimeter of the floor at the vulnerable wall/floor junction.

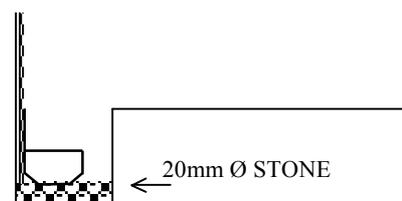
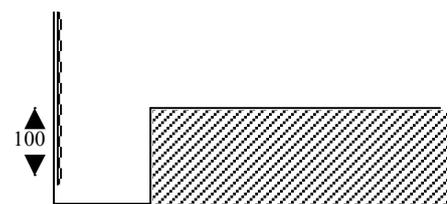
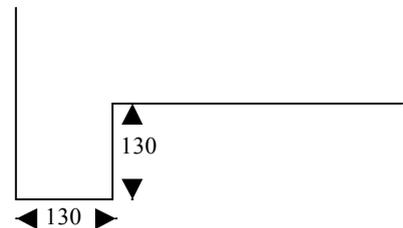
TRITON AQUACHANNEL can be used in most waterproofing situations, and is particularly suited for use in conjunction with Isola Platon Cavity Drain Membrane systems. Water entering the building through the walls is controlled behind the Platon Membrane and diverted to the Aquachannel at the base of the wall. The water enters the Aquachannel through pre-drilled drainage holes and must then be diverted to a suitable drainage point, either natural or a sump and mechanical pump (see Triton Aqua Pump).

In situations where an existing floor slab/screed is solid and showing no signs of water ingress, cracking or de-bonding, the installation of Aquachannel can eliminate the need for Platon Cavity Drain membrane on the floor, proving beneficial in areas of limited headroom.

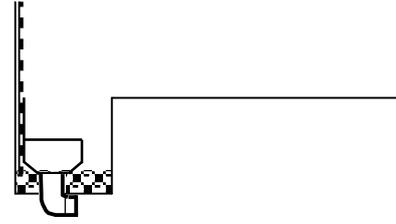
The application of a liquid waterproof coating to the existing floor would be recommended to act as a moisture suppressant.

## INSTALLATION

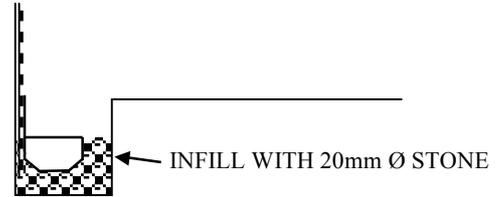
1. Form a trough 130mm deep x 130mm wide in the floor at the wall/floor junction.
2. Apply the waterproof coating or System Platon Cavity Drain Membrane to the wall and finish 100mm minimum below existing floor level.
3. Lay a shallow bed of 20mm stone into the trough. Place the Triton Aquachannel onto the stone with the upstand to the top and flat against the waterproofing/cavity drain membrane to the wall. Lengths of Aquachannel are butt jointed on straight runs and can be mitred in corners. Joints should be sealed with a suitable tape, Platon over tape or builder duck tape, to avoid debris from falling into the channel



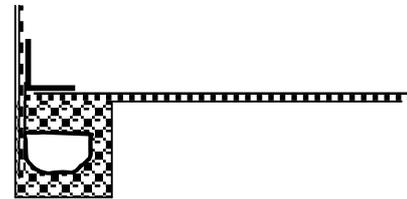
4. Fit the Aquachannel outlet into the Aquachannel at the appropriate location. The Aquachannel outlet requires a 40mm hole in the underside of the Aquachannel. The Aquachannel outlet is solvent welded to the channel using the internal male coupling. A chase should be formed into the floor to accommodate the outlet pipe from the Aquachannel to the sump or drain.



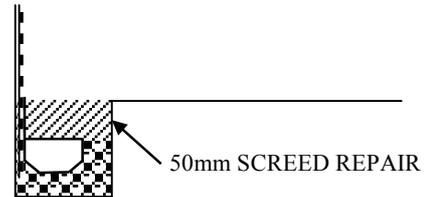
5. Infill the remaining gap between the Aquachannel and the side of the trough with 20mm stone and finish flush with the flat surface of the Aquachannel.



6. When installing Platon membrane over the floor, make good the remaining area with 20mm stone. Lay the membrane over the floor area and seal to the wall membrane using Platon wall/floor junction or Platon Sealing rope.



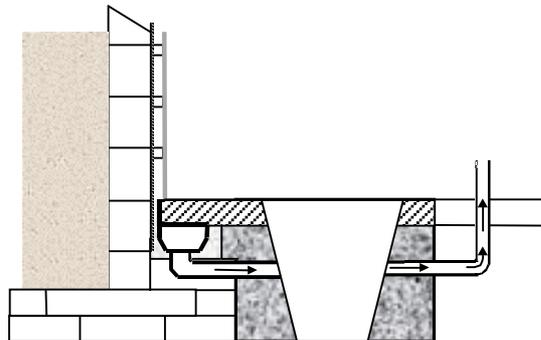
7. When Platon membrane is not going to be installed over the floor, make good the remaining area with approximately 50mm screed.



**MAINTENANCE**

It is recommended that the Triton Aqua channel be jet washed via the jetting ports, which should be incorporated in the channel system, at least once every six months. This should be carried out by the installing contractor (under a maintenance contract) or by the property owner. During this cleaning process the pump/s (if installed) should also be run with water out of the sump chamber to ensure they are fully operational and that the sump chamber be cleaned of any sludge/silt that may have accumulated. In addition to this, the high water level battery alarm box and alarm sensor should also be checked for working order

**TYPICAL INSTALLATION**



For further information please contact:  
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 Tel: 020 8310 3929 Fax: 020 8312 0349



# TRITON AQUA PUMP SYSTEM

## DESCRIPTION AND USE

When installing Isola Platon Cavity Drainage membranes careful attention must be given to provide a suitable drainage solution. Natural drainage is not normally possible or convenient in below ground situations, so mechanical drainage must be used.

TRITON AQUA PUMP is a ready to use complete water control system principally designed for use in below ground structures to control water ingress. The system consists of a pre-formed polyethylene sump basin, a mains powered 230v submersible pump, a non-return valve assembly and a battery operated high water level alarm, which is linked to an integral float switch. The TRITON AQUA PUMP system can be linked to TRITON AQUA CHANNEL (see Triton Aqua Channel Data) to manage water ingress from retaining walls and in turn pumping out to a suitable drainage point.

**IMPORTANT NOTE: The Triton Aqua Pump must only be used for pumping ground water. The pump should not be used to pump grey water from; sinks/washing machines/dishwashers/condensing boilers or effluent. Triton Chemical Manufacturing Ltd will not accept responsibility or liability for pump failure or damage caused due to the misuse of the pumping system.**

## COMPONENTS

**SUMP BASIN** – The Sump Basin is a polyethylene pre-formed chamber, measuring 560mm high x 540mm diameter (top) x 460mm diameter (base) and is most commonly located into the floor, finishing flush with the surrounding floor level. The Sump Basin is supplied with a structural foam flat lid, which can accept foot traffic. The lid can be easily removed to allow regular maintenance of the internal submersible pump or pumps.

**SUBMERSIBLE PUMP** – The pump is positioned within the Sump Basin and is controlled by an automatic snap-action float switch. As the water level increases within the sump the float rises and when the pre-set switch level is reached the pump will automatically operate and discharge the water. The Pump is 230v and requires wiring into an independent fused spur outlet within 1.5m of the pump.

## PUMP SPECIFICATION

Discharge Bore	-	38.1mm
Max. Head	-	6m
Max. Capacity	-	220 litres/min @ 1m
Motor Output	-	1/3 Hp
Max. Width	-	214mm
Max. Height	-	258mm
Max Depth	-	270mm
Voltage	-	230v
Fuse rated	-	5.0amp

**NON-RETURN VALVE ASSEMBLY** – To avoid any discharged water backing-up into the sump basin, a non-return valve assembly is provided. This is fitted directly to the submersible pump outlet via flexible couplings and supplied ready to accept a standard 1½” waste pipe.

**HIGH WATER LEVEL ALARM** – The High Water Level Alarm is an essential component within the Aqua Pump system. In the event of mechanical failure of the pump or an unexpected power failure, the water will continue to fill the sump. When the water reaches the level of the alarm float switch, the 80db alarm will sound, giving warning of the failure. The alarm is powered by a 9v battery, which should be positioned in a convenient location such as a kitchen/lounge where it will be easily heard. Once the alarm is heard immediate action must be taken to avoid flooding. Additionally a 12v battery operated pump can be installed offering peace of mind to the client, while investigations are made into the failure. See Triton Battery Back-up Pump System data.

## **PREPARATION AND INSTALLATION**

The site conditions or situation being encountered may well determine the positioning of the Triton Aqua Pump System. However, ideally it should be sighted at the lowest point of the room and or closest to the nearest point where water will be discharged. **The most important thing is to make sure that water can get to the pumping station.** Once the pump position has been established, dig a circular hole to a depth of 650mm and to a width of 650mm .

At the base of the walls of the sump basin, drill 4 holes opposite each other, (12mm dia ), insert two lengths of reinforcing bar ( 660mm long) through drilled holes .These will add additional anchoring for the sump basin in the ground.

Fit the high water level alarm float switch sensor into the pre-cut hole provided within the wall of the sump basin and ensure that the (jaw) of the switch sensor is open and hangs downwards. Bring the two cables with bullet connectors attached back into the sump basin either through one of the holes provide or by drilling a hole and leave ready to be connected to the wires of the water alarm. **NB:** if the water discharge pipe from the pump is to be concealed below the floor, then a 1½” hole will need to be cut through the side of the basin. However, the position of this hole can only be determined once the sump basin has been offered into position, otherwise the discharge pipe can be taken through the lid of the basin.

Lay approx 100mm concrete at the base of the hole and insert the sump basin. Using a spirit level, adjust the top of the basin to the level of the finished floor level. Fill the basin two thirds with water, then infill around sump basin with concrete, ensuring it is well compacted. **NB:** If Platon membrane is being installed over the floor, then the concrete will need to be finished 100m lower than top of sump, drill a number of perforations to edge of sump basin and infill void above concrete with 20mm stone. (drwg no. IP029.1) However, when Platon membrane is not going to be installed over the floor, the concrete should finish flush with top of sump basin.

Insert the Aqua Pump in the base of the sump basin and connect the water discharge pipe to the flexible coupling already attached to the pump. The discharge end of the pipe can be taken through a wall and extended to a gully outlet at ground/street level. Alternatively, the discharge pipe can be connected straight into a soil pipe using a ‘boss’ connection. **Where a double pump installation is being used (Aqua Pump Plus), each pump must be wired into an independent fused spur outlet. One of the Aqua Pumps (the secondary pump) in the double pump kit will have been fitted with 25mm long spacers at the base of the pump so that this pump is raised off the bottom of the sump basin.**

Connect the wires from the float switch sensor to the wires of the water alarm using the bullet connectors provided. Then connect the pump/s power cable into a fused spur outlet (fuse rating 5amp) and test the pump and alarm for working order.

## **MAINTENANCE**

It is recommended that the Triton Aqua Pump System is maintained /serviced at a minimum every six months. This should be carried out by a competent contractor (under a maintenance contract) or by the property owner. During a service all parts of the Aqua Pump kit should be checked to ensure fully operational. The sump should be cleared of any silt/sludge that may have accumulated to avoid potential damage to the pump/s.

The sump must be filled with water to ensure the automatic float switch and pump are fully operational. We recommend renewal of the 9v battery within the alarm and that the alarm float switch checked to ensure the alarm sounds. Any defective parts must be replaced /repaired to avoid failure of the system. Example of suitable sump, pump and drainage schedule can be found in the Isola manual, or downloaded from the Triton website [www.triton-chemicals.com](http://www.triton-chemicals.com)

We recommend records of each service be kept by the property owner.

*For further information please contact:*

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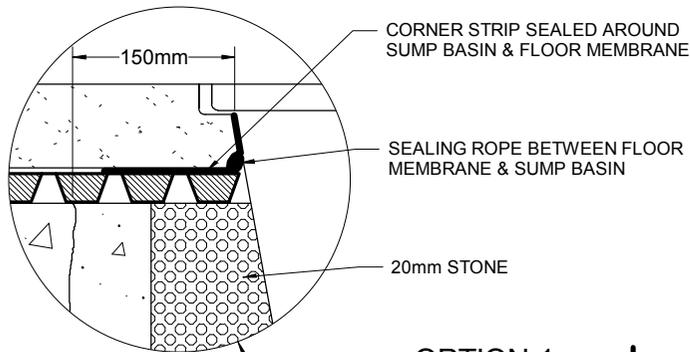
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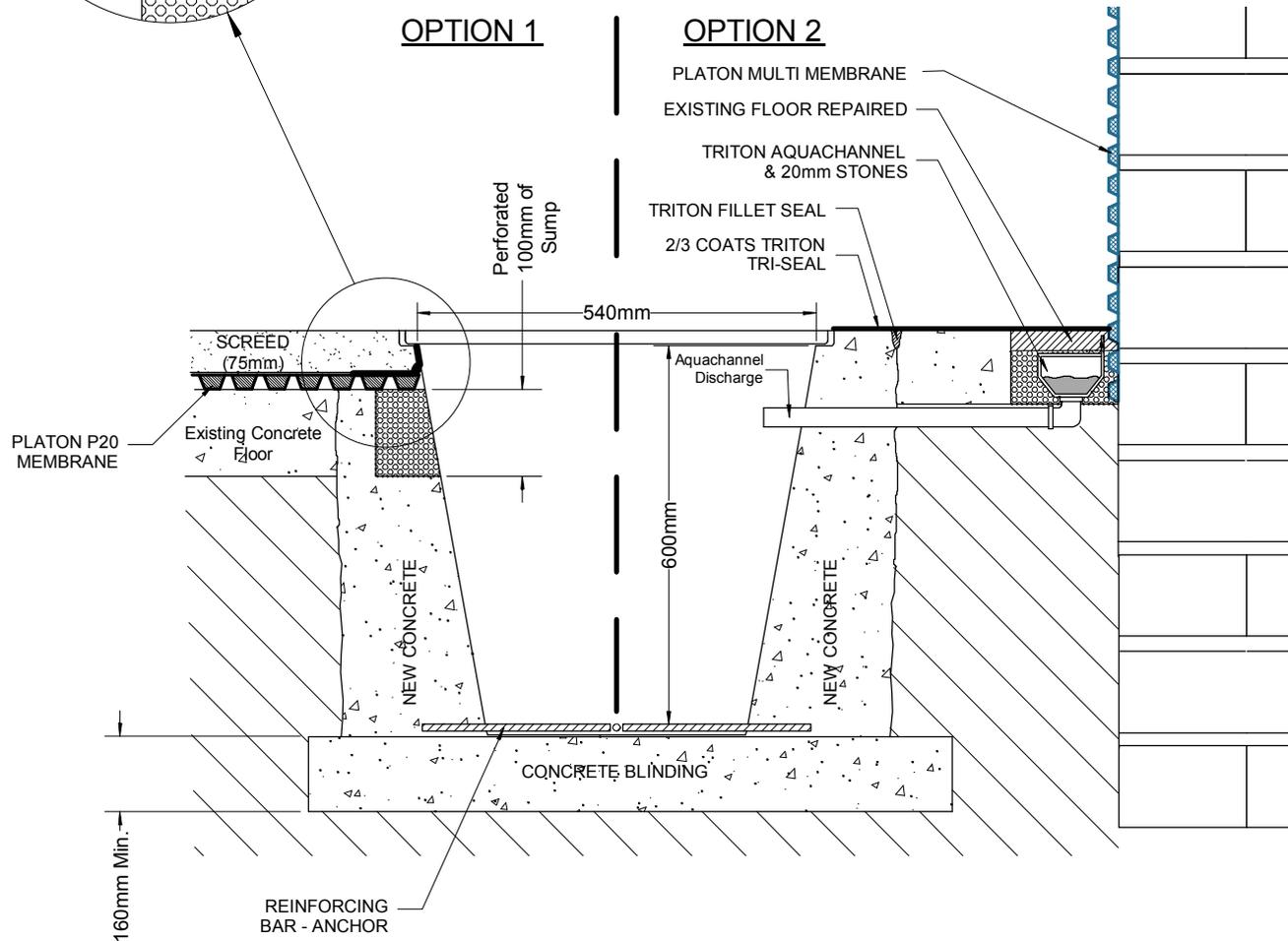
**NOTE**

ALL INSTALLATION TO BE CARRIED OUT IN STRICT ACCORDANCE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS. FOR FURTHER ASSISTANCE CONTACT TRITON TECHNICAL ON THE TELEPHONE NUMBER ABOVE.



**OPTION 1**

**OPTION 2**



REV.	MOD. BY	DATE	CHK. BY	APP. BY

**Alterations**

**TITLE:**

Sump Options - Installation  
(Non-Perforated)

DRG. No.

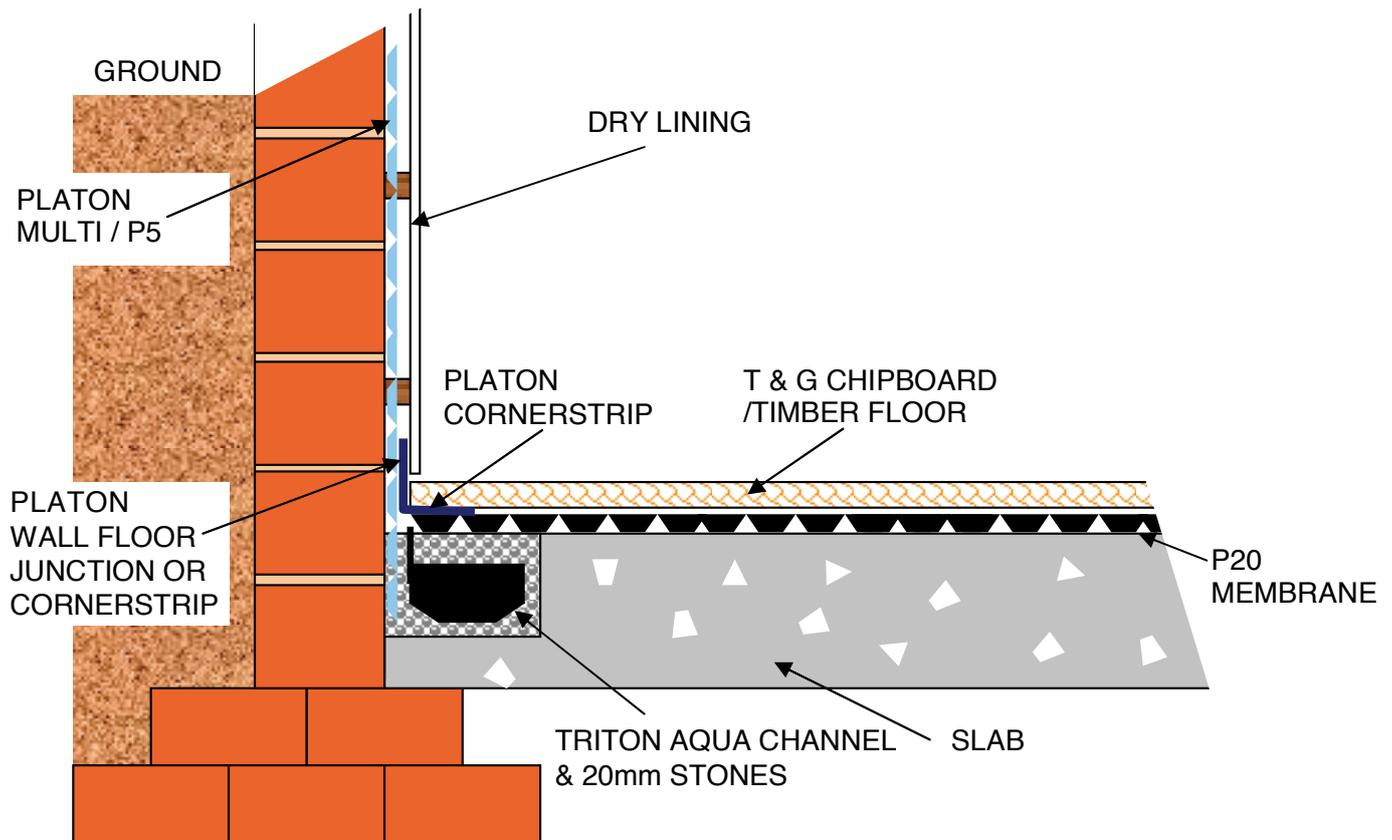
IP 029.1

REV

1

DRAWN	JDF. CBS	System Files: IP029-1(1).pdf IP029-1(1).dwg
DATE	1st February 2007	
SCALE (A3)	Not To Scale	
CHECKED		
APPROVED		

# Typical wall/floor detail below ground Drawing No. (I P 002.1)



© Triton Chemical Manufacturing Company Limited

All installations to be strictly in accordance with manufacturer's guidelines which are set out in the Isola Manual. For any non-standard details, please contact our technical department on 020 8310 3929



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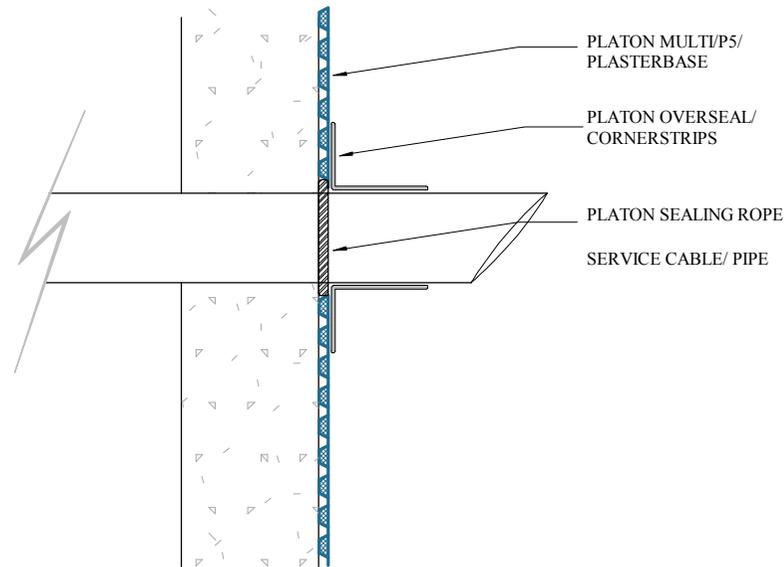
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REV.	MOD. BY	DATE	CHK. BY	APP. BY
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**Alterations**

**TITLE:**

Service Pipe Sealing Detail

<b>DRG. No.</b>	IP 027.1	<b>REV</b>	1
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<b>DRAWN</b>	THF, CBS	<b>System Files:</b> IP 027.1.pdf
<b>DATE</b>	11-01-07	
<b>SCALE (A3)</b>	Not To Scale	
<b>CHECKED</b>		
<b>APPROVED</b>		



## Triton Platon Multi Membrane Data Sheet

### Description

Platon Multi Membrane is manufactured from translucent high-density polypropylene. It is impermeable and resistant to the usual chemicals in building construction.

When Platon Multi is acting as a damp proof membrane, both the product and the wall and floor coverings may be installed independent of the moisture content in the underlying structure and with running water not under pressure in the air gap.

Studs are formed in a regular pattern on one face of the membrane. The studs are round and spaced at 20mm centres. Platon Multi is supplied in rolls 2.05m x 20m.

### Workability

Platon Multi Membrane is tough but pliable and can be bent round corners and projections without risk of breaking even in very low temperatures. The Membrane can be easily cut with a knife and scissors.

### Installation

Detailed installation instructions are set out in the Isola Manual, available on request from Triton or downloadable at [www.triton-chemicals.com](http://www.triton-chemicals.com)

### Storage

Rolls of Platon Multi should be stored upright.

### Technical Data

Dimension:	Roll 2.05m x 20m
Raw Material:	PP (High Density Polypropylene)
Colour:	Translucent
Stud Height:	5mm
Membrane Thickness:	0.5mm
Weight:	480 g/m <sup>2</sup>
Loading Performance:	Defined by floor covering
Water vapour resistance:	Approx. 1800m <sup>2</sup> .s.Gpa/kg or 360n equivalent air layer.
Air Gap Volume:	3.3 l/m <sup>2</sup>
Filling Volume:	1.7 l/m <sup>2</sup>
Biological resistance:	Does not rot or support growth
Chemical resistance:	Resistant to all chemicals in normal building construction
Thermal resistance:	0.10 m <sup>2</sup> .°K/W
Flammability:	B2

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## Outline Specification

### Flood Resilience – Existing Properties Details: Service Entry Points

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#### **1. Introduction**

Where service entry points to an existing property enter the building at a level below the height of anticipated flood levels, these would require waterproofing. Service entries include all piped services, as well as gas, water, and electrical pipes and cables, through both floors and walls, and the detailing to each should be specific to each.

#### **2. Service Penetrations – Solid Floors**

Service entry points through existing floors will require waterproofing from the interior of the property. Therefore any coverings should be removed from the floor area prior to any application of products.

On large pipe work and rigid ducts these should be detailed as per attached drawing no. TT007.1 – Existing structure.

A chase into the floor around the service penetration to a depth of 50-75mm (minimum) and a width of 15mm to be made.

All loose material to be removed, prior to the application of a 10mm bead Triton TT Swellseal Mastic. The chase to be re-profiled to existing floor level using Triton Fillet Seal. Application and mixing of products to be in accordance with their respective data sheets attached.

Smaller pipes and cable penetrations through the floors should be detailed as for service penetrations to the walls, as detailed below and in drawing no. FR002.1 A.

#### **3. Service Penetrations – Existing Walls**

The use of Triton TT Swellmastic is not advised where service penetrations are through masonry walls, as the masonry walls are not strong enough to resist the expansive forces exerted by the product when swelling in contact with water.

Service penetrations through existing walls should be detailed using Triton Trifix and as indicated in drawing no. FR002.1A attached.

Chase out around the service penetration by approx 10mm and to a depth of 15mm, preferably to both internal and external sides of the wall (internal detailing may be left until internal re-decoration and or refurbishment takes place). Gun apply the Triton Trifix resin to the full depth of the chase, smooth over the surface and allow to fully cure.

Triton Trifix resin is a two part epoxy which is mixed within the nozzle as it is being applied to ensure suitable mix proportions of the two parts and adequate mixing prior to application. For full details on use and application of Triton Trifix please refer to the attached data sheet.

#### **4. Summary**

All service penetrations must be detailed as indicated above and all product applications to be in accordance with manufacturer's installation and application guidelines attached.

NOTE: There are no details here for sealing through timber floors as by their very nature it would not be possible to seal service penetrations successfully through timber floors. See separate section on flood resilience to existing properties existing floors detail.

#### **Triton Contact Details:**

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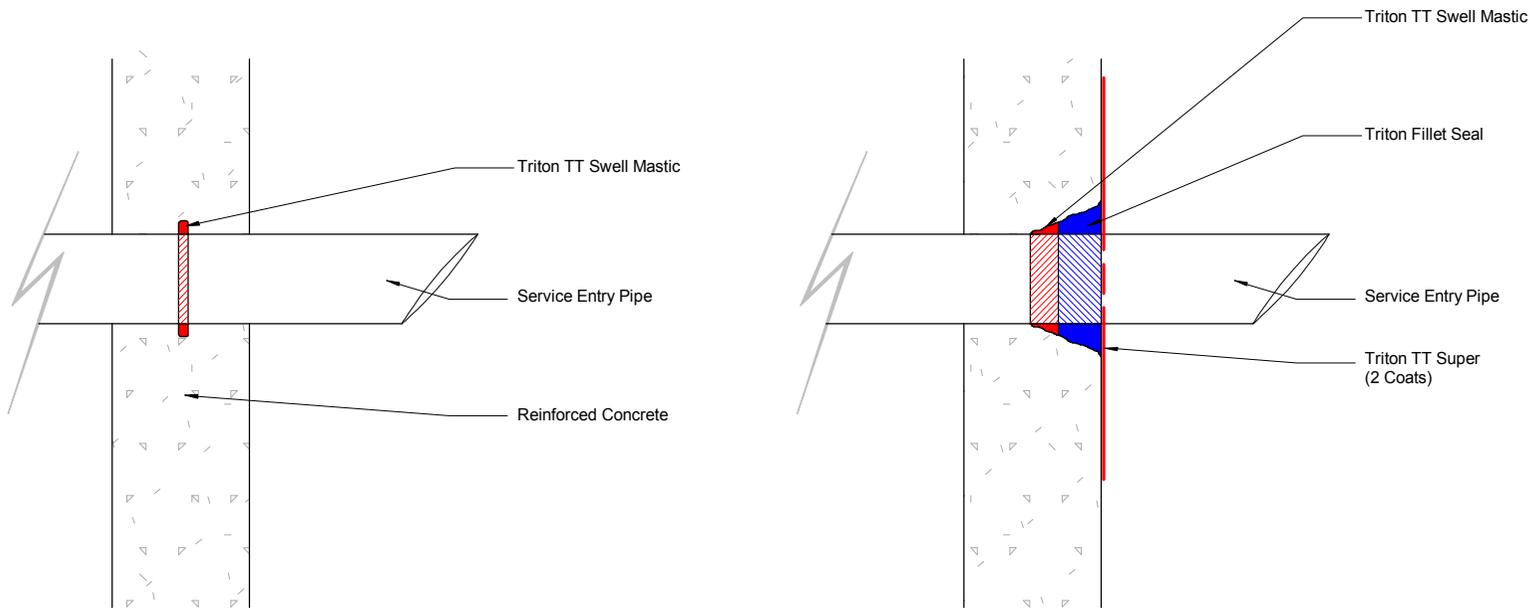
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New Construction

Existing Structure

REV.	MOD. BY	DATE	CHK. BY	APP. BY
<b>Alterations</b>				

**TITLE:**

Service Entry Sealing To  
Concrete Structures

<b>DRG. No.</b>	TT 007.1	<b>REV</b>	1
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DRAWN	JDF, CBS	System Files: TT 007-1(1).pdf
DATE	25-06-07	
SCALE (A3)	Not To Scale	
CHECKED		
APPROVED		



# TRITON TT SWELL MASTIC

## DESCRIPTION

**Triton TT Swell Mastic** is grey colour, gun applied one component hydro reactive expansion sealant for waterproofing joints in concrete.

Triton TT Swell Mastic expands up to 100% when in contact with water to create a durable waterstop with long-lasting adhesive and hydro-swelling properties. When in contact with sea water, Triton TT Swell Mastic expands between 50 – 70%.

Triton TT Swell Mastic has excellent adhesive properties on different surfaces such as concrete, steel, glass, PVC, HDPE etc. The surface can be rough, smooth, damp or dry.

## ADVANTAGES

1. Single component, application directly.
2. As a problem solving hydrophilic in difficult access areas.
3. Fast curing, enable early concrete pour and rapid return to service.
4. Excellent seal on rough concrete and plug up irregular surfaces.
5. Durable – excellent wet/dry cycle, retaining elastic character and swelling performance

## AREAS OF APPLICATION

1. Pipe penetrations (concrete, PVC etc).
2. Waterproofing of joints between pre-cast concrete elements (e.g. inspection manholes, box culverts, sewer systems etc).
3. Waterproofing of H-beam penetration through floor slabs.
4. Adhesion of waterstops on an irregular surface.
5. Sealing around conventional PVC waterstop providing a belt seal prior to concrete pour.

## TECHNICAL DATA

Appearance	<b>Grey</b>
Form	<b>Elastic paste</b>
Specific gravity	<b>1.2</b>
Solids (min.)	<b>98%</b>
Application limits (°C)	<b>20 – 70</b>
Tack-free time	<b>1 hour</b>
Approx. dry time (25°C, 65 RH)	<b>10 hours</b>
Shore A Hardness	<b>25</b>
Tear resistance (N/mm <sup>2</sup> )	<b>20 kg/cm<sup>2</sup></b>
Set time (3 mm thickness)	<b>24 hours</b>
Expansion volume (%)	
Water	<b>100</b>
Sea water	<b>50 – 70</b>
Concrete pour	<b>Allow 4 to 8 hours</b>

## **LIMITATIONS**

Triton TT Swell Mastic should not be used for expansion joint or for joints subjected to significant repetitive movement

Triton TT Swell Mastic should be positioned to ensure that there is a minimum of 70mm concrete cover to accommodate pressure developed during the swelling process.

Triton TT Swell Mastic will establish a firm bond to concrete, however, as with any hydrophilic waterstop, care should be taken during concreting directly onto the seal.

## **PACKAGING**

300ml per cartridge.

## **COVERAGE**

Each 320ml gun cartridge will provide enough material for approximately 1.5 metres when gunned to form a constant 10mm diameter bead.

## **SHELF LIFE**

Shelf life is 6 months in the original unopened packaging. To be stored at room temperature. Do not store in direct sunlight.

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Ref: TT Swell Mastic 06/07



# TRITON FILLET SEAL

A pre-packed cement based and polymer modified product for use as a floor to wall junction seal during waterproofing works when using cementitious slurry coatings (T.T.55) and renders. In most circumstances FILLET SEAL need only be mixed with water for use. Where extra adhesion or flexibility are required, TRITON SBR latex and TRITON TANKING MIX ELASTIFIER (T.T.M.E) may be used respectively.

**NOTE:** Where water is leaking or seeping the use of TRITON QUICK SET is advised.

The use of FILLET SEAL helps to ensure a smooth transition between horizontal and vertical surfaces which minimises the risk of leaving gaps or holes unsealed during the water proofing works.

## **PREPARATION**

Situations where the FILLET SEAL will be employed should already have been prepared in accordance with the slurry coating or render specification. In the majority of instances the FILLET SEAL will be applied onto the slurry coated surface as illustrated in FIG. 1 below.

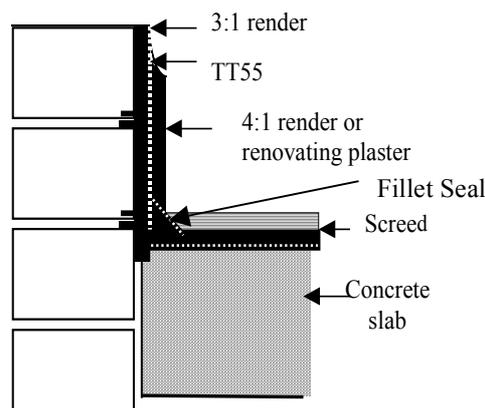


Fig. 1

The FILLET SEAL becomes fully encapsulated within the layers of slurry coating.

## **USAGE**

FILLET SEAL normally needs only mixing with clean water before use. Add sufficient water to make a cohesive, stiff mortar. Ideally the FILLET SEAL should be applied to partly cured (green) slurry coating (T.T.55) surfaces to maximise adhesion. If this is not possible make up the FILLET SEAL using a gauging solution composed of 1 part TRITON SBR to 4 parts water (by volume). Pre-wet the surface with the same solution just before applying the FILLET SEAL. When excessive stress concentrations are expected at floor/wall joints the use of T.T.M.E added to the mix is advised. T.T.M.E increases flexibility and should be added neat to FILLET SEAL until the required consistency is achieved. The slurry coating (T.T.55) under and overcoats should also contain T.T.M.E.

**NOTE:** Only sound substrates suitable to be permanently sealed under a waterproofing system should be treated. Concrete, Brick, Stone, Render and Mortar in poor condition could deteriorate further when sealed inappropriately.

## **CURING**

Avoid rapid drying out, overcoat as soon as set (5-6 hours dependent on conditions) whenever possible. Do not subject to running water until fully hardened (and overcoated).

## **STORAGE AND HANDLING**

Avoid breathing dust.

Wear gloves and eye protection.

Wash hands and exposed skin after use.

Must be stored in dry frost-free conditions.

If bags are stored correctly and unopened they will have shelf life of 12 months.

Packed in 25kg bags.

Minimum application temperature: 5°C

Maximum application temperature: 30°C

## **COVERAGE**

15 – 20Lm (25mm x 25mm triangular fillet) per 25kg approximately.

The information given in this data sheet is given in good faith and is based upon knowledge and experience of the materials used. However, since the application of the product is beyond the control of Triton Chemical Manufacturing Company, the Company cannot accept responsibility for any loss or damage resulting from the use of the product outside the scope of the intended use and precautions set out in the data sheet.

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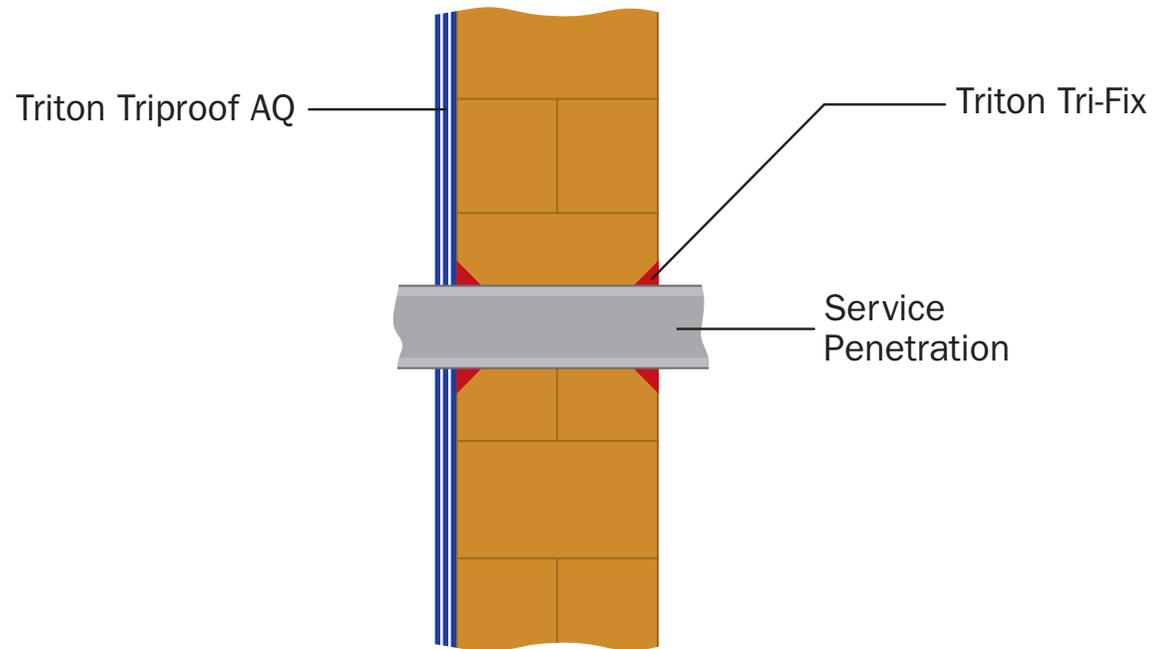
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Ref: 09/02 DATA TRITON FILLET SEAL

# FR002.1 (A)

## SERVICE PENETRATIONS – MASONRY AND CONCRETE





# TRIFIX ADHESIVE

**DESCRIPTION** TRIFIX is a two component epoxy resin system formulated for use with twin component side by side cartridges using either hand operated or, more normally, air operated guns, using “at the nozzle” static spiral mixer or pot mix for larger applications.

**CHARACTERISTICS** TRIFIX is colour coded for visual assurance that the two components are fully mixed. The product is solvent free, thixotropic i.e., will not readily slump, and cures in cold, damp conditions.

**USES** TRIFIX is formulated as an adhesive for bonding and anchoring most building materials e.g. brick, stone, steel, mortar and timber. Once cured TRIFIX creates a strong stress free joint regardless of the surrounding environment.

\*The colour, but no other ingredient, may be changed at the manufacturers discretion. The change will not affect the cured product in any way.

## **TRIMOL SYSTEM**

PRODUCT	APPEARANCE	DENSITY AT 25°C
TRIFIX RESIN	*Orange	1.7
TRIFIX HARDENER	*Red	1.2

## **INSTRUCTIONS FOR USE**

**PREPARATION** Prior to the application of TRIFIX all surfaces must be free from dust, oil, rust and grease. Any loose materials must be removed back to a sound surface.

**MIXING** When supplied in cartridge form the mixing takes place in a static spiral mixer, which delivers the mixed product to the required surface. When supplied in pots, all of the resin must be mixed with all of the hardener. Under no circumstances should part mixes be used. Mix the two components thoroughly until a consistent, no streaky colour is achieved. When using cartridges, extrude TRIFIX onto a surface until a consistent non-streaky colour is achieved.

**USABLE LIFE** In cartridges TRIFIX has no waste apart from the mixed product in the nozzle, which will stay workable for a minimum of 15 mins. In pot form the mixed product will remain workable for approximately 15 mins. This time can vary depending upon the working temperature.

**CURING** Complete cure: 7 days

**TESTING** Not less than 24 hours after application, the temperature to be 12°C or above.

**WORKING TEMPERATURE** The material is formulated for use at 5°C. to 25°C.: it is seasonably adjusted during manufacture to ensure the flow characteristics of the mixed product are constant.

## **TRIFIX ADHESIVE**

Mechanical properties after curing 21 days at 20°C.

Test temperature: 20°C.

Tensile strength 35 Mpa

ISO/R 527

Flexural strength 30 Mpa

ISO 178

Compressive strength 60 Mpa

**STORAGE** The separate components, stored at 5°C. to 20°C. in dry conditions, have a shelf life of at least 9 months.

**PACKAGING** 400ml side by side cartridge

**CLEANING** The method of application cuts cleaning to a minimum but should it be necessary to clean then TRITON RESIN CLEANER should be employed: cured TRIFIX ADHESIVE will require removal by chipping or other mechanical means.

**CAUTION** TRIFIX ADHESIVE is generally harmless providing that the normal common-sense precautions are taken when handling chemicals are observed. For instance neither the separate components nor the uncured mixture should be allowed to come into contact with foodstuffs or utensils. Measures should also be taken to prevent contact with the skin: wearing rubber or plastic gloves will normally suffice along with eye protection. Thoroughly cleanse the skin at the end of each working period by washing with soap and water. Disposable paper towels are recommended to dry the skin. Precautions are fully discussed in Product Safety Information sheet for TRIFIX ADHESIVE, which is available on request.

The information given in the Data sheet is given in good faith and is based upon knowledge and experience of the materials used. However, since the application of the product is beyond the control of Triton Chemical Manufacturing Company, the Company cannot accept any responsibility for any loss or damage resulting from the use of the product outside the scope of the intended use and precautions set out in the data sheet.

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Ref:09/97DATA.TRIFIX ADHESIVE



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## Outline Specification

### Flood Resilience – Existing Properties Details: Party Walls

---

#### **1. Introduction**

Where properties are either in part of a terrace or semi detached, if all/both properties are being made flood resilient then this can be detailed as per details for individual properties. Where this is not the case then consideration must be given to the vulnerability of the party wall to the penetration and impact of flood waters which have entered the neighbouring property.

An assessment of the wall construction and its coverings (renders, plasters or dry lining) must be assessed for its existing flood resilient capabilities, along with an assessment of the type and level of flood risk to the property overall.

Given the nature of a party wall any flood resilience works would need to be carried out internally within the property. This would involve the disruption to internal wall coverings and floors, certainly to the perimeter edge of the floor subject to the level of flood resilience deemed appropriate to the property overall.

#### **2. TT Vapour Membrane Option**

All surface plasters, renders and wall coverings to be removed from the walls and the floor area to be stripped back to a minimum of 150mm (all floorcoverings if floors are to be made flood resilient – see flood resilience to existing floors). Also to the return of the non party wall to ensure suitable overlap between flood resilient measures to other walls.

All loose material and dust to be removed from walls and floor areas. Apply a 25mm fillet of Triton Fillet Seal to the wall/floor junction and to the vertical wall/wall junction. Application rate of Fillet Seal to be approximately 1.6kg per linear metre.

Mixing and application to be in accordance with Triton Fillet Seal data sheets attached.

Apply a tight coat of 3:1 sand cement render to the walls, minimum of 7-10mm. Apply two coats Triton TT Vapour Membrane to entire wall area up to a level beyond height of anticipated flood levels or 2m. Each coat to be applied at a rate of 0.7 litres per square metre.

After application of second coat cast sand into the TT Vapour Membrane to ensure suitable mechanical key for subsequent render/plaster coats. To first backing render coat use Triton SBR, dilute 1:4 with water as the gauging water for the render mix.

The TT Vapour Membrane to extend over the Fillet Seal detail to the wall/floor junction and to extend on to floor by minimum of 150mm, or if entire floor is to be covered to continue across floor as part of floor flood resilience measures.

#### **3. Platon Cavity Membrane Option**

Where the flood resilience measures to the floor include the use of Triton Aquachannel and Platon membranes then this detail can be continued up the party wall areas as flood resilience measures to them. Installation as per attached drawing no.IPO02.1.

This may be considered as an appropriate or simplest of flood resilience systems to install to the entire internal of the property, and detailing to service entry points and door and window reveals should be as per attached drawings nos. IPO27.1 & IPO26.1.

Any complete system installation would need to include flushing/inspection ports along with a suitable discharge point. This is to maintain the system but also ensure that it can be suitably flushed through following flood water entry to the system with Triton X5 Microsanitizer.

#### **4. Summary**

Given the very nature of party walls and the added complication of their requirement to be treated internally, consideration for the installation of appropriate flood resilience measures should be given at times of re-decoration or refurbishment to the property.

The above and other existing property flood resilience measures can be incorporated into post-flood reinstatement works to reduce significantly the risk of future flood damage.

#### **Triton Contact Details:**

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# TRITON FILLET SEAL

A pre-packed cement based and polymer modified product for use as a floor to wall junction seal during waterproofing works when using cementitious slurry coatings (T.T.55) and renders. In most circumstances FILLET SEAL need only be mixed with water for use. Where extra adhesion or flexibility are required, TRITON SBR latex and TRITON TANKING MIX ELASTIFIER (T.T.M.E) may be used respectively.

**NOTE:** Where water is leaking or seeping the use of TRITON QUICK SET is advised.

The use of FILLET SEAL helps to ensure a smooth transition between horizontal and vertical surfaces which minimises the risk of leaving gaps or holes unsealed during the water proofing works.

## **PREPARATION**

Situations where the FILLET SEAL will be employed should already have been prepared in accordance with the slurry coating or render specification. In the majority of instances the FILLET SEAL will be applied onto the slurry coated surface as illustrated in FIG. 1 below.

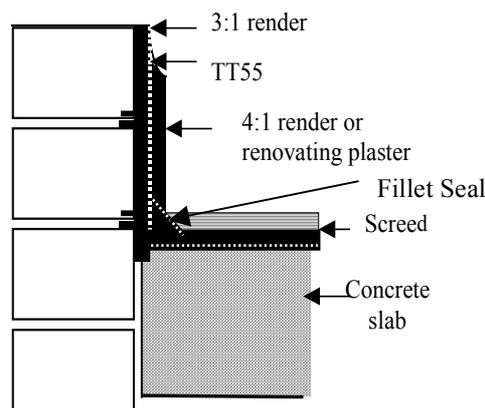


Fig. 1

The FILLET SEAL becomes fully encapsulated within the layers of slurry coating.

## **USAGE**

FILLET SEAL normally needs only mixing with clean water before use. Add sufficient water to make a cohesive, stiff mortar. Ideally the FILLET SEAL should be applied to partly cured (green) slurry coating (T.T.55) surfaces to maximise adhesion. If this is not possible make up the FILLET SEAL using a gauging solution composed of 1 part TRITON SBR to 4 parts water (by volume). Pre-wet the surface with the same solution just before applying the FILLET SEAL. When excessive stress concentrations are expected at floor/wall joints the use of T.T.M.E added to the mix is advised. T.T.M.E increases flexibility and should be added neat to FILLET SEAL until the required consistency is achieved. The slurry coating (T.T.55) under and overcoats should also contain T.T.M.E.

**NOTE:** Only sound substrates suitable to be permanently sealed under a waterproofing system should be treated. Concrete, Brick, Stone, Render and Mortar in poor condition could deteriorate further when sealed inappropriately.

## **CURING**

Avoid rapid drying out, overcoat as soon as set (5-6 hours dependent on conditions) whenever possible. Do not subject to running water until fully hardened (and overcoated).

## **STORAGE AND HANDLING**

Avoid breathing dust.

Wear gloves and eye protection.

Wash hands and exposed skin after use.

Must be stored in dry frost-free conditions.

If bags are stored correctly and unopened they will have shelf life of 12 months.

Packed in 25kg bags.

Minimum application temperature: 5°C

Maximum application temperature: 30°C

## **COVERAGE**

15 – 20Lm (25mm x 25mm triangular fillet) per 25kg approximately.

The information given in this data sheet is given in good faith and is based upon knowledge and experience of the materials used. However, since the application of the product is beyond the control of Triton Chemical Manufacturing Company, the Company cannot accept responsibility for any loss or damage resulting from the use of the product outside the scope of the intended use and precautions set out in the data sheet.

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Ref: 09/02 DATA TRITON FILLET SEAL



# TRITON SBR

SBR Latex admixture for cementitious mixes e.g.; Renders, Screeds, Tile adhesives, Patch repairs and waterproof slurry coatings.

**TRITON SBR** improves the workability and durability of cement mixes. The resultant cured material has the following improved properties over a non latex mix:

- Higher strength, density and water impermeability.
- Increased flexibility and crack resistance.
- Improved adhesive bond allowing thinner layers to be laid.
- Increased chemical resistance.

## **DIRECTIONS FOR USE**

**PREPARATION:** Surfaces to be rendered, screeded etc. must be free from all loose and friable material, dust, dirt, plaster, bitumen, grease etc.

**PRIMING COAT:** The application of a priming coat is normally recommended to obtain maximum adhesion to the substrate. The prepared surface should be thoroughly dampened with water (but with no free standing water). A primer coat consisting of two parts Portland cement mixed with one part of TRITON SBR by volume should be thoroughly worked into the surface by brush or broom. The topping (screed, render etc.) should be applied whilst the primer is still wet.

**MIXING:** Premix the sand and cement. Add 9 - 10litres TRITON SBR for every 50kg of cement used. Add small amounts of water until the desired consistency is achieved. TRITON SBR has a plasticizing/water reducing effect and less water than normal will be required. Do not over-mix.

**APPLICATION:** The thickness of Renders should be restricted to about 7mm per coat to avoid sagging. Multi coats can be applied in relatively quick succession:- 30-60 minutes. Screeds can be placed as normal (priming coat recommended). Avoid over-finishing or rapid drying, if necessary cover with polythene for 24-48 hours after placing.

## **TECHNICAL DATA**

TOTAL SOLIDS	%	44.5
SPECIFIC GRAVITY	g/l	1.01
PH		10.5

## **SAFETY PRECAUTIONS**

- Wear gloves and eye protection.
- Wash hands and exposed skin after use.
- Store in original container in a safe place.

## **PACKAGING**

Available in 5 litre and 25 litre containers

**PROTECT FROM FROST**

*For further information contact:*

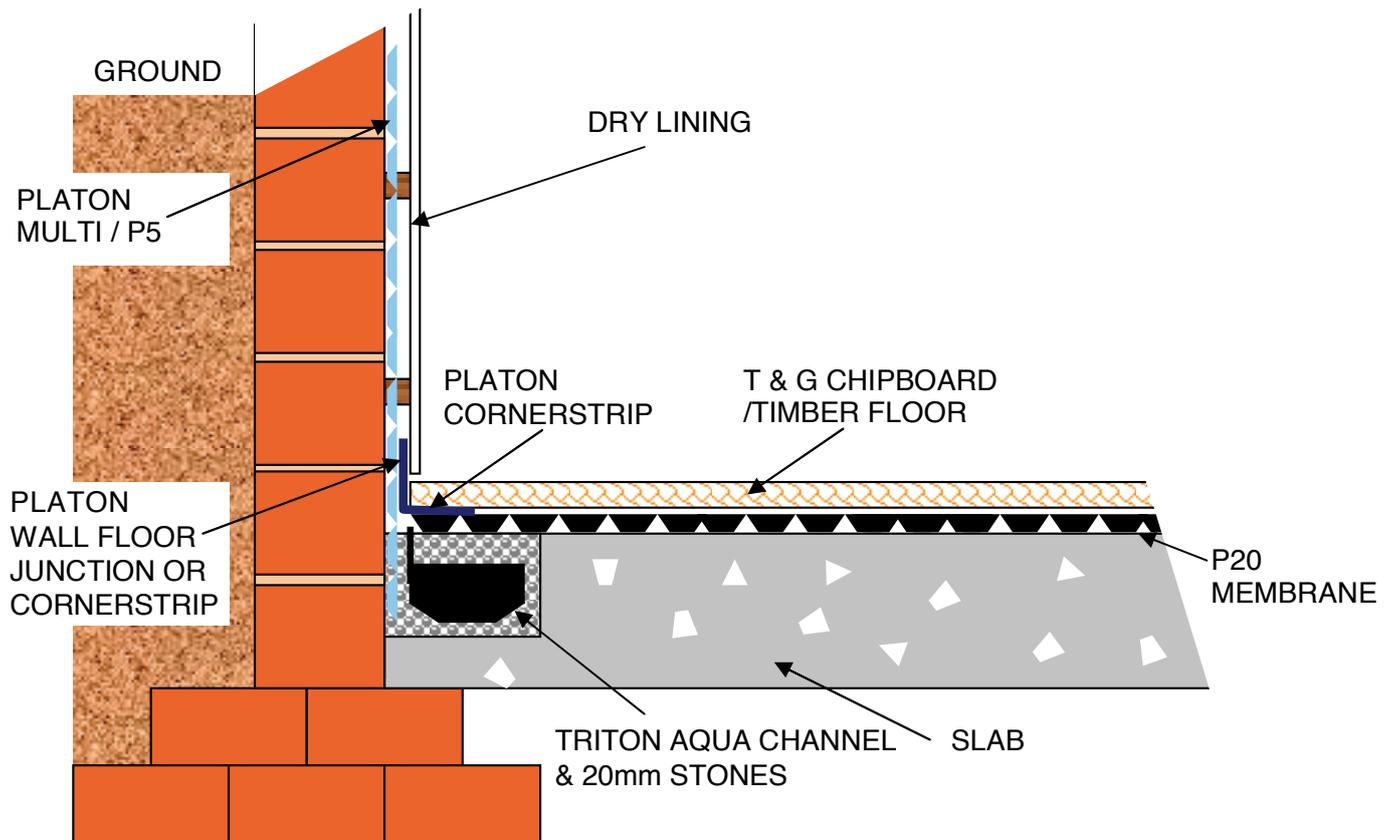
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Ref: 04/97 DATA.TRITON.SBR

# Typical wall/floor detail below ground Drawing No. (I P 002.1)



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All installations to be strictly in accordance with manufacturer's guidelines which are set out in the Isola Manual. For any non-standard details, please contact our technical department on 020 8310 3929



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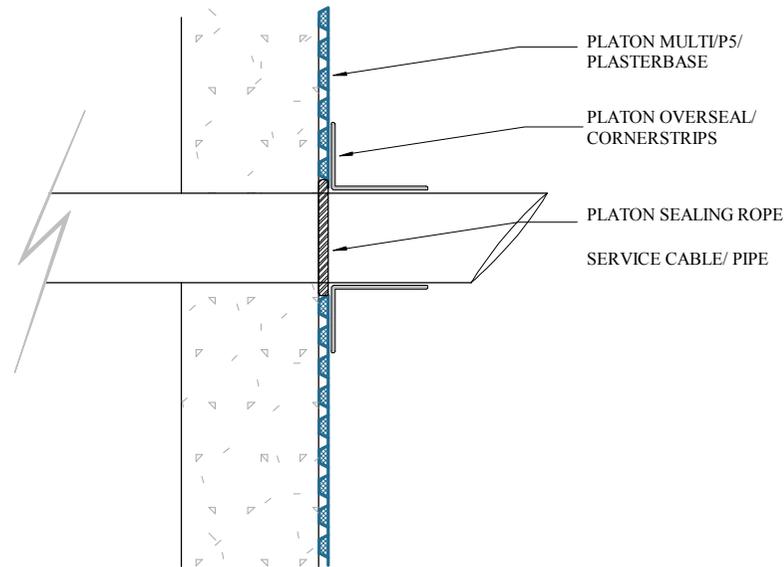
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**NOTE**

ALL INSTALLATION TO BE CARRIED OUT IN STRICT ACCORDANCE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS. FOR FURTHER ASSISTANCE CONTACT **TRITON TECHNICAL** ON THE TELEPHONE NUMBER ABOVE.



REV.	MOD. BY	DATE	CHK. BY	APP. BY
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**Alterations**

**TITLE:**

Service Pipe Sealing Detail

<b>DRG. No.</b>	IP 027.1	<b>REV</b>	1
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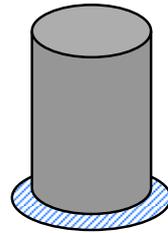
<b>DRAWN</b>	THF, CBS	<b>System Files:</b> IP 027.1.pdf
<b>DATE</b>	11-01-07	
<b>SCALE (A3)</b>	Not To Scale	
<b>CHECKED</b>		
<b>APPROVED</b>		

# Vertical service entry through floor detail

## Drawing No. (I P 026.1)

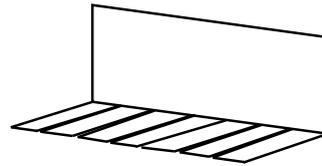
### Stage 1

Clean base of service entry then wrap Platon Sealing Rope around base of service entry. **NB:** If floor conditions are wet then Triton Epoxy Putty can be used.



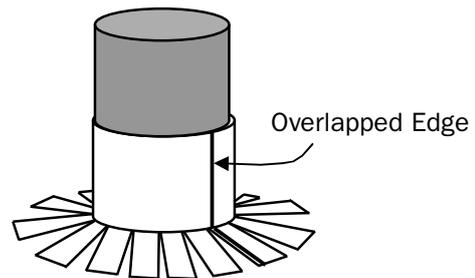
### Stage 2

Cut Wall/floor junction material with scissors in segments of 25mm wide up to the centre fold to create a cloak.



### Stage 3

Wrap Wall/floor junction 'cloak' round entry pipe and press down Sealing Rope. The overlapping edge is sealed with Sealing Tape.



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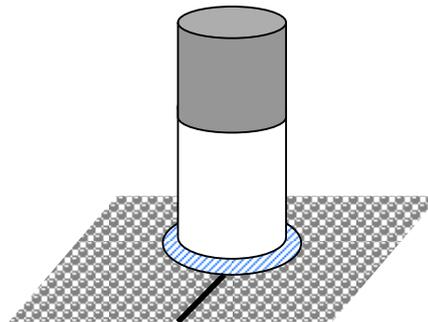
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# Vertical service entry through floor detail

## Drawing No. (I P 026.1)

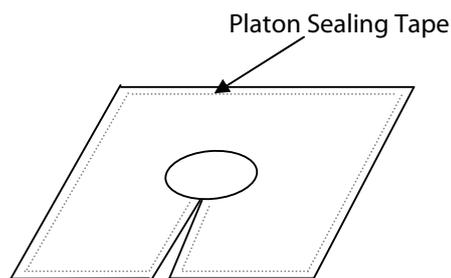
### Stage 4

Lay Platon Floor membrane cutting the membrane around the profile of the service entry and wrap another rope seal at the base between the floor membrane and vertical section of Wall/floor junction.



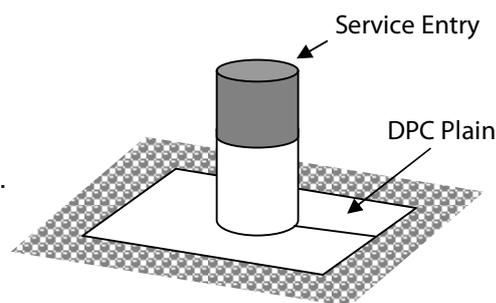
### Stage 5

Cut a 300mm (min) square piece of Platon DPC plain and cut out a hole the size of the service entry. Using scissors cut from one edge of the DPC Plain to the centre hole. Apply Platon Sealing Tape around all edges including the cut section.



### Stage 6

Fir Platon DPC Plain around service entry and seal to floor membrane by pressing down on sealing tape.



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