

# Installation instructions

For underground liquid storage tanks

# **Contents**

•	Introduction	see page-2
•	Tank sizes & specifications	see page-3
•	Orientation of connections	see page-5
•	Preliminaries	see page-6
•	Tank handling (NB – read before unloading!)	see page-6
•	Installation overview	see page-7
•	Installation precautions	see page-8
•	Step-by-step installation guide	see page-8

# **Introduction**

see page-11

# Receipt of goods ...

Sales Terms & Conditions

1. The following information is provided to assist the installation process:



2. Deliveries to site will be organised in conjunction with Site Agents to ensure that arrangements have been made for their safe receipt; Site Agents are advised to ensure that all goods are thoroughly checked on receipt against delivery documentation as items later reported as missing or damaged cannot be replaced and will need to be re-ordered.



3. It should particularly be noted that the condition of the tank becomes the responsibility of the Site Agent once unloading from the delivery vehicle commences.

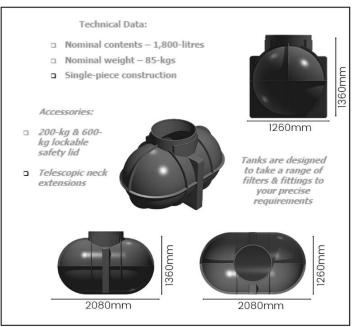
# **Health & safety**

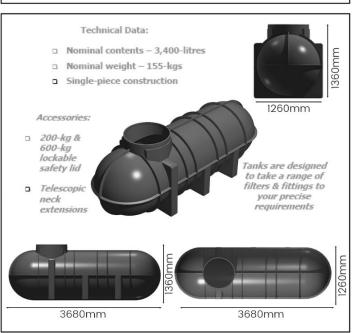
- 4. The main installation phases of a PuraTank underground tank are:
  - Ground works to prepare the ground for the installation of the tank, and installing the associated drainage and service-duct runs
  - Unloading & manoeuvring the tank to the installation position
  - Installation of the tank and its connection to the drainage runs and service duct
  - Correct backfilling of the tank

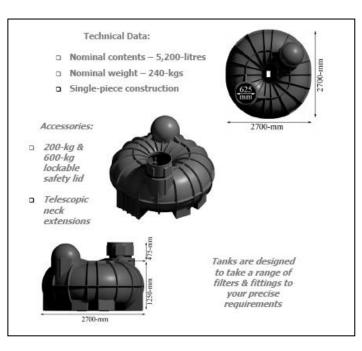


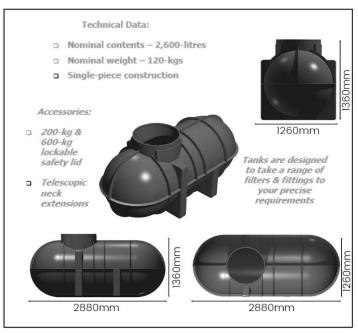
5. All Health & Safety precautions applying to such works are to be implemented, with risk assessments and method statements (RAMS) being prepared.

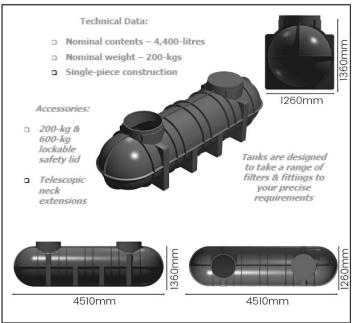
# Tank Sizes & Specifications (depending on your order)

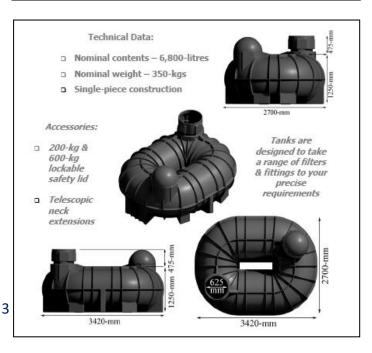


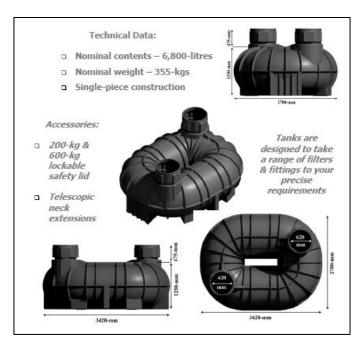


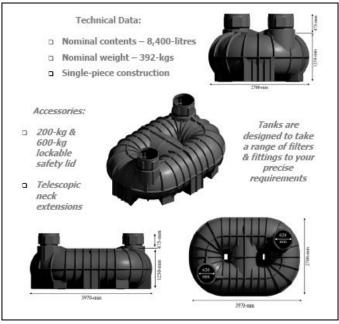


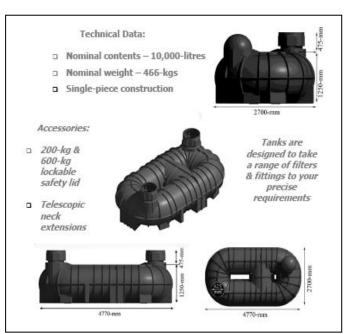


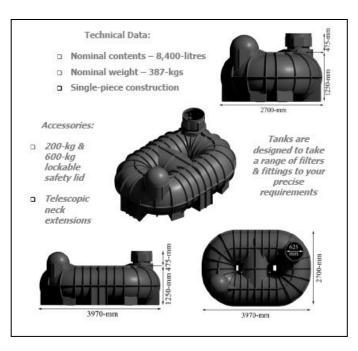


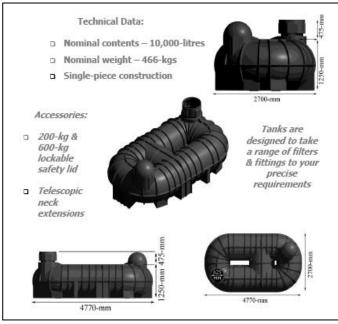


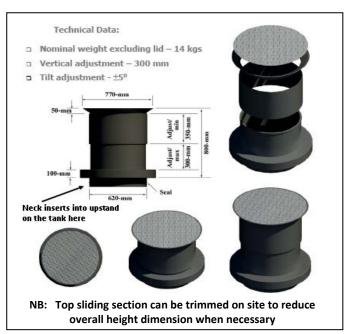




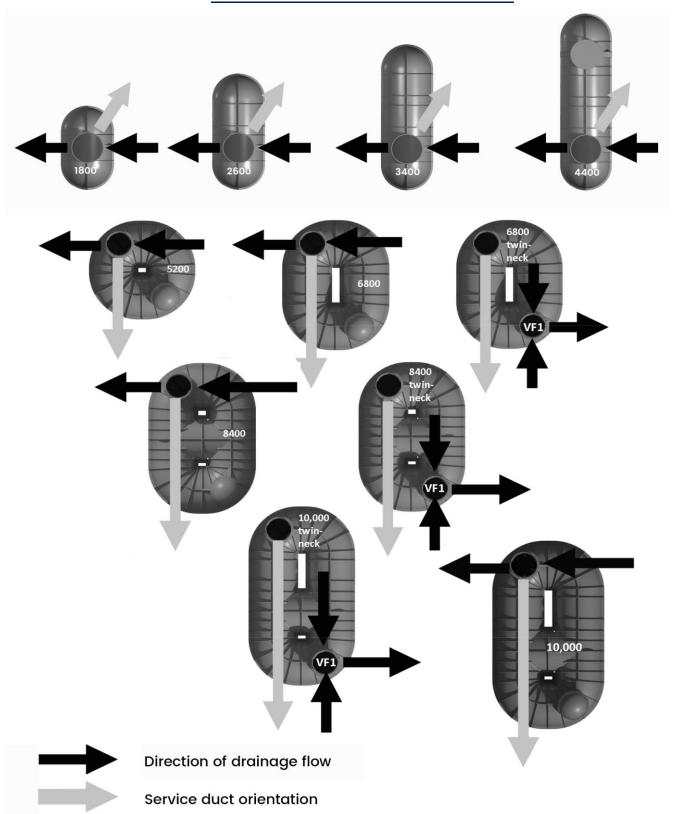








# **Standard Connection Orientations**



# Notes:



- 1. Service-ducts need to be directly aligned with controls location
- 2. On direct-pressure systems, service-ducts must drain towards tank
- 3. Invert-drops across filters are CF-zero; PF-66mm; VF1-300mm

# Preliminaries ...

6. Responsibility for ordering the right tank for the project, and with the right connections to suit the drainage and service-duct connections to suit the underground works, lies with the Buyer.



7. The Site Agent is responsible for checking that the right tank has been delivered to site with all concerned knowing all the implications of its installation; these include factors such as:

- Required capacity and any dimension constraints
- Site access and routes to site
- Filter and other fitments requirements
- Orientation of connections, and any associated invert-level changes
- Ground conditions, re: soil type, water table, contamination etc
- Depth of excavation, adjacent structures, their foundations and proximity to utilities
- Traffic-bearing characteristics
- Topography (adjacent slopes and banks) and proximity to trees
- Delivery timetables
- 8. **Delivery:** Timing of the delivery of the system will always be pre-agreed with the Site Agent and is usually timed to ensure that the tank can be down-loaded, transferred to plot, installed and back-filled with the minimum of delay.



 Accountability: Responsibility for the tank passes to the Site Agent once unloading commences; it is therefore important that the buyer accepts the condition of the tank on arrival before they attempt to move or attach lifting equipment.

# Tank handling ...



10. PuraTank underground tanks are designed to be lifted and manoeuvred only when empty; they are not therefore to be lifted when containing water under any circumstances as this will add considerable weight.



- 11. It is recommended that the tanks be unloaded from delivery lorries, moved around site, and lowered into their installed position by attaching lifting straps/chains and appropriately sized D-shackles to the lifting points provided, or by use of lifting straps around the whole tank; points to note are:
  - The centre of gravity of the tank needs to be established by trial & error before fully raising the tank
  - Chain lengths need to be adjusted so that the tank lifts horizontally
  - To stabilise the load when moving around site, guide-ropes should be attached to enable operatives to control load-swing from a safe distance

# Installation overview ...

12. PuraTank underground tanks, as per the specifications above, have been specifically designed to store harvested rainwater although they can be used in many other applications. Please contact a member of the PuraTank team to discuss further.



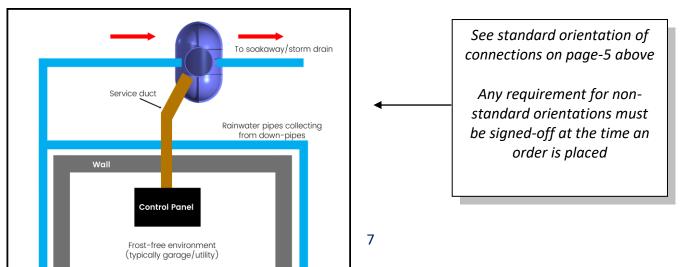
- 13. The tanks are designed to be installed in specific accordance with the instructions that follow; the civils design of a structural engineer is to be followed if any of the following tank installation conditions are present:
  - Trafficking by vehicles other than ride-on lawn-mowers
  - Closer than 4-metres to the foundations of another structure
  - Closer than 4-metres to an adjacent significant change in ground-level
  - Outside the depth parameters identified in the installation diagrams below
- 14. Installation in heavy clay soil or in areas that will experience high water-tables will also affect the installation as highlighted on the installation diagrams.



- 15. If site personnel are faced with any of the conditions noted above, they should seek supervisory advice before commencing tank installation.
- 16. The tanks are designed to take pedestrian and light mower loading only, with the range of excavation depths shown in the installation diagrams below;
- 17. The customer may, if wished, substitute their own brick-construction manhole and cover provided these are so constructed that they do not transfer any weight onto the tank.
- 18. Pipe-falls must be a minimum of 1:100 in the direction of water-flow, ie rainwater delivery pipe and service duct towards the tank, and the overflow away from the tank
- 19. The installation of the rainwater storage tank, and its connection to the water-supply, water-overflow and service-duct pipes should be undertaken at the same time as the overall underground works for the project.



20. The tank should be aligned to provide the straightest possible service duct run between the tank and any such Control Unit as other pipe-work and cabling etc need to be fed through this duct at a later stage; the figure below shows this ideal relationship (bearing in mind the possible permutations shown on page-5)





21. The tank must be handled strictly in accordance with the instructions at paragraphs-10 & 11 above, and installed in accordance with the step-by-step guide below; once installed, the position of the tank is to be clearly marked and over-driving by vehicles within 4-metres of a tank edge is strictly forbidden.



22. All pipe-work associated with a rainwater harvesting system must be kept totally clear of site debris, to which end they must have sealed ends when being pulled through.



23. To prevent roof-water entering the tank prior to the system entering service, the in-tank filter (if applicable) is to be covered with polythene until the property is ready for occupancy; this cover is to be removed as a part of the commissioning process.

# Precautions ...

- 24. To ensure the integrity of the tank is not prejudiced during installation, and satisfactory subsequent operation of the complete system, the following precautions are to be strictly observed:
  - Allow the tank to settle onto the pea-gravel base under its own weight initially, and the weight of the water introduced into it
  - Care is to be taken to ensure that site debris/dust is not allowed to enter the tank during or after its installation
  - Under no circumstances:
    - ✓ Tamp-down the infill with machinery
    - ✓ Tamp-down finished ground level with machinery
    - ✓ Drive vehicles over tanks installed as above

# Step-by-step guide ...



- 25. The following is a step-by-step guide to the installation of the tank when none of the abnormal conditions noted at paragraphs 13 & 14 above are present:
  - Arrangements should be made for the tank to be delivered, coincident with the day it is due
    to be installed; with this in mind, when delivery is expected ensure:
    - Suitable access and parking arrangements have been made for the delivery vehicle
    - O Plant is available to unload the tank
    - A clear route has been designated between the delivery vehicle and the installation site
    - The installation site is level and clear of obstacles and site debris and, ideally:
      - The water ingress pipe-work is complete and ready for connection
      - The water overflow pipe-work is complete, ready for connection, and is itself connected to the surface water management system (soak-away, storm-drain or attenuation as appropriate)
      - The service duct is ready for connection, complete with:



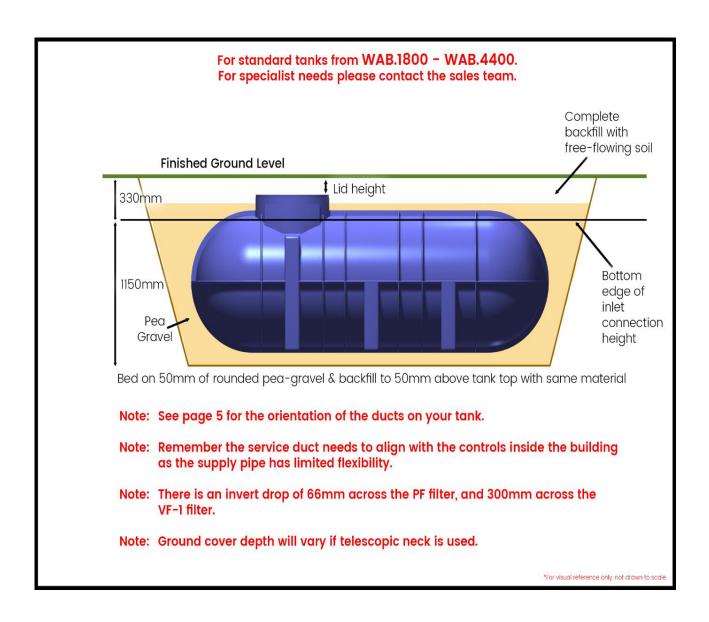
- internal draw-cord (if provided); this should be left in-place on completion
- 32-mm High Performance Polyethylene (HPP) delivery pipe, fed through, section by section, as the service duct is installed

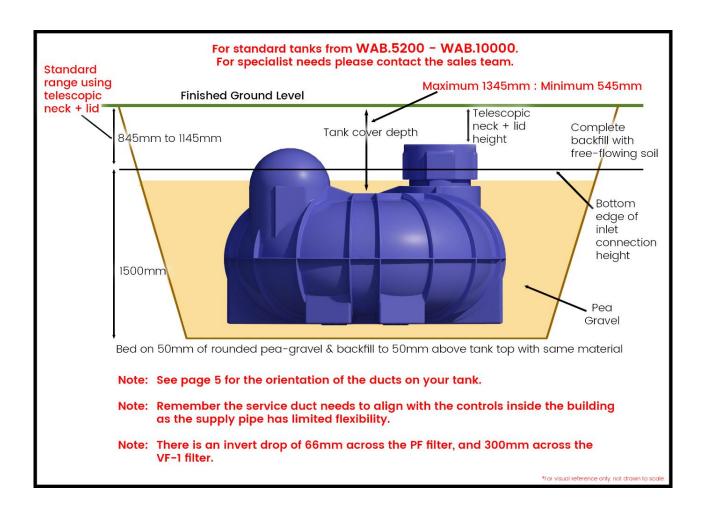


- Before starting the installation, confirm no added precautions (see paragraphs-13 & 14 above) apply; ie, the instructions of a structural engineer must be followed, if any of the following apply:
  - Vehicular over-trafficking required
  - Closer than 4-metres to adjacent foundations, earth bank (above or below) or raised patio
  - O Depth of installation, or constraints arising from clay soil or high water-table not in accordance with installation diagrams below
- Complete and sign-off risk assessment
- Complete and sign-off the method statement
- Calculate depth of dig with reference to the diagrams below

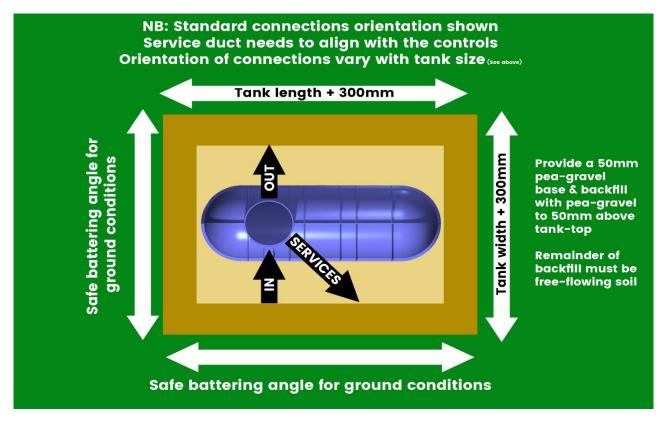
Confirming minimum & maximum tank cover depth will not be exceeded

 NB: All measurements (apart from the tank-cover dimension) are taken from the bottom edge of the rainwater inlet invert level as determined by the drainage plan





NB: Before commencing the dig, ensure invert-level + 300mm is not less than 545mm or more than 1345mm from the finished ground level if the tank is to be unprotected.



- Line-mark dig area, allowing for:
  - Alignment of tank water entry and exit connections, and the service-duct connection (NB: The service duct must slope towards the tank on direct pressure systems to gravity-feed the mains-water top-up)
  - (Tank plan-view dimensions) + (300-mm for tank manoeuvre/access) + (suitable allowance for battering depending on ground conditions)
- Dig the excavation, anticipating that ground water ingress may be experienced in the process; if necessary, keep water interference to a minimum by use of a pump; if the ground needs to be stabilised to provide a firm base for the tank, the excavation depth should be increased by 250-mm and replace with a mixture of hard-core and sand
- Bed the bottom of the excavation with 50-mm of 10-mm washed pea-gravel
- Position tank on the pea-gravel base, and check vertical and horizontal alignments between tank connectors and the drainage runs/service duct, allowing for 10-mm of tank settlement at the next step
- Fill 1/3<sup>rd</sup> full of water to settle tank into the pea-gravel, and bring connectors and pipe-work into final alignment
- Connect all pipe-work (ie rainwater-in, overflow-out, and service duct)
- Install neck and seal the joints with a good bead of silicon sealant to avoid later ingress of ground-water; then fit lid to ensure that no backfill material can enter the tank
- Backfill around and under the tank body and sides of the excavation with more 10-mm washed pea-gravel up to the level of the water inside the tank
- Continue backfilling around and under the tank with pea gravel until the crown of the tank is covered with 50-mm of pea gravel
- Continue filling the tank water, keeping pace with the backfill level up to the level of its inlet/outlet connections
- Complete backfill to finished ground level with free-flowing material
- Once the installation is complete and the tank connected:
  - Install filter (if applicable and not already installed)
  - Seal filter with strong polythene (to prevent roof water entering the tank until the whole system is ready to be handed over to the end-user)
  - Secure the tank lid
  - Mark out an exclusion zone 4-metres outside the original excavation footprint to prevent site vehicles accidentally driving over the tank during construction work

# Sales terms & conditions ...

### 26. Please see below:

#### **Terms & Conditions**

This page (together with the documents referred to on it) tells you the terms and conditions on which we supply any of the products ('Products') listed on our website to you. Please read these terms and conditions carefully before ordering any Products from our site. You should understand that by ordering any of our Products, you agree to be bound by these terms and conditions.

You should print a copy of these terms and conditions for future reference.

#### 1. AVAILABILITY

Our site is only intended for use by people resident in the United Kingdom. We do not accept orders from any person outside the United Kingdom.

#### 2. YOUR STATUS

By placing an order through our site, you confirm that:

- (a) You are legally capable of entering into binding contracts;
- (b) You are a limited liability company, LLP, partnership or a natural person and (if you are a natural person) you are at least 18 years old;
- (c) You are resident in the United Kingdom; and
- (d) You are accessing our site from the United Kingdom.

We rely on these statements by you in entering an agreement with you for sale of any Product.

#### 3. HOW THE CONTRACT IS FORMED BETWEEN YOU AND US

- 3.1 After placing an order, you will receive an e-mail from us acknowledging that we have received your order. Please note that this does not mean that your order has been accepted. Your order constitutes an offer to us to buy Products. All orders are subject to acceptance by us, and we will confirm any such acceptance to you by sending you an e-mail that confirms that the Products have been dispatched ('the Dispatch Confirmation'). The contract between us ('Contract') will only be formed when we send you the Dispatch Confirmation.
- 3.2 The Contract will relate only to those Products whose dispatch we have confirmed in the Dispatch Confirmation. We will not be obliged to supply any other Products which may have been part of your order until the dispatch of such Products has been confirmed in a separate Dispatch Confirmation.

#### 4. CONSUMER CANCELLATION RIGHTS

- 4.1 This clause applies only if you are contracting as a consumer ('Consumer') and the Contract is a distance or off-premises contract.
- 4.2 For the purpose of this clause, the terms Consumer, distance contract and off-premises contracts have the meanings provided by Regulations 4 and 5 of The Consumer Contracts (Information, Cancellation and Additional Charges) Regulations 2013.
- 4.3 If you are contracting as a Consumer and the Contract is a distance or off-premises contract, you may cancel the Contract at any time within fourteen days, beginning on the day after you received the Product. In this case, you will receive a full refund of the price paid for the Product in accordance with our refunds policy (set out in clause 8 below).
- 4.4 To cancel a Contract, you must inform us in writing. We will then arrange for the collection of the Products, which must be returned in the same condition in which you received them. You have a legal obligation to take reasonable care of the Products while they are in your possession. If you fail to comply with this obligation, we may have a right of action against you for compensation.
- 4.5 In entering into this Contract you agree that you will be responsible in the event of cancellation for payment of any costs we incur in the collection of the Products from you. Those costs will be limited to the equivalent of 10% of the total price paid for the Products and will be deducted from any refund due to you.

# 5. AVAILABILITY AND DELIVERY

Your order will be fulfilled by the delivery date set out in the Dispatch Confirmation or, if no delivery date is specified, then within 30 days of the date of the Dispatch Confirmation, unless there are exceptional circumstances.

### 6. RISK AND TITLE

- $6.1\ \mbox{The Products}$  will be at your risk from the time of delivery.
- 6.2 Ownership of the Products will only pass to you when we receive full payment of all sums due in respect of the Products, including delivery charges.

# 7. PRICE AND PAYMENT

- 7.1 The price of any Products will be as quoted on our site from time to time, except in cases of obvious error.
- 7.2 These prices include VAT and delivery costs.
- 7.3 Prices are liable to change at any time, but changes will not affect orders in respect of which we have already sent you a Dispatch Confirmation.
- 7.4 It is always possible that, despite our best efforts, some of the Products listed on our site may be incorrectly priced. We will normally verify prices as part of our dispatch procedures so that, where the Products' correct price is less than our stated price, we will charge the lower amount when dispatching the Products to you. If the Products' correct price is higher than the price stated on our site, we will normally, at our discretion, either contact you for instructions before dispatching the Products, and/or reject your order and notify you of such rejection
- 7.5 We are under no obligation to provide the Products to you at the incorrect (lower) price, even after we have sent you a Dispatch Confirmation, if the pricing error is obvious and unmistakeable and could have reasonably been recognised by you as a mis-pricing.
- 7.6 We accept payment by credit and debit card, Sage Pay, and Paypal.

# 8. OUR REFUNDS POLICY

- 8.1 When you return a Product to us:
  - (a) because you have cancelled the Contract between us within the cooling-off period (see clause 4.3 above), we will process the refund due to you as soon as possible and, in any case, within 30 days of the day you have given notice of your cancellation. In this case, we will refund the price of the Products in full, including the cost of sending the item to you.
  - (b) for any other reason (for instance, because you claim that the Product is defective), we will examine the returned Products and will notify you of your refund via e-mail within a reasonable period of time. We will usually process the refund due to you as soon as possible and, in any case, within 30 days of the day we confirmed to you via e-mail that you

were entitled to a refund for the defective Products. Products returned by you because of a defect will be refunded in full, including a refund of the delivery charges for sending the item to you and the cost incurred by you in returning the item to us.

8.2 We will usually refund any money received from you using the same method originally used by you to pay for your purchase.

#### 9. WARRANTY / OUR LIABILITY

- 9.1 We warrant to you that any Products purchased from us through our site are of satisfactory quality and reasonably fit for all the purposes for which products of the kind are commonly supplied.
- 9.2 We warrant that at the time of delivery the Products will be EN/CE approved and compliant with all applicable laws, including ADR and The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009. Any requirement to re-test the Products following delivery will be your responsibility.
- 9.3 We guarantee that on delivery and for a period of twelve months (or, if longer, any other period shown in our warranty booklet and/or on our invoice for the Products sold to you and/or in our brochure and/or our site as at the date of your order for Products) from delivery, the Products shall be free from material defects. However, this guarantee does not apply in the circumstances described in clause 9.4.
- 9.4 This guarantee does not apply to any defect in the Products arising from:
  - (a) fair wear and tear;
  - (b) wilful damage, abnormal storage or working conditions, accident, negligence by you or by any third party;
  - (c) if you fail to operate or use the Goods in accordance with the user instructions;
  - (d) any alteration or repair by you or by a third party; and
  - (e) any specification provided by you.

This guarantee is in addition to, and does not affect, your legal rights in relation to Products which are faulty or not as described.

9.5 Our liability for losses you suffer as a result of us breaking this agreement is limited to the purchase price of the Products you purchased and we do not accept any liability for consequential losses or (subject to clause 9.3) any losses that are a foreseeable consequence of us breaking the agreement. Losses are foreseeable where they could be contemplated by you and us at the time your order is accepted by us.

- 9.6 This does not include or limit in any way our liability:
  - (a) for death or personal injury caused by our negligence or the negligence of our employees, agents or subcontractors;
  - (b) for defective products under the Consumer Protection Act 1987;
  - (c) for fraud or fraudulent misrepresentation; or
  - (d) for any matter for which it would be unlawful for us to exclude, or attempt to exclude, our liability.
- 9.7 We are not responsible for indirect losses which happen as a side effect of the main loss or damage including but not limited to:
  - (a) loss of income or revenue
  - (b) loss of business
  - (c) loss of profits or contracts
  - (d) loss of the content of any tank
  - (e) loss of anticipated savings; or
  - (f) loss of data

provided that this clause 9.6 shall not prevent claims for loss of or damage to your tangible property that fall within the terms of clause 9.1 or clause 9.3 or any other claims for direct financial loss that are not excluded by any of categories (a) to (f) inclusive of this clause 9.7.

# 10. WRITTEN COMMUNICATIONS

Applicable laws require that some of the information or communications we send to you should be in writing. When using our site, you accept that communication with us will be mainly electronic. We will contact you by e-mail or provide you with information by posting notices on our website. For contractual purposes, you agree to this electronic means of communication and you acknowledge that all contracts, notices, information and other communications that we provide to you electronically comply with any legal requirement that such communications be in writing. This condition does not affect your statutory rights.

# 11. NOTICES

All notices given by you to us must be given to us at sales@atlantistanks.co.uk. We may give notice to you at either the e-mail or postal address you provide to us when placing an order, or in any of the ways specified above. Notice will be deemed received and properly served immediately when posted on our website, 24 hours after an e-mail is sent, or three days after the date of posting of any letter. In proving the service of any notice, it will be sufficient to prove, in the case of a letter, that such letter was properly addressed, stamped and placed in the post and, in the case of an e-mail, that such e-mail was sent to the specified e-mail address of the addressee.

### 12. TRANSFER OF RIGHTS AND OBLIGATIONS

- 12.1 The Contract between you and us is binding on you and us and on our respective successors and assigns.
- 12.2 You may not transfer, assign, charge or otherwise dispose of the Contract, or any of your rights or obligations arising under it, without our prior written consent.
- 12.3 We may transfer, assign, charge, sub-contract or otherwise dispose of the Contract, or any of our rights or obligations arising under it, at any time during the term of the Contract.

### 13. EVENTS OUTSIDE OUR CONTROL

- 13.1 We will not be liable or responsible for any failure to perform, or delay in performance of, any of our obligations under a Contract that is caused by events outside our reasonable control ('Force Majeure Event').
- 13.2 A Force Majeure Event includes any act, event, non-happening, omission or accident beyond our reasonable control and includes in particular (without limitation) the following:
  - (a) Strikes, lock-outs or other industrial action.
  - (b) Civil commotion, riot, invasion, terrorist attack or threat of terrorist attack, war (whether declared or not) or threat or preparation for war.
  - (c) Fire, explosion, storm, flood, earthquake, subsidence, epidemic or other natural disaster
  - $\hbox{(d) Impossibility of the use of railways, shipping, aircraft, motor transport or other means of public or private transport. } \\$
  - (e) Impossibility of the use of public or private telecommunications networks.
  - (f) The acts, decrees, legislation, regulations or restrictions of any government.
- 13.3 Our performance under any Contract is deemed to be suspended for the period that the Force Majeure Event continues, and we will have an extension of time for performance for the duration of that period. We will use our reasonable endeavours to bring the Force Majeure Event to a close or to find a solution by which our obligations under the Contract may be performed despite the Force Majeure Event.
- 13.4 We may have to cancel your order if stock is unavailable. If this happens:
  - (a) We will promptly contact you to let you know.
  - (b) If you have made any payment in advance for Products that have not been delivered to you we will refund those amounts to you.
  - (c) We will not charge you anything further and you will not have to make any payment to us.

#### 14. WAIVER

- 14.1 If we fail, at any time during the term of the Contract, to insist upon strict performance of any of your obligations under the Contract or any of these terms and conditions, or if we fail to exercise any of the rights or remedies to which we are entitled under the Contract, this shall not constitute a waiver of such rights or remedies and shall not relieve you from compliance with such obligations.
- 14.2 A waiver by us of any default shall not constitute a waiver of any subsequent default.
- 14.3 No waiver by us of any of these terms and conditions shall be effective unless it is expressly stated to be a waiver and is communicated to you in writing in accordance with clause 13 above.

#### 15. SEVERABILITY

If any of these terms and Conditions or any provisions of a Contract are determined by any competent authority to be invalid, unlawful or unenforceable to any extent, such term, condition or provision will to that extent be severed from the remaining terms, conditions and provisions which will continue to be valid to the fullest extent permitted by law.

#### 16. ENTIRE AGREEMENT

- 16.1 These terms and conditions and any document expressly referred to in them represent the entire agreement between us in relation to the subject matter of any Contract and supersede any prior agreement, understanding or arrangement between us, whether oral or in writing.
- 16.2 We each acknowledge that, in entering into a Contract, neither of us has relied on any representation, undertaking or promise given by the other or be implied from anything said or written in negotiations between us prior to such Contract except as expressly stated in these terms and conditions.
- 16.3 Each of us agrees that the only rights and remedies available to us arising out of or in connection with a Representation shall be for breach of contract as provided in these terms and conditions.
- 16.4 Nothing in this clause shall limit or exclude any liability for fraud.

#### 17. OUR RIGHT TO VARY THESE TERMS AND CONDITIONS

- 17.1 We have the right to revise and amend these terms and conditions from time to time.
- 17.2 You will be subject to the policies and terms and conditions in force at the time that you order products from us, unless any change to those policies or these terms and conditions is required to be made by law or governmental authority (in which case it will apply to orders previously placed by you), or if we notify you of the change to those policies or these terms and conditions before we send you the Dispatch Confirmation (in which case we have the right to assume that you have accepted the change to the terms and conditions, unless you notify us to the contrary within seven working days of receipt by you of the Products).

#### 18. LAW AND JURISDICTION

Contracts for the purchase of Products through our site and any dispute or claim arising out of or in connection with them or their subject matter or formation (including non-contractual disputes or claims) will be governed by English law. Any dispute or claim arising out of or in connection with such Contracts or their formation (including non-contractual disputes or claims) shall be subject to the non-exclusive jurisdiction of the courts of England and Wales.

#### 19. GENERAL DATA PROTECTION REGULATION

The General Data Protection Regulation ('GDPR') came into force on 1 May 2018 and sets out how we must process data that we hold about you. We refer you to the GDPR Fair Processing Notice on our site for further details.

# 20. INFORMATION ABOUT US

Portafuel, Storafuel, Puratank, Alltank and Easytank are trading names of Atlantis Tanks Group Ltd (company number: 09955291) whose registered address is Legend House, Station Road, Ferryhill, England, DL17 0BP. Details of this company can be found at www.atlantistanks.co.uk.