

# **RAINWATER TANK**

## **INSTALLATION INSTRUCTIONS**

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**FREECALL 1800 816 299**  
**[www.rapidplas.com.au](http://www.rapidplas.com.au)**

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## **INSTALLING YOUR TANK SAFELY**

Congratulations on purchasing a Rapid Plas rainwater tank. If this product is correctly installed and regularly maintained, it will give you trouble free service for years to come.

### ***CORRECT TANK INSTALLATION IS THE SOLE RESPONSIBILITY OF THE PURCHASER***

(Rapid Plas does not install tanks).

## **SITE SELECTION**

**IMPORTANT:** When full of water (depending on size) your tank will weigh up to 33 tonnes. Therefore, it is very important to select a suitable site where special attention to a properly constructed and compacted base can be ensured. In the rare incidence of tank deterioration (or failure), the majority of cases can be traced back to an unstable base, which in turn can void the Warranty.

Major site selection requirements include the following:

- (a) Stable ground not subject to erosion or landslides
- (b) Suitability to sustain the relevant loading (allow 1 tonne for every 1000 litres of tank capacity).
- (c) Maintain any setbacks from boundaries as required by local Council regulations and the relevant building codes.

## **INSTALLATION STEPS**

### **PREPARING THE TANK BASE**

Modular slimline tanks **MUST** be installed on a concrete base to prevent movement between the modules.

#### **(A) CONCRETE**

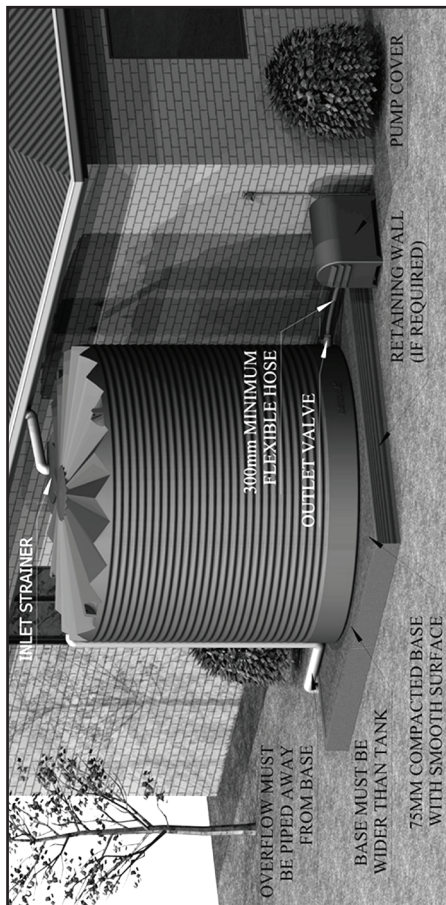
A 75mm (3") reinforced concrete slab that is exactly level and flat in all directions, and is larger than the diameter/base dimensions of the tank. Ensure that the soil base is suitably compacted before pouring the concrete.

#### **(B) COMPACTED MATERIAL**

A 75 mm (3") pad of compacted crusher dust/road base which must be at least 600mm larger in diameter than the tank. The tank base must be free from any rocks or stones or any sharp or foreign matter that may damage the base of the tank. This base must be thoroughly compacted and be exactly level and flat in all directions. The outsides of the base must be supported by a retaining wall of some kind to ensure that no erosion can occur through washout, vermin or any other factor.

#### **(C) TANK STAND (AS SUPPLIED BY RAPID PLAS)**

Ensure that the legs of the tank stand are properly secured on a concrete base to prevent the tank stand from moving over time. Tank stands (not supplied by Rapid Plas) for larger tanks must ensure complete support to the whole base of the tank and must be designed by a structural engineer.



**FAILURE TO PROVIDE A STABLE BASE OR INSTALLING TANK BELOW GROUND LEVEL WILL VOID WARRANTY.**

Diagram 1.

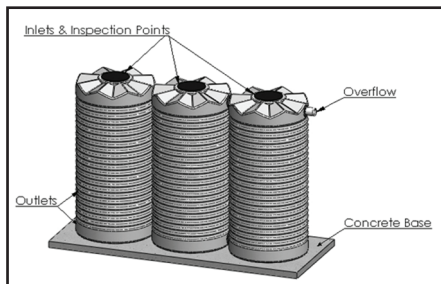


Diagram 2.

## **DELIVERING THE TANK TO THE SITE (LARGE TANKS ONLY)**

The driver needs clear access for a truck and trailer which is 19 metres long, 3.5 metres wide and 5 metres high for delivering the tank. Besides the driver, 2 or 3 people are needed to handle and place the tank on the pad. Upon delivery, IT IS THE CUSTOMER'S RESPONSIBILITY to secure the tank by tying it down with suitable ropes.

## **FIT THE OVERFLOW PIPING**

Overflow Fitting Instructions (using the RAPIDSEAL – the black seal in the installation kit):

- (a) If the tank has been pre-drilled, start at Step (c). Otherwise, determine the required position for the 90mm pipe connection (overflow) by holding the RAPIDSEAL against the tank and marking the centre. (Refer Diagram 3)

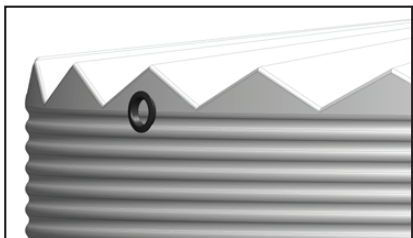


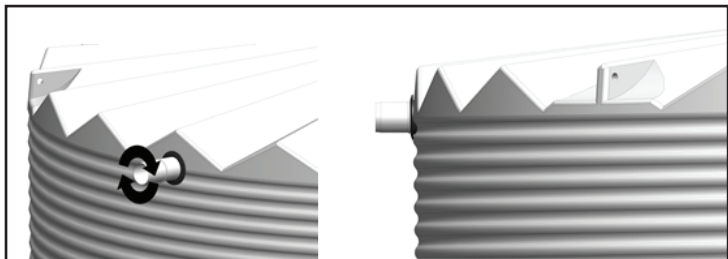
Diagram 3.

(b) Drill with a sharp 102mm hole saw and remove any loose shavings by hand. DO NOT enlarge the hole under any circumstances!

(c) Insert RAPIDSEAL into the hole from the outside of the tank. It should fit snugly into the hole.

(d) Lubricate one end of the 90mm overflow outlet (RJ90) with a generous amount of liquid soap (dishwasher detergent is recommended) and insert this end into the RAPIDSEAL (which should also be lightly lubricated) with a slight twisting action. An even hit with a heavy mallet or a solid block of wood may be used to help insertion. The pipe should be a tight fit. (Refer Diagram 4)

Diagram 4.



(e) Insert the 90mm overflow outlet until the ridged centre piece is flush against the outside of the RAPIDSEAL.

(f) Piping should then be connected into the stormwater drainage system, or taken to a point well clear of the tank where it will not undermine the base.

(g) A polyolefin primer (eg. Loctite 770) can be used on the black polypropylene overflow outlets if required.

NB! The quantity, size and capacity of the overflow pipes must be equal to, or more than, that of the inlet pipes, as required by AS 4766. Failure to ensure this will void the warranty and can cause damage to the tank, either by excessive hydraulic pressure being applied to the tank roof or by erosion of the base, as water may overflow from the inlet strainer. Additional overflow kits (RS90K) or 100mm RAPIDSEALS can be purchased separately as required.

## **SUPPORTING OF PIPE WORK**

All pipe work must be supported so that there is no added strain on the tank. Never support pipe work of any description off the tank. Support the pipe work off the tank stand where applicable.



## **INSTALLING A BALL VALVE/FITTINGS**

NB! Always fit a plastic tapered treaded fitting into the plastic thread of the tank as metal fittings have been known to cut a cross thread. A flexible hose of at least 300mm (12") in length must be installed between the ball valve/tank outlet and any subsequent pipe work. (Refer Diagram 1. Page 5). This is to avoid strain on the Tank should the pipe work move. Apply thread tape to all fittings to prevent leakage.

### **IMPORTANT!**

Flush out the tank before proceeding further. Remove all outlet bung/s, open ball valves (if fitted) and flush out tank to remove any dust or foreign matter before connecting further pipe work. Ensure that all fittings are fitted with a generous amount of thread tape. Do not over tighten any fittings as this can damage the thread. Plastic shavings can damage pumps or other appliances fitted down the line if not flushed out thoroughly before connection.

### **SECURE THE TANK TO THE SITE**

Once the tank is in position with all pipe work connected, fill with approximately 150 - 200mm of water. This water level should be maintained at all times to prevent the tank moving. If water is not available, use ropes to ensure that the tank will not be shifted by strong winds.

## **MAINTENANCE OF THE TANK**

Regular checking and maintenance is the Owner's responsibility and is a condition of your Warranty. Some examples to be considered include the following:

- Regular cleaning of the inlet strainer
- Consistent inspection of the base, so that it is not eroded or the tank undermined.
- Checking of pipe work to ensure there are no leaks.

## **QUALITY OF TANK CONTENTS**

Your tank is made to AS4766 from virgin food grade linear low density polyethylene, complying with AS2070 and AS4020, but the first time it has a little water in it, a taste may be present. It is harmless, but to remedy this, flush out the inside of the tank using a hose and allow the water to drain out.

There is no reason why this tank should not always deliver quality drinking water, but this is reliant on your regular maintenance. Rotting leaves in gutters will quite quickly contaminate the water. There is nothing in the polyethylene that could cause any pollution.

## **SAFETY INFORMATION**

**WARNING:** If it is necessary to enter the tank, enter only in accordance with your State statutory Workplace Health & Safety Act & Regulations and the relevant Codes of Practice. You must complete a Risk Assessment before entering the tank to identify, assess and control the hazards. This is a confined space – only persons trained in AS 2865-1995 "Safe Working in a Confined Space" may enter. Ladders are to be firmly positioned inside and outside and an emergency

response plan must be in place. DO NOT enter tank when the temperature is over 40°C. ALWAYS have an assistant present.

Task (Installation Steps)	Hazards (Anything with the capacity or potential to harm)	Risk (Likelihood of hazard occurring & its severity)	Control Measures (Steps taken to eliminate the hazard or if not reasonably practicable, to control the hazard to its lowest level of risk)
1. Prepare Tank Base	Manual handling; plant, equipment and tools; UV rays; slips, trips and falls; visitors; animals, snakes; weather conditions	Low	Bend knees when lifting, use a two-person lift if load over 20 kg, follow manufacturer's instructions on how to use plant and equipment, clear work area before commencement, wear sun protection – hat, glasses, sunscreen, keep children & nonworking personnel away, take care-work to weather conditions.
2. Deliver the Tank	As above for 1; driving & depositing tank on site	Medium	As above for 1; clear access way for driver, two or three assistants for driver to handle tank.
3. Flush Out the Tank	As above for 1; fall from heights	Medium	As above for 1; if using ladder, follow manufacturer's safe use instructions; if working at heights over 2 m, must have fall arrest system in place.
4. Fit the Overflow Piping	As above for 3; chemicals	Medium	As above for 3; if hazardous substances used, follow MSDS
5. Supporting of Pipework	As above for 1	Low	As above for 1
6. Install Gate Valve/Tank Outlet	As above for 4	Low	As above for 4.
7. Secure the Tank to the Site	As above for 1; tank rollover, fall from heights	High	As above for 1; tie tank down or place 200 mm water inside; if using ladder, follow manufacturer's safe use instructions; if working at heights over 2 m, must have fall arrest system in place.
8. Tank Maintenance	As above for 1	Low	As above for 1.
9. Check Tank Contents	As above for 1	Low	As above for 1

## HAZARD IDENTIFICATION, RISK ASSESSMENT & CONTROL MEASURES FOR RAIN TANK

## **RAINWATER AND LIQUID STORAGE TANK WARRANTY**

Rapid Plas has been manufacturing quality polyethylene products for over 20 years and has a reputation of product support. In the unlikely event that a tank fails to meet our high standards, in addition to any statutory warranty referred to below, Rapid Plas offers this additional warranty to both its industrial customers and consumer customers.

If you are a consumer as defined by the Australian Consumer Law, you will also have statutory warranties as described in the paragraph below.

**Statutory warranty:** Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

**ADDITIONAL WARRANTY:** Rapid Plas offers an additional warranty as set out below to the original purchaser to repair or replace the tank against faulty materials or workmanship subject to the terms and conditions of this additional warranty.

### **HOW TO QUALIFY FOR THIS ADDITIONAL WARRANTY**

The validity of this additional warranty is conditional on the Purchaser fulfilling the following obligations:

1. Product registration must be completed online at [www.rapidplas.com.au](http://www.rapidplas.com.au) or by posting the Product Warranty Registration page from the Installation Guide to Rapid Plas within 30 days of the Purchase Date.

2. The Tank must be installed in full compliance with the installation instructions provided by Rapid Plas.
3. You produce on demand the original proof of purchase receipt.

## **HOW TO MAKE A CLAIM UNDER THIS ADDITIONAL WARRANTY**

If you are entitled to make a claim under this additional warranty you must notify us (subject to clause 9(c) of our Terms and Conditions of Trade referred to pg. 14) within 21 days after the suspected defect has appeared and submit a written claim form which can be obtained online at [www.rapidplas.com.au](http://www.rapidplas.com.au) (downloads) or by contacting Rapid Plas. You will need to supply all the requested information, including photographic evidence, to enable Rapid Plas to process your claim. You will bear the expense of making a claim under this additional warranty. Rapid Plas will assess the claim and advise you of the next step within a reasonable timeframe.

## **ADDITIONAL TERMS**

Approved additional warranty claims may also require you to do the following (as applicable at the discretion of Rapid Plas) at your expense prior to any repair or replacement:

- (a) Facilitate a site inspection by Rapid Plas or our agents if deemed necessary by Rapid Plas.
- (b) Provide clear access to the tank site including moving the tank to ground level if it has been placed on a stand.

(c) In remote or inaccessible areas (for example, a tank situated on an island), you will return the tank to an agent of Rapid Plas in a more accessible location.

(d) Disconnection of the tank and the removal of the contents of the tank (including the flushing of the tank where it has been used to store anything other than potable water).

Rapid Plas will, at our own expense, replace a defective tank if the defect appeared within the first year of the additional warranty period. Rapid Plas will contribute to the repair or the replacement of a tank (at its sole discretion) on a Pro-Rata cost basis within the balance of the additional warranty period. If replaced, the defective tank will be removed at the same time as the replacement is delivered. We will pay the cost of transporting the repair or replacement to and from the site (b. or c. pg. 14, 15) but not any additional costs such as crane hire, earth works or landscaping, plumbing or electrical connections, or the replacement of the contents of the tank.

## **ADDITIONAL WARRANTY EXCLUSIONS**

All the exclusions and conditions of our Terms and Conditions of Trade as published online at [www.rapidplas.com.au](http://www.rapidplas.com.au) (downloads), especially Clause 9, apply to this additional warranty unless altered by this additional warranty.

This additional warranty is rendered void by any of the following:

1. The installation of the tank is deemed by us to be contrary to the installation instructions.

2. You do not comply with our requests for the information and evidence to assess your additional warranty claim, or the prepayment of your portion of the Pro-Rata expenses.
3. The tank serial number has been altered or defaced.
4. The defect or damage to the tank or any other item is caused after the delivery of the tank by any means including, but not limited to, the tank not being properly secured by you to prevent it being blown or washed away.
5. Any accident, contamination, tampering, wilful damage, improper storage, improper use (including but not limited to the carting of liquids) or negligent act of, or omission by, any person other than Rapid Plas.
6. The improper installation of the Tank, improper installation of fittings, deterioration of the base on which it rests, or below ground level installation of the Tank.
7. The use of the Tank for any other purpose than the storage of liquids not exceeding 40°C or the rated specific gravity at ambient temperatures in one fixed position.
8. Any damage to the Tank caused by storm, act of God, washaway, landslide, hail, lightning, or any other natural phenomenon, vermin or other pests, tree roots or branches, and any undermining of the base of the Tank through any cause whatsoever.
9. The repositioning of the Tank from its original installation.

This additional warranty does not cover:

1. Weathering, discolouration, fading, staining or gradual degradation of the Tank over time due to climatic or environmental conditions.
2. Fittings and accessories supplied with the tank. Please contact the manufacturer of the fittings and accessories for details of any warranties of the manufacturer that may exist over and above any statutory warranties.

## **ADDITIONAL WARRANTY PERIODS**

Rainwater tanks used for the storage of potable water have a 10 year Pro-Rata additional warranty period. Above ground liquid storage tanks for liquids other than potable water have a 5 year Pro-Rata additional warranty period. The additional warranty period commences on the Purchase Date.

After the first year of the additional warranty period, the remaining term will be on a pro-rata cost basis where the liability of Rapid Plas will be reduced according to the age of the tank. This is calculated by the following formula:

Rapid Plas additional warranty obligation (maximum cost in dollars) =  $\frac{PP \times RT}{WP}$

Where PP = the original purchase price of the tank

RT = the remaining term in years

WP = the additional warranty period applicable to the tank

Further explanations and examples of Pro-Rata calculations can be found online at [www.rapidplas.com.au](http://www.rapidplas.com.au) (downloads).



## DEFINITIONS

The following words have the following meanings in this warranty:

(a) “Rapid Plas, us, we, our” means Rapid Plas Pty Limited (ACN 109 135 908) its successors, assigns, employees, servants and agents.

(b) “Purchase Date” means the date upon which the tank was purchased by the original purchaser

(c) “Purchaser, you” means the original purchaser of the tank

(d) “Pro-Rata” means that our obligations under this additional warranty are proportional to the remaining term of the additional warranty in relation to the whole additional warranty period.

(e) “Tank” means the rainwater tank manufactured by Rapid Plas and purchased by the Purchaser being the subject matter of this additional warranty.

## CONTACT DETAILS

Email: [sales@rapidplas.com.au](mailto:sales@rapidplas.com.au) Phone: 1800 816 299

Business address: 19 Macintosh Street, Tamworth, NSW, 2340

Disclaimer: Whilst every care has been taken in the compilation of this installation guide, it is impossible for us to envisage every circumstance in which tanks will be installed. It is essential for the installer to use common sense and safe procedures at all times. Please contact Rapid Plas should any further advice be required before proceeding with the installation.

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## PRODUCT WARRANTY REGISTRATION

Product warranty registration must be completed within 30 days of the purchase date (refer page 12).

### **REGISTER YOUR PRODUCT WARRANTY ONLINE!**

**[www.rapidplas.com.au](http://www.rapidplas.com.au)**

Unable to register your product online? Please complete the form below and return to Rapid Plas by post.

First name:
Surname:
Phone:
Fax:
Email:
Site address:
Postal address:
Product code(s):
Serial number(s): <small>(You will find these details on the Base Plate – Each tank has a unique number, including each module of modular tanks)</small>

Tick here to receive our latest FREE product catalogue and monthly specials.

Postal Address:

Rapid Plas

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THIS VERSION MARCH 2014

