

Owner's Guide and Installation Instructions



Commercial Carbon Steel Indirect Storage Tank



Install a Rheem



*This storage tank must be installed and serviced by a qualified person.
Please leave this guide with the householder.*



WARNING: Plumber – Be Aware

- The primary flow and return pipes between the storage tank(s) and the primary water heating source, including the solar hot and solar cold pipes between the solar storage tank(s) and the solar collectors, **MUST BE** of copper or metallic pipe. All compression fittings must use brass or copper olives.
- The full length of the primary flow and return pipes **MUST BE** insulated.

The insulation must:

- be of a type suitable for the application and capable of withstanding the temperature of the water generated by the primary water heating source

The specification of the chosen insulation material should be checked with the insulation manufacturer prior to installation as different materials may vary in temperature tolerance.

Closed cell type or equivalent insulation used between the storage tank(s) and solar collectors, if this storage tank is part of a solar water heater installation, must be able to withstand the temperature of the water generated by the solar collectors under stagnation conditions. Refer to the installation instructions provided with the solar controller for full details on the insulation requirements of the solar hot and solar cold pipes.

- be at least 13 mm thick, however thicker insulation may be required to comply with the requirements of AS/NZS 3500.4
- be weatherproof and UV resistant if exposed
- be fitted up to and cover the connections on both the storage tank(s) and the primary heating source.

The insulation will reduce pipe heat losses and also assist in avoiding accidental contact with the pipe work as high temperature water can flow from the primary heating source and the storage tank(s).

- In addition, the insulation on the solar hot and solar cold pipes must also:
 - extend through any penetrations in the eaves, ceiling and roof
 - cover valves and fittings in the solar hot and solar cold pipe work

Note: Failure to observe these requirements also increases the risk of freeze damage.

The insulation is essential to assist in providing freeze protection and will offer corrosion protection to a metal roof against water runoff over the copper pipe.

Uninsulated pipe work, including concealed in cavities and roof spaces or where it may be in contact with a metal roof, may lead to freeze damage. The system has NO WARRANTY for freeze damage if the solar hot and solar cold pipes are not insulated in accordance with the installation instructions.

Plumber: It is important to refer to and read in full the complete “Warning: Plumber – Be Aware” statement commencing on page 19.

PATENTS

This storage tank may be protected by one or more patents or registered designs in the name of Rheem Australia Pty Ltd.

TRADEMARKS

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Note: Every care has been taken to ensure the accuracy in preparation of this publication. No liability can be accepted for any consequences, which may arise as a result of its publication.

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RESPONSIBLE OFFICER - We recommend you read pages 4 - 10.
The other pages are intended for the installer but may be of interest.

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ABOUT YOUR STORAGE TANK

STORAGE TANK APPLICATION

This storage tank is designed for the purpose of storing water treated with a corrosion inhibitor and is not designed for use with potable water. Its use in an application other than this may shorten its life.

MODEL TYPE

The Rheem® Commercial hot water storage tank you have chosen can be installed indoor or outdoor, depending on the type of insulation selected. Aluminium clad insulation is suitable for indoor or outdoor installation. PVC outer cover is suitable for indoor installation only (not available in Australia or New Zealand).

Heat transfer fluid is stored in a carbon steel cylinder and heated by an external primary heating source, or via the two flanges that allow the fitment of auxiliary heating such as heat exchange coils (not supplied) or an electric heating unit bundle. The temperature is controlled by the thermostat(s) on the heating source. Automatic safety controls must be fitted to the primary heating source to provide safe and efficient operation.

CLOSED CIRCUIT

The storage tank is designed to operate at low pressure in a closed loop circuit, with the use of a heat transfer fluid. The supply pressure must not exceed that [shown on page 12](#).

HOW HOT SHOULD THE WATER BE?

The storage tank is designed for a maximum allowable water temperature of 90°C, unless operated as a permanently vented cylinder. Refer to the installation instructions supplied with the primary heating source plant for further information on water temperatures.

Note: AS 3498 requires that a water heater provides the means to inhibit the growth of Legionella bacteria in potable water.

This storage tank is not designed to contain potable water. The requirement to provide the means to inhibit the growth of Legionella bacteria must be fulfilled by the secondary heating source. Refer to installation instructions of the secondary heating source.

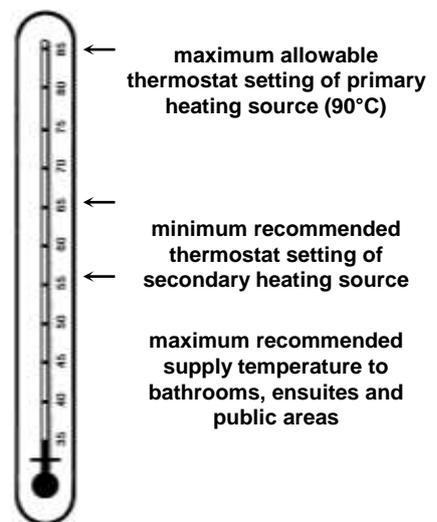
HOTTER WATER INCREASES THE RISK OF SCALD INJURY.

This storage tank can deliver water at temperatures which can cause scalding. Check the water temperature before use, such as when entering a shower or filling a bath or basin, to ensure it is suitable for the application and will not cause scald injury.

We recommend and it may also be required by regulations that an approved temperature limiting device be fitted into the hot water pipe work to the bathing and public areas when this storage tank is installed. This will keep the water temperature below 50°C or the maximum permitted by AS/NZS 3500.4 to these areas. The risk of scald injury will be reduced and still allow hotter water to the kitchen, laundry and other areas requiring sanitising temperatures.

TEMPERATURE ADJUSTMENT

We advise the thermostats of the primary heating plant are adjusted to the lowest temperature setting that meets your needs, especially if there are young children or elderly people in the premises. Refer to [“Hotter Water Increases the Risk of Scald Injury”](#) on page 4



⚠ Warning

This storage tank is only intended to be operated by persons who have the experience or the knowledge and the capabilities to do so. This storage tank is not intended to be operated by persons with reduced physical, sensory or mental capabilities i.e. the infirm, or by children. Children should be supervised to ensure they do not interfere with the storage tank.

SAFETY

This storage tank is supplied with a combination temperature pressure relief valve. When installed as instructed in this manual, this valve has a rating of 575 kW. If the primary heating source has an output exceeding this valve, additional relief valves are required. The valve(s) must not be tampered with or removed. The storage tank and its primary heating source must not be operated unless each of these devices is fitted and is in working order.

This storage tank is designed to be used in a closed circuit. Supplementary pressure relief devices such expansion vessels, permanently venting the cylinder or using as a drain back solar system must be included in the system design.

If a remote thermostat (Tankstat) is fitted to the storage tank and the electrical conduit is damaged, it must be replaced by a qualified person in order to avoid a hazard. Phone Rheem Service or their nearest Accredited Service Agent to arrange for an inspection.

⚠ Warning: For continued safety of this water heating system it must be installed, operated and maintained in accordance with the Owner's Guide and Installation Instructions.

The Rheem warranty may not cover faults if relief valves or other safety devices are tampered with or if the installation is not in accordance with these instructions.

PRECAUTIONS

Where damage to property can occur in the event of the storage tank leaking, the storage tank must be installed in a safe tray. Construction, installation and draining of a safe tray must comply with AS/NZS 3500.4 and all local codes and regulatory authority requirements.

The storage tank must be maintained in accordance with the Owner's Guide and Installation Instructions. Refer to "Regular Care" on page 7.

If this storage tank is to be used where an uninterrupted hot water supply is necessary for your application or business you should ensure that you have back up redundancy within the hot water system design. This should ensure the continuity of hot water supply in the event that this storage tank were to become inoperable for any reason. We recommend you seek advice from your plumber or specifier about your needs and building back up redundancy into your hot water supply system.

TO TURN OFF THE STORAGE TANK

If it is necessary to turn off the storage tank:

- Turn off the primary water heating plant and switch off the electrical supply at the isolating switch to the circulating pump(s).
- Close the cold inlet isolation valve on the cold inlet line to the storage tank(s) to shut down the entire system, or;
- Close the isolation valves on the cold, flow / return and hot branches to shut down an individual storage tank in a bank.

TO TURN ON THE STORAGE TANK

- Open the isolation valves fully on the cold, flow / return and hot water branches to the storage tank(s) installed in a bank.
- Open the cold inlet isolation valve on the cold inlet line to the storage tank(s). Air will be forced out of the System.
- Switch on the electrical supply at the isolating switch to the circulating pump(s) and turn on the primary water heating plant.

HOW DO I KNOW IF THE STORAGE TANK IS INSTALLED CORRECTLY?

Refer to the Application Guide for the most appropriate system configuration. Further information is also provided on [pages 20 to 21](#). The storage tank must be installed:

- by a qualified person, and
- in accordance with the installation instructions, and
- in compliance with Standard AS/NZS 3500.4 and all local codes and regulatory authority requirements.

In New Zealand the installation must also conform with the New Zealand Building Code.

VICTORIAN CUSTOMERS

Notice to Victorian Customers from the Victorian Plumbing Industry Commission. This storage tank must be installed by a licensed person as required by the Victorian Building Act 1993.

Only a licensed person will give you a Compliance Certificate, showing that the work complies with all the relevant Standards. Only a licensed person will have insurance protecting their workmanship for 6 years. Make sure you use a licensed person to install this storage tank and ask for your Compliance Certificate.

DOES THE WATER CHEMISTRY AFFECT THE STORAGE TANK?

The storage tank is designed to store a heat transfer liquid and must be treated to prevent corrosion. The system has either been supplied with the amount of preparation chemicals and corrosion inhibitor required or alternatively can be sourced locally. These are to be applied in accordance with the manufacturers' instructions. Refer to SDS sheets supplied with pre-treatment and corrosion inhibitor. [Refer to Treating the Storage Tank on page 24](#).

Some water chemistries may have detrimental effects on the storage tank, its components and fittings. Refer to ["Water Supplies"](#) on page 9.

If you are in a known harsh water area or you are not sure of your water chemistry, have your water checked against the conditions [described on pages 9 to 9](#).

HOW LONG WILL THE STORAGE TANK LAST?

The storage tank is supported by a manufacturer's warranty ([refer to page 31](#)). There are a number of factors that will affect the length of service the storage tank will provide. These include but are not limited to the fluid chemistry, the fluid pressure, the fluid temperature (inlet and outlet) and the water usage pattern. Refer to ["Precautions"](#) on page 5.

REGULAR CARE

MINOR SIX MONTH MAINTENANCE

It is recommended minor maintenance be performed every six months by a responsible officer.

The minor maintenance includes:

- Check the water chemistry of the closed circuit fluid
- Check the level of the closed circuit fluid
- Check operation of any fill valves and/or expansion vessels
- Operate the easing lever on the temperature pressure relief valve. It is very important you raise and lower the lever gently. Refer to “[Temperature Pressure Relief Valve](#)” on page 8.

⚠ Warning: Exercise care to avoid any splashing of water, as water discharged from the drain line will be hot. Stand clear of the drain line’s point of discharge when operating the valve’s lever.

- Check the drain line from the safe tray (if one is installed) is not blocked.

MAJOR FIVE YEAR SERVICE

It is recommended a major five year service be conducted on the storage tank. The service must be conducted by a qualified person. Phone Rheem Service or their nearest Accredited Service Agent.

Note: The five year service and routine replacement of any components, such as the relief valve(s), are not included in the Rheem warranty. A charge will be made for this work. Only genuine replacement parts should be used on this storage tank.

The major service includes the following actions:

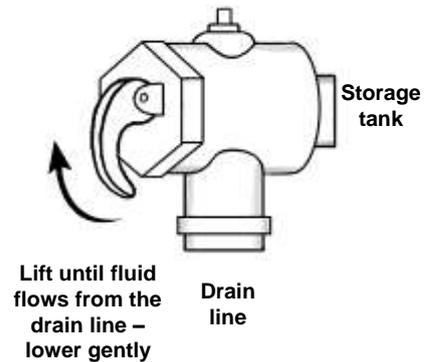
- Replace the temperature pressure relief valve.
- Check the water chemistry of the closed circuit fluid
- Check the level of the closed circuit fluid
- Check operation of any fill valves and/or expansion vessels
- Visually check the unit for any potential problems.
- Inspect all connections.
- Check the drain line from the safe tray (if one is installed) is not blocked.

Note: The storage tank may need to be drained during this service. After the completion of the service, the water heater will take some time to reheat the water. Depending upon the heating source, hot water may not be available for a while.

TEMPERATURE PRESSURE RELIEF VALVE

This valve is near the top of the storage tank and is essential for its safe operation. This valve is designed to only relieve excess thermal energy or an unanticipated build-up of pressure. In a fully flooded closed loop system an appropriately sized expansion vessel must be installed to accommodate for the expansion of heat transfer liquid. It must be sized to accommodate the pressure of the full capacity of the system and its thermal expansion. In a drain back design the system is not filled to 100% of its capacity, therefore an expansion vessel is not required. The heat transfer liquid will expand into the remaining empty capacity of the system.

The relief valve may discharge some fluid on first heat up. Continued leakage of fluid from the valve and its drain line may indicate a problem with the water heater (refer to “[Temperature Pressure Relief Valve Running](#)” on page 10).



⚠ Warning: Never block the outlet of this valve or its drain line for any reason.

Operate the easing lever on the temperature pressure relief valve once every six months. Refer to “[Minor Six Month Maintenance](#)” on page 7. **It is very important the lever is raised and lowered gently.**

⚠ Warning: Failure to do this may result in the storage tank cylinder failing.

⚠ Warning: Exercise care to avoid any splashing of fluid, as fluid discharged from the drain line will be hot. Stand clear of the drain line’s point of discharge when operating the valve’s lever.

If fluid does not flow freely from the drain line when the lever is lifted, then the storage tank must be checked. Phone Rheem Service or their nearest Accredited Service Agent.

The temperature pressure relief valve should be replaced at intervals not exceeding 5 years, or more frequently in areas where there is a high incidence of water deposits (refer to “[Water Supplies](#)” on page 9).

WATER SUPPLIES

This water heater must be installed in accordance with this advice to be covered by the Rheem warranty.

The storage tank is designed to store a heat transfer liquid and must be treated to prevent corrosion. Refer to [Treating the Storage Tank on page 24](#), however, there are some known water chemistries which can have detrimental effects on the water heater and its operation and / or life expectancy.

A list of postcodes is available on the Rheem website (www.rheem.com.au) indicating known areas where the steel cylinder is not covered by the Rheem warranty due to the water chemistry of the area. The list is not necessarily exhaustive and there may be areas outside of these postcodes where the steel cylinder is not covered by the Rheem warranty due to the water chemistry of the area.

If you are unsure of your water chemistry, you may be able to obtain information from your local water supply authority. This water heater should only be connected to a water supply which complies with these guidelines, which takes precedence over the list of postcodes, for the Rheem warranty to apply.

PH

pH is a measure of whether the water is alkaline or acid. In an acidic or very alkaline water supply, the water can attack steel parts and cause them to fail.

Where the pH is less than 6.0 or greater than 9.5, the Rheem warranty does not apply to the steel cylinder. Water with a pH less than 6.0 may be treated to raise the pH.

The water supply from a rainwater tank in a metropolitan area is likely to be corrosive due to the dissolution of atmospheric contaminants. This may result in pH of less than 6.0. It is recommended an analysis on the water from a rainwater tank be conducted prior to connecting this type of water supply to a water heater with a steel cylinder.

SATURATION INDEX

The saturation index (SI) is used as a measure of the water's corrosive or scaling properties. The saturation index figures stated are calculated using a water temperature of 80°C.

In a corrosive water supply, the water can attack copper parts and cause them to fail.

In a scaling water supply calcium carbonate is deposited out of the water onto any hot metallic surface.

Where the saturation index exceeds +0.40, the water is very scaling. Where the saturation index exceeds +0.80, the Rheem warranty does not apply to the steel cylinder.

Water which is scaling may be treated with a water softening device to reduce the saturation index of the water.

TOTAL DISSOLVED SOLIDS

The steel cylinder is only covered by the Rheem warranty when the total dissolved solids (TDS) content in the water is less than 600 mg / L.

Note: Some water analysis reports may state the conductivity of the water rather than the level of total dissolved solids. Conductivity, measured in microsiemens per centimetre ($\mu\text{S} / \text{cm}$), is directly proportional to the TDS content of the water. TDS, in mg / L, is approximately 70% of the conductivity in $\mu\text{S} / \text{cm}$.

SUMMARY OF WATER CHEMISTRY ADVICE AFFECTING WARRANTY

The water heater and its components are not suitable for certain water chemistries. Those chemistries are listed below. If the water heater is connected at any time to a water supply with the following water chemistry, the Rheem warranty will not cover any resultant faults on the components listed below:

Water Chemistry	Component
pH < 6.0 or > 9.5	water heater cylinder
Total Dissolved Solids (TDS) > 600 mg / L	water heater cylinder
Saturation Index (SI) > +0.4	water heater cylinder temperature pressure relief valve
Saturation Index (SI) > +0.8	water heater cylinder

SAVE A SERVICE CALL

Check the items below before making a service call. You will be charged for attending to any condition or fault that is not related to manufacture or failure of a part.

NOT ENOUGH HOT WATER (OR NO HOT WATER)

- **Are you using more hot water than you think?**
Are outlets (especially the showers) using more hot water than you think? Very often it is not realised the amount of hot water used, particularly when showering. Carefully review the hot water usage. Have your plumber fit a flow control valve to each shower outlet to reduce water usage.
- **Temperature pressure relief valve running**
Is the relief valve discharging too much water? Refer to “Temperature Pressure Relief Valve Running” on page 10.
- **Thermostat setting**
Ensure the thermostat setting of the primary heating source is appropriate. You may choose to have your electrician adjust the thermostats upwards to gain additional hot water capacity.

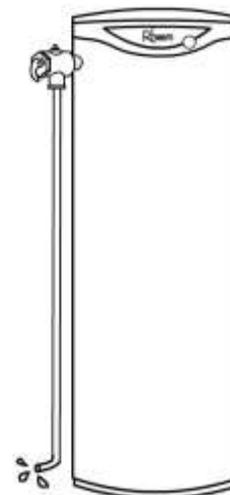


⚠ Warning: Hotter water increases the risk of scald injury.

- **Water heater size**
Do you have the correct size water heater or sufficient storage for your requirements? The sizing guide in the Rheem sales literature and on the Rheem website (www.rheem.com.au) suggests average sizes that may be needed.

TEMPERATURE PRESSURE RELIEF VALVE RUNNING

- **Normal Operation**
This valve is designed to only relieve excess thermal energy or an unanticipated build-up of pressure. In a fully flooded closed loop system an appropriately sized expansion vessel must be installed to accommodate for the expansion of heat transfer liquid. It must be sized accordingly to accommodate the pressure of the full capacity of the system and its thermal expansion. In a drain back design the system is not filled to 100% of its capacity, therefore an expansion vessel is not required. The heat transfer liquid will expand in to the remaining empty capacity of the system.
- **Continuous dribble**
Try gently raising the easing lever on the relief valve for a few seconds (refer to “Temperature Pressure Relief Valve” on page 8). This may dislodge a small particle of foreign matter and clear the fault. Release the lever gently.



The relief valve may discharge some fluid on first heat up. Continued leakage of fluid from the valve and its drain line may indicate a problem with the water heater

- **Heavy flows of hot fluid or steam**
The primary heating source **must** be shut down and the energy source isolated. Phone Rheem Service or their nearest Accredited Service Agent to arrange for inspection.

⚠ Warning: Never replace the relief valve with one of a higher pressure rating.

IF YOU HAVE CHECKED ALL THE FOREGOING AND STILL BELIEVE YOU NEED ASSISTANCE, PHONE RHEEM SERVICE OR THEIR NEAREST ACCREDITED SERVICE AGENT

INSTALLATION

THIS STORAGE TANK IS NOT SUITABLE FOR POOL HEATING

INSTALLATION STANDARDS

The storage tank must be installed:

- by a qualified person, and
- in accordance with the installation instructions, and
- in compliance with Standard AS/NZS 3500.4 and all local codes and regulatory authority requirements.

In New Zealand the installation must also conform to the New Zealand Building Code.

All packaging materials must be removed from the storage tank prior to its installation. This includes the removal of the cardboard base of the carton from the underside of the storage tank.

STORAGE TANK APPLICATION

This storage tank is designed for the purpose of storing water treated with a corrosion inhibitor and is not designed for use with potable water. Its use in an application other than this may shorten its life.

If this storage tank is to be used where an uninterrupted hot water supply is necessary for the application or business, then there should be redundancy within the hot water system design. This should ensure the continuity of hot water supply in the event that this storage tank was to become inoperable for any reason. We recommend you provide advice to the system owner about their needs and building backup redundancy into the hot water supply system.

Note: AS 3498 requires that a water heater provides the means to inhibit the growth of Legionella bacteria in potable water.

This storage tank is not designed to contain potable water. The requirement to provide the means to inhibit the growth of Legionella bacteria must be fulfilled by the secondary heating source. Refer to installation instructions of the secondary heating source.

STORAGE TANK LOCATION

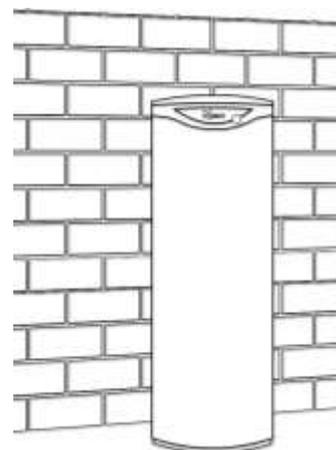
This storage tank is suitable for either outdoor or indoor installation, depending on the selected insulation. Aluminium clad insulation is suitable for indoor or outdoor installation. PVC outer cover is suitable for indoor installation only (not available in Australia or New Zealand).

Whether located outdoor or indoor, the storage tank should be installed either close to the most frequently used outlets or with a circulated flow and return system, and its position chosen with safety and service in mind.

Clearance must be allowed for servicing of the storage tank. The storage tank must be accessible without the use of a ladder or scaffold. Make sure the temperature pressure relief valve lever is accessible and the thermostat (Tankstat) if fitted can be removed for service.

You must be able to read the information on the rating plate. Remember you may have to take the entire storage tank out later for servicing.

The storage tank is to be installed at ground or floor level and must stand vertically upright on a stable base as acceptable to local authorities. The support Legs of the storage tank are coated with a corrosion resistant material, however it is recommended a moisture barrier be placed between the support legs and the supporting surface. It is not necessary to allow for free air circulation under the base of the storage tank.



Note: The storage tank should not be placed in direct contact with a concrete surface that is less than two months old and not fully cured as this may attack the metal coating of the storage tank base. A moisture barrier must be used between the two surfaces in this instance.

It is important to have the heater in position before installing the insulation. (Refer to page 14)

Lifting of Storage Tank

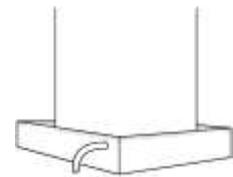
Each storage tank is supplied with suitable lifting lugs located at the top of the cylinder. Refer to storage tank technical data and the rating plate for tank weight. For other than 1000L tanks, the tank must be lifted from the horizontal into its vertical orientation. Take care when removing the straps from the palletised storage cylinder as they may be under tension. Employ safe lifting techniques when locating the tank during installation.

Remember all local authorities have regulations about putting storage tanks into roof spaces.

Refer to the instructions on pages 20 for storage tank installation options. Refer to the **Application Guide** for the most appropriate configuration.

SAFE TRAY

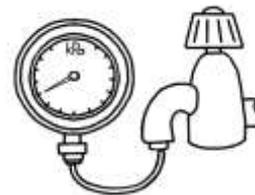
Where damage to property can occur in the event of the storage tank leaking, the storage tank must be installed in a safe tray or the area be suitably banded. Construction, installation and draining of a safe tray must comply with AS/NZS 3500.4 and all local codes and regulatory authority requirements. AS/NZS 3500.4 also has particular requirements when a safe tray must be installed.



SUPPLY PRESSURE

The supply pressure must not exceed that shown in the table below.

Tank Nominal Capacity	1000 – 5000 L
Relief valve setting	500kPa
Max. supply pressure	400kPa



If the storage tank is supplied with water from a tank supply the minimum pressure must be suitable for any primary heating source attached to the storage tank. Refer to the installation instructions of the primary heating source

Hot Water Delivery

This storage tank can deliver water at temperatures which can cause scalding.

It is necessary and we recommend that a temperature limiting device be fitted between the storage tank and the hot water outlets in any ablution and public areas such as bathrooms, ensuites or public amenities to reduce the risk of scalding. The installing plumber may have a legal obligation to ensure the installation of this storage tank meets the delivery water temperature requirements of AS/NZS 3500.4 so that scalding water temperatures are not delivered to a bathroom, ensuite, or other ablution or public area.

Refer to instructions supplied with secondary water heating plant for further information regarding the application of temperature limiting devices.

REDUCING HEAT LOSSES

The cold water line to, primary flow and return lines and the hot water line from the storage tank must be insulated in accordance with the requirements of AS/NZS 3500.4. The insulation must be weatherproof and UV resistant if exposed.

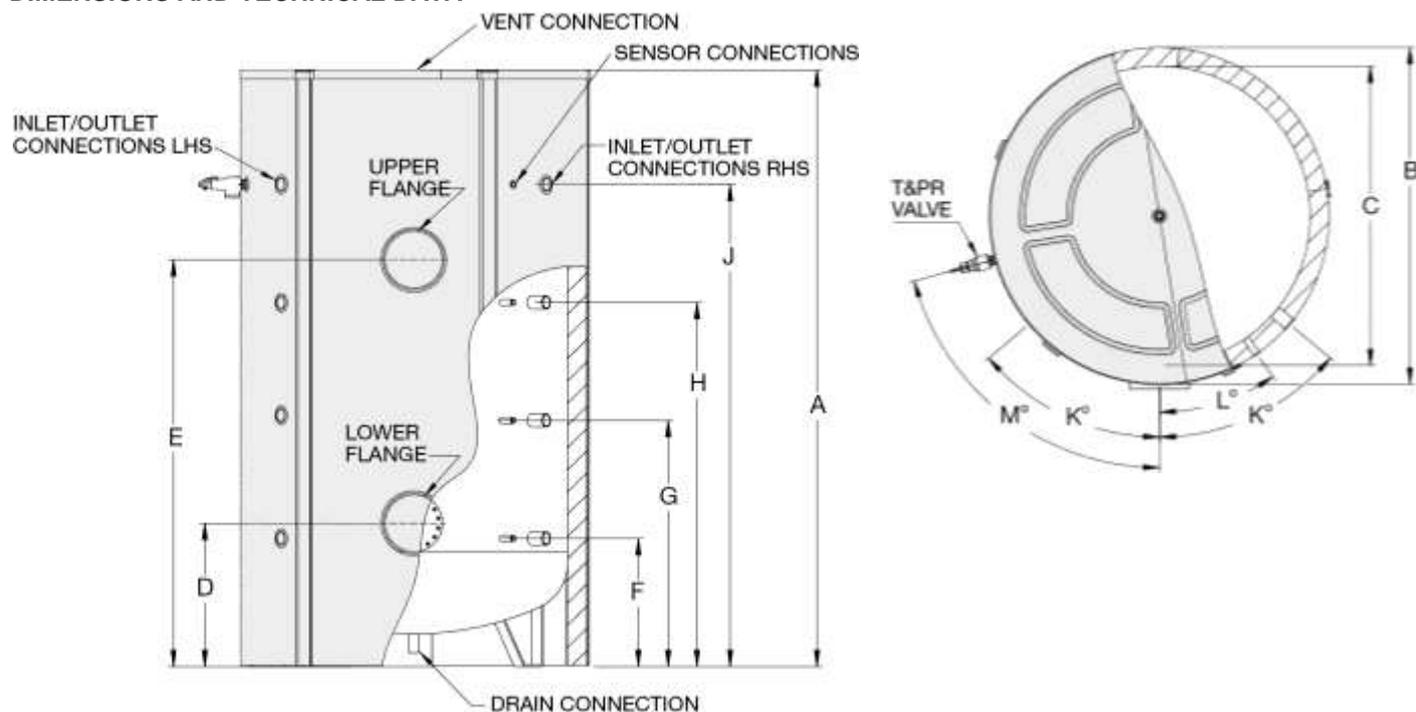
Keep temperature settings down. Lower temperatures reduce heat losses and prolong cylinder life.

SADDLING PIPE WORK

Pipe work must not be saddled to the tank.

Note: If the cylinder or insulation is damaged as a result of attaching pipe clips or saddles to the jacket, any resultant faults will not be covered by the Rheem warranty.

DIMENSIONS AND TECHNICAL DATA



DIMENSIONS TABLE			1000	2000	3000	4000	5000
Model Designation							
Storage capacity		Litres	920	2055	2960	3820	5180
Dimensions	A	mm	2200	2565	2845	2918	3128
	B	mm	1000	1300	1450	1600	1800
	C	mm	800	1100	1250	1400	1600
	D	mm	510	555	600	628	747
	E	mm	1435	1735	1945	1963	2132
	F	mm	417	462	505	533	667
	G	mm	879	1024	1135	1163	1287
	H	mm	1341	1586	1765	1793	1907
	J	mm	1803	2148	2395	2423	2527
	K	degree	50	50	50	50	50
	L	degree	35	35	35	35	35
	M	degree	75	75	75	75	75
Weight Empty		kg	115	245	334	455	535
Inlet/Outlet Connections (BSPF)			RP2	RP2	RP2	RP2	RP2
T&PR Valve Connection (NPTF)*			1¼"	1¼"	1¼"	1¼"	1¼"
Vent Connection (BSPF)			RP1½	RP2	RP2	RP2	RP2
Drain Connection (BSPF)			RP1	RP1	RP1	RP1	RP1
Remote Thermostat Connection (thermowell)			RP½	RP½	RP½	RP½	RP½

*TPR tundish is supplied with 1 1/4" NPT to BSP adaptor

INSULATION - INSTALLATION INSTRUCTIONS

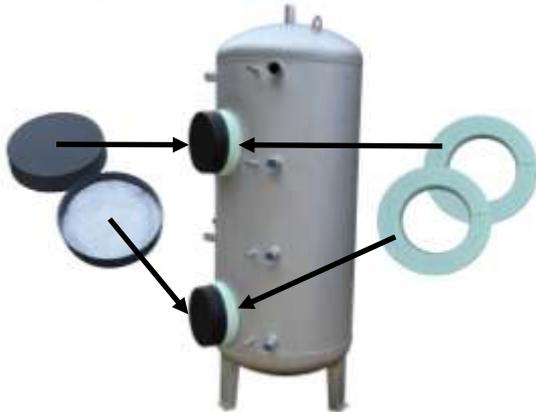
ALUMINIUM CLADDING



Ensure the drain is fitted or plugged. Ensure the tank is in position where it's going to be installed, as it can be difficult to move once the insulation is attached.



The insulation comes in multiple sections that will vary both in quantity and layout depending on the size of the tank. These sections clip together along the edges using a tooth lock system.



Fit the two green foam insulation rings around the upper and lower flange. Fit the two black plastic flange covers over the foam rings.



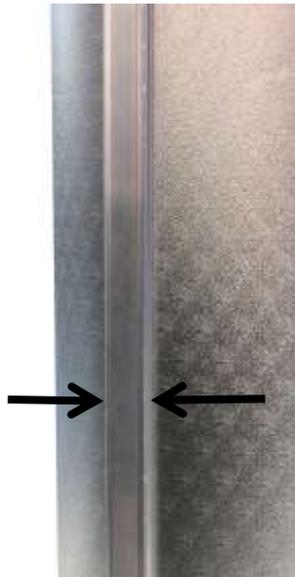
Take the section that has the two larger holes and line them up with the flanges on the tank. The bottom of the insulation should be touching the ground. If there are further holes in the panel fit them over the fittings ensuring the insulation is clear of the fittings.



There are 14 plastic fitting surrounds, these vary in size and should fit tightly around the fittings. The fitting surrounds are placed on after the panel and should sit flush with the front of the fitting. Attach the fitting surrounds as each panel is put in place, this will help to hold the section in the correct position as each panel is added.



When the first panel is in place, fit the panel to the left using the same process. Where the sections meet there are 5 teeth that clip together. We recommend joining to the outside tooth until all sections are together.



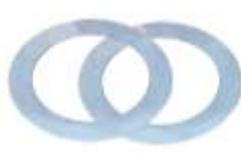
Continue using the same process to wrap each panel around the tank. Once all panels are joined each panel should be tightened into the last tooth if possible. Ensure the teeth are fully engaged along the entire length.

There are two round pieces of insulation that fit on top of the tank. The smaller white high density foam piece fits over the top fitting and the larger green piece fits around the white piece.

Aluminium Disk



Dress Rings



The aluminium disk may be supplied in one piece or two semi circles depending on the tank size. Fit on top of the insulation.

The large plastic lid may be supplied in one piece or two semi circles depending on the tank size. Place the large plastic lid or the two halves on top of the tank.

If supplied in two semi circles use the plastic plugs (supplied) to join along where the two halves meet.

Locate the two aluminium dress rings around each flange cover. Rivet them in two places on the horizontal plane.

Drill and screw the lid to the top of the tank at each panel.



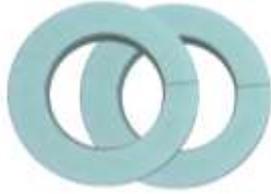
Drill and fit 1 x screw (supplied) into each tooth lock section midway between the top and the bottom

Fit the final top fitting surround in the centre.

Note: 5000L – the semi-circle with 2 x standouts fits the side that houses the flanges.



PVC OUTER COVER



Ensure the drain is fitted or plugged. Ensure the tank is in position where it's going to be installed, as it can be difficult to move once the insulation is attached.

Fit the two green foam insulation rings around the upper and lower flange. Fit the two black plastic flange covers over the foam ring.

The insulation can come in multiple sections that will vary both in quantity and layout depending on the size of the tank. These sections zip together along the edges.

Line up the section that has the two larger holes with the flanges on the tank. The bottom of the insulation should be touching the ground. If there are further holes in the section fit them over the fittings ensuring the insulation is clear of the fittings.



There are 14 plastic fitting surrounds, these vary in size and should fit tightly around the fitting. The fitting surrounds are placed on after the insulation and should sit flush with the front of the fitting. Attach the fitting surrounds as each section is put in place, this will help to hold the section in the correct position as each is added.

When the first panel is in place, fit the section to the left using the same process. Where the sections meet zip together. Make sure to relieve the stress from the zipper by pulling in the two sections either side of the zipper. **Note: failure to observe this precaution may result in damage to the zipper / insulation.**



There are two round pieces of insulation that fit on top of the tank. The smaller white high density foam piece fits over the top fitting and the larger green piece fits around the white piece.

The large plastic lid may be supplied in one piece or two semi circles depending on the tank size. Place the large plastic lid or the two halves on top of the tank.

If supplied in two semi circles use the plastic plugs (supplied) to join along where the two halves meet. Fit the final top fitting surround in the centre.

CONNECTIONS – PLUMBING

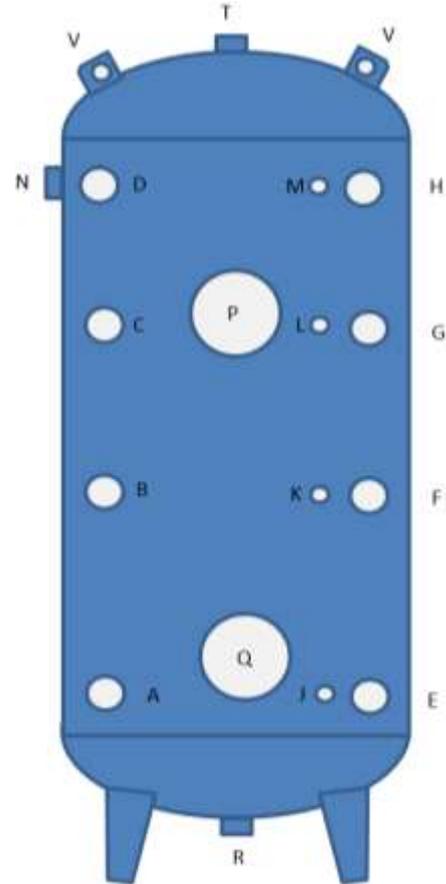
All plumbing work must be carried out by a qualified person and in accordance with the Standard AS/NZS 3500.4 and all local codes and regulatory authority requirements. In New Zealand the installation must also conform with the New Zealand Building Code.

CONNECTION SIZES

The storage tank is supplied with many fittings allowing maximum flexibility in system design and layout. Refer to the **Application Guide** for specific application connection details.

Disconnection unions and isolation valves must be installed on all piping connections to the storage tank.

Unused fittings must be plugged (plugs not supplied).



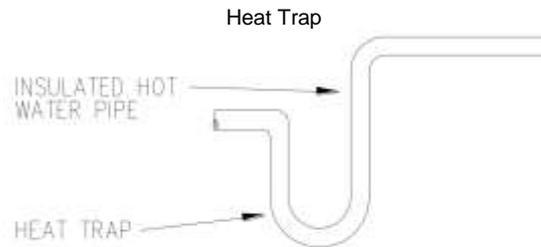
Fitting	Description
A, B, C, D, E, F, G, H	AUXILIARY FITTINGS RP2 BSPF
J, K, L, M	TEMPERATURE SENSOR PORTS RP½ BSPF
N	TPR SOCKET 1¼" NPTF
P	TOP ELEMENT FLANGE
Q	BOTTOM ELEMENT FLANGE
R	DRAIN RP1 BSPF
T	DRAIN BACK VENT: 1000L = RP1½ BSPF 2000, 3000, 4000, 5000L = RP2 BSPF
V	LIFTING LUGS

WATER INLET AND OUTLET

All pipe work must be cleared of foreign matter before connection and purged before attempting to operate the storage tank. All olive compression fittings must use brass or copper olives. Use thread sealing tape or approved thread sealant on all fittings.

HEAT TRAP

An external heat trap is required be installed. The heat trap is to be within one (1) metre of the hot water outlet, before the first hot water branch and have a vertical drop of 250 mm from the outlet of the water heater.



PIPE SIZES

The pipe sizing of hot water supply systems for commercial installations should be carried out by persons competent to do so, choosing the most suitable pipe size for each individual application. Reference to the technical specifications of the primary heating source, storage tank and local regulatory authority requirements must be made.

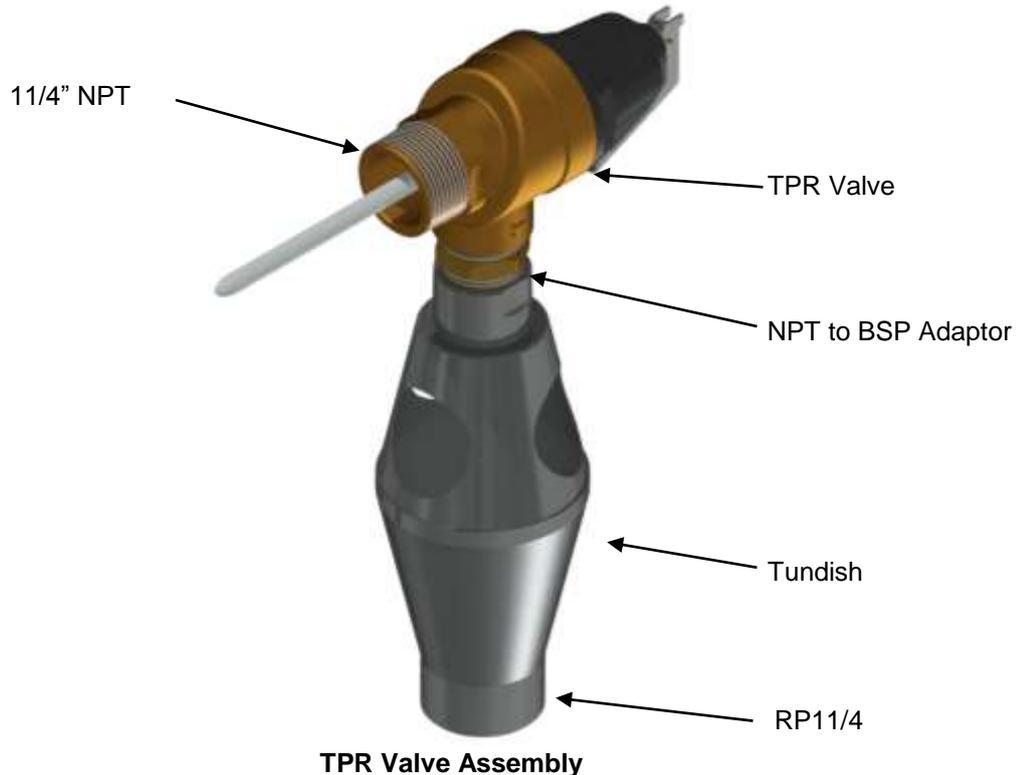
TEMPERATURE PRESSURE RELIEF VALVE

The temperature and pressure relief valve is shipped with the tank. It comes in a separate box that contains, the TPR, NPT to BSP adaptor, tundish and thermostat well. The temperature pressure relief valve must be fitted before the storage tank is operated. Before fitting the relief valve, make sure the probe has not been bent. Seal the thread with an approved thread sealant such as Teflon tape - never hemp. Make sure the tape does not hang over the end of the thread.

Screw the valve into the correct opening (refer to the fitting location diagram on page 17) leaving the valve drain pointing downwards. Do not use a wrench on the valve body - use the spanner flats provided. A copper drain line must be fitted to the temperature pressure relief valve (refer to "Relief Valve Drain" on page 18).

The tundish MUST be installed for the nominated energy rating to be valid.

The valve must be insulated with closed cell polymer insulation or similar (minimum thickness 9 mm) and the insulation installed so as not to impede the operation of the valve. The insulation must be weatherproof and UV resistant if exposed.



RELIEF VALVE DRAIN

DN32 copper drain lines must be fitted to the temperature pressure relief valve and expansion control valve (if one is installed) to carry the discharge clear of the storage tank. Connect the drain lines to the valves using disconnection unions. The drain line from the valve to the point of discharge should be as short as possible, have a continuous fall all the way from the storage tank to the discharge outlet and have no tap, valves or other restrictions in the pipe work. A drain line from a relief valve must comply with the requirements of AS/NZS 3500.4.

A drain line must be no longer than 9 metres with no more than three bends greater than 45° before discharging at an outlet or air break. The maximum length of 9 metres for a drain line is reduced by 1 metre for each additional bend required of greater than 45°, up to a maximum of three additional bends. Where the distance to the point of final discharge exceeds this length, the drain line can discharge into a tundish.

Subject to local regulatory authority approval, the drain lines from the temperature pressure relief valve and expansion control valve from an individual storage tank may be interconnected.

The outlet of a drain line must be in such a position that flow out of the pipe can be easily seen, but arranged so discharge will not cause injury, damage or nuisance. The termination point of a drain line must comply with the requirements of AS/NZS 3500.4. Drain lines must not discharge into a safe tray.

In locations where water pipes are prone to freezing, drain lines must be insulated, must not exceed 300 mm in length and are to discharge into a tundish through an air gap of between 75 mm and 150 mm.

If a drain line discharges into a tundish, the drain line from the tundish must be not less than DN32. The drain line from a tundish must meet the same requirements as for a drain line from a relief valve.

For multiple installations the drain lines from several storage tanks can discharge into a common tundish (refer to ["Multiple Installations"](#) on page 20).

⚠ Warning: As the function of the temperature pressure relief valve on this storage tank is to discharge high temperature water under certain conditions, it is strongly recommended the pipe work downstream of the relief valve be capable of carrying water exceeding 93°C. Failure to observe this precaution may result in damage to pipe work and property.



WARNING: Plumber – Be Aware

- The primary flow and return pipes between the storage tank(s) and the primary water heating source, including the solar hot and solar cold pipes between the solar storage tank(s) and the solar collectors, **MUST BE** of copper, or metallic. All compression fittings must use brass or copper olives.
- Plastic pipe **MUST NOT** be used, as it will not withstand the temperature of the fluid generated by the primary heating source under certain conditions. The primary heating source may generate extremely high fluid temperatures and high fluid pressure of 500 kPa. Plastic pipe cannot withstand these temperatures and pressures, and **MUST NOT** be used. Failure of plastic pipe can lead to the release of high temperature fluid and cause severe water damage and flooding.
- The full length of the primary flow and return pipes **MUST BE** insulated.

The insulation must:

- be of a type suitable for the application and capable of withstanding the temperature of the water generated by the primary water heating source

The specification of the chosen insulation material should be checked with the insulation manufacturer prior to installation as different materials may vary in temperature tolerance.

Closed cell type or equivalent insulation used between the storage tank(s) and solar collectors, if this storage tank is part of a solar water heater installation, must be able to withstand the temperature of the water generated by the solar collectors under stagnation conditions. Refer to the installation instructions provided with the solar controller for full details on the insulation requirements of the solar hot and solar cold pipes.

- be at least 13 mm thick, however thicker insulation may be required to comply with the requirements of AS/NZS 3500.4
- be weatherproof and UV resistant if exposed
- be fitted up to and cover the connections on both the storage tank(s) and the primary heating source.

The insulation will reduce pipe heat losses and also assist in avoiding accidental contact with the pipe work as high temperature water can flow from the primary heating source and the storage tank(s).

- In addition, the insulation on the solar hot and solar cold pipes must also:
 - extend through any penetrations in the eaves, ceiling and roof
 - cover valves and fittings in the solar hot and solar cold pipe work

Note: Failure to observe these requirements also increases the risk of freeze damage.

The insulation is essential to assist in providing freeze protection and will offer corrosion protection to a metal roof against water runoff over the copper pipe.

Uninsulated pipe work, including concealed in cavities and roof spaces or where it may be in contact with a metal roof, may lead to freeze damage. The system has NO WARRANTY for freeze damage if the solar hot and solar cold pipes are not insulated in accordance with the installation instructions.

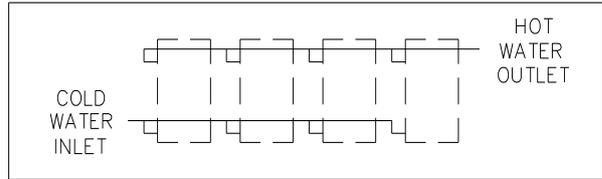
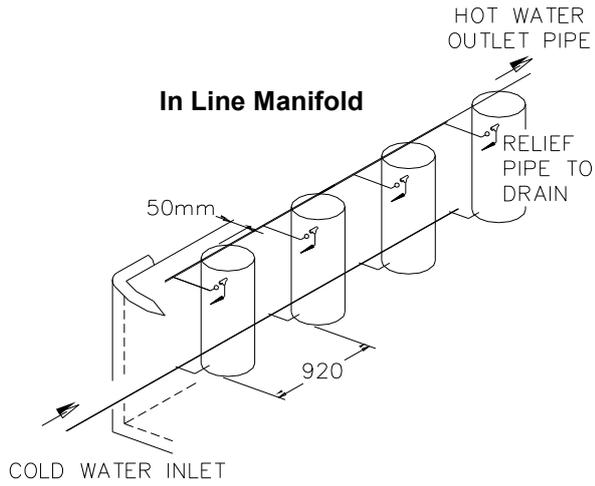
MULTIPLE INSTALLATIONS

A multiple installation of storage tanks on a single manifold or multiple manifolds is possible, using the Equa-Flow® manifold system, where large volumes of hot water is required. The Equa-Flow principle will function with storage tanks in line, around a corner or in rows back to back (refer to the diagrams on page 21).

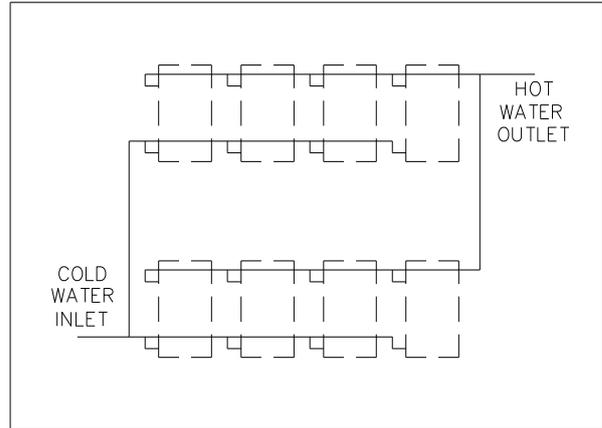
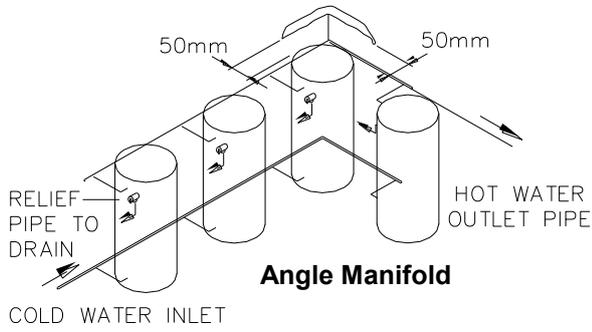
The cold fluid and hot fluid manifolds must be designed to balance the flow from each storage tank. To achieve this, there are basic installation requirements and principles which must be followed:

1. The maximum number of storage tanks in a bank should be 10, however several banks of storage tanks can be installed.
2. The hot fluid line from the manifold must leave from the opposite end to which the cold water line enters the manifold.
3. The storage tanks must be of the same model.
4. The cold fluid line, cold and hot headers and hot fluid line must be sized to meet the requirements of both AS/NZS 3500.4 and the application.
5. The primary flow and return lines must be sized to meet the requirements of AS/NZS 3500.4 and suit the primary heating source. Refer to the literature supplied with the primary heating source.
6. A full flow gate valve or ball valve (not a stop tap, as used on a single storage tank installation) must be installed on the cold fluid branch, primary flow /return branch and hot fluid branch of each storage tank.
7. Non return valves or pressure limiting valves must not be installed on the branch lines to the storage tanks.
8. All fittings, valves and branch lines must be matched sets all the way along the manifold.
9. Sufficient space must be left to enable access, servicing or removal of any storage tank.
10. The temperature pressure relief valve drain line from each storage tank can terminate at a common tundish (funnel) with a visible air break at each drain discharge point (refer to the diagram on page 21 and to "Relief Drain Line" on page 18).

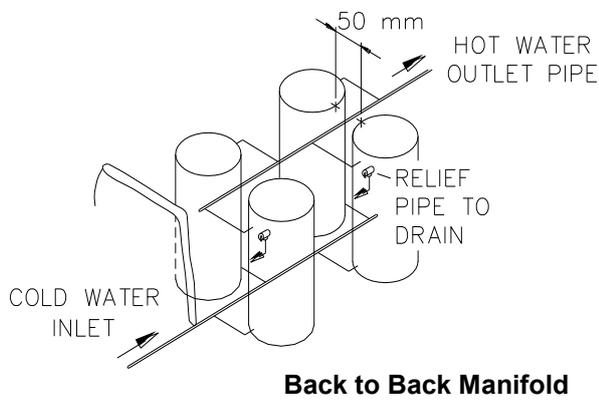
Refer to the **Application Guide** for the most appropriate system configuration.



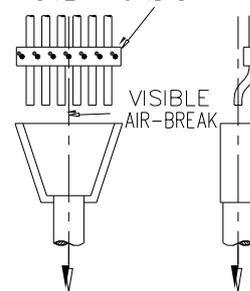
Single Bank of Storage Tanks



Multiple Banks of Storage Tanks



FIX ALL PIPES SECURELY
IN POSITION CENTRALLY
OVER TUNDISH



TO FINAL DISCHARGE OUTSIDE
BUILDING IN ACCORDANCE
WITH REQUIREMENTS OF
LOCAL AUTHORITIES.

**TPR Valve Drain Line
Common Discharge Point**

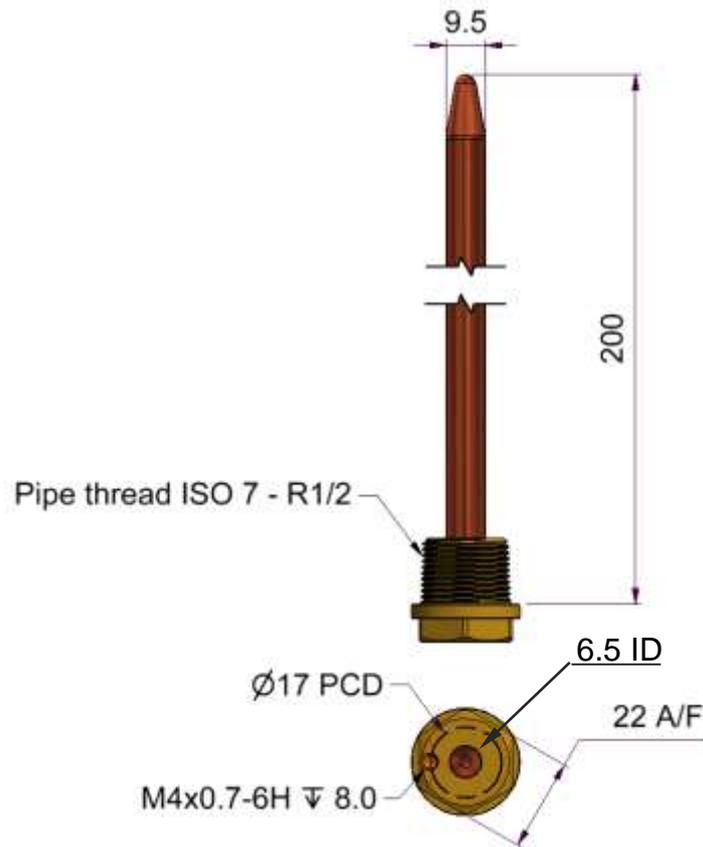
CONNECTIONS – ELECTRICAL

The power supply to the primary heating source and circulating pumps must not be switched on until the storage tank is filled with fluid and a satisfactory megger reading is obtained.

No electrical connections are to be made on the storage tank, except if a remote thermostat or electric heating unit bundle is fitted. All electrical work and permanent wiring must be carried out by a qualified person and in accordance with the Wiring Rules AS/NZS 3000 and all local codes and regulatory authority requirements.

REMOTE THERMOSTAT

The storage tank is fitted with 4 x RP1/2 fittings which can be used to monitor system temperature. 1 x thermostat well is supplied with the storage tank, located in the TPR valve box.



Thermowell Dimensions

ELECTRIC HEATING UNIT BUNDLE

The tanks can be fitted with an electric heating unit bundle. The heating unit bundle is supplied with a digital thermostat which can be adjusted to suit site specific requirements. Also included is all switch gear and over temperature energy cut out (ECO).

The heating unit electrical connections are housed in an IP55 enclosure and the bundle connects to the storage tank via a 16 bolt flange and gasket.

The elements are low watts density incoloy 800, designed to provide long service life. A variety of kW ratings are available.

Note: not all element ratings suit all tank capacities. The elements can be fitted in the top flange for “in-tank” boosting of the solar heat store or located in the bottom flange of a tank when connected as an “in series” solar booster or electric water heater.

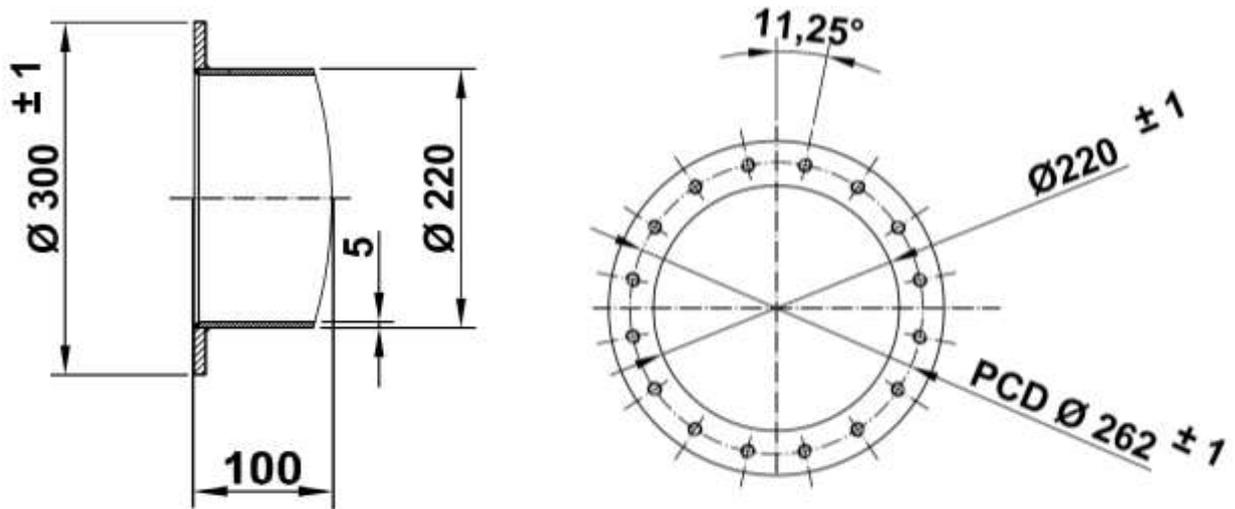


Refer to the heating unit manual for heating unit details and installation requirements.

FLANGE DETAILS

The storage tank is supplied with two flanges to allow the fitment of auxiliary heating such as heat exchange coils (not supplied) or an electric heating unit bundle. The tanks are supplied from the factory with the flange openings capped with a stainless steel plate, EPDM gasket and plastic flange cover.

Each tank is fitted with two 16 bolt flanges consisting of 16 threaded holes X M12 equi-spaced with holes orientated symmetrical to the centre line.



Tank Flange Dimensions

CORROSION INHIBITOR

The storage tank must be treated to prevent corrosion. The system has either been supplied with the amount of preparation chemicals and corrosion inhibitor required or alternatively can be sourced locally. These are to be applied in accordance with the manufacturers' instructions. Refer to SDS sheets supplied with pre-treatment and corrosion inhibitor.

Corrosion inhibitor must be used and maintained in accordance with this instruction in order for the storage tank to be covered by the warranty.

The following chemical treatment is recommended for optimum protection.

Pre-treatment with NALPREP® IV

Corrosion Inhibitor TRASAR™ TRAC107PLUS

Refer to Material Safety Data Sheet supplied with product for safe use and disposal of these products.

Warning: Protective overalls, rubber or nitrile gloves and chemical splash goggles must be worn.

TREATING THE STORAGE TANK

1. Remove the plug from an unused fitting on a storage tank, preferably at the lowest point.
2. Using a funnel, pour Nalprep IV at a dose of 2.7L per 1000L of total storage tank volume into the storage tank.
3. Add 15% of the weight of Nalprep IV of sulphuric acid (30%w/w) to the storage tank. This ratio can be factored if different strengths of sulphuric acid are used. This is required to lower the pH of the water to 6.5 – 6.7.
4. Re-fit the plug on the tank.
5. Fill the system with clean water. Refer to Filling and Testing of Primary Circuit on page 25 for the method to fill and pressure test the system and follow that procedure fully before returning to point (5) below.
6. Once the system is filled and pressure tested with no leaks, ensure that the entire primary circuit is open to water-flow (no isolated dead-legs) and circulate under no load (ie ambient water temperature).
7. Circulate for an absolute minimum of 8 hours, preferably 8-12 hours or overnight. During this time any strainers should be checked for blockage and cleaned.
8. Drain the system. First release the pressure by gently releasing the lever on the TPR Valve. Observe the pressure gauge and wait until pressure is completely released.
9. Open the air bleed valve and the drain fitting 'R' on each storage tank.
10. When completely drained, close the drain/s.
11. Add TRAC107PLUS to one of the storage tanks at a dose of 2 to 3L per 1000L of total storage tank volume. Refit the plug and refill the system with clean water.
12. When water begins to flow from the air bleed valve, close the water supply isolation valve and close the air bleed valve.
13. Close the isolation valve at the inlet and outlet of the Solar Pump Skid and remove the pressure gauge. Cap the gauge spigot and reopen the Solar Pump Skid inlet isolation valve.
14. Unless connected to an auto fill valve and the incoming pressure is [as described on page 12](#), remove the mains water supply from the system.

15. The closed circuit of the system is at ambient condition and the system is now ready for hand over.

Notes:

- It is absolutely imperative that all of the Nalprep IV cleaning solution is purged from the system prior to the introduction of corrosion inhibitor. Residual Nalprep IV means the system has not been adequately drained/flushed and will still contains suspended material/corrosion product. Residual Nalprep IV may also negatively impact the performance of the corrosion inhibitor subsequently applied as well as act as potential food source for bacteria leading to microbiological control issues in the future.
- The waste produced by the cleaning procedure will contain approximately up to 500ppm of o-PO4 and have a pH 6.5. The waste may also be turbid and contain much suspended iron. If the volume of the system is large, the fate of the waste needs to be considered and a once-off discharge permit obtained from the sewer provider. If required, the waste generated may have the pH increased to pH 7.0 by the addition of a caustic product once the waste is out of the chilled system.
- When a system has been left idle during works, there exists the potential for some microbiological contamination to be retained through the cleaning process. Therefore a heightened level of microbiological monitoring is often required up to a few months after inhibitor has been added to ensure that bacterial populations are not allowed to develop.
- Please check with local EPA with regards to the disposal of the passivation chemicals. Contact local Nalco representative.

FILLING AND PRESSURE TESTING OF PRIMARY CIRCUIT

For best results, pressure testing of the system should be conducted late in the evening when there is little solar radiation and the collector array (if fitted) can remain flooded under pressure for around 60 minutes. The maximum pressure that is allowed for testing of the system is 500 kPa (5 bar). When pressure testing is to be conducted using mains pressure, ensure the mains pressure is reduced to 500 kPa (5 bar) before it enters the system. Where the mains pressure is lower than the desired operating pressure of the system a pressure testing pump (not supplied) shall be used for this purpose.



WARNING:

At no stage in the filling of the closed circuit should mains pressure greater than 500kPa be applied to the storage tank without a pressure reducing valve.

1. Fit a pressure gauge capable of measuring up to 600kPa to the inlet of the system.
2. Open all isolation valves in the system, including any air bleed valves.
3. Connect the system to the mains water supply and begin to fill the system.
4. When water overflows from the air bleed valve, reduce the incoming water flow rate by slightly closing the incoming water supply isolation valve.
5. Close the water supply isolation valve fully to stop the incoming water, and then close the air bleed valve.
6. Now, slowly open the water supply isolation valve and continue filling. Check the pressure gauge attached. When the pressure reaches 200kPa (2 bar), close the water supply isolation valve and allow the pressure to stabilise.

-
7. Repeat pressurising in incremental steps and allow stabilising until the operating pressure is reached.
 8. Close the water supply isolation valve and observe the pressure.
 9. Check for leaks at all the connections on the closed circuit. Should a leak be observed at any one of the connections, immediately release the pressure by gently releasing the lever on the TPR valve in the storage tank or at the air bleed valve. Rectify any leak that is observed and repeat the pressure test as described above.
 10. Hold the pressure in the system until the pressure remains steady for around 60 minutes.
 11. After the pressure test, circulate the fluid. Return to step 6 in Treating the Storage Tank on page 24.

COMMISSIONING

Explain to a responsible officer the functions and operation of the water heating system. Upon completion of the installation and commissioning of the water heating system, leave this guide with a responsible officer.

TO TURN OFF THE STORAGE TANK

If it is necessary to turn off the storage tank on completion of the installation, such as on a building site or where the premises is vacant, then:

- Shut down the primary water heating plant and switch off the electrical supply at the isolating switch to the circulating pump(s).
- Close the cold water isolation valve on the cold water line to the storage tank(s) to shut down the entire system, or;
- Close the isolation valves on the cold, flow / return and hot water branches to shut down an individual storage tank in a bank

DRAINING THE STORAGE TANK

⚠ Warning: Exercise care, as fluid discharged from the storage tank may be of a very high temperature.

To drain the storage tank:

- Turn off the storage tank (refer to “[To Turn Off The Storage Tank](#)” on page 26).
- Operate the relief valve release lever - do not let the lever snap back or you will damage the valve seat.

Operating the lever will release the pressure in the storage tank.

- Undo the union at the cold inlet to the storage tank and attach a hose to the storage tank side of the union.

Let the other end of the hose go to a drain.

- Operate the relief valve again.

This will let air into the storage tank and allow the water to drain through the hose.

Alternatively if a drain line is installed, the system can be drained from the drain line connection point located at the base of the cylinder in lieu of the cold inlet. If the drain line was not installed, the insulation would have to be removed to gain access to the drain connection point.

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RHEEM AUSTRALIA STORAGE TANK WARRANTY

**STORAGE TANK MODELS : RT1000C6, RT2000C6, RT3000C6, RT4000C6, RT5000C6
ST1000C6, ST2000C6, ST3000C6, ST4000C6, ST5000C6**

1. THE RHEEM WARRANTY – GENERAL

- 1.1 This warranty is given by Rheem Australia Pty Limited ABN 21 098 823 511 of 1 Alan Street, Rydalmere New South Wales.
- 1.2 Rheem offer a trained and qualified national service network who will repair or replace components at the address of the storage tank subject to the terms of the Rheem warranty. Rheem Service, in addition can provide preventative maintenance and advice on the operation of your storage tank. The Rheem Service contact number is available 7 days a week on 131031 with Service personnel available to take your call from 8am to 8pm daily (hours subject to change).
- 1.3 For details about this warranty, you can contact us on 131031 or by email at warrantyenquiry@rheem.com.au (not for service bookings).
- 1.4 The terms of this warranty and what is covered by it are set out in sections 2 and 3 and apply to storage tanks manufactured after 1st June 2015.
- 1.5 If a subsequent version of this warranty is published, the terms of that warranty and what is covered by it will apply to storage tanks manufactured after the date specified in the subsequent version.

2. TERMS OF THE RHEEM WARRANTY AND EXCLUSIONS TO IT

- 2.1 The decision of whether to repair or replace a faulty component is at Rheem's sole discretion.
 - 2.2 If you require a call out and we find that the fault is not covered by the Rheem warranty, you are responsible for our standard call out charge. If you wish to have the relevant component repaired or replaced by Rheem, that service will be at your cost.
 - 2.3 Where a failed component or cylinder is replaced under this warranty, the balance of the original warranty period will remain effective. The replacement does not carry a new Rheem warranty.
 - 2.4 Where the storage tank is installed outside the boundaries of a metropolitan area as defined by Rheem or further than 25 km from either a regional Rheem branch office or an Accredited Rheem Service Agent's office, the cost of transport, insurance and travelling between the nearest branch office or Rheem Accredited Service Agent's office and the installed site shall be the owner's responsibility.
 - 2.5 Where the storage tank is installed in a position that does not allow safe or ready access, the cost of that access, including the cost of additional materials handling and/or safety equipment, shall be the owner's responsibility. In other words, the cost of dismantling or removing cupboards, doors or walls and the cost of any special equipment to bring the storage tank to floor or ground level or to a serviceable position is not covered by this warranty.
 - 2.6 This warranty only applies to the original and genuine Rheem storage tank in its original installed location and any genuine Rheem replacement parts.
 - 2.7 The Rheem warranty does not cover faults that are a result of:
 - a) Accidental damage to the storage tank or any component (for example: (i) Acts of God such as floods, storms, fires, lightning strikes and the like; and (ii) third party acts or omissions).
 - b) Misuse or abnormal use of the storage tank.
 - c) Installation not in accordance with the Owner's Guide and Installation Instructions or with relevant statutory and local requirements in the State or Territory in which the storage tank is installed.
 - d) Connection at any time to a water supply that does not comply with the water supply guidelines as outlined in the Owner's Guide and Installation Instructions.
 - e) Repairs, attempts to repair or modifications to the storage tank by a person other than Rheem Service or a Rheem Accredited Service Agent.
 - f) Faulty plumbing or faulty power supply.
 - g) Failure to maintain the storage tank in accordance with the Owner's Guide and Installation Instructions.
 - h) Transport damage.
 - i) Fair wear and tear from adverse conditions (for example, corrosion).
 - j) Cosmetic defects.
 - 2.8 Subject to any statutory provisions to the contrary, this warranty excludes any and all claims for damage to furniture, carpet, walls, foundations or any other consequential loss either directly or indirectly due to leakage from the storage tank, or due to leakage from fittings and/ or pipe work of metal, plastic or other materials caused by water temperature, workmanship or other modes of failure.
 - 2.9 If the storage tank is not sized to supply the hot water demand in accordance with the guidelines in the Rheem storage tank literature, any resultant fault will not be covered by the Rheem warranty.
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RHEEM AUSTRALIA STORAGE TANK WARRANTY

**STORAGE TANK MODELS: RT1000C6, RT2000C6, RT3000C6, RT4000C6, RT5000C6
ST1000C6, ST2000C6, ST3000C6, ST4000C6, ST5000C6**

3. WHAT IS COVERED BY THE RHEEM WARRANTY FOR THE STORAGE TANKS DETAILED IN THIS DOCUMENT

3.1 Rheem will repair or replace a faulty component of your storage tank if it fails to operate in accordance with its specifications as follows:

What components are covered	The period from the date of installation in which the fault must appear in order to be covered	What coverage you receive
All components	Year 1	Repair and/or replacement of the faulty component, free of charge, including labour.
The cylinder	Years 2 to 5	Replacement cylinder, free of charge. Installation and repair labour costs are the responsibility of the owner.

4. ENTITLEMENT TO MAKE A CLAIM UNDER THIS WARRANTY

- 4.1 To be entitled to make a claim under this warranty you need to:
- Be the owner of the storage tank or have consent of the owner to act on their behalf.
 - Contact Rheem Service without undue delay after detection of the defect and, in any event, within the applicable warranty period.
- 4.2 You are **not** entitled to make a claim under this warranty if your storage tank:
- Does not have its original serial numbers or rating labels.
 - Is not installed in Australia.

5. HOW TO MAKE A CLAIM UNDER THIS WARRANTY

- 5.1 If you wish to make a claim under this warranty, you need to:
- Contact Rheem on 131031 and provide owner's details, address of the storage tank, a contact number and date of installation of the storage tank or if that's unavailable, the date of manufacture and serial number (from the rating label on the storage tank).
 - Rheem will arrange for the storage tank to be tested and assessed on-site.
 - If Rheem determines that you have a valid warranty claim, Rheem will repair or replace the storage tank in accordance with this warranty.
- 5.2 Any expenses incurred in the making of a claim under this warranty will be borne by you.

6. THE AUSTRALIAN CONSUMER LAW

- 6.1 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.
- 6.2 The Rheem warranty (set out above) is in addition to any rights and remedies that you may have under the *Australian Consumer Law*.

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