# STORAGE TANKS

### Market-leading storage tanks from small to large.

When looking for a hot water system for the Golden Grove Helping Hand project, some of the storage tank details considered included maximising the solar hot water storage capacity while minimising the plant room spatial requirements, longevity of the storage vessels, available water connection points and the ability to manoeuvre through standard plant room doorways.

The Rheem RT2000 tanks were chosen to meet these requirements and coupled with Rheem solar panels, Tankpak system and Crossflow heat exchanger, have allowed the available plant room space to be maximised while providing room for future expansion of the system.

Rob Horn, Hydraulic Engineer

#### CASE STUDY

HEALTH INNOVATION BUILDING North Terrace, SA

#### Challenge

The Health Innovation Building at the University of South Australia is a sophisticated \$247 million cancer research facility. A highly robust and cost-effective water heating solution was required for laboratory handwashing in addition to bathroom facilities for 800 staff members.

#### Hot Water Solution

The Rheem solution encompassed a domestic hot water plant and a laboratory hot water plant providing 5330 litres of hot water over a one hour peak period and 22828 litres per hour for the laboratory and hot water requirement for staff members. Rheem Tankpak Series 2 in combination with 13 x Commercial Storage Tanks was chosen based on the compact design, the ability to rapidly heat large quantities of water at high efficiencies, top down heating system, redundancy and certification for crane lifting.



## RHEEM 610 SERIES

#### SUITED TO INTEGRATION WITH ALMOST ANY SYSTEM



STORAGE VLARGER 50 MM HIGH FLOW



The work-horse storage system that keeps on working, in a wider range of water quality environments.

#### **Flexible**

Compatible with CFWH, Raypak, solar preheat and heat pump storage or as additional storage for a Rheem gas or electric hot water system.

#### Highly durable in poor water quality areas

Manufactured with commercial grade vitreous enamel and larger anode.

#### Stable pressure

No coils means there's virtually no pressure drop.

#### More key features

- Suitable for up to 82° C for sanitising applications
- Range of sizes
- 50mm high flow water connections
- Ease of fitment and replacement



Rheem 610 Series warranty: 5 years on cylinder, 1 year on parts & labour

### TECHNICAL DATA

DIMENSIONS AND TECHNICAL DATA TABI	LE			
Model number			A610340	A610430
			vitreous enamel	
Storage capacity		Litres	325	410
Dimensions	А	mm	1640	1840
	В	mm	640	685
	С	mm	640	685
	D	mm	1008	1210
	Е	mm	115	108
	F	mm	-	-
	G	mm	-	-
	Н	mm	-	-
	J	mm	290	273
	Ρ	mm	-	-
	Q	mm	-	-
	Κ	degrees	-	-
	L	degrees	90°	84°
	Μ	degrees	32°	30°
	Ν	mm	290	273
Weight Empty		kg	96	117
Inlet/Outlet Connections (BSPF)			RP2	RP2
T&PR Valve Connection (BSPF)			RP¾	RP <sup>3</sup> /4
Vent Connection (BSPF)			-	-
Drain Connection (BSPF)			-	-
Remote Thermostat Connection (1 x thermowell supplied)			RP1/2	RP1/2
T&PR Valve Setting		kPa	1000	1000
Expansion Control Valve (ECV)* Setting		kPa	850	850
Maximum Water Supply Pressure				
without ECV* fitted		kPa	800	800
with ECV* fitted		kPa	680	680
Maximum Stored Water Temperature		°C	82	82
Manifold – Min. Centre to Centre		mm	890	935
Maintenance Rate		kWH/day	3.1	4.3





\* Expansion control valve (ECV) not supplied with the water heater.

### RHEEM RT SERIES

SUITED TO LARGE COMMERCIAL **APPLICATIONS** 





SUPERIOR INSULATION

The high pressure, high capacity storage tank.

#### **High pressure**

Carbon steel tanks suit 500kPa operation and stainless steel tanks suit up to 850kPa operation. That's up to 20% more operating pressure than competitor tanks of an equivalent size.\*

#### High capacity

Available in nominal 1000, 2000, 3000, 4000, 5000L capacities. Multiple tanks of the same capacity can be manifolded in parallel to store larger volumes for reduced footprint and installation flexibility.

#### Easy to install

The only large capacity tank to fit through a single door, the RT1000 tank is just 800mm and can be easily installed in replacement situations. Models up to RT4000 tank fits easily through a double 1400mm door.

#### High performance insulation

100mm polypropylene insulation, with a bonded aluminium cladding suitable for outdoor installation. Polypropylene insulation is rot and fireproof, resistant to moisture, mould, bacteria, and rodents, hypoallergenic, 100% recyclable, light weight and self-supporting.

#### Withstands high temperatures

Can store water up to 90°C.

#### More key features

- Available in a fully welded carbon steel cylinder for indirect applications, or 316L stainless steel for direct water applications.
- Flange plates and a variety of high flow 50mm water fittings allow for different auxiliary options such as heat exchange coils (not supplied), electric heating unit bundles (page 38), heat pumps, gas water heaters, solar or waste heat.



### TECHNICAL DATA

DIMENSIONS AND TECHNIC	CAL	DATA TABL	E				
Model number			RT1000	RT2000	RT3000	RT4000	RT5000
				stainless steel / carbon steel			
Storage capacity*		Litres	920	2055	2960	3820	5180
Dimensions	А	mm	2200	2565	2845	2918	3128
	В	mm	1000	1300	1450	1600	1800
	С	mm	800	1100	1250	1400	1600
	D	mm	510	555	600	628	747
	Е	mm	1435	1735	1945	1963	2132
	F	mm	417	462	505	533	667
	G	mm	879	1024	1135	1163	1287
	Н	mm	1341	1586	1765	1793	1907
	J	mm	1803	2148	2395	2423	2527
	Ρ	mm	685	988	1140	1290	1378
	Q	mm	80	100	100	100	100
	К	degrees	50	50	50	50	50
	L	degrees	35	35	35	35	35
	Μ	degrees	75	75	75	75	75
Weight Empty		kg	136/115	245/245	330/334	455/455	660/535
Inlet/Outlet Connections (BSPE)			RP2	RP2	RP2	RP2	RP2
T&PR Valve Outlet Connection (BSPF)			RP11/4	RP11/4	RP11/4	RP11/4	RP11/4
Vent Connection (BSPF)			RP11/2	RP2	RP2	RP2	RP2
Drain Connection (BSPF)			RP11/4	RP11/4	RP11/4	RP11/4	RP11/4
Remote Thermostat Connection (1 x thermowell supplied)			RP1/2	RP1/2	RP1/2	RP1/2	RP1/2
T&PR Valve Setting (stainless steel/carbon steel)		kPa	850/500	850/500	850/500	850/500	850/500
Expansion Control Valve (ECV)* Setting (stainless steel/ carbon steel)		kPa	700/NA	700/NA	700/NA	700/NA	700/NA
Maximum Water Supply Pressure							
without ECV* fitted (stainless steel/carbon steel)		kPa	680/400	680/400	680/400	680/400	680/400
with ECV* fitted (stainless steel/carbon steel)		kPa	550/NA	550/NA	550/NA	550/NA	550/NA
Maximum Stored Water Temperature		°C	90	90	90	90	90
Manifold – Min. Centre to Centre (piping one side)		mm	1350	1550	1700	1850	2050
Manifold – Min. Centre to Centre (piping both sides)		mm	1500	1700	1850	2000	2200
Maintenance Rate		kWH/day	8.5	10.8	12.3	13.5	15.3





WATER CAPACITY ABOVE NOMINATED DIMENSION (litres)							
Model number		RT1000	RT2000	RT3000	RT4000	RT5000	
Storage capacity	/ Litres	920	2055	2960	3820	5180	
Dimensions	J	116	235	309	438	695	
	Н	345	763	1082	1408	1942	
	G	575	1292	1855	2377	3188	
	F	804	1820	2628	3347	4435	
Upper Flange	Е	299	623	861	1146	1489	
Lower Flange	D	758	1732	2511	3201	4274	

\*Expansion control valve not supplied with the water heater.