# 2007/08 Rheem Builder Solutions

www.installarheem.com.au





### The Rheem Promise

Whatever you build, wherever you build, Rheem has a water heater that's ideal for your project.

Designed and manufactured in accordance with Australian Standards, Rheem builds products trusted for reliable performance in all Australian conditions.

Rheem's large range of water heaters includes Solar, Heat Pump, 5 Star Gas Instantaneous, 5 Star Gas Storage and conventional gas and electric storage products. Whether you need a compact, high efficiency hot water solution or are building to a budget, there will be something in the Rheem range to suit. Wherever you build, regardless of your project size, Rheem can provide you with a solution that delivers all the hot water you need and that complies with all building regulations.

Rheem is stocked in all major plumbing merchants across Australia, which makes getting a Rheem on-site easy, wherever you are located.

Rheem offers a comprehensive warranty on every product in its range, backed by over 60 years experience in manufacturing water heaters in Australia.

- Products comply with all building codes 1
- Reliable products manufactured to relevant Australian Standards
- Wide selection of products to suit your application and budget
- · Stocked in all major national plumbing outlets
- · Comprehensive warranty available on all products
- · Expert technical advice on-hand
- · Solar installation service

### **Quick Reference Installation Guide**

The following table provides a quick overview of complying water heaters by State for new Class 1 homes. Refer to the product pages for specific information on Rheem water heater models.

	Code	Solar	Heat Pump	5 Star Gas Instantaneous	5 Star Gas Storage	Gas Storage	Electric Storage
NSW	BASIX	V	V	V	V	<b>V</b>	•
VIC	5 Star	<b>✓</b> ³	<b>O</b> <sup>5</sup>	<b>O</b> <sup>4</sup>	<b>O</b> <sup>4</sup>	<b>O</b> <sup>4</sup>	<b>O</b> <sup>4</sup>
QLD	Sustainable Buildings	<b>✓</b> <sup>2</sup>	<b>✓</b> <sup>2</sup>	<b>V</b>	V	×	X
SA	Mandatory Building Code	<b>✓</b> ²	<b>✓</b> <sup>2</sup>	V	V	<b>✓</b> <sup>6</sup>	<b>O</b> <sup>5</sup>
WA	5 Star Plus	<b>✓</b> <sup>7</sup>	<b>✓</b> <sup>7</sup>	<b>V</b>	<b>V</b>	X	X
TAS	-	<b>V</b>	<b>V</b>	<b>V</b>	V	<b>V</b>	<b>V</b>
ACT	-	V	<b>V</b>	<b>V</b>	V	<b>V</b>	<b>V</b>
NT	-	V	V	•	•	•	•

### **Regulation Overview**

WA (5 Star Plus) – Provides the option to install a 5 star high efficiency gas, heat pump or solar water heater. The heat pump and solar water heater must achieve a minimum energy saving of 60% when rated in climate zone 3, and tested in accordance with AS 4234-1994.

A \$500 rebate is also available for installing gas boosted solar on a new home with reticulated gas, or \$700 if running it on LPG. To qualify for the rebate, solar systems must have a 250L minimum capacity and a collector surface area of at least 2.7m<sup>2</sup>.

**SA (Mandatory Building Code)** – Provides the option to install a gas water heater with a minimum 2.5 star energy efficiency rating, high efficiency gas solution, heat pump or solar water heater. For unrestricted use in Class 1 buildings, the Heat Pump or solar water heater must be eligible for a minimum of 22 RECs.

Where reticulated gas is not available, electric storage water heaters can be used.

Between \$500 and \$700 in rebates are available for installing a solar water heater or heat pump on a new home. In gas reticulated areas, the solar system must be gas boosted, or can be a heat pump. In non-reticulated gas areas, an electric boosted solar system or heat pump can be installed. The \$700 rebate amount is for solar systems with a collector surface area of at least 3.5m² or a heat pump, whilst the \$500 rebate is for solar systems with a surface area of 3.49m² or less.

QLD (Sustainable Buildings) – Provides the option to install a 5 star high efficiency gas, Heat Pump or solar water heater. For unrestricted use in all Class 1 buildings, the Heat Pump or solar water heater must be eligible for a minimum of 22 Renewable Energy Certificates (RECs).

VIC (5 Star) – To comply with Plumbing Industry Commission (PIC) regulations in Victoria by installing a water heater, gas boosted solar must be used in reticulated gas areas. Where reticulated gas is not available, a Rheem Heat Pump or electric boosted solar water heater can be installed.

All products must be approved by Sustainability Victoria (SV), and rated for use in small houses (2 or less bedrooms) and large houses (3 or more bedrooms).

Other – Specific legislation relating to water heater installation currently does not exist in NT, Tasmania and the ACT.

NSW (BASIX) – Require house designs to meet an energy target up to 40%. The installation of highly efficient water heaters, including Rheem solar, heat pump and high efficiency 5 star gas products make achieving the target easier.

Building regulations also exist for Clas 2 buildings under BASIX. Due to their compact size and efficient operation, 5 Star instantaneous water heaters, including Rheem Integrity models are a popular choice amongst builders.

BASIX targets now also apply to renovations with a value greater than \$50,000.

Solar water heaters use roof mounted collectors to absorb heat energy from the sun which is used to heat water stored in a tank. They are highly efficient, cheap to run and help reduce the production of Greenhouse Gas Emissions (GGEs).

Solar water heaters are simply combinations of tanks, collectors and boosters, plumbed together as a system. Rheem offers both space saving, roof mounted Hiline products and discreet ground mounted Loline solar water heaters, in both direct and indirect models. See below.

Rheem can also provide expert knowledge and advice in regards to the correct selection and installation of solar water heaters, and even provides an award winning installation service.

#### **Direct vs Indirect**

In direct solar systems, water is directly heated in the collectors and transferred into the tank. These systems offer great performance in warm climates, however, in cold conditions water can freeze in the collectors, causing them to rupture. Corrosion and scaling in the collectors may also become an issue in areas with poor water quality.

Indirect systems use a glycol based Heat Exchange Fluid (HEF) in place of the water. The heat absorbed in the collectors is transferred from the HEF to the water. Able to withstand freezing down to -17°C, HEF will not freeze in Australian conditions. Unlike water, HEF is uncontaminated, ensuring collector and plumbing pipes remain in perfect working order.





- · Ground mounted tank
- · Direct design with partial frost protection

Loline 511

- · Single and multiple collector models
- · Electric and instantaneous gas boosted models
- Eligible for RECs
- 5 year cylinder warranty

#### Model No.

511270 511340 511430

- · Ground mounted tank
- · Direct design with partial frost protection
- Simple installation
- Multiple collector models
- · In-tank gas boosting
- Eligible for RECs
- 5 year cylinder warranty

#### Model No.

531260

## **Premier Loline**

- · Ground mounted tank
- · Indirect design with complete frost protection
- Tolerates most water qualities
- Single and multiple collector models
- · Integrated or remote gas boosting options
- · Electric and instantaneous gas boosted models
- Eligible for RECs
- 5 year cylinder warranty

#### Model No.

Gas Electric 596270 591270 590270

#### Compliance

QLD	<b>✓</b> 2
NSW	<b>✓</b>
VIC	✓3
SA	2
WA	√7
ACT	<b>✓</b>
TAS	V
NT	V

#### Compliance

QLD	<b>/</b> 2
NSW	<b>✓</b>
VIC	<b>Q</b> 4
SA	<b>√</b> 2
WA	<b>√</b> 7
ACT	<b>✓</b>
TAS	V
NT	V

QLD	<b>√</b> 2
NSW	<b>✓</b>
VIC	<b>√</b> ³
SA	<b>✓</b> 2
WA	<b>√</b> <sup>7</sup>
ACT	<b>✓</b>
TAS	V
NT	V









### Hiline

- Space saving, roof mounted installation
- Direct design suited to warmer climates
- Single and multiple collector models
- Electric and instantaneous gas boosted models
- Eligible for RECs
- · 5 year cylinder warranty

#### Model No.

52S160 52S300

# Premier Hiline Heat Pump

- Space saving, roof mounted installation
- Indirect design with complete frost protection
- Lightweight and durable Stainless Steel tank cylinder
- Single and multiple collector models
- Electric and instantaneous gas boosted models
- Attracts RECs
- · 6 year conditional warranty

#### Model No.

52H180 52H300 Heat Pump water heaters transfer the heat from the air to stored water in the tank. They are second only to solar in efficiency, yet as simple as a conventional electric water heater to install.

- Top down heating
- Easy to handle 2 part design
- Installed by conventional hot water trades
- · Quieter operation 51dB
- · Back-up heating element
- Eligible for RECs
- 5 year cylinder warranty

#### Model No.

551310

## Vulcan VS160

- Ground mounted tank
- Direct design with a patented frost protection system
- · Single collector model
- Partially assembled for easy installation
- Choice of continuous flow gas booster
- Excellent value
- Eligible for RECs
- 5 year cylinder warranty

#### Model No.

511160

#### Compliance

QLD	<b>/</b> 2
NSW	<b>✓</b>
VIC	√3
SA	2
WA	√7
ACT	<b>✓</b>
TAS	V
NT	V

#### Compliance

QLD	<b>√</b> 2
NSW	<b>✓</b>
VIC	✓3
SA	<b>/</b> 2
WA	✓7
ACT	<b>✓</b>
TAS	V
NT	V

#### Compliance

V 2
<b>✓</b>
<b>O</b> 5
✓2
<b>√</b> <sup>7</sup>
<b>✓</b>
V
V

QLD	<b>✓</b> 2
NSW	✓
VIC	<b>✓</b> 3
SA	<b>✓</b> 2
WA	<b>√</b> 7
ACT	✓
TAS	✓
NT	<b>V</b>

# High Efficiency Gas Solutions

Rheem 5 star gas water heaters provide lots of hot water, are highly efficient and cheap to run.

Rheem Stellar is a gas storage water heater with a huge capacity to deliver hot water and reheat it quickly. It is perfect for large homes with peak periods of hot water usage.

Rheem Integrity provides continuous hot water and is packed with features. Compact in size, they are easy to handle and install, and are ideal for space restricted applications.









### Stellar

- · Conventional installation
- Huge hot water delivery and recovery capacity
- Innovative styling complements modern home design
- · High pressure at multiple taps
- 10 year warranty\*

#### Model No.

850330 850360

## Integrity

- · Continuous hot water
- $\boldsymbol{\cdot} \, \mathsf{Compact} \, \, \mathsf{and} \, \, \mathsf{lightweight} \, \,$
- · Natural and Propane Gas models
- Easy to handle and simple to install
- FlameSafe<sup>™</sup> protection
- · Also available in 50°C models
- 10 year warranty\*

#### Model No.

**50°C Pre-Set** 871018 875018 871020 875020 871024 875024

871026 875026

## Accessories

There are a range of accessories to improve the finished appearance of your Rheem Integrity installation, protect it against theft and damage and provide convenient usage options.

#### Integrity

Temperature Controllers Recess Box Pipe Cover Set Security Bracket Security Cage

#### Compliance

QLD	V
NSW	<b>V</b>
VIC	<b>0</b> 4
SA	<b>V</b>
WA	V
ACT	<b>V</b>
TAS	<b>V</b>
NT	•

QLD	V
NSW	<b>✓</b>
VIC	<u>0</u> 4
SA	<b>✓</b>
WA	<b>V</b>
ACT	<b>V</b>
TAS	V
NT	•

# Storage Solutions

Whatever your requirements, Rheems large range of storage water heaters will deliver reliable, durable service.







## **Optima**

- Electric twin element and gas models
- · High pressure at multiple taps
- Proven performance
- Twin anode models offer greater durability
- · Easy to install
- 10 year cylinder warranty

#### Model No.

		Twin Element
811135	411250	462250
811170	411315	462315
	411400	462400

Electric Electric

### RheemPlus

- Factory fitted 50°C tempering valve
- Reliable performance
- · Electric and gas models
- Simple installation
- 5 year cylinder warranty

#### Model No.

Gas	Electri
314135	121125
314170	121160
	121250
	121315

## Rheemglas

- · Available in a wide range of sizes
- Indoor and outdoor models
- Reliable performance
- Available in gas, and single and twin electric element
- Simple installation
- 5 year cylinder warranty

#### Model No.

Gas- Outdoor		Electric	Electric Twin Element
311090	300135	111025	162160
311135	300170	191050	162250
311170		111080	162315
		111125	162400
		111160	
		111250	
		111315	
		111400	

#### Compliance

QLD	×	×		
	V	•		
VIC	<b>O</b> 4	<b>O</b> 4		
	<b>6</b>	<b>O</b> 5		
WA	×	×		
	V	V		
TAS	V	V		
NT				

#### Compliance

	Gas	Electric
QLD	X	×
	V	•
VIC	<b>O</b> 4	<b>O</b> 4
	<b>1</b> 6	<b>O</b> 5
WA	X	×
	V	~
TAS	V	V
NT		

	Gas	Electric
QLD	X	×
NSW	<b>V</b>	•
VIC	<b>O</b> 4	<b>O</b> 4
	<b>1</b> 6	<b>O</b> 5
WA	×	×
ACT	<b>V</b>	<b>V</b>
TAS	V	V
NT	•	

## Glossary of terms

**Solar water heater (SWH)** – A water heater that consists of a tank, solar collector(s) and booster plumbed together as a system whose primary means of heating water is gained from sunlight.

Collectors - Solar panels that form part of a SWH in which water or heat exchange fluid is heated.

**Booster** – A back-up electric heating element or gas powered water heater plumbed into the SWH to provide hot water in periods of low solar gain.

Split Systems – A SWH in which the tank is installed in a separate location to the collectors. Typically, the tank is installed at ground level whilst the collectors are mounted on the roof.

**Close Coupled** – A SWH in which the tank and collectors are installed together. Typically, the tank is mounted on the roof above the collector(s).

**Recovery** – The rate at which cold water can be heated.

**Greenhouse Gas Emissions (GGEs)** – Carbon Dioxide that is emitted into the atmosphere from burning fossil fuels to extract energy. GGEs are believed to contribute towards global warming.

Gas Energy Star Rating – A scheme for rating the efficiency of gas appliances, where 1 star is least efficient and 6 stars is most efficient.

Instantaneous Unit - A gas water heater that heats cold water 'instantly' as it is required.

Partial Frost Protection – Applies to 'direct' solar water heater systems that pump water through collectors to prevent freezing.

Complete Frost Protection – Applies to 'indirect' solar water heater systems that use an 'anti-freeze' heat exchange fluid, ensuring frost protection down to -17°C, regardless of power availability.

### **Solar Installation Service**

Rheem's innovative 'plonk-on' service employs professionally trained installers using specialised lifting equipment to complete the roof work component of the installation. The service currently operates in Sydney, Melbourne and Brisbane.

Call Rheem Service on 131 031 to book or enquire about this service.





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Conditions

- (1) Not all products comply with all building codes. Check with Rheem Australia for further information.
- (2) Conditions apply. Solar systems must be eligible for a minimum of 22 RECs for unrestricted use.
- (3) Conditions apply. Solar systems must be approved for use by Sustainability Victoria (SV).
- (4) May be used where a Sustainability Victoria (SV) approved rain water tank has been installed.
- (5) May be used where reticulated gas is not available.
- (6) Must be at least a 2.5 star energy efficient appliance.
- (7) Conditions apply. Solar systems and heat pumps must achieve 60% annual energy savings in zone 3.

