

THE TRUTH ABOUT HOT WATER IN YOUR HOME

ELECTRIC • GAS • SOLAR • HEAT PUMP • BOILING WATER



3RD EDITION

STEADY, HOT & STRONG

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THE HISTORY OF RHEEM

Rheem has been a trusted name in New Zealand since it began making gas hot water systems in Wellington in 1969. Rheem started with gas fired, mains pressure water heaters and low pressure electric cylinders and moved into electric mains pressure water heating in 1973.

Over the years, Rheem customers have enjoyed their hot water from products manufactured with the latest technology and renowned for both innovation and practicality. Rheem has always remained at the forefront of manufacturing techniques.

The Rheem name was established in the mid-1920s when brothers, Richard and Donald Rheem, acquired a galvanizing plant in San Francisco, California. They opened another plant near Los Angeles a decade later to make water heaters.

Today, Rheem New Zealand is a part of the worldwide Rheem family of companies, owned by Paloma in Japan.

In New Zealand, Rheem has led the development and marketing of Gas, Electric, Solar and Heat Pump water heating products with designs specifically suited to our unique environment and water conditions. Rheem has also established an extensive sales, service and parts distribution network to address the needs of NZ customers.

More technical detail is available at www.rheem.co.nz. It is also advisable to discuss hot water systems with a plumber or gas fitter as the existing systems and energy sources in your home can influence the choice of hot water system.

INTRODUCTION

Welcome to the third edition of “The Truth About Hot Water In Your Home”

Rheem are proud to bring you this easy-to-read reference guide that will detail not only the best water heating products on offer but also key information about hot water and its uses, volumes, heating, and energy alternatives.

Hot water is one of life's true luxuries. Imagine life without it! Hot water has long been recognised through history for its ability to bring people together. Many cultures have bathhouse and sauna facilities to relax in and communicate with family and friends. The bathroom in itself is often the place you go to

soak away tired muscles and rejuvenate body and soul in a peaceful, private way.

Around the home we take for granted the benefits and enjoyment of lots of hot water.

This reference guide will help you find the most energy efficient Hot Water Heating Solution for your specific needs. Thank you for taking the time to read our publication and should you have any queries or need additional information please visit our web site www.rheem.co.nz or call our information line on 0800 657 336.

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Special thanks to KOHLER, METHVEN and DORNBRACHT.

KOHLER images pages 8, 14, 18, 22 and 28.

METHVEN images pages 24, 27. DORNBRACHT images page 16.



HOT WATER BY RHEEM

Hot water is one of life's great luxuries.

Many New Zealanders take the availability of hot water for granted. The development of efficient, fast recovery water heating systems and the availability of reliable energy sources now provide the homeowner with a comprehensive range of options to suit all situations.

Quite simply, modern hot water systems provide a new level of enjoyment, comfort and hygiene that people could not have imagined just a few generations ago.

We're glad you chose to read this reference guide and inside we hope to answer all your questions about modern hot water systems. We will cover the complete hot water heating range now available, safety aspects of using and storing hot

water as well as the different energy options available and how to choose between them.

We have also detailed the complete range of water heating options including Industrial and Commercial water heaters as some bigger homes with spa and swimming pools, multiple bathrooms and guest houses may well be suited to these options.

Life's better with mains pressure hot water and we encourage our customers to take advantage of the luxurious use of hot water while benefiting from the energy efficient systems available today.

Rheem New Zealand is water heating. We'll make sure you choose the right water heating option first time.

Life's better with mains pressure hot water and we encourage our customers to take advantage of the energy efficient systems available today.

KEEPING UP WITH DEMAND

Keeping up with the demand for hot water in your home can be a challenge. A family of five living in a three bedroom home with one bathroom and two ensuites that has a conservative or careful use of hot water, will use far less hot water than a less conservative family living in a similar house but with one bathroom. We all have different circumstances and different needs. Teenagers use hot water like there is no tomorrow, yet others are more hot water conscious. Knowing when the hot water will be in demand can help plan and save energy while delivering the hot water when needed.

New Zealand's appetite for hot water has grown along with the size of our houses and the number of showers, baths, dishwashers

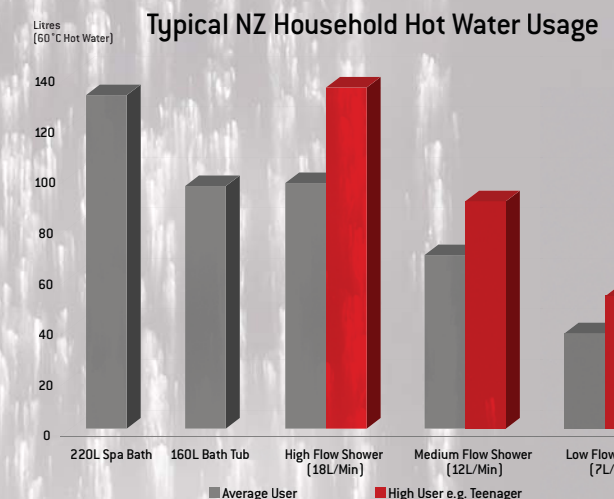
and washing machines we use. Then there are spa pools and spa baths, showers with multiple heads, swimming pools and on-demand boiling water.

In fact, the size of houses and number of bathrooms have been among the biggest changes in NZ's social fabric in the past few decades. Families may have become smaller overall but the number of bathrooms has more than doubled. And the key to it all is the delivery of an abundance of hot water.

This publication looks at all the different water heating options so you can make the right choice for your household needs.

Typical Water Usage

You may be surprised at how much hot water your family consumes each day. This chart gives you an idea of just how much hot water you could be using. To test your shower flow rate, take a standard 10 Litre bucket and fill it for 15 seconds from your shower head. Multiply the litres in the bucket by 4 and this will be your shower flow rate in L/Min. In order to reduce your water flow you can install flow restrictors or water efficient showerheads and taps.



The average shower length in New Zealand is 9 minutes. BRANZ Report SR159 (2007) www.branz.co.nz. All other flow rates, shower times and bath tub capacities used in this chart are estimates only and will differ between showers, baths and lifestyles.



— TYPES OF — WATER HEATING

There are many energy sources but only two types of water heaters.

Storage Water Heater

These are the well-known upright cylinders in our homes and they are generally heated by electricity or gas. Historically, storage water heating has been New Zealand's favourite hot water heating system. These Water Heaters can be installed inside or outside your home and supplementary heating from solar power or wetback stoves is also a possibility with some storage systems.

Gas Continuous Flow Water Heater

The Continuous Flow Water Heater uses gas to heat water when you need it, rather than storing it for use. In the right circumstances, this is an excellent source of endless hot water.

Energy Sources

These include electricity, gas (LPG or Natural) and renewable energy sources such as the sun, the air, wood and even pellet type fuel sources. What's more, you can combine energy sources for incredibly efficient and environmentally friendly water heating solutions.

All in all, there are numerous ways to heat your hot water and the right option for you will depend on many things including your preferred energy source, whether you have a low or mains pressure water source, the number of people, showers and baths in your home, your climate zone and even the actual flow rate of your showers in litres per minute.

Confused yet? Don't be.

Rheem can make your water heater choice an easy one with a wide range of products to suit any need and any situation, including the following types of storage and on-demand water heaters.

Storage Water Heaters

Low Pressure Storage

(Typically electric but some gas systems exist)

Low Pressure storage is very common in older houses. Many of these units are now requiring replacement and better insulated cylinders are available. However homeowners are tending to replace these with modern mains pressure alternatives.

Mains Pressure Storage

The preferred option in modern homes, with mains pressure hot water delivering full water flows to multiple bathrooms and taps. If you are living in a residential area you will almost certainly have mains pressure at your gate. Many rural properties have pumped water supplies which allow for mains pressure also.

Now Mains Pressure systems are leading the way with a more efficient and economic performance that suits modern fittings and the latest appliances.

Heat Pump Water Heater

The most advanced water heating option currently available. Using similar principles to refrigeration to extract energy from the air, the heat pump transfers free heat from the air into the water for the most efficient method of mains pressure water heating all year round.

Solar

Utilises free energy from the sun with roof-mounted solar panels (collectors) as a heat source, then transfers the energy to a storage cylinder. This can be paired with electric and gas storage units for a reliable and energy efficient hot water system.

Continuous Flow Water Heaters

Continuous Flow

Gas Continuous Flow Water Heaters range in sizes depending on the amount of hot water they can deliver per minute. They don't store water – instead they heat water as it passes through the unit, providing a virtually endless supply of hot water. What's more, they can run on either LPG or Natural Gas.

Gas Condensing Boilers

The perfect solution for water based under floor and radiator systems. When combined with a storage tank (calorifier), a gas condensing boiler is capable of meeting the most demanding household hot water needs. Condensing Boilers are now the standard in many European countries — UK, Germany and Holland to name a few.

If you require further advice when selecting your water heater call 0800 657 336 and talk to one of our knowledgeable staff. We'll make sure you get it right first time.



HOT WATER SAFETY

Abundant hot water is a lovely thing, however almost 40% of New Zealand homes have hot water that's dangerously hot, and nearly 10% have water so hot that burns are inevitable. (BRANZ Research)

A safe bath temperature for young children is between 37°C and 38°C. When you are running a bath, always put the cold water in first and stay in the room to supervise. Test the bath temperature with the inside of your wrist before putting your child in.

At **70°C** the skin is burned instantly.*

Water at **60°C** will cause bad burns within one second.*

At **54°C** it takes ten seconds to burn.*

38°C is a safe bathing temperature.*

80°C

70°C

60°C

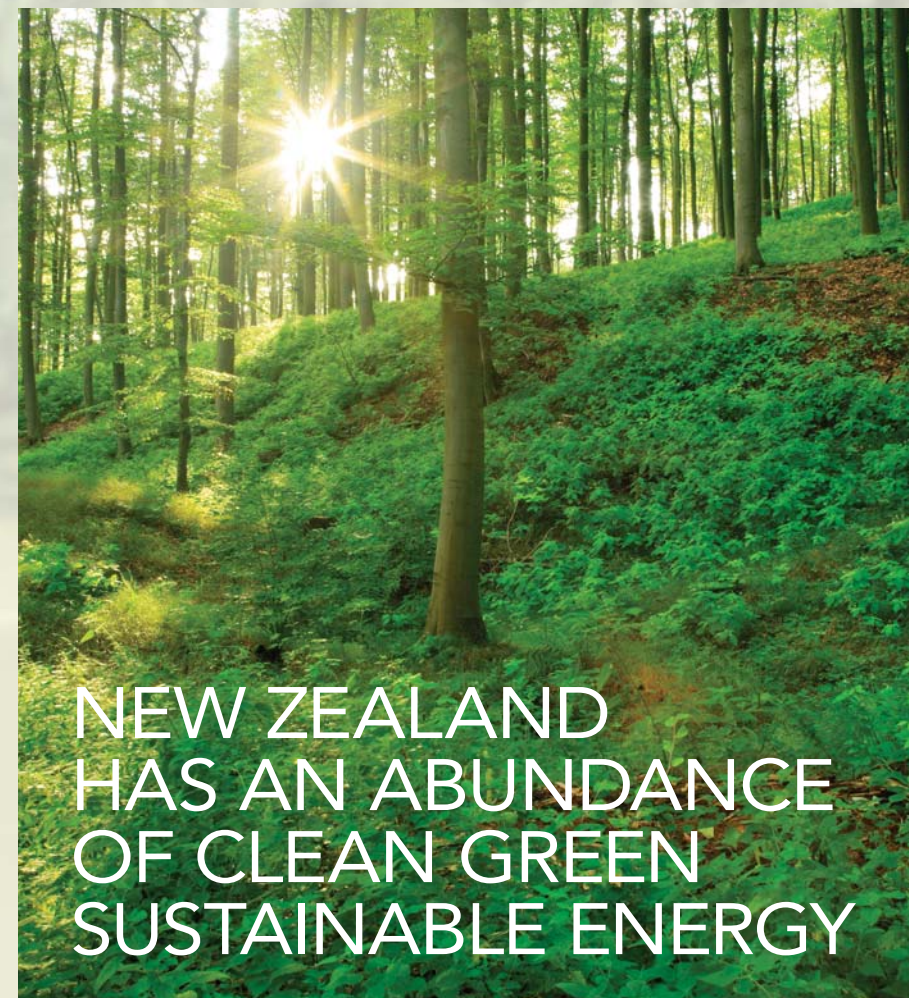
50°C

40°C

Hot water must be stored at 60°C or higher to eliminate the risk of Legionella bacteria growing. A tempering valve installed after your hot water cylinder or on the outlets for personal hygiene is the current required practice and safest way to supply hot water to your showers, hand basins and bath. This will provide safer hot water temperatures.

Some Rheem hot water storage cylinders have a user-adjustable temperature thermostat which should be set at 60°C minimum. A high quality continuous flow gas system such as the Rheem Continuous Flow has a preset 55°C electronic temperature setting. It also has the facility to connect kitchen and bathroom controllers which allows the homeowner to change the temperature to as low as 37°C — a great safety feature for filling a bath.

*Burns Injury. Retrieved August 13, 2009 from <http://www.safekids.org.nz>



NEW ZEALAND HAS AN ABUNDANCE OF CLEAN GREEN SUSTAINABLE ENERGY



New Zealand is in a unique position compared with most other countries. We enjoy electricity sourced from an abundance of renewable energy options.

Over half our generated electricity comes from hydro-electric power schemes situated in various parts of New Zealand. This is supplemented by geothermal generation located in the Central North Island. Our position astride the Roaring Forties offers outstanding opportunities for wind generation, with four existing wind farms and another 15 sites planned for development.

Solar and Heat Pump Hot Water technology continue to make steady gains as a supplementary source of energy in New Zealand. They can save up to 70% of a household's energy needs for hot water in ideal situations.



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CHOOSING THE BEST HOT WATER SYSTEM FOR YOUR HOME¹

How to use this EZ Guide

Answer the following questions. Add up the points for each one, then check your answer against the charts on the next page. The charts will give you options for products with either an Electric, Gas or Renewable energy source.

How much water will you use?

Points

1. What is the maximum number of people in your home?	People	1	2	3	4	5	6	7	8	9+	
	Points	6	12	18	24	30	36	42	48	54	
2. How many baths or spa baths do you have?	Bath/Spa Baths			0	1	2	3+				
	Points			0	10	20	30				
3. Do you have teenagers or soon to be teenagers? How many?	Teenagers			0	1	2	3	4+			
	Points			0	3	6	9	12			

How big is your home?

4. How many bathrooms do you have?	Bathrooms	1	2	3	4+		
	Points	0	0	18	36		
5. How many bedrooms do you have?	Bedrooms	1	2	3	4	5	6+
	Points	0	0	0	6	12	18

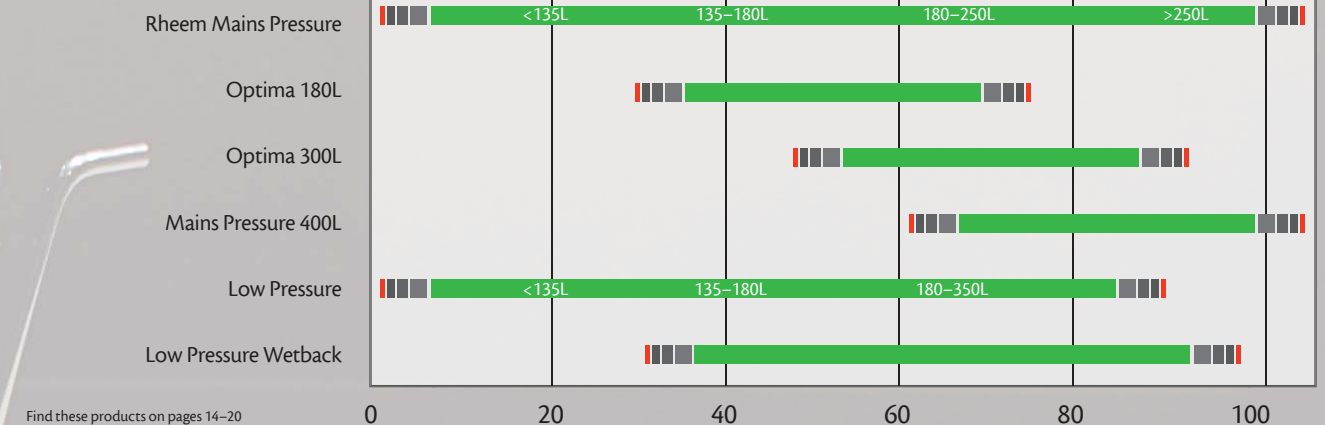
What is your likely usage pattern?

6. How good is your shower flow rate? NB: Multiply by number of people selected in question 1. (i.e. minus 2 x 4 people = minus 8 points)	Shower Flow Rate	Low	Medium	High	
	Points per person	-2	0	2	
7. How often are baths and showers taken at the same time in your home?	How often	Rarely	Occasionally	Often	
	Points	0	9	18	
8. Based on the map, which area of New Zealand do you live in?	Area	Zone 1	Zone 2	Zone 3	
	Points	0	6	12	
Total Points					

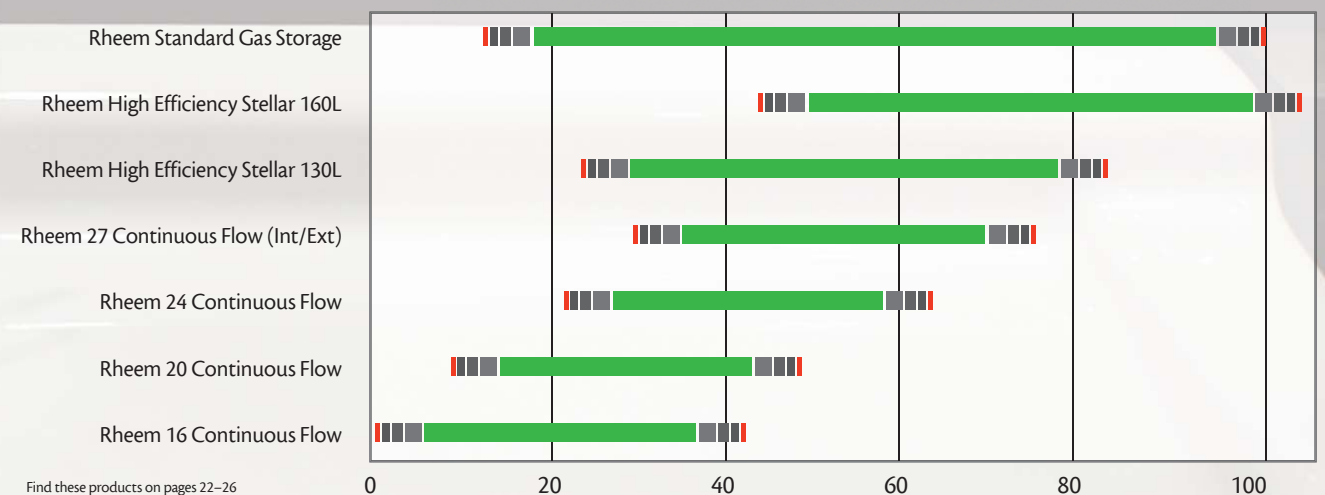


If you would like to discuss your options and/or which energy source is best for you please contact one of our experienced staff on 0800 657 336. This EZ Guide takes into account a moderate daily use of hot water usage in the laundry and kitchen.

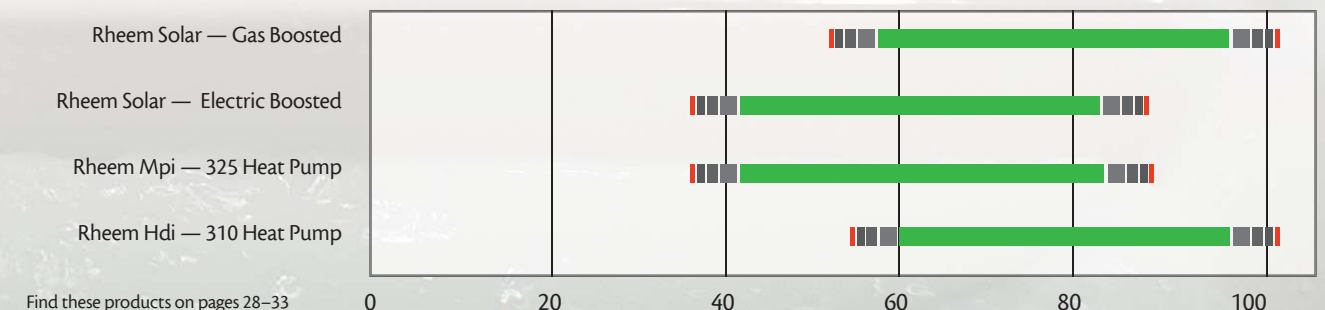
Electric Chart



Gas Chart



Solar/Heat Pump Chart



If you scored **over 100 points** you should consider installing 2 or more Rheem Water Heaters or upsizing to one of our Rheem Commercial Water Heaters. Call Rheem on **0800 657 336** to discuss the best option for you.

¹ Disclaimer: This EZ Guide is provided for guidance only. Professional advice should always be sought prior to final selection of a water heater. The following statistics and assumptions have been used in this EZ Guide.

The average shower is 9 minutes long and uses an average of 93 litres of mixed water. At a 60:40 ratio of hot to cold water the following estimates are derived:

- Low Flow Shower @ 7L per minute = 38L Hot Water Usage
- Medium Flow Shower @ 12L per minute = 65L Hot Water Usage
- High Flow Shower @ 18L per minute = 97L Hot Water Usage
- An estimate of 108L of hot water for an average bath or spa bath with a 60:40 ratio of hot to cold water (NB: Bath capacities and usage patterns can vary)

References:

- BRANZ Research 2003. Retrieved August 13, 2009, from http://www.branz.co.nz/cms_display.php?sn=55&st=1&pg=880
- Map of Climate Zones. Retrieved August 13, 2009, from <http://www.dbh.govt.nz/quick-energy-guide>
- Heinrich, M.(2007). Too much water makes you weep, BRANZ April/May 2007.



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RHEEM VITREOUS ENAMEL

Proven Technology for New Zealand

Rheem Vitreous Enamel (VE) water heaters continue to stand the test of time, confirming that this proven technology, formulated to suit New Zealand conditions, offers the most reliable long-term solution to water heating. VE, a tough durable coating fused to the inside of the steel tank, remains a mainstream, market-leading product with decades of development behind it. Rheem Vitreous Enamel water heaters provide the best corrosion resistance to a wide range of water conditions including varying pH levels, high chlorides, hard water and MIC (Microbiological Induced Corrosion) as found in parts of the country and areas with untreated bore water. Furthermore, VE lined steel cylinders are virtually immune to pitting, crevice, stress and intergranular corrosion, all of which can shorten the life of a metal tank.

Benefits of using Rheem Mains Pressure Vitreous Enamel Water Heaters

- Locally manufactured for New Zealand conditions
- Long lasting, proven technology
- Excellent resistance to corrosion
- Entirely inorganic, tough, hygienic and durable enamel coating
- Sacrificial anode adds further protection
- 7 and 10 year warranties backed by our nationwide service network
- Experienced customer service team
- NZ MEPS compliant

For further information on Rheem products and service call our Customer Service team on Free Phone 0800 657 336 or visit www.rheem.co.nz

Vitreous enamel is long lasting and proven. Rheem now offer a 7 Year Tank Warranty on standard Mains Pressure Electric.



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13.

ELECTRIC MAINS PRESSURE

Life's better with mains pressure!

As older cylinders need replacing, home owners are tending to go to mains pressure which can provide equal hot and cold water pressures throughout the house. This means a much wider range of tapware can be used, including local and imported ceramic cartridge mixers. The biggest benefit is the ability of the homeowner to enjoy stronger more luxurious showers and faster hot water delivery without temperature fluctuations.

When you upgrade from a low pressure cylinder to a Rheem Mains Pressure storage water heater you will get a stronger shower

pressure and up to 40 litres per minute to multiple showers and taps, and stable shower temperatures. You can also do the laundry or run a bath and still shower in comfort.

Rheem vitreous enamel lined cylinders are strong, durable and resistant to corrosion in a wide range of water conditions. Rheem incorporates the latest high quality tank insulation, surpassing New Zealand "MEPS" energy efficiency performance standards and most of the Rheem cylinders are made in New Zealand for New Zealand conditions.

Rheem Mains Pressure Electric

- Abundant hot water
- Suitable for all water pressures
- Vitreous Enamel lined cylinder
- Twin & dual element models
- Can deliver up to 40 litres of hot water per minute
- Surpasses MEPS energy performance standards
- Suitable for a wide range of water conditions

People 1-7

25L-300L

Indoor



Electric

Refer to Page 42 for full specifications

Rheem Mains Pressure Hot Water Cylinders allow a much wider and more modern range of tapware to be used.



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ELECTRIC MAINS PRESSURE


Rheem Optima

The Rheem Optima is a mains pressure electric storage system that is a family favourite with a size for every home. Suitable for indoor or outdoor installation and available in capacities from 180 to an impressive 300 litres. The Optima features a user-adjustable thermostat so you can dial up your perfect temperature setting. The 300 litre model features twin elements and the long life design attracts a 10 year warranty. Hot water delivery is up to 40 litres per minute and the larger models are also compatible with solar energy inputs.

These are ideal units for large families who want multiple showers and other hot water draw-off simultaneously. Rheem Optima also suits homeowners wishing to take advantage of night-rate electricity tariffs.

Rheem Optima

- Ultra long life design
- User adjustable thermostat
- Suitable for a wide range of water qualities
- Delivers up to 40 litres of hot water a minute
- Surpasses MEPS energy performance standards

People 2-7	180L-300L	Indoor & Outdoor	 Electric
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Refer to Page 42 for full specifications



Rheem Optima is a family favourite
with a size for every home.

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www.rheem.co.nz 17.

STAINLESS STEEL MAINS PRESSURE

Rheem is New Zealand's number one hot water provider and our range of Stainless Steel Mains Pressure Water Heaters are designed and assembled in New Zealand for New Zealand conditions. Manufactured from high quality Stainless Steel, Rheem Stainless Steel tanks are ideal for installation with a secondary heat source¹ that may exceed temperature limits of vitreous enamel cylinders; they can be installed indoors or outdoors and are able to be connected to a range of Heat Pump and/or Solar technologies¹.

Rheem Stainless Steel Water Heaters are available from 135L to 300L, and are designed and manufactured using advanced techniques to the highest quality and standards. In fact, all Rheem products meet rigorous industry standards for quality and reliability and are frequently tested and certified by various government and third-party testing laboratories to ensure the continued supply of quality products.

Our range incorporates numerous innovative features designed to ensure the highest performance and operating efficiency.

Key features of the Rheem Stainless Steel Mains Pressure Water Heater Range include:

- 135, 180, 250 and 300 litre capacities
- Indoor / Outdoor installation
- Direct connections for Solar/Heat Pump (Direct and top down sources)
- Stainless Steel tank to withstand high temperatures
- NZ MEPS compliant means better insulation and energy efficiency.
- User Adjustable Thermostat to control water temperature
- Double element option available for faster recovery
- 2 and 3 Kilowatt element options @ 230V
- Longer lifetime — 10 Year Warranty
- TPR valve setting — 1000kPa
- Lightweight and easy to install

Rheem Stainless Steel water heaters come with a ten year warranty when installed in accordance with the Installation Instructions and all relevant building codes and standards. The cylinder itself is guaranteed for ten years, while parts and labour carry a 12 month warranty.

All Rheem products are also backed by our nationwide service network and more technical detail on the Rheem range of products is available at www.rheem.co.nz

¹ 135L model is not Heat Pump/Solar compatible or recommended for installation with a secondary heat source.



Features

- Stainless Steel Technology
- Solar and Heat Pump Compatible*
- Designed and Manufactured by Rheem
- Suitable for a wide range of water conditions
- User Adjustable Thermostat
- Indoor/Outdoor Installation
- Future Proofed — Direct Connections*
- Incoloy Element
- Higher Working Pressure — 1000kPa
- Ease of Replacement — Diameters match popular Rheem Mains Pressure models
- NZ MEPS Compliant
- 10 Year Warranty**

ELECTRIC	1-7 PEOPLE	135-300L	Indoor/ Outdoor	10 YEAR WARRANTY
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* Excludes the 135L model. ** Refer to installation and owner's guide for warranty information.

Rheem Stainless Steel Mains Pressure Hot Water Cylinders are solar and heat pump compatible.*

Poor Water Conditions

While Stainless Steel Water Heaters are an attractive option, water quality can have a detrimental effect on water heater operation, components and life expectancy and may affect warranty.

Rheem Vitreous Enamel (VE) water heaters provide the best corrosion resistance to a wide range of water conditions including varying pH levels, high chlorides, hard water and MIC (Microbiological Induced Corrosion) as found in parts of the country and areas with untreated bore water. Contact the Rheem Customer Service team on free phone 0800 657 336 to discuss what option is best suited to your geographic location..



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ELECTRIC LOW PRESSURE

Rheem Low Pressure Electric


Low pressure cylinders were the only option available until the early 70's and tend to be fitted in older homes. Low pressure cylinders are identifiable by the copper pipe sticking straight up through the roof or the large pressure reducing valve on the inlet. If in doubt, turn your hot and cold water taps on full at the basin. If there is a big difference in flow, then you probably have a low pressure cylinder. They are a good choice for wetback systems and in situations where a replacement is required at the lowest cost possible.

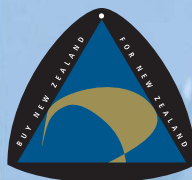
Wetback

Rheem New Zealand manufacture a range of pre-wired Wetback Water Heaters which come fitted with element and thermostat. From 135L to 270L as standard or give us a call for custom made options to suit your needs.

Rheem Low Pressure Electric

- Choice of 3 inlets
- Surpasses MEPS energy performance standards
- Tall, medium, short size options
- Custom built options

People 1-6	15L - 350L	Indoor	 Electric
Refer to Page 43 for full specifications			



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GAS STORAGE

Rheem has been the innovator and leader in gas water heating technology for many years.

Many people associate Rheem with electric water heating through our development of advanced mains pressure and heat pump systems.

We have always been leaders in gas water heating as well.

We started with the manufacture of gas water heaters in 1969 and maintain a commitment to advancing the technology of gas water heating. Vitreous enamel lined cylinders, double-flue kits to extract the maximum heat from the energy source, technology to prevent damaging condensation build up, dual-purpose condensing boilers, electronic temperature controls – these are all features developed by Rheem to maximise your comfort while minimising energy costs.

Rheem also leads the way in advanced Gas Continuous Flow technology developed and manufactured in Japan.

Rheem Stellar is the most efficient domestic gas storage water heater available in New Zealand

Rheem Stellar

- No electricity required
- Suitable for all water pressures
- Most efficient domestic gas storage water heater
- Advanced SuperFlue Technology
- Surpasses MEPS energy performance standards

People
2-6

130L - 160L

Outdoor



Gas

Refer to Page 31 for full specifications

Rheem Stellar

The king of gas water heaters. Designed for outdoor use and a leader in efficiency and economy. This unit features a twin-flue design that pulls the gas-heated hot air through the unit twice to recycle and condense the flue gases - maximising efficiency. The air exit temperature is less than 60 degrees – meaning it won't even melt a thin plastic shopping bag.

This is the most efficient domestic gas storage water heater available in New Zealand, breaking new ground in style and performance. With a flow rate of up to 40 litres per minute, this is the unit for homes with medium to high hot water use. Ideal for massage showers the Stellar will continue to deliver masses of hot water even when the electricity goes off.

If your home is heated with gas and you are cooking with gas, it makes sense to heat your water with gas.



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GAS CONTINUOUS FLOW

Continuous Flow Water Heaters deliver hot water that never runs out because they heat water when you need it.¹

Continuous Flow water heaters deliver hot water that never runs out because they heat water when you need it, for as long as you need it. They work differently to traditional storage water heaters, only heating on demand rather than heating and storing water. Rheem Continuous Flow water heaters mount conveniently to the wall, taking up less space. They are ideal when space is at a premium or when hot water is used sporadically, such as a guest bathroom or distant ensuite.

Rheem Gas Continuous Flow water heaters are a technically advanced continuous flow water heating system. They meet the IQ Function standard, offering the most accurate temperature control with advanced sensors and solenoid-controlled water flow valves to mix the heated water with cold for the perfect result. It will even recall latent heat — for a much more accurate water temperature, if the unit is turned back on within five minutes of its last use.

Generally, Rheem Continuous Flow water heaters operate at higher internal temperatures to prevent damaging condensation from forming.

Patented technology, the FlameSafe® safety mechanism, ensures the safest operation possible.

In homes where there is big demand for water, or in colder areas of the South Island where the ambient water temperature is low, two units (16, 20 & 27 models only) can be linked together using the Rheem EZ-link system to deliver twice the flow (32, 40 or 54 litres per minute).

The efficient cross over point for continuous flow heating is 135 litres per day. If your home uses more than that, a Stellar Gas Storage water heater will be a more efficient water heating option.

With a wide range of capacities, there is a Rheem Continuous Flow model for every budget and family.

Rheem Continuous Flow

- Flame Safe superior safety
- Optional Temperature Controllers
- Continuous hot water
- Built-in diagnostics & operational display
- Optional exterior recess box
- IQ intelligence built-in
- EZ-Link (16, 20 & 27 models only)

Bathroom 1–2	16–27L per min	Outdoor & Indoor	Gas
Refer to Page 45 for full specifications			



Models: 16, 20, 24, 27 Litres per minute available.
¹Providing gas, water and power available.

24/7 — 24L/min, 7 Star Equivalent

7 Star Equivalent energy efficiency.
24L/minute continuous hot water delivery. 93% Thermal Efficiency. Remote Temperature Controller options for added convenience and safety

Outdoor 27L/min

6 Star efficiency. Solar ready options — compatible with Solar systems, without the need for any additional valves. EZ-Link compatible (flexible delivery of any volume between 32 and 54 Litres/minute). Reduced water wastage – reduced flow during start-up.

Indoor 27L/min

6 Star efficiency. Indoor installation e.g. Hot water cupboard, roof space or garage. Centralised installation can minimise delivery delay to hot water outlets. Minimised risk of theft.

Outdoor 24L/min

Our most popular continuous flow water heater. 24L per/min. Digital display for easy fault diagnosis and service. Full technical support through the Rheem National Service Network. Unique Flame Safe overheat protection system.

Outdoor 16L & 20L/min

Ideal for homes which require less demand or for the holiday house or bach. Digital display for easy fault diagnosis and service. Full technical support through the Rheem National Service Network. Unique Flame Safe overheat protection system.



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WHY CHOOSE FROM THE CONTINUOUS FLOW HOT WATER RANGE?

- Never run out of hot water¹
- Range of capacities from 16 – 27 Litres/Minute
- Ability to deliver up to 54L/Minute by linking two units with the Rheem EZ Link system
- Flamesafe® overheat protection
- Digital display for easy fault diagnosis and service
- Frost protected down to -20°C (Standard for all models)
- Compact size models, perfect for any location with limited space
- Full technical support through the Rheem National Service Network
- Available to suit Natural Gas or LPG

¹ Providing gas, water and power are available.



YOU'RE IN CONTROL

Optional intelligent soft touch control pads (Standard and Deluxe available) allow easy setting of safe temperatures. Deluxe controllers also offer a "bath fill" mode and shut off safety features.



FLAMESAFE PROTECTION SYSTEM

A unique Rheem safety protection feature that automatically shuts down the Rheem Continuous Flow Water Heater should a fault occur.



6 STAR RATING

This is achieved reducing start-up water flow (less water wastage). 27L model only

6 Star and 7 Star
Equivalent Energy
Efficient models are
available for energy
savings and reduced
water wastage.



OPTIONAL RECESS BOX AVAILABLE

INSIDE

Rheem offers continuous blending which minimises cold spots and temperature fluctuations.



In homes where there is big demand for water, or in colder areas of the South Island where the ambient water temperature is low, two units (16, 20 & 27 models only) can be linked together using the Rheem EZ-link system to deliver twice the flow (32, 40 or 54 litres per minute).



10 YEAR WARRANTY

Rheem offer a 10 year warranty on the heat exchanger plus a 3 year warranty on parts and labour.



STEADY, HOT & STRONG

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ELECTRIC HEAT PUMP WATER HEATING

Heat Pump water heating — the world's most efficient way to heat water.

With up to 300% efficiency, the Rheem heat pump is the most efficient water heater in the range, yet delivers an abundance of hot water. The running cost is roughly one-third of equivalent electric water heaters. For example, a family using 250 litres of hot water a day and paying 22 cents per kilowatt hour for their power can save up to \$800 a year!

Excellent thermal insulation of heat pump cylinders ensures the efficiency is maintained and these units use the latest refrigerant, for maximum efficiency and long term reliability. The heat pump system works using the same principle as a fridge, with the expansion and compression of the gas removing energy from the air and transferring it to the water.

Rheem Heat Pumps also have a back up heating element as standard which activates in cold conditions, dependent on a combination of ambient air temperature and relative humidity. This is to ensure that a household's hot water needs are never compromised!

Relying on the principles and componentary of reverse cycle air conditioners, combined

with renewable air-sourced heat energy, heat pump water heaters provide similar benefits to a solar water heater without the need to install roof mounted solar panels. Through the use of refrigeration and air conditioning technology, heat is extracted from the surrounding air, concentrated and transferred into the stored water, discharging cold air back to the atmosphere.

By using the available ambient heat in the atmosphere, on average for every 1kW of electrical energy used to operate the heat pump control system, 3 kW of heat is transferred into the water. This makes the heat pump 300% efficient, using approximately 1/3 the electricity of a standard electric water heater. This saves up to 2/3 of a consumer's hot water energy consumption, which means lower operating costs compared to an electric water heater on continuous tariff. This also benefits the environment as it reduces demand for electricity.

Commercial Heat Pump also available.
(Refer to page 40)



How much could you save?

Monthly Power Bill	Electric Hot Water	Heat Pump Hot Water	Est. Annual Savings*
\$100	\$40	\$13	\$320
\$200	\$80	\$27	\$639
\$300	\$120	\$40	\$959
\$400	\$160	\$53	\$1,279
\$500	\$200	\$67	\$1,598
\$600	\$240	\$80	\$1,918
\$700	\$280	\$94	\$2,238
\$800	\$320	\$107	\$2,557
\$900	\$360	\$120	\$2,877
\$1,000	\$400	\$134	\$3,197

*Based on annual average heat pump water heater efficiency of 300%. Estimated annual savings have been rounded to the nearest dollar. Based on 22 cents per kW/h and 24 hour continuous tariff.

Rheem Heat Pump Hot Water — it's the way future generations will heat their hot water.

STEADY, HOT & STRONG

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ELECTRIC HEAT PUMP WATER HEATING

Save up to two thirds of your water heating bill*

Rheem HDi-310 Heavy Duty Heat Pump

The HDi-310 Heat Pump water heater is the perfect system for large families needing loads of hot water at an affordable rate. High recovery and with "top down heating", the HDi-310 will give you usable hot water in a hurry even if the cylinder is completely drained. The cold water is pulled from the bottom of the cylinder and heated in one pass through the heat pump module to 60°C and is then deposited back into the top of the cylinder.

The HDi-310 has a powerful 1200 watt compressor producing noise similar to that of a domestic air conditioner. Careful positioning should mean that this small amount of noise is never an issue. Unique to Rheem is the standard inclusion of a back up element to ensure adequate hot water delivery in even the coldest conditions.

Reduce your carbon footprint by up to 3.6 tonnes of CO₂ per year and help the planet.

Heat Pump Hot Water — it's the way that future generations will heat their hot water.

Rheem HDi-310 Heavy Duty Heat Pump

- Up to 300% efficient
- Top down heating
- Reduces greenhouse gas emissions
- Save up to 2/3 of your water heating cost

People 3-6	310L	Outdoor Install	Electric
---------------	------	--------------------	----------

Refer to Page 46 for specifications

*Based on annual average heat pump water heater efficiency of 300%.



Rheem MPi-325

Mains Pressure Heat Pump

Designed with the smaller family or couple in mind, the MPi-325 can provide hot water at a third of the cost of a standard water heater. A smaller compressor allows a lower operating noise level making the MPi-325 one of the quietest on the market. The large 325 litre cylinder means the heat pump runs at a constant optimised rate topping up as water is drawn off. Although the cylinder is 325 litres this system would suit a household using up to 250 litres of hot water per day.

A back up element is also standard with this model and the simple two piece design allows for easy installation by one person.

Rheem MPi-325 Mains Pressure Heat Pump

- Whisper Technology
- Up to 300% efficient
- Reduces greenhouse gas emissions
- Save up to 2/3 of your hot water heating cost

People 1-4	325L	Outdoor Install	Electric
------------	------	--------------------	----------

Refer to Page 46 for specifications

Rheem MPs-325 Split Heat Pump

The MPi-325 is also available as a split unit enabling the storage cylinder to sit inside through the wall from the actual heat pump unit (max distance of 4 metres). This is great for dwellings where space outside the building may be compromised due to paths or access ways.

The actual heat pump operating specs are the same as the MPi-325 integrated model except for details pertaining to the split installation.

Rheem MPs-325 Split Mains Pressure Heat Pump

- Whisper Technology
- Up to 300% efficient
- Reduces greenhouse gas emissions
- Save up to 2/3 of your hot water heating cost

People 1-4	325L	Indoor & Outdoor	Electric
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Refer to Page 46 for specifications



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31.

RHEEM PREMIER SOLAR

Rheem Premier Solar water heating takes advantage of the sun's free energy to create hot water. During the summer months solar heating can provide almost all your hot water needs.

Free energy from the Sun

There are four types of solar heating:

Open loop (or direct) where the water heated in the collectors is the same water stored in the cylinder.

Closed loop (or indirect) where heating fluid is passed through a heat exchanger in the cylinder.

Roof mounted where the collectors and cylinders are both mounted on the roof, using a thermosyphon to circulate the water.

Split system where the collectors are on the roof and the cylinder is at ground level, with a pump circulating liquid up through the solar collectors.



Closed loop, split solar is Rheem NZ's Premier Solar system which is designed for top performance in our environment, even when it is frosty or the water quality is poor. This revolutionary system combines Rheem NZ's high efficiency T200 collector with a heat exchange cylinder to heat and store 270 litres of water.

The closed system has heat transfer fluid — which drains back into the heat exchanger when the water is sufficiently heated, or is likely to freeze. This provides broad protection for the system, preventing calcium formation from poor quality water and also from overheating, freezing and stagnating. Sacrificial anodes in the vitreous enamel lined storage tank offer the longest term protection available.

For totally reliable water heating and protection from cloudy days, solar should be backed up with another heat source. The Rheem Premier solar system can be supplemented by an internal electric heating element or a remote Rheem Continuous Flow gas booster unit — powered by either natural gas or LPG. The electric boost provides 135 litres of hot water with an element rated at 3.6kW. Both activate automatically when the water temperature is less than 58 degrees.

Rheem provide a range of 'Solar Ready' storage tanks available for new homes or for replacing your existing hot water system. This means you'll be ready for a solar system when the time is right for you.

By future proofing your home, a solar ready storage tank means the added peace of mind that your home is ready to take advantage of renewable energy source at any time.

See www.niwa.co.nz for the sunshine hours in your local area.

Rheem Premier Solar

- Cut hot water heating costs by up to 70%
- Drain Back protection
- Option of electric or gas boosting
- Over heat protection built-in
- Storage cylinder can be installed indoors or outside your home

People
1-7

270L

Internal/Ex-
ternal Install



Refer to Page 47 for full specifications



Solar is wonderful free energy from the sun.



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33.

ELECTRIC BOILING WATER

Rheem. Ready when you are.

Rheem New Zealand's range of boiling, chilled and filtered water systems are designed to provide the best solution to our customers' needs, whether it's in the home, small office or a large factory.

We manufacture reliable and sophisticated boiling water solutions backed by over 40 years of market-leading expertise, a reputation for excellence and good old fashioned customer service.

Our commitment to innovative design and function is supported by our own research and development teams working in New Zealand, Australia and around the Globe.

We have developed the most innovative, functional, cost-effective products that also demonstrate our commitment to economic and environmental responsibility.

Design, Form and Function by Rheem

Rheem On-Tap instant boiling and chilled filtered water systems are engineered to fit in the tight spaces commonly found in the kitchen, boardroom or living area.

The Lazer range of overbench instant boiling water units are perfect for small businesses through to large commercial operations — with capacities ranging from 3–40 litres in three distinct styles and white or stainless steel finish options.

Energy Saving by Rheem

Rheem instant boiling, filtered and chilled water systems can reduce energy use by up to 40 per cent. The programmable sleep mode and timer systems will turn off heating energy when you don't need it, which adds up to a significant saving over a normal working week.

Nationwide Service by Rheem

All Rheem products are backed by an unequalled nationwide network of experienced sales and service centres, giving you the support you need, when you need it.

**Our passion is to
provide solutions
designed to meet
customer needs
and reduce our
impact on the
environment.**

1. Cup size is 170mL and glass size for chilled water is 200mL.

2. Potential energy consumption savings values are approximate and provided for general reference purposes only. Actual heat loss reductions will vary depending on the system installed, regional temperatures, geographical location and other factors.

3. Conditions apply. For full warranty and details please contact Rheem or see Installation manual.

RHEEM ON-TAP

**Stylish design, space-saving, safe and
energy-efficient.**

Performance that's Out of Sight

Many people spend half of their lives in the office. Modern offices are designed to make the working experience as efficient and pleasant as possible. The office kitchen is no different. A Rheem On-Tap system is stylish and locates all the 'plumbing' out of sight under the sink. The Rheem modular system gives high flexibility of installation on a sink or a bench top accessing under bench spaces that would not be possible with some other systems. With a Rheem On-Tap system there's no compromise on performance – instant boiling, chilled or filtered water from a great looking tap in a clean and uncluttered kitchen environment.

Instant Boiling Water with Rheem Reliability

No waiting for tea or coffee. Rheem boiling water systems can be always ready for action up to 170 cups per hour¹... and you know you can count on Rheem reliability as New Zealand's trusted market leader for over 40 years.

Chilled to Perfection

Chilled water is a delicious, refreshing option. Rheem On-Tap offer systems that provide both filtered boiling, filtered ambient or filtered chilled water.

Filtered Purity and Clean Taste

Many water impurities are filtered out reducing such things as lime-scale build-up. The On-Tap filter also removes non-water tastes such as chlorine. A filter light tells you when the filter needs to be replaced which can be easily done by the users. Clear, clean, pure water every time.

Child Safe

The Rheem On-Tap system has an optional setting for two fingered use so that boiling water cannot be inadvertently dispensed providing extra safety for young children and others at risk.

Energy Efficient

The 7 day timer means that you can have filtered boiling and/or chilled water when you want it and save energy when you don't. You can also set the hot water temperature to anywhere between 70 and 99 degrees... or let the system set itself which means you will always get boiling water.

Sleep mode turns the On-Tap system off when it hasn't been used for a specified time (usually 2 hours). With the combined use of the timer and sleep mode over a normal working week, a Rheem On-Tap system can reduce energy use by up to 40%.²

Stylish and Flexible Accessories

The Rheem On-Tap system operates on the bench over a sink or with a space-saving and sleek sink-free kit which includes a drainage gate and tap extension to deal with tall jugs, bottles, pots etc. Chillers require ventilation and Rheem offer a grill, exhaust, intake and fan system which can be located very discreetly at kick board level.

Warranty

Rheem On-Tap systems carry a 5 year warranty for tanks plus 1 year for parts and labour.³



RHEEM LAZER® OFFICE

Stylish and efficient

The Rheem Lazer Office offers simplicity with efficiency.

An attractive asset to any workplace kitchen or boardroom, Rheem Lazer Office is packed with performance features with a clean, sophisticated look. It is available in two stylish finishes — powder coat white and brushed stainless steel.

Easy to operate and keep clean, Rheem Lazer Office is available in three and five litre capacities — equating to 20 to 35 cups of ready to use boiling water and 103 cups recovery per hour.

The temperature can be set from anywhere between 70 to 99 degrees.

Perfect Fit

Among the features that ensure the Rheem Lazer Office is a perfect fit for the workplace are the stylish look and feel, an internal tap and protection against running dry.

Seven Day Timer

The built-in, seven day timer ensures there is boiling water at the ready when you need it, but saves energy when no one is around. The sleep mode automatically shuts down the Lazer Office if it hasn't been used for two hours. Combining these features can reduce energy use by up to 40%² over a normal working week.

Extended Warranty

Rheem Lazer Office carries a seven year warranty for tanks plus a one year warranty for parts and labour.³

1, 2, 3, 4 — Refer to notes on page 34.



Rheem Lazer® Office has a flush mount tap, built-in timer and display with an electronic controller that makes operation simple.



RHEEM LAZER® ECO

Energy reduction

Cost-effective Boiling Water

Rheem Lazer Eco is a cost-effective boiling water powerhouse designed for a wide range of installations such as the workplace or sports club.

Economic At Its Core

It's easy to use with a one-touch button to switch on "Eco Mode" which automatically turns the Lazer Eco off after two hours, reducing power consumption.

The indicator light shows red when heating and green when in energy conservation "Eco Mode", so you can see what it's doing at a glance. "Eco Mode" can reduce energy use by over 40%.²

Easy to Clean

The good looking white powder coat finish is easy to clean and the Lazer Eco comes in 3, 5 and 7.5 litre models delivering up to 50 cups immediately and 103–123 cups of boiling water an hour.¹

Automatic safety devices ensure the unit never boils dry and it also features automatic calibration of the boiling point for whatever altitude the unit is installed at.

The Lazer Eco comes with the reliability and back-up service you expect from Rheem,

New Zealand's market leader and most trusted name in water heating and boiling water for over 40 years.



Eco-mode is a unique one button control that gives you boiling water with reduced energy consumption.



RHEEM LAZER[®] COMMERCIAL

High Capacity

For the Busy Workplace

The Rheem Lazer Commercial is a high capacity boiling water system designed for the demands of a busy workplace, sports club, conference centre and more. The Lazer Commercial range has capacities of 7.5, 10, 15, 25 and 40 litres that can deliver from 50–247 cups of boiling water an hour and 103–241 cups per hour recovery.¹

Easy Operation

The features offered by the Commercial range of boiling water units include easy care and operation. The user friendly timer and controls are integrated into the fascia (Stainless Steel or Powder Coat White), leaving the surfaces smooth for cleaning. The control functions automatically return to your settings in the event of a power cut.

Energy Efficient, Smart Technology

The seven day timer ensures you have boiling water at the ready and turns the energy off when boiling water is not required. Sleep mode will turn off the system automatically when it has not been used for a set period of time. Combining the timer and sleep mode can reduce energy use by up to 40% over a normal working week.²

Extra Features

Automatic safety devices ensure the unit never boils dry and it also features automatic calibration of the boiling point for whatever altitude the unit is installed at. The high flow tap offers up to 35% faster filling.⁴

The Lazer Commercial is compact with a smaller footprint to make best use of the available space in your kitchen.

1, 2, 3, 4 — Refer to notes on page 34.

**The Rheem Lazer[®]
Commercial range can
deliver from around 50
to 247 cups of boiling
water per hour.**



STEADY, HOT & STRONG



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— COMMERCIAL & HIGH END — RESIDENTIAL HEAVY DUTY

Rheem Heavy Duty Electric

The Rheem Heavy Duty Electric range has been designed to be used whenever a large quantity of hot water is required. With recovery rates from 190 to 620 litres per hour the Heavy Duty Electric range is suitable for both indoor and/or outdoor installations and Equa-Flow.

Rheem Heavy Duty Gas

Rheem Heavy Duty Gas water heaters have been designed with the same principles in mind as our Heavy Duty Electric range; where large amounts of hot water are required. The cylinder is protected by multiple anodes and a double layer of vitreous enamel provides long life protection. So, if you require a water heater which is flexible, efficient and economical to run, the Rheem Heavy Duty model is for you.

Rheem Commercial Heat Pump

The Rheem Commercial Heat Pump is designed with the commercial user in mind. Up to 22kW output means over 6,500 litres of hot water can be produced per day. Only the world's best components have been selected to ensure optimal performance and durability.

Rheem Equa Flow

If you need large volumes of hot water, you need to learn about Rheem Equa-Flow. An Equa-Flow manifold system allows you to make multiple installations of up to eight Rheem water heaters on a single manifold. It's a modular system which lets you operate those eight heaters as though they were one.

Commercial Gas Continuous Flow

Rheem have 82° 27L Continuous Flow Gas Water Heaters available in both internal and external models.

Raypak Gas Commercial Water Heaters

Raypak Gas Commercial Water Heaters are compact and through their efficient heating design, are the ideal way to heat large quantities of water for both hot water and hydronic applications. Their thermal efficiency is an outstanding 82% and because they have Hot Surface Ignition (HSI), they save on operating costs too. Raypak's ceramic fibre refractory panels have an ingenious interlocking design which reduces heat losses and this gives you further savings. Raypak's compact design makes them easy to install.

Raypak Gas Spa and Pool Heaters

When selecting a spa and/or pool heater, it's important to consider the time it takes for the spa to reach the operating temperature. If you feel like a spa in the morning, you don't want to wait till evening to have it. We design our Raypak spa heaters to make sure you wait the minimum time for your spa. Normally it takes less than one hour to heat the average size spa.

Rheem Electric Dairy

The Rheem Electric Dairy cylinder range has 4 sizes to suit the needs of the most demanding workload, including 250, 350, 450 and 600 litre capacities. Designed and manufactured in New Zealand.



If you require more detailed information on Rheem commercial products - we have a commercial and industrial brochure available. Call 0800 657 336.



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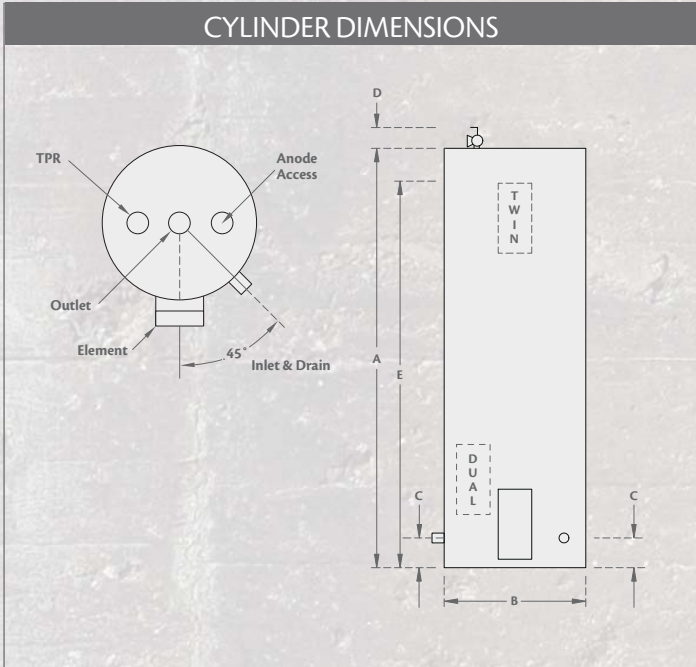
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41.



MAINS PRESSURE ELECTRIC — VITREOUS ENAMEL (VE)

PRODUCT		MODELS								
Rheem Single Element		31202519	31204515	31209015	31213513	32213515	31218013	32218015	31225015	31230015
					31213515		31218015			
Rheem Twin Element							31218025		31225025	
Dual Bottom Element										31230033 31230055
Rheem Optima							91318015			
Rheem Optima Twin Element										91330025
Initial Storage Capacity	Litres	25	45	90	135	135	180	180	250	300
Boost Capacity (Twin Element)	Litres						45		50	50
Height	A (mm)	385	535	955	1335	935	1720	1166	1560	1825
Width	B (mm)	405	488	488	488	580	488	580	580	580
	C (mm)	110	80	76	75	75	75	75	75	75
	D (mm)	N/A	120	120	120	120	120	120	120	120
	E (mm)						1430		1380	
Approx Weight Empty	kg	15	24	35	50	53	65	65	85	95
Relief Valve Setting	kPa	1400	1400	1400	1400	1000	1400	1000	1000	1000
Water Connections		RP 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20
Element Rating (@230V)	kW	2.4	3.0	3.0	2.0 or 3.0	3.0	2.0 or 3.0	3.0	3.0	3.0 or 5.0



1. Inlet/Outlet and TPR valve are side mounted on left-hand side of 31202519 and A46240088.
2. Inlet/outlet and TPR valve are side mounted on right-hand side of 91318015 and 91330025.

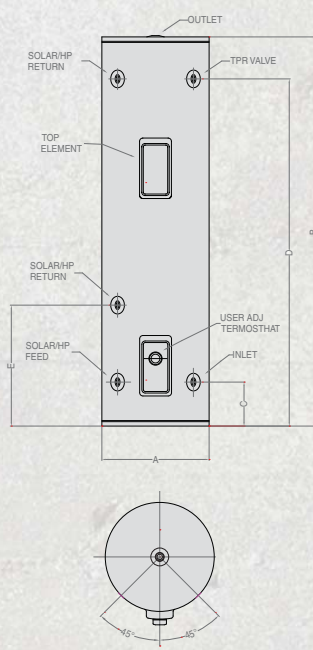


SPECIFICATIONS ELECTRIC (@230V)		
kW	RECOVERY ON A 50°C RISE	AMPS
2.0 kW	34 LITRES PER HR	8.7 A
2.4 kW	40 LITRES PER HR	10.4 A
3.0 kW	51 LITRES PER HR	13.1 A
3.6 kW	62 LITRES PER HR	15.7 A
4.8 kW	82 LITRES PER HR	21.0 A
5.0 kW	85 LITRES PER HR	21.8 A
6.0 kW	103 LITRES PER HR	26.1 A
2 X 3.0 KW	103 LITRES PER HR	26.2 A
2 X 5.0 KW	171 LITRES PER HR	43.6 A

MAINS PRESSURE CALORIFIER

Rheem Mains Pressure Calorifier	323180C5	313300C5
Initial Storage Capacity	180 Litre	300 Litre
Approx. Weight Empty	72 Kgs	102 Kgs
Relief Valve Setting	1000 kPa	1000 kPa
Water Connections	RP 3/4 / 20	RP 3/4 / 20
Element Rating	3 kW	3 kW
Coil	18 kW	18 kW

MAINS PRESSURE ELECTRIC — STAINLESS STEEL



RHEEM STAINLESS STEEL MAINS PRESSURE ELECTRIC*						NON-COILED CYLINDERS	
PRODUCT CODE		32513503-0	32513505-0	32518003-0	32518005-0	32525005-0	32530005-0
Storage Capacity	litres	135	135	180	180	252	295
Weight Empty	kg	29.5	29.5	37.5	37.5		
Inlet/Outlet Connections		RP ¾" / 20				RP ¾" / 20	
Solar/HP Feed Connection		N/A		RP ¾" / 20		RP ¾" / 20	
Solar/HP Return Connection		N/A		RP ¾" / 20		RP ¾" / 20	
TPR Valve Connection		RP ½" / 15				RP ½" / 15	
TPR Valve Setting	kPa	1000	1000	1000	1000	1000	1000
Dimensions:	mm						
A		488	488	488	488	580	580
B		1350	1350	1770	1770	1596	1846
C		195	195	200	200	164	164
D		1170	1170	1575	1575	1414	1666
E		N/A	N/A	550	550	564	564
F		45	45	45	45	4.0	4.0
Element Rating (@230V)	kW	2.0	3.0	2.0	3.0	3.0	3.0
Top Element Rating (kitset)		N/A	N/A	2.0	2.0	3.0	3.0

*250L and 300L models available late 2012.

LOW PRESSURE ELECTRIC

MODELS	CAPACITY (litres)	DIAMETER x HEIGHT (mm)	MODELS	CAPACITY (litres)	DIAMETER x HEIGHT (mm)
149 040 13	40	460 x 490	DAIRY – PRE-WIRED – ELEMENT & THERMOSTAT FITTED		
14T 090 13	90	510 x 795	109 250 1G	250	760 x 1270
14T 110 13	110	510 x 950	109 350 1G	350	760 x 1570
12T 135 13	135	610 x 800	109 450 1G	450	760 x 1850
14T 135 13	135	560 x 955	109 600 1G	600	835 x 1880
16T 135 13	135	510 x 1145	TWIN ELEMENT OPTION:		
18T 135 13	135	460 x 1465	WATER HEATER WIRED FOR SIMULTANEOUS ELEMENT OPERATION		
12T 180 13	180	610 x 1020	WETBACK – PRE-WIRED – ELEMENT AND THERMOSTAT FITTED		
12T 180 15	180	610 x 1020	145 135 13	135	560 x 955
14T 180 13	180	560 x 1225	165 135 13	135	510 x 1145
14T 180 15	180	560 x 1225	185 135 13	135	460 x 1465
16T 180 13	180	510 x 1512	125 180 15	180	610 x 1020
16T 180 15	180	510 x 1512	143 180 15	180	560 x 1225
149 225 15	225	610 x 1245	144 180 15	180	560 x 1225
169 225 15	225	560 x 1520	145 180 15	180	560 x 1225
149 270 15	270	610 x 1470	165 180 15	180	510 x 1512
149 270 25	270	610 x 1470	145 225 15	225	610 x 1245
169 270 15	270	560 x 1800	165 225 15	225	560 x 1520
169 270 25	270	560 x 1800	145 270 15	270	610 x 1470
149 350 25	350	655 x 1595	165 270 15	270	560 x 1800
54T 135 13	135	540 x 1045	UNDERBENCH UNITS PRE-WIRED – ELEMENT, ENERGY CUT-OUT & THERMOSTAT FITTED		
54T 180 13	180	540 x 1355	199 015 13	15	365 x 370
54T 180 15	180	540 x 1355	199 025 13	25	365 x 525
TANK UNITS PRE-WIRED – ELEMENT, ENERGY CUT-OUT & THERMOSTAT FITTED			199 040 13	40	460 x 490
T49 135 13	135	560 x 1240	HEAVY HEAD – PRE-WIRED – ELEMENT, ENERGY CUT-OUT & THERMOSTAT FITTED		
T49 180 15	180	560 x 1515	146 180 15	180	560 x 1225
			166 180 15	180	510 x 1512



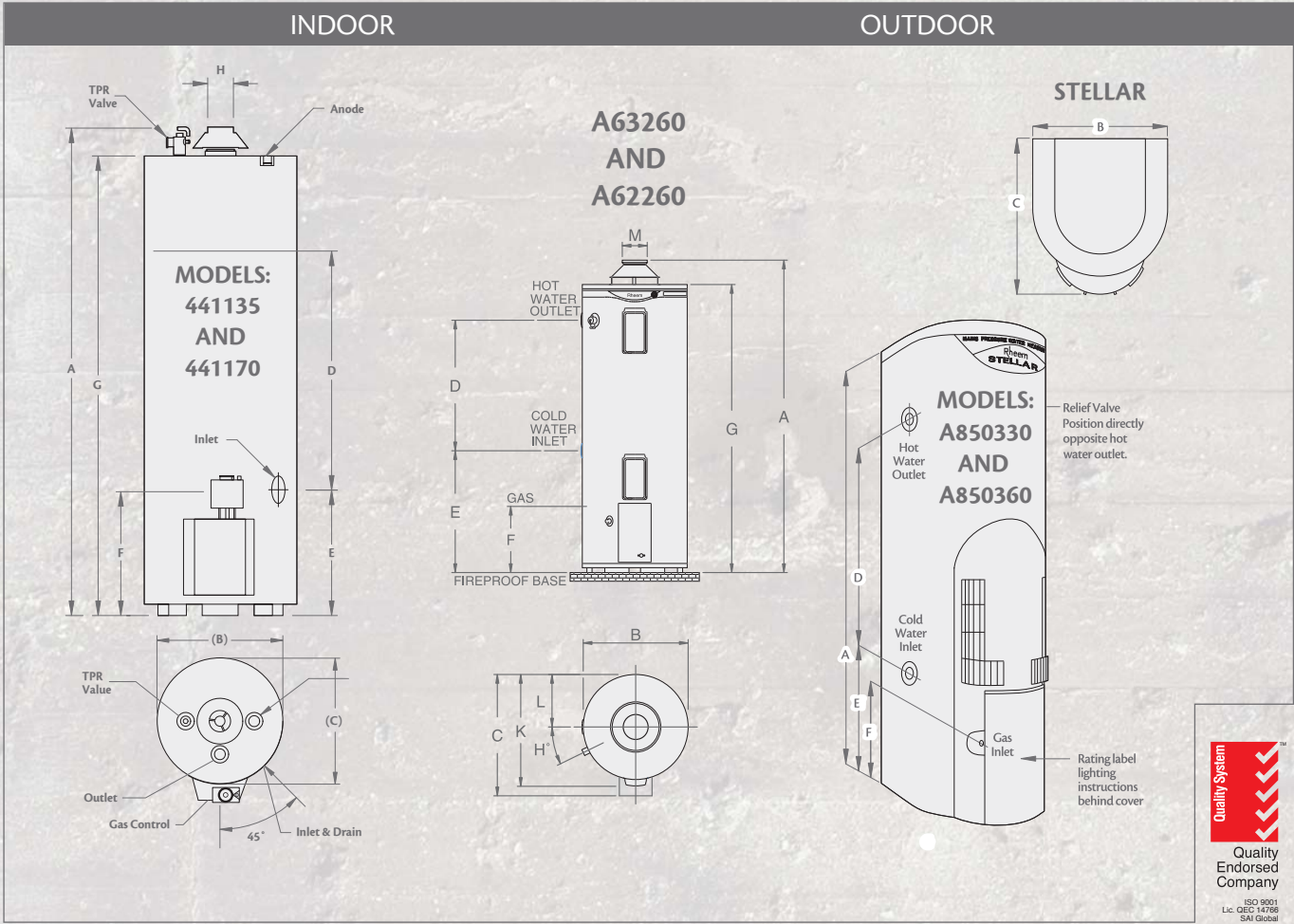
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GAS STORAGE

PRODUCT		OUTDOOR MODELS			INDOOR MODELS		
Rheem Gas Storage			A311170		441135	441170	
Stellar		A850330					
Heavy Duty				A63260			A62260
Storage Capacity	Litres	130	160	260	130	170	260
Recovery @ 45 C Natural Gas	Litres	200	175	210	110	126	210
**First Hour Capacity	Litres	330	335	470	240	296	470
Hourly Gas Consumption Natural Gas	MJ	42	40	50	29	33	50
kW Output	kW	10.5	9	11	5.8	6.6	11
Height	A (mm)	1600	1898	1640	1555	1855	1660
Width	B (mm)	485	422	595	430	430	595
Depth	C (mm)	558	502	670	515	515	670
	D (mm)	988	1213	990	N/A - Outlet on Top	N/A - Outlet on Top	990
	E (mm)	328	403	330	332	407	330
	F (mm)	298	298	295	300	300	295
	G (mm)		1778	1520	1475	1775	1520
	H (mm)				75	75	100
Approx. Weight Empty	kg	70	79	106	50	59	98
Relief Valve Setting	kPa	1400	1400	1000	1400	1400	1000
Max. Supply Pressure		1120	1120	800	1120	1120	800
Water Connections (LHS)		RP 3/4 /20	RP 3/4 /20	RP 1 1/4 /32	RP 3/4 /20	RP 3/4 /20	RP 1 1/4 /32
Gas Connection		RP 1/2 /15	RP 1/2 /15	RP 1/2 /15	RP 1/2 /15	RP 1/2 /15	RP 1/2 /15

**First hour capacity is a method of comparing the capabilities of different gas water heaters. Please contact Rheem for actual hot water delivery for specific applications.



STEADY, HOT & STRONG

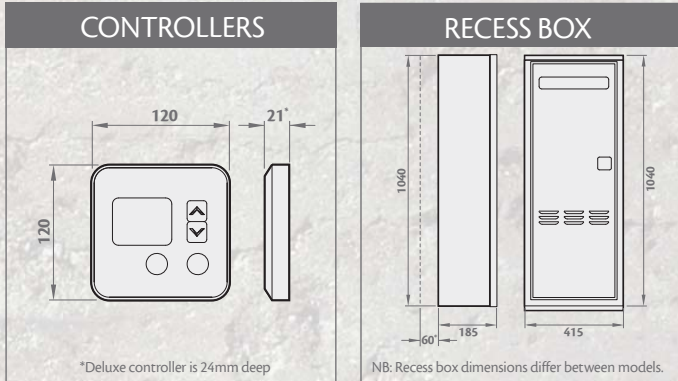
GAS CONTINUOUS FLOW

	RHEEM 16	RHEEM 20	RHEEM 24	RHEEM 24/7	RHEEM 27	INTERNAL 27
Model Number	874016NFZ/LFZ	874020NFZ/LFZ	A871024NFZ/LFZ	884024NFZ/LFZ	874627NFZ/LFZ	864627NFZ/LFZ
L/Min @25 C Rise	16L/Min	20L/Min	24L/Min	24L/Min	27L/Min	27L/Min
Gas Input Max.	126 MJ/Hr	153 MJ/Hr	188 MJ/Hr	162 MJ/Hr	205 MJ/Hr	205 MJ/Hr
Gas Type	NG or LPG	NG or LPG	NG or LPG	NG or LPG	NG or LPG	NG or LPG
Gas Connection	R 3/4 / 20	R 3/4 / 20	R 3/4 / 20	R 3/4 / 20	R 3/4 / 20	R 3/4 / 20
Min. Gas Supply Pressure NG/LPG	1.13 kPa/ 2.75 kPa	1.13 kPa/ 2.75 kPa	1.13 kPa/ 2.75 kPa	1.13 kPa/ 2.75 kPa	1.13 kPa/ 2.75 kPa	1.13 kPa/ 2.75 kPa
Water Pressure (kPa) Min-Max	140-1000	140-1000	140-1000	140-1000	140-1000	140 - 1000
Minimum Flow Rate	2.7L/Min	2.7L/Min	2.7L/Min	2.0 L/Min	2.0 L/Min	2.0 L/Min
Cold Water Connection	R 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20	R 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20
Hot Water Connection	R 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20	R 3/4 / 20	RP 3/4 / 20	RP 3/4 / 20
Approx. Weight	21kg	21kg	21kg	24kg	24kg	24kg
Freeze Protection	Yes	Yes	Yes	Yes	Yes	Yes
Unit Height (mm) A	520	520	565	604	601	651
Unit Width (mm) B	350	350	350	354	351	331
Unit Depth (mm) C	163	163	205	255	226	254
Hot Water Inlet (mm) D	126	126	132	117	132	132
Gas Water Outlet (mm) E	125	125	92	121	127	127
Cold Inlet (mm) F	43	43	21	22	28	28
(mm) G	45	45	103	97	97	103
(mm) H	43	43	53	66	64	70
(mm) J	51	51	127	110	84	91
Gas Energy Rating	5.3 Stars	5.1 Stars	6 Stars	6 Stars*	6 Stars	6 Stars

CONTINUOUS FLOW ACCESSORIES PART NUMBER

Horizontal Flue Kit Side Exit	318278
Horizontal Flue Kit Rear Exit	318279
Vertical Flue Kit	318280
Recess Box - For Rheem 27L	317695
Recess Box - For Rheem 16 & 20L	317714
Recess Box - For Rheem 24L	316383
Recess Box Kit Adaptor - For Rheem 16 & 20L	317618
Pipe Cover - For Rheem 27L	317694
Pipe Cover - For Rheem 24L	316381
Pipe Cover - For Rheem 16 & 20L	317612
EZ Link Cable	290141

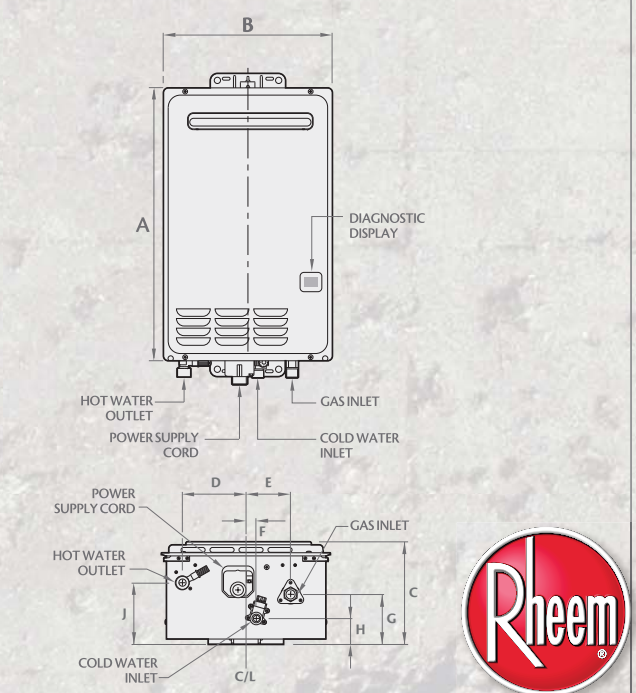
STANDARD TEMPERATURE CONTROLLERS	
Kitchen	A299850
Bathroom 1	A299851
Bathroom 2	A299852
DELUXE TEMPERATURE CONTROLLERS	
Kitchen	A299861
Bathroom 1	A299862
Bathroom 2	A299863



RHEEM 27 INDOOR FLUE SYSTEM

A certified Rheem coaxial flue system must be used with all Rheem 27 indoor models. There are three indoor flue kits available:- Horizontal Side Exit, Horizontal Rear Exit and Vertical. Please contact your local plumber, plumbing merchant or Rheem Customer Service on 0800 657 336 to discuss the best solution for your needs. The Rheem flue system uses a twin-pipe design (one pipe inside the other) ; an inner pipe of stainless steel for exhaust, and an outer steel pipe for inlet air. This flue system can exhaust either through a roof or wall. (Subject to Building Regulations).

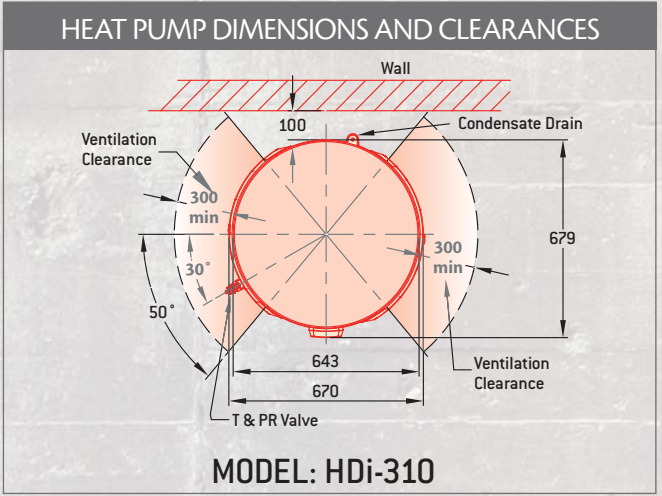
RHEEM CONTINUOUS FLOW SPECIFICATIONS



INSTALL A RHEEM™

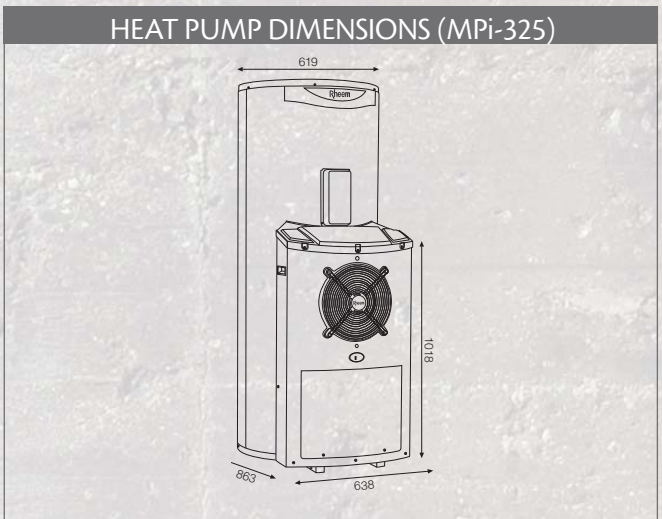
HDI-310 HEAVY DUTY HEAT PUMP

HDI-310		
MODEL NO.	A55131007	
Initial Storage Capacity	Litres	310
Height	(mm)	1870
Approx Weight Empty	kg	135
Relief Valve Setting	kPa	1000
Without Expansion Control Valve	kPa	800
Minimum Water Pressure	kPa	200
Water Connections	RP 3/4 / 20	
Element Rating	kW	3.6



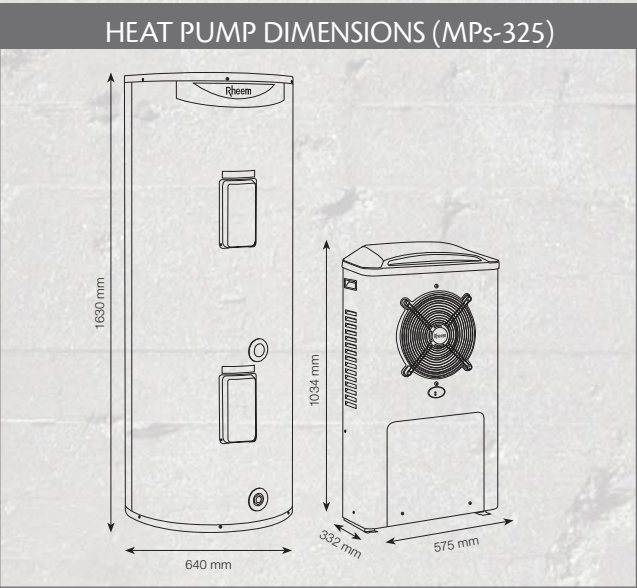
MPi-325 HEAT PUMP

MPi-325		
MODEL NO.	A55132507	
Initial Storage Capacity	Litres	325
Height	(mm)	1631
Approx Weight Empty	kg	136
Relief Valve Setting	kPa	1000
Without Expansion Control Valve	kPa	800
Minimum Water Pressure	kPa	200
Water Connections	RP 3/4 / 20	
Element Rating	kW	3.6



MPs-325 SPLIT HEAT PUMP

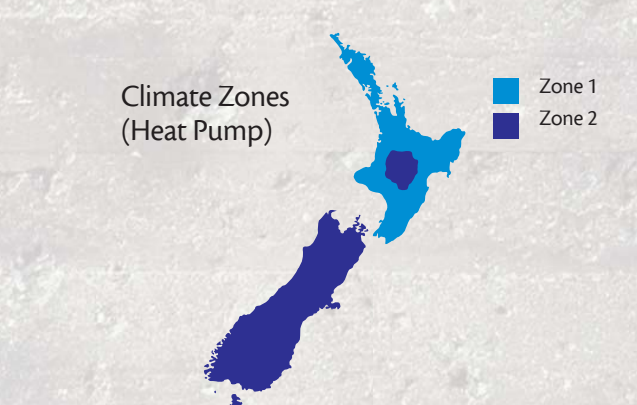
MPs-325		
MODEL NO.	A56132507	
Initial Storage Capacity	Litres	325
Height	(mm)	1631
Approx Weight Empty	kg	136
Relief Valve Setting	kPa	1000
Without Expansion Control Valve	kPa	800
Minimum Water Pressure	kPa	200
Water Connections	RP 3/4 / 20	
Element Rating	kW	3.6



PERFORMANCE

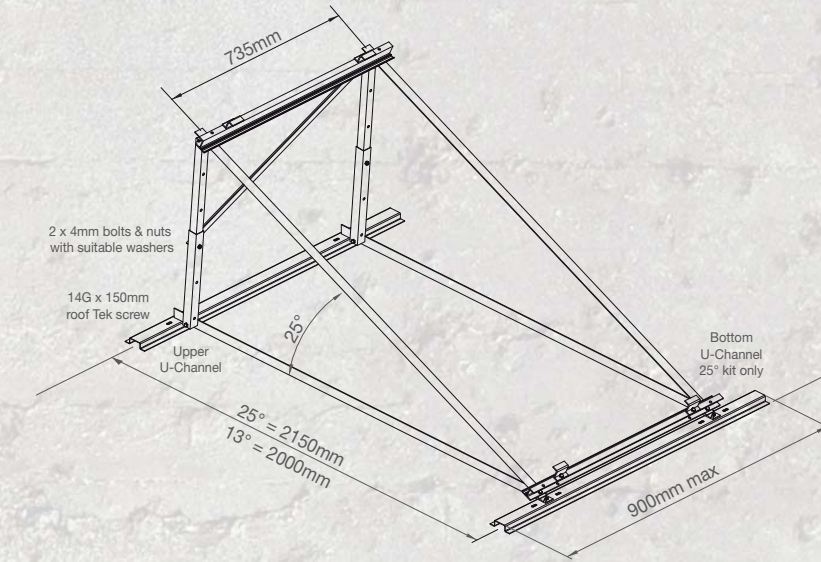
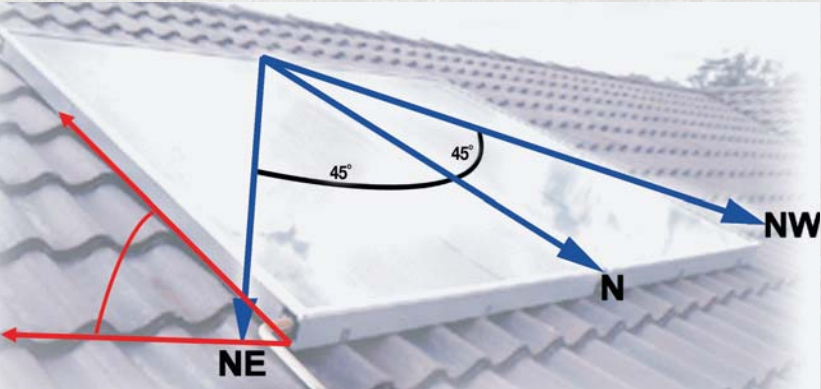
Model	Litres Per Hr	Ambient Air Temp (C)
HDI-310	55	10
	73	20
	92	30
MPi-325 / MPs-325	25	10
	34	20
	42	30

	ZONE	PEOPLE
HDI-310	1	3 - 6
	2	3 - 5
MPi-325 / MPs-325	1	1 - 4



PREMIER SOLAR

MODELS	
Electric / 2 Collectors	A591270/2T
Electric / 3 Collectors	A591270/3T
Gas / 2 Collectors	A591270/2TG
Gas / 3 Collectors	A591270/3TG
Storage Capacity	270 Litres
Roof Space Required	
- 2 Collector	2.4m x 2.0m
- 3 Collector	3.6m x 2.0m
Dimensions - Cylinder	H 1701mm x D 648mm
Weight Empty - Cylinder	146kg
Weight Empty - Collector	22kg
Temperature Pressure Relief Valve Setting	1000kPa
Expansion Control Valve (ECV) Setting	850kPa
Minimum Supply Pressure	150kPa (Gas boosted only)
Water Connections	
- Inlet	3/4 / 20 BSPF
- Outlet Tempered	3/4 / 20 BSPF
- Gas	3/4 / 20 BSPM
- Solar Flow and Return	1/2 / 15 BSPM



N.B. Collector size (1023 x 1941mm) is greater than frame size.

SIZING GUIDE	ZONE	PEOPLE	
BOOSTING TYPE		GAS	ELECTRIC
Moderate Climate	1	2 - 6	1 - 3
Cold Climate	2	2 - 5	1 - 3

MINIMUM PANEL INCLINATION ANGLE FOR LOCATIONS IN NEW ZEALAND

Auckland	20°	Hamilton	22°	Wellington	25°
Christchurch	30°	Dunedin	35°	Invercargill	37°

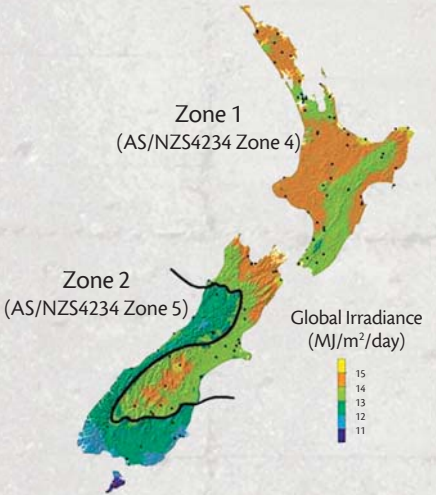
BOOST SPECIFICATIONS

Electric Supply Voltage	Volts 220-250
Available in 3.6kW (15 amp)	
Gas Input	MJ / hr 205
Available in Natural Gas and LPG	

SOLAR READY STORAGE TANKS – NON-COILED

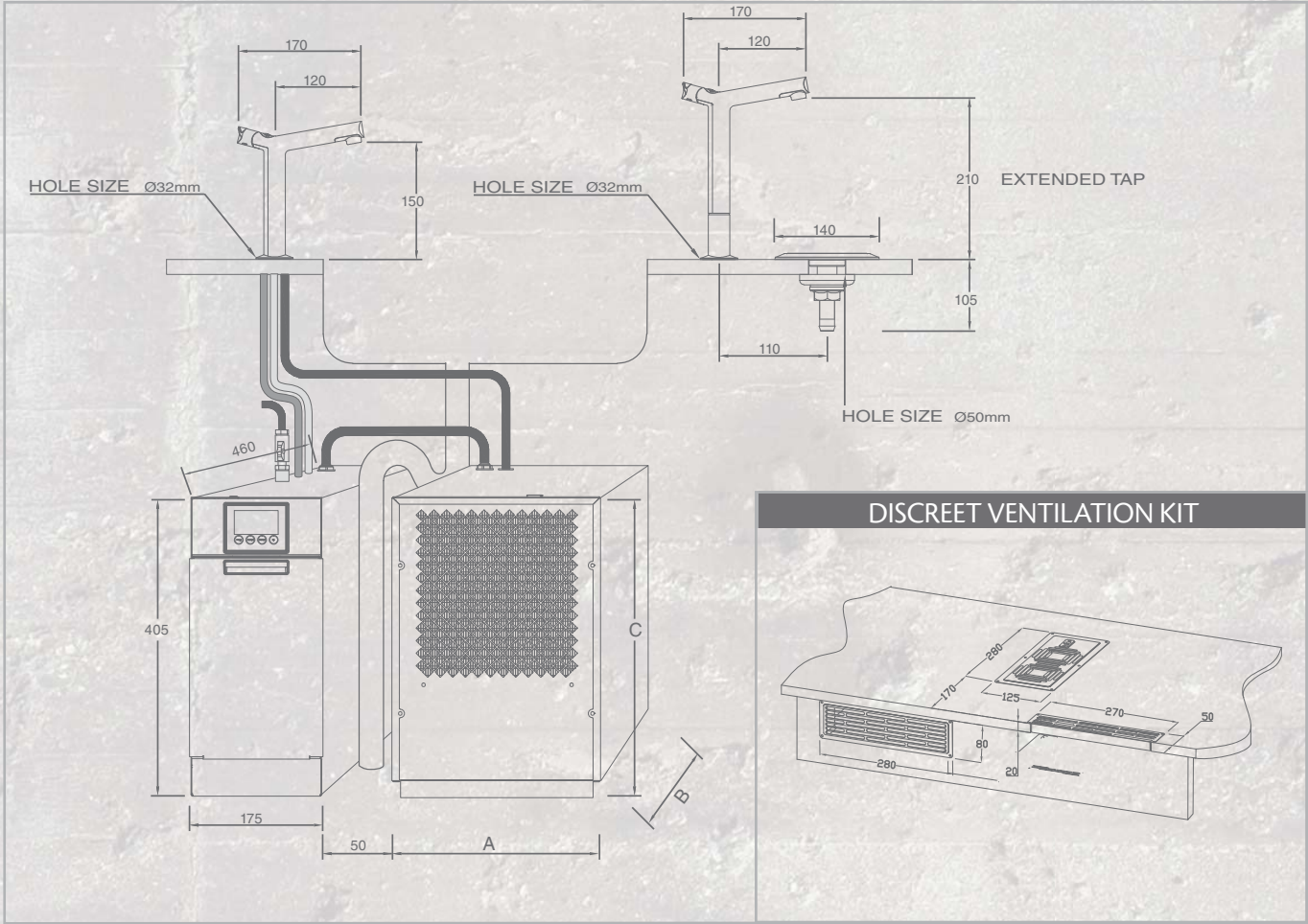
Model	A51127007	A51134007	A51143007
Boost Volume (L) 3.6kW Element	160	200	285
Height x Width (mm)	1395 x 638	1640 x 638	1836 x 686
Weight (kg)	70	87	111

AS/NZS4234 Climate Zones (Solar)



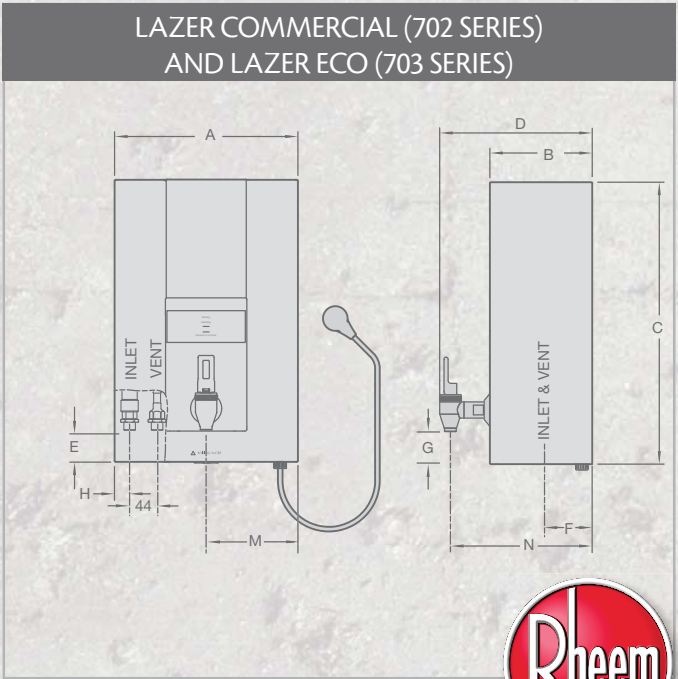
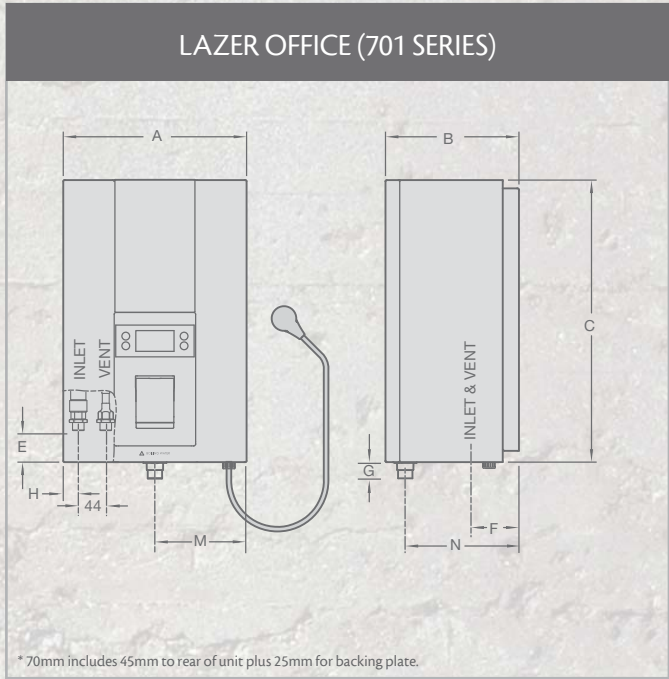
RHEEM® ON-TAP PRODUCT

Rheem on-tap Series		Filtered Boiling & Drinking Water				Filtered Chilled Water			
		Boiling 3L	Chiller 3L	Boiling 3L	Chiller 6L	Boiling 5L	Chiller 3L	Boiling 5L	Chiller 6L
White Powdercoat		740003PC-5	290250-3	740003PC-5	290251-5	740005PC-5	290250-3	740005PC-5	290251-5
Capacity	Litres	3	3	3	6	5	3	5	6
Delivery – Initial	Litres	4	3	4	6	5	3	5	6
	Cups	24	15	24	30	31	15	31	30
Recovery	L/hr	24	25	24	34	28	25	28	34
	- Cups per hour	145	125	145	175	170	125	170	175
Weight empty	kg	12	22	12	31	12	22	12	31
Weight full	kg	18	25	18	37	18	25	18	37
Min water pressure	kPa	100		100		100		100	
Max water pressure	kPa	1000		1000		1000		1000	
Input	kW	1.8		1.9		2.1		2.2	
Electrical connections		10 amp 3 pin plug & flex		10 amp 3 pin plug & flex		10 amp 3 pin plug & flex		10 amp 3 pin plug & flex	
Plumbing connections		½" BSPM		½" BSPM		½" BSPM		½" BSPM	
Dimensions	mm								
A - Width		175	282	175	282	175	282	175	282
B - Depth		460	430	460	450	460	430	460	450
C - Height		405	360	405	405	405	360	405	405
Accessories	Part No								
Sink-free kit	317453	Optional	-	Optional	-	Optional	-	Optional	-
Discreet ventilation kit	317255	-	Supplied	-	Supplied	-	Supplied	-	Supplied



RHEEM LAZER® PRODUCT DATA

Lazer Boiling Water Unit		Lazer Office		Lazer Eco			Lazer Commercial				
White		70103W-NZ	70105W-NZ	70303W-NZ	70305W-NZ	70307W-NZ	70207W-NZ	70210W-NZ	70215W-NZ	70225W-NZ	70240W-NZ
Stainless Steel		70103S-NZ	70105S-NZ				70207S-NZ	70210S-NZ	70215S-NZ	70225S-NZ	70240S-NZ
Capacity	Litres	3	5	3	5	7.5	7.5	10	15	25	40
Delivery – Initial	Litres	3.5	6	3.5	6	8.5	8.5	11	17	27	42
	Cups	20	35	20	35	50	50	65	100	159	247
Recovery	L/hr	17.5	21	17.5	21	21	21	21	21	33	41
	- Mins to full heat	12	15	12	15	22	22	29	40	40	50
Weight empty	kg	6	8	6	8	9	9	10	15	17	19
Weight full	kg	10	15	10	15	19	19	22	34	47	67
Min water pressure	kPa	50	50	50	50	50	50	50	75	75	100
Max water pressure	kPa	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Input	kW	1.8	2.4	1.8	2.4	2.4	2.4	2.4	2.4	3.6	4.6
Electrical connections		Supplied with 10 amp 3 pin plug and flex									Hard wired
Plumbing connections		1/2" BSPM									
Dimensions	mm										
A		283	334	283	334	334	334	334	334	334	490
B		206	239	158	191	191	191	191	299	299	340
C		435	465	435	465	515	515	615	515	720	615
D		-	-	231	264	264	311	311	419	419	460
E		60	60	60	60	60	60	60	60	60	60
F		70*	70*	45	45	45	45	45	45	45	45
G		25	25	44	44	44	58	58	58	58	58
H		17	17	17	17	17	17	17	17	17	17
M		141.5	167	141.5	167	167	167	167	167	167	245
N		174	207	236	269	269	269	269	377	377	418



STEADY, HOT & STRONG

INSTALL A RHEEM™

YOU'RE COVERED

When the time arrives to install your water heater, Rheem is New Zealand's most popular choice. Families looking for practicality and top-quality performance in Gas, Electricity, Solar or Heat Pump water heating can rely on Rheem to provide a system to suit their lifestyle.

Revolutionary Rheem developments ensure concerns for economy and environment are merged in cost effective, high performance systems for every home. For greater confidence, Rheem systems are backed by a national network of after sales professionals.

The Rheem Warranty and the Rheem After Sales Network ensures you of expert technical advice and fast service.

Water heater warranties are for single family premises in New Zealand only.

For full warranty details please contact Rheem.

www.rheem.co.nz



GREATER CONFIDENCE

Rheem Heat Pump

7 years cylinder,
2 years parts and labour.

Rheem Solar

7 years cylinder and collectors,
1 year parts and labour.

Rheem Optima

10 years cylinder,
3 years parts and labour

Rheem Mains Pressure Electric Gas

5 years cylinder,
3 years cylinder labour,
1 year parts and labour.

Rheem Mains Pressure Electric Stainless Steel

10 years cylinder,
3 years cylinder labour,
1 year parts and labour.

Rheem Mains Pressure Electric (VE)

7 years cylinder,
3 years cylinder labour,
1 year parts and labour.

Rheem Low Pressure

5 years cylinder,
1 year parts and labour.

Rheem Stellar

10 years cylinder,
1 year parts and labour.

Rheem Continuous Flow

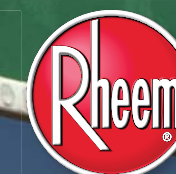
10 years on heat exchanger,
3 years parts and labour.

Rheem On Tap, Lazer* & Zip

5 years tank, 1 year parts and labour.
*Rheem Lazer Office comes with a 7 year tank warranty.

Contact Rheem Customer Service for more information on warranty details on 0800 657 336 or visit www.rheem.co.nz.

All specifications contained in this brochure are subject to change without notice. Please check the specifications are current at the time of ordering or building to incorporate the appliance. All information is current at the time of publication, (August 2012) but may change without notice.





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