

## HOT WATER SOLUTIONS FOR LARGE HOMES

#### SIZE REALLY DOES MATTER

Large homes require careful planning at design stage to ensure that expectations in regards to hot water supply can be met.

When using this guide to help choose the right hot water system, a large home is defined as any residential dwelling with 2 to 8 bathrooms. This also allows for additional fixtures in the home.

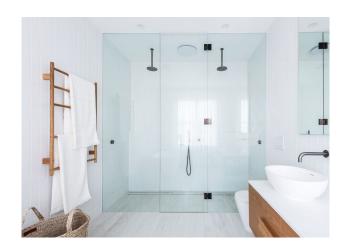


### COMMON HOT WATER CONSIDERATIONS

#### ► HOT WATER WAIT TIMES ARE INCREASING

The pipe length from your hot water system to the outlet is more critical than ever with the introduction of water saving taps. With lower flow rates comes longer waiting times for hot water. Even having your hot water system placed only 10m away from a basin means you will have to wait 45 - 60 seconds for hot water to be delivered.

With large homes, the hot water system can't be in close proximity to all outlets, meaning long waits are inevitable.



#### ► HOT WATER IS NOT HOT ENOUGH

The Australian standards dictate that shower and basins need to be limited to a maximum of 50°C. This is more than hot enough when it comes to personal hygiene, as most people shower between 38-42°C. However, to keep installation costs down during new home builds, a tempering valve is typically installed at the water heater, limiting all outlets to 50°C.

In this scenario, the closest outlet will have the hottest water whilst the furthest outlet could be lower again due to heat loss in the hot water pipe.

This could be problematic in the kitchen/laundry for washing up as 50°C or lower might not be enough to sanitize and remove grease.

Both laundry and kitchen outlets are not temperature limited, and can be set to temperatures above 50°C.







## THE SOLUTION IS A RING MAIN

#### **▶** BUT JUST WHAT IS A RING MAIN?

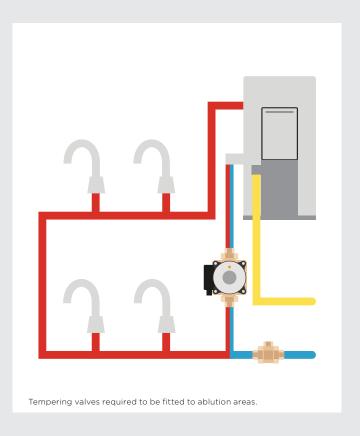
A ring main is a pipe that travels to the furthest outlet in the house and all the way back to the water heater. Hot water is circulated through this pipe using a pump located at the water heater.

As the hot water is circulating past all the outlets in the house ready to go, the wait time for hot water is reduced to a few seconds. Water is circulated at a minimum 60°C to control the growth of legionella. This means hotter water for cleaning in the laundry and kitchen is available. To make the bathrooms safe from scalding, they will need to be tempered to 50°C at point of use.

#### ► IS IT EXPENSIVE TO RUN A RING MAIN?

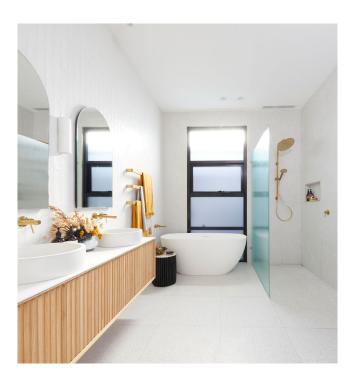
It is important to consider the cost to run a ring main. The pump will use very little electricity. What is more important is the heat loss from the ring main pipe itself. It's recommended to have at least a 25mm thick foam insulation on the ring main, and try to limit the pump to run at most 18 hours a day (6am to midnight).

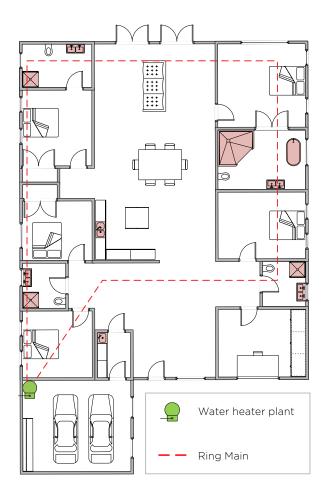
This can easily be done with the use of a timer. By following this, it will cost about \$1 a day to run.



#### **▶** WHY IS A RING MAIN AN IDEAL SOLUTION?

Whilst the house is being constructed, the ring main pipes can be concealed under the house, in the walls or in the ceiling, so there are no ugly pipes detracting from the overall look of the house. The ring main provides almost immediate access to hot water when an outlet is opened.





# From the perspective of supplying adequate hot water, a large home is defined as any residential dwelling with 2 to 8 bathrooms.

#### ▲ What's the best water heater for my house?

All of the below systems can be used with a ring main by adding a pump and a timer. See individual product specification for full details. The main consideration is the number of bathrooms, however if you want to be able to run bathrooms and kitchen taps all together, it's generally safer to upgrade to a larger capacity water heater.

Model	Features & Benefits	Number of Bathrooms	Domestic Warranty
THERMANN 32R GAS CONTRIBUOUS PLOW	<ul> <li>Can be fully recessed into the wall using a recess box</li> <li>Unlocked systems can be set up to 75°C, and can be used with a ring main</li> <li>Better warranty than competitor 32L models when used on a ring main</li> <li>20mm water connections</li> <li>External only</li> <li>Made in Japan</li> </ul>	2 - 3	No Ring Main:  12  33  44  45  45  45  45  45  45  45  45
Thermann Commercial 50L  THERMANN 50 COMMERCIAL	<ul> <li>Commercial grade</li> <li>Highest flow rate of any continuous flow water heater on the market</li> <li>Less pressure loss</li> <li>Condensing technology incorporating two heat exchangers delivers lower running costs</li> <li>25mm water connections</li> <li>External only</li> <li>Made in Japan</li> </ul>	3 - 5	No Ring Main:    12   3
Thermann PP1150	<ul> <li>Commercial grade</li> <li>Mains pressure hot water delivery with the efficiency of continuous flow</li> <li>Internal models don't affect the aesthetic of the house</li> <li>Can be enclosed inside as they have a room sealed flue</li> <li>32mm water connections</li> <li>Internal and External models available</li> <li>Australian made tank with Japanese made commercial continuous flow</li> </ul>	4 - 8	With & Without Ring Main:  12 10 10 10 10 10 10 10 10 10 10 10 10 10

### Reece. Works for you.™

Call **1800 032 566** or visit **www.reece.com.au** for your nearest Reece store. Due to limitations in the printing process the colours in this brochure are a guide only.

The manufacturer/distributor reserves the right to vary specifications or delete models from their range without prior notification. The manufacturer/distributor takes no responsibility for printing errors. Data in this brochure are correct as of 30/7/2020 - all information specification has been sourced off the manufacturers websites and brochures. #All products enjoy a product replacement warranty. For full warranty details visit www.reece.com.au/productquality



