

The Solution For You

How to decide which unit is right for your requirements.

Below are a number of examples, along with data to help you decide which unit is right for you.

There are a number of points to consider along the way - firstly, how many major outlets for hot water do you have to supply?

Baths require between 55 and 100 litres, Jacuzzis require up to 550 litres. (Baths allow 30 minutes duration).

Small Showers require 7 litres per minute, High Volume Showers require 11 litres per minute.

(Showers allow 10 minutes duration). Sinks require between 10 and 15 litres, Wash Basins require between 1 and 5 litres.

Direct	Indirect	Application	Commercial Selection Guide		
					Indirect
120L	90L	Flat	Large House	6 Bed / 4 Bathrooms	2 x 210L
150L	120L	1/2 Bed (1 bath/shower)	Guest House	8 Bed / 4 Bathrooms	2 x 300L
180L	150L	3 Bed (1 bath/shower)	Small Hotel	8 Bed / 8 Bathrooms	3 x 210L
210L	180L	4 Bed (1 bath/shower)	Sports Pavilion	25 People / 4 Showers	2 x 300L
250L	210L	4/5 Bed (2 baths/showers)	Sports Pavilion	25 People / 6 Showers	3 x 210L
300L	250L	4/6 Bed (3 baths/showers)	Student House	25 People / 3 Bathrooms	3 x 300L
-	300L	5/6 Bed (3 baths/showers)	Old People's Home	60 Bed / 10 Bathrooms	5 x 300L

Reheat Performance

Finally, you have to estimate the number of times any one of these outlets will be used before the unit has time to recover.

Indirect	Re-heat	Coil kW	Direct	Re-heat Time	Re-Heat Time
				One Element	Two Element
90L	13 Mins	16.5	90L	58 Mins	-
120L	17 Mins	16.5	120L	90 Mins	45 Mins
150L	17 Mins	18.9	150L	121 Mins	61 Mins
180L	21 Mins	18.9	180L	157 Mins	79 Mins
210L	22 Mins	18.9	210L	192 Mins	96 Mins
250L	28 Mins	21.4	250L	224 Mins	112 Mins
300L	36 Mins	21.4	300L	263 Mins	132 Mins

The reheat performance is measured from 15°C to 60°C after drawing off 70% of the capacity.

The coil kW rating is a guide to the minimum size of boiler required to achieve the reheat times stated. Faster reheat times are achievable using twin-coil Ultrasteel HE units. With both coils fed simultaneously, reheat times can be reduced to almost half. The boiler power required would double.

Flow Rates

UltraSteel Unvented Pressure v Flow Performance

Measured at 50% Backpressure to simulate the effect of the drawoff pipework and taps.

