

New Product Release >> **HEX 250 Hot Water System**



Experience Our Innovation

Rinnai Commercial HEX 250 Hot Water Tank

Not All Hot Water Tanks Are The Same

Rinnai expands the range of Commercial Water Heating Solutions with the HEX 250 reflecting Rinnai's global commitment to quality and innovation.

Removes Water Hygiene Issues With Large Hot Water Demand

The HEX250 is designed to manage water quality over an extensive range of commercial applications. It manages water quality issues by separating consumable hot water from the heat source. This ensures the heat source remains free of contaminants, resulting in greater overall efficiency and life.

Highly Efficient System To Suit Commercial Applications

The HEX250 system features a heavily insulated stainless steel tank and a set of stainless steel heat exchange coils. Heated water is stored within the tank. This energy is transferred through the heat exchange coils, heating the consumable hot water to deliver the desired outlet temperature. The innovative control system delivers a stable output temperature of 60°C.

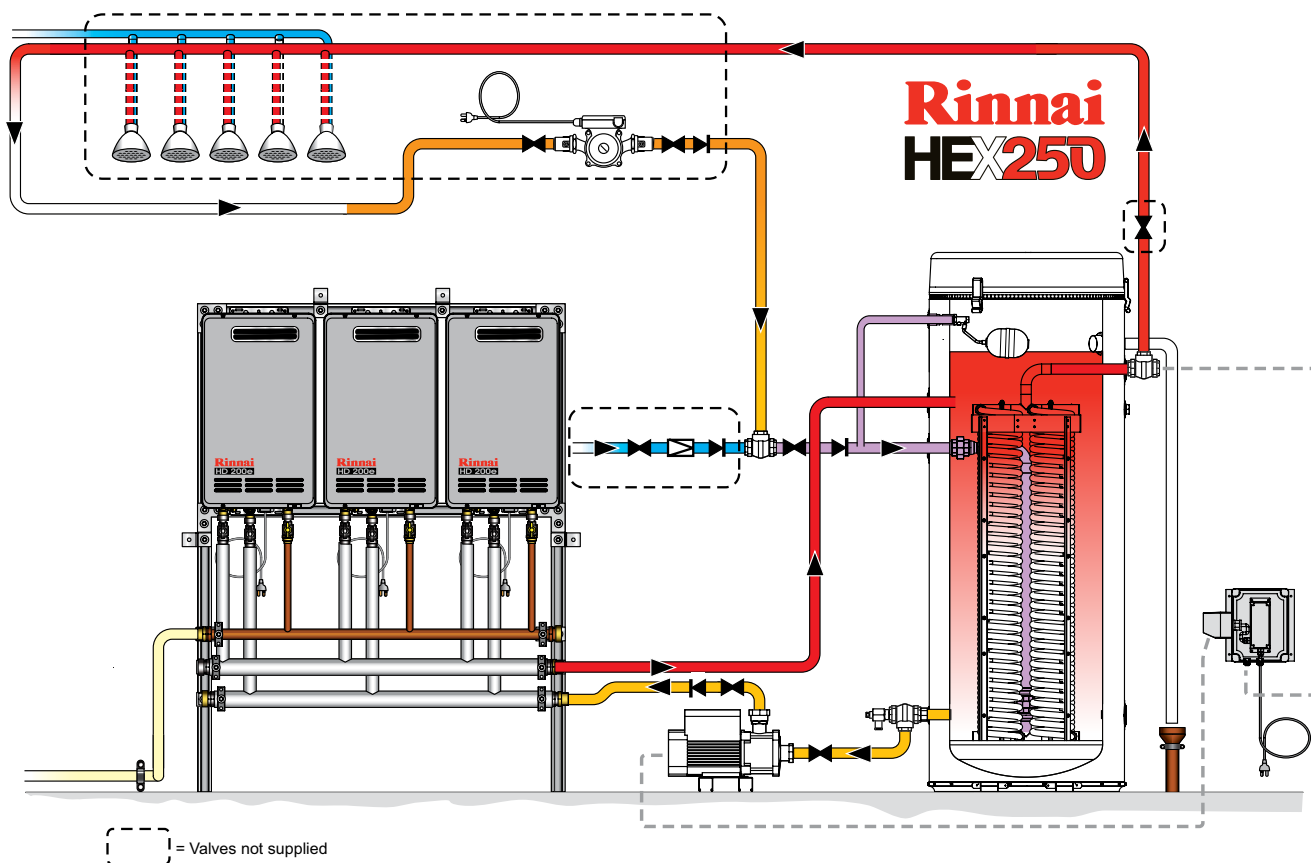
The Thermal energy stored in the tank ensures that the heat source does not activate every time a fixture is used. This saves energy and allows the heat source to operate at optimum performance.

The Heat Source

Built in modules using the dedicated Heavy Duty Continuous Flow water heater as the standard heat source. Rinnai Heavy Duty water heaters are highly efficient, ensuring minimal gas consumption. All models have full electronic ignition with no pilot light. Available in modules of 1,2 or 3 with the option of internal or external models.

Suitable For

- Hotels and Motels
- Apartments
- Shower Blocks
- Mining
- Health Care
- Commercial Kitchens
- Correctional Facilities
- Caravan Parks



System Design

Rinnai's commercial team can design a solution utilising HEX250 Systems to meet your brief, whatever the criteria. Rinnai adopt a modular approach: HEX250 tanks, pump kits and manifolded HD heaters are packaged separately for easy handling and positioning on site.

Designed and made in Australia and backed by Rinnai's global commitment to quality

HEX250 systems are engineered and manufactured by Rinnai in Australia. Our systems are backed by Rinnai technical service and support, providing a complete solution with the assurance of 40 years of trusted quality and workmanship.

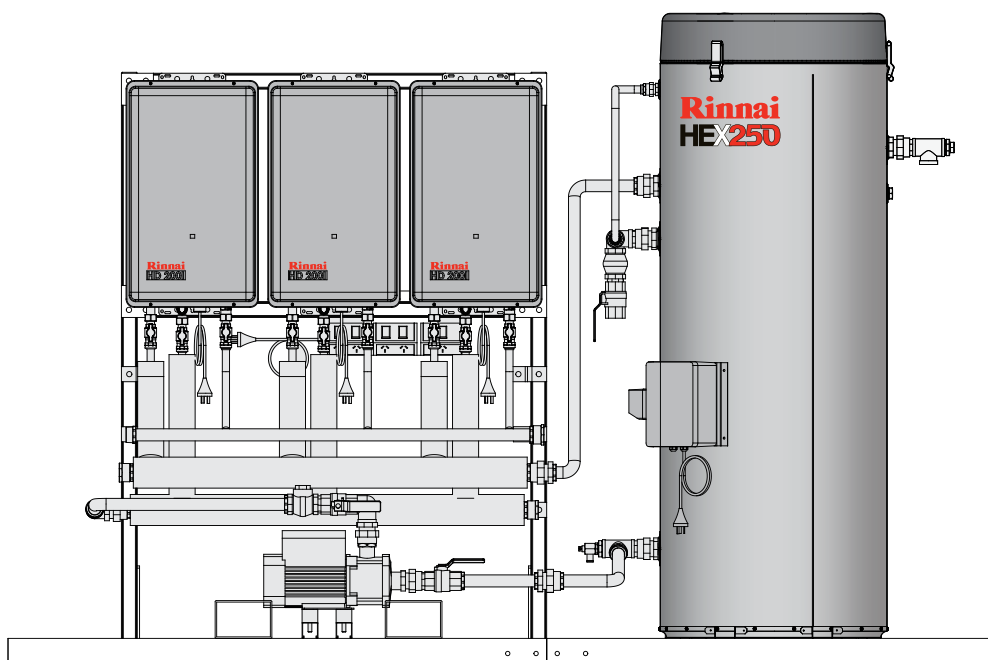
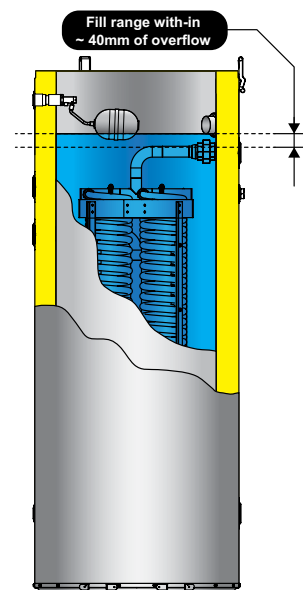
The Coils

The HEX250 coil set is made up of 4 replaceable 316 stainless steel / inox coils in parallel, delivering high thermal capacity, high flow rates and low pressure loss. As the 32mm headers are also stainless steel, all wet areas are designed to withstand corrosion and deliver long life. Alternate Coil material is available on request.

The HEX250 coil set is designed to deliver the hourly hot water demand as well as the higher than average peak flow rates experienced periodically. Selection for accommodation (apartments and hotels) will usually consider both the peak hourly demand and peak flow rate. Selection for shower blocks will usually consider the peak flow rate, as that is the key parameter.

Filling System

The HEX250 tank includes an industrial grade float valve to automatically maintain primary water levels, without the need for an external header tank.



Skid Mounted

Complete systems can be assembled and skid mounted in Rinnai Australia's state of the art factory using the same modular approach. Complete systems can be split into individual skids for transportation and lifting into position. Skid mounted systems require minor fit-off of electrical, cold, hot, return and gas connections before operation.

Design Consideration

Dual Circuit Hydronic Heating

The HD units heat the stored water in the tank. The thermal energy in this primary circuit can be considered as a heat source for non potable external processes, such as hydronic heating

Alternate Heat Sources

Other external heat sources can be used to heat the primary water, in place of HD gas continuous flow water heaters. Performance of these heat sources will influence the performance of the heat exchange coil set.

Selection Criteria

The following information is required to select a HEX250 system:

First Hour Hot Water Demand

- Temperature rise required. Assumed to be 50°C (15-65°C)
- Volume of hot water used per event (ie hot water flow rate x mins the fixture is operating)
- Number of times this event occurs (ie number of people showering per hour)
- Internal or external installation (ie whether a flue system is required)

Hot Water Peak Flow Rate

- Estimate 6.5 litres/min for a sink and 4.5 litres/min for showers when using 3 Star water saver fittings
- Multiply this by a diversity (10%-30% or more) for estimated number of fixtures operating simultaneously

Please note: For diversity calculation methodology contact Rinnai Commercial

Select the HEX system from the table below that can deliver both the hourly hot water demand and the peak flow rate.

Selection of DD HEX250 Hot Water Systems									
Apartments No of 2 Bedrooms	Hotels No of Beds 3 Star rated	Amenities No of 3 Star (AAA) Showers	First Hour Hot Water Delivery Litres 15-60°C	Recovery Rate Litres/Hour	Hot Water Peak Flow Rate (10 min Peak) Litres/Min	Selection External or internal	HEX250 Tanks	HD200 Gas Heaters	Full Load KW Capacity
11	33	4	820	720	20	1 x DD1HEX250200	1	1	45
21	53	7	1560	1440	32	1 x DD2HEX250F200	1	2	90
29	75	10	2300	2100	45	1 x DD3HEX250F200	1	3	135
42	108	14	3120	2820	65	2 x DD2HEX250F200	2	4	180
58	150	20	4600	4200	90	2 x DD3HEX250F200	2	6	270
88	227	30	6910	6300	136	3 x DD3HEX250F200	3	9	405
117	302	40	9200	8340	181	4 x DD3HEX250F200	4	12	540
146	377	50	11500	10440	226	5 x DD3HEX250F200	5	15	675

Flow Rate and Pressure Loss

When sizing building pipework and flow and return pumps it is important to take into consideration the pressure loss through the HEX250 at various flow rates.

Flow Rate Litres/Min Per Tank	10	20	35	45
System Pressure Loss KPa	10	35	80	130

Need Assistance?

Rinnai offers a service whereby we can assist with the design of your Commercial Hot Water system. This includes advice on the full range of Rinnai Commercial products including Heavy Duty Continuous Flow, Manifold Packs, Demand Duo, Solar Pre-heating, Warm Water Valves and Common Flueing. Please contact Rinnai Commercial on 1300 555 545.