

Rinnai

REFERENCE GUIDE



Commercial

Experience Our Innovation

Heavy Duty Units

What is Rinnai Heavy Duty Continuous flow?

The continuous flow is a hot water system that will never run out, providing a constant outlet temperature at all times. Rinnai Heavy Duty (HD) water heaters are a high efficiency gas continuous flow water heater with minimum 5 Star energy rating which ensures minimal gas consumption. All models have full electronic ignition with no pilot light and operating on demand only, consuming no gas when not in use.

What are some suitable applications?

- Cafés
- Child Care Centres
- Hair Dressing Salons
- Small Amenities Blocks
- Butchers
- Factories
- Laundromats with domestic style top loader machines

What clearances are required?

All Rinnai continuous flow HD water heaters are fan assisted. This means reduced clearances are required from doors and windows when compared to natural draft water heaters.

Internal: The unique Rinnai twin skin flue used with the internal HD200i is balanced and classifies the heater as a room sealed appliance. See flueing information on page 12.

What are the flow rates for the individual units?

The maximum flow rate through a continuous flow water heater is dependent on the outlet temperature.

Cold Water Temperature + Temperature Rise = Outlet Temperature

The maximum flow rate cannot be exceeded and will be limited to that flow rate to ensure that the temperature does not fall below the set point.

Model	Flow @ 20°C rise l/min	Flow @ 25°C rise l/min	Flow @ 35°C rise l/min	Flow @ 50°C rise l/min	Flow @ 60°C rise l/min	Flow @ 75°C rise l/min	Flow @ 85°C rise l/min
HD200e	32	26	18.6	13.1	10.9	8.7	n/a
HD250e	37	32	24.1	16.9	14.1	11.2	9.9
HD200i	32	26	18.1	12.7	10.6	8.5	n/a

- Outlet temperature preset and remains constant, even when flow varies.
- Factory preset 65°C standard. Other temperatures available on request to maximum indicated in the table on page 3.
- 50°C and 42°C preset options are available for ablution areas. State and Territory legislation dependent.
- HD250e set at 95°C is not to be used with heated incoming water or on re circulating systems.
- Maximum flow rate set at 60°C or above: 24/Lmin



HD200 External Model



HD200 Internal Model



HD250 External Model

Heavy Duty Selection Table

Model Identification			HD200e VRM2632WC	HD250e VRM3237WC	HD200i VRM2632FFU
Star Rating			5.6	5.3	5.0
Installation			External	External	Internal
Gas Consumption MJ/h (Hi / Low)	NG LPG		199/16 199/16	250/21 250/21	195/16 195/16
Gas Pressures Required kPa	NG LPG		1.13 - 2.75 2.75	1.13 - 2.75 2.75	1.13 - 2.75 2.75
Dimensions	mm	Width	350	470	350
		Height	600	600	600
		Depth	224	244	224
Weight			22 kg	29 kg	22 kg
Water Flow	L/min	minimum	2.4	2.4	2.4
Antifrost			Standard		Optional
Flue System	(FF=Forced Flued)		FF external	FF external	FF internal
Default Temp Settings	°C	with remote	40, 42, 50, 55, 60, 65, 75		
	°C	without remote	40, 42, 50, 55, 60, 65, 75, 85	40, 42, 50, 55, 60, 65, 75, 85, (95)	40, 42, 50, 55, 60, 65, 75, 85
Burner System			Low Nox, Multi Stage - Fully Modulating		
Connections	gas supply, cold, hot		R 3/4 - 20A (right), R 3/4 - 20A (centre), R 3/4 - 20A (left)		
Maximum Water Operating Pressure kPa			1000		
Maximum Outlet Temperature			85°C	95°C	85°C
Electrical Consumption (Watts) Normal / Standby / Anti frost protection			65 / 6 / 100	83 / 12 / 100	80 / 7.5 / 100
Ignition System			Direct electronic ignition with automatic flame sensing (230 / 240 V)		
AGA Thermal Efficiency Rating			85.4%	81.1%	81.1%
kW Output			45.9	58.9	44.3
Power Supply	Appliance		AC 240 Volts 50 Hz (10 Amp power point required)		
	Remote Control		DC 12 Volts (Digital)		
Colour			Titanium		

Rinnai reserves the right to modify specifications



Manifold Packs

What is a Rinnai Manifold Pack?

A Rinnai Manifold Pack consists of 2 to 6 Heavy Duty continuous flow water heaters plumbed together to allow higher flow rates than a single unit can provide.

What are the key features?

- Outlet temperature is preset and remains constant, even when the flow varies
- Peak flow rate cannot be exceeded
- No flow = no gas consumption
- No wasteful pilot lights
- Usually used for dead leg type installations, however ringmain pumps can be fitted if required*

Note: *Continuous flow water heaters used on flow and return ringmain systems must have correct pipe and pump selection. For further information, please contact your Rinnai Commercial Representative.

What are some suitable applications?

- Applications include (with suggested temperatures)
- Sporting Club Change Rooms - temperature set at 42°C or 50°C
- Shower Blocks in Caravan Parks - temperature set at 42°C or 50°C
- Cafés, Restaurants and Pubs - temperatures set at 65°C
- Hot Water Hoses and Manufacturing Processes - temperature set at 75°C or 85°C

What will the system offer your application?

Energy savings, as there are no tank heat losses, pilot lights and the system only uses gas when in operation. Endless hot water for applications where there is a peak demand for only a few hours and then either low or no demand for hours, days or weeks at a time.

What temperature settings are available?

- All HD units are factory set to 65°C as standard
- Temperatures that can be set include: 40, 42, 50, 55, 60, 65, 75 and 85°C
- The HD250e can be set also at 95°C, but only on non recirculating systems and without heated inlet water.

Note: Preset heaters set to 42 or 50°C can replace TMV's or tempering valves for ablution areas. Local Legislation dependant.



Manifold Pack 2



Manifold Pack 2 Internal installed in a cupboard



2 x Roof Mounted Manifold Pack 4 External



Manifold Pack 4 External installed on a roof

Manifold Packs

How does the system deliver constant temperature?

The heater measures the incoming water flow and the outlet temperature. Any alterations will cause the unit to vary the gas rate to ensure a constant outlet temperature. The set outlet temperature can be altered by an authorised person.

What information do I need?

The following information is required to select a manifold pack:

- Inlet water temperature (eg: 15°C average coastal cold water temperature)
- Temperature required at point of use (eg: 40°C for a shower)
Therefore net temperature rise is known (eg: 40-15 = 25°C)
- Simultaneous flow rate required (eg: 5 x 3 star (AAA) 9 l/min showers = 45 l/min)
- Internal or external installation

Tropical		Coastal		Inland		Alpine		Model	Gas Rate MJ / hr
Number of Showers	Flow @ 20°C rise l/min	Number of Showers	Flow @ 25°C rise l/min	Number of showers	Flow @ 35°C rise l/min	Number of showers	Flow @ 45°C rise l/min		
3 - 4	30	3	26	2	18	1	14	HD200	200
6 - 7	60	5 - 6	52	4	36	3	28	MP2 200	400
10	90	8 - 9	78	6	54	4 - 5	42	MP3 200	600
13 - 14	120	11 - 12	104	8	72	6	56	MP4 200	800
16 - 17	150	14 - 15	130	10	90	7 - 8	70	MP5 200	1000
20	180	17 - 18	156	12	108	9 - 10	84	MP6 200	1200

Note: Coastal locations used in Summer can achieve tropical flow rates as ambient water temperature can be 20°C or higher. PAM valves required on MP6.

HANDY HINT

Order Code Example:

MP (Unit quantity) 200 + E (external) + M (MECS) + N (NG) Example: **MP2 200E M N**
or I (internal) or P (PAMS) or L (LPG)



Manifold Packs

Why do they require a staging system

Staging systems are designed so that only the required number of heaters start to match the desired hot water flow rate.

A Manifolded Electronic Control System (MECS) is available for 2 to 5 heater manifold systems and uses the water flow valve inside the heater to control its operation. The firing sequence is rotated every tenth shutdown. A single water controller can control the entire manifold outlet temperature.

Staging can also be achieved by using the Rinnai Pressure Activated Manifold (PAM) valve. PAM valves are available for 2 to 6 heater manifold systems.

Note: Rinnai Manifold Packs are not compatible with Smartstart® Water Saver or Deluxe Water Controllers.

How are they supplied

The HD units are mounted fully assembled to our pre-engineered frames with foam insulated pipe work, ready to plumb into position at your project. The Manifold pack is supplied in modular systems of Manifolds of 2 and Manifolds of 3 units. They are packaged in a separate cartons for ease of freight and positioning on site. The Manifold Pack 4, 5 and 6 will be supplied in combinations of MP2 and MP3 as required.

For Example: A Manifold Pack 4 will be supplied as 2 x Modular 2 pack systems with a couplings kit to join the manifolds together when installed.

What is included with the system

- Heavy Duty continuous flow units
- 32mm foam insulated Copper Manifold
- 20mm foam insulated Copper Branches with Isolation Valves to each unit – Hot, Cold and Gas
- Uni-strut wall Mounting Frame
- Staging System as per specification

Optional Extras:

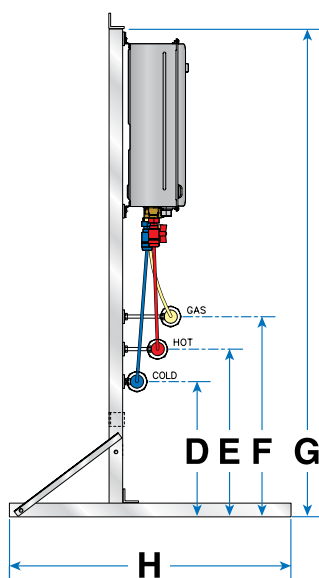
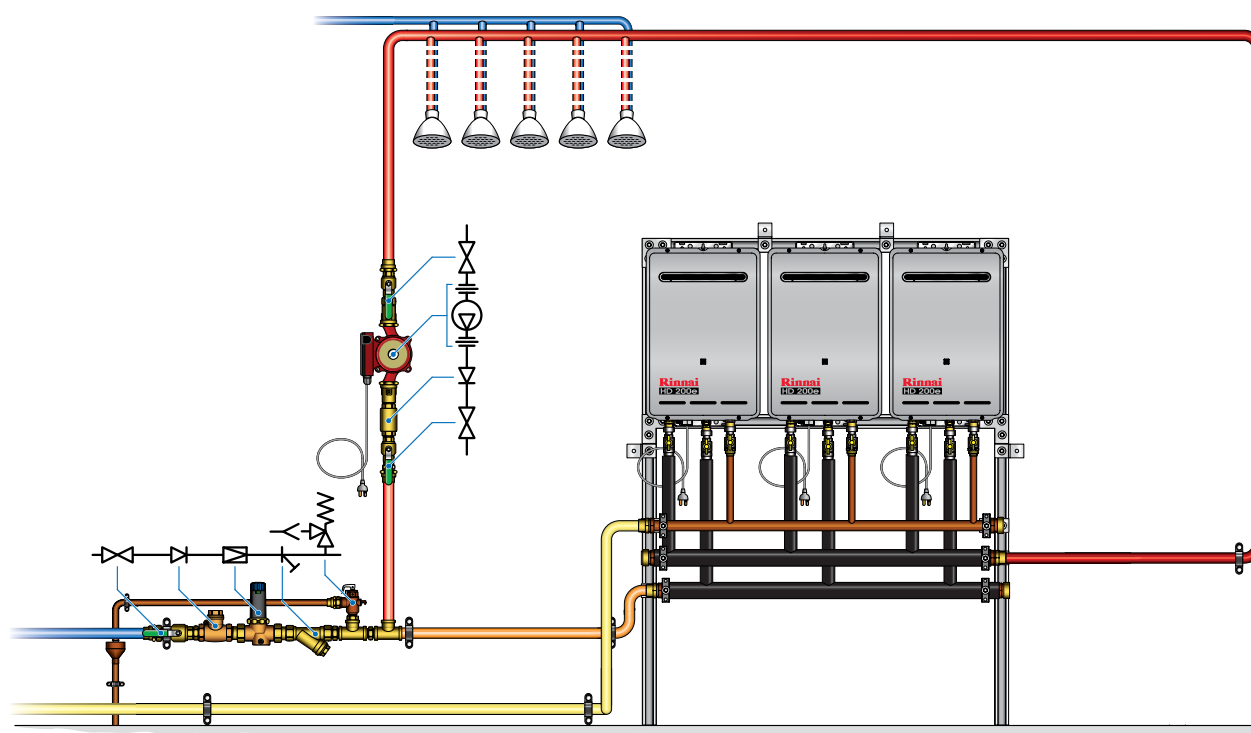
- Freestanding Frame
- Recirculation Pump
- Pre-wired General Power Outlet (GPO) Package
- Ultra Violet (UV) Sterilisation System (legislation dependent)

Note: A GPO is required for each HD unit.

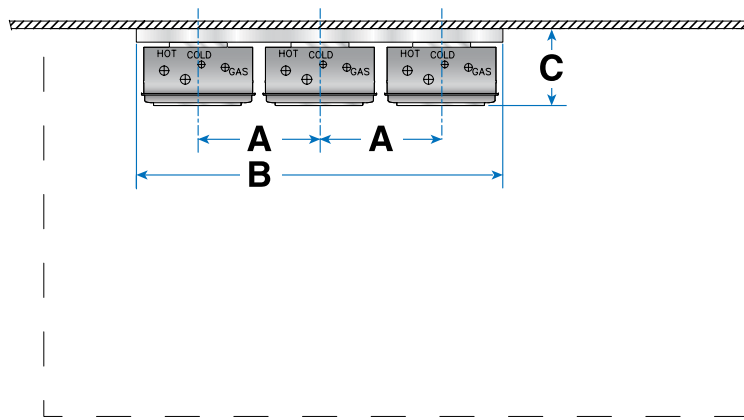


Compact installation of 6 x Manifold Pack 6 External

Typical Manifold Pack Installation



Optional Base



This is not a formal engineering drawing
Insulation not shown on site pipework
Ablution areas: temper as required
Installation as per local regulations
Details subject to change without notice

Non return and cold expansion valves are only required on circulating systems
Please refer to Rinnai Commercial Representative when designing systems

Manifold Pack	A	B	Dry Weight	MJ	C	D	F	G	H
MP2	375	750	60 kg	400	280	340	540	1500	850
MP3		1125	90 kg	600					
MP4		1500	120 kg	800					
MP5		1875	150 kg	1000					
MP6		2250	180 kg	1200					

Demand Duo

What is a Demand Duo System?

Rinnai Demand Duo is the combination of between 1 and 6 gas continuous flow water heaters with a storage tank. The storage tank allows a short period of high hot water flow rate, greater than the continuous flow rate of the HD water heater(s).

How does it work?

Demand Duo is a complete packaged storage hot water system made up of one or more HD water heaters with a manifold system, primary pump(s), thermostat and a stainless steel storage tank.

The thermostat senses the temperature of the water in the tank and when it drops below the set point, the primary pump is activated. This flow in turn starts the Rinnai continuous flow HD water heater which returns heated water to the tank.

What are some suitable applications?

- Hotels & Motels
- Apartment Blocks
- Student Accommodation
- Shower Blocks
- Commercial Kitchens
- Commercial Laundries

Installations of this type typically have a predictable hot water volume, usually based on number of people living in a particular building either showering, washing or eating, or industrial machines that require regular peaks of water.

Demand Duo are often used on projects on a flow and return system to distribute the water around the building. It should be noted that flow and return systems continually lose heat through the circulation pipework and this adds running costs to the project.

How is the selection made?

The following information is required to select a Demand Duo system:

- Temperature rise required. Assumed to be 50°C (15 - 65°C)
- Volume of hot water used per event (i.e. people having a shower)
- Number of times this event occurs (i.e. 6 uses of each shower head per hour)
- Internal or external installation (i.e. whether a flue system is required)

Refer to the table on the next page for selection examples.



DD1 and Manifold Pack 3 with horizontal flueing. Note: now available with new front casing

DD4 with a dual flow and return pump set

Demand Duo Selection Table

Apartments No of eq mix of 1 & 2 Bedroom	Apartments No of 2 Bedrooms	Apartments No of eq mix of 2 & 3 Bedrooms	Hotel No of Beds, 1-3 Star rated	Hotel No of Beds 4-5, Star rated	Amenities No of 3 Star (AAA) showers	Demand Duo Model	Location	First Hour litres @ 50°C rise (15°-65°)	Recovery litres @ 50°C rise (15°-65°)	Tank size (litres)	Burners	Gas Rate MJ / hour (Nominal)
17	13	11	46	29	6	DD1 200(E or I) 250(N or L)	Ext or Int	1010	760	250	1 x HD200	200
18	14	12	49	31	7	DD1 200 315	Ext or Int	1075	760	315	1 x HD200	200
21	17	14	57	36	8	DD1 250E 250	Ext	1250	1000	250	1 x HD250E	250
22	18	15	60	38	8	DD1 250E 315	Ext	1315	1000	315	1 x HD250E	250
30	24	20	80	51	11	DD2 200 250	Ext or Int	1770	1520	250	2 x HD200	400
31	24	20	83	52	11	DD2 200 315	Ext or Int	1835	1520	315	2 x HD200	400
42	34	28	115	72	16	DD3 200 250	Ext or Int	2530	2280	250	3 x HD200	600
43	35	29	118	74	16	DD3 200 315	Ext or Int	2595	2280	315	3 x HD200	600
55	44	37	150	94	20	DD4 200 250	Ext or Int	3290	3040	250	4 x HD200	800
56	45	37	153	96	21	DD4 200 315	Ext or Int	3355	3040	315	4 x HD200	800
68	54	45	184	116	25	DD5 200 250	Ext or Int	4050	3800	250	5 x HD200	1000
69	55	46	187	118	25	DD5 200 315	Ext or Int	4115	3800	315	5 x HD200	1000
80	64	53	219	137	30	DD6 200 250	Ext or Int	4810	4560	250	6 x HD200	1200
81	65	54	222	139	30	DD6 200 315	Ext or Int	4875	4560	315	6 x HD200	1200
87	69	58	236	148	32	2 x DD3 200 315	Ext or Int	5190	4560	2 x 315	6 x HD200	1200
112	89	75	305	192	41	2 x DD4 200 315	Ext or Int	6710	6080	2 x 315	8 x HD200	1600
137	110	91	374	235	51	2 x DD5 200 315	Ext or Int	8230	7600	2 x 315	10 x HD200	2000
163	130	108	443	279	60	2 x DD6 200 315	Ext or Int	9750	9120	2 x 315	12 x HD200	2400

First Hour Delivery = Tank volume + 760 litres per HD200

First Hour Calculations Apartments: 1 bedroom 45 litres, 2 bedroom 75 litres, 3 bedroom 105 litres
Amenities: 6 x 27 litres hot water per shower per hour
Hotel: 1-3 star 22 litres, 4-5 star 35 litres. Allows for showers, meals and laundry



Demand Duo

What are the benefits of rinnai Demand Duo?

Demand Duo storage hot water systems store 250 to 315 litres of hot water per system. This is available where high peak flow rates for short periods of time occur.

Recovery is matched by selecting the required number of Rinnai Heavy Duty water heaters. The heater(s) can also be mounted many metres (remotely) from the tank.

Note: Extended primary pipe runs must be oversized and/or a primary pump upgrade. Please contact your Rinnai Commercial Representative for further information.

Rinnai Demand Duo systems can also be used instead of Manifold Packs for projects where limited gas supply is available.

How is the Rinnai Demand Duo system supplied?

The DD1 system is provided with an integrated HD water heater on the tank. Larger capacity models – up to 6 units on a single system come complete with pre-assembled manifold. They are of modular construction prefabricated under factory conditions. The lightweight individual pieces are transported and assembled in position on site. To complete the Demand Duo system, all that is required on site is the final pipe work between the manifold, pump and tank.

A standard DD1 has the heater mounted on the tank but can be ordered in parts for applications with a remote mounted burner.

What is included in the rinnai Demand Duo package?

- Rinnai Heavy Duty water heater(s)
- 32mm foam insulated copper manifold for DD2-6 c/w 20mm union and isolation valves on Hot, Cold & Gas - mounted on rapid rail sub frame
- Stainless Steel Tank 850kPa PTR valve(s) - 32mm connections
- Pre-wired Thermostat, 240V power connection point(s) for pump
- Primary Pump(s)

Optional Extras:

- Single and Dual Flow and Return Pumps
- Pump Control Boxes
- Wall Mounting & Freestanding Frames
- Skid Mounted System c/w electrical, tank manifolds for multiple systems & aluminium cladding (as required per project)
- Pre-wired General Power Outlet (GPO) Package

Note: GPO is required for the storage tank (thermostat) and each HD unit.

Dual Flow and Return Pumps

Dual Pumps supplied with swing check valves and union sets with isolation valves.

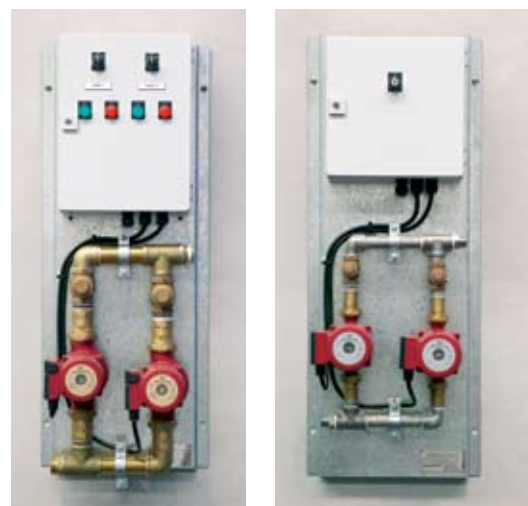
Dual Pumps available complete with the option of:

Standard Control Box: Automatic 12 hour changeover

Selector switch: Pump 1/Auto/Pump 2

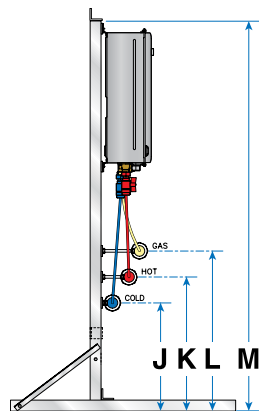
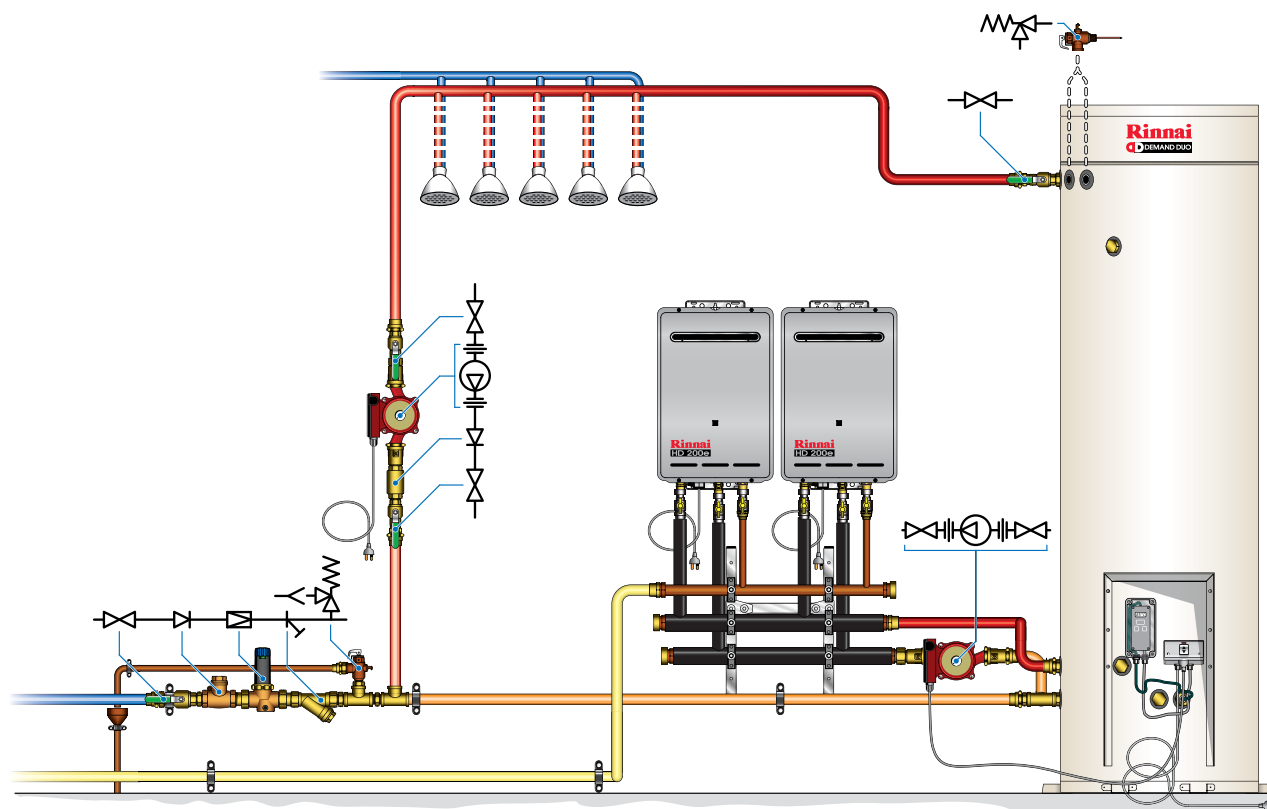
Deluxe Control Box: Automatic 12 hour changeover
 Selector switch: Pump 1/Auto/Pump 2
 Individual Manual/Auto switch per pump
 Individual pump fault/Run & Manual/Auto selector
 BMS points

Note: Weather cover required for external use – not supplied.

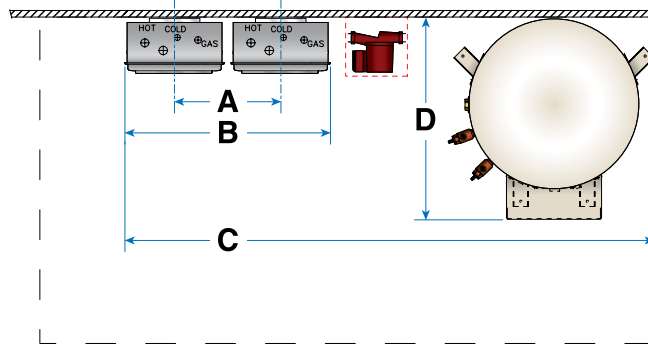
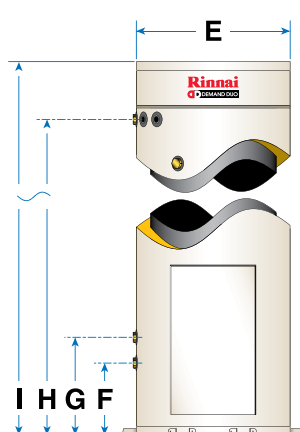


Dual Flow & Return Pumps
with Control Boxes

Typical Demand Duo Installation



Optional Base
Optional Frame



This is not a formal engineering drawing
Insulation not shown on site pipework
Tank control box cover not shown
Ablution areas: temper as required
Installation as per local regulations
Details subject to change without notice

Model	A	B	C	D	E	PTR INCLUSIONS	Primary Pump	Mj Rating (HD200's)	Total System Weight (315 L)
DD1	375	N/A	600	825	600	1 x HT575	UPS20-60N	200	92
DD2		725	1825			2 x HT575	UP25-80N	400	115
DD3		1100	2200			3 x HT575 + Tee	UP25-80N	600	135
DD4		1475	2575	715		1 x HT575 & 1 x Boiler Valve	UP25-80N	800	155
DD5		1850	2950				UP25-80N x 2	1000	175
DD6		2225	3325				UP25-80N x 2	1200	190

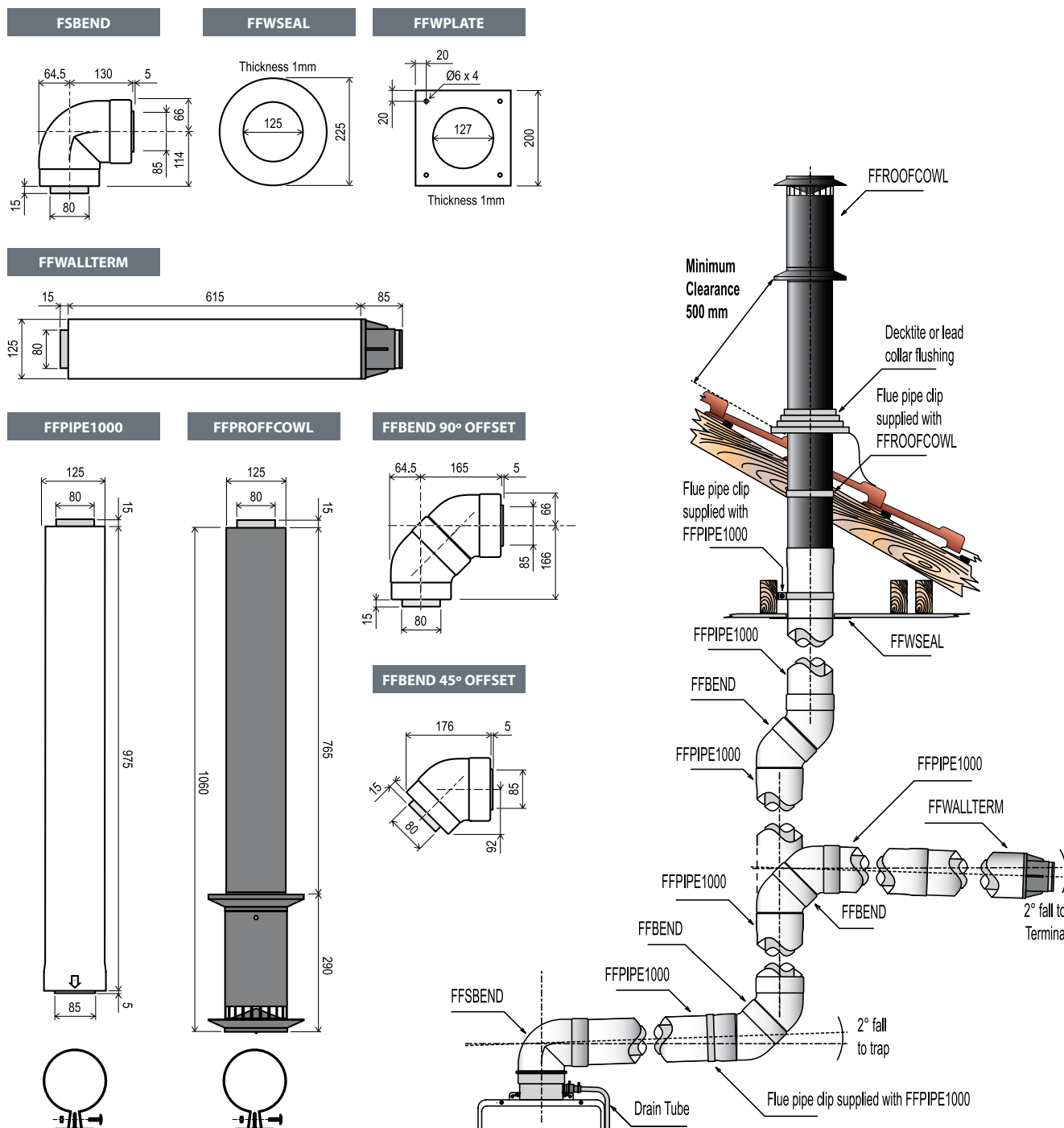
Tank Model	F	G	H	I	Dry Weight	Wet Weight
250 Litre	285	385	1475	1690	60 kg	310 kg
315 Litre			1855	2080	72 kg	385 kg

HD Model	J	K	L	M
HD200 e	340	440	540	1500
HD200 i	340	440	540	

Internal Flueing

There are 4 flueing options that enable the installation of an internal Continuous Flow model virtually anywhere:

1. **Vertical Direct Flueing** - Straight up through the ceiling and penetrating the roofline
2. **Horizontal Direct Flueing** - 90° bend off top of unit, backwards through the wall
3. **Horizontal Extended Flueing** - Identical to horizontal flueing but with additional components to extend the length of the flue
4. **Combination Flueing** - Mixture of both horizontal and vertical flues



Important points:

- There is one flue per water heater installed
- The water heater is a room-sealed appliance with a balanced flue
- There is a maximum flue length of 9 metres with a maximum of 3 x 90° bends per heater
- The main flue lengths (FFPIPE1000) can be cut to length on site
- A condensate drain tube must be fitted if the vertical flue length exceeds 1.5 metres

Common Flueing

The Rinnai Common Flue System Rinnai internal commercial Hot Water Systems can now be flued in a single common, natural draft flue.

Previously the need to install a Rinnai proprietary coaxial flue system sometimes limited opportunities to capitalise on the benefits available with Gas Continuous Flow internal systems.

The Rinnai Common Flue System has been designed with flexibility in mind for both new and existing installations. Rinnai HD200i units can now be flued in a single, common, natural draft flue. Natural draft flues rely on the principle that hot air from the products of combustion are less dense, and so lighter, than the surrounding air.

This heated air will rise up through the flue and discharge at an approved gas flue cowl. To accommodate this change, the air for combustion must now be drawn from within the room and adequate ventilation must be provided in accordance with AS5601. This only applies to common flue installations.

Installation Flexibility

This concept is not only suitable for new buildings, but also in existing buildings where there is a previously installed correctly sized flue that is in sound condition and meets the sizing criteria per AS5601. To simplify the changeover and minimise costs, Rinnai have introduced a number of standard components to enable compatibility with a new or existing natural draft common flue.

Design Flexibility

Often space is a consideration when designing a hot water system. Whether using a Demand Duo or Manifold Pack system, the Rinnai Common Flue System can be used in both single in-line applications usually mounted on a wall, or back to back configuration mounted on freestanding frames. The Common Flue Headers are sized accordingly and are available in 200, 250, 300, 350, 400, 450 & 500mm diameters (ordered separately).



4 x DD6 back to back with 2 x Common Flue headers (power flue assisted)

Warm Water Valve

The Rinnai Demand Duo Warm Water Valve (DDWWV) is a circulating warm water valve designed to accept 60°C or more incoming hot water from a storage hot water system and deliver a reduced constant outlet temperature across a full range of flow rates with minimal pressure drop.

Save on Installation & Maintenance Costs

The DDWWV is suitable for commercial applications such as apartments, hotels, hospitals and nursing homes where multiple tempering or thermostatic mixing valves can be replaced with a centralised valve.

The installation of a centralised DDWWV has many benefits:

- Reduces the installation cost of multiple valves
- Reduces the cost and inconvenience of having to service multiple units
- Maintenance can be fully managed at the hot water plant room
- Improved maintenance scheduling with reduced interruption
- Improves the aesthetics

Retrofit

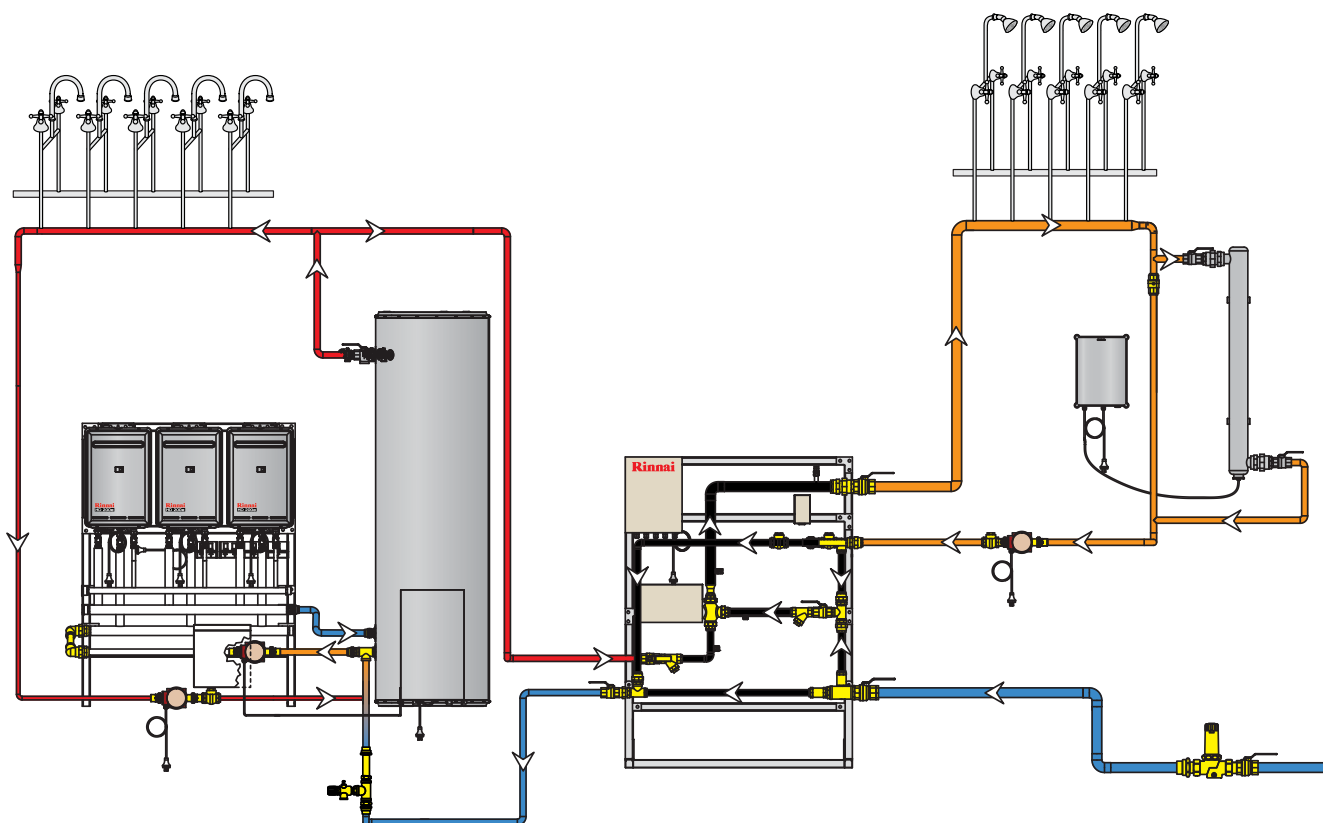
Supplied as a complete assembly on a freestanding or wall mounted frame, the Rinnai DDWWV is also suitable to retrofit to existing (non-Rinnai) storage hot water systems. Simply connect the cold feed and hot return to the storage hot water system and cold water, warm water flow and return to the valve assembly. There must be a ringmain with a suitable pump fitted to allow the valve to function as designed.

Solar Pre-Heating

As part of the Rinnai Demand Duo range, the DDWWV is also compatible with Solar Boosting.

Fully Approved

The DDWWV is approved to AS 4032.1 as a Thermostatic Mixing Valve and to AS 4032.2 as a Tempering Valve. It is also approved as a Warm Water System by NSW Health.



**Demand Duo
(Including a Hot Water Ring Main)**

Warm Water Valve

Warm Water Ringmain

Solar Pre-Heat

Rinnai Solar Pre-heat systems can be used in conjunction with a Rinnai Demand Duo or Manifold Pack system, combining the energy from the sun with high efficiency gas hot water heating – the best of both worlds!

Rinnai high-efficiency Solar Collectors are installed on a roof aligned to face the sun and pitched at around the same angle as the latitude in order to maximise the solar energy collected. Frost Tolerant Collectors (FTC) are also available to minimise potential damage in frost prone areas.

The high efficiency Solar Collectors in conjunction with low heat loss storage tanks, provide for an overall high performance solar pre-heat system. This is reflected in the high Renewable Energy Certificates (RECs) available.

Save on CO2 Emissions

Using solar energy to pre-heat commercial gas and electric boosted hot water systems allows lower energy consumption as well as significantly reducing the CO2 footprint.

Save with RECs Rebates

Rinnai Solar Pre-heat Systems are awarded RECs and substantial rebates are often available for commercial solar installations.

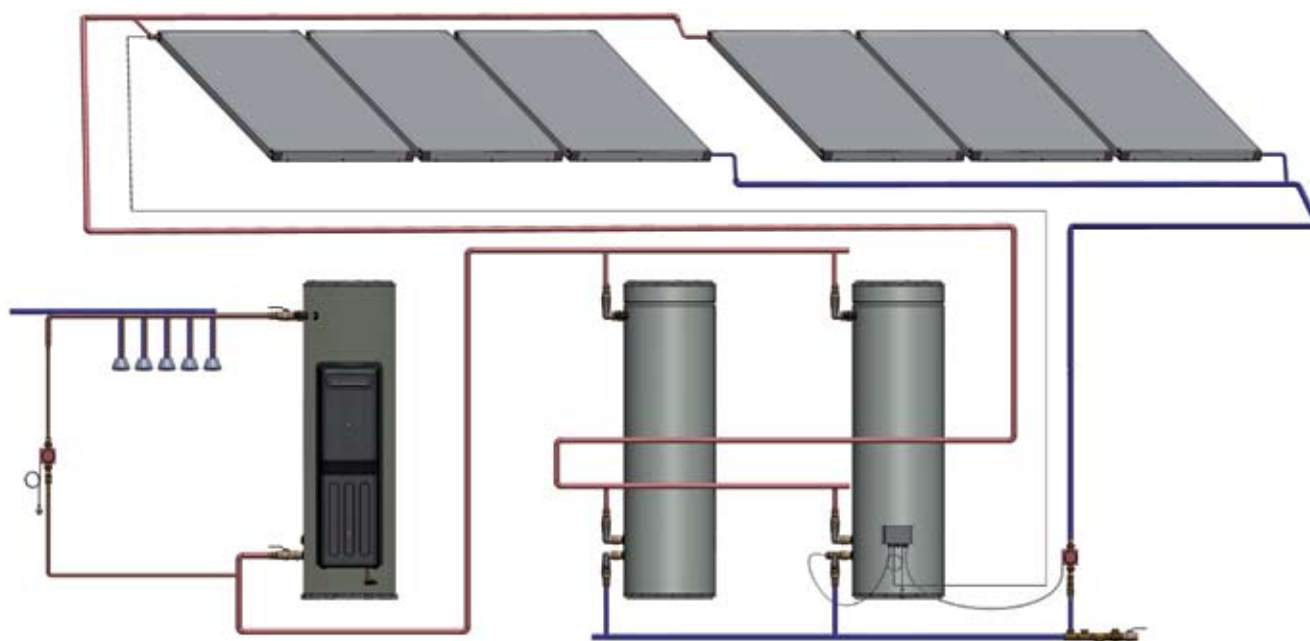


EXAMPLE

**Daily load 3000 litres
7 Tanks and 21 panels
Zone 3 = 287 RECs.
If RECs were valued at \$40
RECs Rebate is around \$11,480
(subject to market fluctuation)**

Save on Running Costs

Common practice is to select a Solar Pre-Heat System to contribute around 50% of the annual energy required to heat an average day's hot water. This is close to 100% solar contribution in Summer (depending on solar zone). All these factors in combination with government incentives (where available) make solar pre-heating a valuable and responsible investment.



Demand Duo

Pre-heat Storage

Rinnai Commercial Hot Water Warranty

Commercial and Other Hot Water Systems		Rinnai Demand Duo and Rinnai Manifold Pack systems				Other Hot Water				
		Continuous Flow Water Heaters used as gas boosters in Demand Duo and Manifold Pack Systems - Heavy Duty (HD) Models ⁽¹⁾		S/Steel storage cylinders	Components ⁽³⁾	Rinnai Roofmaster		Under & Over Sink		Commercial Common Flue and Warm Water Systems ⁽²⁾
		Heat Exchanger	All other components			Cylinder	Components ⁽³⁾	Cylinder	Components ⁽³⁾	
Domestic Use	Parts	10 Years	3 Years	10 Years	1 Year	7 Years	1 Year	6 Years	1 Year	NA
	Labour	3 Years	3 Years	3 Years	1 Year	1 Year	1 Year	1 Year	1 Year	NA
Commercial Use	Parts	5 Years	1 Year	5 Years	1 Year	1 Year	1 Year	1 Year	1 Year	3 Years
	Labour	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year

(1) One (1) year warranty on Heat Exchanger when pre-set to 85 or 95°C. (2) Excludes UV system. UV system warranty is covered by the UV system manufacturer (3) Components include pumps, system controllers, sensors, thermostats, valves, electric heating elements and anodes where applicable.

Definitions

Commercial Use:

The warranty periods that are allocated under "Commercial Use" are for applications other than domestic use and include premises such as commercial and industrial buildings, cafes, caravan parks and sporting complexes, but not limited to these.

"Commercial Use" warranty applies to:

1. Water heater(s) supplying central shower blocks.
2. Water heater(s) supplying kitchens used for the bulk preparation of food.
3. Water heater(s) delivery temperatures pre-set to exceed 65°C for gas boosted systems and pre-set to exceed 70°C for electric boosted systems.
4. Water heater(s) used in commercial or industrial heating processes.
5. Water heater(s) used in hydronic space heating installations.
6. Any application that uses Rinnai water heater(s) in conjunction with building flow and return systems.
7. Water heater(s) installed as component(s) of centralised bulk hot water system(s).

Full warranty conditions including exclusions, water purity, solar frost tolerant collector (FTC) conditions are available with the appliances and can be viewed on-line at www.rinnai.com.au.

Dimensions are subject to production tolerances and may vary slightly from those given.
Rinnai Australia Pty. Ltd. Reserves the right to make modifications and change specifications without notice.
We will however endeavour to communicate any major changes well before implementation.



RINNAI AUSTRALIA PTY. LTD

ABN 74 005 138 769

10-11 Walker Street Braeside VIC 3195

For further information visit

www.rinnai.com.au or call 1300 555 545