



Our commitment to you

Our innovative products are designed with the environment in mind, with low emission technology and high efficiencies, as well as a host of other great features.

Rinnai is committed to ongoing innovation - delivering efficient, well designed and engineered lifestyle solutions offering a host of benefits including versatility, safety, control, water conservation and guaranteed reliability.

Backed with extensive warranties and after sales service teams, Rinnai is proud to be the No.1 choice for Continuous Flow Hot Water. In addition, our innovative range of Solar Hot Water Systems boast market leading efficiencies.

Through innovation, we will endeavour to continue offering superior ranges of appliances that provide a clear insight into what the future holds.



Rinnai | INDUSTRY AWARD WINNER



Rinnai is proud to have received these awards during the last four years. These industry accolades are a testament to Rinnai's ongoing commitment to introducing new ideas that add value by bringing more convenience, comfort and peace of mind through innovation.

2005 – Finalist, Safety Initiative of the Year for the use of temperature stabilising controls in their range of gas water heaters. This solution offers precise temperature control to +/- one degree C of the set-point irrespective of fluctuating pressures. Furthermore, the water heaters will automatically switch off should the temperature rise by more than three degrees C above the set-point.

2006 – Winner, Rinnai won Environmental Initiative of the Year for its continuous flow water heaters and solar collector system. Described by the judges as a 'clever idea', this cold-feed, holistic solar initiative caught their eye. Water is held in a "solar cylinder" where it will absorb energy from the

sun. When required it will flow from the solar cylinder, through the continuous flow water heater/s, where it will be heated only if necessary, and then to the outlets. This solution is very energy efficient and differs from common systems that may use electric immersion heaters to boost the water temperature.

2009 – Finalist, Domestic H&V Product of the Year for the Twin Flow boiler and continuous flow water heater. Twin Flow combines a 32kW condensing system boiler with a 54kW continuous flow water heater. Designed for the larger homes and small businesses with high hot water demands, Twin Flow ensures that heating loads are met with high efficiency and that hot water is delivered, continuously. As there is no water store, standing losses are tiny, so saving energy and reducing carbon footprint.

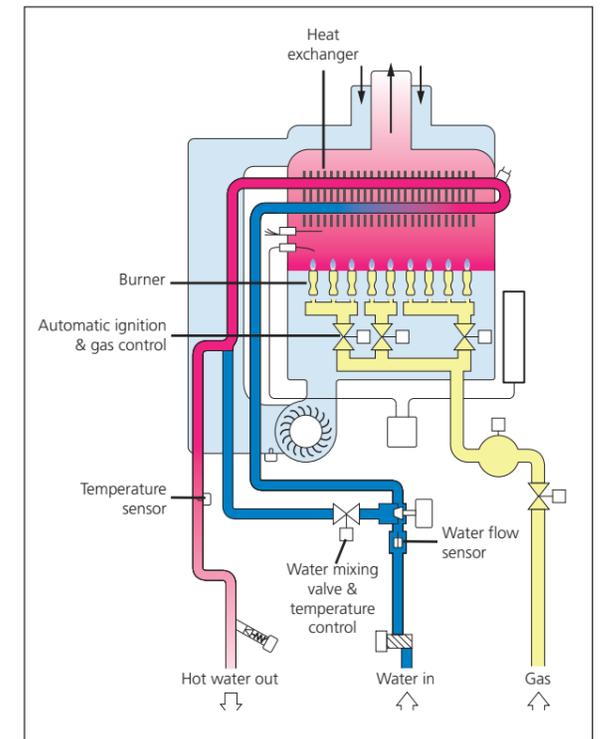
Rinnai | COMMERCIAL HOT WATER SOLUTIONS

Rinnai make over 12 million gas appliances every year, which are distributed to all parts of the world, and are all ISO 9001 and ISO 14001 certified. (International standard for environmental management systems).

Backed with extensive warranties and fully qualified after sales service teams, Rinnai is proud to be the No.1 choice for Continuous Flow Hot Water.

Rinnai hot water systems fulfil your requirements for new or existing projects, providing the optimum solution by using individual or banks of heaters, manifolded together.

Storage systems, by virtue of their design are unable to cope with modern hot water demand, as the recovery times are often longer than the period of use. Restaurants and hotels are a prime example of this as they require heavy loads of hot water at intermittent times of the day, often at high temperature to satisfy health requirements. With the Rinnai continuous flow hot water system, you will never run out of hot water.



Rinnai water heaters reduce the impact on the environment. The market leading design has lower greenhouse emissions, due to Rinnai's reduced NOx burner technology.

Rinnai offers you the complete package

- CE and WRAS approved
- Digital temperature control for absolute safety
- Frost protection as standard on all units

Renewable energy solutions

Rinnai award winning solar water heating solutions are designed to offer a perfect blend of eco-friendly technologies, guaranteed to provide a constant flow of hot water, no matter how many showers and baths are in use at the same time.

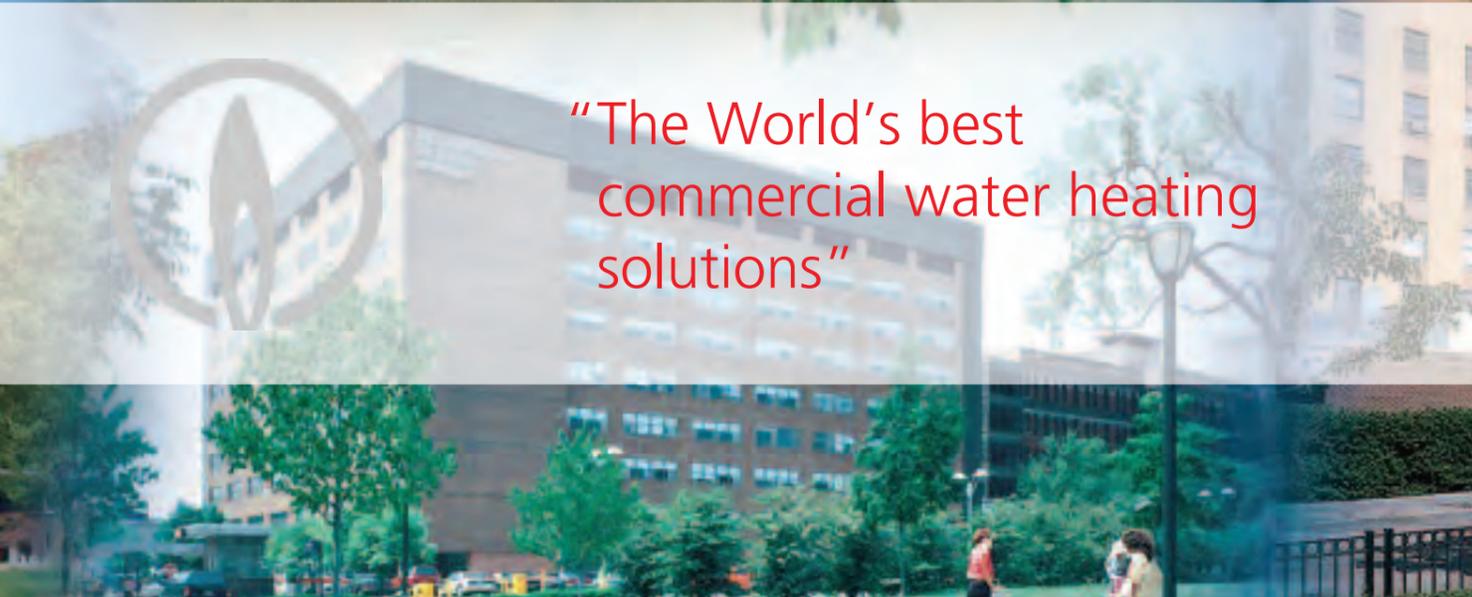
Rinnai continuous flow systems

- Never run out of hot water
- Space saving, compact design means no floor space taken up
- Optional controllers allow you to control water temperature accurate within 1°C of set point to ensure safety and comfort
- Endless hot water delivered more efficiently and with greater control, replacing the need for bulky, inefficient, old-fashioned storage vessels
- Highly efficient, saving up to 30% on hot water gas bills

"The Rinnai continuous flow water heaters represent our commitment to delivering the best systems available in the world today"

Showers can be run directly from the units, removing the need for thermostatic mixer valves. The chosen temperature is always maintained, regardless of other outlets being turned on. The Rinnai continuous flow water heater incorporates many safety features, one of which automatically cuts the heater off should the temperature rise by 3°C above the chosen set point.





“The World’s best commercial water heating solutions”

For latest prices and delivery to your door visit MyTub Ltd -

Rinnai | HEAVY DUTY WATER HEATERS

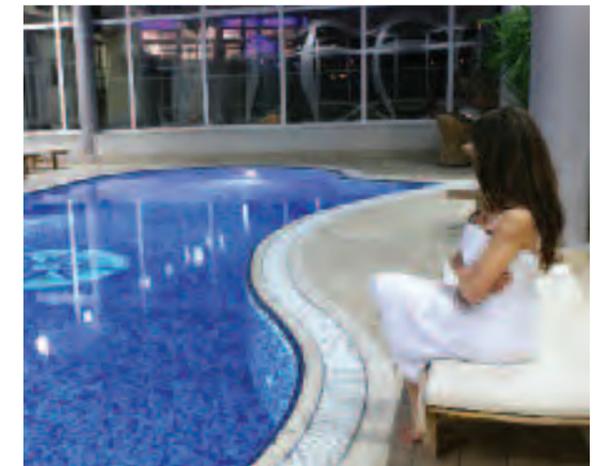
Rinnai Heavy Duty water heaters are high efficiency gas continuous flow water heaters with minimum gas consumption. All models have full electronic ignition with no pilot light and operate on demand only, consuming no gas when not in use.

Typical applications include: cafés, childrens nurseries, factories and offices, laundries with domestic style top loader machines, hotels and restaurants, sports clubs, shower blocks in caravan parks and many more.



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.

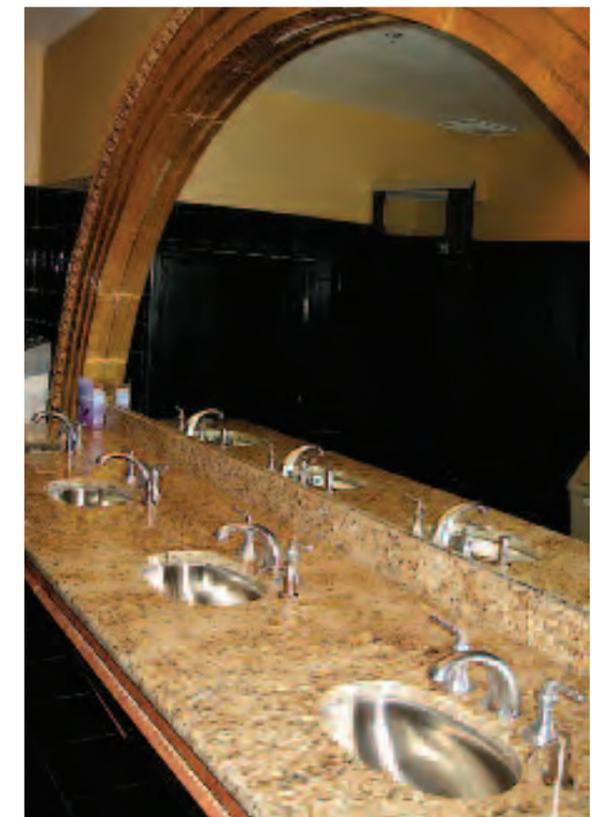
Heavy Duty continuous flow water heaters can be manifolded together to allow higher flow rates than a single unit can provide. Outlet temperature is preset and remains constant, even when the flow varies and peak flow rate cannot be exceeded. When there is no flow there is no gas consumption and there are no wasteful pilot lights. The system maintains a constant water temperature by measuring 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.

Providing hot water is an everyday need in most industrial and other premises. Often, however, the source and control of hot water is critical to the manufacturing process itself and can be a point where the waste of energy is high.

Rinnai Heavy Duty gas fired water heaters feature outputs up to 69kW and water can be delivered at high volume and importantly with very precise temperature control. The smart digital controller regulates to within +/- 1°C without any variation of temperature should other water draw offs are made.



Rinnai | HEAVY DUTY WATER HEATERS



Rinnai Heavy Duty 50i internal water heater

The Rinnai Heavy Duty HD50i Internal water heater is a wall hung, gas fired, continuous flow water heater capable of producing hot water at 780 litres per hour at a 50°C rise.

The HD50i has a 125mm concentric flue which can be extended up to 15m, less 1m per 45° bend.

Compact and reliable, the HD50i operates between 1-10 bar pressure, suitable for mains and systems with boost pumps.

Incoming water temperatures of up to 60°C are accepted, making the HD50i suitable for secondary return systems.

The Rinnai HD50i is a fully modulating 54kW unit.

Specifications

Installation	Internal wall mounted
Height	600mm
Width	350mm
Depth	224mm
Weight	22kg
Exhaust system	Room sealed
Temperature range	37°C - 85°C
Ignition method	Direct electronic
Gas consumption	
Natural gas	4.4kW - 54.1kW max
Propane	4.4kW - 54.1kW max
Hot water delivery capacity	20 ltr/min raised 33°C 780 ltr/hr raised 50°C
Min operating water flow	2.4 ltr/min
Nominal operating pressure	1 - 10 bar
Power supply	230V AC 50Hz 1ph
Electrical consumption	80W



Rinnai Heavy Duty 70i internal water heater

The Rinnai HD70i Internal Water Heater is the largest capacity internal water heater in the Rinnai continuous flow range.

Capable of flow rates of up to 960 litres per hour at a 50°C rise, the HD70i uses a twin pipe flue system which is adapted into one 125mm pipe before penetrating the wall.

The HD70i, as with all heaters in the Rinnai Heavy Duty range, is suitable for installation on a secondary return and operates between 1-10 bar pressure.

The Rinnai HD70i is a fully modulating 69kW unit.

Installation	Internal wall mounted
Height	600mm
Width	470mm
Depth	220mm
Weight	29kg
Exhaust system	Room sealed
Temperature range	37°C - 85°C
Ignition method	Direct electronic
Gas consumption	
Natural gas	5.6kW - 69kW max
Propane	5.8kW - 69kW max
Hot water delivery capacity	24 ltr/min raised 33°C 960 ltr/hr raised 50°C
Min operating water flow	2.4 ltr/min
Nominal operating pressure	1 - 10 bar
Power supply	230V AC 50Hz 1ph
Electrical consumption	83W



Rinnai Heavy Duty 70e external water heater

The Rinnai HD70e External Water Heater has the same output as the HD70i with the added advantage that the unit is externally mounted. This feature gives greater flexibility at the design stage and can offer an alternative solution where flue runs are problematic.

As with all units in the Rinnai Heavy Duty range the HD70e has frost protection and will operate in temperatures down to -25°C.

A range of external ancillary items including a pipe cover box and security cage are available where necessary.

Capable of flow rates of up to 960 litres per hour at a 50°C rise, the HD70e is suitable for installation on a secondary return.

Specifications

Installation	Internal wall mounted
Height	600mm
Width	470mm
Depth	220mm
Weight	29kg
Exhaust system	Room sealed
Temperature range	37°C - 85°C
Ignition method	Direct electronic
Gas consumption	
Natural gas	5.6kW - 69kW max
Propane	5.6kW - 69kW max
Hot water delivery capacity	24 ltr/min raised 33°C 960 ltr/hr raised 50°C
Min operating water flow	2.4 ltr/min
Nominal operating pressure	1 - 10 bar
Power supply	230V AC 50Hz 1ph
Electrical consumption	83W





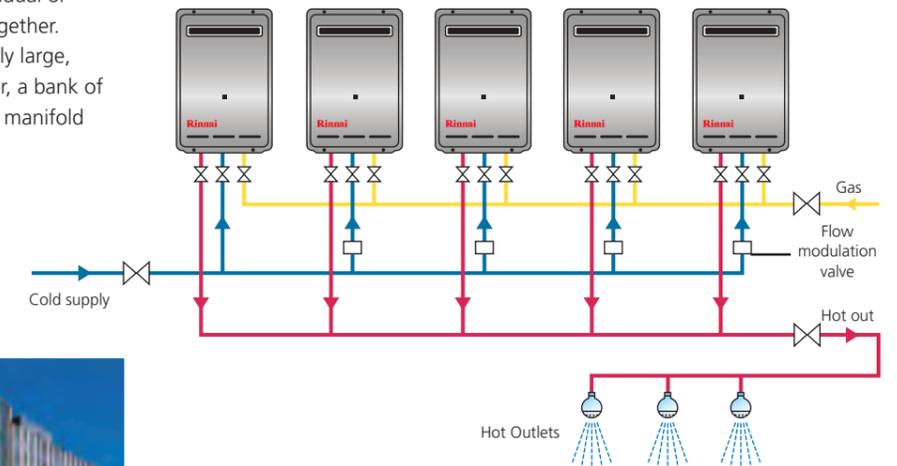
“Manifolding provides even greater capacity”

Rinnai | MANIFOLDING WATER HEATERS

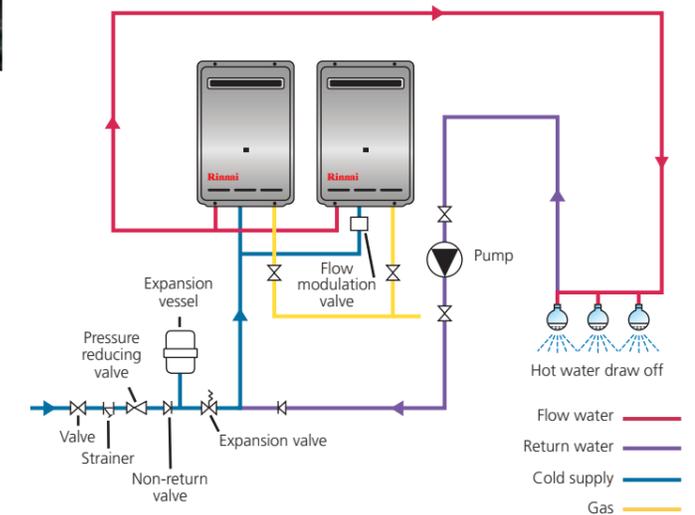
Rinnai hot water systems provide the optimum solution by using individual or banks of heaters, manifolded together. To fulfil the demand for extremely large, continuous volumes of hot water, a bank of units can be installed in a Rinnai manifold system.



5 x Manifolded Rinnai HD units with flow modulation valves



2 x Manifolded Rinnai HD units recirculating with pumped return on cold feed



ONLY Rinnai HD offers you the complete commercial package:

- Largest capacities on the market
- Near mains pressure flow
- CE and WRAS approved
- Frost protection on all units as standard
- Low NOx emissions
- Silicon coated heat exchanger
- Can be set for temperatures as high as 85°C

Heavy duty heaters are ideal for nursing homes, commercial kitchens, hotels, sports clubs etc., as well as domestic situations in larger houses.

An optional electronic control system can link each heater, turning each one on as required. The system automatically evens out the work load between units to minimise wear and tear.

If pipework warrants a recirculation system, this can be achieved by setting the temperature of the water at 65°C. Multiple heaters can be set up in this way for larger installations.

A low temperature re-circulation can be achieved by using an in-line biocide unit with the temperature set at 40 - 43°C.

Flow rates for Rinnai HD50i

No of units	Flow per minute (litres*)	Flow per hour (litres*)
1	12.8	768
2	25.7	1542
3	38.5	2310
4	51.3	3078
5	64.1	3846

Flow rates for Rinnai HD70e/HD70i

No of units	Flow per minute (litres*)	Flow per hour (litres*)
1	15.8	948
2	31.6	1896
3	47.5	2850
4	63.3	3798
5	79.1	4746

The flow rates in these charts are based on a 50°C temperature rise

Rinnai | HOT WATER BUFFER SYSTEMS

In situations where a very large demand of hot water is required Rinnai Buffer Packs offer a cost effective solution.

Using a manifold arrangement of either internal or external Rinnai Heavy Duty water heaters and a stainless steel buffer vessel, demands in excess of 6000 litres per hour can be satisfied. Rinnai's stainless steel buffer vessels do not require electric immersion heating elements.

The manifold system offers the additional benefit of operational cover should a water heater fail; easy access and isolation of a unit for servicing.

Whatever the project Rinnai can offer a solution to meet your needs.

Rinnai are proud to have been associated with very large prestigious water heating projects worldwide.

- Stainless steel vessel - very long life
- Less stored hot water than traditional systems
- Modular system - built-in redundancy
- Solutions for largest industrial and commercial projects

Rinnai's gas fired buffer packs represents a very competitive and energy efficient hot water solution for larger heavy duty applications.

A Rinnai buffer system includes:

- Up to 5 Heavy Duty water heaters (larger systems available on request)
- An equal number of standard flue kits (internal heaters only)
- An equal number of pipe cover boxes (external heaters only)
- An equal number of HD continuous flow water heater valve packs,
 - ball valves for cold water, hot water, gas
- 1 hot water buffer vessel,
 - 300L stainless steel, 500L stainless steel, or 800L
- 1 hot water buffer vessel valve pack,
 - double check valve, two ball valves
- 1 primary pump with valves
- 1 unvented kit (1in or 1½ in pipework),
 - 1 isolation valve
 - 1 pressure reducing valve with gauge
 - 1 strainer
 - 1 double check valve
 - 1 in safety relief valve, 6 bar
- Expansion vessel, 50L or 80L
- 2 drain cocks, ½ in
- 1 tundish 1¼ in
- 1 temperature and pressure relief valve
- 1 control thermostat
- 1 overheat thermostat
- Delivery to site



“Perfect for installations with an intermittent large demand for hot water”

Rinnai | HOT WATER BUFFER PACKS

HD50i HOT WATER BUFFER PACKS - INTERNAL

HD50i heavy duty continuous flow, temperature controlled, room sealed, powered flue. Providing an endless supply of hot water to suit all requirements.

PACK A OPTION (1 off HD50i)

HD50i, standard horizontal flue. Code: V50-A-NG-SF

HD50i, vertical flue. Code: V50-A-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
300	1080	780

PACK C OPTION (3 off HD50i)

HD50i, standard horizontal flue. Code: V50-C-NG-SF

HD50i, vertical flue. Code: V50-C-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
300	2640	2340

PACK E OPTION (5 off HD50i)

HD50i, standard horizontal flue. Code: V50-E-NG-SF

HD50i, vertical flue. Code: V50-E-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
500	4400	3900

PACK B OPTION (2 off HD50i)

HD50i, standard horizontal flue. Code: V50-B-NG-SF

HD50i, vertical flue. Code: V50-B-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
300	1860	1560

PACK D OPTION (4 off HD50i)

HD50i, standard horizontal flue. Code: V50-D-NG-SF

HD50i, vertical flue. Code: V50-D-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
500	3620	3120

UPGRADE OPTIONS

Unvented Kits

From 1" x 50 litre to 1½" x 50 litre

From 1" x 50 litre to 1½" x 80 litre

800 litre vessels must be used with 1½" x 80 litre unvented kit

300 litre vessels cannot be used with more than 3 heaters

Hot water buffer vessel

From 300 litre to 500 litre

From 300 litre to 800 litre

From 500 litre to 800 litre

HD70e HOT WATER BUFFER PACKS - EXTERNAL

HD70e heavy duty continuous flow, temperature controlled. Providing an endless supply of hot water to suit all requirements.

PACK A OPTION (1 off HD70e)

HD70e, no flue required. Code: V70e-A-NG

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
300	1260	960

PACK C OPTION (3 off HD70e)

HD70e, no flue required. Code: V70e-C-NG

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
300	3180	2880

PACK E OPTION (5 off HD70e)

HD70e, no flue required. Code: V70e-E-NG

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
500	5300	4800

PACK B OPTION (2 off HD70e)

HD70e, no flue required. Code: V70e-B-NG

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
300	2220	1920

PACK D OPTION (4 off HD70e)

HD70e, no flue required. Code: V70e-D-NG

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
500	4340	3840

UPGRADE OPTIONS

Unvented Kits

From 1" x 50 litre to 1½" x 50 litre

From 1" x 50 litre to 1½" x 80 litre

800 litre vessels must be used with 1½" x 80 litre unvented kit

300 litre vessels cannot be used with more than 3 heaters

Hot water buffer vessel

From 300 litre to 500 litre

From 300 litre to 800 litre

From 500 litre to 800 litre

HD70i HOT WATER BUFFER PACKS - INTERNAL

HD70i heavy duty continuous flow, temperature controlled, room sealed, powered flue. Providing an endless supply of hot water to suit all requirements.

PACK A OPTION (1 off HD70i)

HD70i, standard horizontal flue. Code: V70i-A-NG-SF

HD70i, vertical flue. Code: V70i-A-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
300	1260	960

PACK C OPTION (3 off HD70i)

HD70i, standard horizontal flue. Code: V70i-C-NG

HD70i, vertical flue. Code: V70i-C-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
300	3180	2880

PACK E OPTION (5 off HD70i)

HD70i, standard horizontal flue. Code: V70i-E-NG

HD70i, vertical flue. Code: V70i-E-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
500	5300	4800

PACK B OPTION (2 off HD70i)

HD70i, standard horizontal flue. Code: V70i-B-NG

HD70i, vertical flue. Code: V70i-B-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
300	2220	1920

PACK D OPTION (4 off HD70i)

HD70i, standard horizontal flue. Code: V70i-D-NG

HD70i, vertical flue. Code: V70i-D-NG-VF

Vessel capacity	Flow rate @ 50°C rise	Flow rate @ 50°C rise
litres	litres 1st hour	litres 2nd hour
500	4340	3840

UPGRADE OPTIONS

Unvented Kits

From 1" x 50 litre to 1½" x 50 litre

From 1" x 50 litre to 1½" x 80 litre

800 litre vessels must be used with 1½" x 80 litre unvented kit

300 litre vessels cannot be used with more than 3 heaters

Hot water buffer vessel

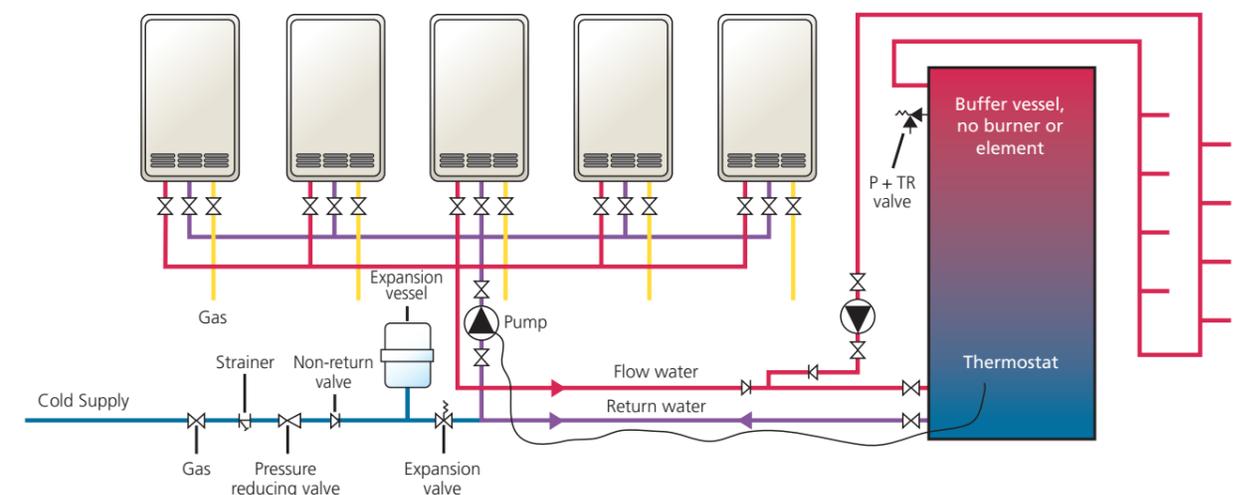
From 300 litre to 500 litre

From 300 litre to 800 litre

From 500 litre to 800 litre

HD70i Vertical Flue

Where there is an intermittent large demand for hot water, Rinnai continuous flow water heaters can be used to maintain the temperature in a large buffer vessel



Rinnai | RENEWABLE HOT WATER SOLUTIONS



Rinnai offers both Flat Plate and Evacuated Tube collectors, each with specific benefits to suit your application. Either option will provide years of low maintenance, “free” energy to heat your water provided the units are correctly sized and installed.

ORIENTATION

Both flat plate and evacuated tube collectors work best when facing due south. However evacuated tube collectors will outperform flat plate collectors when a due south location is not an option, i.e. East/ west facing or both.

PERFORMANCE

The performance of a flat plate collector is close to that of an evacuated tube collector in the summer months when facing due south. Evacuated tube collectors have better overall results in both early and late season and they are not affected by adverse weather conditions and even produce impressive temperatures on cloudy days. The flat plate collectors are exceptionally sturdy and durable, perhaps more suited to vulnerable locations.

Evacuated tube collectors have multiple glass tubes which heat up by absorbing the sun’s energy. The vacuum insulated tube retains most of this heat and the constant profile of the round tube means that the collector is always perpendicular to the sun’s rays. The energy absorbed is approximately constant over the course of the day.

Specifications

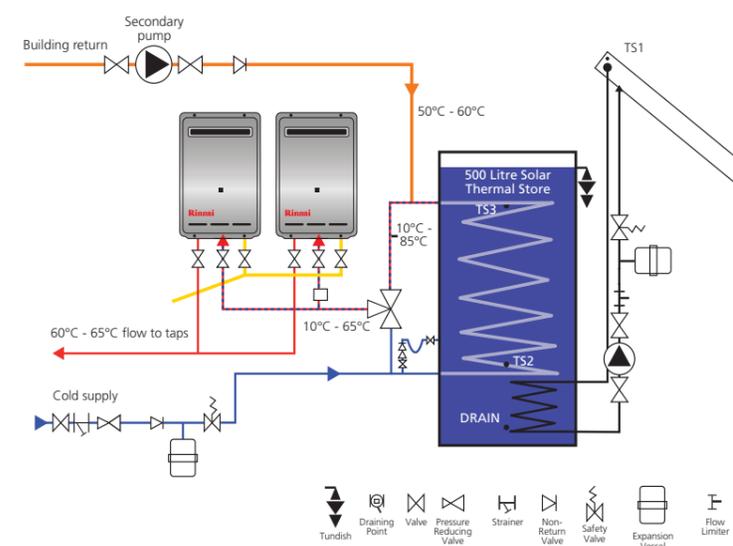
	Evacuated tube collectors	Flat Plate collectors
Dimensions		
Height (mm)	1980	2039
Width (mm)	2460	1139
Total area (m ²)	4.87	2.32
Weight (kg)	96	44.4
Number of heat pipes	30	-
Absorber area (m ²)	2.42	2.14
Absorption coefficient	>93%	95%
Emission coefficient	<6%	5%
Stagnation temperature (°C)	192	209
Maximum operating pressure (bar)	10	6
Tube material	Borosilicate glass	-
Hail resistance	>25mm hailstones	-
Outer tube diameter (mm)	58	-
Outer tube thickness (mm)	1.5	-
Fluid content (ltr)	-	1.2
Material coating	Selective absorber	Copper/Sunselect

Swimming Pools

Swimming pools and jacuzzis are ideal applications for the use of Solar Thermal Heating because they are generally used most in the summer when the energy that can be obtained from the sun’s radiation is at its maximum.

Rinnai can help you to design, size and install a solar heating system for your swimming pool or jacuzzi that could also be set up to heat your domestic hot water at the same time, saving more money on your ever increasing fuel bills.

2 x HD, Solar and Secondary with Diverted Valve



This information is intended as a guide only, it does not imply compliance with water or gas installation regulations. Components will vary depending on the actual installation. Check local regulations before installation.



“Renewable solutions that won’t cost the earth”



“It not only heats the water
... it heats the building too”

Rinnai | TWIN FLOW SYSTEM



What is a Rinnai Twin Flow system?

The Rinnai Twin Flow is a high output water heater and condensing boiler aimed at properties where a conventional combi-boiler is unable to cope with the demand for both heat and hot water. It is the ideal solution for large homes, bed and breakfasts or small hotels, with 2 or more bathrooms and eliminates the need for a massive and expensive hot water storage vessel and complex G3-qualified installation. The Rinnai system provides energy, space saving and is a safe and economical solution for the discerning customer.

The Rinnai Twin Flow features a unique flow switch which regulates the maximum gas loading for the system.

At 6 litres/min (domestic hot water flow rate) and above the boiler automatically switches to standby, allowing the water heater to operate at maximum capacity. This eliminates the need for a larger gas supply or metering.

Installation costs are kept down to a minimum as you do not require a commercial gas meter or a commercial gas qualification to install the system.

Why should you choose a Rinnai Twin Flow system?

Rinnai Twin Flow systems are ideal for installations supporting 3, or more bathrooms, perhaps fitted out as wet rooms or with large capacity shower heads and bath taps requiring up to 20 litres of hot water per minute.

Traditional combi boilers can only manage adequately in buildings with one bathroom. In larger applications, if one shower is used and hot water is called elsewhere (e.g. en-suite or kitchen), a combi will not be able to cope.

The Rinnai Twin Flow provides an endless supply of safe hot water at exactly the temperature required. There is no risk of scalding or suffering cold showers – and there is no need to store hot water at 60°C in a storage vessel.

Rinnai | TWIN FLOW SYSTEM

How does the performance compare to a traditional storage system?

Traditional storage system

A traditional storage system can be expensive to run, because in order to comply to current legislation the water has to be stored at a temperature in excess of 60°C. There is no accurate control of water temperature and users can be left with cold showers as it may run out of hot water at times of high demand.

Typically these systems will be supplied with a 24kW boiler, which is not able to cope with the demand for heat and hot water in larger properties.

Rinnai Twin Flow

The running costs for the Rinnai Twin Flow are lower than storage systems as it only heats water on demand, with no need for expensive storage. The system will never leave the householder with cold showers as it never runs out of hot water and it features accurate control of water temperature to within ±1°C.

The 32kW high performance modulating condensing boiler (Band A SEDBUK rated) is more efficient in larger premises and will easily cope with the heating demand.



Ease of installation

Unlike a traditional storage system, which can take up to three days to install, and requires a qualified electrician and a G3 qualified plumber. The Rinnai system has no vessel, is not subject to water storage regulations and has all its electrics and expansion vessel pre-assembled onto a convenient mounting plate.

The Twin Flow system can be typically installed in half the time of a traditional system.

A Rinnai Twin Flow system benefits users developers and installers

End user Specifier/ Developer Installer

•	•	•	Never run out of hot water
•	•	•	Accurate temperature control
•	•	•	High performance showers and heating
•	•	•	Saves space – no need for a storage vessel
•	•	•	Saves money – lower running costs
•	•	•	Quick and easy to install
•	•	•	Hot water at near to mains pressure
•	•	•	3 years warranty
•	•	•	Flexibility in siting
•	•	•	Built in safety controls
•	•	•	No cold feed cistern to install
•	•	•	No electrical or G3 qualifications needed
•	•	•	Compatible with renewable energy sources
•	•	•	Lightweight modular design
•	•	•	Factory tested for reliability and safety
•	•	•	Design and professional advice service

The green choice?

Rinnai is ISO - 14001, environment management system accredited. This ensures that the best environmental practice is achieved at every stage of the product life cycle having minimal effect on the environment. The Rinnai system can be



used as a booster for renewable energy sources and is pre-wired to accept inputs from solar, ground source heat pumps or air source heat pumps. Because there is no pilot light and no hot water storage, gas consumption is significantly reduced.



Save money with a Rinnai Twin Flow

Soaring energy prices mean storing water in a vessel at 60°C, waiting to be used, is a waste of money. Part L of the Building Regulations prohibits the fitment of electric immersion heaters unless there is no alternative. It makes economic sense to fit a Rinnai Twin Flow, where savings of up to 25% can be achieved on gas bills, compared to traditional storage systems.

Accurate temperature control

Complete control over the water temperature can be achieved by installing one or more of the optional Rinnai controllers.

Specifications

RINNAI INFINITY 26i WATER HEATER

Installation	Internal wall mounted
Height	600mm
Width	350mm
Depth	224mm
Weight	22kg
Exhaust system	Room Sealed 80/125 Concentric
Temperature range	37°C - 85°C
Ignition method	Direct electronic
Gas consumption	
Natural gas	4.4kW - 54.1kW gross
Propane	4.4kW - 54.1kW gross
Hot water delivery capacity	20L/min raised 33°C 780L/hr raised 50°C
Min operating water flow	2.4L/min
Nominal operating pressure	1 - 10 bar
Power supply	230V AC 50Hz 1ph
Electrical consumption	80W

The temperature can be easily changed at the touch of a button and precise control to within ±1°C reduces the chances of scalding for children and the elderly.

Boosting performance

The standard configuration for a Twin Flow includes a 32kW boiler, which will cope with heating larger properties, plus a Rinnai 26i instantaneous water heater. This combination is sufficiently powerful for most domestic applications, but for extremely large properties larger output water heaters are available, please contact Rinnai for details.

What if you are limited for space?

The back plate does not have to be ordered or used with the Twin Flow system. If required the boiler can be installed within the property and the Rinnai water heater can be installed elsewhere within the property or an external Rinnai water heater can be purchased for external mounting.

Please contact Rinnai on 01928 531870 for details of the complete product range available.

Warranty

Rinnai offer a full design, installation and maintenance package, supported by a 3 year parts warranty on all Twin Flow systems.

RINNAI E32S CONDENSING BOILER

Installation	Internal wall mounted
Height	500mm
Width	395mm
Depth	315mm
Weight	40kg
Exhaust system	Room Sealed 80/125 Concentric
Temperature range	20°C - 90°C
Ignition method	Direct electronic
Gas consumption	
Natural gas	7kW - 32kW gross
Propane	7kW - 32kW gross
Modulating heat output capacity	6.1-28.2kW at 80/60°C 6.8-30.6kW at 50/30°C
Pump Head	UP 20-60 17 kPa available for system
Nominal operating pressure	1 - 3 bar (1.5-1.7 bar ideal)
Power supply	230V AC 50Hz 1ph
Electrical consumption	145W max
Expansion vessel	16 litre

OVERALL TWIN FLOW DIMENSIONS: width 955mm, height 670mm, depth 455mm

Twin Flow maximum gas consumption on full load 54.1kW. 5.05m³/hr

(Patent Pending)



Rinnai | INFINITY WATER HEATERS

"Safe predictable hot water - all day, everyday"

Sudden changes in water temperature, causing cold showers or scalding hot baths are a thing of the past with Rinnai's Infinity range of water heaters. Unlike many competitors, the water temperature you set is the water temperature you get. So, if you are showering at, say 40°C, and someone turns on a tap elsewhere in the house, the temperature will not vary.

Rinnai Infinity is available for internal and external installations

- 100% accurate water temperature control
- Frost protected to water heater
- 16i with integral temperature controller

Suggested applications:

- Domestic properties/dwellings
- Cafés, pubs and restaurants
- Offices, shops and hairdressers
- Small industrial units

as shower roses and basin outlets. Add to this the convenience of precise water and temperature control with the installation of water controllers and its compact size, which allows it to be installed almost anywhere, and you have the most technologically advanced hot water system available today!



The installation of water controllers allows you to select the exact temperature you need, reducing the chance of scalding. Our deluxe controllers have the added feature of an automatic bath fill which stops the water flow at your desired level. The Rinnai Infinity range, in common with all Rinnai water heaters, offers a system that guarantees a constant flow of safe hot water at just the temperature you choose.

Operated via an easy to use built-in digital controller, the 16i provides near mains pressure flow for as long as you need it, without the need for thermostatic mixer valves. The Rinnai Infinity range also comes with frost protection as standard. Other models in the Infinity range may be connected to up to four remote temperature controllers.

Simply select the temperature you want and turn on the hot tap. Not only can you experience total control in the bathroom, but unlike other Continuous Flow hot water systems, you can have up to four controllers... a controller for the bathroom, kitchen, ensuite and even the laundry.

The number of users in any installation is extremely important as it directly affects the size of unit that is required. Rinnai Infinity Continuous Flow systems are sized according to the number of outlets potentially operating at once (ie multiple showers or bathrooms). Nobody likes a cold shower so it is vital that any system is correctly sized for an application. Please talk to your hot water specialist about the best model to suit your needs. Infinity installations are protected by Rinnai's parts & labour warranty.

Weighing in at just 18kg and at less than 680mm high, the Rinnai Infinity 16i is the perfect solution to hot water requirements for domestic properties/ dwellings and light commercial point of use.

It is designed to allow maximum flexibility when choosing where to install it, as it does not have to be mounted on an external wall. Optional slimline flue kits include a choice of vertical and horizontal terminals and extensions, allowing installation up to 5 metres from an outside wall.

Because the Rinnai Infinity range is extremely efficient, it will usually run from a normal domestic gas meter. The Rinnai Infinity range is designed for use directly off the mains and therefore there is no need for large, cumbersome storage vessels that runs out of hot water.

Hot water and more specifically showering & bathing, contributes the highest proportion of water used in most households. Gas Continuous Flow systems such as the popular Rinnai Infinity have been designed to minimise wastage with faster start-ups and the ability to operate at lower flow rates, and are more compatible with water efficient fixtures such



"The perfect water heating solution for point of use commercial applications and the home"

Rinnai | INFINITY WATER HEATERS



Rinnai Infinity 16i internal water heater specifications

Installation	Internal wall mounted	Hot water delivery capacity	15.2L/min raised 33°C
Height	675mm	Min operating water flow	2.0L/min
Width	370mm	Nominal operating pressure	1 - 10 bar
Depth	139mm	Power supply	230V AC 50Hz 1ph
Weight	18kg	Electrical consumption	68W
Exhaust system	Room sealed forced flue		
Temperature range	37°C - 60°C		
Ignition method	Direct electronic		
Gas consumption			
Natural gas	4.3kW - 34.9kW max		
Propane	4.3kW - 36.5kW max		



Rinnai Infinity 16e external water heater specifications

Installation	External wall mounted	Hot water delivery capacity	12.0L/min raised 33°C 8.0L/min raised 50°C
Height	530mm	Min operating water flow	2.4L/min
Width	350mm	Nominal operating pressure	1 - 10 bar
Depth	170mm	Power supply	230V AC 50Hz 1ph
Weight	15kg	Electrical consumption	47W
Exhaust system	Forced exhaust		
Temperature range	37°C - 75°C		
Ignition method	Direct electronic		
Gas consumption			
Natural gas	5.2kW - 35kW max		
Propane	5.0kW - 35kW max		



Rinnai Infinity 26i internal water heater specifications

Installation	Internal wall mounted	Hot water delivery capacity	19.6L/min raised 33°C 12.8L/min raised 50°C
Height	600mm	Min operating water flow	2.4L/min
Width	350mm	Nominal operating pressure	1 - 10 bar
Depth	224mm	Power supply	230V AC 50Hz 1ph
Weight	22kg	Electrical consumption	80W
Exhaust system	Direct vent forced flue		
Temperature range	37°C - 85°C		
Ignition method	Direct electronic		
Gas consumption			
Natural gas	4.3kW - 54kW max		
Propane	4.3kW - 54kW max		



Rinnai Infinity 26e external water heater specifications

Installation	External wall mounted	Hot water delivery capacity	19.0L/min raised 33°C 13.0L/min raised 50°C
Height	600mm	Min operating water flow	2.4L/min
Width	350mm	Nominal operating pressure	1 - 10 bar
Depth	224mm	Power supply	230V AC 50Hz 1ph
Weight	22kg	Electrical consumption	55W
Exhaust system	Forced exhaust		
Temperature range	37°C - 85°C		
Ignition method	Direct electronic		
Gas consumption			
Natural gas	4.4kW - 55.3kW max		
Propane	4.4kW - 55.3kW max		





“Relax with confidence and peace of mind”

Rinnai | DIGITAL CONTROLLERS

Rinnai digital controllers allow you to simply key in the water temperature you want (from 37°C to 55°C) in up to four different locations around your home. You can set water to a safe temperature for the bathroom, then set it higher for the kitchen or laundry. Rinnai controllers are water resistant for use in damp areas, including bathrooms.

Precise temperature control

- Bath the baby at 38°C, the kids at 40°C and yourself at 42°C - it's your choice
- Reduce the risk of scalding, especially useful for children or the elderly
- No more hot or cold blasts in the shower. If someone turns on another tap in the house, the controller ensures water is still delivered to you at the desired temperature
- No need to mix hot and cold water to achieve the right temperature - simply turn on the hot tap and enjoy
- All Rinnai controllers* are compatible with standard use and Heavy Duty water heaters

Deluxe kitchen controller*

For use in the kitchen and the laundry, as with the standard controller, with the added benefit of working in conjunction with your deluxe bathroom controller.

When your bath is ready the alarm sounds on all deluxe controllers.



Compact controller*

Our smallest and most economical model, the Rinnai compact controller can be installed in the kitchen, bathroom, en suite, even the laundry.



At the touch of a button you can change the temperature up or down as required. The 'transfer' button is a safety feature that ensures no other controller in the house can change the temperature whilst the hot water is running.

Deluxe bathroom controller*

Rinnai deluxe bathroom controllers allow you to achieve ultimate control, with the option of working in conjunction with the kitchen deluxe controller.

Deluxe bathroom controllers are complete with integral clock, speaker and volume controls, allowing you to fill a bath to the desired level and at the precise temperature you want, at the touch of a button.

The controller will automatically turn off the hot water and a voice recording will advise you when the bath filling is completed.

You can select any volume of water, small volumes for youngsters in a bath to large volumes for spas.

* Controllers are not compatible with the 16i water heater



Rinnai | INTERNAL FLUEING FOR HD HEATERS

The Rinnai internal flueing system is highly versatile and makes installation of an internal water heater simple and convenient.

The flueing for internal water heaters is a coaxial design. It is manufactured from an aluminium alloy inner flue pipe to discharge product of combustion and a thermoplastic outer pipe for air supply to the appliance. The water heater is a room sealed appliance.

Note: Each Rinnai heater is flued individually.

As it is fan assisted, the heater can be flued vertically, horizontally or any combination of both, to a maximum of 9 metres and 3 x 90 degree bends.

Horizontal flueing can be used as a direct wall flue or extended from another internal wall.

Vertical flueing is used when the water heater needs to be flued vertically through the roof.

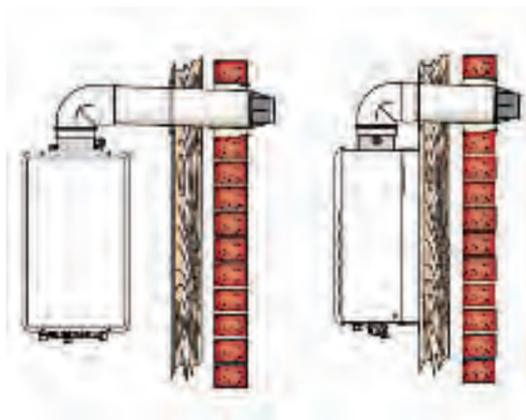
A condensate trap is required when vertical flue exceeds 1.5 metres.

Rinnai HD internal water heaters are classified as 'room sealed' appliances. Flue systems must be installed in accordance with Rinnai Installation instructions (supplied with flue terminals), local gas fitting regulations, municipal building codes, and all other relevant statutory regulations.

Discuss with your Rinnai Commercial representative for further details.

Note: Only Rinnai flueing systems can be used with internal water heaters.

Non-Rinnai flueing systems are not certified and will not be covered under warranty.



Although the 16i heater top connection size is 60mm inner diameter and 100mm outer diameter all extension pieces are from the 26i/HD50i range of 80/125mm flueing.

All extensions, bends, brackets and flashings should be chosen from that range.

When extending, the heater must have a 60/100 to 80/125 adaptor with condensate trap on top of the unit. No extensions can be run in 60/100 flue. Maximum flue length is 10m less 1m per bend, up to a maximum of 4 bends. All flue extensions incorporate a condensate trap; this must be drained for flue runs over 1.5m and can be left capped for shorter flues.

All flue components for the 26i/HD50i are 80mm inner diameter and 125mm outer diameter.

A full programme of extensions, bends, brackets and flashings are available from Rinnai. The component on top of the heater must be a female/female adaptor. In some cases an additional adaptor may be required.

Maximum flue length is 15m less 2m per bend, up to a maximum of 4 bends.

Additionally the height from top of the heater to the terminal cannot exceed 9m.

All flue runs exceeding 1.5m total length must incorporate a condensate kit.

All flue components for the HD70i are 100mm diameter single wall, up to the concentric terminal.

A full programme of extensions, bends, brackets and flashings are available from Rinnai. The heater must have two

female/female straight adaptors directly on top of the unit for flue extensions.

Maximum flue length is 15m less 2m per bend, up to a maximum of 4 bends. These distances are used for both the air intake and exhaust (each can be up to 15m).

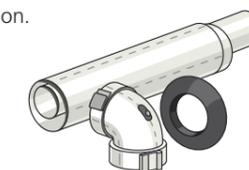
Additionally the distance from top of heater to the terminal cannot exceed 9m. All flue extensions incorporate a condensate trap; this must be drained for flue runs over 1.5m and can be left capped for shorter flues.

FLUES AND ACCESSORIES FOR 16i

16i Standard Horizontal Flue Kit (100mm)

For use where installations terminate horizontally, directly back through the wall the unit is mounted on. No extensions can be used.

Contents: 60/100mm Flue Adaptor F/F, 60/100mm Horizontal Flue Terminal, Wall Gasket, black
Product Code - 952 - 016 - 001



16i Vertical Flue Kit (100mm)

For use where installations terminate vertically

Contents: 60/100mm to 80/125mm Adaptor with condensate drain, 80/125 Vertical Terminal, Roof Attic Clamp
Product Code - 952 - 016 - 002

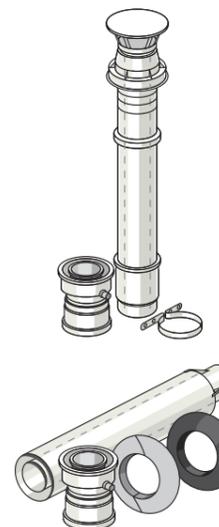
16i Non-standard Horizontal Flue Kit (100mm)

For use where installations require extensions and terminate horizontally

Contents: 60/100mm to 80/125mm Adaptor with condensate drain, 80/125 Horizontal Terminal, Wall Gasket black/white
Product Code - 952 - 016 - 003

Additional parts for use with 16i extensions

250mm Flue Extension (125mm)	Code 952 - 026 - 004
500mm Flue Extension (125mm)	Code 952 - 026 - 005
1000mm Flue Extension (125mm)	Code 952 - 026 - 006
90° Flue Elbow M/F (125mm)	Code 952 - 026 - 003
45° Flue Elbow M/F (125mm)	Code 952 - 026 - 002
Siphon Pack for Condensate Trap	Code 952 - 026 - 014
Roof Attic Pipe Clamp (125mm)	Code 952 - 026 - 010
Standoff Pipe Clip (125mm)	Code 952 - 026 - 012
Flat Roof Flashing (125mm)	Code 952 - 026 - 008
Pitched Roof Flashing 5° - 25° (125mm)	Code 952 - 026 - 017
Pitched Roof Flashing 25° - 45° (125mm)	Code 952 - 026 - 011
Pitched Roof Flashing 35° - 55° (125mm)	Code 952 - 026 - 018



Rinnai | FLUE KITS AND ACCESSORIES

FLUES AND ACCESSORIES FOR 26i AND 50i

26i and HD50i standard horizontal flue kit

For use where installations terminate horizontally.

Contents: 80/125mm Wall Terminal, 80/125mm 90° Flue Adaptor F/F, Wall gasket white, Wall Gasket black

Product Code: 952 - 026 - 001

26i and HD50i standard vertical flue kit

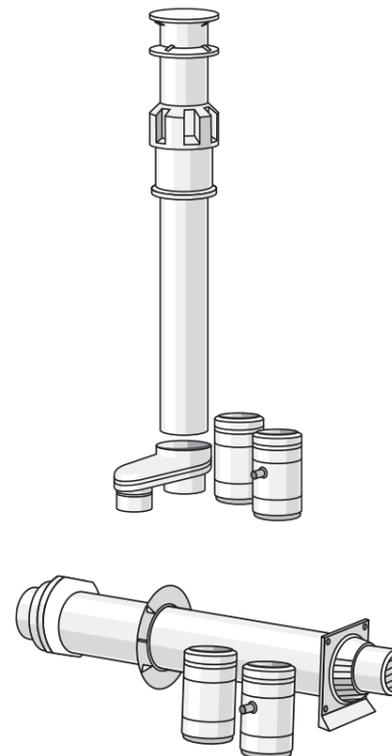
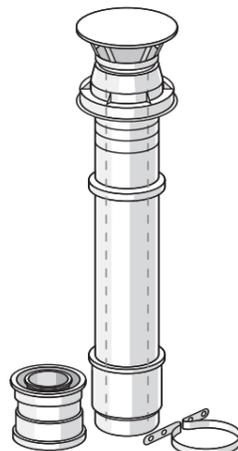
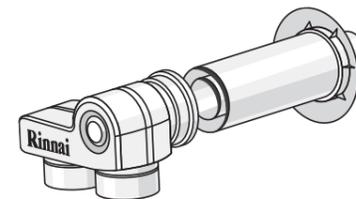
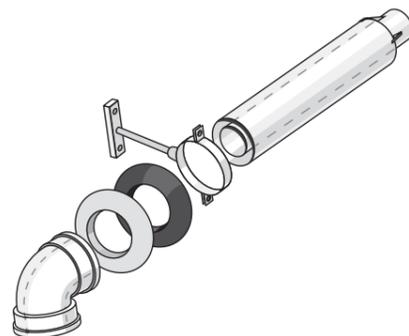
For use where installations terminate vertically.

Contents: 80/125mm Concentric Roof Terminal, Vertical Flue Adaptor F/F, Roof/Attic Pipe Clamp

Product Code: 952 - 026 - 015

Additional parts for the 26i and 50i flue system

250mm Flue Extension (125mm)	Code 952 - 026 - 004
500mm Flue Extension (125mm)	Code 952 - 026 - 005
1000mm Flue Extension (125mm)	Code 952 - 026 - 006
90° Flue Elbow M/F (125mm)	Code 952 - 026 - 003
45° Flue Elbow M/F (125mm)	Code 952 - 026 - 002
90° Flue F/F Adaptor (125mm)	Code 952 - 026 - 020
Vertical Flue Adaptor F/F (125mm)	Code 952 - 026 - 009
Wall Gasket White (125mm)	Code 952 - 026 - 021
Roof Attic Pipe Clamp (125mm)	Code 952 - 026 - 010
Standoff Pipe Clip (125mm)	Code 952 - 026 - 012
Flat Roof Flashing (125mm)	Code 952 - 026 - 008
Pitched Roof Flashing 5° - 25° (125mm)	Code 952 - 026 - 017
Pitched Roof Flashing 25° - 45° (125mm)	Code 952 - 026 - 011
Pitched Roof Flashing 35° - 55° (125mm)	Code 952 - 026 - 018
Flue Condensation Kit (125mm)	Code 952 - 026 - 016



FLUES AND ACCESSORIES FOR 70i

HD70i standard horizontal flue kit

For use where installations terminate horizontally.

Contents: 100/100 to 80/125mm Manifold Adaptor, 80/125 Horizontal Flue Terminal, Wall Gasket White

Product Code: 952 - 032 - 001

HD70i standard vertical flue kit

For use where installations terminate vertically.

Contents: 100mm Straight Adaptor F/F, 100mm Straight Adaptor F/F with condensate drain, 100/100 to 100/150 Adaptor, 100/150 Vertical Flue Terminal

Product Code: 952 - 032 - 007

HD70i non-standard horizontal flue kit

For use where installations terminate vertically using extensions

Contents: 100mm Straight Adaptor F/F, 100mm Straight Adaptor F/F with condensate drain, 100/100 to 100/150 Adaptor, 100/150 Horizontal Flue Terminal, Wall Gasket White

Product Code: 952 - 032 - 022

Additional parts for the 70i flue system

Flue Extension (1000mm)	Code 952 - 032 - 006
Flue Extension Telescopic (330mm)	Code 952 - 032 - 024
90° Bend (100mm)	Code 952 - 032 - 003
45° Bend (100mm)	Code 952 - 032 - 002
Siphon Pack for Condensate Trap	Code 952 - 026 - 014
Stand-off Pipe Clamp (100mm) white	Code 952 - 100 - 003
Attic Pipe Clamp (100mm)	Code 952 - 100 - 005
Flat Roof Flashing (150mm dia)	Code 952 - 032 - 008
Lead Tile 25°-45° (150mm)	Code 952 - 032 - 011
Lead Tile 5°-25° (150mm)	Code 952 - 032 - 017

GAS WATER HEATER ACCESSORIES

Electronic sequencers

MECS 1, for use with the 24e, 32e and HD70e. Code REU-MSA-M Additional Slave. Code REU-MSA-S

MECS 2, for use with the 26e, 26i and HD50i. Code REU-MSA-2M Additional Slave. Code REU-MSA-2S

MECS 3, for use with the HD70i. Code REU-MSA-3M Additional Slave. Code REU-MSA-3S

EZ Connect, for use with the HD70i to manifold together 2 heaters low cost alternative to MECS 3 (only for use when manifolding a maximum of 2 HD70i units)

Pipe CoverBoxes

16e & 20e Pipe Cover Box.	Code 951-000-003
26e Pipe Cover Box.	Code 951-000-004
32e Pipe Cover Box.	Code 951-000-001
70e Pipe Cover Box.	Code 951-001-001

Sequencing Valve

Pressure Activated Manifold (PAM) Valve

Heater Guards

Universal external water heater guard.	Code 956-000-003
Water heater terminal guard.	Code 956-000-001

Water system kits

¾ in - 12 Litre Unvented Potable Kit

12 Litre Expansion Vessel
Safety Release Valve, Strainer
Pressure Reducing Valve with Gauge
Double Check Valve and Tundish
Code 953-001-001

1 in - 12 Litre Unvented Potable Kit

12 Litre Expansion Vessel
Safety Release Valve, Strainer
Pressure Reducing Valve with Gauge
Double Check Valve and Tundish
Code 953-001-002

1½ in - 35 Litre Unvented Potable Kit

35 Litre Expansion Vessel
Safety Release Valve, Strainer
Pressure Reducing Valve with Gauge
Double Check Valve and Tundish
Code 953-003-003

Pipe Cover

Allows the pipework to be properly lagged after installation. The cover can be easily attached to the Rinnai Infinity external units to cover pipes and valves.

Security Cage

The cage is available to protect the external units from theft and damage. They also protect the external air outlet when located in a low position.

Rinnai | WARRANTY

As the purchaser of a high quality Rinnai water heater you are provided with the following conditional warranty



Standard use 16e, 20e, 24e, 26i, 26e & 32e	Heat exchanger		All other parts	
	Parts	Labour	Parts	Labour
	3 Years	1 Year	3 Years	1 Year



Heavy duty use HD50i, HD70i & HD70e	Heat exchanger		All other parts	
	Parts	Labour	Parts	Labour
	5 Years	1 Year	5 Years	1 Year

16i domestic standard use heaters come with a 1 year parts and labour warranty on the heat exchanger and all other parts

Definition of standard use

The warranty period allocated under standard use is based on domestic and light commercial hot water usage.

Rinnai standard use warranty periods apply only where Rinnai water heaters are installed in domestic and light commercial situations at operating temperatures below 65°C and do not include installations incorporating storage cylinders or building flow and return systems.

The warranty shall apply to any Rinnai water heater from the Infinity range used in this way.

Definition of heavy duty use

The warranty period allocated under heavy duty use are for Rinnai HD water heaters installed at premises such as commercial and industrial buildings, cafés, caravan parks, and sporting complexes.

Heavy duty use warranty applies to:

Water heaters supplying a central shower block.

Water heaters supplying kitchens used for the bulk preparation of food.

Water heaters set to 65°C or higher.

Water heaters used in commercial or industrial processes.

Any application that uses Rinnai water heaters in conjunction with buffer vessels.

Any application that uses Rinnai water heaters in conjunction with a flow/return system.

Water heaters installed as components of centralised bulk hot water systems.

Situations defined as heavy duty use *MUST* have the Rinnai HD range of water heaters to be eligible for the heavy duty use warranty. Rinnai Infinity units used in commercial situations are only subject to a 1 year warranty across the board.

Description	pH	Total dissolved Solids (TDS)	Total Hardness	Chlorides	Magnesium	Calcium	Sodium	Iron
Maximum Recommended Levels	6.5 - 9.0	600 mg/litre	200 mg/litre	300 mg/litre	10 mg/litre	20 mg/litre	150 mg/litre	1 mg/litre

No Rinnai warranty will cover faults arising from improper installation or gas supply, water contaminants beyond defined limits, environmental factors, plumbing fittings, or other outside influences of which Rinnai is not responsible. Service calls for these issues will be chargeable.



... Solar key marked certified