

Internal & external models available

Horizontal or vertical flue discharge

Pre-engineered solutions



Rheem Tankpak Series 2 installed at Hydro Majestic Hotel - Blue Mountains, NSW

## COMMERCIAL CONTINUOUS FLOW

incl. **COMMPAK<sup>®</sup>**, **MULTIPAK<sup>®</sup>** & **TANKPAK<sup>®</sup>**

### THE RANGE

Our Commercial Continuous Flow Water Heater (CFWH) range meets all the demands expected of Rheem products – from luxury homes to the largest commercial hot water application imaginable.

#### Tankpak Series 2<sup>®</sup>

- 84% thermal efficiency heat source
- Vitreous enamel storage tank up to 82°C operation
- Large flow 50mm storage tank fittings
- Digital temperature display
- Internal and external models available
- Pre-assembled CFWH banks

#### Multipak<sup>®</sup>

- Plug and Play – simply connects to the plumbing services
- Staged delivery on demand
- 50°C and up to 82°C models
- Left or right hand plumbing

#### Commpak<sup>®</sup>

- Engineered and pre-assembled for ease of installation
- Compact floor mount design
- Mains pressure performance without the use of tanks
- Suitable for small to medium sized applications

#### Commpak Plus<sup>®</sup>

- Engineered to meet customer requirements
- Dual pumps provide back up and redundancy
- Staged system operation
- Suitable for large applications

#### Individual Continuous Flow

- Q-factor<sup>®</sup> provides constant temperature at the outlet rapidly
- Unique Flame Safe<sup>®</sup> technology detects heat exchanger faults and shuts the system down
- Frost protection is supplied standard
- Suitable for sanitising applications when set at 82°C.

- EZ Link<sup>®</sup> two units together with a Deluxe Kitchen Temperature Controller for greater capacity. Max 60°C
- The range includes external models and internal models with Rheem supplied flue kits. Models are available for use on either natural or propane gas



EXTERNAL MODEL

INTERNAL MODEL

# COMMERCIAL CONTINUOUS FLOW WATER HEATING

The Rheem Commercial CFWH range has been developed to provide an engineered solution for commercial hot water applications. Starting with systems as small as two Commercial Continuous Flow units through to systems as large as you can imagine.

All systems are pre-assembled on an engineered frame, which can be wall or floor mounted model dependent. A range of options are available with all systems.

## Installation

Models designed to deliver temperatures in excess of 60°C can be used as an in line booster to solar pre-heat plant and can be used in conjunction with Rheem Guardian® to provide tempered or warm water.

The entire range can be specified for installation outdoors or indoors with Rheem supplied coaxial flue kits with high grade stainless steel inner and aluminised steel outer. Both internal and external Commercial Continuous Flow units are certified for installation with zero clearance between water heaters.

## Warranty\*

- 5 years heat exchanger with a thermostat setting not exceeding 75°C
- 12 months parts and labour. 12 months heat exchanger warranty when used with a thermostat setting exceeding 75°C

\* **Conditions apply:** For full terms and conditions please contact Rheem or see Owner's Guide and Installation Instructions, available at [www.rheem.com.au](http://www.rheem.com.au)

## CFWH TECHNICAL DATA

RHEEM COMMERCIAL CONTINUOUS FLOW		EXTERNAL MODEL	INTERNAL MODEL
<b>Model</b>		<b>872627</b>	<b>862627</b>
Delivery Temperature		up to 82°C	up to 82°C
Input	MJ/h	205	205
Output	kW	47.5	47.5
Efficiency	%	84	84
Gas Energy Rating	Stars	6	6
Flow Rate @ 25°C Rise	L/min	27	27
Minimum Flow Rate	L/min	2	2
<b>Dimensions</b>			
Height	mm	600	650
Width	mm	350	350
Depth	mm	225	250
Frost Protection		yes	yes
Approximate Weight	kg	23	23
Inlet/Outlet Connections	BSPM	R¾/20	R¾/20
Gas Connection	BSPM	R¾/20	R¾/20
<b>Water Supply Pressure</b>			
Maximum	kPa	1000	1000
Minimum	kPa	140	140
<b>Gas Supply Pressure Range</b>			
Natural Gas	kPa	1.13 – 3.5	1.13 – 3.5
Propane	kPa	2.75 – 3.5	2.75 – 3.5
Temperature Settings	°C	38, 40, 42, 43, 45, 50, 55, 60, 65, 70, 75, 82	38, 40, 42, 43, 45, 50, 55, 60, 65, 70, 75, 82
Factory Set Temperature	°C	60	60
<b>Co-Axial Flue Specification</b>			
Inner – Material/Diameter	mm	NA	316SS/75
Outer – Material/Diameter	mm	NA	Aluminised Steel/125
Maximum Flue Run		NA	13.5m and no bends <sup>16</sup>
<b>Accessories</b>			
Pipe Cover		299830	NA
Recess Box		299831	NA
Security Bracket		299868	299868
Security Cage		299867	NA
EZ Link® Kit Max 60°C (Deluxe Kitchen Controller not included)		290141	290141
<b>Deluxe Temperature Controllers (Max 60°C)</b>			
Kitchen		299858	299858
Bathroom 1		299859	299859
Bathroom 2		299860	299860

<sup>16</sup> Reduce the maximum length by 1.5m for every 90° bend and by 0.75m for every 45° bend. The flue system is suitable for vertical and horizontal termination when used with the appropriate terminal.

## MULTIPAK®

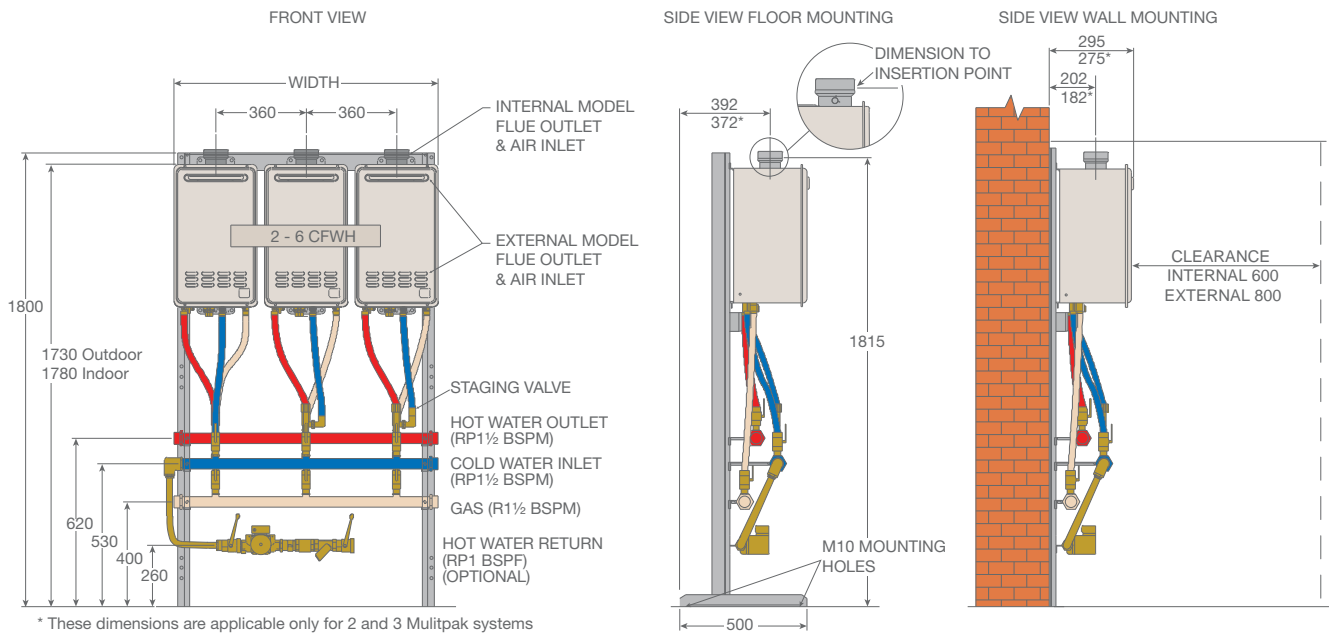
The range starts with Multipak, which is a staged ignition system available in models comprising two to six Commercial Continuous Flow units. Typically used where large demands are required intermittently, such as in sports clubs. In 60°C temperature mode, Multipak is suitable for use in dead leg and recirculation systems. 50°C limited models are suitable for dead leg applications only<sup>17</sup>.

### Features Include:

- Engineered and pre-assembled for ease of installation
- Natural gas and propane models
- Left or right hand plumbing
- High efficiency continuous flow
- Optional secondary hot water circulator (timer required not supplied)<sup>18</sup>



Multipak®



MULTIPAK MODEL	INTERNAL EXTERNAL	MPI 02 MPE 02	MPI 03 MPE 03	MPI 04 MPE 04	MPI 05 MPE 05	MPI 06 MPE 06
Input	MJ/h	410	615	820	1,025	1,230
Recovery Rate at 50°C rise	L/hr	1,645	2,470	3,290	4,115	4,935
Maximum Flow Rate at 50°C rise	L/min	27	41	54	68	81
Minimum Flow Rate	L/min	2.0	2.0	2.0	2.0	2.0
Approx Weight	kg	95	120	185	210	235
Wall Mount		standard	standard	standard	standard	standard
Free Standing Frame (FSF)		optional	optional	optional	optional	optional
Electrical Supply (240V/50Hz)	Amps	1.50	2.25	3.0	3.75	4.5
Electrical Connection		1.8m 10A Plug and Lead per CFWH				
<b>Dimensions</b>						
Width	mm	820	1180	1540	1900	2260
Depth (Wall Mount / Free Standing Frame)	mm	360/500	360/500	360/500	360/500	360/500
Frost Protection		Yes	Yes	Yes	Yes	Yes
Accessories - Secondary circulator <sup>18</sup>	part number	299658	299658	299658	299658	299658

<sup>17</sup> 50°C limited systems are suitable for dead leg applications only. Further tempering may be required. Consult AS3500.4 for details.

<sup>18</sup> Secondary hot water circulator option not available on systems set to deliver 50°C

## COMMPAK<sup>®</sup>

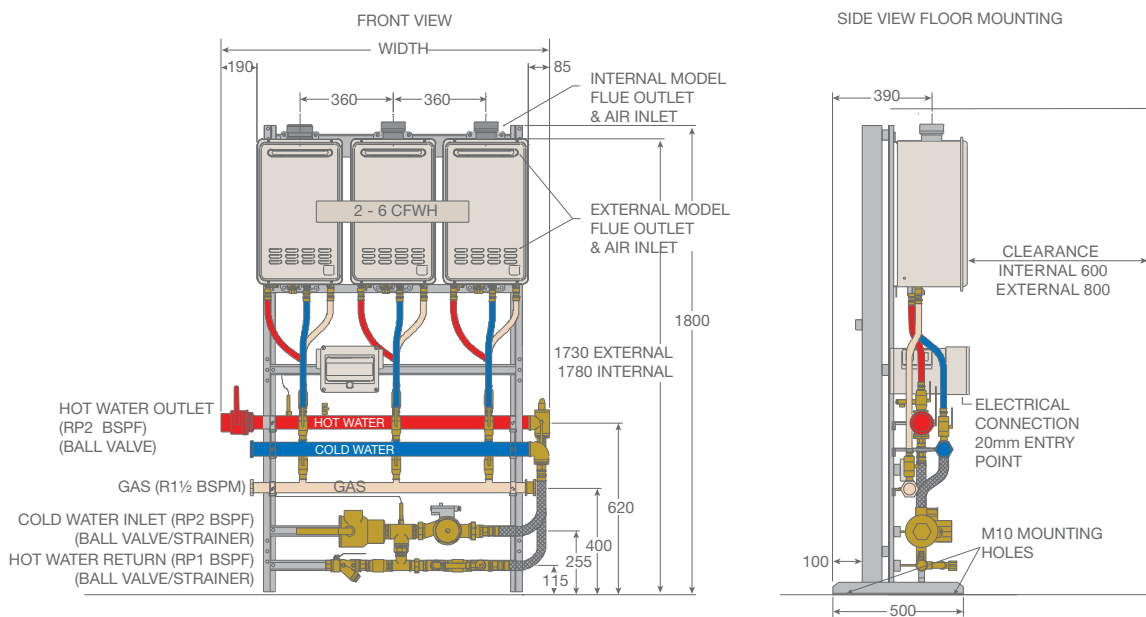
Featuring mass-flow technology Commpak combines sophisticated electronics and pump technology to equalise hot and cold water pressures. A differential set point combined with the thermal mass in the system piping replicates storage. The result is mains pressure performance without the need for storage tanks, reducing overall plant footprint and increasing plant efficiency. Commpak is suitable for small to medium commercial applications utilising up to six Commercial Continuous Flow units.

### Features Include:

- Engineered and pre-assembled for ease of installation
- Natural gas only
- Suitable for use in dead leg and recirculation systems.
- Mains pressure performance
- Optional Duty/Standby pumps



Commpak<sup>®</sup>



COMMPAK MODEL	INTERNAL EXTERNAL	CPI 02 CPE 02	CPI 03 CPE 03	CPI 04 CPE 04	CPI 05 CPE 05	CPI 06 CPE 06
Input	MJ/h	410	615	820	1,025	1,230
Recovery Rate at 50°C rise	L/hr	1,645	2,470	3,290	4,115	4,935
Peak Flow Rate at 50°C rise	L/min	27	41	54	68	81
Approx Weight	kg	120	150	220	245	270
Free Standing Frame (FSF)		standard	standard	standard	standard	standard
Electrical Supply (240V/50Hz)	Amps <sup>19</sup>	3.62	4.62	5.62	6.62	7.92
Electrical Connection		Hard Wired	Hard Wired	Hard Wired	Hard Wired	Hard Wired
<b>Dimensions</b>						
Width	mm	1330	1330	1690	2050	2410
Depth (Free Standing Frame)	mm	500	500	500	500	500
Frost Protection		Yes	Yes	Yes	Yes	Yes
Accessories - Duty/Standby pump	part number	299659	299659	299659	299659	299659

<sup>19</sup> Single pump. Add 1.62 Amps for Duty/Standby pump option.

# COMMPAK PLUS®

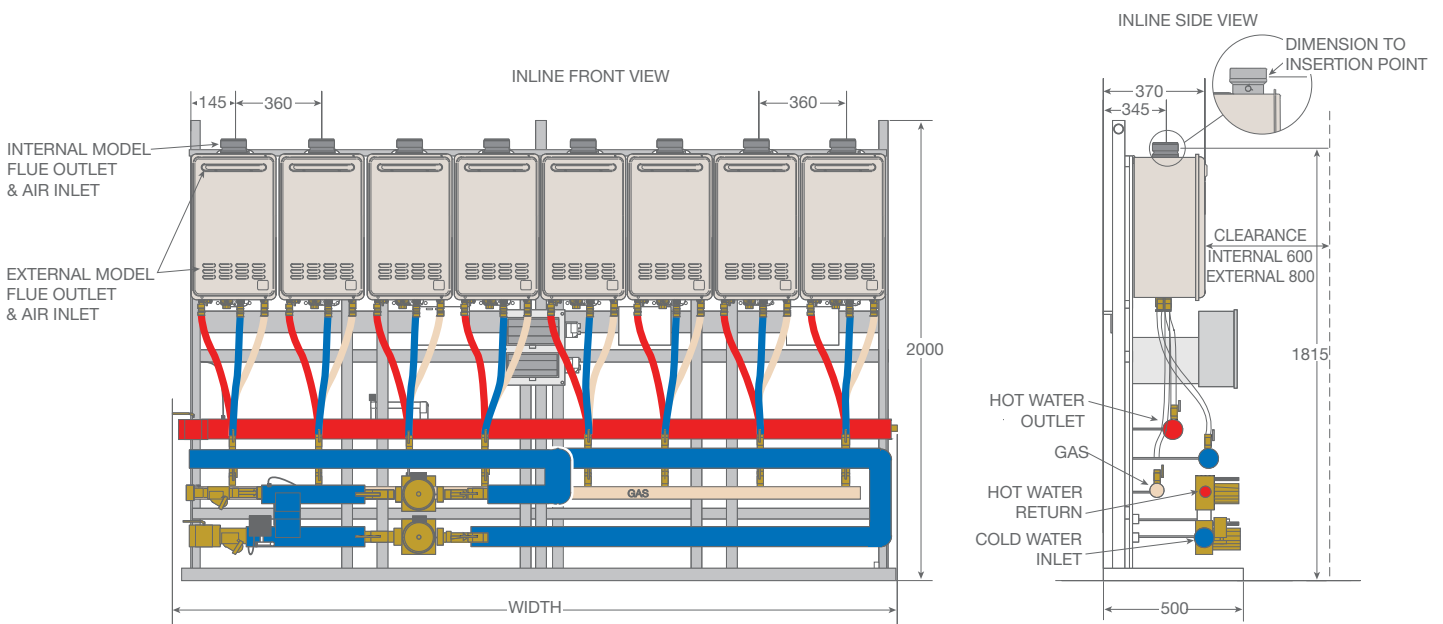
## COMMPAK PLUS®

Where large demands are required, Commpak Plus is the ideal choice. Starting with systems greater than six Commercial Continuous Flow units, Commpak Plus is engineered to meet customer requirements.

In-line or back to back arrangements are available to meet plant room space availability. Dual pump systems are provided which allows staging of the system as well as providing redundancy.

Commpak Plus has BMS/BAS connectivity and systems are available in temperature delivery from 60°C to 80°C.

### Inline 7-12 Commpak Plus®



COMMPAK PLUS MODEL	INTERNAL EXTERNAL	CPI 07 CPE 07	CPI 08 CPE 08	CPI 09 CPE 09	CPI 10 CPE 10	CPI 11 CPE 11	CPI 12 CPE 12	CPI 14 CPE 14	CPI 16 CPE 16	CPI 18 CPE 18
Input	MJ/h	1435	1640	1845	2050	2255	2460	2870	3280	3690
Recovery Rate at 50°C rise	L/hr	5761	6584	7407	8230	9053	9876	11522	13168	14814
Maximum Flow Rate at 50°C rise	L/min	96.0	109.6	123.3	137.0	150.7	164.4	191.8	219.2	246.6
Approx Weight	kg	350	380	410	440	470	500	570	640	710
<b>Cold Water/Hot Water</b>										
7-12: Threaded Connection	BSPF	RP2	RP2	RP2	RP2	RP2	RP2	-	-	-
14-36: Table E Flanged End	mm	-	-	-	-	-	-	65	65	65
Return	BSPF	RP1	RP1	RP1	RP1	RP1	RP1	RP1¼	RP1¼	RP1¼
Gas	BSPM	R2	R2	R2	R2	R2	R2	R2	R2	R2½
Electrical Supply (240V/50Hz)	Amps	10.24	11.24	12.24	13.24	14.24	15.24	-	-	-
Electrical Supply (415V/3 phase/50Hz)	Amps	-	-	-	-	-	-	11.0	11.0	11.0
<b>Dimensions</b>										
Width - inline	mm	2670	3030	3390	3750	4110	4470	-	-	-
Width - back to back	mm	1980	1980	2340	2340	2700	2700	3310	3670	4030
Frost Protection		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Relief Valve Setting	kPa	1000	1000	1000	1000	1000	1000	1000	1000	1000
<b>Water Supply Pressure</b>										
Minimum/Maximum	kPa	140/800	140/800	140/800	140/800	140/800	140/800	140/800	140/800	140/800

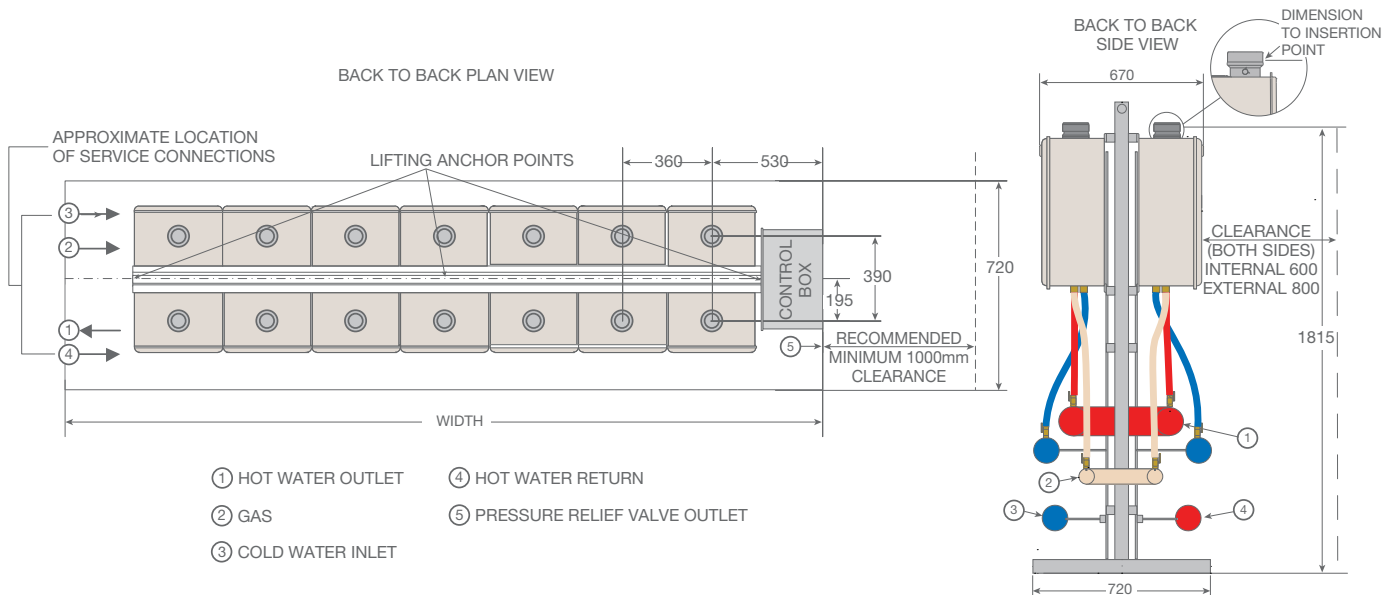
# COMMPAK PLUS®

## Features Include:

- Engineered and pre-assembled for ease of installation
- Left or right hand plumbing
- High efficiency continuous flow
- Loss of prime protection
- Natural gas only



## Back to back 7 - 36 Commpak Plus®



COMMPAK PLUS MODEL	INTERNAL EXTERNAL	CPI 20 CPE20	CPI 22 CPE 22	CPI 24 CPE 24	CPI 26 CPE 26	CPI 28 CPE 28	CPI 30 CPE 30	CPI 32 CPE 32	CPI 34 CPE 34	CPI 36 CPE 36
Input	MJ/h	4100	4510	4920	5330	5740	6150	6560	6970	7380
Recovery Rate at 50°C rise	L/hr	16460	18106	19752	21398	23044	24690	26336	27982	29628
Maximum Flow Rate at 50°C rise	L/min	274.0	301.4	328.8	356.2	383.6	411.0	438.4	465.8	493.2
Approx Weight	kg	780	850	920	990	1060	1130	1200	1270	1340
<b>Cold Water/Hot Water</b>										
7-12: Threaded Connection	BSPF	-	-	-	-	-	-	-	-	-
14-36: Table E Flanged End	mm	65	80	80	80	80	100	100	100	100
Return	BSPF	RP2½	RP1½	RP1½	RP1½	RP1½	RP2	RP2	RP2	RP2
Gas	BSPM	R2½	R2½	R2½	R2½	R2½	R2½	R2½	R3	R3
Electrical Supply (240V/50Hz)	Amps	-	-	-	-	-	-	-	-	-
Electrical Supply (415V/3 phase/50Hz)	Amps	13.0	14.0	14.0	14.0	15.0	17.0	17.0	17.0	17.0
<b>Dimensions</b>										
Width - inline	mm	-	-	-	-	-	-	-	-	-
Width - back to back	mm	4390	4750	5110	5470	5830	6190	6550	6910	7270
Frost Protection		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Relief Valve Setting	kPa	1000	1000	1000	1000	1000	1000	1000	1000	1000
<b>Water Supply Pressure</b>										
Minimum/Maximum	kPa	140/800	140/800	140/800	140/800	140/800	140/800	140/800	140/800	140/800

# TANKPAK SERIES 2<sup>®</sup>

## Tankpak Series 2<sup>®</sup>

The Rheem Tankpak Series 2 combines the benefits of mains pressure and continuous flow water heating. Manifolled banks of Continuous Flow Water Heaters (CFWH) meet the peak demand period requirements whilst the storage tank provides buffer for peak simultaneous demands.

## Range

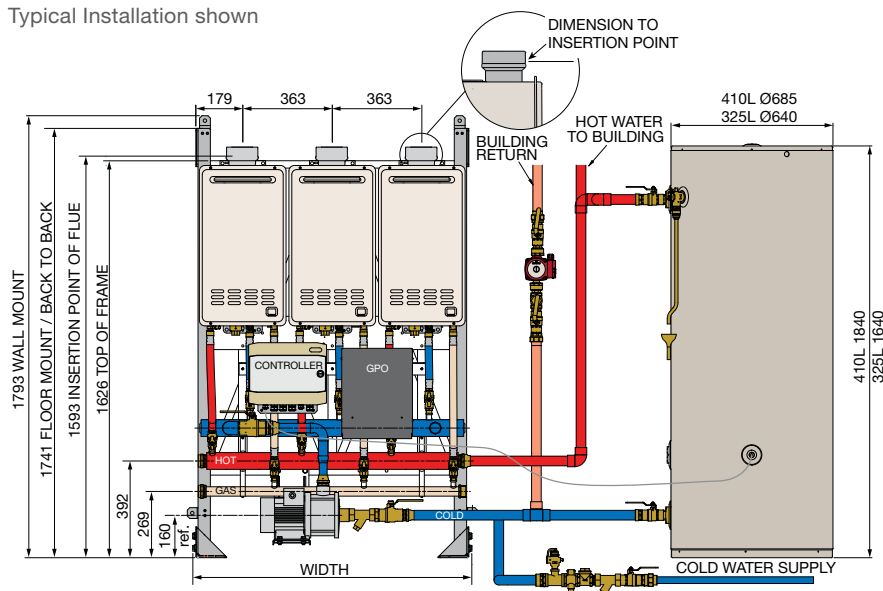
Rheem Tankpak Series 2 is available from 1<sup>20</sup> to 18 Continuous Flow Water Heaters (CFWH) with 1 to 3 storage tanks depending on system size. Systems are available in a variety of mounting configurations, model dependant, including wall, floor or back to back (refer technical data for details). Rheem Tankpak Series 2 is supplied with the controller and pump

factory assembled<sup>20</sup>. The Deluxe version also includes in line strainer and water heater power sockets. Systems with 1<sup>20</sup> to 7 CFWH are supplied with plug and lead. Larger systems require a single hard wired connection by an electrician.

Plumbing is supplied right handed but can be field altered for left hand to suit installation requirements.

WALL MOUNT (W) / FLOOR MOUNT (F) / BACK TO BACK (B)  
FRONT VIEW

Typical Installation shown



TANKPAK MODEL	INTERNAL EXTERNAL	TPI 01 TPE 01	TPI 02 TPE 02	TPI 03 TPE 03	TPI 04 TPE 04	TPI 05 TPE 05	TPI 06 TPE 06	TPI 07 TPE 07
Thermal Input	MJ/h	205	410	615	820	1025	1230	1435
Recovery Rate at 50°C rise	L/hr	825	1645	2470	3290	4115	4935	5760
Mounting options		W	W/F	W/F	W/F/B	W/F/B	W/F/B	W/F/B
<b>Storage Tanks</b>		1 x 610340 1 x 610430	1 x 610340 1 x 610430	1 x 610340 1 x 610430	1 x 610340 1 x 610430	- 1 x 610430	- 1 x 610430	- 1 x 610430
1st Hour Capacity (340L)	Litres	1150	1970	2795	3615	-	-	-
1st Hour Capacity (430L)	Litres	1230	2055	2880	370	4525	5345	6170
Electrical Supply (240V/50Hz)	Amps	0.75	4.0	4.8	5.5	7.0	7.8	8.6
Electrical Connection		1.8m 10A Plug and Lead per CFWH						
PHWF & PHWR Pipe Size	mm	25	40	40	40	40	40	50
Natural Gas Pipe Size	mm	20	40	40	40	40	40	50
Propane Gas Pipe Size	mm	20	40	40	40	40	40	40
Width (Inline)	mm	360	1132	1132	1495	2239	2239	2965
Width (Back to Back)					1132	1132	1132	1495
Weight Empty (W/B) <sup>21</sup>	kg	150	176	216/206	298/237	330/268	387/311	423/347

<sup>20</sup> Tankpak models with 1 x CFWH are supplied with CFWH, pump & controller separately. The CFWH must be mounted on a vertical wall.

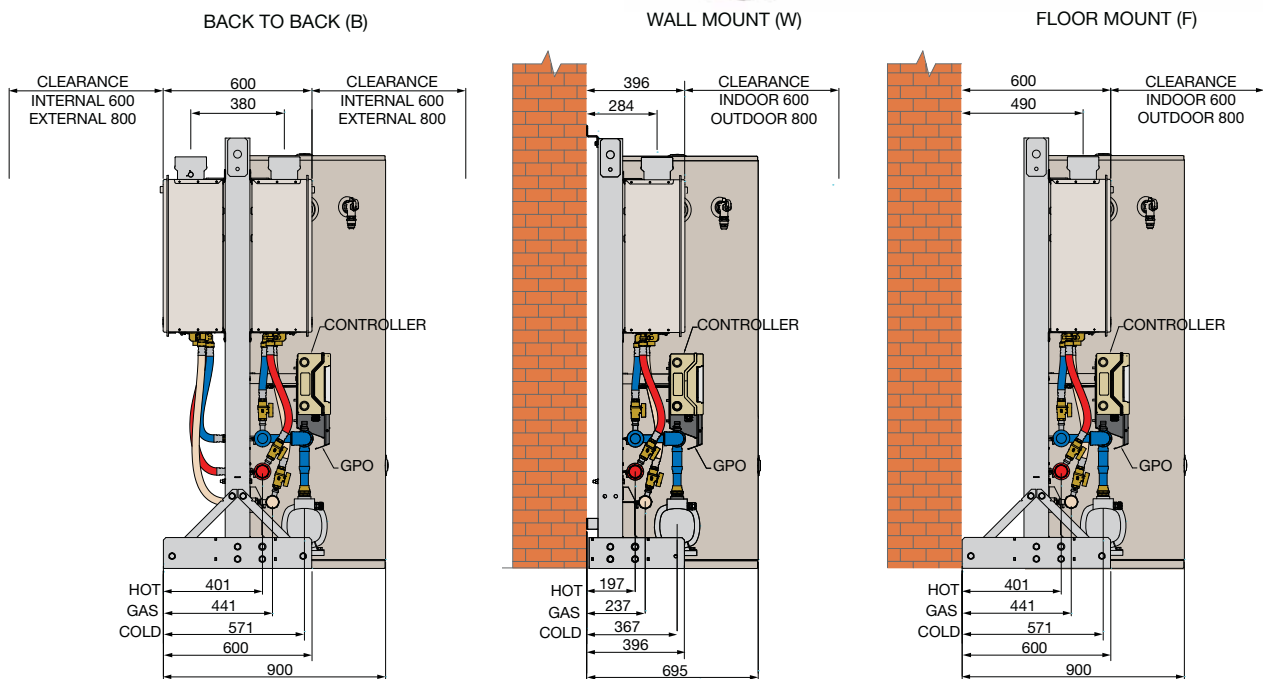
<sup>21</sup> Weight includes CFWH unit, storage tank, pump, frame and preassembled manifolds.

## Features Include:

- 84% thermal efficiency 6.0 Star heat source
- Heavy duty storage tank up to 82°C operation
- Large flow 50mm storage tank fittings
- Fully hot dip galvanised frame
- Natural gas and propane models

## Benefits Include:

- Improved installation time and confidence
- High recovery
- Mains pressure performance
- Reduced footprint
- Redundancy backup



TANKPAK MODEL	INTERNAL EXTERNAL	TPI 08 TPE 08	TPI 09 TPE 09	TPI 10 TPE 10	TPI 12 TPE 12	TPI 14 TPE 14	TPI 16 TPE 16	TPI 18 TPE 18
Thermal Input	MJ/h	1640	1845	2050	2460	2870	3280	3690
Recovery Rate at 50°C rise	L/hr	6580	7405	8225	9875	11520	13165	14810
Mounting options		W/F/B	W/F/B	B	B	B	B	B
Storage Tanks		-	-	-	-	-	-	-
		2 x 610430	2 x 610430	2 x 610430	2 x 610430	3 x 610430	3 x 610430	3 x 610430
1st Hour Capacity (340L)	Litres	-	-	-	-	-	-	-
1st Hour Capacity (430L)		7400	8225	8850	1130	1930	2735	3540
Electrical Supply (240V/50Hz)	Amps	10.6	11.4	12.2	14.8	15.5	16.9	18.5
Electrical Connection		240V 50Hz Single hard wired connection						
PHWF & PHWR Pipe Size	mm	50	50	50	50	65	65	80
Natural Gas Pipe Size	mm	50	65	65	65	65	80	80
Width (Inline)	mm	2965	3346	-	-	-	-	-
Width (Back to Back)		1495	2239	2239	2239	2965	2965	3346
Weight Empty (W/B) <sup>21</sup>	kg	423/347	497/429	459	527	611	672	776
<b>Product code example</b>	<b>No. of units</b>	<b>Gas Type</b>	<b>Mounting option</b>		<b>Option</b>	<b>No. of Tanks and model</b>		
TPE (external) + or TPI (internal)	10 +	N (Natural gas) + or P (propane)	B (Back to Back) + or W (Wall Mount) or F (Floor Mount)		D (Deluxe) + or S (Standard)	/2 + 430		

Order code result: TPE10NBD/2430



## TANKPAK QUICK SIZING GUIDE

Apartments 1 hr peak				Hotel Rooms 1 hr peak	Amenities 30 min peak	Nursing home 2 hr peak	Tankpak Series 2 Model	Recovery @ 50°C Rise (L/hr)	Storage Tank Capacity (L)	First Hour Capacity (L)	Thermal Input (MJ/h)
Studio <sup>22</sup>	1 & 2 bedroom <sup>22</sup>	2 bedroom <sup>22</sup>	2 & 3 bedroom <sup>22</sup>	1-3 Star <sup>23</sup>	No. of showers <sup>24</sup>	No. of beds <sup>25</sup>					
49	21	16	14	24	32	30	TP01/1430	825	410	1235	205
82	35	27	24	41	49	54	TP02/1430	1645	410	2055	410
115	50	38	34	57	65	79	TP03/1430	2470	410	2880	615
148	64	49	44	74	82	103	TP04/1430	3290	410	3700	820
181	78	60	54	90	98	128	TP05/1430	4115	410	4525	1025
213	92	71	64	106	115	152	TP06/1430	4935	410	5348	1230
246	107	82	74	123	131	176	TP07/1430	5760	410	6170	1435
296	128	98	89	148	164	207	TP08/2430	6580	820	7400	1640
329	143	109	99	164	180	231	TP09/2430	7405	820	8225	1845
361	157	120	109	180	197	255	TP10/2430	8225	820	9045	2050
427	186	142	129	213	230	304	TP12/2430	9875	820	10695	2460
510	221	170	154	255	279	359	TP14/3430	11520	1230	12750	2870
575	250	191	174	287	312	408	TP16/3430	13165	1230	14395	3280
641	278	213	194	320	345	457	TP18/3430	14810	1230	16040	3690

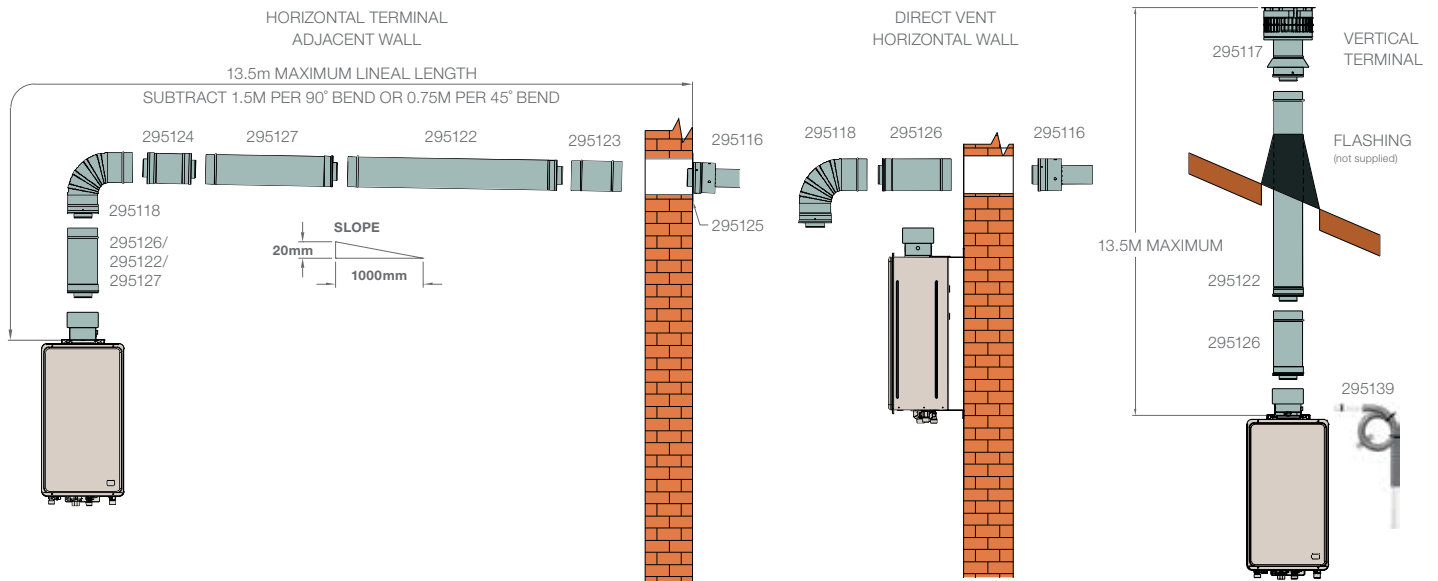
<sup>22</sup> Allowance - Studio 25L, 1 bedroom 40L, 2 bedroom 75L, 3 bedroom 90L. Calculated on even ratio of apartment mix

<sup>23</sup> Allowance - 2 people per room, 25L per person

<sup>24</sup> Allowance - 25L per shower

<sup>25</sup> Allowance - 37.5L per bed for showering, bed pans, cleaning, 6L per bed for meals, 24L per bed for laundry

## INDOOR INSTALLATION RHEEM CONTINUOUS FLOW FLUE SYSTEM



### How to Size

Use the following as a guide to selecting the flue components required. The overall dimension of each flue piece is shown in the drawings. Allow approximately 35mm for insertion of each flue piece.

Determine the lineal distance and number of 45° and/or 90° bends between the top of the water heater and flue terminal. Note, the bottom edge of a vertical flue terminal must be 500mm

away from the nearest structure in accordance with AS/NZS 5601.1.

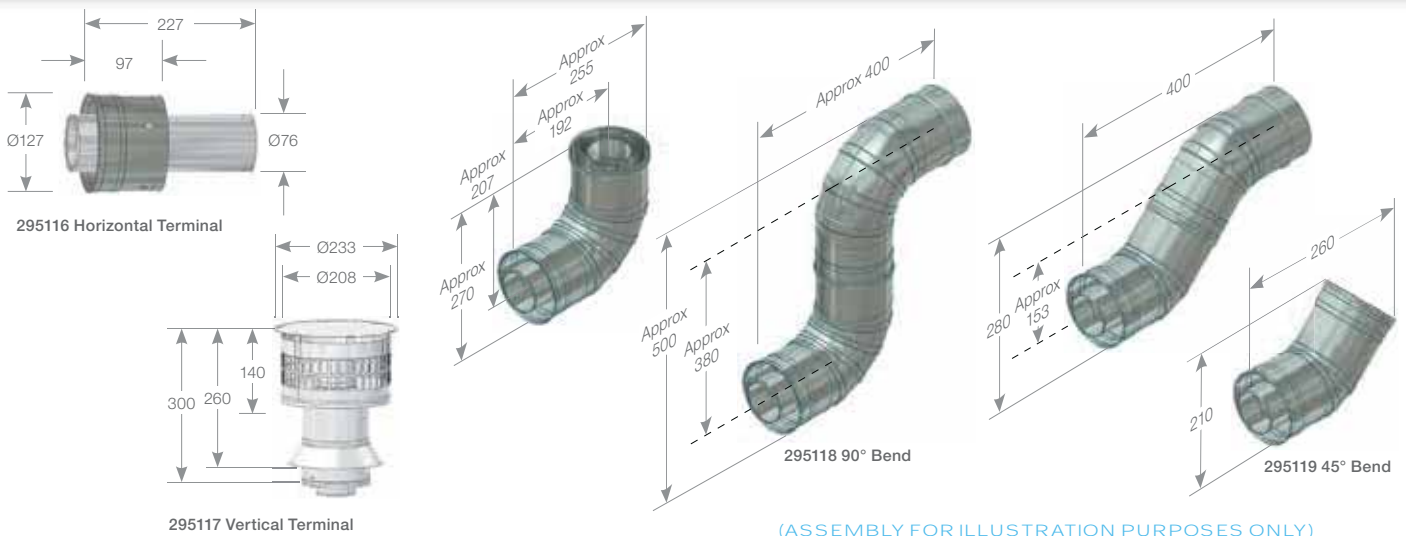
Flashing is required to be installed where a vertical flue section penetrates the roof line (not supplied).

Where a condensate drain section is installed, the hose must be connected and drained to the sewer waste or outside. A condensate trap must be installed and filled with water to prevent spillage of products of combustion.

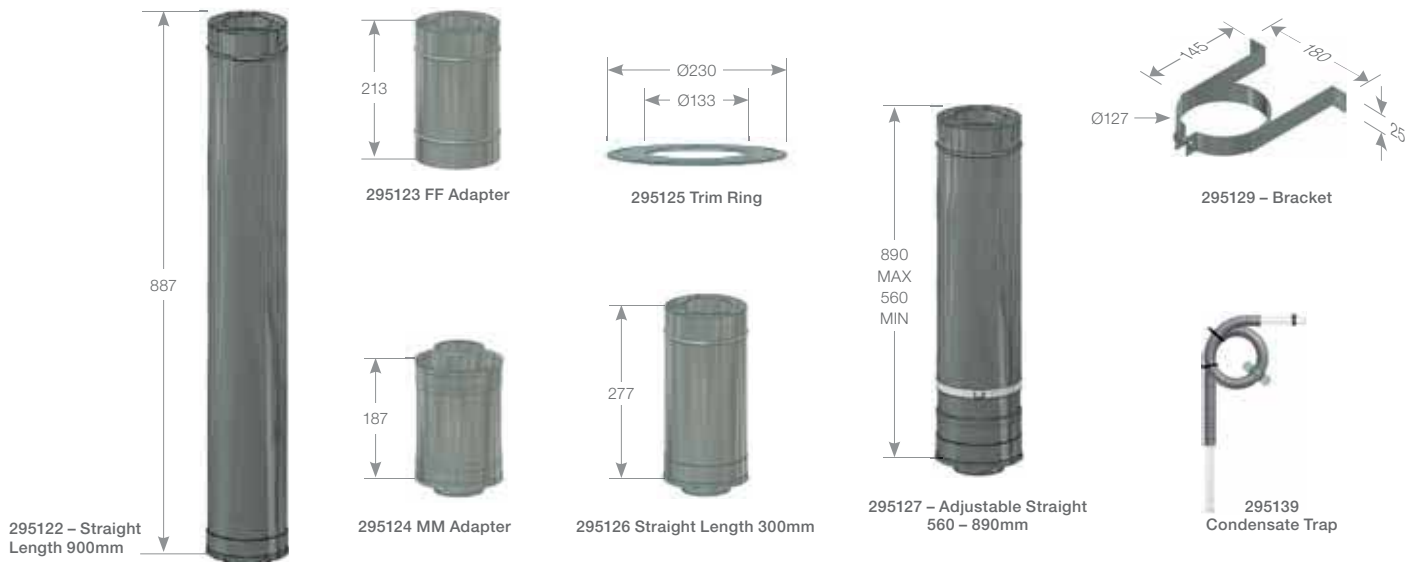
Separate ventilation for combustion is not required as the air for combustion is supplied in the flue outer. The flue system is certified to be installed with zero clearances between the water heaters and combustible materials. Flue termination must comply with the requirements of AS/NZS 5601.1.

Flue penetrations through walls and ceilings must be sealed in accordance with local fire regulations

# COMMERCIAL CONTINUOUS FLOW FLUE COMPONENTS



(ASSEMBLY FOR ILLUSTRATION PURPOSES ONLY)



Use the following table as a guide to selecting Rheem Continuous Flow flue components:

The maximum flue length with no bends is 13.5m. Reduce the maximum length by 1.5m for every 90° bend and reduce the maximum length by 0.75m for every 45° bend.



**Rheem INTERNAL CFWH must only be installed using certified Rheem coaxial flue components. Do not use any other type of flue system. Carefully follow the installation instructions.**

P/NO	DESCRIPTION	WHERE USED
295116	Horizontal Terminal	Required where flue terminates horizontally
295117	Vertical Terminal	Required where flue terminates vertically
295118	90° Bend	Maximum of 3 per installation
295119	45° Bend	Maximum of 6 per installation (with no 90° bends)
295122	Straight Length 900mm	Long straight sections
295123	Female Female Adapter	Required to reverse flue pipe direction to allow condensate to drain away correctly from water heater in long horizontal sections of horizontally terminating flues
295124	Male Male Adapter	Required to reverse flue pipe direction to allow condensate to drain away correctly from water heater in long horizontal sections of horizontally terminating flues
295125	Trim Ring (optional)	Conceal internal and/or external hole in wall for horizontally terminating flues
295126	Straight Length 300mm	Short straight sections
295127	Adjustable Length 560 – 890mm	Allows to trim flue to exact length required
295129	Bracket	Support flue at intervals not exceeding 2m and after any bend
295139	Condensate Trap	Required with every condensate drain. Can be connected to a common waste