## WALL HUNG GAS BOILERS



Wall hung gas fired condensing boiler with stainless steel heat exchanger and integrated tank-in-tank DHW storage cylinder.



PRESTIGE®
24 > 32 SOLO

Wall hung gas fired condensing system boiler with stainless steel heat exchanger.



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# PRESTIGE® 42 > 120 SOLO

Wall hung gas fired condensing heat only boiler with stainless steel heat exchanger.



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## **PRESTIGE 24 > 32 EXCELLENCE**





### Wall hung gas fired condensing boiler with stainless steel heat exchanger and integrated tank-in-tank DHW storage cylinder.

#### Available in two sizes.

- > Heating and hot water from one unit saves space, reduces energy use and speeds up installation
- > Simple to operate integrated controls plus range of external control options for accurate and intelligent control of system
- > Close load matching for more efficient use with a 6:1 turndown ratio
- > Stainless steel heat exchanger for a long life, backed up by a 10-year heat exchanger warranty

- > Designed for sealed systems with integrated 12I expansion vessel
- > Range of flue options extended flue lengths and choice of configurations
- > Simple to operate with integrated ACVMax controls LCD display that can operate two heating circuits or four boilers in a cascade
- Integrated pump
- Configurable hot water priority







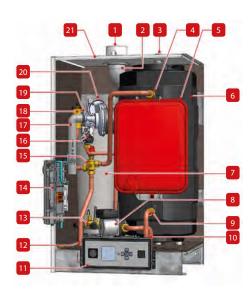




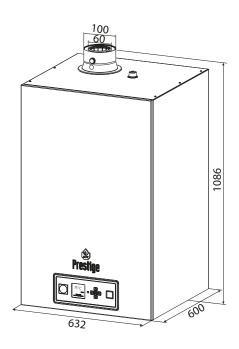
#### **ANATOMY**

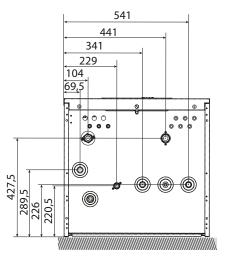
- 1. Concentric flue connection 60 / 100 mm with measuring element
- 2. Flue tube
- 3. DHW tank air vent (manual)
- 4. Heating supply to DHW tank
- 5. 12 litre expansion vessel (heating circuit)
- 6. Internal hot water tank (54 L)
- 7. Stainless steel heat exchanger
- 8. High efficiency circulator pump
- 9. Heating return from DHW tank
- 10. Heating return
- 11. Control panel with display and pressure gauge
- 12. Heating supply

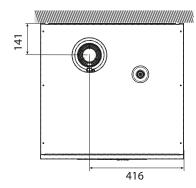
- 13. Exchanger return multifunctional quick-connection block
- 14. Electrical panel (with spare fuses at back).
- 15. Built-in 3-way valve
- 16. Gas valve assembly
- 17. Silencer
- 18. Auto air vent (heating circuit)
- 19. Flame sight glass
- 20. Modulating air/gas premix burner with fan
- 21. Insulated casing











#### **TECHNICAL DATA**

		D 1: 04	D 1: 22
TYPE	UNIT	Prestige 24 Excellence	Prestige 32 Excellence
Part number		05648101	05648201
Fuel		Natural gas	Natural gas
Input max (heating)	kW	24	32
Output power max (80/60°C)	kW	23.3	31
Output power min	kW	4.0	4.9
Efficiency at 30% load	%	109	109
Efficiency at 100%	%	97	97
Capacity domestic hot water / Primary	L	54/16	54/16
Connection - heating	Ø"	1 M	1 M
Connection - DHW	Ø"	3/4 M	3/4 M
Connection gas	Ø"	3/4 M	3/4 M
Water pressure drop boiler at Δt = 20°C	mbar	141	243
Gas flow rate (max output)	m³/h	2.54	3.39
Flue connection	Ømm	60/100	60/100
Flue: max length of concentric flue pipe	m	40	16
Max operating temperature	°C	87	87
Max service pressure heating (primary)	bar	3	3
Max service pressure (DHW)	bar	8.6	8.6
Voltage	V	230	230
Electrical consumption	W	82	90
Weight (empty)	kg	92	92
Space heating energy efficiency class		А	А
Water heating energy efficiency class		В	В
NOx class		5	5
NOx emissions	mg/kWh	38	38

#### **DOMESTIC HOT WATER PERFORMANCE**

ТҮРЕ	UNIT	Prestige 24 Excellence	Prestige 32 Excellence
Peak flow at 40°C	L/10'	200	224
Continuous flow at 40°C	L/h	560	745
Peak flow at 60°C	L/10'	102	103
Continuous flow at 60°C	L/h	310	320

This data assumes an incoming mains water temperature of 10°C.

For flue accessories and controls see page 58.



### PRESTIGE 24 > 32 SOLO



### Wall hung gas fired condensing system boiler with stainless steel heat exchanger.

#### Available in two sizes.

- > Easy access to components and controls for service, operation and maintenance
- > Close load matching for more efficient use with a 6:1 turndown ratio
- > Stainless steel heat exchanger for long life, backed up by a 10-year heat exchanger warranty
- > Designed for sealed systems with integrated 12I expansion vessel
- Combine with an ACV Smart cylinder for highly efficient heating and hot water performance

- Integrated pump for hot water priority system
- > Range of flue options extended flue lengths and choice of configurations
- > Can control high and low temperature heating circuits such as radiators and underfloor heating
- > Simple to operate with integrated ACVMax controls LCD that can operate two heating circuits or a four boiler cascade
- > NEW optional pipework kits and low loss headers available - see page 48





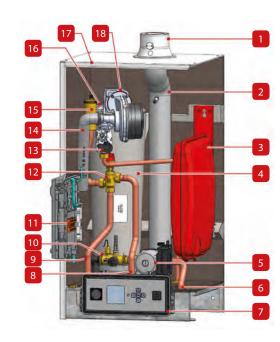


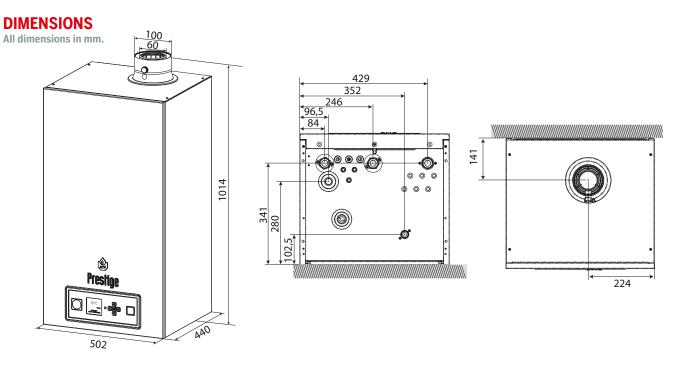


#### **ANATOMY**

- 1. Concentric flue connection 60 /100mm with flue gas test point
- 2. Flue tube
- 3. 12 litre expansion vessel (heating circuit)
- 4. Stainless steel heat exchanger
- 5. High efficiency circulator pump
- 6. Heating return
- 7. Control panel with display and pressure gauge
- 8. Connection for external DHW tank
- 9. Heating supply
- 10. Exchanger return multifunctional quick connection block (see detail view next page).

- 11. Electrical panel (with spare fuses at the back).
- 12. Built-in 3-way valve
- 13. Gas valve assembly
- 14. Silencer
- 15. Auto air vent (heating circuit)
- 16. Flame sight glass
- 17. Insulated casing
- 18. Modulating air/gas premix burner with fan





### **TECHNICAL DATA**

ТУРЕ	UNIT	Prestige 24 Solo	Prestige 32 Solo
Part number		05647901	05648001
Fuel		Natural gas	Natural gas
Input max (heating)	kW	24	32
Output power max (80/60°C)	kW	23.3	31.0
Output power min	kW	4.0	4.9
Efficiency at 30% load	%	109	109
Efficiency at 100%	%	97	97
Capacity (primary)	L	8	8
Connection - heating	Ø"	1 M	1 M
Connection gas	Ø"	3/4 M	3/4 M
Water pressure drop boiler at $\Delta t = 20^{\circ}C$	mbar	141	243
Gas flow rate (max output)	m³/h	2.54	3.39
Flue connection	Ømm	60/100	60/100
Max operating temperature	°C	87	87
Max service pressure heating (primary)	bar	3	3
Voltage	V	230	230
Electrical consumption	W	82	90
Weight (empty)	kg	54	54
Space heating efficiency class		А	А
NOx class		5	5
NOx emissions	mg/kWh	38	38



## PRESTIGE 42 > 120 SOLO



### Wall hung gas fired condensing heat only boiler with stainless steel heat exchanger.

#### Available in five sizes.

- > Easy to service and maintain with all components accessible from the front and flame inspection panel
- > Compact and lightweight
- > Integrated non return valve saves space above the boiler installation
- > Stainless steel heat exchanger for a long life, backed up by a 10-year heat exchanger warranty
- > Close load matching for more efficient use with a 6:1 turndown ratio

- Simple to operate with integrated ACVMax controls LCD that can operate two heating circuits or a four boiler cascade
- > NEW optional pipework kits and low loss headers available - see pages 48
- > Supplied with LPG kit for easy on site conversion









#### **ANATOMY**

- 1. Concentric flue connection 100/150mm with flue gas test point
- 2. Flue tube
- 3. Modulating air/gas premix burner
- 4. Gas pressure switch
- 5. Air inlet
- 6. Condensate recovery dish
- 7. Cold water return
- 8. Safety valve
- 9. Control panel with display and pressure gauge

- 10. Pressure sensor
- 11. Electrical panel
- 12. Stainless steel heat exchanger
- 13. Water supply
- 14. Auto air vent
- 15. Flame sight glass
- 16. Insulated casing
- 17. Gas valve

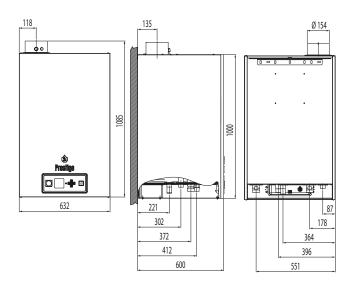


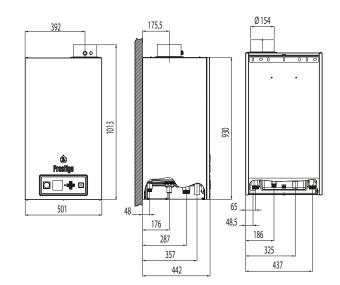
#### **DIMENSIONS - 42 > 75 SOLO**

All dimensions in mm.

#### **DIMENSIONS - 100 > 120 SOLO**

All dimensions in mm.



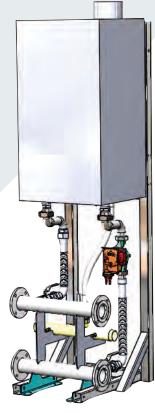


#### **TECHNICAL DATA**

ТҮРЕ	UNIT	Prestige 42 Solo	Prestige 50 Solo	Prestige 75 Solo	Prestige 100 Solo	Prestige 120 Solo
Part number		05650201	05629801	05629901	05648401	05630001
Fuel		Natural gas	Natural gas	Natural gas	Natural gas	Natural gas
Input max (heating)	kW	42	50	69.9	99	115.3
Input max (heating) HCV	kW	46.62	55.5	77.59	109.89	129.87
Output power max (80/60°C)	kW	40.7	48.5	67.8	97.5	111.8
Output power min (80/60°C)	kW	5.7	6.9	9.9	12.2	12.2
Efficiency at 30% load (EN677)	%	108.5	109	108.5	108.1	108
Connection - heating	Ø"	5/4 M	5/4 M	5/4 M	6/4 M	6/4 M
Connection gas	Ø"	3/4 M	3/4 M	3/4 M	1 M	1 M
Water pressure drop boiler at $\Delta t = 20$ °C	mbar	23	30	74	42	80
Gas flow rate (max output)	m³/h	4.4	5.2	7.3	10.5	12.4
Flue connection	Ømm	100/150	100/150	100/150	100/150	100/150
Weight (empty)	kg	50	54	59	89	93
Max operating temperature	°C	87	87	87	87	87
Max service pressure heating (primary)	bar	4	4	4	4	4
Voltage	V	230	230	230	230	230
Electrical consumption	W	82	77	126	142	178
NOx class		5	5	5	5	5
NOx emissions	mg/kWh	28.8	35.1	43.2	34.2	39.6



### PIPE KITS



Designed to save time and simplify installation, optional pipe kits are available for the Prestige® wall hung boilers. The kits enable multiple boilers to be easily connected in cascades of one, two, three and four boilers.

#### **FEATURES**

- Minimal self-assembly reduced
   Complete kit supplied with gas labour time
- > High quality rigid frame no boiler leaning or sagging
- > Flexible installation options can be sited as a stand-alone frame (no need to secure to a wall)
- connection pipes with test and purge point, A-rated pumps, blinds, service valves and joining kits
- > Option for bespoke configurations by order (lead time increased)
- > Choice of low loss headers

Boiler models		Prestige 42-75		ige 100-120
	Size	Part number	Size	Part number
1 boiler (1 x 1 boiler pipe kit)	DN65	XB080001	DN80	XB080005
2 boilers (1 x 2-boiler pipe kit)	DN65	XB080002	DN80	XB080006
3 boilers (1 x 2-boiler pipe kit + 1 x 1-boiler pipe kit )	DN65	XB080003	DN80	XB080007
4 boilers (2 x 2-boiler pipe kit)	DN65	XB080004	DN80	XB080001
Standard low loss header (including flow sensor temperature pocket)	DN125	XBACV106503	DN150	XBACV108005
Low loss header with air and dirt separator* (including swan necks including flow sensor temperature pocket)	DN125	XBACV106504	DN150	XBACV108006

#### **EACH KIT CONTAINS THE FOLLOWING COMPONENTS:**

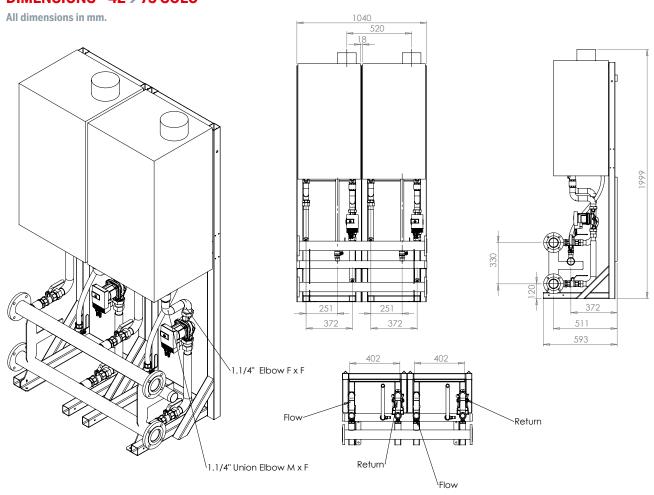
1 boiler	2 boilers	3 boilers	4 boilers
1 x frame for 1-boiler	1x frame for 2 boilers	1 x frame for 2 boilers 1 x frame for 1 boiler	2 x frame for 2 boilers
2 x 3 barg PN06 flanges	2 x 3 barg PN06 flanges	2 x 3 barg PN06 flanges	2 x 3 barg PN06 flanges
1 x Wilo Stratos Para 30/1-8 PN10 T3 pump	2 x Wilo Stratos Para 30/1-8 PN10 T3 pump	3 x Wilo Stratos Para 30/1-8 PN10 T3 pump	4 x Wilo Stratos Para 30/1-8 PN10 T3 pump
2 x Blind ends on manifold, one with drain plug included	2 x Blind ends on manifold, one with drain plug included	2 x Blind ends on manifold, one with drain plug included	2 x Blind ends on manifold, one with drain plug included
2 x Stainless steel flow and return flexible connections	4 x Stainless steel flow and return flexible connections	6 x Stainless steel flow and return flexible connections	8 x Stainless steel flow and return flexible connections
1 x Stainless steel gas hoses	2 x Stainless steel gas hoses	3 x Stainless steel gas hoses	4 x Stainless steel gas hoses
1 x 1-boiler gas pipe header with blank and purge/pressure test point	1 x 1-boiler gas pipe header with blank and purge/pressure test point	1 x 2-boiler and 1 x 1-boiler gas pipe header with blank and purge/pressure test point	2 x 2-boiler gas pipe header with blank and purge/pressure test point
		1 x header joining kit	1x header joining kit

#### **ADDITIONAL EXTRAS**

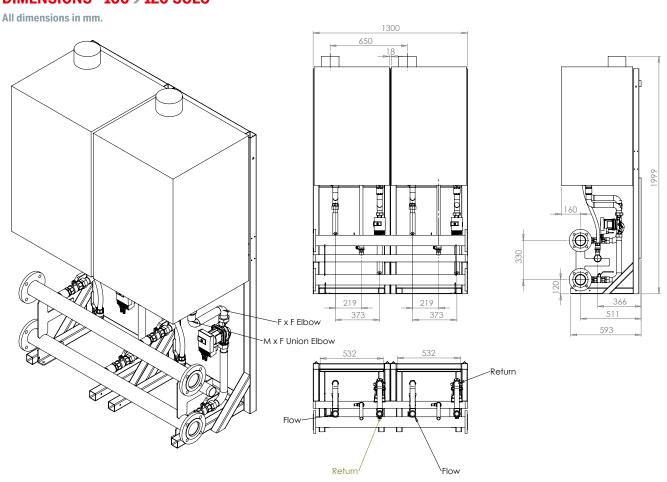
Talk to ACV about options for cascading your boilers and hydraulic separation using plate heat exchangers.

<sup>\*</sup> A low loss header with air and dirt separator and magnetic filter is also available on request.

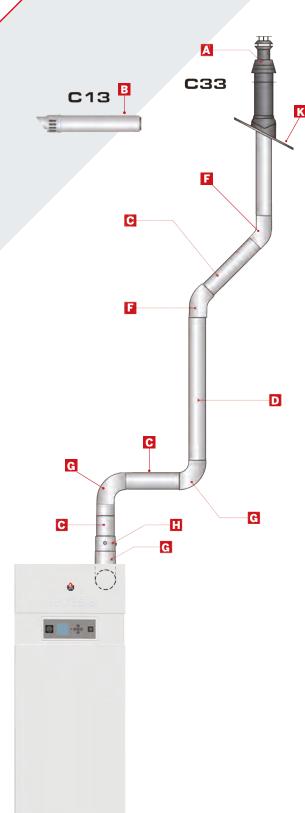
#### **DIMENSIONS - 42 > 75 SOLO**



#### **DIMENSIONS - 100 > 120 SOLO**



## **FLUE COMPONENTS**



#### **Compatible with:**

- > HEATMASTER® 25C\*,
- > HEATMASTER® 25 45 TC\*
- **> WATERMASTER 25 45**
- > PRESTIGE® 24 32

Flue diameter 80/125mm

#### **TERMINALS**

	PART NUMBER	DESCRIPTION
Α	537D6184	Vertical Terminal
В	537D6185	Horizontal Terminal

#### **FLUE EXTENSIONS**

	PART NUMBER	DESCRIPTION
С	537D6187	500 mm cuttable length
D	537D6188	1000 mm cuttable length

#### **ELBOWS**

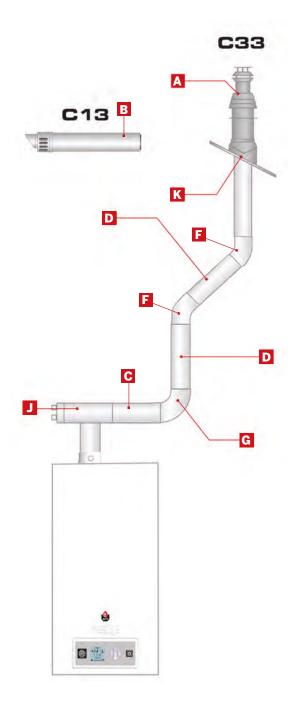
	PART NUMBER	DESCRIPTION
F	537D6190	43° - 45° bend
G	537D6191	87° - 90° bend

#### **MEASUREMENT TUBE**

	PART NUMBER	DESCRIPTION
Н	537D6193	Measuring tube for flue gas analysis
J	537D6229	Measurement T-piece with inspection panel (Not Shown)

#### **ACCESSORIES**

	PART NUMBER	DESCRIPTION
K	537D6182	Adjustable roof flashing
	537D6183	Wall bracket DN125
	537D6364	Flat roof flashing



#### **Compatible with:**

- > HEATMASTER® 70 85 120 TC\*
- **>** WATERMASTER 70 85 120
- > PRESTIGE® 42 50 75 100 120

Flue diameter 100/150mm

#### **TERMINALS**

	PART NUMBER	DESCRIPTION
Α	537D6300	Vertical terminal
В	537D6301	Wall terminal

#### **FLUE EXTENSIONS**

	PART NUMBER	DESCRIPTION
С	537D6303	500 mm cuttable length
D	537D6304	1000 mm cuttable length

#### **ELBOWS**

	PART NUMBER	DESCRIPTION
F	537D6306	43° - 45° elbow
G	537D6307	87° - 90° elbow

#### **MEASUREMENT TUBE**

	PART NUMBER	DESCRIPTION
Н	537D6308	Measuring tube (Not Shown)
J	537D6310	Measurement T-piece with inspection panel

#### **ACCESSORIES**

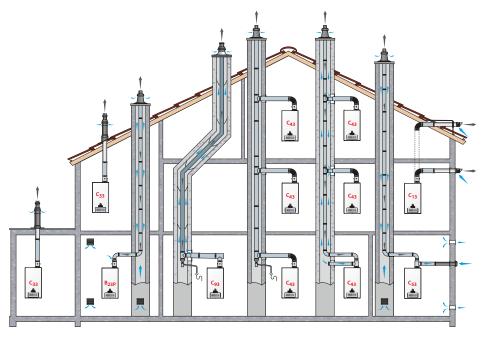
	PART NUMBER	DESCRIPTION
	537D6208	Flat roof collar
K	537D6209	Adjustable roof flashing

### **ADAPTERS (NOT SHOWN)**

	PART NUMBER	DESCRIPTION
	537D6207	Concentric to parallel adaptor Ø 100/150mm - Ø 2 x 100mm
	537D6210	Bracket Ø 100 mm



## **FLUE CONFIGURATIONS**



#### **A TERMINALS**

REFERENCE	DESCRIPTION
B23P	Connection to a combustion product exhaust system designed to operate with positive pressure.
B23	Connection to an exhaust duct that discharges the combustion products outside the room where it is installed, with the combustion air being drawn directly from the boiler room
C13(x)	Connection using pipes fitted with a horizontal terminal that simultaneously takes in combustion air for the burner and discharge combustion products outside through openings that are either concentric or close enough together to be subjected to similar wind conditions, i.e. openings shall fit inside a square of 50 cm for boilers up to 70 kW and inside a square of 100 cm for boilers above 70 kW.
C33(x)	Connection using pipes fitted with a vertical terminal that simultaneously takes in fresh air for the burner and discharges combustion products outside through openings that are either concentric or close enough together to be subjected to similar wind conditions, i.e. openings shall fit inside a square of 50 cm for boilers up to 70 kW and inside a square of 100 cm for boilers above 70 kW.
C43(x)	Connection using two pipes to a collective duct system serving more than one appliance; this system of collective ducts features two pipes connected to a terminal unit that simultaneously takes in fresh air for the burner and discharges the combustion products outside through openings that are either concentric or close enough together to be subjected to similar wind conditions
C43(x)	Boilers are suitable for a connection to a natural draught chimney only.
C53(x)	Connection to separate ducts for supplying combustion air and discharging combustion products; these ducts may end in zones with different pressure levels, but are not allowed to be installed on opposite walls of the building.
C63(x)	Type C boiler meant to be connected to a system for supplying combustion air and discharging combustion products, that is approved and sold separately (Prohibited in some countries (e.g. Belgium) - refer to local regulations and standards in force). Terminals for the supply of combustion air and for the evacuation of combustion products are not allowed to be installed on opposite walls of the building. See also the following additional specifications:  • Maximum allowable draught is 200 Pa.  • Maximum allowable pressure difference between combustion air inlet and flue gas outlet (including wind pressures) is as follows: 95 Pa (HM 25 TC), 130 Pa (HM 35-45 TC), 110 Pa (HM 70 TC), 160 Pa (HM 85 TC) and 170 Pa (HM 120 TC). 150 Pa (for P42/P50/P75) and 180 Pa (for P100/P120)  • Condensate flow is allowed into the appliance.  • Maximum allowable recirculation rate of 10% under wind conditions.
C83(x)	Connection using a single or double duct system. The system is made of a normal exhaust flue duct that discharges the combustion products. The appliance is also connected through a second duct fitted with a terminal, that supplies the burner with fresh outdoor air. Please contact your ACV representative for the meters of flue pipes that can be used to connect the appliance(s
C93(x)	Connection using an individual system whose combustion product exhaust duct is installed in an exhaust duct that is integral with the building. The appliance, the exhaust duct and the terminal units are certified as an inseparable assembly. Minimum usable diameter for the vertical duct supplying the combustion air is 100 mm. The C93 configuration enables airtight operation in a pre-existing chimney.  The combustion air crosses the space between the tubing and the pre-existing chimney. Make sure to clean the pre-existing chimney thoroughly prior to installation, especially if there is soot or tar residue. Make sure that there is a clearance area for the combustion air at least equivalent to the area that would have been provided by separate concentric ducts or air intake ducts.