

Combat

Heating Solutions Ltd

Expertise

Surpassing
our customers
requirements

Innovation

HVAC Solutions
to exceed
expectations

Support

Experienced
Design &
Technical Teams

ELITE Pro Unit Heaters: Models EPU 30-115kW



Features :

- For room sealed or open flued installations.
- Heater status indicator lamps
- Stainless steel heat exchanger as standard
- Suspended or shelf mounted installation
- Remote fan operation for summer air circulation facility

Committed to meeting the needs and expectations of our customers, we are dedicated to providing energy-efficient products, services and support

Welcome to Combat Heating Solutions, the leading provider of high-quality, energy-efficient heating solutions for commercial and industrial applications. With over 60 years of experience in the industry, we are committed to delivering reliable and innovative heating solutions that meet the needs of our customers.

At Combat Heating Solutions, we understand that every business has unique heating requirements, which is why we offer a wide range of heating products to suit various applications. Whether you need a heating solution for a large industrial facility or a small retail space, we have the expertise and experience to deliver a solution that fits your needs and budget.

Our heating solutions are designed with energy efficiency in mind, helping you to save money on your energy bills while reducing your carbon footprint. We use only the highest quality materials and components to ensure that our heating products are durable, reliable, and long-lasting. At Combat Heating Solutions, we pride ourselves on our exceptional customer service, from the initial consultation and design to installation and ongoing support.

Our team of experienced professionals is dedicated to ensuring that your heating system meets your expectations and provides reliable, efficient heating for years to come.

Thank you for considering Combat Heating Solutions for your commercial or industrial heating needs. We look forward to working with you to deliver a heating solution that meets your requirements and exceeds your expectations.



The Elite Pro line of ErP Compliant suspended unit heaters represents Combat's latest and most efficient range yet. With its innovative air stream system and exceptionally low NOx emissions, this range offers optimal energy efficiency for both industrial and commercial heating needs.

The Elite Pro range offers hassle-free installation, maintenance, and operation, making it a top choice for commercial and industrial settings. These units will provide flexibility for a range of air handling options, providing versatility to meet your specific needs. The Elite Pro range offers a comprehensive solution for all your heating needs.



MADE IN THE UK

Elite Pro Unit Heaters

At Combat, we pride ourselves on our unwavering commitment to designing, developing, and delivering cutting-edge products and system solutions that are both energy-efficient and highly effective. That's why we've given our Elite unit heaters a fresh, new look and expanded the range to include several sizes.

Our newly revamped Elite Pro range of warm air unit heaters is designed to offer even greater energy efficiency and smoother operation. These heaters are incredibly easy to install, maintain, and operate, and come with a variety of options to choose from. They can be installed in either room-sealed or open-flued configurations and feature lockout indicator lights that make troubleshooting a breeze.

The Elite Pro range comes packed with a host of features, including fully modulating burners, for superior energy efficiency and stainless-steel heat exchangers that ensure long-lasting performance. Moreover, these heaters can be either suspended or shelf-mounted, freeing up valuable workspace and providing flexibility with several air handling options, such as axial, centrifugal fan, or ducted applications.

Product Features

- Room sealed or open flued installations
- Lockout indicator lights for easy fault diagnosis
- Ultra quiet operation
- Ease of Installation
- All new construction
- Easy access to components
- New innovative modulating burner design.
- Reduced components
- Stainless Steel Heater exchanger as standard.
- Reduced NOx levels.
- Suspended or shelf mounted
- Remote fan operation for summer air circulation



**Ease of
installation**



Service



**Technical
Support**

Elite Pro Unit Heaters

General Technical Information		EPUA30	EPUA40	EPUA50	EPUA60	EPUA75	EPUA90	EPUA100	EPUA115
Maximum heat input - Gross CV	kW	36.75	48.6	58.3	71.3	85.7	107.7	119	134
Maximum heat input - Net CV	kW	33.10	43.78	48.01	64.23	77.20	97.02	107.20	120.72
Maximum heat output	kW	30	40	50	60	75	90	100	114
Minimum heat input - Gross CV	kW	13.75	13.75	23.3	23.3	38	38	41	41
Minimum Heat output	kW	11.8	11.8	20	20	34	34	34	34
Gas connection	ELUA B,C,D	½BSP	½BSP	½BSP	½BSP	¾BSP	¾BSP	¾BSP	¾BSP
Gas consumption rates	m³/h	3.5	4.6	5.6	6.8	8.2	10.3	11.3	12.8
EPUA with Axial Fan									
Total electrical load	W	547	547	596	596	960	960	1060	1060
Air flow	m³/h	5200	5200	8200	8200	12000	12000	15000	15000
Sound pressure level at 5m	dB(A)	[59.4]	59.4]	[62.5]	[62.5]	[66]	[66]	[68.2]	[68.2]
	dB	58.7	58.7	61.5	61.5	64.8	64.8	66.6	66.6
EPUB with centrifugal fan and EPUC with centrifugal fan and duct inlet									
Total electrical load	W	1695	1695	3167	3167	3518	3518	5444	5444
Normal speed		MID	MID	MID	MID	MID	MID	High	High
Airflow	m³/h	5800	5800	8500	8500	13000	13000	15300	15300
EPUD duct heater no fan									
Minimum air flow required	m³/h	5200	5200	8200	8200	12000	12000	15000	15000
Pressure loss across heat exchanger		30	30	30	30	30	30	30	30
Flue and air intake									
Flue and air intake size	mm Ø	80	80	80	80	100	100	130	130
Maximum straight flue/air intake	m	10	10	10	10	10	10	10	10
CO2 levels									
CO ₂ at maximum rate		8.8	9.0	8.8	9.0	8.2	8.0	8.8	9.0
CO ₂ at minimum rate		8.0	8.0	8.0	8.0	9.2	9.2	8.0	8.0
G20 Gas rates									
Max m³/h		3.5	4.6	5.6	6.8	8.2	10.3	11.3	12.8
Min m³/h		1.3	1.3	2.2	2.2	3.6	3.6	3.9	3.9
G31 Gas rates									
Max Kg³hr		2.6	3.5	4.2	5.1	6.1	7.7	8.5	9.6
Max L/hr		1383	1829	2194	2684	3226	4054	4479	5043
Max m³/hr		1.4	1.8	2.3	2.6	3.5	4.1	4.4	5.0

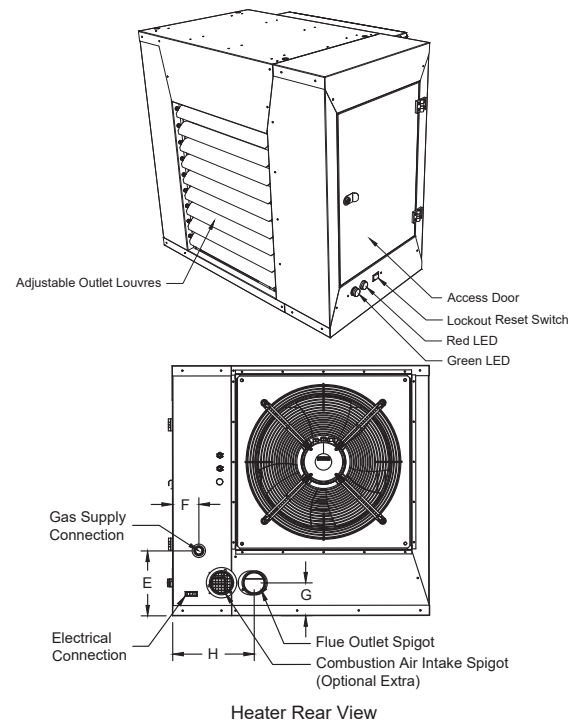
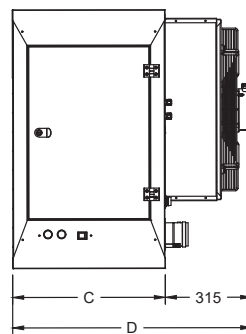
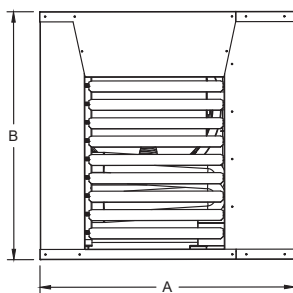
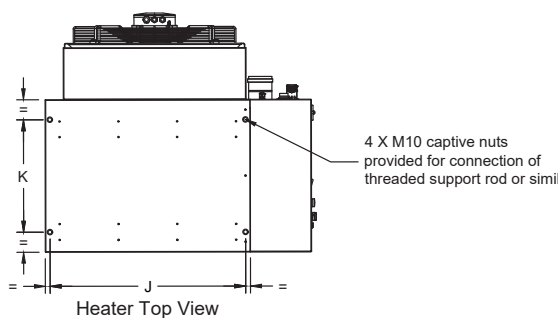
*Sound pressure levels given for standard heater without applied ductwork

EPUA Range Automatic Ignition

- Natural gas (G20) or LPG (G30 & G31) suspended tubular unit heater
- Automatic Ignition
- Fully modulating burner
- Stainless steel heat exchanger
- Horizontal louvred front panels for free blowing air discharge.
- Room sealed or open flue
- Vertical or horizontal flue

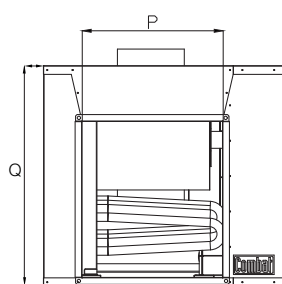


Dimension data, EPUA			EPUA30	EPUA40	EPUA50	EPUA60	EPUA75	EPUA90	EPUA100	EPUA115
A	Width	mm	970	970	1077	1077	1511	1511	1758	1758
B	Height	mm	942	942	991	991	933	933	994	994
C	Depth	mm	555	555	650	650	650	650	650	650
D	Overall Depth	mm	870	870	965	965	965	965	965	965
E	Gas connection height from base	mm	244	244	294	294	232	232	232	232
F	Gas connection from nearest side	mm	99	99	97	97	86	86	86	86
G	Flue outlet height from base	mm	123	123	133	133	125	125	135	135
H	Flue outlet from nearest side	mm	307	307	304	304	380	380	451	451
J	Support spacing width	mm	712	712	819	819	1187	1187	1435	1435
K	Support spacing depth	mm	409	409	464	464	464	464	464	464
	Flue & air intake diameter	mm	80	80	80	80	100	100	130	130
	Weight	Kg	94	94	109	109	155	155	178	178

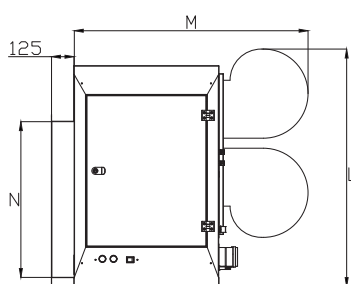


Elite Pro Unit Heaters

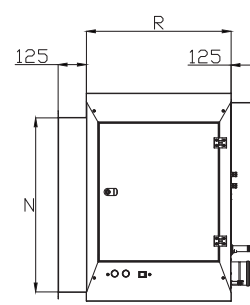
Dimension data, EPUB/C/D			EPU30	EPU40	EPU50	EPU60	EPU75	EPU90	EPU100	EPU115
L	EPUB height	mm	942	942	1064	1064	932	932	1012	1012
M	EPUB depth	mm	954	954	1051	1051	1112	1112	1112	1112
Q	EPUC height	mm	942	942	1177	1177	933	933	994	994
R	EPUD overall depth	mm	555	555	650	650	650	650	650	650
N	Inlet spigot height EPUC only	mm	659	659	880	880	659	659	720	720
P	Inlet spigot width EPUC only	mm	661	661	723	723	1180	1180	1450	1450
	Outlet spigot height EPUB/C & D	mm	655	655	700	700	785	785	855	855
	Outlet spigot width EPUB/C & D	mm	530	530	630	630	710	710	1240	1240
	Weight EPUB	kg	102	102	136	136	173	173	230	230
	Weight EPUC	kg	112	112	146	146	183	183	236	236
	Weight EPUD	kg	92	92	106	106	143	143	176	176



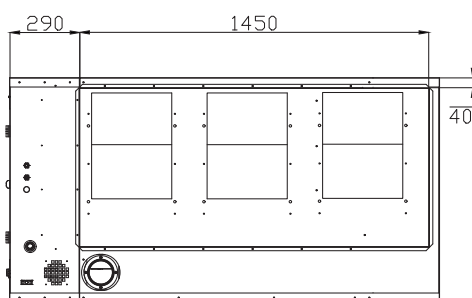
Front View B/C All Models



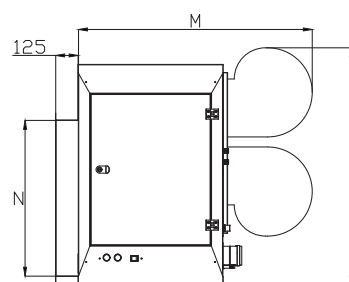
End View B/C All Models



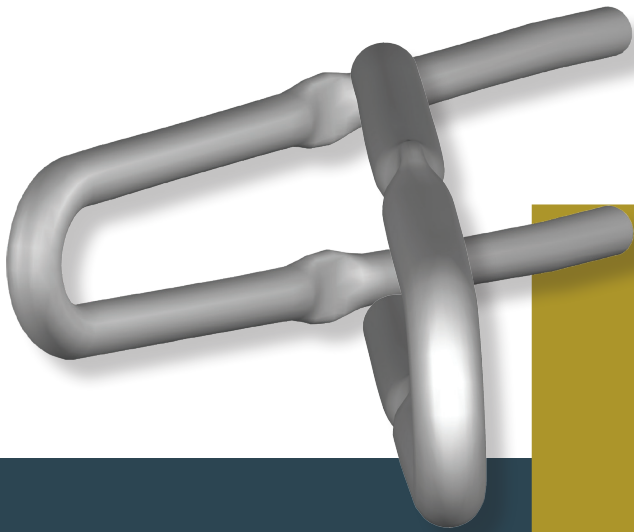
Front View D All Models



Rear View B/C 100-115



End View B/C All Models



New Style Heat Exchanger

Heat Exchanger Tube 'Dimples'

Heat exchangers are designed to combust fuel (usually gas) and then force the combustion gases through a series of tubes to ultimately reach a flue system and vent to outside. A distribution fan then pushes air across the heat exchanger to deliver warm air.

If the gases travel through the heat exchanger too quickly the distribution air fan will not have enough time to 'scrub' the heat off the heat exchanger which will result in cool leaving air temperatures and high flue temperatures. High flue temperatures mean too much of the heat is being wasted and the appliance efficiency will be poor.

The challenge, for design, is to balance the combustion, heat output and distribution air.

How is this done?

We partially achieve this by restricting the flow of gases through the tubes. This slows down the speed of travel and gives more time for the distribution air fan to 'scrub off' more heat. Restrictors also act as 'mixers' which spread the gases more evenly around the inner surface of the tube.

Restricting the flow of the gases can be achieved in several ways. Inserts or turbolators can be inserted into the tubes or the tube diameter can be reduced (by means of a 'dimple') in various places.

The dimples in the tubes are a purposely designed feature to greatly improve the efficiency of the appliance. Unit heater tubes have always had dimples in them for this reason. On previous models the gases flow from front to back so the dimples are at the rear of the appliance. On the latest design the gases flow from top to bottom so the dimples are more visible.

A new design for enhanced energy efficiency



Elite Pro

Flue Components

Room Sealed Components EPU Pro Range Description	Flue	EPU Pro Models 30-60 (80mm)	EPU Pro Models 75-90 (100mm)	EPU Pro Models 100-115 (130mm)
		Part No	Part No	Part No
Combustion air inlet adaptor	Vert/Horiz	90501025k	90501030K	90501040K
Flue bracket c/w wall plug & stud	Vert/Horiz	F941	F942	F943
Flue bracket extension stud c/w wall plate	Vert/Horiz	F940	F940	F940
Sealed pipe 1m length	Vert/Horiz	F921	F911	F912
Sealed pipe 0.5m length	Vert/Horiz	F951	F952	F953
90° bend	Vert/Horiz	F923	F913	F915
45° bend	Vert/Horiz	F922	F914	F916
Vertical roof terminal	Vertical	F925	F901	F905
Plastic cup (cravat)	Vertical	F924	F903	F907
Masterflash (c/w fixing kit)	Vertical	F322	F323	F323
Masterflash with ali apron (c/w fixing kit)	Vertical	F319	F319	F319
Horizontal wall terminal	Horizontal	F926	F904	F908
Manifold for horizontal	Horizontal	F928	N/A	N/A
Open Flued Components EPU Pro Range Description	Flue	EPU Pro Models 30-60 (80mm)	EPU Pro Models 75-90 (100mm)	EPU Pro Models 100-115 (130mm)
		Part No	Part No	Part No
Flue bracket c/w wall plug & stud	Vert/Horiz	F941	F942	F943
Flue bracket extension stud c/w wall plate	Vert/Horiz	F940	F940	F940
Sealed pipe 1m length	Vert/Horiz	F921	F911	F912
Sealed pipe 0.5m length	Vert/Horiz	F951	F952	F953
90° bend	Vert/Horiz	F923	F913	F915
45° bend	Vert/Horiz	F922	F914	F916
Terminal	Vert/Horiz	F073A	F074A	F075A
Masterflash (c/w fixing kit)	Vert/Horiz	F322	F322	F322
Masterflash with ali apron (c/w fixing kit)	Vert/Horiz	F319	F319	F319

Flue accessories

Fans & Controllers

Accessories Description	Part No if ordered separately
3/4" Flex gas connection	L802
1" Flex gas connection	L801
EPU 30-40 vertical louver kit	VL3040
EPU 50-60 vertical louver kit	VL5060
EPU 75-90 vertical louver kit	VL7590
EPU 100-115 vertical louver kit	VL100115
30-40 downhead	E501
50-60 downhead	E502
75-90 downhead	E503
100-115 downhead	E504

HVE De-stratification fans

Reduce your heating and cooling costs while minimising your CO2 emissions with our Combat De-stratification systems, one of the most effective energy-saving technologies on the market.

Our HVE fans are designed to eliminate thermal stratification in your building by continuously circulating and mixing the internal air, ensuring balanced and equalised temperatures between the floor and ceiling – a process known as thermal de-stratification.

This not only significantly reduces the workload for heating and cooling systems but also leads to substantial energy savings and a reduced carbon footprint.



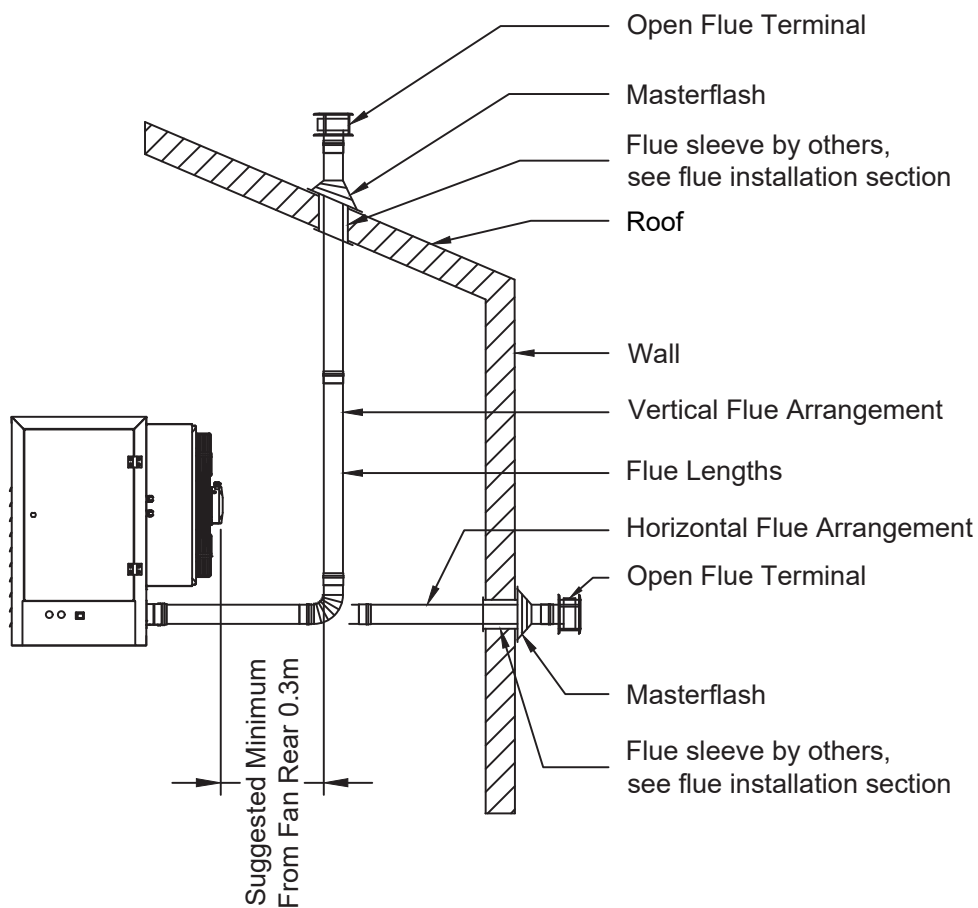
The Enercal Space 10

- One control for all single zone heating applications, unit heaters, cabinet heaters and radiant tubes (Maximum of eight standard radiant tubes)
- Microprocessor based 100-year calendar clock with battery back up
- Optimum start, built in warm air sensor with options for a remote warm air sensor or a radiant sensor with auto sensing and calibration.
- Engineer's menu/end users menu via numeric code entry system
- Very simple set up, supplied with a set of default settings for on/off times and temperature
- Multiple languages, plug in convenience



Elite Pro

Unit Heaters Flues

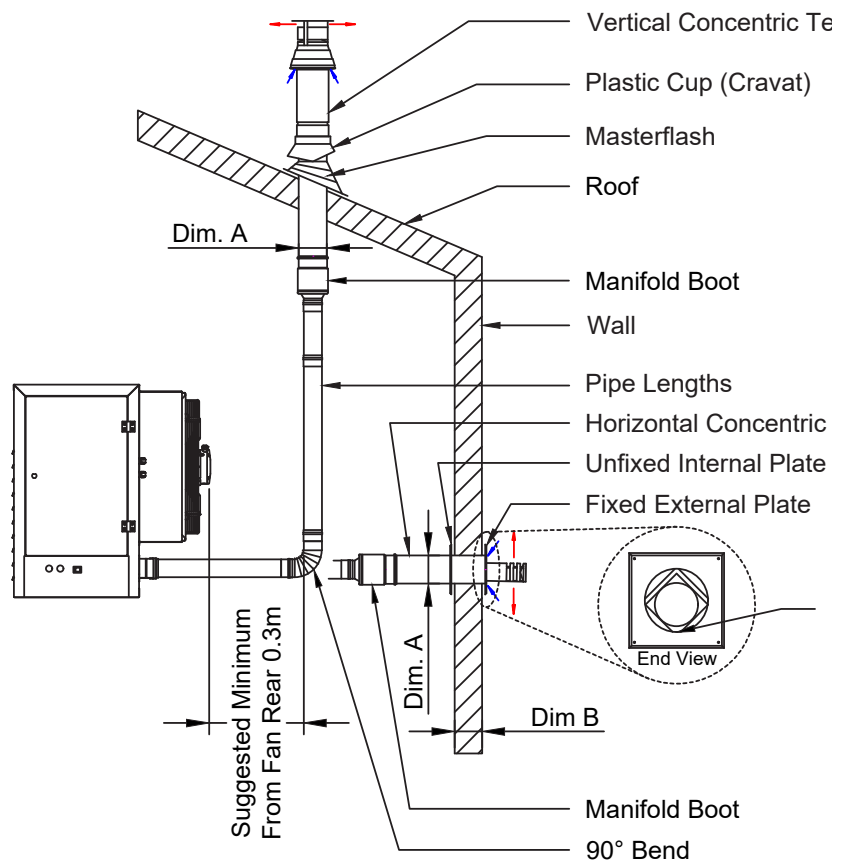
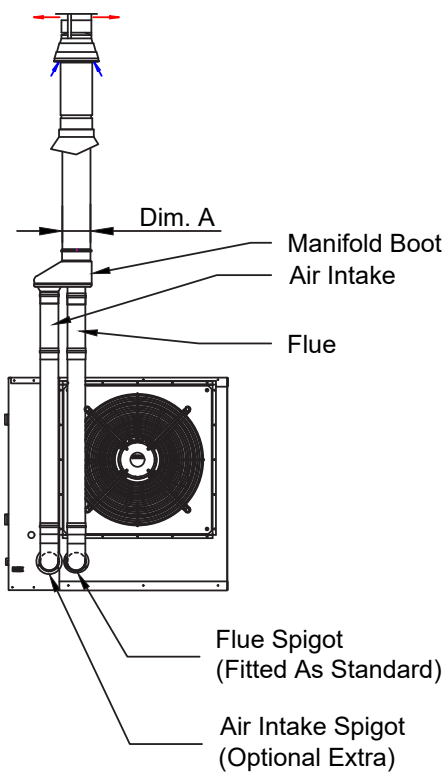


Models	Flue
30-60	80mm Ø
75-90	100mm Ø
100-115	130mm Ø

Note:

When using a type C or D unit heater, the actual flue configuration may need to be different to that shown depending on the proposed route of inlet ductwork.

Flue Diagrams



Models	Flue	Dim. A	Dim. B
30-60	80mm Ø	125mm Ø	0.5m
75-90	100mm Ø	150mm Ø	0.3m
100-115	130mm Ø	200mm Ø	0.4m

Note:

When using a type C or D unit heater, the actual flue configuration may need to be different to that shown depending on the proposed route of inlet ductwork.



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