



High efficiency
gas boilers

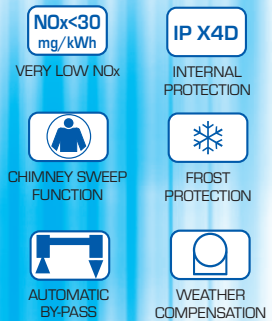
MURELLE EV HE RANGE



 **sime**[®]
SIMPLICITY IN HEATING



High efficiency gas boilers



MURELLE EV HE

The Versatile Intelligent Boiler Range

Murelle EV HE is a range of high efficiency, condensing boilers defined by an electronic management system that allows remarkable flexibility of use to each installation in compliance with current legislation and with the

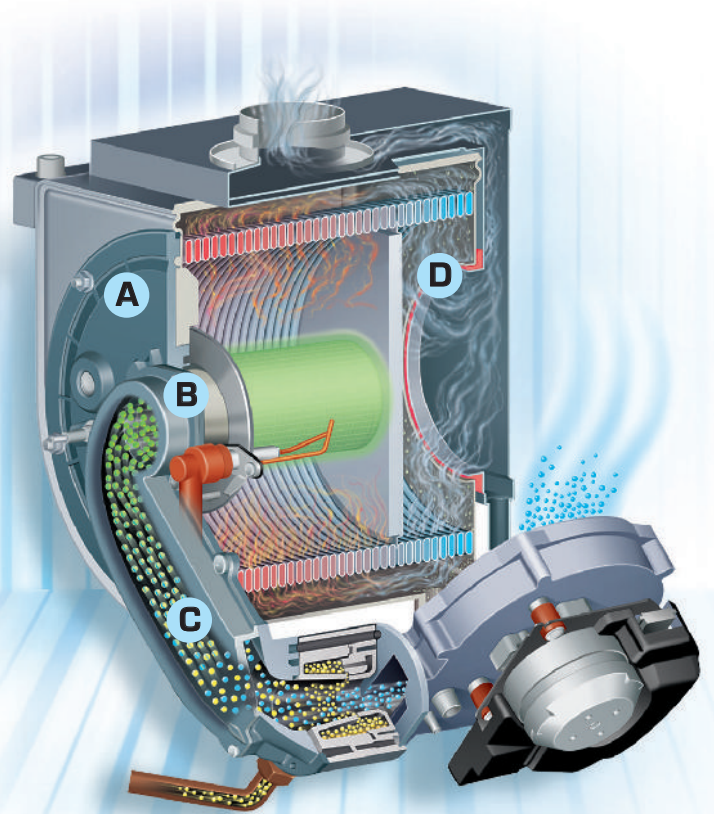
principles of energy saving and ecological awareness. Sime offers 10 models in five variants of power from 12 to 35 kW in versions for heating only, with instantaneous D.H.W. production and with D.H.W. storage.

A green heart

At the heart of the **Murelle EV HE** boiler is a combustion system that ensures the highest efficiency by extracting the most heat possible from the burnt gas. **Murelle EV HE** is Band A SEDBUK rated at

over 90% seasonal efficiency. The advanced system also means polluting emissions are kept to a minimum. NOx emissions are well within limits set by European standards (Class 5 reference EN 483).

- A** The main heat exchanger is manufactured in high quality stainless steel (AISI 316 LC) to resist the corrosive action of the condensation that is produced. Its cylindrical shape, as well as efficiently collecting the condensate liquid, ensures the best possible heat exchange takes place.
- B** The pre-mixed burner, also in stainless steel, is cylindrical and positioned radially in the combustion chamber. Its 'micro-flame' feature allows for a lower operating surface temperature which reduces significantly the amount of polluting emissions (nitrous-oxide) produced. Air and gas for combustion are introduced into the burner manifold pre-mixed in an ideal balance.
- C** The recovery of normally wasted energy occurs where the water vapour, present in the hot flue gases, condenses as it contacts the cooler surface created by the return water from the heating system.
- D** The sophisticated pre-mixing system along with constant temperature monitoring means the boiler output is perfectly matched to demand and ensures the highest possible operating efficiency at all times.



The pre-mixed condensation system of Murelle EV HE

Energy efficiency and environmental protection

The innovation of **Murelle EV HE** range incorporates a new exchanger that achieves a modulation range from 1:5 and 1:4.



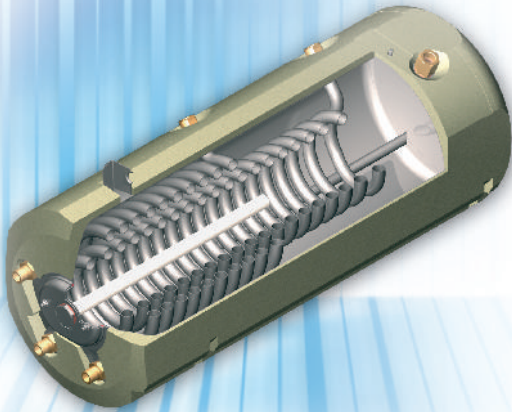
Furthermore **Murelle EV HE** pays particular attention to environmental protection with the

adoption of a sophisticated pre-mix system, in which air and gases are mixed in a special collector. Together with a constant temperature monitoring this ensures the boiler output is always perfectly matched to demand and also ensures the highest operating efficiency at all times reducing pollutant emissions (CO and NOx).

Thanks to these solutions NOx emissions of **Murelle EV HE** are about 30 mg/kWh, less than half of the more restrictive rules of **Class 5** UNI EN 297 and 483.

Tailored Hot Water

Murelle EV HE storage combination system incorporates this clever all-in-one designed tank manufactured in high quality stainless steel harmonising security and efficiency. The particular shape of the tank with double coil and a capacity of 55 litres, satisfies the highest demands for hot water and heating whilst reducing energy consumption allowing a powerful



55 litres capacity stainless steel D.H.W. tank



Murelle EV HE 25-30/55 BF

high exchange that fully recharges the store in approximately 6 minutes. Stainless steel is synonymous of reliability, less exposure to corrosion and increased hygiene. The **Murelle EV HE** range includes 5 models for heating only with output from 12 to 35 kW suitable for integration with solar storage systems.

New Range of Intelligent Remote Controllers

The remote controllers **CR 53** and **CR 73** are multifunctional devices managing time and thermoregulation delivering comfort with efficiency and optimising integration with the **Murelle EV HE** Range.



Remote controller CR 53

Remote controller CR 73

CR 53 allows a constant display of time and temperature managing the comfort of your environment .

Its main functions are:

- Maintaining a climate zone on the basis of room temperature
- Programming daily time

CR 73 thanks to a bigger screen and the internal clock allows a constant display of the room temperature, the time, the hourly programming, operation mode and the state of the burner.

Its main functions are:

- management of 2 climate zones on the basis of room and external temperature
- C.H. weekly programming
- D.H.W. storage weekly programming
- Anti-legionella function for **Murelle EV HE** 55 litres Storage

Technical features

Model		25	30	35	12 SYSTEM	20 SYSTEM	25 SYSTEM	30 SYSTEM	35 SYSTEM	25/55	30/55
Heat Input nominal/minimum	kW	24.5/5.0	29.5/6.2	34.8/8.2	12.0/3.0	19.5/4.5	24.5/5.0	29.5/6.2	34.8/8.2	24.5/6.5	29.5/8.0
Heat Output nominal/minimum	kW	26.2/5.4	31.6/6.6	37.2/8.8	12.8/3.2	20.9/4.8	26.2/5.4	31.6/6.6	37.2/8.8	26.2/7.0	31.6/8.5
Thermal Efficiency (CEE 92/42 directive)		★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Sedbuk Seasonal Efficiency rating		90.3%	90.4%	90.7%	90.3%	90.3%	90.4%	90.5%	90.8%	90.7%	90.7%
Hot water flow rate Δt 35°C	l/min	9.8	11.8	14.0	–	–	–	–	–	9.8	11.8
Expansion vessel capacity	litres	8	10	10	8	8	8	10	10	10	10
Maximum D.H.W. pressure	bar	7	7	7	–	–	–	–	–	7	7
Minimum installation clearance											
Above	mm	200	200	200	200	200	200	200	200	300	300
Below	mm	200	200	200	200	200	200	200	200	400	400
Side	mm	15	15	15	15	15	15	15	15	20	20
Front (for servicing)	mm	500	500	500	500	500	500	500	500	500	500
Max. horiz. length of coax. duct \varnothing 60/100	m	6	5	4	6	6	6	5	4	6	5
Max. vertical length of coax. duct \varnothing 60/100	m	8	7	6	8	8	8	7	6	8	7
Max. horiz. length of coax. duct \varnothing 80/125	m	12	10	8	12	12	12	10	8	12	10
Max. vertical length of coax. duct \varnothing 80/125	m	15	13	11	15	15	15	13	11	15	13
Max. horiz. length of twin ducts \varnothing 80+80	m	47+47	35+35	27+27	50+50	50+50	47+47	35+35	27+27	47+47	35+35
Max. vertical length of twin ducts \varnothing 80+80	m	47+47	34+34	26+26	50+50	50+50	47+47	34+34	26+26	47+47	34+34
Weight	kg	42	43	50	42	43	44	44	45	77	80

We pursue a policy of continuing improvement in design and performance of our products. The right is therefore reserved to vary specifications without notice.

A Name you can trust

Sime is one of Europe's top ten heating manufacturers, founded in 1972 Sime have continued to develop a reputation for manufacturing quality products supported by a dedicated service network. Our strength is our commitment to research and development embracing challenges such as global warming, demand for improved efficiencies, reduced carbon emissions and adoption of new technologies.

Our extensive range of intelligent High Efficiency domestic gas boilers, deliver flexibility with complete integration of renewable technologies. Our policy of continuous improvements ensures that we deliver solutions that match today's heating requirements, both in terms of comfort and efficiency and of course impact on the environment.



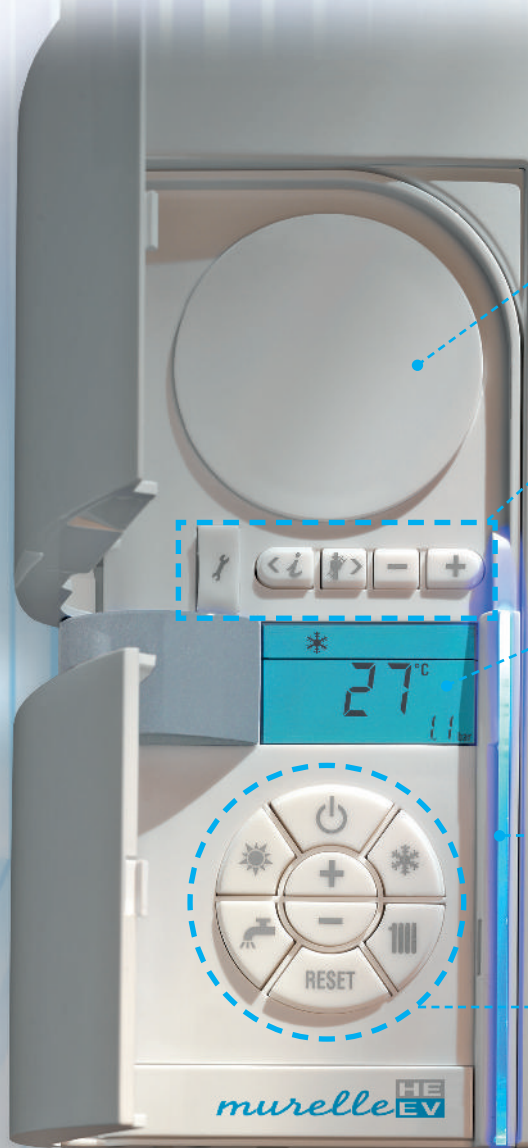
Sime Ltd • 1a Blue Ridge Park, Thunderhead Ridge • Glasshoughton, Castleford, WF10 4UA
Phone 0845 9011114 • Fax 0845 9011115 • www.sime.ltd.uk • e-mail: enquiries@sime.ltd.uk

New Interface Controls

Murelle EV HE has a control panel that consists of two separate areas.

The lower area is dedicated to the end-user interface via a keyboard with eight keys to manage operation intuitively. The area above the display is

dedicated to the operating parameters of the Murelle EV HE managed by four buttons and a port for connecting to a PC for data extraction. In addition, the integral time programmer housing is also located above the display.



TIME PROGRAMMER OPTION

INSTALLER INTERFACE AREA

BACKLIT SEMI-GRAPHIC DISPLAY WITH INSTANTANEOUS VISION OF ALL MAIN INFORMATIONS

LED BAR HIGHLIGHTS STATUS OF THE BOILER:
BLUE: Boiler operating
RED: Boiler in alarm

USER INTERFACE

USER INTERFACE

	ON/OFF In OFF mode security features active
	SUMMER MODE The boiler works only on D.H.W. demand
	WINTER MODE The boiler works in heating 24 hrs or within programmable controller settings

	D.H.W. Displays the D.H.W. temperature
	C.H. Press once to view heating temperature circuit 1 Press twice to view heating temperature circuit 2
	RESET Allows reset of the appliance after an operating anomaly
	ADJUST THE VALUE Increases or decreases the value of the parameter you are setting

Evolution

The **Murelle EV HE** boilers are equipped with a new hydraulic assembly.

This provides a better system head, improved de-aeration and a two speed pump.

The instantaneous version includes a motorised valve, and a flow meter for accurate management of hot water.

The system version, which can be connected directly to an external cylinder, also includes a motorised valve.

A range for all requirements

SYSTEM	INSTANTANEOUS	WITH STORAGE
12 SYSTEM	25	25/55
20 SYSTEM	30	30/55
25 SYSTEM	35	
30 SYSTEM		
35 SYSTEM		

Flexible & modern system

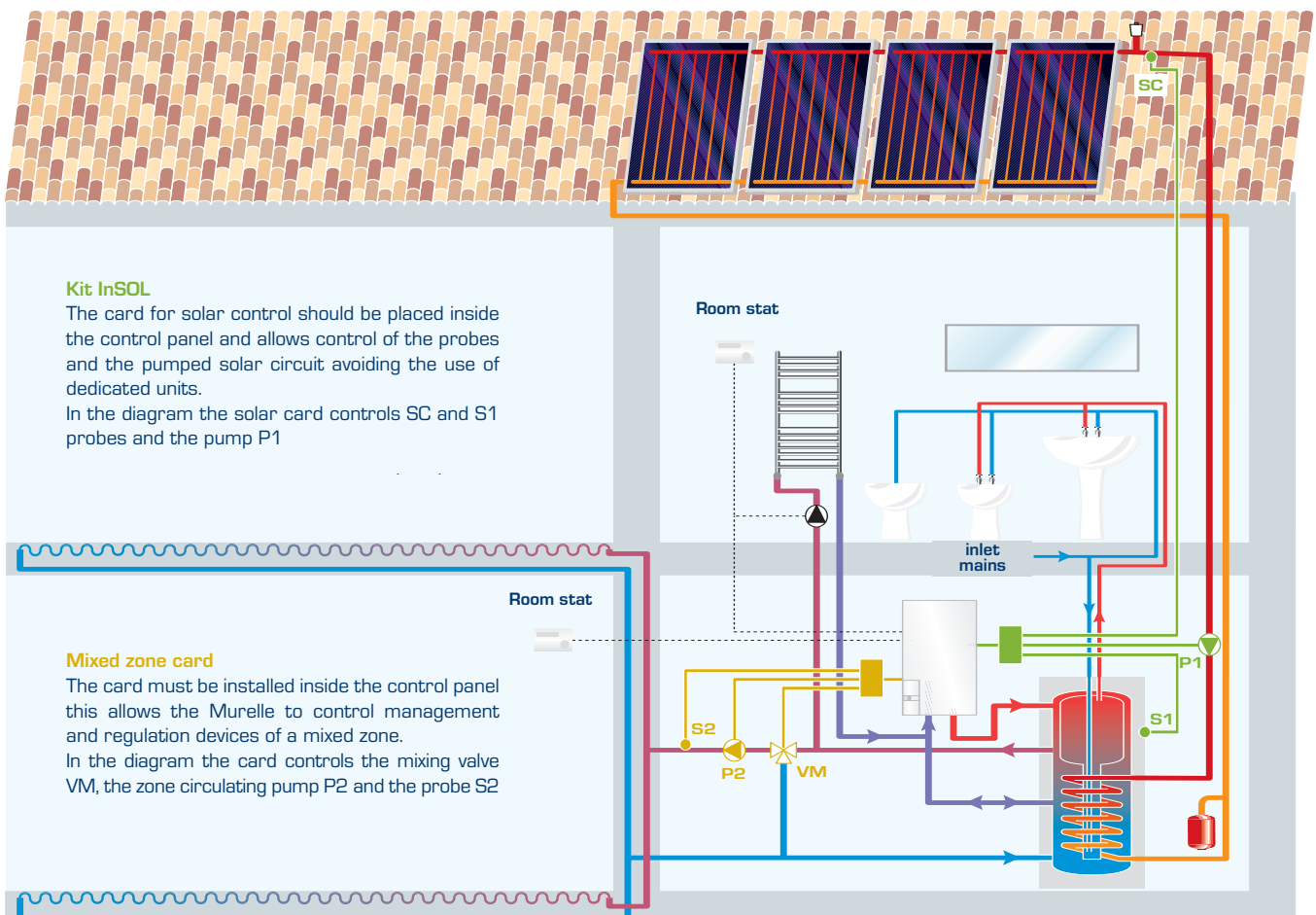
The **Murelle EV HE** range can manage the temperature regulation externally by installing an external probe directly into the electronic management controller (PCB), and reduce operating costs of the heating system.

The management controller (PCB) allows inputs from two different thermostats managing two

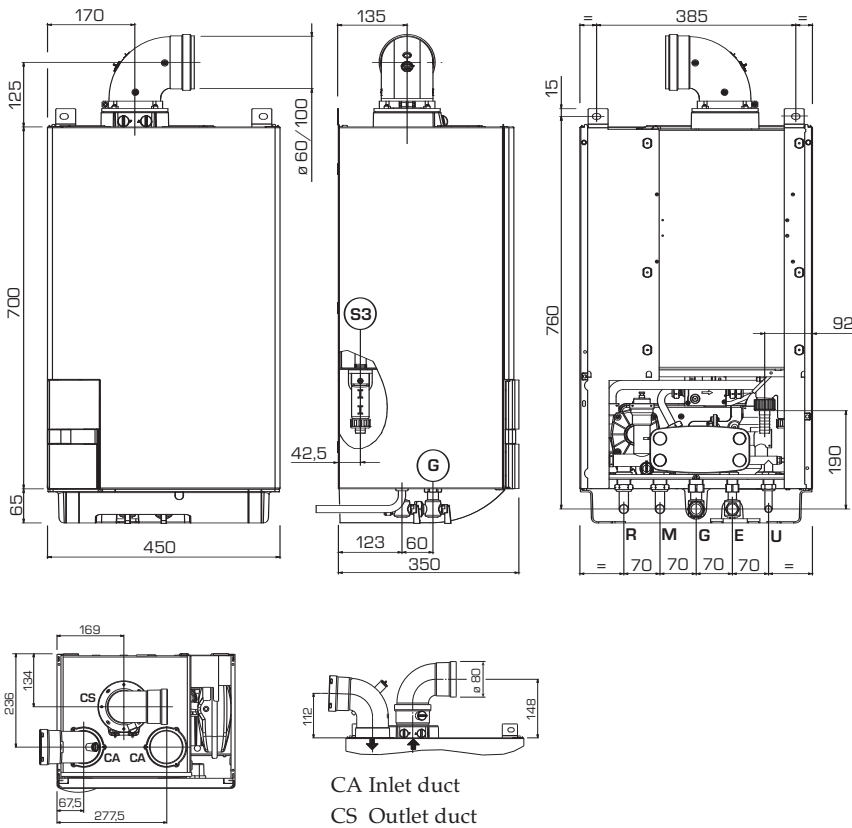
different circuits at different temperatures.

The optional **Mixed Zone** kit can manage up to two low temperature zones controlling the relevant devices (mixing valve, zone pump, and temperature control).

The optional **Solar Kit** will manage a forced circulation solar system.



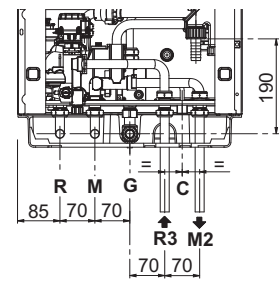
Dimensions - Connections - MURELLE EV HE instantaneous and C.H. only



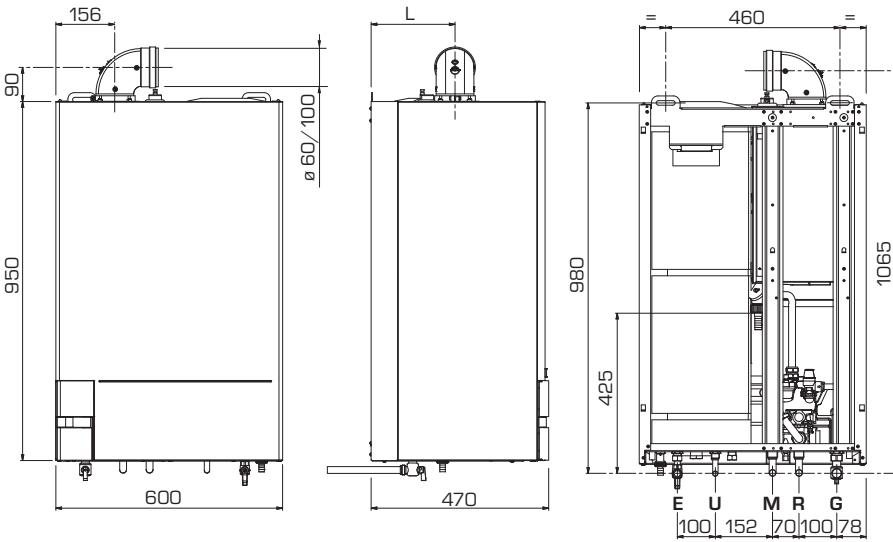
Connections

		Dimensions
M	C.H. flow	3/4"
R	C.H. return	3/4"
G	Gas	3/4"
E	D.H.W. inlet	1/2"
U	D.H.W. outlet	1/2"
R3	D.H.W. tank return	1 3/4"
M2	D.H.W. tank flow	3/4"
S3	Condensate discharge	ø 25

"System" versions

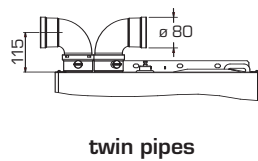
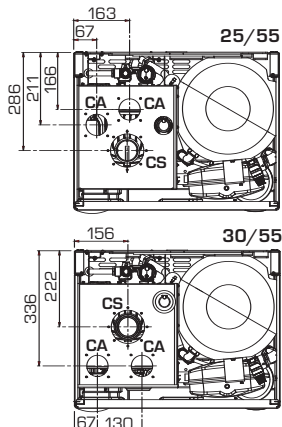


Dimensions - Connections - MURELLE EV HE with storage tank



Dimensions

	L mm
Murelle EV HE 25/55 BF	286
Murelle EV HE 30/55 BF	222



twin pipes

Connections

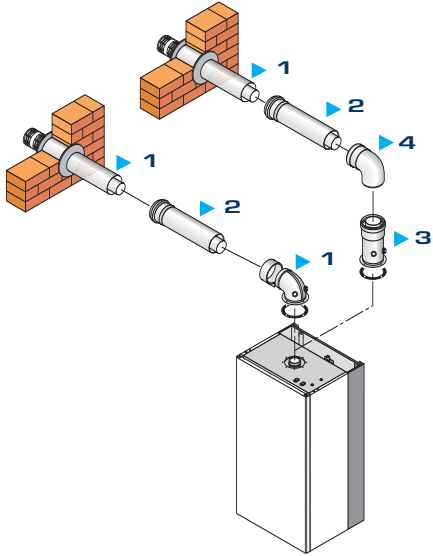
		Dimensioni
M	C.H. flow	3/4"
R	C.H. return	3/4"
G	Gas	3/4"
E	D.H.W. inlet	1/2"
U	D.H.W. outlet	1/2"
C	Recirculation	1 1/2"
S3	Condensate discharge	ø 25

CA Inlet duct
CS Outlet duct

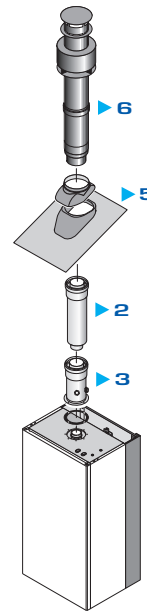
Flueing options

The range of **Murelle EV HE** is enhanced by our versatile flueing systems which provide for more siting choice. The appliance can be extended as shown in the table below, using either a concentric or twin flue system. All components are finished in white.

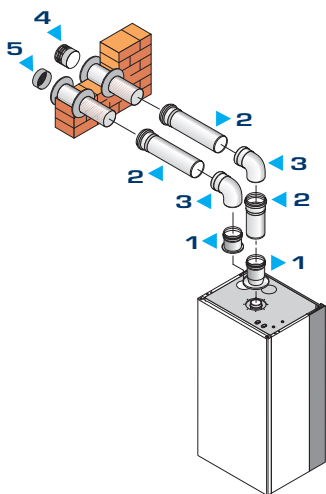
60/100 mm CONCENTRIC FLUE SYSTEM



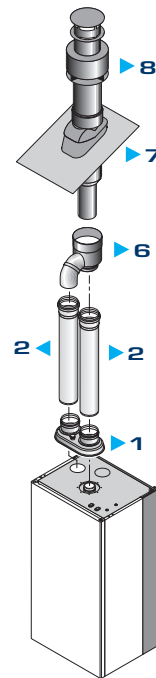
	Code	Description
▶ 1	8096250	Concentric duct kit
▶ 2	8096150	Extension L. 1000
▶ 3	8086950	Vertical adapter L. 120
▶ 4	8095850	90° elbow
▶ 5	8091300	Tile with articulation
▶ 6	8091205	Vertical roof terminal
	8096151	Extension L. 500
	8095950	45° elbow
	8096260	Plume management kit



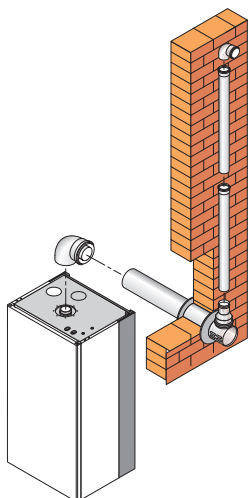
80 mm TWIN FLUE SYSTEM



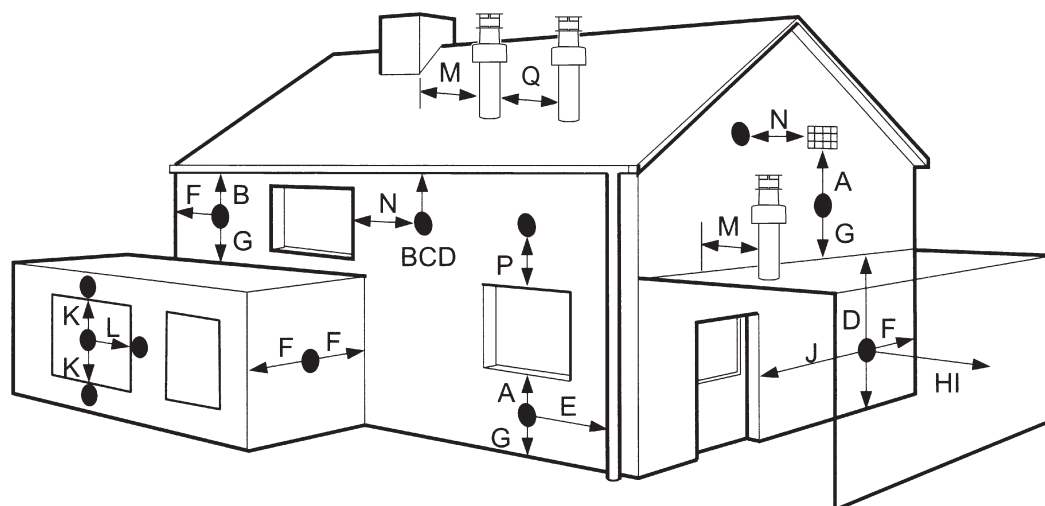
	Code	Description
▶ 1	8089912	Twin flue adapt. (for combi and system)
	8089911	Twin flue adapt. (for 25/55 and 30/55)
▶ 2	8077351	Extension L. 1000 (6 off)
▶ 3	8077450	90° elbow (6 off)
	8077450A	90° elbow (single)
▶ 4	8089501	Exhaust terminal
▶ 5	8089500	Air inlet terminal
▶ 6	8091401	Junction twin to concentric
▶ 7	8091300	Articulated tile
▶ 8	8091205A	Vertical roof terminal
	8077350	Extension L. 500 (6 off)
	8077350A	Extension L. 500 (single)
	8077451	45° elbow (6 off)
	8077451A	45° elbow (single)



60/100 mm PLUME MANAGEMENT SYSTEM



Flue exit clearances



Terminal position		Minimum clearances
A	Directly below an openable window, air vent or any other ventilation opening	300 mm
B	Below guttering, drain pipes or soil pipes	75 mm**
C/D	Below eaves, balconies or carport roof	200 mm
E	From vertical drain pipes or soil pipes	75 mm
F	From internal or external corners	300 mm
G	Above adjacent ground, roof or balcony level	300 mm
H	From a surface or boundary facing the terminal	600 mm
I	From a terminal facing the terminal	1,200 mm
J	From an opening in the carport (eg door, window into dwelling)	1,200 mm
K	Vertically from a terminal on the same wall	1,500 mm
L	Horizontally from a terminal on the same wall	300 mm
M	Horizontally from a vertical terminal to a wall	300 mm
N	Horizontally from an openable window or other opening	300 mm
P	Above an openable window or other opening	300 mm
Q	From an adjacent vertical terminal	600 mm

Main features

	HE	HE System	HE with storage
Frost protection	▲	▲	▲
Plume management kit options	▲	▲	▲
Weather compensation option	▲	▲	▲
Two room thermostat connections	▲	▲	▲
Wide modulating range	▲	▲	▲
Very low NOx emissions (NOx < 30 mg/kWh)	▲	▲	▲
Mixed zone card (optional)	▲	▲	▲
Solar card control (optional)	▲	▲	▲
24 hour mechanical, 7-days digital, radio frequency time and temp. controllers	▲	▲	▲
Automatic by-pass fitted	▲	▲	▲
Rear pipe space frame available	▲	▲	▲
No compartment ventilation required	▲	▲	▲
Pre-wired electrical lead	▲	▲	▲
Aquaguard filter protection	▲	▲	▲
Full gas/air modulation	▲	▲	▲
Extended warranty option	▲	▲	▲
IPX4D electrical protection	▲	▲	▲
Anti-cycling device	▲	▲	▲