

The **New** Remeha Quinta Pro Selection, Design and Installation of Flue Systems



HIGH EFFICIENCY
110% NCV AT 40/30°C



FULLY MODULATING
BOILER CONTROL



PREMIX BURNER CLEAN
COMBUSTION



ULTRA LOW NOx
BREEAM EXCELLENT



RECYCLABLE
MATERIALS



High efficiency wall hung condensing boiler
with ultra low NOx emission

QUINTA PRO RANGE OUTPUTS

QP30: 8.0 - 31.4 kW

QP45: 8.0 - 43.0 kW

QP65: 12.0 - 65.0 kW

QP90: 14.1 - 89.5 kW

QP115: 16.6 - 114.0 kW

SEDBUK RATED (QP30, QP45, QP65)



OR remeha

commercial

Quinta Pro Series flue options

The Quinta Pro series of boilers have fan assisted flues and are supplied as standard with a "concentric" flue outlet/air inlet which is used for room sealed operation or for open flue (room ventilated) applications. An optional twin pipe fitting is available for the room sealed "CLV" system.

The concentric system can be supplied for individual boilers for horizontal or vertical installation and because of the excess fan capacity of the boiler most flue lengths can be accommodated (depending on boiler model and actual route taken) which enables the installer to position the boiler almost anywhere in the building.

Open flue or room ventilated systems can be installed as individual or combined flues and should discharge vertically with the flue terminating in a optional tapered cone but c/w bird guard.

Care should be taken when siting the actual discharge point as a vapour plume will be visible when the boiler is operating (max flue gas exit temperature will be less than 75°C) and it is possible for water to drip to the ground from the terminal on horizontal installations which could turn to ice in freezing conditions.

Recommendations

Refer to latest relevant British Standards

(Ref BS 5440 - 2 : Specification for installation and maintenance of ventilation for gas appliances not exceeding 70kW) (1st, 2nd and 3rd family gases)

(Ref BS 5440 - 1 : Specification for installation of gas appliances to chimneys and for maintenance of chimneys not exceeding 70kW) (1st, 2nd and 3rd family gases)

(Ref BS 6644 : Specification for installation of gas-fired hot water boilers of rated inputs between 70kW to 1.8 kW)(net)(2nd and 3rd family gases)

(Ref IGE/UP/10) Installation of flued gas appliances in industrial and commercial premises.

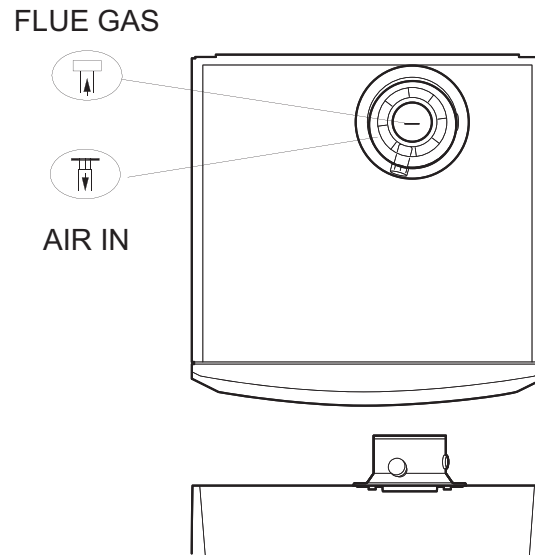
It is the responsibility of the installer to install the flue to comply with the current regulations and standards.

The data published in this leaflet is based on the latest information (at date of publication) and may be subject to revisions. It should be read in conjunction with the Quinta Pro Installation and Service Manual supplied with each boiler or available on request. We reserve the right to continuous development in both design and manufacture, therefore any changes to the technology or equipment employed may not be retrospective, nor may we be obliged to adjust earlier supplies accordingly. Flue components are constructed from unpainted aluminium/steel. Flue Terminals are painted as detailed in terminal diagrams. Plume kit external components are aluminium or plastic and are painted black. All flue components are CE approved.

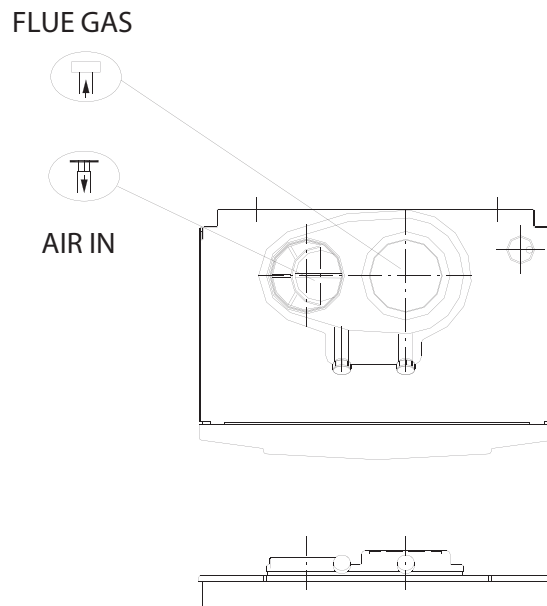
Quinta Pro Series Flue outlet / Air inlet details

The Quinta Pro Series boilers are supplied as standard with a Concentric Flue outlet / Air inlet connection which can be used for:

1. Room sealed operation using the concentric flue system (Flue within air duct)
2. Conventional/Open flue operation using single skin flue system connected to the inner concentric connection with the air supply taken from the boiler house via the outer concentric connection.

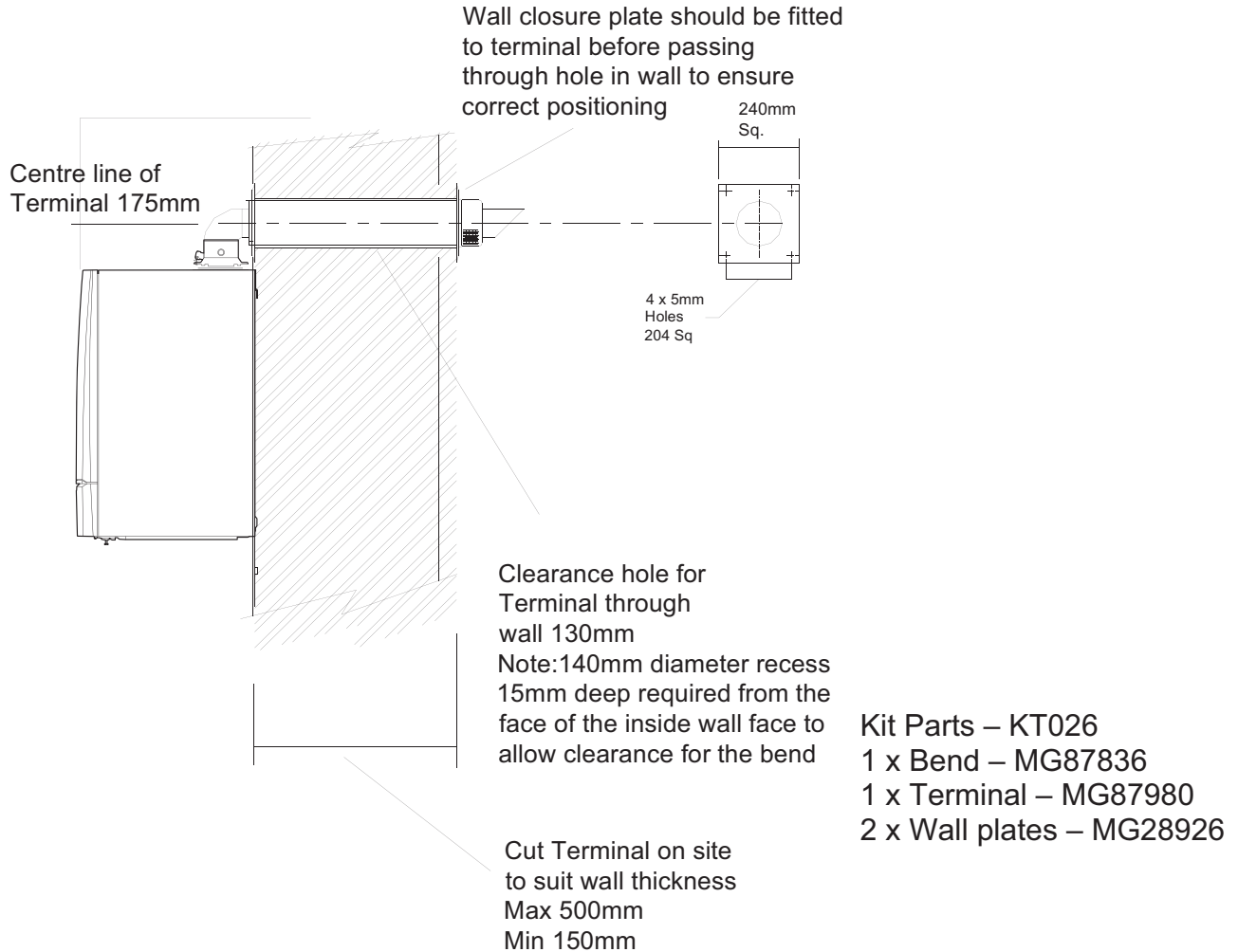


This shows the optional Twin pipe Flue outlet / Air inlet connection and is used for Room sealed operation using the CLV flue system (air inlet and flue gas discharge from two pressure zones). Using single skin, water and gas tight flue system with single skin air tight air inlet system.

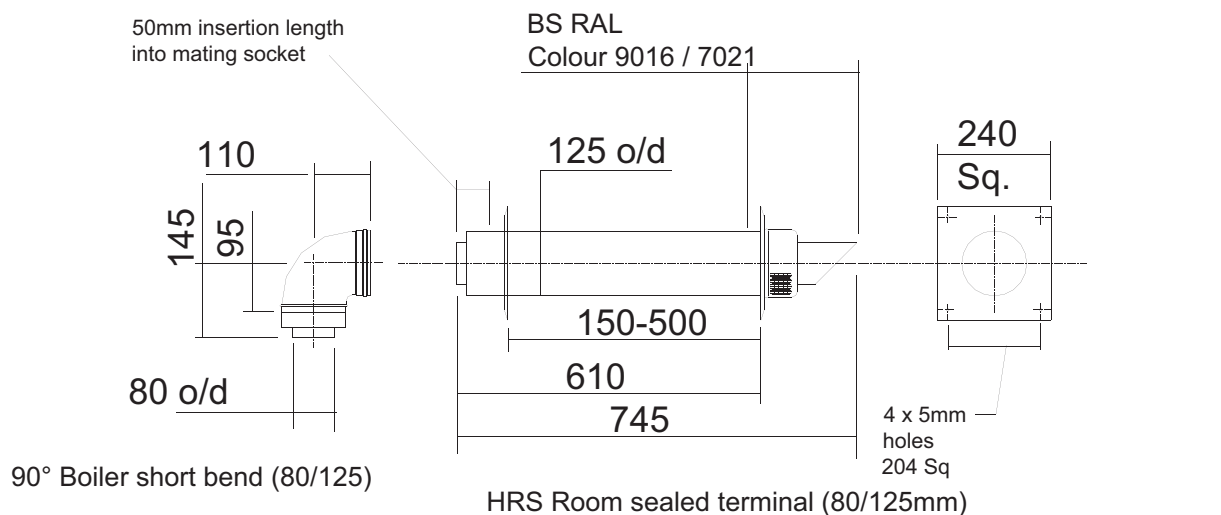


Quinta Pro 30 and 45 - Room Sealed, 80/125mm Horizontal Concentric Flue Kit Option QP01

(For use when the boiler/s are mounted on and flued through a rear outside wall)
 Typical single boiler installation - can also be used for multiple boilers but each must have its own flue system at a min 530mm centres and never immediately above another.
 For two boilers **only** it is also possible to install the external terminal wall plates touching each other.



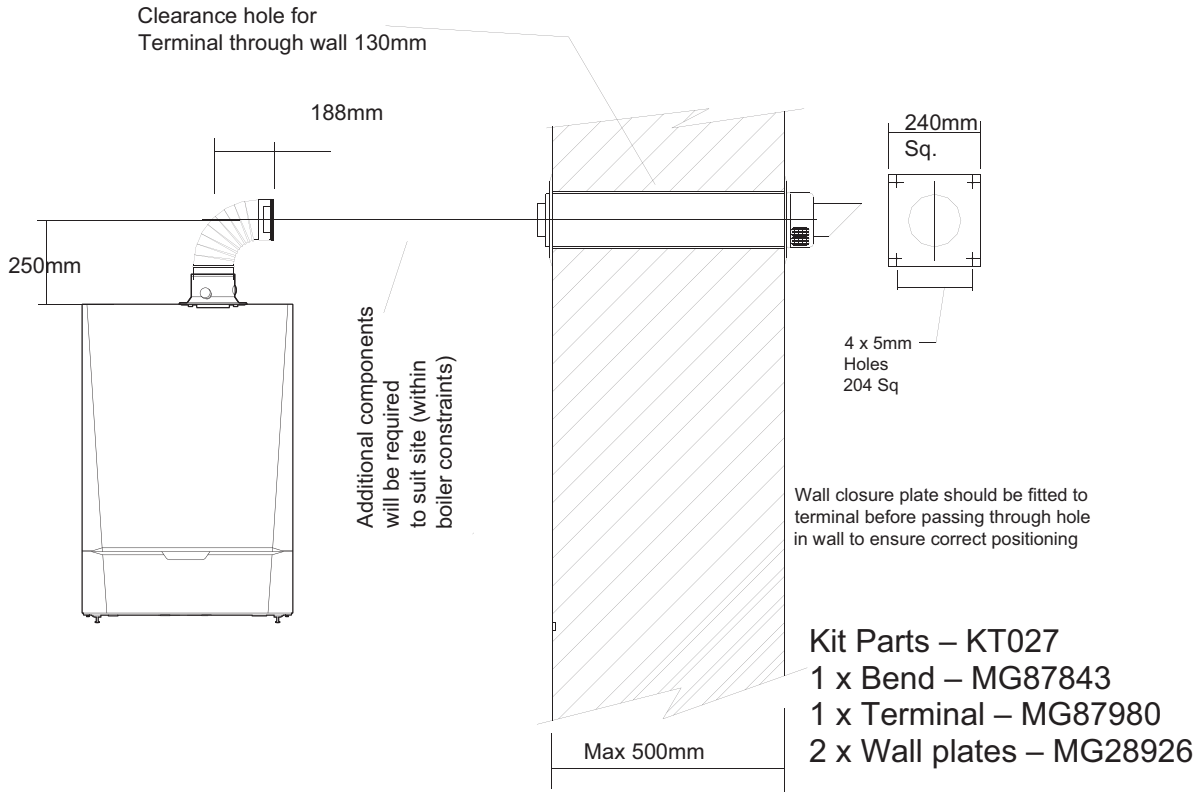
Detail of the Horizontal 80/125mm Concentric Flue Kit Option QP01 (Part No KT026)



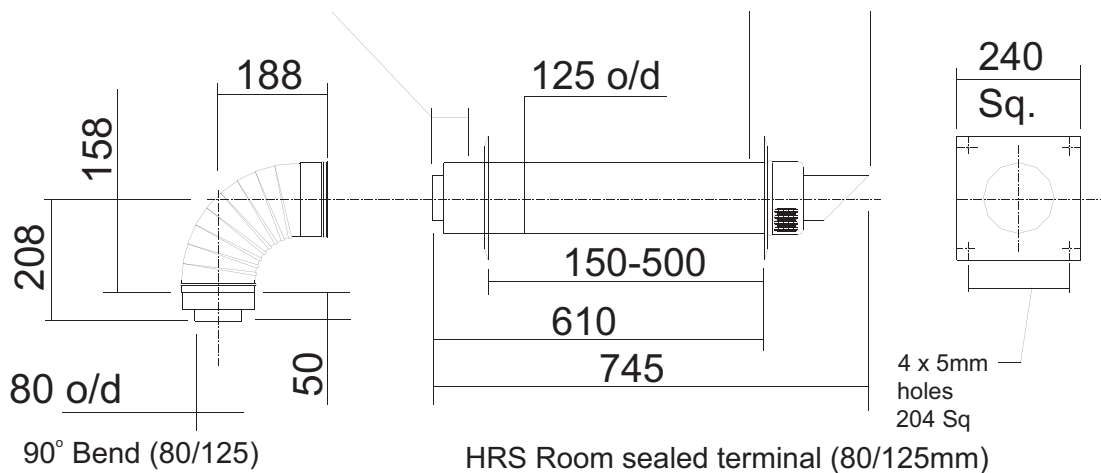
Quinta Pro 30 and 45 - Room Sealed, 80/125mm Horizontal Concentric Flue Kit Option QP02

(For use when the flue is discharged through a side wall left or right)

Typical single boiler installation - can also be used for multiple boilers but each must have its own flue system and installed a Min of 530mm. centres horizontally and never immediately above another. For two boilers **only** it is also possible to install the external terminal wall plates touching each other.



Detail of the 80/125mm Horizontal Concentric Flue Kit Option QP02 (Part No KT027)

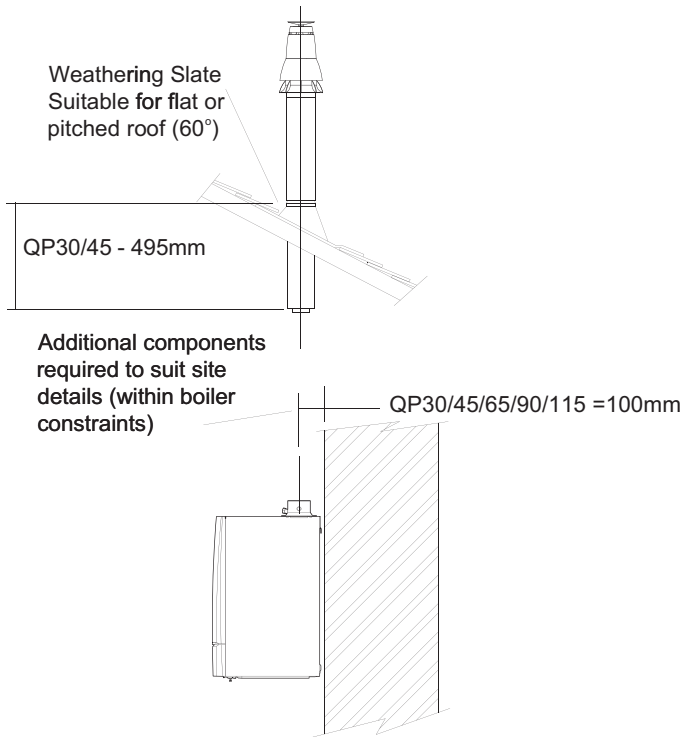


PLEASE NOTE: All dimensions are in mm.

Quinta Pro 30 and 45 - Room Sealed, 80/125mm Vertical Concentric Flue Kit Option QP03

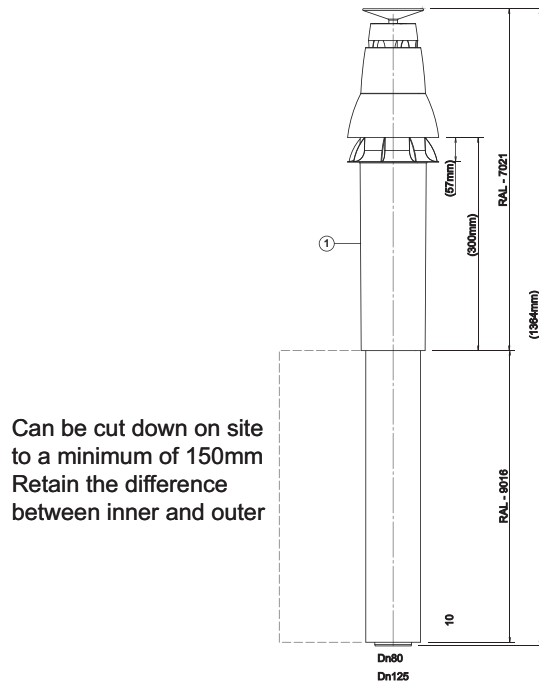
(For use when the flue is discharged vertically through the roof)

Typical single boiler installation - can also be used for multiple boilers, but each must have its own flue system and terminals separated a Min of 300mm if at the same height. Refer to the relevant British Standard if this is not the case.

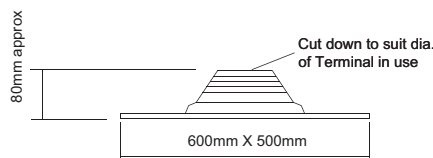


Kit Parts – KT031
 1 x Vertical Terminal – MG87973
 1 x Universal Roof seal Pack – VE001

Detail of the Vertical 80/125mm Concentric Flue Kit Option QP03 (Part No KT031)



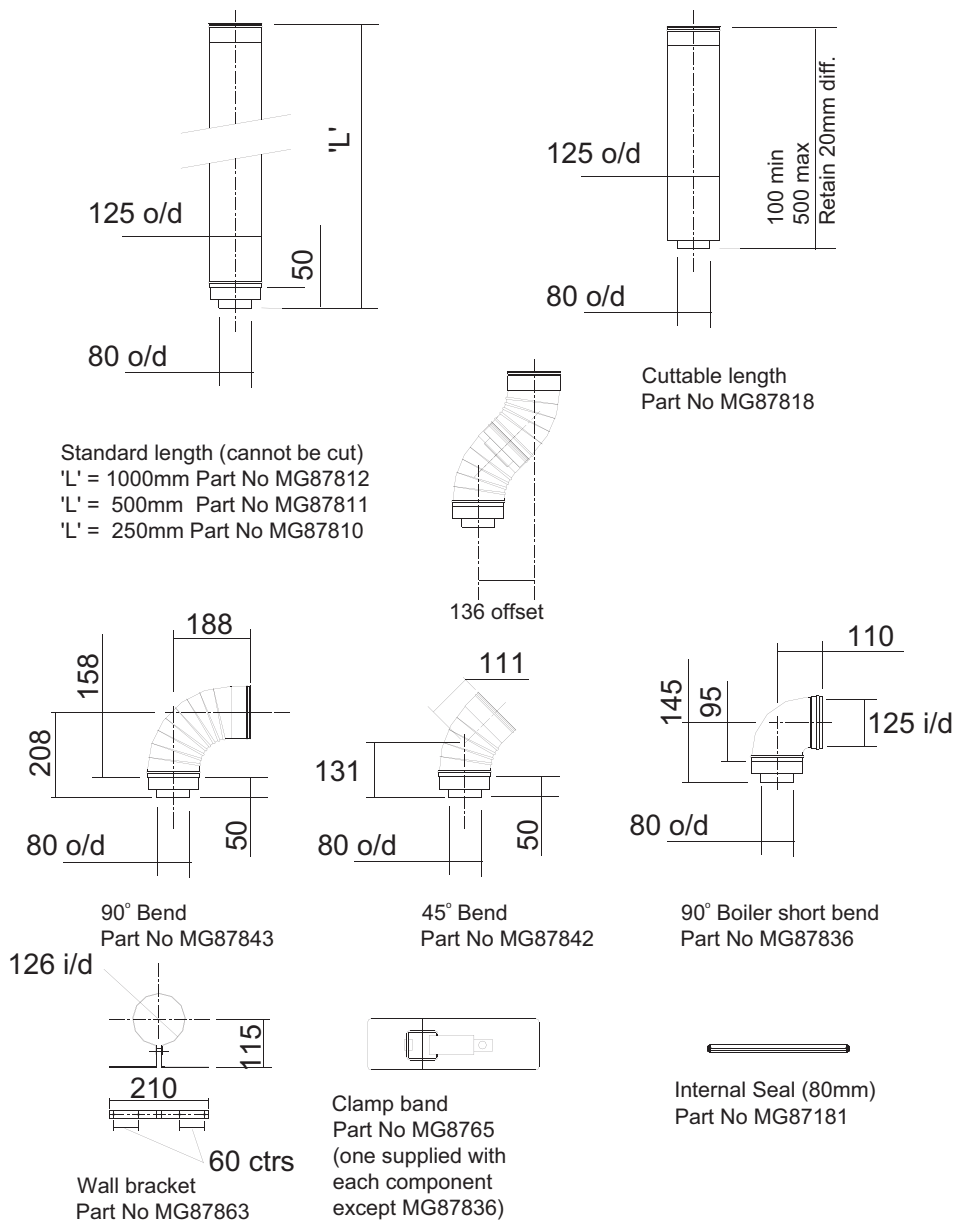
Detail of Standard weathering plate for 100mm to 150mm flue (Part No VE001)
 flat or pitch roofs up to 60°



Quinta Pro 30 and 45 - 80/125mm Room Sealed Calculation data to determine max flue runs
 (Calculation data based on flue products supplied by Remeha)

		Quinta Pro 30 80/125mm	Quinta Pro 45 80/125mm
Maximum overall flue run	Metres	20	16
Reduction Length for each 45° bend	Metres	1	1
Reduction Length for each 90° bend	Metres	2	2

80/125mm Concentric flue system Components for Room Sealed Operation



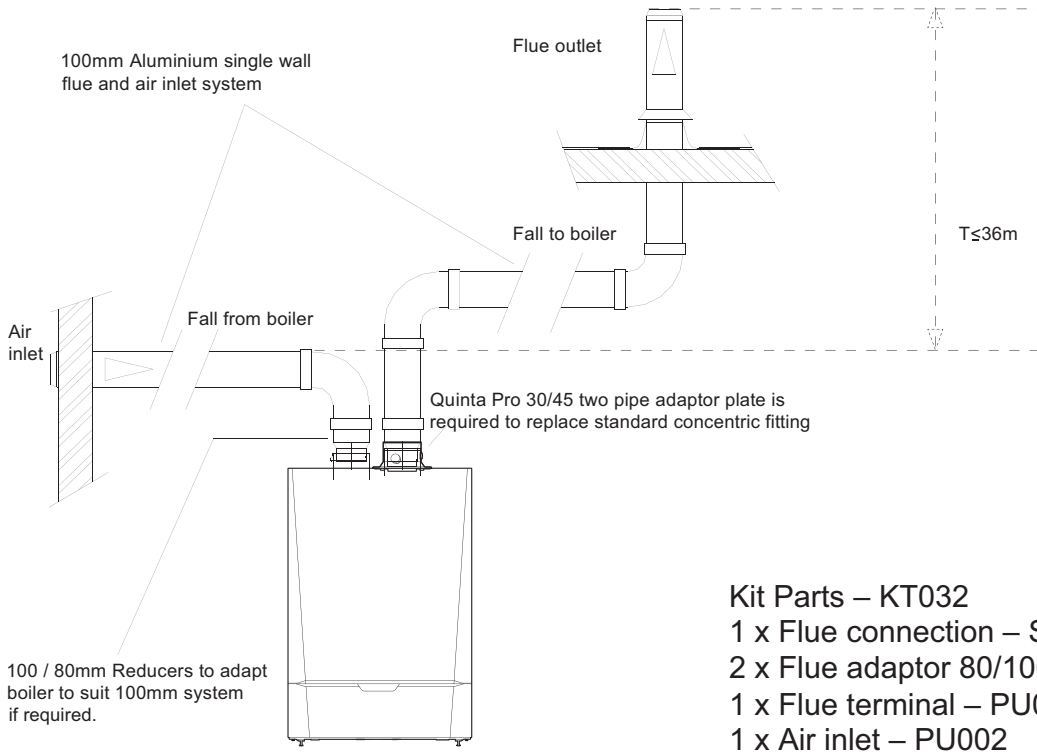
PLEASE NOTE: All dimensions are in mm.

Quinta Pro 30 and 45 - Room Sealed, 100mm Two zone CLV Flue Kit Option QP04

(For use when the air inlet is drawn from low level and flue outlet discharged vertically in a different pressure zone).

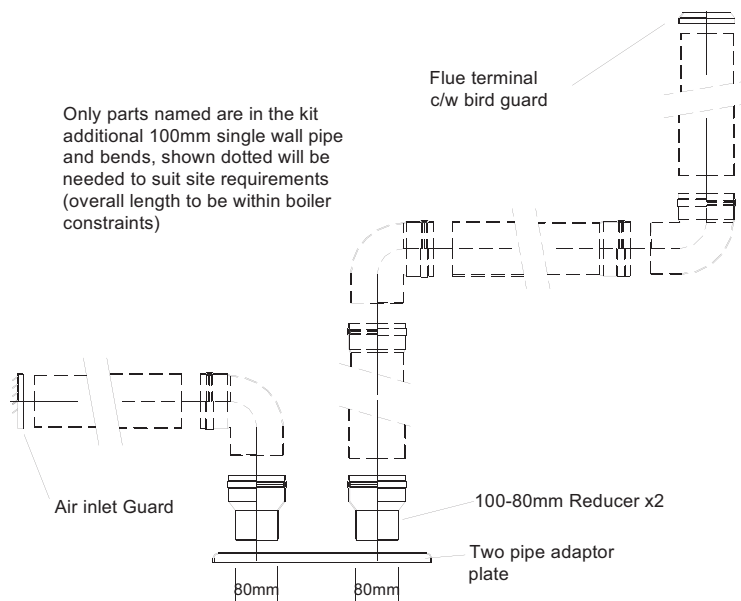
Typical single boiler installation - can also be used for multiple boilers, but each must have its own flue system.

Please ensure that the overall route does not exceed the Max values.



- Kit Parts – KT032**
 1 x Flue connection – S100250
 2 x Flue adaptor 80/100 – MG87127
 1 x Flue terminal – PU001
 1 x Air inlet – PU002

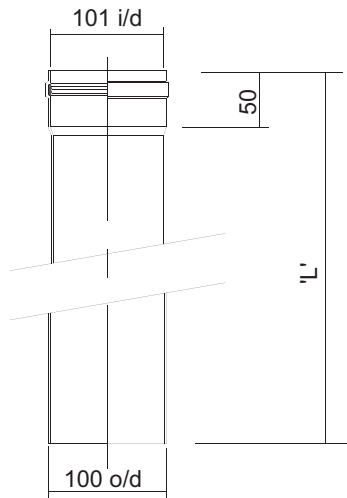
Detail of the 100mm Two Zone CLV Flue Kit Option QP04 (Part No KT032)



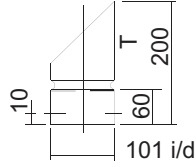
Quinta Pro 30 and 45 - Two zone 100mm Room Sealed Calculation data to determine max flue runs

For calculation data in regards to CLV (different pressure zones) installations please contact our technical department.

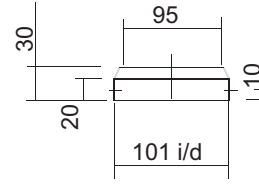
100mm single wall aluminium flue system components



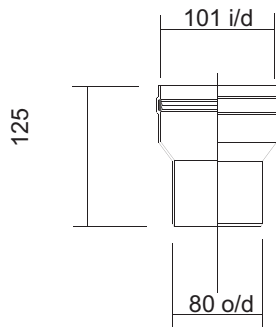
Standard length
 'L'= 1000mm Part No. MG87062
 'L'= 500mm Part No. MG87061
 'L'= 250mm Part No. MG86060



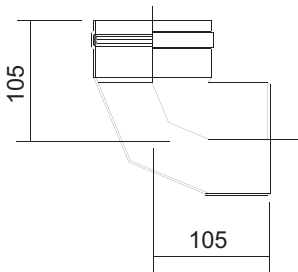
Air Inlet guard
 Part No. PU002



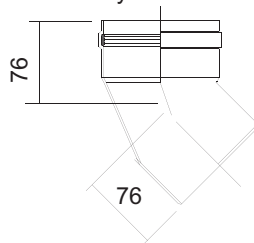
Flue terminal c/w bird guard
 Part No. PU001



Reducer 80mm spigot to 100mm socket
 Part No. MG87127
 Must be used on the Q30/45 flue connection to adapt to 100mm system



90° Bend
 Part No. MG87113

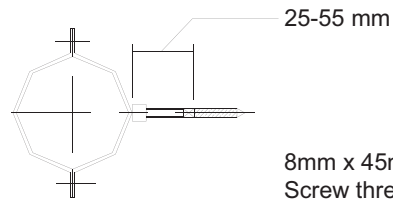


45° Bend
 Part No. MG87103

Note:
 2 x 45 bends will off set to 71mm centres



Silicon seal ring
 Part No. MG87186

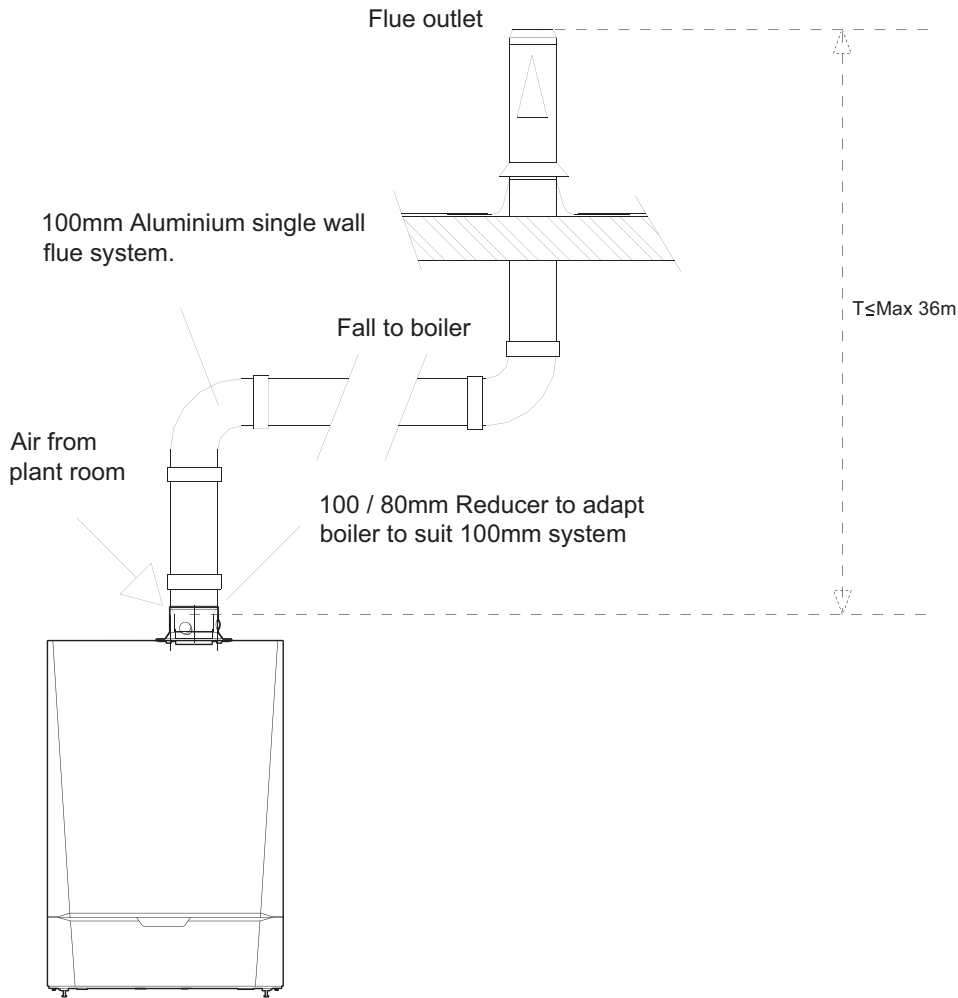


Mountng Bracket
 Part No. MG87193

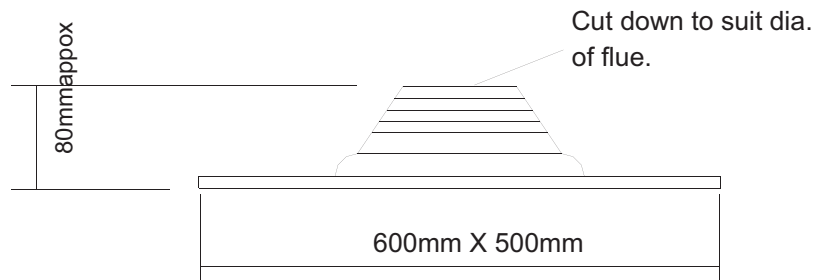
PLEASE NOTE: All dimensions are in mm.

Quinta Pro 30 and 45 - 100mm Conventional or Open Flue Systems

Typical single boiler installation - can also be used for multiple boilers with each boiler having its own flue system. Please ensure that the overall route does not exceed the max values in table on page 11.



Detail of Standard weathering plate for 100mm to 150mm flue (Part No VE001) flat or pitch roofs up to 60°



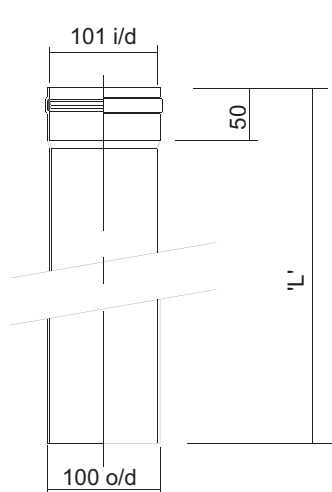
Quinta Pro 30 and 45 - 100mm Conventional or Open Flue Systems

(As the Boiler is fan assisted it makes no difference if the run is horizontal or vertical but should terminate vertically as shown on page 10).

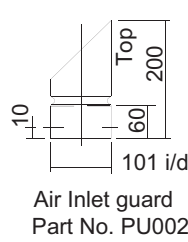
(Calculation data based on flue products supplied by Remeha).

		Quinta Pro 30 100mm	Quinta Pro 45 100mm
Maximum overall flue run	Metres	40	40
Reduction Length for each 45° bend	Metres	1.4	1.4
Reduction Length for each 90° bend	Metres	4.9	4.9

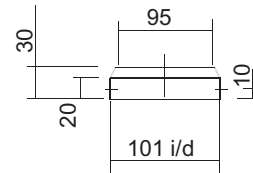
NOTE: Table shows max length of flue (using 100mm) — Greater distances can be achieved by using larger diameter flue - please refer to Remeha for further details.



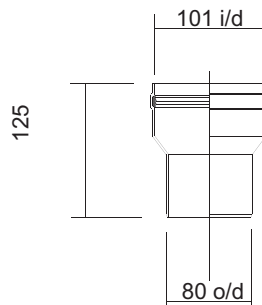
Standard length
 'L' = 1000mm Part No. MG87062
 'L' = 500mm Part No. MG87061
 'L' = 250mm Part No. MG86060



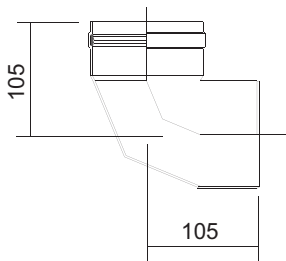
Air Inlet guard
 Part No. PU002



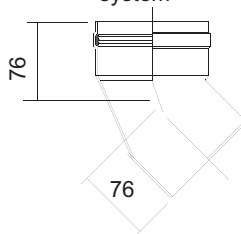
Flue terminal c/w bird guard
 Part No. PU001



Reducer 80mm spigot to 100mm socket
 Part No. MG87127
 Must be used on the QP30/45 flue connection to adapt to 100mm system



90° Bend
 Part No. MG87113

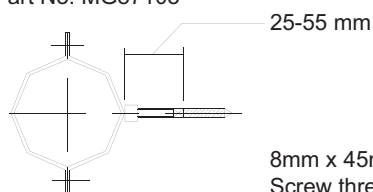


45° Bend
 Part No. MG87103

Note:
 2 x 45° bends will offset to 71mm centres



Silicon seal ring
 Part No. MG87186



Mounting Bracket
 Part No. MG87193

PLEASE NOTE: All dimensions are in mm.

Remeha Quinta Pro 30 & 45 Plume Kits 80/125mm Flue Kit Option QP05

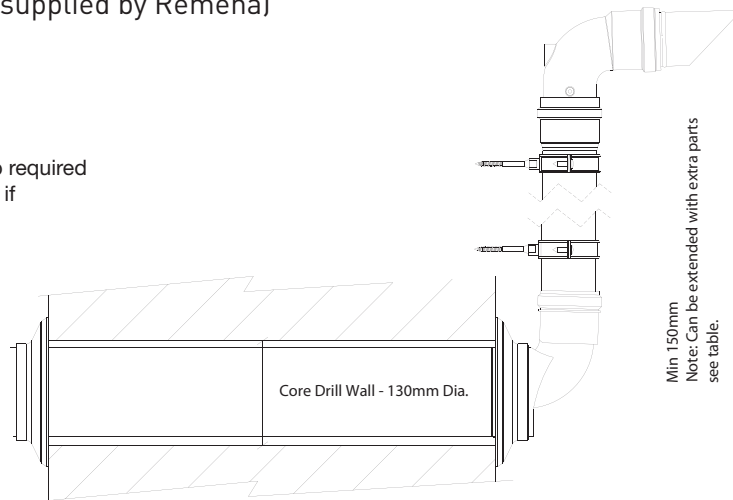
[Calculations based on products supplied by Remeha]

Wall Depth - Max 500mm - Min 150mm
Terminal inner and outer can be cut to suit.

Note1: 140mm diameter recess 15mm deep required from the face of the inside wall face to allow if clearance for the bend.

Note2: Both the air intake and flue outlet termination positions must comply with current regulations and British Standards.

Flue can be taken directly through rear outside wall or discharged through a side wall left or right, both must be within the constraints in the table below.

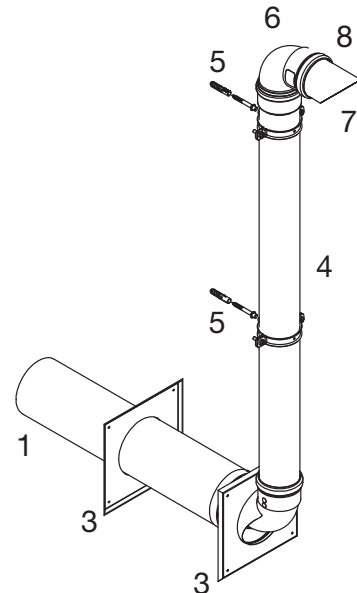


80/125mm Plume Management Kits

QP05 Part No. KT00302 PMK-Horizontal Terminal Kit

1. PMK Wall terminal
2. Boiler bend - not illustrated
3. Wall plates
4. 1000mm flue extension (80mm)
5. Support bracket (80mm)
6. 90° bend (80mm)
7. Flue outlet (80mm)
8. Bird guard

Note: The horizontal terminal unit must be installed with the outlet pointing vertically upwards. External components are constructed of black PP (plastic).



Horizontal terminal kit installed

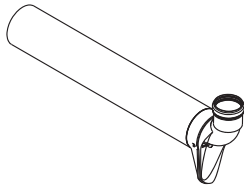
80/125mm Plume Management details

		Quinta Pro 30 80/125mm	Quinta Pro 45 80/125mm
Maximum overall flue run	Metres	37	23
Reduction Length for each 45° bend	Metres	1.96	1.96
Reduction Length for each 90° bend	Metres	2.25	2.25

The table shows the maximum lengths allowed which includes both the internal concentric 80/125mm and the external 80mm. The bend from the top of the boiler and the external 80mm bend have already been taken into account. Any bends used must be taken from the total using the table above, this applies to the internal 80/125mm and the external 80mm.

The maximum horizontal run is 6metres.

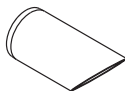
80/125mm Plume Management Components Part details



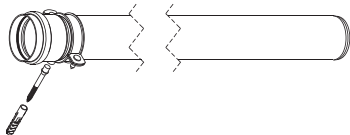
PMK-Horizontal
Terminal - not supplied as a separate component



MG82343
PMK-90° Bend (80mm)



MG82344
PMK-Horizontal outlet (80mm)



MG82341
PMK- 1000mm Flue Extension piece c/w wall bracket (80mm)



MG82342
PMK-45° Bend (80mm)



MG82345
Bird Mesh (80mm)

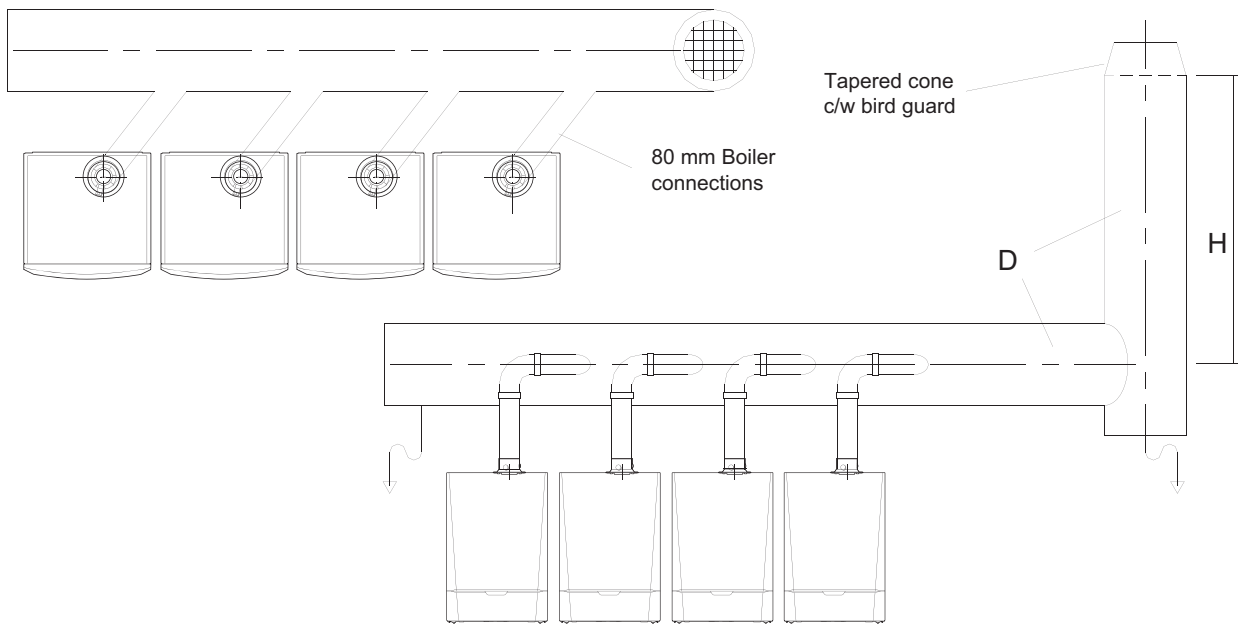
MG87191
PMK-Wall bracket (80mm) - not illustrated

MG84460
Boiler Bend - not illustrated

Quinta Pro 30 and 45 - Multi boiler Installation on a combined header

(For Conventional or Open Flue Systems).

Typical multi boiler installation with the flue combined into a single header and riser.



Quinta Pro 30/45 Multi boiler Installation connected to a common header and riser in						
" H" Height of riser in Metres						
Total		2 to 4	5 to 8	9 to 12	13 to 16	17 to 20
kW		"D" Header and Riser diameter in mm				
56	2 x QP30	115	110	110	115	115
84	3 x QP30	160	150	145	145	145
112	4 x QP30	185	175	170	170	170
80	2 x QP45	130	125	125	130	130
120	3 x QP45	180	170	165	165	165
160	4 x QP45	220	205	195	195	195

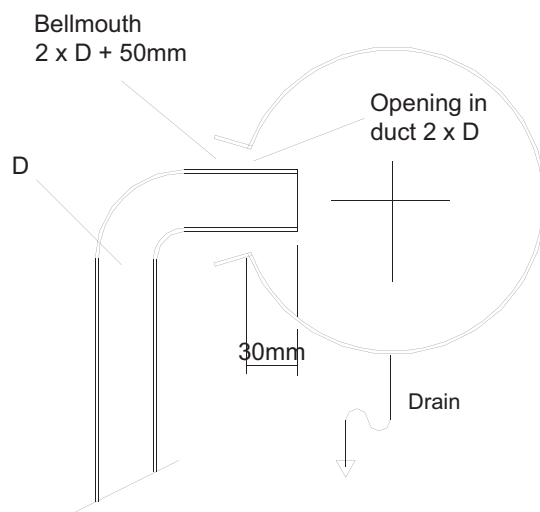
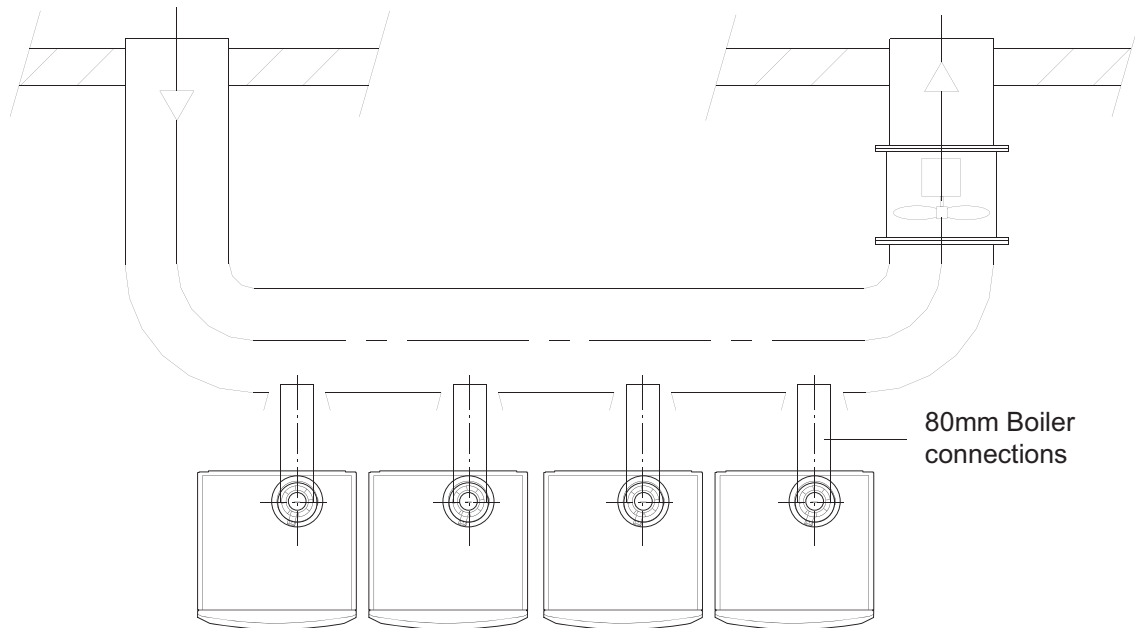
NOTE: Using 90° boiler connections into the header may result in larger headers and risers being required. Other multi boiler flue combinations for the Quinta Pro 30/45 may be available to suit different site conditions — for further information please consult our technical department — contact details can be found on our web site www.remeha.co.uk

Quinta Pro 30 and 45 - Multi or Single boiler Installation on a Flue Dilution system

NOTE:

Remeha Commercial are unable to offer a flue dilution system and recommends that the installer contacts a flue specialist to design and manufacture the system in accordance with the requirements of the British Standards and to comply with the guidelines illustrated below.

Typical multi boiler installation for a flue dilution flue system showing the flue break necessary for all pre-mix boilers to prevent the dilution fan affecting the gas/air ratio control system in the boiler.



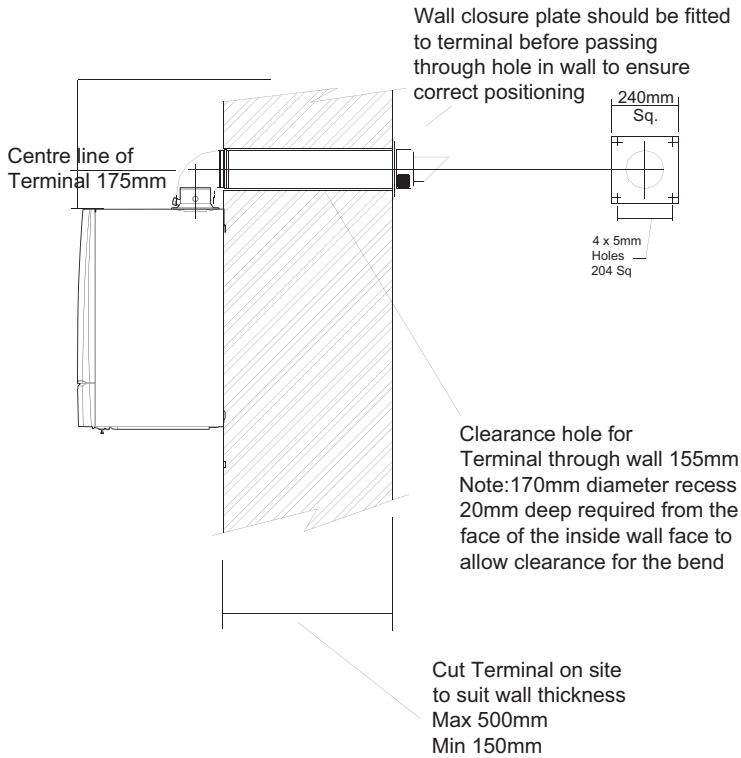
Typical Duct entry Detail

Quinta Pro 65, 90 and 115 - Room Sealed, 100/150mm Horizontal Concentric Flue Kit Option QP06

(For use when the boiler/s are mounted on and flued through the outside wall).

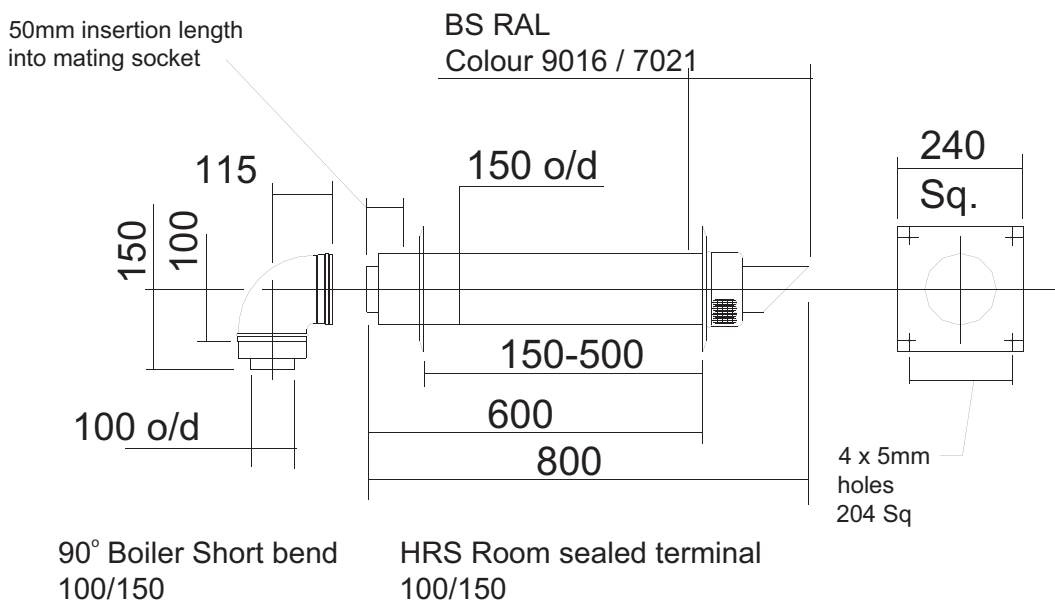
Typical single boiler installation - can also be used for multiple boilers but each must have its own flue system. At a min 530mm centres and never immediately above another.

For two boilers only it is also possible to install the external terminal wall plates touching each other.



- Kit Parts – KT206**
 1 x Bend – MG87631
 1 x Terminal – MG87990
 2 x Wall plates – MG28927

Detail of the 100/150mm Horizontal Concentric Flue Kit Option QP06 (Part No KT206)

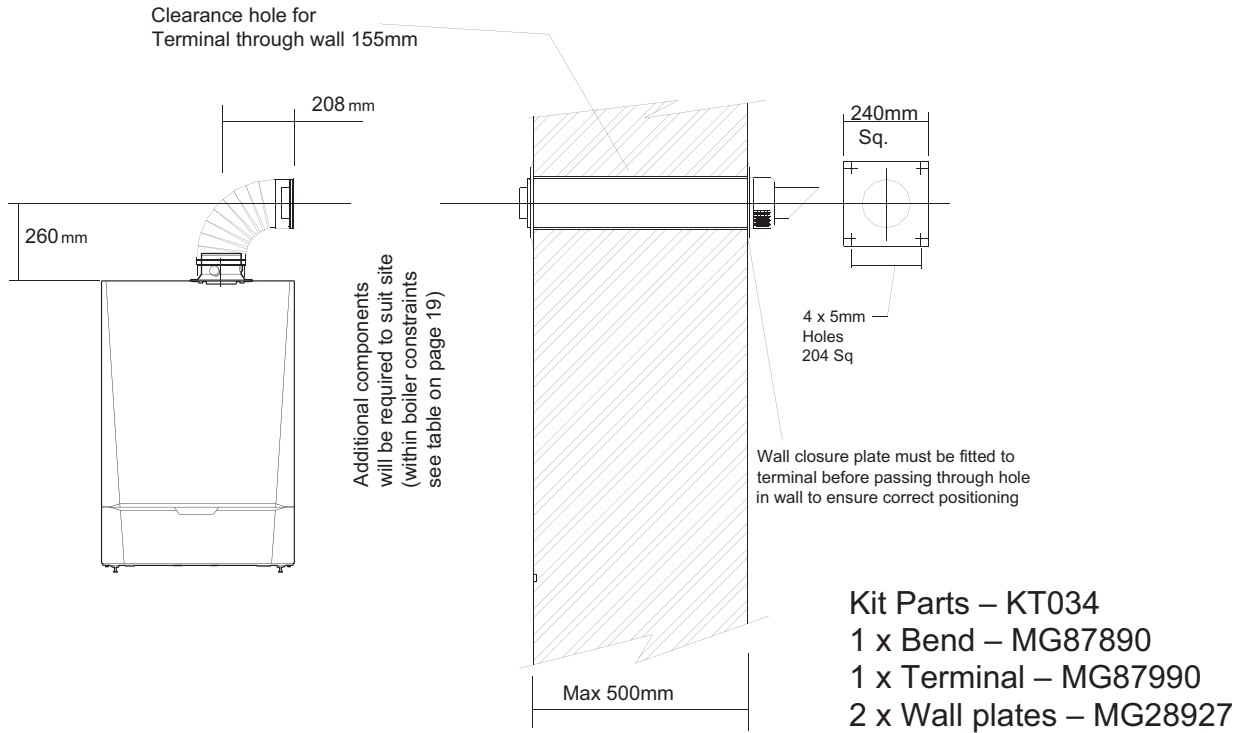


PLEASE NOTE: All dimensions are in mm.

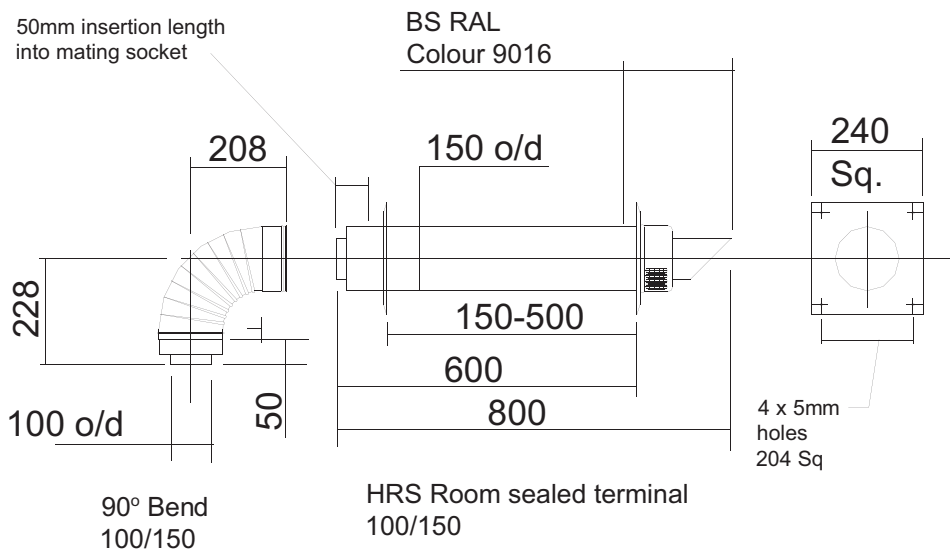
Quinta Pro 65, 90 and 115 - Room Sealed, 100/150 Horizontal Concentric Flue Kit Option QP07

(For use when the flue is discharged through a side wall left or right).

Typical single boiler installation - can also be used for multiple boilers but each must have its own flue system and installed a minimum of 530mm. centres horizontally and never immediately above another. For two boilers **only** it is also possible to install the external terminal wall plates touching each other.



Detail of the 100/150mm Horizontal Concentric Flue Kit Option QP07 (Part No KT034)



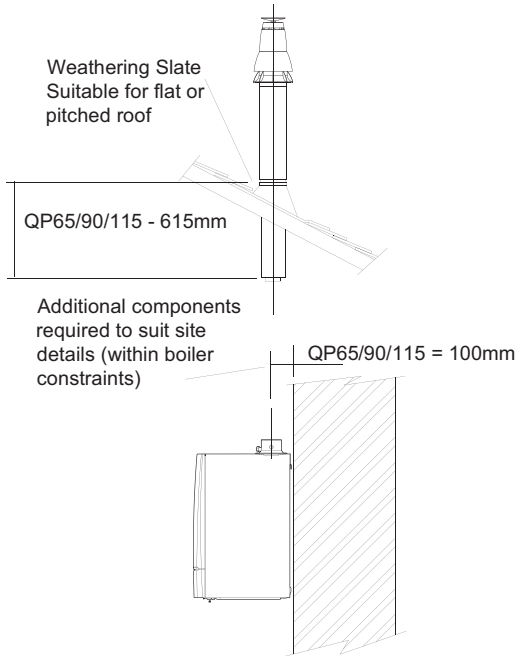
PLEASE NOTE: All dimensions are in mm.

**Quinta Pro 65, 90 and 115 - Room Sealed, 100/150mm Vertical Concentric Flue Kit
Option QP08**

(For use when the flue is discharged vertically through the roof).

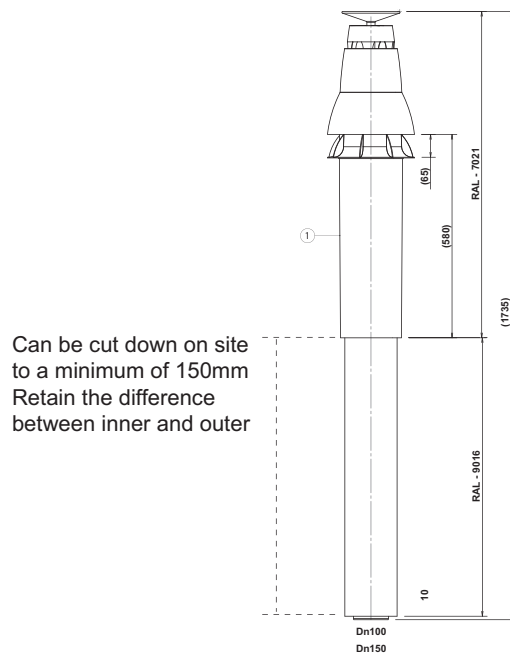
Typical single boiler installation - can also be used for multiple boilers but each must have its own flue system and separated a Min of 300mm if at the same height.

Refer to the relevant British Standard if this is not the case.

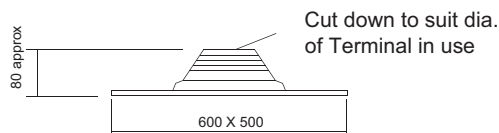


Kit Parts – KT038
 1 x Vertical Terminal – MG87969
 1 x Universal Roof Seal Pack – VE001

Detail of the Vertical 100/150mm Concentric Flue Kit Option QP08 (Part No KT038)



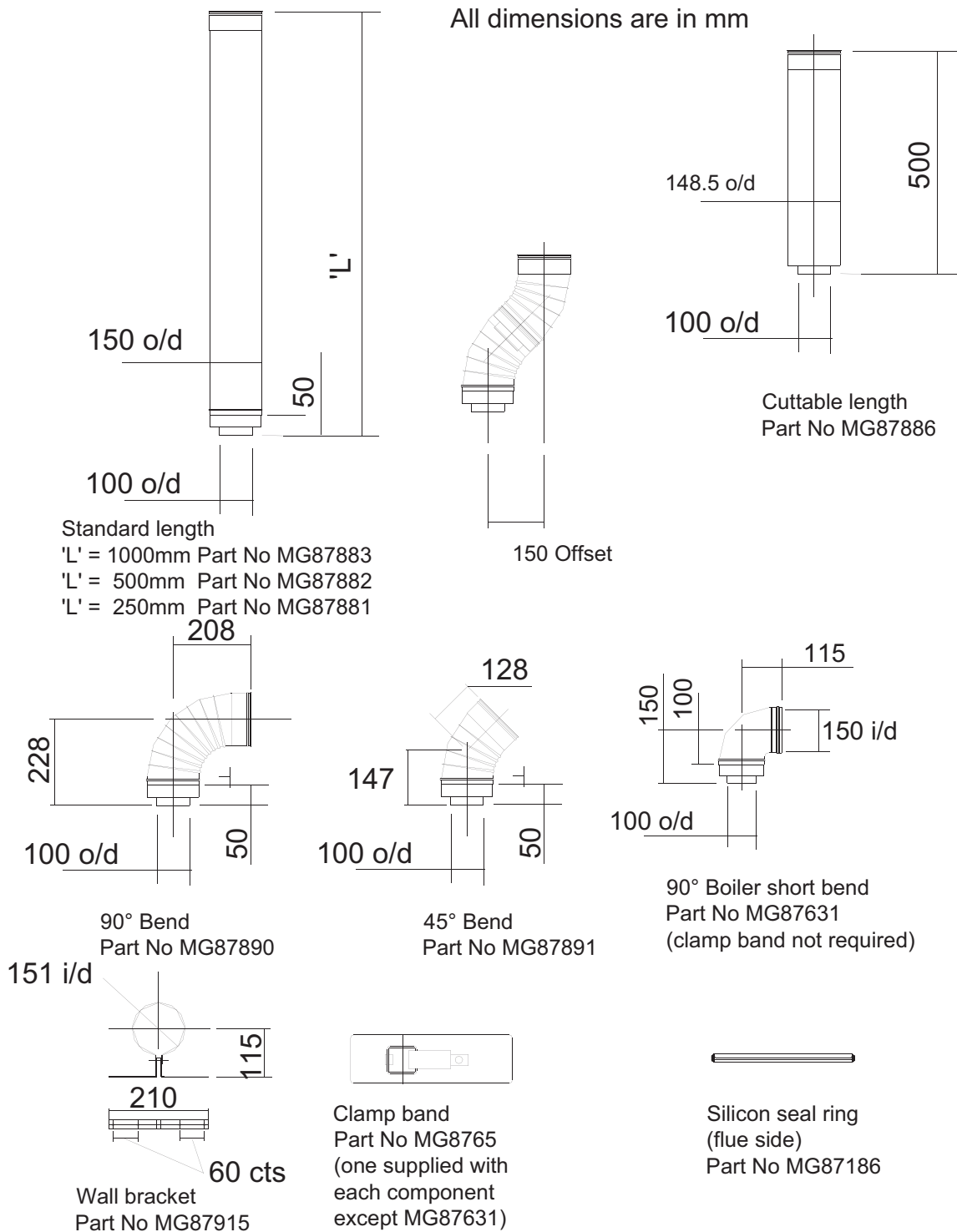
VRS Room sealed terminal 100/150mm



Quinta Pro 65, 90 and 115 - 100/150mm Room Sealed Calculation data to determine max flue runs.
 (Calculation data based on flue products supplied by Remeha).

		Quinta Pro 65 100/150mm	Quinta Pro 90 100/150mm	Quinta Pro 115 100/150mm
Maximum overall flue run	Metres	13	13	7
Reduction Length for each 45° bend	Metres	1	1	1
Reduction Length for each 90° bend	Metres	2	2	2

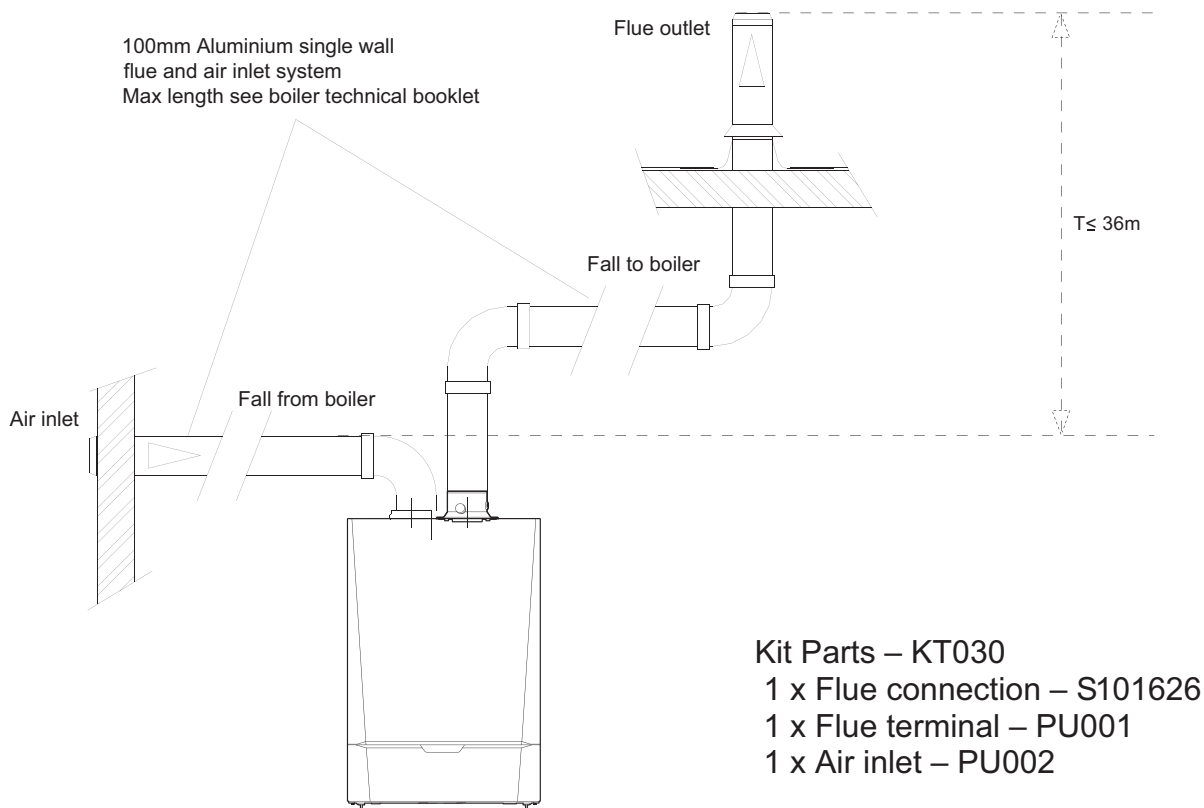
100/150mm Concentric flue system Components for Room Sealed Operation



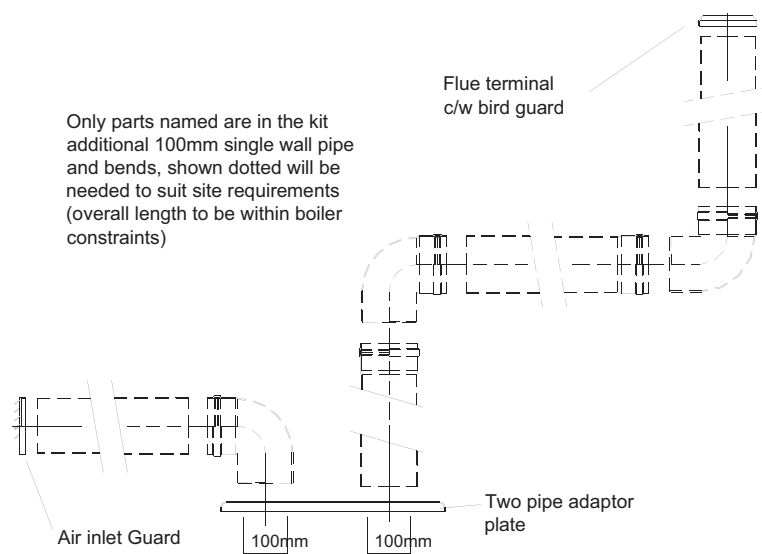
Quinta Pro 65, 90 and 115 - Room Sealed, 100mm Two zone CLV Flue Kit Option QP09

(For use when the air inlet is drawn from low level and flue outlet discharged vertically in a different pressure zone).

Typical single boiler installation - can also be used for multiple boilers, but each must have its own flue system. Contact our technical department for details.



Detail of the 100mm Two Zone CLV Flue Kit Option QP09 (Part No KT030)

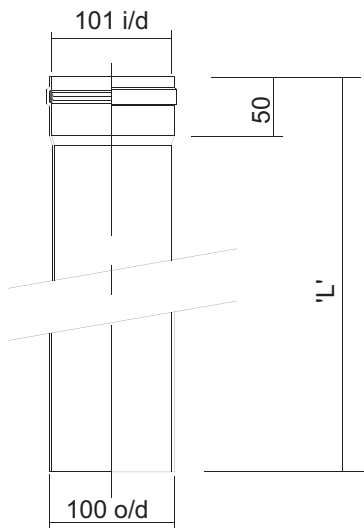


Quinta Pro 65, 90 and 115 - Two Zone Room Sealed Calculation data to determine max flue runs

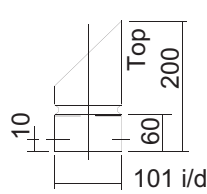
For calculation data in regards to CLV (different pressure zones) installations please contact our technical department or refer to the installation and service manual.

100mm single wall aluminium flue system Components

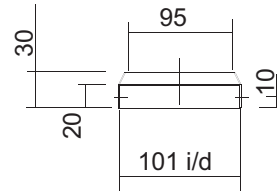
All dimensions are in mm



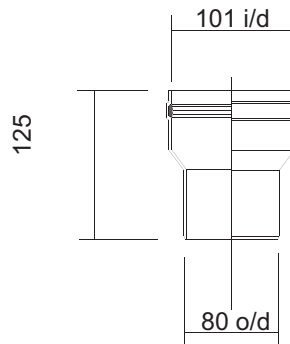
Standard length
 'L'= 1000mm Part No. MG87062
 'L'= 500mm Part No. MG87061
 'L'= 250mm Part No. MG86060



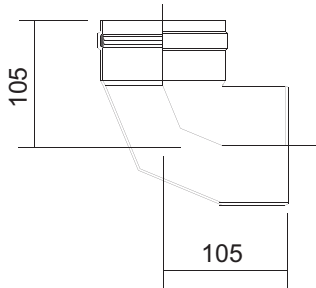
Air Inlet guard
 Part No. PU002



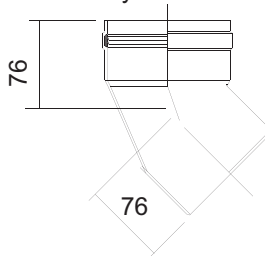
Flue terminal c/w bird guard
 Part No. PU001



Reducer 80 spigot to 100 socket
 Part No. MG87127
 Must be used on the QP30/45 flue connection to adapt to 100mm system

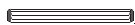


90° Bend
 Part No. MG87113

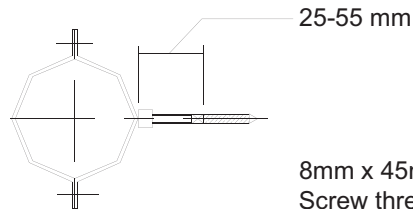


45° Bend
 Part No. MG87103

Note:
 2 x 45° bends will off set to 71mm centres



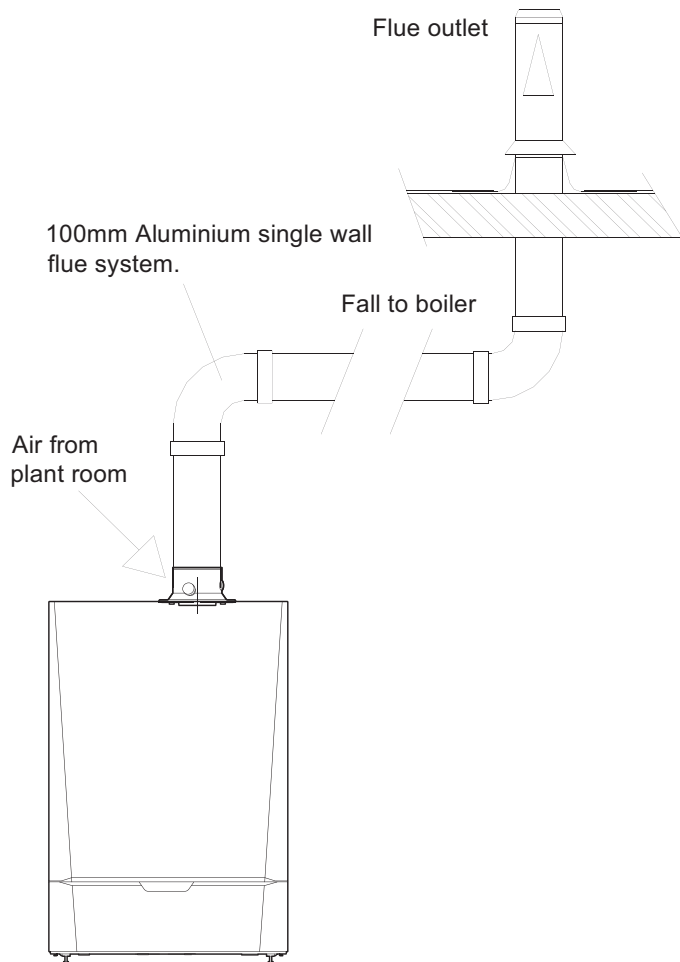
Silicon seal ring
 Part No. MG87186



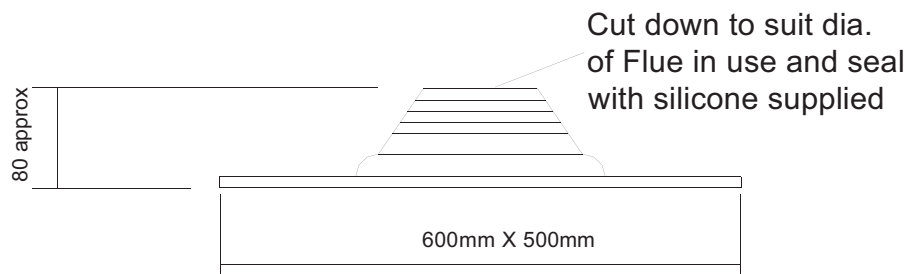
Mountng Bracket
 Part No. MG87193

Quinta Pro 65, 90 and 115 - 100mm Conventional or Open Flue Systems QP10

Typical single boiler installation - can also be used for multiple boilers with each boiler having its own flue system.



Detail of Standard weathering plate for 100mm to 150mm flue (Part No VE001)



Quinta Pro 65, 90 and 115 - 100mm Conventional or Open Flue Systems

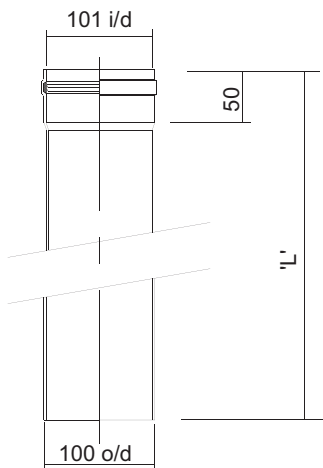
(As the Boiler is fan assisted it makes no difference if the run is horizontal or vertical but should terminate vertically as shown on page 22) (Calculation data based on flue products supplied by Remeha).

		Quinta Pro 65 100mm	Quinta Pro 90 100mm	Quinta Pro 115 100mm
Maximum overall flue run	Metres	27	24	19
Reduction Length for each 45° bend	Metres	1.4	1.4	1.4
Reduction Length for each 90° bend	Metres	4.9	4.9	4.9

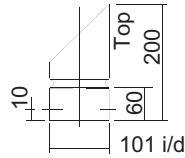
NOTE: Table shows max length of flue (using 100mm) — Greater distances can be achieved by using larger diameter flue – please refer to Remeha Commercial technical department for further details.

100mm single wall aluminium flue system Components

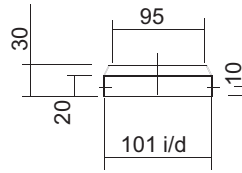
All dimensions are in mm



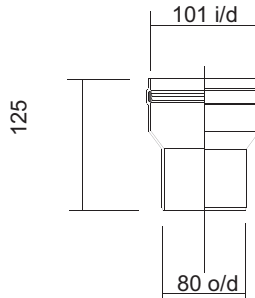
Standard length
 'L'= 1000mm Part No. MG87062
 'L'= 500mm Part No. MG87061
 'L'= 250mm Part No. MG87060



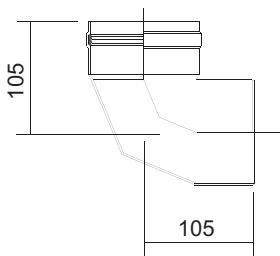
Air Inlet guard
 Part No. PU002



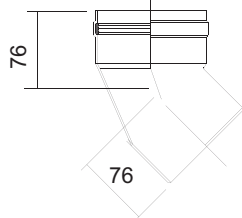
Flue terminal c/w bird guard
 Part No. PU001



Reducer 80mm spigot to 100mm socket
 Part No. MG87127
 Must be used on the QP30/45 flue connection to adapt to 100mm system



90° Bend
 Part No. MG87113

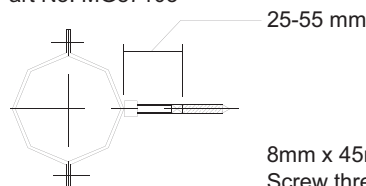


45° Bend
 Part No. MG87103

Note:
 2 x 45° bends will off set to 71mm centres



Silicon seal ring
 Part No. MG87186



Mountng Bracket
 Part No. MG87193

Remeha Quinta Pro 65, 90 & 115 Plume Kits 100/150mm Flue Kit Option QP11

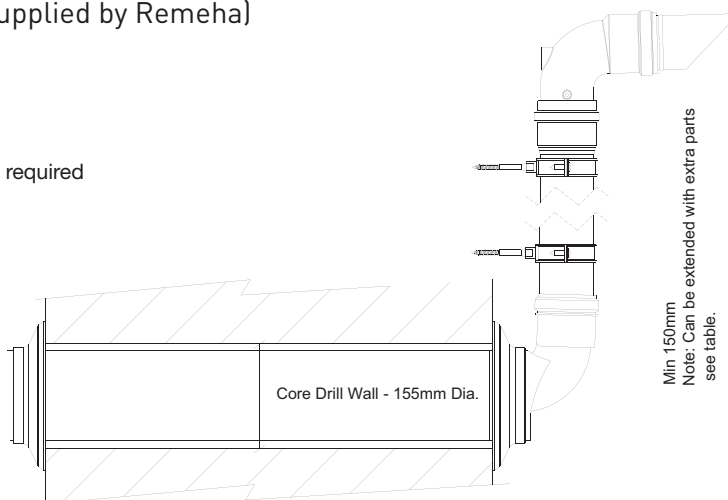
[Calculation based on products supplied by Remeha]

Wall Depth - Max 500mm - Min 150mm
Terminal inner and outer can be cut to suit.

Note1: 170mm diameter recess 15mm deep required from the face of the inside wall face to allow clearance for the bend.

Note2: Both the air intake and flue outlet termination positions must comply with current regulations and British Standards.

Flue can be taken directly through rear outside wall or discharged through a side wall left or right both must be within the constraints in the table below.



100/150mm Plume Management Kits

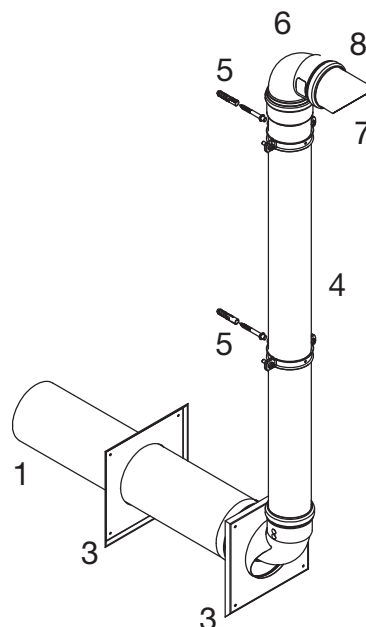
QP11 Part No. KT00303 (Rear and left or right exit)

PMK-Horizontal Terminal Kit

1. PMK Wall terminal
2. Boiler bend - not illustrated
3. Wall plates
4. 1000mm flue extension (100mm)
5. Support bracket (100mm)
6. 90° bend (100mm)
7. Flue outlet (100mm)
8. Bird guard

Note1: The horizontal terminal unit must be installed with the outlet pointing vertically upwards.

Note2: The external components are constructed of black aluminium



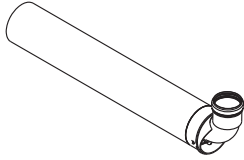
PMK - Horizontal Terminal Kit Installed

100/150mm Plume Management details

		Quinta Pro 65 100/150mm	Quinta Pro 90 100/150mm	Quinta Pro 115 100/150mm
Maximum overall flue run	Metres	20	17	11
Reduction Length for each 45° bend	Metres	1.2	1.2	1.2
Reduction Length for each 90° bend	Metres	2.8	2.8	2.8

The table shows the maximum lengths allowed which includes both the internal concentric 100/150mm and the external 100mm. The bend from the top of the boiler and the external 100mm bend have already been taken into account. Any bends used must be taken from the total above, this also applies to both the 100/150mm internal and 100mm external flue. The maximum horizontal run is 6metres.

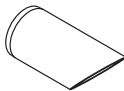
100/150mm Plume Management Components Part details



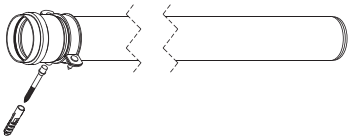
PMK-Horizontal
Terminal - not supplied as a separate component



MG81753
PMK-90° Bend (100mm)



MG81754
PMK-Horizontal outlet (100mm)



MG81751
PMK- 1000mm Flue Extension piece
c/w wall bracket (100mm)



MG81752
PMK-45° Bend (100mm)



MG82345
Bird Mesh 100mm

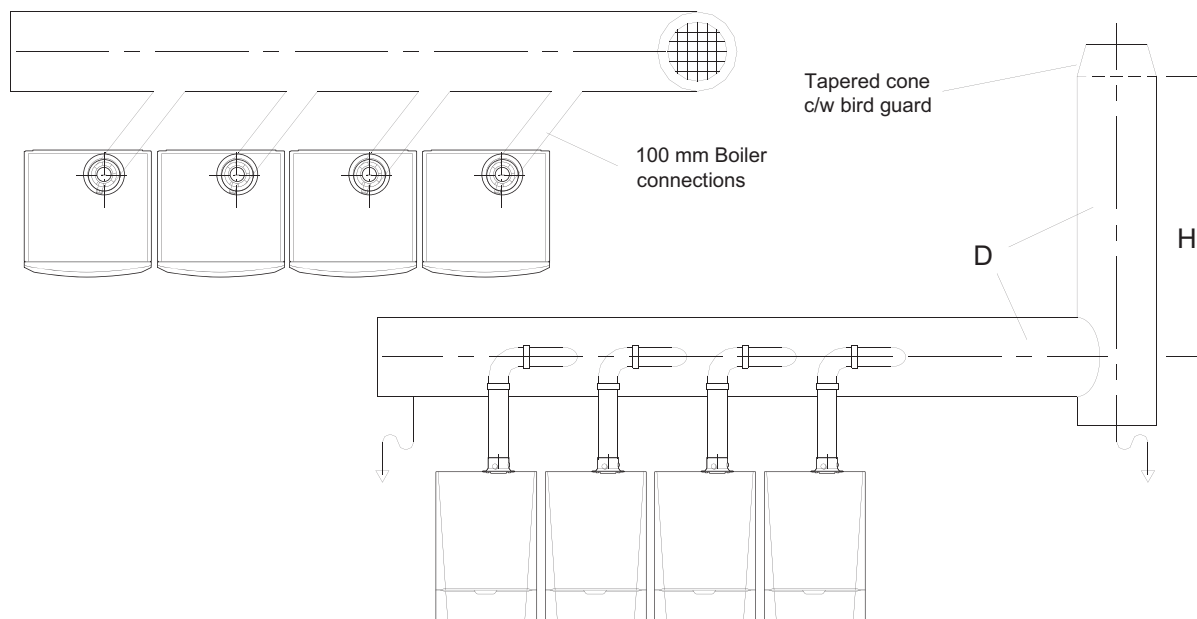
MG87193
PMK-Wall bracket (100mm) - **not illustrated**

MG84310
Boiler Bend - **not illustrated**

Quinta Pro 65, 90 and 115 - Multi boiler Installation on a combined header

(For Conventional or Open Flue Systems).

Typical multi boiler installation with the flue combined into a single header and riser.



Quinta Pro 65, 90 and 115 Multi boiler Installation connected to a common header and riser in Series Open Flue

		"H" Height of riser in Metres				
Total kW	Combination	2 to 4	5 to 8	9 to 12	13 to 16	17 to 20
		"D" Header and Riser diameter in mm				
122	2 x QP65	155	145	145	145	150
183	3 x QP65	220	200	195	190	190
244	4 x QP65	265	240	230	225	225
168	2 x QP85	175	165	160	160	170
252	3 x QP85	250	225	215	215	210
336	4 x QP85	305	270	255	250	245
214	2 x QP115	200	185	180	180	180
321	3 x QP115	285	255	240	235	235
428	4 x QP115	345	305	285	275	275

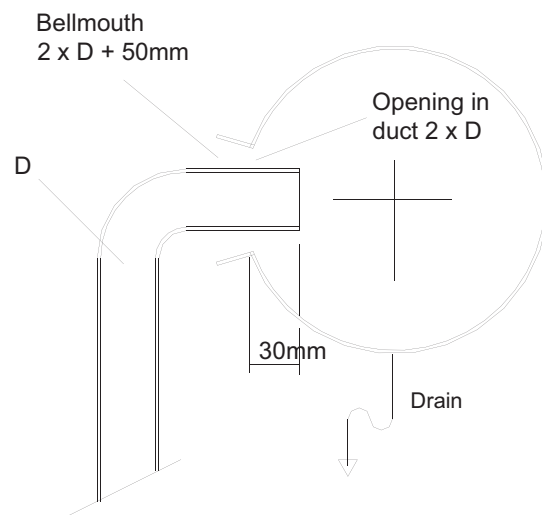
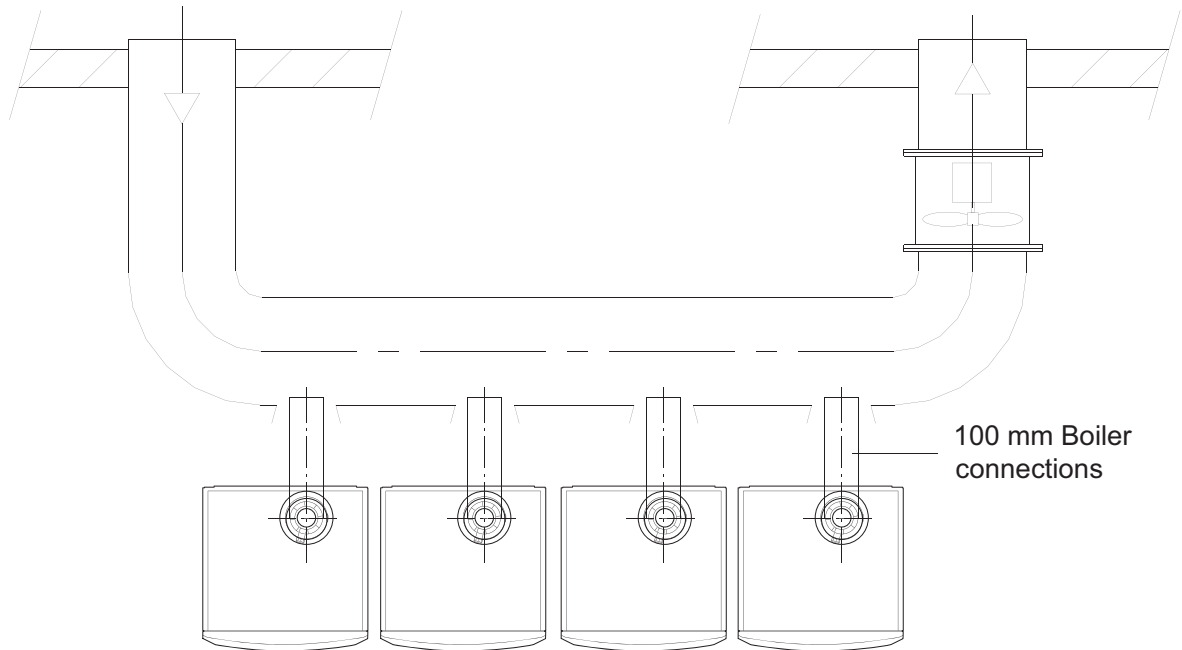
NOTE: Using 90° boiler connections into the header may result in larger headers and risers being required. Other multi boiler flue combinations for the Quinta Pro 65, 90 and 115 may be available to suit different site conditions — for further information please consult our technical department — contact details can be found on our web site www.remeha.co.uk

Quinta Pro 65, 90 and 115 – Multi or Single boiler Installation on a Flue Dilution system

NOTE:

Remeha Commercial are unable to offer a flue dilution system and recommends that the installer contacts a flue specialist to design and manufacture the system in accordance with the requirements of the British Standards and to comply with the guidelines illustrated below.

Typical multi boiler installation for a flue dilution flue system showing the flue break necessary for all pre-mix boilers to prevent the dilution fan affecting the gas/air ratio control system in the boiler.

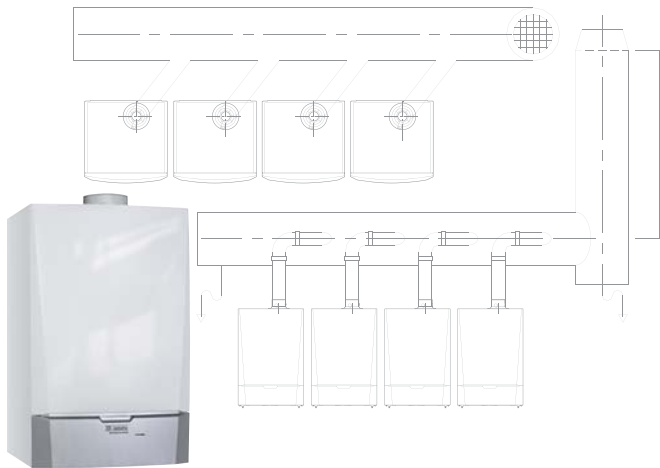


Typical Duct entry Detail



TreadLightly

ON THE PLANET



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The data published in this technical sales leaflet is based on the latest information (at date of publication) and may be subject to revisions. It should be read in conjunction with our full technical brochure (available on request). We reserve the right to continuous development in both design and manufacture, therefore any changes to the technology or equipment employed may not be retrospective, nor may we be obliged to adjust earlier supplies accordingly.
Issue 1 date: 01/03/11sj



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