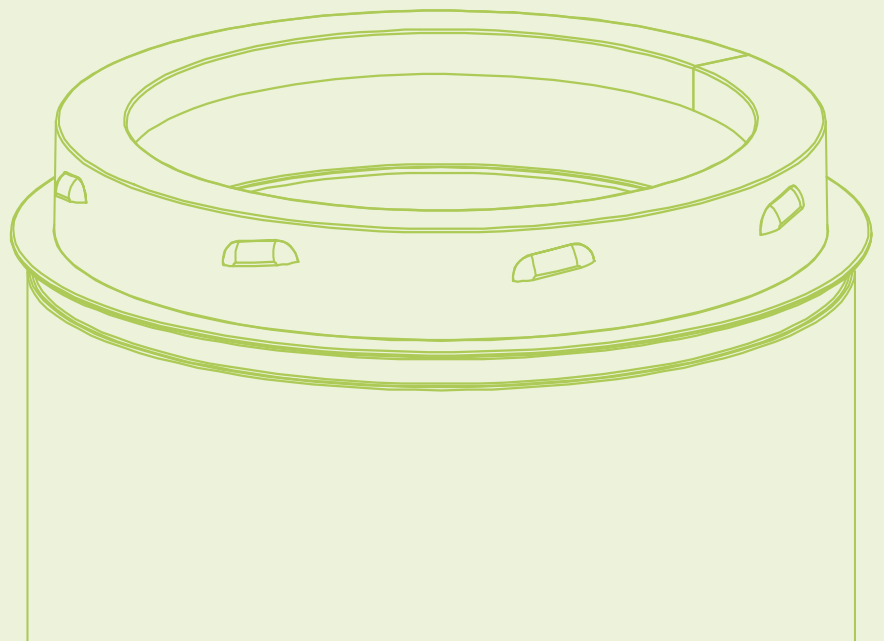


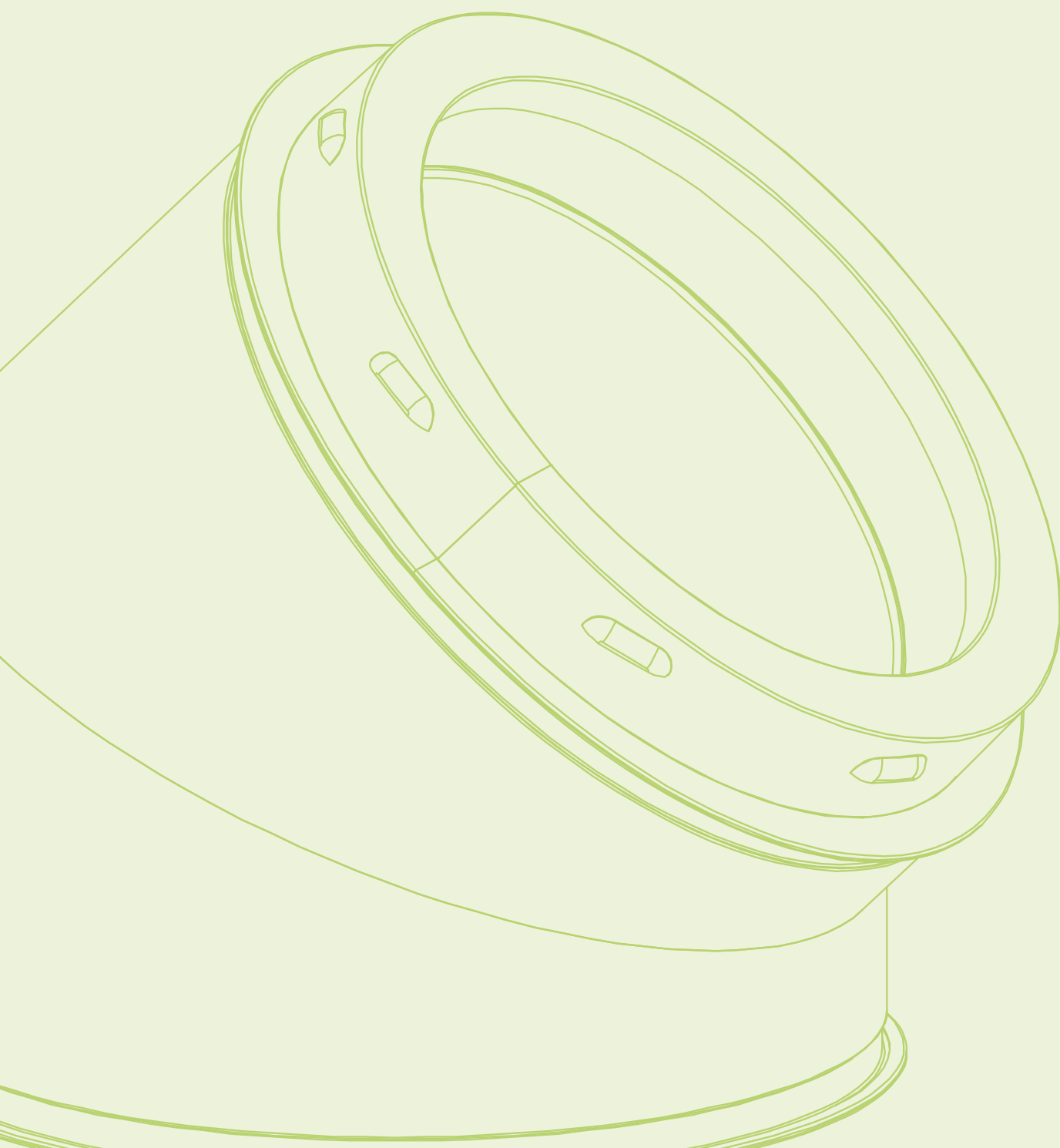


# **Installation manual**

## **Vantage Installation instructions**

125 - 200mm Internal Diameter  
Twin Wall Insulated Chimney System for wood burning  
and multi fuel stoves





*Vantage made by*



# CONTENTS

<b>APPROVAL</b> .....	page 3	<b>INSTALLATION INSTRUCTIONS</b> .....	page 9
<b>DESIGN GUIDE</b> .....	page 4	- Jointing System	
- Mandatory Requirements		- Standard Chimney Sections	
		- Individual Components	
<b>PRIOR TO INSTALLATION</b> .....	page 4	<b>OFFSET DIMENSIONS</b> .....	page 11
- Ventilation		<b>FIRESTOP COMPONENTS</b> .....	page 12
- Carbon Monoxide Alarms		<b>OUTLET SITING</b> .....	page 16
- Painting		<b>TYPICAL INSTALLATIONS &amp; LOAD BEARING</b> .....	page 17
- Handling		<b>HEALTH &amp; SAFETY</b> .....	page 18
- Delivery to Site and Storage		<b>AFTER INSTALLATION</b> .....	page 19
<b>CONNECTING FLUE PIPE</b> .....	page 5	- Testing and Commissioning prior to first use	
- Appliance/Chimney Connection		- Appliance Operation	
- Connection to Draught Diverter		- Multi-Fuel Applications	
- Connecting Flue Pipe Diameter		- Maintenance	
- Distance to Combustibles		- Fuel Storage and Usage	
- Connecting Flue Pipe Route		<b>CHIMNEY PLATE</b> .....	page 19
- Inspection		<b>PRODUCT GUARANTEE</b> .....	page 19
<b>BS EN 15287-1</b>			
<b>ACCEPTABLE ALTERNATIVE METHODS OF</b>			
<b>CONNECTION</b> .....	page 6		
<b>SYSTEM CHIMNEY</b> .....	page 7		
- Chimney Diameter			
- Chimney Route			
- Connection to Draught Diverter			
- Direct Connection Appliance to System Chimney			
- Distance to Combustibles .....	page 8		
- Enclosures/Shfts			
- Support Components			
- Chimney Termination			
- Terminals			

## APPROVAL

Vantage is CE Certified to EN1856-1 MPA 0432-CPR-113090037345 with designations:

### **Twin walled stainless steel system with insulation**

EN 1856-1 T450 N1 D Vm L50050 G50 (in free air)

EN 1856-1 T600 N1 D Vm L50050 G50 (in free air)

EN 1856-1 T450 N1 D Vm L50050 G60 (in combustible shaft with ventilated fire stop)\*

EN 1856-1 T600 N1 D Vm L50050 G100 (in combustible shaft with ventilated fire stop)\*

\* For full information please see p.8 - Distance to Combustibles Section

• Manufactured under a Quality Management Scheme approved to ISO 9001



# DESIGN GUIDE

## Mandatory Requirements

Connection to an appliance which is not connected to the fuel supply, should be carried out by a competent person. We recommend the use of HETAS approved installers for solid fuel applications. If installation is carried out by a non HETAS registered installer, the installation must be certified by a local Building Control inspector. Connection to an appliance that is connected to the fuel supply must be carried out by a Gas Safe (Gas) or OFTEC (Oil) registered installer.

The design guide must be read in conjunction with the detailed component installation instructions. For full design and installation details the key referral documents are:

- **BS EN 1856-1:** Chimneys - System Chimney Products
- **BS EN 1856-2:** Connecting Flue Pipes
- **BS EN 1859:** Metal Chimneys - Testing Methods
- **BS EN 1443:** Chimneys - General Requirements
- **BS EN 15287-1:** Chimneys. Design, installation and commissioning of chimneys. Chimneys for non-room sealed heating appliances.
- **BS 5440-1:** Fluing and ventilation for gas appliances of rated input not exceeding 70kW net (1st, 2nd and 3rd family gases). Specification for installation of gas appliances to chimneys and for maintenance of chimneys.
- **Approved Document J:** - Combustion appliances and fuel storage systems (England & Wales)
- **DFP Technical Booklet L:** - Combustion appliances and fuel storage systems (NI)
- **Technical Handbook (Domestic & Non Domestic), Section 3** - Environment (Scotland)
- **Appliance Installation Instructions** and related standards. Other standards covering specific applications will also be relevant and must be adhered to.

Planning permission may be required, and reference should be made to the local Building Control Department.

Ensure all chimney components are available and check them to ensure there has been no damage. Do not use damaged components. Build the chimney up through the previous designed route which should be as straight as possible.

## PRIOR TO INSTALLATION

### Ventilation

It is very important that sufficient air for combustion and ventilation is provided to the room containing the appliance, to enable correct and efficient working of the appliance and chimney system. Reference should be made to the appliance manufacturer's instructions and recommendations are also given in the Building Regulations Document J, CIBSE guidance notes and BS 5440.

### Carbon Monoxide Alarms

The carbon monoxide alarms should comply with BS EN 50291

Where a new or replacement fixed solid fuel appliance is installed in a dwelling, a carbon monoxide alarm must be provided in the room where the appliance is located.

Please follow manufacturers instructions with regards to siting and fixing or alternatively :-

- a) On the ceiling at least 300mm from any wall or if it is located on a wall, as high up as possible (above any doors and windows), but not within 150mm of the ceiling and
- b) between 1m and 3m horizontally from the appliance.

N.B Provision of a carbon monoxide alarm should not be regarded as a substitute for correct installation and regular servicing.

### Painting

If painting of any external sections is required, it is important to de-grease, dry and prime the exterior surface prior to the application of appropriate heat resistant paint.

### Handling

It is advised that suitable PPE should be used when handling the products.

### Delivery to Site and Storage

Components should be carefully transported and off loaded. They should be inspected to ensure they have not been damaged, and should be stored off the ground and under cover so that they are protected from accidental damage and the adverse effects of weather.

# CONNECTING FLUE PIPE

## Appliance/Chimney Connection

Connection to the appliance can be made using approved single wall connecting flue pipes.

This must be done by using the appropriate appliance connector. When a single wall connecting flue pipe is used to connect an appliance to the chimney, the lower end of the chimney section must extend a minimum of 425mm below the ceiling. When connecting the appliance to the flue pipe all joints between the flue pipe/appliance outlet must be securely caulked and sealed with non asbestos rope (or suitable alternative) and fire cement on solid fuel appliances.

Any flue pipe connection to the chimney MUST be made in the same room as the appliance.

## Connection to Draught Diverter

Where the appliance features a draught diverter the connection should rise vertically from it for at least 600mm before any change of direction (unless otherwise specified by the appliance manufacturer). This is in accordance with the recommendations contained in BS 5440 Part 1 section 6.1.4

## Connecting Flue Pipe Diameter

Connecting Flue Pipe Diameter size should be as recommended by the appliance manufacturer. Under all circumstances the operational requirements of the appliance and the configuration of the flue must satisfy the flue sizing requirements of EN13384-1.

## Distance to Combustibles

In accordance with building regulations, it is essential that the correct distance to combustible material is maintained on connecting flue pipes. On solid fuel applications, where there is a risk of soot fire, on unmeasured (NM) designated single wall product, this distance is  $3 \times \text{ØInt}$  of the pipe, e.g. for Ø125mm the distance is 375mm and for Ø150mm the distance is 450mm to combustibles on both painted and non painted variants. On measured (M) single wall or double wall products this distance will be as declared by the chimney manufacturer.

## Connecting Flue Pipe Route

Single wall connecting flue pipes should only be used to connect appliances to a Chimney. They should not pass through any roof space, partition, internal wall or floor, except to pass directly into a chimney through a wall of the chimney.

Connecting flue pipes should be located as to avoid igniting combustible material.

On solid fuel appliances the maximum length of a connecting flue pipe is 2m. This distance is reduced to 1.5m if any of the acceptable alternative methods of connection are adopted as per BS EN15287-1. (See p.5-6 for full details.)

On appliances with a top outlet, it is recommended that a vertical run of at least 600mm should be allowed immediately above the appliance prior to any change of direction.

On appliances with a rear outlet, it is recommended that there is maximum of 150mm in the horizontal run however under certain conditions, as described in alternative methods in BS EN 15287-1, this may be increased to 450mm. (See p.5-6 for full details.)

Within a system (Chimney + Connecting Flue Pipe) there should be no more than 4 changes of direction of maximum 45°. 90° Factory made bends or tees within the system may be treated as being equal to two 45° bends (as per Document J of the Building Regulations issued October 2010).

## Inspection

On solid fuel applications to conform to Building Regulations, provisions should be made to enable a chimney to be inspected and cleaned.

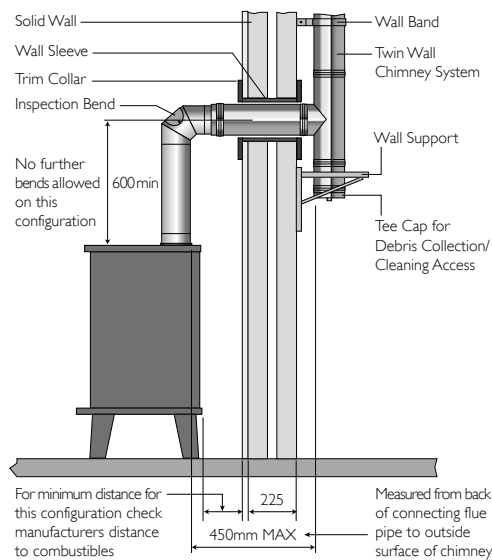
An inspection pipe, inspection elbow or a 45° or 90° Tee with tee cap can form a suitable inspection point (unless cleaning/inspection can be done through the appliance). To aid cleaning, sufficient distance should be left between changes of direction to permit the safe passage of cleaning brushes within the system. This is particularly important on solid fuel applications. It is recommended that chimneys serving solid fuel appliances be swept as frequently as necessary, but at least twice a year.

# BS EN 15287-1

## ACCEPTABLE ALTERNATIVE METHODS OF CONNECTION

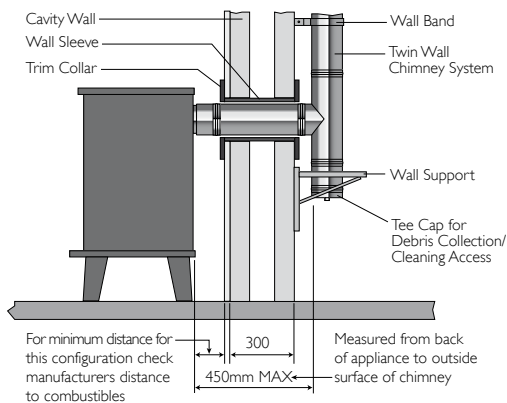
Where a horizontal connecting flue of more than 150mm is required to connect a solid fuel fired appliance to a chimney, an installation method as per the examples below may be used provided the following criteria is met:-

- a) The maximum length of horizontal connecting flue pipe does not exceed 450mm;
- b) A Defra exempt appliance or an appliance, which is limited to burning authorised smokeless fuel only, is installed;
- c) A calculation according to BS EN13384-1 has indicated safe operation of the proposed configuration, and the results of the calculation are left with the householder along with the appliance installation instructions;
- d) The appliance manufacturer agrees in writing to the proposed configuration;
- e) The chimney manufacturer agrees in writing to the proposed configuration;
- f) The total length of single wall connecting flue pipe is not more than 1.5m;
- g) The appropriate distances to combustible materials from both the appliance and the connecting flue pipe are maintained.

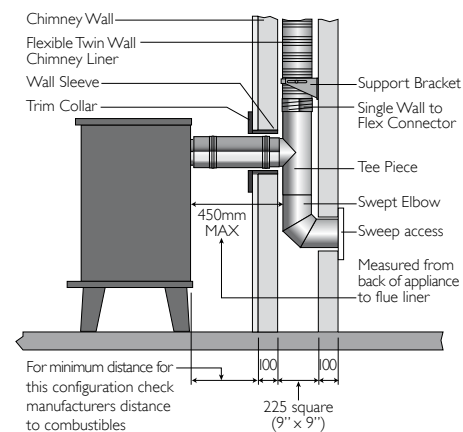


### Top Outlet Single Wall Connecting Flue Pipe through Solid Wall into Twin Wall System Chimney

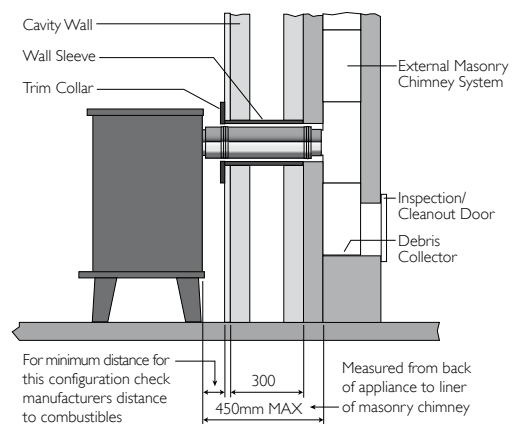
NB Where the connecting flue pipe from the appliance passes through any wall other than the existing chimney wall, the connecting flue pipe must be a System Chimney of twin wall insulated design.



### Rear Outlet Twin Wall Connecting Flue Pipe Through Cavity Wall into Twin Wall System Chimney



### Rear Outlet Twin Wall Connecting Flue Pipe into Re-lined Masonry Chimney



### Rear Outlet Twin Wall Connecting Flue Pipe into External Masonry Chimney through a Cavity Wall

# SYSTEM CHIMNEY

## Chimney Diameter

The chimney size should be as recommended by the appliance manufacturer. Where there is a requirement for a flue diameter smaller than the appliance spigot, then the operational requirements of the appliance and the configuration of the flue must satisfy the flue sizing requirements of EN13384-1 for single appliances, and EN13384-2 for multi appliances.

## Chimney Route

The chimney should remain as straight as possible through its vertical run to assist flow. Should it be necessary to offset a chimney run then the following guidelines should be adhered to:

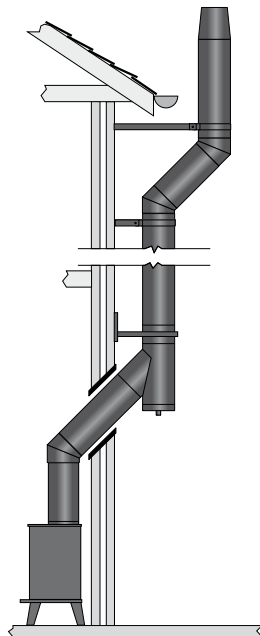
It is recommended that a vertical run of at least 600mm should be allowed immediately above the appliance prior to any change of direction. Within a system, on all fuels, there should be no more than 4 changes of direction of maximum 45°. Factory made 90° bends or tees within the system may be treated as being equal to two 45° bends (as per Document J of the Building Regulations issued October 2010).

## Connection to Draught Diverter

Where the appliance features a draught diverter the connection should rise vertically from it for at least 600mm before any change of direction (unless otherwise specified by the appliance manufacturer). This is in accordance with the recommendations contained in BS 5440 Part 1 section 6.1.4

## Direct Connection Appliance to System Chimney

When connecting from the appliance directly to a system chimney, the appropriate appliance connector must be used and the joint between the appliance spigot and the appliance connector must be securely caulked and sealed with non asbestos rope (or suitable alternative) and fire cement on solid fuel appliances.



direct connection from appliance

### Distance to Combustibles

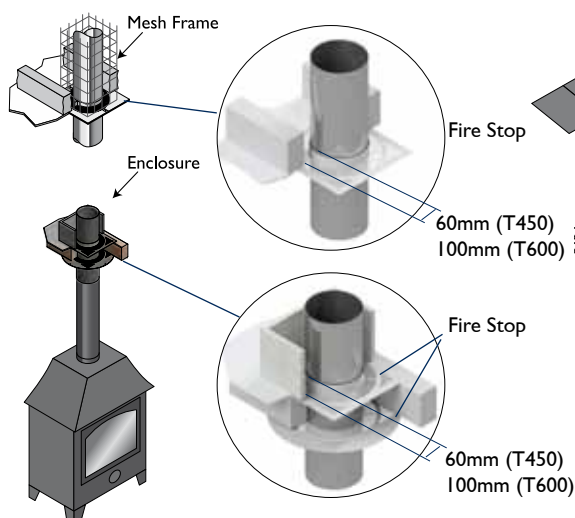
In accordance with building regulations, it is essential that the correct distance to combustible material is maintained. On solid fuel applications, where there is a risk of soot fire, a distance of 60mm (at T450) or 100mm (at T600) to combustibles must be maintained within a combustible floor and within a combustible shaft (see Fig. 1 below). There is no need to line the area within the floor cavity with plasterboard; however the ventilated fire stop plate and ventilated support plate must be used.

On bungalow applications where the chimney runs through either a combustible or non-combustible ceiling, a ventilated fire stop can be used. The weight of the chimney should be supported using the roof support. Distance to combustibles must be respected within the ceiling space (see Fig. 2 below) and mesh frame should be used within the loft space, which must be ventilated (see Fig. 2 below).

### Enclosure/Shfts

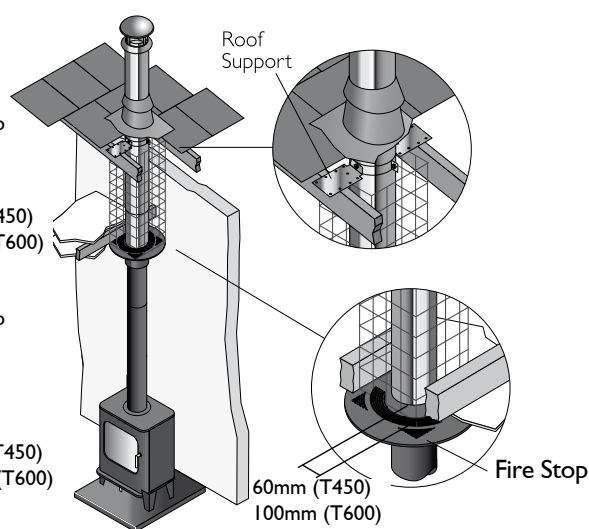
With the exception of the room containing the appliance, where the chimney passes through any part of the building, where there is a risk of accidental human contact, i.e a bedroom etc., or where there is a risk of contact with combustible materials stored in a cupboard or in the roof-space, the chimney must be enclosed in an appropriate way to meet Building Regulations. This can be achieved by boxing in the chimney in habitable rooms, or by the use of a protective wire mesh frame in roof spaces etc. In all cases the minimum distance to any combustible material, including loft insulation, must be respected according to the table on page 3, and any enclosure should be ventilated using the appropriate ventilated fire stops (see page 12).

Fig. 1



Internal House  
Combustible Floors

Fig. 2



Internal Bungalow (Ventilated Loft Space)  
Combustible and Non-Combustible Floors

### Support Components

The weight of a chimney system is considerable and requires independent support. Minimal weight should be borne by the appliance. The weight of the chimney can be supported from floor level by using a base support plate, from the wall by using wall support or from first floor level by using a support plate and clamp fixed to the floor/ceiling joists.

Wall brackets are non load bearing and provide lateral support only. Refer to the load bearing tables on page 17 for full details of maximum loadings.

Where the flue is freestanding above the roof and its height exceeds 1.5m above the last support or above the roof, a height of up to 3m can be achieved unsupported using the extended locking bands at the joint immediately below the last support and on each pipe joint above the last support.

Alternatively guy wire brackets can be used at the 1.5m level and every 1.5m thereafter in conjunction with guy wires, or rigid stays (provided by others).

### Chimney Termination

For full information regarding to chimney termination, please refer to Annex M of BS EN 15287-1. As a guide please refer to page 16 of these installation instructions.

### Terminals

All terminals must be secured with the use of a locking band. On solid fuel appliances, an open termination is normally recommended. However in certain conditions, rain caps or storm cowl terminals may be used.



# INSTALLATION INSTRUCTIONS

## Jointing System

All joints in the Vantage chimney range, which require a locking band, are made by means of a simple twist lock jointing method. This is achieved by pushing together the male and female collars on each end of the main chimney components and twisting the components through  $1/6$  of a turn to lock the collars into place.

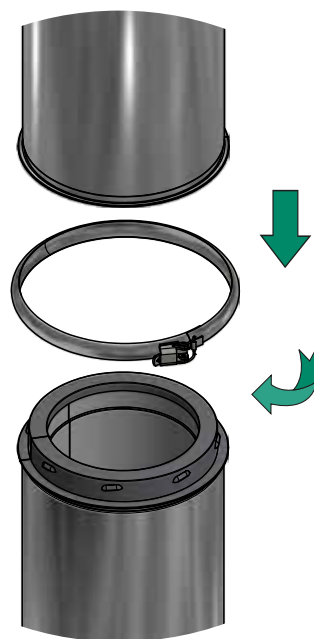


## Standard Chimney Sections (Pipes, Tees and Elbows)

Before assembling chimney sections, loosen the locking band by lifting the clip. Push the interlocking collars together and twist into position (see Fig. 1). Position the locking band so that it grips both collars then fasten using the clip.

Note:-joints must NOT occur within floor or ceiling spaces.

All flue gas carrying components must be installed with the direction arrow on the product label pointing to termination with the external male collar uppermost.

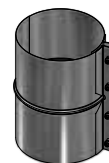


## Locking Band (supplied with each component with a female collar)

A locking band must be fitted to every joint in the system. The band is of stainless steel construction and is fitted with a quick release clip.

### Structural Locking Band

The structural locking band, which is purchased separately, is used instead of a standard locking band in a situation where extra structural support is required, for instance where the chimney height is >1.5m above the last support or above the roof. It is also used to provide extra support in long horizontal runs. A maximum of 3m unsupported height can be achieved by fitting the structural locking band on the joint immediately below and on every joint above the last support. Please see diagram on page 17.



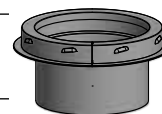
### Appliance Connector

Appliance Connector

1. The protruding liner of these components should be pushed into the appliance spigot with the male collar pointing upwards. The liner can be trimmed to suit the depth of the appliance spigot.
2. On solid fuel appliances the appliance connector should be sealed to the appliance with fire rope and fire cement or high temperature sealant to provide a gas tight joint.

Male ———  
Collar

Protruding —  
Liner



**Appliance Connector**

### Adaptors from single wall to Vantage

These components are used to convert from a single wall connecting flue pipe to the Vantage system chimney. The protruding liner should be pushed down inside the female socket of the connecting flue pipe, with the male collar pointing upwards.

### Adaptor flex to Vantage

This component is used to convert from flex to Vantage. The Flex is pushed over the upstand on the adaptor, secured using self tapping screws and sealed with fire cement and fire rope to provide a gas tight joint.

### Stove Pipe Starter Section

This component is used to connect from a vitreous enamel or stainless steel single wall connecting flue pipe to Vantage. The protruding liner should be pushed down inside the female socket of the connecting flue pipe and the joint sealed with fire cement or high temperature sealant to provide a gas tight joint.



Please note that when a single wall connecting flue pipe is used to connect to the starter section, the joint between these two components must be a minimum of 425mm below the ceiling in accordance with BS EN 15287-1. This component MUST only be fitted to stove pipe and NOT directly to appliance.

### Increaser

This component is used to increase from one diameter to the next diameter (e.g.) 125mm to 150mm. The component is fitted in the same way as a standard pipe length and should be secured with the locking band provided.

### Adjustable Pipes

They are used with standard components to achieve an exact length on site and avoid on-site cutting of components.

1. Calculate the length required.
2. Remove insulation as required to achieve the correct length.
3. Fix the adjusted section to standard components using the locking band provided.



Please note that the adjustable pipe is non load bearing.

### Inspection Pipe

The inspection length is a component providing the facility for flue inspection and cleaning. It is installed as per a standard pipe section. The removable inspection door must be parallel with the front of the stove, or at least 3 x the internal diameter from any combustible material (125mm I/D door must be at least 450mm from combustible material).



### 90° Tee

This component may be used to connect from a connecting flue pipe to the vertical system chimney at 90° or the branch may be used to locate a draft stabiliser. It is installed as per a standard pipe section. Please note that there are no barbs on the female collar in order to allow for the tee to be positioned at the correct angle.



### 45° Tee

This component may be used in combination with a 45° elbow to connect from a connecting flue pipe to the vertical system chimney. It is installed as per a standard pipe section and provides the least resistance to the flow of the flue gases. Please note that there are no barbs on the female collar in order to allow for the tee to be positioned at the correct angle.

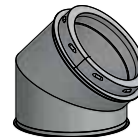


## Elbows

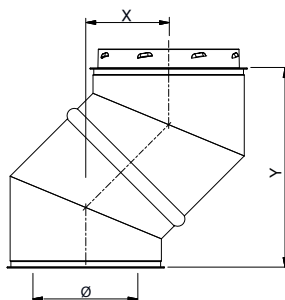
For offset information on standard elbows, please refer below.

In cases of top mounted stoves, a minimum vertical height of 600mm from the appliance is recommended prior to any change of direction in the flue pipe.

It should be noted that the female collars on elbows and tees are not barbed in order to allow for these items to be positioned according to requirements on site. In all cases the joints should be held securely in place using the locking band.



## OFFSET DIMENSIONS

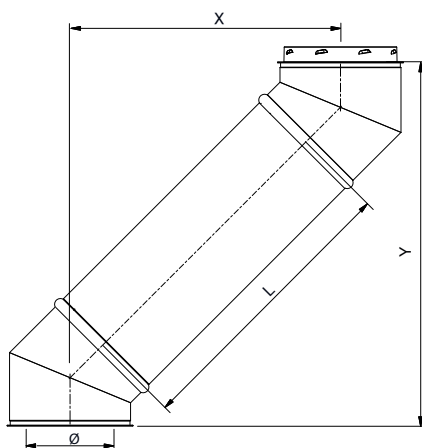


2 x 15°		
Ø	X	Y
125	28	214
150	29	222
175	30	228
200	31	234

2 x 30°		
Ø	X	Y
125	62	231
150	65	243
175	69	258
200	91	338

2 x 45°		
Ø	X	Y
125	105	254
150	110	265
175	122	295
200	128	309

X Offset  
Y Offset height



15° L:	120		300		500		750		1000	
Ø	X	Y	X	Y	X	Y	X	Y	X	Y
125	59	330	106	504	158	697	222	939	287	1180
150	60	338	107	512	159	705	223	947	288	1188
175	61	344	108	518	159	711	224	952	289	1194
200	62	350	108	524	160	717	225	958	290	1200

30° L:	120		300		500		750		1000	
Ø	X	Y	X	Y	X	Y	X	Y	X	Y
125	122	335	212	491	312	664	437	881	562	1097
150	125	347	215	502	315	676	440	892	565	1109
175	129	361	219	517	319	691	444	907	569	1124
200	151	442	241	598	341	771	466	987	591	1204

45° L:	120		300		500		750		1000	
Ø	X	Y	X	Y	X	Y	X	Y	X	Y
125	190	339	317	466	459	608	636	785	812	961
150	194	349	322	477	463	618	640	795	817	972
175	207	380	334	507	476	649	653	826	829	1002
200	213	394	340	521	482	663	658	839	835	1016

X Offset  
Y Offset height



# FIRESTOP COMPONENTS

## Ventilated Support Plate

The support plate is used where the chimney passes through a combustible floor, and the weight of the chimney has to be taken at floor level. The support plate must be firmly fixed by using bolts or screws. For load bearing data refer to page 17.



1. Frame a four sided level square opening within the joists using timber stringers where necessary to allow for the correct distance to combustibles from the outer wall of the chimney. This distance must be a minimum of 60mm (at T450) or 100mm (at T600) for solid fuel applications (see Fig. 3 below).
2. Lower the chimney section through the opening in the floor, and secure to the next section of pipe.
3. Locate the two halves of the support plates around the chimney section, and secure to the joists using screws or bolts.
4. Remove the self-drilling screws which are fastened to the clamp band. Then fasten clamp band around the chimney section and position on top of the plate. Tighten using the nuts and bolts provided.
5. Using the holes in the clamp band as a guide, fasten the three self-drilling screws to the outer case of the Vantage system.

**Note: Joints must NOT occur within the floor or ceiling joists.**

Fig. 1

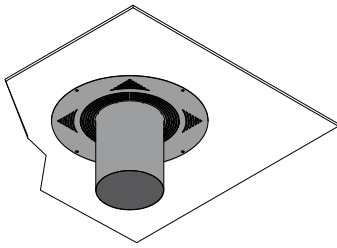
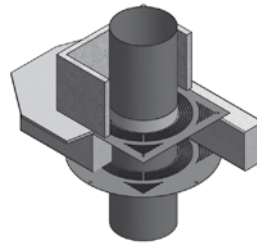


Fig. 2



## Ventilated Firestop Plate (1 & 2-Piece Round and 2-Piece Rectangular)

The ventilated fire stop plates are used in combination with standard Vantage pipes where the chimney passes through a combustible floor or ceiling. The outermost circle of ventilation slots gives a distance to combustibles of 60mm (at T450) or 100mm (at T600). This measures the required distance for solid fuel applications. The fire stop plate should be positioned around the chimney and fastened to the pre-cut plasterboard or to the timber frame with nails or screws using the location holes provided (see Fig. 2 above).



### Wall Band (50-90mm)

Internal and External Application

The wall band is supplied in two parts, a stainless steel bands which fits tightly around the outside of the chimney and a stainless steel back bracket.

1. Once the position of the support has been determined, secure the back bracket to the wall with a method of fixing to ensure adequate attachment and support.
2. The stainless steel band is then positioned around the chimney section and secured with the nut and bolt provided to the bracket.
3. The wall bracket provides lateral stability only, it is NOT load bearing and is to be positioned at 2 metre centres.

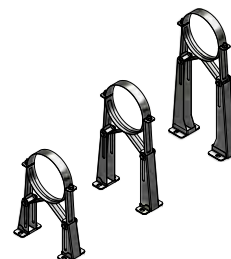


### Adjustable Back Bracket (90-200/190-300/290-400mm)

Internal and External Application

The adjustable wall bracket is supplied in two parts, two stainless steel adjustable legs, and a frame which fits tightly around the chimney.

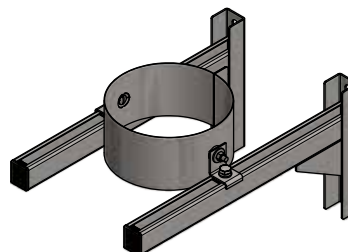
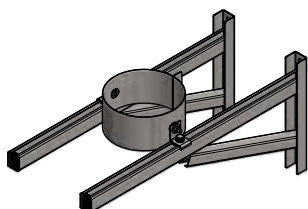
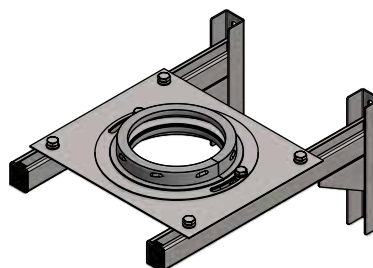
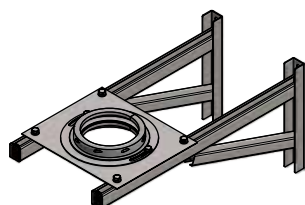
1. Once the position of the support has been determined, secure the legs to the wall with a method of fixing to ensure adequate attachment and support.
2. Determine the amount of extension required and secure the back bracket of the wall band in place onto the adjustable section.
3. Fasten the strengthening back frame in place using the bolts provided.
4. With the back frame in place, locate the rear portion of the band onto the back bracket, the outer part of the band is then positioned around the chimney section and secure with the nuts and bolts provided.
- 5 The adjustable wall band provides lateral stability only, it is NOT load bearing and is to be positioned at 2 metre centres.



### Adjustable Plate/band

The wall support is designed to be used internally or externally to provide either initial or intermediate support for the vertical chimney. It is used in combination with wall brackets. The female socket on the pipe attached to the underside of the plate should be pushed down onto the preceding pipe and the joint secured using the locking band provided. The top plate is then attached to the wall brackets using the bolts provided through the fixing slots in the top plate. The bolts should then be tightened firmly.

For maximum height of chimney see load bearing details, please refer to tables and diagrams on page 17.



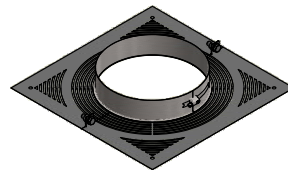
### Wall Brackets

Once the position of the support has been established in relation to the chimney route, secure wall brackets to the wall using expansion bolts to ensure adequate attachment and support.

### Ceiling Joist Support

Where the chimney passes through a combustible ceiling into the roof space, and the weight of the chimney has to be taken at floor level. The ceiling joist support must be firmly fixed by using bolts or screws. For load bearing Data refer to page 17.

1. Frame a four sided level square opening within the joists using timber stringers where necessary to allow for the correct distance to combustibles from the outer wall of the chimney. This distance must be a minimum of 60mm (at T450) or 100mm (at T600) for solid fuel applications (see Fig. 3 alongside - distance x).
2. Lower the chimney section through the opening in the floor, and secure to the next section of pipe.
3. Locate the two halves of the support plates around the chimney section, and secure to the joists using screws or bolts.
4. Remove the self-drilling screws which are fastened to the clamp band. Then fasten clamp band around the chimney section and position on top of the plate. Tighten using the nuts and bolts provided.
5. Using the holes in the clamp band as a guide, fasten the three self-drilling screws to the system.



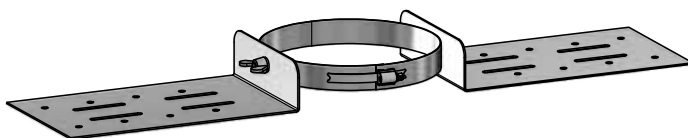
**Note: Joints must NOT occur within the floor or ceiling joists**

### Roof Support

The roof support is supplied as a kit complete with two side plates for fixing to the roof trusses, a band to give lateral support to the chimney as it passes through the roof, and 3 self tapping screws, which are secured to the chimney through the band to give a load bearing capacity. When the plates are installed above the roof trusses as in Fig.1 the maximum number of pipes, which may be suspended from the roof support is 6 x 1m pipes. When the plates are attached below the trusses as in Fig.2 the maximum number of pipes, which may be suspended is 4 x 1m pipes.

1. The band should be lowered down over the top of the Vantage pipe, and positioned so that the side plates are resting on top of the roof trusses as in Fig. 1 or below the roof trusses in the case of Fig. 2. The recommended position is always as per Fig.1 where circumstances allow this solution.
2. The band should then be tightened using the nut and bolt provided.
3. Using the holes pre-drilled in the roof support band, drill 3mm holes in the outer case of the chimney section (drill bit should be set for a depth no greater than 10mm to avoid any damage to the liner of the chimney)
4. Use the self tapping screws provided to secure the clamp band to the outer casing of the chimney section.

**Please note: It is the responsibility of the installer to ensure that the joist to which the roof support is being attached is load bearing and capable of withstanding the weight of the system being installed.**



### Guy Wire Bracket

This component should be used to secure unsupported chimney sections above roof level. Guy wires or preferably rigid stays (supplied by others) must be fixed to the bracket and secured to suitable anchorage points to ensure that the chimney sections are stable.

A maximum chimney height of 1.5 metres from the last support, or from the roof is permitted. Additional height requirements MUST be supported at 1.5 metre intervals using the guy wire bracket as specified above.

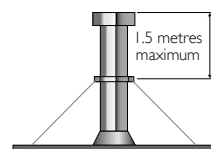


Fig. 1

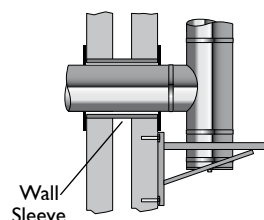
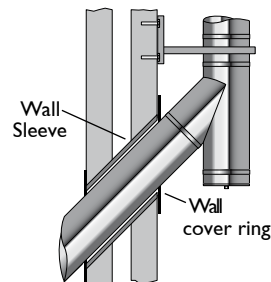


Fig. 2



### Wall sleeve

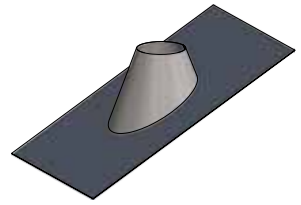
Wall sleeves must be used to protect the building where the chimney passes through a wall (see Fig. 1 & 2). The sleeve should be cut down to the correct length on site to fit flush with the wall (see Fig. 1 & 2). The sleeve should be adequately weatherproofed, using a good quality building mastic and rope fibre.

### Wall cover ring

The wall cover ring fitted around the Vantage pipe where it protrudes through both the inside and the outside of the wall (see Fig. 1 & 2). They should be fastened to the wall using an adequate method of fixing. The wall cover ring should be adequately weatherproofed back to the wall and around the chimney, using a good quality building mastic or equivalent.

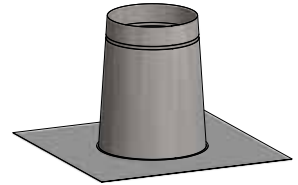
### Angled Flashing

Manufactured in sheet aluminium for use on pitched roofs. The base of the flashing should be nailed or screw fixed to the roof batons prior to tiling. The front edge of the flashing should be hooked to the underside of the batons to prevent lifting. This component should be sealed with the mastic sealant provided and **MUST** be used in conjunction with the storm collar supplied.



### Flat Flashing

Manufactured in sheet aluminium for use on flat roofs the base of the flashing should be covered by the roofing felt and then sealed. This component should be sealed with the mastic sealant provided and **MUST** be used in conjunction with the storm collar supplied.



### Storm Collar

The storm collar should be sealed to the outer casing of the flue immediately above the flashing with the mastic sealant provided.



### Terminals

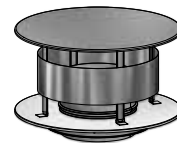
Terminals are supplied complete with a locking band. Once the terminal has been pushed into place, the adjustment bolt on the locking band clip should be tightened to ensure that the terminal is properly secured to the previous pipe.



**Top Stub**



**Rain Cap**



**Storm Cowl**

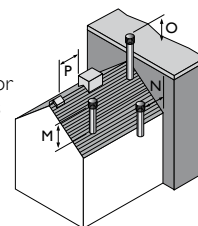
# OUTLET SITING

Flue terminations for solid fuel & oil are subject to EN15287-1. Figures A and B illustrate recommendations for the most commonly encountered outlet terminations. Flue terminations for gas in domestic situations are governed by the BS5440-1 Section 4.2. Figure C illustrates recommendations for the most common siting situations encountered. Adjacent taller structures may require increased height. The minimum flue projection through the roof is 600mm to the underside of the terminal.

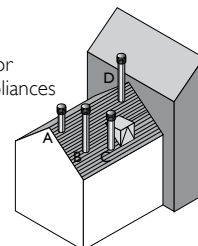
## Outlet siting for Oil Appliances (<45kW)

Location of outlet		Pressure Jet Burner	Vapourising Burner
<b>M</b>	Above the highest point of an intersection with the roof	600mm	1000mm
<b>N</b>	From a structure to the side of the terminal	750mm	2300mm
<b>O</b>	Above a vertical structure which is less than 750mm (pressure jet burner) or 2300mm (vapourising burner) horizontally from the side of the terminal	600mm	1000mm
<b>P</b>	From a ridge terminal to a vertical structure on the roof	1500mm	Should not be used

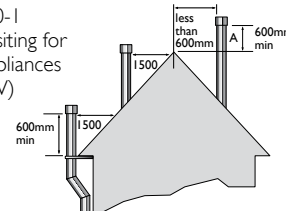
**Fig. A**  
Outlet siting for Oil Appliances (<45kW)



**Fig. B**  
Outlet siting for Solid Fuel Appliances (<50kW)

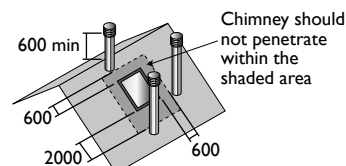


**Fig. C**  
BS 5440-1  
Outlet siting for Gas Appliances (<70kW)



## Outlet siting for Solid Fuel Appliances (<50kW)

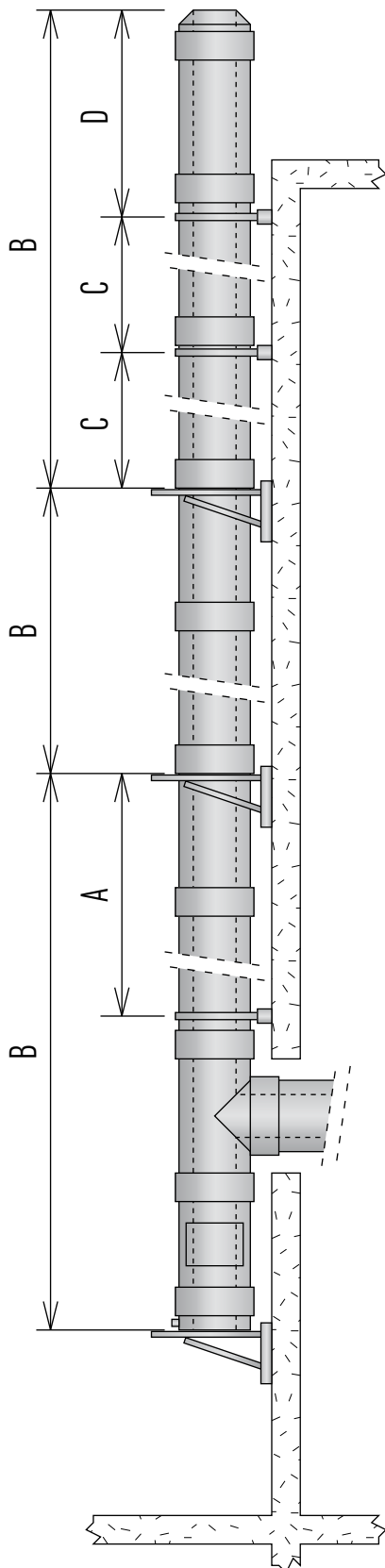
Point where flue passes through weather surface (Notes 1, 2)	Clearance to flue outlet
<b>A</b>	At or within 600mm of the ridge
<b>B</b>	Elsewhere on the roof (whether pitched or flat)
<b>C</b>	Below (on a pitched roof) or within 2300mm horizontally to an openable rooflight, dormer window or other opening (Note 3)
<b>D</b>	Within 2300mm of an adjoining or adjacent building, whether or not beyond the boundary (Note 3)



1. The weather surface is the building external surface, such as its roof, tiles or external walls.
2. A flat roof has a pitch less than 10°.
3. The clearance for A or B, as appropriate, will also apply.
4. A vertical flue fixed to an outside wall should be treated as equivalent to an inside flue emerging at the nearest edge of the roof.



# TYPICAL INSTALLATIONS & LOAD BEARING

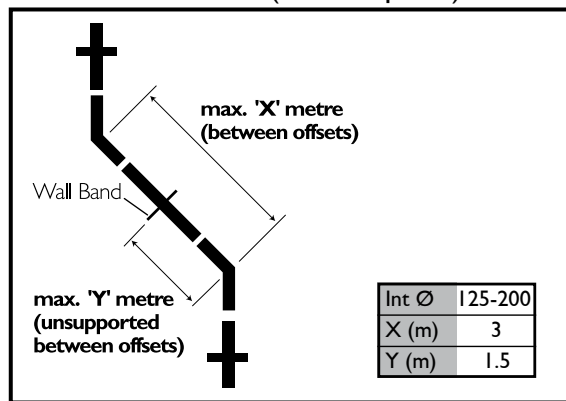


## Mounting heights and distances

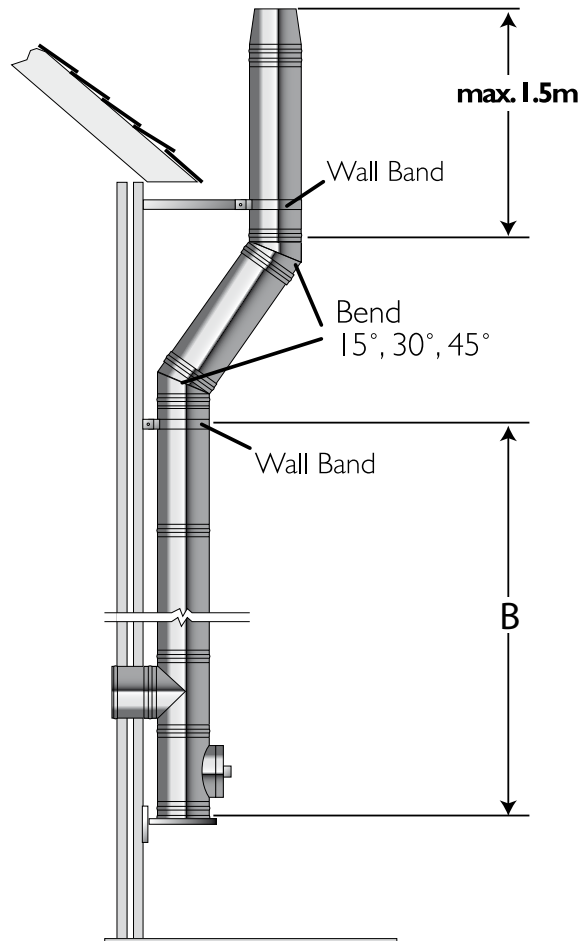
Ø(mm)		125	150	180	200
A (m)	EXT 45	15	15	15	15
	EXT 90	15	15	15	15
	EXIH	15	15	15	15
B (m)	EXOH 2/4	15	15	15	15
	EXRSB	3	3	3	3
C (m)	EXRSB	2	2	2	2
	EXWB	2	2	2	2
	EXMBV2/3/4	2	2	2	2
	EXCSP	4	4	4	4
	EXCSPG	4	4	4	4
D (m)	EXMB	1,5	1,5	1,5	1,5
	EXMBV2/3/4	1,5	1,5	1,5	1,5
	EXMBV2/3/4 + EXSLB	3	3	3	3
	EXRSB	3	3	3	3
	EXGWB	1,5	1,5	1,5	1,5





- A Maximum supportable height above Tee piece when chimney is supported by wall support at base.
  - B Maximum supportable height that can be borne by wall support.
  - C Maximum distance between lateral supports i.e. wall bands and wall supports.
  - D Maximum allowable free standing height above last support.
  - For non-vertical parts of flue system the maximum distance between two wall bands i.e. brackets is 1,5\* m
- Important: the product with the lowest load bearing capacity determines the maximum supported height.




## Max Offset Info (in same plane)



## Offset installation



 <p>Protection measures are required when cutting and drilling. Wet-cutting or dust extraction should be used.</p>		<p><b>HEALTH &amp; SAFETY INSTRUCTION</b></p> <p>Many building products, including chimney elements are manufactured using natural raw materials which contain proportions of crystalline quartz.</p> <p>During the mechanical processing of products, such as cutting and drilling, quartz dust is released which can get into the lungs.</p> <p>With higher levels of exposure over longer periods this may result in damage to the lungs (silicosis) and as a consequence of the silicosis disease, to an increased risk of lung cancer.</p> <p><b>THE FOLLOWING PROTECTIVE MEASURES ARE TO BE TAKEN</b></p> <ul style="list-style-type: none"> <li>• When cutting and drilling, a P3/FFP3 respiratory protection mask is to be worn.</li> <li>• In addition, wet-cutting equipment or equipment with dust extraction should be used.</li> </ul>
 <p>Eye Protection</p>	 <p>P3/FFP3 Respiratory Protection Mask</p>	
 <p>Ear Protection</p>		

<p><b>HAZARDS FOR PEOPLE AND THE ENVIRONMENT</b></p> <p>Mineral wool insulation materials in this group of products can release fine fibres which may have carcinogenic effects in the lungs. If inhaled, fibres can get into the body and cause damage to health. Larger fibres or fragments of fibres can cause irritation (itching) of the skin, the upper airways and the eyes!</p> <p><b>PROTECTION MEASURES AND SAFE PRACTICE</b></p> <p><b>Avoid contact with the skin!</b></p> <p>After finishing work, rinse off dust with water and change your clothes. wash exposed areas of skin thoroughly with soap and if necessary use a skin care product!</p>	
 <p><b>Eye Protection:</b></p>	When working overhead and where large amounts of dust are produced, wear goggles with side protection.
 <p><b>Hand Protection:</b></p>	Protective gloves, e.g. in leather or nitrile-coated cotton.
 <p><b>Breathing:</b></p>	For low-level activities (exposure category E1/E2) the use of half or quarter masks with P2 filters (white) or FFP2 particle filtering half masks is recommended.

# AFTER INSTALLATION

## Testing and Commissioning prior to first use

This is carried out using a flue flow test as described in BS EN 15287 Parts 1 & 2, with reference to the appropriate appliance type.

## Appliance Operation

Appliance slumbering must be avoided, and if the appliance has been run on low fire conditions for an extended period, then it is advisable to run the appliance at controlled high fire condition for a minimum period of at least 30 minutes afterwards. Prolonged slumbering of the appliance at all times is a contributing factor to a system chimney failure. It is important to maintain sufficiently high flue gas temperatures in order to avoid condensate and acid corrosion problems, and to ensure complete combustion of the fuel at all times. If corrosion occurs due to slumbering, then the guarantee will be invalidated on the system.

## Multi-Fuel Applications

Multi-Fuel refers to an appliance which may be used to burn either seasoned wood, or approved solid fuels. These fuels should not be mixed, as this increases the risk of deposits being built up in the liner.

## Maintenance

Each chimney must be designed to allow for easy inspection; sweeping should be carried out by competent persons. On solid fuel applications a list of HETAS registered sweeps can be found at [www.hetas.co.uk](http://www.hetas.co.uk). Chimney flue cleaning and inspection require the use of appropriate tooling – under no circumstances should chemical cleaners or mild steel tools be used to sweep stainless steel chimneys. Cleaning/inspection of any chimney system should be carried out at least once a year, along with maintenance of the appliance, but it is recommended that chimneys serving solid fuel appliances be swept at least twice a year, at the end of the heating season to remove any deposits, which may have built up during the season, and prior to the start of the next heating season to ensure that the flue way is clear of any blockages such as birds nests etc. We would advise that monthly checks are carried out to ensure that there is no build up of any deposits in the flue way of the connecting flue pipe or system chimney.

## Fuel Storage and Usage

Where solid fuels are being used, correct storage is critical and fuels must be kept dry. Wood must be seasoned prior to use, with a maximum moisture content of 20%. Only approved fuels should be used. Refer to HETAS list for details on [www.hetas.co.uk](http://www.hetas.co.uk). The fuel used must be suitable for the appliance - please refer to manufacturer's instructions.

# CHIMNEY PLATE

## Chimney Plate for Vantage

The Notice plate should be marked up in indelible ink and securely fixed in an unobtrusive but obvious position within the building such as:

- Next to the electricity consumer unit.
- Next to the chimney installation described.
- Next to the water supply stop-cock.

See example alongside:



# PRODUCT GUARANTEE

Under normal operating conditions and providing the system is installed correctly, it should last the lifetime of the appliance, which normally is 10 years. Vantage carries a 10 year conditional guarantee. The conditions are that the system is:-

- Correctly sized and installed in accordance with the manufacturer's instructions, current Building Regulations and relevant British and European standards.
- Maintained correctly by a qualified and competent person and maintenance records kept updated for both appliance and system chimney.
- Used in combination with an appliance burning only approved fuels in accordance with Ontop and the appliance manufacturer's instructions.
- The product registration form must have been filled in by an appropriately qualified installer (see p.3 for details), and returned to Ontop.

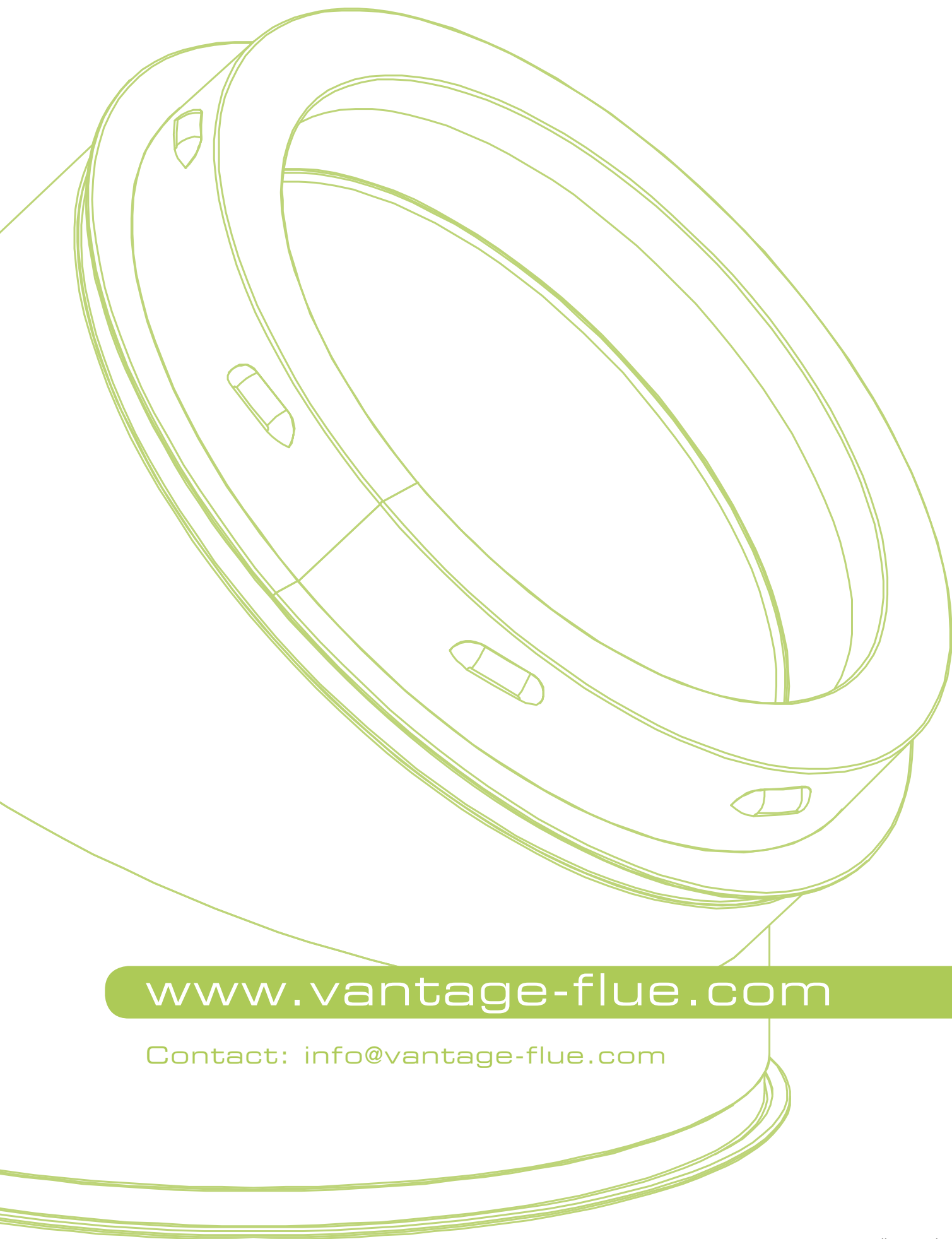
For recommended fuels listings, please refer to the HETAS Guide [www.hetas.co.uk](http://www.hetas.co.uk)

In the event of a fault developing in the product due to defective materials or faulty manufacture Ontop undertake to replace the product only.

Ontop cannot accept liability nor take any responsibility for the installation, building or redecorating costs or any other consequential losses arising.

If any complaint is found to be a result of faulty installation, non-compliance with or abuse contrary to these conditions, the cost of site investigation is chargeable.





[www.vantage-flue.com](http://www.vantage-flue.com)

Contact: [info@vantage-flue.com](mailto:info@vantage-flue.com)

Vantage\_install\_manual\_B