



Grant EZ-Fit Flue Guide

For Grant Vortex and Euroflame Boilers

Visit our Website
for further
Information





Grant Engineering has been designing and manufacturing reliable, efficient and innovative heating products since 1978. Specialising in condensing oil-fired boilers and an expanding range of renewable products including air source heat pumps, biomass boilers, solar thermal, heat emitters including underfloor heating and aluminium radiators, the Grant brand has established a reputation for quality that is second to none.

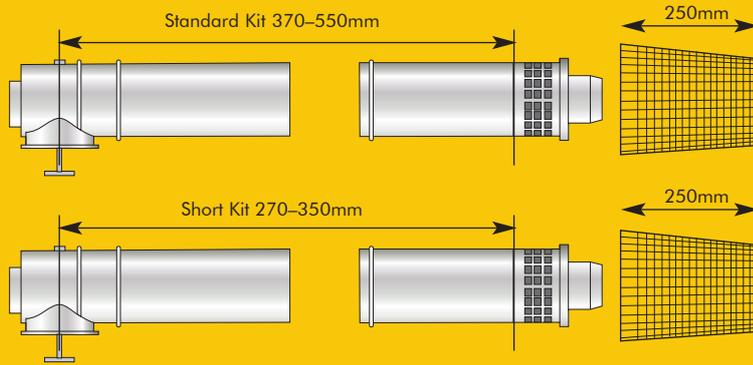
Here at Grant, we combine precision engineering, innovation, performance and value for money to produce sustainable heating solutions that are trusted by installers and homeowners alike. While the technology is sophisticated, Grant products are easy to install, straightforward to maintain and backed-up by excellent after-sales support. When customers choose Grant, they also get the added peace of mind that comes with the excellent reliability and superb efficiencies of our products.

At the heart of everything we do is continuous product development. Every Grant product incorporates the latest technologies and materials which enable them to exceed performance and environmental standards ensuring that they make the best use of our natural resources. Consequently, Grant products meet the heating needs of tomorrow, today.

Contents

Round low level balanced flue systems	4
Order part preference guide	5
Single wall flue kit	6
Order part preference guide	7
Internal high level balanced flue systems	8
Order part preference guide	9
Internal vertical balanced flue systems	10
Order part preference guide	11
External low level/high level/vertical flues	12
Order part preference guide	13
Conventional flue systems	14
Order part preference guide	15
Clearances	16

Low Level balanced flue kits



Standard flue kit	
EZ90IRL	Models up to 26kW
EZ200IRL	Models 26 - 70kW

Short flue kit	
EZ90SIRL	Models up to 26kW
EZ200SIRL	Models 26 - 70kW

Low Level balanced flue extensions & accessories



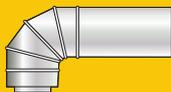
Extension 225mm	
X90SIRL	Models up to 26kW
X200SIRL	Models 26 - 70kW



Extension 450mm	
X90MIRL	Models up to 26kW
X200MIRL	Models 26 - 70kW



Extension 675mm	
X90LIRL	Models up to 26kW
X200LIRL	Models 26 - 70kW



90° elbow kit	
EZELB90IRL	Models up to 26kW
EZELB200IRL	Models 26 - 70kW

Important

Flue extensions cannot be cut. Yellow system extensions are for horizontal use only and cannot be used vertically with Green, Orange or White system components.

Important

Horizontal lengths up to 4 metres can be accommodated, including one 90° or two 45° elbows.

Important

Extended elbows allow telescopic adjustment for extensions or terminal sections.

Blue System - Single wall flue kit - stainless steel

Single wall flue kits Blue System

The Grant range of flue systems have been developed to make the installation of Grant Boilers quick, simple and to reduce cost, while ensuring trouble free operation - even in the most exposed site conditions.

Plume Diverter kits

The Grant Plume Kits are available for boilers up to 90,000 BTU (26kW) in 80mm and 120,000 (36kW) and above in 100mm.

The kits come in two forms, a 2mm telescopic flue and a 1 metre kit:

Telescopic flue (2 metres)	
GPDA 90IRL	1240mm - 2080mm
GPDA 200IRL	1290mm - 2140mm
1 metre kit	
GPD901000IRL	(80mm)
GPD2001000IRL	(100mm)

Boiler House Models

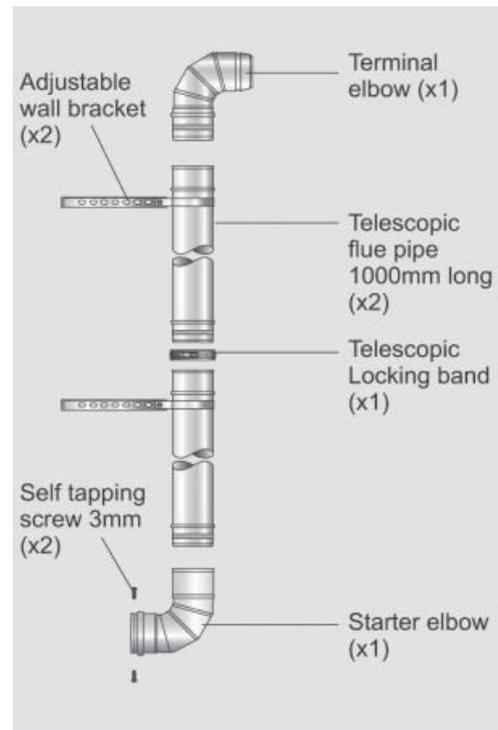
The Grant "Blue system" is only compatible with the Boiler-house range when ensuring the flue is sleeved within the required clearance through a non combustible material. Where this cannot be achieved, the White system should be otherwise considered.

Combustion Air and Ventilation

An adequate permanent air supply is required for the safe operation of all open-flued (conventional flue) oil fired appliances.

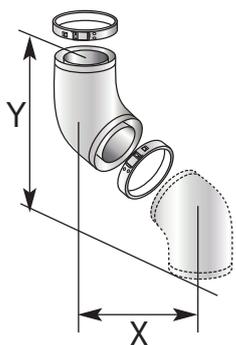
This must be in accordance with the requirements of BS5410 Part 1: 1997.

Full details of the ventilation requirements for Grant Boilers are given in the instructions provided with every appliance.



Single wall Plume Diverter kit components

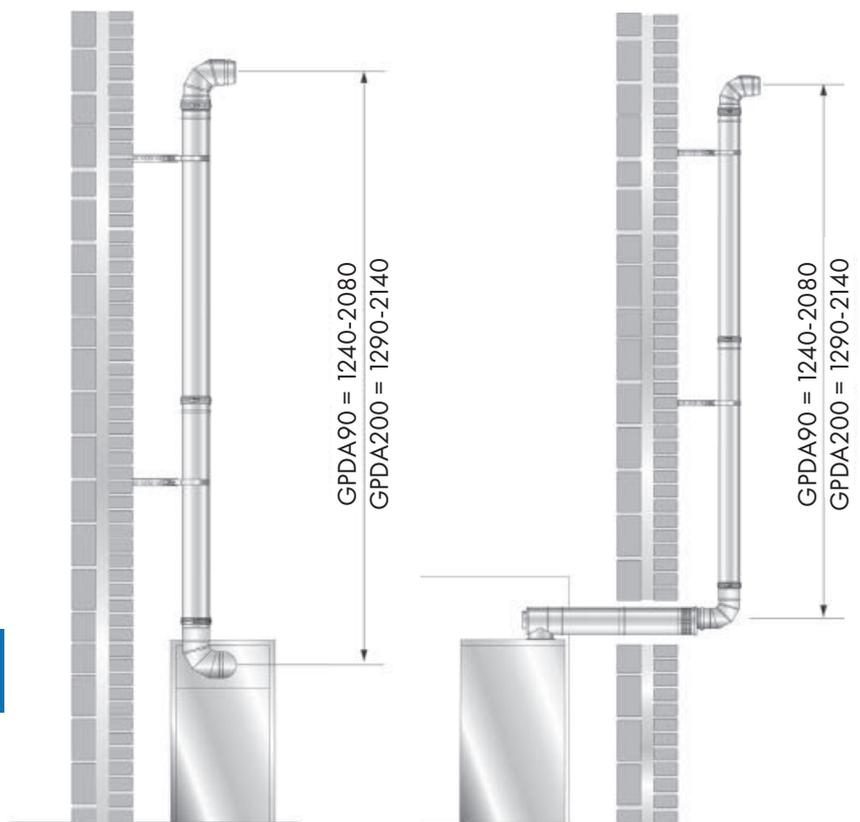
Offset elbows



45° elbows can be used with Blue System to offset the flue. Extensions can be used between elbows.

CODE	X	Y
GPDA 90IRL	115	320
GPDA 200IRL	130	360

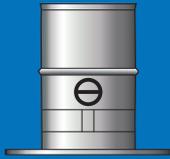
Note: Maximum flue extension of 10m, reducing by 1m per elbow used



Single wall Plume Kit fitted to Module Boiler

Single wall Plume Kit fitted to Indoor Boiler

Starter flue kit Boiler house only

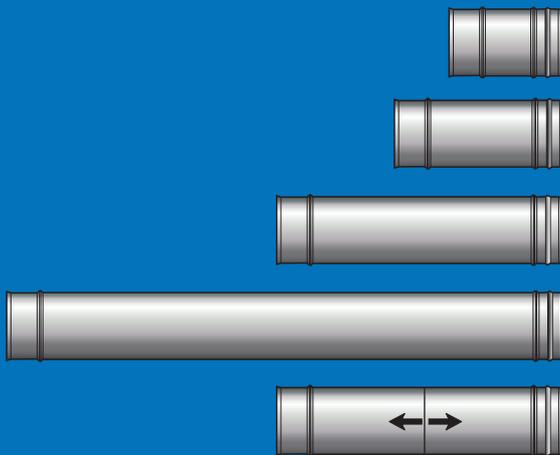


Starter Section c/w test point 125mm high

GPD~~BC~~90I~~RL~~ Models up to 26kWGPD~~BC~~200I~~RL~~ Models 26 - 70kW**Important**

Safety installation requirement for flue pipes serving oil fired boilers discharging flue gas temperatures below 250° C. A minimum of 25mm separation is required where external surfaces of the flue pipe are adjacent to any combustible material.

Flue extensions stainless steel (single skin)



Extension 200mm c/w locking band

GPD200EXT/90I~~RL~~ Models up to 26kW*GPD200EXT/200I~~RL~~ Models 26 - 70kW*

Extension 250mm c/w locking band

GPD250EXT/90I~~RL~~ Models up to 26kW*GPD250EXT/200I~~RL~~ Models 26 - 70kW*

Extension 500mm c/w locking band

GPD500EXT/90I~~RL~~ Models up to 26kW*GPD500EXT/200I~~RL~~ Models 26 - 70kW*

Extension 1000mm c/w locking band

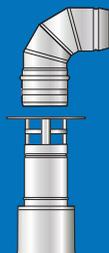
GPD1000EXT/90I~~RL~~ Models up to 26kW*GPD1000EXT/200I~~RL~~ Models 26 - 70kW*

Adjustable extension 225-295mm c/w locking band

GPDAP/90I~~RL~~ Models up to 26kW*GPDAP/200I~~RL~~ Models 26 - 70kW***Important**

Flue extensions cannot be cut.

Terminals Stainless steel



High level 90° terminal c/w locking band

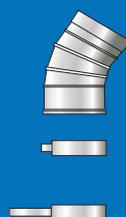
GPDHLT90I~~RL~~ Models up to 26kW*GPDHLT200I~~RL~~ Models 26 - 70kW*

Vertical terminal c/w locking band

GPDVT90I~~RL~~ Models up to 26kW*GPDVT200I~~RL~~ Models 26 - 70kW***Important**

Diameters
Models up to 26kW 80mm
Models 26kW - 70kW 100mm

Accessories Stainless steel



45° elbow c/w locking band

GPD45/90I~~RL~~ Models up to 26kW*GPD45/200I~~RL~~ Models 26 - 70kW*

Wall bracket 50mm Ext

GPDWB5090I~~RL~~ Models up to 26kW*GPDWB50200I~~RL~~ Models 26 - 70kW*

Wall bracket 300mm Ext

GPDWB30090I~~RL~~ Models up to 26kW*GPDWB300200I~~RL~~ Models 26 - 70kW***Important**

Vertical flue lengths of up to 10 metres can be achieved utilising extensions. Maximum horizontal length: up to 3m. 45° elbows can also be accommodated within this length (maximum 2 elbows).

High Level Balanced flue kits 'White System'

High level balanced flue kits feature the same boiler connections as the low level flue. The unique connection system on the high level flue ensures easy assembly thereby reducing installation costs.

Flexible design

The kits may be extended horizontally and vertically. It is now possible to create offsets in standard high level flue systems by using our 45° elbows and extension kits – increasing the versatility of this range.

Reduces installation time

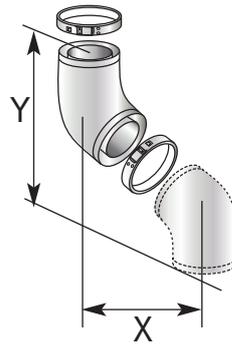
The high level kits feature self sealing exhaust ducts and a quick-fit locking band connection for the air duct, which vastly reduces the time taken to complete the installation.

High level balanced flue hole cutting dimensions					
Model	Dimensions (mm)				
	A dia	B min	C min	C max	D side
Vortex Utility & Boiler House models 50/90 (15/26)	175	1215	1715	2115	115
Vortex Utility & Boiler House models 90/120 (26/36)	200	1278	1700	2018	115
Vortex Utility & Boiler House models 120/155 (36/46)	200	1280	1870	2020	115
Vortex 155/240 (46/70)	200	1595	2015	2335	115
Euroflame Condensing Kitchen & Boilerhouse 50/90 (15/26)	175	1215	1715	2115	115
Euroflame Condensing Kitchen & Boilerhouse 90/120 (26-36)	200	1280	1700	2020	115

Dimensions

Section 'A' is the starter piece for the flue system and push fits into the boiler connector supplied with the kit. Section 'A' incorporates the air supply spigot and a combustion test point. Sections 'B' and 'C' combine to form a telescopic length. Terminal section 'E' slides over elbow 'D'. The horizontal length can be extended using the extensions listed. The adjustable extension cannot be connected to the terminal section 'E' – a fixed extension must be used. The vertical height can be extended using the extensions or 45° elbows listed. For short heights sections 'B' and 'C' may be omitted and elbow 'D' fitted to starter section 'A'.

Offset Elbows

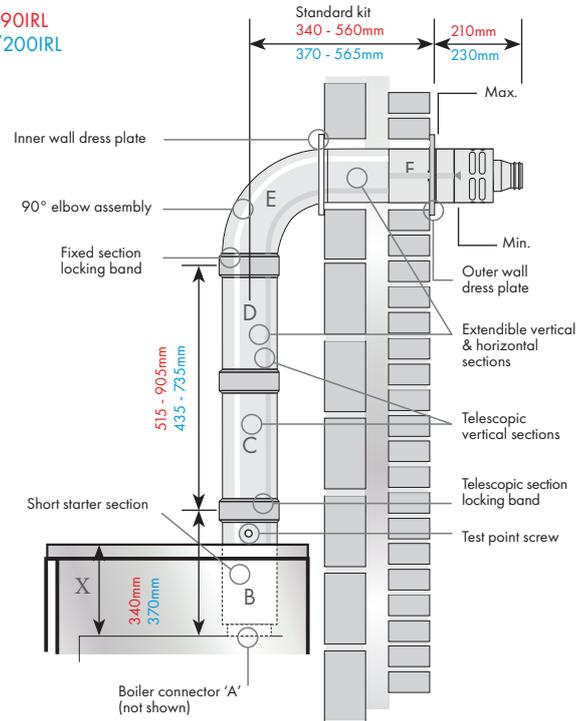


CODE	X	Y
ELB K21IRL	140	340
ELB K22IRL	160	385

45° elbows can be used with vertical kits to offset the flue. Extensions can be used between elbows.

Internal High Level flue kit (white powder coated)

HL K01 50/90IRL
HL K02 90/200IRL



Contents of High Level balanced flue kit:

- Boiler connector A
- Short starter section B
- Vertical telescopic section C/D
- Horizontal telescopic section (inc. terminal) E/F

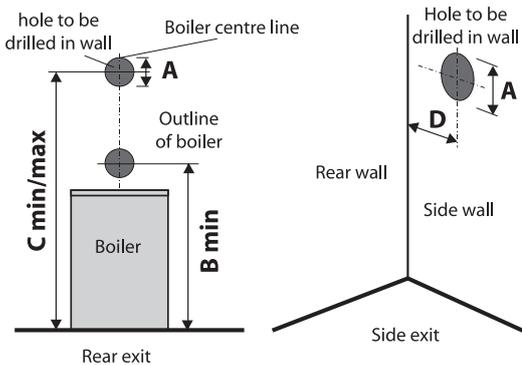
Note: For height adjustment see chart on the left.

Note: For Boiler House models, air supply kit part No. EZAS is supplied with boiler.

- Locking bands
- Inner seals (red)
- Outer seal (black)
- Boiler connector
- Dress plates (inner & outer)
- Fitting Instructions

STANDARD KIT WITH NO EXTENSIONS FITTED.

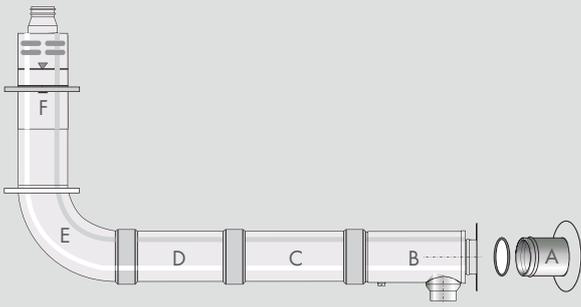
NOTE: Flue pipe diameter: 150mm 180mm
Excluding locking bands
(SEE DIMENSION 'A' OPPOSITE FOR HOLE SIZE).



NOTE: B Min = Minimum height with sections 'B' & 'C' removed and is measured from the floor to the centre line of the hole. C Min/Max = Minimum and maximum heights with sections 'A', 'B', 'C', 'D' & 'E' used.

Note: Maximum total flue length 10 metres

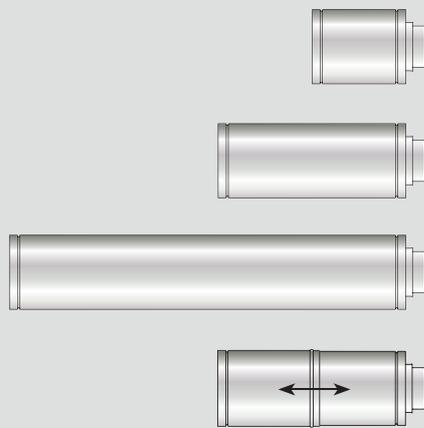
Internal High Level balanced flue kits



1.2 metre High Level flue kit		
HL K01 50/90IRL		Models up to 26kW
HL K02 90/200IRL		Models over 26kW

Important
 If the terminal section executes below two metres, a terminal guard must be fitted. A terminal guard is required when the flue terminates less than 2 metres above outside ground level (not supplied as standard).

Internal High Level balanced flue kits



Extension 225mm C/W locking band		
EXT K31 225/90IRL		Models up to 26kW
EXT K32 225/200IRL		Models over 26kW
Extension 450mm C/W locking band		
EXT K09 450/90IRL		Models up to 26kW
EXT K10 450/200IRL		Models over 26kW
Extension 950mm C/W locking band		
EXT K11 950/90IRL		Models up to 26kW
EXT K12 950/200IRL		Models over 26kW
Adjustable extension 275-450mm C/W locking band		
EXT K13 ADJ/90IRL		Models up to 26kW
EXT K14 ADJ/200IRL		Models over 26kW

Important
 Flue extensions cannot be cut. White system extensions are for High Level, Vertical and Red system Internal use only and cannot be used with Yellow, Green or Orange system components.

High Level balanced flue accessories



45° Elbow C/W locking band		
ELB K21 45/90IRL		Models up to 26kW
ELB K22 45/200IRL		Models over 26kW



Wall bracket		
BRK 29 90IRL		Models up to 26kW
BRK 30 200IRL		Models over 26kW

Important
 We recommend an additional wall bracket for every 1 metre of flue extension.

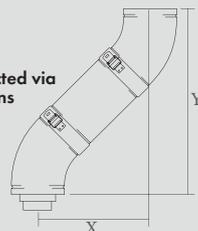
Offset elbows

45° elbows can be used with High Level kits to offset the flue.

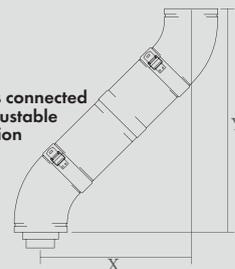
Elbows directly connected



Elbows connected via fixed extensions



Elbows connected via adjustable extension



Code	X	Y
ELB K21IRL	140	340
ELB K22IRL	160	385

Code	Extension	X	Y
ELB K21IRL	EXT225	300	500
	EXT450	455	665
	EXT950	810	1010
ELB K22IRL	EXT225	320	545
	EXT450	475	700
	EXT950	830	1055

Code	X	Y
ELB K21IRL	335-455	535-655
ELB K22IRL	355-475	580-700

Important
 High Level balanced flues can be extended to a maximum length of 10 metres using the extension kits illustrated above. Deduct one metre for each additional 45° elbow used (maximum 6 elbows). We recommend an additional wall bracket for every 1 metre of flue extension.

Important
 A terminal guard is required when the flue terminates less than 2 metres above outside ground level (not supplied as standard).

* Internal High Level balanced flue systems are compatible with all Grant boilers, with the exception of the external modules.

White System Vertical Balanced EZ-Fit flue kits

Vertical balanced flue kits share the same EZ-Fit boiler connections as our high level kits. The unique clamping system on the vertical balanced flue ensures easy assembly thereby reducing installation costs.

Flexible design

As with our high level kits it is now possible to create offsets in straight flue runs by using our 45° elbows and adjustable extension kits – increasing the versatility of this new range.

Maximum Vertical flue length

Vertical balanced flues can be extended to a maximum length of 10 metres on condensing boilers in straight run using the extension kits illustrated on Page 9. Deduct one metre for each additional 45° elbow used (maximum 4 elbows).

Dimensions

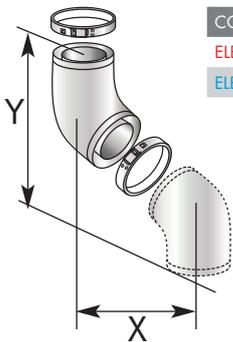
The dimensions shown are measured from the top of the boiler spigot, not the boiler case. The distance between the boiler flue spigot and the top of the casing should be taken into consideration (See boiler installation manual).

Section (A) is the starter piece for the flue system and push fits into the boiler connector supplied with the kit. Section (A) incorporates the air supply spigot and a combustion test point.

Sections (B) and (C) combine to form a telescopic length. Terminal section fits onto fixed extension (D).

For short flue heights section (D) may be omitted and the terminal section (E) may be fitted directly to section (C). The terminal section (E) overlaps section (C) by 50mm. Telescopic adjustment of the flue, if required, is still possible between sections (B and C).

Offset elbows



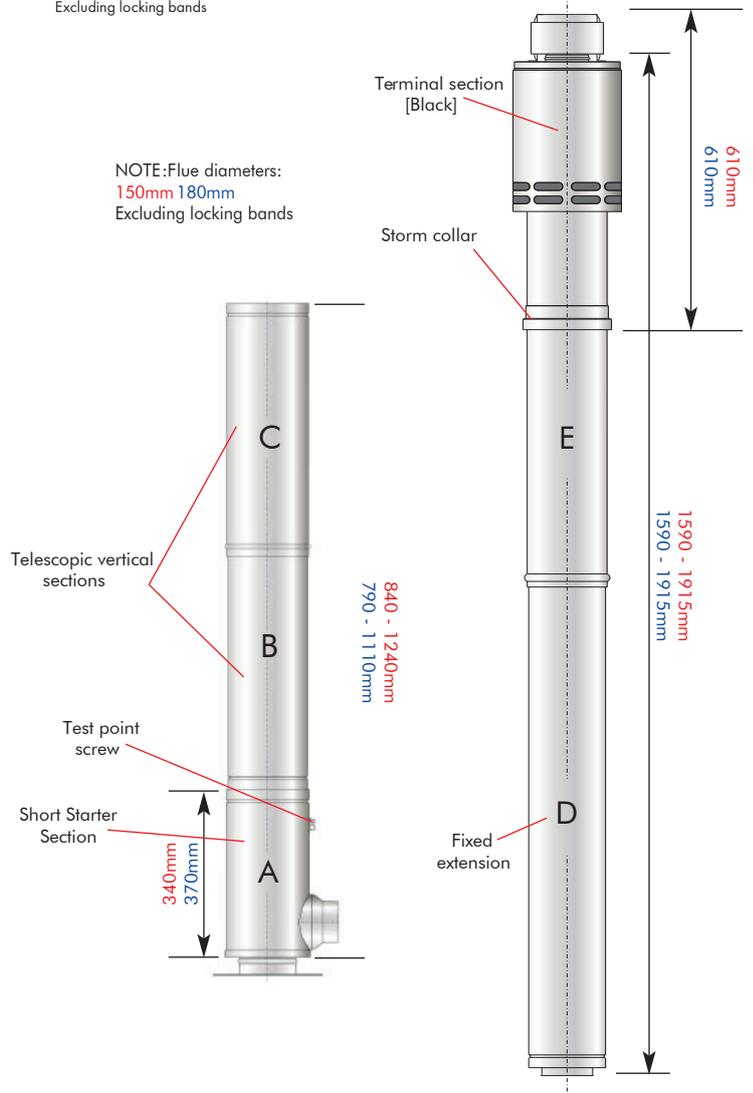
CODE	X	Y
ELBK2145/90IRL	140	340
ELBK2245/90IRL	160	385

45° elbows can be used with vertical kits to offset the flue. Extensions can be used between elbows.

Vertical flue kit (white powder coated)

VT K05 50/90IRL
VT K06 90/200IRL

Note: Flue diameter:
150mm 180mm
Excluding locking bands



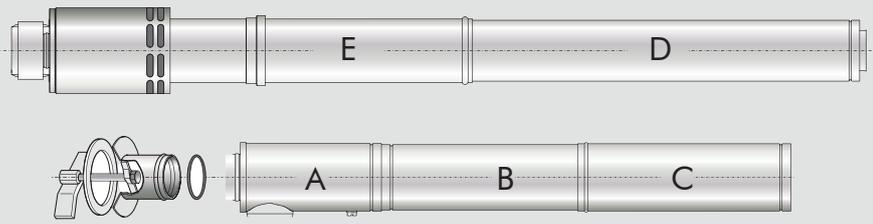
Contents of 3 metre balanced flue kit:

- Boiler connector A
- Vertical telescopic section B/C
- Fixed section 950mm D
- Terminal section E [inc. storm collar]
- Locking bands [not shown]
- Inner seals [red]
- Boiler connector [c/w clamp]
- Ceiling dress plate [not shown]
- Firestop spacers [not shown]
- Wall bracket
- Fitting Instructions

NOTE: For Boiler House models, air supply kit is supplied with boiler

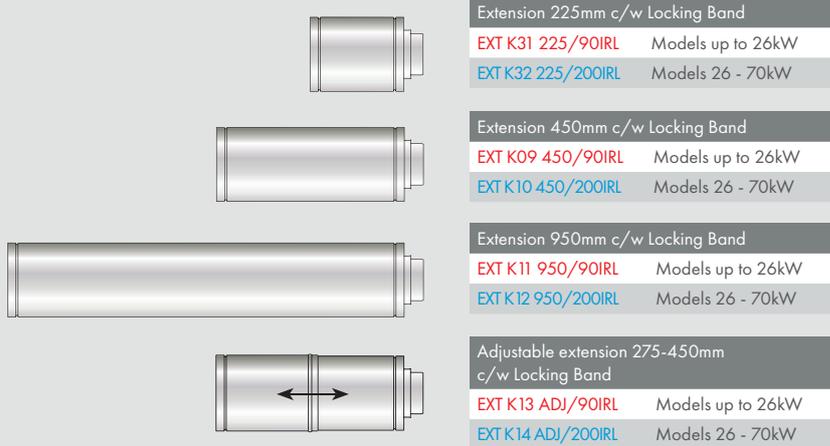
Note: Maximum length 10 metres on condensing boilers

Vertical balanced flue kits Internal



3 metre Vertical flue kit	
VT K05 50/90IRL	Models up to 26kW
VT K06 90/200IRL	Models 26 - 70kW

Vertical balanced flue extensions Internal



Extension 225mm c/w Locking Band

EXT K31 225/90IRL	Models up to 26kW
EXT K32 225/200IRL	Models 26 - 70kW

Extension 450mm c/w Locking Band

EXT K09 450/90IRL	Models up to 26kW
EXT K10 450/200IRL	Models 26 - 70kW

Extension 950mm c/w Locking Band

EXT K11 950/90IRL	Models up to 26kW
EXT K12 950/200IRL	Models 26 - 70kW

Adjustable extension 275-450mm c/w Locking Band

EXT K13 ADJ/90IRL	Models up to 26kW
EXT K14 ADJ/200IRL	Models 26 - 70kW

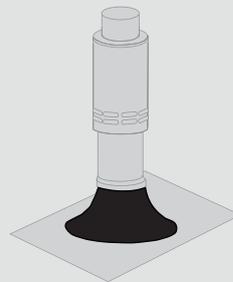
Important
Flue extensions cannot be cut. White system extensions are for High Level or Vertical use only and cannot be used with Yellow, Green or Orange system components.

Important
White enamel for internal use only

Vertical balanced flue accessories

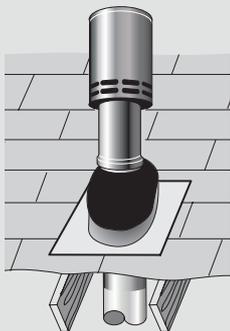


45° Elbow c/w Locking Band	
ELB K21 45/90IRL	Models up to 26kW
ELB K22 45/200IRL	Models 26 - 70kW

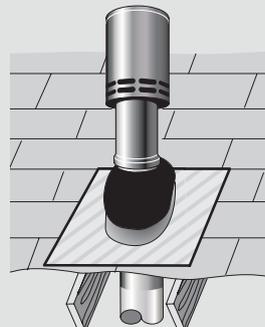


Flat roof flashing - Aluminium	
VT K27 F90IRL	Models up to 26kW
VT K28 F200IRL	Models 26 - 70kW

Highlighted section only



Pitched roof flashing - Aluminium	
VT MF 90/200IRL	Models up to 70kW



Pitched roof flashing - Lead	
VT K25 P90IRL	Models up to 26kW
VT K26 P200IRL	Models 26 - 70kW



50mm Wall Bracket	
BRK 29 90IRL	Models up to 26kW
BRK 30 200IRL	Models 26 - 70kW

High Level/Vertical External EZ-Fit flue kits 'Green System'

The Grant range of EZ-Fit Systems have now been extended to include 'external' high level and vertical options, which are fully compatible with most Grant boilers, including our condensing models. These new systems are supplied in a modular form, enabling most installations to be accommodated and are manufactured from high grade stainless steel.

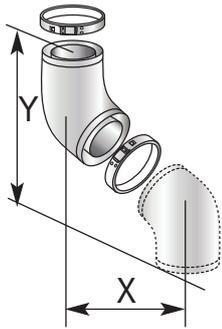
Starter flue kits (Plume diverter)

The starter flue kit enables all internal boilers to be connected to an 'external' high level or vertical flue system, whilst maintaining the room sealed operation of the boiler. It is even possible to convert an existing EZ-Fit low level balanced flue kit to an external high level or vertical arrangement without any additional building work. This is particularly useful when plumbing from a low level flue terminal is a nuisance.

Starter Elbow

The Starter Elbow converts any of Grant's external modules or module combis to high level or vertical conventional flue operation. The stainless steel flue components are fully insulated, have 'O' ring seals and locking bands, ensuring a rigid construction every time.

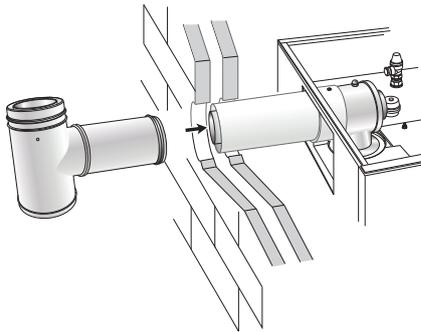
Offset elbows



Code	X	Y
GE45/90IRL	126	304
GE45/200IRL	142	343

Low Level starter kits

Standard kit - 370 to 550mm 370 to 550mm



45° elbows can be used with high level flues to create off-sets. Extensions can be used between elbows.

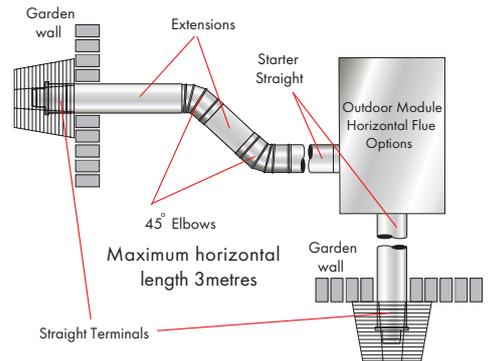
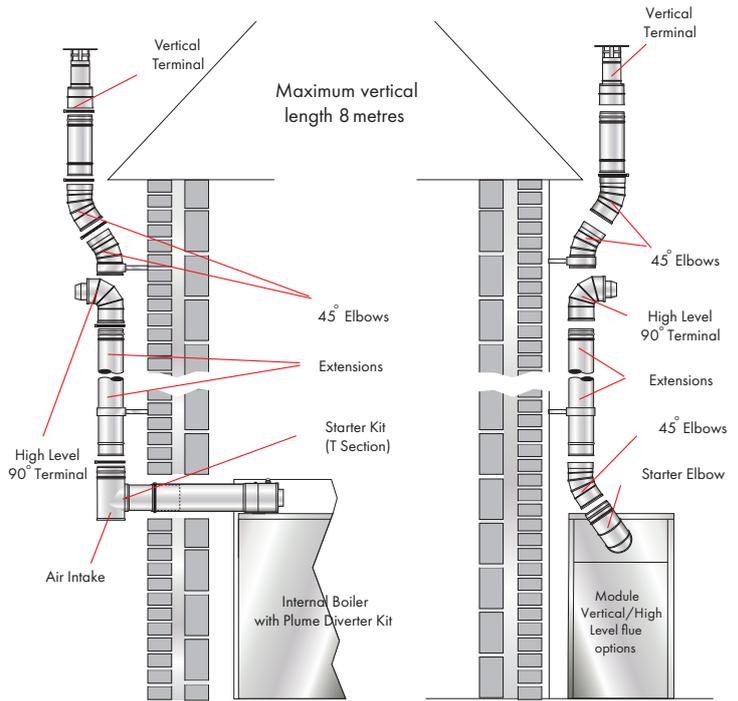
Contents of Low Level starter kit:

- Boiler connector section
- Tee section
- Side outlet cover trim
- Snorkel clamp (not shown)
- Dress plate
- Fixing clamp and gasket
- Lubricant (not shown)

External high level flue hole cutting dimensions			
Model	Dimensions (mm)		
	A	B	C
Vortex Utility & Boiler House 50/90 (15/26)	768	127	127
Vortex Utility & Boiler House 90/120 (26/36 & 36/46)	780	162	162
Vortex Kitchen models 155-240 (46/70)	1105	115	162
Euroflame Condensing Kitchen & Boiler House 50/90 (15/26)	768	115	127
Euroflame Condensing Kitchen & Boiler House 90/120 (26/36)	780	115	162

Note: Maximum vertical length 10 metres

External Flue Systems

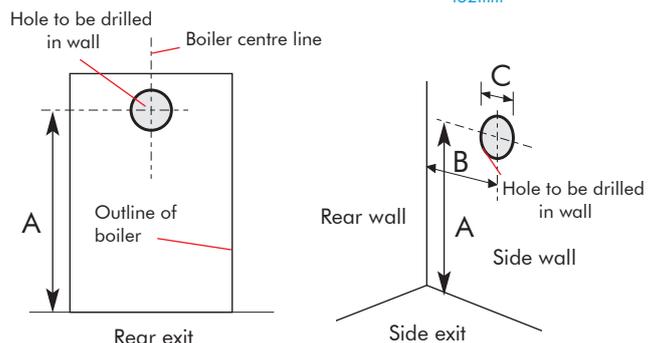


Note:

Dimension 'B' is given with the boiler pushed back against the rear wall. Any clearances must be added to 'B'

Note: Flue diameters:

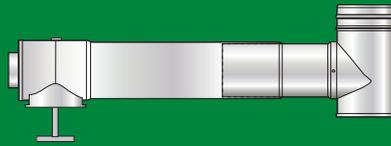
123mm
152mm



Note:

Core drill sizes - Models up to 26kW (90,000Btu/h) 127mm
Remaining models from 26 to 70kW (90-240,000Btu/h) 162mm

Starter flue kit high level/vertical external



Standard flue kit	
GK90IRL	Models up to 26kW
GK200IRL	Models 26 - 70kW

Important
 Starter flue kits can be extended horizontally using extensions or elbows from the Low Level balanced flue, Yellow system only. See page 4.

Starter connectors outdoor module only - high level/vertical external

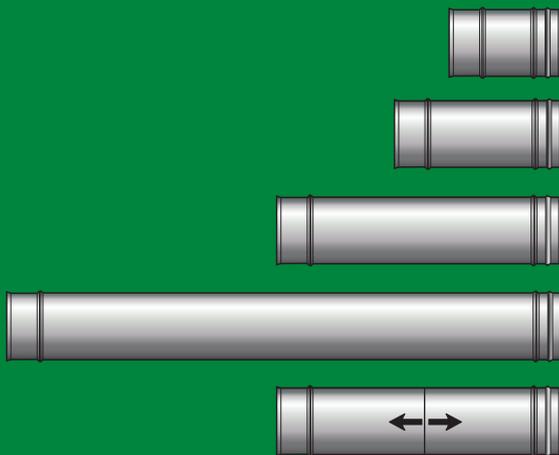


Outdoor Module Starter Straight	
GKM90CIRL	Models up to 26kW*
GKM200CIRL	Models 26 - 70kW*



Outdoor Module Starter Elbow	
GKM90IRL	Models up to 26kW*
GKM200IRL	Models 26 - 70kW*

Flue extensions high level/vertical stainless steel (double skin)



Extension 150mm c/w locking band	
GX150/90IRL	Models up to 26kW*
GX150/200IRL	Models 26 - 70kW*

Extension 250mm c/w locking band	
GX250/90IRL	Models up to 26kW*
GX250/200IRL	Models 26 - 70kW*

Extension 450mm c/w locking band	
GX450/90IRL	Models up to 26kW*
GX450/200IRL	Models 26 - 70kW*

Extension 950mm c/w locking band	
GX950/90IRL	Models up to 26kW*
GX950/200IRL	Models 26 - 70kW*

Adjustable extension 195-270mm c/w locking band	
GXA250/90IRL	Models up to 26kW*
GXA250/200IRL	Models 26 - 70kW*

Important
 Flue extensions cannot be cut. Green system extensions are for horizontal or vertical use with conventional flue systems only and cannot be used with Yellow or White balanced flue components.

Terminals stainless steel



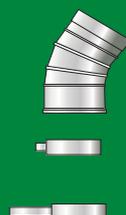
High Level 90° terminal	
GTH90IRL	Models up to 26kW*
GTH200IRL	Models 26 - 70kW*

Vertical terminal	
GTV90IRL	Models up to 26kW*
GTV200IRL	Models 26 - 70kW*

Straight terminal only	
GTL90IRL	Models up to 26kW*
GTL200IRL	Models 26 - 70kW*

Important
 Extension lengths given are effective lengths i.e. when fitted in a flue system.

Accessories stainless steel



45° elbow c/w locking band	
GE45/90IRL	Models up to 26kW*
GE45/200IRL	Models 26 - 70kW*

Wall bracket	
GWB90IRL	Models up to 26kW*
GWB200IRL	Models 26 - 70kW*

Extended wall bracket	
GEB90IRL	Models up to 26kW*
GEB200IRL	Models 26 - 70kW*

Important
 Vertical flue lengths of up to 8 metres can be achieved utilising extensions. 45° elbows can also be accommodated within this length (maximum 2 elbows).

* For Euroflame Condensing 90/120 Module use Red code versions

Conventional flues for Grant condensing boilers Orange System

As many older oil fired boilers are traditionally connected to conventional flue systems, updating to a modern condensing boiler often results in the appliance needing to be relocated.

The Grant EZ-Fit conventional flue system (Orange System) has been specifically designed to enable the existing chimney to be re-used and the appliance retained in its original position.

EZ-Flexi packs

Grant has developed a range of EZ-Fit flexi packs containing all the components required to utilise the existing chimney, including a smooth bore stainless steel flue liner, terminal, clamp plate and connectors for both the flex and boiler. All that is required to complete the installation is extension pipes or elbows from our Grant Orange system accessories range.

Plumbing

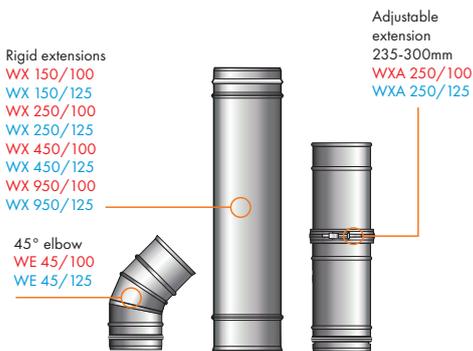
Condensing boilers operate at extremely high efficiencies with cool flue gas temperatures, resulting in a plume of vapour being visible at the flue terminal. This plumbing (steam) is a normal condition of condensing boilers and indicates that the appliance is working efficiently. As an alternative to a Low Level, High Level, or Vertical balanced flue kit, utilising the original chimney with a Grant conventional Flexi-pack moves the plume of vapour above roof level.

Combustion air and ventilation

An adequate permanent air supply is required for the safe operation of all open-flued (conventional flued) oil-fired appliances. This must be in accordance with the requirements of BS 5410: Part 1: 1997.

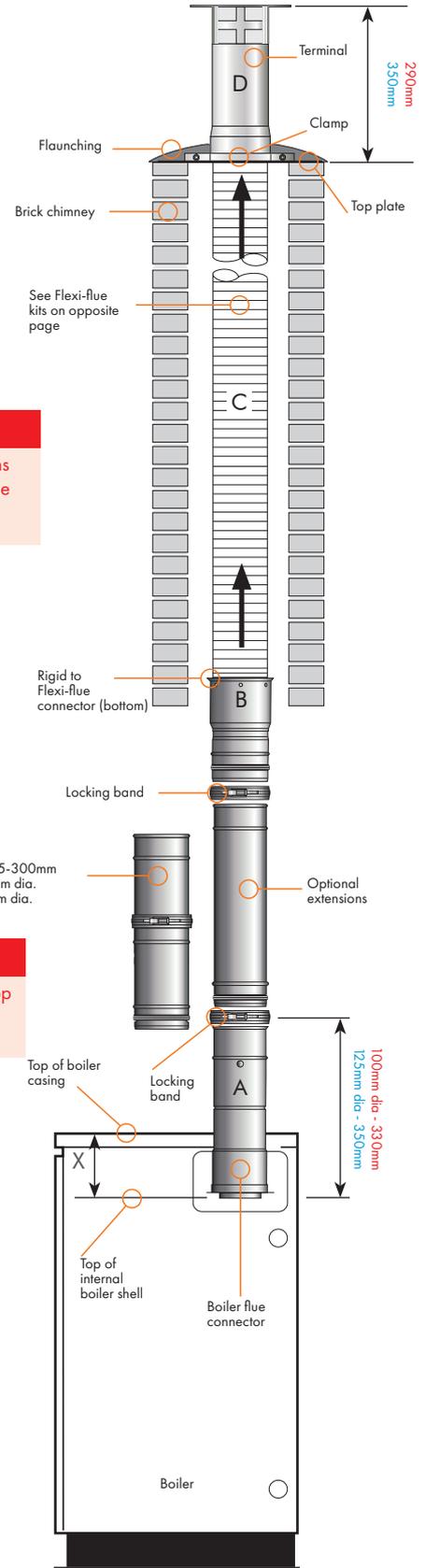
Full details of the ventilation requirements of Grant boilers are given in the instructions provided with every appliance.

Optional extras



Note: Maximum vertical height from top of boiler to terminal 19 metres

Rigid to Flexible Conventional flue system



Important
 For optional extensions and elbows - see page 13.

Important
 Allow 600mm from top of boiler before first elbow.

Smooth Bore Flexi-flue kits stainless steel (To suit Grant Condensing boilers only)



6 metre flexible flue kit	
GF KIT 6/100IRL	Models up to 46kW
GF KIT 6/125IRL	Models 46 - 70kW

8 metre flexible flue kit	
GF KIT 8/100IRL	Models up to 46kW
GF KIT 8/125IRL	Models 46 - 70kW

10 metre flexible flue kit	
GF KIT 10/100IRL	Models up to 46kW
GF KIT 10/125IRL	Models over 46kW

11 metre flexible flue kit	
GF KIT 11/100IRL	Models up to 46kW
GF KIT 11/125IRL	Models 46 - 70kW

14 metre flexible flue kit	
GF KIT 14/100IRL	Models up to 46kW
GF KIT 14/125IRL	Models 46 - 70kW

Flue extensions white powder coated (single skin)

	<table border="1"> <thead> <tr> <th colspan="2">Extension 150mm c/w locking band</th> </tr> </thead> <tbody> <tr> <td>WX 150/100IRL</td> <td>Models up to 46kW</td> </tr> <tr> <td>WX 150/125IRL*</td> <td>Models 46 - 70kW</td> </tr> </tbody> </table>	Extension 150mm c/w locking band		WX 150/100IRL	Models up to 46kW	WX 150/125IRL*	Models 46 - 70kW
Extension 150mm c/w locking band							
WX 150/100IRL	Models up to 46kW						
WX 150/125IRL*	Models 46 - 70kW						
	<table border="1"> <thead> <tr> <th colspan="2">Extension 250mm c/w locking band</th> </tr> </thead> <tbody> <tr> <td>WX 250/100IRL</td> <td>Models up to 46kW</td> </tr> <tr> <td>WX 250/125IRL*</td> <td>Models 46 - 70kW</td> </tr> </tbody> </table>	Extension 250mm c/w locking band		WX 250/100IRL	Models up to 46kW	WX 250/125IRL*	Models 46 - 70kW
Extension 250mm c/w locking band							
WX 250/100IRL	Models up to 46kW						
WX 250/125IRL*	Models 46 - 70kW						
	<table border="1"> <thead> <tr> <th colspan="2">Extension 450mm c/w locking band</th> </tr> </thead> <tbody> <tr> <td>WX 450/100IRL</td> <td>Models up to 46kW</td> </tr> <tr> <td>WX 450/125IRL*</td> <td>Models 46 - 70kW</td> </tr> </tbody> </table>	Extension 450mm c/w locking band		WX 450/100IRL	Models up to 46kW	WX 450/125IRL*	Models 46 - 70kW
Extension 450mm c/w locking band							
WX 450/100IRL	Models up to 46kW						
WX 450/125IRL*	Models 46 - 70kW						
	<table border="1"> <thead> <tr> <th colspan="2">Extension 950mm c/w locking band</th> </tr> </thead> <tbody> <tr> <td>WX 950/100IRL</td> <td>Models up to 46kW</td> </tr> <tr> <td>WX 950/125IRL*</td> <td>Models 46 - 70kW</td> </tr> </tbody> </table>	Extension 950mm c/w locking band		WX 950/100IRL	Models up to 46kW	WX 950/125IRL*	Models 46 - 70kW
Extension 950mm c/w locking band							
WX 950/100IRL	Models up to 46kW						
WX 950/125IRL*	Models 46 - 70kW						
	<table border="1"> <thead> <tr> <th colspan="2">Adjustable extension 235-300mm c/w locking band</th> </tr> </thead> <tbody> <tr> <td>WXA250/100IRL</td> <td>Models up to 46kW</td> </tr> <tr> <td>WXA250/125IRL*</td> <td>Models 46 - 70kW</td> </tr> </tbody> </table>	Adjustable extension 235-300mm c/w locking band		WXA250/100IRL	Models up to 46kW	WXA250/125IRL*	Models 46 - 70kW
Adjustable extension 235-300mm c/w locking band							
WXA250/100IRL	Models up to 46kW						
WXA250/125IRL*	Models 46 - 70kW						

Important

Flue extensions cannot be cut. Orange system extensions are for vertical use only and cannot be used with Yellow or White system components.

Important

Extension lengths given are effective lengths i.e. when fitted in a flue system.

Accessories white powder coated



45° elbow c/w locking band	
WE 45/100IRL*	Models up to 46kW
WE 45/125IRL*	Models 46 - 70kW

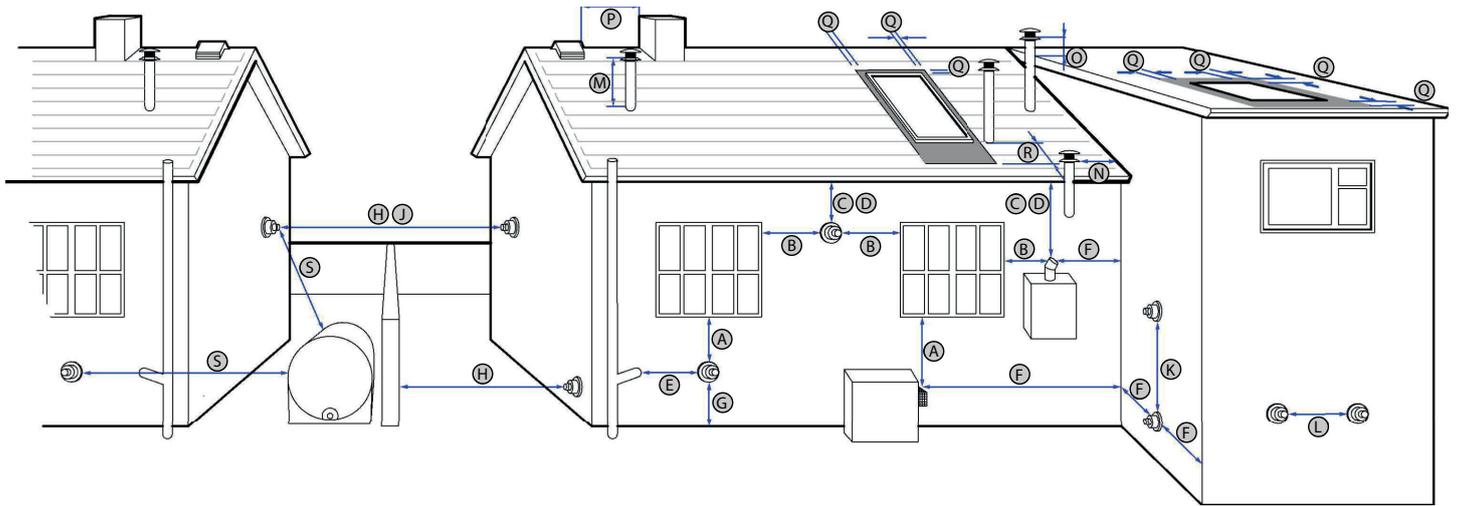
Important

Wherever possible incorporate one adjustable section.

Important

Components from the orange and green system can be used to construct internal high level, or vertical conventional flue discharge kits using the flue adaptor kit CFA 15/70 IRL.

Clearances



Ref	Location of outlet	Pressure Jet (mm)	Condensing (mm)* **
A	Directly below an opening, air brick opening, opening window, etc.	600	1000**
B	Horizontally to an opening, air brick opening, opening window, etc.	600	1000**
C	Below a gutter, eaves or balcony with protection	75*	1000**
D	Below a gutter, eaves or balcony without protection	600	1000**
E	From vertical sanitary pipe work	300	
F	From an internal or external corner	300	
G	Above ground or balcony level	300	
H	From a surface or boundary facing the terminal	600	2500**
J	From a terminal facing the terminal	1200	
K	Vertically from a terminal on the same wall	1500	
L	Horizontally from a terminal on the same wall	750	
M	Above the highest point of an intersection with the roof	600	
N	From a vertical structure to the side of the terminal	750	
O	Above a vertical structure less than 750 mm from the side of the terminal	600	
P	From a ridge terminal to a vertical structure on the roof	1500	
Q	Above or to the side of any opening on a flat or sloping roof	300	
R	Below any opening on a sloping roof	1000	
S	From oil storage tank (Class 1)	1800***	

Note:

* A heat shield at least 750mm wide must be fitted to provide protection of combustible material

** Clearances required by BS 5410-1:2014 to alleviate the effect of plume nuisance. If a risk assessment shows that there will be no impact from pluming, then the 'pressure jet' figure could apply - seek confirmation from Local Authority Building Control.

Note: This column is only a recommendation.

*** In ROI, the appliance must be 1800mm from the oil tank.

- Appliances burning class D fuel have additional restrictions. Refer to BS 5410-1:2014.
- Vertical structure in N, O and P includes tank or lift rooms, parapets, dormers, etc.
- Terminating positions A to L are only permitted for appliances that have been approved for low level flue discharge when tested in accordance with BS EN 303-1, OFS A100 or OFS A101.
- Terminating positions should be at least 1.8 metres from an oil storage tank (Class 1) unless a wall with at least 30 minutes fire resistance and extending 300 mm higher and wider than the tank is provided between the tank and the terminating position.
- Where a flue is terminated less than 600 mm away from a projection above it and the projection consists of plastics or has a combustible or painted surface, then a heat shield of at least 750 mm wide should be fitted to protect these surfaces.
- If the lowest part of the terminal is less than 2 metres above the ground, balcony, flat roof or other place to which any person has access, the terminal should be protected by a guard.
- Notwithstanding the dimensions given above, a terminal should not be sited closer than 300 mm to combustible material. In the case of a thatched roof, double this separation distance should be provided. It is also advisable to treat the thatch with a fire retardant material and close wire in the immediate vicinity of the flue.
- A flue or chimney should not pass through the roof within the shaded area delineated by dimensions Q and R.
- Where protection is provided for plastics components, such as guttering, this should be to the standard specified by the manufacturer of the plastics components.
- Terminals must not be sited under car ports.
- Terminals at low levels (terminals under 2.1 metres) have more restrictive recommendations and should not be positioned near public foot ways, frequently used access routes, car parking spaces less than 2.5 metres from the terminal or patio's (hard surface area).
- Further guidance can be obtained from BS 5410-1:2014, OFTEC Book 4 (Installation) and Approved Document J.
- Grant flue products are fully compliant with the CE (Communauté Européenne/European Community) standards having undergone rigorous product testing.



Grant Engineering (IRL) ULC

W: www.grant.eu

E: info@grant.ie

T: +353 (057) 912 0089

