

FLUE OPTIONS AND FLUE INSTALLATION GUIDE FOR TUSCAN BOILERS

Domestic Oil Fired Boilers Designed & Made in Britain



www.hounsfieldboilers.co.uk



f У 🞯 G+ 🛗

INTRODUCTION

Our balanced flue twin wall system is common to all boiler models, making selection of components easy whether you're installing a Kitchen, External or a wall mounted boiler, "one system fits all".

For open vented, conventional chimney systems we have a range of single wall rigid flue components combined with corrugated flexible chimney liner. The flexible liner has a secondary inner smooth skin for easy drain down of condensates it also prevents condensate penetrating the corrugated liner.

Components are manufactured using 316L stainless steel with a polished finish, seams are laser welded to provide an accurate and unobtrusive seam. Flue joints are "push-fit" utilising high grade Viton seals; they will not degrade like some.

The following pages detail some of the more typical installation options; if you're unable to find a flue system or option you require, need a bespoke system, or a even a flue painted a specific colour to accommodate listed building requirements, we're here to assist.

CONTENTS

Page	Description
ruge	Description

- 2. Boiler and flue configuration
- 2. Flue assembly instructions
- 3. Low level horizontal flues
- 4. High level horizontal flues
- 5. Vertical flues
- 6. Kitchen Model plume kit
- 7. External Boiler flue options
- 10. Wall mounted boiler flue options
- 12. Conventional open flue options
- 13. Flue termination clearance requirements

BOILER AND FLUE CONFIGURATION





1. LOW LEVEL REAR OUTLET FLUE. KIT PT. NO. FL80LL

2. LOW LEVEL SIDE OUTLET FLUE. KIT PT.NO. FL80LLSO



3. HIGH LEVEL ADAPTOR FOR VERTICAL AND HIGH LEVEL FLUES ON KITCHEN AND EXTERNAL MODELS. KIT PT. NOS. FL80HL & FL80VL

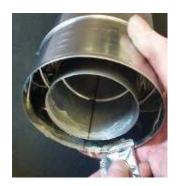


4. CONVENTIONAL FLUE ADAPTOR FOR SINGLE WALL OPEN FLUE. KIT PT.NO. FL100CF

FLUE ASSEMBLY INSTRUCTIONS



5. FLUE TRIM - APPLY GREASE TO RUBBER SEAL SLIDE TRIM INTO POSITION.



6. APPLY A GENEROUS AMOUNT OF GREASE TO FEMALE SOCKETS TO AVOID DAMAGING SEALS.

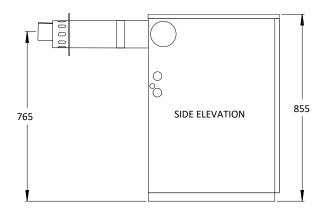


7. LOCKING BAND ASSEMBLY - FIT THE LARGER DIAMETER OF THE BAND TO THE SOCKET / FEMALE END.



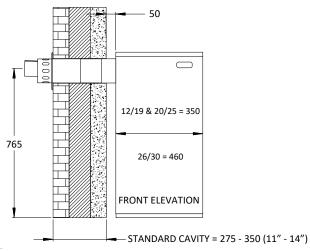
8. HIGH LEVEL FLUE INSTALLATION, CUT MICRO JOINTS, TWIST BLANKING PANEL TO REMOVE. CUT ROCKWOOL INSULATION TO SUIT.

LOW LEVEL HORIZONTAL - REAR OUTLET KIT



REAR OUTLET - WALL THICKNESS RANGE			
STANDARD KIT 275 - 450 MM			
WITH A TELESCOPIC EXTENSION	450 - 750 MM		

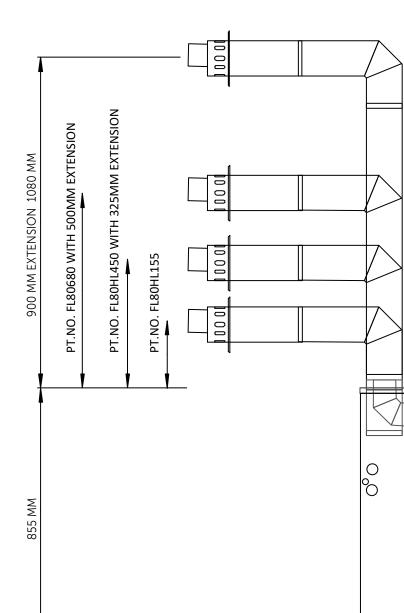
LOW LEVEL HORIZONTAL - SIDE OUTLET KIT



SIDE OUTLET - WALL THICKNESS RANGE			
WITH 50 MM TO THE SIDE OF CASING			
STANDARD	12/19 & 20/25 BOILERS	280 - 375 MM	
KIT	26/30 BOILER	280 - 325 MM	

PT. NO. FL80	PT. NO. FL80LL, LOW LEVEL HORIZONTAL KIT COMPONENTS:			
PT.NO.	DESCRIPTION	IMAGE	KIT INCLUDES	
FL80LLTERM	LOW LEVEL - REAR OUTLET		1	
FL80TRIM	FLUE TRIM PLATE	0	1	
PT. NO. FL80L	LSO, LOW LEVEL HORIZONTAL SIDE OUTI	LET COMPONENTS:		
PT.NO.	DESCRIPTION	IMAGE	KIT INCLUDES	
FL80LLSOT	LOW LEVEL - SIDE OUTLET	and the second s	1	
FL80TRIM	FLUE TRIM PLATE	0	1	
OPTIONAL CO	MPONENTS			
FL125FTG	KITCHEN FLUE GUARD KIT			
FL80X900	900 MM T.W. EXTENSION			
FL80X500	500 MM T.W. EXTENSION			
FL80X325	325 MM T.W. EXTENSION			
FL80TEL	50-250 TELESCOPIC T.W. EXTENSION			
FL125LB	125 MM LOCKING BAND	Q		

HIGH LEVEL HORIZONTAL PT. NO. FL80HL (REAR OR SIDE OUTLET)

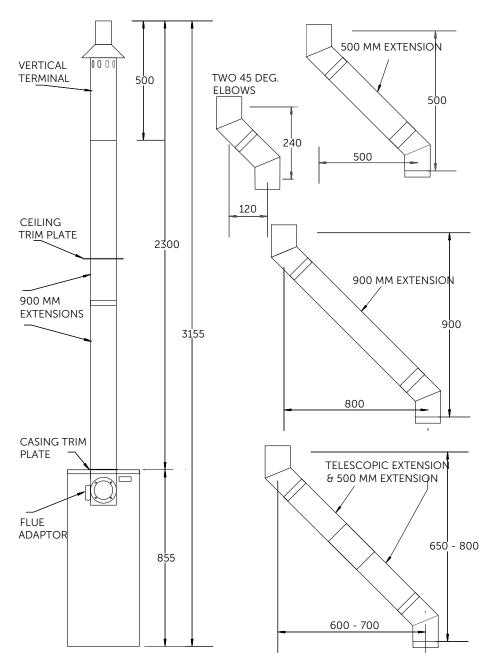


PT.NO.	DESCRIPTION	IMAGE	STD. KIT INCLUDES
FL80HLT	HIGH LEVEL TERMINAL	e	1
FL80HLADA	HIGH LEVEL ADAPTOR	-	1
FL80X900	900 MM T.W. EXTENSION		1
PW20010	WHITE CASING TRIM PLATE	9	1
FL80TRIM	FLUE TRIM PLATE	0	1
OPTIONAL CO	MPONENTS		
FL80X900	900 MM T.W. EXTENSION		
FL80X500	500 MM T.W. EXTENSION		
FL80X325	325 MM T.W. EXTENSION		
FL80TEL	50-250 TELESCOPIC T.W. EXTENSION		
FL125LB	125 MM LOCKING BAND	Q	
FL125CL	125 MM PIPE SUPPORT KIT	Q	
		·	

WALL THICKNESS RANGE				
REAR OUTLE	Т	SIDE OUTLET ORIENTATION		
STANDARD KIT	280 - 355 MM	WITH A TELESCOPIC EXTENSION AND 50 MM CLEARANCE TO THE BOILER SIDE.		
WITH A TELESCOPIC EXTEN- SION	450 - 625 MM	280 MM - 450 MM.		

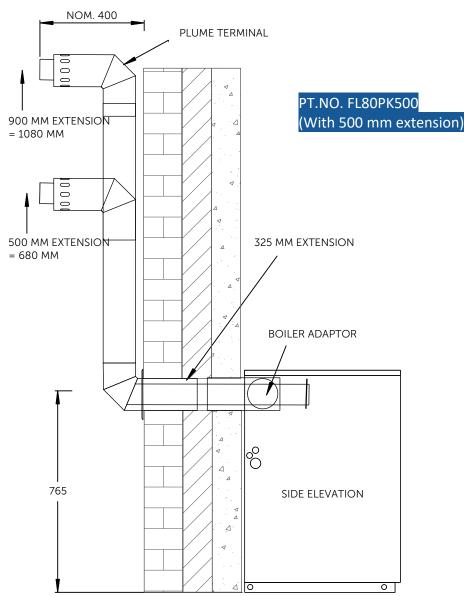
0

VERTICAL BALANCED FLUE PT. NO. FL80V



PT. NO.	DESCRIPTION	IMAGE	STD. KIT INCLUDES
FL80VT	VERTICAL TERMINAL		1
FL80HLADA	HIGH LEVEL ADAPTOR	-	1
FL80X900	900 MM T.W. EXTENSION		2
PW20010	WHITE CASING TRIM PLATE	1	1
FL125LB	125 MM LOCKING BAND	Q	3
FL80TRIM	FLUE TRIM PLATE	0	1
OPTIONAL CO	MPONENTS		
FL80X900	900 MM T.W. EXTENSION		
FL80X500	500 MM T.W. EXTENSION		
FL80X325	325 MM T.W. EXTENSION	100	
FL80TEL	50-250 TELESCOPIC T.W EXTENSION		
FL80-45ELB	45 DEGREE ELBOW	E	
FL125FPIT	PITCHED ROOF FLASHING	۲	
FL125FLA	FLAT ROOF FLASHING KIT		
FL125LB	125 MM LOCKING BAND	Q	
FL125CL	125 MM PIPE SUPPORT KIT	Q	

KITCHEN MODEL - BALANCED FLUE PLUME KIT PT.NO. FL80PK900

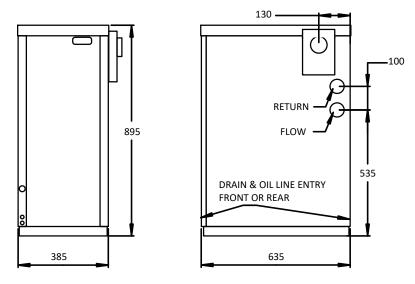


STANDARD KIT = 275 - 400 MM WALL THICKNESS

PT. NO.	DESCRIPTION	IMAGE	KIT
FL80PT	PLUME TERMINAL		1
FL80LLADA	BOILER ADAPTOR		1
FL80X900	900 MM T.W. EXTENSION		1
FL80X325	325 MM T.W. EXTENSION		1
FL80-90ELB	90 DEGREE ELBOW	C	1
FL125LB	125 MM LOCKING BAND	0	3
FL125CL	125 MM PIPE SUPPORT KIT	0	2
FL80TRIM	FLUE TRIM PLATE	0	1
OPTIONAL CO	MPONENTS		
FL80X900	900 MM T.W. EXTENSION		
FL80X500	500 MM T.W EXTENSION		
FL80X325	325 MM T.W EXTENSION		
FL80TEL	50-250 TELESCOPIC T.W EXTENSION		
FL80-45ELB	45 DEGREE ELBOW	E	
FL80-90ELB	90 DEGREE ELBOW	<u>e</u>	
FL80VT	VERTICAL TERMINAL	aar (1995)	
FL125LB	125 MM LOCKING BAND	Q	
FL125CL	125 MM PIPE SUPPORT KIT	ot	

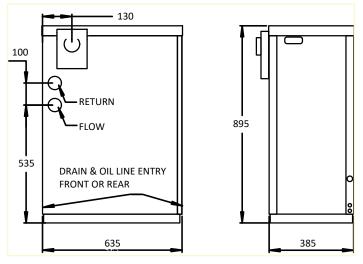
Page 6

EXTERNAL BOILER - LOW LEVEL FLUE OPTIONS

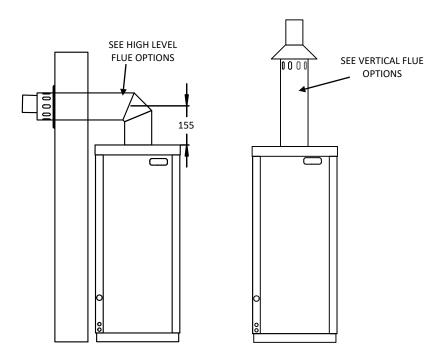


RIGHT SIDE LOW LEVEL FLUE

IMPORTANT: Boilers are supplied with right side flue as shown above, (as brochure Photograph). If left side flue is required please specify when ordering.



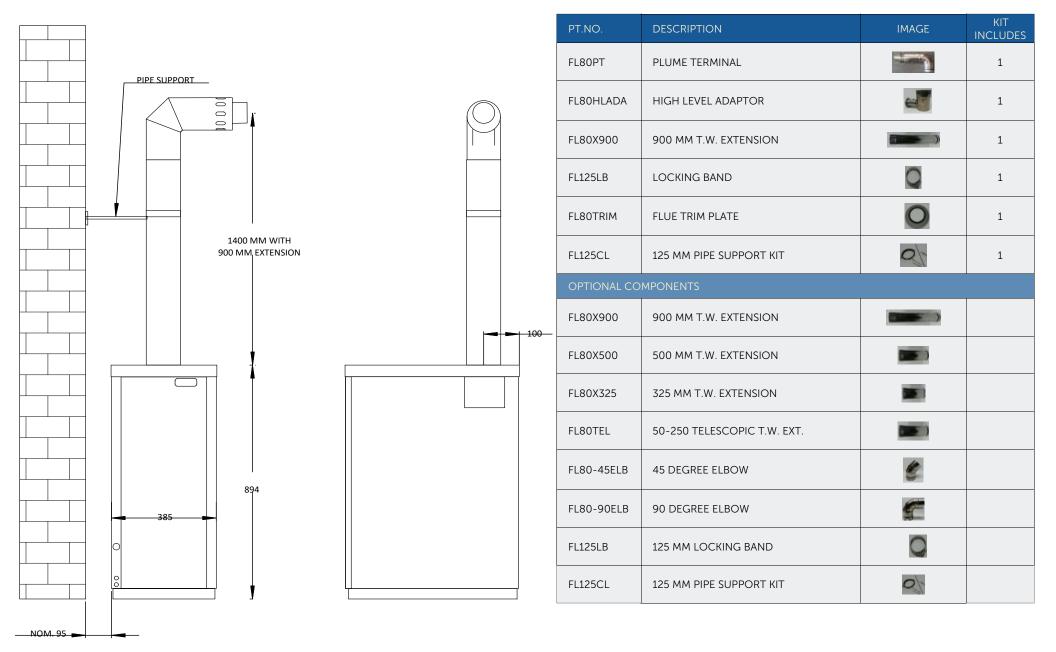




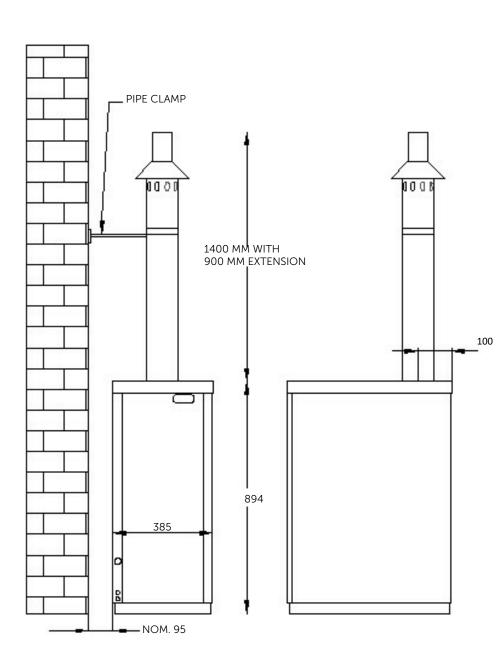
FLUE OPTIONS

The external boiler with top outlet flue option, ideally suited for installation in out-buildings. Flue options are as Kitchen Model Boilers.

EXTERNAL BOILER - HIGH LEVEL HORIZONTAL BALANCED FLUE PLUME KIT PT.NO. FL80EV Page 8

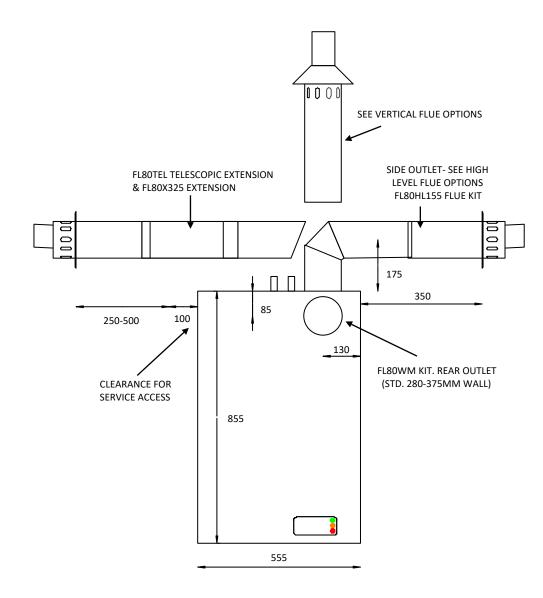


EXTERNAL BOILER - VERTICAL BALANCED FLUE PLUME KIT PT.NO. FL80EH



PT.NO.	DESCRIPTION	IMAGE	KIT INCLUDES
FL80VT	VERTICAL TERMINAL	-	1
FL80HLADA	HIGH LEVEL ADAPTOR	4	1
FL80X900	900 MM T.W. EXTENSION		1
FL125LB	125 MM LOCKING BAND	0	1
FL80TRIM	FLUE TRIM PLATE	0	1
FL125CL	125 MM PIPE SUPPORT KIT	Q	1
OPTIONAL CO	MPONENTS		
FL80X900	900 MM T.W. EXTENSION		
FL80X500	500 MM T.W. EXTENSION		
FL80X325	325 MM T.W. EXTENSION		
FL80TEL	50-250 TELESCOPIC T.W. EXTENSION		
FL80-45ELB	45 DEGREE ELBOW	L.	
FL125FPIT	PITCHED ROOF FLASHING	۲	
FL125FLA	FLAT ROOF FLASHING KIT		
FL125LB	125 MM LOCKING BAND	Q	
FL125CL	125 MM PIPE SUPPORT KIT	Q	

INTERNAL WALL MOUNTED BOILER FLUE OPTIONS



PT. NO. FL80WM, REAR OUTLET HORIZONTAL KIT COMPONENTS:			
PT.NO.	DESCRIPTION	IMAGE	KIT INCLUDES
FL80LLSO	LOW LEVEL - REAR OUTLET	Mark and a second secon	1
FL80TRIM	FLUE TRIM PLATE	0	1
PT. NO. FL80H	IL155		
PT.NO.	DESCRIPTION	IMAGE	KIT INCLUDES
FL80HLT	HIGH LEVEL TERMINAL		1
FL80HLADA	HIGH LEVEL ADAPTOR	1	1
FL80TRIM	FLUE TRIM PLATE	0	1
OPTIONAL COMPONENTS			
FL125LB	125 MM LOCKING BAND	0	
FL80X900	900 MM T.W. EXTENSION		
FL80X500	500 MM T.W. EXTENSION		
FL80X325	325 MM T.W. EXTENSION		
FL80TEL	50-250 TELESCOPIC T.W. EXTENSION		

CONVENTIONAL OPEN FLUE OPTIONS

IMPORTANT:

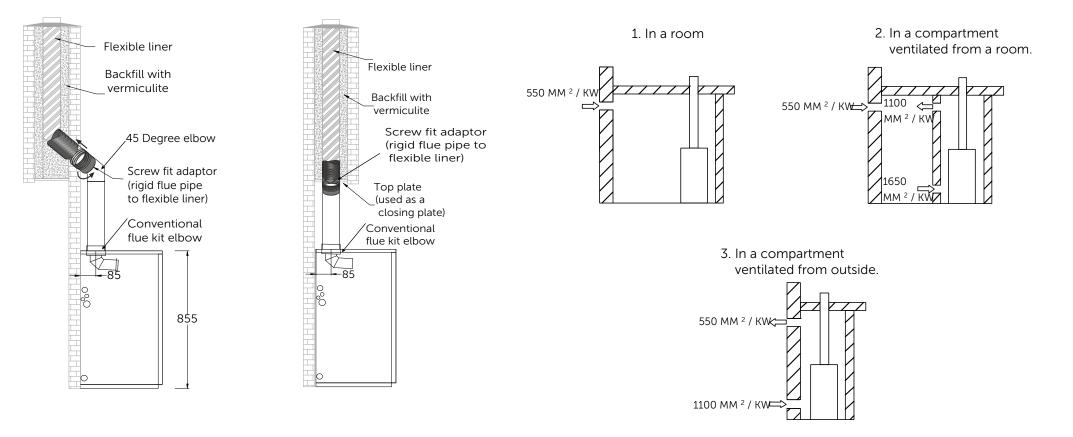
It is essential to upgrade an existing flue system when replacing an old boiler; flue temperatures on a modern boiler are considerably lower and will not heat the chimney, as a result condensation will form and may penetrate brickwork or drain back into the boiler causing internal corrosion (on a non-condensing boiler).

Existing flexible corrugated liners must also be replaced; they will not be twin walled as detailed in the diagram below, condensation will penetrate the liner.

TYPICAL INSTALLATIONS

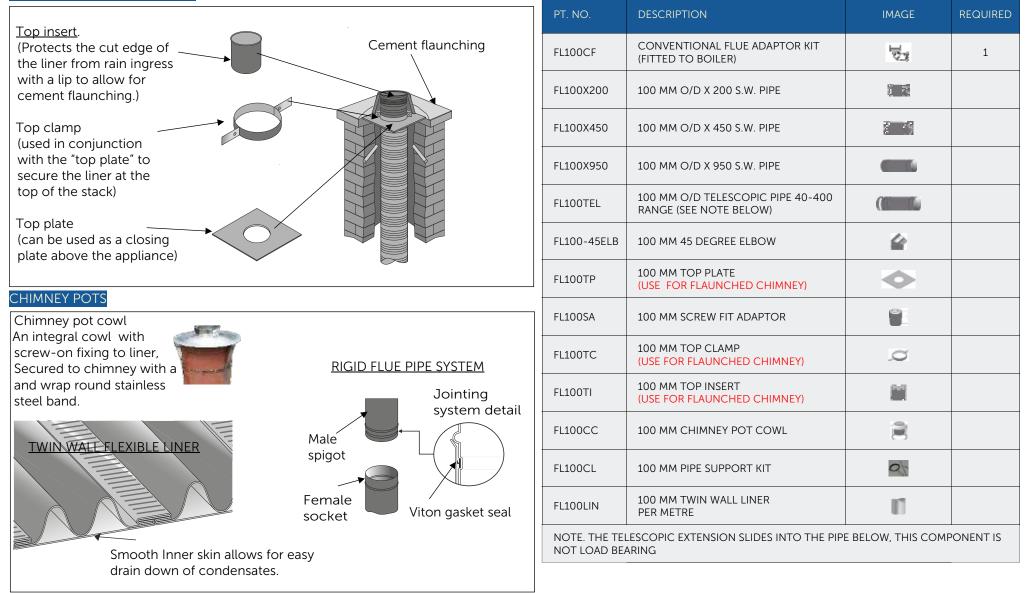
COMBUSTION AND VENTILATION AIR SUPPLY

Air supply requirements for combustion and ventilation , consideration must also be given to air supply required for extractor fans.

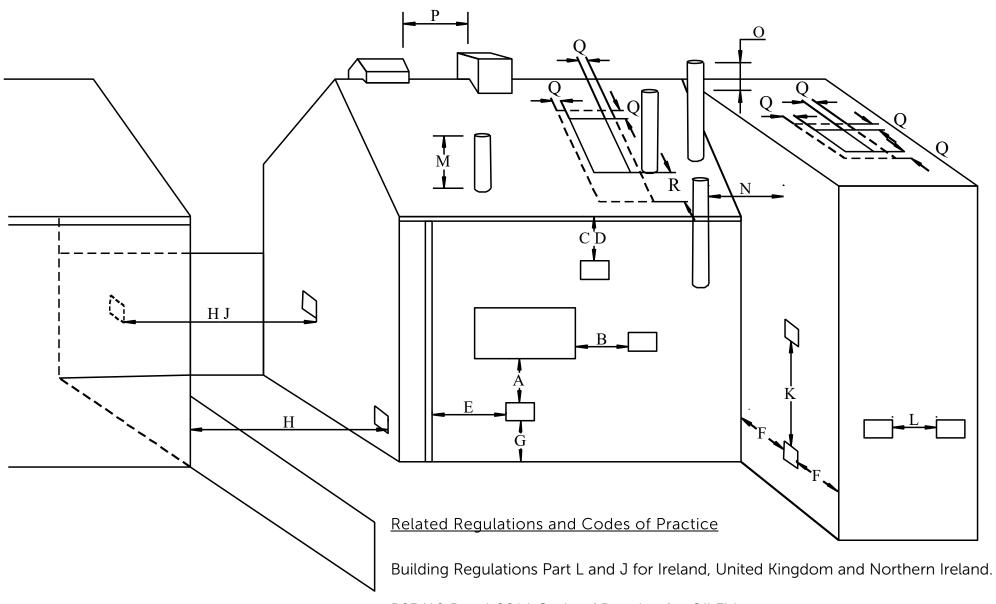


CONVENTIONAL OPEN FLUE OPTIONS

FLAUNCHED CHIMNEY STACK



FLUE TERMINATION CLEARANCE REQUIREMENTS



BS5410 Part 1 2014 Code of Practice for Oil Firing.

Dimension	Terminal position	Building Regs. Doc J	Code of Practice BS5410 2014
		Mandatory	Advisory
А	Directly below an opening, air brick, window etc.	600	1000
В	Horizontally to an opening, air brick, window etc.	600	1000
С	Below a gutter, eaves or balcony with protection	75	1000
D	Below a gutter or balcony without protection	600	1000
E	From vertical sanitary pipe work	3	00
F	From an internal or external corner	300	
G	Above ground or balcony level	3	00
Н	From a surface or boundary facing a terminal	600	2500
J	From a terminal facing the terminal	12	200
К	Vertically from a terminal on the same wall	15	500
L	Horizontally from a terminal on the same wall	7	50
М	Above the highest point of an intersection with the roof	6	00
N	From a vertical structure to the side of the terminal	6	00
0	Above a vertical structure less than 750mm from the side of the terminal	6	00
Р	From a ridge terminal to a vertical structure on the roof	15	500
Q	Above or to the side of any opening on a flat or slopping roof	3	00
R	Below any opening on a slopping roof	10	000

IMPORTANT:

It is mandatory for flue terminals to be sited in accordance with the requirements of Building Regulations Approved Document J; these requirements are specified for safety reasons and must always be followed. The more stringent requirements detailed in BS5410 2014 are advisory and are for reference in the absence of manufacturers instructions, they are intended to ensure that plume from wet flue products do not impinge on, or significantly affect the use of the householders' dwelling and also reduce the possibility of nuisance to neighbouring buildings. We advise the use of Document J distances unless of course there are likely to be issues as noted above whereon terminals should be relocated or reconfigured. Distances are measured in the direction of the flue terminal, a suitable flue divertor may provide a resolution for awkward installations.

<u>Notes.</u>

1. Dimension C above, where a terminal is less than 600mm from gutters, eaves or balcony a heat shield at least 750mm wide should be fitted to protect surfaces.

2. Dimension Q above, applies to England only, for other regions the requirement is 600 mm.

3. If the lowest part of the terminal is less than 2m above the ground or other place to which any person has access, a terminal guard must be installed.

4. Terminals should be positioned so as to avoid products of combustion accumulating in stagnant pockets around the building or entering into buildings.

5. Terminating positions must be at least 1.8 metres from oil tanks in the absence of a suitable fire barrier.

6. Where a flue terminates near the boundary of a property, consideration should be given to possible noise disturbance as some people are sensitive even to low noise levels.

8. Avoid flue terminating positions where PVC windows, doors or decorative patio slabs are directly below the terminal; over time products of combustion may cause staining.







Hounsfield Boilers Ltd, Maitland Road, Lion Barn Industrial Estate, Needham Market Suffolk IP6 8NZ 01449 722461 www.hounsfieldboilers.co.uk Co. Reg. No. 06303547