Making sense of the CE Designations

One of the key features of the European Standard for metal chimneys (EN 1856) is a user-readable classification system that designates the features of the product.

A label showing the classification must go with each flue component. Understanding the classification can make the job of selecting the right flue much easier and will allow you to compare different flues. It's easy to use so long as you know the keys. The diagram below unlocks the coded information.

Picking out a few of the main points:

Temperature rating Maximum temperature (˚C) for continuous use of the flue. T450 is suitable for multi-fuel. T200 is suitable for gas and oil.

Corrosion resistance This is fuel dependent as follows;
V1 Resistant to attack from products of combustion from gas

V2 Resistant to attack from products of combustion from light oil (sulphur content up to 0.2%) and natural wood

V3 Resistant to attack from products of combustion from heavy oil (sulphur content > 0.2%), solid fuels and peat

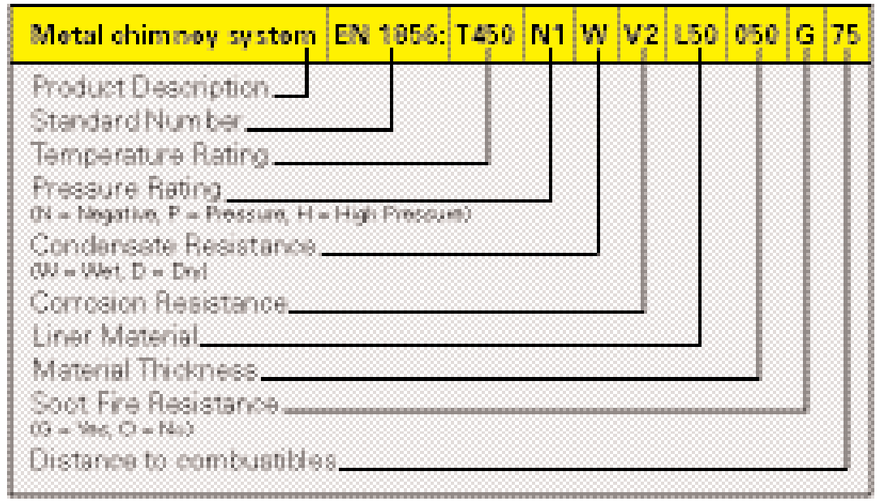
VM Not tested but rating declared by the manufacturer

Liner material and thickness 316L, is the highest quality grade and is expected to withstand the corrosion effect of multi-fuel, wood or heavy oil. The code for 316L is L50. Light oil is less corrosive and normally 304 (L20) has proved adequate in dry conditions, but in the increasingly common wet conditions created by high efficiency condensing boilers, the higher grade is required (316L). The thickness is the steel thickness in mm.

Soot fire resistance and distance to combustibles Expressed as either G, for soot fire resistance or O for not, followed by the declared minimum distance to combustibles expressed in mm. To obtain the G classification means that the product has been tested at 1000˚C for 30 minutes and remains intact. The temperature of combustible material at the designated distance must not exceed 100˚C at an ambient temperature of 20˚C.

A fuller explanation is available in the technical section of our web site or in our pocket sized installer's guide.

The CE Designation Marking System is laid out as follows:



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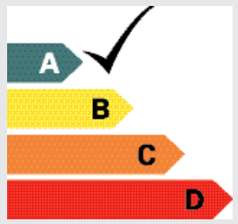
CE

MONIER

Choosing the right flue for your stove

- Well performing appliance
- Energy efficient
- Low CO_2 output when burning wood
- For new houses and existing ones



ISSUE 1 - JUNE 2008

MONIER

Helping you choose the right chimney/flue.

The purpose of this booklet is to guide you to the correct flue for an appliance. The 3 types of stainless steel flue, Twin Wall, Single Wall and Flexible Liner have been designed for different applications and you must install the right one for the appliance.

ICS

Twin wall insulated chimney system for new flues in new and existing houses. Suitable for wood, oil, gas and solid fuel.

Prima Plus 1mm

Single wall stainless steel flue system for use as an alternative to vitreous enamel or the relining of an existing chimney. The adjustable bend is particularly useful if the stove is not directly in line with the chimney.

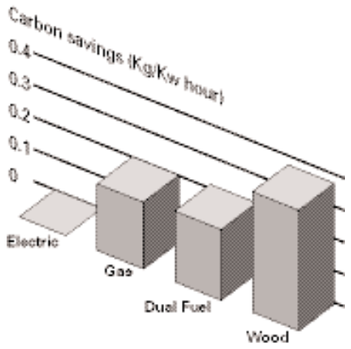
Flexible Liners

For relining existing chimneys to take gas, oil and multi-fuel stoves. Single skin Wonderflex and Triplelock for gas and oil (28 sec) stoves. Twin skin TecnoFlex for multi-fuel and wood stoves

Energy efficient, CO2 savings, Document L, SAP ...what do they all mean when I am choosing a stove?

In the drive for more efficient homes the latest revision of the Document L building regulation means that all new houses must comply with stringent new rules, aimed at reducing carbon emissions from houses by 20%.

By choosing an appropriate secondary heating appliance and an efficient chimney/flue system, you can help meet the Government's target without compromising on the cosy focal point that truly makes a house a home.



Carbon savings using other fuels compared to electricity

Lower your carbon count
Document L assumes two types of heating - primary central heating and secondary heating from room heaters. The SAP calculation used to determine the carbon emissions assumes the secondary heating to be electric.

Electricity is a more carbon intensive energy source than wood, gas or oil. Wood is the most environmentally friendly fuel you can use. The use of wood in an efficient glass fronted stove can save nearly 200Kg of carbon per year when compared to the use of an electric fire. This fact gives you the opportunity to make a carbon saving by substituting electricity with an efficient wood burning stove. You can then use this gain in carbon credits to offset against other aspects of construction like insulation or glazing.

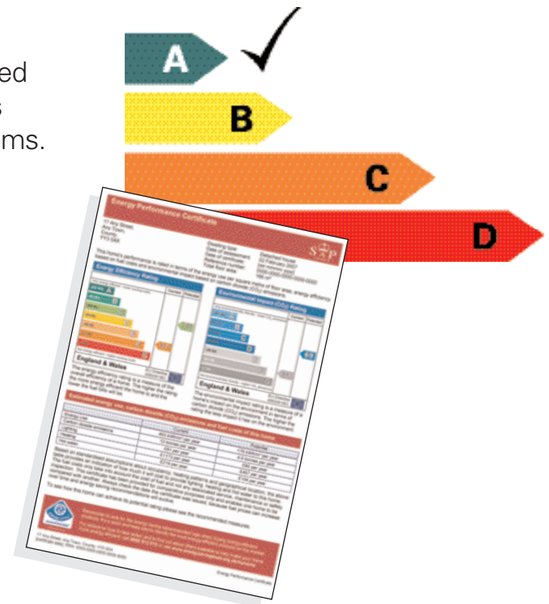
Chimney specification
The carbon saving is further increased by using a chimney that has a diameter of less than 200mm as this reduces the air loss in the chimney by 50%. The good news is most wood burning stoves require a 150mm or 180mm chimney. Modern efficient appliances require a well insulation chimney to perform effectively.

Choosing your appliance at the planning stage is now crucial
Both primary and secondary heating MUST be specified at the design stage if the required carbon savings are to be realised. This is a big change in our thinking as the choice of appliance would usually have been left until building was complete or the house occupied. If the choice is not made before the build, the SAP programme will default to the worst case scenario.

- Greater energy efficiency
- Lower carbon emissions from burning wood
- Gain carbon credits to offset against other aspects of construction
- Meet the requirements of Document L and SAP

Energy Efficiency Certificates and Home Improvement Packs

The introduction of an Energy Performance Certificate as part of the documentation required when selling a house will make home owners think about the efficiency of their heating systems.



The Energy Performance Certificate will cause people to be more thoughtful about the selection of secondary heating in an extension or when upgrading an existing appliance.

The energy efficiency certificate will contain a chart showing the efficiency rating for the house from A to G in the format we have become accustomed to for consumer goods like fridges and freezers. As the energy efficiency for the house is expressed as a single figure any saving gained from heating can be used to offset the negative effect of less environmentally friendly aspects of the house. An efficient heating appliance also needs an efficient chimney system. The key to a well performing chimney is consistent insulation along the entire length of the flue without cold spots. It is the flue's ability to keep flue gases warm that will ensure they can escape freely into the atmosphere.

HETAS is the independent UK body recognised by DEFRA for the official testing and approval of domestic solid fuels, solid fuel and wood burning appliances and associated equipment and services. Also approved by DCLG (by Statutory Instrument) to run a Competent Persons self-certification scheme for Installers of wood, biomass and solid fuel appliances/systems.

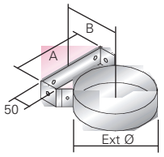
Schiedel Rite-Vent flues are HETAS approved products and should be installed by a competent person.
www.hetas.co.uk

New chimneys

Using ICS twin wall to create a new chimney for a wood or multi-fuel appliance

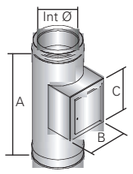
Corrosion Resistance
Chimneys are subject to significant corrosion attack by flue gas condensates, particularly from solid fuel appliances.

ICS is specifically designed and manufactured to resist this corrosion.



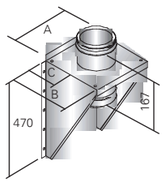
Wall Bracket 50mm
92940

Int Ø mm	150	180	200
Ext Ø mm	200	230	250



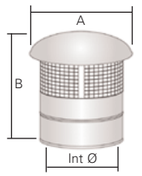
Inspection Length - ICS
ICS J2111

Int Ø mm	150	180	200



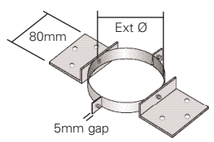
Wall Support
J2182

Int Ø mm	150	180	200



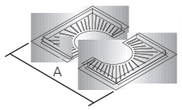
Raincap
J2137 with mesh
J2156 without mesh

Int Ø mm	150	180	200



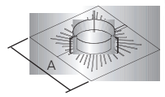
Roof Support
94640

Int Ø mm	150	180	200
Ext Ø mm	200	235	256



Firestop Plate 2 piece
94730

Int Ø mm	150	180	200
Ext Ø mm	200	235	250



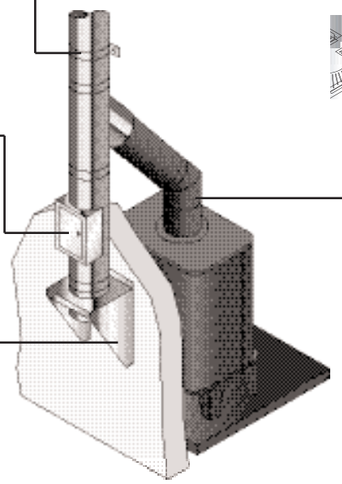
Support Plate 2 piece
95740

Int Ø mm	150	180	200
Ext Ø mm	200	235	250

Firestop Plate 2 piece
94730

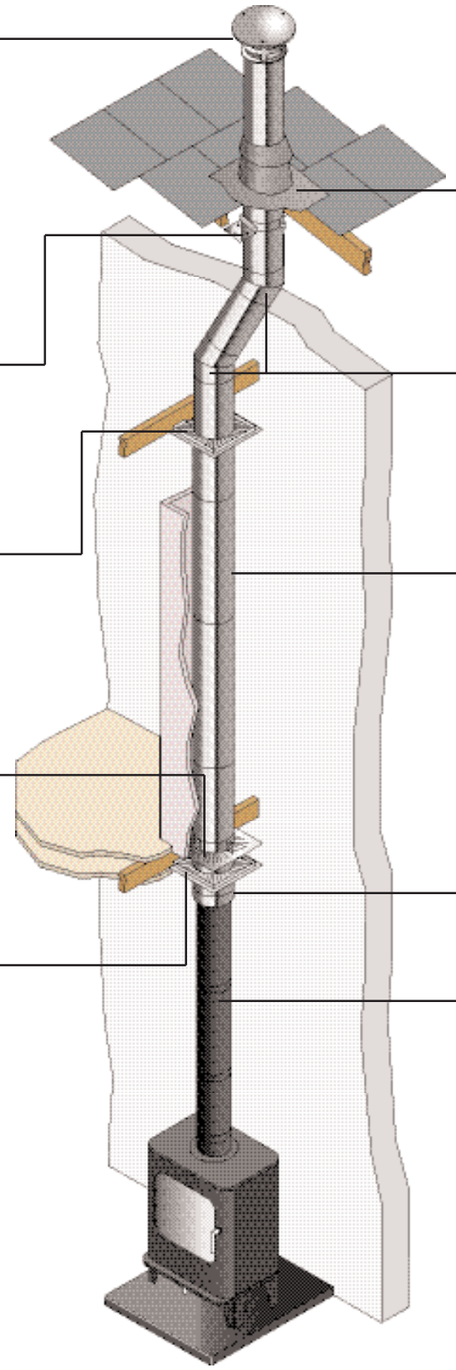
Int Ø mm	150	180	200
Ext Ø mm	200	235	250

Vitreous enamel
or Prima Plus 1mm (see page7)



External chimney

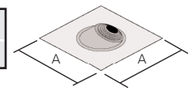
New chimneys



Chimney within the house

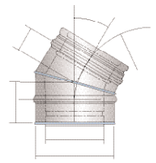
Uniflash
Universal EPDM rubber/aluminium flashing. Just pull the required diameter tab on the rubber seal.

Product Code	94540001	94540002
Ext Ø mm	80 - 200	150 - 300



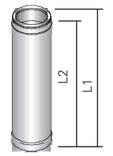
the most frequently used bends are
30˚ Bend **45˚ Bend**
ICS J2119 ICS J2117

Int Ø mm	150	180	200



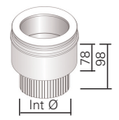
Int Ø mm	150	180	200

Pipe Length L1 Length L1
J2101 1000mm 955mm
J2102 500mm 455mm
J2103 250mm 205mm
J2104 195mm 150mm



Multi-purpose Connector
J2147

Int Ø mm	150	180	200

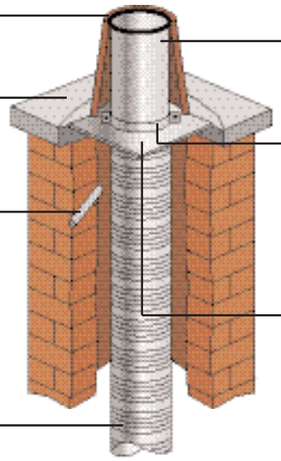


Vitreous enamel
or Prima Plus 1mm (see page7)

Chimney Routing for wood and solid fuel stoves
The chimney should remain as straight as possible through its vertical run to assist the flow of the flue gases. Horizontal runs should be avoided or kept as short as possible. Should it be necessary to offset a chimney the maximum offset is 45° to the vertical, with a run between the bends not exceeding 20% of the overall height of the chimney. A maximum of two bends in any one chimney run should be used. A vertical rise of 600mm should be allowed immediately above the appliance before any offsets.

Existing chimneys

Re-lining existing chimney with TecnoFlex for a wood or multi-fuel stove



Weatherproof Seal

Cement Flaunching

15mm Angled Vent Tubes

TecnoFlex Liner
Available in cut lengths or packs containing the Top Clamp and Top Plate

Top Insert
4027

Int Ø mm	155	180	200

Top Clamp
4003

Int Ø mm	155	180	200

This item is used in conjunction with the top plate to secure the liner at the top of the stack. Can also be used as an intermediate support.

Top Plate
4002

Int Ø mm	155	180	200

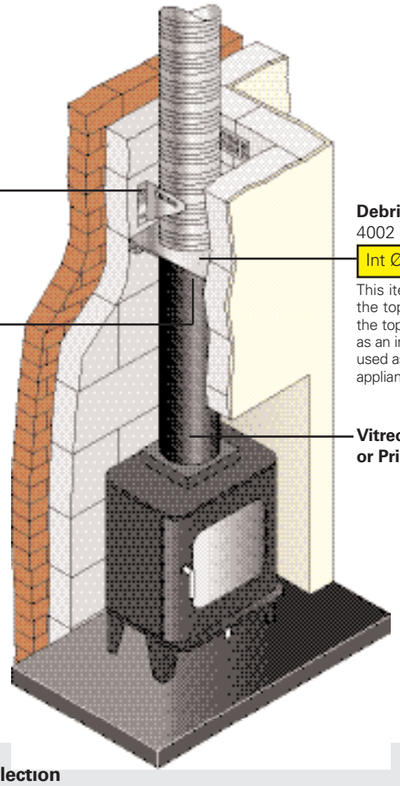
This item is used in conjunction with the top clamp to support the liner at the top of the stack. Can also be used as an intermediate support and to be used as a debris plate above the appliance, gather unit or flue box.

Bottom Support Bracket
4009

Int Ø mm	155	180	200

For use where a tee is fitted to the base of the stack. Can also be used as an intermediate support.

Vitreous enamel adaptor to TecnoFlex
S165
or Prima Plus 1mm adaptor to TecnoFlex
S165



Debris Plate (Top Plate)
4002

Int Ø mm	155	180	200

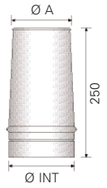
This item is used in conjunction with the top clamp to support the liner at the top of the stack. Can also be used as an intermediate support and to be used as a debris plate above the appliance, gather unit or flue box.

Vitreous enamel or Prima Plus 1mm (see page7)

Flue Size Selection
The chimney size will be recommended by the appliance manufacturer. This should be in accordance with Document J. The guidance given by HETAS is that the minimum internal diameter for a wood burning stove is 150mm. The Schiedel Installer Guide is a handy reference for chimney sizes - download a copy from our web site **www.schiedelrite-vent.co.uk**

Existing chimneys

Re-lining existing chimney with Prima Plus 1mm

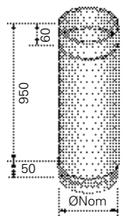


Tapered Terminal
S437

Int Ø mm	150	180	200
A	140	170	190

Adjustable Pipe
S185

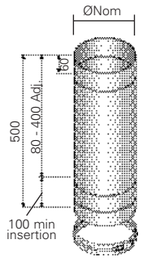
The adjustable pipe must be used to allow for expansion between fixed points along the chimney



1000mm Pipe
S101

Int Ø mm	150	180	200

Also available 500 and 250mm pipes



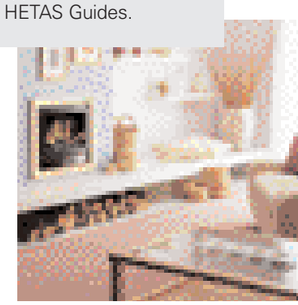
Adjustable Pipe
S185

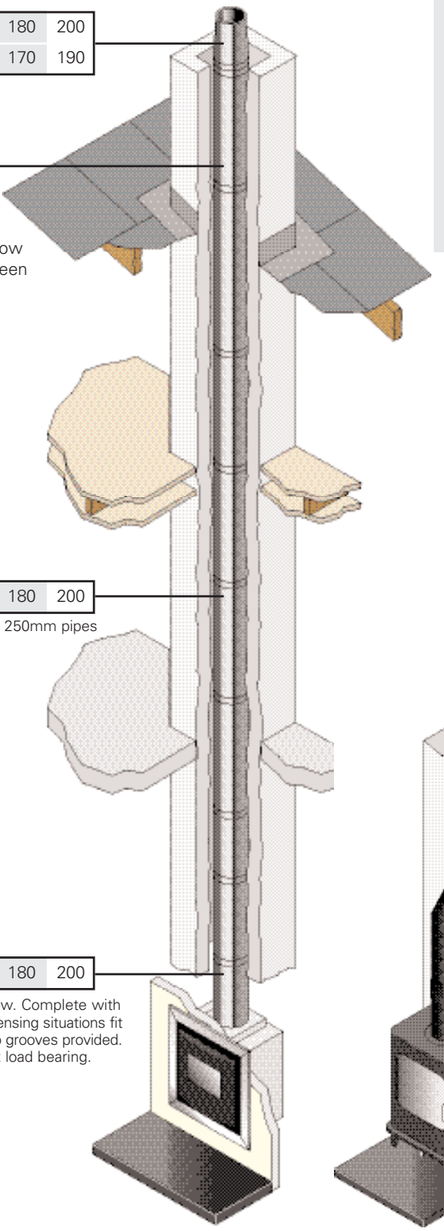
Int Ø mm	150	180	200

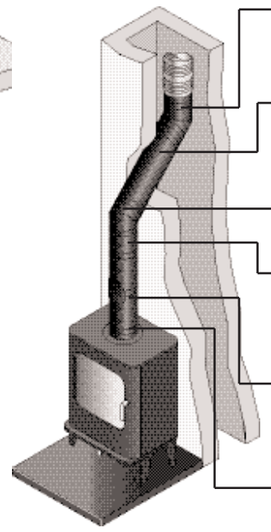
Slides inside pipe below. Complete with locking band.For condensing situations fit gasket S000 in the two grooves provided. This component is not load bearing.

Provision for sweeping, cleaning and maintenance
Most stoves provide access for cleaning and chimney inspection, but inspection components are available if required.

It is recommended that the chimney be swept at least twice a year. It is essential that the flue way be kept clear at all times. The system should be checked regularly in accordance with the appliance manufacturer's instructions and the HETAS Guides.







Adaptor to Flex
S165

Int Ø mm	150	180	200
Ø Flex	155	180	200

1000mm Pipe
S101

30° Bend S119 **45° Bend** S115

Int Ø mm	150	180	200

Adjustable Pipe
S185

Inspection Pipe
S112

Int Ø mm	150	180	200

Connector
S113

Int Ø mm	150	180	200

Using Prima Plus 1mm instead of vitreous enamel
Prima can be painted to match the stove