

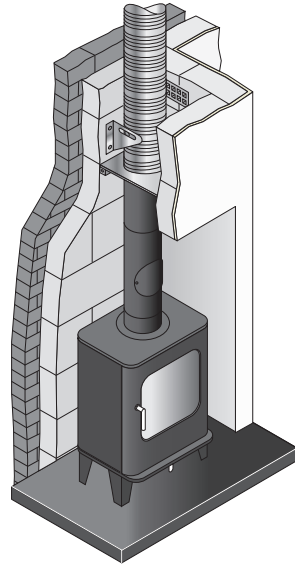
# PRIMA SMOOTH

## INSTALLATION INSTRUCTIONS

Single Wall Stainless Steel Connecting Flue Pipe & Chimney Liner  
for use on wood and multi-fuel applications

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## APPROVALS



High Temperature Applications	High Temperature Applications
<p>Connecting Flue Pipe</p> <p>EN1856-2 TÜV 0036 CPD 9195 029</p> <p>T600 N1 WV2 L50060 GXX NM</p> <p>T600 N1 WV2 L50100 GXX NM</p> <p>(XX = 3 x Ø Int. of Pipe)</p>	<p>Chimney Liner</p> <p>EN1856-2 TÜV 0036 CPD 9195 033</p> <p>T600 N1 DV2 L50060 G</p> <p>T600 N1 DV2 L50100 G</p>

The Prima Smooth range is manufactured under the strict requirements of BS EN ISO 9001 Quality management scheme. Prima Smooth has corrosion certification from TÜV. Prima Smooth is listed by HETAS as a product suitable for solid fuel.

## DESIGN GUIDE

### Mandatory Requirements

Connection to an appliance which is not connected to the fuel supply, may be carried out by a competent person. We recommend the use of HETAS approved installers for solid fuel applications.

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 1856-2:** Connecting Flue Pipes and Chimney Liners
- **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.
- **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 for a System Chimney 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.

### Inspection

To conform to Building Regulations, provisions should be made to enable a chimney to be inspected and cleaned. An inspection length or an insulated 90° or 135° Tee 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.

### Connecting Flue Pipe Diameter

Connecting Flue Pipe Diameter 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.

### Connecting Flue Pipe Route

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 either a wall of the chimney or a floor supporting the chimney.

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

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 450mm in the horizontal run with provision for sweeping, refer to p.11, BS EN15287-1 Acceptable Alternative Methods of Connection.

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)

### 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, this distance is  $3 \times \text{Ø}_{\text{Int}}$  of the pipe, i.e for Ø125mm the distance is 375mm and for Ø150mm the distance is 450mm to combustibles on both painted and non painted variants.

## Appliance/Chimney Connection

When a single wall connecting flue pipe is used to connect an appliance to a Twin Wall Insulated System Chimney, the lower end of the chimney section must extend a minimum of 425mm below the ceiling. When connecting the appliance to the connecting flue pipe, the joint between the connecting flue pipe and the appliance outlet must be securely caulked and sealed with non asbestos rope (or suitable alternative) and fire cement.

## Support Components

Where an offset arrangement is required for the connecting flue pipe, adequate lateral support should be given using the appropriate wall band.

## Ventilation

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

## Carbon Monoxide Alarms

The carbon monoxide alarms should comply with BS EN 50291:2001.

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 manufacturer's instructions with regard 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.

## 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. Particular care and attention should be taken to avoid surface damage to product with the high temperature painted finish.

# AFTER INSTALLATION

## Testing before 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.

## Commissioning

On painted product, care must be taken to ensure that when the stove/appliance is first lit, a low fire is used in order to allow the paint to cure on both appliance and flue pipe.

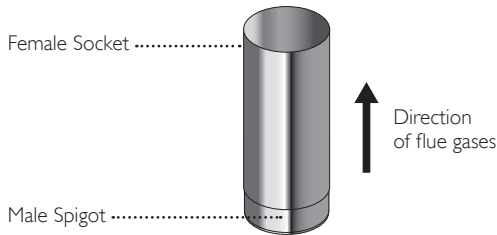
## Maintenance

Each chimney must be designed to allow for easy inspection; sweeping should be carried out by competent persons. 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 clean or 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.

## INSTALLATION INSTRUCTIONS

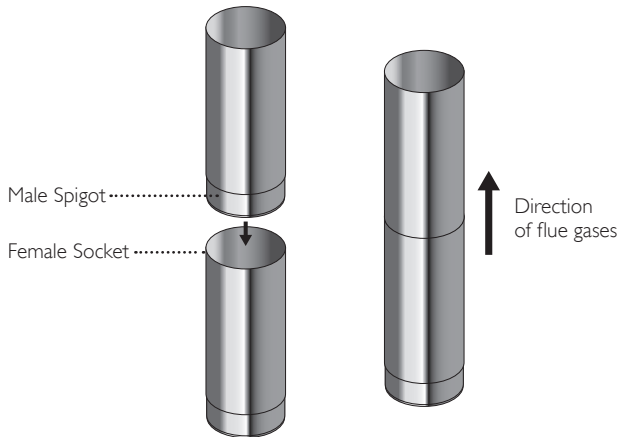
### Joint Detail



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

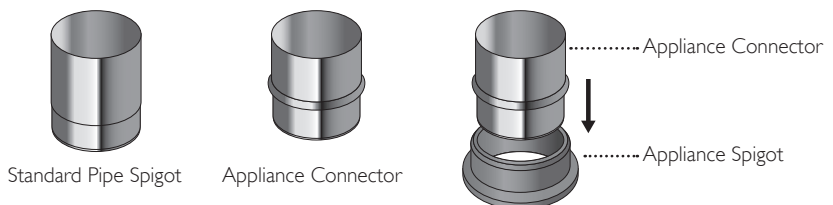
All flue gas bearing components must be installed with the male spigot pointing towards the appliance.

With the exception of the direct connection to the appliance, there is no requirement to apply sealant to the joints of the Prima Smooth system.



### Connecting to an Appliance

Connection to the appliance can be done using either an appliance connector or a standard pipe or inspection pipe. In both cases the male spigot should be pushed inside the appliance outlet. The joint between the connecting flue pipe and the appliance should be securely caulked and sealed using non asbestos fibre rope (or alternative) and fire cement.



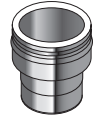
### Adaptor from Prima Smooth to Eco ICID

This component is used to convert from Prima Smooth Connecting Flue Pipe to the Eco ICID System Chimney. The protruding liner of the adaptor should be pushed down inside the female socket of the connecting flue pipe, with the male collar pointing upwards.



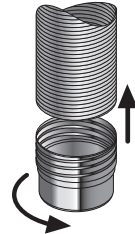
### Adaptor from Prima Smooth to ICS

This component is used to convert from Prima Smooth Connecting Flue Pipe to the ICS System Chimney. The protruding liner of the ICS should be pushed down inside the female socket of the Prima Smooth.



### Adaptor from Prima Smooth to TecnoFlex Plus

This component is used to convert from Prima Smooth Connecting flue pipe to TecnoFlex Plus. The end of the TecnoFlex Plus should be trimmed to allow the adaptor to be screwed in a clockwise direction onto the TecnoFlex Plus. Care should be taken to ensure that the TecnoFlex Plus liner is fully engaged into the inner sleeve of the adaptor, thereby protecting the cut edges of the TecnoFlex Plus.



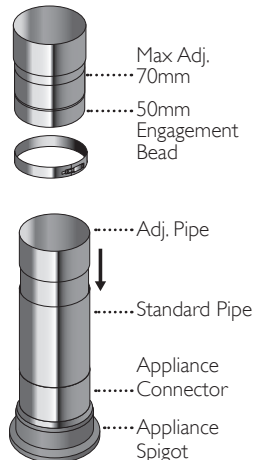
### Increaser

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.



### Adjustable Pipe (Length 200mm with 70mm adjustment)

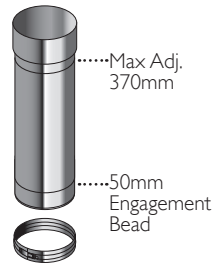
The adjustable pipe allows for an appliance to be removed for cleaning and servicing. It should be positioned immediately below the adaptor from Prima Smooth to TecnoFlex Plus, Eco ICID or ICS. It is fitted by sliding the male spigot 50mm inside the preceding pipe. The 50mm mark is indicated by a bead on the male spigot. The joint is then secured by using the cover band, which is supplied with the article. When the appliance has to be moved, remove the adj. pipe cover band and slide the adj. pipe down inside the previous pipe until the socket is clear of the spigot of the adaptor above it. The appliance can then be removed safely. It is refitted after servicing by sliding the adjustable pipe back up to fully engage with spigot of the adaptor above it and the cover band should then be refitted and fastened tightly in place.



## Adjustable Pipe

### (Length 500mm with 50mm-370mm adjustment)

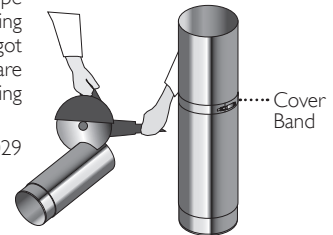
The standard adjustable pipe is installed by sliding the male spigot a minimum of 50mm and a max of 370mm into the preceding pipe. The locking band, which is provided with each adjustable pipe is then fastened in place using the nut and bolt.



## Cutting of Fixed Length

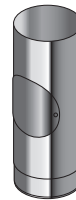
Where required fixed lengths may be cut on site to achieve a non standard pipe length. Only the female end of the pipe should be cut using appropriate cutting tools. The cut female socket end should then be de-burred to allow the male spigot of the next component to slide smoothly into the cut female socket. The pipes are then installed in the usual way with the male spigot of the next component being inserted into the cut female end of the pipe.

The cut edge can be protected and covered using the Cover Band ref. PS029 (Steel Finish), PSB029 (Black) to give a more aesthetic appearance.



## Inspection Length

The inspection lengths are components providing the facility for flue inspection and cleaning. They are installed as per a standard pipe section.



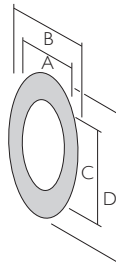
## Trim Collar (90° & 45° variants)

One piece trim collars are fitted around the Prima Smooth pipe where it protrudes through the wall (see Fig. 1). They should be fastened to the wall using an adequate method of fixing.

Int Ø	125	150	180	200
A (mm)	129	154	184	204
B (mm)	275	300	330	350
C (mm)	181	215	259	287
D (mm)	376	412	454	483

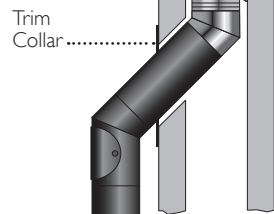


**90° Trim Collar**



**45° Trim Collar**

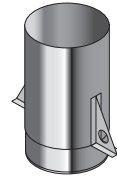
**Fig. 1**



## CHIMNEY LINING COMPONENTS

### Lowering Pipe

The lowering pipe is used to take the weight of up to 15 x 1m pipe lengths as they are lowered down the existing chimney stack. Rope, which is supplied by the installer, should be fastened to the lowering brackets and the lowering pipe then lowered gently down the chimney stack with the standard pipe lengths being added one at a time up to the maximum load of 15m.

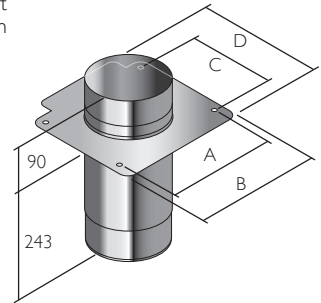


### Support Plate

The Support Plate is used as a base support or as an intermediate support to take the weight of up to 15m of Prima Smooth, when used as a chimney liner.

It is used in conjunction with cantilever brackets. The spigot below the plate is constructed from adjustable pipe to allow for thermal expansion within the system. The plate is notched at the back to allow the plate to slide into the correct position as required using the full length of the cantilever bracket. The support plate is then attached to the cantilever brackets using the bolts provided through the fixing slots in the top plate.

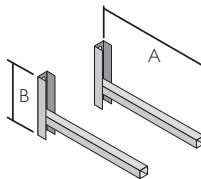
Int Ø	125	150	180	200
A (mm)	185	210	240	260
B (mm)	221	246	276	296
C (mm)	105	130	160	180
D (mm)	190	215	245	265



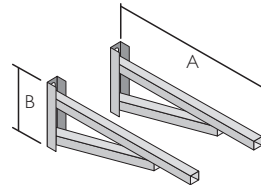
### Cantilever Support

Once the position of the support has been established within the chimney stack, secure the cantilever brackets to the wall using expansion bolts to ensure adequate attachment and support.

Type	325	475	570
Ø Range	125-150	125-200	125-200
A	325	475	570
B	242	242	330



**Types 325, 475**

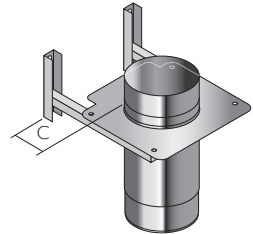


**Type 570**



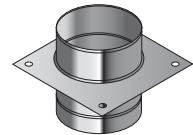
## Cantilever Support Adjustment Dimension Table

Int Ø	125	150	180	200
C max				
Type 325	165	140	110	90
Type 475	315	290	260	240
Type 570	410	385	355	335
C min				
Type 325	60	60	60	60
Type 475	60	60	60	60
Type 570	60	60	60	60



## Expansion Joint

The expansion joint must be used at the top of the masonry stack to close off the stack and to allow for thermal expansion within the chimney system. It is provided as a closure plate with a removable adjustable pipe section. The previous pipe section should terminate 200mm below the top of the chimney stack. The top of the masonry stack should be prepared with a layer of cement. Then the adjustable pipe length slides down a minimum of 50mm into the proceeding pipe length, with the expansion joint plate bedding down firmly into the cement at the top of the masonry stack. The joint between the plate and the adjustable pipe length should be sealed using an appropriate high temperature sealant. Once securely in place, the plate should be flounced to make weatherproof.

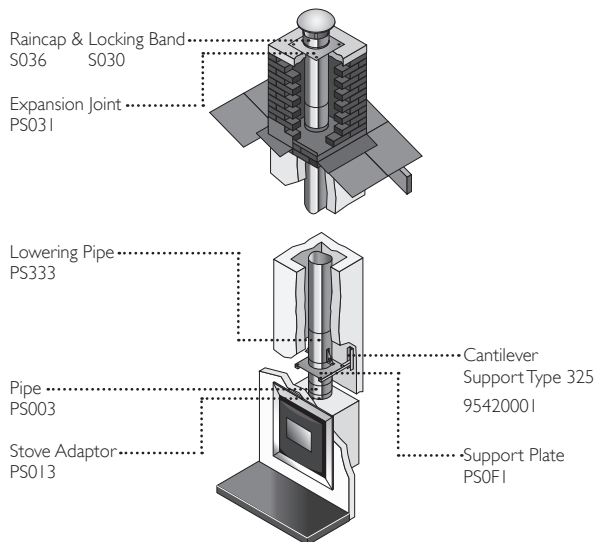


## Raincap

The raincap is of standard Prima Plus design. The male spigot is pushed down inside the female form of the expansion joint, which incorporates the standard Prima Plus female form. The joint is then secured using a Prima Plus standard locking band, which is purchased separately.



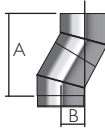
## Typical Liner Installation



## OFFSET DIMENSIONS (made by assembling 2 bends)

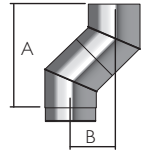
### 30° Offset

Int Ø	125	150	180	200
A	276	276	276	276
B	74	74	74	74



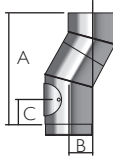
### 45° Offset

Int Ø	125	150	180	200
A	333	333	333	333
B	138	138	138	138



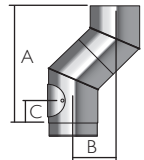
### 30° Offset using Inspection Bend

Int Ø	125	150	180	200
A	407	407	407	407
B	74	74	74	74
C	100	100	100	100



### 45° Offset using Inspection Bend

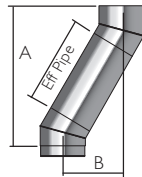
Int Ø	125	150	180	200
A	415	415	415	415
B	138	138	138	138
C	94	94	94	94



## OFFSET DIMENSIONS (made by assembling 2 bends and a standard pipe section)

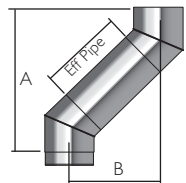
### 30° Offset with standard Pipe lengths

Int Ø mm	125	150	180	200
950 Eff Pipe	A 1099	1099	1099	1099
	B 549	549	549	549
450 Eff Pipe	A 666	666	666	666
	B 299	299	299	299
200 Eff Pipe	A 449	449	449	449
	B 174	174	174	174



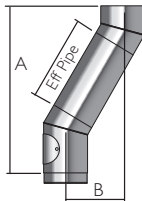
### 45° Offset with standard Pipe lengths

Int Ø mm	125	150	180	200
950 Eff Pipe	A 1005	1005	1005	1005
	B 810	810	810	810
450 Eff Pipe	A 651	651	651	651
	B 456	456	456	456
200 Eff Pipe	A 474	474	474	474
	B 279	279	279	279



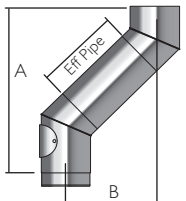
### 30° Offset using Inspection Bend

Int Ø mm	125	150	180	200
950 Eff Pipe	A 1230	1230	1230	1230
	B 549	549	549	549
450 Eff Pipe	A 797	797	797	797
	B 299	299	299	299
200 Eff Pipe	A 580	580	580	580
	B 174	174	174	174



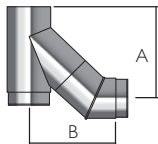
### 45° Offset using Inspection Bend

Int Ø mm	125	150	180	200
950 Eff Pipe	A 1087	1087	1087	1087
	B 810	810	810	810
450 Eff Pipe	A 733	733	733	733
	B 456	456	456	456
200 Eff Pipe	A 556	556	556	556
	B 279	279	279	279



### Offsets for 135° Tee & 45° Bend installation

Int Ø	125	150	180	200
A	348	386	432	458
B	315	348	424	430

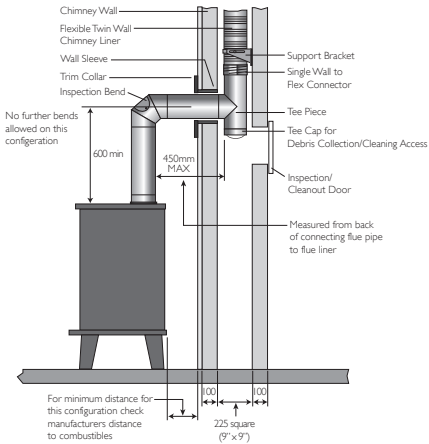


## BS EN 15287-1

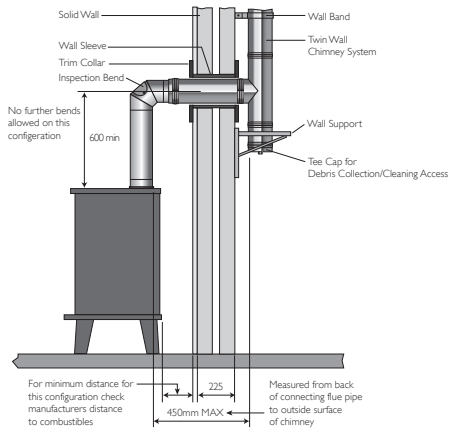
### Acceptable Alternative Methods of Connection

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:-

- The maximum length of horizontal connecting flue pipe does not exceed 450mm;
- A Defra exempt appliance or an appliance, which is limited to burning authorised smokeless fuel only, is installed;
- A calculation according to BS EN 13384-1 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;
- The appliance manufacturer agrees in writing to the proposed configuration;
- The chimney manufacturer agrees in writing to the proposed configuration;
- The total length of single wall connecting flue pipe is not more than 1.5m;
- The appropriate distances to combustible materials from both the appliance and the connecting flue pipe are maintained.

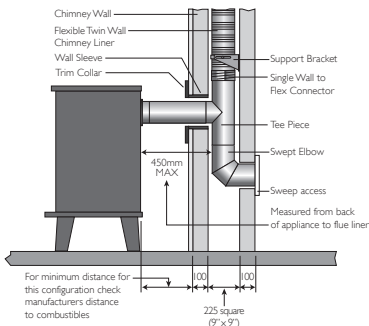


**Top Outlet Single Wall Connecting Flue Pipe into Re-lined Masonry Chimney**



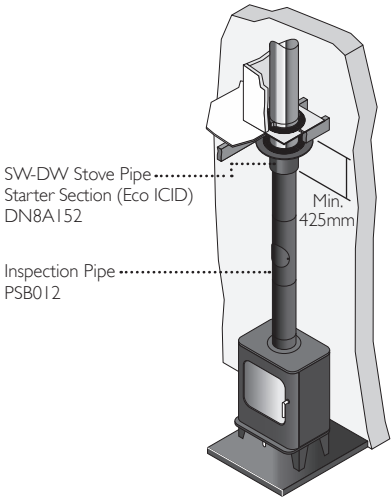
**Top Outlet Single Wall Connecting Flue Pipe through Solid Wall into Twin Wall System Chimney**

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.

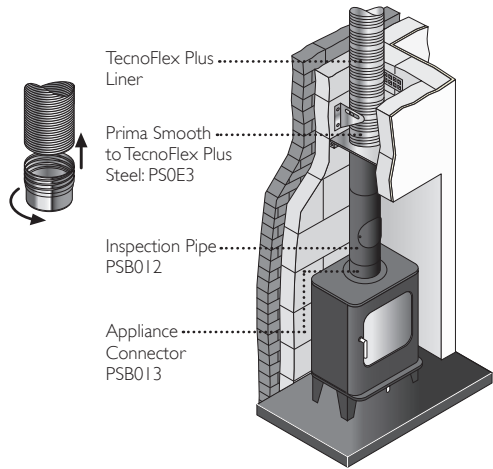


**Rear Outlet Single Wall Connecting Flue Pipe into Re-lined Masonry Chimney**

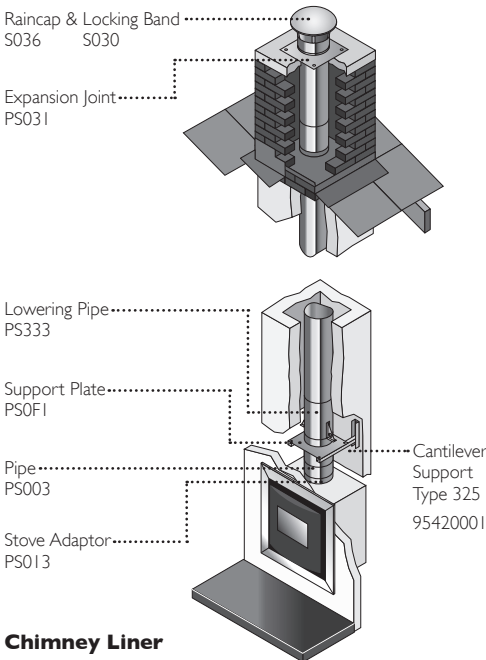
## TYPICAL INSTALLATIONS



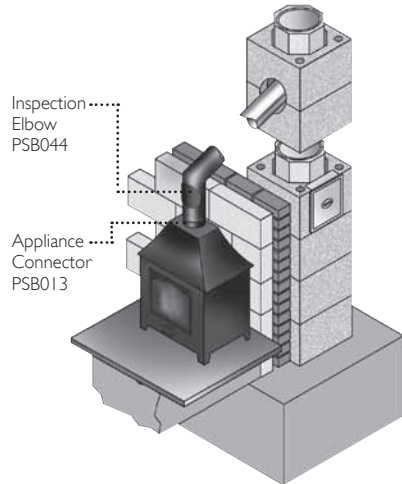
**Connection to Internal System Chimney**



**Connection to Flex through Fireplace Recess**



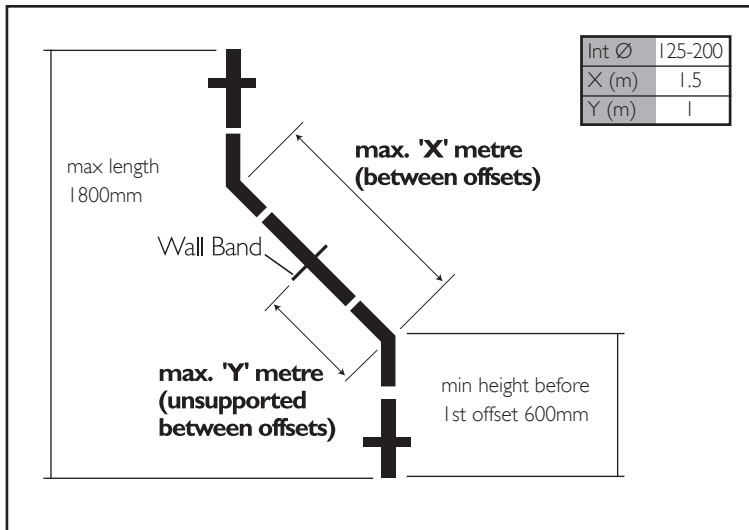
**Chimney Liner on Inset Fire**



**Connection to Modular Pumice or Ceramic System Chimney**

## MAX OFFSET INFO

(in same plane)



## COMPONENT WEIGHTS

Approximate Weights of Finished Goods (Kg)

### Prima Smooth 0.6mm

Internal Diameter	Length(mm)	1000	500	250
125mm		1.82	0.91	0.46
150mm		2.28	1.14	0.57
180mm		2.72	1.36	0.68
200mm		3.02	1.51	0.76

### Prima Smooth 1mm

Internal Diameter	Length(mm)	1000	500	250
125mm		3.03	1.5	0.77
150mm		3.8	1.9	0.95
180mm		4.54	2.27	1.13
200mm		5.04	2.52	1.26

## CHIMNEY PLATE


### Chimney Plate for Prima Smooth Product

The Chimney 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 below:

CE

  
 CHIMNEY SYSTEMS

### IMPORTANT SAFETY INFORMATION

THIS NOTICE MUST NOT BE REMOVED OR COVERED

PROPERTY ADDRESS Smiths Cottage, Thatchville

THE CHIMNEY/FLUE/HEARTH IS INSTALLED IN THE Lounge

SYSTEM IS SUITABLE FOR:- SOLID FUEL ☒ GAS ☐ OIL(28 SEC) ☐ OTHER ☐

APPLIANCE IS CONDENSING YES ☐ NO ☒ (IF YES) TYPE OF SEAL FITTED: S000 (GAS) ☐ V000 (OIL) ☐

APPLIANCE INSTALLED IS A Wood burning stove

FLUE TYPE:

WONDERFLEX <input type="checkbox"/>	TRIPLELOCK <input type="checkbox"/>	TECNOFLEX <input type="checkbox"/>	Eco ICID <input type="checkbox"/>	ICS <input type="checkbox"/>
PRIMA + <input type="checkbox"/>	PRIMA SMOOTH <input checked="" type="checkbox"/>	K-VENT <input type="checkbox"/>	B-VENT <input type="checkbox"/>	

DATE OF INSTALLATION: 10/05/11 REF. job no. 99991

INSTALLER NAME/ADDRESS: A.N. Installer, Home Street, Washington, Tyne and Wear, NE38 0AB

OTHER INFORMATION Connecting Flue Pipe

CHIMNEY DESIGNATION T600-NI-W-V2-L50050-G450-NM FLUE SIZE Ø 150mm  
(Refer to product/packaging label for designation to EN 1856)

**IMPORTANT**

PLEASE ENSURE THAT THE APPLIANCE IS OPERATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IT IS ADVISED THAT THE SYSTEM IS REGULARLY SERVICED/SWEPT IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS TO ENSURE THAT THE SYSTEM OPERATES EFFICIENTLY.

PLEASE ENSURE THAT ALL THE INFORMATION IS FILLED IN WITH THE USE OF PERMANENT INK

# PRODUCT WARRANTY

Under normal operating conditions and providing the system is installed correctly, it should last the lifetime of the appliance, which normally is 10 years. Prima Smooth carries a 10 year conditional warranty. 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 Schiedel Chimney Systems and the appliance manufacturer's instructions.

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 Schiedel Chimney Systems undertake to replace the product only.

Schiedel Chimney Systems 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.

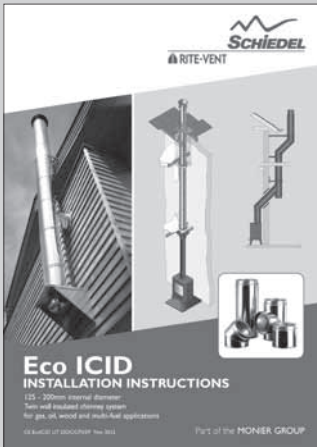


## Product Registration

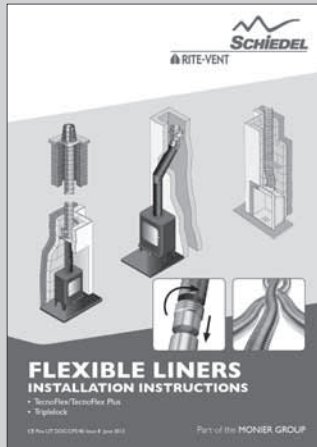
The installer/customer is required to fill in the details below and return the registration form to Schiedel Chimney Systems. Failure to register the installation may affect any claim made during the warranty period of the product.

Name & Address of Installer:		Address of property where product installed:	
Supplier/Stockist:		Date of Purchase:	
Occupier of Property:	Date of Installation:	Product Installed:	
Appliance Type/Model:			
Internal Flue Diameter:		Fuel Type:	

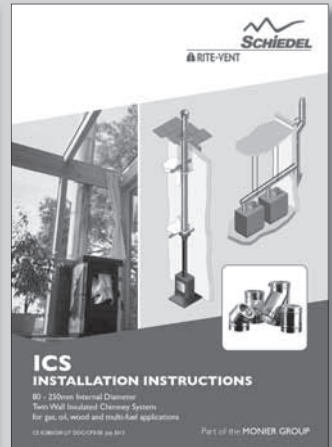
## Complementary products and services from Schiedel Chimney Systems



ECO ICID



FLEXIBLE LINERS



ICS

## HETAS TRAINING

Courses H001-H006 available. See website for course prospectus and application form downloads or scan QR code below.



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