



DEFRA
EXEMPT



SCHIEDEL

Sirius Stove System

Complete room sealed Ecodesign stove and concentric chimney flue system for a bungalow, log cabin or house.

Defra exempt for installation and use in Smoke Control Areas



LEVEL 5 ECODESIGN

DEFRA EXEMPT The Sirius is approved for use in Smoke Control Areas in the United Kingdom, when operated in accordance with the instruction and installation manuals, and when conditions are met.



An all-in-one Stove package

Schiedel offers a unique all-in-one system: a perfect combination of DEFRA exempt stove in an easy to install package to add a stove and chimney to a newly built house or a bungalow, a self build project, or a luxury home at the drawing stage.

Our innovative and advanced clean burning technology provides an eco-friendly and pleasant warmth. Wood stoves achieve up to 82% energy-efficiency – delivering more heat with less wood.

clearSkies

Both Sirius models have achieved the highest level in clearSkies certification



clearSkies certified appliances meet the minimum performance level for Ecodesign regulations – the minimum legal requirement for an appliance manufactured in the UK from 1st January 2022.

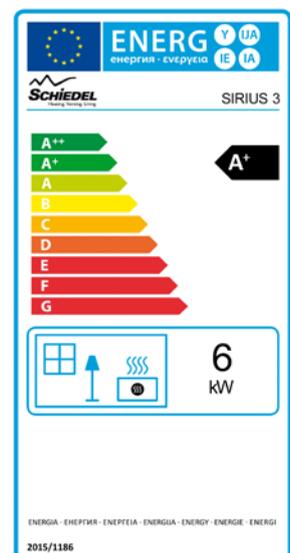
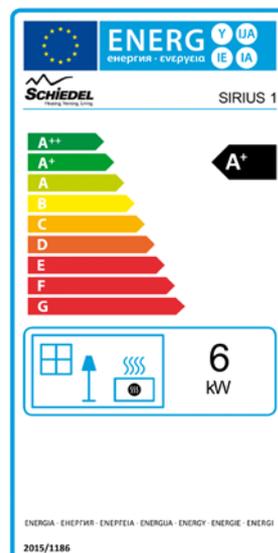
These criteria are the minimum energy efficiency of the appliance and the maximum levels of emissions permitted

These new Ecodesign Regulations represent a significant tightening of these criteria over the current CE requirements.

DEFRA exempt

In addition to meeting the requirements of Ecodesign for efficiency and emissions, all clearSkies certified appliances at Level 3 or above will also have been verified by the scheme administrator as meeting the requirements for Defra exemption.

Therefore you can be assured that our Sirius 1 and Sirius 3 models exceed the minimum requirements and are future proofed as well as approved on the Defra website to be installed in Smoke Control Areas



Wood burning stove system

Sirius 1.1 and 3.1



SIRIUS 1

Large front window



SIRIUS 3

Large front window and door and additional side windows for 180° degree view.

- ① Only one lever for regulating primary and secondary air.
- ② Elegant powder coated combustion-door handle.
- ③ Comfortable wood-box compartment with front door.
- ④ The touching point to open the door is marked with powder coated circle, preventing scratches in the varnish.



Sirius stove system advantages

STOVE-HIGHLIGHTS

Highly efficient up to 82%! More heat, less wood

Highest European and National Standards - EN 13 240, DIN+, 1.BImSchV2, DiBt, 15a B-VG, NS 3058/3059

Easy to operate with self closing door and interlock system for igniting or cleaning purpose

3 Windows for 180° view in the 3 model

Eco-friendly corpus paint resulting in environmentally friendly low smoke and low emission colour

Adjustable legs to adapt to uneven surfaces

SYSTEM HIGHLIGHTS

Combustion air independent from installation room, provided through Perimeter Smooth Air Chimney from top, allows flexible placement

Due to system solution, no separate air channel adaptor/ bypass necessary.

IDEAL FOR TIMBER FRAME BUILDINGS SUCH AS LOG CABINS

Ceiling Box and Protect Box options for complete safety in timber framed buildings.

Exceptional small distances to combustibles



Specifications / Approvals

	SIRIUS 1.1	SIRIUS 3.1
Width	522mm	522mm
Height	1208mm	1208mm
Depth	382mm	382mm
Output	6 kW	6 kW
Efficiency	82%	82 %
Energy efficiency	A+	A+
Weight	133 kg	130 kg
Air independent	✓	✓
Triple-air-connection	✓	✓

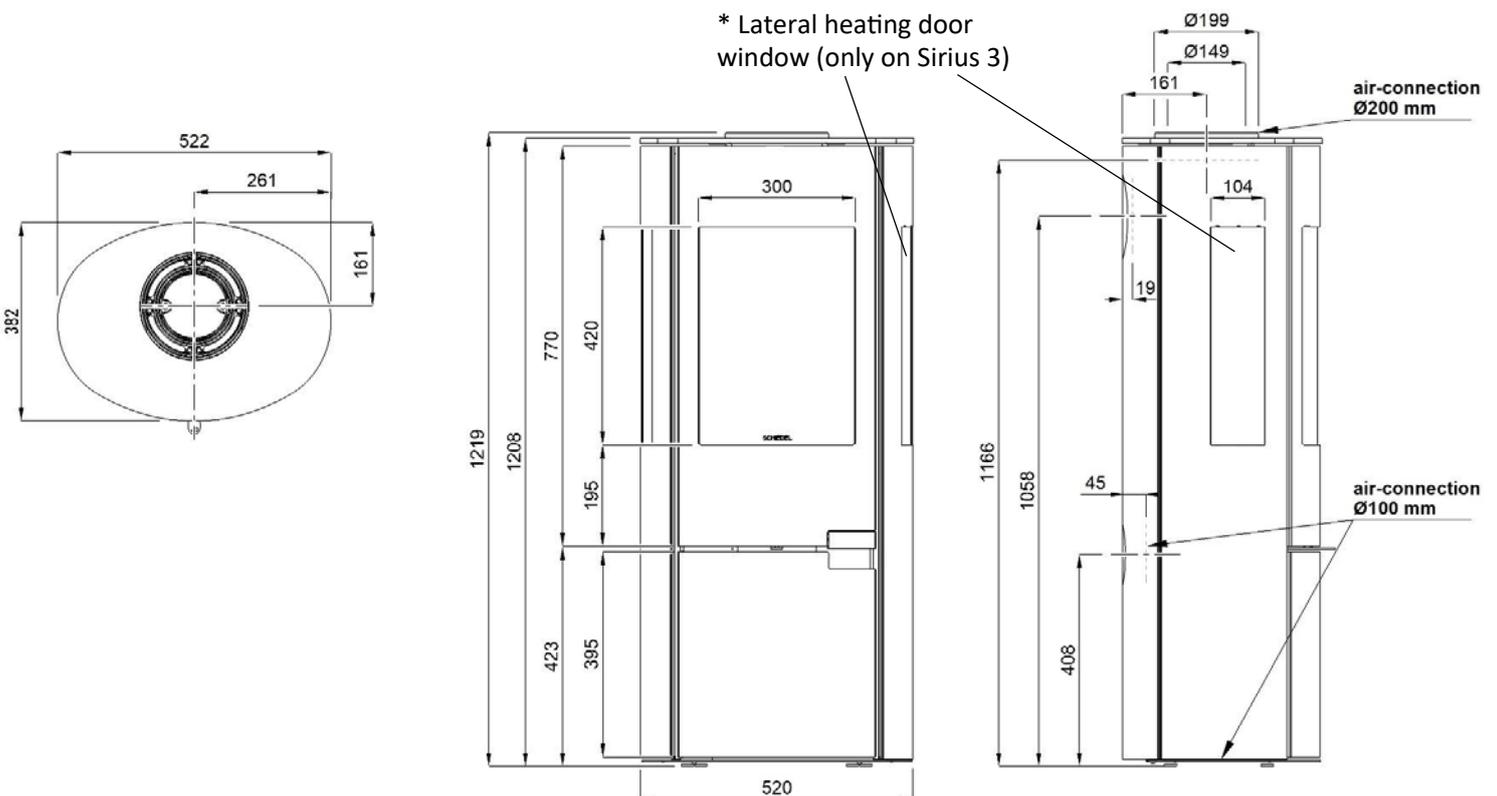
APPROVALS	
EN 13 240	✓
DIN+, BImSchV 2, CE	✓
15a B-VG	✓
NS 3058 / 3059	✓
DEFRA EXEMPT	✓
CLEARSKIES LEVEL 5	✓



DEFRA EXEMPT
The Sirius is DEFRA exempt so it can be installed and used in Smoke Control Areas in the United Kingdom, when operated in accordance with the instruction and installation manuals and when any conditions are met.



CLEARSKIES LEVEL 5
Both Sirius models have achieved the highest level in clearSkies certification, which means that they exceed the minimum performance level for Ecodesign Regulations.



Permeter Smooth Air chimney system

Steel chimney with air supply offers great flexibility and flexible placement

All Sirius models are approved by the highest European standards for air independent use (Germany). This allows the combined usage with ventilation systems in modern buildings and guarantees a healthy indoor environment.

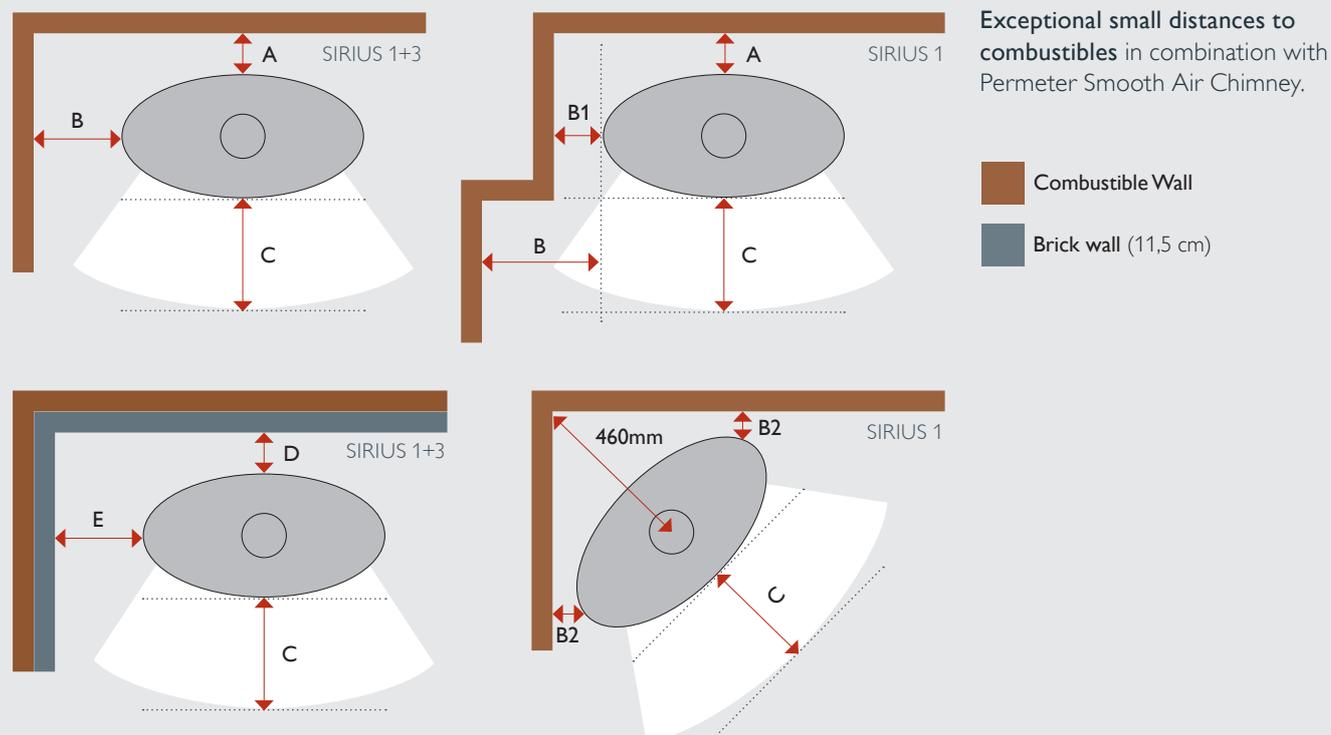
Schiedel Permeter Smooth Air chimney is constructed with a separate inlet-duct ensuring that the stove is supplied with the optimal amount of combustion air from the top of the pipe. The double insulated pipes avoid condensation.

The chimney system can be delivered with 45 degrees bends to achieve best placement flexibility of the stove.



DISTANCES TO COMBUSTIBLES		SIRIUS 1.1	SIRIUS 3.1
A	With Permeter Smooth Air system	50mm	70 mm
B	With Permeter Smooth Air system	250mm	350mm
B1	With Permeter Smooth Air system	150mm	–
B2	With Permeter Smooth Air system	150mm	–
C	Distance from glass	950mm	800mm
C	Distance from superimposed hearth	225mm	225mm
D	Distance to non combustible wall	50mm	50mm
E	Distance from non combustible wall	100mm	200mm

For distances to combustibles from the chimney, or chimney through floor or shaft, please refer also to page 9



System overview

Product description	Modular, concentric flue system for operation with room sealed Wood appliances with continuous operating temperature up to 600 °C.
Installation	Inside a building
Fuel	Wood
Operating temperature	≤ 600 °C
Mode of operation	- negative pressure (N1 ≤ 40 Pa) - dry
Inner pipe material	EN 1.4404 (AISI 316L)
Outer case material	- galvanized steel, powder painted - 1.4301 (304) stainless steel
Outer case finish	- black (RAL 9005)
Insulation type	PMSA 25: 25 mm thick mineral wool tube, with aluminium lamination.
Insulation density	128 kg/m ³
Thermal resistance	PMSA 25 = 0,37 m ² K/W
Mean roughness	1,0 mm according to EN 13384-1
Height above last structural support	Max free standing height is 2m. Where height is >600mm above the last structural support, a locking band is required immediately below the roof support and on any pipe joints above it.
Distance between lateral supports	3,0 m

CE Certificate number EN 1856-1:	CE Designation EN 1856-1:
0036 – CPR – 91236 – 034	T400 N1 D V3 L50050 G75 With Ceiling Box and Protect Box with in Bungalow
0036 – CPR – 91236 – 034	T400 N1 D V3 L50050 G100 With Ventilated Firestop Plate in a combustible shaft with combustible floors

PERMETER SMOOTH AIR 25	
Internal diameter:	150 mm
External diameter:	250 mm
Inner liner thickness:	0,6 mm
Outer wall thickness:	0,6 mm
Weight:	7,7 kg/m

Prior to installation

Mandatory requirements

The PMSA system must be installed according to valid British/European Standards, national building regulations and Schiedel Installation Instructions of the manufacturer as indicated in the documentation.

Apart from the general instructions there are specific instructions in connection with the type of connected Wood appliance. Always refer to appliance installation instructions and related standards covering specific applications!

Chimney diameter

The chimney size should be as recommended by the appliance manufacturer. The operational requirements of the appliance and the configuration of the flue must satisfy the flue sizing requirements of EN13384-1 for single appliances.

Appliance-chimney connection

When connecting the appliance directly to a system chimney, the appropriate appliance connector must be used and the joint between the appliance spigot and the appliance connector must be securely caulked and sealed with non asbestos rope or suitable alternative. The connection to the appliance should be carried out only by a competent person.

Chimney route

The chimney should remain as straight as possible through its vertical run to assist flow. Before installing the chimney be sure that there are no beams or rafters mounted in the chimney vertical run.

Enclosure/Shaft

With the exception of the room containing the appliance, where the chimney passes through any part of the building where there is a risk of accidental human contact, i.e. a bedroom etc., or where there is a risk of contact with combustible materials, the chimney should be enclosed in an appropriate way. Please check requirements in national building and fire regulations. This can be achieved by boxing in the chimney in habitable rooms, or by the use of a protective wire mesh frame in roof spaces etc. In all cases the minimum distance to any combustible material, including loft insulation, must be respected and any enclosure should meet the requirements of national building and fire regulation.

Inspection openings

According to national regulations, provisions should be made to enable a chimney to be inspected and cleaned. Respective national building code and requirements of appropriate standards should be observed. We recommend consulting a competent chimney sweep on the arrangement of the inspection opening. To aid cleaning, sufficient distance should be left between changes of direction to permit the safe passage of cleaning brushes within the system.

Distance to combustibles

On Wood applications, where there is a risk of soot fire, it is essential that the correct distance to combustible material is maintained. Perimeter Smooth Air is available with two different insulation thickness's where these versions have different required distance to combustibles.

PERMETER SMOOTH AIR 25		
Temperature rating:	T400 Protect Box	T400 Ventilated Firestops
Installed fully ventilated:	75 mm	100mm
Installed through insulated floor/roof H ≤ 200 mm:	75 mm	100mm

System design guide

Loading bearing Information

A	Max. installation height from base or intermediate support	8 m
B	Max. distance between lateral supports	3 m
C	Max height above last support	2 m
X	Max offset distance between 2 bends	1 m

Support components

Prior to installation the number and position of support components should be established according to the load bearing information and max. allowed distances between supports.

The weight of a chimney system requires an independent support. Only minimal weight should be borne by the appliance (e.g. vertical connecting flue section, up to the floor passage). The chimney can be supported from floor level by using a telescopic rear support, or from first floor level by using a ceiling box fixed between two ceiling joists. In longer vertical runs wall bands should be used to support the chimney, fixed to the wall/ roof structure.

They can be used in combination with the wall band extension components to provide for adjustment to various distances from the wall. Wall bands are non-load bearing and provide lateral support only.

Terminals

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

Free standing height above the roof

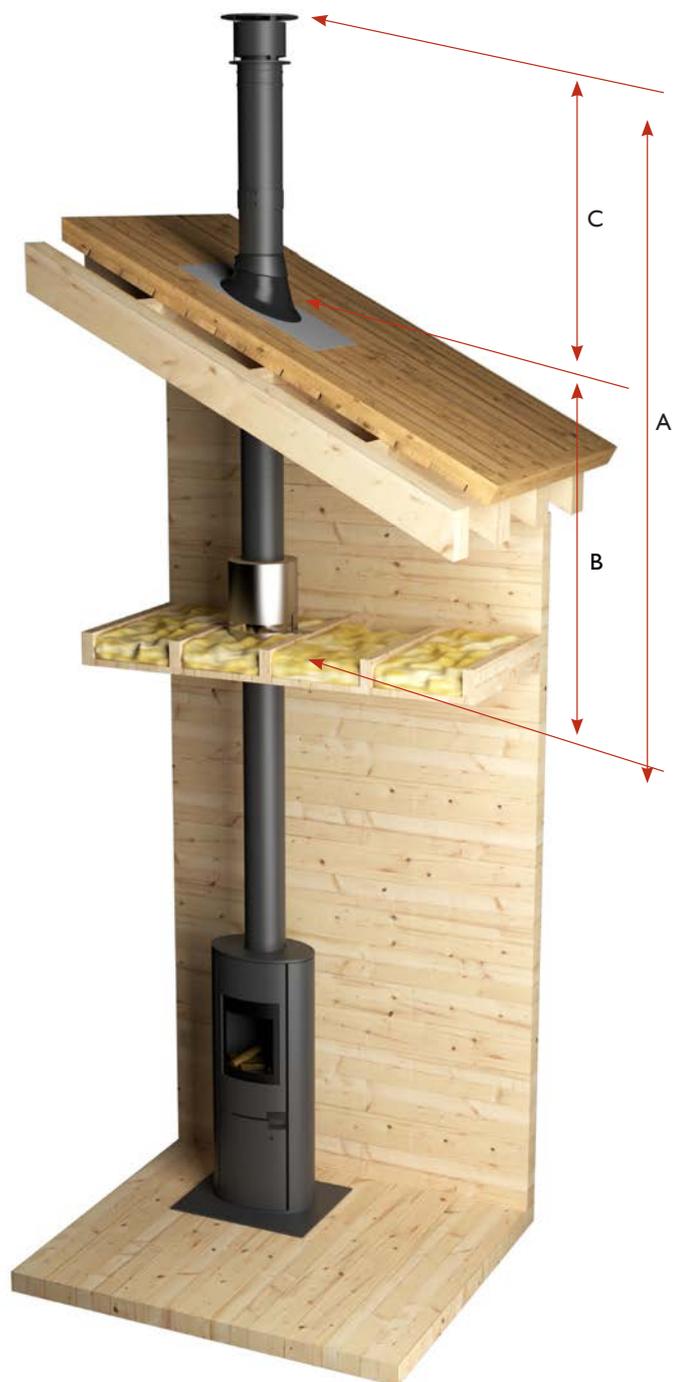
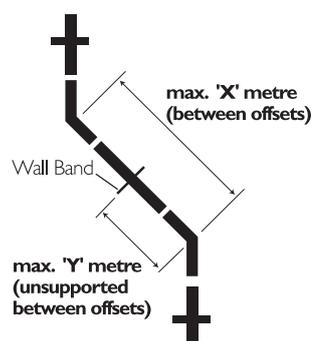
Max free standing height is 2m. Where height is >600mm above the last structural support, a locking band is required immediately below the roof support and on any pipe joints above it. Where the free-standing height should exceed 2,0 m above the last support or above the roof, a guy wire bracket must be used in conjunction with guy wires or rigid stays.

Lightning protection

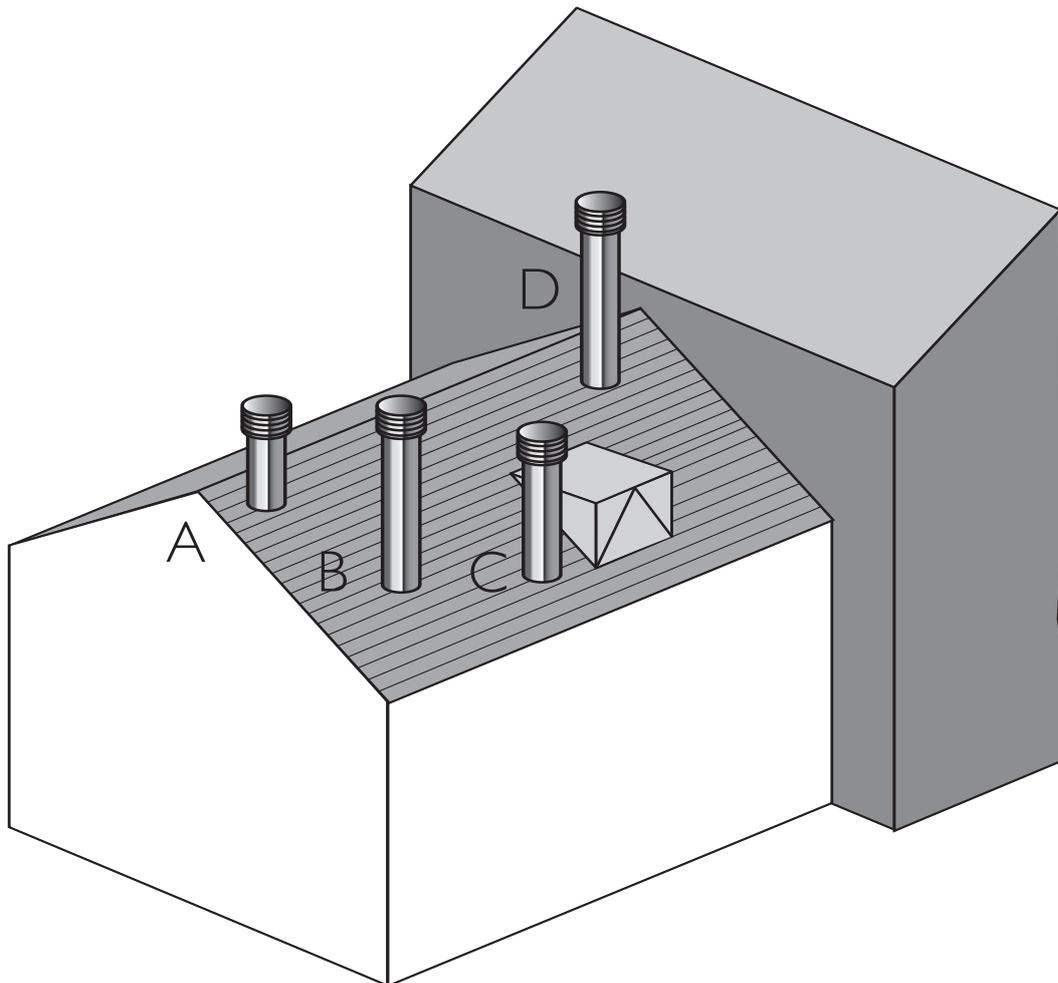
Stainless steel flue gas system can be damaged by a lightning strike. If a building has a lightning conductor or earthing circuit make sure that flue gas system is incorporated to it.

Maximum offset info.

Int Ø	150
X (m)	1
Y (m)	1



Outlet siting



	Point where flue passes through weather surface (Notes 1, 2)	Clearance to flue outlet
A	At or within 600mm of the ridge	At or within 600mm above the ridge
B	Elsewhere on the roof (whether pitched or flat)	At least 2300mm horizontally from the nearest point on the weather surface and: a) at least 1000mm above the highest point of intersection of the chimney and the weather surface; or b) at least as high as the ridge
C	Below (on a pitched roof) or within 2300mm horizontally to an openable roof-light, dormer window or other opening (Note 3)	At least 1000mm above the top of the opening
D	Within 2300mm of an adjoining or adjacent building, whether or not beyond the boundary (Note 3)	At least 600mm above any part of the adjacent building within 2300mm

Delivery to site and storage

Components should be carefully transported and off loaded. Ensure all chimney components are available and check them to ensure there has been no damage. Components should be stored and protected on site from accidental damage. Do not use damaged components!

Handling

It is advised that suitable personal protective equipment should be used when handling the products. Use only clean gloves! Stainless steel components may only be processed with stainless steel tools!

Installation instructions

Appliance connection



1. Make sure the concentric outlet on the stove is installed correctly, according to the installation manual for the stove. Apply high temperature liquid sealant on the inner and outer ring of the stove outlet to provide a gas tight connection.



2. Place the concentric adapter and push the protruding liner onto the stove connector. If necessary, the adapter can be cut at the bottom to get the desired distance between the pipe and the stove top plate.



3. The outer case of the adapter should not be in direct contact with the top plate of the stove. There should be at least 5 mm clearance ensured.

The weight of the chimney can be supported by the stove without the need for additional support

Installation – which way up?

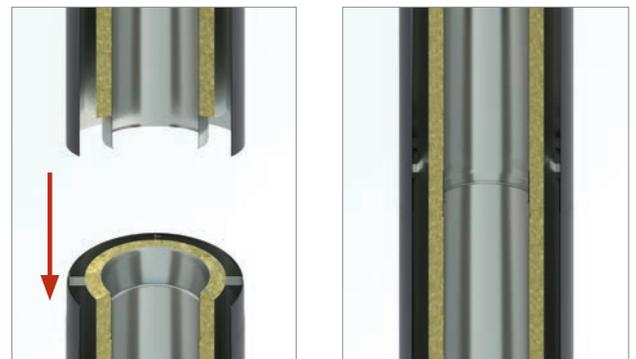
All flue gas carrying components must be installed with the direction arrow on the product label pointing to termination with the external male spigot of the case uppermost.

Jointing system

All joints in the PMSA chimney range are made by means of a simple push fit jointing method. This is achieved by the engineered spigot and socket system having a pronounced lead-in-edge to ease assembly.

Thermal expansion

All PMSA elements are designed to allow for thermal expansion of the liner within each joint, so there is no requirement for any additional expansion joints.



Inspection

The stove has a removable baffle plate to allow for sweeping the chimney

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 Wood applications.

It is recommended that chimneys serving Wood appliances be swept as frequently as necessary, but at least twice a year.

Installation instructions

Passage through a combustible floor

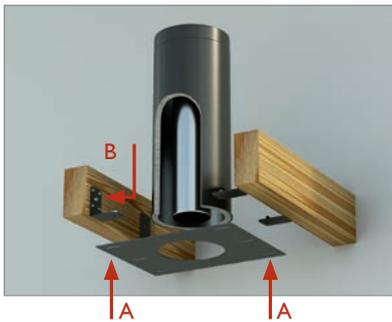
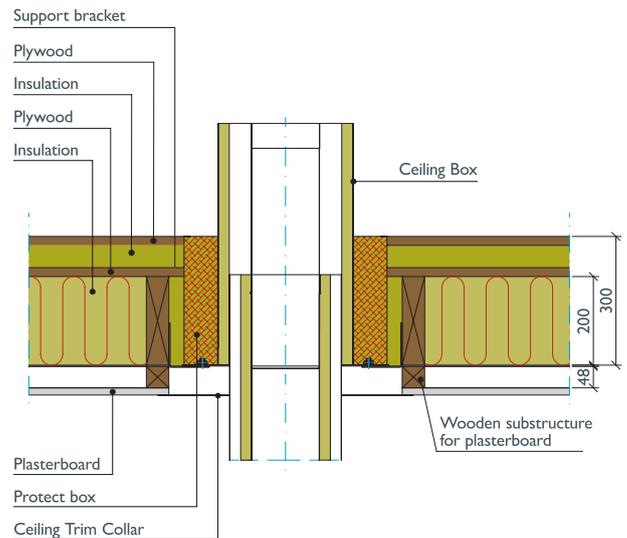
The chimney from first floor level up can be supported by using a ceiling box fixed between the ceiling joists.

The ceiling box includes retractable pipe which can span the distance of max. 800 mm. When installing the first pipe section be sure the distance between the top end of the pipe and ceiling box is less than 800 mm.

Before continuing to assemble chimney sections, ensure sections are pushed together firmly.

The ceiling box can be installed between ceiling joists with a clearance between 470-560 mm, which can be adjusted with brackets attached on both sides of the ceiling box base plate.

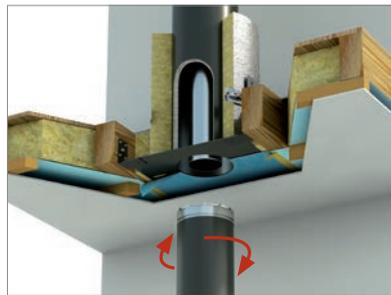
Make sure the ceiling box is installed centred between joists and that min. required distance to combustibles is ensured.



5. Position the ceiling box to the middle between the ceiling beams, flat with the lower side of the beams.

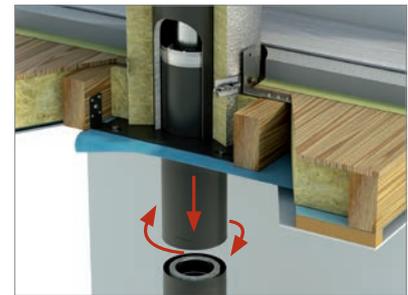
A. Adjust the side brackets to the beams and tighten the M10 bolts firmly.

B. Use 4 Ø 6 mm bolts on each bracket to fix the ceiling box to the beams.



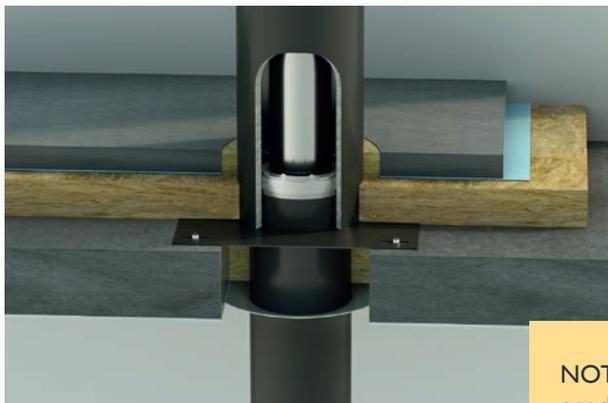
6. Insert lowering pipe into the ceiling box and lock it in place with a fast turn of the pipe. A twist-lock mechanism ensures the pipe remains in place.

Protect Box is lowered into place around the ceiling box and fastened onto the joists.



7. After installation of the stove, the stove adapter and chimney pipe (see pictures 1-3), release/unlock the lowering pipe by fast turn. Lower the pipe and push it down to fit both pipes together firmly.

Passage through a concrete floor



8. Ceiling box can also be used as an anchor plate to support the chimney from concrete floor level up. For installation of a chimney a round hole should be prepared through the floor with the diameter $D_{ext} + \text{min. } 60 \text{ mm}$.

Ceiling box should be positioned to the centre above the hole and anchored to the concrete floor through the drill holes prepared in all sides of ceiling box base plate.

NOTE: Although supporting structure is non-combustible the attention needs to be drawn to insulation layer under the finished floor which needs to be made of mineral fibre boards surrounding the chimney at the required distance to combustibles.

Installation instructions

Passage through ceiling structure using Protect Box

Where chimney penetrates the outside insulation layer of the house (e.g. ceiling) these are normally much thicker than with floor structures between habitable floors, so special attention must be drawn to distance to combustibles – see table on page 6.

Schiedel recommends using Protect box, a special insulation pipe which prevents combustible structure or insulating materials (e.g. paper flocks) to get in contact with chimney's outer skin. It can span insulation thickness's of up to 600 mm.



Offset (optional)

In most cases, pipes are installed vertically from bottom to top, but conflict with roof rails or alike can occur, so an offset should be used to avoid obstacle. Check national regulation on required inspection openings when installing offsets to assist cleaning.

A locking band should be mounted on each joint to strengthen installed length. Wall bands should be installed in locations as shown in the picture to support stability of the chimney.



Wall bands

Wall bands are non load bearing and provide lateral support only. They are used in intermediate chimney sections where non supported chimney length exceed max. allowed lengths. Refer to the load bearing tables on page 10 for full details.



Passage through the roof

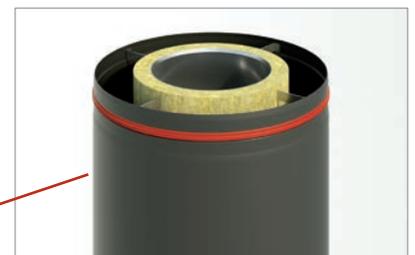
Roof structure represent the upper most position for fixing the chimney before transition to the free standing part. We recommend using a roof support bracket which is supplied as a kit, complete with two side plates for fixing to the roof trusses and a band to give lateral support to the chimney as it passes through the roof. Special attention should be drawn to distance to combustible between the outer case of the chimney and the wooden beams.



Section above the roof

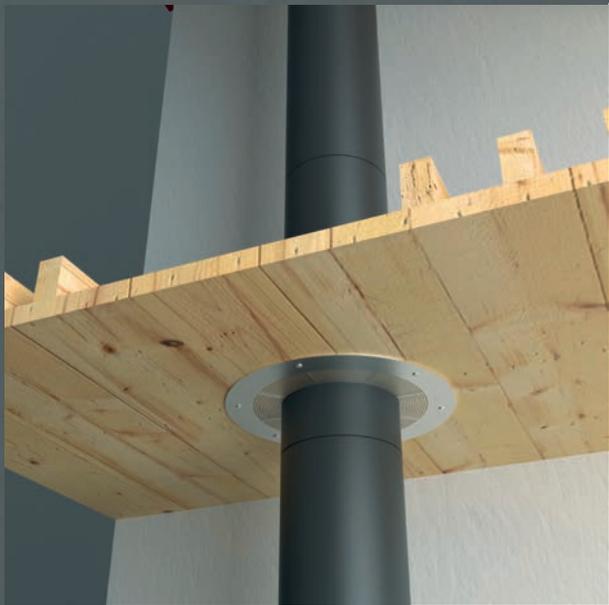
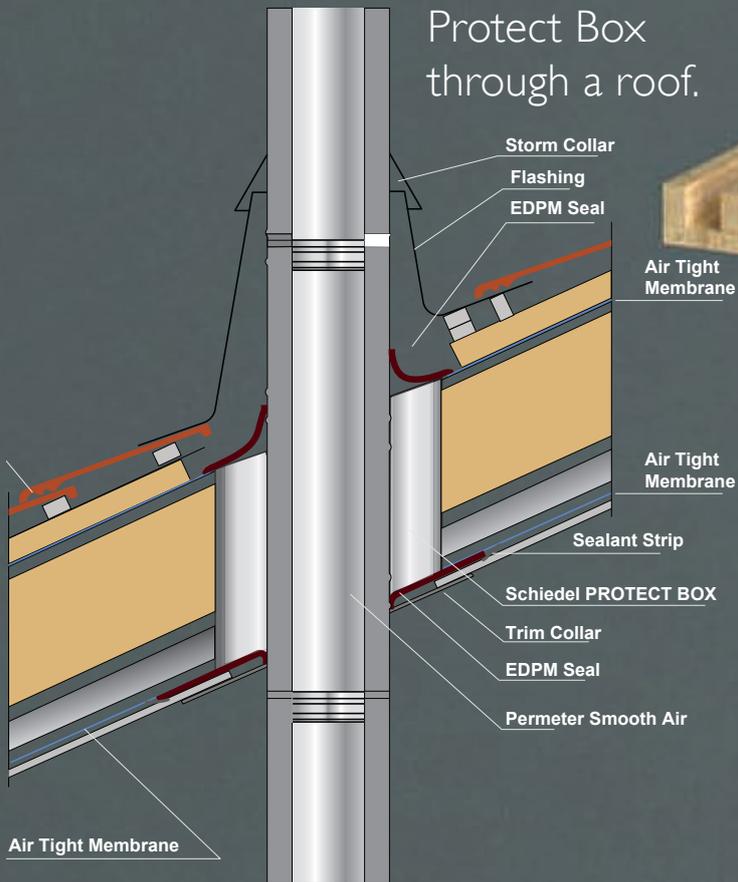
A chimney penetration should be protected accordingly. We recommend to use our Uniflash which is available in respective roof angle ranges.

For external applications (above the roof) a bead of silicone may be applied.



Bead of silicone sealant can be applied on external pipes.

Protect Box through a roof.



Support detail using ventilated firestops and ventilated support plates.

A ventilated firestop is used on the living room ceiling with a ventilated support plate at first floor level.

A ventilated firestop is used in the bedroom ceiling and then a Protect Box can be used at roof level together with EPDM mats to maintain an air tight envelope within the building



Support components



Structural locking band

A structural locking band (supplied separately) should be used in sections above the roof where structural support is required. Max free standing height is 2m. Where height is >600mm above the last structural support, a locking band is required immediately below the roof support and on any pipe joints above it.



Guy wire bracket

Where the free-standing height should exceed 2,0 m above the last support or above the roof, a guy wire bracket must be used in conjunction with guy wires or rigid stays. Please contact Schiedel technical service for advice on details of installation.

Terminal

The terminal used is designed to ensure sufficient air supply to the Sirius stove, which has been approved as a room sealed appliance.



After installation

CE chimney plate

After installation a chimney plate must be applied. This is the responsibility of the installer.

Maintenance and cleaning

Chimneys should be regularly inspected and cleaned according to the national chimney sweep regulation. Only stainless steel or plastic brushes are allowed to be used for cleaning to avoid corrosion on the flue liner.

Carbon monoxide detector

It is essential that a Carbon monoxide detector is installed in room or dwelling where a Wood appliance is installed. This should comply with EN 50291.

Please follow manufacturer's instructions with regards to siting and fixing on the ceiling at least 300 mm from any wall or if it is located on a wall, as high up as possible (above any doors and windows), but not within 150 mm of the ceiling between 1 m and 3 m horizontally from the appliance

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



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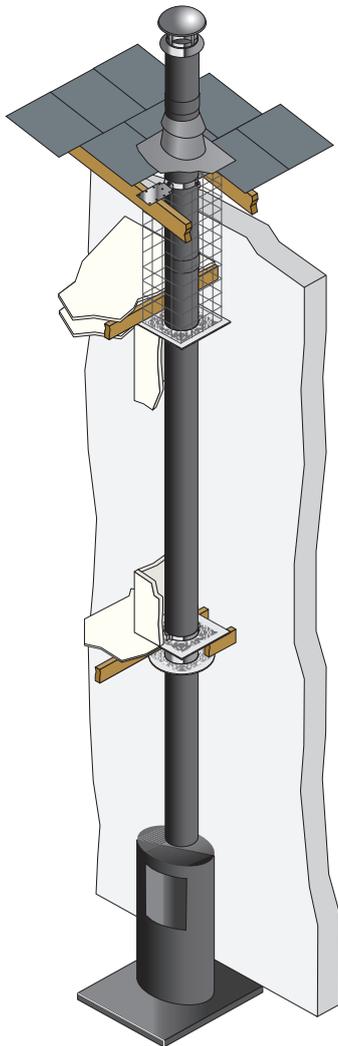


Our brilliant app now allows you to see what this stove looks like in your room, using Augmented Reality!

Point your mobile camera on to the QR code above to try it out.

Stove packages

PERMETER SMOOTH AIR - 2 STOREY INTERNAL INSTALLATION



Stove and chimney package contents

The Sirius stove package comprises of the stove and the relevant pipes and accessories for a full installation. Installation by a HETAS installer is recommended.

CODE	PACKAGE COMPONENTS	QUANTITY
157842	Concentric Stove Connector	1
142696	955mm Pipe	6
142700	455mm Pipe	1
110286	Locking collars	3
173118	Round G100 FSP Vent	1
173128	Square G100 FSP Vent.	1
173120	Square G100 Support Plate Vent	1
100965	Roof Support	1
112197	Uniflash	1
110460	Storm Collar	1
116577	Terminal	1
110460	Storm Collar	1

Installation example

An example of an internal installation. Please note that this is for visual purposes only - the exact components are listed within the table.

Any additional components can be ordered based on your particular installation type, i.e. if you require more pipe lengths for example.

For info on chimney support and heights, please refer to the installation guides which will be provided. Our Technical Department will be happy to assist in these and other questions.

Package with Sirius 1.1

£POA



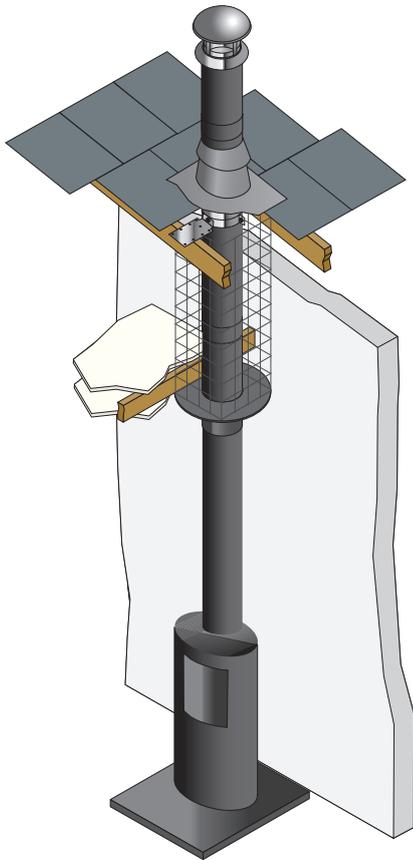
Package with Sirius 3.1

£POA



Stove packages

PERMETER SMOOTH AIR - BUNGALOW INTERNAL INSTALLATION



Stove and chimney package contents

The Sirius stove package comprises of the stove and the relevant pipes and accessories for a full installation. Installation by a HETAS installer is recommended.

CODE	PACKAGE COMPONENTS	QUANTITY
157842	Concentric Stove Connector	1
142696	955mm Pipe	4
142700	455mm Pipe	1
110286	Locking collars	3
111344	Bungalow FSP	1
100965	Roof Support	1
112197	Uniflash	1
110460	Storm Collar	1
116577	Terminal	1

Installation example

An example of an external installation. Please note that this is for visual purposes only - the exact components are listed within the table.

Any additional components can be ordered based on your particular installation type, i.e. if you require more pipe lengths for example.

For info on chimney support and heights, please refer to the installation guides which will be provided. Our Technical Department will be happy to assist in these and other questions.

Package with Sirius 1.1

£POA



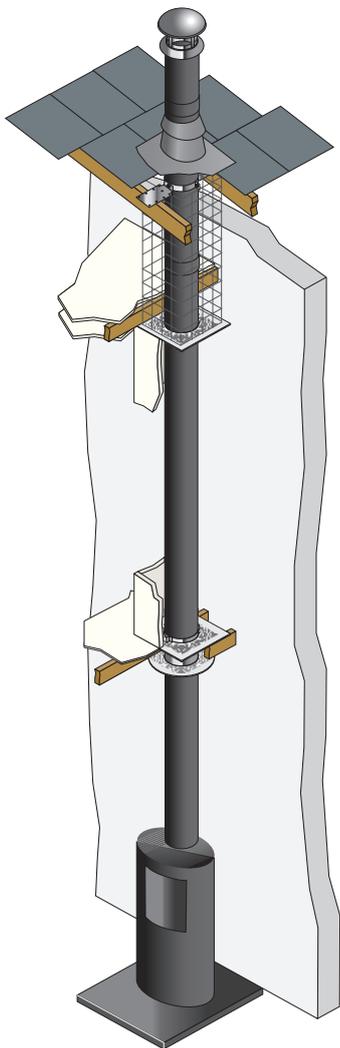
Package with Sirius 3.1

£POA



Stove packages

TWIN WALL ICID - 2 STOREY INTERNAL INSTALLATION



Stove and chimney package contents

The Sirius stove package comprises of the stove and the relevant pipes and accessories for a full installation. Installation by a HETAS installer is recommended.

CODE	PACKAGE COMPONENTS	QUANTITY
175710	DW Adj. Starter Section	1
125286	960mm Pipe & L/B	6
125265	45 Deg. Bend	2
175703	Round G50 FSP Vent	1
126946	Magnetic Cover Plate	1
175705	Square G50 FSP Vent.	1
175707	Square G50 Support Plate Vent	1
100962	Roof Support	1
157492	5°-45° Flashing Kit	1
125145	Terminal	1
175711	Direct Air Feed Kit	1

Installation example

An example of an internal installation. Please note that this is for visual purposes only - the exact components are listed within the table.

Any additional components can be ordered based on your particular installation type, i.e. if you require more pipe lengths for example.

For info on chimney support and heights, please refer to the installation guides which will be provided. Our Technical Department will be happy to assist in these and other questions.

Package with Sirius 1.1

£POA



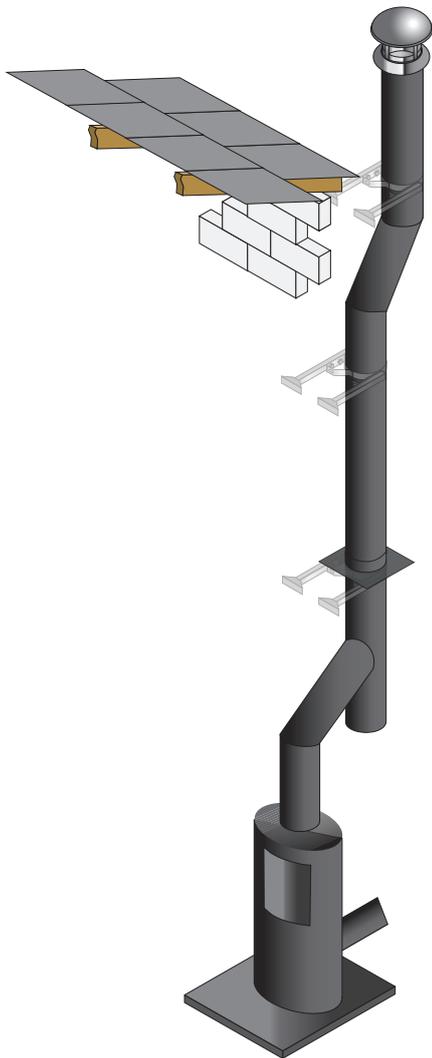
Package with Sirius 3.1

£POA



Stove packages

TWIN WALL ICID - 2 STOREY EXTERNAL INSTALLATION



Stove and chimney package contents

The Sirius stove package comprises of the stove and the relevant pipes and accessories for a full installation. Installation by a HETAS installer is recommended.

CODE	PACKAGE COMPONENTS	QUANTITY
175710	DW Adj. Starter Section	1
125286	960mm Pipe & L/B	2
125265	45 deg Bend	1
125250	135 TEE (with Tee Plug & Drain)	1
169697	Retro Wall Support	1
127036	2 Piece Trim 45°	2
125251	1460 Pipe	2
125270	460 Pipe	1
125145	Terminal	1
175711	Direct Air Feed Kit	1
126641	45° Wall Sleeve (Masonry)	1
126654	Wall Band 50mm	2
126622	ADJ Bracket 60-300mm	1

Installation example

An example of an external installation. Please note that this is for visual purposes only - the exact components are listed within the table.

Any additional components can be ordered based on your particular installation type, i.e. if you require more pipe lengths for example.

For info on chimney support and heights, please refer to the installation guides which will be provided. Our Technical Department will be happy to assist in these and other questions.

Package with Sirius 1.1

£POA



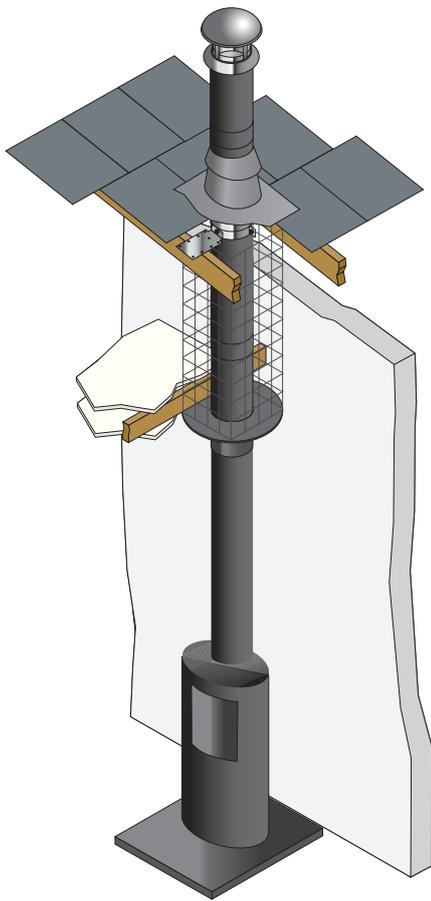
Package with Sirius 3.1

£POA



Stove packages

TWIN WALL ICID - BUNGALOW INTERNAL INSTALLATION



Stove and chimney package contents

The Sirius stove package comprises of the stove and the relevant pipes and accessories for a full installation. Installation by a HETAS installer is recommended.

CODE	PACKAGE COMPONENTS	QUANTITY
175710	DW Adj. Starter Section	1
125286	960mm Pipe & L/B	4
126528	Bungalow FSP	1
100962	Roof Support	1
157492	5°-45° Flashing Kit	1
125265	45 Deg. Bend	2
125145	Terminal	1
175711	Direct Air Feed Kit	1

Installation example

An example of an internal installation. Please note that this is for visual purposes only - the exact components are listed within the table.

Any additional components can be ordered based on your particular installation type, i.e. if you require more pipe lengths for example.

For info on chimney support and heights, please refer to the installation guides which will be provided. Our Technical Department will be happy to assist in these and other questions.

Package with Sirius 1.1

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Package with Sirius 3.1

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