

# Sirius Stove

# **Operating Manual**

Schiedel Chimney Systems, Crowther Road, Crowther Industrial Estate Washington, Tyne & Wear NE38 0AQ – Tel. 0191 4161150 info.uk@schiedel.com



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# **DEVICE DESCRIPTION**

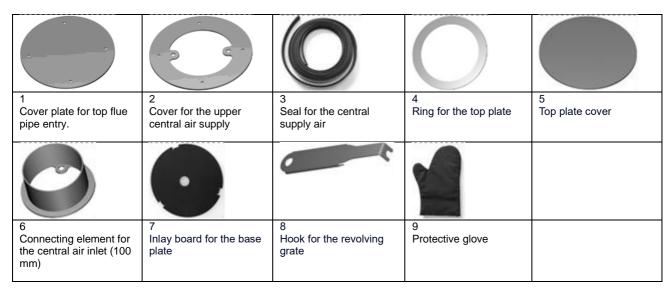
The SIRIUS fireplace is a stove for intermittent burning which has been specially designed for the combustion of firewood. A stove for intermittent burning can be used over long periods of time without the risk of the device getting damaged. The device shell is a welded steel structure.



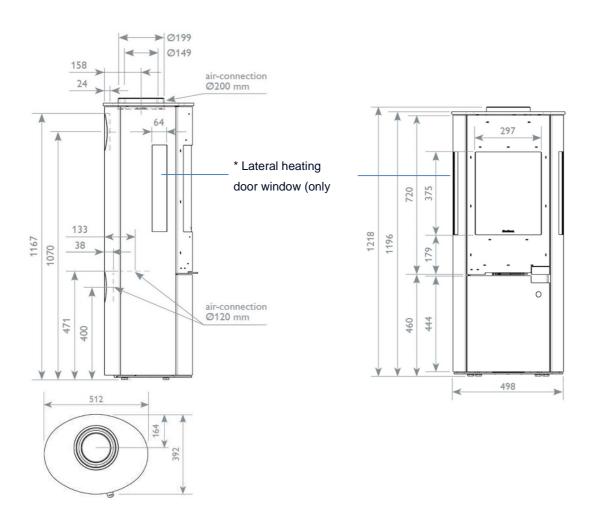


## **Accessories included**

All the accessory components below are in the wood storage compartment upon delivery.



## **Device dimensions**





## IMPORTANT INFORMATION

Please read these instructions on installation and operation carefully before installing the device and entering it into service. In doing so, damage that may arise due to improper installation or operation can be avoided.

## SAFETY

#### **Burn hazard**

Please be aware that some components (heating door, handles etc.) get hot whilst the device is being used in heating mode and, as such, they may cause burns.

Please use the protective glove provided when using the device.

#### Fire hazard

Please observe the safety distances for flammable components when installing the device.

It is forbidden to place any objects which are not resistant to heat on the stove. It is also prohibited to dry clothes on the stove. Clothes, or similar items, must be placed a sufficient distance away from the stove when drying.

## Caution - children playing

Please note that the surface of the stove can become extremely hot when the device is being used. Make sure children are aware of the hazard and keep them away from the stove when it is being used.

## **Chimney connection**

The stove should only be used after it has been properly connected to a chimney.

## Using the stove

When the stove is in operation, it is forbidden to use highly flammable or explosive substances in the same, or in adjacent, rooms.

The stove should never be operated when the heating door is open.

Please make sure that the combustion air supply is sufficient by using an air inlet pipe with an appropriate design.



## Labelling

Using the documentation provided, you may

- safely operate the device
- carry out cleaning and maintenance work

#### Store this instruction manual in a safe location.

If the instruction manual goes missing, you can contact SCHIEDEL to order a new copy at any time.

Illustrations and simplified images are for general guidance. They are not true to scale.

## Liability

In the event of bodily injury or material damage, the manufacturer may only be held liable if design faults are proven to exist.

The manufacturer shall bear no liability if

- the device is not used as intended
- the device is not operated as intended
- maintenance work is inadequate
- the spare parts used are not original
- structural changes have been made to the device

## Improper use

Using the device in any other way than that intended may result in life-threatening injuries and large-scale material damage. It may also mean that the guarantee or warranty become void.

Improper use includes

- making any structural changes to the device.
- operating the device when it is not properly connected to the chimney.
- operating the device when the heating door is open
- operating the device without having read the instruction manual.



- using spare parts which are not original.
- using fuel which has not been approved

## Information on legal regulations

Please observe the local, national, and European regulations and standards which apply to the installation and operation of stoves.

## Only use suitable fuel

Only use suitable fuel from a selection of environmentally friendly, high-quality and dry varieties.

## **Chimney requirements**

It must be ensured that any new or existing chimneys are suitable and ready for use before using the stove, or before entering it into service.

Please ensure that the chimney is not blocked if the device is going to be stoked after it has not been used for a long time.

## Regular cleaning and maintenance work

The stove, including all of the system components connected (e.g. the chimney,) must be cleaned and serviced on a regular basis in order to make sure that the device remains functional and efficient.

## Spare parts and accessories

Only use original spare parts and accessories

## **Original condition**

The stove has been inspected in the form in which it is delivered and changes should not be made.

## **Correct installation & entering service**

The device is only considered safe if installed by a qualified specialist in accordance with the regulations and requirements applicable to the installation site.

## Sufficient supply of fresh air

This stove is supplied together with the Permeter Smooth Air Chimney System, which has



been designed and tested to provide sufficient combustion air for the system to be used in a room sealed application.

If doors and windows are tightly closed, or if devices, such as extractor hoods, tumble dryers and fans, among other appliances, extract air from the room in which the device is situated, combustion air (fresh air) must be fed into the room from outdoors if need be.

Combustion air inlets must not be closed.

## What to do in the event of a chimney fire

If the stove, chimney or connecting element is not cleaned on a regular basis, or if unsuitable fuel is used, residue may catch fire. This may cause a chimney fire.

Keep the heating door closed and set the air regulator to the lowest possible setting. Keep any combustible materials well away from the appliance and the chimney. Do not try and put the chimney fire out by throwing water on it under any circumstances.

## Call the fire brigade!



## TRANSPORT / PACKAGING

The device is packaged in such a way so that it is well protected from getting damaged during transportation. However, there is a possibility that device and its accessories may still become damaged.

After unpacking the device, please check carefully whether the device has been damaged during transportation and check whether all components are present.

PLEASE NOTE Any visible defects should be reported immediately! It is not possible to make complaints later!

## Modes of transport

The device may only be transported using vehicles with a sufficient load-bearing capacity.

## Safety during transportation

The device is secured on the pallet using transport locking screws in the wood storage compartment (see image).

## **Transport on pallets:**

Transport the device to the installation site on a pallet. Remove the equipment used as a transport



lock in the wood storage compartment and lift the device off the pallet.

## **Transport on dollies:**

The device may be placed on its back and transported using a dolly. Remove the equipment used as a transport lock and take the device to the installation site using the dolly. In order to prevent any damage to the paintwork, protect the rear side of the stove, with cardboard for example.



## **FUEL**

#### Permitted fuel

The device is suitable for burning firewood.

Only small amounts of the following materials may be used for igniting purposes: bark, wood chippings, brushwood, wood shavings, sawdust and paper. When these types of fuel are set alight, large amounts of emissions and ash are discharged, with little heat being generated.

#### Wood

The water content of firewood should be less than 20% of its dry weight.

Firewood should also be max. 1/3m long and chopped into small pieces. In this way, the pieces of wood catch fire quickly and generate a higher heat output than if the same amount of wood were used in larger pieces. Spruce, pine and alder can be stored outdoors

for 2 years, whilst hardwood can be stored for 3 years (under cover!).

The following table shows the impact of the water content of wood on its heat value:

| Wood Storage            | Water Content (%) | Heat Output<br>(kWh/kg) |
|-------------------------|-------------------|-------------------------|
| Straight from the woods | 50                | ~ 2,3                   |
| Stored over the winter  | 40                | ~ 2,7                   |
| Stored over the summer  | 18-25             | ~ 3,4                   |
| Air-dried               | 15-20             | ~ 4,2                   |

## Refuelling on to a low fire bed

If there is insufficient burning material in the firebed to light a new fuel charge, excessive smoke emission can occur. Refuelling must be carried out onto a sufficient quantity of glowing embers and ash that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed add suitable kindling to prevent excess smoke.

#### **Unauthorised fuel**

Surface-treated wood (veneered, varnished, water- proof coating, etc.), damp wood, chipboard, flammable liquids, any type of waste (packaging waste), plastics, newspapers, rubber, leather, fabrics, etc. Burning these kinds of materials pollutes the environment very



badly. Furthermore, it may cause damage to the device and chimney.

Burning charcoal is not permitted. The device has not been verified for use with this kind of fuel and, as such, it may cause damage to the device and is not covered by the guarantee.

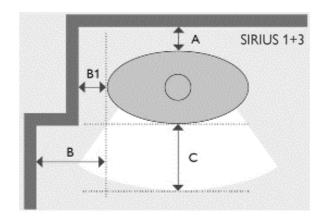
PLEASE NOTE If unauthorized and low-quality fuels are used, we reserve the right to withdraw the guarantee and warranty claims!

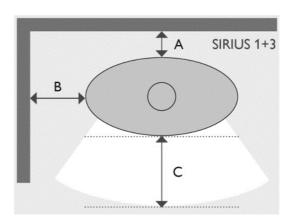
# **INSTALLATION**

## Minimum distances to combustibles

The stove is designed to be a free-standing indoor device. It must be installed at the following distances from heat-sensitive components (wood partitions, furniture, decorative fabrics,):

| Distances |                            | SIRIUS 1 mm | SIRIUS 3G mm |
|-----------|----------------------------|-------------|--------------|
| A         | Permeter Smooth Air System | 50          | 70           |
| В         | Always                     | 220         | 600          |
| B1        | Always                     | 150         | -            |
| С         | Always                     | 1.000       | 1.100        |







#### Installation in a stove recess

It is only permitted to install the stove in a recess, built using non-flammable components (e.g. in an inoperative, open fireplace) and with a flue pipe connection which leads upwards into the chimney, if there is a minimum distance of at least 5cm from the sides.

## Floor protection

If the floor is made from flammable material (floors made from wood, synthetic materials, carpets, ...), a superimposed hearth made from toughened glass, or any other non-flammable material, should be used.

This base must have the following minimum dimensions, with the opening of the combustion chamber as the starting point:

- Front 225mm
- Side 150mm

## Inlay board for the base plate

(please see accessory component 7 provided) install after the final location for the stove has been chosen.

## Chimney

It must be ensured that any new or existing chimneys are suitable and ready for use before using the stove, or before entering it into service. Please ensure that the chimney is not blocked if



the device is going to be lit after it has not been used for a long time.



## **Room-sealed operation**

Schiedel recommends using the Sirius stoves together with our tested and approved Permeter Smooth Air System, which has been specifically designed for use with room sealed appliances.

As modern or refurbished houses have a highly dense construction, it often means that there is not enough interior air for combustion.

The SIRIUS stove has been certified as a room-sealed stove as per the DIBt (*Deutschen Institutes für Bautechnik, German Institute for Structural Engineering*) eligibility criteria.

As such, the stove can be used, by and large, regardless of the air and pressure rations in the room where it has been installed.

It is safe to use these kinds of room-sealed stoves if the building has a controlled ventilation system as they are characterised by their largely compact design and self-closing doors.

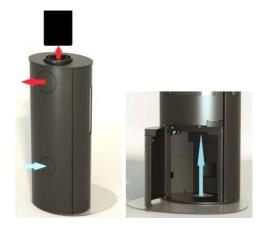
If the structural conditions mean that room-sealed operation is impossible, it is also possible for the SIRIUS stove to draw the combustion air from the room where it has been installed (non-room-sealed operation).

In this case, the installer should ensure that the air supply in the room where the device has been installed is sufficient.

#### **Connection methods**

- 1.) On standard installations using Permeter Smooth Air, the combustion air is brought directly into the stove through the outer wall of the Permeter Smooth Air System
- 2.) Combustion air comes from the rear or from below. The connecting element is 100 mm in diameter. The air pipe used by the installer should be airtight.
- Combustion air comes from the room where the device has been installed (not recommended by SCHIEDEL)

No separate air supply connection necessary, combustion air is extracted from the room where the device has been installed via the bottom of the device – open windows regularly, this is mandatory, especially for extremely impermeable houses







## Changing the supply air feed/exhaust extraction pipe

The device comes delivered with an upper supply air feed/exhaust extraction pipe as standard

Tools required to make any alterations:

- Allen key (magnetic)
- Allen wrench



1.) Remove the top plate and take off the outer air inlet and inner flue tube supports





2.) Stick the cover for the upper central supply air feed (accessory part #2) with the seal for the central supply air feed (accessory part #3) to the inner and outer edge and attach to the stove.







3.) Remount the inner flue tube supports. Replace the top plate and top plate ring (accessory part #4).

## Exhaust pipe from the rear

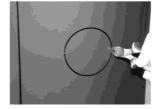


1.) Remove the top plate and take off the outer air inlet and inner flue tube supports



2.) Stick the cover for the upper flue pipe (accessory part #1) with the seal for the central supply air feed (accessory part #3) above and below the screw holes and attach to the stove.





3.) Replace top plate and top plate cover (accessory part #5). Then carefully remove the rear flue pipe cover using diagonal-cutting pliers.





4.) Unscrew the rear flue pipe panel and take it off. Then mount inner flue pipe supports (from above) at the rear.



## Supply air feed from the rear



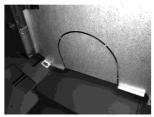


1.) Carefully remove the rear/bottom supply air cover using diagonal-cutting pliers. Then screw off the rear panel.



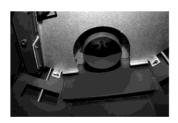
2.) Screw on supports for the central air supply feed (accessory part #6)

## Supply air feed from below





1.) Cut the predetermined point in the galvanised sheet underneath the combustion chamber using diagonal-cutting pliers and remove the sheet. Then screw off the air supply feed cover located behind.



2.) Screw on supports for the central air supply feed (accessory part #6)



## **OPERATION**

## **Accessories provided**

A hook is provided for the revolving grate, as well as a protective glove to open the heating door (please refer to page 4).

## **Heating door lock**

The device has a self-closing door. Simply pull on the door handle to open the heating door.

## Setting for the combustion air

For optimal combustion, a certain amount of wood requires a certain amount of oxygen. If the amount of air supplied to the wood is smaller than that need for a clean and efficient combustion process, the device will generate less energy (device protected from overheating as far as possible) - the unused "wood gas" escapes through the chimney; the result: the device is less effective and the environmental footprint is higher.

# PLEASE NOTE It is strictly necessary to observe the recommended fuel quantities and air settings!

The primary air entering the combustion chamber from below via the grate is responsible for performance, as it generates most of the heat that leads to "wood gasification". This wood gas is burnt in a clean and efficient manner thanks to pre-heated secondary air.

The secondary air comes from above and flows along the combustion chamber door (or window) and over the fuel in the combustion chamber. An accurate mixture of wood gas and hot secondary air creates an optimal combustion process - and in turn excellent use of fuel. Nature will thank us for it!

## Setting for the Air Supply Lever to prevent flow of combustion air

The supply of the primary and secondary air required for combustion is regulated using the lever to manage flow of combustion air.

This determines the burning rate and, as such, the amount of heat output by the device.





#### Device set to "0"

(only permitted in areas not covered by DEFRA restrictions for use on wood burning appliances).

When set to "0", the air feed is closed, and no combustion air is supplied = this should be the setting if the device is not going to be used for long periods (e.g. in summer).

## Heat setting "1"

When set to "1", primary and secondary air is supplied in a ratio optimal for a clean combustion process = setting to operate the device at nominal capacity.

## Heat setting "2"

A large amount of combustion air is needed in the igniting phase and the lever should be pushed all the way to the right to setting "2" = maximum supply of primary and secondary air.

PLEASE NOTE Setting "2" should only be selected for igniting purposes!

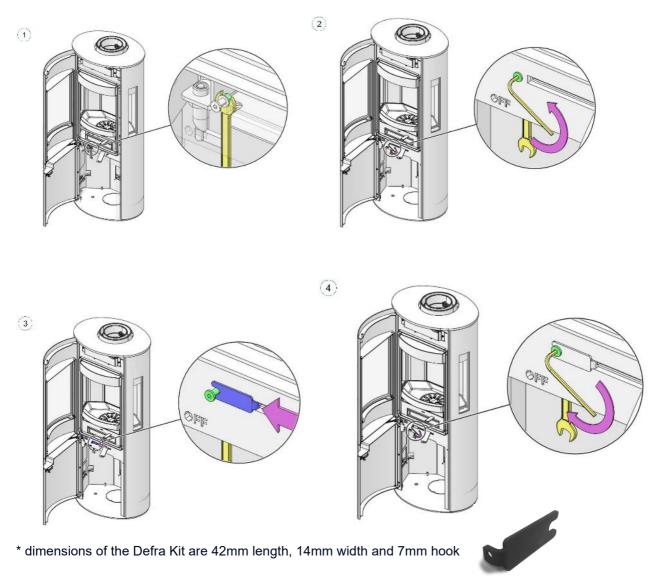
## **Dampers left open**

Operation with the air control or appliance dampers open can cause excess smoke. The appliance must not be operated with air controls, appliance dampers or door left open except as directed in the instructions.

In order for the stove to comply with the DEFRA exempt conditions, a DEFRA kit must be installed, as per the instructions below:



## **DEFRA KIT INSTALLATION GUIDE**



## Air flow to maintain clean glass

Air flow is very important to keep the glass clean, whilst at the same time acting as secondary air in order to create an optimal combustion process low in emissions. It flows right in front of the glass in the combustion chamber and is a key part of the combustion process at this location. In doing so, the glass is kept as clean as possible.

If, despite this, the glass becomes dirty, this soot can be removed using glass cleaner which is specially designed for oven and stove glass when the device has cooled. Please find more information in the section on Maintenance and Servicing.



## **INITIAL OPERATION**

## Using the appliance the first time

PLEASE NOTE Before using the appliance for the first time, it is necessary to inspect all system connections (flue pipe connection, combustion air connection, etc.).

Please make sure that there are no objects in the combustion chamber.

After the device has been installed and connected, and before it is entered into service for the first time open the door of the combustion chamber and remove the accessories.

After you have familiarised yourself with how to operate the device, it can be entered into service. During the first 2-3 days, only heat with low output.

## Running in the appliance

A high-quality, air-drying varnish is used on the device. When this varnish is completely dry (at room temperature), it is practically odourless and smoke-free. However, if the device is heated before the varnish is completely dry, it may result in an unpleasant, yet harmless, smoke or odour being produced for a short time. Make sure that the room where the device has been installed is well ventilated!

#### Information on noises

The device may emit clicking noises due to the heating and cooling processes. These are caused by the enormous temperature differences in the material and do not indicate a fault with the device.

# Information on combustion chamber lining

If the conditions for combustion are unfavourable (e.g. if the combustion chamber is cold during the heating stage) a layer of black soot may form on the combustion chamber plate.

This does not indicate any fault with the device. After operating temperature has been achieved, the soot deposits will burn off - the combustion chamber plate will become light coloured.

However, if dirt does not come off the combustion chamber plate, please refer to the information in the section "Troubleshooting".



## **HEATING CORRECTLY**

1

To start the heating process,



move the combustion air regulator above the combustion room door onto "Ignite"

Move the air regulator above the combustion chamber from position 0 to position II. Doing so will fully open the air supply.

2



Now **pile** two to three dry wooden logs (not too thick, girth smaller than 20cm) **on top of each other** in the combustion chamber.

Then put wood shavings, or kindling wood which has been cut approximately as thick as a finger, onto the wood pile.

Lay 1 -2 natural wood firelighters on top. You should only use natural wood.

3

#### Ignite the fire at the top



using a long matchstick, for example. Then close the door to the combustion chamber. You will start to see flames appear in the combustion chamber after just a short period.

4



When all the pieces of wood are burning, reduce the air

supply by setting the regulator to "Heating mode". Move the air regulator above the combustion chamber from position II to position I.

5

You should top the fire up

when glowing embers remain, and you can only see small flames.



6

In order to avoid smoke escaping from the device, open the door slowly. Top the fire up with a maximum of two small wooden logs, cleaved edge facing downwards.



Under no circumstances should fuel be thrown into the combustion chamber. This may damage the combustion chamber lining and cause embers to fall out of the chamber.

7



If you wish to put the fire out, let the remaining embers go out and close the air regulator. Please note that on DEFRA exempt appliance, the lever will stop once it reaches the DEFRA limiter kit.



## **Fuel loading**

The recommended filling quantity for nominal heat output are specified in the following table:

| Recommended filling quantity | 2-3 logs, max. 2 kg   |
|------------------------------|---|
| Combustion period            | approx. 60 min  |
| Heat output                  | Nominal output.   |
| Maximum fill level           | 205mm.  The maximum level to which fuel can be filled in the combustion chamber is 205mm due to openings for the air supply on the rear wall. |

PLEASE NOTE If the recommended filling quantity is exceeded, damage may be caused due to overheating! If the device casing becomes yellow or discoloured, if the combustion chamber lining, door lock or chamber windowpane is damaged, these are all signs that the device is being misused.

## Heating in the transitional period

If outdoors temperatures are above 15°C, there is the risk that the fire will only be moderate due to the chimney's low supply pressure.

This results in an increased build-up of soot in the device flues and chimney. Increase the supply of air, stoke the fire more often and top up the fire with logs more often (with smaller wooden logs) to reduce the build-up of soot in the transitional period.

## **CLEANING AND MAINTENANCE**

#### **Burn hazard**

Please let the device cool before cleaning to prevent contact with embers or hot components!

It is particularly important to clean, maintain and service the device, hot gas flues and chimney on a regular basis to ensure that the device is safe to operate, efficient and retains its value. A deep clean should be performed after every heating period, as well as if the



device has been left unused for a long period of time. If the device is used frequently, or if poor- quality fuels are used, perform a deep clean more often as appropriate.

Always check each seal when cleaning the device - if any seal is damaged, it should be replaced. Pay attention to ensuring that all air supply openings (slits on the grate/ash drawer openings) are not blocked.

Get a specialist to inspect your stove annually (Schiedel recommends a HETAS Accredited Chimney Sweep).

## How to clean the heating door

You can fix the heating door for the combustion chamber in place in order to make the cleaning process more convenient. Open the door to the wood storage compartment, as well as the heating door, so that they are completely open (> 90°). You will find a catch located underneath the door closing mechanism. This can be used to lock the door in place.



PLEASE NOTE Always keep the door to the combustion chamber closed when the device is in heating mode! The door should only be fixed in place for cleaning purposes, or to remove ash! DANGER may arise if exhaust gases leaks out!

## Cleaning with an ash vacuum

Using an ash vacuum makes cleaning the device particularly convenient. Leave the device to cool down completely and use an ash vacuum to clean.

## Cleaning varnished surfaces

Wipe down varnished surfaces with a damp cloth. Do not scour. Do not use any detergents which contain solvents (e.g. glass cleaner etc.).



Please note that highly heat-resistant varnish is less resistant to corrosion. If too much water is used to clean the device or adjoining components, a film of rust may form.



## Cleaning the window

Secondary air forms a curtain of hot air in front of the window (rinsing) if the fire has been properly created. This means that less soot forms on the window of the heating door.

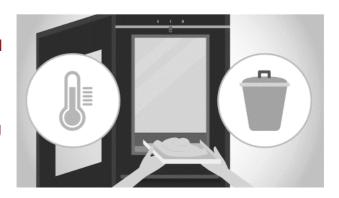
If ash particles settle on the window despite this, we recommend using a standard stove window cleaning agent.

A tried and tested cleaning procedure that is environmentally friendly: moisten a ball of newspaper or kitchen roll and dip it into the cold wood ash. Rub the inside of the heating door window. Wipe with a dry bunch of paper.

## Cleaning the combustion chamber

## Grate and ash holder

PLEASE NOTE Do not empty the ash holder when it is hot! Please note that seemingly cold ash may still contain small embers. To avoid starting a fire, it is recommended to place ash into a suitable metal container before throwing it away.



Wipe the ash into the ash holder through the

slits of the grate using an ash slider. Remove cinders, encrustations and other deposits created due to combustion from the air slits in the grate.

Empty the ash holder on a regular basis and on time - the cone of ash should not block the primary air openings in the grate!

## Flue gas ducts

Screw off the outer and inner cover on the cleaning port (only when the device is cold!) and remove any residual flue ash at regular intervals (especially important before the hot season). This is easiest to do with an ash vacuum.







## **CLEAN AIR ACT**

#### The Clean Air Act 1993 and Smoke Control Areas

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

In England appliances are exempted by publication on a list by the Secretary of State in accordance with changes made to sections 20 and 21 of the Clean Air Act 1993 by section 15 of the Deregulation Act 2015. Similarly, in Scotland appliances are exempted by publication on a list by Scottish Ministers under section 50 of the Regulatory Reform (Scotland) Act 2014.

In Wales and Northern Ireland these are authorised by regulations made by Welsh Ministers and by the Department of the Environment, respectively.

Further information on the requirements of the Clean Air Act can be found here at: https://www.gov.uk/smoke-control-area-rules

Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements.

The Sirius 1 and Sirius 3G have been recommended as suitable for use in smoke control areas when burning wood logs. The Sirius 1 and Sirius 3G must be fitted with a permanent stop to prevent closure of the air inlet control beyond 20% open.



# **TROUBLESHOOTING**

PLEASE In the event that an error occurs, (overloading) set the air regulator to "0" and keep the door to the combustion chamber closed. Do not add any more fuel! In the event of damage or potential fire, leave the building immediately and call the fire brigade!

| PROBLEM                                       | CAUSE   | SOLUTION  |  |
|---|---|---|--|
|   |   | In principle: every glass panel must be cleaned from time to time (depending on usage) (please refer to the section 'Cleaning the window ')   |  |
|   | Poor flue draught   | Clear with a chimney sweep (possibly make the chimney longer/measure the draught)   |  |
| Glass gathers soot too fast                   | Air regulator used incorrectly                                      | It is strictly necessary to use the air regulator as specified in the instruction manual. If secondary air is blocked, the window will gather soot very quickly. However, this can burn off itself if the device is used correctly. |  |
|   | Wooden logs are too large, too much fuel, damp wood, incorrect fuel | See the section on "Heating correctly"  |  |
|   | Operating temperature was not reached                               | Use more fuel, dry wood (< 20 % residual moisture), please pay attention to the air regulation  |  |
|   | Insufficient flue draught   | Clear with a chimney sweep (possibly make the chimney longer/measure the draught)   |  |
| Stove is not extracting properly              | Stove has soot inside   | Use more fuel, dry wood (< 20 % residual moisture), please pay attention to the air regulation See the sections on "Heating correctly" and 'Cleaning and Maintenance'   |  |
| Stove has a strong smell                      | Varnish curing phase  | The varnish will give off a smell during the first heat cycle!  |  |
| and smoke is escaping                         | Stove is dusty/dirty  | Please clean before the season!   |  |
|   | Chimney draught is too little, flue pipe                            | Check connection points and reseal where necessary  |  |
| Exhaust fumes escape when topping up the fire | connection is not airtight  | Check the chimney draught, check the device is working  |  |
| and during the heating stage                  | Heating door is opened too quickly when topping up the fire         | Open the heating doors slowly when topping up the fire  |  |
|   | Heating door opened before the fire has burned down                 | Only add more fuel to the fire when there are only embers left (no visible flames)  |  |



## **TECHNICAL DATA**

## Type testing / Quality seal

The SIRIUS 1 & SIRIUS 3 room-sealed wood stoves from SCHIEDEL have been certified according to the following testing principles:

- DIN EN 13240 (Raumheizer f
  ür feste Brennstoffe, Room heaters Fired By Solid Fuel)
- · Certification principles for the inspection and evaluation of room-sealed stoves for solid fuel, DIBt Berlin
- Agreement as per art. 15a B-VG on the protective measures for small-scale furnaces
- NS 3058 (NS 3059) inspection of a room heater as per the requirements set out in the Norwegian standard

The exhaust gas values stipulated in the following standards and regulations have been observed: the Regensburger standard, Stuttgarter standard, Munich.

The device was type-tested at the RRF test centre in Drolshagen (GER) / Test report number: RRF - 40 17 4786

| 4/86  |                       |  |
|---|-----------------------|--|
|   | SIRIUS 1              | SIRIUS 3G  |
| Dimensions W x H x D  | 512 x 1218 x 392 mm   | 512 x 1218 x 392 mm  |
| Size of the combustion chamber W x H x D                      | 360 x 349 x 277 mm    | 417 x 349 x 277 mm   |
| Diameter of the flue pipe outflow                             | 150 mm                | 150 mm   |
| Diameter of fresh air connection                              | 100 mm                | 100 mm   |
| Nominal heat output   | 5,4 kW                | 5,0 kW   |
| Indoor heat output  | 5,9 kW                | 5,5 kW   |
| CO emissions (with 13% O²)                                    | 500 mg/m <sup>3</sup> | 750 mg/m³  |
| Emission of dust (with 13% O²)                                | 18 mg/m³              | 23 mg/m³   |
| Emission of dust (NS 3058)                                    | 2,59 g/kg             | 4,63 g/kg  |
| Efficiency  | 84 %                  | 82 %   |
| Exhaust fume temperature (exhaust gas outlet)                 | 291°C                 | 278°C  |
| Exhaust fume mass flow (when heat output is nominal)          | 4,2 g/s               | 512 x 1218 x 392 mm  |
| Stove draught requirement (when heat output is nominal)       | 12 Pa                 | 12 Pa  |
| Weight  | 164 kg                | 172 kg   |
| Room-sealed operation and non-room-sealed operation possible? | Υ                     | Y  |
| Energy efficiency class                                       | ENERG © 500.0 1       | ENERG SO SOCIONAL SOCIAL SOCIA |



# **CE MARKING**

## **SIRIUS 1 SCHIEDEL** Brennstoffe Fuel type Type brensel Scheitholz Wood Tre Leistung Heat output Varmeeffekt 5,9 kW Wirkungsgrad Efficiency Virkningsgrad 84 % CO emission bez. auf 13% O<sub>2</sub> CO emission at 13% O<sub>2</sub> CO utslipp ved 13% O<sub>2</sub> 500 mg/Nm<sup>3</sup> Staub bez. auf $13\% O_2$ Dust emission at $13\% O_2$ Støv utslipp ved $13\% O_2$ 12 mg/Nm<sup>3</sup> Abgastemperatur Flue gas temperature Røykgasstemperatur 291 °C Registrationsjahr Registration year Registrering år 2018 Lesen und befolgen Sie der Aufstellungs- und Bedienungsanleitung. Verwenden Sie nur vorgeschriebene Brennstoffel Die Feuerstätte ist nicht für einen Dauerheizbetrieb geeignet! Mehrfachbelegung des Schornsteins möglich, außer bei RLU. Scholle von der Schornsteins manual. Use only recommended fuel. Not for continuous heating! This appliance can be operated in a shared flue, if it's not used air independent. Felg montering og bruksanvisningen. Bruk bare anbefalf brensel. Kun for intermitterende bruk. Dette ildstedet kan brukes på en felles røykkanal dersom den ikke monteres med ekstern tilluft i toppen. Sicherheitsabstand zu brennbaren Werkstoffen Safety clearance distance Sikkerhetsavstand 1000 150 220 mm vorne/front/foran mm seitlich Korpus/side corpus/side corpus mm seitlich ab Ofenfront/side from stove front/side fra front ildsted mm hinten/back/bak 150 15a B-VG NS 3058 NS 3059 EN 13 240 $\mathbb{C}$ DIN + BlmSchV 2

| SCHIEDEL   | SIR                       | IUS 3  |
|--|---------------------------|--|
| Brennstoffe<br>Fuel type<br>Type brensel   | Scho<br>Woo<br>Tre        | eitholz<br>od  |
| Leistung<br>Heat output<br>Varmeeffekt   | 5,5                       | kW   |
| Wirkungsgrad<br>Efficiency<br>Virkningsgrad  | 82                        | %  |
| CO emission bez. auf 13% O <sub>2</sub><br>CO emission at 13% O <sub>2</sub><br>CO utslipp ved 13% O <sub>2</sub>  | 750                       | mg/Nm³   |
| Staub bez. auf 13% O <sub>2</sub><br>Dust emission at 13% O <sub>2</sub><br>Støv utslipp ved 13% O <sub>2</sub>  | 23                        | mg/Nm³   |
| Abgastemperatur<br>Flue gas temperature<br>Røykgasstemperatur  | 231                       | °C   |
| Registrationsjahr<br>Registration year<br>Registrering år  | 201                       | 7  |
| Lesen und befolgen Sie der Aufstellungs- und Bedienungsanleitung. Verwenden Sie nur vorgeschriebene Brennstoffel Die Feuerstätte ist nicht für einen Dauerheizbetrieb geeignet! Mehrfachbelegung des Schornsteins möglich, außer bei RLU. Follow assembly and instructions manual. Use only recommended fuel. Not for continuous heating! This appliance can be operated in a shared flue, if it's not used air independent. Følg montering og bruksanvisningen. Bruk bare anbefalt brensel. Kun for intermitterende bruk. Dette ildstedet kan brukes på en felles rypkkanal dersom den ikke monteres med ekstem tilluft i toppen. |                           |  |
| Sicherheitsabstand zu<br>brennbaren Werkstoffen<br>Safety clearance distance<br>Sikkerhetsavstand  | 1100<br>600<br>600<br>220 | mm vorne/front/foran<br>mm seitlich Korpus/side corpus/side corpus<br>mm seitlich ab Ofenfront/side from stove<br>front/side fra front ildsted<br>mm hinten/back/bak |
| EN 13 240<br>-<br>DIN +<br>BImSchV 2   | Œ                         | 15a B-VG<br>NS 3058<br>NS 3059   |



# **CLEARSKIES LEVEL 5**

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 3G models exceed the minimum requirements and are future proofed as well as approved on the Defra website to be installed in Smoke Control Areas



Schiedel Chimney Systems Ltd. Unit 8 & 9, Block A, Holton Road Holton Heath Industrial Estate Poole, Dorset BH16 6LG

Tel. +44 (0)1202 861650

sales.uk@schiedel.com | www.schiedel.com/uk

