



# Installation and Operating Manual

Stoves SEO S and SEO L

SEO S leva and SEO L leva





## PREFACE / QUALITY PHILOSOPHY

You have decided in favour of a Spartherm stove; thank you for your confidence in our company.

In a world of excess and mass production, our company stands for the values expressed by our owner, Gerhard Manfred Rokossa:

„High technical quality combined with contemporary design and service to the satisfaction of our customers so they will recommend us to others“.

Together with our specialist trade partners, we offer a range of first-class products, which not only evoke passion, but also engender feelings of comfort and security. To ensure that this occurs, we encourage you to read the operating manual carefully so that you can become familiar with your fireplace and its accessories quickly and thoroughly.

In addition to information on use, these instructions also include important details on care and operation to guarantee your safety and to protect the value of your stove as well as useful tips and guidance. Moreover, we show you how you can operate your stove in an environmentally responsible manner.

For further enquiries, please contact your specialist dealer.

We hope you enjoy your new stove.  
Your Spartherm team

G.M. Rokossa

# CONTENTS

1. General notes	4	4. Combustion	21
1.1 Quality control	5	4.1 Initial commissioning	21
1.2 Scope of Delivery	5	4.2 SEO S and SEO L operating concept	22
1.3 Transport damage	5	4.2.1 The 'SEO app'	22
		4.2.2 The indicator	22
2. Installation instructions	5	4.2.3 Start and menu structure of the app	23
2.1 Fundamental requirements for installation	6	4.2.4 Starting level	24
2.1.1 Installation site	6	4.2.5 Fire area	24
2.1.2 Multiple connection	6	4.2.6 Mode	25
2.2 Technical data	7	4.2.7 Settings	25
2.3 Installation / assembly	10	4.2.8 Assistance	26
2.3.1 Changing the flue gas connection direction	10	4.2.9 Fire	26
2.4 Combustion air supply	11	4.2.10 Monitor	27
2.4.1 Open flue operating method	11	4.2.11 Example of menu guidance	27
2.4.2 Separate combustion air supply	12	4.3 Heating-up / firing	28
2.4.3 Closed flue operation	13	4.3.1 Refuelling	29
2.5 Fire protection	13	4.3.2 Hourly wood consumption rate	29
2.6 Shut-off devices	16	4.4 Controlling heat output	29
2.7 Connecting pieces	16	4.5 Room heating options / indoor climate	29
2.8 Integrated throttle valve	16	4.6 Heating in the shoulder seasons/during unfavourable weather conditions	30
2.9 Closing force for the fire door	17	4.7 Chimney fire	30
3. Operating Manual	18	5. Fuel	30
3.1 General information on operation	18	5.1 CO <sub>2</sub> Neutrality	31
3.2 Burn-up control, SEO S leva / SEO L leva	19	5.1.1 Wood storage	31
3.3 Burn-up control, SEO S / SEO L	20	5.2 Your contribution to environmental protection	32
3.4 Function of the rotary-base for SEO S	20		
3.5 Rating plate	21		

6. Cleaning and care	32
6.1 Cleaning the firebox/cladding parts	32
6.2 Firebox lining	33
6.2.1 Firebox lining SEO S / SEO S leva	33
6.2.2 Firebox lining SEO L / SEO L leva	34
6.3 Maintenance	34
6.3.1 Lubrication manual for door latches with Smart-Close	34
7. Troubleshooting	35
7.1 Glass becomes sooted heavily, rapidly and unevenly	35
7.2 Fire is difficult to ignite	35
7.3 Smoke escapes when adding wood	36
7.4 Excessively rapid burn-up / rate of wood consumption is too high	36
8. General warranty conditions	36
8.1 Application area	36
8.2 General information	36
8.3 Warranty period	36
8.4 Requirements for this warranty to be effective	37
8.5 Exclusion of warranty	37
8.6 Rectification of defects / repair	37
8.7 Extension of the warranty period	38
8.8 Replacement parts	38
8.9 Liability	38
8.10 Final comments	38

## 1. GENERAL NOTES

Please consult your district master chimney sweep before assembling and installing your SEO stove. He will advise you of building law regulations, the suitability of your chimney, and will conduct the acceptance procedure for your stove. The chimney calculation is executed in accordance with DIN EN 13384 with the value triplet specified in this manual (see technical data).

**Important for small children, elderly or infirm persons:** As is the case with all heating devices, it is expedient that you attach a protective fixture for these groups of persons, as the view pane and the cladding parts of the stove can become extremely hot! **Danger of burn injuries!**

Never leave these groups of persons unattended near the stove when a fire is burning or has just been extinguished! The stove should never be operated for an extended period of time unattended.

**ATTENTION:** The heat-resistant glove provided serves only as thermal protection when using the operating handle and the cold hand. The glove is not fire-proof!

National and European standards, the respective state-specific and local directives and regulations, in particular the respective firing installation ordinance of the German Federal State, must be complied with for setup and operation of your stove and for the connection to the chimney.

The stove must always be operated with the door closed. Modification of the closing device is prohibited!

## 1.1 QUALITY CONTROL

**OUR STOVE HAS BEEN TESTED IN ACC. WITH DIN EN 13240 AND COMPLIES WITH THE REQUIREMENTS OF THE CONSTRUCTION PRODUCT DIRECTIVE. (DECLARATION OF PERFORMANCE IS AVAILABLE AND CAN BE VIEWED AT [WWW.SPARTHERM.COM](http://WWW.SPARTHERM.COM))**

These stoves have a self-closing fire door which means the door is only opened when the fireplace has to be serviced (e.g. to clean the combustion chamber or add more fuel). For safety reasons, the closing mechanism must not be tampered with; furthermore, any such action would render the warranty and operating licence null and void. The warranty and operating licence are also rendered invalid if the customer modified the technology of any other area of the stove.

## 1.2 SCOPE OF DELIVERY

The SEO stoves have the following characteristics:

- Fireplace made of refractory concrete / chamotte
- Primary and secondary air supply
- Extractable ash drawer
- Self-closing fire door with high-temperature-resistant ceramic glass.
- Insulated glove\*
- Flue pipe Ø 150mm / 500mm - EN 1856-2\*\*
- Rating plate (cf. Chapter 3.4 "Rating plate" on page 19 for fitting details).
- Supplied pre-assembled in transport-friendly disposable cardboard packaging

\* **Attention:** The glove provided serves only as thermal protection and is not fireproof.

\*\* Only a component of the SEO L and SEO L leva stoves

## 1.3 TRANSPORT DAMAGE

Immediately on arrival, please check the goods delivered (visual inspection). Make a note of any damage on your delivery document. Inform your stove or fireplace fitter of the damage before the installation work begins. Protect the visible elements of the stove from soiling and damage during installation.

Only permitted and sufficiently strong transport aids may be used to transport the stove.

The following points must be noted to ensure safe and problem-free transport.

- Stoves should always be shipped in an upright position, or slightly tilted onto their backs.
- If wheelbarrows are used for transport, always lay the backs of stoves in them.

## 2. INSTALLATION INSTRUCTIONS

The assembly and installation of your SEO stove must be carried out by a specialist. Before your stove is assembled and installed you should meet with the master chimney sweep responsible for such matters in your area to discuss the suitability of your chimney and the installation location and to clarify other matters.

## 2.1 FUNDAMENTAL REQUIREMENTS FOR INSTALLATION

For installation, connection and operation of the SEO stoves, all necessary national and European standards, TROL as well as local regulations (DIN, DIN EN, state construction ordinances, firing ordinances, etc.) must be complied with and applied! The list of regulations given below is not exhaustive.

FeuVo / LBO / VKF	Firing Installation Ordinance of the respective German Federal State / State building or fire protection regulations VKF (Switzerland)
1. BImSchV	Erste Verordnung zur Durchführung des Bundes-Immissionsschutzgesetz (First Ordinance on the Implementation of the Federal Immission Control Act)
TROL	Regulations of the German Tiled Stove and Air Heating Constructors Association (ZVSHK)
DIN 1298 / EN 1856:	Connecting flue pipes for heat generating systems
DIN EN 13240	Stoves / solid fuel room heaters
DIN 18896	Solid-fuel fireplaces Technical specifications for installation and operation
DIN EN 13384	Chimneys - Thermal and fluid dynamic calculation methods
DIN 18160-1/2	Chimneys / house chimneys
Artikel 15a	B-VG (Austria)

Fireplaces may only be installed in rooms and places where the location, construction situation and type of utilisation do not lead to hazards. The floor area of the installation must be of a design and size such that the fireplace can be operated properly and as intended.

### 2.1.1 INSTALLATION SITE

The SEO stoves must not be installed:

1. In stairways, unless they are in residential buildings with two or fewer flats.
2. In hallways with general access.
3. in garages.
4. Fireplace systems in rooms or flats that are ventilated through ventilation systems or warm air heating through the use of fans, unless the safe operation of the stove is ensured.
5. In rooms in which highly combustible or potentially explosive substances or mixtures are processed, stored or manufactured in quantities that would be hazardous in the event of ignition or explosion

Closed flue stones can be installed in rooms, apartments or utilization units of comparable size from which air can be extracted using fans, e.g. in ventilation or hot air heating systems. The condition is that the vacuum-capable equipment cannot create a vacuum > 8 PA.

### 2.1.2 MULTIPLE CONNECTION

multiple use of the chimney in accordance with DIN 18160 is possible because all SEO stoves have a self-closing fire door (design A1). Without exception, this should always be discussed and agreed in advance with the local chimney sweep. All fireplaces connected to a chimney must also be approved for multiple connection!

## 2.2 TECHNICAL DATA

The following details refer to the conditions for type testing as defined in EN13240. Depending on local conditions and individual operating methods, deviations may arise on location for specific forms of operation.

Wood burning stove	SEO S / SEO S leva	SEO L / SEO L leva	
<b>Technical data:</b>			
Fuel type:	Wood logs		
Wood feed quantity:	1,5	1,6	kg/h
Nominal heat output	5,1	5,5	kW*
Thermal output range:	4,5-6,5	4,5-7,2	kW
corresponding wood consumption:	1,0-1,9	1,0-2,1	kg/h
Efficiency:	80	80	%*
CO content at 13% O <sub>2</sub>	< 1250	<1250	mg/Nm
Dust content:	<40	<40	mg/Nm
Flue gas temperature at the connector <sup>1</sup> :	309	283	°C*
Supply pressure**:	12	12	mbar
Mass flow of flue gas:	5,2	6	g/s*
Combustion air requirement:	16,3	15,7	m <sup>3</sup> /h*
Weight according to model	240	225	kg
<b>Minimum distances from combustible components:<sup>1</sup></b>			
back <sup>1</sup> :	160	160	mm
side <sup>1</sup> :	310	560	mm
top <sup>1</sup> :	500		mm
Area of direct radiant heat <sup>1</sup> :*	800		mm

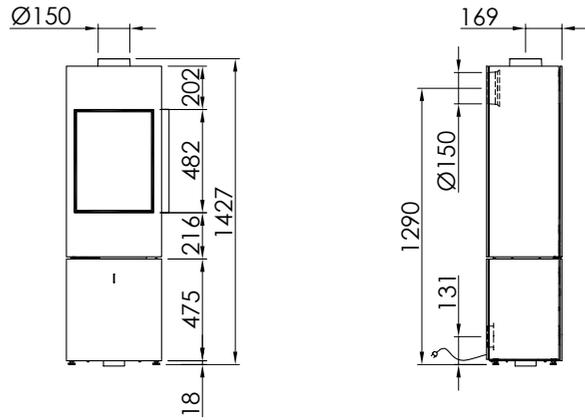
Requirements	
BlmSchV Levels 1 and 2, German legislation	Yes
EN 13240	Yes
DIN Plus	Yes
Regensburg municipal ordinance	Yes
Munich municipal ordinance	Yes
Aachen requirement	Yes
15a (for Austria)	Yes
Air cleanliness directive from 01.2011 (for Switzerland)	Yes
Flamme Verte 7*	Yes
Belgian Royal Decree No. 2010-3943 (Levels 1, 2 and 3)	Yes

\* The specified values represent the mean value over a burn-up cycle. These values arise under type testing conditions.

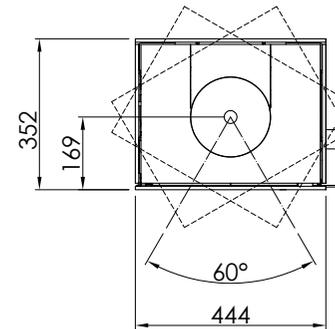
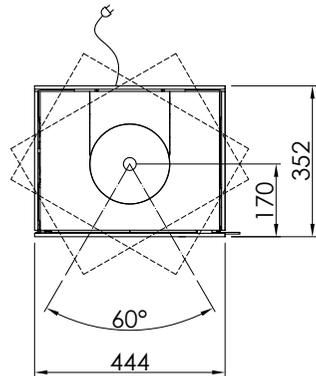
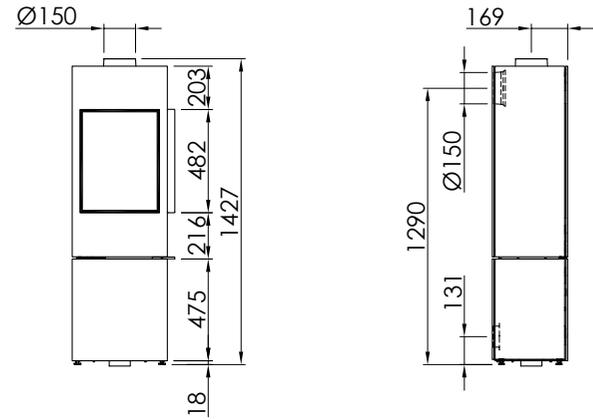
\*\* Depending on the stove, negative pressures greater than 20-25 Pa can influence correct operation. The viewing pane can become increasingly contaminated or noise can be intensified!

<sup>1</sup> refer to 2.5 for details. Fire protection, illustrating installation variants.

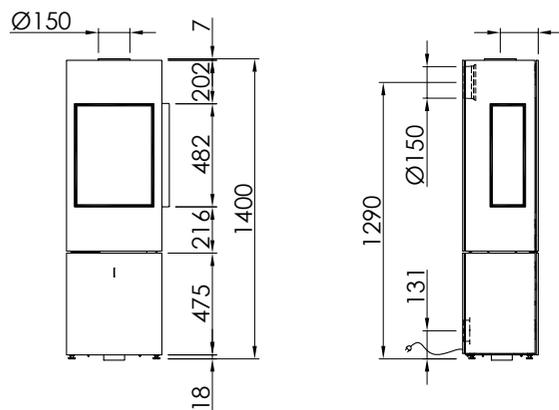
Dimensional drawing of SEO S



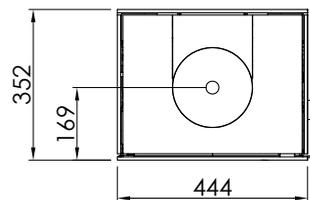
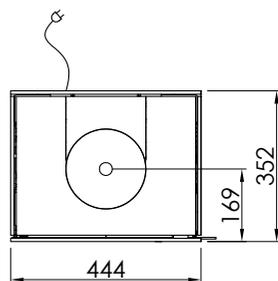
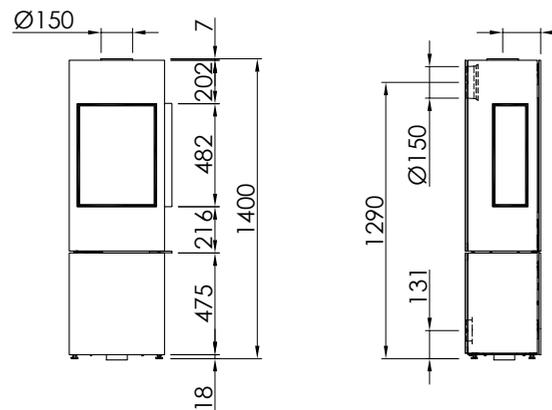
Dimensional drawing of SEO S leva



Dimensional drawing of SEO L



Dimensional drawing of SEO L leva



## 2.3 INSTALLATION / ASSEMBLY

SEO stoves must be installed on floors made of non-flammable materials with a sufficient load-bearing capacity. Please observe the overall weight (cf. Chapter 2.2 Technical data on page 7)! The load-bearing capacity may have to be ensured by a sufficiently thick board (weight distribution).

When selecting the installation site, also note the necessary measures for fire protection in the floor area (cf. Chapter 2.5 Fire protection on page 12).

The stove is placed on the floor in compliance with the safety distances (cf. Chapter 2.5 Fire protection on page 12) and aligned horizontally. The feet are adjustable in height.

### 2.3.1 CHANGING THE FLUE GAS CONNECTION DIRECTION

The stove is prepared for the flue gas connection at the top when delivered. The flue gas connection position can be changed to the back. If the position of the flue gas connection is changed, the following assembly steps must be performed:

#### **Installation from back to top**

As a first step, remove the top sealing cover by pulling it forwards. Lift off the blanking plate with the help of the recessed aperture. Dismantle the inner cover plate by unfastening the two screws (Fig. 2a).

In the next step, remove the flue gas connector on the back of the stove by unfastening the hexagon screws (waf 13 mm) (Fig. 2b).

Fit the unfastened connection journal at the top of the stove connection flange (Fig. 2c) with the help of the two hex screws. Now fit the cover plate removed in step 1 back to the inside rear wall panel using the two screws.

Seal the outer rear cladding panel with the help of a second cover plate supplied in the stove combustion chamber.

Finally, slide the cladding cover removed in step 1 back onto the top plate (Figs. 2d+2e).

Make sure that the sealing elements are correctly positioned under the dummy cover and the flue gas outlet and ensure a tight seal.

**Note for SEO S / SEO S leva:** If the SEO S and SEO S leva model is connected to the rear flue point, this blocks the turning function!

1. Remove the 3 cladding parts at the top in the following sequence (Fig. 2a):
  - Cap (forwards)
  - Blanking plate (upwards)
  - Inside cover plate (upwards)
2. Remove the back connecting socket by unfastening the two screws (Fig. 2b)
3. Fit the connecting socket on the top appliance flange using 2 screws (Fig. 2c).
4. Fit the 3 back cladding parts (Figs. 2d+2e)

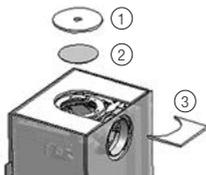


Fig. 2a



Fig. 2b



Fig. 2c

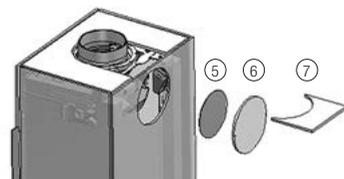


Fig. 2d

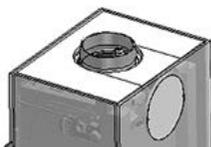


Fig. 2e

1	Blanking
2	Cover plate, inside
3	Cap
4	Pipe nozzle

5	Cover plate, inside
6	Cover plate, outside
7	Cladding cover

Installation from top to rear occurs in reverse order:

## 2.4 COMBUSTION AIR SUPPLY

The combustion air can be supplied in accordance with Chapter 2.4.1 Open flue and Chapter 2.4.3 Closed flue in different ways.

### 2.4.1 OPEN FLUE OPERATING METHOD

Your ambiente SEO S / SEO L stove draws the combustion air from the installation area (open flue operation). Ensure that there is a sufficient supply of fresh air to the installation area (for more details, refer to the applicable regional Fire Installation Ordinance (German 'FeuVO'), DIN 18896, applicable rules of technology etc.).

The fresh air supply must be checked by the installer and the operator. When operating several fireplaces in a single room or linked space, ensure that sufficient air is available for combustion! It is possible that there is not a sufficient supply of fresh air if the windows and doors are sealed (e.g., in combination with energy saving measures).

As a result, the ventilation of the stove can be affected. This can also adversely affect your well-being and, potentially, your safety. If necessary, an air valve must be installed near the pellet stove for the additional supply of fresh air, or a combustion air line must be routed outwards (see 2.4.2) or in a well-ventilated room (except for the heating room). In particular, ensure that the necessary combustion air pipes are open during the operation of the fireplace insert.

This means that simultaneous operation with a ventilation system (e.g. extractor hood, bathroom fan, etc.) in the same room or connected space can adversely affect the function of the stove (to the point of smoke or flue gas accumulating in the living room, despite the firebox door being closed). It is therefore prohibited to operate appliances of this kind simultaneously with a fireplace without first taking appropriate precautionary measures.

## 2.4.2 SEPARATE COMBUSTION AIR SUPPLY

The stove can be supplied with combustion air separately. The connection for external combustion air is located underneath the appliance ( $\varnothing=100$  mm). The combustion air line to be attached can be connected underneath or at the back. The connection is integrated in the plinth for a bottom connection.

To connect up combustion air, the following steps must be taken.

### Assembly of the combustion air channel on the underside of the appliance:

1. Place the appliance above the combustion air port in the floor and remove the cladding plate (Fig. 3a).
2. Remove the sealing cover (Fig. 3b).
3. Connect the combustion air neck to a flexible and removable combustion air line. If the combustion air connection is rigid at floor level, the separate combustion air nozzle supplied must be pushed into the connection to form an airtight seal.
4. Finally, press together the combustion air line and install the combustion air neck (Fig. 3c).

### Fitting the combustion air channel to the back of the appliance:

1. Unscrew the outer and inner cover plates (Fig. 3d).
2. Now fit the combustion air nozzle (Figs. 3e+f).
3. Lastly, connect the combustion air nozzle with the combustion air line.

During installation of the stove, combustion air is supplied from outside (e.g. from the basement or from other rooms) by means of the separate combustion air journal (SVS journal), so the notes from TROL (technical rules) and DIN 18896 etc. must be observed and applied.

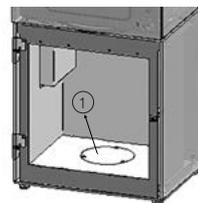


Fig. 3a

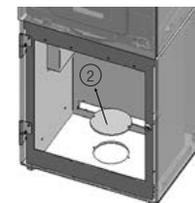


Fig. 3b

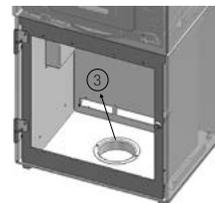


Fig. 3c



Fig. 3d

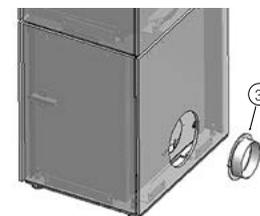


Fig. 3e



Fig. 3f

1	Cladding plate
2	Cap
3	Combustion air neck

In particular, ensure that the dimensions of the pipes are adequate!

The combustion air openings and lines must not be closed or blocked by external flaps unless it has been ensured that the fireplace can only be operated with an open lock and secured combustion air supply journal by means of special safety equipment. The cross-section must not be narrowed by a fastening or a grille. A shut-off valve must be installed, if this combustion air feed pipe runs outside the building. In doing so, it must be possible to easily determine the shut-off device setting from outside of the connecting line. This arrangement allows the feed pipe to be insulated to guard against the formation of condensation. The pipe should be positioned so that no water or other foreign substances from outside cannot get into the stove, and that any condensation formed can run out of the pipe. Even with a separate combustion air line for the stove, its operation can be impaired by a ventilation system. Therefore, simultaneous operation is not possible on closed-flue stoves.

In accordance with regulations, combustion air piping crossing a fire protection wall in buildings with more than two storeys must be established in such a manner that smoke or fire cannot be transmitted to other floors or fire compartments. Country-specific and local fire safety regulations must be observed!

### 2.4.3 CLOSED FLUE OPERATION

The SEO closed flue stoves have been developed for use with residential ventilation systems for a vacuum range of up to 8 Pa in the installation area and can be operated without additional safety equipment. The combustion air must be supplied in airtight lines from the outside or via an LAS system to the device for room-air-independent operation without fail. To do this, the combustion air duct must be permanently sealed to the combustion air neck (connection type back or bottom) of the stove.

When connecting the close flue stove to a combustion air line, the TROL instructions (technical rules) and DIN 18896, etc. must be observed and

applied. In particular, ensure that the dimensions are adequate! Multiple connection is permitted.

Comply with all country-specific and local fire safety regulations! Make sure that the pipes are always airtight.

## 2.5 FIRE PROTECTION

The handover inspection of your stove before commissioning is performed by the chimney sweep responsible. You can also advise the chimney sweep prior to installation about installation conditions on site, and can provide advice on how to install your stove properly.

### General information on fire prevention

Stoves are heat generators and are subject to regulations and necessary measures for fire protection. Right from selection of the installation site stage, fire regulations and recommended minimum individual clearances for the appliance must be observed.

Basically, a minimum wall clearance of 5 cm to the back wall must be adhered to. For reasons of safety and fire protection, make sure that large distances to walls to be protected or combustible components are maintained. See the following installation examples (p.14).

The following table documents the permissible safety distances. Using the diagrams (Figs. 4a-4f), match the mounting situation, taking into account the specified distances that need to be complied with.

During installation, please pay attention to the fire protection instructions and contact your local chimney sweep with any questions you may have.

- Mounting walls that are non-combustible or which do not require protection are able to withstand permanent exposure to temperatures  $> 85^{\circ}\text{C}$  thanks to their structure and material type.
- Combustible mounting walls in need of protection (e.g. stud partition construction) must be protected from temperatures above  $85^{\circ}\text{C}$ .

Before installing the stove, it is necessary to evaluate the mounting walls. If it is not possible to identify the precise type of installation wall, a specialist (chimney sweep) needs to be brought in.

- Wallpaper as wall coverings in accordance with DIN 4102-1 are non-combustible components and do not require special precautions for fire protection. Ensure here that the underlying structure of the wallpaper (e.g. timber frame construction) is very easily ignited or must be protected and appropriate precautions must be taken!
- Ensure that the minimum clearances from chimney connecting piece to combustible components are adhered to (see Chapter 2.7 Connecting flue pipes on page 15).
- Combustible objects must not be located at a distance of 50 cm above the fireplace!

#### Floor coverings near the fireplace:

Floors made of combustible materials in front of the firebox opening must be protected by a board made of non-combustible materials. The board must extend over at least 50 cm to the front and at least 30 cm to the side (measured from the combustion chamber opening or viewing window)!

No combustible components, furniture, curtains or decorations may be placed in the area of direct radiant heat of the fire door or inspection glass. This distance may be reduced to 400 mm if radiation protection plates are installed between the fireplace and combustible structures on both sides.

#### Installation example for the SEO S / SEO S leva:

1. For installation against a straight wall, the following distances from walls must be maintained: a minimum distance of 160 mm must be maintained behind any combustible components (Fig. 4a)

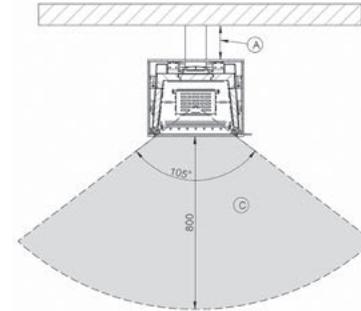


Fig. 4a

2. For installation in the corner of a room, maintain the following wall distances: If the stove is installed as shown as in Figure 4b, a minimum distance of 160 mm must be maintained to the sides of combustible components.

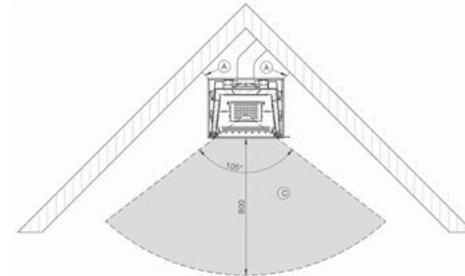


Fig. 4b

If the stove is installed as shown in figure 4c, a minimum distance of 160 mm at the back and of 600 mm at the side must be maintained. If the wall is in the radiant heat area, fit a thermal protector to this area.

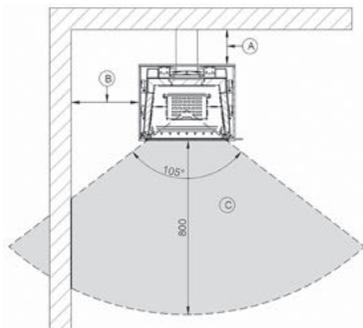


Fig. 4c

3. For floor coverings in close range:

Floors made of combustible materials in front of the combustion chamber opening must be protected by a board made of non-combustible materials. The board must extend at least 670 mm to the front and at least 570 mm to the side! Due to the ability of the stove to rotate, a large area of the floor covering must be protected (Fig. 4d).

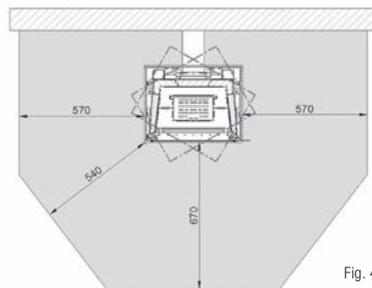


Fig. 4d

### Installation example for the SEO L / SEO L leva:

1. For installation against a straight wall, the following distances from walls must be maintained: a minimum distance of 160 mm must be maintained behind combustible components (Fig. 4e).

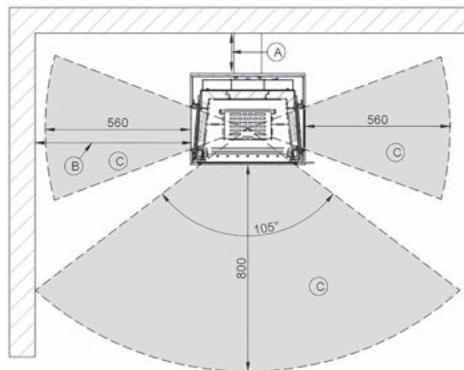


Fig. 4e

2. Floors made of combustible materials in front of the firebox opening must be protected by a board made of non-combustible materials. The board must extend at least 500 mm to the front and side! (Fig. 4f).

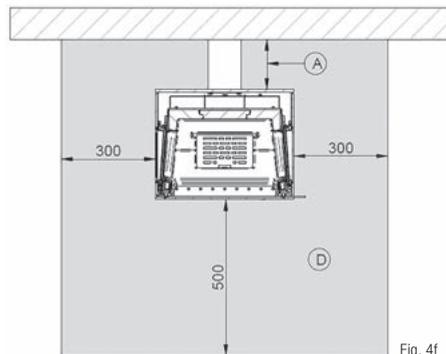


Fig. 4f

Stove	Distance to the rear wall		Distance to side wall		Distance in the area of direct radiant heat of the view pane.		Dimensions of the fire protection floor covering	
	A (mm)		B (mm)		C (mm)		D (mm)	
	combustible	No protection required	combustible	No protection required	combustible	No protection required	Length x Width	Radius (with round floor covering)
SEO S	160	50	310	200	800	800	500 x 300	500
SEO L	160	50	560	250	800	800	500 x 300	500

## 2.6 SHUT-OFF DEVICES

Flue gas systems must be created as per the technical rules of the German Association of Tiled Stove and Hot-Air Heating Systems.

Stoves must feature a shut-off valve on the exhaust path. These devices must not be self-closing and must not be positioned such as to prevent or hinder the inspection and cleaning of connecting pipework. The position of the shut-off device must be visible from the outside, e.g., from the position of the operating handle. Shut-off devices may only be installed in the exhaust manifold or collecting pipe, the flue gas pipe stub or the pipeline connecting piece.

## 2.7 CONNECTING PIECES

Connecting pieces: Your SEO stove is connected to the chimney by  $\varnothing$  150 mm connecting piece made from steel sheet at least 2 mm thick. These must comply with DIN 1298 or DIN EN 1856-2 and they must be connected to the chimney in accordance with DIN 18160 or the regulations that apply in the country concerned.

Ensure that the flue gas pipe is installed in the shortest possible route upwards towards the chimney. The number of bends in the flue gas pipe should be kept to a minimum. In addition, the flue gas pipe must be

connected to the chimney with a bricked-in wall lining and sealed. If necessary, the flue pipe may need to be secured with brackets to assure sufficient stability. If the flue gas pipe is routed through components with flammable building materials, the flue gas pipe must be insulated as specified in the regulations.

The connecting line must always be mounted in such a manner that it is possible to clean the connecting line at any time. This must be ensured through a sufficient number of cleaning openings.

Depending on the information provided by the flue gas pipe manufacturer, the minimum distance from the chimney connecting piece to combustible components may increase the distance between the stove and combustible building components. The specified minimum distances to combustible components as stated in these instructions refer to the fireplace and must be adjusted if necessary (see Chapter 2.5 Fire protection).

Ensure that a cleaning opening is located above the flue pipe connection with gas evacuation to the top.

## 2.8 INTEGRATED THROTTLE VALVE

A throttle valve is integrated in the exhaust flue above the deflector plate in the SEO stove. When the fire door is closed, this throttle valve is in its starting position. The exhaust gases can escape upwards through an opening cross section in the sheet metal panel, optimally adjusted for combustion.

Whenever this fire is opened, e.g. for adding fuel, the throttle valve swivels upwards, greatly increasing the opening aperture for the exhaust gases. This ensures that the exhaust gases do not escape into the room as a result of the change in pressure in chimney and combustion chamber while the fire door is open.

The initial position of this flap is set ex-factory for optimum air cross-sections. Depending on chimney conditions, this can cause impaired or insufficient combustion, and/or to smoke escaping into the room. In such cases, it is possible to adjust the position of the throttle valve and therefore also of the exhaust cross sections.

1. To do this, remove the top cladding parts from the top plate. (Fig. 5a).
2. Now you have access from above to the rod mechanism on the right side of the stove that controls the throttle valve. The driving rod, mounted with the help of a lock nut, can be used to adjust the position of the flap (Figs. 5b and 5c).
3. To enlarge the opening cross section in the exhaust gas flue, unfasten the lock nut and turn the driving rod further towards the back.
4. Then tighten down the lock nut again firmly.
5. Finally, place the cladding parts back onto the top plate.

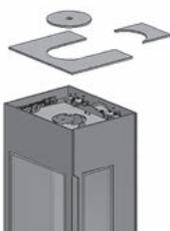


Fig. 5a

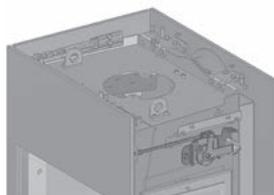


Fig. 5b - Bottom view

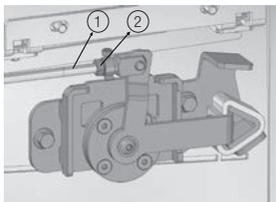


Fig. 5c

1	Driving rod.
2	Lock nut

## 2.9 CLOSING FORCE FOR THE FIRE DOOR

The closing force of the self-closing Type A1 fire door is factory-set to its optimum level. To change the closing force, the setting can be adjusted using a spring.

1. To do this, remove the top cladding parts from the top plate. (Fig. 6a).
2. You now have access to the spring mechanism. (Fig. 6b).
3. Unfasten the two hex screws with flange and slide the holder in the two elongated holes. You increase the closing force of the door by continuing to tighten the spring ("tighten clockwise"), and you decrease the closing force of the door by relieving tension on the spring (by turning it anti-clockwise) (Fig. 6c).

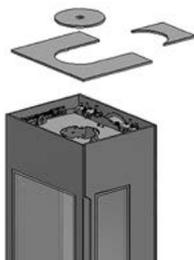


Fig. 6a

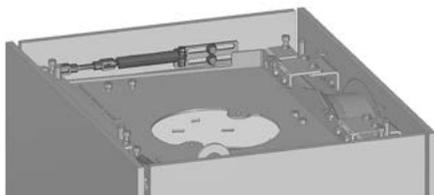


Fig. 6b

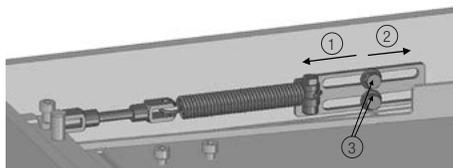


Fig. 6b

1	Reduce force
2	Increase force
3	Hex screws with flange

## 3. OPERATING MANUAL

Read these installation and operating instructions carefully before installing and starting up your stove. All objects must be removed from the combustion chamber (except for combustion chamber liner).

Ask your specialist dealer to explain to you how to operate the SEO stove and how it functions.

National and European standards and local regulations for operating the fireplace must be observed!

### 3.1 GENERAL INFORMATION ON OPERATION

- Small children, elderly or infirm persons: As is the case with all heating devices, it is expedient that you attach a protective fixture for these groups of persons, as the view pane and the lining parts of the stove can become extremely hot! **Danger of burn injuries!**
- Never leave these groups of persons unattended near the stove when a fire is burning or has just been extinguished! Make these individuals aware of these risks.
- No combustible objects may be placed or laid on the free surfaces and the cladding parts of the SEO stove. Do not place items of clothing on the stove to dry. Racks for drying clothing may only be placed outside the radiation area!
- Burning fuel releases thermal energy which heats up the various parts of the stove, such as the surfaces, the door, the door handle and control handle, the viewing pane, the flue ducts, etc. Do not attempt to touch these components without adequate protection (i.e. heat-resistant gloves).

- The SEO stoves may only be operated with the fire door closed. The door should always be kept closed, even when cold. The door is only opened for lighting up and for refuelling.
- The fireplace must never be modified! Do not insert any foreign component (any component not expressly approved by Arcadia) into the combustion chamber, combustion passages or exhaust gas flue. Any such modification of the fireplace without express approval will void the warranty and operating permit.
- This applies in particular when operating several fireplaces in a single room or linked space. It must be ensured that sufficient air is available for complete combustion!
- Your appliance is designed to operate as a temporary or short-term combustion device. Continuous burning cannot be achieved even through withdrawal of the combustion air and is not permitted! A longer heating period is achieved by repeatedly by adding suitable amounts of fuel to the fire.

### 3.2 BURN-UP CONTROL, SEO S LEVA / SEO L LEVA

Burn-up is controlled manually on your SEO S leva and SEO L leva stove. For this, there is an air adjustment lever on the right side. The amount of combustion air increases by pulling this lever forwards and to the left. The amount of combustion air decreases by pushing this lever backwards and to the right.



### 3.3 BURN-UP CONTROL, SEO S / SEO L

Your SEO S or SEO L stove is equipped with S-Thermetik NEO burn-up equipment.

Supply voltage	230V AC
Power consumption during operation:	approx. 10VA
Power consumption in "Stand-by" mode:	approx. 6VA
Safety class	I
Degree of protection	IP 20

For further information about the burn-up control, please request the assembly and service instructions from the manufacturer of the S-Thermetik NEO.

### 3.4 FUNCTION OF THE ROTARY-BASE FOR SEO S

**Attention:** The swivel function is not available when the exhaust flue gas connection is at the back!

The SEO-S model is divided into two areas: the upper combustion area and the lower maintenance and storage area. The upper section of the stove can be turned by 30° in either direction using the rotary base at this interface (Fig. 7a).

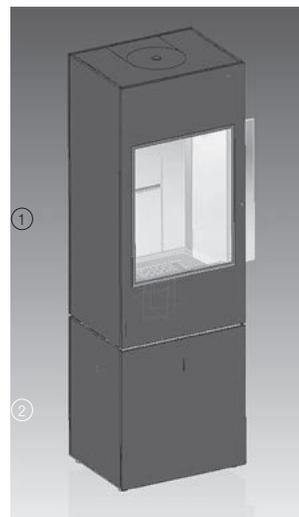


Fig. 7a

1	Oberer Feuerungsbereich – lässt sich um 30° in jede Richtung drehen
2	Lower maintenance and storage area
3	Remove stop.

To activate the swivel function, you must first operate the stop on the rotary base. This detent pin is located centrally in the lower storage area (Figs. 7b and 7c).



Fig. 7b

After pulling out the spring-actuated stop, the top cube can be swivelled 30° in either direction. After swivelling, lock the stove in its final position by engaging the stop (Fig. 7d).



Fig. 7c

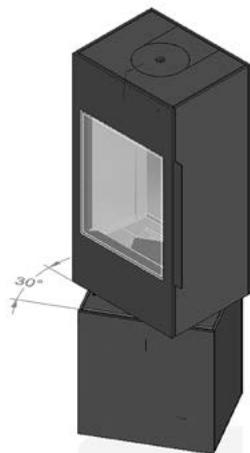


Fig. 7d

### 3.5 RATING PLATE

The rating plate is located on your warranty certificate and also on the back of your stove in the storage area under the combustion chamber. It contains technical data and notes. Never remove the rating plate because it confirms that the appliance has been tested, and it is also required for the acceptance procedure and annual inspections by the chimney sweep.

## 4. COMBUSTION

### 4.1 INITIAL COMMISSIONING

The SEO stoves must only be installed and set up by a specialist company. Initial commissioning must only be executed by an expert employee of the installation company. A certificate confirming proper installation and proper adjustment / function of all control components and safety components must be given to the owner / operator of the system (see sample, chapter 10).

When first putting your appliance into service, only start a moderate fire. This enables you to avoid cracks in the firebox covering (which may still contain residual humidity before the first firing). Slowly increase the heating power to about 30% above nominal heat output by setting the fire 3 to 5 times to give the corrosion coating applied to the surfaces time to 'burn in' properly. During this process, the paint can become slightly soft, do not place any objects on the stove and do not touch the appliance. During this burning-in process, an unpleasant yet harmless odour (sometimes accompanied by the build-up of smoke) may be given off. It is therefore important to ensure that the room is well ventilated during the burning-in process. Open all doors and windows to the outside of the building.

During heating and cooling, metallic grinding noises may be heard as the components of your stove expand or contract. These are completely normal and arise as a result of material expansion caused by the high temperatures.

**Note:** It can be helpful for the lighting up to weigh the recommended quantity of wood (1 - 1.5 kg) to estimate what (visual) quantity of wood corresponds to this weight. This enables you to ensure that the stove is not overheated as a result of you adding too much wood.

## 4.2 SEO S AND SEO L OPERATING CONCEPT

### 4.2.1 THE 'SEO APP'

Your SEO stove is controlled fully automatically by the integrated S-Thermatik NEO burn-up controller. To operate this appliance, the "SEO APP" provides you with an information platform. With this, you can choose various settings, e.g. the desired power/performance level, as well as request further information about the prevailing operating condition, historical data or information about suspected faults.

This app is available for devices running Android and the IOS operating system. It is called "SEO App" and it can be downloaded from the Play Store or from iTunes.

To install the app, you must activate Bluetooth on your device, and you may need to permit "Installation from unknown sources".

The data link only functions using Bluetooth. The module is integrated in the control system. Only ever one mobile device can be connected to the controller at any one time. Another device can log in once Bluetooth is switched off on the connected device, or until that device moves outside reception range.

**Note:** Depending on the configuration of the tablet or smartphone being used, a Bluetooth coupling code can be requested during first-time installation. To enable the connection between the stove and the tablet or smartphone, please enter this numerical string:

**0 0 0 0**

in the input screen.

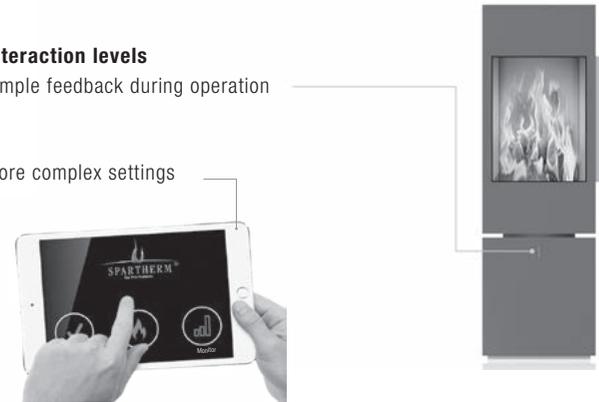
### 4.2.2 THE INDICATOR

An illuminated indicator acts as a direct information communicator between the SEO stove and the operator. It is recessed into the lower door of the storage compartment. This provides basic information about the prevailing operating status. For further information, please consult the "SEO App"

#### Interaction levels

Simple feedback during operation

More complex settings



This indicator provides basic information about the prevailing operating status and of any faults/operating errors with a range of light signals: Off, continuously lit, pulsating flashes and rapid flashes.

Here are the interactions in detail:

### Indicator

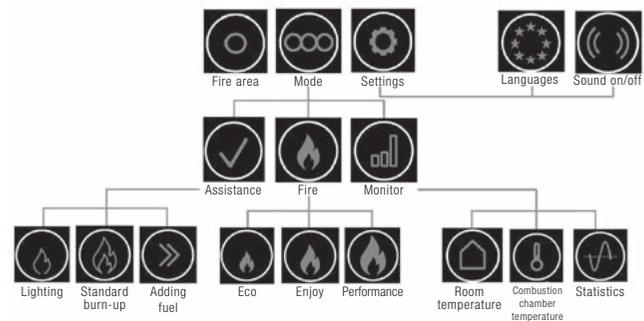
<b>LED - Off</b>	<b>LED - On</b>	<b>LED -</b> pulsating flashes	<b>LED -</b> flashes rapidly	
				
<b>Function</b> Appliance OFF Appliance is in standby mode	<b>Function</b> Appliance ON Appliance is in normal operation	<b>Function</b> Add fuel signal Burn-up ended - add more fuel	<b>Function</b> Fault message - door open Overheating Sensor defect	

## 4.2.3 START AND MENU STRUCTURE OF THE APP

After starting the app, the user can retrieve further items of information.



To do this, it is possible to navigate within the following menu structure.

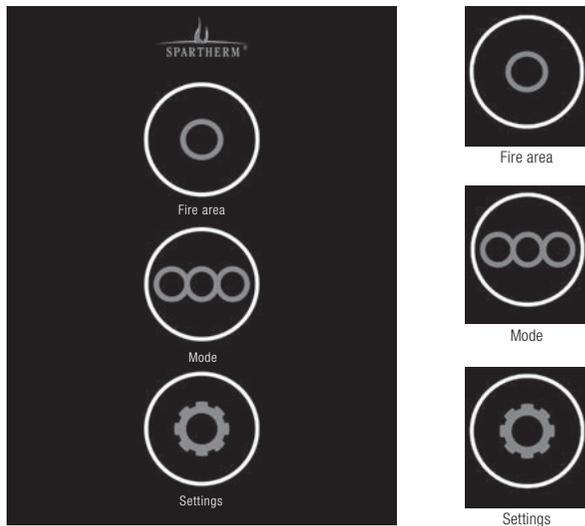


For details of the individual levels and menu items, please consult the following sections:

## 4.2.4 STARTING LEVEL

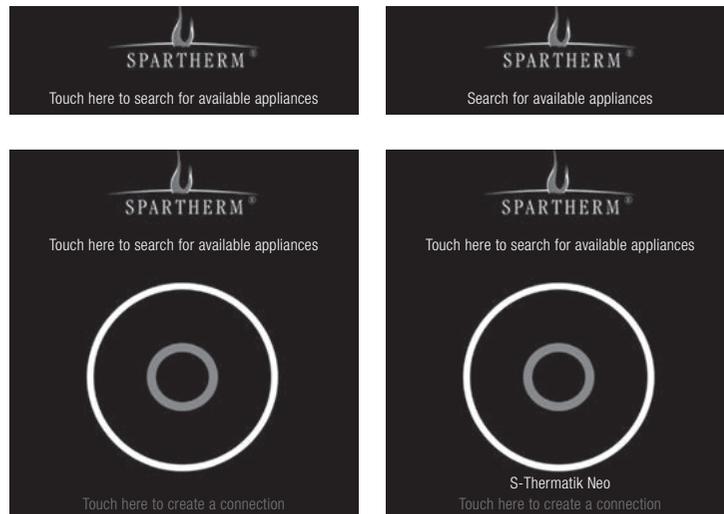
The first level offers a choice between the following modes:

### Fire area / Mode / Settings



## 4.2.5 FIRE AREA

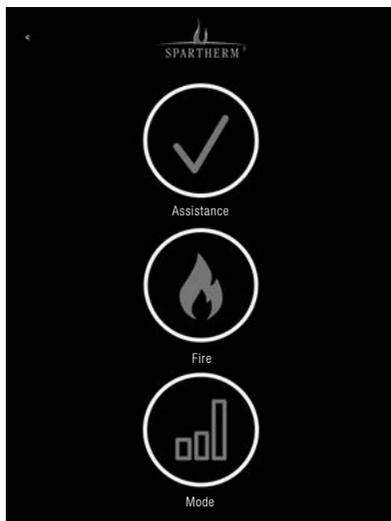
All stoves detected in the scan range are displayed at the "Fireplace" menu item. After selecting an appliance, a connection is established between the app and the chosen stove.



## 4.2.6 MODE

The following levels are arranged behind the Mode menu.

### Assistance / Fire / Monitor



Assistance



Fire

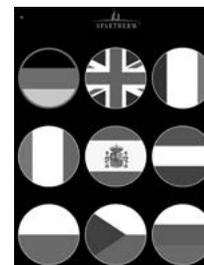
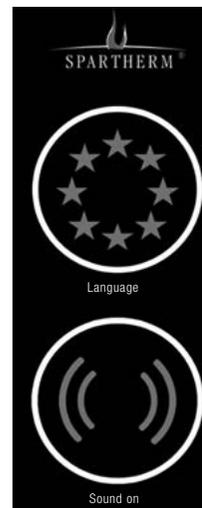


Mode

## 4.2.7 SETTINGS

Under the Settings menu item,

- the menu language can be selected (9 standard languages available)
  - German • English • French • Italian • Spanish
  - Dutch • Polish • Czech • Russian
- and the acoustic signal for adding fuel can be activated/deactivated.



## 4.2.8 ASSISTANCE

The assistance (Help) level provides the user with additional information about the message on the illuminated indicator.



Lighting



Normal burn-up

The indicator is lit continuously. The appliance is operating in normal mode. Depending on operating condition, the symbols for “Lighting up” or “Full burn-up” are displayed.



Adding fuel

The indicator flashes with a pulsating light. The user is called upon to add wood. This signal can also be amplified acoustically.



Warning

The indicator flashes in a fast rhythm. At the same time, a fault message is displayed. The type of fault is described and is displayed on the welcome screen (homepage).

The following types of fault can be displayed:

- Open door! After filling, close door correctly.
- Overheating! Next time, add less fuel.
- Sensor defective! Contact your specialist dealer.
- Motor malfunction! Contact your specialist dealer.

## 4.2.9 FIRE

At the “Fire” level, the user has the option of choosing between 3 performance/power levels. The power levels

**Eco** (lowest power)

**Enjoy** (moderate performance)

**Performance** (maximum performance)

are illustrated by different sizes of flame symbol and these can be adapted during the burn-up phase.



Eco



Enjoy



Performance

## 4.2.10 MONITOR

At the Monitor menu, the prevailing combustion chamber temperature and the room temperature can be queried online.



Room temperature

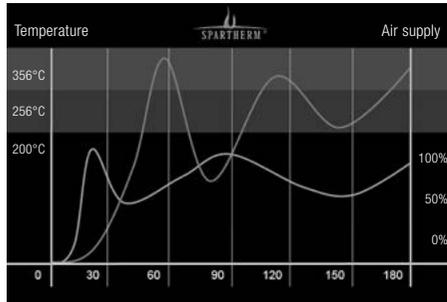


Combustion chamber  
temperature



Statistics

Also, using the Statistics button, a time plot (over a period of 3 hrs.) can be displayed showing combustion chamber temperature, room temperature and air intake (%).



## 4.2.11 EXAMPLE OF MENU GUIDANCE

The following example shows how to set the desired power level:



Activate your tablet. This app appears on the user interface



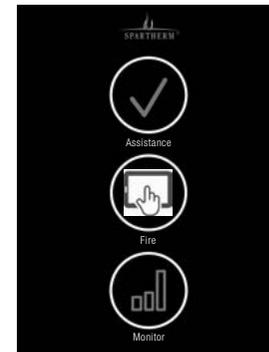
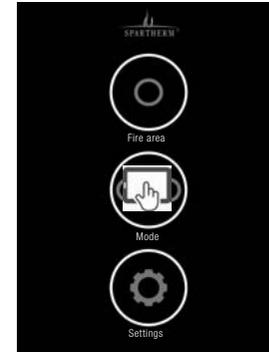
Activate the app. The main interface appears.



Select the Mode menu.



In the sub-menu, select Fire.

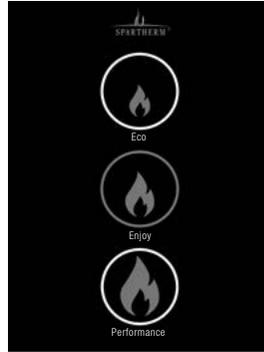
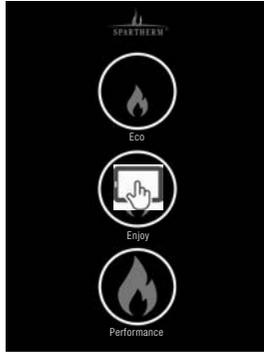


The last 3 power stages saved are then displayed.

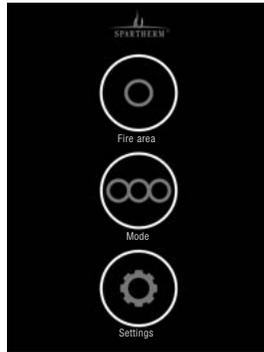


Select the desired power level (in this example, the middle stage of Enjoy).

The selected power level is shown in red.



By clicking the arrow in the top left corner of the screen (back), you can return to the main menu.



## 4.3 HEATING-UP / FIRING

Lighting this stove is very easy if you follow the instructions below.

1. SEO stoves must only be operated with correctly inserted firebox lining.
2. The split timber is layered crosswise in the centre of the combustion chamber, tapering upwards (soft wood).
3. Never load more than 1 kg - 1.5 kg per burn-up in the SEO stove.
4. Place commercial firelighter cubes under the stack of firewood to assist with lighting the fire. (Paper is not recommended because it burns too quickly and causes ash flight).
5. Never use methylated spirits, petrol, oil or any other highly flammable liquids.
6. Light the fire at the firelighter cubes and leave the fire door open about 3 - 5 cm. The fire should now ignite brightly and burn intensely.
7. If the initial stack of wood burns well, add smaller hardwood split logs or larger softwood split logs in a haphazard stack.
8. You can learn more about the correct amount of timber to add in the chapter on wood feed quantities per hour (see Point 4.3.2).
9. Once the wood has burned down completely, or once only hot embers are left, you can add more firewood as required (the ideal fuel is now hardwood).



10. Do not open the door forcefully or gases may enter your living room through a suddenly produced negative pressure. At first, open the door slowly and slightly.
11. By putting fresh firewood onto hot embers you prevent the possible release of smoke when the door is opened.
12. Never repeatedly put more than the recommended amount onto the fire.



### 4.3.1 REFUELLING

Do not refuel until the indicator flashes in a pulsating manner and/or until the acoustic signal sounds (if activated) ((cf. Chapter 4.2 SEO S and SEO L operating concept).

**Caution:** Never add more than the recommended amount of wood (1-1.5 kg)! Otherwise there is a risk of overheating the stove.

1. Open the combustion chamber door very slowly (use the heat protective glove), so that no turbulence can might cause smoke to escape into the room.
2. Place the wood logs on the embers (bark facing upwards, cut ends to either side). Make sure that the air supply is open! Embers must not be smothered).
3. Close the combustion chamber door (use the heat-resistant glove!)

### 4.3.2 HOURLY WOOD CONSUMPTION RATE

In order to avoid damage due to over-heating (discolouration of the steel, deformation, etc.) and to guarantee optimum performance over the lifetime of the appliance, ensure that the stove is fuelled in the proper manner. To prevent any risk of overheating, make sure that the maximum heating capacity is never exceeded.

The recommended wood feed quantity per hour is 1 - 1.5 kg/hr. The length of individual logs should be approx. 25 cm.

Please note: Larger feed quantities lead to overheating and damage to the chimney insert. Wood pellets (briquettes) have a much higher heating capacity than hardwood. The hourly feed rates are therefore to be kept 20% less than with wood logs.

In the event of damage caused by overheating (an excessively high hourly feed rate), we shall decline all warranty claims.

## 4.4 CONTROLLING HEAT OUTPUT

Heat output is controlled by regulating the amount of fuel being added, and this should never exceed the recommended quantity of wood. Ensure that the combustion chamber door is always firmly closed to prevent combustion being accelerated by the uncontrolled inflow of air.

The performance of your stove is also dependent on the draught in your chimney. This draught can be adversely affected by the cross-section of the chimney, or by environmental factors such as strong winds etc.

## 4.5 ROOM HEATING OPTIONS / INDOOR CLIMATE

The room heating capability used to be quoted in accordance with the DIN 18893 standard (most recent edition being August 1987) so is no longer a meaningful indicator for modern houses constructed after 1990. As a comparison value, or for use in relation to older housing stock that fails to comply with the thermal insulation standard of 1977, the old indication of room heating capability may still be of interest.

Precise descriptions of the terms 'favourable', 'less favourable' and 'unfavourable' can be found in DIN 18893. The simplified description 'favourable' applies to the case, where the room under consideration only has one external wall and the remaining walls are adjacent to heated internal areas of the building, 'unfavourably' on the other hand is based on two exterior walls and adjacent unheated rooms.

The values given above refer to building fabrics that do not yet meet the requirements of the Heat Insulation Ordinance of 1977 and that therefore also constitute a simplification valid for room sizes of up to 200 m<sup>3</sup>. DIN 18893 standard recommended a calculation according to DIN 4701 for rooms larger than 200 m<sup>3</sup>. Nowadays, room heating capacity estimates are made in accordance with TROL guidelines and more detailed calculations in accordance with DIN 12831.

#### 4.6 HEATING IN THE SHOULDER SEASONS/DURING UNFAVOURABLE WEATHER CONDITIONS

In the 'shoulder seasons' (transitional periods), that is, when outdoor temperatures are above about 15°C or under unfavourable conditions (catatic/adiabatic winds, etc.) can lead to disturbances in the chimney draught during a sudden temperature rise, so that the hot gases are not completely removed. To combat this, less fuel should be used and the air supply setting (see 4.2) should be increased. This burns the fuel more quickly (with larger flames). and stabilises the draught. In order to prevent the build-up of ash, the fire should be carefully stoked more frequently.

#### 4.7 CHIMNEY FIRE

When burning wood (especially softwood), sparks can often be transferred from the fireplace to the chimney. This can ignite the coating of soot inside the chimney (if cleaned on a regular basis by a chimney sweep, this problem is unlikely to occur). The chimney catches fire. This can be recognized by flames that blaze from the chimney opening, excessively flying sparks, smoke and odours, as well as the chimney walls becoming progressively hotter. It is important to act properly in such cases. You can alert the fire brigade by dialling 999 (or 112 in Germany). The chimney sweep must also be informed. Combustible objects should be located away from the chimney.

**Attention:** Do not attempt to extinguish the fire with water before the fire brigade arrives on the scene. Temperatures in a chimney fire can reach up to 1300°C. Extinguishing water would immediately turn to steam. A 10-litre bucket of water yields 17 cubic meters of steam. The enormous pressure created as a result could cause the chimney to disintegrate. After the chimney has burned out, this is to be examined by an expert for cracks or leaks and to be repaired if necessary.

### 5. FUEL

The German 'Wald in Not' (Forest in Peril) Foundation formulates this aptly in an informative brochure as follows: "Wood does not run up debts for Nature. Wood is stored solar energy. Sunlight, water and carbon dioxide are the building blocks that make wood. During the lifetime of the tree, sunlight is chemically captured. Solar energy is stored in lignin and cellulose. When burned, this is released again".

For more information, please visit the website [www.wald-in-not.de](http://www.wald-in-not.de). Only those fuels listed in the 1st BImSchV (German Federal Emissions Protection Ordinance) may be burned in stoves.

The only fuels authorized for fireplaces are firewood (recommended residual humidity of 20% or less) or wooden briquettes, as defined in DIN 51731.

Incidentally: A measuring instrument for determining the moisture of wood logs does not cost much and can pay for itself quickly.

Do not use any other fuels

It follows from this that it is not permitted to burn:

- painted or plastic-coated wood
- Fibreboard or wood that has been treated with timber preservative
- Wood from Europool pallets
- Rubbish, household waste, old clothes
- Paper, paper briquettes, cardboard
- Damp wood (residual humidity > 20%)
- Plastic or foam of any kind
- Any solid or liquid materials that contain no wood

It is prohibited to burn these or other inappropriate materials in your stove. When burning other materials than the permitted fuels, wood logs or wood briquettes defined in DIN 51713, toxic gases can be formed that have an adverse effect on the combustion process, and that may even cause explosions.

Operating SEO stoves with non-approved fuels renders the warranty invalid!

Use small bits of wood for beginning to heat. Only use split wood as firewood that is not thicker than about 8 cm at its thickest point. The optimum length of firewood is approximately 25 cm. Please do not add too much wood at one time. Instead, it is better to add smaller quantities of wood at regular intervals. When adding fuel, the embers must not be completely covered.

## 5.1 CO<sub>2</sub> NEUTRALITY

Wood only emits as much carbon dioxide as it had previously gained from the air and incorporated when it was a living tree. It is immaterial whether the wood burns or rots in the forest – the carbon dioxide output always remains constant. New trees absorb the carbon dioxide that the wood emits when burned, and a closed natural carbon cycle is the result.

Conclusion: When wood burning, nature remains in balance. German Law legislates for the sustainable management of forests. This obligation leads to an increase in timber volumes, since the average increase in timber is 40% greater than the amount of firewood and timber that is consumed.

### 5.1.1 WOOD STORAGE

In general, it is recommended to store firewood for approx. 2-3 years, the wood should be protected from dampness and well ventilated (e.g. under a roof overhang on a side of the building protected from the weather). When properly stored, a wood moisture level < 20% is achieved much more quickly. Therefore, the firewood should be split when stored, because the bark prevents the moisture from escaping. To ensure good ventilation, you should leave a hand gap distance between the logs, so that air can circulate freely and so escaping moisture can be well absorbed by the air. A gap of about 20 - 30 cm to the ground should be maintained below the log pile. The re-absorption of moisture due to precipitation (e.g. rain or snow) should be avoided. The storing of wood in garages, under plastic sheets or in poorly ventilated basements is not recommended as this makes it difficult for any moisture in the wood to escape. Use a readily available wood humidity measuring appliance to check your fuel.

## 5.2 YOUR CONTRIBUTION TO ENVIRONMENTAL PROTECTION

Whether or not your SEO stove burns in an environmentally-friendly way is very much dependent on the choice of fuel and the manner, in which the fire is operated. The following tips should help you operate your stove with minimum harm to the environment.

- Use as little wood containing resin as possible (fir, pine, spruce). These types of wood cause soot to form on the window of your stove more rapidly, and also cause more sparks. Therefore, for safety reasons, only use deciduous woods (birch, beech, oak, fruit tree timber).
- Adapt the amounts of wood you add to the fire to suit your heating requirements.
- It is advisable to purchase a wood humidity measuring appliance (inexpensive and easy to operate).

You can check that combustion in your stove is clean and relatively free of pollutants in the following way:

- The ash should be white. If the ash is dark, this indicates the presence of residual carbon, which in turn indicates incomplete combustion.
- The flue gases in the chimney after the lighting up phase should be almost invisible (the less visible the flue gases, the better the combustion).
- The firebox lining in your stove should be bright after combustion, not sooty.

**Note:** The fireplace must not be used as a waste incinerator! Furthermore, remember that the device is designed for temporary burning only. Continuous burning cannot be achieved even through withdrawal of the combustion air and is not permitted!

## 6. CLEANING AND CARE

The stove may only be cleaned when cold. Bear in mind that when cleaning the room in which the fireplace is installed and any clothing may become dirty. We recommend that you protect the area around the combustion chamber opening with foil or a cloth against dirt and to wear work clothes. After cleaning, all removed parts should be refitted.

### 6.1 CLEANING THE FIREBOX/CLADDING PARTS

- The stove, the combustion chamber, the smoke collecting chamber with the heating gas diverter, the combustion air supply and the connecting pieces to the chimney must inspected at regular intervals for deposits and cleaned if necessary annually, possibly also during and after each heating season and after cleaning the chimney (consult your stove dealer or responsible chimney sweep). Use a hand brush and/or an ash vacuum (specialist dealer) to remove the debris. The chimney should be cleaned at regular intervals by the chimney sweep! Furthermore, the stove should be checked annually by a specialist.
- Flue gas deflector: A flue gas deflector is also located above the combustion chamber and in the exhaust manifold. This component must be cleaned at regular intervals. The flue gas deflector can be removed for this purpose. This must be raised, then tilted and removed through the firebox. The deposits on the deflector can be cleaned off simply with a handheld brush.
- Ash removal: Your SEO stove is suitable for burning dry wood that burns best in its own ashes. However, if you want to remove the ash from the combustion chamber, open the fireplace door. Brush out the ash, e.g. onto a dustpan or shovel, or use an ash vacuum to remove ash from the combustion chamber.
- Please note that the embers can remain hot up to 24 hours or more!
- Cleaning of ceramic glass pane: The glass view pane can be easily cleaned using a commercial fireplace cleaner, that you can purchase at

your specialist dealer. Then, wipe (do not rub on the glass!) with a dry cloth. The fibreglass seals should not be soaked with detergent!

- Painted surfaces and the cladding parts can be cleaned with a moist cloth (do not use a microfibre cloth!).
- Glass surfaces can be cleaned with a standard glass cleaner and a soft cloth (do not use a microfibre cloth!).
- Stainless steel surfaces can be cleaned with standard stainless steel cleaning agents! Only use in the direction of the finish!
- Natural stone surfaces can be cleaned with a wet cloth or with appropriate standard cleaning agents!
- Ceramic surfaces can be cleaned with a damp cloth or with appropriate commercial cleaners!

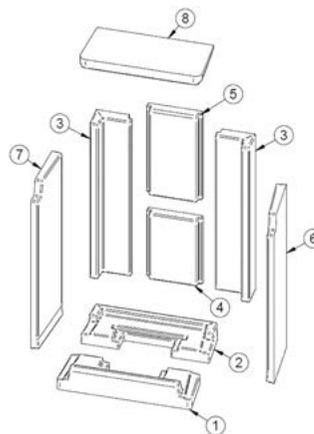
During the hot season, remove any dust on and below the stove furniture regularly as dust particles can burn or char. This can cause dirt in the room and on the furnishings where the fire is installed.

## 6.2 FIREBOX LINING

In the heating-up phase it is normal for the lining to have a dark coating. Once the operating temperature is reached, the combustion chamber lining will be burned off. Cracks are not grounds for a justified complaint. The lining is exposed to very high loads. A tension or expansion crack is not a matter for concern and is not a functional deficiency. However, any broken and shifted combustion chamber fireclay must be replaced.

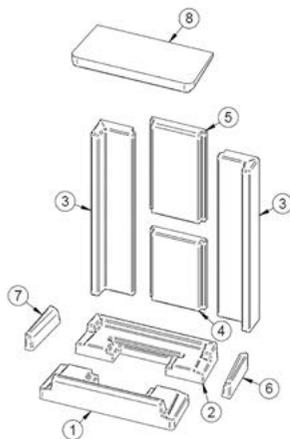
If replacement chamotte is required, you can order this from your stove fitter stating the relevant order number.

### 6.2.1 FIREBOX LINING SEO S / SEO S LEVA



Item	Designation	Item no.	Quantity
<b>Single stone, fireclay</b>			
1	Flagstone, front	1054254	1
2	Flagstone, back	1024256	1
3	Back wall stone, right/left	1054257	2
4	Back wall stone, bottom	1054258	1
5	Back wall stone, top	1054259	1
6	Sidewall stone, right	1054821	1
7	Sidewall stone, left	1054822	1
8	Deflector plate	1053975	1
<b>Complete set, fire clay</b>			
Fireclay set, complete, without baffle plate		1054824	-
<b>Accessory</b>			
Grills (small) 180/110 mm		1019059	1

## 6.2.2 FIREBOX LINING SEO L / SEO L LEVA



Item	Designation	Item no.	Quantity
<b>Single stone, fireclay</b>			
1	Flagstone, front	1054254	1
2	Flagstone, back	1024256	1
3	Back wall stone, right/left	1055603	2
4	Back wall stone, bottom	1055605	1
5	Back wall stone, top	1055604	1
6	Edge stone, right	1054260	1
7	Edge stone, left	1054261	1
8	Deflector plate	1053975	1
<b>Complete set, fire clay</b>			
Fireclay set, complete, without baffle plate		1054778	-
<b>Accessory</b>			
Grills (small) 180/110 mm		1019059	1

## 6.3 MAINTENANCE

The door seal must be checked at regular intervals! This seal must be replaced if necessary (in case of wear, breakage, etc.). The firebox lining is made of natural products and must therefore be checked at regular intervals.

As long as the firebox lining maintains its position in the firebox and does not break, it is fully functional. A crack in the chamotte is therefore no cause for a complaint. To ensure proper functioning, it is essential that an annual (if possible before the heating season) maintenance of the stove be carried out by a specialist!

Furthermore, the following applies to closed flue stoves: Proper door seal is an essential item for room-air-independent operation of the stove. Perform a visual inspection of the seal (pressure, wear, bulges) at least once per heating season and replace it immediately if damaged.

The fireplace must never be modified! Only original spare parts that have been approved by the manufacturer may be used! If you have any questions, please contact your specialist dealer.

### 6.3.1 LUBRICATION MANUAL FOR DOOR LATCHES WITH SMART-CLOSE

Stoves with Smart-Close door locking mechanisms must be lubricated at regular intervals to assure problem-free operation (once per heating season). For this purpose, the scope of delivery of each fire area includes a tube of special stove lubrication compound.

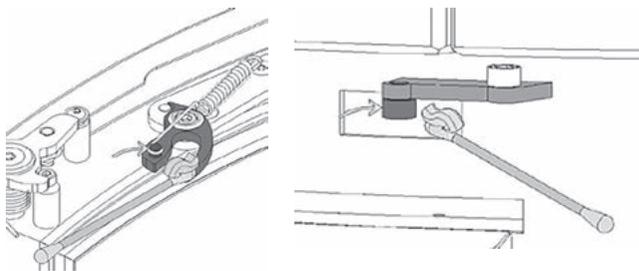
This lubrication compound is applied to facilitate ease of movement of heavy combustion chamber doors, and to prevent noise caused when opening and closing the doors. The lubricating compound must be applied at least once

a year to the Smart-Close door locking mechanism and its associated roller. In the case of fireplaces which are used frequently or very frequently, it may be necessary to shorten this lubrication interval. With the SEO stove, the door lock springs may be located below and/or above, as well as to the side of, the fire door. In order to lubricate the lock, you may use a standard cotton swab/Q-tip as an aid.



Open and secure the fire door. Apply a little lubricant compound to the cotton swab and use it to coat the spring support on the door lock; Turn the locating roller on the body of the stove during this application process. Open and close the combustion chamber door a few times and, if necessary, apply the copper paste once again

**Attention!** Ensure that no copper paste comes into contact with trim components or similar. Remove dirt and grime directly with a cotton cloth. Never operate the equipment during intervening periods



## 7. TROUBLESHOOTING

You can remedy the following problems on your SEO stove product yourself, but for other problems, please contact your specialist dealer or your tiled stove installer.

### 7.1 GLASS BECOMES SOOTED HEAVILY, RAPIDLY AND UNEVENLY

If this did not occur from the very start, please check the following points:

- Have the correct burning materials and equipment been used?
- Combustion air control fully open (actuating lever turned fully to the left)?
- External combustion air line free?
- This means that soot accumulates quickly, within just half an hour. (it is normal for the fireplace unit to become progressively dirtier from operation of the system. a car windscreen gradually gets dirty during a drive). To remedy this, ensure that no split logs are in direct contact with the window, or are lying very close to it.
- Is the seating of the seal perfect?
- Is the wood dry enough?
- Has enough wood been added? (insufficient amounts of wood can result in temperatures in the stove not being high enough).

### 7.2 FIRE IS DIFFICULT TO IGNITE

If this did not occur from the very start, please check the following points:

- Have the correct burning materials and equipment been used?
- Is the wood dry enough?
- Is the wood thin enough?
- Is a sufficient air supply assured.

- Not a shoulder season?
- No thermal inversion?
- Is the combustion air controller fully opened?
- External combustion air line free?

### 7.3 SMOKE ESCAPES WHEN ADDING WOOD

If this did not occur from the very start, please check the following points:

- See all questions under Point 7.1
- Is the complete burn-up phase reached?
- Is the bypass flap open?
- Has the required level of negative pressure been reached?
- Is the chimney unobstructed?
- Has your stove already reached operating temperature?
- Did you open the door slowly at the beginning?

### 7.4 EXCESSIVELY RAPID BURN-UP / RATE OF WOOD CONSUMPTION IS TOO HIGH

If this did not occur from the very start, please check the following points:

- Is the wood split in large enough log sections?
- Is the chimney draught too strong?
- Have you reduced the combustion air control (by turning the actuating lever slightly to the left)?
- Are you using hardwood with 15-18% residual humidity?
- Is the door completely closed?
- Have you complied with the recommended amount of wood?

## 8. GENERAL WARRANTY CONDITIONS

### 8.1 APPLICATION AREA

These standard warranty terms apply for the contractual relationship between the manufacturer, Spartherm Feuerungstechnik GmbH, and the dealer/distributor. They are not congruent with the contractual and warranty terms which the dealer/distributor offers his customers in individual cases.

### 8.2 GENERAL INFORMATION

This product has been manufactured in compliance with current standards of quality control. The materials used have been carefully selected and - like the production process - are subject to on-going quality control. Specialist knowledge is required when assembling and installing the product. The product must, therefore, only be installed and started up by specialist technical staff, in compliance with current statutory provisions.

### 8.3 WARRANTY PERIOD

The standard warranty terms only apply within Germany and the European Union. The warranty period and scope of the warranty are ensured within the framework of these conditions outside the statutory warranty which remains unaffected.

The company Spartherm Feuerungstechnik GmbH offers a 5-year warranty for:

- Main carcass combustion cells
- Main carcass fireplace stoves
- Main carcass fireplace cassettes
- Main carcass fireplace doors

Spartherm Feuerungstechnik GmbH offers a 24-month warranty in respect of the sliding door mechanism, operating components such as handles, setting levers, shock absorbers, electrical and electronic components such as fans, rotational speed controllers, the manufacturer's original spare parts, all items purchased as additional extras and all safety appliances.

Spartherm Feuerungstechnik GmbH offers a 6-month warranty in respect of consumables mounted in the combustion / firebox area, such as fire clay, vermiculite, fire grates, seals and glass ceramic.

## 8.4 REQUIREMENTS FOR THIS WARRANTY TO BE EFFECTIVE

The warranty period shall begin on the date, on which the product is delivered to the dealer / distributor. Invoices or delivery notes may be used as confirmation of the warranty commencement date. The warranty certificate for the product must be presented by the claimant upon making a warranty claim. Spartherm Feuerungstechnik GmbH is not obliged to satisfy any claim if such documentation is not presented.

## 8.5 EXCLUSION OF WARRANTY

This warranty does not cover:

Product wear:

- Chamotte(vermiculite): This is a natural product that expands and contracts with every heating process. This can cause cracks to appear. As long as the lining elements stay in position in the combustion chamber and do not break, they are fully functional.
- The surfaces: Discolouration in the paint finish or on the galvanic surfaces that is due to thermal stress or overload.

- The elevating door mechanism: failure to comply with installation guidelines, resulting in overheating of the deflection rollers and bearings.
- The seals: Decrease in the leak tightness due to thermal load and hardening.
- The glass panes: contamination, due to soot or other burnt-on combustion materials and visual deterioration due to thermal loading.
- Careless transportation and/or incorrect storage:
- Inappropriate or careless handling of fragile components
- Such as glass or ceramics.
- Improper handling and/or use
- Lack of maintenance
- Incorrect installation or appliance connection
- Failure to comply with installation instructions and operating instructions
- Technical modifications to the appliance by persons that are not employed by the manufacturer

## 8.6 RECTIFICATION OF DEFECTS / REPAIR

Independent of any statutory provisions acknowledged as taking precedence over the terms of this warranty, all necessary repair works resulting from material or manufacturing defect shall be carried out free-of-charge and shall not invalidate the remaining provisions of the warranty.

Within the scope of this warranty promise Spartherm Feuerungstechnik GmbH reserves the right to either remedy the fault or replace the device free of charge. The elimination of defects shall take precedence. The terms of this warranty shall not extend to any damage or compensation not covered by statutory provisions.

## 8.7 EXTENSION OF THE WARRANTY PERIOD

The warranty period shall automatically be extended, where claims made in respect of these warranty provisions result in the repair or replacement of defective equipment.

## 8.8 REPLACEMENT PARTS

Only the manufacturer's own components, or replacement parts recommended and approved by the manufacturer, shall be used for appliance servicing and repair.

## 8.9 LIABILITY

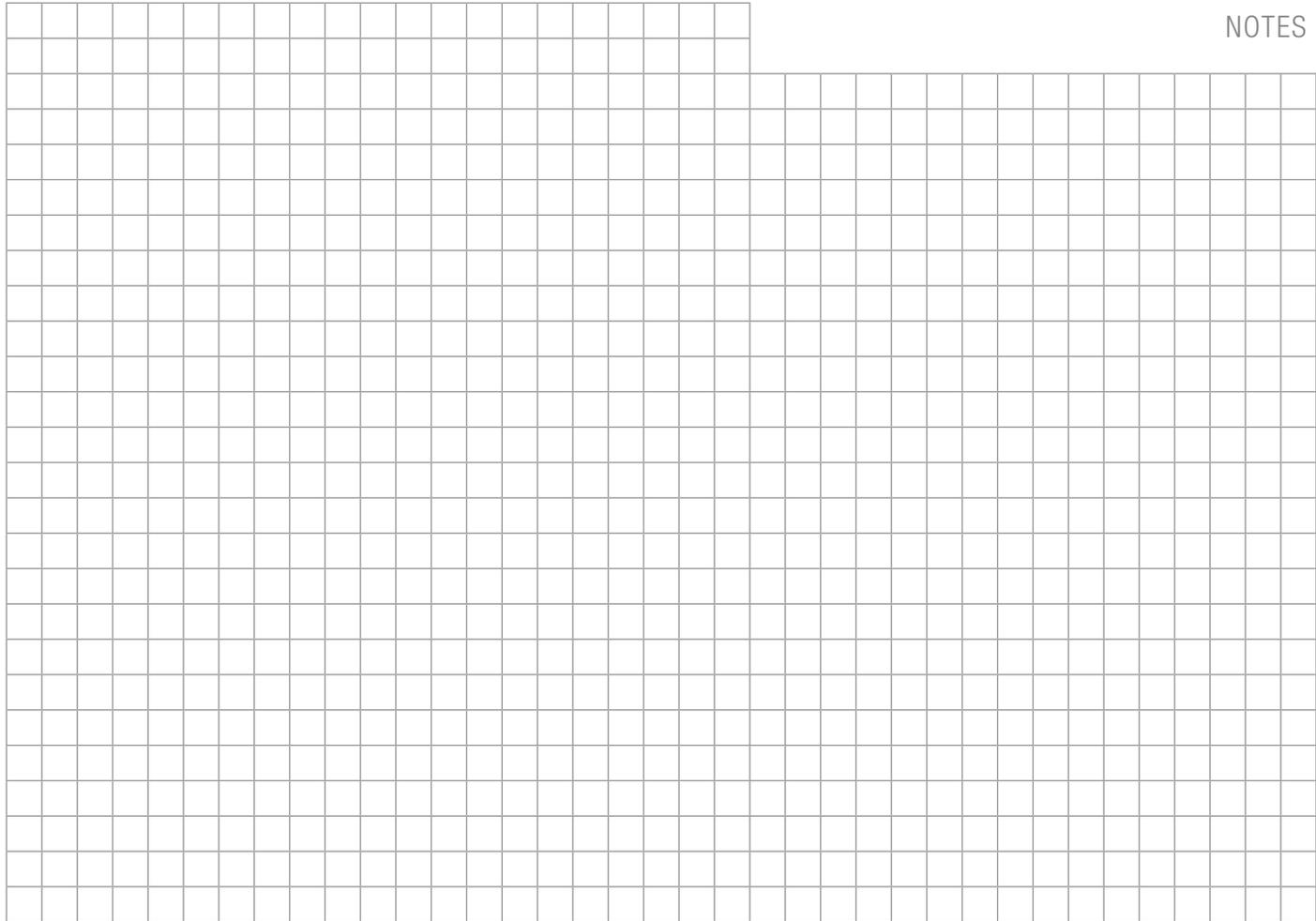
Damages and claims for compensation which are not the result of delivery of a defective appliance from Spartherm Feuerungstechnik GmbH are excluded and are not part of this warranty promise.

The above shall not include claims made in respect of statutory legal requirements.

## 8.10 FINAL COMMENTS

In addition to these warranty conditions and our commitment to them, our dealers and contractual partners are pledged to assist you in both word and deed. We expressly recommend that our fireplaces and stoves are regularly inspected by a qualified technician.

NOTES



# SPARTHERM

## DIE WELTMARKE FÜR IHR WOHNZIMMER

The Global brand for your living room | La référence mondiale pour votre salon | Il marchio mondiale per il vostro soggiorno

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Торговая марка № 1 для Вашего дома

D Ihr Fachhändler | UK Your specialist dealer | F Votre revendeur spécialisé  
IT Il vostro rivenditore specializzato | E Sus comercios especializados  
NL Uw vakhandelaar | PL Państwa sprzedawca | PУC Ваш дилер

