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Introduction

Dear user,
By purchasing this heating appliance from DOVRE you have selected a quality product. This product is part of a new generation of energy-efficient and environmentally-friendly heating appliances. These appliances make optimal use of convection heat as well as thermal radiation (radiant heat).

- Your DOVRE appliance has been manufactured with state-of-the-art production equipment. In the unlikely event of a malfunction, you can always rely on DOVRE for support and service.
- The appliance should not be modified; please always use original parts.
- The appliance is intended for use in a living room. It must be hermetically connected to a properly working flue.
- We advise you have the appliance installed by an authorized and competent installer.
- DOVRE cannot be held liable for any problems or damage resulting from incorrect installation.
- Observe the following safety regulations when installing and using the appliance.

In this manual, you can read how the DOVRE heating appliance can be installed, used and maintained safely. Should you require additional information or technical data, or should you experience an installation problem, please first contact your supplier.

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English

Performance declaration

In accordance with construction products regulation 305/2011

No. 032-CPR-2025

1. **Unique identification code of the product type:**

   Sense 103 - 203

2. **Type, batch or serial number or other form of identification for the construction product, as pre-scribed in article 11, subsection 4:**

   Unique serial number.

3. **Intended use for the construction product, in accordance with the applicable harmonised technical specification, as specified by the producer:**

   Stove for solid fuel without production of warm water in accordance with EN 16510.

4. **Name, registered trade name or registered trademark and contact address of the producer, as pre-scribed in article 11, subsection 5:**

   Dovre N.V. Nijverheidsstraat 18 2381 Weelde Belgium.

5. **If applicable, name and contact address for the authorised whose mandate covers the tasks spe-cified in article 12, subsection 2:**

   -

6. **The system or systems for the assessment and verification of the performance durability of the con-struction product, specified in appendix V:**

   System 3

7. **If the performance declaration refers to a construction product that falls under a harmonised stand-ard:**

   The appointed agency GAS.BE, registered under the number 2013, has performed a type test under system 3 and has issued the test report no. 2025-0001.

8. **If the performance declaration concerns a construction product for which a European technical assessment is issued:**

   -

9. Declared performance:

The harmonised norm		**EN16510-1:2022, EN16510-2-1:2022**		
Maximum load chimney		120	kg	
Chimney designation Tclass		T400G		
Safety distances	Front	800	mm	
	Rear	350	mm	
	Side	500	mm	
	Bottom	N/A	mm	
	Ceiling	750	mm	
	Floor radiation area	800	mm	
	Side radiation area	500	mm	
Protective isolation (insert)		-	mm	SILCA
Emissions		**Nominal**	**Part-load**	
CO-emission (13% 0_2)		942	1975	mg/Nm^3
NOx-emission (13% 0_2)		123,4	95,5	mg/Nm^3
OGC-emission (13% 0_2)		41,6	165,1	mg/Nm^3
PM-emission (13% 0_2)		19,6	32	mg/Nm^3
Flue gas temperature		329,2	275,9	°C
Minimum draught		12	6	Pa
Mass flow of flue gasses		5,8	4	g/s
Output		7	3,7	kW
Efficiency		76,6	76,1	%
Electrical consumption		-	-	kW
Seasonal efficiency		66,6	%	
Energy-efficiency-index		101,07		
Energy-efficiency-class		A		

10. The performance of the product described in points 1 and 2 conform with the performance reported in point 9.

This performance declaration is supplied under the exclusive responsibility of the producer specified in point 4:



12/11/2025 Weelde

Tom Gehem
CEO

Due to continuous product improvement, the specifications of the appliance supplied can vary from the description in this brochure without prior notice.

DOVRE N.V.
Nijverheidsstraat 18
B-2381 Weelde
Belgium
Tel : +32 (0) 14 65 91 91
E-mail : info@dovre.be

English

Performance declaration

In accordance with construction products regulation 305/2011

No. 032-CPR-2025

1. **Unique identification code of the product type:**

   Sense 213

2. **Type, batch or serial number or other form of identification for the construction product, as pre-scribed in article 11, subsection 4:**

   Unique serial number.

3. **Intended use for the construction product, in accordance with the applicable harmonised technical specification, as specified by the producer:**

   Stove for solid fuel without production of warm water in accordance with EN 16510.

4. **Name, registered trade name or registered trademark and contact address of the producer, as pre-scribed in article 11, subsection 5:**

   Dovre N.V. Nijverheidsstraat 18 2381 Weelde Belgium.

5. **If applicable, name and contact address for the authorised whose mandate covers the tasks spe-cified in article 12, subsection 2:**

   -

6. **The system or systems for the assessment and verification of the performance durability of the con-struction product, specified in appendix V:**

   System 3

7. **If the performance declaration concerns a construction product that falls under a harmonised norm:** The appointed GAS.BE instance, registered under the number 2013, has performed a type test under system 3 and has issued the test report no. 2025-0001.

8. **If the performance declaration concerns a construction product for which a European technical assessment is issued:**

   -

9. Declared performance:

The harmonised norm		EN16510-1:2022, EN16510-2-1:2022		
Maximum load chimney		120	kg	
Chimney designation Tclass		T400G		
Safety distances	Front	800	mm	
	Rear	350	mm	
	Side	500	mm	
	Bottom	N/A	mm	
	Ceiling	750	mm	
	Floor radiation area	800	mm	
	Side radiation area	500	mm	
Protective isolation (insert)		-	mm	SILCA
Emissions		**Nominal**	**Part-load**	
CO-emission (13% 0_2)		942	1975	mg/Nm^3
NOx-emission (13% 0_2)		123,4	95,5	mg/Nm^3
OGC-emission (13% 0_2)		41,6	165,1	mg/Nm^3
PM-emission (13% 0_2)		19,6	32	mg/Nm^3
Flue gas temperature		329,2	275,9	°C
Minimum draught		12	6	Pa
Mass flow of flue gasses		5,8	4	g/s
Output		7	3,7	kW
Efficiency		76,6	76,1	%
Electrical consumption		-	-	kW
Seasonal efficiency		66,6	%	
Energy-efficiency-index		101,07		
Energy-efficiency-class		A		

10. The performance of the product described in points 1 and 2 conform with the performance reported in point 9.

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Belgium
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E-mail : info@dovre.be

English

Performance declaration

In accordance with construction products regulation 305/2011

No. 041-CPR-2025

1. **Unique identification number of the product type:**

   Sense 303 - 403

2. **Type, batch or serial number or other form of identification for the construction product, as pre-scribed in article 11, subsection 4:**

   Unique serial number.

3. **Intended use for the construction product, in accordance with the applicable harmonised technical specification, as specified by the producer:**

   Stove for solid fuel without production of warm water in accordance with EN 16510.

4. **Name, registered trade name or registered trademark and contact address of the producer, as pre-scribed in article 11, subsection 5:**

   Dovre N.V. Nijverheidsstraat 18 2381 Weelde Belgium.

5. **If applicable, name and contact address for the authorised whose mandate covers the tasks spe-cified in article 12, subsection 2:**

   -

6. **The system or systems for the assessment and verification of the performance durability of the con-struction product, specified in appendix V:**

   System 3

7. **If the performance declaration refers to a construction product that falls under a harmonised stand-ard:**

   The appointed agency GAS.BE, registered under the number 2013, has performed a type test under system 3 and has issued the test report No. 2025-0063.

8. **If the performance declaration concerns a construction product for which a European technical assessment is issued:**

   -

9. Declared performance:

De geharmoniseerde norm		**EN16510-1:2022, EN16510-2-1:2022**		
Maximaal gewicht schouw		120	kg	
Schoorsteen aanduiding Tclass		T400G		
Veiligheidsafstanden	Voorkant	1300	mm	
	Achterkant	400	mm	
	Zijkant	700	mm	
	Onderkant	N/A	mm	
	Bovenkant	750	mm	
	Straling onderkant	350	mm	
	Straling zijkant	700	mm	
Beschermende isolatie (inbouw)		-	mm	SILCA
Emissies		**Nominaal**	**Deelbelasting**	
CO-emissie (13% 0_2)		721	2167	mg/Nm^3
NOx-emissie (13% 0_2)		123	106	mg/Nm^3
OGC-emissie (13% 0_2)		39	123	mg/Nm^3
PM-emissie (13% 0_2)		10	22	mg/Nm^3
Rookgastemperatuur		333	295	°C
Minimum trek		12	6	Pa
Massadebiet van rookgassen		7,3	5,1	g/s
Vermogen		7,5	4,5	kW
Rendement		76	74	%
Elektriciteitsverbruik		0	0	kW
Seizoensgebonden energie-efficiëntie		66	%	
Energie-efficiëntie-index		100,2		
Energie-efficiëntie klasse		A		

10. The performance of the product described in points 1 and 2 conform with the performance reported in point 9.

This performance declaration is supplied under the exclusive responsibility of the producer specified in point 4:



12/11/2025 Weelde

Tom Gehem
CEO

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E-mail : info@dovre.be

English

Safety

Please note: All safety regulations must be complied with strictly.

Please read carefully the instructions supplied with the appliance for installation, use and maintenance before using the appliance.

The appliance must be installed in accordance with the legislation and requirements applicable in your country.

All local regulations and the regulations relating to national and European standards must be observed when installing the appliance.

The appliance should preferably be installed by an authorised installer. Installers will be aware of the applicable regulations and requirements.

The appliance is designed for heating purposes. All surfaces, including the glass and connecting tube, can become very hot (over 100°C)! When operating, use a so-called "cold hand" or an oven glove.

Ensure that the appliance is adequately guarded if young children, disabled people, the elderly or animals are present in the vicinity.

Safety distances from flammable materials must be strictly adhered to.

Do not place any curtains, clothes, laundry or other combustible materials on or near the appliance.

When in use, do not use flammable or explosive substances in the vicinity of the appliance.

Avoid chimney fires by having the chimney swept regularly. Never burn wood with the door open.

In the event of a chimney fire: close all the appliance's air inlets and alert the fire service.

If the glass in the appliance is broken or cracked, it must be replaced before the stove is used again.

Do not exert force on the door, do not allow children to pull on the opened door, never stand or sit on the opened door and do not place heavy objects on the door.

Ensure that there is adequate ventilation in the room in which the appliance is installed. If ventilation is insufficient, combustion will be incomplete whereby toxic gases can spread through the room. See the chapter "Installation requirements" for more information on ventilation.

Installation requirements

General

- The appliance must be connected tightly to a well-functioning flue.
- For connection measurements: see "Technical data" appendix.
- Ask the fire service and/or your insurance company about any specific requirements and regulations.

Flue

The flue is needed for:

- Removal of combustion gases via natural draught.

  As the warm air in the flue or chimney is lighter than the outside air, it rises.
- Air intake, needed for the combustion of fuel in the appliance.

A poorly-functioning flue or chimney can cause smoke to escape into the room when the door is opened. Damage caused by smoke emissions into the room is not covered by the warranty.

Do not connect multiple appliances (such as a boiler for central heating) to the same flue, unless local or national regulations allow this. In the event of two connections ensure that the difference in height between the connections is no less than 200 mm.

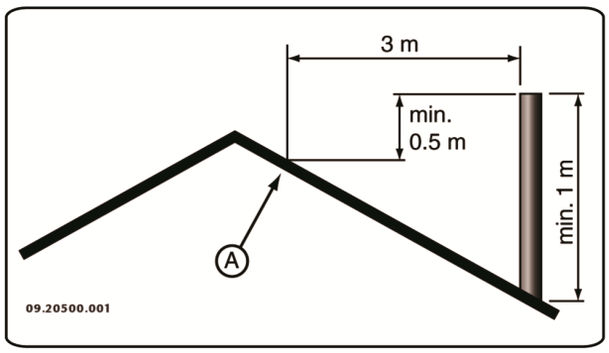
Ask your installer for advice regarding the flue. Refer to the European norm EN13384 for a correct calculations for the flue.

The flue must satisfy the following **requirements**:

- The flue or chimney must be made of fire-resistant material, preferably ceramics or stainless steel.
- The flue or chimney must be airtight and well-cleaned and guarantee sufficient draught.

  A draught/vacuum of 15 - 20 Pa during normal operation is ideal.
- Starting from the flue spigot, the flue must run as vertically as possible. Changes in direction and horizontal pieces disrupt the outward flow of combustion gases and may cause soot deposits.
- To prevent combustion gases from cooling down too much, which reduces the draught, ensure that the interior diameter is not too big.
- The flue or chimney should ideally have the same diameter as the connection collar.

  For nominal diameter: see "Technical data" appendix. If the smoke channel is well insulated, the diameter may be slightly bigger (up to 2x the section of the connection collar).
- The section (area) of the smoke channel must be constant. Wider segments and (in particular) narrower segments disrupt the outward flow of combustion gases.
- In fitting a cover plate/exhaust cap to the flue: make sure that the cover does not restrict the flue outlet and that the cap does not impede the outward flow of combustion gases.
- The flue must end in a zone that is not affected by surrounding buildings, trees or other obstacles.
- The flue outside the house must be insulated.
- The flue should be at least 4 metres high.
- As a rule of thumb: 60 cm above the ridge of the roof.
- If the ridge of the roof is more than 3 metres from the flue: use the measurements given in the following figure. A = the highest point of the roof within a distance of 3 metres.



Room ventilation

For good combustion, the appliance needs air (oxygen). This air is supplied via adjustable air inlets from the area in which the appliance is installed.

If ventilation is insufficient, combustion will be incomplete, which may lead toxic gases to spread through the room.

As a rule of thumb, the air supply should be 5.5 cm²/kW. Extra ventilation is needed when:

- The appliance is in a well-insulated area.
- There is mechanical ventilation, for example a central extraction system or an extraction hood in an open kitchen.

You can provide extra ventilation by having a ventilation louvre fitted on the outside wall.

Make sure that other air consuming appliances (such as tumble-driers, other heating appliances or a bathroom fan) have their own supply of outside air, or are switched off when you use the appliance.

You can also connect the appliance to an outside air supply. A connection kit is supplied for this purpose. This makes additional ventilation unnecessary.

Floor and walls

The floor on which the appliance is placed must have sufficient bearing capacity. The weight of the appliance is given in the appendix “Technical Data appendix”.

Protect flammable flooring from heat radiation by means of a fireproof protective plate. See

English

the appendix "Distance from combustible material".

Remove combustible material such as linoleum, carpets/rugs and similar materials below the fireproof protective plate.

Keep sufficient distance between the appliance and combustible materials such as wooden walls and furniture.

The connecting tube also radiates heat. Ensure that there is sufficient distance or a shield between the connecting tube and combustible material.
The rule of thumb for a single-walled tube is a distance of 3x the diameter. If a lining shell is fitted around the tube, a distance of 1x the diameter is permissible.

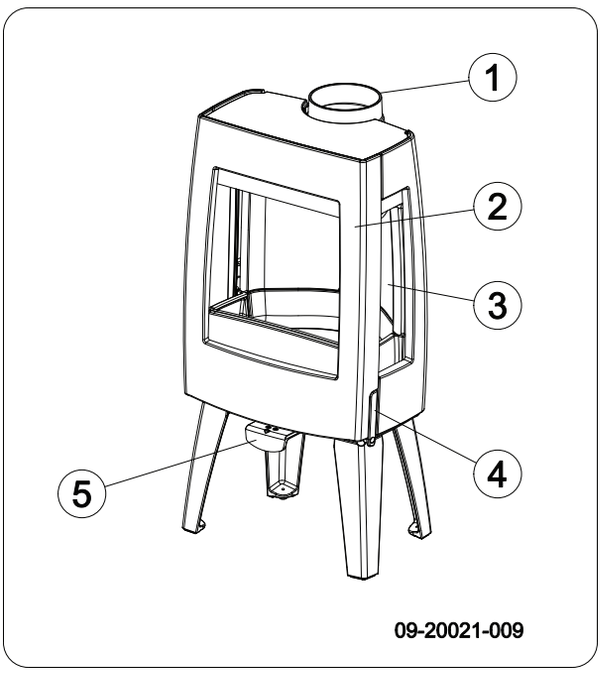
Carpets and rugs must be at least 80 cm away from the fire.

Use a fireproof floor plate to protect a flammable floor from any ash which may fall in front of the stove. The floor plate must comply with national standards.

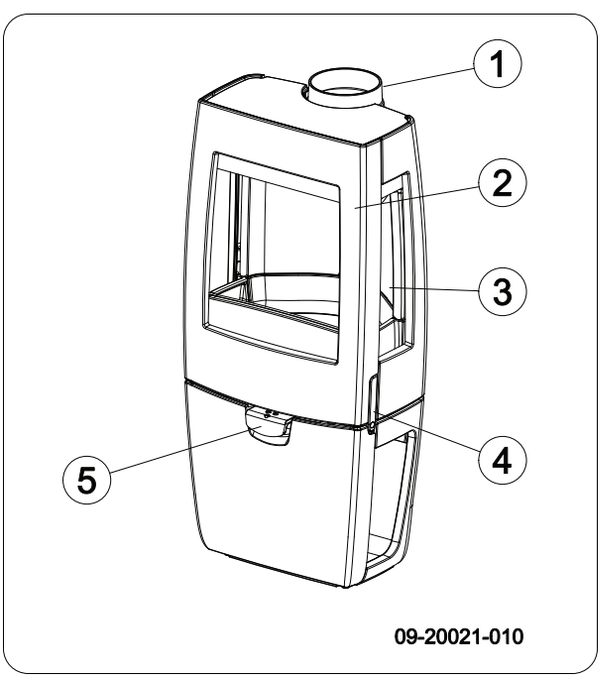
For the dimensions of the fireproof protective plate: see the appendix "Distance from combustible material".

For further requirements with respect to fire safety, see the appendix "Distance from combustible material".

Product description



09-20021-009



09-20021-010

1. Connection collar
2. Door
3. Side glass
4. Latch
5. Air slide

Door lock

The appliance is supplied with the latch button (4) installed. The door is opened by pressing in the latch button. As the latch button becomes warm during use, a glove has been supplied which you can use to protect your hand.

Installation

General preparation

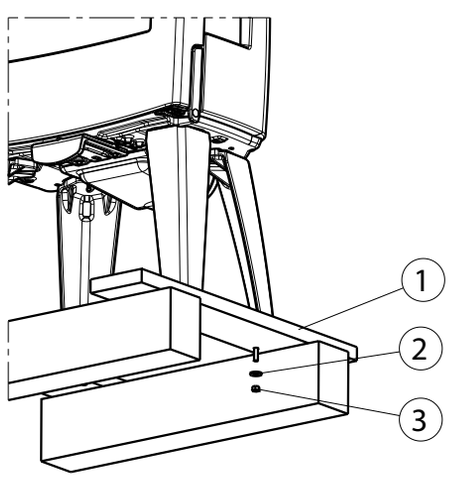
- Please check the appliance immediately after delivery for damage during transport or any other damage or defects. The appliance is attached to the pallet with screws at the bottom.

  ⚠ If you detect transport damage or any other damage or defects, do not use the appliance and notify the supplier.

- Remove removable parts (fire-resistant inner plates, fire grate, top plate, ashtray) from the appliance before starting installation.

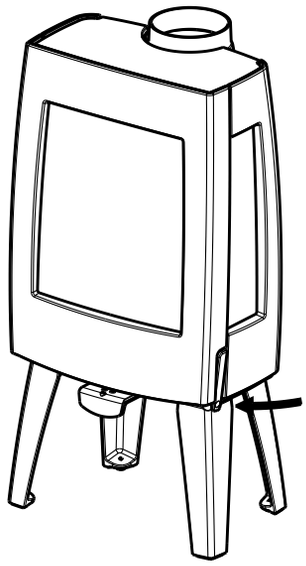
  ℹ It is easier to move the appliance and to avoid damage if the removable parts have been removed.

  ⚠ Note the location of the removable parts, so that you can re-position the parts in the correct place later on.



09-20021-011

1. Open the door; see the following figure:


09-20021-012

2. Remove the fire-resistant inner plates; see the following figure:

   a. First remove the baffle plate (09).

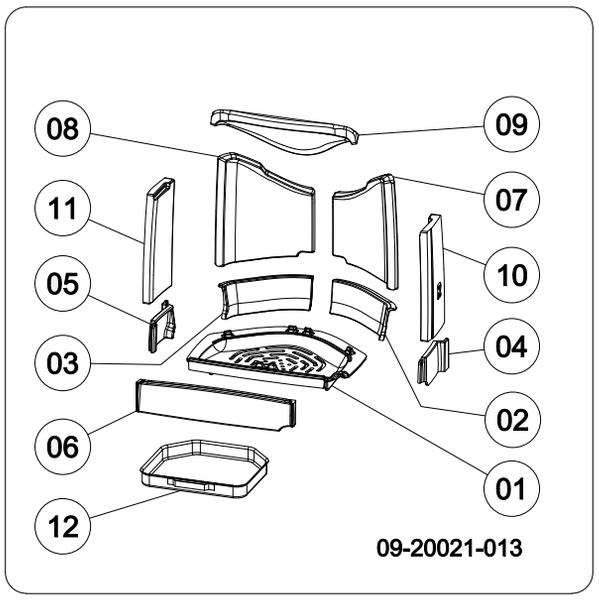
      ⚠ The baffle plate is attached at the top with a metal clip. This is to avoid damage during transit.

   b. Remove the inner plates (10), (11), (07) and (08) at the side and at the back.

   c. Remove the fire basket at the rear (02) and (03) and at the front (04), (05) and (06).

   d. Remove the grate and the ash pan (01) and (12).

      ℹ Vermiculite inner plates are light and tend to be ochrous in colour on delivery. They insulate the combustion chamber to boost combustion.



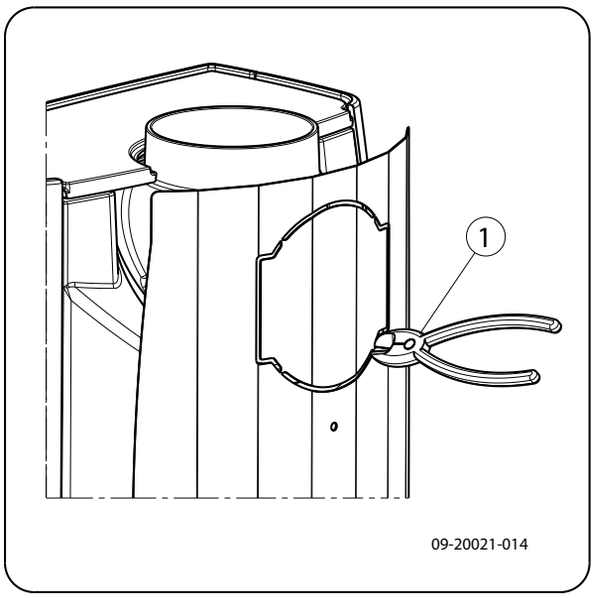
Removable internal parts

01 fire compartment base
02 fire basket right rear
03 fire basket left rear
04 fire basket right
05 fire basket left
06 fire basket
07 side inner plate right rear
08 side inner plate left rear
09 baffle plate inner plate
10 side inner plate right
11 side inner plate left
12 ash pan

Preparing the connection to the flue

When connecting the appliance to the flue, you can choose to connect to the **top** or to the **rear** of the appliance

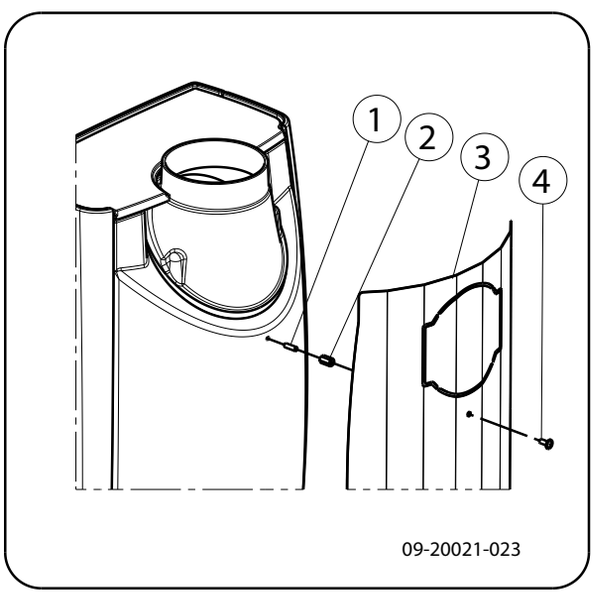
An optional heat shield is available. By using this heat shield you can reduce the distance to the combustible material. See appendix "Distance from combustible material". For a rear connection the escape plate needs to be removed. You can do this with the assistance of a screwdriver (1); see following figure.



Fitting the heat shield

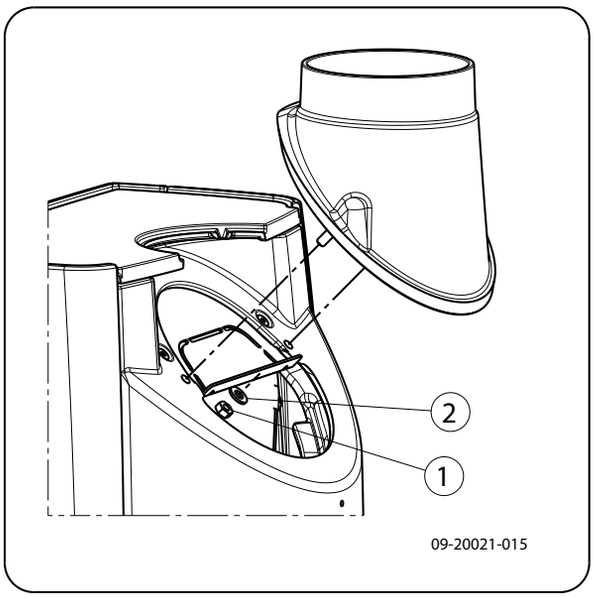
To fit the optional heat shield, proceed as follows:

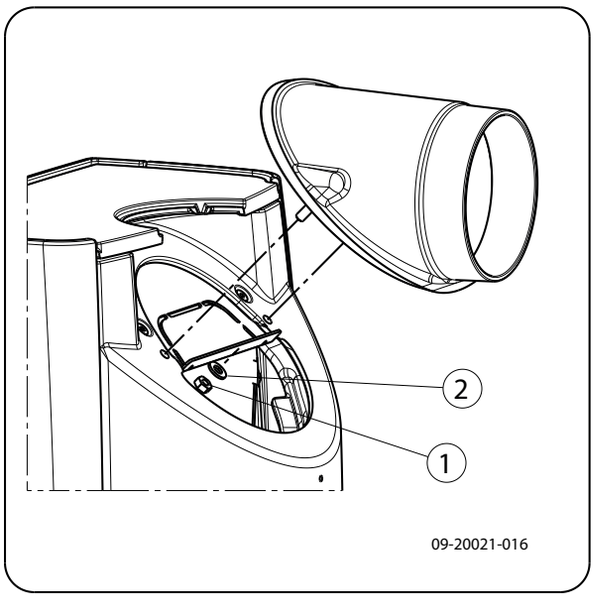
1. Screw 2 M6 studs (1) with spacer (2) to the rear wall.
2. Place the heat shield (3) and screw into place with 2 M6 flanged cap screws (4), see following figure.



Connecting to the top

As standard, the appliance is delivered with the connection collar fitted for a connection at the top, see following figure.





Connecting to the rear

For a connection to the rear, the position of the connection collar needs to be changed. The connection collar is attached with 2 M8 nuts (key 13). Proceed as follows:

1. First remove the baffle plate.
2. Unscrew the nuts and remove the connection collar.

   ⚠ Check that the sealing tape on the contact surface is not damaged. Replace the sealing tape if it is damaged.
3. Place the connection collar turned 180° with respect to its original position; see next figure.
4. Fit the connection collar with the 2 M8 nuts.
5. Replace the baffle plate.

Preparing the outside air connection

If the appliance is installed in a room with insufficient ventilation, you can install the outside air connecting kit to the appliance.

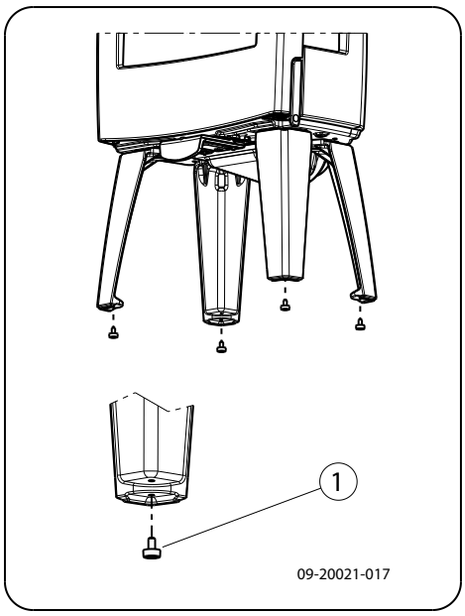
The air supply tube is 100 mm in diameter. If the tube is smooth, it may be no longer than 12 metres. If accessories such as bends are used, the maximum length (12 m) must be reduced by 1 m for each accessory used.

Outside air connection via the wall

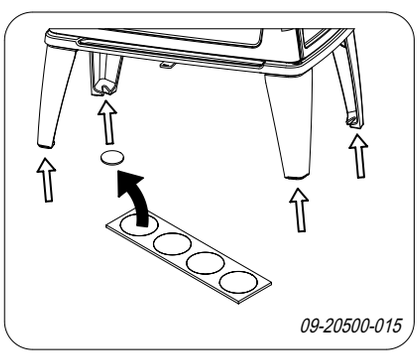
1. Make an opening in the wall (see the appendix, "Measurements", for the correct position of the opening).
2. Close the air connection hermetically to the wall.

Installing and connecting

1. Position the appliance in the correct place, and make sure it is level. The appliance is designed with adjustable feet, which may already be mounted on the appliance or be included. Use these adjustable feet so that the appliance can be placed perfectly level.



2. If the appliance is to be placed on a smooth floor, the four anti-slip pads can be placed beneath the adjustable feet to prevent the appliance from moving, see next image.



3. Connect the appliance to the flue hermetically.
4. For outside air supply connection: connect the outside air supply to the connection kit which is fitted to the appliance.
5. Re-position all removed parts to the correct places in the appliance.

⚠ Never use the appliance without the fire-resistant inner plates.

The appliance is now ready for use.

Use

First use

When you use the appliance for the first time, make an intense fire and keep it going for a good few hours. This will cure the heat-resistant paint finish. This may result in some smoke and odours. You could open windows and doors for a while in the area in which the appliance is located.

Fuel

This appliance is only suitable for burning natural wood; sawn and chopped wood that is sufficiently dry.

Do not use other fuels, as they can cause serious damage to the appliance.

The following fuels may not be used as they pollute the environment, and because they heavily pollute the appliance and flue, which may lead to a chimney fire:

- Treated wood, such as scrap wood, painted wood, impregnated wood, preserved wood, plywood and chipboard.
- Plastics, scrap paper and domestic waste.

Wood

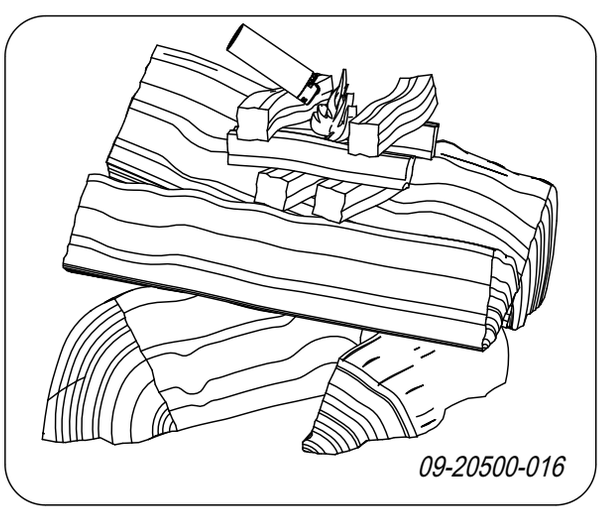
- Hardwood, such as oak, beech, birch and fruit tree wood is the ideal fuel for your stove. This type of wood burns slowly with calm flames. Softwood contains more resins, burns faster and sparks more.
- Use seasoned wood that contains no more than 20% moisture. The wood should have been seasoned for at least 2 years. Wood with a moisture content of 20% provides 4.2 kWh per kg wood. Wood with a moisture content of 15% provides 4.4 kWh per kg wood. Freshly felled wood has a moisture content of 60% and only provides 1.6 kWh per kg wood.
- Saw the wood to size and split it while it is still fresh. Fresh wood is easier to split, and split wood dries more easily. Store the wood under a roof where the wind has free access.
- Do not use damp wood. Damp logs do not produce heat as all the energy is used in the evaporation of moisture. This will result in a lot of smoke and soot deposits on the appliance door and in the flue. The

water vapour will condense in the appliance and can leak away through chinks in the stove, causing black stains on the floor. It may also condense in the chimney and form creosote. Creosote is a highly flammable compound and may cause a chimney fire.

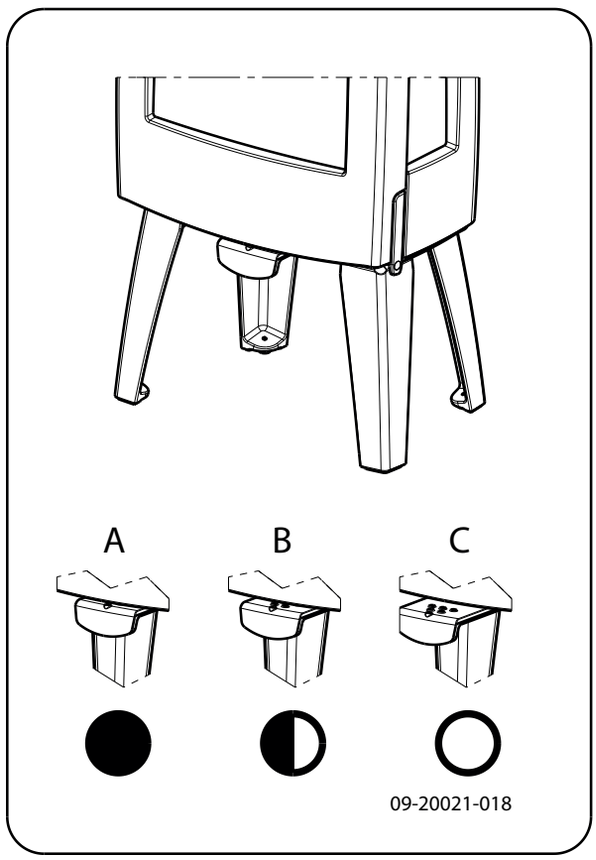
Lighting

You can check whether the flue has sufficient draught by lighting a ball of paper above the baffle plate. A cold flue often has insufficient draught and consequently, some smoke may escape into the room instead of up the chimney. You can avoid this problem by lighting the fire as described below.

1. Stack two layers of medium sized logs crosswise.
2. Stack two to three layers of kindling crosswise on top of the logs.
3. Place a firelighter between the bottom layer of kindling and light the firelighter according to the instructions on the packaging.



4. Close the appliance door and open the primary and secondary air inlets; see the following figure.
5. Allow the fire develop into a good blaze until there is a glowing bed of charcoal. You can then add fuel and adjust the appliance, see the chapter "Stoking with wood".



C:

o o o Primary air open (when lighting the stove)
o o Secondary air open (glass wash)
o Air for post-combustion open

B:

o o Secondary air open (glass wash)
o Air for post-combustion open

A:

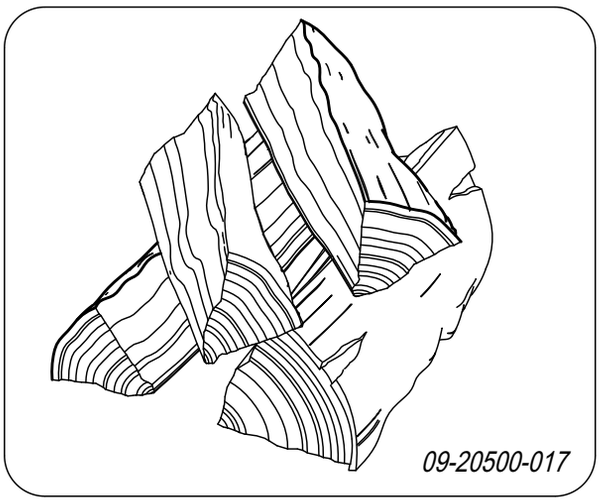
o Air for post-combustion open
(never close entirely for proper combustion)

Burning wood

After you have followed the instructions for lighting:

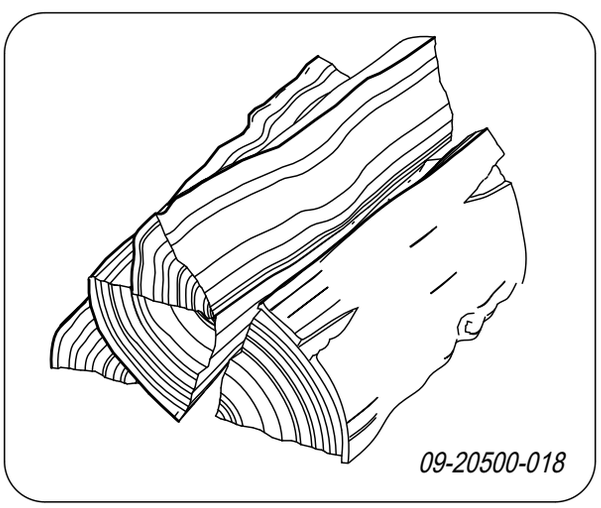
1. Slowly open the door of the appliance.
2. Spread the charcoal evenly across the bottom of the stove base.
3. Stack a few logs on the charcoal.

Open stacking



If the logs are stacked openly, the wood will burn quickly as the oxygen can reach each log easily. If you want to use the stove for a short while, make an open stack.

Compact stacking



If the logs are stacked tightly, the wood will burn more slowly as the oxygen can only reach some logs easily. If you want to burn wood for a longer period, make a compact stack.

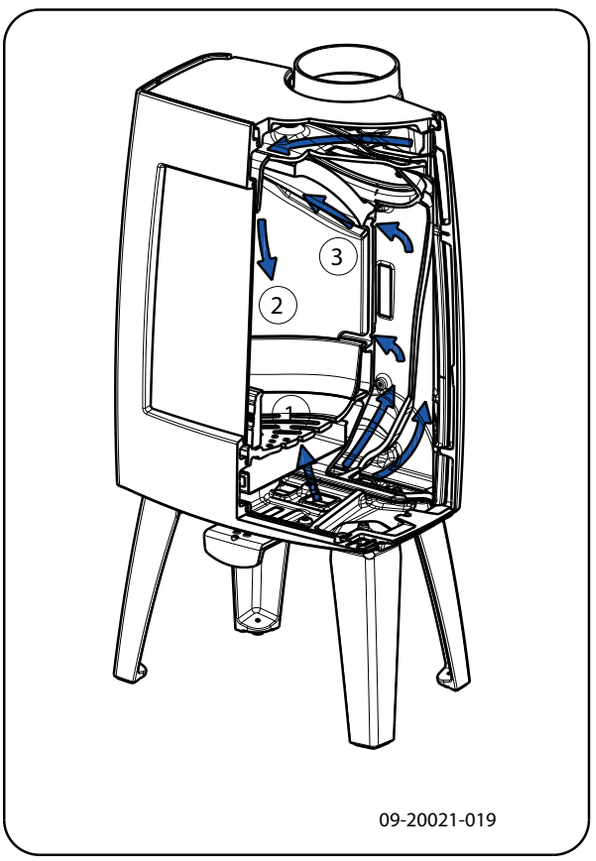
4. Close the door of the appliance.
5. Close the primary air inlet and leave the secondary air inlet open.

⚠ Do not fill the appliance by more than a third.

Controlling combustion air

The appliance has various features for air control; see next figure.

The appliance has one air slide that regulates both the primary air and the secondary air inlet. If the air slide is completely pulled out, the primary and the secondary air inlet is open. As the air slide is pushed in, the primary air inlet and then the secondary air inlet is closed. If the air slide is completely closed, a small air vent remains open to allow for the post-combustion under the baffle plate.



The primary air inlet regulates the air under the grate (1).

The secondary air inlet regulates the air for the glass (air wash) (2).

The back wall has permanent vents (3) below the baffle plate that allow for post-combustion.

Advice

Never burn wood with an open door.

Regularly burn wood with intense roaring fires.

If you burn at a low setting frequently, tar and creosote may be deposited in the flue. Tar and creosote are highly combustible substances. Thicker layers of these substances may catch fire if the temperature in the flue increases suddenly. By allowing the fire to burn very intensely regularly, layers of tar and creosote will disappear.
Low intensity fires can also cause tar deposits on the stove window and door.
When the outside temperature is mild, it is better to burn wood intensely for a few hours instead of having a low intensity fire for a long period of time.

- Control the air supply using the air vent.

The air inlet not only supplies air to the fire but to the glass as well, so that it does not quickly become dirty.

- Open the primary air inlet for the time being if the air supply by the secondary air inlet is inadequate or if you want to fan the fire.
- Topping up with a few logs regularly is better than adding many logs in one go.

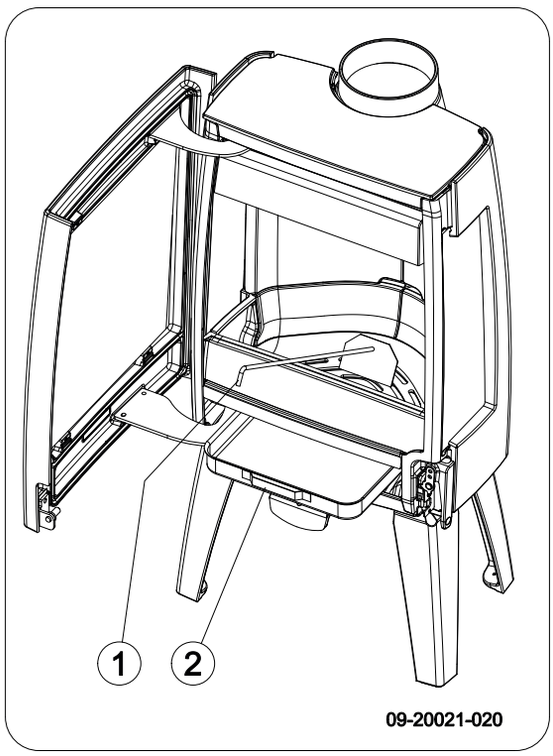
Extinguishing the fire

Do not add fuel and just let the fire go out. If a fire is damped down by reducing the air supply, harmful substances will be released. For this reason, the fire should be allowed to go out naturally. Keep an eye on the fire until it has gone out. All air inlets can be closed once the fire has died completely.

Removing ash

After wood has been burnt, a relatively small amount of ash remains. This ash bed is a good insulating layer for the stove base plate and improves combustion. It is a good idea to leave a thin layer of ash on the stove base plate.

The flow of air through the fire plate must not be obstructed, however, and no ash may be allowed to accumulate behind a cast-iron inner plate. Remove the excess ash regularly.



1. Open the door of the appliance.
2. Use the scraper supplied to sweep the excess ash into the ash pan.
3. Using the glove supplied, remove the ash pan and empty it.
4. Replace the ash pan and close the door of the appliance.

Fog and mist

Fog and mist hinder the flow of flue gases through the flue. Smoke can blow back and cause a stench. If it is not strictly necessary, it is better not to use the stove in foggy and misty weather.

Resolving problems

Refer to the appendix "Diagnostic diagram" to resolve any problems in using the appliance.

Maintenance

Follow the maintenance instructions in this chapter to keep the appliance in good condition.

Flue

In many countries, you are required by law to have your chimney checked and maintained.

- At the start of the heating season: have the chimney swept by a recognised chimney sweep.
- During the heating season and after the chimney has not been used for a long time: have the chimney checked for soot.
- At the end of the heating season: close off the chimney and plug with newspaper.

Cleaning and other regularly maintenance

⚠ Do not clean the appliance when it is still warm.

- Clean the exterior of the appliance with a dry lint-free cloth.

You can clean the appliance interior thoroughly at the end of the heating season:

- If necessary, first remove the fire-resistant inner plates. See the chapter "Installation" for instructions on removing and installing the inner plates.
- If necessary, clean the air supply ducts.
- Remove the baffle plate at the top of the appliance and clean it.

Checking fire-resistant inner plates

The fire-resistant inner plates are consumables that are subject to wear and tear. Vermiculite inner plates are fragile. Do not knock the inner plates with logs. Check the fire-resistant inner plates frequently and replace them when necessary.

- See the chapter "Installation" for instructions on removing and installing the inner plates.

ℹ The insulating vermiculite or chamotte inner plates may develop hairline cracks, but this does not affect their performance adversely.

ℹ Cast-iron inner plates last a long time if you remove frequently the ash that can accumulate behind them. If accumulated ash behind the cast-iron plate is not removed, the plate will no longer be able to dissipate the heat to the surroundings and this may cause the plate to warp or crack.

⚠ Never use the appliance without the fire-resistant inner plates.

Cleaning the glass

Dirt clings less easily to well-cleaned glass. Proceed as follows:

1. Remove dust and loose soot with a dry cloth.
2. Clean the glass with stove glass cleaner:
   a. Apply stove glass cleaner to a kitchen sponge, rub down the entire glass surface and give the cleaning agent time to react.
   b. Remove the dirt with a moist cloth or kitchen tissue.
3. Clean the glass again with a normal glass cleaning product.
4. Rub the glass clean with a dry cloth or kitchen tissue.

- Do not use abrasive or aggressive products to clean the glass.
- Wear household gloves to protect your hands.

⚠ If the glass in the appliance is broken or cracked, it must be replaced before you can use appliance again.

⚠ Ensure that no stove glass cleaner runs between the glass and the cast-iron door.

Enamelled stove maintenance

Never clean the appliance while it is still hot. The most effective way to clean the enamelled surface of the stove is with a mild green soap and lukewarm water. Use as little water as possible, rub the surface dry and prevent the formation of rust. Wire wool or other abrasives should never be used. Never place a

kettle directly onto an enamelled stove; use a stand to prevent damage. Attention: Do not allow aggressive acidic products to get onto enamelled components.

Lubrication

Although cast-iron is slightly self-lubricating, you will still need to lubricate moving parts frequently.

- Lubricate the moving parts (such as guide systems,hinge pins, latches and air slides) with heat resistant grease that is available in the specialist trade.

Touching up damaged paint

Small areas of damaged paint finish can be touched-up with a spray can of special heat-resistant paint, available from your supplier.

Touching up the enamelled surface

Enamelling is a process carried out by traditional methods, meaning that it is possible that small colour differences and damage may occur. The appliances undergo a visual inspection in the factory, that is to say, the inspector looks at the surface for a period of 10 seconds from a distance of 1 metre.
Any damage that does not stand out is regarded as OK. A special heat-resistant paint is supplied with the appliance to touch up any minor damage caused during transport.
Apply the heat-resistant paint in thin layers and leave to dry well before using the appliance.

- Some enamel colours are temperature-sensitive. It can happen that the colour changes during use. The original colour will return after the appliance has cooled down.
- If enamelled surfaces become very hot, hairline cracks can occur. This is a normal phenomenon and has no impact on the functioning of the stove.

⚠ Ensure that the stove is not overburdened. If it does become overburdened then the surface gets very hot possibly resulting in lasting damage to the enamel.

Checking the seal

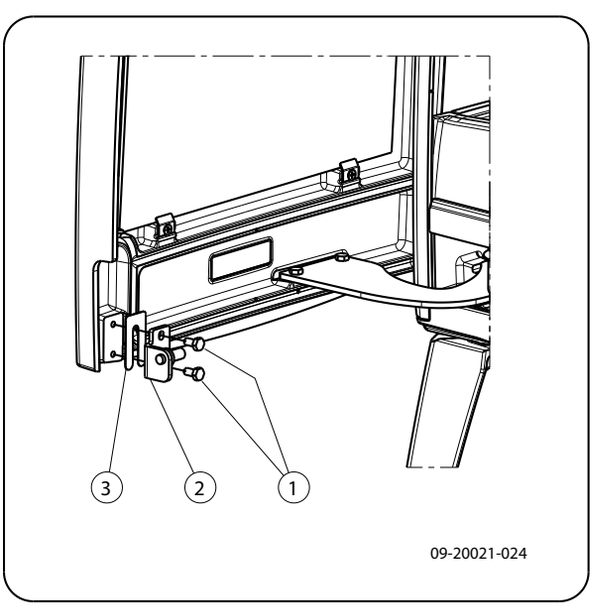
- Check whether the door sealing rope is still in good condition and works well. The sealing rope is subject to wear and will need to be replaced over time.
- Check the appliance for air leaks. Close any chinks with stove sealant.

⚠ Allow the sealant to harden fully before lighting the appliance, as any moisture in the sealant will form bubbles, resulting in a new air leak.

Adjust door closing

Check if the door closes properly. If required, the closing of the door can be set looser or tighter by adjusting the distance between the locking cam and the door. Proceed as follows:

1. Open the door. The locking cam (2) is now freely accessible; see next figure.
2. Unscrew the two screws (1) with which the locking cam is attached.
3. By removing the packing plate (3) behind the locking cam (2), the door closes more tightly. If the door closes too tightly then insert an additional packing plate behind the locking cam.
4. Tighten the two screws and check the closing of the door once again.



Replacing the glass

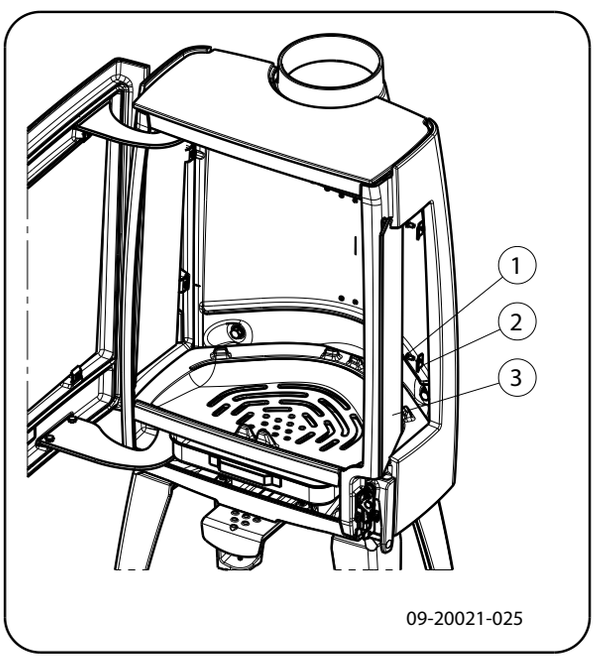
⚠ If the glass in the appliance is broken or cracked, it must be replaced before the stove

English

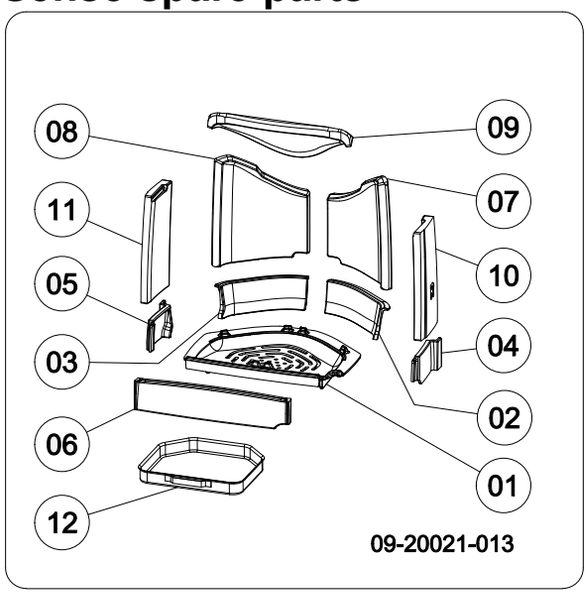
is used again.

In order to replace the side glass, all the inner panels and the air guide must first be removed. The air guide is attached with a M8 nut in the middle at the top of the appliance. Proceed as follows:

1. Unscrew the two glass fixings with parts (1) and (2) and remove the glass (3), see following figure.
2. Check the glass seal and, if necessary, fit a new sealing rope.
3. Place the new glass in the grove and tighten the glass fixings.



Sense spare parts



Sense 103/203/213

Pos.	Part number	Description	Quantity
01	03.66544.002	base plate	1
02	03.77429.002	fire basket right	1
rear 03	03.77428.000	fire basket left	1
rear 04	03.77425.002	fire basket	1
right 05	03.77424.002	fire basket left	1
06	03.77423.002	fire basket	1
07	03.77523.000	side inner plate right	1
08	03.77522.000	side inner plate left rear	1
09	03.76181.000	baffle plate inner plate	1
10	03.77525.000	side inner plate right	1
11	03.77524.002	side inner plate left	1
12	03.05216.000	ash pan	1

Sense 303/403

Pos.	Part number	Description	Quantity
01	03.66549.002	stove base	1
02	03.77444.002	fire basket right rear	1
03	03.77443.000	fire basket left rear	1
04	03.77442.002	fire basket right	1
05	03.77441.002	fire basket left	1

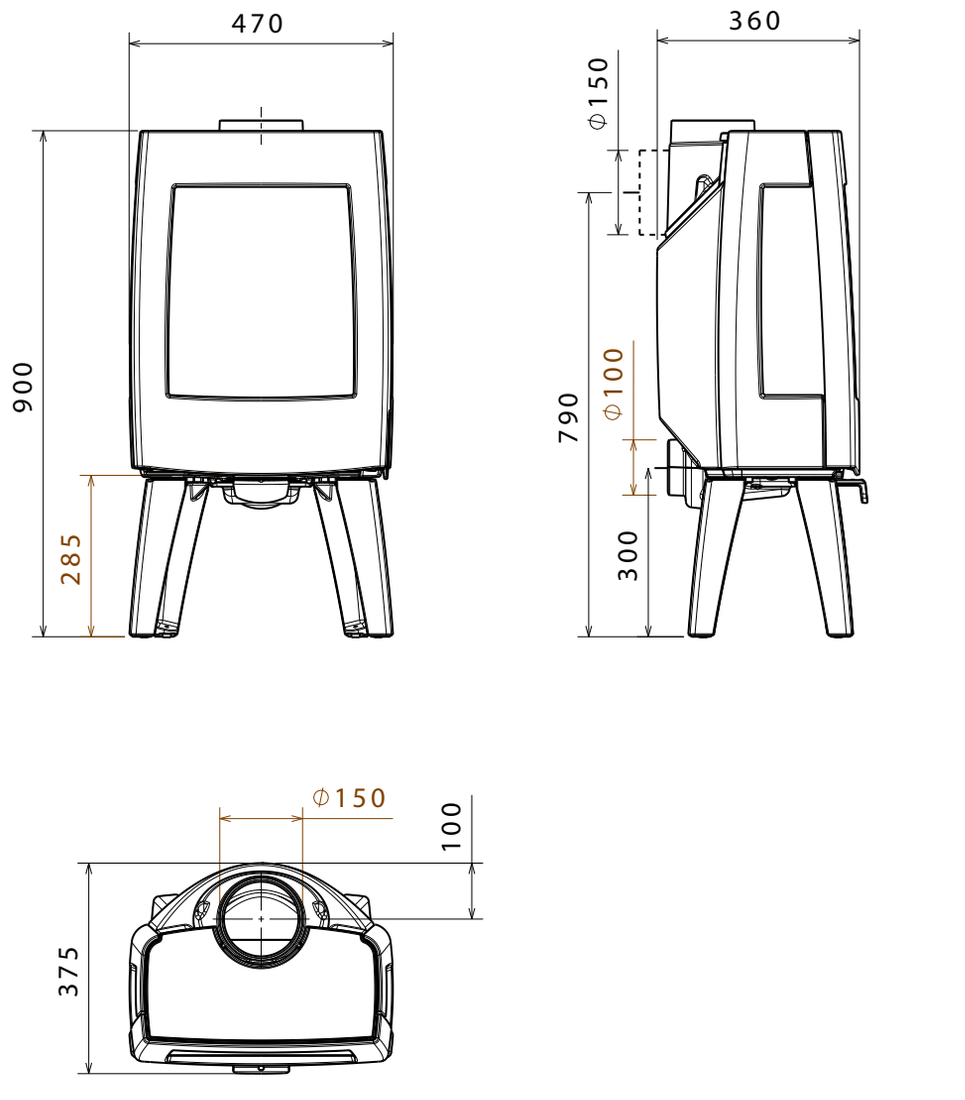
06	03.77440.002	fire basket	1
07	03.77548.000	side inner plate right rear	1
08	03.77547.000	side inner plate left rear	1
09	03.76188.000	baffle plate inner plate	1
10	03.77550.000	side inner plate right	1
11	03.77549.002	side inner plate left	1
12	03.05216.000	ash pan	1

Appendix 1: Technical data

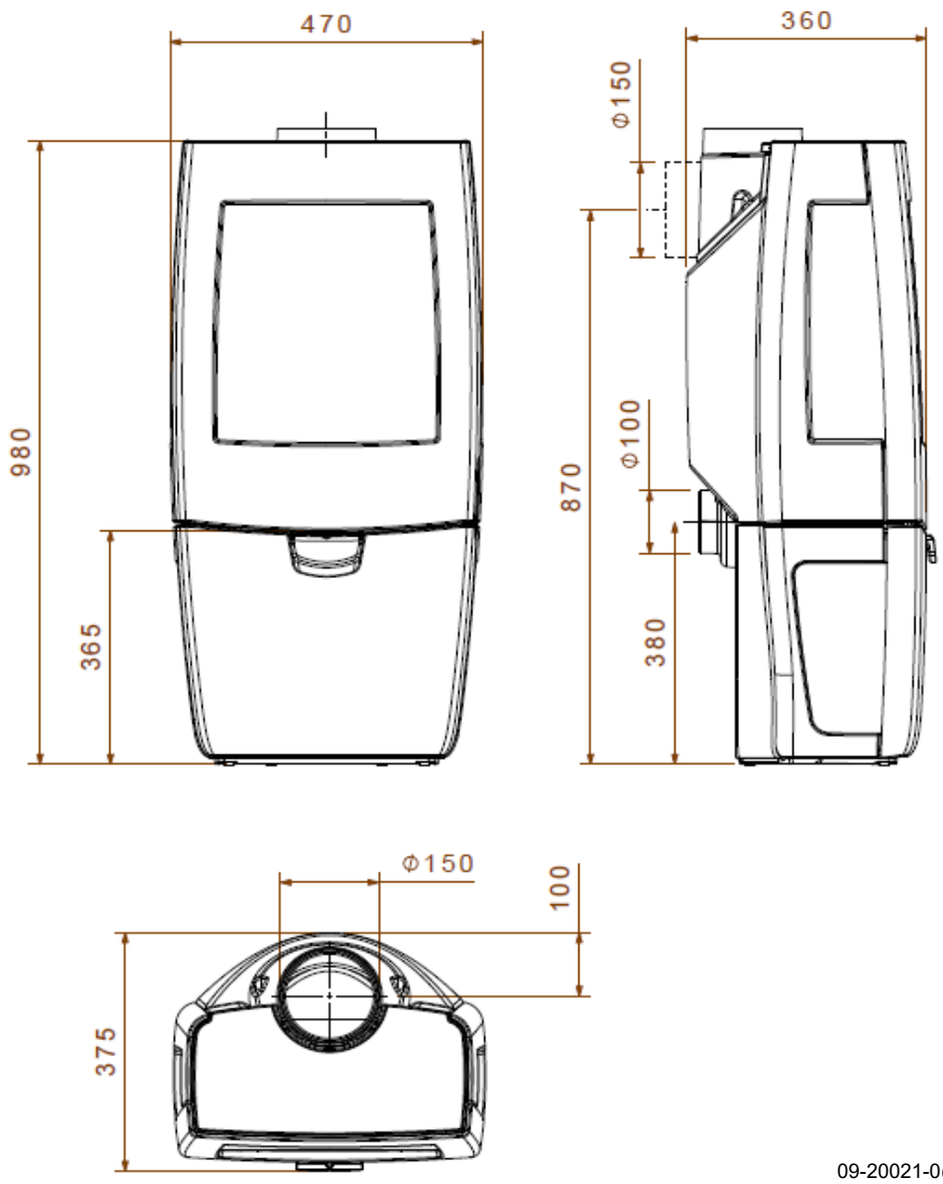
Model		SENSE103-203-213			SENSE303-403		
Type (EN-16510-1)		CM			CM		
Flue connection (Ø)		150	mm		150	mm	
Chimney designation Tclass		T400G			T400G		
Maximum load chimney		120	kg		120	kg	
Weight		105	kg		175	kg	
Dimensions (mm)		470x900x375			555x1160x440		
Recommended fuel		Wood			Wood		
Fuel property, max. length		25	cm		40	cm	
Protective isolation (insert)		-	mm	SILCA	-	mm	SILCA
Power supply voltage		-	V		-	V	
Distance to non-combustible materials		100	mm		100	mm	
Safety distances	Front	800	mm		1300	mm	
	Rear	350	mm		400	mm	
	Side	500	mm		700	mm	
	Bottom	N/A	mm		N/A	mm	
	Ceiling	750	mm		750	mm	
	Floor radiation area	800	mm		350	mm	
	Side radiation area	500	mm		700	mm	
Emissions		**Nominal**	**Part-load**		**Nominal**	**Part-load**	
Output		7	3,7	kW	7,5	4,5	kW
CO-emission (13% 0_2)		942	1975	mg/Nm^3	721	2167	mg/Nm^3
NOx-emission (13% 0_2)		123,4	95,5	mg/Nm^3	123	106	mg/Nm^3
OGC-emission (13% 0_2)		41,6	165,1	mg/Nm^3	39	123	mg/Nm^3
PM-emission (13% 0_2)		19,6	32	mg/Nm^3	10	22	mg/Nm^3
Efficiency		76,6	76,1	%	76	74	%
Flue gas temperature		329,2	275,9	°C	333	295	°C
Minimum draught		12	6	Pa	12	6	Pa
Mass flow of flue gasses		5,8	4	g/s	7,3	5,1	g/s
Electrical consumption		-	-	kW	0	0	kW
Seasonal efficiency		66,6	%		66	%	
Energy-efficiency-index		101,07			100,2		
Energy-efficiency-class		A			A		

Appendix 2: Dimensions

Sense 103

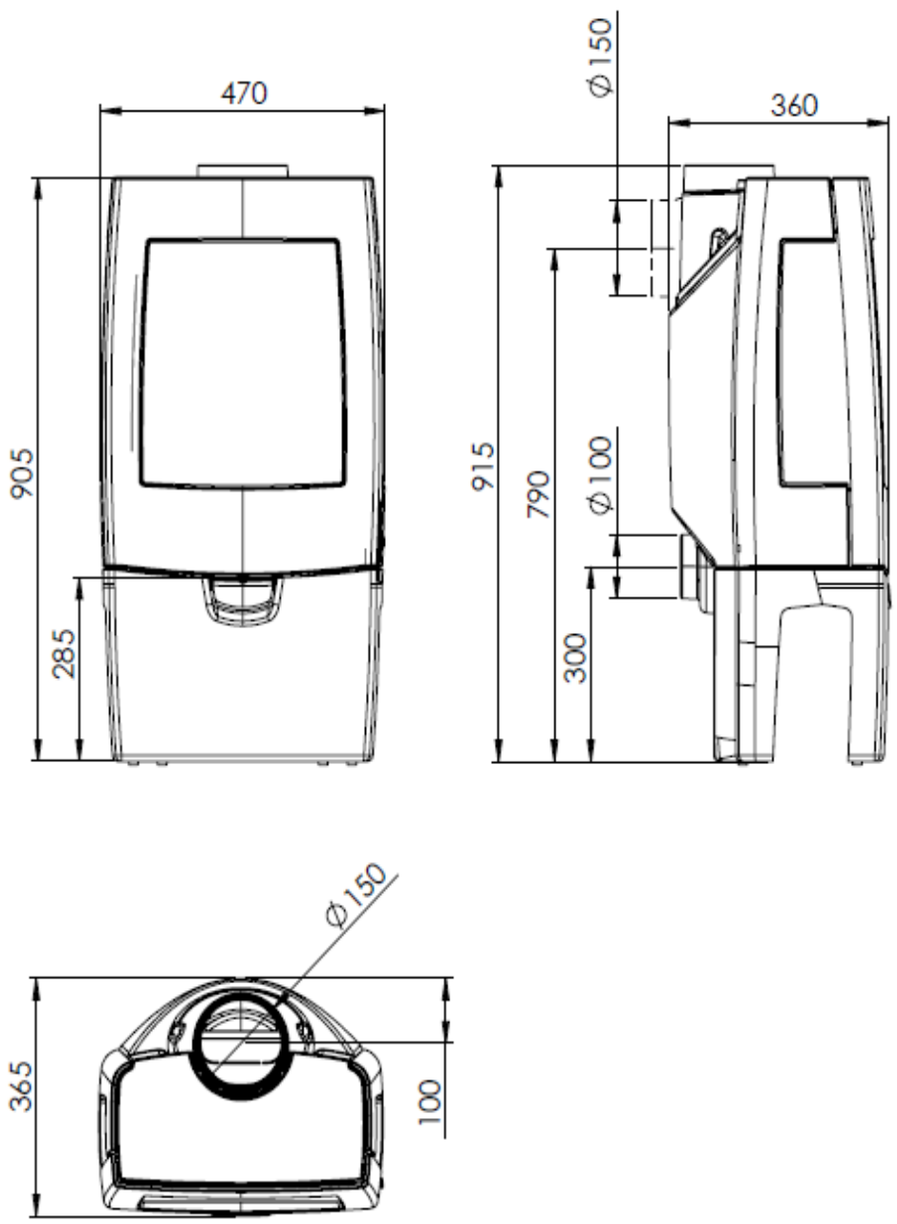


Sense 203



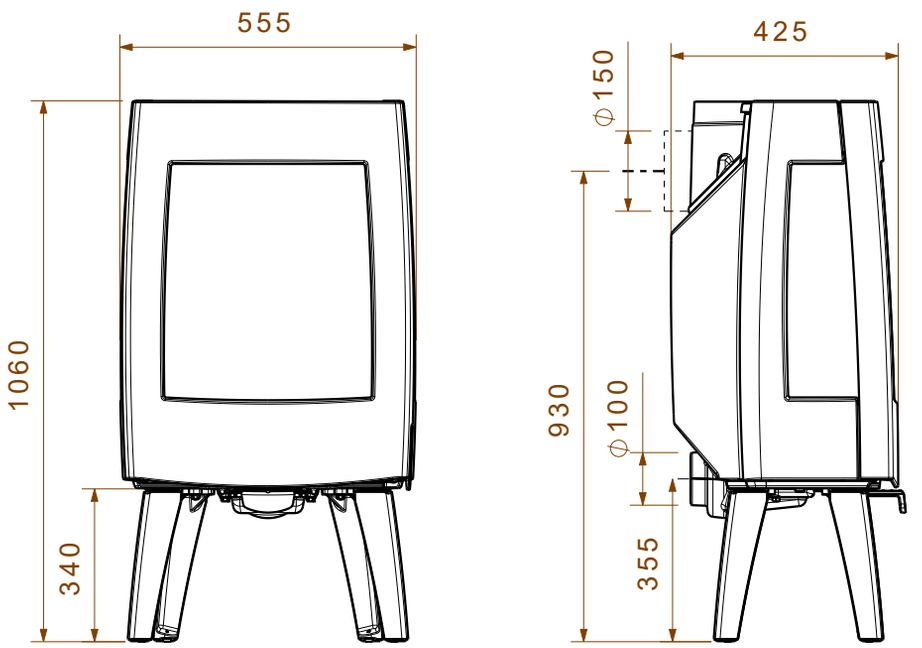
09-20021-004

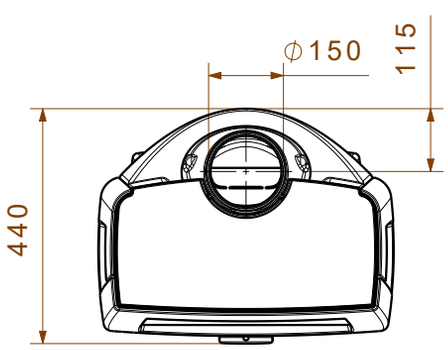
Sense 213



09-20021-04*0*

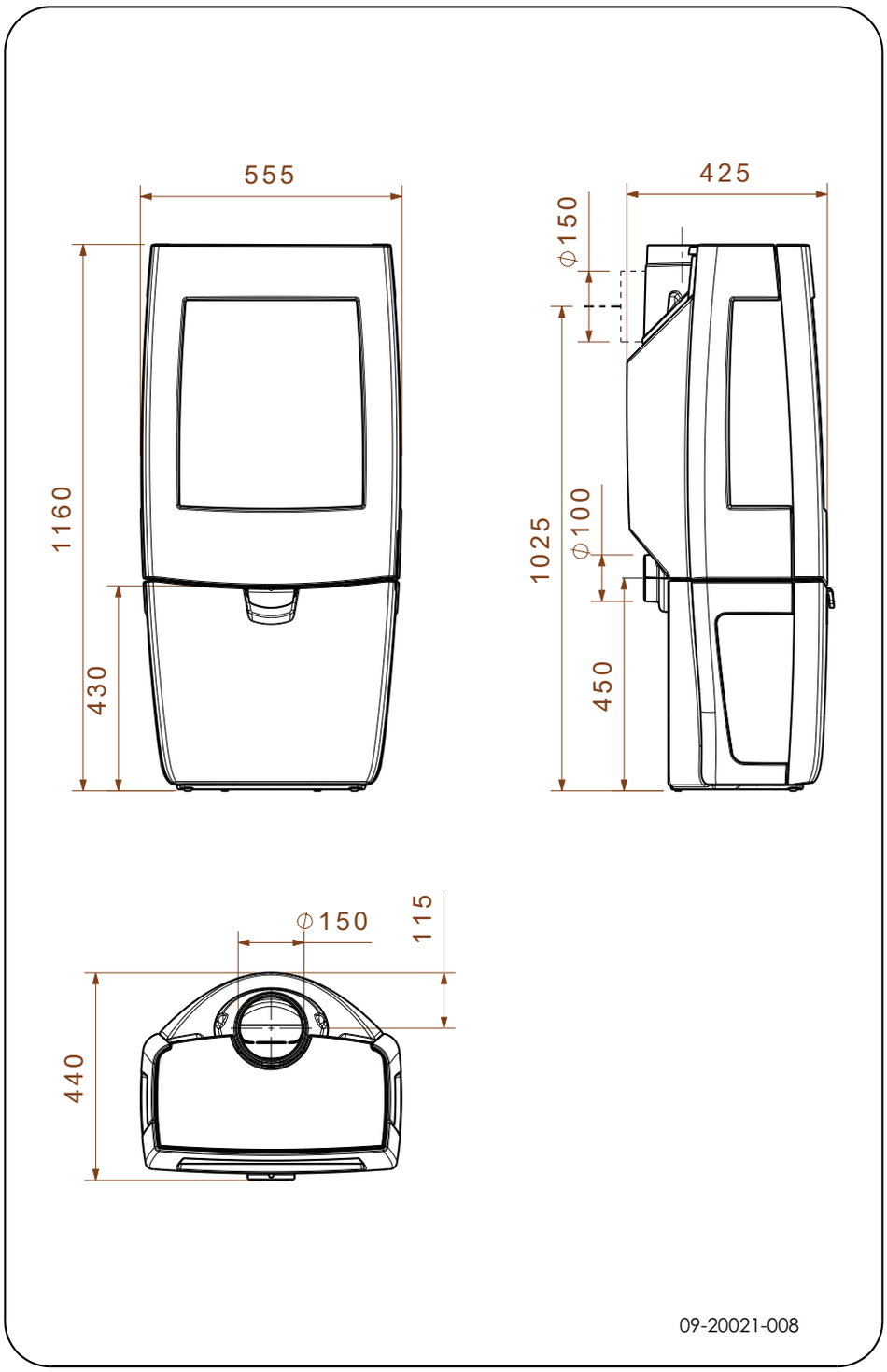
Sense 303





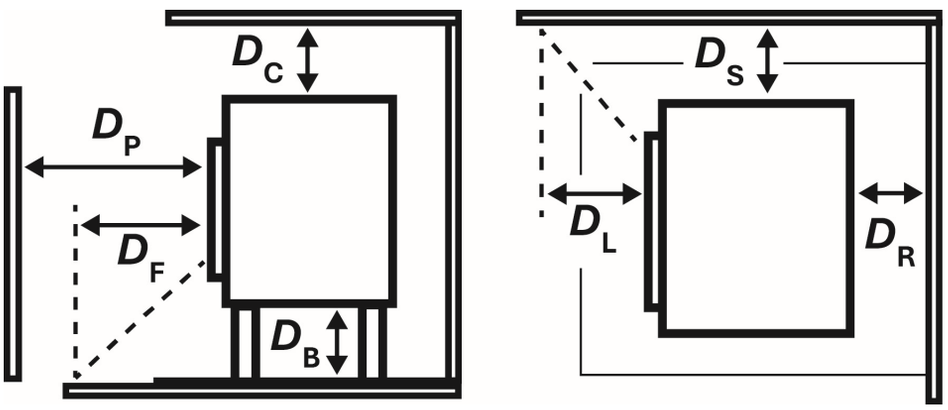
09-20021-006

Sense 403



Appendix 3: Distance from combustible material

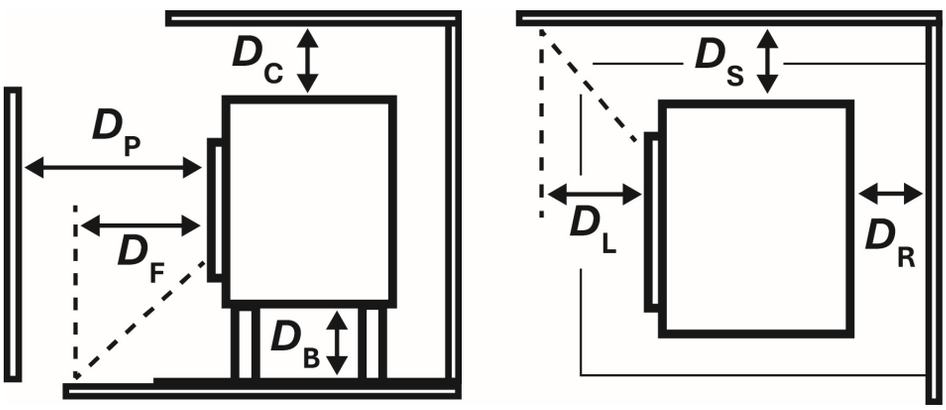
Sense 103/203/213: Minimum distances in millimetres



Front (D_P)	800	mm
Rear (D_R)	350	mm
Side (D_S)	500	mm
Bottom (D_B)	N/A	mm
Ceiling (D_C)	750	mm
Floor radiation area (D_F)	800	mm
Side radiation area (D_L)	500	mm
Rear+heat shield	100	mm

⚠ Please note: In order to guarantee the supply of combustion air when there is no outside air supply connection, the distance from the connection collar for the outside air to the wall must be at least 20 mm. If necessary, the connection collar can be removed.

Sense 303/403: Minimum distances in millimetres

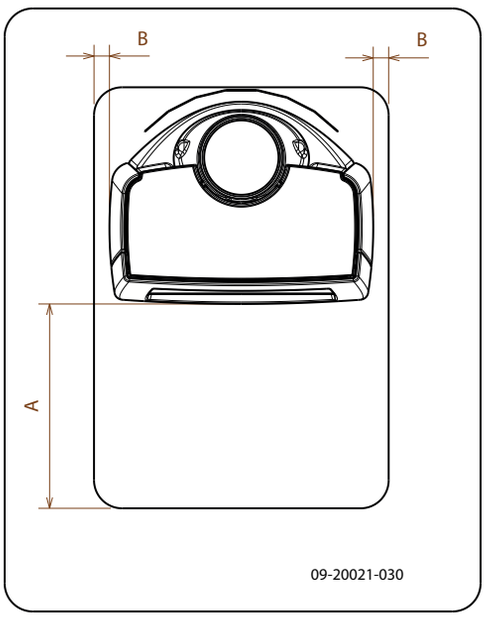


Front (D_P)	1300	mm
Rear (D_R)	400	mm
Side (D_S)	700	mm
Bottom (D_B)	N/A	mm
Ceiling (D_C)	750	mm
Floor radiation area (D_F)	350	mm
Side radiation area (D_L)	700	mm
Rear+heat shield	100	mm

⚠ Please note: In order to guarantee the supply of combustion air when there is no outside air supply connection, the distance from the connection collar for the outside air to the wall must be at least 20 mm. If necessary, the connection collar can be removed.

English

Sense - Dimensions of fireproof floor plate



Minimum dimensions of fireproof floor plate

	A (mm)	B (mm)
Din 18891	500	300
Germany	500	300
Finland	400	100
Norway	300	5

Appendix 4: Diagnosis diagram

					Problem	
●					Wood will not stay lit	
	●				Gives off insufficient heat	
		●			Smoke emissions into the room when adding wood	
			●		Fire in appliance is too intense, is hard to adjust	
				●	Deposit on the glass	
					possible cause	**possible solution**
●	●	●		●	Insufficient draught	A cold flue usually fails to create sufficient draught. Follow the instructions for starting a fire in the 'Use' section; open a window.
●	●	●		●	Wood too damp	Use wood with no more than 20% moisture.
●	●	●		●	Logs too large	Use small pieces of kindling. Use split logs no larger than 30 cm in circumference.
●	●	●	●	●	Wood stacked incorrectly	Stack the logs in a way that allows adequate air flow between the logs (open stacking, see "Burning wood")
●	●	●		●	Flue does not work properly	Check whether the chimney meets the requirements: at least 4 metres high, correct diameter, well-insulated, smooth inside, not too many bends, no obstructions in chimney (bird's nest, too much soot deposit), hermetically tight (no chinks).
●	●	●		●	Chimney stack incorrect	Sufficiently high above the roof, no obstacles in the vicinity
●	●	●	●	●	Air inlets set incorrectly	Open the air inlets completely.
●	●	●		●	Appliance connected to the flue incorrectly	Connection should be hermetically tight.
●	●	●		●	Vacuum in area in which the appliance is installed	Switch off extraction systems.
●	●	●		●	Insufficient supply of fresh air	Provide an adequate air supply; if necessary use outside air connection.
●	●	●		●	Bad weather ? Inversion (reversed air flow in chimney because of a high outside temperature), extreme wind speeds	We recommend you don't use the appliance in the case of inversion. If required, install an extra hood on the flue to increase the draught.
		●			Draught in the living room	Avoid draught in the living room, do not place the appliance near a door or heating air ducts.
				●	Flames touch the glass	Make sure the wood is not positioned too close to the glass. Slide the primary air inlet cover closer to the "Closed" position.
			●		Appliance is leaking air	Check the door seals and appliance joints.

English

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