INSTALLATIEVOORSCHRIFTEN EN GEBRUIKSAANWIJZING
INSTALLATION INSTRUCTIONS AND OPERATING MANUAL
INSTALLATION ET MODE D'EMPLOI
EINBAUANLEITUNG UND GEBRAUCHSANWEISUNG
INSTRUCCIONES DE INSTALACIÓN Y USO
REQUISITI PER L'INSTALLAZIONE E ISTRUZIONI PER L'USO
MONTERINGS- OG BRUKSANVISNING

HOUTKACHEL
WOOD STOVE
POELE A BOIS
HOLZ-FEUERSTÄTTE
ESTUFA DE LEÑA
STUFA A LEGNA
PEISOVN




ASTRO 3CBP PEGASUS
ASTRO 3CBWB PEGASUS
ASTRO 4CBP LEON
ASTRO 4CBWB LEON

03.27661.300 - 10/2012

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English

Introduction

Dear user,
In buying this DOVRE heating appliance, you have chosen a high quality product. This product is part of a new generation of energy-efficient and environmentally-friendly heating appliances. These appliances make optimum 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 should be connected hermetically to a well-functioning chimney.
- 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.

Declaration of conformity

CE

Notified body: 1625

The undersigned

Dovre nv, Nijverheidsstraat 18 B-2381 Weelde hereby declares

that houtkachel Astro 3CBP, Astro 3CBWB, Astro 4CBP en Astro 4CBWB have been produced in accordance with EN 13240.

Weelde 19-01-2011

T. Gehem

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

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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 laws and requirements of 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 authorized 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 get very hot (over 100°C)! For operation, use a so-called "cold hand" or an oven glove.

⚠ Safety distances from flammable materials must be adhered to strictly.

⚠ Don't place any curtains, clothes, laundry or other combustible materials on or near the appliance.

⚠ Don't use flammable or explosive substances near the appliance when it is in use.

⚠ Avoid a chimney fire by having the chimney swept regularly. Never burn wood with the door open.

⚠ In the case of a chimney fire: close all air inlets of the appliance and alert the fire brigade.

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

⚠ Make sure there is adequate ventilation in the room where the appliance is installed. If ventilation is insufficient, combustion will be incomplete resulting in toxic gases being produced and 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 chimney.
- For the connection measurements: see the appendix "Technical data".
- Ask the fire brigade and/or your insurance company about any specific requirements and regulations.

Chimney (flue)

The flue or chimney is needed for:

- Removal of combustion gases via natural draught.

  ℹ 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.

  ℹ A draught/vacuum of 15 - 20 Pa during normal operation is ideal.

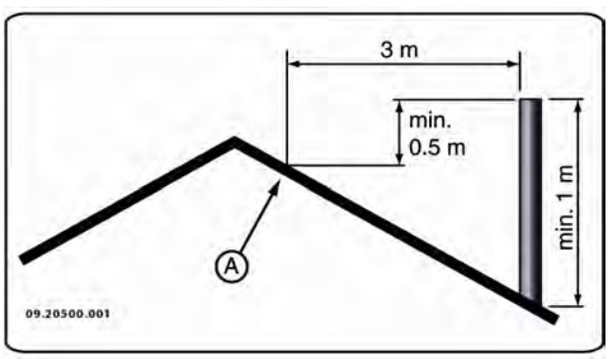
- Starting from the flue spigot, the flue must run as vertically as possible. Changes in direction and

English

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 the nominal diameter: see the appendix "Technical data". 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.
- When using a cover plate or exhaust hood : 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 chimney must 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 away from the flue: stick to the measurements in the following figure. A = the highest point of the roof within a distance of 3 metres.



Ventilation of the area

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

The combustion will be incomplete in case of insufficient ventilation, which results in toxic gases being produced and spread through the area.

As a rule of thumb, the air supply should be 5,5 cm²/kW. Extra ventilation is needed when:

- The stove is in an area that is well-insulated.
- 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.

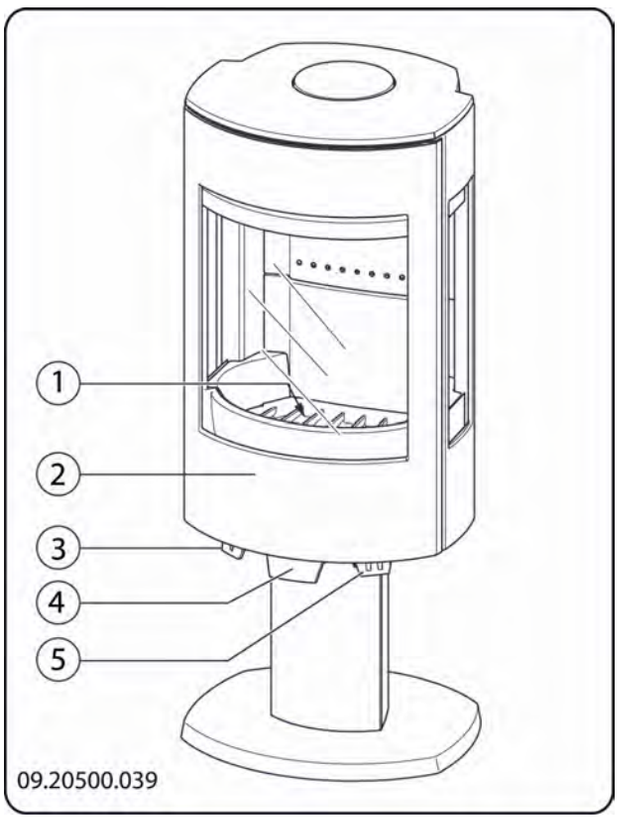
You can also connect the appliance to an outside air supply. This makes additional ventilation unnecessary.

Floors and walls

The floor on which the appliance is placed must have sufficient bearing capacity. For the weight of the appliance, see the appendix "Technical data".

- Protect flammable flooring from heat radiation by means of a fireproof protective plate. See 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 protective plate must comply with national standards.
- For the dimensions of the fireproof protective plate: see the appendix "Distance from combustible material".
- For further requirements in connection with fire safety: see the appendix "Distance from combustible material".

Product description

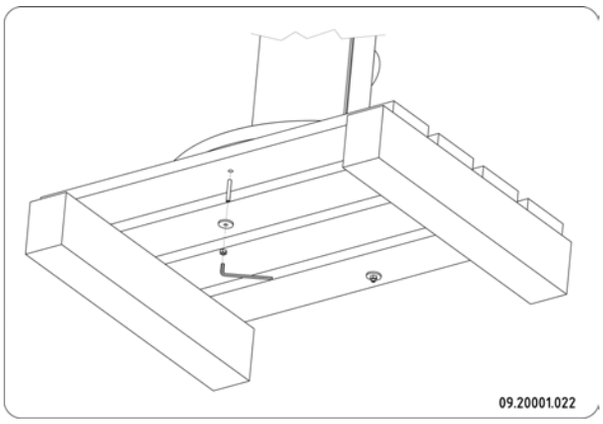


1. Bottom of the fire compartment
2. Door
3. Primary air slide
4. Door latch
5. Secondary air slide

Installation

General preparation

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



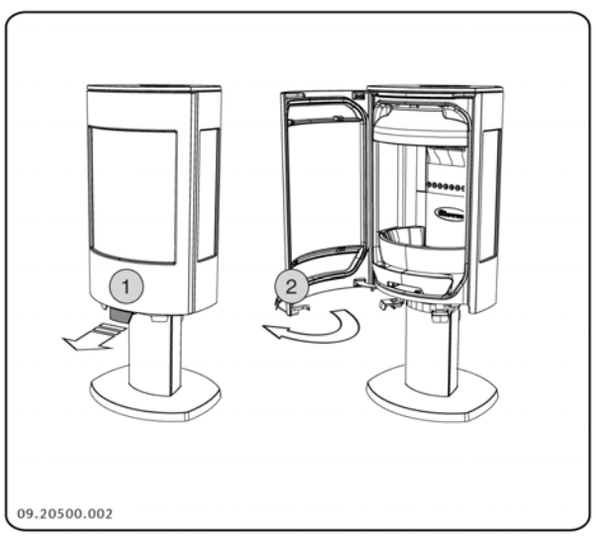
⚠ If you detect damage caused during transport or any other damage or defects, do not use the appliance and notify the supplier.

▶ Remove the removable parts (fire-resistant inner plates, fire grate, top plate, ash pan) from the appliance before you start installing the appliance.

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.

1. Open the door; see the following figure.



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

Vermiculite inner plates are light and tend to be ochrous in colour on delivery. They insulate the combustion chamber to boost combustion. Cast iron inner plates protect the combustion chamber and dissipate heat to the surroundings.

Removable internal sections

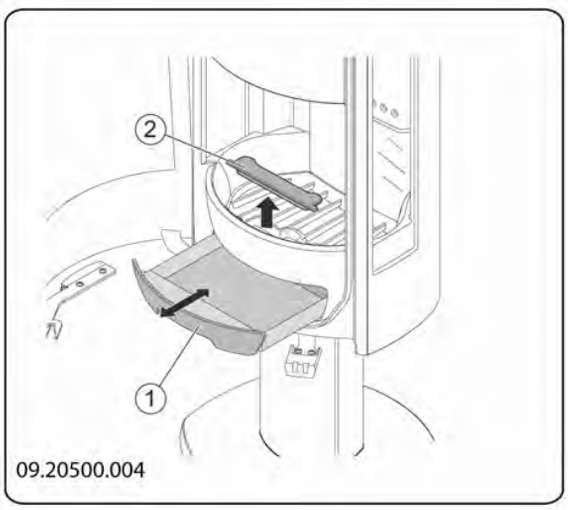
astro3 series

1	03.77091.002	Fire basket front
2	03.77092.002	Fire basket left
3	03.77093.002	Fire basket right
4	03.77378.100	Vermiculite inner plate
5	03.05404.020	Ash removal port
6	03.66531.100	Bottom of the fire compartment

astro4 series

1	03.77091.002	Fire basket front
2	03.77095.102	Fire basket left
3	03.77096.102	Fire basket right
4	03.77378.100	Vermiculite inner plate
5	03.05404.020	Ash removal port
6	03.66531.100	Bottom of the fire compartment
7	03.35210.000	Corner piece

4. Remove the ash pan; see the following figure.



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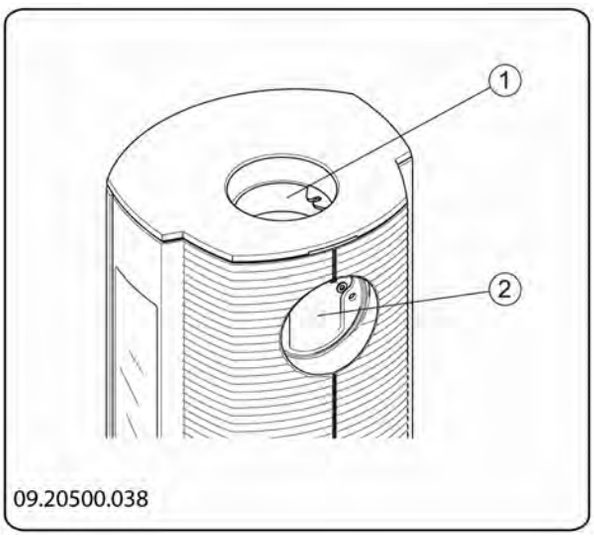
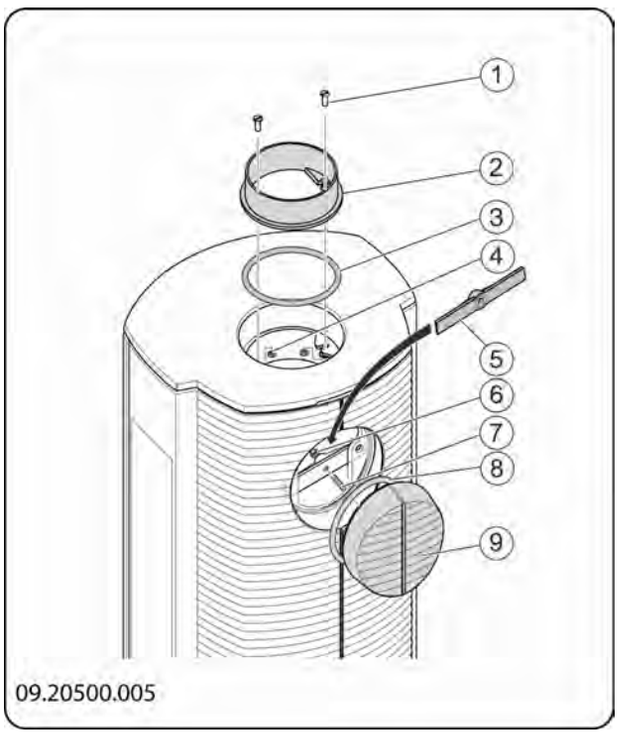


1	Connection - top
2	Connection - rear

Connect to top

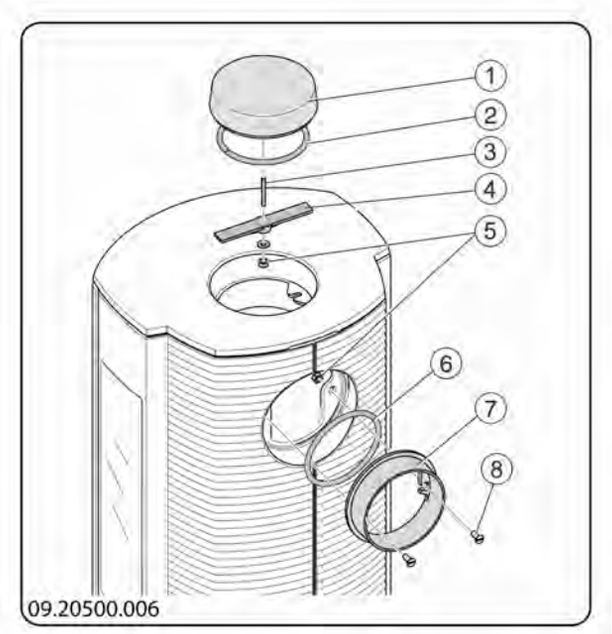


1. Remove the top plate.

   The top plate can be taken off the appliance just like that.

2. At the outlet at the top, apply sealant to the contact surface where the connection collar will be positioned.
3. Install the connection collar with the materials.
4. At the outlet at the rear, apply sealant to the contact surface where the cover will be positioned.
5. Install the cover using the materials.

Connecting to the rear



1. Remove the top plate.

   The top plate can be taken off the appliance just like that.

2. At the outlet at the top, apply sealant to the contact surface where the cover will be positioned.
3. Install the cover using the materials.
4. At the rear, apply sealant to the contact surface where the connection collar will be positioned.
5. Install the connection collar with the materials.

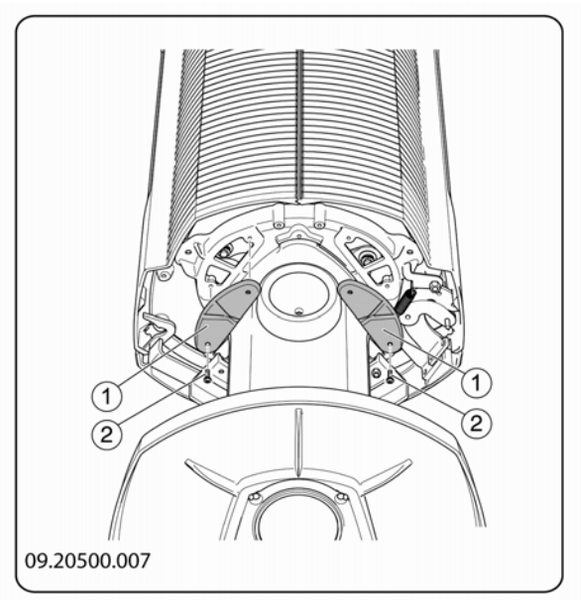
Preparing the outside air connection

If the appliance is installed in a room without sufficient ventilation, you can install the connecting kit on the appliance for the outside air supply. Some of the air inlets on the appliance must then be plugged with the blanking material provided. We recommend applying a connection set that has a valve you can close when the stove is not in use.

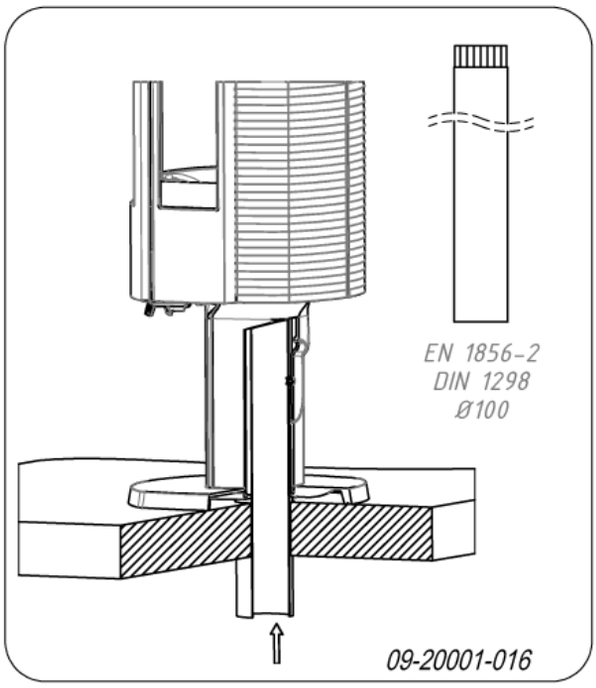
The air supply tube is 100 mm in diameter. If the tube is smooth, it may be no longer than 12 metres. If accessories such as bends are used, the maximum length (12 m) must be reduced by 1 m for each accessory used.

1. Close the air inlet in the bottom plate with the small cast-iron cover plates (1) and screws (2); see following figure.

   By closing the air inlet in the bottom plate you prevent air being used for combustion from an insufficiently ventilated space.

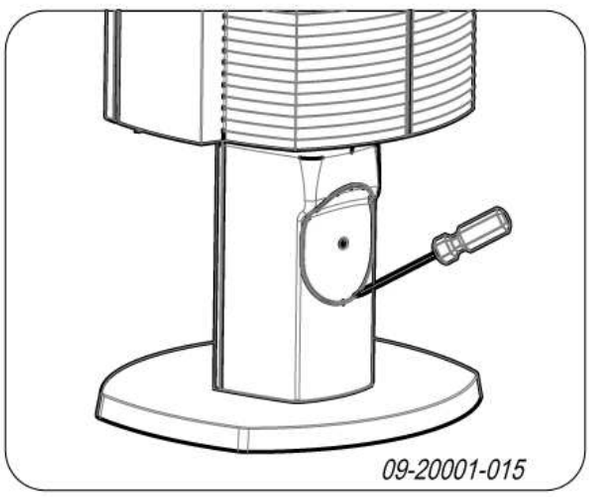


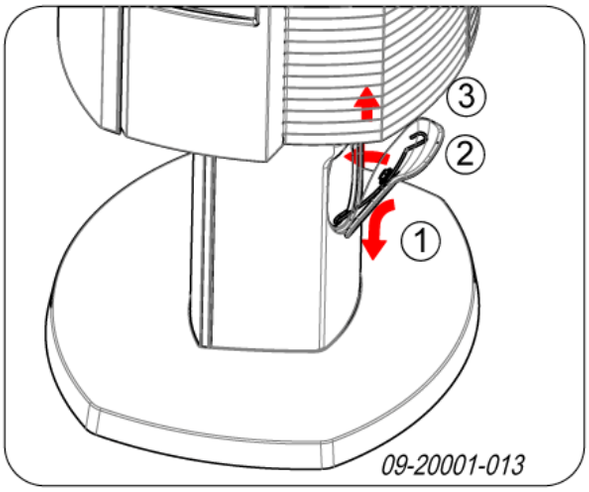
2. For connection to outside air via the floor:
   a. Make an opening in the floor; see 'Appendix 2, Measurements' for the correct position of the opening.
   b. Connect the foot hermetically to the floor using a rubber seal.
   c. Slide a straight air supply tube onto the connection collar of the stove, so that it cannot move; see following figure .

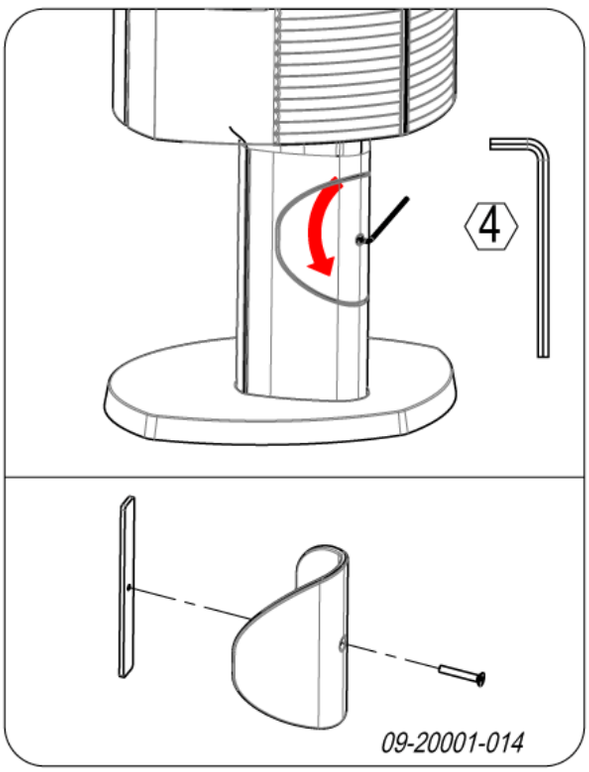


3. For connection to outside air via the rear of the appliance:
   a. Create an opening in the base or the log compartment by removing the panel at the back of the base or the log compartment; see following figures.

   Depending on the version of the stove the cover plate is affixed either with springy clips or with a washer plate. In case of a spring fixing use a screwdriver to lift the cover plate out of its groove.

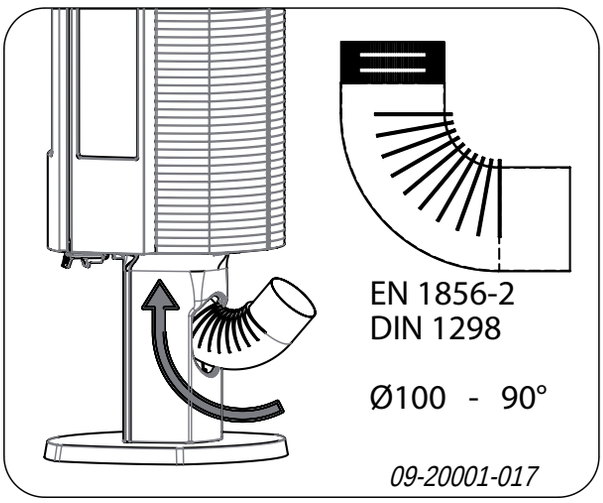






   b. Connect a so-called 'elbow' hermetically to the opening in the base or the log compartment so that it cannot move; see following figure.

   The height for the connection through the wall may vary depending on the elbow type.



Installing and connecting

1. Position the stove in the correct place, and make sure it is level.
2. Connect the appliance airtight to the flue (chimney).
3. In the case of connection to outside air: connect the outside air supply to the connection collar within the base or log compartment of the stove or to the fitted elbow.
4. Re-position all removed parts in the correct places in the stove.

⚠ Never light a fire in the appliance without the fireproof inner plates.

The appliance is now ready for use.

Use

First use

When you use the stove 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 stove is located.

Fuel

This stove 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 stove.

You are not allowed to use the following fuels, as they pollute the environment and because they heavily soil 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.

for example the drain connector or the connections for temperature sensors.

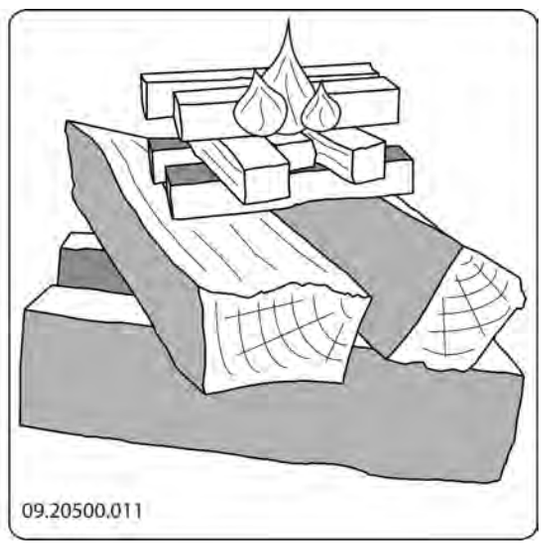
Wood

- 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.
- 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 stove door and in the chimney. The water vapour will condense in the stove 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 layers of kindling crosswise on top of the logs.
3. Place a firelighter cube in the lower layer of kindling and light the cube according to the instructions on the packaging.



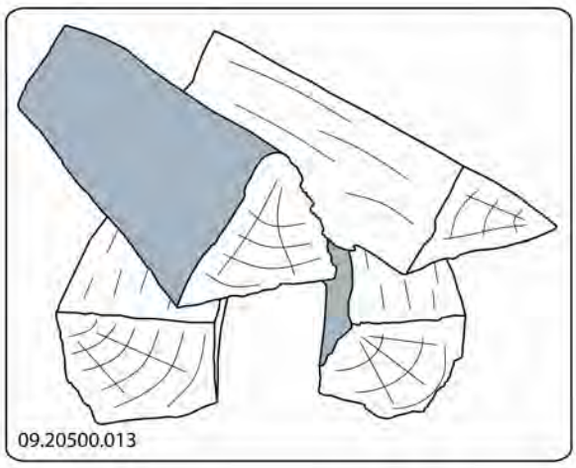
4. Close the door of the appliance and open the primary air inlet and open the secondary air inlet of the appliance; see 'Controlling air combustion'.
5. Allow the fire develop into a good blaze until there is glowing bed of charcoal. You can then add fuel and adjust the appliance, see the chapter "Stoking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

Burning wood

After you have followed the instructions for lighting :

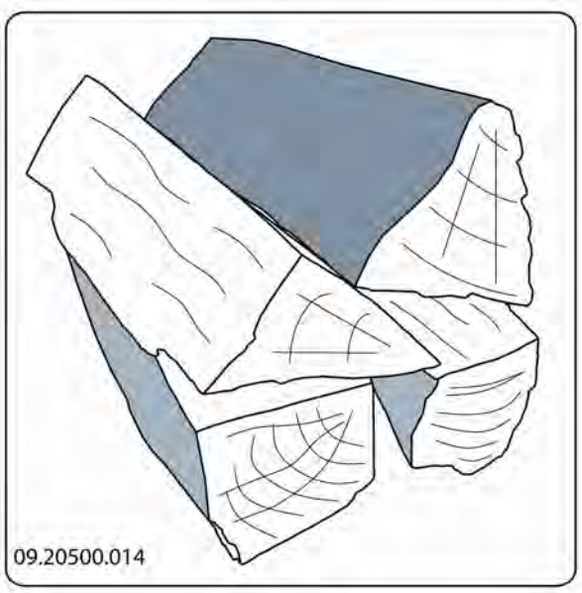
1. Slowly open the stove door.
2. Spread the charcoal evenly across the bottom of the stove base.
3. Stack a few logs on the charcoal.

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.

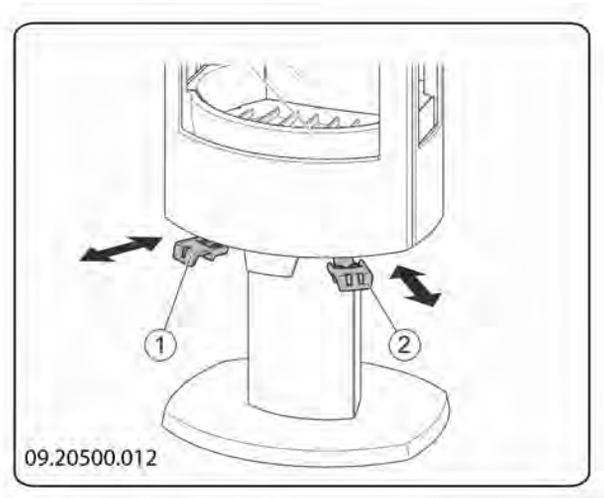
4. Close the door of the appliance.
5. Close the primary air inlet and leave the secondary air inlet open.

⚠ Fill the appliance up to one third capacity.

English

Controlling combustion air

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

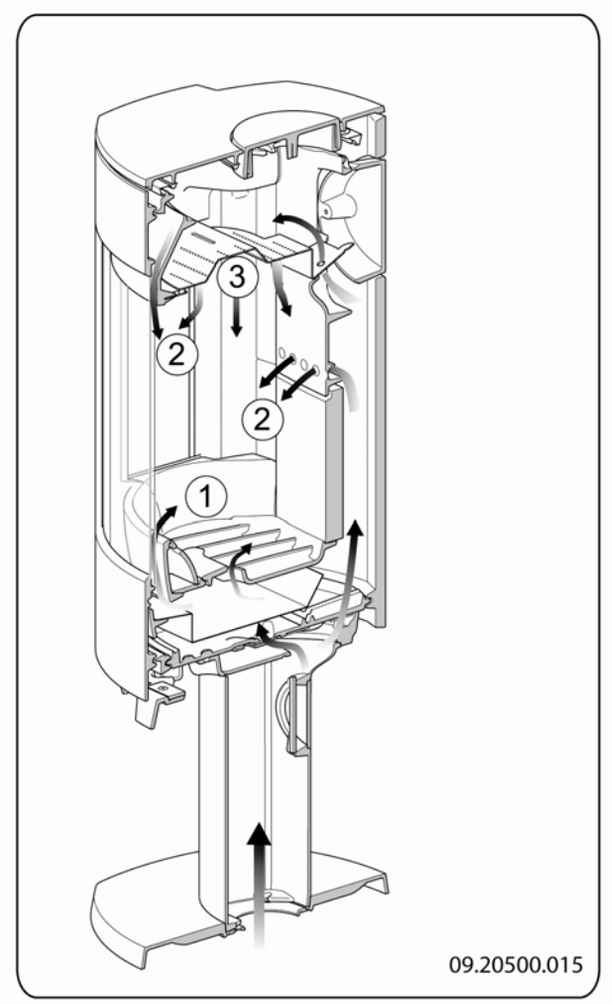


1. The primary air slide is open in pulled out position and closed in pushed back position.
2. The secondary air slide is open in pulled out position and closed in pushed back position.

The primary air slide controls the air flow under the grille (1);see following figure.

The secondary air slide controls the air flow for the glass and the vents in the back wall (2).

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



Advice

Never burn wood with an open door.

Regularly burn wood with intense roaring fires.

If you frequently have low intensity fires, tar and creosote may be deposited in the chimney . Tar and creosote are highly combustible substances. Thicker layers of these substances may catch fire if the temperature in the chimney increases suddenly. By allowing the fire to burn very intensely regularly, layers of tar and creosote will disappear.
Low intensity fires also cause tar deposits on the stove window and door.
When the outside temperature is not very low, 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 with the secondary air inlet.

  The secondary 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.
- It is better to add a small amount of logs regularly than to add many logs at the same time.

Extinguishing the fire

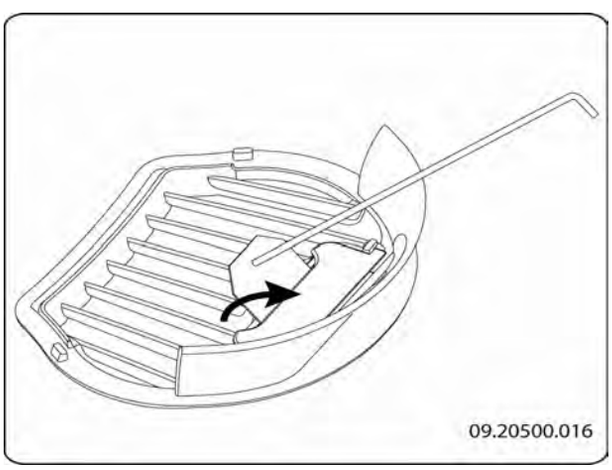
Do not add fuel and just let the fire go out. If a fire is damped down by reducing the air supply, harmful substances will be released. For this reason, the fire should be allowed to go out naturally. Keep an eye on the fire until it has gone out. All air inlets can be closed once the fire has died completely.

Removing ashes

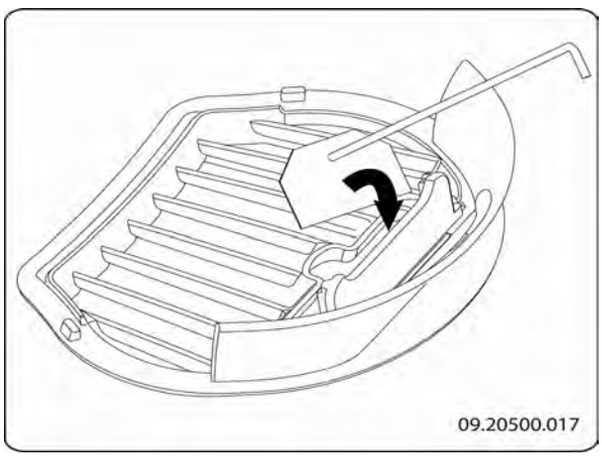
After the wood has been burnt, a relatively small amount of ashes is left over. This bed of ashes is a good insulating layer for the stove base plate and improves combustion. It is good to leave a thin layer of ashes on the stove base plate.

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.

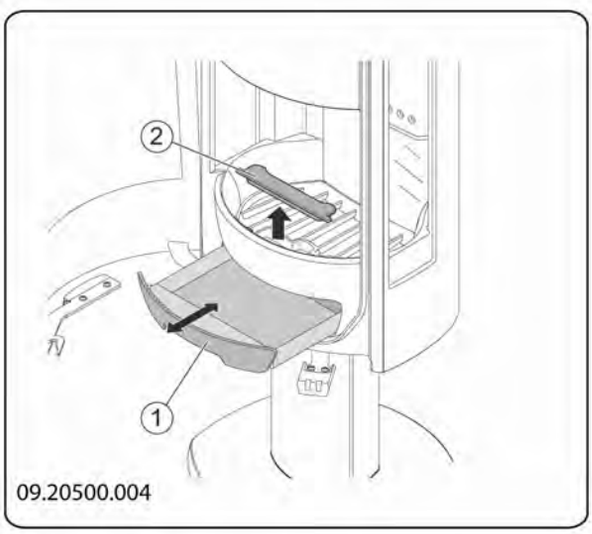
1. Open the appliance door and use the scraper to open the ash removal port in the bottom of the fire compartment.



2. Using the scraper, sweep the excess ashes through the ash removal port into the ash pan underneath.



3. Close the ash removal port.
4. Remove the ashtray (see next figure) using the glove provided and empty the ashtray.



5. Replace the ash pan and close the stove door.

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.

Solving problems

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

To reach the nominal output, approximately 2 kg of fuel needs to be burnt every 45 minutes.

Maintenance

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

Chimney

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

- At the beginning of the heating season: have the chimney swept by an expert.
- During the heating season and after the chimney has not been used for a long time: have the chimney checked for soot deposits.
- After the heating season: seal off the chimney with a ball of paper.

Cleaning and other regular maintenance activities

Do not clean the stove when it is still warm.

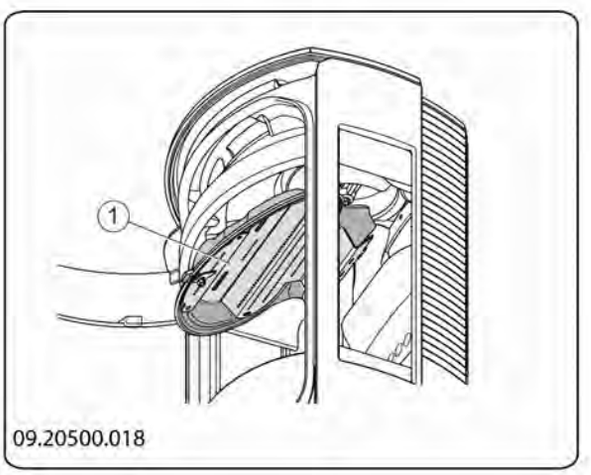
- Clean the exterior of the stove with a dry lint-free cloth.

You can clean the stove 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 top plate to this end. The top plate lies loosely on the appliance.
- If required, remove the baffle plate at the top of the appliance and clean it.

Remove and install baffle plate

Unscrew the clamping plate on the front of the baffle plate. Lift the baffle plate from the support and tilt the baffle plate out of the appliance. Please ensure that the rear of the baffle plate properly connects to the air tunnel at the back of the appliance when reinstalling.



Checking fire-resistant inner plates

The fire-resistant inner plates are consumables and subject to wear . 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.

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

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 stove without the fire-resistant inner plates.

Cleaning 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 the appliance again.

⚠ Make sure that no stove window cleaner runs between the glass and the cast-iron door.

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 the paint finish

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

Areas of damaged enamel can be touched up with a special heat-resistant paint finish that is available from your supplier.

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 stove, as any moisture in the sealant will form bubbles, resulting in a new air leak.

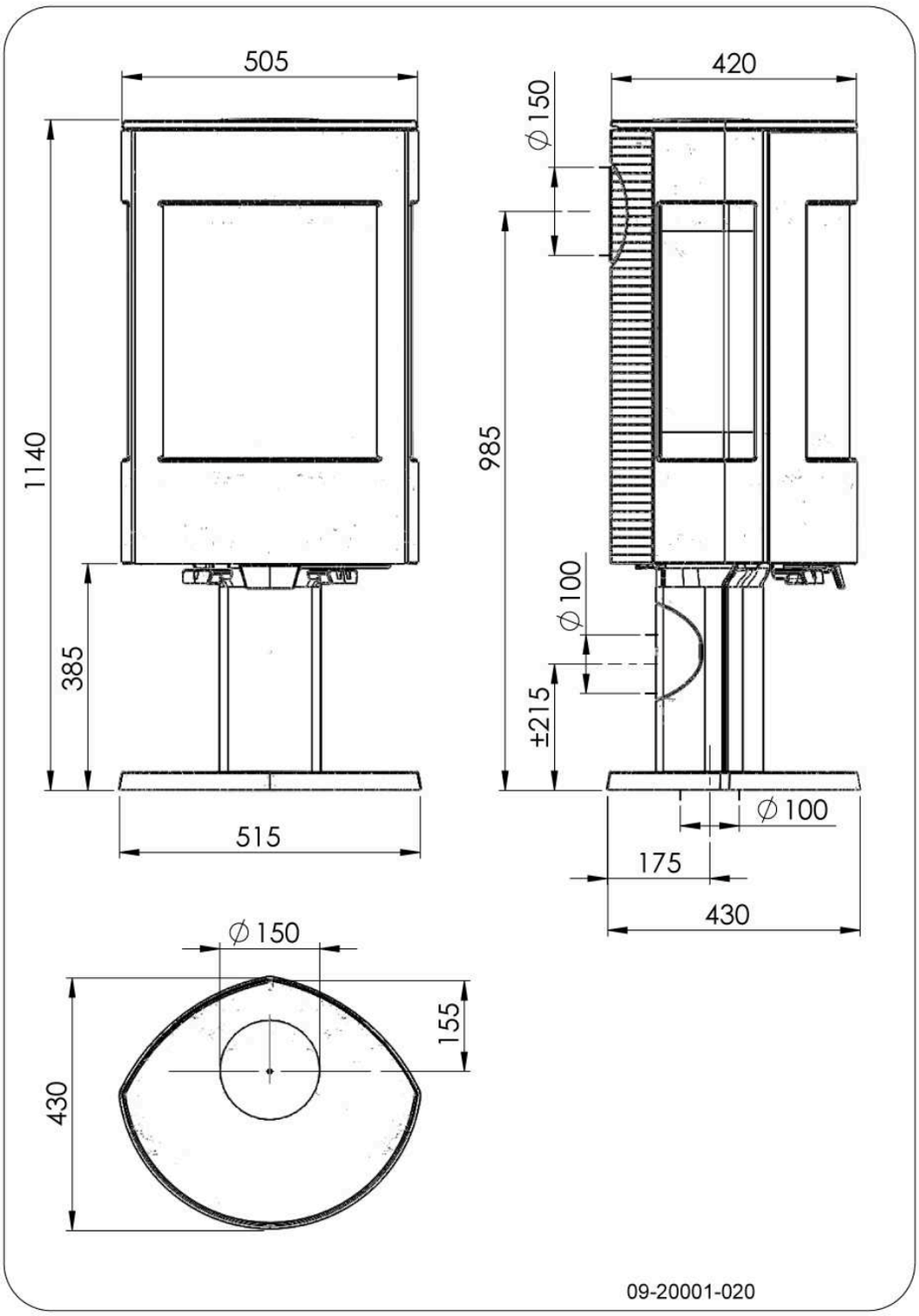
English

Appendix 1: Technical Data

Model / Modèle / Modell	Astro 3 / Astro 4
Nominaal vermogen / Puissance nominale / Nominal heat output / Nominalleistung	8 kW
Schoorsteenaansluiting (diameter) / Raccordement cheminée (diamètre) / Connection to chimney (diameter) / Schornsteinanschluss (Diameter)	150 mm
Gewicht / Poids / Weight	+/- 140 kg
Aanbevolen brandstof / Combustible conseillés / Recommended fuel / Empfohlene Brennstoffe	Hout / Bois / Wood / Holz
Kenmerk brandstof / caractéristique combustible / Fuel property / Kennzeichen Brennstoffe	maximum length 25 cm
Massadebiet van rookgassen / Débit des fumées / Flue gas mass flow / Abgasstutzentemperatuur	7.5 g/s
Rookgastemperatuur gemeten in de meetsectie / Température des fumées au niveau du tronçon de mesure / Flue gas temperature measured in the test measurement section / Abgas-temperatur gemessen in der Messstrecke	299 °C
Temperatuur gemeten aan de uitgang van het toestel / température en aval de la buse / Temperature directly downstream flue spigot / Abgastemperatur gemessen im Abgasstutzen	367 °C
Minimum trek / Dépression minimal / Minimum draught / Mindesförderdruck	12 Pa
% CO (13% O2)	0.09 %
% NOx (13% O2)	160 mg/Nm³
CnHm (13% O2)	70 mg/Nm³
Stof-emissie/ articulate-emission / Particulate emission / Staub Emission	23 mg/Nm³
Stof-emissie volgens NS3058-NS3059 / émissions selon la norme NS3058-NS3059 / Particulate emission according to NS3058-NS3059 / Staub Emission gemessen nach NS3058-NS3059	2.7 g/kg
Rendement / Rendement / Efficiency / Wirkungsgrad	76.4 %

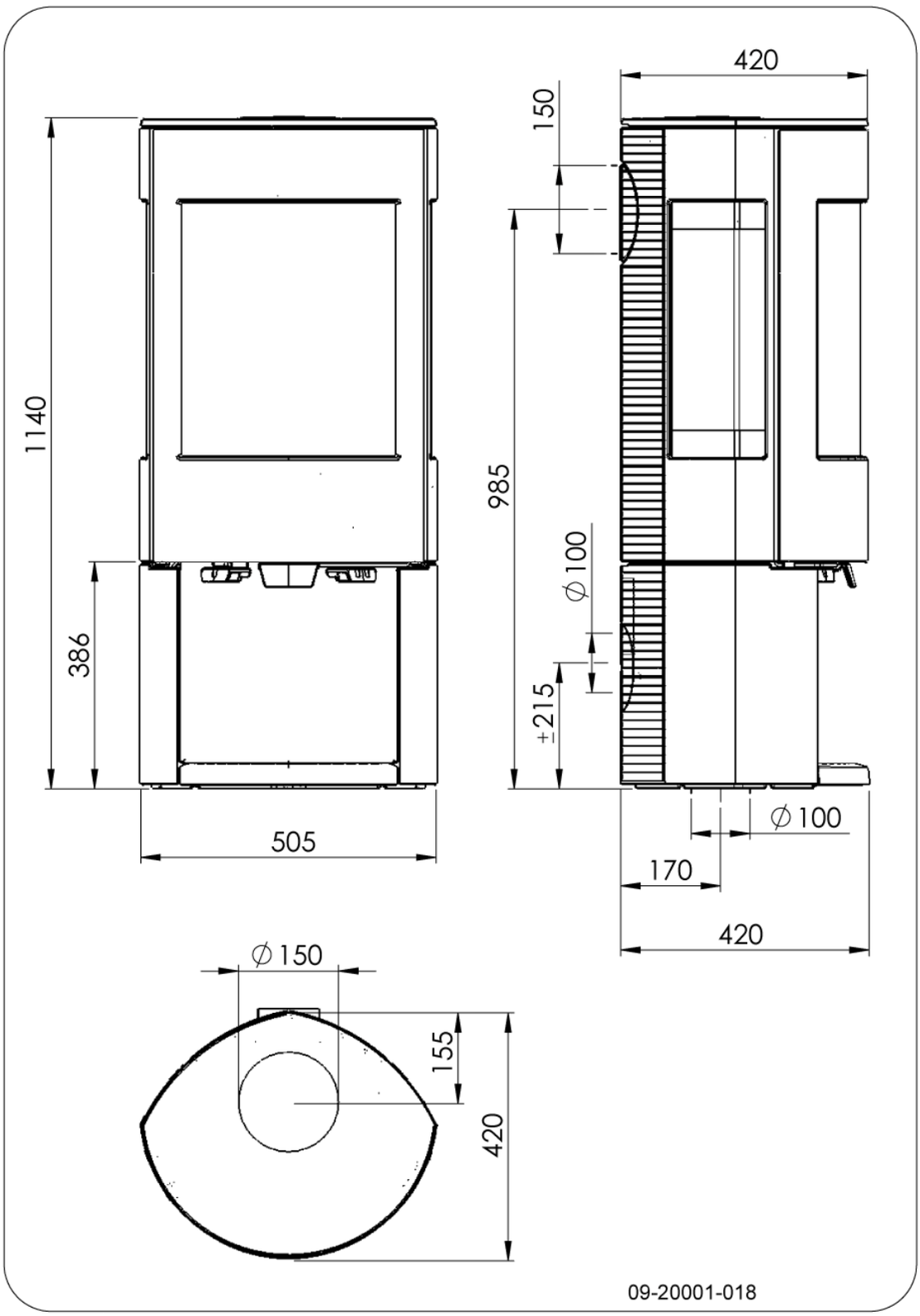
Appendix 2: Measurements

ASTRO 3CBP

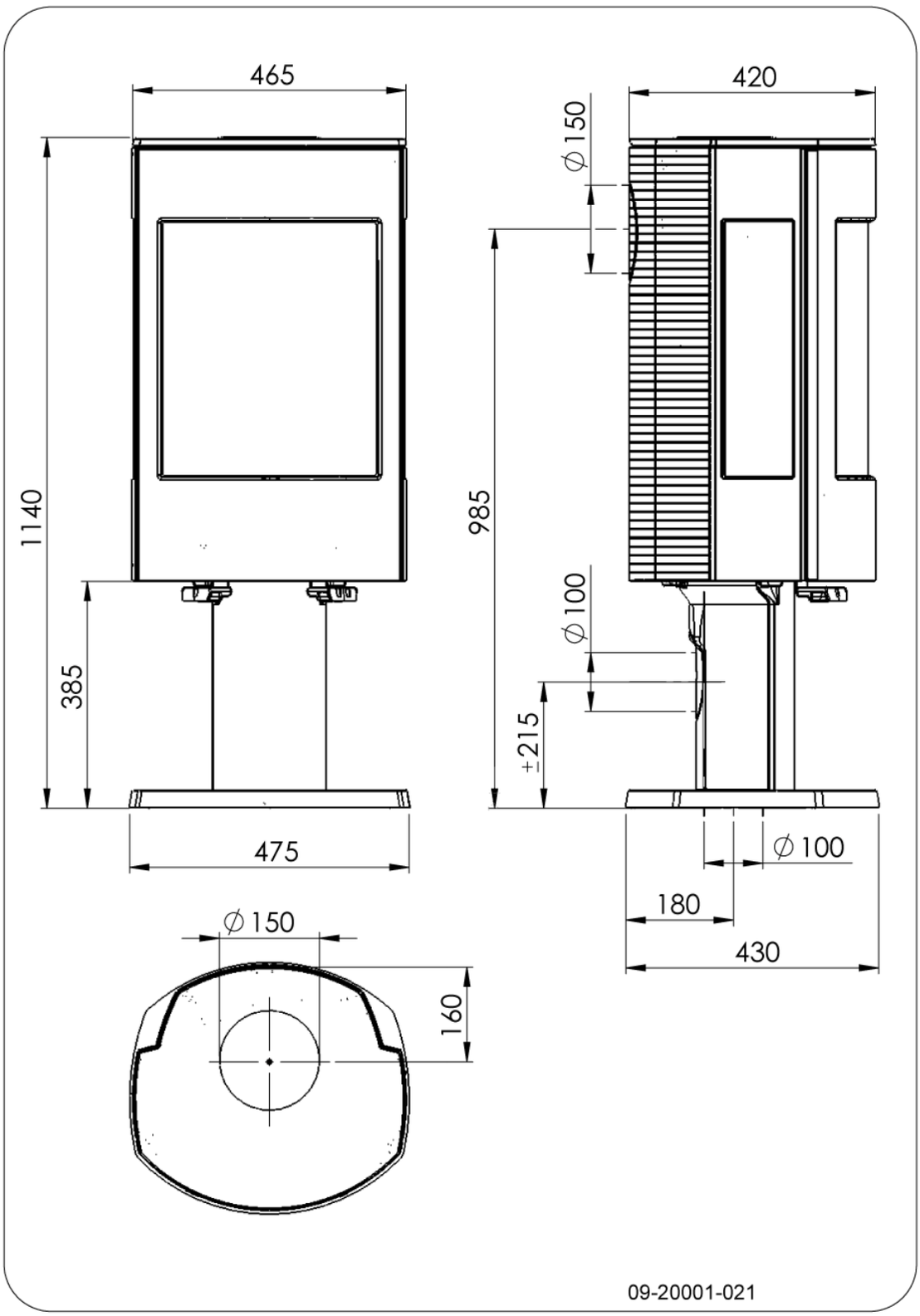


English

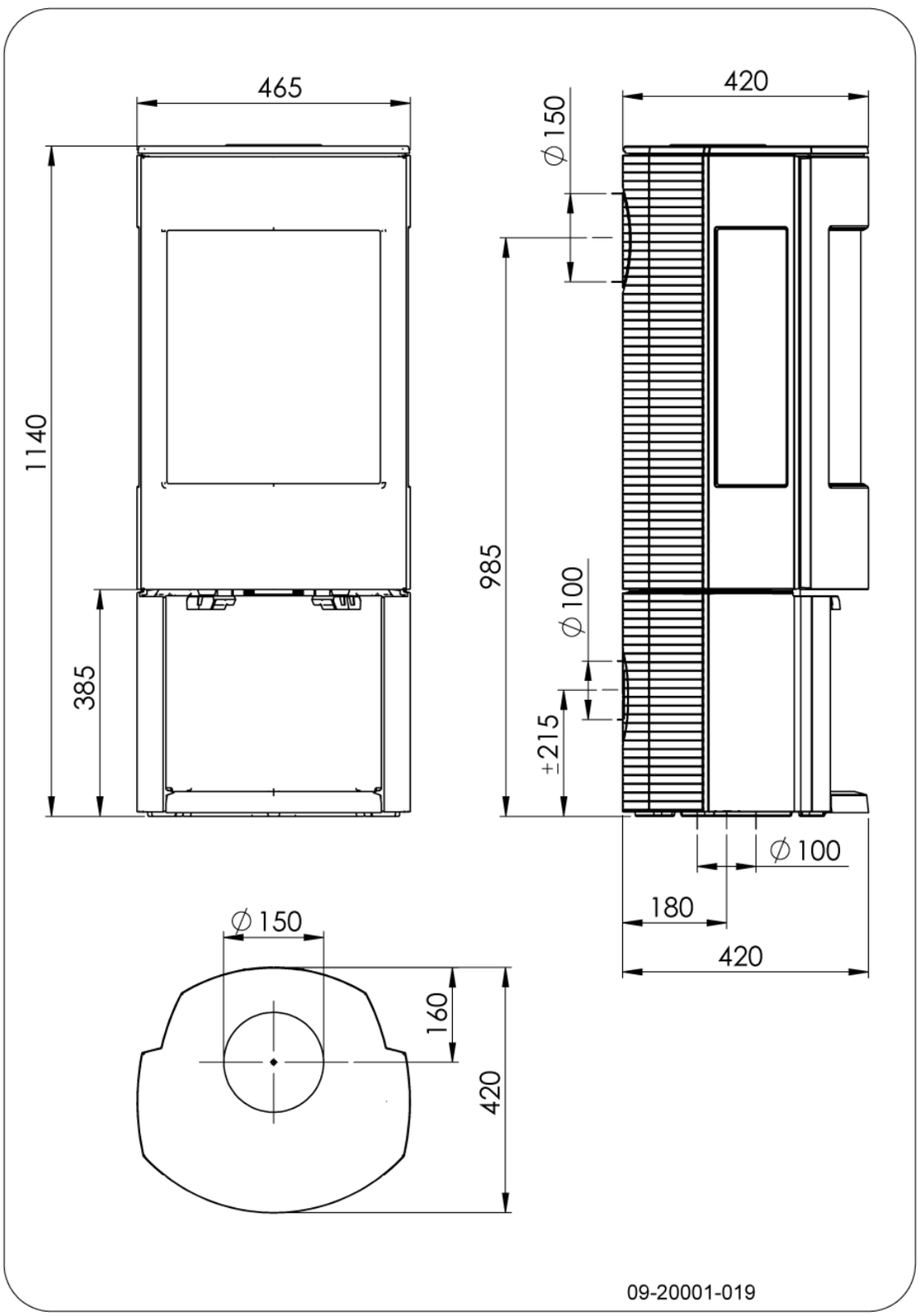
ASTRO 3CBWB


420
150
1140
985
386
∅100
±215
505
∅100
170
420
∅150
155
420
09-20001-018

ASTRO 4CBP


465
420
∅150
1140
985
385
∅100
±215
475
∅100
180
430
∅150
160
09-20001-021

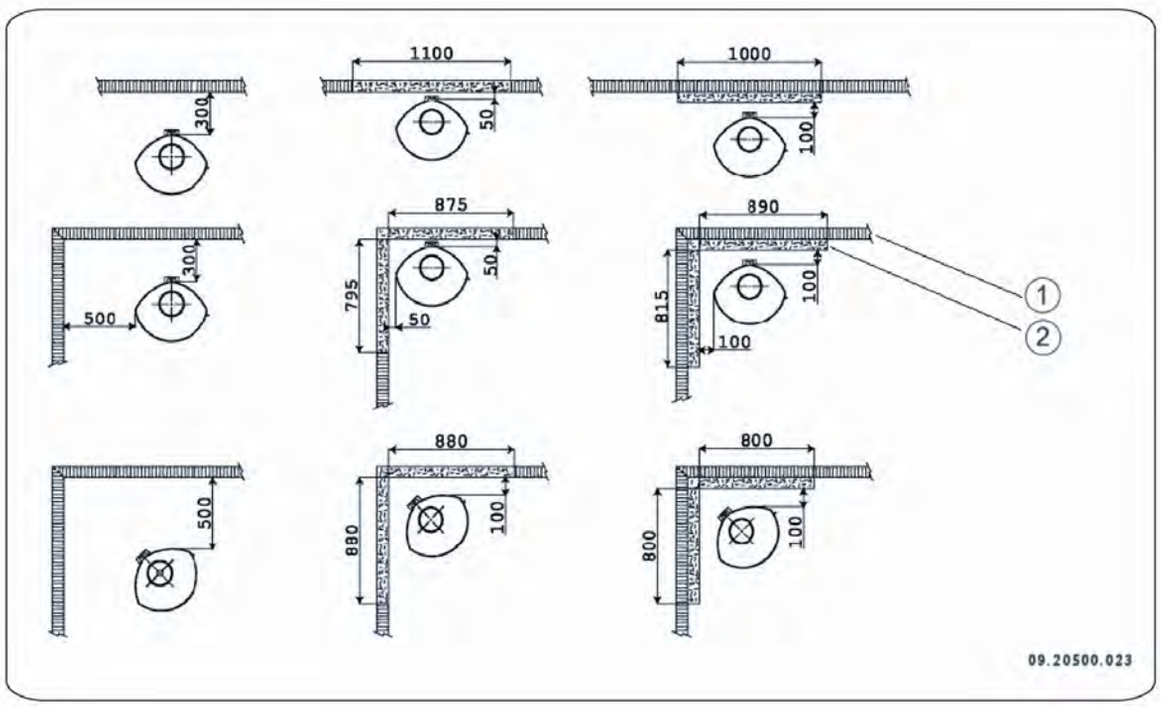
ASTRO 4CBWB


465
1140
385
420
∅150
985
∅100
±215
∅100
180
420
∅150
160
420
09-20001-019

Appendix 3: Distance from combustible material

ASTRO 3 PEGASUS

Minimum distances for versions without heat shield:

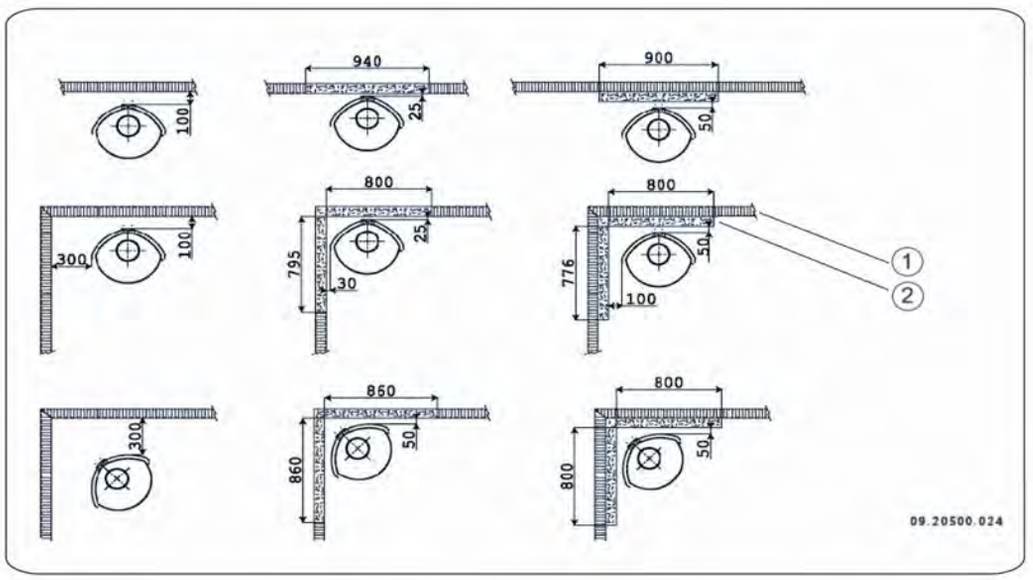


If the distance between the connecting tube and combustible materials is less than 300 mm the connecting tube should be protected.

1. Combustible material
2. Incombustible material, thickness 100mm

English

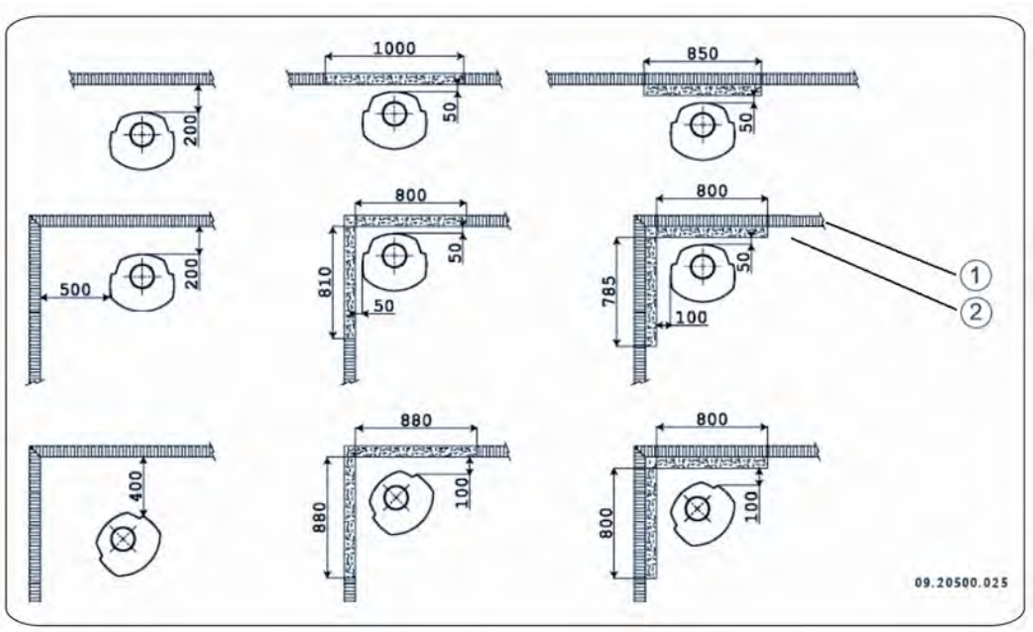
Minimum distances for versions with heat shield:



1. Combustible material
2. Incombustible material, thickness 100mm

ASTRO 4 LEON

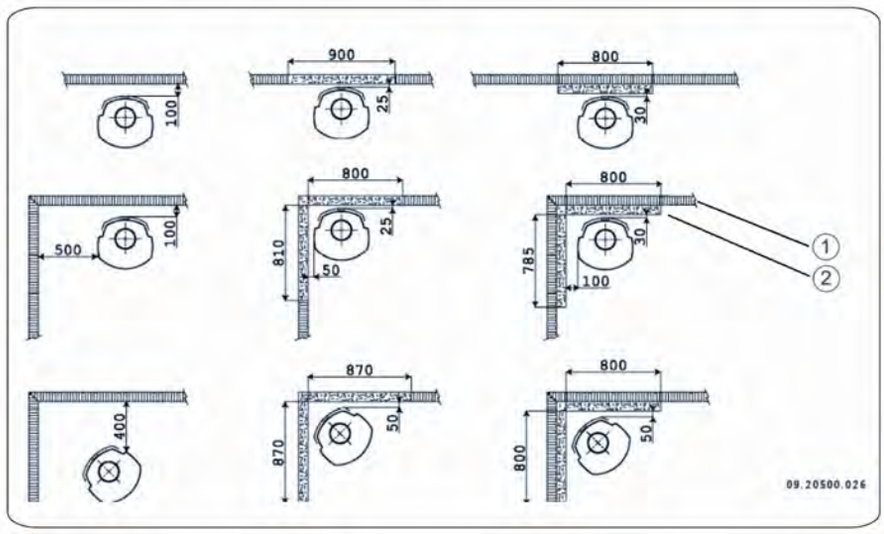
Minimum distances for versions without heat shield:



If the distance between the connecting tube and combustible materials is less than 300 mm the connecting tube should be protected.

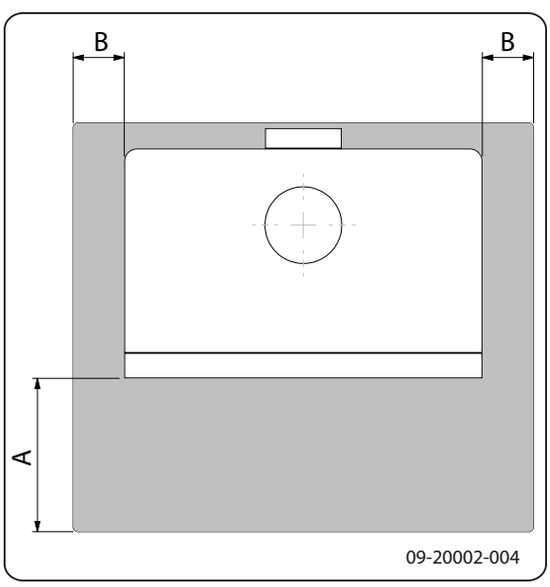
1. Combustible material
2. Incombustible material, thickness 100mm

Minimum distances for versions with heat shield:



1. Combustible material
2. Incombustible material, thickness 100mm

ASTRO 3 PEGASUS and ASTRO 4 LEON - Dimensions fireproof floor plate



Minimal dimensions of fireproof protective plate

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

Appendix 4: Diagnostic diagram

					Problem	
●					Wood will not stay lit	
	●				Gives off insufficient heat	
		●			Smoke emissions into the room when adding wood	
			●		Fire in stove 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 lighting in the "Use" chapter; 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")
●	●	●		●	Chimney does not work properly	Check whether the chimney meets the requirements: at least 4 metres high, right 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.
●	●	●		●	Stove connected to the chimney incorrectly	Connection should be hermetically tight.
●	●	●		●	Vacuum in area in which the stove is installed	Switch off extraction systems.
●	●	●		●	Insufficient supply of fresh air	Provide an adequate air supply; if necessary use outside air connection.
●	●	●		●	Adverse weather conditions? 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.
			●		Stove is leaking air	Check the door seals and stove joints.

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English

English

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