CE

Installation and users manual

2023-V5_KWADRAAT ENGELS

JACOBUS 2

KWADRAAT

Convection wood burning stoves, continuously fired by solid fuels

Types:

- JAcobus KWADRAAT staand
- JAcobus KWADRAAT hang
- JAcobus KWADRAAT inbouw

PLEASE READ THIS USERS GUIDE BEFORE INSTALLING AND LIGHTING YOUR STOVE!

Please fill in the serial number of your JAcobus KWADRAAT woodstove. The serial number is given in the sticker on the backside of the stove and on the packaging of the stove.

Serial number:

5	0	2	4						-			-			

Please keep this number at hand when you communicate with your supplier or manufacturer.

Table of contents

1 Introduction

1.1 General information

Congratulations on the purchase of your new JAcobus KWADRAAT wood stove. Great care was taken to ensure quality during design, production and transport. For the correct functioning of the stove, it is very important that you carefully study the information in this manual. Then you will be able to operate the JAcobus properly and it will meet your expectations.

As the user, you may only carry out the work mentioned in the user manual. The other work must be carries out by a recognized installer. If you have any questions or doubts, always contact you supplier/installer.

1.2 Application

The JAcobus convection wood stove is designed for heating closed spaces by means of convection and radiant heat, which are created by the continuous burning of solid fuels
The JAcobus KWADRAAT is available as a freestanding, hanging and built-in stove.

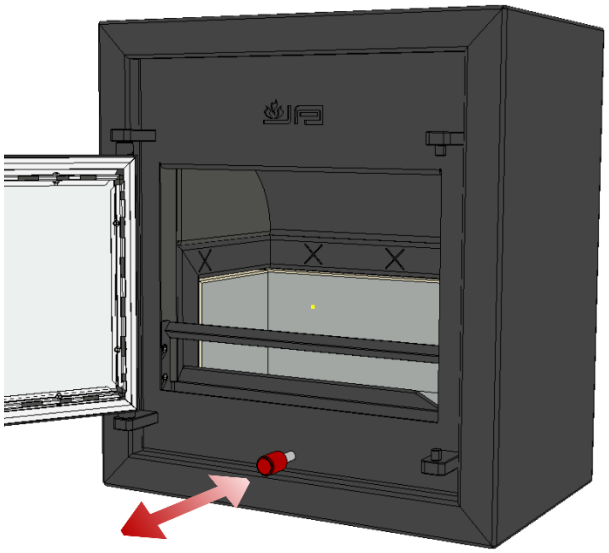
1.3 Construction

The JAcobus KWADRAAT is equipped with an innovative combustion system. The system used in the JAcobus woodstove was used as a basis. Some updates and adapted production techniques result in even cleaner and more efficient combustion. An additional advantage is that the flue gas temperature of the KWADRAAT series is slightly higher, which minimizes condensation in the flue gases. The 1-button operation had been simplified so that the JAcobus KWADRAAT is even easier to operate. Because the deflector at the top of the combustion chamber has been given a different shape, the afterburning is clearly visible and the play of flames is enchanting!

The stove is made of (sheet) steel (Corten and st.37). Rotating and wearing parts are made of high-quality wear-resistant steel (including st.52). The combustion chamber is made of Corten steel and lined with walls of ceramic-bonded refractory fibers. A flame plate separates the combustion chamber from the smoke exhaust section.

The stove has one manually operated air supply slider. This is located under the door as shown in the picture. This air supply slider controls the dosage of primary, secondary and tertiary air.

The suction opening is located in the middle at the bottom of the combustion chamber. The combination of this unique construction of the combustion chamber, with the position of the combustion air supply points, causes air swirls in the combustion chamber. This results in high heat efficiency and low carbon monoxide and particulate matter emissions.



1.4 Technical data and emission values

The most important technical data and emission values are shown in the table below.

Type of stove	*Weight* ***Kg***	*Capacity (dep. on insulation value)* ***m3***	*Nominal power* ***kW***	*Efficiency at nominal power* ***%***	*Average flue gas temperature at the connection* ***°C***	*CO content In the flue gased at O²=13%* ***mg/m₀³***	*Dust concentration at O²=13%* ***mg/m₀³***	*Max. permissible moisture content in the fuels* ***%***	*Max. length fuel blocks* ***cm***	*CxHy* ***Mg/MJ***	*NOx* ***Mg/MJ***
JAcobus 06	*105*	*60-120*	*6*	*80*	*267*	*800*	*30*	*20*	*30*	*41*	*110*
JAcobus 09	*120*	*100-160*	*9*	*77*	*291*	*478*	*24*	*20*	*40*	*31*	*126*
JAcobus 12	*135*	*140-240*	*12*	*77*	*314*	*966*	*24*	*20*	*50*	*75*	*144*

The values originate from the inspection report according to standards for free-standing convection heating appliances for closed spaces EN13240.

2 Models

2.1 Freestanding

2.1.1 Scope of delivery

The standard delivery package includes:

- 1pc JAcobus KWADRAAT wood stove
- 1pc Square rosette/convection grille for finishing on top of the stove
  - *This grille can be used universally with a 130, 150 or 180mm top outlet or as a blind plate if you install the stove with a rear outlet. And can also be used for finishing a concrete model.*
- 1pcs Ash scoop with lid
  - *With these ash scoop you can scoop excess ash form the combustion chamber without spilling.*
- 1pcs Wood rack (already mounted in the combustion chamber)

- *This wood rack prevents logs from falling out of the combustion chamber.*

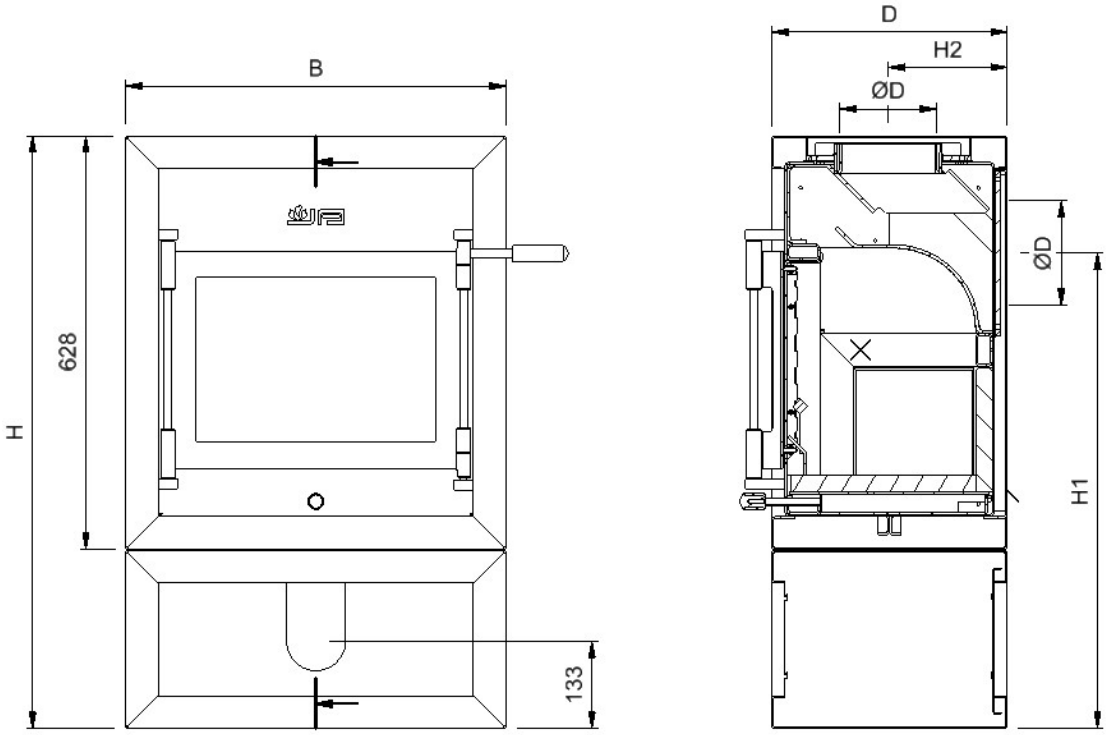
- 1pcs Installation and user manual
  - *Read this manual carefully!*
- 4pcs Adjusting screw M8x30 with saw cut
  - *To level the stove or prevent 'wobbling' on an uneven floor.*
- 2pcs Felt Gasket oval 3.0 mm thick. Is (probably) necessary when converting from top to rear output.
- 1pcs Cover plate oval 1.5mm thick. Is necessary for conversion from top to rear output.

2.1.2 Connection

The JAcobus wood stove can be universally connected. It is supplied as a top output as standard. Thanks to an advanced 'niche bus' connection, the stove can be easily and quickly converted to a rear outlet. (see §2.1.4) The JAcobus SEE-THROUGH wood stove can only be connected as a top outlet.

2.1.3 Dimensions

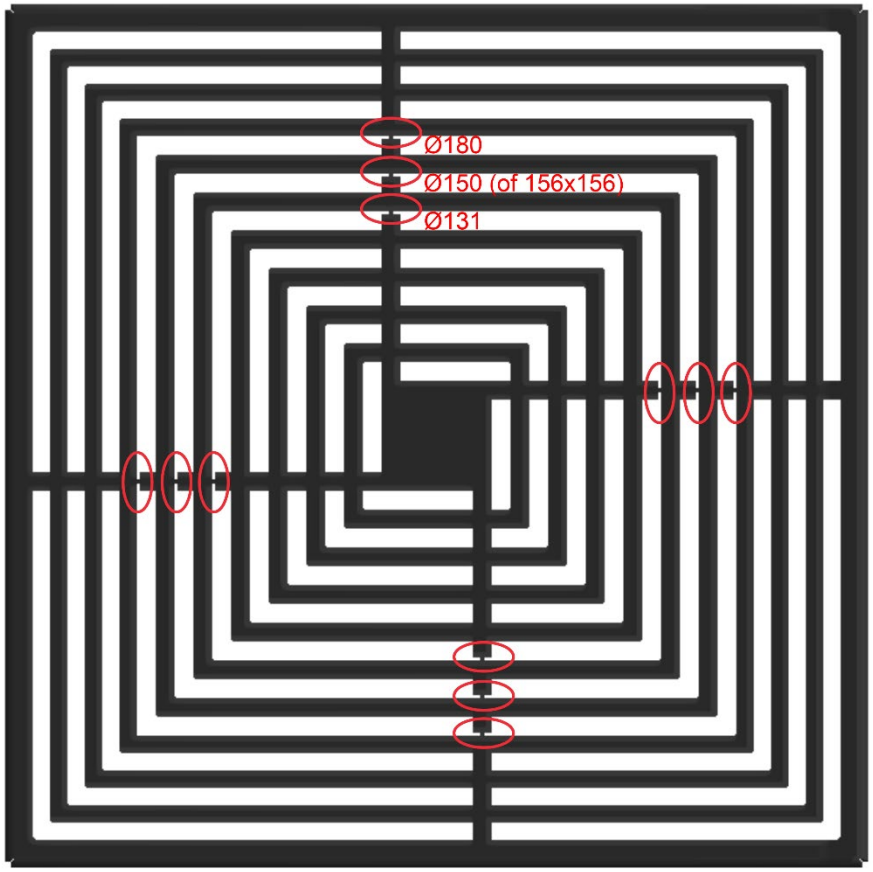
Type	Dimensions HxWxD (mm)	Connection ØD (mm)	Rear-connection H1 (mm)	Top-connection H2 (mm)	Option Ext. Air supply	Available as see-through
JAcobus KWADRAAT 06	900x476x360	Ø 130	725	180	Yes (floor/wall)	Yes
JAcobus KWADRAAT 09	900x579x360	Ø 150	725	180	Yes (floor/wall)	Yes
JAcobus KWADRAAT 12	900x682x360	Ø 150	725	180	Yes (floor/wall)	Yes



2.1.4 Conversion from top to rear outlet

If you are going to connect the stove as a model with a top outlet (image 2.0), the stove is almost ready for installation:

- Check the position of the deflector and wood rack, see chapter §3.2
- The rosette/convection grille is provided with perforations to make a recess for the pipe. Depending on the discharge diameter, you can choose the correct perforation over which you break out the material. See image below.



If the stove with rear outlet is desired, the actions to be carried out are described below, see also images 2.1 t/m 2.8:

- Remove the perforated convection grill that lies on top of the stove around the drain.
- Image 2.1: Unscrew the 6pcs M6 bolts with a 5mm hex key and keep them in a safe place.
- Lift the flue collar with flange from the stove. Try to keep the gasket intact. This flue collar with flange will later have to be mounted at the rear.
- Image 2.2: Remove the plate at the back of the stove by loosening the 6pcs M6 bolts with a 5mm hex key. Also keep this bolts.
- Press the pre-perforated round disc out of this plate using a hammer and/or screwdriver. You can throw away this round disc (old iron), put the plate aside for a while.

TIP: Drill the bottom dam 'away' with a 5mm steel drill. By drilling a hole at the location of the center point A. You can then easily break the disc out.

- Image 2.3: Remove the blind flange plate at the rear of the stove by loosening the 6pcs M6 bolts with a 5mm hex key.
- Image 2.4: Mount the flue collar with flange that has been removed from the top at the rear of the stove. Make sure that you place the gasket properly between the stove and the flange and that the flue collar points ‘outwards’ with the open side! Replace the gasket if it is broken. Tighten the 6pcs M6 bolts firmly with the 5mm hex key.
- Image 2.5: Mount the back plate (remove the round disk!) behind the stove again with the 6pcs M6 bolts. Please note: do not tighten too much, otherwise the plate will bend.
- Image 2.6 + 2.7: Mount the blank blind flange together with the supplied black coloured thin oval plate on top of the stove with the 6pcs M6 bolts. So the black side of the thin plate upwards. Replace the gasket if it is broken. Make sure that you place the gasket properly between the heater and the flange and tighten the bolts securely.
- Image 2.8: Place the convection grille in the square opening on the stove. The stove is now ready for installation as a rear outlet model. (if the grille has already been used for a model with a top outlet and therefore has a recess, you can order a new grille from your dealer if desired)

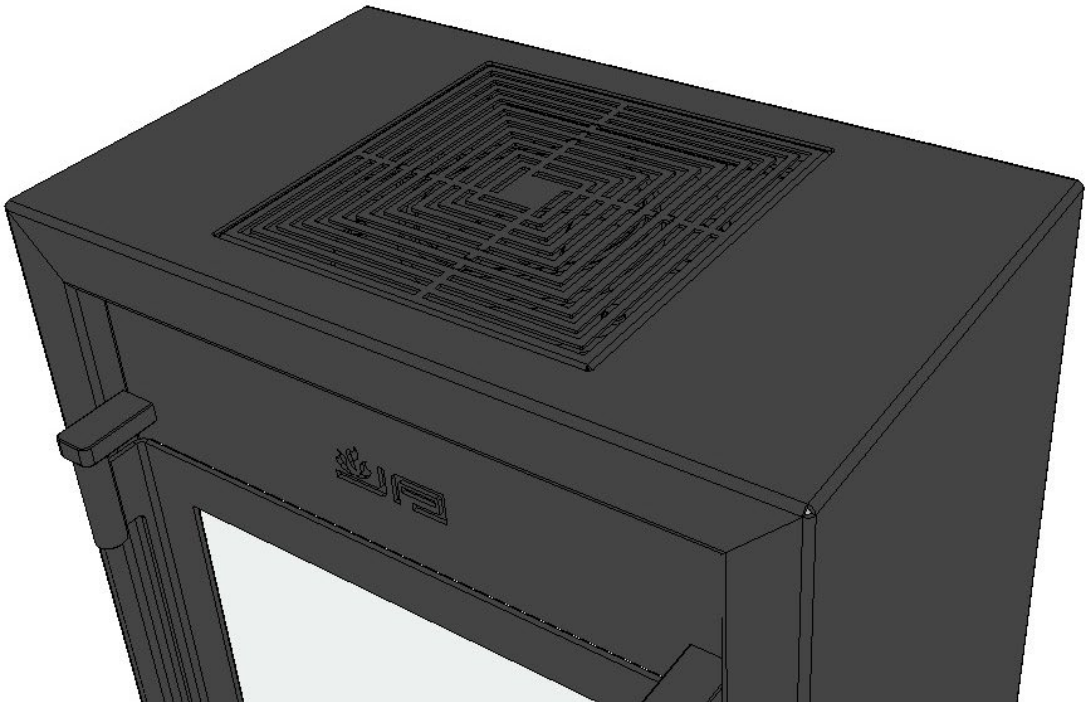


Image 2.0

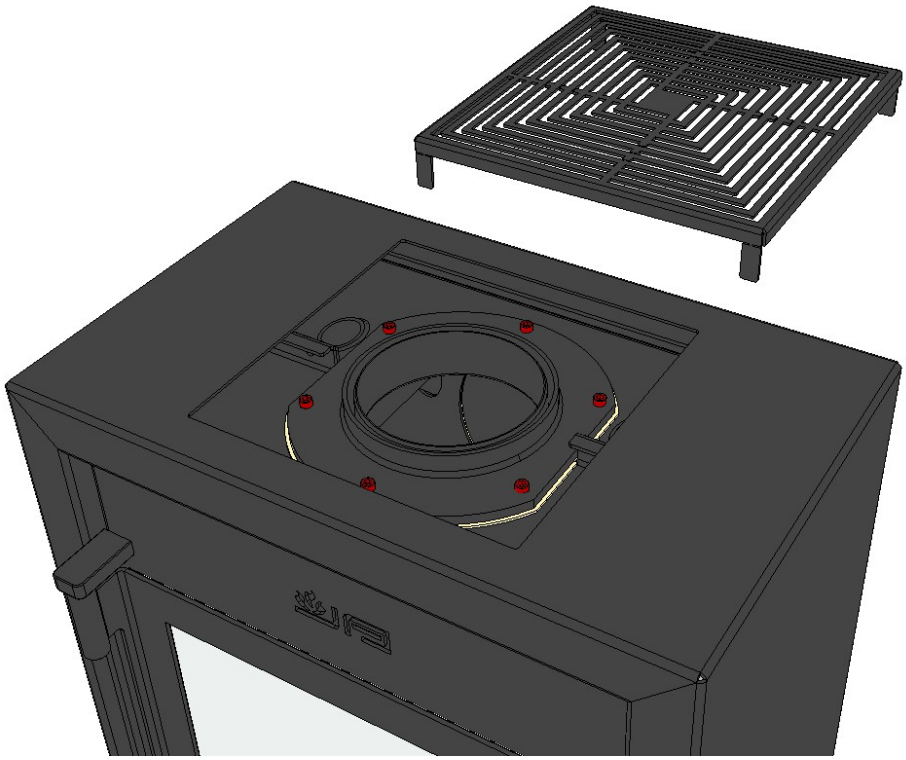


Image 2.1

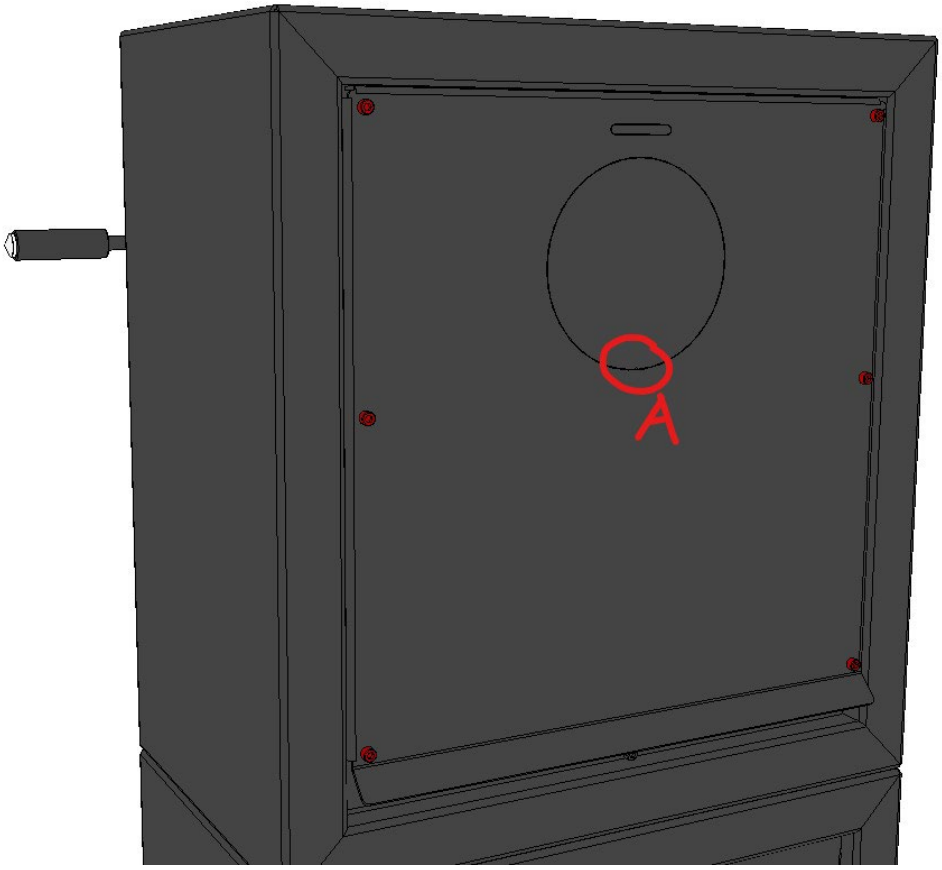
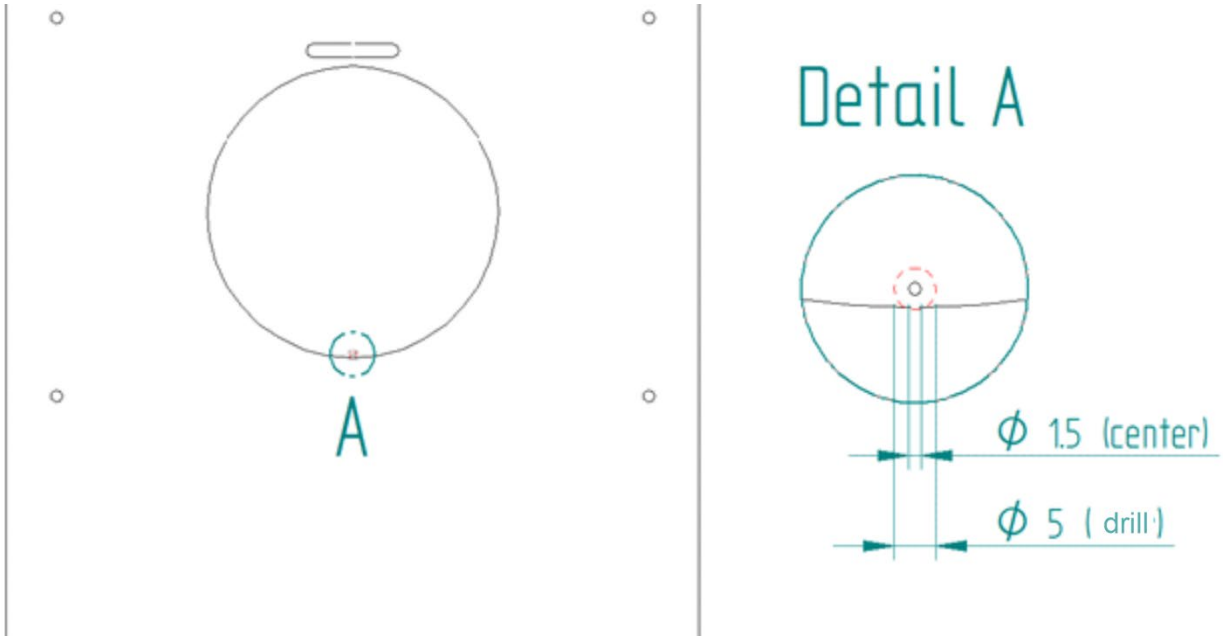


Image 2.2



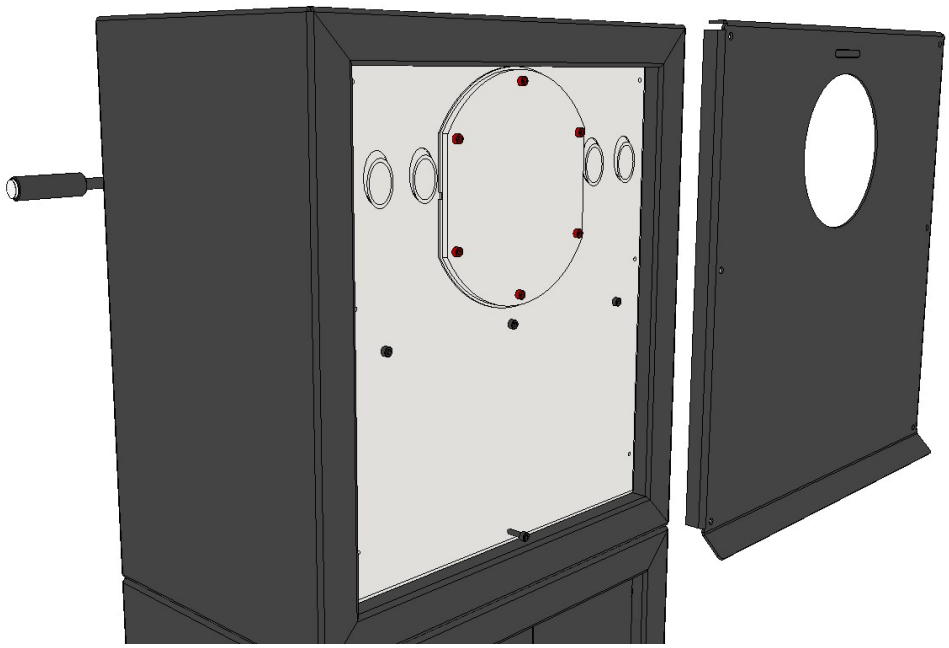


Image 2.3

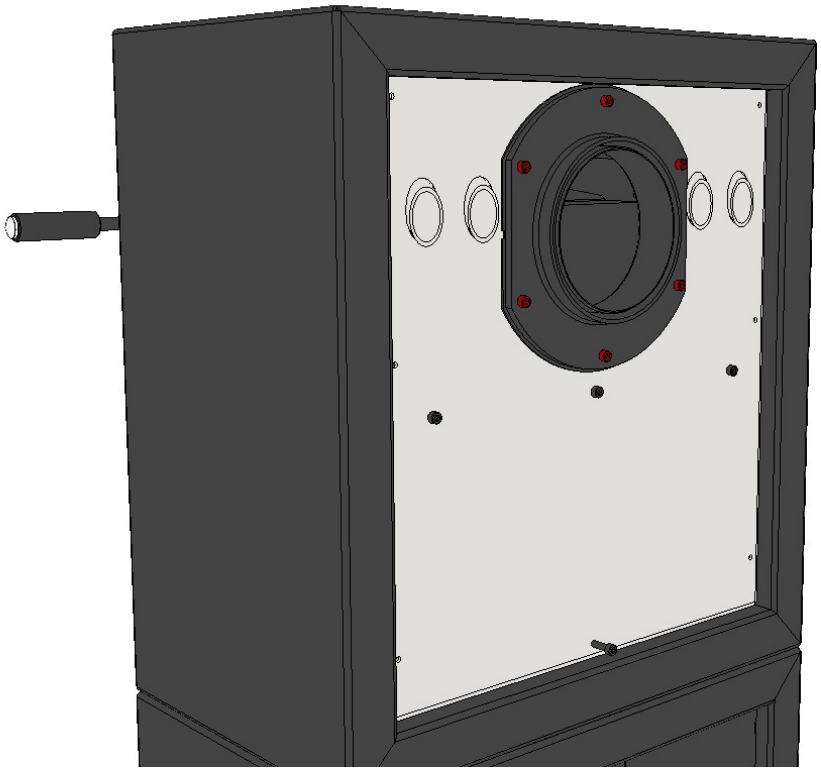


Image 2.4

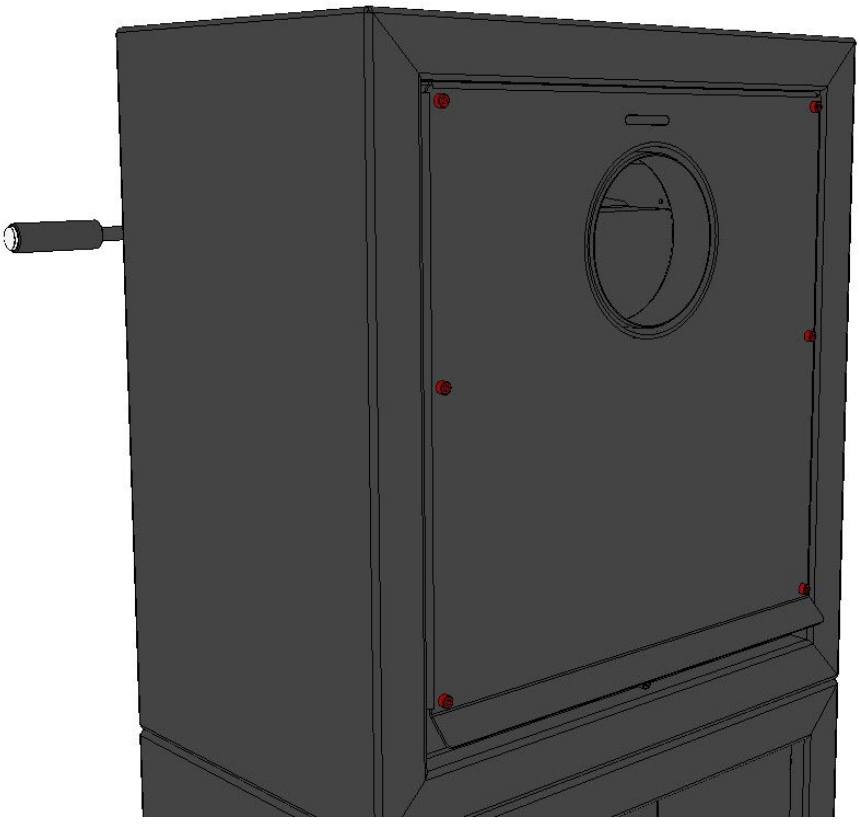


Image 2.5

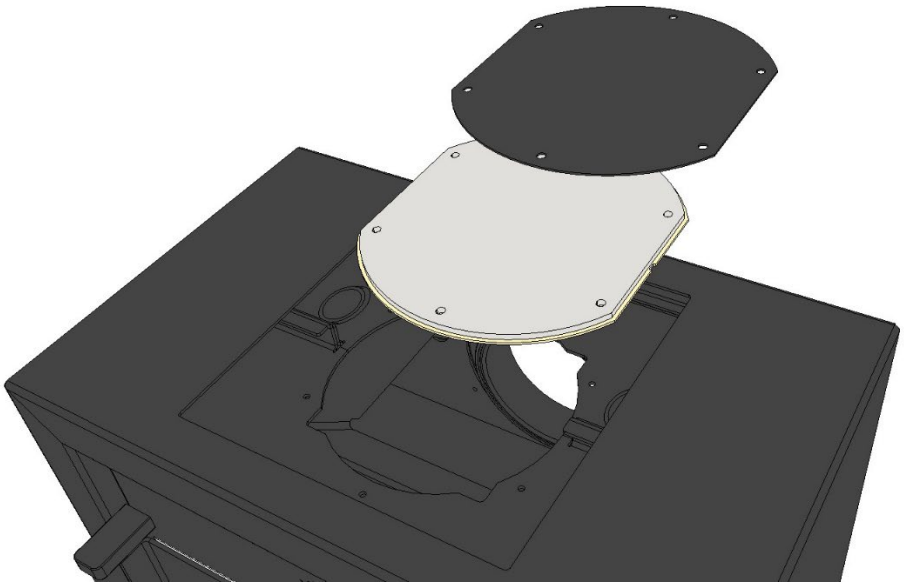


Image 2.6

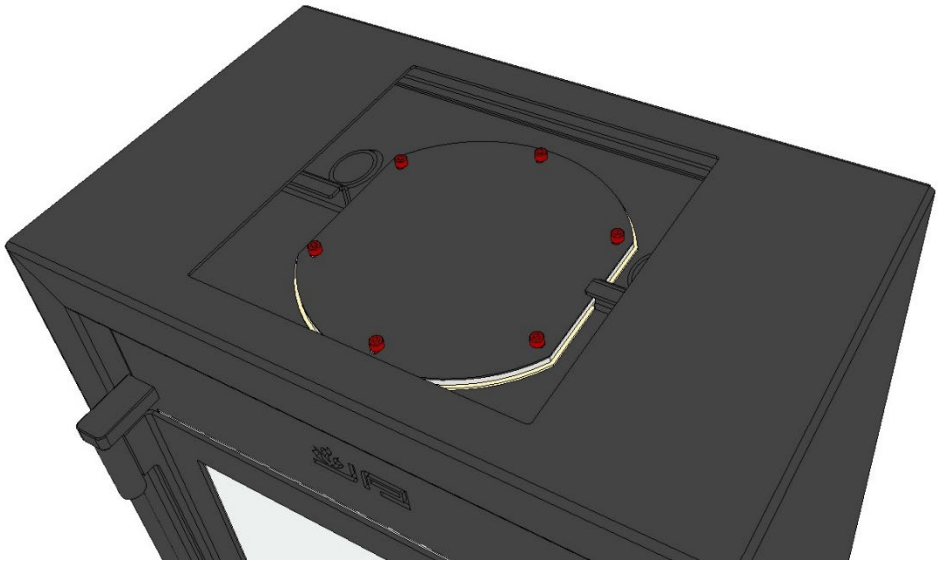


Image 2.7

Tekening 2.8

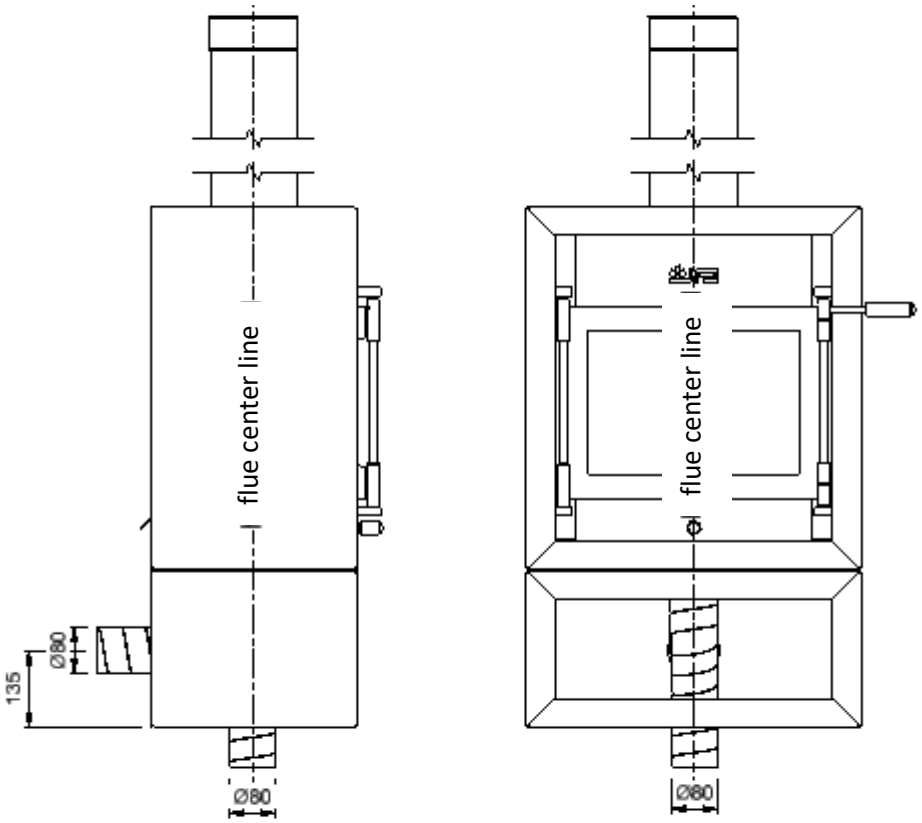
2.1.5 External air supply

If there are no ventilation options in the room to be heated, and/or if a heat recovery system is present, an external air supply can be installed. If there is possibility of ventilation by means of ventilation grilles or tilting windows, etc. no external air supply needs to be installed.

The external air supply set consists of:

- Adapter box + M5x50 wing bolt (mounting under the stove)
- 80cm flexible tube 80mm
- Rosette 80x130mm

The stainless steel wall grill must be ordered separately if necessary.



Supply through wall
(only possible with front model)

- Drill hole 100mm
- Center distance to floor 135mm
- Finishing wall with rosette
- Finishing exterior façade with stainless steel wall grill

Supply through floor

- Drill hole 100mm
- Center in the center line of the flue gas channel
- Finishing floor with rosette

2.1.6 Concrete

To enjoy your stove for a long time, it is important to take a few things into account. The concrete panels of your stove is factory-fitted with a coating that can be cleaned with mild soap or washing-up liquid, preferably using a microfiber cloth or other soft cloth. Scouring pads and/or other abrasive materials can damage the applied coating.

Long lasting beautiful

The robust-looking concrete panels are manufactured using traditional methods. Craftsmen have selected a mix of specific high-quality raw materials for production that contribute to pleasant heat emission, a robust appearance and easy maintenance. However, aggressive and/or abrasive cleaning agents, such as descaler and other solvents, can damage the coating and the concrete and are therefore strongly discouraged during maintenance. To prevent stains, it is best to wipe off splashes or spills immediately with a soft cloth. Penetrated liquids can lead to discoloration of the surface. Prevent wear of the top layer by lifting objects when you move them. Sliding can cause scratches because sharp parts slide over the top layer. The panels may also not be subjected to mechanical loads. So do not stand on the stove during installation or while cleaning the ceiling or flue gas channel.

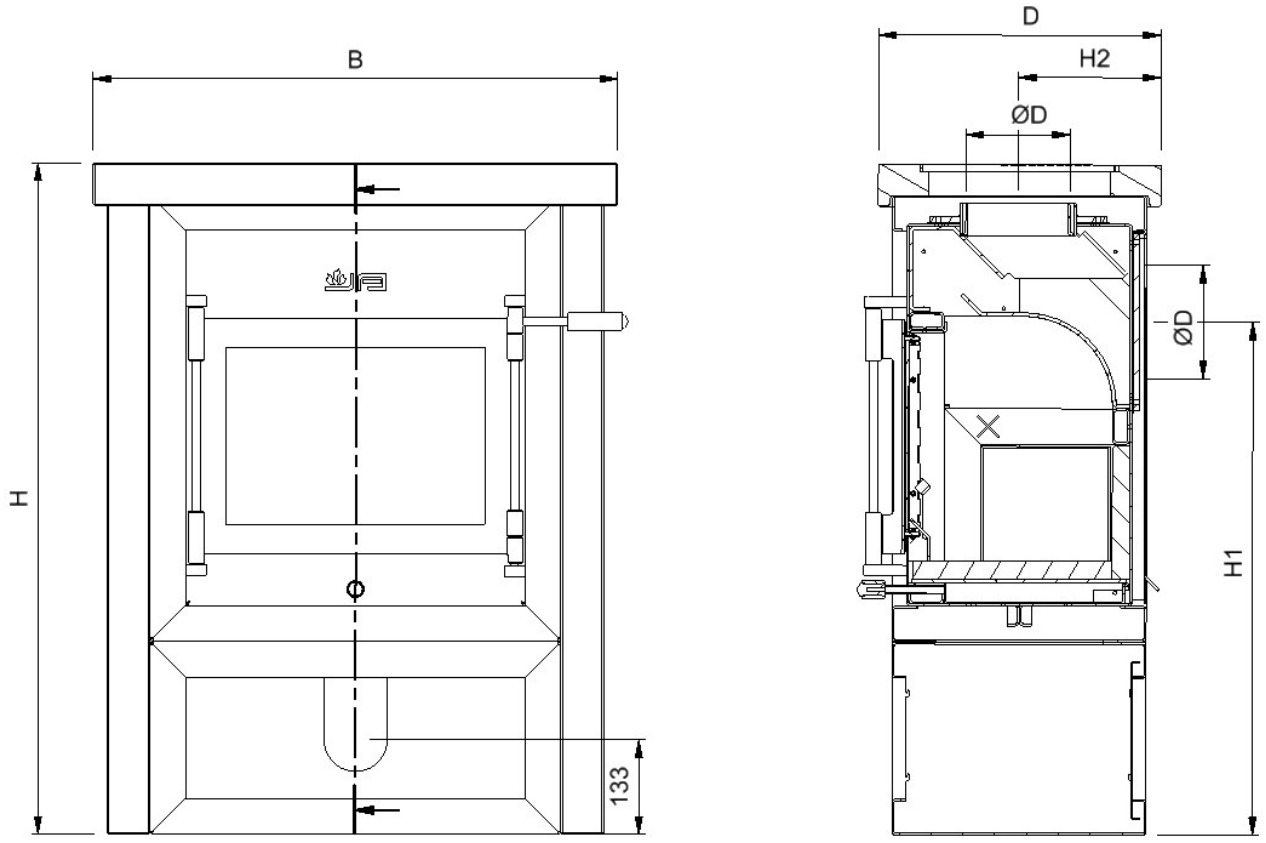
Be careful!

The concrete used can reach temperatures of 200 °Celsius of higher. So do not touch it with bare hands and only carry out service or maintenance when the stove is cold. To prevent burning or melting, do not cover the stove or place anything on it. Never place your stove between walls. As the concrete heats up, it will expand by a few millimeters and shrink again when it cools down. If signs of use become visible during (intensive) use, we can update these on location during a service visit. The concrete panels of your stove will be like new again, ask us about the options so that you can enjoy a beautiful stove for years to come. You can order Evolve maintenance products, etc. here: www.evolveproductions.nl/winkel

General features

While features is hardening, hairline cracks and/or crazing can occur. This is a normal phenomenon and has no negative consequences for the structural value of the concrete. The color of the concrete consists of a range of colors. The chosen color is therefore always indicative; the color cannot be precisely predicted in advance, partly due to the humidity during pouring and drying. In addition, color differences and some structural differences may arise during the production process, for example where air bubbles have been sealed or when the surface had been touched up in some other way.

Type	Dimensions HxWxD (mm)	Connection ØD (mm)	Rear-connection H1 (mm	Top-connection H2 (mm)	Option Ext. Air supply	Available as see-through
JAcobus KWADRAAT 06	945x636x400	Ø 130	725	200	Yes (floor/wall)	Yes
JAcobus KWADRAAT 09	945x739x400	Ø 150	725	200	Yes (floor/wall)	Yes
JAcobus KWADRAAT 12	945x842x400	Ø 150	725	200	Yes (floor/wall)	Yes



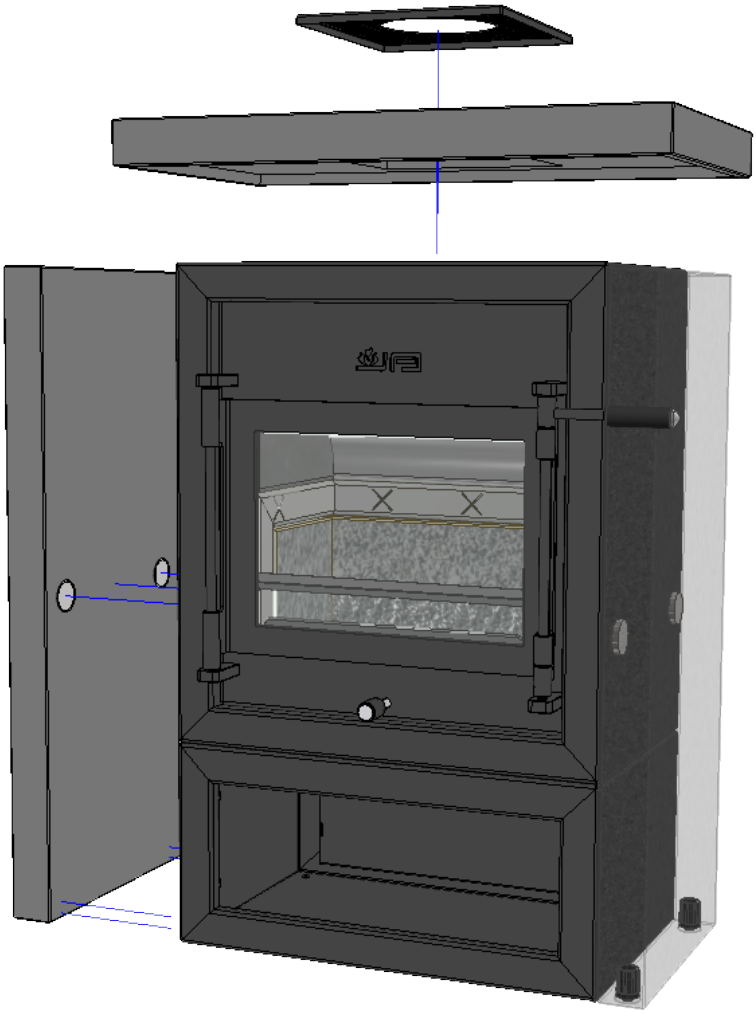
2.1.7 Mounting concrete panels

Install the JAcobus KWADRAAT upright as described in this manual.

Rear outlet: If you connect the stove as a rear outlet, you can install the concrete panels last and the flue gas discharge can be connected first.

Top outlet: If you connect the stove as a top outlet, the concrete panels will first have to be placed around the stove before you connect the flue gas discharge to the stove.

- Place the side panels first. To do this, the side with the magnets must face the stove and the adjustable feet must rest on the floor. The panels will 'stick' to the stove due to the magnetic force. You can use the adjustable feet to adjust the panels so that they are parallel to the stove.
- Then place the top plate on the stove and over the side panels. The top plate rests on the stove.



- Then place the square rosette/convection grille. The rosette/convection grille is provided with perforations to make a recess for the pipe. Depending on the discharge diameter, you can choose the correct perforation over which you break out the material. See image $2.1.4 on page. 7 $2.1.4 NOTE: Only remove material if you connect the heater as a top outlet.
- You must break off the 4 legs from the rosette/convection grille so that they fit flush into the rebate of the concrete. See image below.

- ***Break off the 4 legs before placing them in the concrete panel.***

2.2 Suspended

2.2.1 Scope of delivery

The standard delivery package includes:

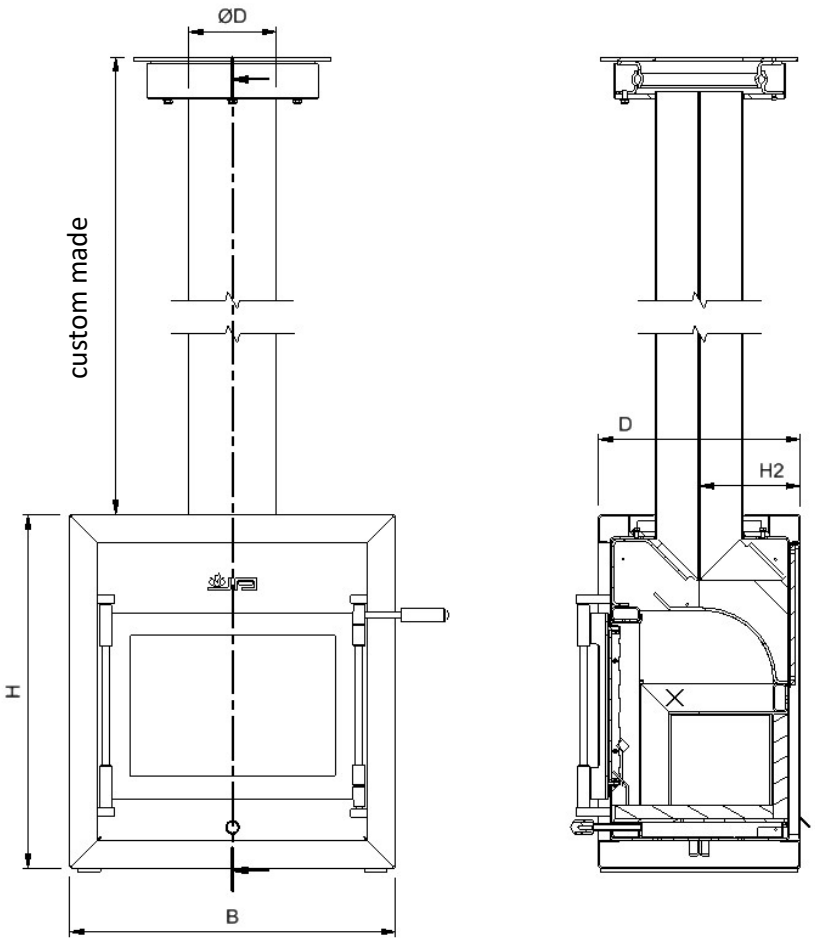
- 1pcs JAcobus KWADRAAT wood stove
- 1pcs Square pipe with flanges for ceiling mounting (custom made)
- 1pcs Ash scoop with lid
  With these ash scoop you can scoop excess ash form the combustion chamber without spilling.
- 1pcs Wood rack (already mounted in the combustion chamber)
  This wood rack prevents logs from falling out of the combustion chamber.
- 1pcs Installation and user manual
  Read this manual carefully!

2.2.2 Connection

The suspended JAcobus can only be connected as a top outlet. And can be mounted on the ceiling either fixed or rotating (optional rotating module required). The hanging stove is supplied with a square pipe that has the same size for all capacities; 156x156mm.

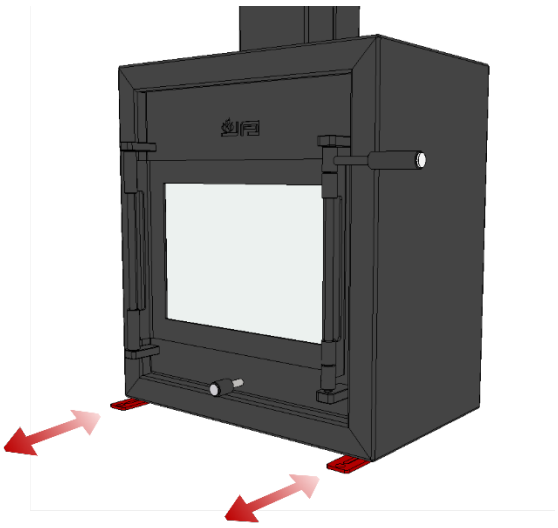
2.2.3 Dimensions

Type	Dimensions HxWxD (mm)	Connection ØD (mm)	Top-connection H2 (mm)	Hanging height	Available as see-through
JAcobus KWADRAAT 06	628x476x360	Ø 130	180	Custom made	Yes
JAcobus KWADRAAT 09	628x579x360	Ø 150	180	Custom made	Yes
JAcobus KWADRAAT 12	628x682x360	Ø 150	180	Custom made	Yes



2.2.4 Rotary module

The suspended version of the JAcobus KWADRAAT can optionally be supplied 360 ° rotatable. Extendable handles are provided to turn the stove. Pull both handles towards you and turn the stove with 2 hands in the desired direction. Slide the handles back under the stove when you are done.



An external air supply is not possible for a suspended JAcobus.

2.3 Built-in

2.3.1 Scope of delivery

The standard delivery package includes:

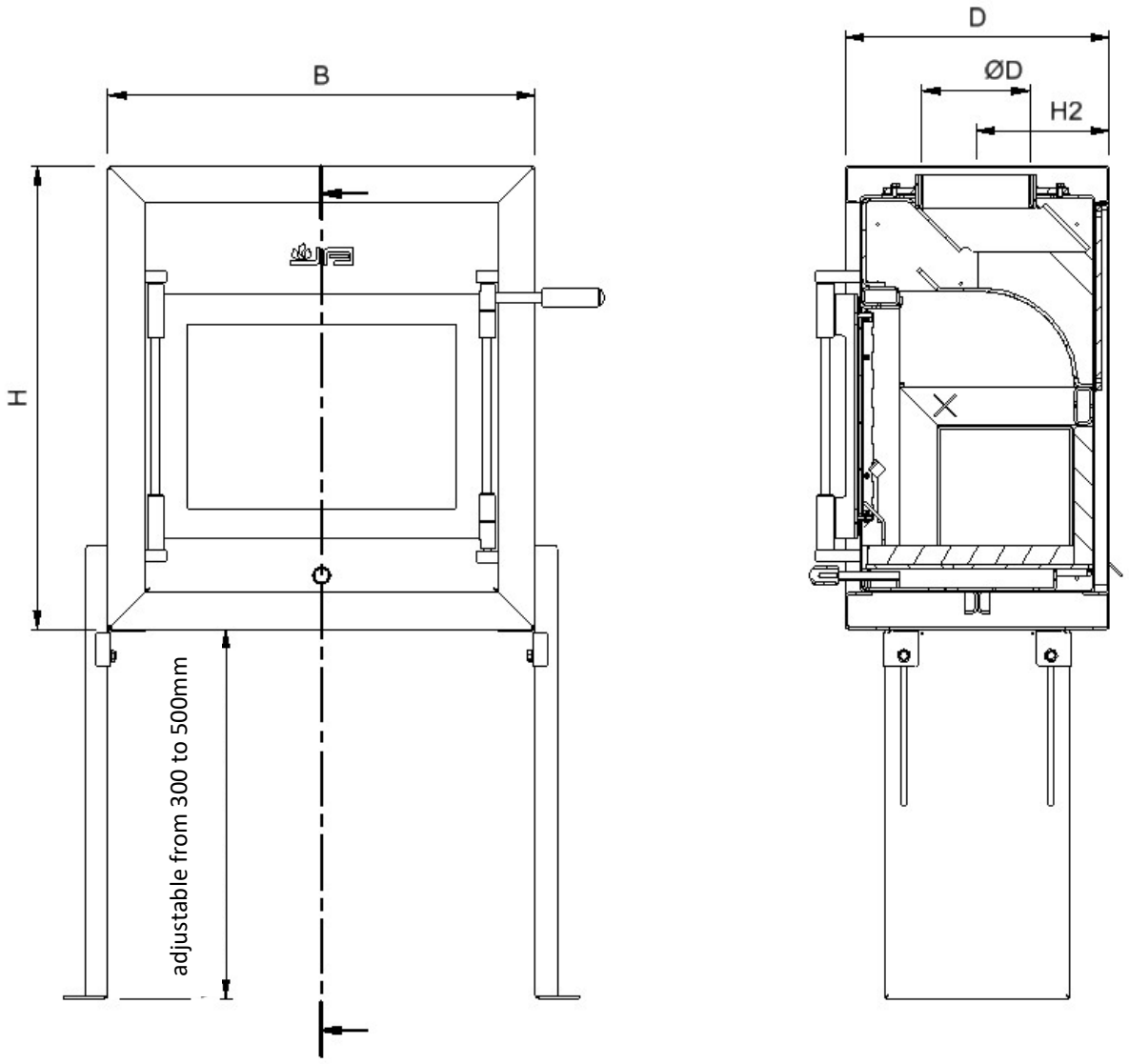
- 1pcs JAcobus KWADRAAT wood stove
- 1pcs Ash scoop with lid
  With these ash scoop you can scoop excess ash form the combustion chamber without spilling.
- 1pcs Wood rack (already mounted in the combustion chamber)
  This wood rack prevents logs from falling out of the combustion chamber.
- 1pcs Installation and user manual
  Read this manual carefully!

2.3.2 Connection

The JAcobus built-in wood stove can only be connected as a top outlet.

2.3.3 Dimensions

Type	Dimensions HxWxD (mm)	Afmetingen met lijst HxBxD (mm)	Connection ØD (mm)	Top-connection H2 (mm)	Available as see-through
JAcobus KWADRAAT 06	628x476x360	680x508x360	Ø 130	180	Yes
JAcobus KWADRAAT 09	628x579x360	680x611x360	Ø 150	180	Yes
JAcobus KWADRAAT 12	628x682x360	680x714x360	Ø 150	180	Yes

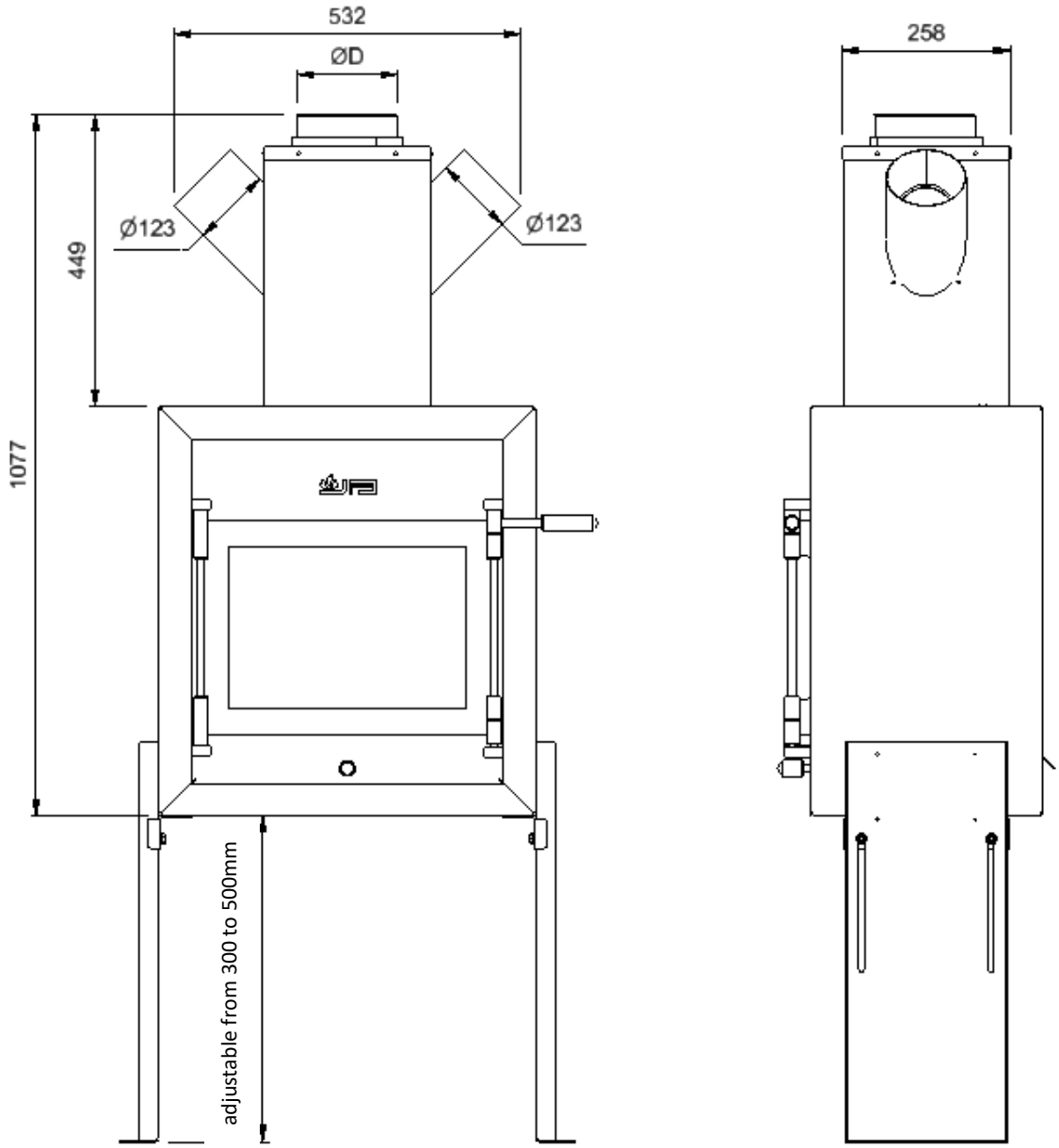


2.3.4 Convection module

☛ For optimal efficiency, it is important to generate sufficient convection air. It is therefore necessary to provide the conversion with an inlet and outlet opening with a minimum surface area of 250cm2 each. The best result is achieved with the inlet opening(s) as low as possible to the floor, but in any case below the bottom of the stove. The outflow opening(s) must be as high as possible in the housing.

☛ A JAcobus convection module is available to control the outflowing convection air. This is equipped with 2 connection to which an (insulated) flexible tube with a diameter of 125 mm can be connected.

☛ The conversion must be made of fire-resistant material!



3 Installation

The following symbols are used in the manual to indicate important information:

- ▪ Actions to be performed
- ☛ Suggestions and advice
- ☛ These instructions are necessary to prevent possible problems during use
- ☛ These instructions are necessary to prevent fire, personal injury or other serious damage

☛ Read this safety chapter carefully and adhere to the measures/instructions in this manual.

3.1 Precausion and safety installation

Correct installation and operation of the stove as described in this manual guarantees safe use and optimal utilization of the stove generated. In addition, the long lifespan and high reliability of the stove will also be maintained. Therefore, read the list below carefully and follow it.

☛ You should preferably have the installation of your stove carried out by a skilled installer for wood-burning appliances.
☛ Have the stove installed in accordance with the applicable national, local and construction (installation) regulations.
☛ The flue gas channel must be assessed in advance for suitability for the stove and inspected and/or cleaned by a recognized specialist. Have the flue gas channel checked and cleaned by a specialist at least once a year. Only with a good flue gas channel will your stove function safely and problem-free.
☛ On a flammable floor, a steel floor plate must be placed under the stove. A matching floor plate is available as an accessory from your supplier.
☛ Do not make any changes to the stove yourself unless instructed to do so in the manual.
☛ Only use original parts for replacement and maintenance.
☛ Do not carry out any work when the stove is still warm.
☛ Only burn the stove with the recommended fuel (see chapter ‘Fuel’)
☛ Carefully follow the lighting instructions as stated in chapter ‘Lighting’ and ‘Firing’.
☛ Do not use the stove as a waste incinerator/all-purpose burner.
☛ Take into account the minimum distance from the stove to flammable objects or materials stated on the rating plate.
☛ Do not allow clothes, towels etc. to dry on the stove.
☛ Avoid contact with a burning stove to prevent burns and/or clothing from catching fire.
☛ Ensure sufficient combustion air supply. This can be done, if possible, by means of an external air supply set.
☛ In the event of a chimney fire, close the air supply; if necessary, extinguish the fire with sand and call the fire brigade or emergency number 911.

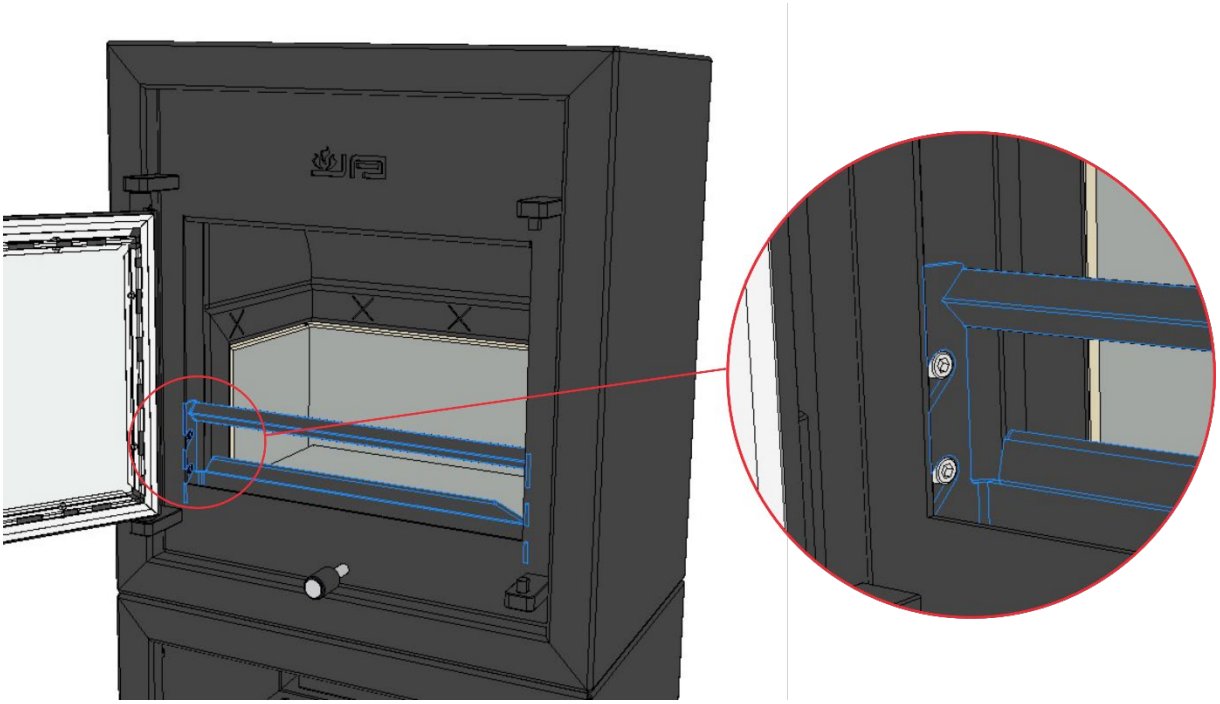
3.2 Check position of the deflector and wood rack

During the transport of the stove, the deflector and/or the wood rack may move due the vibrations or shocks. Therefore, check whether they are still properly positioned. If not, we explain below how to place the deflector and the wood rack back in the correct position.

- Open the door of the stove and remove all loose parts from the combustion chamber.
- Check that the deflector is positioned as shown in the image below. The ridge on the support must fit into the opening in the deflector.

  ☛ *The deflector must fit snugly on the brackets on the left and right at the top of the stove and on the strip at the back of the stove.*

- Check that the wood rack is properly positioned as shown in the image below.
  ☛ *The wood rack must hang properly in the ridges on the left and right.*



3.3 Distances from flammable materials

☛ Place the stove on a fireproof floor with enough supporting power.

☛ The fireproof floor on the front side of the stove must cover an area of about 25 cm with a width of at least 74 cm.

☛ The minimum distance of combustible materials (such as furniture, curtains or TV equipment) to the front of the stove must be at least 1.5 meters.

☛ The minimum distance of combustible materials to the sides and the backside of the stove must be 60 cm. Combustible materials are, among other things, curtains, candles, fabric-covered furniture, clothes.)

☛ The minimal distance of materials that are not combustible (bricks, gypsum, glass fibre wallpaper or other wall covers) to the sides and the rear of the stove must be 15 cm.

☛ If in doubt, contact your dealer or the manufacturer.

3.4 Ventilation and combustion air

☛ JAcobus wood stoves without an external air supply set may only be installed in rooms that have natural (gravitation) ventilation (for example ventilation grilles at the top of the windows).

☛ If the same space has other appliances that use combustion air you must take this into account when designing the ventilation.

☛ Your JAcobus woodstove comes with an optional extra for connection to external air supply. This makes it possible to extract combustion air from another room. This means that the JAcobus can also be installed in modern 'airtight' homes and the EPC value remains intact.

☛ If you are unsure whether there is sufficient ventilation or combustion air in your home, please contact your dealer or installer.

3.5 Connecting to the flue channel

☛ It is advisable to have your stove installed by a recognised installer. If you do the installation yourself we recommend that you get proper information about the activities to be carried out

☛ The flue channel must be free of soot and other dirt such as bird nests or insects. Only with a clean flue will your stove function safely and problem-free.

☛ The JAcobus woodstove is suitable only for connection to an adequately insulated flue or chimney. We advise you to get proper information about the suitability of your flue before using the JAcobus woodstove!

☛ Flue outlets must be mounted in such a fashion that water is discharged, which means that the water must always flow into the pipe underneath!

☛ When connected, the chimney must generate an underpressure of 12 Pa (draught) when operated at nominal capacity. Having the right draught is one of the most important factors to guarantee a reliable operation and a high yield of the stove. When the draught is too weak, the nominal heat capacity will not be reached. When the draught is too strong it may cause overburdening and consequently a lower heat yield (but high fuel consumption).

☛ A high combustion temperature in the stove keeps the flue channel clean and warms the flue channel. This improves the draft so that the stove will function at its best.

☛ Always ensure a proper and airtight connection from the stove to the flue channel or chimney.

☛ Are you not sure whether your flue channel meets the requirements? Then have the connection and the flue channel checked by a professional.

3.6 Burning position (adjusting)

The burning position is the optimal position of the air slider when the stove is tempered. You reach the burning position by pushing the air slider until it stops. The combustion chamber is then supplied with the correct amount of oxygen.

Upon delivery, the burning position is set in such a way that the stove burns well under the most common conditions (combination of draft and type of fuel). However, if you want to supply more or less oxygen in the burning position, this is possible. You can therefore optimally adjust the burning position depending on variables such as the type of fuel and the draft in the flue gas channel. See images below. At the rear of the stove there is an adjustment screw with which you can adjust the end position of the air slider (= burning position):

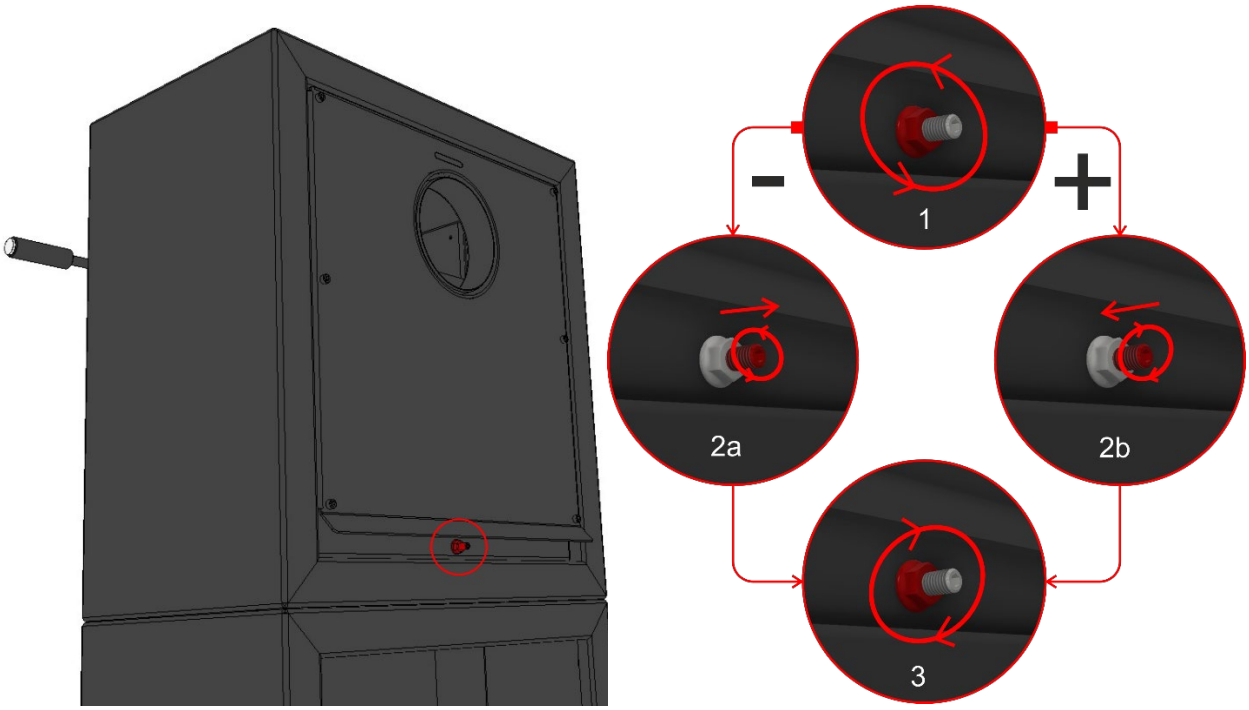
1. Loosen the lock nut counterclockwise.

2a. If you want less **(-)** air in the heating position, turn the adjusting screw 'counterclockwise' (= counterclockwise). 1 full rotation is 1.25mm of adjustment of the air slide.

2b. If you want more **(+)** air in the heating position, turn the screw 'clockwise' (= right). 1 full rotation is 1.25mm of adjustment of the air slide.

3. Tighten the lock nut clockwise again.

☛ ***Please note: adjustment 1.25mm already means 10% more or less air supply in the burning position.***



4 Lighting and firing

4.1 Instructions for proper and safe heating

The following information is important for safe use of the stove:

☛ When filling the combustion chamber, cleaning the window and other maintenance actions, the door and window must be handled with care. In particular, do not exert pressure on the door and window. This may result in damage to the window.

☛ The door must remain closed when the stove is lit, with the exception of operating activities. You may burn the stove with the door open but this will lower the heat output. And please be careful when sparks are being thrown out!

☛ Use of the stove when the chimney draft is disturbed is not permitted. Try to determine and resolve the cause. Have you chimney cleaned annually by a specialist.

☛ Modifying the construction of the Jacobus stove is not permitted without the express written permission of the manufacturer.

☛ It is not permitted to clean the window while the stove is burning due to the high temperature that the window can reach.

☛ Do not use fuels other than those prescribed by the manufacturer (see §4.2).

☛ Ensure sufficient supply of fresh air (see §3.4).

☛ Preferably do not burn in foggy and/or windless weather to prevent (smoke) nuisance.

☛ A properly heated flue gas channel is necessary for the draft in the channel.

☛ A high combustion temperature keeps the flue gas channel clean.

☛ Operations such as cleaning, repairs, etc. can be carried out safely when the stove is out of use for at least 24 hours.

☛ Never suck the ash out of the stove with a vacuum cleaner.

☛ High temperatures must be taken into account when operating.

☛ In the event of a chimney fire, fully depress the air supply (0%), i.e. over the heating setting, and call the fire brigade. The flames will extinguish due to insufficient oxygen required for combustion.

☛ Do not use water to extinguish the fire in the stove.

4.2 Fuel

The combustion system of the JAcobus wood stoves is optimized for burning deciduous [(1)]- and conifer wood [(2)] in the form of split trunks. The maximum length of the logs varies and depends on the type of stove:

- JAcobus 06 max. 30-35cm;
- JAcobus 09 max. 40-45cm;
- JAcobus 12 max. 50-55cm.

In addition to deciduous tree wood, the stove is also suitable for burning wood, peat and coal briquettes.

For optimal heat efficiency, clean combustion and a beautiful flame image, the following information is very important:

☛ Burn with sufficient wood. To reach the nominal capacity, you must load the JAcobus 6, 9, and 12 with at least 1.4kg, 1.9kg and 2.8kg respectively. It will burn on this for about an hour. Afterwards, the glowing mass naturally continues to emit heat for a long time.

☛ Burn dry wood[3]. Wood is only dry when the humidity percentage is lower than 20%. Depending on the type of wood, the wood must dry for 2-3 years in a well-ventilated place after felling. Preferably outside under a canopy. Dry wood produces a clear sound when you strike two blocks together. There are shrinkage cracks on the end side and the bark comes off easily. Short, chapped trunks dry the fastest. After drying, they only contain 15 to 20% moisture and provide the highest yield.

☛ We recommend using a moisture meter to measure the moisture percentage on the wood. This is available from your supplier/installer.

☛ Burning wet wood, chipboard, paper, flammable liquids, plastics and wood treated with chemicals, for example glue, paint etc, is not permitted.

(1) Oak is excellent firewood, but – unlike other types of wood – it must be stored in an uncovered place for two years to allow rain to remove the tannin; it must then be stored in a sheltered place for at least two years before it can be placed in the stove. If the tannin has not completely disappeared, tannic acid will form during condensation and the lifespan of the stove will be significantly shortened and the warranty on the stove will be void. American oak contains a lot of tanning.

(2) Soft wood or spruce wood. Only use this wood in a well-burning fire, otherwise you will get deposits in the flue gas channel. Spruce wood burns easily, which is why it is often used as kindling.

(3) Burning wet wood causes:
- failure to reach the values indicated in the technical data table; therefore a low efficiency and an increase in emissions of carbon monoxide, particulate matter and hydrocarbons due to incomplete combustion.
- intensive contamination of glass and surfaces inside the stove.
- intensive contamination of the chimney due to creosote formation, the main cause of chimney fires!

4.3 Lighting

During the first heating cycle, the stove may emit an unpleasant odor. This is caused by the hardening of the heat-resistant lacquer. By providing sufficient ventilation (open the windows and doors in the installation room), the odor will disappear after approximately 1 hour.

☛ Before using the stove for the first time, or after a long break in using the stove, check the condition and degree of contamination of the flue gas channel.

Steps to light the stove:

- Open the air supply regulator under the door *(see image 3 on page 21)* to the maximum by pulling the slide towards you.
- Open the door and place a log parallel to the back wall in the combustion chamber.
- Place 1 or 2 firelighter(s) at the bottom of the combustion chamber (preferably on a layer of ash), and light it on the fire with a long lighter or match.
- Stack sufficient (at least 5 pcs) small wood crosswise/perpendicularly over the already placed trunk.
- Also place some large blocks of wood on top.

☛ Make sure that sufficient air can flow through the wood pile so that the wood ignites easily.

☛ Start the stove with plenty of wood. The more wood you use when lighting, the faster the stove and the flue gas channel will reach the correct temperature. This is important for good draft and efficient and a clean combustion.

- Close the door until there is still a small gap.

- After approx. 5-10 minutes the kindling will burn ‘independently’, then close the door.
- After approx. 20-30 minutes, when the larger logs are fully burning (the combustion chamber must be full of fire!), the air slider can be set to the burning position (25%) by pressing the air supply slider until it clicks. A nice, calm flame image is a good indication of optimal adjustment. See also appendix 1.
- If the flames ‘subside’ or go out too far, the temperature in the combustion chamber is not high enough. Do you have enough wood in the stove?
- Open the air slider completely again and wait until the stove is really hot and then return the air slider to the burning position.

☛ Lighting the stove according to the principle of the ‘the Swiss method’, where you start the fire from above, is not preferred. The combustion system of a JAcobus is so innovative that this method of lighting provides no benefits.

4.4 Firing

The wood stove must be refilled with wood if you feel that the temperature in the living room is/becomes too low and there are only some glowing charcoal residues left in the combustion chamber.

☛ Open the door and spread the glowing charcoal residues over the bottom of the combustion chamber with a suitable poker.

☛ Place at least 3-4 logs of wood on the glowing firebed.

☛ If the temperature of the firebed is (too) low, you should place some smaller kindling wood together with (!) the large logs on the smoldering firebed.

☛ Pull the air supply completely towards you.

☛ Wait (10-15 minutes) until the fire has fully formed around all the blocks and then switch the air supply back to the burning position.

☛ Do you want to stop burning and there is not much unburned wood left in the stove? Then pull the air supply all the way towards you (100%). The stove will then burn nice and clean when empty.

☛ Do you want to continue burning if there is still a lot of unburned wood in the stove? Then set the air supply to the burning position (10 or 25%) and the stove will burn out quietly.

☛ When controlling the heater with the air supply slider, it is important that incomplete combustion does not occur. Incomplete combustion occurs if too little combustion air is supplied because the air supply regulator is closed too much or too early. Never push the air supply beyond the heating setting during heating.

You can signal incomplete combustion by:

- an increase in smoke development in the combustion chamber
- grey or black smoke from the flue gas channel outlet
- extinguishing the fire
- condensation forms on the window
- soot deposits on the window and/or walls in the combustion chamber of the stove

☛ Prevent incomplete combustion by using the air supply correctly.

4.5 Ash

When burning wood, ash is produced. The ash provides an insulating layer in your stove. This increases the combustion temperature and improves the combustion process. Furthermore, a layer of ash protects the combustion floor. You should therefore leave this layer of ash behind. If the ash

layer is so high that it falls out of the stove through the doorway, scoop about half of the ash out of the fireplace.

☛ A layer of ash protects the combustion floor. Therefore, always leave a minimum layer of ash and ensure that the bottom remains completely covered.

☛ Use the supplied ash scoop to remove excess ash.

☛ Remove the wood rack.

☛ Always scoop the ash out of the stove from front to back.

☛ Never throw the ashes directly into the regular waste bin, but into a steel bucket and place it on a non-flammable floor. Even after a few days, the ash can still glow. Ash from pure (untreated) and dry wood is a natural product. You can use it as a soil improver. In all other cases, dispose of the ash via the regular route.

☛ Replace the wood rack.

☛ Never use a household vacuum cleaner to remove ash from the fireplace. The dust bag is highly flammable and the ash can damage the motor.

5 Maintenance

JAcobus wood stoves are made of steel (pc. 37, pc. 52) and Corten steel in various thicknesses. A lot of attention had been paid to ease of use in the design of the stove. A thorough manufacturing process and careful finishing also ensure that your stove requires little maintenance. The maintenance tips/instructions below contribute to the proper functioning and long life of your stove.

☛ carry out maintenance when the stove has been out of use for at least 24 hours;

☛ do not make any changes to the stove yourself unless these are described in the manual;

☛ as a user you may only carry out the maintenance as mentioned in this chapter, for other work you must engage an expert professional;

☛ only use original parts for replacement. These are available through your supplier/installer and on jastore.nl

5.1 Cleaning

You can clean the stove as needed, but at least once a year.

- Clean the outside of the stove with a soft duster.

☛Do not use corrosive or abrasive cleaning agents when cleaning the stove and/or window to prevent damage.

☛ Do not use water when cleaning because the heat-resistant varnish is not water-repellent. Water can cause rust spots.

- Remove any deposits on the window with window cleaner for fireplaces and stoves. Follow the instructions for use on the packaging. Window cleaner is available from your supplies or at jastore.nl

5.2 Paint

Minor paint damage such as scratches or smudges (sand marks) are not covered by the warranty because they are easy to repair.

☛ The paint is not rust resistant. Be careful with moisture around and in the stove. Any occurrence of rust or color difference is not covered by the warranty.

☛ You can easily repair minor damage to the paint yourself using the supplied spray can. This is also available from your supplier or on jastore.nl

If there is a rust spot, scratch or other damage on the stove, you can remedy this as follows:

- Remove large contaminants or roughness with a putty knife.
- Sand the area lightly with fine steel wool or Scotch Brite®.
- Remove the dust, also generously around the area to be touched up.
- Then treat this part with the supplied varnish. Check in advance whether the color indicated on the spray can matches the color on the stove. If in doubt, contact your supplier.
- Make sure that the immediate area surrounding the stove is covered in case of spray mist.

☛ Keep the spray can at a sufficient distance (approx. 30cm) from the surface to be sprayed. It is better to apply 2 thin layers of lacquer than one that is too thick.

☛ In case of paint damage, touch up an entire area by misting out the paint around the area. This prevents color differences and stains.

5.3 Annual inspection

For proper and reliable operation of the stove, it is important that you check the following parts in the stove annually:

- Deflector (zie 5.3.1)
- Interior (zie 5.3.2)
- Window (zie 5.3.3)
- Door (zie 5.3.4)

☛ It is recommended that the JAcobus wood stove be serviced by the manufacturer or at a designated service point after several years of use.

5.3.1 Deflector

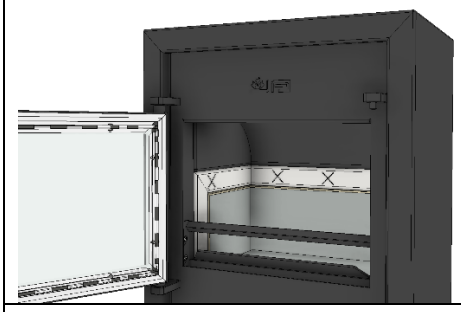
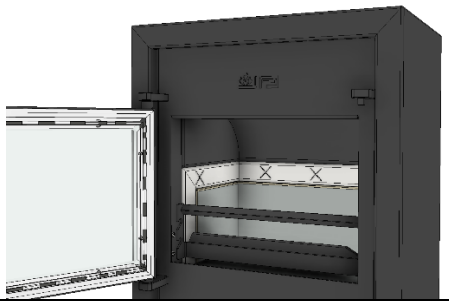
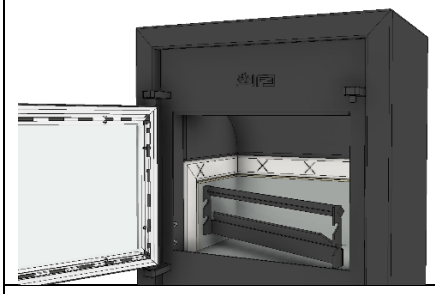
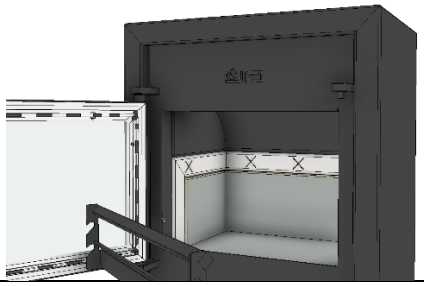
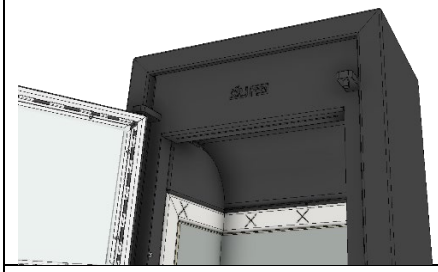
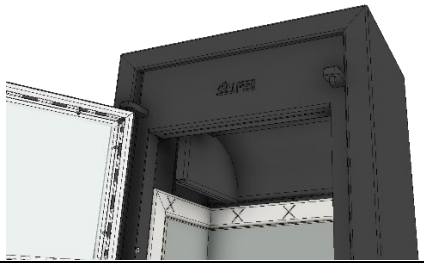
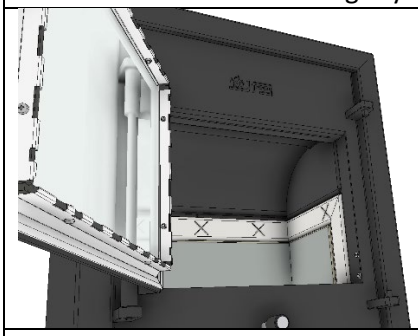
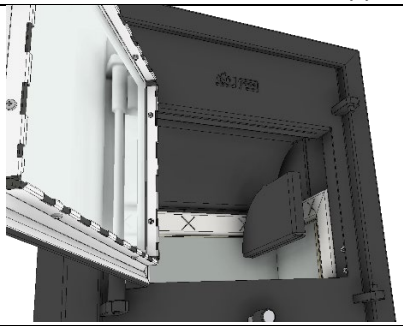
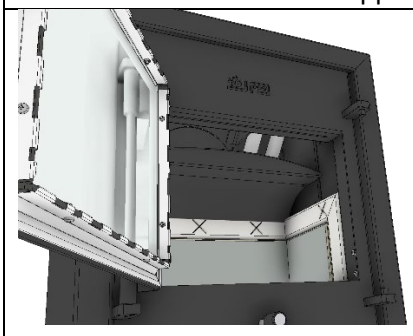
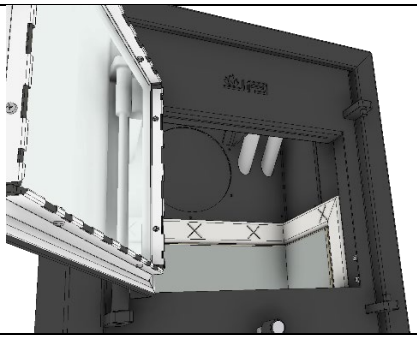
The deflector is located at the top of the combustion chamber. The deflector increases the temperature in the combustion chamber and increases the efficiency of the stove. Check whether the deflector at the top of the combustion chamber is positioned correctly and is not deformed. You can check this by checking whether the deflector still fits properly into the brackets on the left and right at the top of the stove. Reposition the deflector if necessary or replace it if deformed.

☛ Remove the deflector when sweeping the chimney, mark it so that it is replaced in the same way.

☛ Do not burn the stove without the deflector. This can cause the stove to become overloaded and damaged beyond repair.

☛ The risk of a chimney fire is greater if you burn without a deflector.

Remove the deflector by following steps 1 to 9 below.

	
1. Open the door	2. Lift the wood rack diagonally upwards
	
3. Turn the wood rack slightly	4. Remove the wood rack
	
5. Lift the deflector slightly	6. Remove deflector support 1
	
7. Remove deflector support 2	
	
8. Deflector comes down	9. Remove the deflector by tilting/turning

Replacing the deflector:
To replace the deflector, you can perform steps 1 to 9 in reverse order. You can also use the instructions below.

- Step 9: Take the deflector in your hand. The deflector must point with the concave side downwards and the short edge towards the rear.
- Move the deflector diagonally (right side up) through the doorway and place the back on the tube with the cross shaped openings. Push the front up.
- Step 7: Place a deflector support in the correct position with your free hand.
- The deflector can now rest on this support plate.
- Step 6: Bring the other support
- Now move the flame plate so that the lugs of the supports fall into the slots of the deflector.

☛ To check: The hollow shape of the deflector fits tightly with the shape of the supports on which it rests.

- Replacet he wood rack and close the door.

5.3.2 Interior

Heat-resistant plates are placed on the bottom and against the walls of the combustion chamber. These plates reflect the heat, have an insulating effect and protect the sheet steel walls of the combustion chamber against the high temperature. If cracks occur due to, for example, extreme heat in the stove or due to shrinkage stresses, that is not a problem. If the plates fall apart, they must be replaced.

☛ Always leave a minimum layer of ash on the bottom. This promotes the lifespan of the bottom plate.

Remove interior:

- Open the door and open it as far as possible.
- Remove the wood rack from the stove (see page 22).
- Scoop all ash residues from the stove with the supplied ash (see §4.5).
- Then use an ash vacuum cleaner to completely clean the combustion chamber.
- You can now remove the bottom plate from the stove.
- Now remove both side walls from the stove and finally the back wall.
- Vacuum the combustion chamber thoroughly again. Make sure that the sealing cord remain in place around the steel bottom plate.

Installing the interior:

- Placet he back wall with the beveled side (grey side) facing you.
- Placet he side walls on the left and right with the beveled side pointing upwards and towards you.
- Placet he bottom plate with the grey side up and push it against the back wall.
- Replace the wood rack (see page 22).
- Close the door, the stove is now ready for use again.

Example complete interior

5.3.3 Window

The window in the stove is a heat-resistant ceramic material and has a heat-reflecting coating on the outside.

☛ Check the window regularly for break(s)/cracks.

☛ You should have a window replaced by a specialist if it is cracked or broken.

☛ To replace the window, it is necessary to remove the door from the stove. §5.3.4 explains how to disassemble and reassemble the door.

Although the stove is equipped with a clean glass system, deposits can still form on the glass. Prevent the deposits from burning in and therefore remove any deposits with window cleaner for fireplaces and stoves.

☛ Do not use corrosive and/or abrasive cleaning agents to clean the window.

☛ You can use hob cleaner or copper polish to clean the window.

☛ A broken ceramic window should be disposed of with the normal household waste.

☛ The window should definitely not be placed in the glass container because the ceramic material has a much higher melting temperature than normal glass.

5.3.4 Door

To replace the window or gaskets, the stove door must be dismantled. You do this as follows:

- Open the door with the right hand and hold the door handle.
- Grasp the round bar to the left of the door with your free left hand.
- Move the rod upwards using short circular movements.
- The door is released at the left bottom.
- Pull the door towards you with your left hand so that it no longer rests on the hinge block.
- Now lower the door, this also releases the top left.

Replace the door:

- Grasp the door in the same way as when removing the door.
- Slide the left top hinge point of the door around the pin of the left top hinge block.

- Place the bottom left hinge point above the hole in the bottom left hinge block.
- Pressure by means of a rotating movement lowers the rod.
- The rod now slides back into the hole and the door is mounted.

The steps for (dis)assembling the door are very simple, but difficult to explain in words. That is why we have made a video showing what the correct actions are. For this, look at jacobus.nl under downloads or go directly to www.jacobus.nl/JAcobus_deur_uitnemen

5.4 Chimney sweeping

The flue gas channel must be inspected and cleaned by a recognized specialist.

☛ Have the flue gas channel inspected and cleaned at least once a year;

☛ Have the flue gas channel checked for blockages if you have not used the stove for a long time.

☛ Keep the invoice for the chimney cleaning, your insurance company may ask for this.

6 Malfunctions

In Table 1 you will find an overview of malfunctions that can occur, the possible cause and solution.

☛ Notify your supplier if the table does not provide a solution.

Table 1: Diagnosis of malfunctions

Malfunction	Possible cause	Solution
A. Smoke odor/smoke recoil	1. Smoke/ smoke odor comes from the stove due to underpressure in the installation room 2. Poorly functioning flue due to contamination or blockage 3. Humid or foggy weather conditions	1. Open a ventilation grille or leave a window ajar to provide fresh air; if possible, turn of the extractor hood 2. Install an external air supply set 3. Have the flue gas channel inspected/cleaned 4. Do not burn in foggy weather
B. The stove goes out when the door is closed	1. Damp wood 2. Draft in flue duct is too low 3. Burning with too low a power, because: 3.1. The kindling is too big 3.2. There is too little combustion air 3.3. There is too little ash on the combustion floor 4. Not enough wood is used	1. Use dry wood (15-20%) 2. Have the flue gas channel inspected/cleaned 3. Let the stove get hotter 4. Use smaller kindling 5. Pull the air supply completely towards you (100%) or leave the door ajar for a little longer 6. Leave a layer of ash 7. Use more wood
C. Soot deposits on window or inside of the combustion chamber	1. Damp wood 2. Burning with too low a power, because: 2.1. The kindling is too big 2.2. Air supply switched to heating mode too quickly 2.3. Too little ash on the combustion floor 2.4. Not enough wood is used	1. Use dry wood (15-20%) 2. Let the stove get hotter 3. Use smaller kindling 4. Leave the air supply fully open for longer (100%) 5. Leave a layer of ash 5.1. Use more wood
D. Much or dark smoke development	1. Damp wood 2. Poor flue draft 3. Insufficient combustion air supply	1. Use dry wood (15-20%) 2. Have the flue gas channel inspected/cleaned 3. Leave the air supply fully open for longer (100%) 4. Open a ventilation grille or leave a window ajar to provide fresh air; if possible, turn of the extractor hood

Table 1: Diagnosis of malfunctions (continued)		
Malfunctions	**Possible cause**	**Solution**
E. Cracks in interior	1. No ash on combustion floor 2. Stove overload 3. Careless refilling	1. Leave at least 1cm of ash 2. Set the air supply to the burning position (10-25%) as soon as the stove is hot 3. Carefully refill
F. Rust on or in the stove	1. Leakage from, or condensation in, the chimney 2. Wet cloth used for cleaning 3. The stove has been damp	1. Check the flue gas channel 2. Sand lightly and spray with the supplied spray can 3. Prevent the stove from getting wet
G. Handle or hinge becomes heavy or squeaks	1. Too little lubrication	1. Lubricate the rotating parts as indicated in appendix 4

7 Warranty

The warranty on your JAcobus wood stove is provided through your supplier. In case of complaints you should always contact him. Your supplier will engage the manufacturer if he deems this necessary.

The manufacturer grants a warranty on the following parts:

Table 2: Warranty	
Components	**Periode**
Welded joints	5 years
Steelwork (deflector excluded)	5 years
Hinges and locks	5 years
Stainless stell door gasket	5 years
Interior *	No warranty
Window *	No warranty
Concrete panels (optional covering, if applied)	2 years

* Consumable materials, such as the window, interior and deflector are not covered by the warranty.

The mentioned warranty and warranty periods apply when the stove is used without overheating, i.e. when using the stove in accordance with this manual and on the condition that periodic inspections and maintenance are carried out.

☛ Warranty is only granted on stoves supplied by an official JAcobus® dealer, as stated on www.jacobus.nl

☛ For warranty please contact your supplier.

8 Manufacturer's declarations

This manual covers the legal requirements throughout the European Union. For decisions regarding any legal despute, you can turn to a court located in the manufacturer's place of business.

8.1 EU Declaration of Conformity

Manufacturer:
Janco de Jong BV
Tolbaas 2-10
8401 GD Gorredijk
NETHERLANDS
Tel. 0031 (0) 513 571757
website: www.jancodejong.nl
email : info@jancodejong.nl

Explains that,

Product:
JAcobus 06 KWADRAAT, JAcobus 09 KWADRAAT, JAcobus 12 KWADRAAT.

Product description:
Free-standing convection heaters for closed spaces, fired with solid fuels.

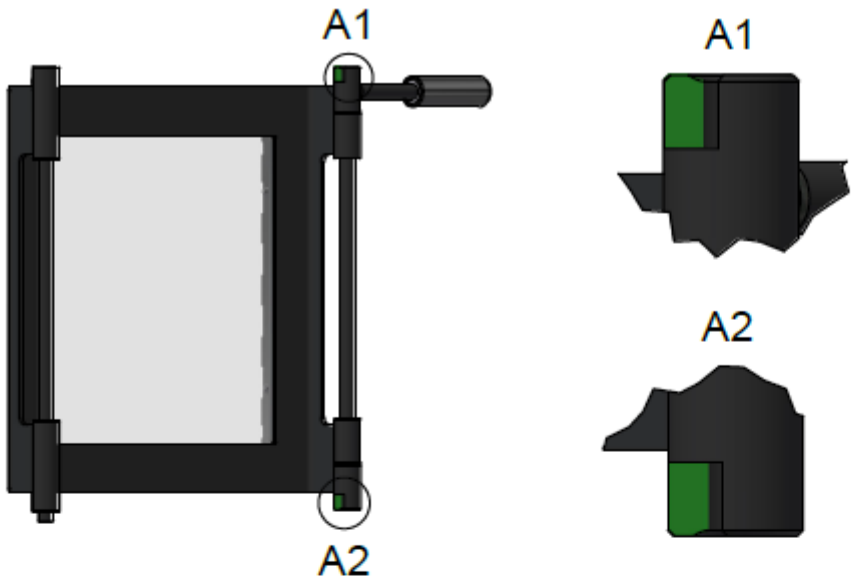
This product, accordance with directive CPD 89/106/EEC meets the requirements of EN 13240/DIN+ and ECO-design 2022.

Signature: _____
Director Ing. Rudolf de Jong

8.2 Declaration of performance (DOP)

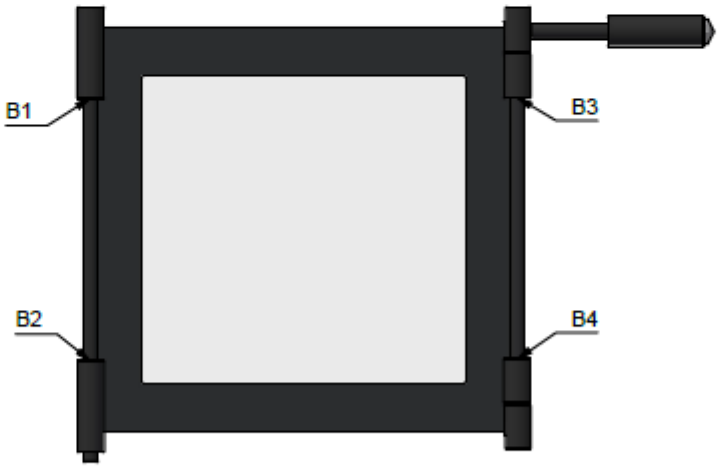
The DOP certificates of the JAcobus 06, 09 en 12 KWADRAAT can be found in the appendices at the back of this manual, appendix 3, 4 en 5.

APPENDIX 2 Door maintenance



Lubricate the clamp openings A1 and A2 with a little (copper) grease.

This prevents unnecessary wear and ensures smooth operation.



Lubricate the pivot points with a graphite-containing penetrating oil (e.g. IMAL).

This prevents unnecessary wear and ensures smooth operation.

APPENDIX 3 DOP JAcobus 06 KWADRAAT

JACOBUS

Declaration of performance (Dop)

DOP NO. 2023-JAC6 KWADRAAT			
1.	**Product Type:**		JAcobus 6 KWADRAAT
2.	**Type, batch or serial number:**		JAcobus 6 staand, JAcobus 6 doorkijk, JAcobus 6 hang, JAcobus 6 inbouw
3.	**Intended use of the product:**		Heat distribution/room heating Without hot water supply Fuel type: Wood
4.	**Name and Address of the manufacturer:**		Janco de Jong BV Tolbaas 2-10 8401 GD Gorredijk The Netherlands
5.	**Contact address:**		No relevance
6.	**AVCP** System(s) of assessment and verification of constancy of performance (AVCP) of the construction product as set out in CPR, Annex V		System 3
7.	**Notified body:** **Test report no:**		SGS NB-No 0608 EZKA/2023-03/00040-1
8.	**Declared performance**		**ECOdesign 2022**
	Harmonized technical specification		**EN13240:2001;EN13240-A2:2004**
	Essential characteristics		**Performance**
	Fire safety	Reaction to fire Distance to combustible materials Risk of burning fuel falling out	A1 Minimum distances in mm: Rear: 150 (doorkijk 850) Sides: 250 Front: 850 NPD
	Emission of combustion products		CO [0,06%] NOx [110mg/Nm³] OGC [41mg/Nm³] Dust [30mg/Nm³]
	Surface temperature		Pass
	Electrical safety		
	Cleanability		Pass
	Maximum water operating pressure		
	Flue gas temperature at nominal heat output [EN]		T [257°C]
	Mechanical resistance (to carry a chimney/flue)		NPD
	Thermal output Normal heat output Room heating output Water heating output		6kW
	Energy efficiency		η 80 %]

Declaration:
The product characteristics written above are consistent with the product characteristics. The manufacturer named above is solely responsible for issuing this declaration of performance in accordance with Regulation (EU) No 305/2011

Signed on behalf of the manufacturer:
ING. Rudolf de Jong (dir. R&D)

Gorredijk, June 19, 2023
(Place and date of issue)

(Signature)

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APPENDIX 4 DOP JAcobus 09 KWADRAAT

JACOBUS

Declaration of performance (Dop)

DOP NO. 2023-JAC9 KWADRAAT			
1.	**Product Type:**		JAcobus 9 KWADRAAT
2.	**Type, batch or serial number:**		JAcobus 9 staand, JAcobus 9 doorkijk, JAcobus 9 hang, JAcobus 9 inbouw
3.	**Intended use of the product:**		Heat distribution/room heating Without hot water supply Fuel type: Wood
4.	**Name and Address of the manufacturer:**		Janco de Jong BV Tolbaas 2-10 8401 GD Gorredijk The Netherlands
5.	**Contact address:**		No relevance
6.	**AVCP** System(s) of assessment and verification of constancy of performance (AVCP) of the construction product as set out in CPR, Annex V		System 3
7.	**Notified body:** **Test report no:**		SGS NB-No 0608 EZKA/2023-03/00040-2
8.	**Declared performance**		**ECOdesign 2022**
	Harmonized technical specification		**EN13240:2001; EN13240-A2:2004**
	Essential characteristics		**Performance**
	Fire safety	Reaction to fire Distance to combustible materials Risk of burning fuel falling out	A1 Minimum distances in mm: Rear: 150 (doorkijk 850) Sides: 250 Front: 850 NPD
	Emission of combustion products		CO [0,04%] NOx [126mg/Nm³] OGC [31mg/Nm³] Dust [24mg/Nm³]
	Surface temperature		Pass
	Electrical safety		
	Cleanability		Pass
	Maximum water operating pressure		
	Flue gas temperature at nominal heat output [EN]		T [291°C]
	Mechanical resistance (to carry a chimney/flue)		NPD
	Thermal output Normal heat output Room heating output Water heating output		8,5kW
	Energy efficiency		η [77 %]

Declaration:
The product characteristics written above are consistent with the product characteristics. The manufacturer named above is solely responsible for issuing this declaration of performance in accordance with Regulation (EU) No 305/2011

Signed on behalf of the manufacturer:
ING. Rudolf de Jong (dir. R&D)

Gorredijk, June 19, 2023
(Place and date of issue)

(Signature)

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APPENDIX 5 DOP JAcobus 12 KWADRAAT

JACOBUS

Declaration of performance (Dop)

DOP NO. 2023-JAC12 KWADRAAT			
1.	**Product Type:**		JAcobus 12 KWADRAAT
2.	**Type, batch or serial number:**		JAcobus 12 staand, JAcobus 12 doorkijk, JAcobus 12 hang, JAcobus 12 inbouw
3.	**Intended use of the product:**		Heat distribution/room heating Without hot water supply Fuel type: Wood
4.	**Name and Address of the manufacturer:**		Janco de Jong BV Tolbaas 2-10 8401 GD Gorredijk The Netherlands
5.	**Contact address:**		No relevance
6.	**AVCP** System(s) of assessment and verification of constancy of performance (AVCP) of the construction product as set out in CPR, Annex V		System 3
7.	**Notified body:** **Test report no:**		SGS NB-No 0608 EZKA/2023-03/00040-3
8.	**Declared performance**		**ECOdesign 2022**
	Harmonized technical specification		**EN13240:2001; EN13240-A2:2004**
	Essential characteristics		**Performance**
	Fire safety	Reaction to fire Distance to combustible materials Risk of burning fuel falling out	**A1** Minimum distances in mm: Rear: 150 (doorkijk 850) Sides: 250 Front: 850 NPD
	Emission of combustion products		CO [0,08%] NOx [144mg/Nm³] OGC [75mg/Nm³] Dust [24mg/Nm³]
	Surface temperature		Pass
	Electrical safety		
	Cleanability		Pass
	Maximum water operating pressure		
	Flue gas temperature at nominal heat output [EN]		T [314°C]
	Mechanical resistance (to carry a chimney/flue)		NPD
	Thermal output Normal heat output Room heating output Water heating output		12kW
	Energy efficiency		η [77 %]

Declaration:
The product characteristics written above are consistent with the product characteristics. The manufacturer named above is solely responsible for issuing this declaration of performance in accordance with Regulation (EU) No 305/2011

Signed on behalf of the manufacturer:
ING. Rudolf de Jong (dir. R&D)

Gorredijk, June 19, 2023
(Place and date of issue)

(Signature)

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