JD227

Idun No1

JD27

A

# Manual

Preparation, installation, operation and maintenance.

JOSEF DAVIDSSONS
since 1882

# Made in Sweden

This wood-burning stove is manufactured at Josef Davidssons AB in Reftele, Småland.

The wood-burning stove is both a timeless and efficient heat source with more than 150 years of development and history behind it.

These wood-burning stoves are equipped with the latest combustion technology to provide maximum heat output in a sustainable way. Our hope is that you'll derive a great deal of pleasure and enjoyment from using your new wood-burning stove.

Warm greetings from
Josef Davidssons AB

# Warranty

You can feel secure when you choose a wood-burning stove from Josef Davidssons AB!

**GENERAL PRODUCT WARRANTY**
Josef Davidssons AB offers a secure and comprehensive, 10-year warranty on your stove, which ensures high quality and durability.

**WEARING PARTS**
Grates, vermiculite discs, and glass in firebox and oven doors are parts that are naturally exposed to wear. We provide a 1-year warranty on all of these parts

**COVER**
The warranty covers material and manufacturing defects but does not include damage caused by improper use, external influences or normal wear and tear.

**CAVEAT**
The product must be kept in its original condition, do not modify/adapt it.

# What comes with the wood-burning stove?

**MANUAL**
A guide to installing, using and maintaining your wood-burning stove.

**ACCESSORY BOX**
The box contains a flue pipe, smoke cover, gaskets and screws, as well as an oven thermometer and stove polish.

**STOVE POKER**
JD27 and Idun No 1 are equipped with a spiral stove poker. JD227 has a stove poker with an oak handle.

**ASH PAN**
Collects leftover ash after burning.

**CE LABEL**
Guarantees that the product meets basic safety, health and environmental requirements according to the Construction Products Regulation and the Ecodesign Directive.

**BAKING PLATE**
For use when baking in the oven.

**SOOT RAKE**
For cleaning the firebox.

**GLOVE**
For handling hot surfaces when using the stove.

# Before you start

**PLANNING APPLICATION**
When installing a fireplace, a planning application has to be submitted to the municipality's planning committee. Contact your planning committee if you feel unsure about how to make the application.

**INSPECTION**
The installation has to be inspected by a qualified chimney sweep before the wood-burning stove is put into use. Get in touch with your chimney sweep even before the start of the project to get some valuable tips!

**CHIMNEY**
Getting the draught right is important! See the section ‘Connecting to a chimney’ later in this manual.

**THE WOOD-BURNING STOVE GETS VERY HOT**
When in use, several surfaces on the wood-burning stove will become very hot and can cause burns if touched. Also be careful of strong heat radiating through the door glass.

If flammable material is placed closer than the specified safety distance, it can quickly start a fire. Setting fire to wood can cause rapid ignition of gas with the risk of damage to people and property.

# Installation

**PREPARATIONS**
Always contact a qualified chimney sweep if you are unsure about how to position and install your stove. All local regulations, including those referring to national or European standards, must be complied with when installing this device.

**INSTALLATION SPACE**
The wood-burning stove needs access to air in the room where it will be placed. Well-insulated windows, mechanical ventilation and other fireplaces in the home will affect the air requirement.

More air can be supplied through ventilation openings to adjacent rooms. An outdoor air connection on the stove's secondary air intake can also draw combustion air from outside or from another room with sufficient ventilation. For more information, see the outdoor air package which is sold separately.

The stove is intended for placement in a kitchen environment with walls or on a pedestal. In both cases, it is important that secondary air can flow freely to the firebox.

**DISTANCE ABOVE STOVE**
The lowest possible ceiling height is 1000 mm from the stove's top plate for a secure safety distance.

There has to be a safety distance of at least 1000 mm upwards and 200 mm sideways between the stove and any overhead cabinet.

**GAP IN FRONT OF THE STOVE**
In front of the wood-burning stove, the distance from combustible material should be 1000 mm.

**DISTANCE NEXT TO STOVE**
The minimum distance for flammable material next to the stove is 500 mm. Make sure that there is an air gap of at least 5 mm on both sides of the stove.

**DISTANCE BEHIND STOVE**
The minimum distance from combustible material behind the stove is 500 mm. Non-combustible material behind the stove must reach at least 1000 mm above the stovetop and 100 mm to each side of the stove. Make sure to create an air gap of 5 mm around the stove.

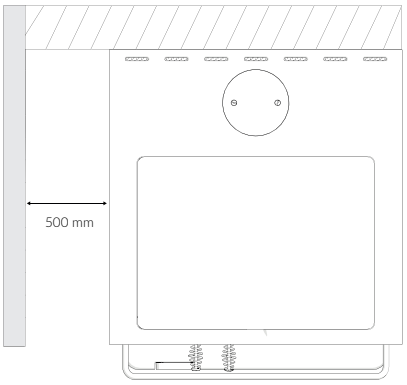
**DISTANCE UNDER STOVE**
The pictures on page 5 show a connector mounted on the secondary air intake under the stove. The connector is included in the optional Connector package Ø60mm and shows here where the secondary air intake is located. Leave room for air to enter and make sure the knob on the front of the stove can be adjusted.

**FLUE PIPE**
The distances refer to installation with an insulated flue pipe. Non-insulated flue pipes must have a distance of at least 500 mm from combustible material. In the case of diagonal placement, remember that the measurement always starts from the centre of the flue pipe.

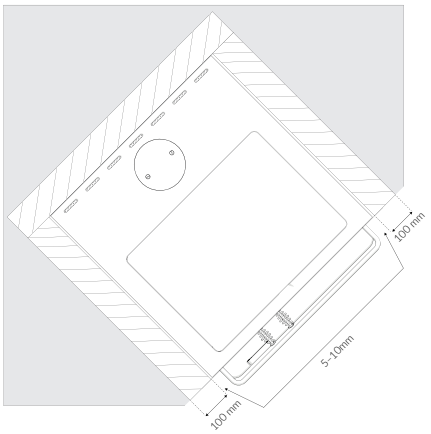
**FIREPLACE FLOORSPACE**
Falling embers from the stove pose a risk of fire. If you have a flammable floor in front of your wood-burning stove, it must be protected by a fireplace surface that covers at least 300 mm in front of the door and 100 mm along each side. The fireplace floor may consist of, for example, natural stone, concrete, sheet metal or glass.

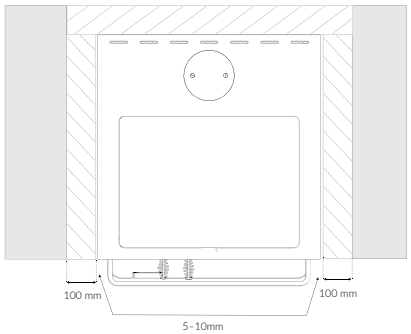
**RECYCLING**
The packaging used during transport can be recycled. The pallet is sorted as untreated wood, the cardboard as corrugated cardboard, and the plastic strapping and foam plastic as plastic.

**CHIMNEY FIRE**
If a chimney fire occurs or might be occurring, close the secondary air damper and the firebox door. Contact the fire brigade. After a chimney fire, the chimney must always be inspected by a qualified chimney sweep.

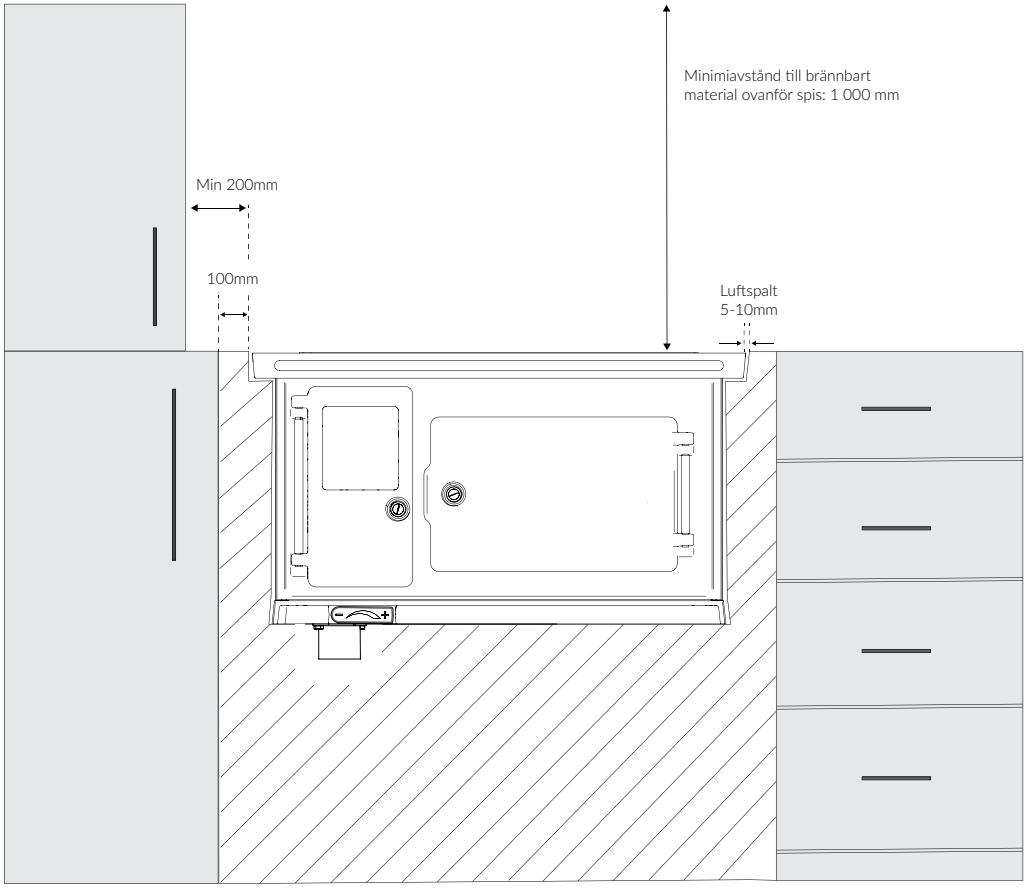


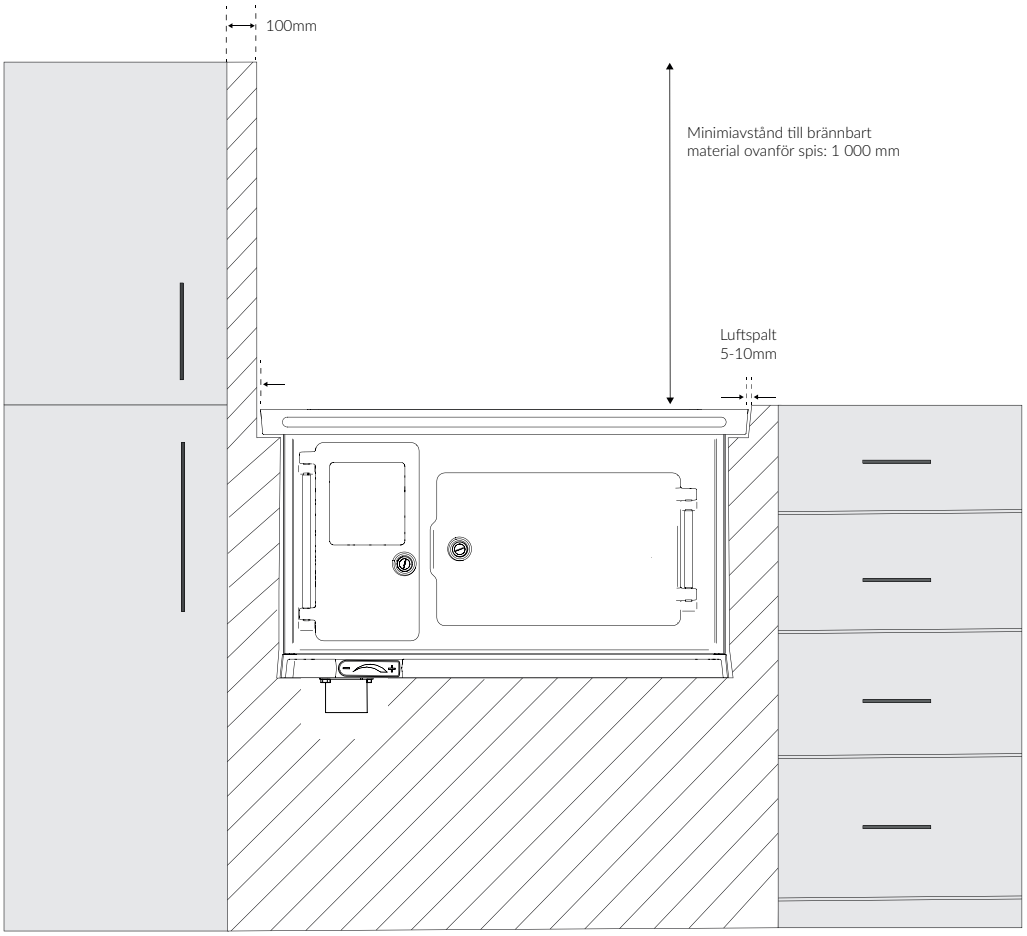

The minimum distance for flammable material next to the stove is 500 mm.




Non-combustible material >100 mm wide and >1000 mm above the hob. Ensure that there is an air gap of at least 5mm around the stove.


Minimiavstånd till brännbart
material ovanför spis: 1 000 mm
Min 200mm
100mm
Luftspalt
5-10mm


100mm
Minimiavstånd till brännbart
material ovanför spis: 1 000 mm
Luftspalt
5-10mm

# Connection to the chimney

**CHIMNEY**
The chimney should be of type T400. The diameter of the connection socket measures 125 mm externally at both the rear and top connections.

**TOP OR REAR CONNECTION**
The stove is intended for top or rear connection. Use the accompanying screws to attach the flue pipe and smoke cover to the sockets in the stove. When connecting from the back, the flue pipe should be placed at the back of the stove and the smoke cover placed at the top of the stove. When connecting at the top, the flue pipe must be attached at the top and the smoke cover at the back. In addition, when connecting to the top, the first flue pipe above the stove must be equipped with a soot trap to enable soot removal. When connecting to the top, the chimney must not rest on the stovetop.

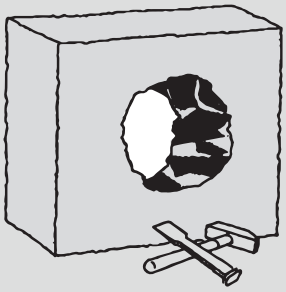
**CHIMNEY DRAUGHT**
A well-functioning chimney with appropriate draught that creates a suitable negative pressure in the firebox is a prerequisite for the wood-burning stove to function. The negative pressure in the firebox should be –12 Pa. The draught will mainly be affected by the length and area of the chimney, but also how well-sealed it is.

**SMOKE FLUE**
A flue with sharp bends and horizontal pull reduces draught in the chimney. Maximum horizontal flue length is 50 cm, provided that the vertical flue length is at least 500 cm.

The flue should be able to be cleansed of soot along its entire length, and the soot hatches should be easy to access. Check that the chimney is sealed and that there are no leaks around soot hatches and smoke connections. The wood-burning stove may be connected to a chimney with multiple fireplaces.

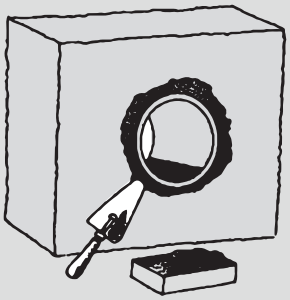
## CONNECT THE WOOD-BURNING STOVE TO THE EXISTING CHIMNEY

1



Carefully drill a hole where you will connect your stove into the chimney.

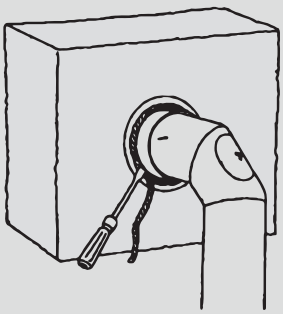
2



Build the masonry flue pipe into the wall.

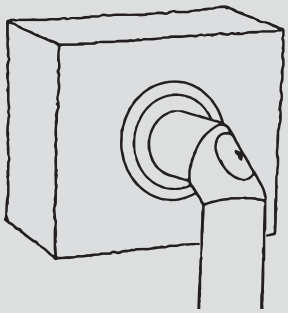
**AT THE REAR CONNECTION**
Apply putty to the stove's connection piece and attach the connection pipe. Put putty in the wall connection and press in the connecting pipe.

3



Fill with oakum between the flue pipe and the masonry flue pipe.

4



Finish by using the flue pipe collar to cover the installation.

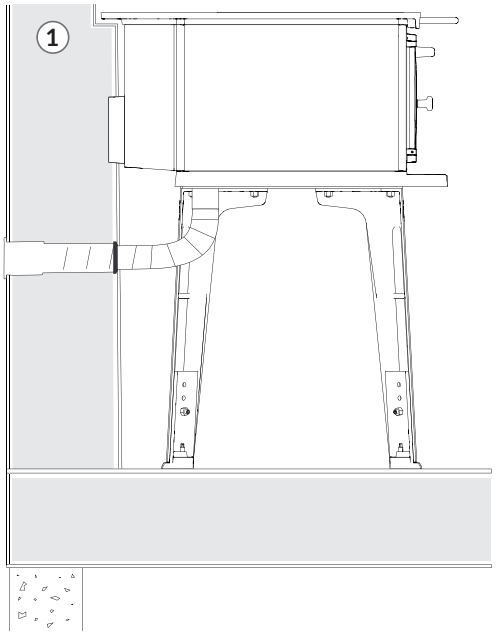
**WITH TOP CONNECTION**
Steps 3 and 4 apply to a top connection to existing chimney.

# Connection to outdoor air

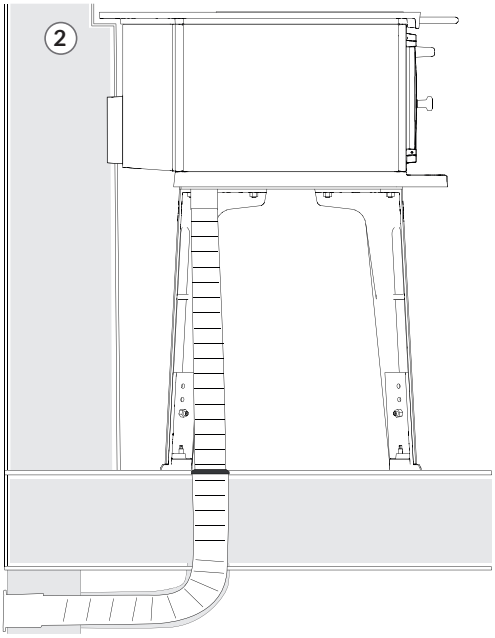
**MECHANICAL VENTILATION**
A lot of houses built in recent years have mechanical ventilation. The chimney's ability to create negative pressure in the firebox is thus affected and can lead to less functionality in the stove or wood-burner.

**EXTERNAL SECONDARY COMBUSTION AIR**
One solution is to install an outdoor air connection on the secondary air inlet. Outdoor air can then be led into the firebox and used as secondary combustion air. This creates the conditions for ensuring the negative pressure in the firebox is -12 Pa.

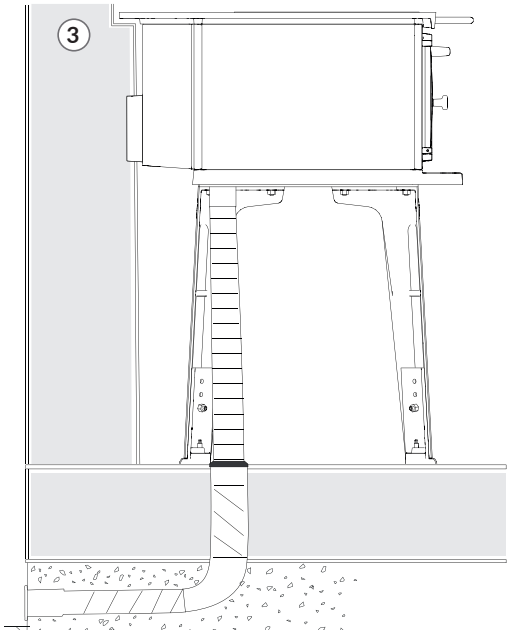
**CONNECTION TYPES**
There are different ways to connect outdoor air to your wood-burning stove depending on the type of house you have. Some take air directly through the outer wall, others go down into the floor and then out through the foundation of the house. If you take it down into the floor, it's important that the supply air pipe is insulated to prevent condensation.




Connection of outside air via outer wall.




Connection of outside air via foundations.




Outdoor air via base plate. Common in new constructions.

Connection package Ø60mm for secondary air intake. Item no. 990000934.

# Operation

**THIS IS HOW YOUR WOOD-BURNING STOVE WORKS**
Primary air is supplied by leaving the firebox door ajar during the wood filling and lighting phase. The secondary air is supplied through the intake under the stove. The secondary air is then heated in the stove and finds its way to the fire via the holes in the vermiculite plates in the firebox. The flames leave the firebox by going over the ceiling of the oven, down the right side of the stove and then towards the back edge of the stove. The flue gases leave the stove at the back or top, depending on the connection to the chimney.

**FUEL**
You will get the best heating value from split birch wood. The wood should have a moisture content of 15–20%. For normal burning, 1 kg of wood will be enough for 40 minutes.

**FLUE GAS DAMPER**
If the stove is connected at the back, there is an optional flue gas damper that can also be retrofitted. The power of the chimney draught can be adjusted with the help of the damper. In case of strong draught, the damper can reduce the negative pressure in the firebox. If the damper is left completely open, the chimney's full potential will be utilised instead.

**LIGHTING**
Turn the secondary air knob downwards to open the secondary air intake. Open the firebox door and place firelighters in the centre of the firebox. Stack small pieces of wood across each other on top of the kindling briquettes. Light the cubes. These in turn will ignite the wood. Leave the firebox door ajar for a while until the wood has properly started to burn.

**COMBUSTION**
The wood in the firebox burns due to the supply of primary and secondary air.

Primary combustion air is air that is supplied directly to the firebox. On the JD27, JD227 and Idun No1 wood-burning stove models, primary air is supplied most easily by not fully closing the firebox door.

Secondary combustion air is air that is supplied to the firebox indirectly. The amount of secondary air can be adjusted during operation via the knob on the front of the stove. The secondary air is led through channels in the stove and heated before it reaches the firebox. With preheated combustion air, burning becomes more efficient.

Secondary combustion air is supplied to the firebox via the air inlet from either surrounding indoor air or outdoor air if a separate outdoor air connection is installed on the stove.

**REFILLING WOOD**
Open the door carefully to avoid smoke escaping. Spread the ash and embers into an even layer. Fill with wood and leave the firebox door open for a while until the fire is burning properly. Refilling of wood should take place when there are only embers in the combustion chamber.

**CONTINUOUS BURNING**
To burn properly, it's important to achieve the highest possible temperature in the firebox. This will ensure clean combustion and get the maximum use of the wood. With clean combustion, you reduce soot buildup in the firebox and on the glass. When you're burning wood properly in a hot stove, smoke should not be visible.

**PLATES AND HOBS**
The top of the wood-burning stove is equipped as standard with either hotplates or a full steel hob. If you have chosen the version with a hob, a glass ceramic hob is available as an option for retrofitting.

**BAKE AND FRY**
When cooking, it's advisable to use less firewood and add fuel as needed. This makes it easier to maintain the desired temperature during cooking.

Bringing the food to a boil is best done in the area above the firebox where the hob is hottest. To retain heat, you can push the pots to the side, away from the firebox, where the temperature is lower.

**OVEN DOOR ON JD227**
On the model JD227 wood-burning stove, the oven door opens downwards. A spring mounted at the bottom ensures that the door has good tension and can be opened and closed comfortably.

Over time, the spring may need to be tensioned. Stand in front of the oven and open the oven door fully. Just to the right of the open oven door's right fastening, you can see a screw that fits a 3 mm Allen key. Loosen the screw slightly. Now the larger screw (located beside but on the right edge of the oven door) can be tightened anti-clockwise with a 6 mm Allen key to tension the spring. Once the spring has been tensioned by tightening the larger screw, simply tighten the smaller screw again to lock the spring in position. Finished!

**HOB**
Different hotplates depending on the design.

**CONNECTION**
Choose rear or top connection. Attach the included flue pipe and smoke cover wherever you like!

**STOVE RACK**
Practical stainless steel handle for the stove poker or other accessories.

**FIREBOX DOOR**
JD27 and JD227 are equipped with ceramic glass windows that provide visibility to the inside of the firebox. The Idun has classic doors made entirely of cast iron.


**OVEN DOOR**
The oven is behind the door. Heat-retaining soapstone packages are available as an option. Tailored for placement inside the oven.

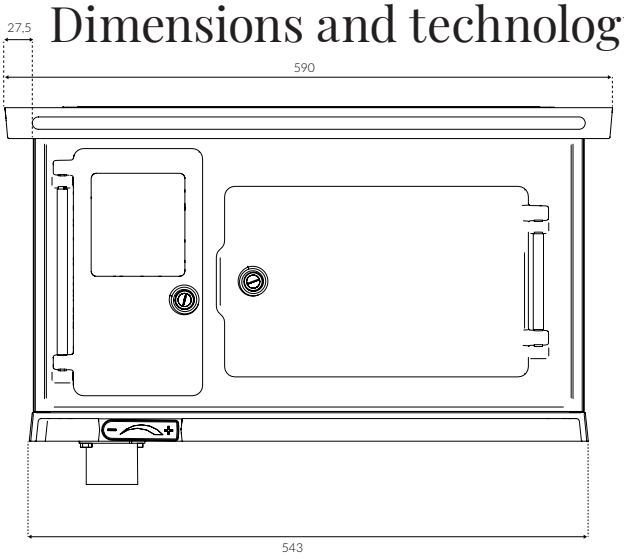
**SECONDARY AIR KNOB**
Just below the firebox door is a knob for adjusting the amount of secondary air.

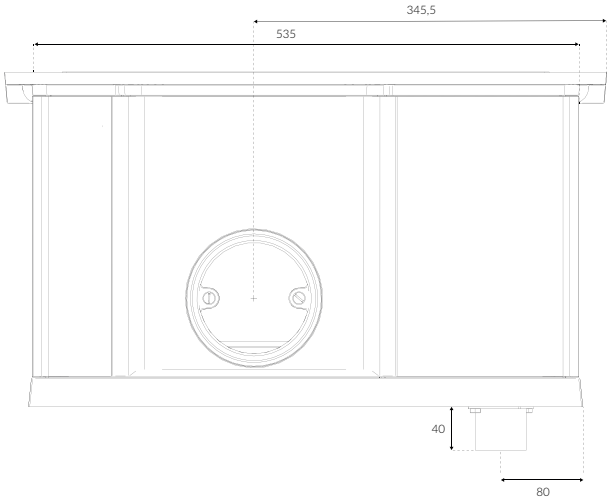
**SOOT TRAP**
At the bottom of the oven there is a soot trap that can be easily lifted off for simple soot removal.

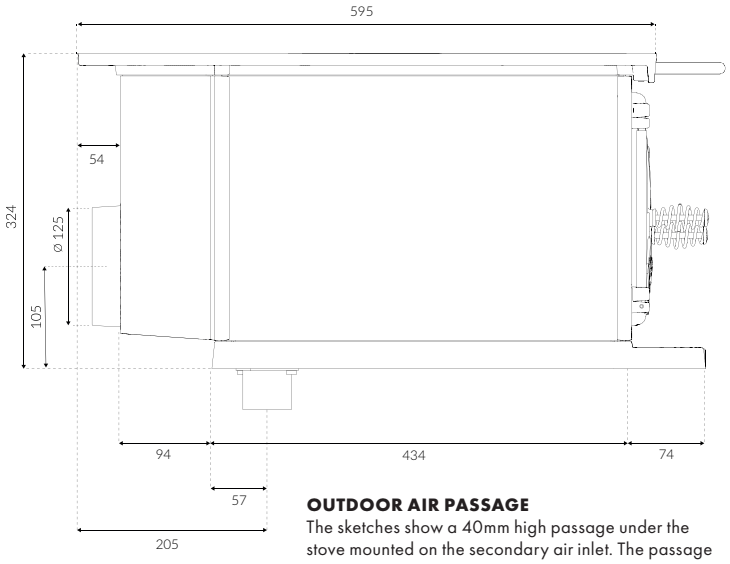
**SECONDARY AIR INLET**
Near the back edge of the stove's underside is a secondary air inlet. This supplies the stove with combustion air. An outdoor air connection is available as an option to take combustion air from another room or from outside.

**PEDESTAL**
Pedestal with adjustable feet is available as an option.

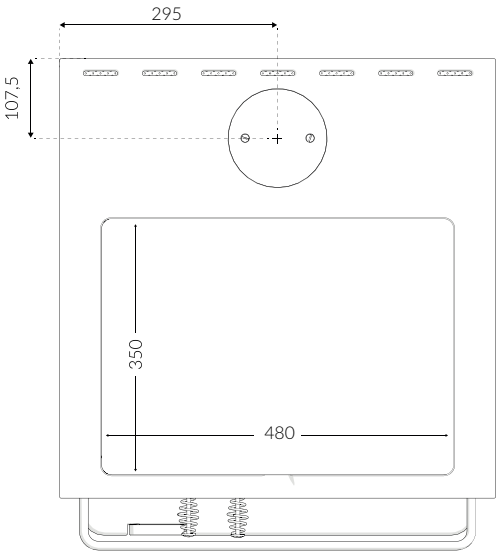
# Dimensions and technology

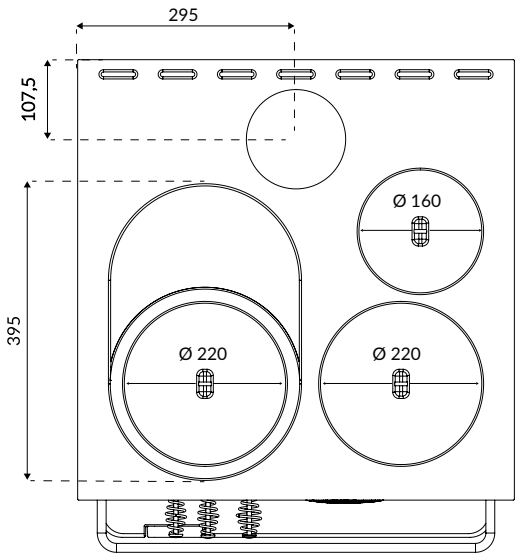



**OUTDOOR AIR PASSAGE**
The sketches show a 40mm high passage under the stove mounted on the secondary air inlet. The passage is a component of the Ø60mm connection package for outdoor air. Item no. 990000934.




| Dimensions, weight and data | |
|---|---|
| Width x Height x Depth | 590 x 324x595 mm |
| Weight | 120 kg |
| Firebox dimensions | 140 x 190 x340 mm |
| Seal tightness classification | B |
| Nominal power | 4.4kW |
| Flue gas temperature | 188°C |
| Flue gas temperature in flue pipe | 226°C |
| Reduce chimney draught | -12 Pa |
| Flue gas flow | 5.9 g/s |

# Maintenance

**SOOT REMOVAL**
Sweeping of chimneys and chimney connections should be done by a qualified chimney sweep. You can carry out everyday cleaning yourself by scraping or brushing away soot and ash from the wood-burning stove.

Clean ash from the grate regularly and empty the ash box when it is full. Keep the firebox and flue pipe clean. If you burn wood often, you should sweep the chimney occasionally between times the chimney sweep visits.

The easiest way to remove soot and clean the firebox is by lifting off the plates or hob. From above, it's easier to clean the firebox and the oven ceiling. The included soot rake should be used to access the right outer side of the oven and the right inner side of the wood-burning stove.

Through the soot hatch at the bottom of the oven, you can access the underside all the way out into the flue of the wood-burning stove if it's connected at the back. When connected at the rear, the smoke cover can also be unscrewed and the rear part can be accessed for soot removal. When connected at the top, the soot from the chimney will drop to the back edge of the wood-burning stove, under the oven. The chimney soot can also be accessed through the soot hatch located in the bottom of the oven.

Wet paper towels with cold ash on them are an effective tool for removing soot from the inside of the firebox glass. Dampen the paper thoroughly, dip it in the ash pan and then rub it against the inside of the firebox glass.

**THE STEEL HOB**
The steel hob is painted black to protect against rust. Handle the hob with care and it will continue to look good for a long time.

**THE CERAMIC HOB**
A glass ceramic hob is available as an option. Keep the hob clean and presentable with lukewarm water and a mild cleaning agent. For harder-to-remove stains, commercially available glass hob cleaners are recommended.

**HOBS**
The hobs are made of cast iron with a turned surface. Use a wire brush for basic cleaning and apply stove polish if necessary.

**SOAPSTONE CEILING**
In older wood-burning stoves, the stove ceiling was insulated against heat with stove clay. This meant that a common maintenance measure was replacing the stove clay layer when necessary. This wood-burning stove uses a soapstone slab instead, which makes stove clay unnecessary and requires no maintenance of the stove ceiling.

**VERMICULITE**
The wood-burning stove's firebox is cladded with yellowish beige boards made of vermiculite. The material can withstand high temperatures and has very good insulation properties. The plates protect the interior of the stove from direct heat and extend its lifespan. They are also relatively easy to replace. Check the vermiculite sheets occasionally to make sure they are intact and not cracked.

**STOVE POLISH**
After a while, stove polish can help bring the stove back to looking like new. The polish also gives the stove some rust protection. Put a small dab of polish on a dry kitchen sponge. Spread the polish everywhere you can reach, including corners and trimmings. Wipe away any excess with a cloth. Done!

| CE **SWE** \| EN \| DE | 25<br>NB 0402<br>**Vedspis JD 27, JD 227, IDUN NO1**<br>DoP Nr JD_27_227_IDUN_NO1_ 250401<br>EN 12815:2001/A1:2004<br>SS-EN 16510-2-3:2022 |
|---|---|
| **Produkttyp** \| Product type \| Produkttyp | **Köksspis för eldning med fast bränsle typ B**\| Cooker fired by solid fuel type B\| Herde fur feste Brennstroffe typ B |
| **Avsedd användning** \| Intended use \| Verwendung | **Rumsvärmare** \| Space heater \| Raumheizung |
| **Rekommenderat bränsle** \| Recommended fuel \| Empfohlener Brennstoff | **Ved** \| Firewood \| Brennholz. |
| **Utsläpp av förbränningsprodukter \|** Emissions of combustion products \| Emissionen von Verbrenunngprodukten.( **13% $O_2$**) | CO 0,09% \| CO 1121mg/m³ \| OGC 77 mg/m³ \| NOx 98 mg/m³ \| PM 39 mg/m³ |
| **Brandsäkerhet** \| Fire safety \| Brandschutz | **Klarar** \| Pass \| Zugelassen |
| **Minsta avstånd till brännbart material \|** Minimum distance to flammable materials \| Mindestabstand zu brennbaren Materialen. | **Bakom** \| Behind \| Hinter 500 mm.<br>**Sidled** \| Sideways \| Seitlich. 500 mm.<br>**Ovan** \| Above \| Oben. 1000 mm.<br>**Framför** \| In front \| Vor. 1000 mm. |
| **Yttemperaturer** \| Surface temperatures \| Oberflächentemperatur | **Klarar med handske \|** Pass with glove \| Mit Handschuhe zugelassen |
| **Nominell värmeeffekt**\|Nominal heat output\| Nennvärmeleistung | 4,4 kW |
| **Rumsvärmeeffekt** \|Space heating output\| Raumvärmeleistung | 4,4 kW |
| **Minsta skorstensdrag vid nominell värmeeffekt** \| Minimum flue draught at nominal heat output \| Minimaler Schornsteinzug bei Nennvärmeleistung | 12,0 Pa |
| **Verkningsgrad \|**Efficiency \| Wirkungsgrad | 79 % |
| **Säsongsverkningsgrad \|** Seasonal efficiency \| Saisonwirkungsgrad | 69 % |
| **Energieffektivitetsindex \|** Energy efficiency index \|Energieeffizienzindex | 105 |
| Josef Davidssons Eftr. AB, Jättevägen 1, 333 75 Reftele, Sweden<br>JOSEF DAVIDSSONS since 1882 | Serienummer \| Serial number \| Seriennummer |

JOSEF DAVIDSSONS

since 1882

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