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# It'll soon be time to light your first fire.

#### Congrats on your new wood burning stove!

All of us at Josef Davidssons hope that you, like many other people around the country, will enjoy many, many wonderful moments in the kitchen. The wood burning stove is a solid product that works just as well for cooking as it does on cold winter evenings.

This manual contains instructions on how to install your wood burning stove as well as maintenance advice and tips on the best way to light the fire. Don't hesitate to contact us if you have any further questions about using a fire or about your wood burning stove.

Warm regards, Josef Davidssons

## TECHNICAL FACTS - SMÅLANDSSPISEN 1896

Efficiency (%)	83
Nominal Power (kW)	4.5
Heating surface (approx. m²)	30-70
Weight (kg)	160
Oven size (WxHxD mm)	320x185x490
Log length (mm)	Max 380
Flue pipe dimension (Ø, mm)	190x75
Rear connection Ø125 top connection	
Distance to combustible material	See page 10-11

CE marked according to standard EN12815

## TECHNICAL FACTS - IDUN NO 1

Efficiency (%)	83
Nominal Power (kW)	4.5
Heating surface (approx. m²)	30-60
Weight (kg)	119
Oven size (WxHxD mm)	280x165x425
Log length (mm)	Max 330
Flue pipe dimension (Ø, mm)	175x75/
Rear connection Ø125 adaptor	
included with top connection	
Distance to combustible material	See page 10-11

CE marked according to standard EN12815

## TECHNICAL FACTS - SMÅLANDSSPISEN 28

Efficiency (%)	83
Nominal Power (kW)	3.5
Heating surface (approx. m²)	20-50
Weight (kg)	94
Oven size (WxHxD mm)	235x140x370
Log length (mm)	Max 290
Flue pipe dimension (Ø, mm)	155x78/adapter
Ø125 adapter included	
with top connection	
Distance to combustible material	Se page 10-11

CE marked according to standard EN12815

# IMPORTANT BEFORE YOU GET STARTED!

#### **Professional mounting**

The manual contains instructions on how to mount and install your wood burning stove. To ensure the function and safety of the range, we recommend that installation be carried out by a professional. Contact one of our dealers who can assist with the installation or recommend a suitable technician.

#### **Planning permission**

When installing a fireplace and building a chimney, planning permission must be applied for with the municipality's planning commission. Contact your local planning commission if you are unsure of how the application works. Information is also available on your municipality's website.

### Load-bearing substrate

Make sure that the ground floor in your home has sufficient bearing capacity for a wood burning range with a chimney. Normally, a wood burning range and chimney can be placed on a standard wooden frame in a single-family house if the total weight does not exceed 400 kg.

#### **Outer hearth**

Ember coming from the range poses a risk of fire. If you have a flammable floor in front of your wood burning range, it must be protected by a hearthstone that covers at least 300 mm in front of the door and 100 mm along each side. The hearthstone can consist of, for example, natural stone, concrete, sheet metal or glass.

The specified safety distances in this manual apply to the Swedish market. If the wood burning range is installed in another country, the local regulations must be met.

## NB!

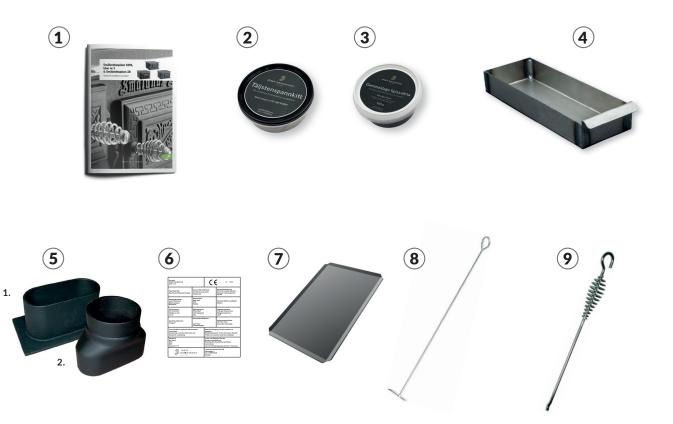
The installation must be inspected by a competent chimney sweeper before using the range.

### WARNING! THE WOOD BURNING STOVE GETS VERY HOT

When burning, some areas of the wood burning range become very hot and can cause burns when touched. If flammable material is placed closer than the specified safety distance, it can quickly catch fire. Smouldering fires can quickly cause gas to ignite, with the risk of injury to persons and property.

# WHAT IS INCLUDED IN THE WOOD BURNING RANGE?

Make sure all parts are included in the package on delivery.



## 1. Installation manual

Guide to installation and maintenance of your wood burning range.

**2. Refractory mortar** Sealing for connection to the chimney.

#### 3. Stove paint

Black paint for maintenance of the stove.

**4. Ash pan** Collects ashes left after burning.

## 5. Wall mounting connectors/Oval connectors

For installation instructions, see page 10.

- 1. Oval-shaped included with rear connector
- 2. Wall mounting connectors included for connection above (not applicable to Smålandsspisen 1896 (Old Sweden) and later)

### 6. CE mark

Shows that the product meets all basic health and safety requirements defined in the Construction Products Directive.

### 7. Baking tray

For use when baking in the oven. Do not forget to remove the protective plastic film before use.

### 8. Soot rake

Accessories for sweeping the stove.

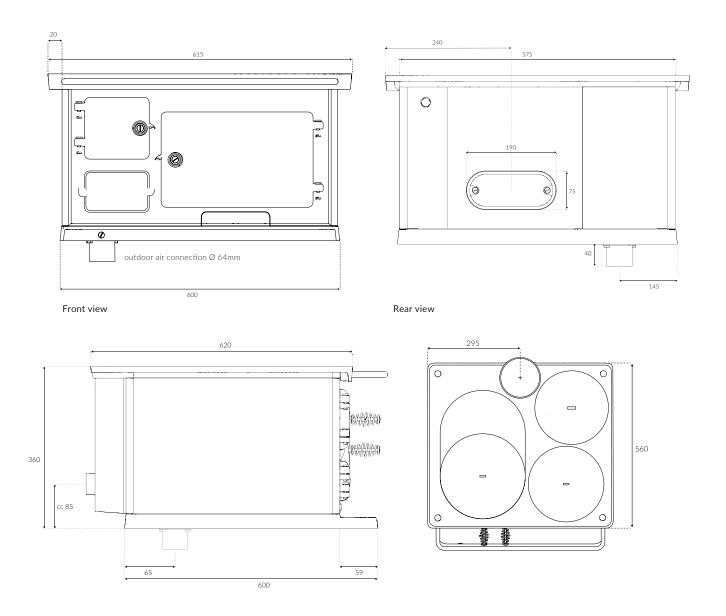
## **9. Poker** Handy poker included.

## TIP!

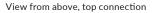
The pallet should be recycled as untreated wood. Corrugated cardboard is sorted as corrugated cardboard and plastic tapes go into the flammables container at the recycling centre.

## SMÅLANDSSPISEN 1896 (OLD SWEDEN) MEASUREMENTS AND INSTALLATION

Here are the most important dimensions required for proper installation and optimal operation. All measurements are indicated in millimetres.



Side view, rear connection

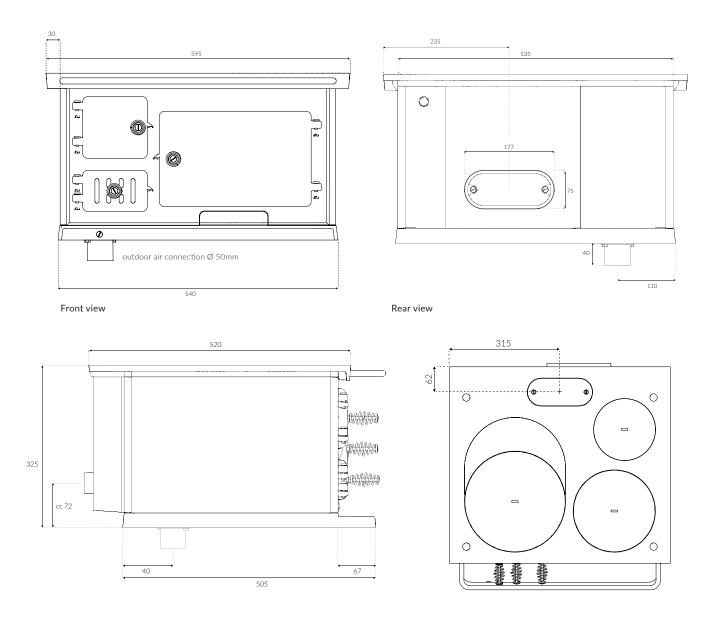


### NB!

Keep in mind that the hearthstone (floor cover) should cover at least 300 mm in front of and at least 100 mm on the side of the fireplace opening.

## IDUN NO 1 MEASUREMENTS AND INSTALLATION

Here are the most important dimensions required for proper installation and optimal operation. All measurements are indicated in millimetres.



Side view, rear connection

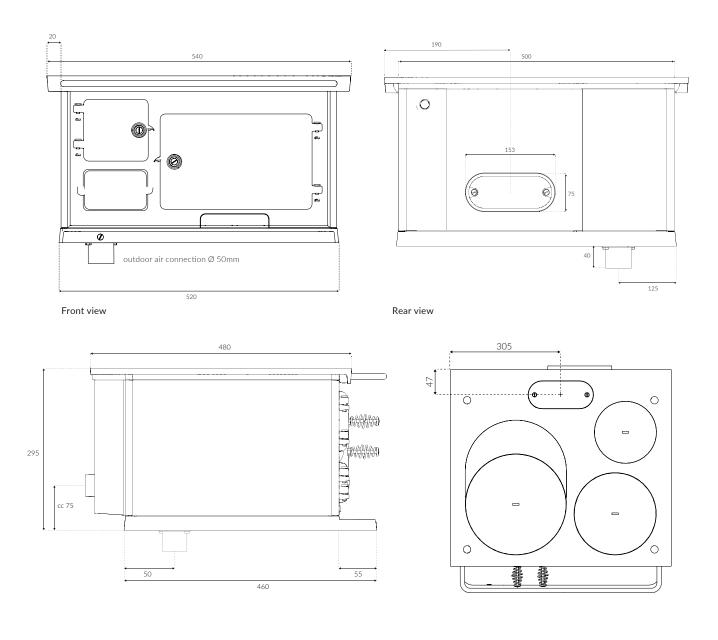
View from above

## NB!

Keep in mind that the hearthstone (floor cover) should cover at least 300 mm in front of and at least 100 mm on the side of the fireplace opening.

## SMÅLANDSSPISEN 28 MEASUREMENTS AND INSTALLATION

Here are the most important dimensions required for proper installation and optimal operation. All measurements are indicated in millimetres.



Side view, rear connection

View from above

### NB!

Keep in mind that the hearthstone (floor cover) should cover at least 300 mm in front of and at least 100 mm on the side of the fireplace opening.



## Installation distance

Please consider the safety installation distance.

The lowest possible ceiling height is 2 000 mm for a safe distance.

Allow for at least 1 000 mm distance to combustible material in front of the wood burning range.

The distances refer to installation with an insulated flue pipe.

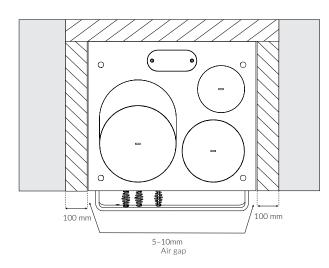
Non-insulated flue pipes must have a distance of at least 500 mm to combustible material.

The stove is tested and approved with a 100 mm firewall, lightweight concrete or similar material for insulation to combustibles. An electric stove is considered combustible.

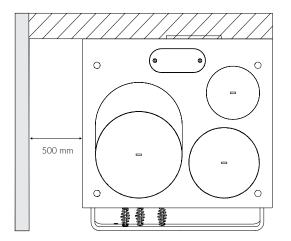
If you choose a diagonal position, keep in mind that the measurement always starts from the centre of the flue pipe.

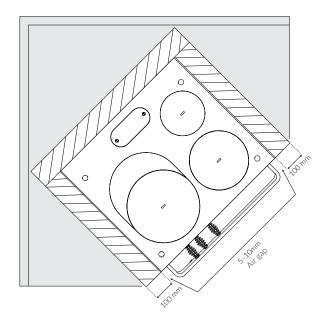
Between the stove and any wall cabinet there must be a safety distance of at least 1 000 mm and 150 mm laterally.

Always contact your chimney sweeper if you are unsure how to place and install your range.



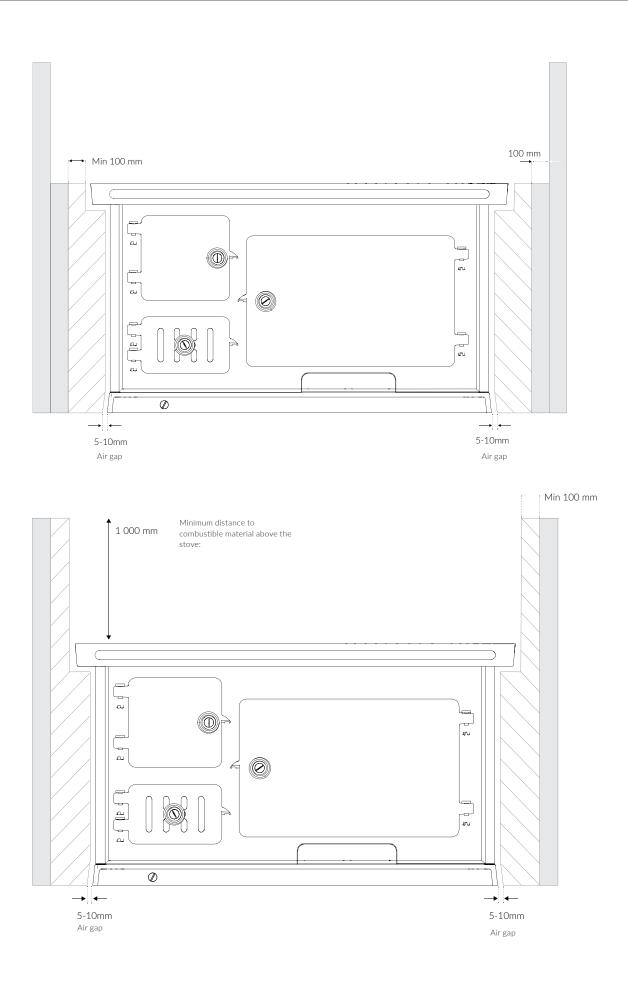
Gray = Combustible wall Striped = Firewall White = Air





#### **IMPORTANT!**

Between the range and insulating material (light concrete or the like) there must be an air gap of 5-10 mm. This is to enable the stove to shift between cold and hot.



# ABOUT YOUR WOOD BURNING STOVE

## Manufacturer's declaration

The product meets the requirements of and is CE marked according to EN12815 standard. Instructions for installation and maintenance are included in an additional document.

## General

The wood burning stove is made of heavy castings and the fireplace is fitted with a protective cast iron plate. The oven ceiling is clad with soapstone for additional heat protection and for a more even temperature in the oven. Due to the heat retaining material, the stove will emit plenty of residual heat for several hours after use.

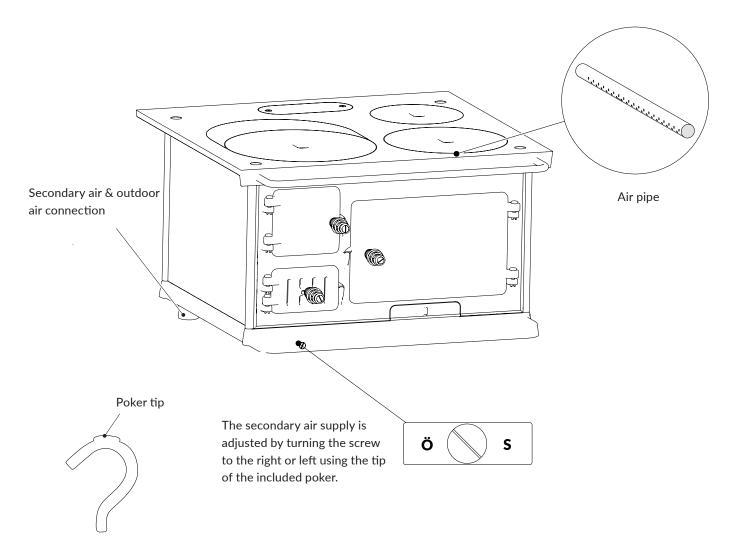
## HERE'S HOW YOUR WOOD BURNING STOVE WORK

## **Combustion air**

The primary air is supplied when the glass door of the range is left half-open during the filling up of firewood and during the ignition phase. There is also a primary air damper which is adjusted on the ash hatch/tilt damper. This damper is used if you need to intensify the fire when the fireplace door is completely closed.

Secondary air is supplied through a fresh air intake under the stove. The secondary air is then heated in the range and disseminates into the fire through the holes in the branding iron.

The flames leave the fireplace by moving across the oven ceiling, where the flames are oxygenated once again via the air pipe (*clean burning technology*) for optimal combustion. The flames then travel down the right side of the stove. They then travel towards the rear edge of the stove and leave the stove at the rear or at the top depending on the connection to the chimney.



## INSTALLATION AND MOUNTING

The wood burning stove meets the requirements for connection to a chimney designed for 350°C smoke temperature.

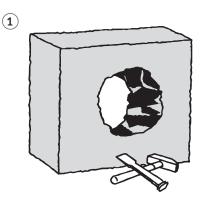
The optimum chimney draft is between -10 to -15 Pa. The draft is mainly affected by the length and area of the chimney, but also by how pressure-tight it is. The minimum recommended chimney length is 3.5 m, and the appropriate cross sectional area is  $120-180 \text{ cm}^2$  (125 mm in diameter).

A flue with narrow bends and horizontal draught reduces the draft in the chimney. The maximum horizontal flue is 500 mm, provided that the vertical flue length is at least 5 m. It should be possible to sweep the flue throughout its length, and the soot doors must be easily accessible.

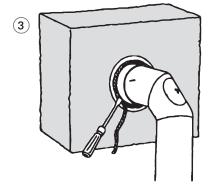
Check that the chimney is sealed and that no leakage occurs near the soot doors and smoke connections. The range can be connected to the chimney with several fireplaces.

All chimney accessories are available from your nearest reseller or on our website josefdavidssons.se.

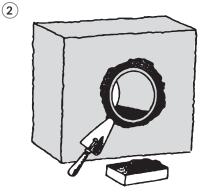
## CONNECTING THE RANGE TO AN EXISTING CHIMNEY



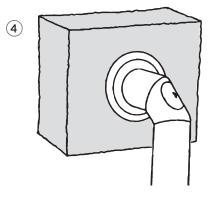
Carefully open a hole in the spot where you will connect your wood burning range to the chimney stack.



Stuff with tow material between the flue and the wall mounting connectors.



Immure the wall lining.



Finish with the flue rosette to seal the installation.

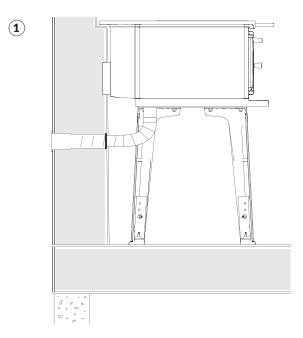
#### NB!

Steps 3 and 4 apply to a top connection to an existing chimney. When connecting straight backwards to an existing chimney, no tow material is used, rather the refractory mortar included.

# CONNECT OUTDOOR AIR TO THE WOOD BURNING STOVE

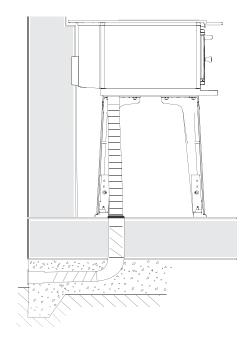
For the optimal function of the stove, the fireplace needs around 20  $m^3$  air per hour.

If you have mechanical ventilation in your house, you should connect outdoor air to your wood burning stove. Otherwise you risk the wood burning stove disturbing air streams that go to the mechanical ventilation's air vents. There are different ways to



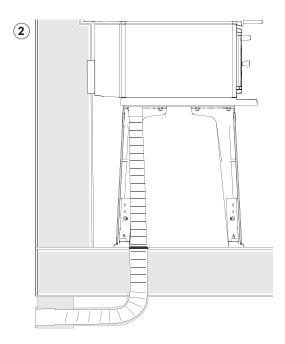
Connection to outdoor air via outer wall.

3



Connection to outdoor air via bottom plate. To be used primarily for new-builds.

connect outdoor air to your wood burning stove, depending on what type of house you live in. Some take air directly through the outer wall, others go down into the floor and then out through the foundations. If you use the foundations, it's important that the air supply pipe is insulated to prevent condensation build-up. Contact your reseller if you are unsure which connection is best for your house. No matter the solution, a spiro duct or similar with a diameter of Ø100 mm should be installed to the wall / floor.



Connection to outdoor air via foundations.

#### **NB! IMPORTANT!**

If you do not connect to outdoor air, space must be freed up under the stove by the air supply duct. This is because the combustion air travels in this direction regardless of whether you connect an external air supply or if the air in the room is used.

For example, if the stove is bricked in, it must allow for a free passage of air to reach the air supply duct under the stove. Otherwise, the fireplace will not have an oxygen supply.

Our connection kit for connecting outdoor air is available from your reseller or at josefdavidssons.se

## Connection kit for outdoor air

- Art. no. 990000932
- Connector Stove
- Flexible tube (1 m)
- Tube clamp (x2)Adapter from tube to 100 mm

Connection pipes from the wall / floor and out are not included in the kit.

# COMMON REPLACEABLE PARTS

The wood burning stove is built to be used for decades to come, but do not forget to replace wear details when needed.

Keep an eye on the branding iron and grates and replace the parts when worn out.

## SMÅLANDSSPISEN 1896 (OLD SWEDEN)

1	101896101-1	Outer iron plate
2	101896102-1	Branding iron
3	101896301-1	Rear iron plate
4	101896303	Grates
5	101896302-1	Grate frame
6	101896311	Half moon

Spare parts and other accessories can be ordered on our website josefdavidssons.se

## IDUN NO 1

1	101930101-1	Outer iron plate
2	101930102-1	Branding iron
3	101930301-1	Rear iron plate
4	101930303	Grates
5	101930302-1	Grate frame
6	101930311	Half moon
7	101930307	Smoke cover (without screws)

## SMÅLANDSSPISEN 28

1

2

3

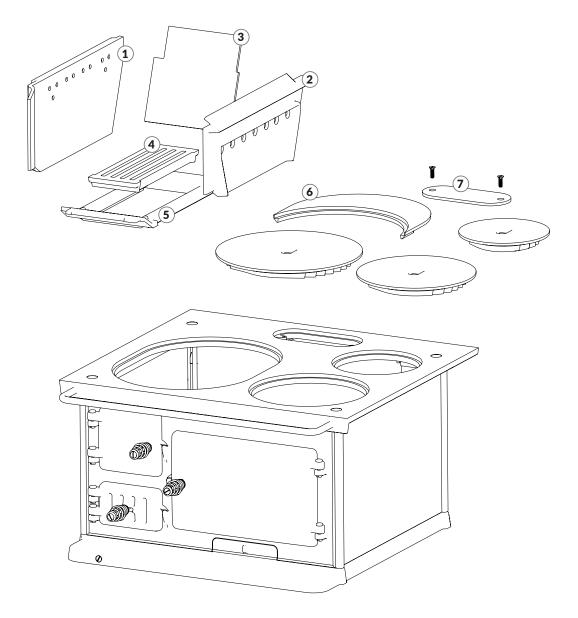
4

5

6

7

100028101-1	Outer iron plate
100028102-1	Branding iron
100028301-1	Rear iron plate
100028303	Grates
100028302-1	Grate frame
100028311	Half moon
100028307	Smoke cover (without screws)





## HOW TO REPLACE BRANDING IRON, REAR IRON PLATE AND GRATES

## **NOTE!** Never unscrew the cooker hob / top! This invalidates the warranty.

**1.** Remove the hotplates / rings and the half moon above the fireplace.

2. Start by angling the right plate inwards at the back edge, then angle it upwards to remove it. Repeat for the left plate. The rear iron plate is now loose and can be removed. (*Rear iron plate does not apply Smålandsspisen 1896, OLD SWEDEN*)

**3.** Start with the rear iron plate when installing the replacement parts. Then install the left followed by the right plate.

**4.** The grate is loose. The grate can be pried open with a screwdriver or similar.

The side plates may be stuck if they have been deformed by heat. Tap carefully with a hammer and use a screwdriver to loosen the iron plate.

## MAINTENANCE

Continuously maintain your stove and treat it with stove paint when necessary. Mild rust can be removed with the coarse side of a sponge. Then apply stove paint.

Ash should regularly be removed from the grate. The easiest way to do this is with a piece of wood or a poker prior to ignition.

Empty the ash pan as soon as it is full. Do not empty the ash pan when the stove is lit as there may be sparks.

Keep the fireplace and flue clean. If you use the stove often, you should sweep the chimney every once in a while in-between visits from the chimney sweep.

Products and recommendations can be found on our website josefdavidssons.se

### Sweeping the wood burning stove

The easiest way to clean / sweep the fireplace is by lifting up the hotplates / cooking rings. This enables you to access the entire fireplace and oven ceiling for cleaning.

The supplied soot rake is used to access the right hand side of the oven and the inside of the right outer side. The underside of the oven all the way to the flue (applies to rear connection) may be accessed through the soot hatch located beneath the oven door.

In case of a top connection, the soot from chimney will end up at the rear edge beneath the oven. This soot can also be accessed through the soot hatch located beneath the oven door.

# HOW TO USE THE STOVE CORRECTLY

## **First fire**

A new wood burning stove should be fired with care during the first few occasions. This makes the heatresistant colour more durable. There may also be a slightly unpleasant smell the first few times you use the fire. This is completely normal and

due to excess paint or oil remaining on the iron casting. The smell will disappear quite quickly and won't come back.

### Combustibles

The best heat value is obtained from split birch wood. Hardwood trees generally burn more calmly than softwood, which creates a more even heat. If you are burning oak, beech or other wood with high heat value, always mix the wood with other types of wood. Otherwise you risk damaging your fireplace. The wood should be dry, with preferably 15-20% moisture content. For a normal fire, approximately 1-1.5 kg wood / hour is a suitable amount of wood. 1 kg birch wood produces about 4 kW power.

#### Lighting the fire

Open the air supply damper fully. Place briquettes in the centre of the fireplace. Pile up about 1 kg of small wood logs crosswise, like a log house, on top of the briquettes. Start by lighting the briquettes. These should, in turn, ignite the wood. Keep the fireplace door ajar for the first few minutes until the wood is properly lit. Depending on the chimney draught, you may need to leave the door open slightly longer to build a temperature in the fireplace and to create a satisfactory chimney draught. Then close the door and adjust the valve to the desired intensity of the fire. The range should be properly heated before starting to reduce the air supply.

**NB!** If the flames slow down too much when you close the fireplace door completely, some primary air may be supplied. This damper is located on the ash hatch. When the stove has reached the right temperature and a satisfactory chimney draught has been achieved, the primary air damper should be closed for a cleaner combustion.

#### **Adding firewood**

When the intensity of the fire has decreased, it is time to replenish. Open the door carefully. That way, you avoid smoke gusts. Use a fireplace tool or a piece of wood to distribute ash and glow. Replenish with 2-4 logs and close the door when the wood has ignited properly (1-1.5 kg wood).

#### **Continuous fire**

In order to use the fire correctly, it's necessary to achieve as high a temperature as possible in the fireplace. Then you'll have a clean combustion and get the most out of the range and the firewood. With clean combustion, you avoid soot coating the fireplace. When you use the fire correctly, smoke shouldn't be visible.

## FIRE-LIGHTING PROBLEMS AND SOLUTIONS

## **Poor draught**

- The connection to the chimneystack has not been properly sealed. Ask the chimney sweep to check the connection between the stove and the chimney is completely sealed.
- The flue pipe is clogged. Clean the flue pipe and combustion chamber.
- The chimney is too short, has too much cross-sectional area or has been clogged by a bird nest. Contact chimney sweep or reseller for guidance.
- Negative pressure in the home. Open a window or place an exterior wall vent near the range.
- The firewood has too much moisture content or is too cold. Only use dry wood at room temperature with a maximum moisture content of 20%.

## Draught is too strong

- False air enters the fireplace.
- The chimney is too long. Contact chimney sweep or reseller for guidance.

## Smoke gets into the room when the door is opened

- Opening the door too quickly causes pressure equalisation in the combustion chamber. Open the door slowly.
- Poor chimney draught. Contact your chimney sweep or reseller to check the height of the chimney in relation to the draught that the stove requires.
- Too much negative pressure in the home. Open air supply vent or window to increase oxygen in the air.

#### White smoke

- Combustion temperature is too low. Increase air supply.
- The wood is damp and contains water vapour. Use clean and dry combustibles.

## Black or dark grey smoke

• Incomplete combustion. Increase air supply.



Smålandsspisen 1896 (Old Sweden), Idun no 1 & Smålandsspisen 28

# WARRANTY CERTIFICATE

## WARRANTY TERMS

Josef Davidssons Eftr AB is responsible for ensuring that the products are not defective in way that can be attributed to manufacturing or storage at the factory. The warranty is valid from the date of delivery to the customer.

Josef Davidssons Eftr AB accepts no responsibility for dismantling and assembly costs for replacement of a stove.

Josef Davidssons Eftr AB accepts no liability for costs due to downtime or other direct or indirect costs or damage.

The warranty conditions do not apply to glass or the replaceable fireplace parts. Warranty period for grates, branding iron and glass is 1 year.

**10 years** Smålandsspisen 1896 (Old Sweden), Idun no 1, Smålandsspisen 28

Markus Ander Milacel Dec

Markus and Mikael Andersson, owners

#### NB!

The installation of a fireplace must be reported to the local planning commission. The homeowner is responsible for ensuring that the required safety requirements are met and must have the installation checked by a qualified inspector.

The chimney sweeper must be informed about the installation as it causes a change in the need for sweeping.





## **CUSTOMER SERVICE & CONTACT**

Our Customer Service offers you personal help and answers to your questions. Contact us by phone or email.

Josef Davidssons, Jättevägen 1, 333 75 Reftele, SWEDEN

Phone: +46 371 - 200 01 | info@josefdavidssons.se | josefdavidssons.se/en

