

Heimdall 790

Manual for preparation, installation, operation and maintenance.



JOSEF DAVIDSSONS
since 1882

A⁺

Made in Sweden

Heimdall 790 is manufactured in Reftele, Småland by Josef Davidssons AB.

Your new wood-burning stove is a timeless and effective heat source with more than 150 years of development and history behind it.

The Heimdall 790 is equipped with the latest combustion technology to provide maximum heat output in a sustainable way. We hope you get a lot of pleasure and enjoyment from using your new wood-burning stove.

Warm greetings from
Josef Davidssons AB

Heimdall 790

Warranty

Josef Davidssons AB is responsible for the product being manufactured without faults.

The warranty covers all parts of the stove and is valid from the date of delivery to the customer.

warranty period for grates, vermiculite sheets and glass in the fireplace and oven doors is 1 year.

The warranty period for all other parts is 10 years.

product the way it came from the factory. Do not make changes to it.



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What comes with the wood-burning stove?

MANUAL

A guide to installation, use and care of your wood-burning stove.

SEALANT

Sealant for connection to the chimney.

ASH BOX

Collects leftover ash after burning.

FLUE GAS CONNECTOR & FLUE GAS COVER

Included with top-connected stove.

MASONRY PIPE, FLUE PIPE & FLUE GAS CONNECTOR

Included with rear-connected stove.

BAKING TRAYS

Two baking trays and a long pan in Corten steel for use in the oven of the wood-burning stove.

SOOT RAKE

For cleaning the fireplace.

ALLEN KEY

For adjusting the height of the stove

STOVE HOOK

This stove hook can also be used to adjust the flue gas damper.

GLOVE

Protects you against the hot parts of the stove.

Before you start!

PLANNING APPLICATION

When installing a fireplace and erecting a chimney, planning application has to be submitted to the local authority's planning committee. Contact your planning committee if you feel unsure about how to make the application.

INSPECTION

The installation must 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

The right draught is important! See the section 'Connecting to a chimney' later in this manual.

The wood-burning stove gets very hot.

When in use, certain surfaces of the wood-burning stove will be very hot and could cause burns if touched. Also, be careful about the powerful heat that radiates through the glass of the hatch. If combustible material is nearer than the specified safety distance, it may start to burn quickly. Setting fire to wood can cause rapid ignition of gas with the risk of damage to people and property.

Installation

PREPARATIONS

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

THE ROOM FOR INSTALLATION

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 can affect the air supply.

More air can be supplied via ventilation openings to adjacent rooms. An outside air connection to 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 exhaust air package which is sold separately.

ADJUSTABLE STOVE HEIGHT

The total height of the stove can be adjusted between 880-920 mm. The adjustable feet also allow for a lowered position when the stove is only 850-880 mm. A lowering kit with plinth plates can be ordered as an accessory.

INSTALLATION WITH REAR CONNECTION

Measure the height of the wall stud from the floor and raise the stove to the correct level using the adjustable feet. Apply sealant to the in-wall connector and flue gas connector. Place the stove a little in front of the in-wall connector and then push the stove into place. The stove is equipped with wheels, which makes the procedure easier.

INSTALLATION WITH TOP CONNECTION

Adjust the stove to the desired height using the adjustable feet. Slide the stove into place. The stove is equipped with wheels, which makes the procedure easier. Install the accompanying top mounting kit. Ensure that the chimney's first flue pipe is fitted with a soot door and preferably a flue gas damper.

DISTANCE ABOVE THE STOVE

The lowest possible ceiling height should be 1100 mm from the stove's top plate for a comfortably safe gap.

There should be a safety gap of at least 1100 mm upwards and 200 mm across between the cooker and any overhead cabinet.

GAP IN FRONT OF THE STOVE

In front of the wood-burning stove, there needs to be a distance of 700 mm from any combustible material.

DISTANCE NEXT TO THE STOVE

Make sure that there is an air gap of at least 5 mm on both sides of the stove.

DISTANCE BEHIND THE STOVE

The stove must always be installed with fire-rated material, concrete or similar, at the back.

Fire-rated material behind the stove must reach at least 1100 mm above the stove top and 200 mm on each side of the stove.

FLUE PIPE

The distances refer to installation with an insulated flue pipe. Non-insulated flue pipes must be at 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.

TOP & REAR CONNECTION TO THE CHIMNEY

See more information in the section 'Connection to a chimney' later in the manual

FIREPLACE FLOOR COVER

Falling embers from the stove can entail a risk of fire. If you have a flammable floor in front of your wood-burning stove, it needs to be protected by a fireplace floor cover that covers at least 300 mm in front of the fireplace hatch and 100 mm along each side. The fireplace floor may consist of, for example, natural stone, concrete, sheet metal or glass.

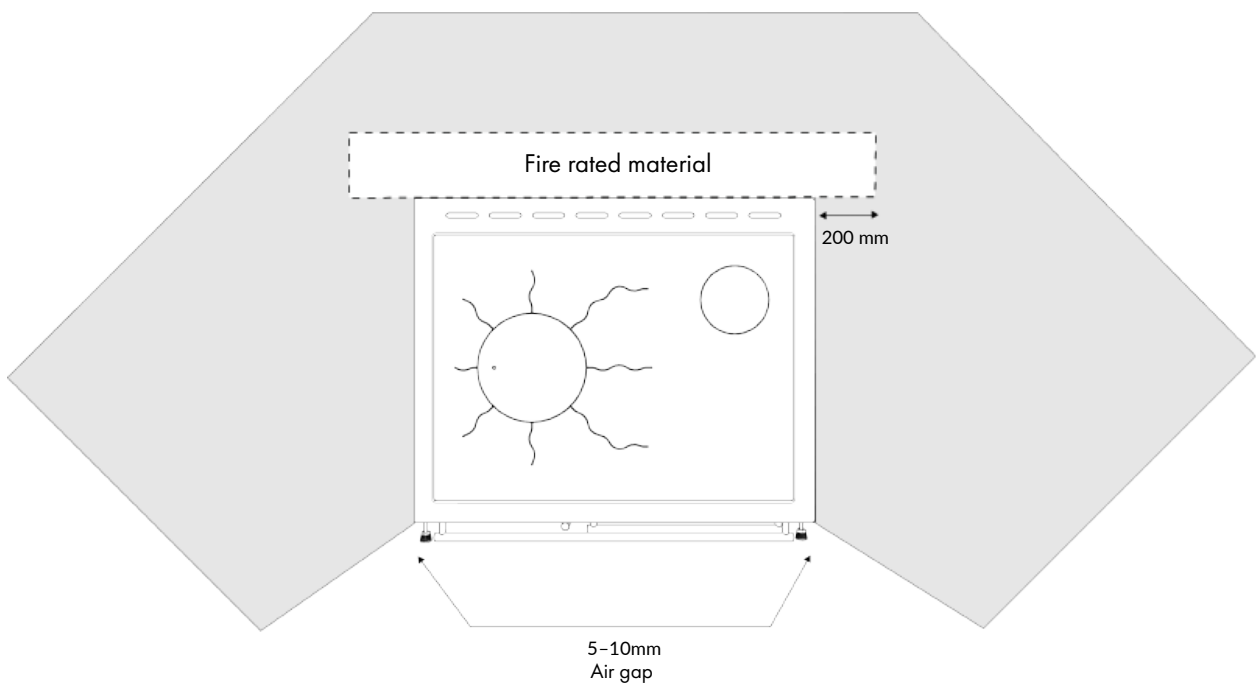
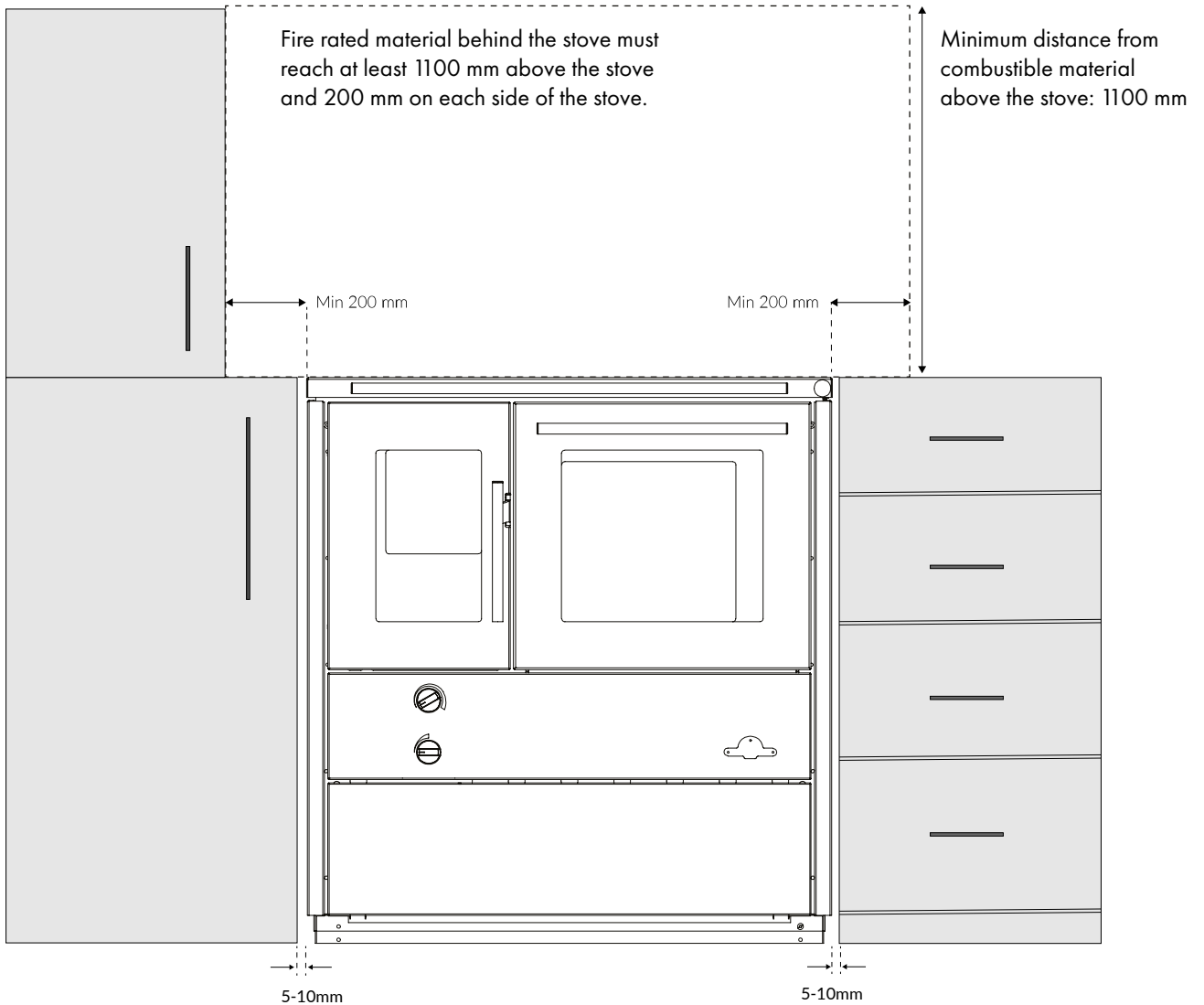
RECYCLING

The packaging used during transport can be recycled. The wooden packaging should be sorted as untreated wood, the cardboard as corrugated cardboard, and the plastic straps as plastic.

CHIMNEY FIRE

If a chimney fire occurs or is suspected to occur, close the combustion air damper and the fireplace hatch. If necessary, contact the fire brigade if it needs to be extinguished. After a chimney fire, the chimney must always be inspected by a professional chimney sweep.

Important measurements



Connection to the chimney

CONNECTION

The chimney must be of type T400. The diameter of the connection socket measures 120 mm on the outside, for both back and top connections.

CHIMNEY DRAFT

A well-functioning chimney that, with a suitable draft, creates an appropriate amount of negative pressure in the fireplace is a prerequisite for the wood-burning stove to function. The negative pressure in the fireplace has to be at least -10 Pa. Recommended vacuum is -10 to -15 Pa. The draft is mainly influenced by the length and area of the chimney, but also how dense it is.

SMOKE FLUE

A flue with sharp bends and horizontal draft reduces the draft in the chimney. The maximum total horizontal smoke flue should be 50 cm, provided the vertical flue length is at least 500 cm.

The flue has to be able to be swept along its entire length, and the soot hatches have to be easy to access.

Check that the chimney is sealed and that there are no leaks around soot hatches and at smoke connections.

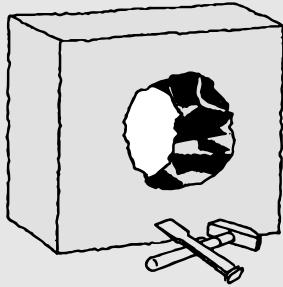
The wood-burning stove may be connected to the chimney with several fireplaces.

TOP CONNECTION

When connected at the top, the chimney must not rest on the hob. The stove cannot be connected at the top if you have a ceramic hob. In the case of a top connection, the first pipe has to have a soot hatch to enable sweeping.

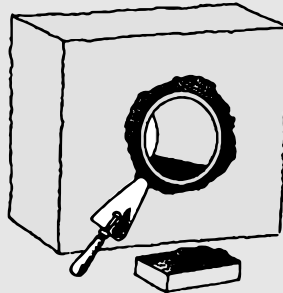
CONNECT THE WOOD-BURNING STOVE TO THE EXISTING CHIMNEY

1



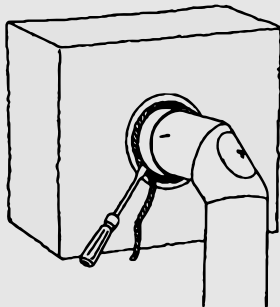
Carefully drill a hole where you will connect your stove into the chimney.

2



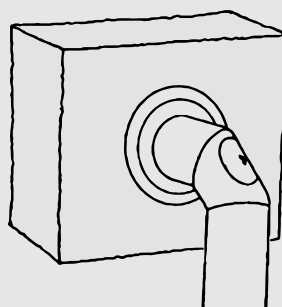
Build the masonry pipe into the wall.

3



Push in some oakum between the flue pipe and the masonry pipe.

4



Finish by using the flue rosette to cover the installation.

FOR REAR CONNECTION

Put sealant on the stove nozzle and put the connection pipe on. Put sealant in the wall nozzle and push the connecting pipe in.

WITH TOP CONNECTION

Steps 3 and 4 apply for top connection to the existing chimney.

Connection to outside air

MECHANICAL VENTILATION

A lot of houses built in recent years have mechanical ventilation. This then affects the chimney's ability to create negative pressure in the fireplace and can lead to impaired function in the fireplace oven or wood-burning stove.

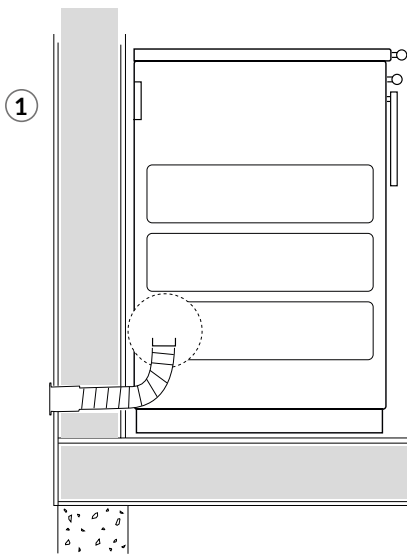
EXTERNAL SECONDARY COMBUSTION AIR

One solution is to install an outside air connection on the secondary air intake. Outdoor air can then be led into the fireplace and used as secondary combustion air. The conditions are then created to secure the negative pressure in the fireplace to the -10 to -15 Pa recommended for the stove.

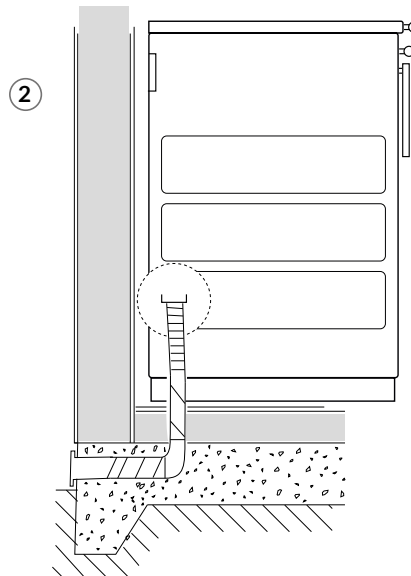
CONNECTION TYPES

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

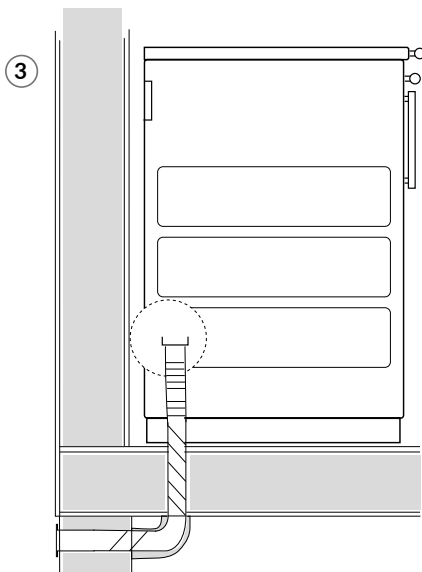
For connection of the external combustion air:
First remove the firewood box to access the connecting nozzle. Connect a flexible aluminium hose $\varnothing 60$, sold separately, to the connection nozzle at the bottom of the stove.



Connection of outside air via outer wall.



Connection of outside air via foundations.



Connection of outside air via base plate. Often used in new construction.



Connection package $\varnothing 60$ for secondary air intake. Article 990000931.

Handling

FUEL

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

BUTTERFLY VALVE

The Heimdall 790 is equipped with a butterfly valve. With the valve open, the path of the flue gases is as short as possible and the draft in the stove is maximised. Open the valve by pulling out the lever on the front of the hob. When the fire is going properly, the butterfly valve should be closed, which causes the smoke gases to take a longer route out. This way, the heat is retained in the stove.

FLUE GAS DAMPER

On a rear-connected stove, the effect of the chimney draft can be adjusted using the flue gas damper. In the event of a strong draft, the damper can reduce the negative pressure in the fireplace. If the damper is left fully open, the chimney's full potential will be used instead. This way, burning is made easier with the recommended lower pressure in the fireplace of -10 to -15 Pa.

IGNITION

Open the butterfly valve, turn the primary and secondary air controls fully to the right and place kindling briquettes in the centre of the fireplace. Stack kindling crosswise, like a log cabin, on top of the kindling briquettes. Start by lighting the briquettes. These should in turn ignite the wood. Leave the fireplace hatch ajar for a while until the wood has started burning properly. The stove needs to be thoroughly warmed up before you start to adjust the primary or secondary air inflows.

COMBUSTION

The wood in the fireplace burns due to the supply of primary and secondary air.

Primary combustion air is air supplied directly to the fireplace. The amount of primary air can be adjusted during combustion by an automatic draft regulator. With the upper knob on the front of the stove, the effect of the draft regulator can be adjusted and more or less primary combustion air will be supplied to the fireplace. With the butterfly valve open, more primary air will be supplied to the fireplace, which is useful at start-up. Additional air can be supplied by not fully closing the fireplace hatch.

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

Secondary combustion air is supplied to the fireplace via the secondary air intake from either ambient indoor air or outdoor air if a separate outdoor air connection is fitted to the stove.

REFILLING WOOD

Open the door carefully to avoid smoke. Spread the ash and embers into an even bed. Fill with wood and leave the fireplace door open for a while until the fire is going properly. Replenishment of wood should take place when there are only embers in the combustion chamber.

CONTINUOUS BURNING

In order to burn properly, it is important to achieve as high a temperature as possible in the fireplace. Then you will have clean combustion and make maximum use of the stove and the wood. With clean combustion, you reduce soot deposits in the fireplace and on the glass. When you use the fire correctly, the smoke should not be visible when the stove has become hot.

CONVECTION HEATER

In addition to the stove emitting radiant heat, warm air flows from the stove's convection heater. The cool room air is drawn in along the sides of the wood-burning stove, heated, and flows out through the oval holes on the stove top and further on into the room.

The convection heaters also insulate the stove and the stove can therefore be installed against combustible material without additional insulation. An air gap of 5 mm on each side of the stove is needed to ensure the function of the convection heaters.

COMPLETE HOB

The upper part of the wood-burning stove is equipped as standard with a steel hob, or optionally with a glass-ceramic hob, which functions as a single large heating plate.

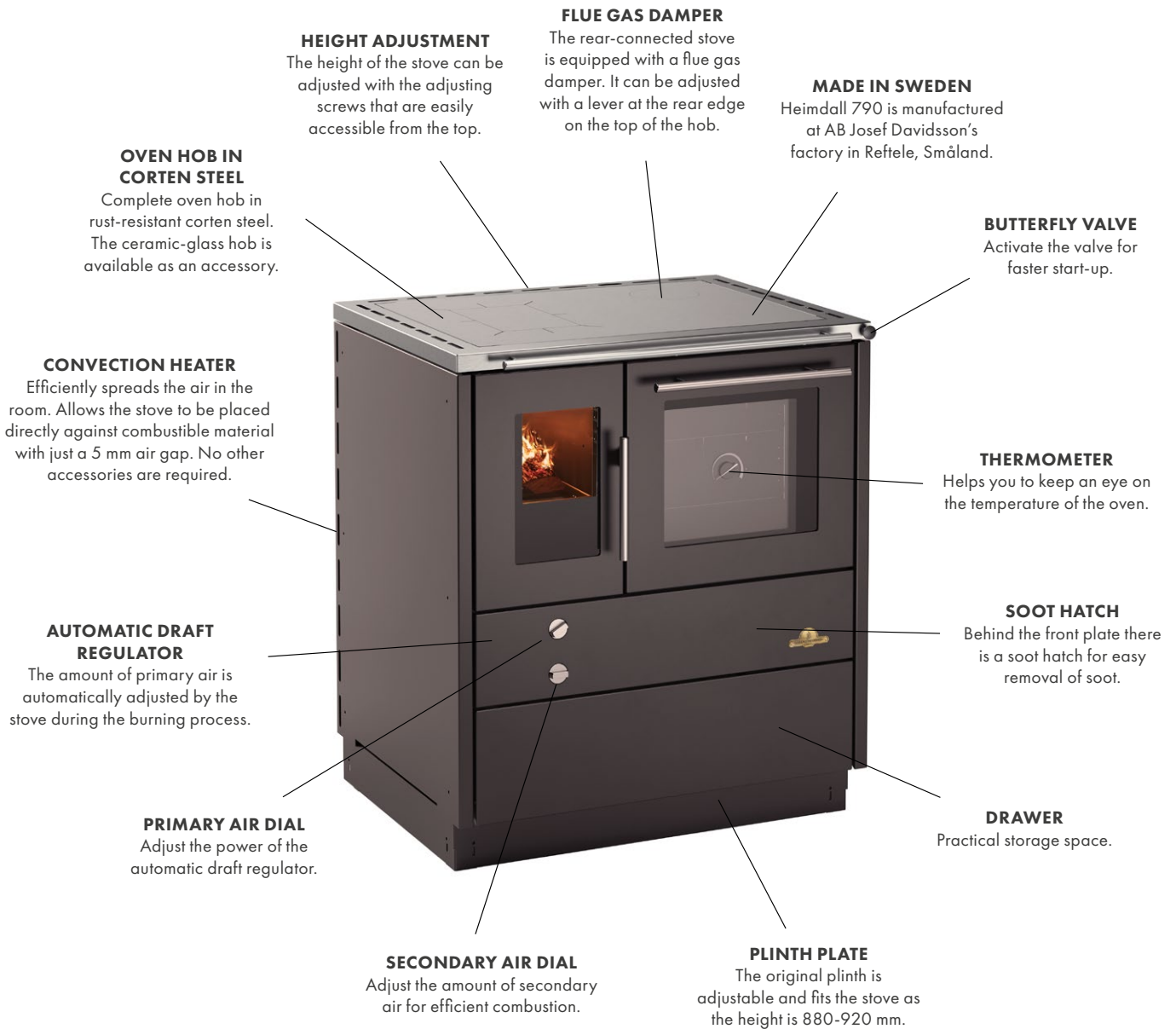
BAKE AND FRY

When using the hob, remember that pots and pans should have a solid and flat bottom.

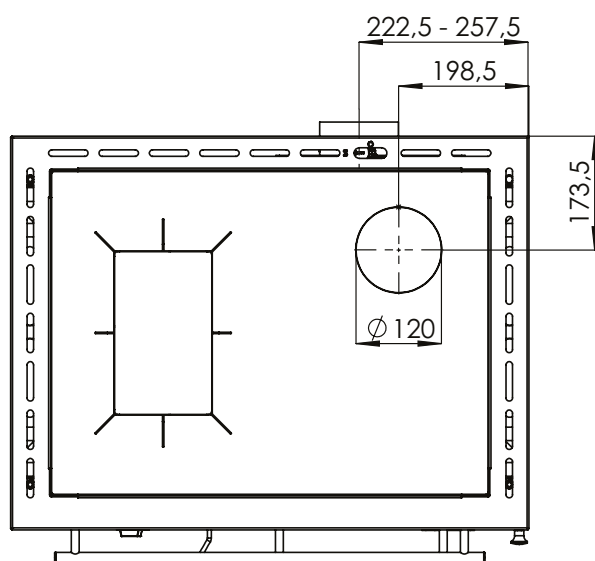
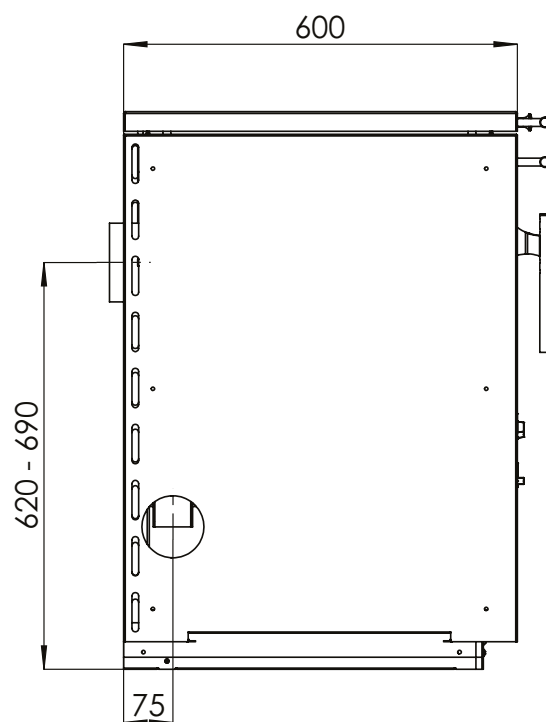
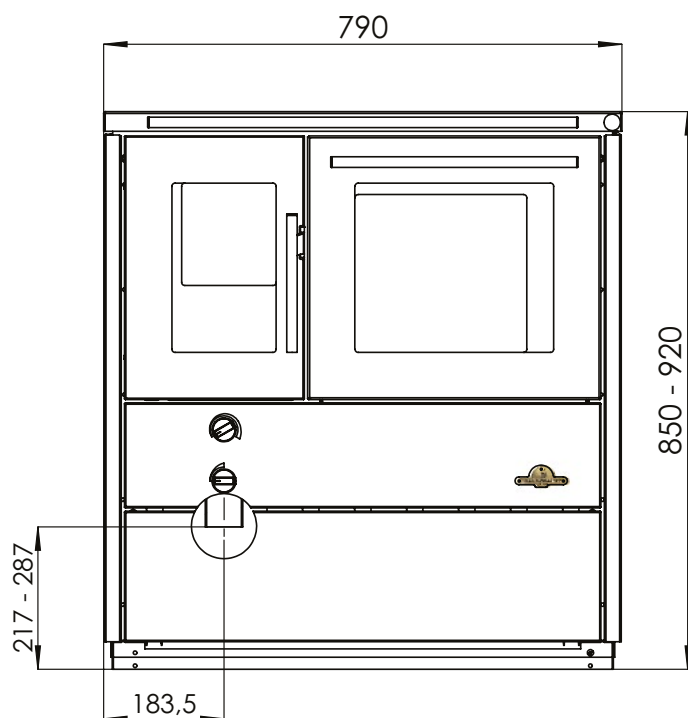
When cooking, it's advisable to use less firewood and to add fuel as needed. This makes it easier to maintain the desired temperature during cooking.

Boiling is best done in the area above the fireplace, where the hob is at its hottest.

For keeping warmth, you can move pans to the side, away from the fireplace where the temperature is lower. Make sure the butterfly valve is closed when the oven is to be used. The heat in the oven will then be more even.



Dimensions and technology



Height	(850)/880-920mm
Width	790 mm
Depth	600 mm
Weight	160 kg

Fireplace dimensions	200x200x380 mm
Density class	BE
Nominal power	5,7 kW
Flue gas temperature	180°C
Flue gas temp. in flue gas connector	216°C
Minimum chimney draft	-10 Pa
Flue gas flow	8 g/sek

Maintenance

THE INTERIOR OF THE STOVE

Clear the grate of ash regularly and empty the ash box when it gets full. Keep the fireplace and flue pipes clean. If you use the fire often, you should sweep the chimney an extra time between visits from the chimney sweep.

Wet a piece of paper towel and dip in cold ash from the stove's ash tray. Now rub it against the inside of the fireplace glass for effective soot removal.

THE OUTSIDE OF THE STOVE

The lacquered steel surfaces should be cleaned with lukewarm water and a mild detergent when the stove is cold. For cleaning stainless steel, only the special products available for purchase in the trade should be used. To keep the hob looking as good as possible for a long time, wipe it clean every time you cook.

THE STEEL HOB



The Heimdall 790 is equipped as standard from the factory with a stainless Corten steel hob. If you keep the hob clean and dry, it will be protected against possible rust stains.

THE CERAMIC HOB

A glass-ceramic hob is available as an option. Keep the hob clean and in good order with lukewarm water and a mild detergent. For more difficult stains, we recommend commercially available cleaning agents for glass hobs.

SWEEPING

Sweeping of chimney flues and chimney connections should be done by a professional chimney sweep. Scrape or brush away any soot and ash from the wood-burning stove. Behind the front plate is a soot hatch. The best thing you can get is a soot vacuum cleaner!

 <p style="text-align: right;">SWE EN DE</p>	<p>24 NB 0402 Vedspis Heimdall 790 DoP Nr JD_H790_240201 EN 12815:2001/A1:2004/AC:2007 SS-EN 16510-2-3:2022</p>
<p>Produkttyp Product type Produkttyp</p>	<p>Kökspis för eldning med fast bränsle typ BE Cooker fired by solid fuel type BE Herde für feste Brennstoffe typ BE</p>
<p>Avsedd användning Intended use Verwendung</p>	<p>Rumsvärmare Space heater Raumheizung</p>
<p>Rekommenderat bränsle Recommended fuel Empfohlener Brennstoff</p>	<p>Ved Firewood Brennholz.</p>
<p>Utsläpp av förbränningsprodukter Emissions of combustion products Emissionen von Verbrennungsprodukten. (13% O₂)</p>	<p>CO 0,09% CO 1177mg/m³ OGC 113 mg/m³ NO_x 102 mg/m³ PM 33 mg/m³</p>
<p>Brandsäkerhet Fire safety Brandschutz</p>	<p>Klarar Pass Zugelassen</p>
<p>Minsta avstånd till brännbart material Minimum distance to flammable materials Mindestabstand zu brennbaren Materialien.</p>	<p>Bakom Behind Hinter. N/A Sidled Sideways Seitlich. 5 mm. Ovan Above Oben. 1100 mm. Framför In front Vor. 700 mm.</p>
<p>Yttemperaturer Surface temperatures Oberflächentemperatur</p>	<p>Klarar med handske Pass with glove Mit Handschuhe zugelassen</p>
<p>Nominell värmeeffekt Nominal heat output Nennwärmeleistung</p>	<p>5,7 kW</p>
<p>Rumsvärmeeffekt Space heating output Raumwärmeleistung</p>	<p>5,7 kW</p>
<p>Minsta skorstensdrag vid nominell värmeeffekt Minimum flue draught at nominal heat output Minimaler Schornsteinzug bei Nennwärmeleistung</p>	<p>12,0 Pa</p>
<p>Verkningsgrad Efficiency Wirkungsgrad</p>	<p>80 %</p>
<p>Säsongverkningsgrad Seasonal efficiency Saisonwirkungsgrad</p>	<p>70 %</p>
<p>Energieeffektivitetsindex Energy efficiency index Energieeffizienzindex</p>	<p>116</p>
<p>Josef Davidssons Eftr. AB, Jättevägen 1, 333 75 Reftele, Sweden</p> 	<p>Serienummer Serial number Seriennummer</p>



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