D.O.O. METAL INDUSTRY VRANJE
Radnička br. 1

Solid Fuel Cooker

Alfa 55



Installation, Operation and Maintenance Manual

ENG_V.1.0

1612594

Dear Customer,

Thank you for the purchase of the appliance in which a lot of effort has been invested, so you would be satisfied with its performance.

You have purchased a quality and cost-efficient appliance, the result of our factory's long-term experience in the production of household appliances. The product is made and tested in compliance with the security measures of applicable regulations in the European Union.

Prior to installation and use of the appliance, we kindly ask you to read the manual carefully and adhere to all recommendations contained there, so as to secure continuous proper operation of the appliance, as well as long service life.

In the event of appliance breakdown, you should contact the nearest customer service center for professional help and troubleshooting. Keep the manual for future use, as it could be useful in various instances.

Should you choose to sell the appliance, you should provide the customer with the manual. In case of any doubt, please contact our professional office or authorized service center. Be sure to always specify the number of chapter where you have experienced any ambiguity.

Printing, translation and reproduction of the manual, partially or in whole, are forbidden without the consent of ALFA PLAM. Technical data, images and specifications contained there must not be shared with third party.

Installation, Operation and Maintenance Manual is applicable to the following type of cooker:

- Alfa 55

⚠ ATTENTION

Important Notes

- For the proper operation of the cooker, it is important to read the manual carefully and adhere strictly to the instructions contained there.
- Use only recommended types of fuel as specified by the user manual.
- Use of firewood with less than 20% moisture content is mandatory, or namely firewood stored in dry and open area for two years.
- Required discharge pressure should be 12 Pa under normal workload.

Should the pressure exceed 15 Pa it is necessary to install a damper in the flue pipe.

- Chimney connected with the cooker must meet the requirements provided by the user manual.
- In order to connect the appliance with the chimney, you must never use flexible hoses, instead use only steel flue pipes.
- Regular maintenance and care, such as cleaning the cooker and flue pipes, is important for safe operation , especially in terms of

appliance cost-efficiency and preservation of value.

- Unauthorized modifications are strictly prohibited and any unauthorized modification shall void the warranty.
- Only original spare parts made by the manufacturer may be installed.
- The installation area should be equipped with sufficient fresh air supply.

If windows and doors are sealed hermetically or other appliances, such as cooker hood, dryer, fan etc. are located in the installation area, in such cases, combustion air (fresh air) must be supplied externally. In this respect you should contact an expert or competent chimney sweeper before the cooker installation.

- The ash dump must not contain any flammable materials. The filling level may not exceed the height of lateral sides of the ash dump.
- Firebox door and the ash dump door should always be closed during operation (except for stoking, additional fuel supply and ash clean-up) to prevent the discharge of products of combustion (smoke).
- In case of fire breaking out inside the chimney, the cooker door should remain closed and the air control should also be closed. Never attempt to put out fire by pouring water down the chimney. Due to sudden formation of water vapor there is a risk of damages to the chimney. If necessary, contact fire department.
- Highly flammable materials like paper should not be kept in the fuel box. Pay attention to the level while filling up the box.

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1. INTRODUCTION

The manual is intended to provide the user with all necessary actions to secure safe and proper use of the cooker.

ALFA PLAM shall reserve the right to amend specification and technical and/or operating characteristics of the cooker at any time, without notification.

Cooker is intended for heating of residential areas. The cooker is operational only with closed firebox door. During operation you should never open the door.

Intended purpose and provided configuration of the cooker are the only ones approved by the manufacturer: **the cooker should be used only in compliance with the manual.**

ALFA PLAM cooker is the appliance to be used only indoors.

The manual has all necessary information with regard to installation, use and maintenance of the cooker. Careful adherence to the instructions in the manual shall guarantee high level of safety and performance of the cooker. The manual should be saved and kept always available for consultation by both the user and service staff in charge of installation and maintenance. **The Installation, Operation and Maintenance Manual is an integral part of the cooker.** If you lose the manual, you should ask ALFA PLAM for another copy. In case of resale, the user is obliged to provide new customer with the manual.

1.1. GENERAL INFORMATION

INFORMATION

When you contact the cooker manufacturer, specify the serial number and identification data available in the section 'GENERAL DATA' at the end of the manual.

LIABILITY

ALFA PLAM shall assume no liability for any material damage or injury due to:

– failure to obey the recommendations and warnings contained in the manual,
– improper operation of the cooker by the user,
– modifications and repairs not authorized by ALFA PLAM,
– poor maintenance,
– unforeseen events,
– use of spare parts that are not original or not intended for specified models of the cooker.

Liability in terms of connection shall be assumed by the installer in entirety.

OPERATION

During the operation of the cooker, you must comply with all instructions in the manual, as well as all national regulations of the country where the installation took place.

1.2. Manufacturer's Liability

The manufacturer shall deny any civil and criminal liability, direct or indirect, in the following cases:

- installation is not in compliance with applicable national regulations of the country where the installation should take place, as well as safety recommendations,
- failure to obey recommendations and warnings contained in the manual,
- installation is performed by unqualified staff without proper training,
- use is not in compliance with the safety recommendations contained in the manual,
- modifications and repairs are performed without the manufacturer's consent,
- use of spare parts that are not original or not intended for the specified model of the cooker,
- poor maintenance of the cooker,
- unforeseen events.

All local regulations, including regulations related to the national and European standards, must be adhered to during the use of the appliance.

1.3. User Profile

The user must be an adult and a responsible person with technical knowledge necessary for regular maintenance of mechanical parts of the cooker.

Children may not come close to the cooker when in operation, with the intent to play. The appliance may be used by children age 14 and older, as well as persons with diminished physical, sensory or mental capacity, provided that they are familiar with the user manual and supervised by seniors. Cooker cleaning and maintenance may not be performed by children without the supervision of senior.

1.4. Technical Aid

ALFA PLAM can solve any technical problem with regard to the use and maintenance of cooker for entire duration of service life.

Technical support shall be at your disposal to give answers to your questions and, if necessary, to refer you to the nearest authorized service center.

1.5. Spare Parts

You should use only original spare parts. Do not wait for the parts to wear out from use before you replace them. Replacement of a worn part before the breakage shall prevent potential accidents due to sudden breakage of parts, which may result in injury to people and damage to property.

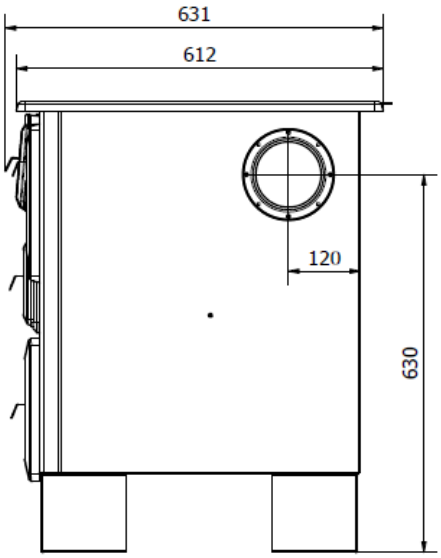
1.6. Technical Data and Product Features

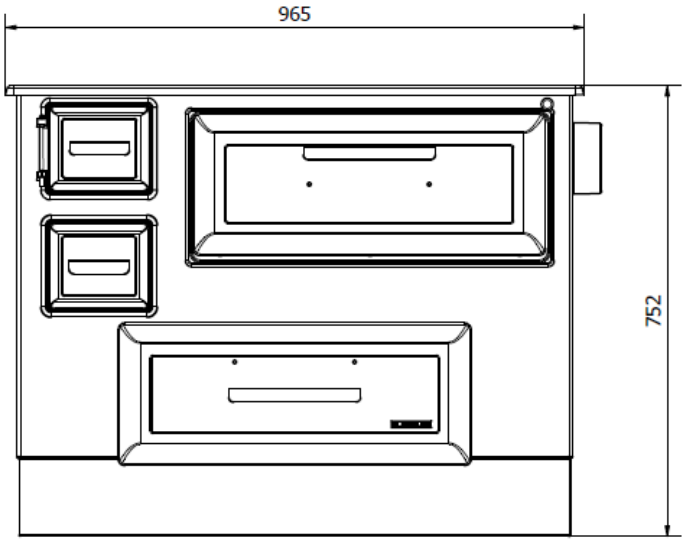
No.	Parameter	Unit	Comment	**Alfa 55**
1.	P_{nom}	kW	Rated Power	5,1
2.	P_{shnom}	kW	Rated Heat Output	5,1
3.	P_{wnom}	kW	Hot-Water Exchanger Output	/
4.	η_{nom}	%	Efficiency at Rated Heating Capacity	81
5.	η_s	%	Seasonal Space Energy Efficiency	72
6.	EEI	-	Energy Efficiency Index	109
7.	CO_{nom}	mg/Nm³	CO Emission with 13% Oxygen at Rated Power	932
8.	NOx_{nom}	mg/Nm³	NOx Emission with 13% Oxygen at Rated Power	152
9.	OGC_{nom}	mg/Nm³	OGC Emission with 13% Oxygen at Rated Power	31
10.	PM_{nom}	mg/Nm³	Dust Emission with 13% Oxygen at Rated Power	22
11.	p_{nom}	Pa	Minimum Flue Draught at Rated Power	13
12.	d_R	mm	Minimum Clearance between the Back and Flammable Materials	200
13.	d_s	mm	Minimum Clearance between the Lateral Sides and Flammable Materials	400
14.	d_c	mm	Minimum Clearance between the Top and Flammable Materials	>750
15.	d_p	mm	Minimum Clearance between the Front and Flammable Materials	1500
16.	d_F	mm	Minimum Clearance between the Bottom of Product and Flammable Materials	0
17.	d_L	mm	Minimum Clearance between the Front and Flammable Materials for the Front Side Radiation Zones	1500
18.	d_B	mm	Minimum Clearance between the Bottom of Product (excluding the footing) and Flammable Materials	0
19.	d_{non}	mm	Minimum Clearance between the Non-Combustible Walls	/
20.	s	mm	Protective Insulation in compliance with Manufacturer's Recommendations	2
21.	T_{snom}	°C	Flue Gas Temperature at Rated Power	224
22.	Tclass	-	Chimney Designation in compliance with the Relevant Chimney Standard	T400 G
23.	$\Phi_{f,g\ nom}$	g/s	Flue Gas Mass Flow at Rated Power	/
24.	CON or INT	-	(CON) device operation in continuous mode, (INT) device operation in intermittent mode.	INT
25.	d_{out}	mm	Diameter of Flue Outlet	120
26.	W,D,H	mm	Overall Product Dimensions (width, depth, height)	965x631x752
27.	m	kg	Product Weight	91
28.	m_{chim}	kg	Maximum Chimney Load Capacity	0
29.	🕮	-	Read and Follow the Instructions in the User Manual	

Table 1



1. Stove cover
2. Cooktop frame
3. Firebox door
4. Ash pan door
5. Oven door
6. Fuel box
7. Draft regulator lever





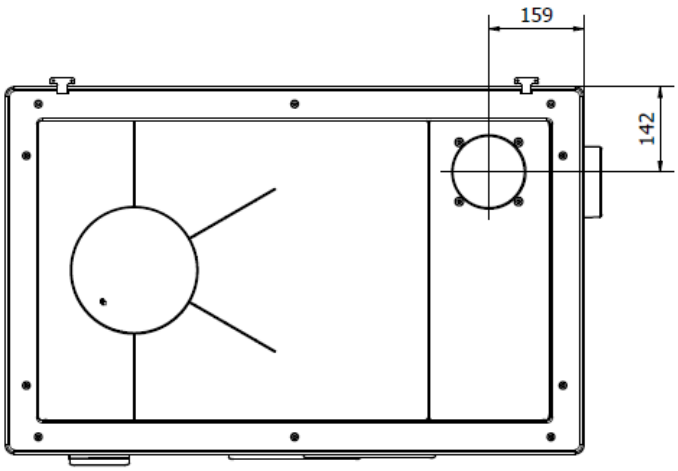


Figure 2 - Alfa 55

1.7. Recommendation in terms of Firewood

Type of Wood	kg/m³	kWh/kg moisture 20%
Beech	750	4.0
Oak	900	4.2
Elm	640	4.1
Cottonwood	470	4.1
Larch	660	4.4
Spruce	450	4.5
White Pine	550	4.4

Table 2

Rated Heating Capacity of Alfa 55 is achieved during the use of the following fuel quantity:

Type of Wood	Fuel Quantity	Combustion Period	Primary Air Regulation
Beech	1,38 kg	40 min	/

Table 3

- Pay attention not to place more wood than necessary to achieve rated heating capacity. Above mentioned quantity must not be exceeded, otherwise it may lead to cooker overheating.
- Wood to be used must be dry (moisture content < 20 %). That is usually the case if the wood is stored for two years in dry area with good ventilation. Wet wood has low calorific value, leading to the formation of soot deposits in flue ducts and chimney. Wood with treated outer surface (varnished, painted, veneered and impregnated), plywood, all kind of waste (packaging waste), plastics, newspaper, rubber, leather, textile etc. must not be used for heating purpose.
- Combustion of these materials would pollute the environment and is prohibited by lawmaker. In addition, damage to the chimney may occur. In that case, any manufacturer's warranty shall cease to be valid.

2. Connection with the Chimney

After the unpacking of the cooker it is necessary to read the instructions, inspect the cooker and get familiar with the parts and the accessories. Pay special attention to the following:

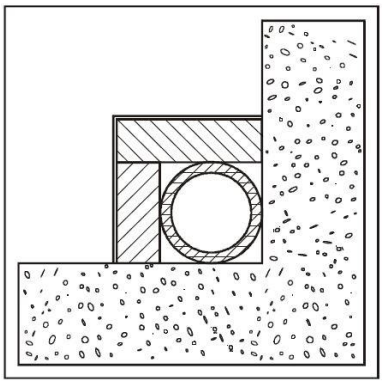
- The door should be sealed tightly, as well as the lid on the hot plate, so the air is not introduced to the cooker uncontrollably.
- Power control (image 1 position 3) should open and close the valve by means of regulation button.
- Chimney connector should be sealed tightly with asbestos-free tape for the installation on side or back flue outlet, depending on the position against the chimney.

SPECIAL NOTES

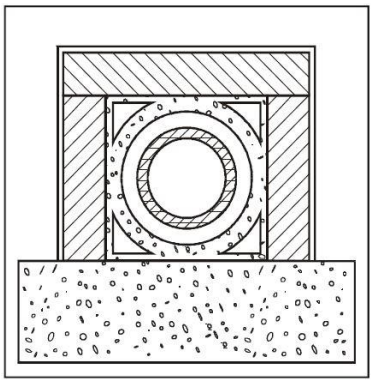
- During the installation of horizontal flue pipe (in cases where necessary), flue pipe should be installed under +5° angle.
- Flue connector, flue pipes and chimney must not be narrowed;
- Connection of cooker with the common flue system is not recommended.
- All connections, as well as the chimney, must be sealed tightly, without dirt and grime inside the flue pipes.

Adequate chimney and meeting of other requirements are prerequisite for perfect performance of the cooker.

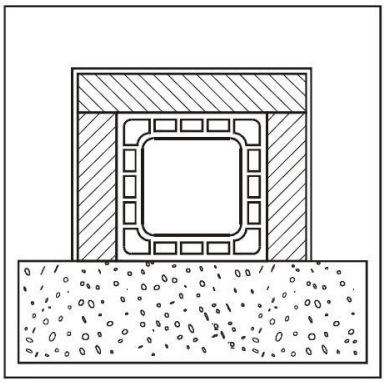
The cooker may be installed within the kitchen area or in other adequate area, paying attention to place non-flammable base under the cooker, and in case of parquetry it is necessary to place special tinplate to prevent damage to the base or fire due to negligent use.



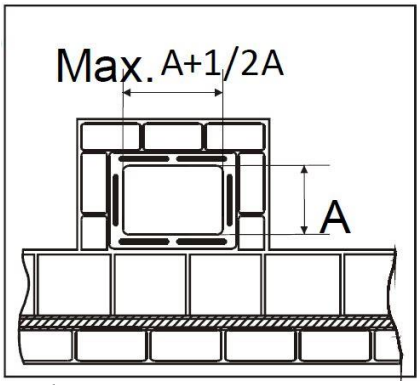
Steel chimney AISI 316 with double insulated chamber, heat resistant material up to 400 ° C. 100% optimal efficiency



Fireproof chimney with double insulated chamber and lightweight concrete external cladding. 100% optimal efficiency



Traditional-looking chimney made of clay with depressions. 80% optimal efficiency



The use of chimney pipes with rectangular internal section of different ratio than planned is prohibited. 40% moderate efficiency

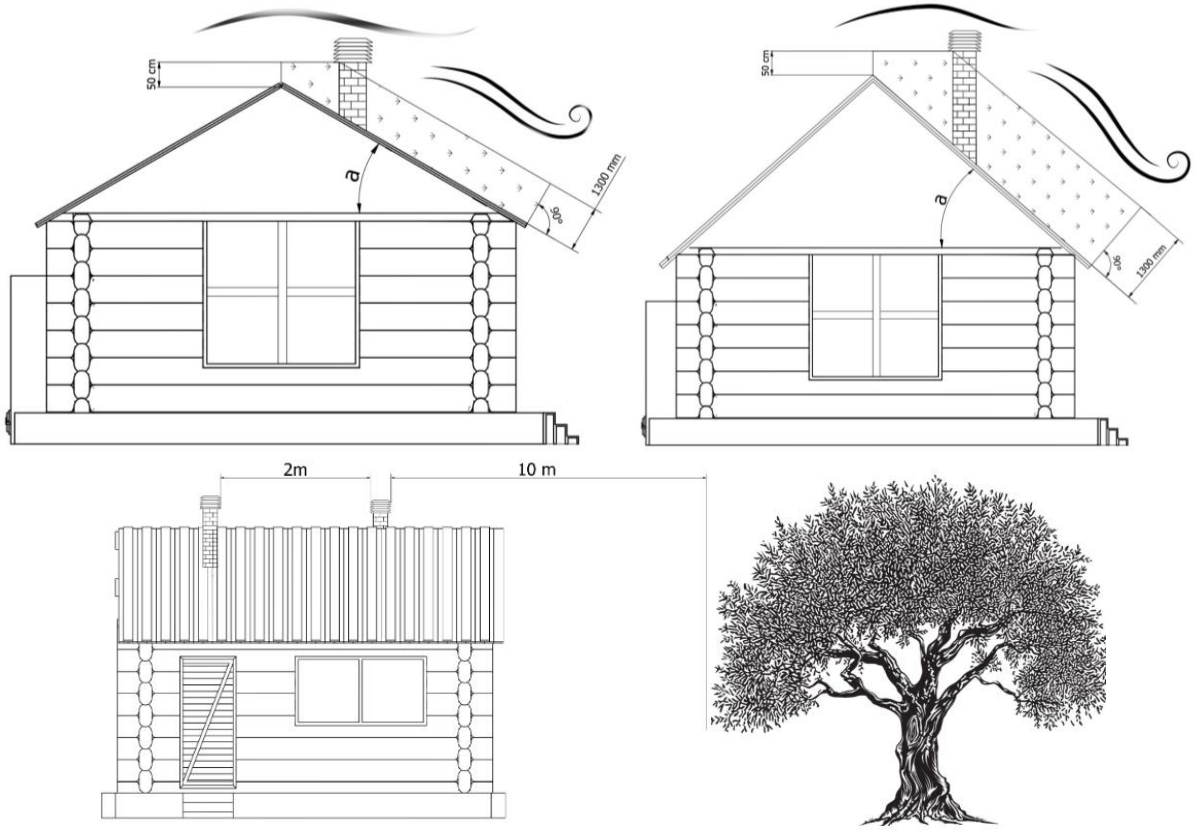


Figure 3 - Chimney – Positioning and distance

ATTENTION

Fumes created from blocked chimney are dangerous. Keep the chimney and flue pipe clean; clean according to the instructions in the manual.

Keep the stove's flue paths clean; clean them according to the instructions in the manual. Use only recommended fuels. Read the user manual.

Continuous use of the cooker is not recommended. Weather conditions are in fact an important factor in the dispersion of smoke into the surrounding environment. Do not light fire when there is no wind or on a foggy day. Flue gases may be trapped inside the house and it is harmful for you and your neighbors. Wind force of 2 or less by Beaufort scale is considered to be wind free weather.

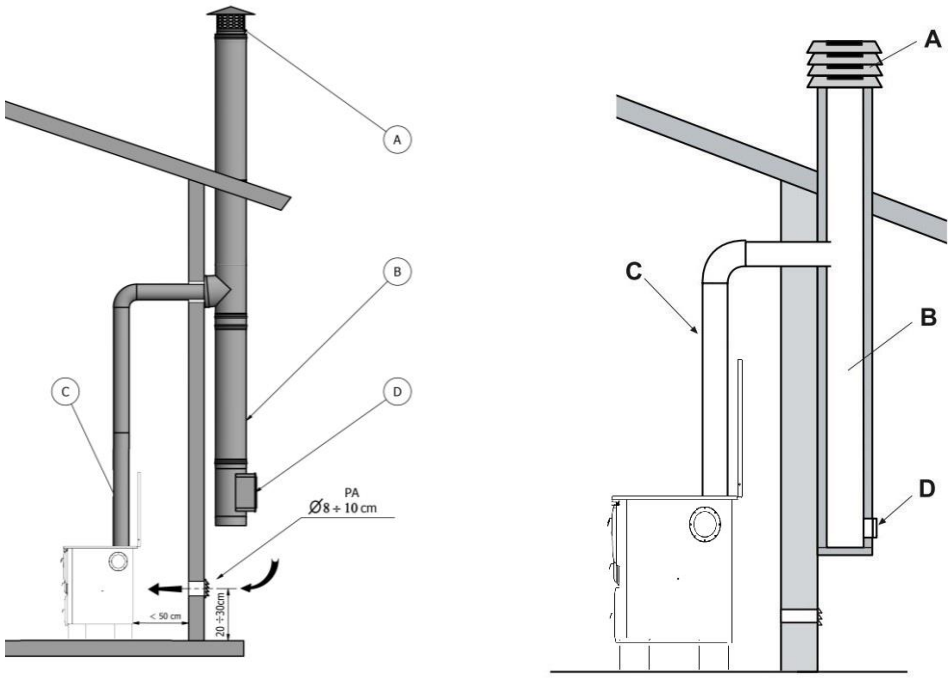


Figure 4

A - Chimney Cap
B - Chimney with minimum diameter ø120 mm or minimum cross-section 12x12 cm, chimney height 4-5 m as a minimum.
C – Flue Pipe ø120 mm
D– Chimney Cleanout Access Point

During the operation the cooker shall use the air from the surrounding area. The outside air may be supplied directly by means of pipe with diameter 80 mm with a gasket as shown in *figure 4*. The air inlet must be placed at height of approximately 20-30 cm from the floor. On the outside it is necessary to place a grate for continuous ventilation.

- Check whether the air inlet is installed in the manner that it cannot be blocked accidentally.
- If it is not possible to make direct supply of outside air through the wall located behind the cooker (the wall is not external), an opening must be made in any of external walls of the room with the cooker in place.
- If the room has no external walls, it is possible to make an external opening in the adjacent room and provide continuous supply of air through the gasket on the wall between the two rooms.
- If the cooker is installed in the room with gaskets for air extraction or in the room with already existing appliances that extract the air from the room during operation, you should always pay attention that the amount of incoming air into the room is sufficient to ensure safe operation of the cooker and already existing appliances.
- **It is forbidden to supply air for combustion purpose from the area with fire risk, for example garage, warehouse, depot and similar.**

If in the area where the cooker is installed, one or more air extractor fans are in function, it is necessary to check whether the cooker is operating poorly due to less air flow necessary for combustion.

- Flue duct for smoke extraction must be carried out in accordance with the applicable regulations both in terms of size and materials used for the construction.
- To avoid bi draught problems, each cooker should have its own independent chimney.
- The use of conventional chimney is possible if the following rules are observed:
  - Check whether the area for smoke extraction in the chimney is clear of obstacles
  - In case of an older chimney, it is recommended to perform rehabilitation i.e. introduction of steel pipe of suitable diameter with adequate insulation (rock wool).
  - Minimum cross section should not be less than 12x12 cm or minimum diameter ø120 mm
  - Chimney height 4 – 5m as a minimum.

If the chimney is not cleaned regularly, the following problems may occur during the operation of cooker:
- poor combustion,
- soiling of glass,
- the accumulation of ash and soot inside the stove, which leads to poor heat transfer.

3. Installation of the Cooker in the Area, Combustion Air Supply and Ventilation

3.1. Installation of the Cooker

In terms of the cooker installation you should pay attention to the applicable regulations related to the relevant construction and fire safety regulations and provisions.

Connection of cooker with the chimney may be done from the top, side or bottom left or right part of the cooker, depending on whether you have chosen left or right-oriented cooker. Pay attention that the installation area of the cooker should be horizontal. If the floor is flammable (wood, plastics, carpet ...), you should use sheet metal made of steel, copper or other non-combustible material. It is recommended that the base be larger than the cooker footing by 30 cm in relation to all sides of the

cooker. The clearance from all sides of wooden or plastic furniture should be 80 cm **and from the side 40 cm as a minimum**. Installed parts made of flammable materials may not be placed from the door and sides of the cooker at distance less than 80 cm.

Safety clearance for objects to be protected (flammable walls, kitchen cabinets and load-bearing walls of reinforced concrete) should be 40cm with 40 cm laterally as a minimum. Sufficient clearance should be kept in the area around the cooker in relation to flammable objects (with wooden lining, furniture, curtains etc.). During the use of steel cooker plate it is prohibited to make extensions above the cooker. When moving the flue pipes, a minimum distance of 40 cm from combustible materials must be maintained.

Prior to the connection of cooker with the chimney you should consult chimney sweeper. Connection of the cooker with the chimney shall be done with the adequate connection of flue pipes according to SRPS.M.R4.031 (DIN 1298.or DIN EN 1856-2).

You should make sure that the chimney plug and the flue pipe must not be fitted in the cross section of flue vent system and should be sealed hermetically.

For taking measures of the chimney view SRPS EN 13 384-1 and for proper use of the chimney view the provisions of SRPS EN 13 384-2.

In order for the cooker to achieve desired capacity, you must ensure that the installation is carried out adequately and, above all, that the chimney is of the impeccable working condition. In any case, you should inspect pre-load pressure (draught) in the chimney before the cooker is commissioned. The easiest way to control the chimney draught is to hold a candle flame under the chimney opening. Draught is sufficient if the candle flame moves considerably towards the chimney opening. Slight movement of the flame is a sign of weak draught.

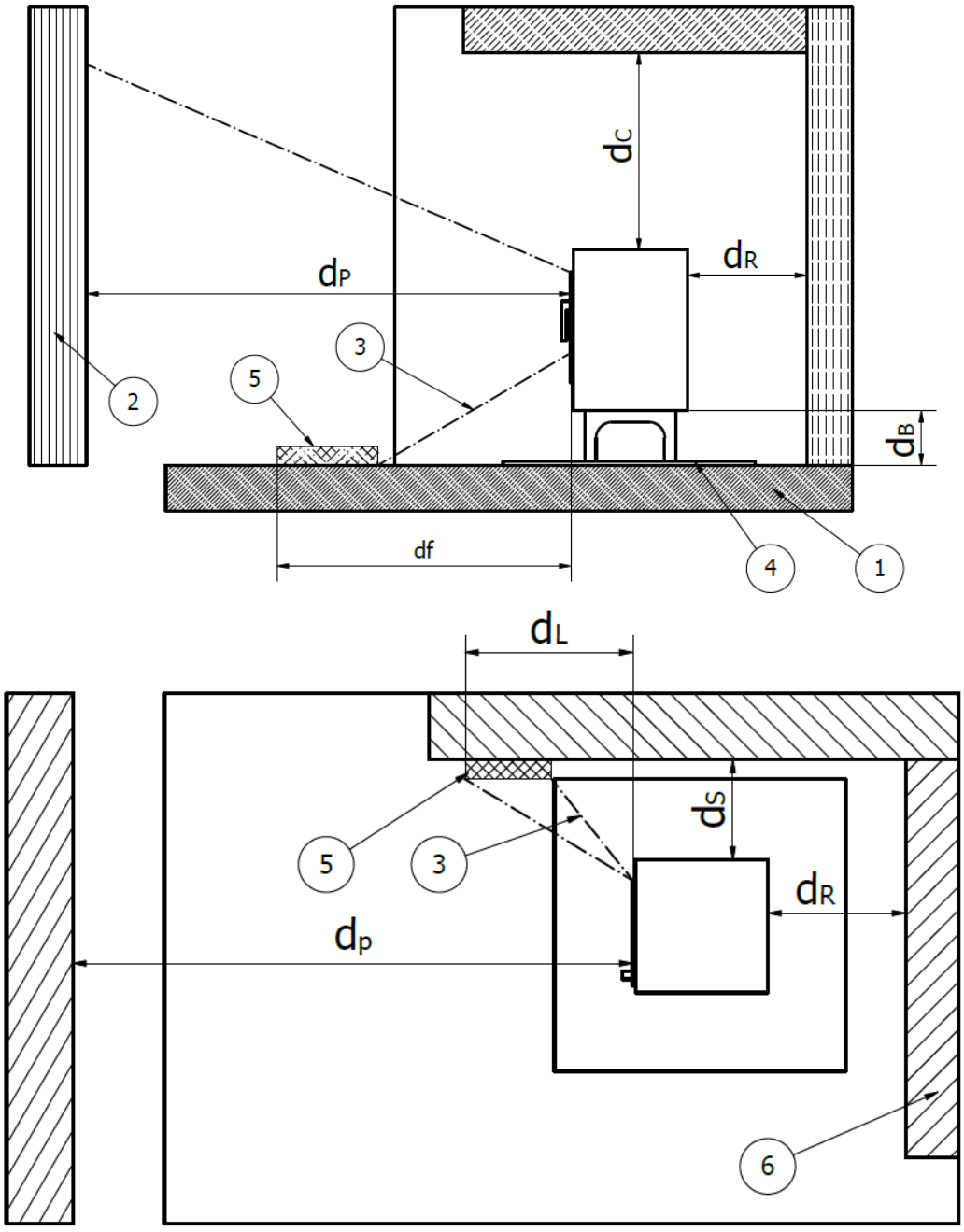


Figure 5 - All minimum safety clearances are listed on the technical nameplate, DO NOT use lower values than those specified (view CE MARKING INFORMATION).

Bottom (which is 0mm in case of appliances without feet)	d_B	0 mm
Floor in Front	d_F	0 mm

ceiling	d_C	>750 mm
rear	d_R	200mm
side	d_S	400 mm
Side radiation area	d_L	1500 mm
front	d_P	1500 mm

Table 4

1.	Trihedron floor
2.	Trihedron-like front plate
3.	Radiation area
4.	Floor protection plate
5.	Critical area (65K superseded due to radiation)
6.	Trihedron wallls

Table 5

3.2. Air Combustion Supply and Ventilation

Combustion air must be supplied to the rooms where the cooker is installed. The room should be ventilated continuously.

Fresh air inlet should be located at the bottom of room, with the air passing inside the inlet.

A) Combustion air supply via pipeline through the basement. For such option of connection, the combustion air is heated previously, which is useful regarding good and clean combustion. The installation of pipeline in the basement is simple.

B) Combustion air supply via basement. The combustion air is heated previously. The basement area should be separated from the ventilation system in the house and with external openings. Avoid high levels of dust and moisture.

C) Combustion air supply from above. Air supply from above can be done only with inspected chimney systems.

In this case it is necessary to calculate the exact size of chimney!

D) Combustion air supplied directly outside. If the air supply comes directly via external wall, the combustion air is only slightly preheated, which is unfavorable to clean combustion. In this case there is also a risk of condensation!

NOTE: These options of air supply are not recommended! However, if such options are implemented, contact qualified expert.

The room with installed heating device must be supplied with sufficient fresh air. If windows and doors are sealed hermetically or the room with the installed cooker is also equipped with devices such as hood, hair dryer, fan etc., which extract the air, the combustion air (fresh) must be supplied externally. In any case, the issue should be discussed with the competent chimney sweeper before the cooker installation.

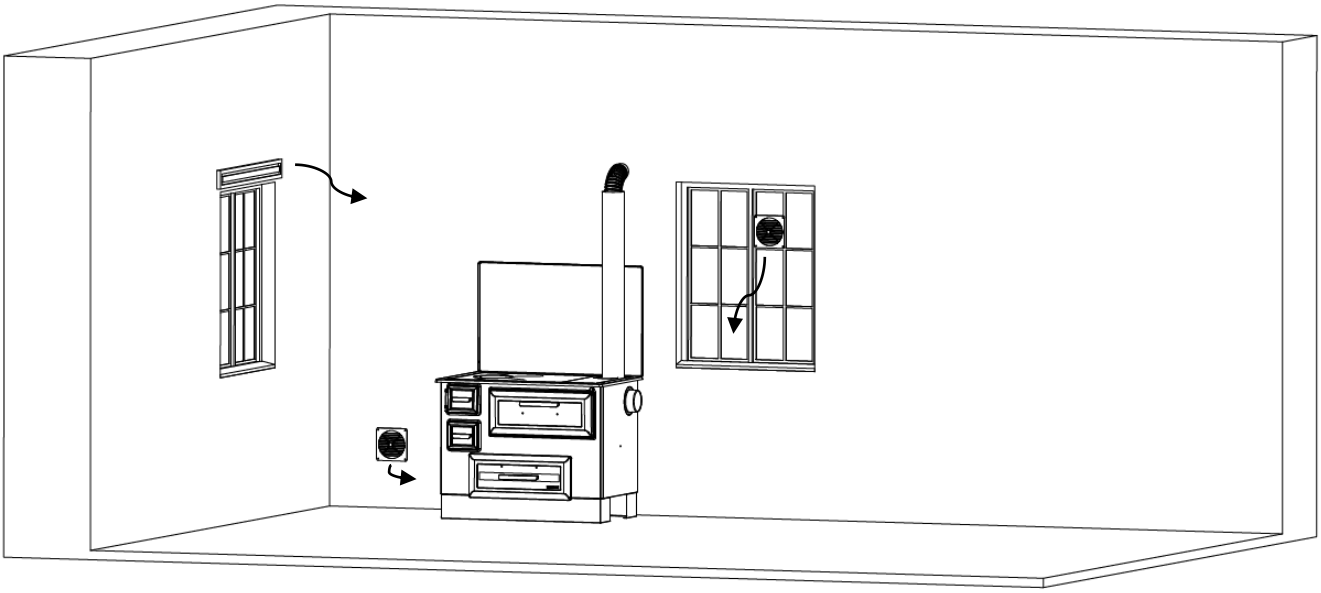


Figure 6 - Fresh air supply to the room with installed cooker

Installation of all grates for the purpose of fresh air supply should be done so as not to cause blockage or closing off by accident.

4. Instructions for the Cooker Operation, Ignition and Commands Regulation

4.1. Damper

Pulled out draught leverage button – open damper.

Retracted draught leverage button - closed damper

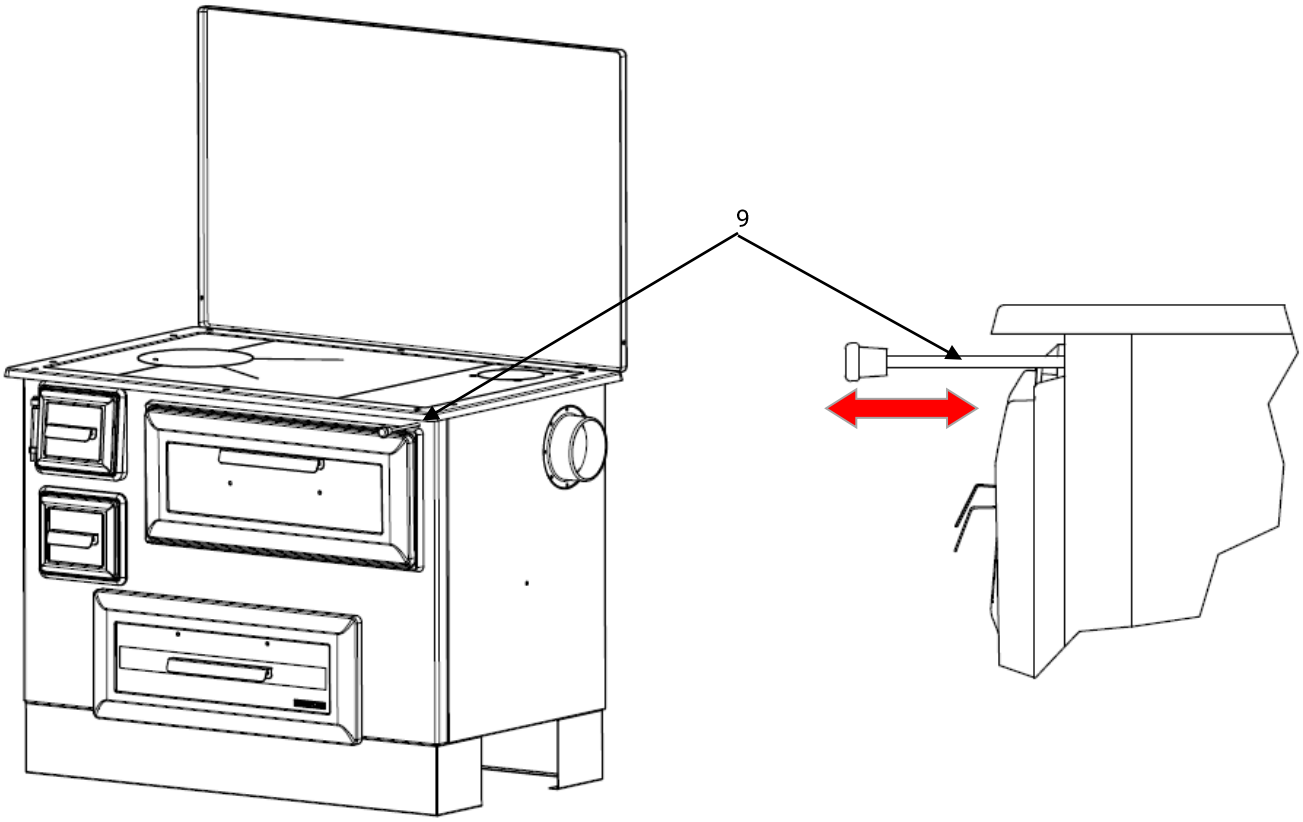


Figure 8

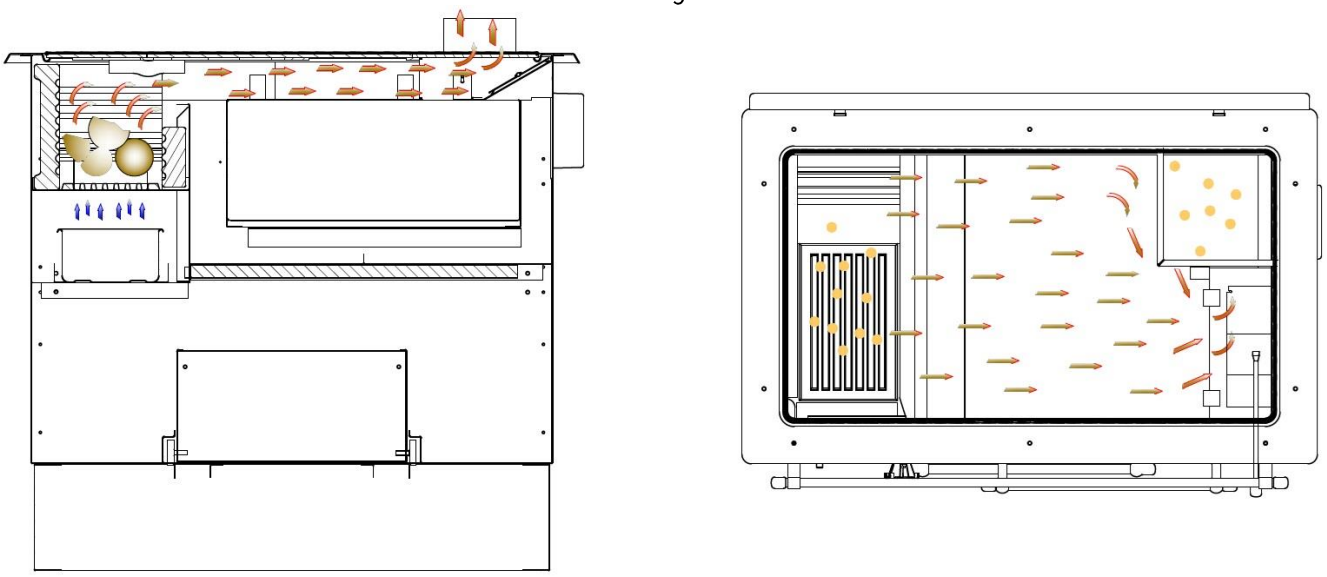


Figure 9 - Open damper

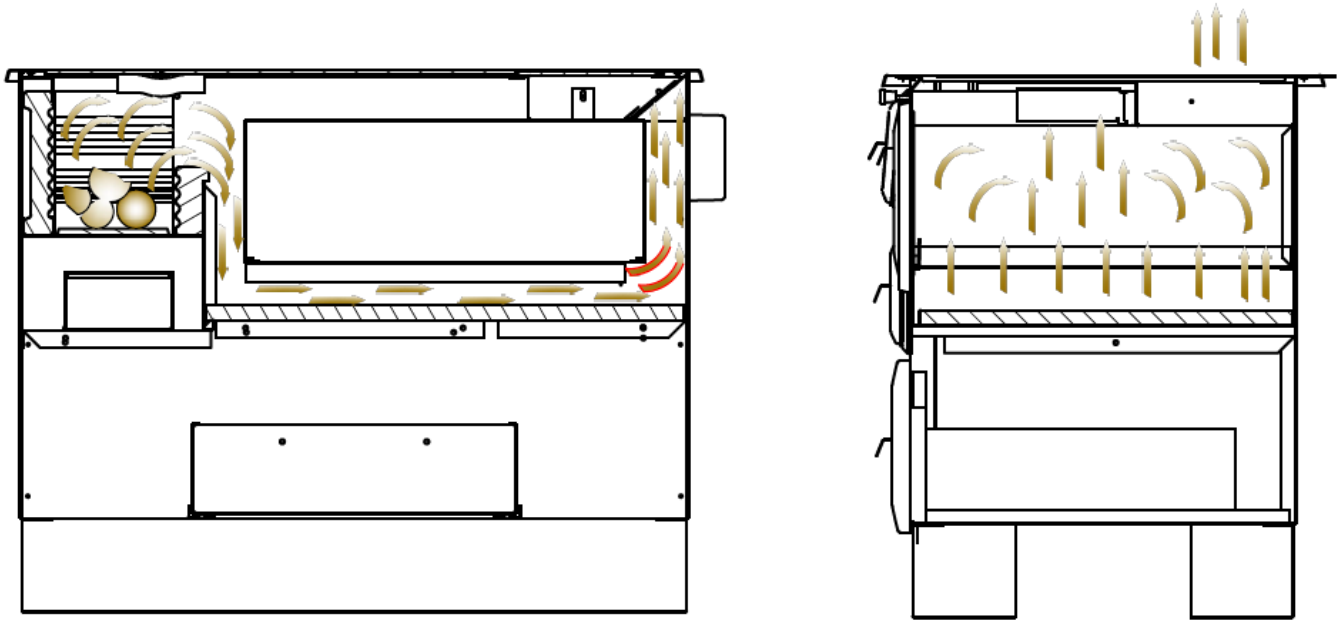


Figure 10 - Closed damper

The ignition and preheating flap is operated via the draft lever button (see Image 8, position 9), which is located above the oven door. It is used to shorten the flue gas paths during ignition, as explained in Images 9 and 10.

The flap should be in the open position only during the stove ignition phase.

During burning, when the flap is open, there is less heat emission into the room and an increase in the flue gas temperature in the chimney. Additionally, the open flap results in higher fuel consumption.

Oven door may be in either of two positions as necessary, depending on desired heat to be generated in the room.

Open oven door: greater heat emission for heating of the room.

Closed oven door: less heat emission for heating of the room.

4.2. Cooker Commissioning

Before the cooker is stoked for the first time, all enameled surfaces should be wiped down with soft and dry cloth to prevent staining. After reading the user manual, the cooker is commissioned for the first time. During the first stoking you should open the windows because the anticorrosive protection shall produce slightly unpleasant, but harmless smoke or an unpleasant smell in short period of time. That is normal phenomenon, which shall soon disappear. Built-in parts of the cooker (flue pipe, firebox door, etc.) may become hot and pose a risk for burns when the cooker is stoked. You should pay special attention to small children, so they would not be in any danger.

Below are the instructions to be observed during stoking of the cooker:

- Pull out the draught leverage button and the heating and ignition damper is open.
- Open the firebox door and place the wooden dust or paper. Place a smaller quantity of firewood on top (2-3 smaller wood logs) and stoke.
- After stoking of the cooker (first ember), retract the ignition damper button (Figure 8,position 11)

When adding fuel, open the firebox door slightly to avoid sudden release of flue gases trapped in the combustion chamber, and therefore the appearance of flue gases in the room.

Firebox door and the ash dump door should always be closed, except during stoking of the cooker, refueling and removal of remaining material to prevent the release of smoke!

4.3. Refuelling

After the basic ember is created, fuel should be added in the opening for loading. When refuelling, be careful to open the firebox door slowly so that fuel gases are not drawn and, thus, you will avoid flue gases entering the room. Nominal heating capacity of the Alfa 55 stove is achieved when using the following amount of fuel:

Fuel	Quantity of fuel	Time of combustion	Adjusting primary air
Slit logs	1,38 kg	40 min	/

Table 6

Ensure that higher quantities of logs than necessary for the rated heating capacity are never loaded. The above quantity of fuel should not be exceeded because overheating of the stove can occur.

Only naturally dried wood can be used according to the regulation on emission protection. Wood that is used must be dry (residue of moisture, 20%). This is usually case if the wood is stored for two years in a dry place where there is a good draught.

Wet wood has a low calorie value and leads to deposits of soot in flue canals and the chimney.

Wood with a treated upper surface (varnished, painted, veneered and impregnated), plywood, waste of any kind, packaging waste, plastic, newspapers, rubber, leather, textile, etc., must not be fuelled.

Combustion of such matters pollutes the environment and is prohibited by the legislator. Furthermore, damages to the chimney can occur. In that case, any warranty from the producer will be annulled.

Under unfavourable circumstances and insufficient draught, some obstacles can appear in the chimney in a way that flue gases are not discharged in full. In that case, reasons in the chimney should be removed, otherwise, use of the stove is not allowed for security reasons.

Note: Better fuel efficiency and thus better heating of the area is achieved by opening the door of the stove a little or in full.

5. Cooking and Baking Instructions

In the summer, when the cooker is used for cooking, it is recommended to keep the oven door always closed.

In cold days, the solid fuel cooker is mainly used for heating the room. To foster quick cooking results, the use of dry wood is recommended. Draught leverage button must be closed with the air control open to the maximum. After cooking is done, the air control should be placed on the marked spot to reach rated heat capacity.

- **During the use of cooker in the transitional period, when the outdoor temperature is high, the exhaust gases in the chimney may not dry up completely and the soot and condensation may appear in the chimney.**
  In that case, you should increase the supply of primary air and stoke fire more often (with smaller wood logs).
- Before you start cooking, it is preferable to stabilize the operation of cooker, i.e. reach full working capacity. It is recommended to turn on the cooker at least an hour before cooking.
- For baking cakes and roast evenly distributed heat is required. To achieve such even distribution and high temperature, the oven door should be closed, as well as the draught leverage button, depending on the type of food to be baked. Upon reaching stable temperature of the oven and the cooker heated to the desired temperature, you may place the food in the oven. You can read temperature on the oven thermometer and it is recommended to check the state occasionally during baking. You should not allow for strong fire, instead you should keep adding fuel in small quantity.

For cooking food with high moisture content, fruit cakes or fruit itself, water shall appear due to condensation. Throughout cooking, water vapor in form of droplets may form on the oven door.

With brief and careful opening of the oven (once /twice or often for slow cooking) you may release steam from the oven and reduce condensation considerably.

6. Cooker Cleaning and Maintenance

Regular maintenance and cleaning of the cooker, flue pipes and flue connections are important for proper and efficient operation of the cooker.

IMPORTANT: Cooker should be cleaned only once the cooker and the ashes have cooled down.

The use of **ash vacuum cleaner** may facilitate cleaning of the cooker. The vacuum cleaner must be equipped with a filter preventing the return of vacuumed ashes and unburned remaining ashes to the room with the installed cooker.

Cleaning frequency shall depend mainly on the use of fuel, duration of use and the method of use in terms of the cooker.

Thorough cleaning of the cooker should be done twice in the season as a minimum or any time when necessary.

Below are the recommendations for optimal cleaning of the cooker under regular working conditions:

- Cleaning of the ash dump (empty the ashes) should be done once the level of ashes has reached the highest level in the ash dump, 2-3 times weekly
- Removal and thorough cleaning of the cooker plate are preferable to be done once in the season (Image 11).
- Cleaning of soot and deposits on the underside of the oven (the area where flue gases pass) should ideally be done once or twice during the season (see Image 12).
- Cleaning soot and ashes from the partition sheet and at the bottom of the cooker is preferable to be done twice in the season.

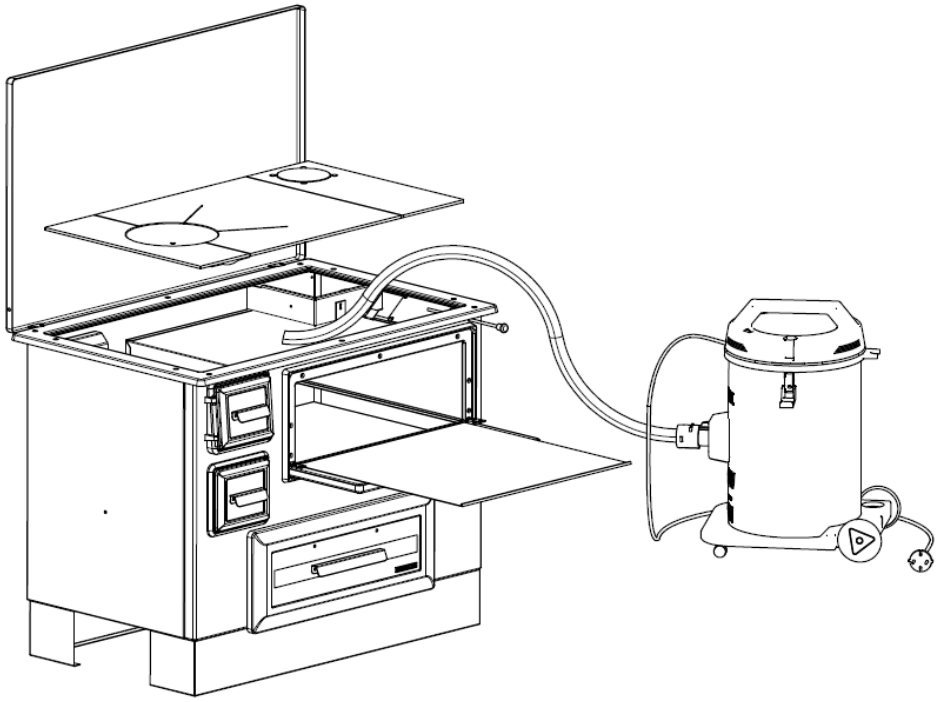


Figure 11

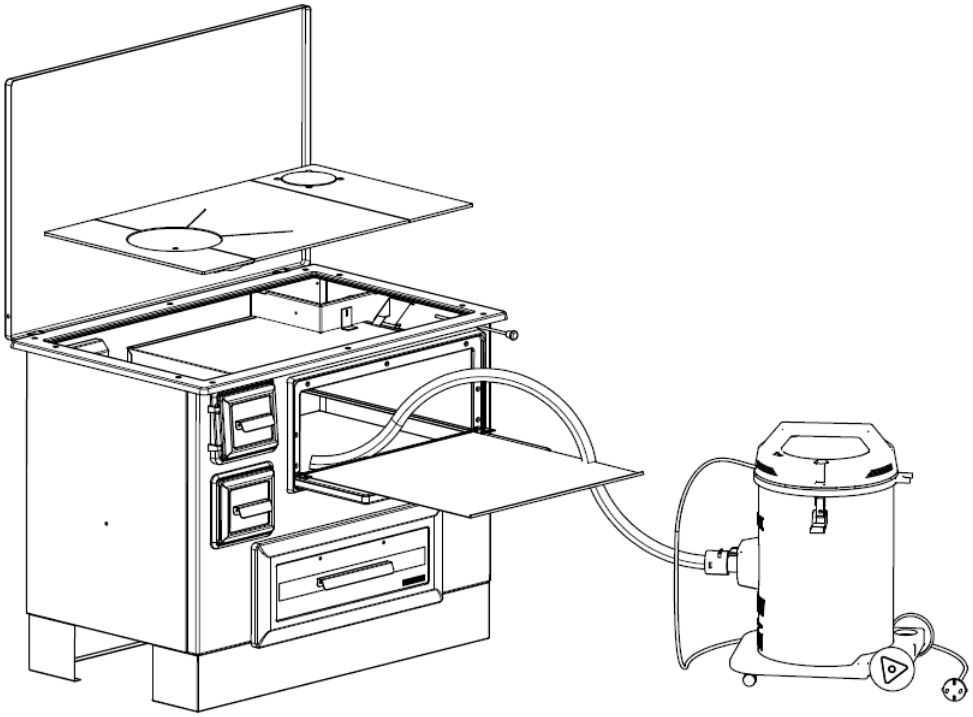


Figure 12

There is no absolute rule for calculation of required thermal power. The calculation shall depend greatly on the fact whether the room is insulated and the energy efficiency class. On average, thermal power required for adequately insulated room would be **30 kcal/h by m³** (outside temperature of 0 ° C).

		Indicative combustion value		Quantity against 1 kg dry wood
Fuel	Unit of measure	kcal/h	kW	
Dry wood (15% moisture)	kg	3600	4.2	1.00
Wet wood (50% moisture)	kg	1850	2.2	1.95

Table 7

Maintenance of enameled surfaces of the cooker is recommended only once cooled down.

If you have any questions contact the authorized service center for further information and clarification.

The manufacturer has no insight into the installation of the cooker and shall not issue warranty for installation and maintenance of the cooker.

The manufacturer shall assume no liability for damages experienced due to third party.

7. Safe Operation of the Appliance

Radiation from the cooker, especially through glass surfaces, can ignite flammable objects surrounding the appliance.

For that reason, you should adhere to the instructions regarding clearance as specified by chapter 3 Installation of the Cooker.

The external surfaces on the cooker may be extremely hot during the operation, you should be careful and always use protective gloves.

That is why it is very important to pay attention to the following while the cooker is in function:

– do not approach or touch the fireplace and oven doors, as there is a RISK OF BURNS.
– don't get close and touch exhaust pipe, there is DANGER OF BURNS,
– don't perform any cleaning activities,
– don't empty ashes while the cooker is in function,
– children and pets should be kept away from the cooker,
– ADHERE TO ALL RECOMMENDATIONS CONTAINED IN THE MANUAL.

For proper use of the cooker, you should do the following:

– use only fuel in compliance with the manufacturer's instructions,
– always adhere to the cooker maintenance plan,
– clean the cooker according to the recommendations within the manual
– don't use the cooker in case of malfunction or other irregularities during operation, unusual sound and/or you suspect malfunction,
– don't spray or spill water on the cooker, even for putting out fire,
– don't touch painted parts of the cooker while in function,
- use only recommended firewood specified in the user manual
– don't use the cooker for burning waste,
– always perform all actions with maximum safety measures.

The manufacturer is always at your disposal to provide all necessary information regarding the cooker, as well as installation instructions for your conditions. Proper installation of cooker in compliance with the manual, as well as local and national regulations is very important to prevent danger, fire and any malfunction or poor operation.

In terms of complaints regarding errors or defects related to function you should contact our service center.

Use only original parts on the cooker as recommended by the manufacturer.

The cooker works with negative pressure in the combustion chamber. **For that reason, you make sure that flue exhaust system is well sealed thermally.**

DANGER: In case of fire in the exhaust pipe or chimney, evacuate all people and pets from the room and call firefighters immediately.

DANGER: The cooker is not intended for the combustion of lignite or other types of fuel.

DANGER: Don't use the cooker for burning waste.

In case of fire or overheating, close the air inlet cover and do NOT open the door of the cooker. Extinguish fire with the appropriate means (household fire extinguisher, ...). NEVER USE WATER TO EXTINGUISH FIRE! In case of fire you should also inform the local firefighters. Adhere to the local fire protection regulations!

Never use gasoline, gasoline fuel for lanterns, kerosene, lighter fluid, ethyl alcohol or similar liquid to start or rekindle fire. Keep all liquids away from the appliance while in function.

The cooker may not be used if the gaskets on the firebox door, ash dump door, cleanout opening are damaged.

WARNING: Fumes generated from blocked chimney are harmful. Keep the chimney and the flue pipe clean; clean according to the instructions. Exhaust pipes should be kept clean; clean according to the instructions.

Use only recommended fuel. Read the user manual.

Firebox door and ash dump door should be closed at all times during the use of appliance (except for stoking, additional refueling and ash clean-up) in order to prevent the release of products of combustion (smoke).

8. Potential Malfunctions and Problems during Operation

Potential malfunctions and solutions for wood-burning cookers:

Malfunction	Solution
Combustion of wood with great speed	Check sealing tapes on the door Check door hinges and closing mechanism. Check whether the partition is in the appropriate position and not damaged. Check that the chimney draught would not be too great. Check whether the appropriate fuel is combusted.
Cooker makes whistling and other similar sounds	Cooker whistling may be a sign that stabilizer or chimney cap is required. Whistling is a result of combustion air entering the cooker through restricted pathway and over sharp or angular edges. It is usually caused by great draught above 20 Pa (Pascal). Whistling is also experienced more often for cookers with tertiary air inlet. If you experience whistling of cooker, we recommend you to check chimney draught.
Cooker makes clicking sound (crackling)	It is normal for wood-burning cooker to produce certain sounds during stoking. Cause is the expansion and contraction of metal component when heated.
Too much smoke	Continuous emission of smoke could be harmful potentially and should not be tolerated. In case of continued emission of smoke: Open doors and windows to ventilate the room. Exit the room. Seek expert advice, if necessary.

	You may have a cold cooker and cold chimney that might need small fire before lighting. Read more about cold chimneys. Burning wet wood logs may lead to the combustion with more smoke and odors. Read more about burning wet wood logs. Poor quality of chimney – Check chimney draught Adding fuel at the wrong time – Fuel should be added only when there is no flame, namely on a hot ember. When you are done using the cooker and the fire is out, don't be tempted to turn off the air controls. Leave the levers fully open and allow air to enter the cooker and pass through the chimney to prevent blockage of cold air. Air control malfunction. Check the furnace air control guide during ignition and refueling.
Corrosion on cast parts	In case of corrosion on cast parts, remove corrosion with abrasive material and then apply neutral vaseline to the treated surface.
Damaged sealing tapes	Sealing tapes guarantee the impermeability of product and subsequently good operation. They must be inspected periodically. In case of damage, they must be replaced immediately.

Table 8

9. Disassembly, Recycling and Safe Disposal at the End of Service Life

Disassembly and disposal of old cooker that shall no longer be used is complete responsibility of the cooker owner.

The cooker owner must comply with applicable legal regulations of relevant country with regard to safety and protection of environment.

Disassembly and disposal of the cooker can be entrusted to the third party, provided that it is a company authorized for the collection and disposal of such materials.

ATTENTION

The product is delivered together with the guidelines for disposal of cooker at the end of service life.

It is necessary to follow the instructions contained in the manual during the disassembly of the cooker.

NOTIFICATION: In all cases, you must comply with applicable legal regulations of relevant country regarding the disposal of such materials (objects) and, if necessary, report the disposal of such objects.

ATTENTION

Disposal of cooker at public place is a dangerous threat for people and animals. In such cases, the owner is always liable for injuries to people and animals.

Once the cooker is disassembled, CE marking, the user manual and all other documentation related to the cooker must be destroyed.