NORDIC FIRE

Instruction manual
Wood stove TIMBER

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INTRODUCTION

Dear customer
Team Nordic Fire is delighted that you have chosen a stove from us and wish you much stoking enjoyment and warmth.

This manual is designed to help you use and maintain the unit effectively, and to ensure that you get the most out of your wood stove. This manual provides detailed instructions for installing, using and maintaining the stove.

To use the appliance safely, it is important to read this manual carefully and follow the instructions. Read this manual completely before using the appliance for the first time, and keep it in a safe place for future reference. If you have any questions or problems while using the device, refer to this manual for help. If you continue to experience problems, contact your dealer for further support.

Nordic Fire wishes you much stoking enjoyment!

Before installing and connecting the stove to the chimney system, it is essential to read the operating and installation instructions and check the completeness of the product's components. The information in the Use and Installation Instructions ensures the proper operation of the stove and helps prevent damage and accidents caused by improper use.

If in doubt or operating problems, contact your dealer.

NOTE:
The appliance should not be used by children.
Never leave children or pets unattended near a burning or just extinguished stove.
Use protective gloves to open the door after and during use.
Danger of burns (parts of the stove can be very hot).

In order to improve the product, the manufacturer reserves the right to make changes in the drawings, photos and descriptions, as well as in the parameters of the equipment, without prior notice and at any time. Copying all or part of the operating and installation instructions without the manufacturer's permission is prohibited. Keep the operating and installation instructions out of the reach of children.

In case of damage, loss or destruction of the user manual and installation manual, please request a copy from the point of sale or from the dealer, stating the identification data of the device.

GENERAL INFORMATION

Safety regulations

Compliance with the manual is essential to the proper operation of the stove and the prevention of damage and accidents due to improper use.

Follow the following safety rules:
- before installing or servicing the stove, read and understand the operating and installation instructions;
- install the stove in the most suitable location, taking into account current building and fire codes;
- installation, maintenance and functional tests of the system must be carried out by qualified specialists;
- use the appliance for its intended purpose;
- it is imperative that the stove be adequately ventilated and supplied with air at the installation site;
- check the permissible load on the floor (floor, ceiling) at the intended location of the stove (taking into account the total weight of the appliance including the installation);
- provide a suitable chimney installation to ensure safe use (e.g. a chimney made of non-combustible materials with low heat absorption);
- **avoid installing the stove in rooms where there are B gas appliances, extractor hoods (with and without extractor hoods), heat pumps, collective ventilation ducts, numerous active smoke ducts, as well as near stairwells and rooms with equipment that can create negative pressure;**
- avoid direct contact with the stove (the appliance gets very hot during operation) and, if necessary, use suitable protective equipment (clothing, heat-resistant gloves);
- install the stove in a room with fire protection, equipped with a fresh air supply and smoke exhaust;
- in case of problems, contact the dealer (ask for original spare parts in case of repair);
- regularly check and clean the flue according to the regulations in force;
- enclose operating and installation instructions in case the appliance is sold or rented.

Incorrect use

- leaning and climbing on the stove;
- use the device in case of malfunctions or defects;
- leave combustible materials within 1.5 m of the stove;
- the use of materials other than wood in the stove.

Nordic Fire warranty regulation

Nordic Fire is released from civil and criminal liability in the event of:
- use of the stove not in accordance with the Instructions for Use and the Installation Manual;
- modification of the stove and unauthorized replacement of non-original parts (these actions lead to immediate cancellation of the warranty);
-injury and material damage caused by incorrect installation and maintenance (not in accordance with the Operating and Installation Manual).

Nordic Fire wood stove warranty.
Thanks to the high quality, we can give no less than 5 years warranty on the Nordic Fire stove.
The purchase date must be evidenced by a copy of the purchase receipt.

Should a defect occur within the guarantee period, at the basis of the stove itself, which is the result of a material and/or manufacturing fault, then Nordic Fire bv is prepared to send the part where the fault was found to the installer free of charge for replacement without compensation from us for disassembly and assembly. Any freight charges will be at your expense.

If the malfunction of the appliance is of such a nature that the installer cannot correct it, then Nordic Fire bv is only willing to take care of this at the request of the installer.

If, due to circumstances, the complete appliance or parts thereof must be sent for evaluation and/or repair, this must be done after prior consultation, enclosing the purchase invoice with the purchase date. In case of home service the purchase invoice/receipt with purchase date must be shown. Outside the warranty period, home service will incur labor, material and travel costs.

The appliance must be installed and connected by a recognized installer. The installation must be carried out in accordance with national regulations or the enclosed installation instructions. The installer must first ensure that the flue is working properly.

Warranty is invalid if:
- the stove has not been installed by an authorized Nordic Fire dealer or installer.
- the installation deviates from what is prescribed by Nordic Fire. Incorrect installation can cause damage to the stove. It can also cause the system not to heat up sufficiently because the stove cannot dissipate its heat sufficiently. Therefore, a correct installation is very important.
- changes have been made to the appliance without the knowledge of Nordic Fire.
- the appliance has changed owner.
- the instructions of the manual have not been followed.
- the appliance has been neglected or roughly treated.
- the original purchase receipt cannot be presented or if any information on the warranty certificate or purchase receipt has been altered, crossed out, removed or made illegible.

Deviations

In deviation for parts below a different warranty period:
- glass: no warranty.
- cord and/or gasket: no warranty.
- inner lining (e.g. vermiculite / chammot parts): no warranty.
- mechanically moving parts: 1 year warranty.
- paint wear or discoloration: no warranty.

For other provisions please refer to our terms and conditions.

Service & malfunction

Despite all the care taken in the production of Nordic Fire fireplaces, it may happen that something is not in order. In that case, contact your dealer or installer. In most cases your dealer or installer will solve the problem immediately.

Your dealer or installer can contact Nordic Fire for advice or (after) delivery of parts. If desired, your dealer or installer can use the Nordic Fire service department. In this case, a Nordic Fire technician will visit you to fix the problem. If this is within the warranty, the parts are covered by your warranty. However, your dealer may charge for the hours worked.

THE STOVE

A characteristic of a wood stove is that heat is delivered directly through radiation and convection. This heat is delivered into the room itself.
Get adequate information from your installer so that you know what the wood stove can offer you.
It is also important to read this manual carefully.

Note: the wood stove can not be used as main heating. It can be used as additional heating!

Purpose of the stove

Conventional wood stoves are intended for use as an additional source of heat indoors. They are equipped with a slow-burning hearth and manual feed of fuel and are closed with a standard door.

The wood stoves are designed to be fired primarily with deciduous wood with a moisture content of 12-20%. We especially recommend seasoned birch wood. During the burning process, thermal energy is released from the combustion chamber by conduction and radiation.

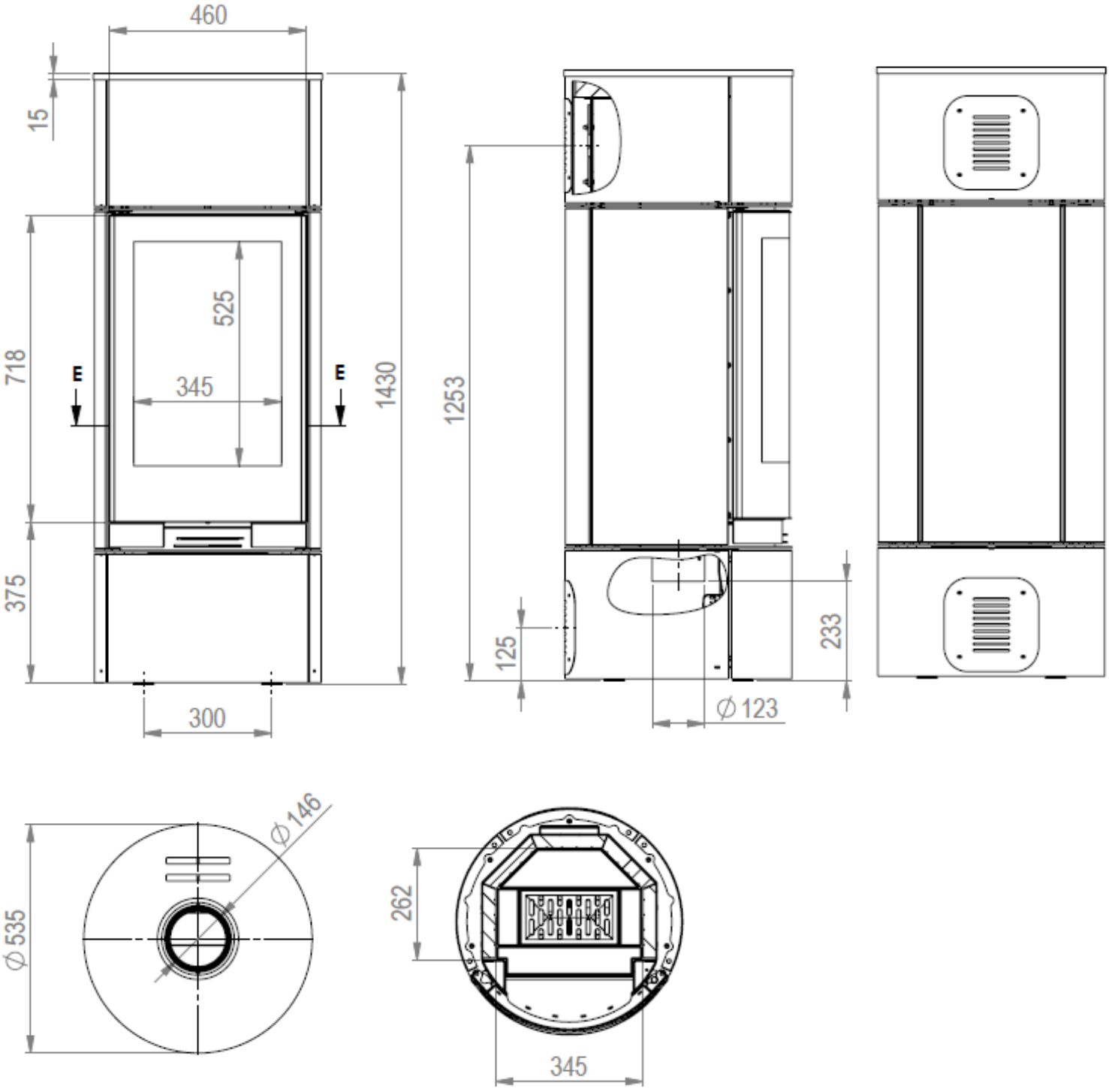
Construction & function

The stove is made of boiler steel grade P256GH. The inside of the combustion chamber is lined with a ceramic stone. The design allows the flue gases to be routed out through the top or back wall of the stove. The air intake has a diameter of 100mm, the flue has a diameter of 150mm. The front of the stove consists of a steel door made of special profile and profiled sheet steel, heat-resistant glass and a handle, which, thanks to the special design, stays cooler for longer while burning. The door is bolted to hinges attached to the stove.

Technical data

Capacity output	8,5 kW
Power range	4,2 - 11 kW
Efficiency	78%
Space to be heated	215 m^3
Flue outlet	top / rear
Flue outlet diameter	ø 150 mm
External air supply	ø 125 mm
Dimensions HxWxD	1430x535x535 mm
Maximum logs	35 cm
Weight	175 kg

Dimension drawing



Data plate

The data plate is located on the back of the stove and provides accurate identification of your model with a series of technical data and a serial number.

NORDIC FIRE

MONTAGE

Transportation & handling

Check carefully that the stove is in undamaged condition. Please check that there is no transport damage. You must report damage to the carrier.
Damage to the glass or vermiculite/chammoth after commissioning is almost always caused by overloading or incorrect operation. In this case, a warranty claim is not possible.

Setup

- make sure that the installation location is chosen so that a straight connection to the chimney is possible. The exact requirements will be indicated by your installer or Nordic Fire dealer.

- Nordic Fire wood stoves are usually provided with a top connection. A rear connection is not possible.

- the installation location must be flat and level before the stove is set up. If the stove is not positioned correctly, excess smoke may not flow out of the stove.

- the smoke discharge materials must be at a sufficient distance from combustible materials. The distances indicated on the rating plate and in this manual must be maintained.

- please ensure that there are no combustible materials directly in the radiant area of the glass window.

Fire safety

The inspection with distances to combustible materials was performed with an insulated flue. With uninsulated materials, it is wise to keep a greater distance. The minimum distance indicated should be maintained. This is indicated on the label of the flue. For non-combustible materials, the distance can be reduced.

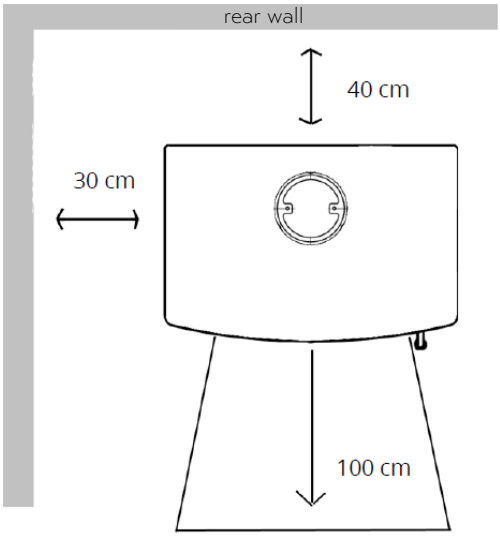
Despite maintaining these distances, certain materials and/or floor coverings may become very hot and start to smell. This may occur because paint evaporates from the materials. You should keep these materials far away from the stove.

The following safety measures must be observed when installing the stove:
- the minimum distance from building elements and combustible and heat-sensitive objects (furniture, wood paneling, fabrics, etc.) must be 40 cm at the rear and 30 cm on both sides to ensure adequate thermal insulation (FIG. 1A).
- there should be no flammable or heat-sensitive objects or building materials within a distance of at least 80 cm in front of the stove door or within its radius. This distance can be reduced to 40 cm if a double-sided ventilated and heat-resistant protective device is installed before the entire part to be protected.
- **all minimum safety distances from combustible parts and furniture are indicated on the plate of the appliance and must not be less than this distance.**
- if the appliance is installed on a floor of combustible material, a fireproof surface must be provided.
- **make children aware of these dangers and keep them away from the stove while it is being used.**
- if the wrong fuel is used or if the fuel is too moist, deposits may form in the chimney, which can lead to a fire hazard in the chimney itself.

The stove must only be used with the combustion chamber in place. Never light the stove in the presence of gas or vapors (e.g. glue for linoleum, gasoline, etc.).

Do not store flammable materials near the stove. When fuel is burned, heat energy is released, causing the surfaces, door and pane of the combustion chamber, door handles, guides, flue and possibly the front part of the stove to become very hot.

Avoid touching these parts without suitable protective clothing or aids (heat-resistant gloves, operating devices).



NOTE: In emergency situations, extinguish the fire by covering the fuel with sand or cold ash. DO NOT USE WATER! If the fire does not function properly, maintenance work may only be carried out after proper ventilation of the rooms and with the help of another person with a dry powder extinguisher.

When the combustion process is slow, large amounts of organic combustion products are produced, which can lead to the buildup and ignition of creosote in the chimney flue. As a result, the chimney fire breaks out.

In the event of a chimney fire, proceed as follows:
- close the air supply to the fireplace by closing the air valve of the air supply;
- close the fireplace door securely;
- call 911 to alert the local fire department.

THE CHIMNEY

Warm flue gases rise in the chimney flue and at the same time combustion air flows out of the living room, or with an external air supply from outside, into the combustion chamber. The cross-section of the chimney, the height, the number of bends and the insulation influence the chimney draft, in addition, the outside temperature is also an influence. Each stove has its special characteristics: An additional retaining plate in the flue gas increases efficiency, however, it means more resistance.

Furthermore, the flue gas temperature and the amount of flue gas vary from stove to stove. As a result, each stove places different requirements on the flue. Thus, a good stove and a chimney that does not fit or functions poorly can lead to poor stove operation. So it is very important that the chimney fit the stove. Your installer can determine if this is correct.

Connection to the flue pipe

The connection to the chimney should be provided and checked by a Nordic Fire dealer. The Nordic Fire dealer can check if the flue and chimney are sufficiently safe. In addition, he will check if the flue meets the valid regulations.

Nordic Fire wood stoves are tested according to German EN standards and are approved according to Bauart 1. This means that the stove is equipped with a self-closing door. This has no function in the Netherlands and the spring mechanism can be removed by the Nordic Fire installer. The necessary connecting materials for the chimney are not part of the delivery of the stove. These materials are provided by the installer. The diameter of the chimney must be at least the diameter of the stove pipe mouth. A larger diameter is possible, a smaller diameter is not allowed.

Wood stoves are complex technical devices. A safe and trouble-free connection is important here. Regulations must be observed in this regard.

Flue requirements

The flue system must meet the following characteristics:

- the cross section of the flue must not be smaller than that of the connection to the stove and must not become narrower towards the chimney (adapters can be used to increase the diameter of the flue to the chimney);
- the flue must have as few bends as possible (increase the resistance of the flow, avoid condensation);
- the stove must not be connected to a common flue with another heating appliance; (Unless it is fitted with a Bauart 1 spring and only in Germany)
- it is recommended to connect the stove to a separate flue;
- the flue must not have more than two chokes of 45° up to a pipe height of 5 m and 20° for a pipe height of more than 5 m;
- the flue must be made of non-combustible materials and be thermally insulated;
- the insulation of the flue must have a fire resistance of at least 60 minutes;
- the joint must be tight;
- the end of the chimney must allow for a smooth discharge of the flue gases and be located at least 60 cm above the highest point of the roof;
- the joints must be made of stainless steel 1.4401 (316), heat-resistant or fire-resistant steel, sufficiently painted with a special paint and with a suitable sheet thickness;
- the material must be resistant to heat, the acidity of flue gases and condensate.

Stove ventilation

- the combustion chamber must be supplied with fresh air from outside (if the amount of air is too small, it will impede the combustion process and may produce toxic combustion gases, including carbon monoxide);
- it is estimated that about 8m3 of air is needed to burn 1kg of wood;
- if you are using a system to distribute air to other rooms, it is essential that the cooled air is returned to the room where the stove is installed so that the air can circulate freely (otherwise, the stove's operating cycle may be disrupted, which will hinder the distribution of warm air);
- when choosing the location for the appliance and during installation, attention must be paid to proper air circulation and a good balance between air inlet and outlet in the room;
- ventilation must be provided in the room where the stove is installed;
-in order to ensure sufficient convection space (cooling of the stove, heating of the air), the stove must be placed at least 80 cm away from materials that can be deformed or damaged by heat (furniture, paneling, wallpaper, etc.).

Stove installation

The stove is installed ready for connection and must be connected to the existing chimney using a connector. The connection should be as short, straight, horizontal or slightly inclined as possible. The connections must be securely fastened.

National and European, local and building codes and fire regulations must be followed. Therefore, consult your local chimney sweep beforehand.

A check must also be made to ensure that the air supply needed for the combustion is adequate.

Important when connecting the chimney

- the chimney must first be checked by the Nordic Fire installer for leaks and the condition of the chimney.
- a masonry, uninsulated flue is not allowed!
- a masonry flue must be lined with a suitable inner liner which is insulated. For example, with vermiculite granules. The lining must be smooth and at least the diameter of the stove.
- the minimum draught in the flue must be at least 12 Pa. This draught must be measured beforehand to make sure that it is sufficient. As soon as the draft exceeds 20 Pa, a draft limiter should be installed. If the draft in the duct is insufficient, smoke may enter the room when opening the door.
- all flue gas connections must be tight
- the flue must not be plugged loose in the chimney.
- it is not allowed to connect more than one stove to a chimney.
- if the draught is insufficient, smoke may enter the room when filling the stove. One can prevent this to some extent by opening the door slightly first and then slowly all the way in before filling wood.

We recommend a fully insulated duct with a diameter of at least the connection of the stove. A larger diameter will improve draft and is therefore advisable. Bends in the duct should be avoided as much as possible. A masonry duct is not allowed, since it can cause too many problems with the draught due to cooling and resistance.

CAUTION: A high-efficiency wood stove is susceptible to an improperly functioning chimney.

WOOD AS FUEL

The surface of the stove is covered with a special heat-resistant paint that, when lit, first softens (be careful not to scratch it) and then hardens. This process may cause an unpleasant odor during the first firings. The manufacturer recommends intensive ventilation of the room. If there are pets or birds in the room, move them temporarily. The manufacturer recommends keeping the flame low for the first few days (about 2 weeks) and burning less fuel at a lower temperature. This is to avoid cracks in the ceramic lining, distortion of the structure and damage to the protective coating (paint) of the pan.

- for use in a Nordic Fire wood stove, only wood that is sufficiently dry, cleaved and clean is suitable.
- do not use wet wood. This is wasted energy (50% less energy!) and it pollutes your stove and chimney, increasing the risk of chimney fire.
- prevent nuisance. Do not fire during foggy days.

Wood suitable for stoking

It is important to use dry European wood. Cleaved wood is dry after the wood has dried in the air under a canopy for at least 2 years, leaving a residual moisture of up to 18%. Oak wood must be dried for at least 5 years before reaching these residual moisture levels.

We recommend not using oak or other hardwoods! Burning poorly dried wood can lead to increased emissions of creosote into the flue, which can cause chimney fires, overheating of the stove and glass breakage.

The performance of your stove depends greatly on the quality of and the amount of residual moisture in the wood. The more moisture present in the wood, the more energy is required to evaporate residual moisture. This leaves very little residual energy in the wood. Wet wood is wasted energy.

Wet wood causes greater deposits in your stove and chimney. In addition, it is much more environmentally damaging than dry wood. Firing with not enough dry wood, leads to possible chimney fires!

The type of wood also determines the amount of energy that can be given off. Light wood releases energy quickly, while hardwood releases energy more slowly. The following table shows the different types of wood and their energy values.

Wood	**kWh/kg**
Birch	4.30
Beech	4.00
Oak*	4.20
Fir	4.50
Spruce	4.50
Pine	4.50

Lighter woods burn faster and give off heat faster, reaching higher temperatures more quickly. Lighter woods are therefore better for heating the stove. Hardwood burns more slowly, so you can stoke it for longer without replenishing the wood.

* A disadvantage of oak is that it is more difficult to dry. In practice, we often find that hardwood still contains too much residual moisture. This affects the operation of the stove. Oak wood can contain tannic acid, which is harmful to your stove and flue and will damage them.

Some tips
- wood should be stored split
- firewood should be stored in a windy place protected from rain.
- hardwood must dry longer than lighter woods.
- damp wood is wasted energy. It pollutes your chimney and creates a nuisance in the area.

Only wood that is suitable should be used in the wood stove.
Never use the following types of wood:
- damp wood, or impregnated wood/hardwood
- varnished wood or wood with a plastic coating
- chopped wood
- chipboard residue
- coal
- waste
- paper and cardboard

The manufacturer strictly prohibits the use of coal, tropical wood, any type of product containing chemical compounds such as gasoline, alcohol, naphthalene, oil, od pads and laminated panels with glue, varnish, etc. as fuel for the stove.

It is important not to use your stove as a waste incinerator. Burning waste releases toxic substances. These lodge in your chimney, but also spread into your living environment.

To achieve the output of your stove, you need the prescribed amount of wood. Overfilling leads to overheating and damage to your stove. Normally, the proper amount of wood is completely burned after about 45 minutes.

Overfilling leads to damage to the chammot, retaining plate. If it appears that
within a few years these parts are defective, this is due to overheating of the wood stove. This leads to additional replacement costs.

Adding wood
Use only the amount of wood in your stove necessary for the heat required at that time.

- refill the fuel when the flames disappear above the layer of embers in the combustion chamber;
- do not place embers on one level, as this significantly reduces the air supply and produces too much smoke in the combustion chamber, which can lead to gassing of the stove and possible too rapid ignition;
- logs in the combustion chamber should be placed parallel to the plane of the door;
- before loading a new batch of fuel into the combustion chamber, the combustion chamber must be emptied if necessary.

Air supply & smoke development

Primary air is the air required to ignite the fire. Primary air enters the base of the fire. This air supply should be fully open when starting.

Secondary air (window cleaning air) is supplied from above. This air also ensures that the glass window remains mostly clean.

Tertiary air is the air supply that goes into the back of the heater. This air supply is fixed and cannot be controlled by the user.

The amount of ash is mainly determined by the type of wood and the intensity of the firing.

The stove is equipped with an external air supply, which can be used in a poorly ventilated house (passive / new construction). However, the stove is not completely sealed. If there is a possibility of negative pressure, additional ventilation must be provided to prevent this. Even if the stove is connected to an external air supply!

The installer can decide whether it is necessary to connect an external air supply. This depends entirely on your living situation.

If the external air supply is not connected, adequate ventilation should always be provided.

To prevent smoke from the stove escaping into the room when the door is opened, a check is recommended:
- about 10 seconds before opening the door, fully open the primary air regulator (air lever as far for ward as possible);
- open the door slightly and after waiting a few seconds (the time needed for the smoke to dissipate), slowly open the stove door;
- be very careful when opening the door and after opening the door, as bits of burned fuel may fall out of the firebox;
- once the proper amount of fuel has been added, close the firebox door;
- after firing the fuel, set the air regulator to its original position;
- the optimum amount of fuel is shown in the table.

Air levers to the left:
The primary and secondary air supply completely closed.

Air levers to the right:
The primary and secondary air supply fully opened.

Upper air lever to the right:
Primary air supply fully opened and secondary air supply fully closed.

Lower air lever to the right:
The primary air supply fully closed and secondary air supply fully opened.

STOKING THE STOVE

Important: Read through before commissioning

- check that the connection to the chimney is completely sealed.
- the stove becomes very hot when in use. You should pay attention to small children, people with physical disabilities or pets. They may burn themselves on the stove.
- take care not to place flammable materials near the stove.
- the stove door should be kept closed as much as possible. Even when not in use.
- as far as possible, avoid overheating the stove with too much wood, which will shorten its life.
- never use gasoline, methylated spirits or other lighter fluids.
- make sure that the stove's air supply is not blocked.
- there must be no flammable materials in the radiant area of the stove. The minimum distance is given below.
- ensure adequate air supply, aeration of the staging area.
- be aware that an exhaust hood and the same or adjacent room can cause negative pressure. This may draw flue gas from the stove.
- it is important that the exhaust hood is not used at the same time as the wood stove as soon as an underpressure situation may arise.
- ash may only be removed once the wood stove has cooled completely. Ensure that the ashes have cooled completely before removal.
- always use a heat-resistant glove when operating the stove.
- observe minimum distances from combustible materials. These can be found in this manual.

The wood stove is approved according to the standard: EN 13240. Modifications to the stove are therefore not permitted. Always consult your dealer.

The first commissioning of the stove, after it has been installed and correctly connected to the chimney, must be carried out by the installer or an authorized service technician. The user must be present during commissioning so that he/she can be trained by the installer. The installer must refuse to commission the stove if he discovers an installation error that endangers the safety of the user. Correct commissioning must be confirmed in writing on the warranty card.

Before using the stove for the first time:
- remove all stickers and other paper labels and accessories from the casing, fire chamber that may cause fire, this also applies to the transport protection;
- check that the retaining plate and ceramic pieces are properly in place, and that they have not fallen out of position during installation. Otherwise, the stove may not operate correctly. For stove types whose door is equipped with a multi-pane glass, check that the different parts of the glass have not fallen apart during transport or use of the stove);

Check operation:
- mechanism for controlling the air supply to the combustion chamber (cold air dampers);
- locking mechanism of the front door (hinges, handle);
- to check the correctness of the installation in accordance with these operating and installation instructions and the applicable legal provisions, in particular regarding the following safety-related issues;
- is the fireplace level;
- is there a proper ventilation system for the room and the fireplace;
- does the air inlet provide an unobstructed air flow from outside to the room;
- is the connection to the chimney properly sealed;
- is the casing of the fireplace built correctly.

NOTES:
During the first hours of operation, it is recommended to operate the stove at a low load, i.e., up to 50% of the normal load.

The first ignition may be accompanied by condensation on the inner walls of the combustion chamber. This phenomenon is normal and results from the condensation of water vapor in the flue gases. It should disappear after the fire chamber cools down.

If smoke escapes from the combustion chamber, adjust the flue valve setting and increase the chimney draft. Clean the fireplace of ash residue before the next time you light the stove.

First use

When you use the wood stove for the first time, the stove must 'stoke'. By the way, this "stoking" can bring with it an unpleasant smell, but it is harmless. Ventilate the room well while firing. Make sure that no hood is on in the same room while the stove is burning; a hood draws away combustion air that the stove needs. Do not touch the surface of the stove as this may damage the paint during the burn-in process.

Lighting

- open the air slider fully while lighting the stove.

- fill the bottom of the stove with a layer of wood. Place small wood on top and make sure there is enough kindling on top. Ignite this kindling with kindling suitable for wood stoves. Starting the fire on top creates less smoke when the stove starts up.

- leave the door ajar so that sufficient air can enter the stove at start-up. You should stay with the stove while the door is ajar. After the stove has warmed up the door can be closed.

- when the stove is warm, the air slider can be retracted slightly, but the air slider should never be completely closed!

- a wood stove with one air slider controls both the primary (combustion air) and secondary (post-combustion air) air supply. When pulling out, until the first half applies, you control primary air supply, the second half the secondary air supply.

The stove must only be used according to these instructions and with a green cap on. It must be fed only with the fuels intended for it. When adding fuel, the fuel must not touch the glass of the combustion chamber door. Except when adding fuel, the combustion chamber door must always remain closed. The stove should be used only when people are present. The outer walls of the stove are hot during operation.

A protective glove must be worn to safely operate the stove. Children must not operate the stove! Only fuels and fuel quantities intended for use may be fed into the stove. Ensure that the stove is not overloaded. In case of overloading, shut off the air supply to the stove. No highly flammable materials may be stored on or near the stove.

Extra tips

This wood stove should be stoked as hot as possible to achieve good combustion. Smothering the stove will result in poorer combustion which can lead to chimney fires. It is not permitted to close the air slider completely.

It is not possible to keep the stove burning at night. If you add wood in the evening, it will normally burn out after a few hours. You cannot keep the stove burning overnight. A smoldering / choked combustion leads to nothing. It only causes more severe contamination of your chimney and your surroundings, and a dangerous situation.

A choke valve in the chimney is not allowed.

Environmental & adverse climatic and transitional conditions

Wood burning is a natural process that releases as much CO2 as it does during decay in the forest. However, poor combustion can release harmful fumes. That is why it is imperative that you, the user, fire correctly to avoid nuisance. Provide dry, clean wood and do not fire during foggy weather.

Control the amount of heat not by means of the air sliders, but by means of the amount of wood. Completely squeezing the air supply can cause poorer combustion.

In the so-called transition period or in bad weather conditions (e.g. fog, damp rainy days, strong gusts of wind and when the outside temperature is higher than +15°C) the chimney draught may be impeded, so that the smoke is not fully discharged. To compensate for this adverse effect, load the stove with as little wood as possible or use additional draft regulators.

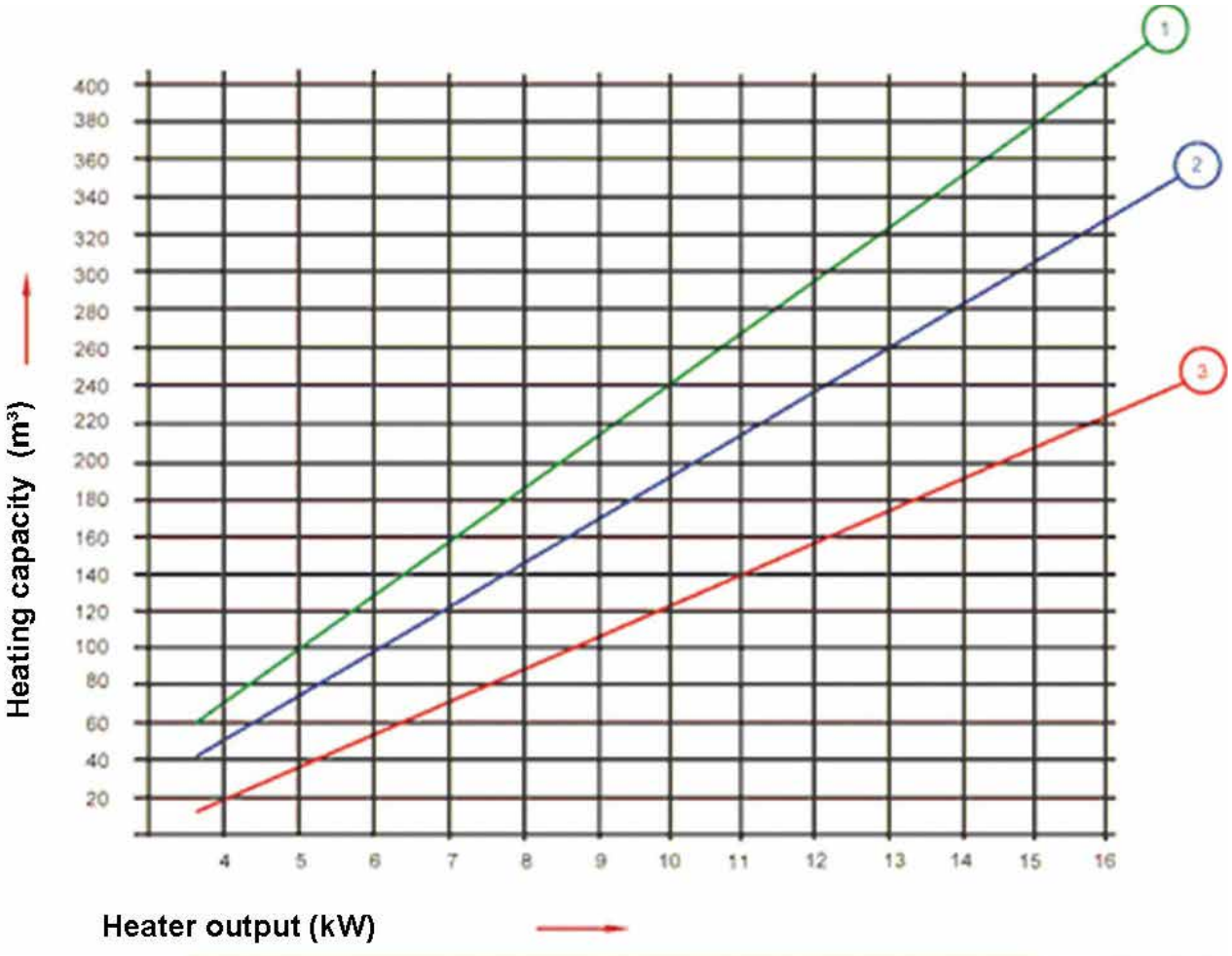
Heating capacity

The actual power of the stove is largely determined by the amount of wood fired.
As a rule of thumb: **1 kg of wood corresponds to 4 kW of power.**

The capacity of the stove is indicated on the rating plate. This is the power achieved during inspection with the prescribed amount of wood. Stoking less wood leads to less power. Stoking more wood leads to a higher output. However, it must be taken into account that the stove does not overheat.

The capacity of the wood stove is tested during the inspection and indicated on the type plate of the wood stove. Depending on the power rating, you can heat more or less.

The space you can actually heat depends on the amount of fuel, the chimney draft and the insulation level of your home. Values issued for this reason are different in each case because not all other conditions are equal.



NORDIC FIRE

PROPER OPERATION

Stoves are designed to provide maximum efficiency. A properly fired wood stove can achieve an efficiency of about 78%. This means you need less wood for the same amount of heat.
In addition, a well-fired stove produces less smoke pollution.

Some tips for optimal stoking pleasure:
- always fire your stove with the door closed.
- do not put more than 3 logs on the fire at once. A lot of fuel at once will counteract efficient combustion and burden the environment.
- place the logs with the split side in the firebed.
- ventilate the room well when your fireplace is burning.
- never turn on your exhaust hood when your stove is burning in the same room.
- only feed additional air to your wood stove when you start firing. If you constantly feed a lot of primary air, the efficiency is much lower.
- do not fire in fog or windless weather. In windless weather there is hardly any draft in the cold chimney. Because smoke is heavier than air, there is a chance that smoke will enter the room. In fog, smoke from the chimney (outside) will cool quickly, settle down and cause a nuisance in your area.
- do not extinguish the fire suddenly with water but let it burn out. The materials inside the fireplace may deform or crack due to sudden, large temperature differences.

Note: You control the heat output not by operating the air slider, but by the amount of wood you fill the stove with.

We recommend that maintenance be performed by a specialized company before the start of the heating season. If the stove is used only for a limited period of time, in unfavorable wind or climatic conditions, increased attention during commissioning is essential. After a longer period without firing, it is necessary to check the permeability of the flue. The outer surfaces of the stove are very hot during operation, so wear protective gloves when handling the stove. Also pay attention to small children if they are in the room where the stove is installed. Only original spare parts and accessories should be used for wood stoves.

Measures in case of fire in the chimney

Flues connected to solid fuel stoves should be thoroughly cleaned regularly each year. Maintenance of both chimneys and flues is subject to local regulations. Sedimentation of soot and tar occurs in the chimney during normal use, especially when heating with moist fuel. Failure to inspect and clean the chimney increases the likelihood of a fire starting in the chimney.

Should this occur, proceed as follows:
- call 112 fire department
- close the door securely;
- never extinguish the fire with water!
- close all air supply ducts. Cover the chimney if conditions permit.
- always consult a specialist to assess the condition of the chimney!

As a result of slow combustion, large amounts of organic combustion products are released, forming creosote in the flue that can ignite. A so-called creosote fire then occurs, which can cause the entire building to catch fire.

CLEANING AND MAINTENANCE

The surface of the stove should be cleaned only when cold. The use of a dry cloth is recommended for cleaning.

Observe the following guidelines for safe and trouble-free operation of the appliance:
- perform periodic maintenance tasks in a timely manner - have the stove checked by a specialized maintenance company at least once a year;
- keep the following parts clean: glass plate, combustion chamber with combustion chamber and chimney channel;
- empty the combustion chamber systematically - ash residue can lead to corrosion of the combustion chamber and restricted air flow;
- make sure the combustion chamber is cleaned and maintained at a frequency appropriate for a particular type of fuel;
- ensure that steel or cast iron elements inside the insert are cleaned with suitable tools such as: brush, scraper and poker; use protective gloves;
- all maintenance work should be performed only after the fire has been extinguished and the fireplace has cooled;
- clean the ceramic glass plate of the stove with kitchen paper (kitchen roll). It should be moistened with water and then dipped in the ashes of the stove, avoiding direct contact with steel elements and cast iron appliances. By rubbing the glass with moistened paper, we can effectively dissolve the deposit - so that it can be wiped with a dry paper towel. All agents used to clean the glass should not contain abrasive materials that will damage (scratch) the glass;
- regularly clean the chimney flues, as documented on the warranty card, by a licensed chimney sweep;
- clean the inside of the fireplace, check the inlet and outlet;
- replace all gaskets after each heating season. To get an efficient burning process in the fireplace, the combustion chamber, flue and combustion gas ducts must be cleaned periodically.

Part	**Periodicity**	**Tools and resources**
The convection surfaces of the stove and the pipes connection to the flue - cleaning	If necessary, but not less frequently than once a year or after a prolonged downtime	A brush made of resilient material, vacuum cleaner, cleaning products for fireplaces.
Combustion gas flue, chimney - Check that the chimney is not clogged and that the combustion gas system is in good condition	Regularly, after the heating season and after a prolonged downtime	Specialized chimney sweep company
Front glass plate	If necessary	Cooled - moistened paper towel with a little clean ash, no abrasive materials that are harmful
Grid and internal parts of the insert	If necessary	Vacuum cleaner, fireplace cleaning products
Maintenance of combustion air valve - replacing the gaskets of the window and of the fireplace door	At least once a year, after the heating season or as necessary, depending on the degree of wear	Maintenance company approved by the manufacturer

NORDIC FIRE

Cleaning the glass window

The Nordic Fire wood stove is constructed so that the secondary air supply ensures that the glass pane is cleaned. Due to the high temperature and this air supply, dirt particles are burned as much as possible. With the right fuel (dry), sufficient chimney draught, the window will remain mostly clean. However, a slight deposit cannot be avoided.

Poor combustion (e.g., due to wet wood) results in dark deposits not only on the window, but also in the stove itself as well as the chimney. Deposits from wet wood are difficult to remove and can lead to a greater risk of chimney fire. Cleaning the window should only be done with a mild glass cleaner, using a non-scratch cloth.
In addition to using the proper fuel, keeping the glass clean is affected by:
- adequate supply of combustion air;
- optimum chimney draft;
- how to operate the stove;
- use of fuel with a moisture content of less than 20%.

To keep the glass clean, it is advisable to add the recommended amount of wood so that the fuel is central and as far away from the glass as possible.
If the glass gets dirty during firing, we recommend increasing the combustion intensity by opening the air valve, which usually makes the glass clean itself.

Cleaning the lacquered parts

Painted parts can only be cleaned with a dry cloth. Without cleaning agent.

Emptying the combustion chamber

To empty the combustion chamber, you can use a canned hand duster. However, the stove must be completely cooled down. Also, no glowing particles should be present anymore. This can often take up to at least a day after the fire is extinguished. A standard vacuum cleaner is not recommended, as the filter gets clogged by the fine ash. However, special ash vacuum cleaners are available.

A vacuum cleaner can catch fire if glowing ash particles are still present.

Depending on the amount and type of fuel to be burned:
- the combustion chamber can only be emptied when it is cold, we recommend performing this operation at the latest before lighting;
- before emptying the combustion chamber, check that there is no burning fuel residue in it that could cause a fire in the waste container,
- every few months, depending on the use of the hearth, it is necessary to remove the grate pan (ceramic fittings) and suck the ash residue from the bottom of the insert fireplace.

NOTE: The manufacturer recommends not overfilling the combustion chamber.
Overfilling the combustion chamber leads to a restriction of the air supply, which leads to a deterioration of the combustion parameters, and in extreme cases the fire cannot kindle.

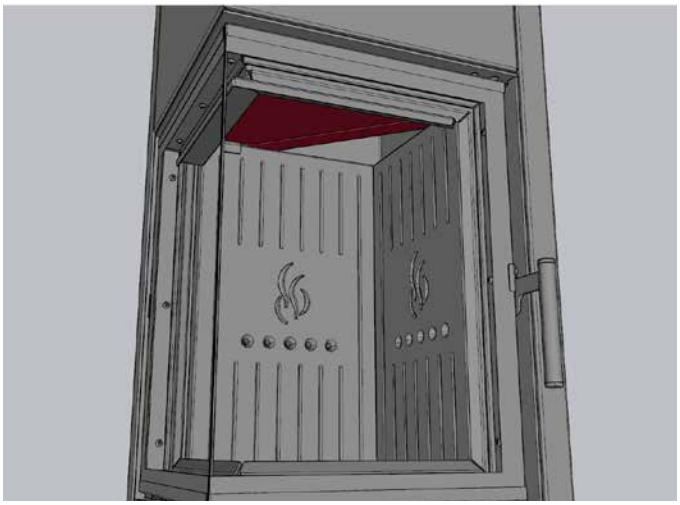
If ash is left in the combustion chamber for too long, it can lead to premature corrosion. Ash from burned wood can be used for compost or as fertilizer.

Maintenance of the seals

Seals on doors and glass experience high thermal loads. It is therefore necessary to have them checked once a year by your dealer. If damaged, these seals must be replaced.

Cleaning the stove and chimney

At least once a year the fireplace should be completely cleaned. This can possibly be performed in conjunction with cleaning the chimney.



At the top of the stove is the baffle plate. After a certain time more and more ash will accumulate here. The retaining plate must be replaced in exactly the same way.

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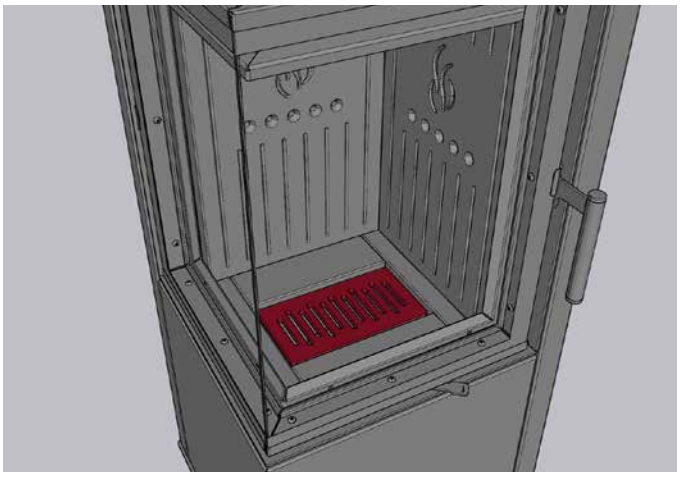
avoid damaging the chammoth.



Ash will accumulate in the bottom of the stove.

The grate should be replaced in exactly the same way afterwards.

Special maintenance

Special maintenance should be performed annually. This is often combined with sweeping the flue.

-check at least once a year that all screws securing the glass are tight. If they are loose, you can tighten them by hand.
- if the door is difficult to close, we recommend greasing the closing mechanism. This can be done with a heat-resistant grease or copper grease.
- cracks in chamotte stone or vermiculite lining develop over time. These need not be replaced unless loose parts fall out. This is normal for a wood stove and is therefore not covered by the warranty.

Downtime in summer

After cleaning the stove, chimney and flue, ash and any other debris must be completely removed. Then all doors and control valves must be closed. In case the unit is disconnected from the chimney, the exit opening must be closed.

MALFUNCTIONS AND SOLUTIONS DURING OPERATION

	Problem	Solution
Backflow of smoke into the room when opening the stove door	the door may have opened too abruptly, creating negative pressure in the combustion chamber	slowly opening the door
	closed, adjustable flue shaft (if the installation has such an option)	opening the shaft
	insufficient air circulation in the room where the stove is installed	Check the efficiency of ventilation and make sure there is enough air in the room
	atmospheric conditions	
	insufficient draft	check the operation of the installation chimney
Heating with low productivity or phenomenon heater extinction	insufficient wood in the stove	increase the amount of wood to the required level
	fuel humidity too high	use wood with a humidity up to 20%
	insufficient draft	check the efficiency of ventilation
Low heating capacity with correct combustion process in the stove	unsuitable, low-calorific wood was used	switching to a more calorific type of wood being burned
	fuel humidity too high	use wood with a humidity up to 20%
	thin, fine pieces of wood are used that burn quickly	use for smoking other thicker clearance
Dirty glass, no self-burning glass	too slow combustion of wood resulting in low combustion chamber temperature	increase the amount of air in the combustion chamber, use wood with a moisture content of 20%
	coniferous wood with high resin content was used	changing wood type to dry firewood
If the device does not work correctly, it may be due to extreme factors.	tall objects too close to the chimney	increase the height of the chimney or use a 'fireman' or other type of hood
	unsuitable atmospheric conditions, e.g. wind or lack of wind, low air pressure, high humidity, fog, etc.	use a chimney pot, but if this does not help, a chimney sweep should be called in to determine the source of the problem

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Instruction manual
Wood stove
TIMBER

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