



HS Flamingo®

HS Flamingo s.r.o. | Mírové náměstí 98 | 55001 Broumov

Všeobecný technický popis a návod k použití

KRBOVÁ KAMNA NA DŘEVO A EKOBRIKETY

Všeobecný technický popis a návod na použitie

KRBOVÉ KACHLE NA DREVO A EKOBRIKETY

Ogólna charakterystyka techniczna z instrukcją obsługi

PIEC KOMINKOWY NA DREWNO I EKOBRYKIETY

Allgemeine technische Beschreibung und Betriebsanleitung

KAMINOFEN FÜR HOLZ UND EKOBRIKETTE

General technical description and instructions for use

STOVES FOR BURNING WOOD AND ECOLOGICAL BRIQUETTES

You have become an owner of fire stove with brand called HS Flamingo. Thank you for your trust which you have demonstrated by purchasing our product. Read please these instructions for use thoroughly where you can find information on functions and operation of the stoves in order to avoid risk of damages and to extend the service life of the stove.

With correct manipulation you can save fuels and protect the environment.

We shall grant the guarantee to our stoves only if the instructions for installation and manipulation have been respected.

We shall grant the guarantee to our stoves only if the instructions for installation and manipulation indicated herein have been respected. Please, keep these instructions and the document with technical data in a safe place so you can refresh your knowledge necessary for correct operation of your stove at the beginning of each heating season.

1. TECHNICAL SPECIFICATION

The combined fire stove is determined for heating living rooms, recreational facilities as well as working places, where it is intended to increase thermal comfort and which is also supported by sensations while watching flames.

1.1. Construction design

The stoves are designed for burning wood, ecological briquettes and carbon briquettes. It is not possible to burn coal or coke in the burning system of the stoves.

The stoves are welded from steel plates 2-5 mm thick. In the central part of the stove there is a combustion chamber of which the front side is formed by stoking door. In the stoking door is embedded large glass resistant to temperatures up to 800 °C. The combustion chamber is encased by fireclay fittings. The fittings are not connected to any coating material. On the bottom of the combustion chamber there is a simple cast iron fire grate. In front of the fire grate is placed a barrier against falling of fuel out and its sliding on the front glass. The lower part of the fire stove is determined for storage of fuel. The stove is designed as double casing with vertical conduct of flue gases outlet. Diameter of the flue gas pipe is 150 mm. Manipulation elements of the stove are made of stainless. The casing of the stove is made of steel plate and ceramic tiles.

Caution: The fire stoves are not designed for permanent heating but for periodic – intermittent (temporary) operation.

2. PROCESS OF COMBUSTION

2.1. Quantity of fuels and setting up the process of combustion

The combustion of wood and ecological briquettes in the fire stove is based on heating-through system, which means that the combustion takes its course through all the load of fuel. In order to find out optimum conditions of kindling and subsequent burning up it is necessary to ensure sufficient inlet of air under the burning fuel, through the grate – the air indicated as primary which is always reusable. With increasing temperature of combustion gases are released gas components of the fuel, which do not effectuate work in form of thermal energy without other inlet of air, therefore it is necessary to fetch in more air in the level of flames where the process of combustion of such gas components can further take its course. In that case there is usually no need for inlet of primary air, but in contrary, there is a need for inlet of secondary air.

The inlet of secondary air, which is generally regulable, improves the quality of combustion as well as it facilitates self-cleaning of the glass embedded in the door. With correct quantity of proportion of air fetched in the right spot of the combustion chamber, the efficacy of the combustion is increased and on the other hand the emission of harmful gases into the environment is decreased this way. Allocation of air inlet regulators is illustrated on the scheme in the document with technical data, which makes part of each delivery of fire stove.

Achievable thermal power of the heating unit depends on quantity of combusted fuel within a time, its quality and efficacy of the combustion process. According to the chart No. 2 regarding calorific value of fuels you can have an idea about achievable output with combustion of 1 kg of wood in one hour with its 20% moisture. Further it is proved that with increasing moisture of fuel its calorific value decreases.

At the conditions of testing room, the regulability of heating unit was tested within the range of 20 - 100% of nominal power. Regulation of power was executed through the use of flue in chimney and by quantity of fuel. In practice, the stoves are generally regulated by air regulators, especially by primary air inlet. It is not possible to define exact setting up of the combustion process through the use of the regulators with definiteness. It is affected by many factors – fuel moisture, type of fuel, draught of chimney, outdoor pressure conditions etc. Therefore it is necessary to regulate the combustion process (intensity and quality of flames) with regard to actual conditions.

The ability to set up the combustion process effectively will get improved with your increasing experience with use of the stove. More detailed chart regarding the setting up of inlet air regulators makes part of the technical document, in which are indicated real values, which were observed during trials at testing conditions in the state laboratory. The following chart No.1 serves as a general information for air inlet regulation.

Chart No. 1

Types of wood combustion:

Fuel	Quantity of fuel	Primary air	Secondary air
		regulable	not regulable
Wooden chunks	2 - 3 chunks (ap. 2 - 3 kg)	Closed or according to the need opened with regard to the actual combustions conditions	Opened at maximum
Wooden briquettes	2 - 4 pc (ap. 2 - 3 kg)		
Carbon briquettes	2 - 4 pc (ap. 2 - 3 kg)		

At each lighting up of fuel in the stove, keep the regulator of primary air opened rather longer in order to kindle the fuel better. At stoking up the fuel, you are advised to fully close the regulator of primary air.

At combustion of wood, it is necessary to ensure that the wood is dry with maximum moisture of 20%.

In order to achieve optimum output of exchanger, it is advisable to stoke fuel continuously and to keep the fuel on area of the grate during the burning process.

2.2. Fuel

In the fire stove it is possible to burn wood in pieces and briquettes made of pressed wood. The moisture of burned wood should be lower than 20%, optimally 10%. There is rule saying that as lower the content of water in fuel is, as higher the calorific value is achieved. Recommended moisture of the wood can be achieved by storage at a ventilated shed for a period of two years at least. The content of water in briquettes shall be indicated by the manufacturer of the briquettes. It is necessary to store the briquettes in a dry place, otherwise there is a risk of their decomposition. Recommended size of pieces of wood is aprox 3-6 cm and 20 - 35 cm long. **It is forbidden to burn coke and coal in the fire stove.** As a fuel do not use flammable liquids or waste such as: wallpapers, chipboards, plastics, impregnated wood or separate use of wood shavings or sawdust. The combustion of such materials is harmful not only to environment but also it shortens the service life of the fire stove, and further, the stove -chimney might get damaged. Note: obviously it is also possible to burn the bark on wooden chunks.

Chart No.2

Calorific value of selected types of wood with 20% moisture (scm- solid cubic meter (m³))

Type of wood	Calorific value kWh/scm	Calorific value kWh/1kg	Weight kg/scm
Spruce, fir	1957	4,0	485
Larch	2461	4,0	610
Pine	2280	4,0	565
Oak, beech	2743	3,8	726

3. SAFETY OF OPERATION

3.1. General provisions

At the operation and installation of the fire stove it is necessary to respect the principles of fire prevention contained in national norm.

The heating unit can be used under normal conditions in accordance to national norm. If the conditions are changed there can be some temporary risk of fire or explosion (for example at gluing linoleum, PVC, at work with coating materials, etc.). The fire stove must be temporarily set out of service. Further, the fire stove must be used only after thorough ventilation of the room, preferable by draught.

3.2. Safe distance of the fire stove from combustible materials

If the fire stove is placed in a room with combustible objects (within the categories of inflammability B,C1 and C2), it is necessary to keep safe distance of 800 mm from the front side of the fire stove and in other directions 200mm.

Safe distance of the flue gas ducting from door casing etc, placed constructions, constructions of inflammable materials and from installation of waterpiping including its insulation. From other parts of constructions made of inflammable materials it is at least 400mm. It concerns the building materials with classification of inflammability B, C1, C2 according to the chart No. 3.

If the stove is operated in place with the material of C1 category, then the safe distance shall be prolonged.

3.3. Instructions for save operation

No inflammable liquids shall be used for lighting up and burning! Further, it is forbidden to burn any plastics, wooden materials with different connective chemicals (chipboards, etc.) and also house, not selected, waste including pieces of plastics and so on.

The fire stove must be attended by adults only! It is forbidden to leave children without supervision of adults by the fire stove. The surface of the stove is heated up, especially the areas of glass, with a touch you could get seriously burned.

The operation of the stove demands for regular attendance and supervision. For safe controlling of the regulators and for manipulation for the stoking door it is necessary to use protective gloves. It is forbidden to, during the operation and if heated, lay aside any object of inflammable materials which can provoke fire. Do not put any vessel with cold liquid in to the heated stove with ceramic casing in order to prevent rupture of the casing.

Pay particular attention while manipulating with the ashtray and when removing the hot ash, in order to prevent the risk of burning. Hot ash shall not come into contact with inflammable objects – for instance while disposing hot ash into the vessels for municipal waste.

The stove shall be operated only in accordance with the present instructions. It is forbidden to make any unauthorized modifications.

Chart No. 3

Degree of inflammability of building materials and products	Building materials qualified according to the degree of inflammability
A - non inflammable	Granite, sandstone, heavy aerated concrete, bricks, ceramic tiles, special plasters
B - hardly inflammable	acumin, heraclit, lihnos, itaver
C1 - inflammable with difficulties	Deciduous wood, plywood, sirkoklit, herkolite, formica
C2 - medium inflammable	Chipboards, solodur, cork slabs, rubber, floor covering
C3 - easily inflammable	Wood fibre slabs, polyester, polyurethan

Information on degree of inflammability of selected building materials

4. INSTALLATION OF THE FIRE STOVE AND ITS CONNECTION TO CHIMNEY

Caution: At the installation of the fire stove it is necessary to respected all the local norms, including national and european standards for this kind of appliance.

4.1. Connection of the stove to chimney or to chimney insert

Connection of the fire stove to chimney outlet can be realized only with consent of chimneyers enterprise in accordance national standards, or in accordance with valid legal norms regarding this kind of appliances in countries where installed. For illustration see the attachment No. 2.

In order to ensure correct functionality of the stove it is necessary to ensure correct draught of chimney in neck of the flue gas pipe.

Data on minimum draught is always indicated in technical documents for respective type of stove. Insufficient draught of chimney causes bad functionality of the stove, excessive sooting of glass and excessive clogging of the flue gas ducting. The total thermal output of the stove is decreasing. If we are stoking and the chimney has not good draught conditions, the flue gases might get off into the room. Therefore we recommend regular revisions provided by a chimneyer from a professional enterprise in accordance with national standards and to ensure a regular maintenance of the heating unit. When the draught in chimney is too strong and exceeds 20 Pa, in such case it is advisable to install a chimney clack-valve (for example flue gas pipe with clack-valve). Excessive draught might be the cause of difficulties at the operation, for example too intensive combustion, high consumption of fuels and it can also lead to permanent damage of the heating unit.

4.2. Connection of the stove to chimney air hole

We recommend to have connected the fire stove with a separate chimney air hole. It is possible to connect the stove to a joint chimney air hole only if the provisions of national standard been respected. The stove can not be connected to a joint air hole together with a gas appliance.

4.3. Instructions for installation and setting up the flue gas ducting

Connect the outlet neck with the chimney in the shortest possible way so the length of flue gas ducting is maximum 1,5 m. Join the flue gas pipes and elbow-pipe firmly with an overlap of min. 50mm and make sure that the joints are set up in direction of flue gas flow. Furnish the input hole into the chimney with a metal shrunk ring of corresponding diameter. The flue gas pipe should rise under the angle of aprox. 10°.

4.4. Installation (setup) of the stove in space (room)

Before installation of the fire stove, it is necessary to check on bearing capacity of the floor (ceiling) if it fulfils the conditions of bearing for the respective type of stove in dependence on its weight. The stove must be installed on heat-insulation fireproof ground-sheet, which should overlap the ground-projection of the stove on sides and behind at least by 100 mm and in front by 300mm. If a metal ground-sheet is used, it should be min. 2 mm thick. For illustration have a look at the **attachment No. 1**.

Caution: in order to have the possibility to clean the appliance, it is necessary to leave sufficient space for access to the flue gas pipes and chimney.

5. SERVICE INSTRUCTIONS

5.1. First time setting the fire stove into service

Before setting the stove into service for the first time, it is necessary to remove eventual labels from the glass, door, accessory parts in ashtray, resp. from the fireplace, this applies also to eventual shipping safety. Check up, according to the picture on the technical document, if the screens freely laid for draught direction, fireclay fittings and the barrier are placed correctly (it is possible that during the transport or installation of the stove they slid into wrong position). If you may find any defect of setup, set it into the right position, otherwise the correct functionality of the heating unit might be at risk.

For the superficial treatment of the fire stove was used a fireproof paint which gets hardened after temporary softening at the first service operation. At the softening phase, there is an enhanced risk of damage on the paint by hand or some object. With the first use of the stove, it is advised to kindle the fuel with small flames, with smaller quantity of fuel at a lower temperature. All the materials must get used to the heat burden. With a careful kindling up you can prevent eventual occurrence of cracks in fireclay bricks, damage on the paint and material deformation of the stove construction. Possible odour at the paint hardening shall disappear soon – we advise to ventilate the room intensively, preferable with an air draught.

If there are any pets of birds in the room, relocate them to some other place for a temporary period of time.

5.2. Kindling and heating

For easy kindling, at first put on the bottom of the fireplace resp. on the grate, 2 or 3 small wooden chunks, on them paper or approved fire-lighters, then some brushwood or wooden chips, small pieces of wood and at the end thicker chunks. Load the fuel in a good quantity (aprox. up to 2/3 height of fireclay brickwork). With loading bigger quantity of fuel you will ensure sufficient time of burning in order to warm up the chimney and its correct functionality. Open the regulator of the primary air at maximum. Sometimes, it is advised to regulate also inlet of secondary air for better kindling. After the kindling, the door of fireplace must be closed. As soon as the fuel gets burned through the use of the regulators of air inlets, you may set up calm, rather damped combustion. For setting up the flames and combustion you can follow the provisions indicated in the technical document of the **chart. No.1**

Caution: Before every heating it is necessary to check up if the grate is not sooted, and remove the excessive ash with ash-hook. The door to the fireplace (combustion chamber) must be always closed, with an exception of setting the stove into the service, loading with fuels and removal of ash. **After each longer discontinuation of the service operation of the stove, it is necessary to check up the throughput and cleanness of the flue gas ducting, chimney and the combustion chamber of the stove before its repeated kindling.**

5.3. Fuel loading

In order to prevent the release of flue gases into the room at loading we advise you to: fully open the primary air regulator approximately 5 - 10 seconds before opening the door to the fireplace, then wait few seconds for suction of the flue gases into the chimney and then you can fully open the door. After opening the stoking door, it is always necessary to be careful; there is a risk of a firebrand to fall out. After loading the stove you can close the door. As soon as the fuel gets burned (without sooty flames) put the regulator into the original position (eventually close it). When loading the stove, make sure that the fuel does not exceed the level of the fireclay brick-work in the combustion chamber. The quantity of stoked fuel should correspond to informative consumption per hour for a given heating unit (see the technical document). When overheated, there is a risk of permanent damage of the stove.

Caution: You can prevent the excessive release of the flue gases into the room by loading the stove after the fuel is burned out to a griddle-hot base.

5.4. External inlet of combustion air

It is necessary to ensure sufficient quantity of fresh air for the combustion process. At wood burning, the stove consumes up to 15m³ of fresh air per hour. New houses are rather more insulated from external ambient (windows of plastics). Other difficulties can be caused by air suction units or other thermal appliances which are in service in the room or space together with the stove.

With this, the quality of the combustion process is particularly lowered along with sooting of flue gas pipes, and at stoking process the smoke might be released into the room. You can ensure sufficient air inlet by opened windows or door to next, better ventilated room. Preferably, at the installation of the stove you are advised to ensure a ventilation air inlet with regulation grid which is secured against clogging.

5.5. Operation during transition period of time and at unfavourable climatic conditions

In the transition period, resp. at higher external temperatures above 15°C, in rainy and wet days, at strong gust wind, according to the actual circumstances the draught in the chimney (stove) can be deteriorate, so the flue gases are not fully exhausted. Therefore it is advised that in such period the stove is in service at minimum fuel loading in order to improve the combustion and draught in chimney by opening the air inlets.

5.6. Cleanness of the glass

To keep the transparent window clean, it is necessary to use appropriate fuels, ensure sufficient inlet of combustion air (particularly the secondary air) and corresponding draught in the chimney as well as the correct way of servicing the fire stove. In this regard we recommend to stoke the fuel in one layer only so the fuel is proportionally spread in the fireplace and to keep the fuel distant from the glass. The same applies to briquettes (distance among them 5 to 10 mm). If the glass gets unpurified, we advise you to increase the intensity of the combustion by opening the primary air regulator so the glass should get cleaned itself.

5.7. Removal of ash

According to the time and intensity of heating, it is necessary to remove ash by fire-hook through the grid into the ashtray and then to empty the ashtray. The most convenient way is to remove the ash when the stove is cold. Make sure, that the ash tray does not get overfilled. Cumulated ash prevents the access of air inlet under the grate. **ATTENTION:** before emptying the ashtray make sure that it does not contain any griddle-hot pieces which might cause fire in the waste vessel. The ash from burned wood can be used as fertilizer.

6. CLEANING AND MAINTENANCE

6.1. Cleaning the heating unit

It is necessary to clean the cold fire stove at least once a year (after the heating season), eventually more often. At cleaning it is necessary to remove settlements in flue gas pipes, combustion chamber and on screens for draught direction. To repair, preferable to replace, the missing parts of the fireclay brick work. The completeness of fireclay brick-work must be controlled also during the heating season. The gaps between the fireclay fittings serve as thermal dilation which prevents their cracking, so it is not advisable to fill them (for example by coating materials) as it was usage with old type of heating units for solid fuels.

The fireclay fittings are functional even if cracked. This does not apply if they fall out!

For cleaning the glass, you can use ordinary agents for cleaning cookers and ovens, dry soft towel or newspaper, eventually special cleaning agent determined for fire stove glass, for example from the manufacturer of the fire stove. The glass must be cleaned only if cold. Do not ever use water for cleaning varnished parts of the heating unit; it is advisable to use a foam sponge or soft flannel towel.

6.2. Fire in the chimney

In case of occurrence of a fire in the chimney, it is necessary to extinguish the fire immediately by removing the burning pieces of fuel with a shovel into the appropriate fireproof vessel and to call immediately the firemen (line 158) or the integrated rescue system on line 112.

6.3. Cleaning ceramic and tiles

For cleaning ceramic tiles it is advised to use only dry or slightly dampened towel. The cleaning must be done only if cold.

6.4. Sealing cords and stripes

For sealing the seating areas of doors and glass (eventually other parts of the stove) was used a special glass-ceramic cord (stripe), which is resistant to high temperatures. We recommend you to check up the sealing continuously and to replace it with new if it lost its functionality.

After a certain time of use the new sealing gets settled and therefore we advise to check up after three months of its use whether the glass fits to the door construction, and if unclamped to tighten it carefully by glass holders.

6.5. Spare parts

In case of necessity, you are advised to use only original spare parts recommended by the manufacturer, see Section 9.2. Recommended spare parts. You can identify the spare part according to the technical document which is attached to the delivery of the fire stove.

7. FREQUENT DEFECTS

7.1. Cracked (missing) fireclay fitting in the combustion chamber

First of all, it is necessary to mention that cracked fireclay fittings do not lose their functionality, if not missing, so it is not necessary to replace them! In case of replacement, you can order these parts directly at your manufacturer or at the address of the manufacturer indicating the type and serial number of the fire stove, further, indicate the number of fireclay brick which you need to replace according to the technical document (attached to each delivery of the fire stove).

How to replace: the side fittings must be replaced in the following way: first remove the holders of the fireclay and then pull out the defective fireclay fitting. Sometimes it is also necessary to pull out the cast iron grate with fireclay fittings on the bottom. The placing of new fittings is analogical in reverse way, do not forget to assemble all the parts into the original positions, which you can check with the illustrations in the technical document.

Caution: Do not put the stove into operation if the lower part of casing of the combustion chamber has fallen out. There is a risk of damages on the construction of the stove by burning through.

7.2. Broken glass

The door glass is made of a special glass-ceramic material with resistance to high temperatures. It is not possible to use ordinary glass!

How to replace it: It is not necessary to dismantle entire door, it is sufficient to unscrew the holders of the glass and to take the glass out. At the installation of a new glass it is necessary to settle the glass appropriately in the door. The contact area between the door and glass must be fixed by a sealing stripe. The sealing stripe can be reused if not damaged. The glass holders must be tightened up very carefully and proportionally in order to prevent the rupture of the glass by excessive tightening up.

7.3. Ruptured side tile

The tiles of the stove casing may be damaged at transport, operation or at other circumstance. The tiles or metal sheet panels are fixed in the casing

by pressure of special holding springs.

Disassembly: Move the tile with tapping by surface of your palm on side (right or left).

Be careful so the tile does not fall down and is not damaged by springing up. Start to disassembly the central tile, or such tile which is in contact with casing by two sides.

Assembly: Start the assembly by bottom or upper tile. Insert the assembled tile into the required place (from right of left) and overcome the strength of the fixing spring. In order to repress the spring it is advisable to press the tile, preferably by both hands, behind the edge of the stove and move the tile with soft strokes by palm into the right position (for repressing the springs it sometimes necessary to use force). Install the tile symmetrically – with identical overlaps on both sides of the casing. As the last one put the central tile (or that one which touches the casing by two sides).

Caution: If during the operation of the stove, by dilation of materials, falls out any tile itself, it is advised to enhance the clamping strength of the springs by appropriate springing.

8. GUARANTEE AND SERVICE

8.1. Generally

If the rules and instructions for installation, operation and maintenance indicated herein have been respected, the manufacturer (supplier) firm HS Flamingo s.r.o. guarantee that for period 60 months from the moment of handing over to the user, the product shall have the qualities determined by technical standards, by the present instructions and data indicated on production label.

8.2. Guarantee conditions

The guarantee applies to free repair of the stove, respectively repair of the claimed parts or components, where the defects were caused by defective material or production defect. At unjustified complaints for repairs within the guarantee, such costs shall be sustained by the owner (customer).

8.3. Service in period of guarantee and posterior service

The service within the guarantee period and posterior service in the Czech Republic is ensured by the manufacturer, the company HS Flamingo s.r.o., through its service department with its seat at:

Service department:

HS Flamingo s.r.o.
Mírové náměstí 98
55001 Broumov

Tel/fax: +420 491 422 647

E-mail: podpora@hsflamingo.cz

Working hours:

Monday to Friday 8:00 a.m. – 16:30 p.m.

The period for resolving the complaint is determined by the national acts.

8.4. Guarantee

If during the guarantee period occurs in your stove any functional defect or a defect of superficial treatment, you are advised to not repair it yourself. The repairs within the guarantee period or posterior repairs shall be carried out by the manufacturer, which you can contact directly or through its sales agents. The manufacturer does not grant its guarantee to damages and defects on the stoves or its parts, which were caused by:

- incorrect set up of the output of the stove for a given room (overheating or insufficient heating of the room)
- not respecting the respective legal norms regarding edification
- incorrect installation and assembly of the devices
- insufficient or strong draught in the chimney (connection must be realized according to the valid legal norms)
- realization of alterations or other, particularly additional, modifications of the fireplace or outlet of the flue gases
- intervenes or modification of the unit by unauthorized persons
- not respecting rules and service instructions
- if additionally installed spare parts or accessories, which are not product of the firm HS Flamingo s.r.o
- using inappropriate fuels
- incorrect servicing, overloading and subsequent damage on the construction of the heating unit
- (For example burning the screens for draught directions, deformation of the stove construction)
- unprofessional manipulation, violent mechanical damage
- insufficient care of use of inappropriate cleaning agents
- vis maior (floods etc.)

8.5. How to claim the goods

At filing a complaint, it is necessary to indicate your exact address, phone number and to describe the defect. The claim shall be resolved only if the guarantee certificate correctly filled including the date of purchase and stamp of the store or the sales slip (ev. invoice) is presented. At the purchase you are advised to fill in the guarantee certificate legibly. On method and place of repair in order to judge the defect shall be decided in the service department and further, the proposed measures shall be consulted with the owner of the unit. To the replacement of the product or to cancellation of the purchase contract apply the respective provisions of the Civil Code and complaint rules.

9. PACKAGING OF THE FIRE STOVES – WASTE DISPOSAL

The fire stoves are delivered on wooden transport mat and are furnished with protective wooden crate. The fire stove is protected against climatic influences by PE foil and paper box. Stabilization and compatibility of whole packaging for storage and transport is ensured by use of metal or plastic stripe.

Disposal of the packaging: The wooden crate and mat can be used for heating. The steel stripe shall be brought to the collection point of metal scrap. The PE foil and paper box shall be handed over for recycling.

Disposal of the fire stove: In case of disposal of the fire stove you are advised to dismantle the fireplace fittings, glass and sealing stripes and ceramics to solid municipal waste, and the metal corpus, or other metal parts to collection point for metal scrap

9.1. Special accessories at order

1. Flue gas
2. Tools, baskets, screens
3. Separation vessel (ash exhauster)
4. Fire-lighter
5. Agent for stove glass
6. Cleaner of chimneys
7. Shovel
8. Coal-scuttle

9.2. Recommended spare parts

Some of the spare parts which can be ordered:

1. Fireclay fittings
2. Ashtray drawer
3. Glass on stoking door
4. Cast iron grate
5. Sealing stripes
6. Glue for sealing stripes
7. Casing
8. Decorative elements (sticks, twirls, regulators)

10. EC DECLARATION ON CONFORMITY AND CE CERTIFICATE

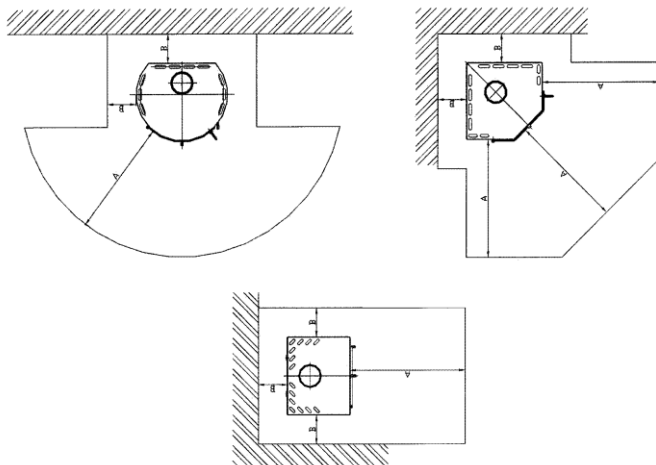
The EC declaration on conformity has been issued to all the products on the basis of protocol on initial trial of the type according to the standard EN 13 240:2005 + A2 and CE certificate. Protocol on initial trial of the type and the CE certificate is conform with the EC directive No. 89/106EEC (corresponding to government regulation No. 190/2002 Coll.) and it was issued by: Strojirenský zkušební ústav, s.p. ES 1015, AO 2002 Hudcova 56 b., 621 00 Brno

The manufacturer declares that the fire stoves indicated herein fulfill the requirements for safety determined in the Directive No.89/106 EEC (corresponding to the government regulation No. 190/2002 Coll.) and that, under conditions of ordinary use given by the manufacturer, are save.

The manufacturer has taken such measures in order to ensure conformity of all the products placed on the market with the technical documentation and with identical requirements.

Příloha, Załącznik, Beihang, Príloha, Annex

ODSTUPOVÉ BEZPEČNOSTNÍ VZDÁLENOSTI KAMEN V PROSTORU/BEZPIECZNA ODLEGŁOŚĆ PIECA KOMINKOWEGO W POMIESZCZENIU/SICHERHEITSABITRITTWEITEN VON OFEN IM RAUM/ODSTUPOVÉ BEZPEČNOSTNÉ VZDIALENOSTI KACHLÍ V PRIESTORE/SAFETY DISTANCES OF FIRESTOVE IN SPACE

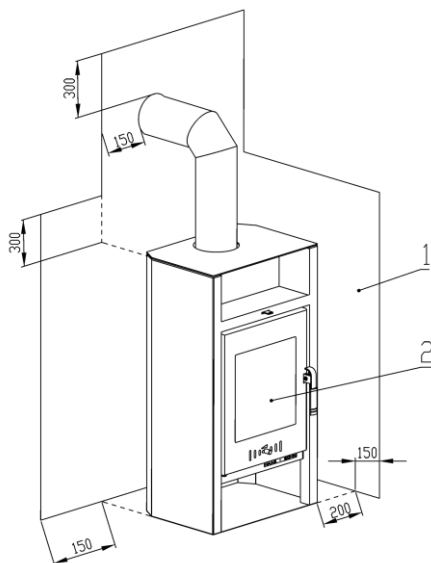


MINIMÁLNÍ VZDÁLENOSTI
MINIMALNA ODLEGŁOŚĆ
NIEDRIGSTE ENTFERNUNG
MINIMÁLNE VZDIALENOSTI
MINIMUM DISTANCES

A > = 800 mm

B > = 200 mm

PŘÍKLAD UMÍSTĚNÍ OCHRANNÉ CLONY PALIVOVÉHO SPOTŘEBIČE A KOUŘOVODU (rozměry v mm)/PRZYKŁADOWE ZASTOSOWANIE EKRANU KOMINKOWEGO (rozmiary w mm)/BEISPIEL DER PLATZIERUNG VON SCHUTZBLENDE DES TRIEBSTOFFVERBRAUCHERS UND RAUCHROHR/PŘÍKLAD UMIESTNENIA OCHRANNEJ CLONY PALIVOVÉHO SPOTŘEBIČA A DYMOVODU (rozměry v mm)/EXAMPLE OF PLACING OF PROTECTIVE SCREEN OF FUEL UNIT AND FUEL GAS PIPE (sizes in mm)



1 – ochranná clona palivového spotřebiče a kouřovodu chránící okolní hořlavé stavební konstrukce před jejich tepelnými účinky
2 – příkladací a popelníkový otvor

1 – przykładowe zastosowanie ekranu chroniącego konstrukcje budowlane z materiałów palnych
2 – otwór służący do ładowania paliwa i umieszczenia popielnika

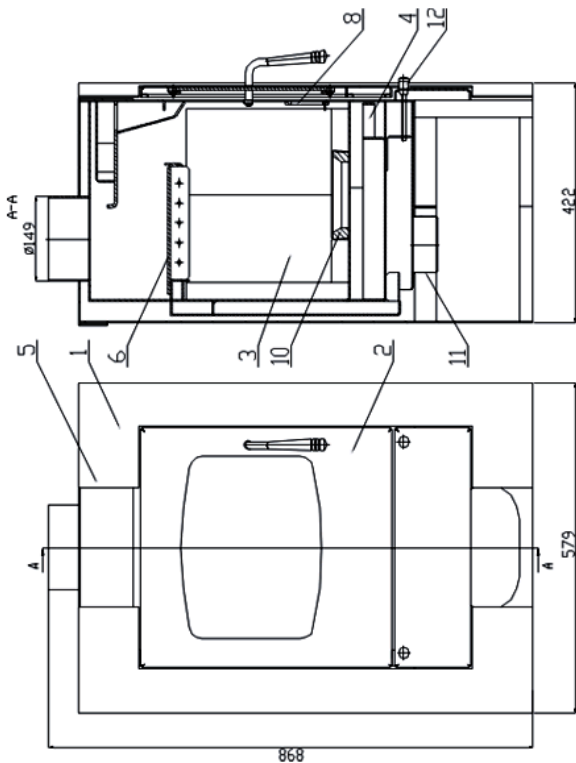
1 – Schutzblende von Triebstoffverbraucher und Rauchrohre schützende die umgehende brennbare Baukonstruktionen vor ihren Warmwirkungen
2 - Zuladungs- und Aschbecher Öffnung

1 – ochranná clona palivového spotřebiča a dymovodu chrániaca okolné horľavé stavebné konštrukcie pred ich tepelnými účinkami
2 – príkladací a popelníkový otvor

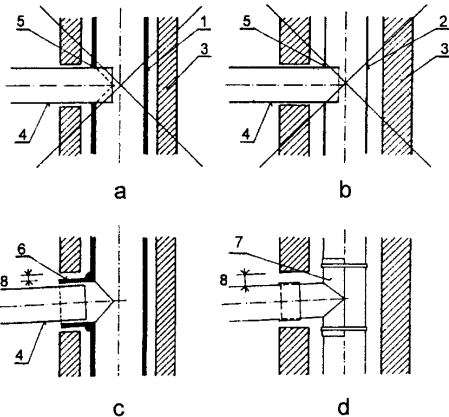
1 – protection screen of fuel unit and fuel gas pipe protecting surrounding inflammable building structures against their thermal effects
2 – enclosing and ashtray outlet

Seznam náhradních dílů / Lista części zamiennych / Ersatzteil Liste / Prehľad náhradných dielov / List of spare parts

Pozice / Pozycja / Position	Název dílu	Nazwa elementu lub części	Teilname	Name	Názov dielu	Meländ	Narvik	Vega	Stavanger	Espo
1	Těleso	Korpus	Korpus	Body	Teleso	5013000001	5012000001	5011000001	5014000001	5023000001
2	Dvířka	Drzwiczki	Türchen	Door	Dvierka	5010200001	5010200001	5010200001	5010200001	5020200001
3	Šamot	Szamot	Schamott	Fireclay	Šamot	50103001	50103001	501030001	501030001	501030001
4	Popelník	popielnik	Aschbecher	Ashtray	Popelník	10104001	10104001	10104001	10104001	10104001
5	Víko	Pokrywa	Verdeck	Lid	Víko	5010530001	5010520001	5010500001	5010520001	5020530001
6	Clona	Ekran kominkowy	Blende	Screen	Clona	5010001801	5010001801	5010001801	5010001801	5010001801
7	Diaždice malá	Plytka mala	Ziegel - klein	Small tile	Diaždica malá	x	x	x	x	x
8	Diaždice celá	Plytka zvykła	Ziegel - ganz	Entire tile	Diaždica celá	barva, colour	barva, colour	barva, colour	barva, colour	barva, colour
9	Zábrana	Protek	Hemmung	Barrier	Zábrana	5010000008	5010000008	5010000008	5010000008	5010000008
10	Rošt	Ruszt	Rost	Grate	Rošt	10100010	10100010	10100010	10100010	10100010
11	Hrdlo	Tuleja	Mündung	Neck	Hrdlo	x	x	x	x	x
12	Regulátor	Przepust. powietrza	Regulator	Regulator	Regulátor	101000015	101000015	101000015	101000015	101000015
13	Nýl 8x16	Nf 8x16	Niete 8x16	Rivet 8x16	Nýl 8x16	x	x	x	x	x



PŘIPOJENÍ KOUŘOVODU DO OTVORU V KOMÍNOVÉ VLOŽCE/PODŁĄCZENIE PRZEWODU KIMINOWEGO DO OTWORU WE WKŁADZIE KOMINOWYM/EINSCHLUSS DER RAUCHROHRE IN ÖFFNUNG IN SCHORNSTEINBELAG/PRIPOJENIE DYMOVODU DO OTVORU V KOMÍNOVEJ VLOŽKE/CONNECTION OF GAS FLUE PIPE INTO OUTLET IN CHIMENY INSERT



1 – keramická (kovová) vložka
 2 – kovová komínová vložka
 3 – komínový plášť
 4 – kovový kouřovod
 5 – otvor v komínové vložce
 6 – přitmelená odbočka ke komínové vložce
 7 – kovová příložka upevněná k vložce kovovými pásky
 8 – dilatační mezera mezi tvarovkou a pláštěm komína
 SPRÁVNĚ – viz. c, d ŠPATNĚ – viz. a, b
 Komentář k ČSN 73 4201 : 2002

1 – wkładka ceramiczna (metalowa)
 2 – metalowa wkładka kominowa
 3 – płaszcz kominowy
 4 – czopuch metalowy
 5 – otwór we wkładzie kominowym
 6 – odgaężenie do wkładu kominowego
 7 – nakładka kominowa umocowana do wkładu kominowego za pomocą pasków metalowych
 8 – szczelina dylatacyjna między kształtką i płaszczem komina
 PRAWIDŁOWO – patrz c, d, NIEPRAWIDŁOWO – patrz a, b

1 – wall
 2 – flue gas ducting
 3 – cover plate (fire-resistant, non metallic)
 4 – rose
 5 – protective pipe (fire-resistant, non metallic)
 6 – insulating filling I (fire-resistant, i.e. fibreglass)
 7 – insulating filling II (fire-resistant, i.e. stove-clay) ČSN 06 1008 : 1997

1 – Wand
 2 – Rauchrohre
 3 – Deckplatte (unbrennbare, unmetallisch)
 4 – Roserei
 5 – Schutzrohre (unbrennbare, unmetallisch)
 6 – Isolationseinlage (unbrennbare, z.B. Glasfaser)
 7 – Isolationseinlage (unbrennbare, z.B. Ofenklei)
 ČSN 06 1008 : 1997

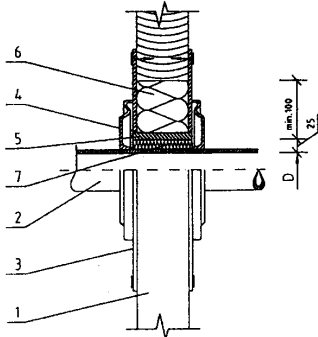
1 – stena
 2 – dymovod
 3 – krycia doska (nehorľavá, nekovová)
 4 – ružica
 5 – ochranná rúra (nehorľavá, nekovová)
 6 – izolačná výplň (nehorľavá, napr. sklenené vlákno)
 7 – izolačná výplň II (nehorľavá, napr. kachľová hliňa) ČSN 06 1008 : 1997

Technický list / Informacja techniczna / Technische Auskünfte / Technické informácie / Technical information

	Dřevo / Drewno / Holz / Wood Ekobrikety / Ekobrikety / Ekobrikette / Ecological pellets
Dosažený tepelný výkon (100 %) / Moc cieplna (100 %) / Erreichte Wärmeleistung (100 %) / Dosiahnutý tepelný výkon (100 %) / Achievable thermal output (100 %)	9,01 kW
Maximální dávka paliva / Maksymalny załadunek paliwa / Höchste Triebstoffgabe / Maximálna dávka paliva / Maximum fuel load	2,68 kg/h.
Průměrná teplota spalin v kouřovodu / Średnia temperatura spalin w przewodzie kominowym / Durchschnitttemperatur von Rauchgasen in Rauchrohre / Priemerná teplota spalin v dymovode / Average temperature of combustions gases in flue gas ducting	261 °C
Hmotnostní průtok suchých spalin / Wagowy przepływ spalin / Gewichtsdurchfluss von trockenen Gase / Hmotnostný prietok suchých spalin / Weight flow of dry combustions gas	8,7 g/s
Energetická účinnost / Wydajność energetyczna / Energetische Wirksamkeit / Energetická účinnost / Energy efficacy	78,36 %
Průměrná koncentrace CO₂ / Średnia koncentracja CO ₂ / Durchschnittkonzentration von CO ₂ / Priemerná koncentracja CO ₂ / Average concentration of CO ₂	9,02 %
Koncentrace CO při 13% O₂ / Koncentracja CO przy 13% O ₂ / Konzentration von CO bei 13% O ₂ / Koncentracja CO pri 13% O ₂ / Concentration of CO at 13% O ₂	0,0932 %

Zkoušeno dle ČSN EN 13240/A2:2005 (A. 4.7, A. 4.8, A. 4.9) / Badania wg ČSN EN 13240/A2:2005 (A. 4.7, A. 4.8, A. 4.9) / Nach den ČSN EN 13240/A2:2005 (A. 4.7, A. 4.8, A. 4.9) geprüft / Skúšané podľa ČSN EN 13240/A2:2005 (A. 4.7, A. 4.8, A. 4.9) / Tested according to ČSN EN 13240/A2:2005 (A. 4.7, A. 4.8, A. 4.9)

PROSTUP KOUŘOVODU STĚNOU Z HOŘLAVÝCH MATERIÁLŮ (rozměry v mm) / PRZEJŚCIE PRZEWODU KOMINOWEGO PRZEZ ŚCIANĘ Z MATERIAŁÓW PALNYCH (rozmiary w mm) / DURCHGANG VON RAUCHROHR DURCH WAND VON BRENN-BAREN MATERIAL / PRIESTUP DYMOVODU STĚNOU Z HORLAVÝCH MATERIÁLOV (rozmery v mm) / PENETRATION OF FLUE GAS PIPE IN WALL OF INFLAMMABLE MATERIALS (sizes in mm)



- 1 – stěna
 - 2 – kouřovod
 - 3 – krycí deska (nehořlavá, nekovová)
 - 4 – růžice
 - 5 – ochranná roura (nehořlavá, nekovová)
 - 6 – izolační výplň I (nehořlavá, např. skelné vlákno)
 - 7 – izolační výplň II (nehořlavá, např. kamnářská hlína)
- ČSN 06 1008 : 1997

- 1 – wall
 - 2 – flue gas ducting
 - 3 – cover plate (fire-resistant, non metallic)
 - 4 – rose
 - 5 – protective pipe (fire-resistant, non metallic)
 - 6 – insulating filling I (fire-resistant, i.e. fibreglass)
 - 7 – insulating filling II (fire-resistant, i.e. stove-clay)
- ČSN 06 1008 : 1997

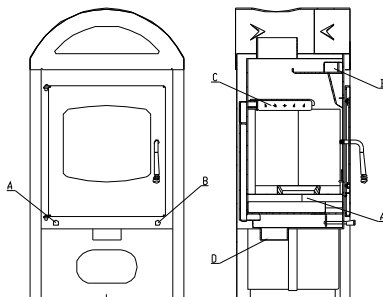
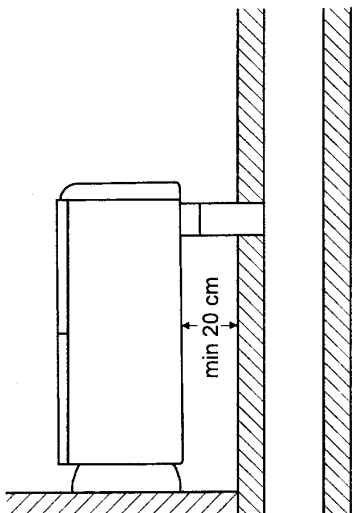
- 1 – ściana
 - 2 – czopuch
 - 3 – pokrywa (niepalna, niemetalowa)
 - 4 – rozeta
 - 5 – rura ochronna (niepalna, niemetalowa)
 - 6 – materiał izolacyjny I (niepalny, naprz. włókno szklane)
 - 7 – materiał izolacyjny II (niepalny, naprz. glina żduńska)
- norma ČSN 06 1008 : 1997

- 1 – Wand
- 2 – Rauchrohre
- 3 – Deckplatte (unbrennbare, unmetallisch)
- 4 – Roserei
- 5 – Schutzrohre (unbrennbare, Inmetallisch)
- 6 – Isolationseinlage (unbrennbare, z.B. Glasfaser)
- 7 – Isolationseinlage (unbrennbare, z.B. Ofenklei) ČSN 06 1008 : 1997

- 1 – stena
- 2 – dymovod
- 3 – krycia doska (nehorlavá, nekovová)
- 4 – ružica
- 5 – ochranná rúra (nehorlavá, nekovová)
- 6 – izolačná výplň (nehorlavá, napr. sklenené vlákno)
- 7 – izolačná výplň II (nehorlavá napr. kachľová hlina) ČSN 06 1008 : 1997

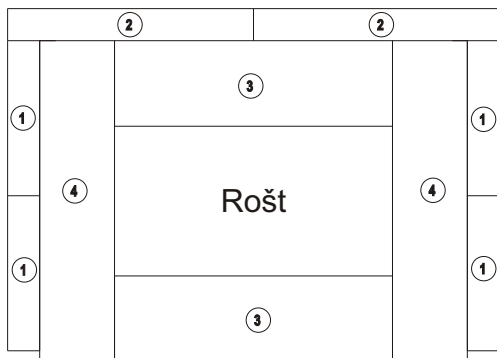
PRÍMÉ NAPOJENÍ PALIVOVÉHO SPOTŘEBIČE NA KOMÍN A ODSTUP OD STĚNY / BEZPOŚREDNIE PODŁĄCZENIE URZĄDZENIA GRZEWCZEGO DO KOMINA I ODLEGŁOŚĆ OD ŚCIANY / DIREKTEINSCHLUSS VON TRIEBSTOFF-VERBRAUCHER AN SCHRDNSTEIN UND WANDABTRITT / PRIAME NAPOJENIE PALIVOVÉHO SPOTREBIČA NA KOMÍN A ODSTUP OD STĚNY / DIRECT CONNECTION OF FUEL UNIT TO CHIMNEY AND DISTANCE FROM WALL

Popis regulace / Opis regulacji / Regulationsbeschreibung / Popis regulácie / Description of regulation

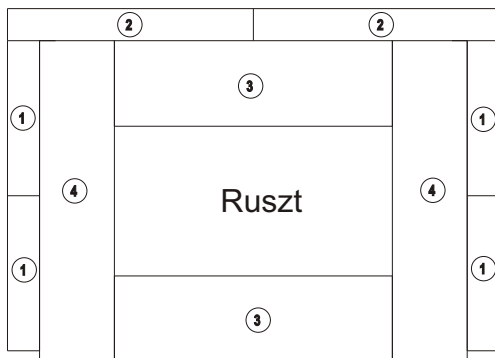


- A - regulace a průchod primárního vzduchu (P)
 - B - regulace a průchod sekundárního vzduchu (S)
 - C - průchod terciálního vzduchu- neregulovatelný
 - D - externí přívod vzduchu
-
- A - regulacja i przepływ powietrza pierwotnego (P)
 - B - regulacja i przepływ powietrza wtórnego (S)
 - C - przepływ powietrza trzeciego (bez możliwości regulacji)
 - D - zewnętrzny dopływ powietrza
-
- A - Regulation und Durchgang von primar Luft (P)
 - B - Regulation und Durchgang von sekundar Luft (S)
 - C - Durchgang von terciar Luft - unregelbar
 - D - extern Luftzufuhr
-
- A - regulácia a priedchod primárneho vzduchu (P)
 - B - regulácia a priedchod sekundárneho vzduchu (S)
 - C - priedchod terciálneho vzduchu- neregulovateľný
 - D - externý prívod vzduchu
-
- A - regulation and output of the primary air (P)
 - B - regulation and output of the secondary air (S)
 - C - outlet of tertiary air- non regulable
 - D - external air input

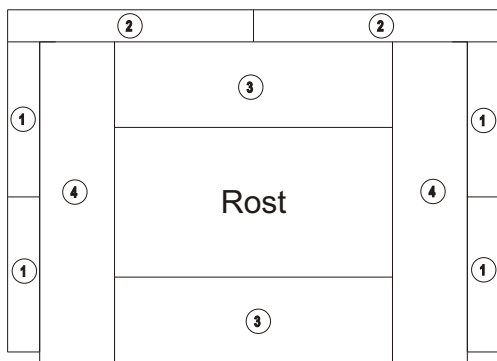
ŠAMOT / SZAMOT / SCHAMOTT / FIRECLAY



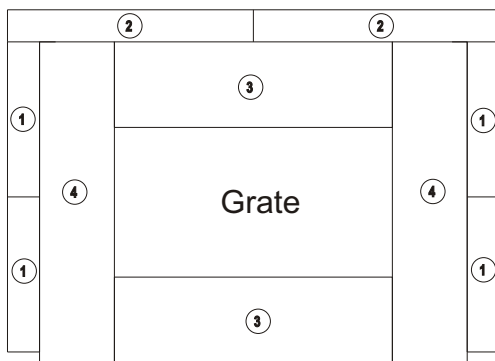
4	DESKA 30x70x300	501 03 004
3	DESKA 30x80x260	501 03 003
2	DESKA 30x230x300	501 03 002
1	DESKA 30x145x300	501 03 001



4	BLAT 30x70x300	501 03 004
3	BLAT 30x80x260	501 03 003
2	BLAT 30x230x300	501 03 002
1	BLAT 30x145x300	501 03 001



4	PLATTE 30x70x300	501 03 004
3	PLATTE 30x80x260	501 03 003
2	PLATTE 30x230x300	501 03 002
1	PLATTE 30x145x300	501 03 001



4	BRICK 30x70x300	501 03 004
3	BRICK 30x80x260	501 03 003
2	BRICK 30x230x300	501 03 002
1	BRICK 30x145x300	501 03 001

ZÁRUČNÍ LIST / ZÁRUČNÝ LIST / KARTA GWARANCYJNA / GARANTIESCHEIN /CERTIFICATE OF WARRANTY

Typ výrobku / Typ des Artikels /
Type of Product

MELAND	
NARVIK	
VEGA	
STAVANGER	
ESPO I	
ESPO II	

Datum a značka výstupní kontroly

Dátum a značky výstupnej kontroly

Data i nr kontroli końcowej

Datum und Marke der Ausgangskontrolle

Date and Sign of the Checkout

--

Výrobní číslo/Výrobné číslo

Nr fabryczny/Herstellungsnummer

Serial Number

--

Datum prodeje Dátum predaja Data sprzedaży Verkaufsdatum Date of Sale	Razítko prodejny Pečiatka predajne Pieczęć Stempel Stamp	Podpis Unterschrift Signature



Záruční podmínky:

Při dodržení způsobu používání, obsluhy a údržby výrobku uvedeném v návodu k obsluze, ručíme 60 měsíců od doby převzetí spotřebitelem za to, že výrobek bude mít po celou dobu záruky vlastnosti stanovené příslušnými technickými normami a podmínkami – zák. č.40/64 Sb v platném znění, zák. 634/92 Sb v platném znění. Charakteristiku s popisem závady pošlete písemně nebo faxem, popř. elektronickou poštou na níže uvedené kontakty servisního oddělení.

Záruka se nevztahuje na:

- ✓ Škody způsobené nesprávnou manipulací, nevhodným zacházením, nesprávným uložením, mechanickým poškozením, vztahuje se i na chyby způsobené cizím zásahem.
- ✓ Škody způsobené nedodržáním návodu na obsluhu.

POZOR!

✓ Opatřitelné součástky, které jsou v přímém kontaktu s ohněm :ROŠT, VYDÍVKA SPALOVACÍ KOMORY, DEFLEKTOR (clona), TĚSNÍCÍ ŠNŮRY, ZÁBRANA. Tyto díly mají záruční dobu 24 měsíců. K poškození těchto dílů během provozu může dojít pouze nesprávným užíváním krbových kamen, přetopením nebo používáním nevhodného paliva. Ostatní specifikace jsou v návodu ZÁRUKA A SERVIS



Záručné podmienky:

Pri dodržaní spôsobu používania, obsluhy a údržby výrobku uvedenom v návode na obsluhu ručíme 60 mesiacov od doby prevzatia spotrebiteľom za to, že výrobok bude mať po celú dobu záruky vlastnosti stanovené príslušnými technickými normami a podmienkami – zák. č.40/64 Zb v platnom znení, zák. 634/92 Zb v platnom znení. Charakteristiku s popisom závady pošlite písomne alebo faxom, popr. elektronickou poštou na nižšie uvedené kontakty servisného oddelenia.

Záruka se nevztahuje na:

- ✓ Škody způsobené nesprávnou manipuláciou, nevhodným zaobchádzaním, nesprávnym uložením, mechanickým poškodením, vztahuje sa i na chyby spôsobené cudzím zásahom.
- ✓ Škody spôsobené nedodržaním návodu na obsluhu.

POZOR!

✓ Opatriteľné súčiastky, ktoré sú v priamom kontakte s ohňom : ROŠT, VYMUROVKA SPALOVACEJ KOMORY, DEFLEKTOR (clona), TESNIACE ŠNŮRY, ZÁBRANA. Tieto diely majú záručnú dobu 24 mesiacov. K poškodeniu týchto dielov v priebehu prevádzky môže dôjsť iba nesprávnym užívaním krbových pecí, prekúrením alebo používaním nevhodného paliva. Ostatné špecifikácie sú v návode ZÁRUKA A SERVIS.

Warunki gwarancji:

Produkt objęty jest gwarancją 60 miesięcy od daty odbioru przez użytkownika pod warunkiem prawidłowej eksploatacji, obsługi i konserwacji przeprowadzanej zgodnie z zaleceniami zawartymi w instrukcji obsługi. Gwarantujemy, że produkt przez cały okres gwarancji będzie posiadał właściwości określone właściwymi normami oraz obowiązującymi przepisami. Rodzaj usterki wraz z jej opisem należy zgłosić pisemnie, faksem lub pocztą elektroniczną na niżej podany adres lub numery kontaktowe Działu Serwisu.

Gwarancja nie obejmuje:

- ✓ Wad powstałych wskutek nieprawidłowego montażu lub eksploatacji urządzenia, jak również uszkodzeń mechanicznych, w tym uszkodzeń powstałych wskutek działania osób trzecich.
- ✓ Uszkodzeń powstałych wskutek nieprzestrzegania instrukcji obsługi.

UWAGA!

- ✓ Części podlegające zużyciu będące w bezpośrednim kontakcie z ogniem: RUSZT, WYMURÓWKA KOMORY SPALANIA, DEFLEKTOR (osłona), SZNURY USZCZELNIAJĄCE, BARIERA. Części te objęte są gwarancją 24 miesięcy. Uszkodzenie produktu podczas eksploatacji może być spowodowane wyłącznie nieprawidłowym użytkowaniem, przegrzaniem lub spalaniem niedozwolonego paliwa. Inne specyfikacje zawarte są w dziale GWARANCJA I SERWIS.

Garantiebedingungen: Bei der Einhaltung der Anwendungsweise, der Bedienung und der Artikelswartung, die in der Bedienungsanleitung eingeführt ist, leisten wir 60 Monate seit der Zeit der Übernahme Gewähr dafür, dass der Artikel während der ganzen Garantiezeit die von den zuständigen technischen Normen und Bedingungen bestimmten Eigenschaften haben wird - Gesetz n. 40/64 Sb in der geltenden Fassung, Gesetz 634/92 Sb in der geltenden Fassung. Senden Sie die Charakteristik zusammen mit der Beschreibung der Störung schriftlich oder mit dem Fax, bzw. mit der elektronischen Post an die unten angeführten Kontakte der Service-Abteilung.

Die Garantie bezieht sich nicht auf:

- ✓ Schäden, die durch die falsche Manipulation, unpassende Behandlung, unrichtige Aufbewahrung oder durch mechanische Schädigung verursacht wurden. Es bezieht sich auch auf die durch fremden Zugriff verursachten Fehler.
- ✓ Schäden, die durch die Nichteinhaltung der Bedienungsanleitung verursacht wurden.

VORSICHT!

- ✓ Abnutzbare Bestandteile, die im direkten Kontakt mit dem Feuer sind: ROST, AUSMAUERUNG DER BRENNKAMMER, WINDABWEISER (Blende), DICHTENDE SCHNÜRE, SCHRANKE. Diese Teile haben 24 Monate lange Garantiezeit. Diese Teile können während des Betriebs nur durch unrichtigen Gebrauch des Kaminofens, Überheizen oder durch den Gebrauch vom ungeeigneten Brennstoff beschädigt werden. Andere Spezifikationen sind in der Anleitung GARANTIE UND SERVICE angeführt.

Warranty Terms and Conditions:

Provided that the manners of use, attendance and maintenance of the product as stated in the service instructions are observed, we grant warranty period of 60 months of the date of acceptance by the customer for the fact that the product will have qualities prescribed by the relevant technical standards and conditions – Act No. 40/64 Coll., as amended, Act No. 634/92 Coll., as amended, for the entire term of warranty period. Please send any possible specification describing a defect in writing or by fax or an e-mail to the service department contacts listed below.

The Warranty Does not Cover:

- ✓ Damages caused by incorrect manipulation, improper treatment, improper fitting, mechanical damage, it does cover faults caused by a third party intervention.
- ✓ Damages caused by failure to observe the service instructions.

ATTENTION!

- ✓ Expendable parts which are in direct contact with fire: FIRE GRATE, HEARTH LINING, DEFLECTOR (SCREEN), GASKETS, BARRIER. These parts have warranty period of 24 months. Any damage to these parts during operation may only occur due to incorrect use of the fireplace, overheating or use of unsuitable fuel. Further specifications are in the instructions WARRANTY AND SERVICE.

Datum nahlášení závady	Datum opravy	Číslo protokolu o opravě	Podpis	Závada - způsob odstranění
Dátum nahlášenía závady	Dátum opravy	Číslo protokolu o opravie	Podpis	Závada - spôsob odstránenia
Data zgłoszenia usterki	Daty naprawy	Numer protokołu	Podpis	Wada - metoda usuwania
Datum der Schadensanzeige	Datum der Reparatur	Protokoll-Nummer	Unterschrift	Defekt - ein Verfahren zur Entfernung
Date of a defect reported	Date of repair	Protocol number	Signature	Defect - a method of removing