

INSTRUCTION

**for installation and operation of
solid fuel fireplace**

SKLADOVA TEHNIKA
Division "Bitova tehnika"
2 Ivan Momchilov St.
5100 Gorna Oryahovitsa

CONTENTS

1.Introduction.....	3
2.Assembling of the fireplace.....	3
3.Operation of the fireplace	4
4.Important instructions for fire-precaution and safety regulations.....	9
5.Cleaning	10
6.Possible defects and their causes	10
7.Equipment composition	11
Appendix 1	12
Spare parts.....	13
Appendix 2	14
Connecting of a fireplace with a built-in boiler.....	15

1. Introduction

We congratulate you on the excellent choice! We wish you many pleasant moments with your new fireplace. Your fireplace is made and tested in accordance with the requirements of the Standard EN 13240 and responds to the approved technical documentation.

You may expect that you will have the opportunity to use your fireplace for the purpose with which it was made, for a long period of time, and with the least possible servicing. That is why we have a request for you, which is only for your benefit:

Don't leave the instructions unread. The assembly and the exploitation of a fireplace are connected with different legal obligations, which are explained in this instruction. According to the laws and regulations for safety, when using an appliance of such class, the buyer and the user of the fireplace are obliged, with the help of this instruction, to inform themselves for the assembly and the right exploitation of the appliance.

The correct installation, careful exploitation and care for the fireplace are of great necessity for its perfect functioning and longevity.

The convenience of maintenance, the high level of usability of the fuels and the excellent performance in continuous combustion allow the usage of the fireplace as a room heater of full value adding a comfortable atmosphere around the live fire.

Respecting all the directions in this user's manual guarantees that your fireplace will provide you with a lot of joy.

By keeping the user's manual in a good condition, you will always be able to inform yourself about the right maintenance of the fireplace before the beginning of the heating season.

2. Assembly of the fireplace

The technical parameters of the fireplace are given in Appendix 1.

An example scheme of connecting a fireplace to a water heating component is given in Appendix 2.

It is necessary the following conditions to be kept in order to ensure a safe and correct work of the fireplace:

The fireplace should be installed in rooms with sufficient air flow which is required for the combustion.

Not every fireplace could be connected to any chimney. Before assembling the fireplace check if the static pressure and the chimney dimensions conforms to the needed parameters for the fireplace. If the fireplace does not conform to the chimney, it will lead to a lower burning rate and polluting the glass with soot.

The chimney should be high enough (at least 5 meters). Only one more device can be connected to the same chimney. The flue draught should be higher than 10 Pa, and for fireplaces with a boiler higher than 15 Pa. If the chimney is too high (the draught exceeding 35 Pa) then it is necessary to mount a supplementary valve to diminish the draught.

The fireplace should not be connected to a chimney when there is another boiler used for steam heating connected to it.

The floor where the fireplace is placed should be flat, horizontal, produced from non-combustible materials (mosaic, marble, terracotta, etc.). The minimum distance from the wall behind is 20 cm. If the floor is not heat resistant (carpets, linoleums or others of the same kind) then a stable non-combustible platform should be used, made of steel, glass or stone plates.

If there are any combustible materials or constructions, the fireplace should be away from them to the specified distance, or to dispose of an additional incombustible screen.

After the installation of the fireplace it is attached to the chimney through flueway pipes. The junctions between the separate flueway pipes and the socket should be tight. The flueway pipe should not be projecting into the chimney.

3. Operation of the fireplace

3.1 Fuels

The most appropriate fuels are dry cleaved wood (wood logs) and briquettes. The wood logs, stored in the open under shelter reach a humidity level of 10-15% after 2 years, when they are most suitable for combustion. We recommend to burn wood dried as much as possible. The maximum heat output is reached after burning wood logs dried for at least 2 years period of time.

The newly cut wood has little calorific effect and is too humid and burns poorly – they extract a lot of flue gases and additionally contaminate the environment. This leads to minimizing the longevity of the fireplace and chimney as well. The increased condensate and tar content in the flue gases leads to blocking up the flue pipes and the chimney, and an appreciable impurity of the glass. When using them, the heat output of the fireplace falls to 50%, and the fuel consumption grows twice.

The type, the dimension and the recommended quantity of fuel for the fireplace is given in Appendix 1.

It is not advised to use the following fuels in the fireplace: wet or tarred wood, shavings, fine coal, paper and cardboard (except for the ignition).

Do not use liquid fuels.

Do not use the fireplace like a furnace for burning waste matters.

If the fireplace is used for burning unalloyed fuels then the warranty is not valid.

3.2 Components

Glass

The glass cannot be damaged by the temperature which is achieved when the fireplace is working, but it could be damaged by a mechanical influence when installing or transporting the fireplace, or by putting big wood logs into the firebox.

The glass belongs to the spare parts which are quickly worn out, and that is why it is not included in the warranty conditions.

Polluting the glass with soot

The construction of the fireplace helps during exploitation not to pollute the glass with soot. The soot is accumulated only when there is bad burning, which may be caused by the following reasons: the static pressure and the dimension of the chimney do not comply with the needed parameters for the fireplace, the air flow necessary for the combustion is stopped too early or the right fuel is not used. In order to keep the glass as clean as possible from soot, then the wood logs must be placed in such a manner that the cut surface is not facing to the glass.

We cannot influence to those factors and that's the reason why we cannot guarantee that the glass won't be polluted with soot.

Refractory bricks

The firebox is supplied with thermal plates. These plates keep the heat and give it back to the firebox in order to increase the burning temperature. The higher is the burning temperature, the higher is the effectiveness of the burning process. As a result of too high temperatures or mechanical influences the thermal plates might be damaged. Extremely high temperatures may be achieved when with high flue draught of the chimney, the primary and secondary air controls are open, and thus it makes a burning out of control. Under mechanical influence it is understood e.g. throwing a wood log into the firebox or using bigger wood logs.

The thermal plates might be easily exchanged. If there is only a crack then it is not necessary to change them. It is necessary only in case when the metal parts between them or under them can be visibly seen.

The thermal plates are quickly worn out, and that is why they are not included in the warranty conditions.

Sealing

The sealing of the fireplace are made of special glass fiber and does not content asbestos. This material is worn out during usage and the sealing must be periodically exchanged. Your shopkeeper could order these sealings to us.

The sealings are quickly worn out, and that is why they are not included in the warranty conditions.

Grate

The lower part of the firebox is supplied with cast ironed grate. This grate could be blocked up by nails in the wood material, small wooden parts, the residue etc. You are advised to clean regularly the grate in order to keep its functionality.

When using inappropriate fuel or reaching high temperatures due to incorrect servicing, the grate could burn.

The grate is quickly worn out, and that is why it is not included in the warranty conditions.

Cover

The fireplace is painted in highly temperature-resistant paint. This paint is resistant to high temperatures, but it is not resistant to rust. Please do not put any objects on the paint. When dust eventually accumulates then clean by brush or dry towel, but not by wet towel or water.

When the fireplace is set to work for the first time it is necessary to leave the paint to be heated for a few hours to be baked and to reach its maximum thermal stability.

During that period do not put anything on the fireplace so that the surface remains unaffected. The smell which is produced is caused by the baking of the paint and disappears after a few hours. That is why the room should be well ventilated.

If as a result of overheating or incorrect servicing the color changes into white-grey, or a stain of rust appears or a part of the surface is damaged, then it is not a problem. You may order a spray in the appropriate color to your shopkeeper.

Handles

The handles of the fireplace are made of brass or nickel-plated. This is an advantage because they cannot be worn out. The handles are heated to such a degree as the front part of the fireplace is, that is why they must be serviced by using a heat-resistant glove.

A recess for storing the wood material

In the recess for storing the wood material you can put wooden blocks for a short period of time. When keeping the wood material in the recess for a longer period it may be dried faster and then it burns faster. If the wood material does not comply with the given criteria for humidity in 3.1, then it may be dried additionally in the recess.

The recess for the wood material should not be fully filled to the base of the ashpit.

Boiler

If your fireplace is supplied with a boiler, before the first ignition of the fireplace you should be acquainted with the information given in Appendix 1.

3.3 Control devices

Before the first ignition of the fireplace pay attention to the function of all control devices. The primary air passes through the ashpan, the grate and goes into the firebox. When the fuel is wood, primary air is not necessary. Primary air is necessary for the faster ignition and better combustion of the coal. The control over the quantity of the primary air is done by slightly pulling the ashpan or through the valve mounted on the ashpan door. If the chimney has a strong flue draught it is recommended to entirely close the ashpan or the valve. The ashpan should not be fully filled for the primary air to be let in the firebox without disturbing. It is necessary to clean the ashpan regularly.

Secondary air provides the fire with the required for the combustion oxygen and assists for the better combustion of the fuel. The quantity of the secondary air is controlled through the regulator mounted above the door of the firebox. The fireplace design enables the preliminary heating of secondary air which results in an increase of the combustion temperature, the efficiency of the fireplace and prevents fumigation of the glass. While the fireplace is working, the secondary air regulator ensures control over the combustion process both qualitatively and quantitatively. The secondary air regulator should not be closed when the fireplace is working. In many cases the secondary air regulator has been closed shortly after the ignition, despite our directions, in order to reduce the fuel consumption. This leads to limitation of the flow of oxygen, which bothers the combustion and the glass is covered with soot. Also there are harmful emissions which may cause burning in the chimney.

As the power of your fireplace depends on the height of the chimney, the precise control of the necessary air for the combustion is done by trial and error.

3.4 Initial ignition of the fireplace

At the first ignition of the fireplace pay attention to the following:

Take all the supplementary tools out of the ashpan.

The regulators for the primary and secondary air control must be opened.

During the first ignition it is necessary the door of the firebox to be left slightly open, in order to prevent the sealing of the fire door to be stuck on the paint.

The first ignition must be slow and still, with little quantity of sticks and paper. After burning them you may put two or three wood logs.

3.5 Ignition during exploitation

Your fireplace is constructed and designed for intermittent and continuous condition of burning.

At each ignition you must do the following:

The secondary air control is opened.

Put the basic combustion materials, ignite them and close the door. After they burn well, the wished heat output is achieved by regulating the combustion air.

If a continuous heating is necessary, fuel is added additionally into the fireplace, but only after the volatile materials have burned and the basic firebed is reached.

The ash-tray is taken out for cleaning only after it cools down

3.6 Ventilation requirements

An important factor for the right combustion of the fireplace is the supply of additional quantity of air in the room, which must be minimum $4\text{m}^3/\text{h}$ of the kW from the total heat output. If there are other working fireplaces in the same room, then it is necessary for them additional minimum of $1,6\text{ m}^3/\text{h}$ air at each hour and at each kW from the total heat output.

A ventilator for suction of the air from the room (desiccators, tumble driers, etc.) working at the same time with the fireplace leads to change in the flue draught and consequently to bad burning conditions of the fireplace. In this case for the right burning to be achieved it is necessary to let additional air into the room.

If it is impossible to supply a natural flue draught, then it is necessary to mount a flue draught ventilator or additional devices to increase its capacity.

3.7 Heating during the transitional period

For the good functioning of the fireplace, it is necessary to achieve enough draught of the chimney. This depends on both its height and the ambient temperature. At a temperature exceeding 14°C disturbances in the combustion caused by insufficient draught might occur. In this case it is necessary to load the fireplace with less fuel and the regulators to be left open so that the fuel to be burned faster (with flame) and thus reaching a stable flue draught in the chimney. In this case it is necessary to clean the ashpan more often.

4. Important directions for fire-precaution and safety regulations

The door of the firebox should always be firmly closed even when the fireplace is not working.

The fireplace should be installed only on a non-combustible floor.

The fireplace and the flue draught pipes should be at least 80cm away from combustible objects or constructions.

Using easily inflammable liquids is not advised at ignition.

Vertical connection of flue draught pipes with the chimney through floor structures is not allowed .

The presence of easily inflammable and explosive substances in the heated room is not allowed.

The ash disposal and the cleaning of the fireplace should be done only at safe places and when the fireplace has cooled down.

The fireplace is intended to local heating of chambers with normal fire hazard.

It is prohibited to put combustible materials and objects on the fireplace or in the immediate proximity of it.

Please pay attention during the operation of the fireplace children to be kept away from it, because its surface is too hot. **Incineration danger!**

We recommend the following instructions in case of a chimney fire:

- Close the combustion air control!
- Call the fire brigade in your neighborhood!
- Don't try to extinguish the fire with water by yourself!
- All easily inflammable materials to be away from the chimney!
- When the fireplace is set to work again it is necessary the chimney to be checked by a competent person for eventual damages.
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When the fireplace has been overworked over the limited heat output or for a longer period, and also when using fuels other than the recommended by the manufacturer, then we cannot guarantee reliable work of the fireplace.

Please do regularly with the help of a specialist a full check of the fireplace related to its functionality. Replace the defected parts only with the spare parts manufactured and supplied by the manufacturer.

5. Cleaning

The correct maintenance and cleaning of the fireplace guarantee its reliable work and keeping its good appearance.

The flue draught pipes and the interior of the fireplace should be cleaned at least once per year.

The painted surfaces should be cleaned with a dry and soft brush.

The glass should be cleaned after cooling down by washing with a soap solution and should be dried afterwards.

While cleaning do not use sharp objects or abrasive materials!.

6. Possible defects and their causes

At ignition the fireplace smokes / no draught /:

- the chimney or the flue draught pipes are not sealed;
- incorrectly measured chimney;
- open door of another device connected to the same chimney;

The room cannot get heated:

- greater warmth is needed;
- bad fuel;
- there is too much ash on the grate;
- provided air is insufficient;

The fireplace radiates too much heat

- too much air provided;
- the chimney flue draught is too big;

The grating is damaged or slag is formed:

- the fireplace is overloaded repeatedly;
- inappropriate fuel is being used;
- too much primary air is being provided;
- the chimney flue draught is too big;

When the fireplace does not work well:

- open the primary air control fully. The secondary air control should be fully closed;
- Load less fuel;

- Clean the ashpan regularly;
- The peat briquettes should be well ignited before closing the primary air control;
- Check if the chimney is blocked up;
- Check if the flue draught pipe does not enter the chimney;
- Check if the socket of the fireplace was not cleaned , and if air comes above it;
- If another fireplace is connected to the chimney check if it is working properly;
- Check if the needed pressure of the flue mass flow of your chimney corresponds to your fireplace;
- Check if the passage to your chimney near your fireplace is not closed by a cap;

The manufacturer is keeping the right to make changes in the construction without violating the technical and exploiting quality of the fireplace.

The manufacturer is not responsible for changes made on the fireplace by the user.

After you had carefully read this manual, then you can easily use your fireplace. We wish you many pleasant and happy hours enjoying the sound of burning and watching the game of the flames.

7. Equipment composition.

The fireplace is equipped with:

For all fireplaces

- a heat - resistant glove -1pce.

For fireplace Tandem

- a flue draught pipe with a damper -1pce.
- a handle -1pce.

For fireplace Taifun

- a heat exchanger pipe -1pce.
- a heat exchanger pipe with a flue draught controller -1pce.
- a passage of Ø200mm to Ø130 mm -1pce.

TECHNICAL PARAMETERS

Category 1-appliances working with doors closed

Type	Nominal heat output (kW)	Space heating output (kW)	Water heating output (kW)	Overall dimensions			Flue gas mass (g/s)	Flue gas temperature (°C)	Weight (kg)	Minimum flue draught at nominal heat output (Pa)	Boiler capacity (l)
				Width	Depth	Height					

Distances at which the fireplace is mounted because of the fire precautions:

Non-combustible floor:

_____ -in front, _____ -sideways, _____ -at the back

Thermo resistant plate:

_____ -in front, _____ -sideways, _____ -at the back

Please, watch out that there are not any easily inflammable materials in the place of radiation:

_____ -in front, _____ -sideways, _____ -at the back

Type, dimension and recommended quantity of the fuels:

Dried wood logs with length _____ cm and circumference _____ cm

Coals (brown/bituminous briquettes).

SPARE PARTS

INSTRUCTION FOR INSTALLATION AND OPERATION OF SOLID FUEL FIREPLACE WITH A BUILT-IN BOILER

The solid fuel fireplace with a boiler purchased by you gives you the great possibility of heating the nearby premises with radiators.

Your fireplace with a boiler is designed to work in an open type water system with maximum heat output according to Appendix 1.

The heat output of the installed loads (radiators) should correspond to the heat output indicated in Appendix). In case of connecting loads with greater heat output a cooling down of the heating surfaces occurs, which leads to condensate and pitching.

The pipe fitting dimensions to the fireplace are made for pipe thread 1".

The following regulations should be observed when installing the heating system:

- For a system with natural circulation of the heating medium, the radiators should be installed at a greater height than the water heater of the fireplace. The minimum difference between the middle lines of the radiators and the water heater should be 500 mm. If the radiators are installed on an upper floor, the heating improves.

- For a system with forced circulation - there is a pump installed - radiators can also be placed under the water heater level and the system can be installed with thinner pipes.

In both cases of mounting of the heating system there should be an open-type expansion container attached, connected to the uppermost point of the system. The capacity of the expansion container should be 5%÷10% of the water content of the installation. It should be protected from freezing.

For fireplaces with boiler it is better to clean the surfaces of the boiler from soot and resinous matters at least once a month.

By inserting appropriate isolation materials between the wall and the radiators you will achieve radiation heating whose advantages are proved.

This water heater provides another possibility - installing a coil into the boiler for sanitary water for the household.

The manufacturer cannot guarantee the work of the heating installation, except for the fireplace. The design and mounting of the heating installation should be done by an authorized expert!

In case of incorrect connecting caused by increased pressure an inflation of the water jacket and a welding rupture occur. The manufacturer does not take any responsibility for such defects.

CONNECTING OF A FIREPLACE WITH A BUIL-IN BOILER