



A.D. METALNA INDUSTRIJA VRANJE
Radnička br:1

SOLID FUEL STOVE

ELITA

ELITA II



INSTRUCTIONS FOR INSTALLATION AND USE

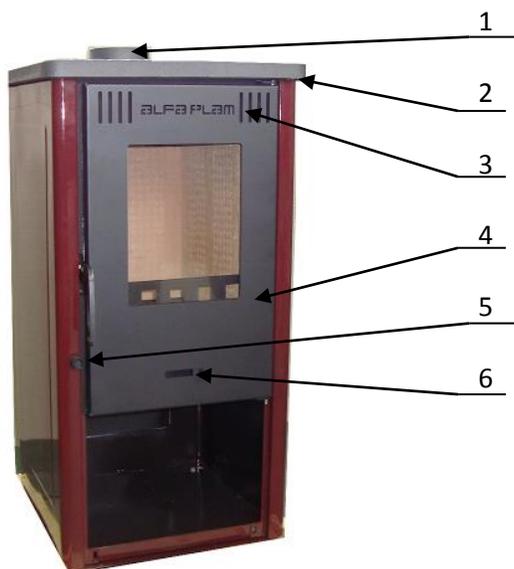
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GENERAL DATA

Generally it is necessary to adhere to the construction rules and regulations about fireboxes applicable in the country, as well as all necessary local, national and European standards.

Important before use:

- So that your stove could function properly, it is important that you carefully read this manual and strictly adhere to the listed instructions herein.
- Use only a recommended fuel type – that is, wood logs and brown coal briquettes.
- The required discharge pressure during normal operating load should be ca. 12 Pa. At discharge pressure over 15 Pa a built-in vent damper should be used in the outlet pipe.
- In the room where the stove is being placed, it is necessary to ensure that there is enough intake of fresh air in the firebox. If the windows and door are hermetically sealed or if other devices such as steam extractor, clothes dryer, fans etc. draw away the air in the room where the stove is placed, then, if needed, the combustion air (fresh air) must be brought from outside. In this regard, in any case before installing the stove, consult with a competent organization for flues.
- No type of flammable materials should be kept in the ash box. The height of filling must not exceed the height of the lateral sides of the ash box.
- The door of the stove and the space for ash must always be kept closed (except during ignition, inserting fuel and cleaning ash), in order to prevent release of hot air.
- The stove must not be changed, except with our offered, checked original parts of accessories and if work is performed by our factory repair service.
- In case of fire in the flue, the door of the stove must be kept closed, and close the air regulator! Never attempt to extinguish fire in the flue by pouring water. Due to the water vapor which is then created in the flue, an explosion in the flue might occur. If necessary call the fire department on emergency their number!
- If there are faults, close all air regulators and do not insert new fuel in the stove until the cause for the fault is eliminated!



Solid fuel stove

1. Flue connection
2. Stove panel
3. Secondary air intake
4. Stove door
5. Grate shaker
6. Primary air regulator

Fig. 1

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1. Technical data

- width	455 mm
- depth	422 mm
- height	865 mm
- rated heating power.....	6,0 kW
- diameter of flue pipe connection	Ø120 mm
- draft.....	12 Pa
- stove weight.....	76,5 kg
- flue engagement	upwards
- mass flow of flue gases	
- wood logs	3,5 g/s
- browncoal briquettes.....	4,1 g/s
- waste gases temperature	
- wood logs	260°C
- browncoal briquettes	225°C
- required discharge pressure	
- wood logs	12 Pa
- browncoal briquettes	12 Pa
- content CO ₂	
- wood logs	9,61 %
- browncoal briquettes	9,03 %

2. Stove description

The stove consists of sheet-metal parts with a cast iron grate, cast iron panel and sheet-metal door.
The firebox is covered with replaceable panels of fire clay.
The external coating is enameled or painted.
The opening for adjusting air needed for combustion is located on the stove door.

3. Air regulation

Air regulation is done on the stove door.

The air regulator on the stove door provides ignition and fuel combustion.

Pay attention that the ash box is not overfull. Its emptying should be regular in order to provide unobstructed air intake.

The secondary air intake is on the stove door. The secondary air supplies fire with the oxygen needed for clean combustion (burning of previous incomplete combustion products). Due to poor oxygen intake, a great emission of harmful substances occurs, which can lead to blockage of the flue.

3.1. Primary air

Reliable fuel combustion is determined on the basis of primary air for combustion.

This air is adjusted by regulating the primary air on the stove door in the ashtray part (figure 2, position 7). The air regulation on the stove door in the part of the space for ash (figure 2, position 7) indicates the direction of closing and opening of regulator. For wood ignition, the regulator should be maximally open.

WARNING: To avoid stove overheating, fuel quantity must not exceed 2,0 kg of dry wood logs or coal briquettes per hour, when the combustion air is properly adjusted.

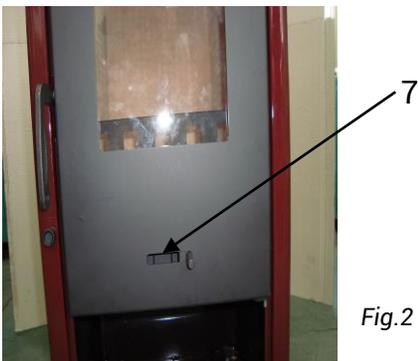


Fig.2

3.2. Use of knobs on firebox door

As the knobs on the firebox door become very hot during stove combustion, closing and opening of the firebox door is possible only with a special wrench from the enclosed stove accessories (see figure 3).



Fig.3

4. Stove installation

When installing the stove adhere to the applicable regulations regarding construction and fire preventive requirements. The placement site should be horizontal and must have sufficient bearing capacity, otherwise appropriate measures must be implemented for even load distribution. In case of flammable floor (wood, plastic, textile...) it is necessary to put steel sheet, copper or other inflammable material under the stove. This pad must pass at least 30 cm from the stove profile and on the side of the knob that pad should be bigger than 50 cm distance from the stove. The distance between wooden parts of furniture or plastic and other flammable objects that need to be protected must be at least 30 cm on the sides and 30 cm on the back of the stove. Inflammable objects must have a distance of at least 80 cm from the opening for filling the stove.

There should be enough distance between the stove and flammable objects (with timber paneling, furniture, curtains etc.) Embedding objects above the stove is not allowed when a stove with cast iron plate is used.

When installing the used air outlet pipe, the distance from flammable materials should be at least 40 cm.

Before connecting the stove to the flue, a competent local flue institution should certainly be consulted. The connection of the stove to the flue is performed through the connection elements according to SRPS.M.R4.031 (DIN 1298 or DIN EN 18562). Pay attention that connection parts for the flue do not protrude in the waste gasses outlet section and they should seal properly.

In order to achieve the best stove power, the stove installation should be properly performed and flawless flue function should be provided. In any case, the existing flue pressure should be checked before stove commissioning by putting a burning candle under the flue opening. The flue draft is sufficient if the candle flame bends towards the flue opening. Slight candle flame bending indicates insufficient air draft.

If two fireboxes are installed on one flue on one floor (multiple engagements), the distance between the connections should not be less than 50 cm.

5. Stove commissioning

Before stoking for the first time, enameled surfaces should be wiped with a damp cloth, in order to prevent creation of stains. Do not touch painted surfaces and do not leave any objects on the stove to prevent damage of paint. The paint finally hardens even after few hours of heating.

After reading Instructions for use, the first commissioning follows. When stoking for the first time, open the windows since the anticorrosion protection creates an unpleasant smell and some smoke. This is a normal occurrence and it stops after a short time. If necessary, also switch on the fan for fast air circulation. Stoke up to the maximum temperature load at least for 1 hour. If the maximum temperature is not reached during the first process of stoking, problems with unpleasant smell might occur later as well. Persons such as pregnant women and small children should be outside that room during this stoking stage.

Keep in mind that some built-in stove parts (outlet pipe, door for filling, stove door) etc. become very hot during operation and there is a risk of burns. Keep small children away from the stove. When stoking the stove for the first time, small quantities of fuel should be stoked three times in order to prevent fire clay bursting.

5.1. Stove commissioning and stove operation

- Maximally open the primary air regulation (figure 2, position 7)
- Open the stove door
- Put wood wool, wood chips or paper
- Put two pieces of wood over this
- Ignite
- Close the stove door
- Let the wood burn away.

After ember is created, put new fuel through the opening for stoking and adjust the air regulator for primary air according to the fuel type. Never put new fuel on a flame!

In case of sudden opening of the stove door, certain quantity of smoke is released. When adding fuel, the stove door should be slowly open, in order to remove smoke. This way smoke entering the room is avoided.

Rated heating power is reached with the following fuel quantities, followed by adjusting the primary air regulator.

Fuel type	Fuel quantity	Combustion time	Air regulation on the stove door in the ashtray part
	Kg	h	Degree
Wood logs	2,0	1	20 mm open
Brown coal briquettes	1,7	1	30 mm open

The stove may be stoked only with natural, wood logs and brown coal briquettes. Wood logs are inserted in wood pieces with a length of 32 cm and certain number of pieced is inserted in case of brown coal briquettes.

Lacquered, painted, veneered and impregnated firewood or wood treated with glue is not allowed for use in the stove. In this case every guarantee and responsibility of the manufacturer ceases. The firewood that you need to use should be dry (wood humidity up to 20%). The wet wood has low calorific value and creates sediments in the drain channels as well as in the flue.

In cases of the most adverse weather conditions, a fault may occur in the flue (for example bad weather conditions). In such cases, stove operation is not allowed for safety reasons.

5.2. Stove maintenance and cleaning

The entire stove should be regularly controlled by an expert. The stove, smoke pipe and flue must be regularly cleaned several times a year, and at least once in the heating season.

Regular maintenance and cleaning of the stove has special importance for good and reliable stove operation. Maintenance of the enameled – painted surfaces is recommended only when the stove is cold. The stove is washed with clean water and soft cloth. Painted surfaces of the stove are cleaned with a dust brush or a dry cloth.



Fig.4

Do not use water or damp cloths for painted stoves. The period between stove cleanings depends on the fuel type, that is, on the duration and the type of stove usage.

The ash box (figure 4, position 11) should be regularly emptied before every stove ignition. The grate should be cleaned 1-2 times a week. In case of clogged air intakes with clay or other combustion residues, these should be immediately removed. For this purpose, the grate must be completely removed and cleaned.

When stoking, creation of smoke on the glass should be avoided. During combustion, smoke is created for the following reasons:

- poor draft in the flue (bad flue)
- the stove is improperly used, for example, the oxygen supply is stopped too early.

We do not have any influence on the previously listed facts. For this reason we cannot take over any guarantee for clean glass.

Shaking of the grate is performed via the knobs presented on figure 5.



Fig.5

6. General data

If you adhere to the instructions for installing and use of the stove, this stove will be a reliable source of heat. All problems with Your stove can be resolved by our service. In case of complaints regarding problems or mistakes about the functions, please contact our service. They will help You as well as for orders of spare parts.