TECHNICAL DATA SHEET
№ 10-10-1

Victoria-05 Ltd

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Freestanding roomheater for intermittent burning with firedoors closed.

Designation :	**Opal Lux-w, Opal-w**
Types of appliance:	Type BE (BDS EN 16510-1:2023)
Fuel type:	Dry cleaved wood logs humidity level 25%
Heating volume:	110 м^3

Technical data and parts of the stove.

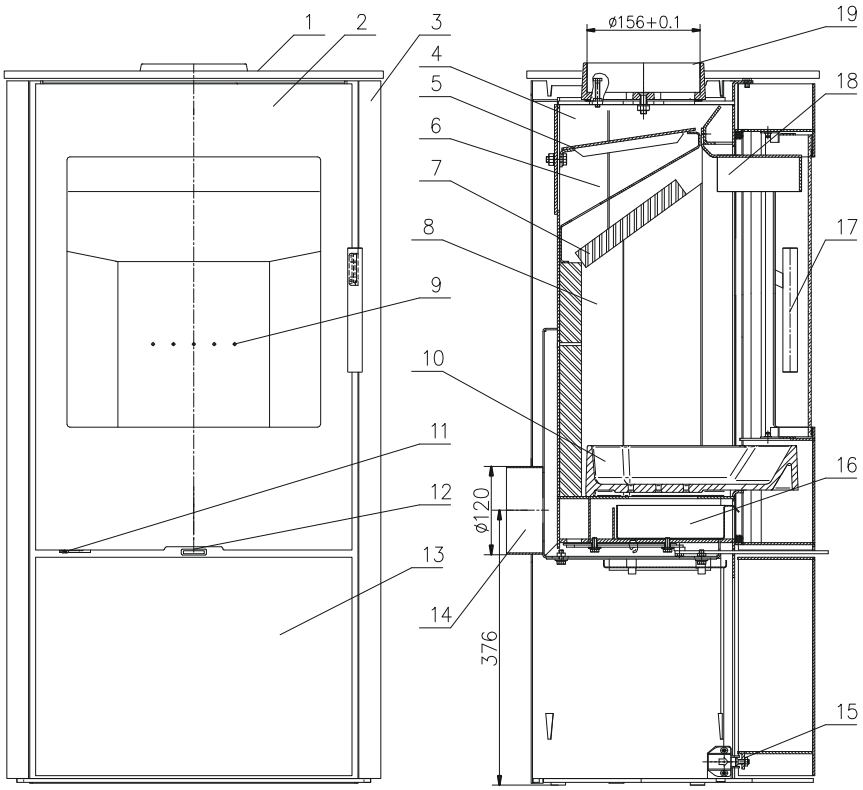


Fig. 1.

1.Top plate; 2. Fire door; 3.Side plate; 4.Body; 5.Top deflector II; 6.Top deflectorI; 7. Top brick; 8.Brick set (Fig.3); 9. Back brick tertiary air; 10.Cast iron grate; 11.Spring; 12.Air regulator; 13.Door niche; 14.Air box; 15. Schnaper; 16.Ashtray; 17.Handle; 18.Deflector; 19.Flue socket.

QR code to the required product information on the manufacturer's freely accessible website.

- Declaration of performance
- Declaration of conformity
- Technical documentation
- Energy efficiency label
- Product information sheet
- Instruction manual

Opal Lux-w

Opal -w

The wood burning stove is produced and tested in accordance with EU standard EN 16510-2-1:2023.

TECHNICAL DATA SHEET
for wood burning stove OPAL LUX-w, OPAL-w
in accordance with table 22 (EN 16510-1:2023)

Parameters at 13% O2	Unit	Explanation	Value for wood logs
P_{SHnom}	kW	The nominal space heat output or a range of outputs (dependent on fuel types)	6,1
η_{nom}	%	The appliance efficiency at nominal heat output	≥75
η_s	%	The appliance seasonal space heating efficiency at nominal heat output	≥ 65
EEI	-	The energy efficiency index	106
CO_{nom}	mg/m^3	CO emission at 13 % oxygen content at nominal heat output	≤ 1500
NOx_{nom}	mg/m^3	NOx emission at 13 % oxygen content at nominal heat output	≤ 200
OGC_{nom}	mg/m^3	Hydrocarbon emission at 13 % oxygen content at nominal heat output	≤ 120
PM_{nom}	mg/m^3	Particulate matter emission at 13 % oxygen content at nominal heat output.	≤ 40
p_{nom}	Pa	Minimum flue draught at nominal heat output	12
T_{snom}	°C	The flue gas outlet temperature at nominal heat output	253
T_{class}	-	Chimney designation according to the appropriate chimney standard	T400G
$\Phi_{f,g\ nom}$	g/s	The flue gas mass flow at nominal heat output	5,8
CON or INT	-	Whether the appliance is capable of continuous operation (CON) Whether the appliance is capable of intermittent operation (INT)	INT
d_{out}	mm	The diameter of the flue gas outlet	150
m_{chim}	kg	The maximum load of a chimney the appliance may carry	20
d_R	mm	The minimum distances from the rear to combustible material	350
d_S	mm	The minimum distances from the sides to combustible material	500
d_C	mm	The minimum distances from the top to combustible material in the ceiling	750
d_P	mm	The minimum distances from the front to combustible material	1200
d_F	mm	The minimum distances from the front to combustible material in bottom front radiation area	600
d_L	mm	The minimum distances from the front to combustible material in side front radiation area	1000
d_B	mm	The minimum distances below the bottom (not regarding feet) to combustible material	0
d_{non}	mm	The minimum distances to non-combustible walls	200
	-	**Read and follow the user manual!**	

Parameters	Unit	Explanation	Opal Lux-w	Opal-w
m	kg	Mass of the appliance	99	98
L, H, W	cm	the overall dimensions of the appliance (length, height, width)	52/99/43	52/99/40

Required safety distances during installation and operation of the wood burning stove for preventing fire hazard:

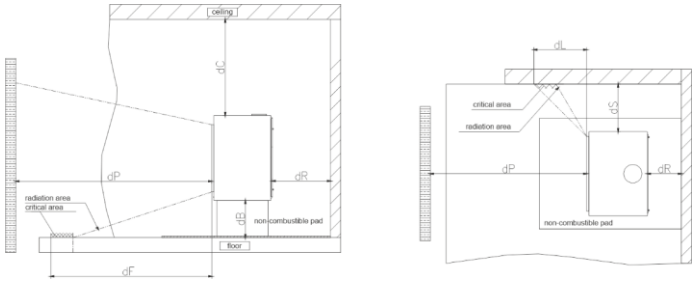


Fig.2.

Appliance operation.

The standard requirements for wood burning stove operation are described in chapter 2 and 3 in the instruction manual.

The niche is decorative and it's not allowed to store easy combustible materials.

- When non-combustible platform is used for fire protection, it must be larger than the stove with 50 cm in front and 30 cm at the sides. Measurement is taken from the fire door. If there are any combustible materials or constructions, the wood-burning stove should be away from them at minimum 80 cm or fire proof deflector should be installed.
- The chimney should be very well insulated and suitable for temperatures of the flue gasses of minimum 400 ^{0}C, with inside diameter of at least ø 150 mm or with a cross-section area of at least 200 cm^2. Chimney fire-safety class -T400G.
- **The wood-burning stove should not be connected to a chimney when there is already a connected solid fuel boiler.**

If the stove does have a spring for self-closing fire door it can be used in a common chimney. Presence of a spring for self-closing fire door is indicated on the packing label and described in the technical data sheet.

Control of the burning process.

Prior first usage of the appliance, the user should get familiar with all parts and control devices.

The combustion process is controlled with the supplied primary, secondary and tertiary air by the regulator (Fig.1, Pos. 12). The combustion rate is increased by pulling the leaver from position "0" to position "max" (Fig.3). This allows more air to be send to the combustion chamber. Primary air is used during ignition of the stove and for control of the burning intensity. Primary air is adjusted by the position of the air regulator (Fig.3). By pulling the air regulator (Fig.1, Pos. 12) the heat output of the stove is increased. Respectively when pushed in towards the stove the heat output decreases. Primary air is required for faster ignition of the fire. The primary air passes through the ashpan, the bottom grate and goes into the firebox. The ashtray should not be left fully filled. If full, it will prevent the primary air to get in the combustion chamber. It is necessary to clean the ash pan regularly.

The ashtray is cleaned only when it is cold.

Secondary air is used for preventing the accumulation of dust on the glass. The air is channeled above deflector (Fig.1 Pos. 18) at the top part of the fire door. The secondary air supply is increased when the air regulator is pulled out (Fig.3).

Tertiary air (Fig.1 Pos. 9) is helping for the full burning of the fuel, reduces the amount of used fuel and reduces the harmful emissions. When there is rapid burning, the tertiary air is preheated and enters at the back of the combustion chamber and flames are very visible. As the heat output of your appliance depends also on the height of the chimney, the precise control of the necessary air for the combustion is done by trial.

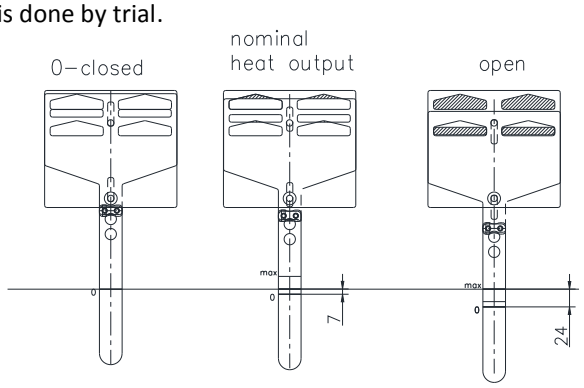


Fig. 3

Initial ignition of the appliance.

At the first ignition of the appliance, pay attention to the following:

- Take off all the supplementary tools out of the ash pan..
- The regulator for primary, secondary and tertiary air have to be in open position (pulled to maximum).
- Remove the energy efficiency label.
- The first ignition must be slow and still, with little quantity of sticks and paper
- **Only during the first ignition, it is necessary to leave the fire door slightly open, to prevent sticking of the sealing rope of the fire door onto the paint.**

Ignition during regular exploitation.

Your appliance is constructed and designed for intermittent burning.

At each ignition, you must do the following:

- The regulator for primary, secondary and tertiary air have to be in open position (pulled to maximum).
- Put the basic combustion materials, ignite them and close the door completely.
- After the kindling has burned down, you must wait few minutes until good embers form. After that, the embers must be collected in the middle. Then you can put 2 - 3 wood logs on top of it.
- After the wood is burning well, the preferred heat output is achieved by regulating the combustion air.

Fuel quantity and reloading interval

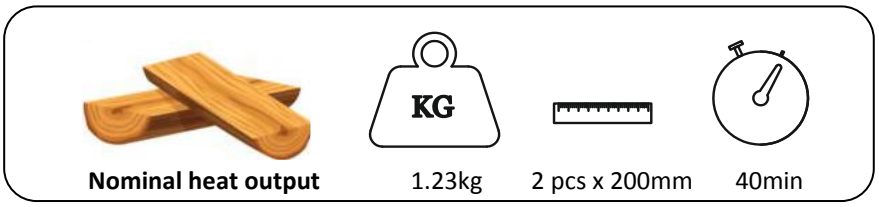


Fig.4.



Fig.5.

- **Maximum allowed height of the used fuel in the combustion chamber is 150 mm (Fig.5).**
- **When more fuel than the maximum allowed is used, there is a danger of overheating, unexpected deformations and overall bad appearance of the appliance.**

Spare parts.

Scheme of the used bricks and grate

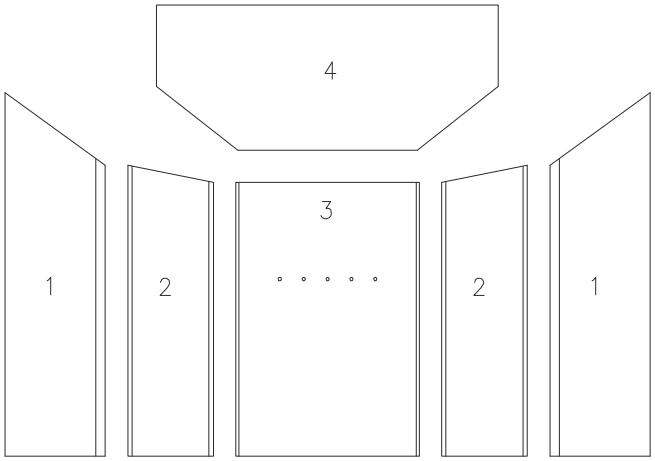


Fig.6.

N	Designation	Dimensions / number	Material	Quantity	
				Opal Lux-w	Opal-w
1	Brick side L/R	188.00.00.52	Vermiculitte	1	
2	Brick L/R	188.00.00.53	Vermiculitte	2	
3	Brick back	188.00.00.54	Vermiculitte	2	
4	Brick top	188.00.00.51	Vermiculitte	1	
5	Grate	188.00.00.02	Cast iron	1	
6	Grate	187.00.00.02	Cast iron		1
7	Ceramic glass	188.30.00.03		1	
8	Ceramic glass	4x350x440			1
9	Handle			1	1
10	Door sealing	Rope ϕ12		1	
11	Glass sealing	Flat rope 10x2		1	

Table 2.