OPERATING AND INSTALLATION INSTRUCTIONS

BLAZE ELEMENT WOOD STOVE

BE04 BE07

BLAZE HARMONY s.r.o.
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Dear Customer,

you have chosen to purchase a Blaze Element stove from BLAZE HARMONY. You become a user of a stove of top parameters. To ensure that the stove serves you well, reliably and for a long time, operate it in accordance with the instructions in the operating manual, paying particular attention to chapters 1, 2 and 3

We greatly appreciate the trust you have shown and would be happy to receive feedback on the operation and maintenance of the stoves.

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1. Installation

Please read this manual carefully and keep it.
During the installation and operation of the stove, all local regulations and regulations relating to national and European standards must be observed. The assembly and installation may only be carried out by an authorised person.
This stove is not designed for continuous operation.

Safety instructions

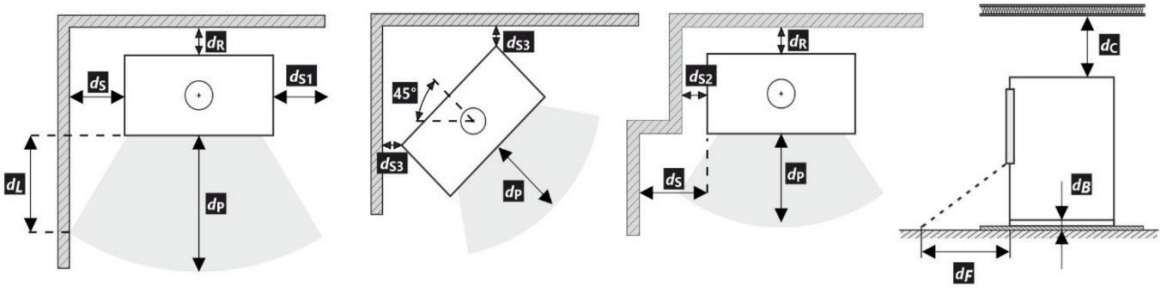
- The stove must be installed in such a way that the requirements of BS EN 13240- Fire safety of thermal equipment are met.
- The installation must comply with the relevant design, safety and hygiene regulations (the stove must not be installed in a room where there is insufficient air supply).
- Safety regulations must be observed when handling the product to its destination. The transport must be carried out using equipment and transport devices designed for this purpose with a load capacity corresponding to the weight of the product to be transported.
- The stove must be installed in a space with a sufficient air supply that is ensured (e.g. an openable window, sufficient infiltration of the building, controlled ventilation with negative pressure regulation, a tap from the external air supply (with a manual damper))

1.1. Safe distance

Minimum distance from combustible materials (mm)

front floor (d_F)	430
ceiling (d_C)	min 750
rear part (d_R)	250
side (d_S)	300
side radiation surface (d_L)	390
minimum distance from combustible materials (e.g. furniture) (d_P)	1250

Applies to building materials of reaction to fire class B, C, D.
(e.g.: expanded polystyrene, structural timber, wood-based panels)



Stoves placed on a combustible floor must be supported by a non-combustible base (e.g. glass, metal).

1.2. Connecting the stove to the chimney

Safety instructions

- The construction of the flue and chimney must be carried out in accordance with the applicable regulations. The flue pipe must be safely inserted into the chimney flue. The flue must be mechanically strong, tight against the penetration of flue gases and cleanable.
- Stoves must not be installed in rooms where there is not sufficient air supply.

Before connecting the stove to the chimney, make sure that the flue gas passages meet the calculated dimensional requirements and the draft requirement for operating the stove at its rated output. The calculation can be carried out by an authorised person (chapter **8. Dimensions and technical data**) for the minimum draft.

- Low chimney draft could cause flue gas leakage into the room, clogging of flue passages, blackening of glass.
- High chimney draught (more than 17 Pa) causes intense combustion with high combustion temperature, this can lead to permanent damage to the stove structure and higher fuel consumption.

The flue pipe must be assembled in accordance with the direction of the flue gas flow (after the smoke). The maximum recommended length of an uninsulated flue is 2 m.

The stove cannot be installed on a common chimney flue with a gas boiler. It is not recommended to install the stove on a common chimney with other heaters.

For dimensions for connection to the chimney (chapter **1.4. Dimensions for connecting the flue and external air supply**).
The installation and operation of the equipment must comply with the requirements of the standards:
CSN 73 4201 Chimneys and flues - Design, construction and connection of appliances
CSN 061008 Fire safety of thermal equipment.

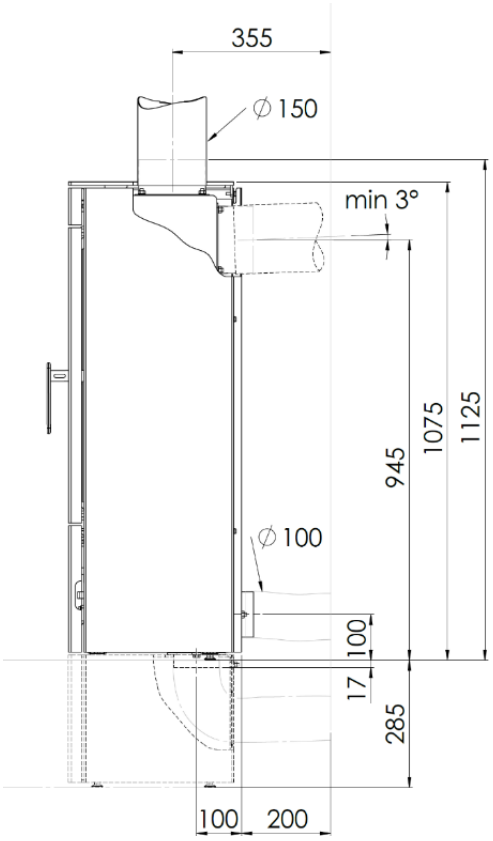
1.3. Connecting the stove to an external air supply

The BLAZE ELEMENT fireplace stove is equipped with a sleeve for connecting the combustion air supply from the outside. If the outside air duct is not connected to this sleeve, it is necessary to ensure (in the room where the stove is operated) a sufficient air supply by ventilation.
For dimensions for connection to the external air supply (chapter **1.4. Dimensions for flue and external air supply connection**).

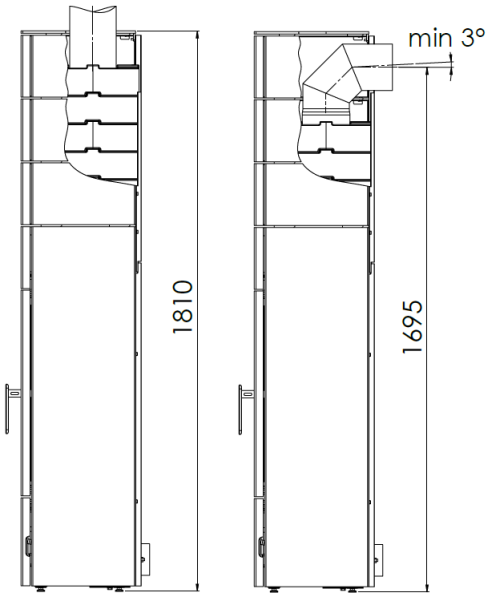
The combustion air inlet must be fitted with a ventilation grille to prevent blockage!

If no external air supply is connected to the stove and the stove takes air from the room, the hood and other devices creating negative pressure in the room must be switched off when connecting the stove.

1.4. Dimensions for connecting the flue pipe and external air supply



Dimensions for connecting the flue pipe with accumulation extension



The external air inlet pipe can be moved to the underside of the stove using only the stove base.

The diameter of the flue pipe must be 150 mm. The maximum recommended length of uninsulated flue pipe is 2 m.

The cross-section of the external supply air duct shall not be less than 75 cm^2 and its length should not exceed 5 m.

2. Operating Instructions

Description

Fuel is added to the tray moving grate through the feed hole, the fuel allowed for the Blaze Element is firewood. The fuel is then either ignited by the operator during the plugging process or ignites itself from the glowing base layer of fuel left over from the previous plugging.

The primary supply air flows into the combustion chamber through openings in the rear ceramic fittings, which are arranged in two horizontal lines above each other. The lower line is covered by a primary air diverter which forms a baffle between the primary air inlet and the fuel. The primary air reacts with the combustible gases released from the fuel, and the rising stream of burning gases produces a flame at the upper edge of the primary air diverter and at the rear wall of the combustion chamber.

The primary air diverter prevents the incoming primary air stream from coming into direct contact with the fuel and directs the primary air stream upwards along the rear wall of the combustion chamber. This achieves high quality combustion with low pollutant emissions.

Secondary air flows through the secondary inlet from the blower bar, mixes with combustible gases and causes secondary combustion.

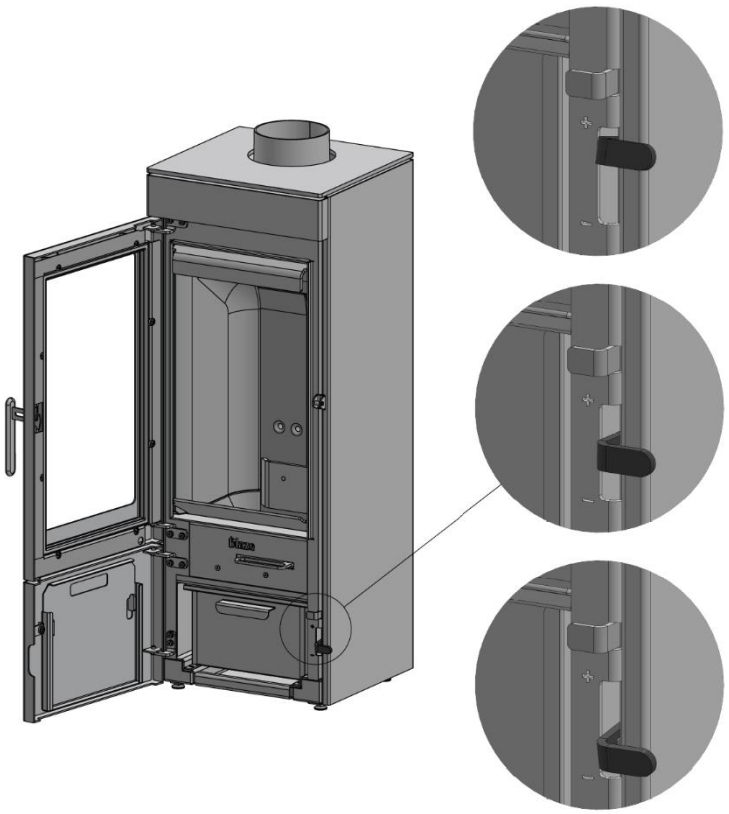
Remove the fuel ash accumulated on the tray grate before each fire by tilting the grate trays using the grate lever and the ash will slide into the ash pan.

Safety instructions

- With the exception of approved solid firelighters, the use of flammable liquids (gasoline, oil, etc.) is prohibited. The use of liquid and gel lighters is prohibited.
- It is forbidden to burn anything in the stove other than the fuel approves for this purpose, (chapter **2.3. Approved fuel)**.
- During operation and for some time after the heating has stopped, the outer surfaces of the stove are very hot. **There is a high risk of burns!** It is unacceptable to leave children, persons requiring assistance and animals unattended near hot stoves.
- Never close the combustion air inlet during combustion
- The operator of the stove must be a person over 18 years of age and must follow these operating instructions.
- Flammable objects must not be placed on or near the stove.
- The stove is not designed for operation with the door open. They may be opened with care only for the time necessary to add fuel. The door must then be properly closed immediately.
- For all activities related to the operation of the stove, it is necessary to wear appropriate protective gloves - the handle and glass are hot during operation and there is a risk of burns.
- If there is a risk of flammable vapours or gases entering the room with the stove or during work that creates a temporary risk of fire or explosion (gluing floor coverings, painting with flammable paints), the stove must be taken out of operation in good time before work begins

2.1. Control description

Combustion air **control lever**



Start-up fire
(lever fully up)

In operation
(lever in middle position)

Closed off
(lever fully down)

2.2. Setting the air control lever

Start-up fire
The control lever is in the **start-up fire** position only until the batch of fuel is fully ignited. When the fuel batch is properly fired, the time for full ignition is max 30 min. After ignition, place the lever in the **In operation** position**.**

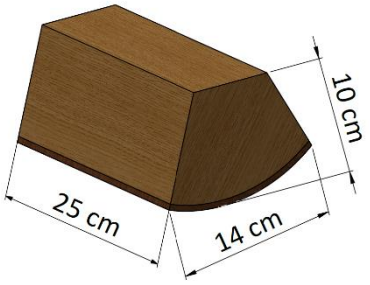
In operation
The combustion air control lever is used to set the optimum combustion of a given fuel batch (chapter **2.8. Refueling**). When operating at rated power, the lever is in the middle position - this can be varied depending on the size of the batch, the size of the char layer, the wood moisture content, the chimney draft.

Closed
After the fire has burned out, close the air supply to prevent the negative effect of continuous airflow through the stove, which could cool the chimney (the stove would "ventilate"). When the stove is out of operation, keep the control lever in the **Closed** position.

2.3. Approved fuel

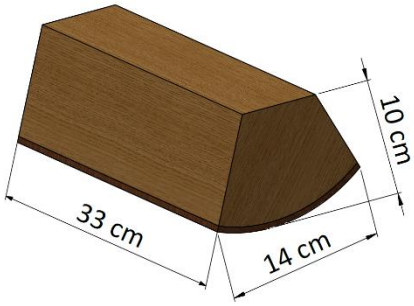
- The approved fuel for use in BLAZE ELEMENT stoves is dry wood with a maximum moisture content of 20%, the optimum moisture content is between 10% and 15%.
- The calorific value of all types of wood is approximately the same - about 15 MJ per 1 kg of dry wood. However, wood density varies, and different types of wood can be categorized as either softwood or hardwood:
    - Softwoods (spruce, pine, linden, fir, poplar) - more suitable for start-up fires
    - Hardwoods (oak, beech, hornbeam, maple, ash) - more suitable for refueling
- Split the round pieces of wood before use.

Maximum log length for BE4 is 25 cm



average **1.5 kg/h** of hardwood
fuel consumption for rated power **BE04**
maximum weight of the load **4 kg of** wood

Maximum log length for BE7 is 33 cm



average **2 kg/h** of hardwood
fuel consumption for rated power **BE07**
maximum weight of **5 kg of** wood

Examples of prohibited fuel

- fresh or too wet wood
- sawdust, shavings
- plastics and all synthetic materials
- coal, lignite briquettes, coke
- liquid fuels
- municipal waste
- wood-based materials containing adhesives or binders (particleboard, OSB boards, etc.)

2.4. First operation

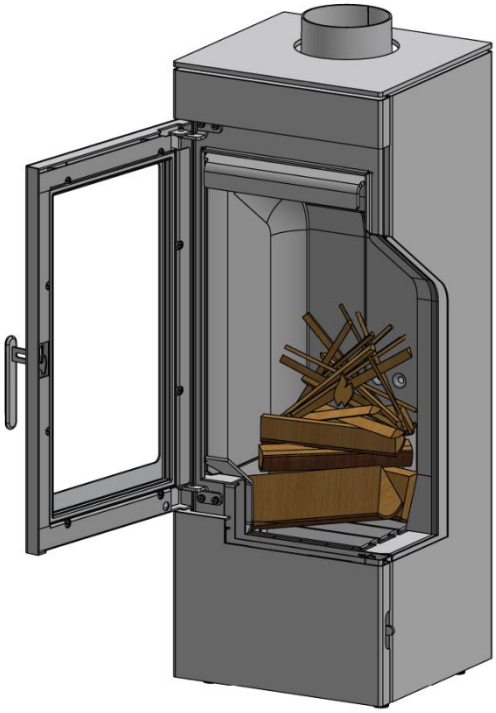
- Before using the stove for the first time, ensure that the flue pipe is properly sealed and unobstructed.
- Remove all transport and protective packaging from the stove before putting it into operation.
- During the initial firing, the paint on the stove will cure and any residual moisture will evaporate. This may produce a slight odor, which is completely normal. We recommend ventilating the room and surrounding areas well during this process. The emitted vapors are harmless.
- After the first fuel batch has burned out, make at least 2 full heating cycles using the optimal fuel amount (chapter **2.8. Refueling**) to complete the stove's initial burn-in process.

2.5. Start-up fire

Do not stack the wood tightly in the combustion chamber. Place the pieces so there are gaps between them. With proper burning of the start-up load, the wood burns gradually and releases a minimal amount of flue gases, helping to keep the glass clean.

- The door must remain closed throughout the start-up process, and the ash drawer should be fully inserted — except during fuel loading or when checking the ash level.
- Switch off all ventilation devices in your home (e.g., kitchen extractor fans) to prevent smoke from leaking into the room.
- Set the control lever to the **Start-Up** position.
- Using several movements of the riddling lever, clear any excess ash from around and between the grate trays. Do not remove the ash inside the trays — it helps protect them from heat.
- Check the ash drawer — the stove can be operated only if the ash drawer is filled to **no more than two-thirds** of the height of its rear wall.

Load the fuel onto the grate, placing it **against the back wall** of the combustion chamber. Start with large logs at the bottom, then add medium-sized pieces, and finally place small sticks on top. Insert an appropriate firelighter into the upper two-thirds of the load and light it. Once the entire base load has burned through, set the control lever to the **In operation** position.



Start-up load

Small pieces

firelighter

medium pieces

large pieces

BE04 - 4 kg
BE07 - 5 kg

Link to the video of the start-up fire

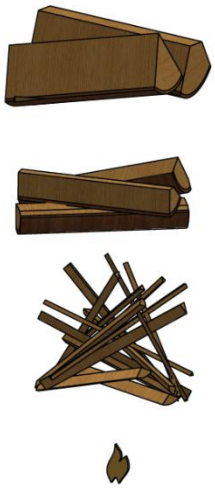
Use only solid firelighters designed for this purpose. It is forbidden to use liquid and gel lighters in BLAZE ELEMENT stoves.

2.6. Unsuccessful Start-up fire

If the start-up load fails to ignite and begins to smolder heavily, pull the ash drawer out by approximately 3 cm. Leave it slightly open for about 1 minute, then push it back in. Repeat this process as needed.For the correct start-up procedure (chapter **2.5: Start-Up fire)**.

Examples of incorrect wood stacking and firelighter placement in the strat-up batch

Example 1



Example 2

Link to the video of unsuccessful start-up and how to fix it

2.7. Stove operation during transitional seasons

In autumn and spring, when the outdoor temperature is higher, the chimney draft is lower, which can make lighting the fire more it difficult. You can prevent problems with lighting the fire during the transition period by using thinner chips of well-dried soft wood in the upper part of the load. This will heat the chimney more quickly and increase its draft. Once the chimney is sufficiently heated, further stoking can be carried out without any special requirements (chapter **2.8. Refueling**).

2.8. Refueling

Refuel only after the previous fuel load has fully burned out (i.e. when the flame disappears). Use the poker to level the remaining hot embers into an even layer, and place the next fuel load on top. A uniform ember layer improves combustion. Try to maintain the ember layer at a height of approximately **10 cm** (up to the joint of the side firebricks).

Once the new fuel load is fully ignited, move the control lever to the **in operation position** – this ensures **optimal operation**. The flame should remain mostly near the **rear wall** of the combustion chamber and should not burn intensely across the entire fuel surface.

- If the **entire surface of the fuel is burning**, too much combustion air is being supplied – move the air control lever **downward**.
- If you only see a **slow flame** coming from the metal strip at the back wall of the combustion chamber, the air supply is too low – move the control lever **upward**.

The size of the fuel load affects the stove's heat output. For recommended fuel weight at nominal output (chapter **2.3: Approved Fuel).**

Refueling intervals depend on the size of the fuel load, control lever setting, wood moisture, ember layer height, and chimney draft.

Ideally, refuel with **one large log**. If using multiple pieces, place them tightly together without gaps. This ensures the **gradual and controlled release of combustible gases** from a smaller fuel surface. The benefits of this refueling method include:

- efficient combustion with **low emissions**
- longer and more even burn time of the fuel load
- prevention of **glass blackening**

If the door is opened when the previous load has not fully finished, the flue gases may leak into the room.

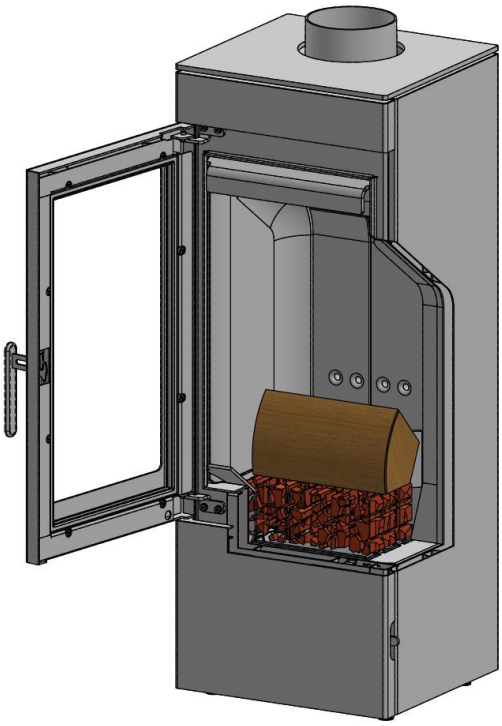
The refueled load didn't ignite

If the fuel does not ignite within 5 minutes of adding fuel, move the air control lever to the **closed** position. Slowly open the door just enough to allow ignition (for a few seconds). Then close the door the door and return the air control lever back in the **in operating** position (i.e. its previous position).

Even if no flames are visible 5 minutes after refueling, the combustion chamber is filled with gases released from the fuel load. For this reason, always open the door with maximum caution!

Loading procedure

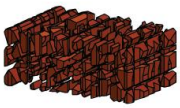
- Set the air control lever in the **closed** position – this creates the vacuum in the stove needed to prevent smoke from escaping into the room.
- Open the door slightly (about 3 cm) and wait approximately 10 seconds to allow the pressure in the stove and the room to equalise, then open the door slowly.
- Place the new fuel in the middle of the layer of embers, adjust the size and number of pieces of wood to the height of the layer.
    - 10 cm high layer is suitable for attaching a large piece of wood
    - If the ember layer is 5 cm or less, add a few medium sized logs to rebuild it.
- After closing the door, return the air control lever to the in **operation** position (previous position).



Refueling

1 large piece of wood

2 - 3 medium-sized pieces



10 cm high layer

5 cm layer

Link to video of refueling

If there is unburnt fuel in the combustion chamber, never fully close the air inlet!

3. Cleaning and maintenance

Safety instructions

- Troubleshooting and cleaning can only be carried out on extinguished and cooled stoves.
- Any interference with the construction of the stove is prohibited!

3.1. Glass cleaning

When the stove is operated correctly, the glass is only minimally polluted and this is achieved by correct power control and the use of approved fuel with a humidity of up to 20%.

- Cleaning the glass during operation is done by increasing the power of the stove. Put the air control lever in the **start-up fire** position until the glass is cleaned, then return it to the **in operation** position (previous position).
- Glass cleaning when the stove is cold can be carried out with standard cleaners designed for this purpose.

A light layer of fine ash dust should be regularly removed (wipe with a damp cloth). If left in place, this layer can etch the glass surface at high temperatures, causing it to lose clarity (turn milky).

Be careful not to let the cleaner come into contact with the door gasket, as it may become damaged (harden) and lose its sealing function.

Wiping the glass with a damp cloth should only be done when the glass is completely cold — there is a risk of cracking!

3.2. Cleaning the external surfaces of the stove

- Use a soft, dry cloth to clean the stove surface.
- Wipe the dust off the stove once every 14 days to prevent it from catching fire.

3.3. Cleaning the flue pipe and chimney

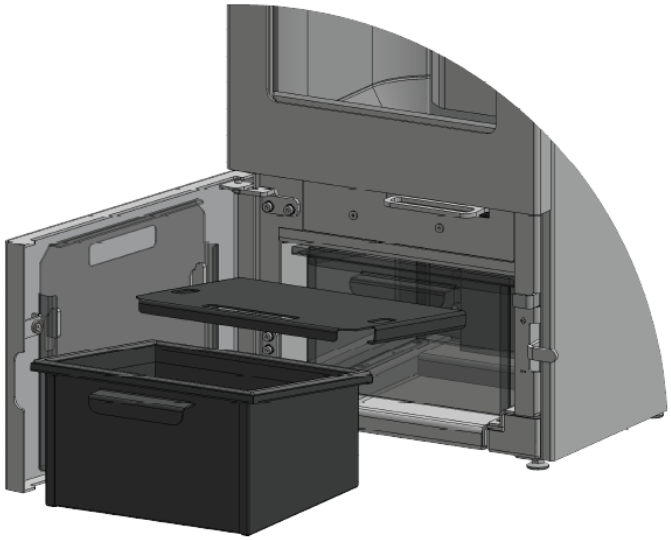
Every user of a solid fuel appliance is obliged to ensure regular inspections of the flue pipe and flue gas paths (chimney) in accordance with local regulations, including applicable national and European standards.

3.4. Ash removal

Empty the ash drawer when it is filled to approximately 2/3 of the height of its rear wall**.**

Ash reaches the ash drawer through the gaps between the grate trays during riddling — a rocking motion toward the back wall of the combustion chamber widens the gaps between the trays, allowing excess ash to fall into the drawer.

Do not remove ash from the grate trays**.** The ash serves as thermal insulation for both the grate and ash drawer, extending their lifespan and helping maintain a high combustion temperature, which is essential for efficient burning



To reduce dust when carrying the ashtray, place a lid on top, located in the bottom door.

Always remove ashes from a completely extinguished stove.

Ashes must be deposited in fireproof containers with lids.

4. What to do in case of a fault

Cracked glass

- The doors of the BLAZE ELEMENT fireplace stoves are fitted with high-quality ceramic glass, which cannot be replaced by ordinary sheete glass
- The glass replacement must only be carried out by an authorised service technician.
- Contact your dealer or authorized partner for glass replacement.

Cracked refractory concrete fitting

- Cracks in refractory concrete fittings do not affect their functionality and do not necessarily warrant replacement. If the fittings are so damaged that whole pieces fall off or begin to crumble, replacement is necessary.

Worn sealing cord

- Door and ashtray glass sealing cords are subject to normal mechanical wear, hardening and heat wear, which causes them to lose their sealing properties.
- The sealing cords must be changed regularly - at least once every 2 years. It is forbidden to use other than the original sealing cord approved by the manufacturer.

The glass gets heavily soiled

- Incorrect start-up procedure (chapter **2.5. Start-up fire)**.
- Improper refueling (chapter **2.8. Refueling)**.
- Excessive restriction of combustion air supply.
- The air supply to the stove is not sufficient (chapter **1.4. Connecting the stove to an external air supply)**.
- The chimney draught is insufficient (e.g. due to blockage, weather or another connected appliance).

Smoke escapes into the room during refueling

- You opened the door too fast.
- You've refueled at the wrong stage of the burn. Only add when the last of the flames are gone, on top of the layer of hot coals.
- The chimney draft is insufficient.
- There is no air supply to the stove area (chapter **1.2. Air supply to the stove compartment).**

The refractory concrete fittings went black during the start-up fire

- During the burning of the start-up load, the refractory fittings are not sufficiently heated and unburnt solid particles are temporarily deposited on them. Once the stove is sufficiently heated during the first refill and the combustion has stabilized, the fittings will clean themselves (burn).

Fire in the chimney

- **Call the fire department!**
- Close the air supply of the stove!
- Never attempt to extinguish a chimney fire with water
- Use a shovel to remove burning fuel residues and place them in a suitable non-flammable container.
- After a fire, contact your chimney sweep to assess the condition of the chimney.

5. Related standards

Appliance

EN 16510-1	Solid fuel burning household appliances - Part 1: General requirements and test methods
EN 16510-2-1	Domestic appliances burning solid fuels - Part 2-1: Stoves

Chimney

CSN 73 4201	Chimneys and flues - Design, construction and connection of appliances

Fire

EN 13501-1	Fire classification of construction products and construction
CSN 06 1008	Fire safety of thermal

6. Disposal of packaging and appliance at the end of its life

Disposal of transport packaging

- put the cardboard box in the paper container
- take the polyethylene cover to the plastic container
- wooden pallet dismantled, cut up and used as fuel

Disposal of the appliance at the end of its useful life

- clean and disassemble the appliance into its individual parts
- take metal parts to a scrap metal collection point
- Dispose of refractory fittings, insulation boards, glass and sealing cords as normal municipal waste

7. General Warranty Terms and Conditions

The warranty applies only to an appliance that has been installed by an authorized person and operated in accordance with the operating and installation instructions.
The installation and use of the appliance must comply local regulations, including those relating to national and European standards.

The warranty does not cover damage caused by:

- not following the instructions in the operating and installation instructions.
- by using other than the fuel or by overheating the stove, i.e. by adding too much fuel (chapter **2.3. Approved fuel)**.
- continuous operation of the stove.
- transport or due to improper storage in a humid environment.
- improper operation, mechanical damage to parts and any technical change to the stove design.

7.1. Warranty period

The warranty period begins on the date of sale to the end customer.

- The warranty period for the fireplace stove body is 60 months.
- The warranty period for mechanical parts and parts in contact with fire is 24 months.

7.2. Normal wear and tear of parts

Parts subject to normal wear and tear are not covered by the warranty:

Glass wear

- contamination by soot or residues of burnt materials, colour changes, embrittlement and cracking of glass or other changes caused by heat.

Wear of ceramic fittings

- the fittings expand and contract during operation due to the thermal load. These processes can produce micro-cracks. As long as the ceramic fittings retain their shape and do not crumble, they fulfil their function.

Cord seal wear

- weakening of the seal due to heat, mechanical wear and hardening of the sealing cord.

Wear and tear of the surface finish

- colour change of paint or galvanised surfaces due to thermal stress or overheating.

7.3. Repair and maintenance

During the warranty period, all defects caused by demonstrable defects will be repaired material and manufacturing defects. Compensation for damages in excess of this provision is excluded.
Maintenance of the equipment or replacement of components does not extend the warranty period.
After the parts have been replaced, the statutory warranty period applies.

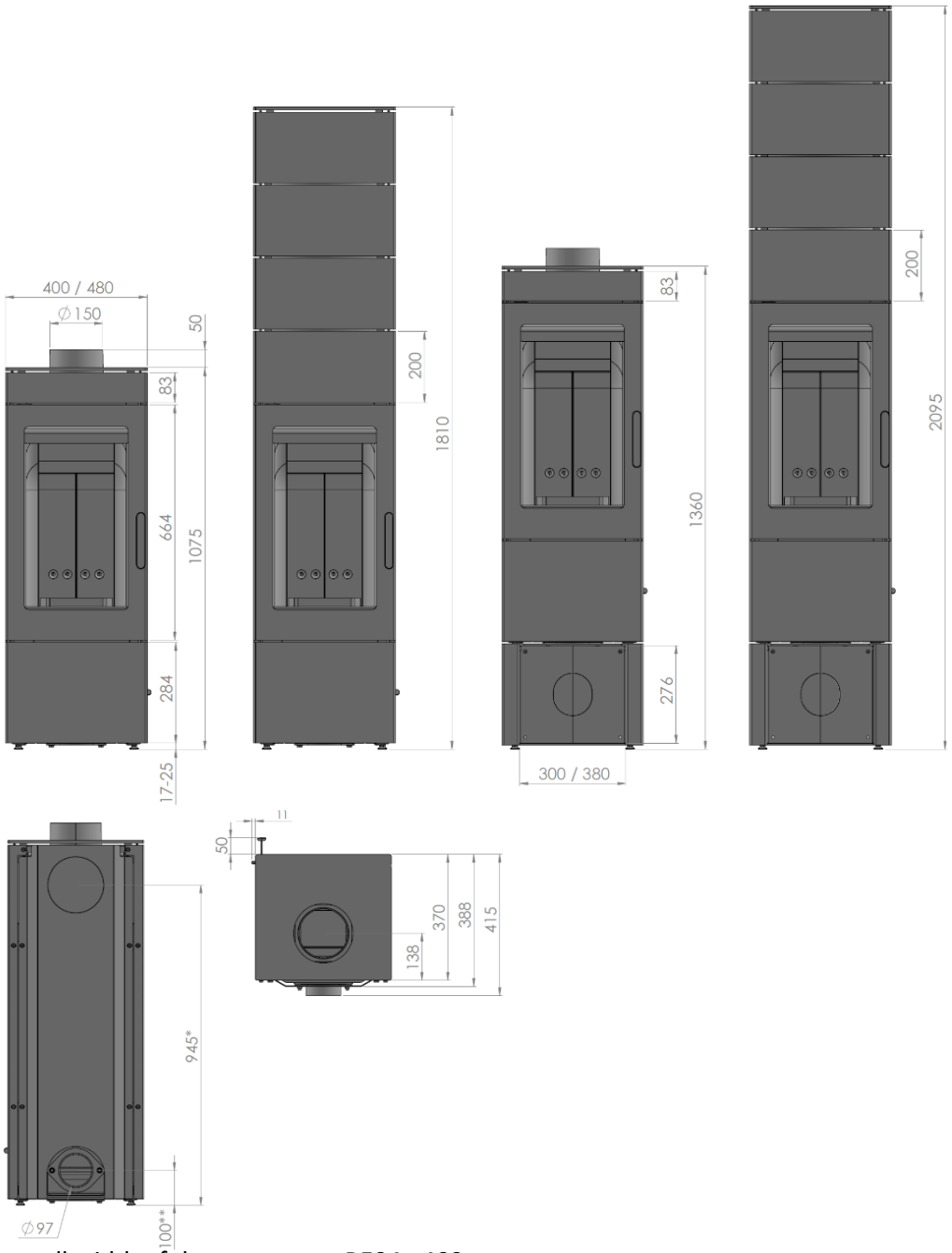
7.4. Making a claim

To make a claim, please contact your stove provider and submit:

- warranty card
- description of the fault with photo documentation

The manufacturer reserves the right to make changes as part of product innovation that may not be included in the instructions

8. Dimensions of the stove



- overall width of the stove: BE04 - 400 mm
  BE07 - 480 mm

- with a fuel pedestal: * - 1230 mm
  ** - 385 mm

9. Technical data sheet

Type of stove		**BE04**	**BE07**
Weight of basic version	kg	153	173
Weight with accumulation superstructure	kg	296	318
Weight with fuel pedestal	kg	174	196
Weight with accumulation superstructure and fuel pedestal	kg	316	342
Diameter of chimney connection	mm	150	
Diameter of air supply inlet	mm	100	
Operating chimney draft	Pa	11	
Energy efficiency class		A+	A
Rated power	kW	4	7
Power adjustability	kW	3 - 6	5 - 11
Fuel consumption at rated power	kg/h	1,5	2
Stove class according to EN 16510-1		BE	
Ecodesign		Yes	
CO (13% O_2)	mg/Nm^3	604	953
OGC (13% O_2)	mg/Nm^3	32	60
Dust (13% O_2)	mg/Nm^3	18	30
NOx (13% O_2)	mg/Nm^3	90	88
Flue gas temperature at rated output	°C	270	265
Efficiency	%	81,9	80,5
Fuel type		Wood	
Max. length of logs	cm	25	33

The appliance has been manufactured and tested in accordance with the applicable documentation and complies with EN 16510-1 Solid fuel household appliances - Part 1: General requirements and test methods.

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