



FREE-STANDING WOOD-BURNING SPACE HEATERS

USER MANUAL AND WARRANTY CARD (EN)

!!! Important

The most important point in manual/manufacture's warranty is the correct usage of the fireplace - its loading.

Wood quality - deciduous wood with a moisture content of maximum 16 % (+/-) 4 %.
The fireplaces have energy consumption values for the amount of fuel (wood) in operation.
Depending on the size of the fireplace, its capacity will vary, which means the amount of fuel you can fit in it will be different.

Important 1 kg of wood provides ~3 kW

Example:

to obtain the rated kW power of the fireplace stove of 10 kW, the wood load will be ~ 3.5 kg

10 kW : 3KW = 3.5 kg of wood

for a 15 kW fireplace, the load will be ~ 5 kg.

15 kW : 3 kW = 5 kg of wood

The next parts of wood should be added successively on the ignition layer of the embers, after the wood has burned out.

Failure to meet the proper wood load in the fireplace=will lead to overheating of the fireplace and its components and thus void the fireplace's warranty

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(Date 01.2023)

Thank you for your trust and for choosing our heater to warm your house. We produce our fireplaces with your safety and comfort in mind. We can be confident that our commitment to designing and manufacturing fireplaces will be matched by your satisfaction in making this excellent choice. Please read all the sections in this Manual carefully before starting any installation work and use. Please contact our technical-support department if you have any queries or doubts. For any further information go to www.fram-gmbh.de

FRAM GmbH is a well known and appreciated heating appliance manufacturer, on both the European market. Our products are made in compliance with stringent standards. Each of the fireplace insert and stove we have manufactured undergoes internal quality inspection, during which it is assessed in rigorous safety tests. The prime-quality materials we use in the production ensures that the final user will benefit from a functional and reliable heating unit. This manual provides all the necessary information for the correct connection, operation and maintenance of the stove.

NOTE!!!

Please make sure that the stove is operated in the correct way: use suitable wood, and clean regularly, to be rewarded with many wonderful and warm autumns and winters. Please find below a few guidelines for the correct maintenance of the stoves:

- 1. The stove must be installed and adapted by qualified person*
- 2. Check the chimney flue at least once a year*
- 3. Use dry hardwood with a humidity of up to 20%*
- 4. Replace the sealing before every heating season (joint strengthening in the door and under the glass)*
- 5. Remove ash from the ash trap regularly*
- 6. Do not overheat the stove: maximum load must not exceed 1/3 of the combustion-chamber volume*
- 7. Clean the glass with product for such use, keeping in mind not to apply directly onto the glass, but on a cloth*

INTRODUCTION

THE REQUIREMENTS ON THE CONDITIONS AND RULES OF INSTALLING FIREPLACE OR FREE-STANDING WOOD-BURNING SPACE HEATERS CAN BE FOUND IN THE APPLICABLE STANDARDS AND NATIONAL AND LOCAL REGULATIONS IN EVERY COUNTRY ADHERING TO THE PROVISIONS CONTAINED THERE!

To avoid the risk of fire, the appliance must be installed in compliance with the valid standards and technical practice referred to in this Manual. Its installation must be carried out by a professional or qualified person. The appliance conforms to EN 13240 and is CE certified.

Any applicable laws at the site where the appliance is installed must be adhered to at all times. Firstly, make sure that the chimney flue is suitable.

The appliance must be installed in compliance with the applicable construction-law standards. The stove must be placed within a safe distance from any inflammable materials. Protect walls and materials surrounding the stove if necessary. Place the appliance on a rigid, non-flammable base; the chimney must be air-tight with smooth walls. Prior to being connected, it must be cleaned of soot and any contaminants; the connection between the chimney and the stove must be air-tight and made of non-flammable materials and protected against oxidation (enamel or steel flue liner).

If the chimney generates poor draught, consider installing new ducts. It is also important that the chimney does not generate too much draught, but, if so, install a chimney-draught stabiliser; alternatively, special chimney terminations for the draught control. The inspection of the chimney flue must be contracted to a master chimney sweep, and any conversions are obliged to be made by an authorised service only, so that all the requirements stipulated by the respective national law in force are met.

APPLICATIONS

The free-standing stoves by FRAM GmbH are stoves from the group of solid-fuel hearths with a manual fuel load, connected to a building by means of a conduit which transports flue gases out of the building, and a lockable hearth door. They are designed to burn hardwood, specifically, hornbeam, oak, beech, acacia, elm, maple, or birch, with a humidity of <20% (lignite and charcoal briquettes are also allowed). They provide an additional heat source for the rooms they are installed in.

NOTE BEFORE INSTALLATION!

To prevent the risk of fire, the heater must be installed in compliance with the rules and regulations of good building practice, and with the technical guidelines provided in this Installation and Operation Manual. The design of the chimney system must be by a qualified specialist. Prior to commissioning, a recorded technical acceptance must be conducted and the chimney sweep and fire-specialist assessments attached.

GENERAL REMARKS

- Prior to the heater's installation, the chimney flue must be assessed by an expert and accepted for its technical specifications, as well as the technical functionality of leak tightness and flow capacity.
- The installation and start up of the heater must be carried out by an installation-specialist company with satisfactory qualifications and experience.
- The heater must be placed as close to the chimney flue as possible. The room it will be installed in must have a functional ventilation system and the required amount of air for correct heater operation.
- Before you start using the heater, remove the stickers from the glass.
- The technical parameters of the stove apply to the fuel specified in these operating instructions.
- The chimney flues must be inspected in the due time (min. twice a year).
- Pursuant to the applicable law, a stove may not be the only source of heat, but a supplementary one to the existing heating system only. The purpose of such a regulation is the necessity to provide heating for buildings during a prolonged absence of residents.

The heater's installation must be performed with adherence to the provisions in force within this standard scope, construction-law requirements and fire-safety standards in force in this regard. The particular provisions on design safety, fire safety and safety of use are laid down in the construction regulations and codes in force in the respective countries.

FUEL CHOICE

Recommended Fuel

- The manufacturer recommends hardwood billets like beech, hornbeam, oak, alder, birch, ash, etc., with billet or split log dimensions 30cm long and circumferences between 30 and 50cm.
- The humidity of the fuel wood for the appliance should not exceed 20 %, which is characteristic of wood seasoned 2 years after felling and stored under cover.

Not Recommended Fuel

You should avoid burning billets of split logs with a humidity of over 20% as it can prevent the appliance from achieving its declared technical specifications, and can reduce the heat output.

Burning softwood billets and high-resin wood in the appliance is not recommended, as they result in heavy smoking and frequent cleaning of the appliance and chimney flue.

Prohibited Fuel

The following is not allowed to be burned in the heaters: minerals, e.g. coal, tropical wood (like mahogany), chemical products and fluids, (like oil, alcohol, petrol, and naphthalene), laminated boards, or adhesive-bonded, impregnated or pressed wood chips and litter. If any other fuel is allowed, it will be notified on the rating plate.

Avoid overfilling the combustion chamber, optimising the amount of fuel at one-third of the combustion chamber's capacity. Before you reload the wood, wait until the flames have died down; do not add wood onto too much heat. After you light the fire, make sure you reload the wood in the combustion chamber by putting fuel inside so that the chamber is filled in a reasonable way for the intended burning time determined by the user, based on his/her individual experience.

Close the door slowly each time. After a long period of non-use, a lower output start-up is recommended.

WOOD BURNING STOVE ASSEMBLY AND INSTALLATION

The installation of the heater must be carried out by a person who is sufficiently qualified to conduct assembly and installation work of this kind. This is a requirement for the safe use of the use of the stove. The installer must confirm correct assembly and installation execution in the guarantee certificate by signing and sealing it. Failure to comply with this requirement will void all the Buyer's warranty claims against the fireplace manufacturer.

PREPARATION FOR INSTALLATION

The stove is delivered in a ready-to-be-installed state. Remove the packaging and check the appliance for completeness according to this Operation Manual. You should also ensure that the following are operational

- The control of the air supply for the combustion chamber (ash trap);
- The correct functioning of closing the front door (hinges, handle);
- The flue and smoke pipe durability must have a fire-resistance rating of a min. of 1 hr;
- The stove may be installed only after the smoke-duct chimney-sweep report has been completed.

CONNECTION TO CHIMNEY STACK

A free-standing stove must be connected to an individual chimney flue.

The minimum chimney draughts for rated heat output [Pa]: the chimney-draught values

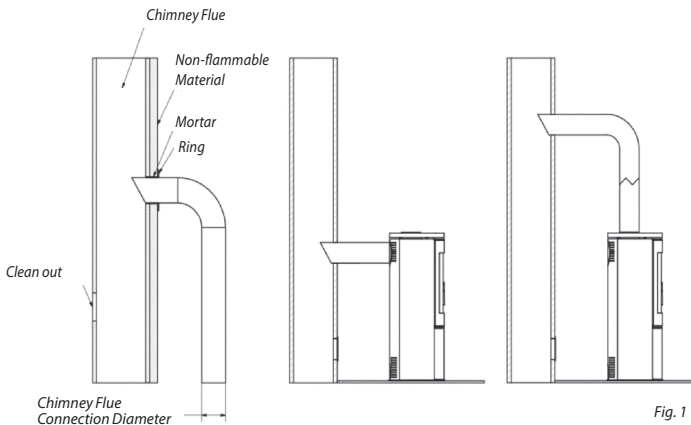
- Minimum draught: 6 ± 1 Pa
- Medium, recommended draught: 12 ± 2 Pa
- Maximum draught: 15 ± 2 Pa

The chimney must be air-tight and its walls without any obstacles. Clean it of any soot and other dirt before connecting. The connection between the chimney and the stove must be air-tight, made of non-flammable materials, and protected against oxidation (e.g. enamel-steel flue liner). If the chimney generates a poor draught, consider installing new ducts.

It is also important that the chimney does not generate too much draught, but, if so, install a chimney-draught stabiliser.

Alternatively, install special chimney terminations for the draught control. The inspection of the chimney flue must be contracted to a master chimney sweep, and any conversions are allowed to be made by an authorised service only, so that all requirements are met.

Examples for the chimney connection:



THE VENTILATION OF THE ROOM WITH THE STOVE INSTALLED

The stove consumes air for its operation, so the proper ventilation of the room in which it is installed is required. The supply grilles of the ventilation system in the room should be protected against automatic closing.

POSITIONING THE STOVE AT A SAFE DISTANCE

If possible, the installation site should have a level, horizontal and non-combustible surface. Before assembly, please check the substructure for load-bearing capacity and even weight distribution. By using a non-combustible base plate, you ensure that the weight of the stove is distributed over a larger area. Weight information for our stoves can be found on page 25 of these instructions.

The surface in the front area of the stove must be made of a fireproof, non-combustible material (e.g. tiles, stoneware, stone, glass or steel). This non-flammable area must protrude from your stove by 80 cm at the front and min. of 15 cm at the sides, measured from the edge of the firebox.

A stove with the connecting components of the flue-discharge system must be at a distance of at least 40 cm from any uncovered flammable structural components of the building, and at least 15 cm from the covered ones. The distance from the side and back walls of the stove to the flammable materials must be a min. of 15 cm, and the distance from the stove door/glass to the flammable materials must be min. 80 cm.

Remember that during all stove operation and maintenance work the temperature of the stove's steel parts might be high, so wear heat-resistant gloves for the stove's operation. Follow the rules which ensure the basic safety conditions for all operation and use of the stove:

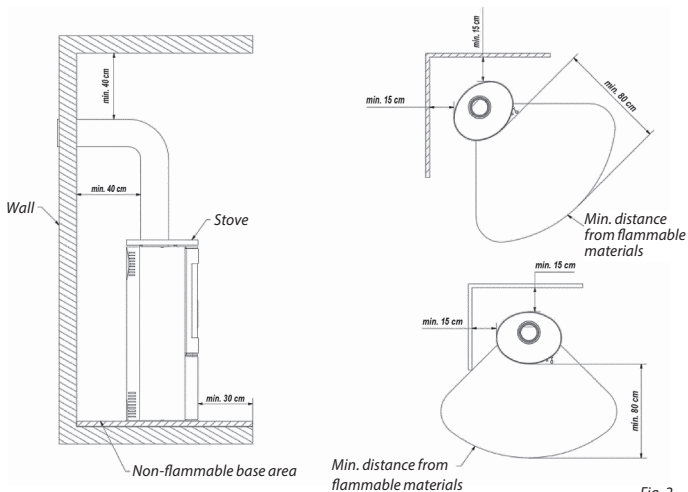


Fig. 2

- Read the manufacturer's Operation Manual and adhere to its instructions at all times;
- The stove must be installed and started by an installer complying with the safety rules;
- Do not leave temperature-sensitive objects near the glass, do not extinguish the fire in the stove with water, do not use a stove with broken glass, and do not place any flammable elements near the stove.
- Any items made of flammable materials must be put at a distance of at least 0.8 m from the hearth
- Do not let your children near the stove
- Have all repairs done by an installer and use spare parts from the manufacturer only
- Any structural, installation or operational changes are not allowed without the written consent of the manufacturer

Air Supply from Outside - Connection Methods

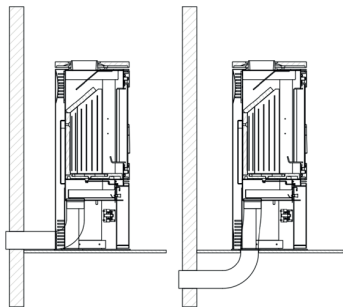


Fig. 3

Air can be supplied to the combustion chamber from within the room or from outside. The stove is fitted with an in-built outside air-intake opening - connector dia. 100 mm. The adjustment of the primary air under the fire grate is effected by means of a single control device below the door. The stove is fitted with a triple combustion-chamber air-feed system, with primary and secondary airs.

The air is redirected into the combustion chamber inside the space (air chamber) below the fire grate on which combustion takes place. The primary air is supplied to the underneath of the fire grate which is on the floor of the combustion chamber. The secondary chamber is supplied through a special conduit (located on the back wall of the stove), along the system of openings into the combustion chamber. The secondary combustion is the burn-out of the particles contained in the smoke. The stove is also fitted with an over-door air-curtain system. The air is directed through a turning vane and "sweeps" the glass separating the flames and smoke from it, which largely reduces any soot depositing on it. In this way oxygen is supplied to the upper section of the combustion chamber in which the gases generated during the wood burning are burnt out, which reduces the air emissions of toxic CO.

Some models feature an additional air damper installed in the air supply, independently of the in-built control device.

OPERATION OF THE STOVE

Caution! When carrying out any work related to the operation and operation of the device, it should be remembered that the elements can have a high temperature. Protective gloves should therefore be used when operating the stove.

START-UP AND OPERATION OF THE FURNACE

FIRE UP THE FREE-STANDING FIREPLACE/STOVE

The so-called top-down lighting is the only correct and recommended method of starting fireplaces and free-standing stoves.

STEP-BY-STEP PROCEDURE

1. MATERIAL NEEDED

- A few larger wooden billets (split; max. humidity 20%; approx. 10-13 cm) - a handful of splints for kindling (dia. approx. 2-5 cm; max. humidity 20%),
- Tinder of choice
- Matches/Lighter

2. STOVE PREPARATION

- Open all air supplies
- Stack the larger billets in alternate directions on the bottom of the hearth
- Put a layer of smaller splints on the top of the thick billets for kindling (not more than 3 layers). Arrange the splints so that there is some space between them to let the air flow freely
- Place the tinder on the top layer



Fig. 4

BURNING

Strike a light and close the door of the stove slowly. Depending on how long the chimney flue is and how strong its draught, lighting may take from a few to dozen minutes. If the chimney draught is not sufficient, let some air in by opening the fireplace door slightly. It might be a good idea to open a window slightly in the room to supply larger amount of air to the appliance (the appliances without integrated external air intake only)

The wood burning stove is designed to burn wood with a humidity of up to 20%. Using coal, coke, coal-based products, plastic, litter, cloths and other flammable materials is not allowed.

Burning approved wood briquettes made of wood dust or pellet is temporarily allowed, but in small quantities only.

The practical assessment of the moisture content of the wood used is as follows: The wood that should have a moisture content of 18-20%, must be conditioned for approx. 18-24 months or be dried in a drying plant. As the humidity of wood decreases, its net calorific value rises, which brings financial savings of even up to 30 % of the total wood weight needed to run the appliance during one heating season. If the wood used for burning is of too high humidity, then, too much energy needed for evaporation and condensation in the flue pipe or combustion chamber can be consumed, which affects the heating process of a room.

Another negative process occurring when the high-humidity wood is used is the emission of creosote, a deposit which damages the chimney flue and, in extreme cases, can result in ignition and a chimney fire.

It is therefore recommended to use hardwood like oak, beech, hornbeam or birch. Lower calorific values are typical of the coniferous trees and burning their wood produces heavy soot accumulation on the glass.

FREE-STANDING SPACE-HEATER MAINTENANCE

Stove Maintenance

The stove and smoke-duct-maintenance activities consist of ensuring that the guidelines below are followed. Regular or scheduled stove-maintenance activities involve removing the ash, cleaning the front glass, cleaning the combustion chamber, and cleaning the chimney flue.

CHIMNEY-FLUE MAINTENANCE

A well-cleaned and maintained chimney provides the basis for correct and safe stove operation. The user must clean the chimney in accordance with the valid regulations. How often you clean and perform the maintenance depends on the chimney insulation and the type of wood used. Using unseasoned wood with a humidity above 20%, or softwood, will pose the risk of a chimney fire related to a thick layer of flammable creosote deposits, which must be removed regularly. Failing to remove the creosote layer inside the chimney liner causes sealing damage, and also contributes to corrosion build-up. Consequently, the regular inspection and maintenance of the stove and its related components are required.

COMBUSTION CHAMBER CLEANING

Before and after each heating season, the chamber must be cleaned and checked carefully, as leaving ash in the ash drawer over a longer time will cause its chemical corrosion. During operation, regular cleaning of the combustion chamber must be performed (how often it needs to be done depends on the variety and humidity of the wood used). Use a poker, scrapers, a brush, chimney vacuums and ash separators for cleaning the components.

GLASS CLEANING

The glass gets heated up to high temperatures, so clean it only when the glass has cooled down. Clean it using approved agents designed for this purpose only (do not use them to clean the firebox parts). Do not use any abrasive products for this purpose, otherwise it may cause its surface to be scratched.

DOOR/SEALING

The friction surfaces of the door hinges and closing device must be treated with graphite grease from time to time. Before each heating season the whole stove must be inspected and cleaned. Give special care to checking the sealing for its integrity, and replace it, if necessary

ASH REMOVAL

Ash should be removed prior to each time you light the stove. To remove the ash, just empty the ash container located below the fire grate. Regular hearth-ash removal prevents the ash from spilling out. Do not allow ash to spill over the barrier. Remove the ash from the stove when it is cold.

THE RANGE OF MODELS WITH TILES

Tiles – due to their production process, each individual production batch of the tiles has its unique features. This can result in minor colour changes, shading or crazing visible on their surface. These features are not faults and do not affect the functioning of the product. They may not be the basis for lodging any claims, either. The surface of the tile sections must be protected against mechanical damage during storage, transport and installation.

TILE MAINTENANCE

Use dry cotton cloth or paper towels to clean the tiles. Do not spray detergents onto the tiles surface or use damp cloths (especially on the warm stove). Moisture can make the small crazing on the ceramic surface become more visible, particularly for bright colours, and it can also cause grout fracturing. The use of sharp and abrasive materials which can leave scratches on the tile surface, as well as corrosive agents, are not allowed.

Caution: Any maintenance work may be performed when the appliance is in a cooled-down state only

SPARE PARTS

If after many years you find exchanging some parts necessary, contact the supplier or any representative of our company. To order a spare part, submit the information listed in the rating plate located on the back of the guarantee certificate, which must be kept even when the guarantee has terminated.

If you have this information, and our factory documentation, the supplier will be able to deliver all spare parts in a short time.

POSSIBLE IRREGULARITIES DURING THE OPERATION OF THE APPLIANCE

During the operation of the appliance there may occur some irregularities which indicate that it is not working. This can be due to a false installation of the appliance - without adhering to the valid construction provisions or the instructions in this Manual, or for reasons beyond one's control, e.g. the natural environment.

The next section shows the most-frequent reasons for the incorrect operation of the appliance, and how to avoid those:

- a) Back-puffing when the door is open:
 - the door is opened too abruptly (open the door slowly); slide the primary air damper towards the closed position
 - if a flue damper is fitted as a chimney-draught control, open the flue damper each time you open the door;
 - insufficient air supply to the room in which the appliance is installed (provide adequate ventilation in the room or supply air to the combustion chamber in accordance with the instructions in the Manual, if possible for the right model);
 - weather conditions: low pressure, fog and precipitation, sudden temperature changes;
 - insufficient chimney draught (have the chimney flue inspected by a chimney sweep).
- b) Too-low heating, or the fire goes out:
 - too little fuel in the hearth (load the hearth according to the Manual);
 - too-high humidity of the wood used for burning (use wood with a humidity of up to 20%); a large portion of the energy obtained is lost in the process of water evaporation;
 - insufficient chimney draught (have the chimney flue inspected by a chimney sweep).
- c) Insufficient heating in spite of proper burning in the combustion chamber:
 - low-calorific softwood (use wood which meets the guidelines in the Manual);
 - too-high humidity of the wood used for burning (use wood with a humidity of up to 20%);
 - too fragmented wood, too-thick wood billets:
- d) Excessive glass-dirt accumulation:
 - low-intensity burning (when burning with a very-low flame, use dry wood fuel only);- the use of high-resin softwood as fuel (use dry hardwood fuel in compliance with the firebox-operation manual).
- e) The operation can be affected by weather conditions (air humidity, fog, wind, air pressure), and sometimes by surrounding tall buildings. If the problem persists, have a chimney sweep company carry out a study and issue a report to confirm the cause of such disruption and to advise on the best solution to the problem.

CAUTION! As a result of slow burning, an excessive amount of organic combustion products is produced (soot and water vapour), which forms ignitable creosote in the smoke duct.

This leads to violent combustion in the chimney flue (large flame and high temperature) referred to as a chimney fire.

If such a phenomenon occurs, do the following:

- close the air intake;
- ensure that the door is closed correctly;
- call your local Fire Service.

The manufacturer FRAM GmbH waives all liability for any damage arising from any changes to the appliance and any changes to the other system made by the user. In aiming at the continual improvement of its products, FRAM GmbH reserves the right to make changes to its appliances without any notification.

THE LILLI SERIES

The LILLI free-standing space-heater series has been designed with your comfort and enjoyment in mind, in accordance with the highest safety and quality standards, as well as combining unique stylishness and looks. Please find all further useful information, including technical data, chimney air-circulation diagram, glass-replacement diagram, door-removal and -replacement diagram, and the Termotec lining diagram and replacement diagram in the final sections of this manual.

APPLIANCE DESCRIPTION AND DESIGN

The steel shell is a principal part of the stove (figure 5), containing the combustion chamber. The combustion chamber front wall consists of a steel door fitted with heat-proof glass and a handle.

The door is set in special holders of the appliance body. The combustion chamber is lined with Termotec panels. The base of the firebox consists of a two-shell floor which also forms the air-intake chamber. The air intake is made with the external air intake connector with a diameter of $\bar{d} = 125$ mm, fitted with a control device.

The base supports a cast-iron fire grate, on which fuel is burnt. The fire grate should be laid with its fins facing upwards.

The burnt waste: ash and residual fuel accumulate in a replaceable ash pan situated under the fire grate.

A vermiculite baffle or a steel baffle is located above the combustion chamber. The baffles provide a natural convection conduit for flue-gas flow to enhance heat exchange.

The air is regulated by a lever located either on the outside of the unit under the door or in the lower chamber behind the inspection door.

Open the primary air supply by moving the lever fully to the left and close the air supply by moving the lever fully to the right.

During the firebox's operation, the flue gases ascend the walls of the combustion chamber, then they move under the baffle and continue up to the flue pipe to get to the chimney via the smoke duct.

The air damper mounted in the air intake duct outside the building controls the amount of air drawn in by the stove and optimizes the combustion process.

THE LUISA SERIES

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APPLIANCE DESCRIPTION AND DESIGN

The basic part of the heater is a steel shell in which the combustion chamber is located (figure 14). The front wall of the combustion chamber is a steel door equipped with two heat-resistant glass panes and a handle.

The door is mounted on the outer surface of the steel case. The combustion chamber is lined with Termotec molded panels. The basis of the fireplace stove is a two-layer floor, the construction of which also forms the air supply chamber. Air is also supplied to the combustion chamber through the openings on the back of the stove - system for post-combustion of exhaust gases.

A cast iron grate is mounted on the inner floor, on which the fuel wood is burned. The grate should be laid with the ribs facing up.

Stove waste: ash and unburned fuel residues are collected in the removable ash pan located under the grate.

A vermiculite deflector is placed over the combustion chamber. The deflectors create a natural convection channel for the flue gas flow, which intensifies heat exchange.

Air regulation is done with the lever located in the lower chamber behind the inspection door. The adjustment lever shifted to the left to the maximum means that the primary air supply is open, while the lever shifted to the right means that the air supply is closed.

During the stoves operation, the flue gases ascend the walls of the combustion chamber, then they move under the baffle and continue up to the flue pipe to get to the chimney via the smoke duct.

The air damper is fitted in the air-intake duct outside the building and it controls the amount of air taken in by the fireplace to ensure the optimal burning process.

Typ LILLI: Dimensioned view

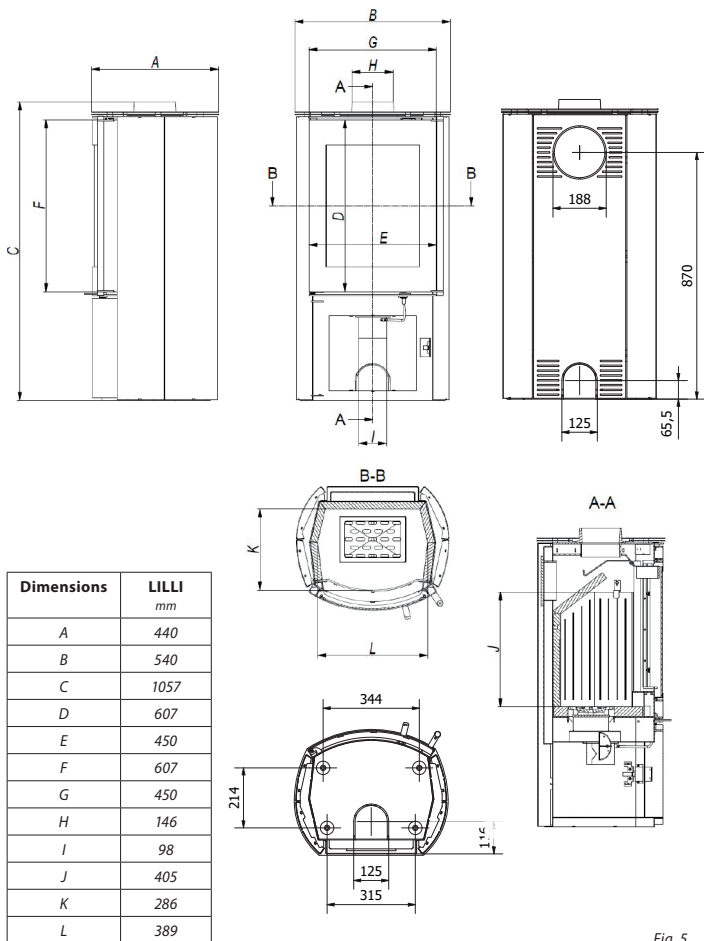


Fig. 5

Typ LILLI: Glass replacement view

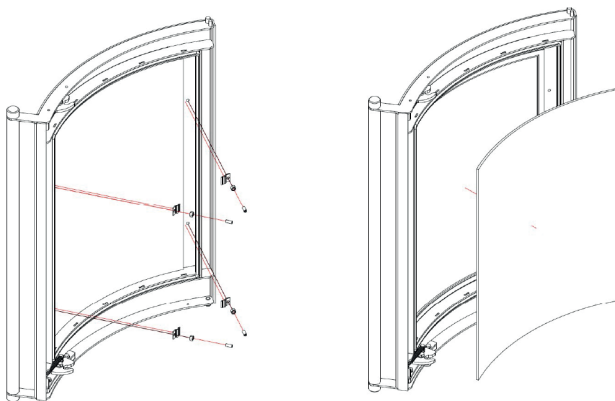


Fig. 6

Typ LILLI: Door replacement view

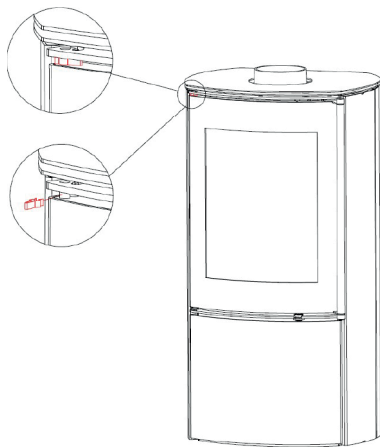


Fig. 7

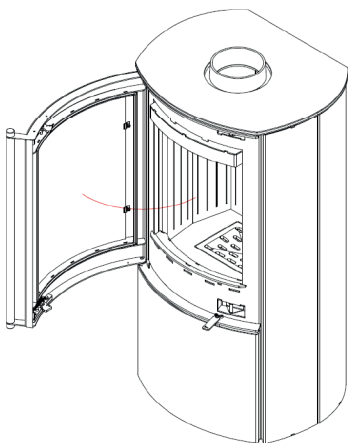


Fig. 8

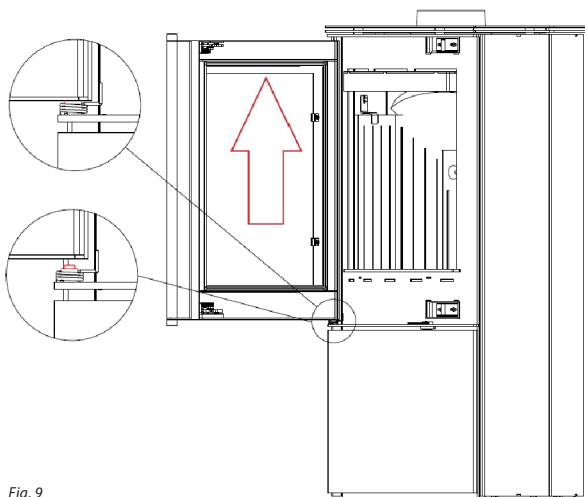


Fig. 9

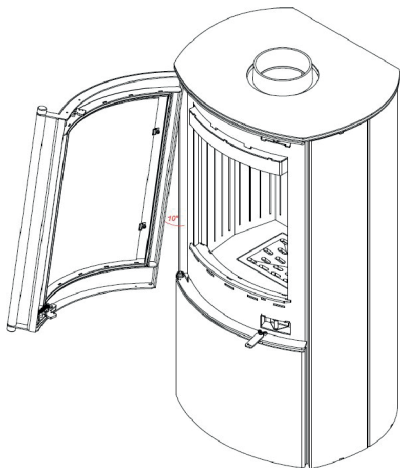


Fig. 10

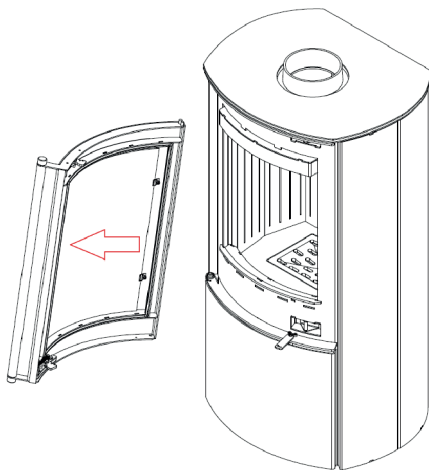


Fig. 11

Diagram for dismantling and replacing the baffle and Termotec lining on the LILLI Typ:

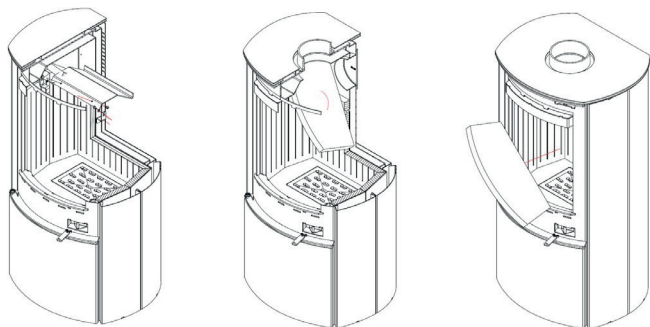
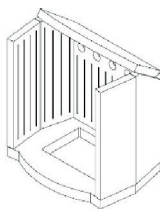
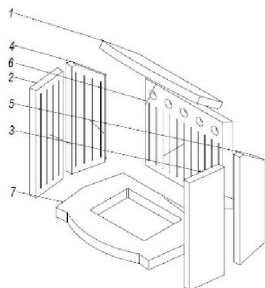


Fig. 12



**Order when removing
Termotec elements**



**Order when inserting
Termotec elements**

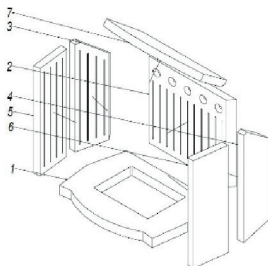
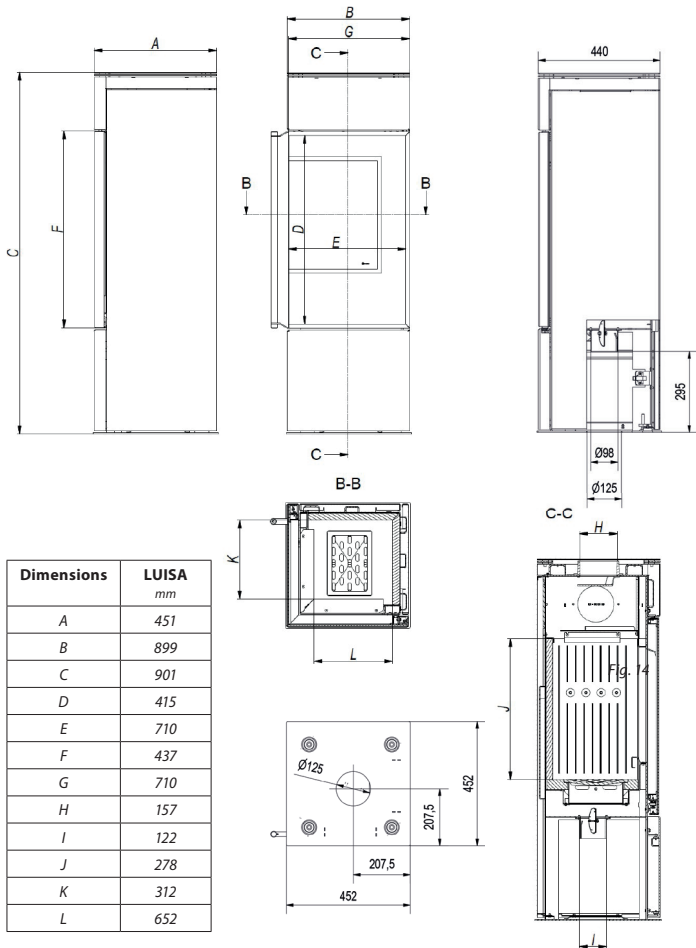


Fig. 13

Typ LUISA: Dimensioned view



Typ LUISA: Glass replacement view

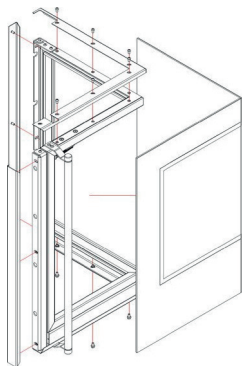


Fig. 15

Typ LUISA: Door replacement view

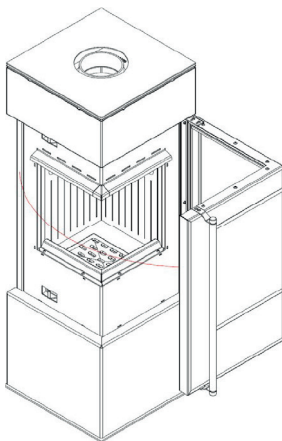


Fig. 16

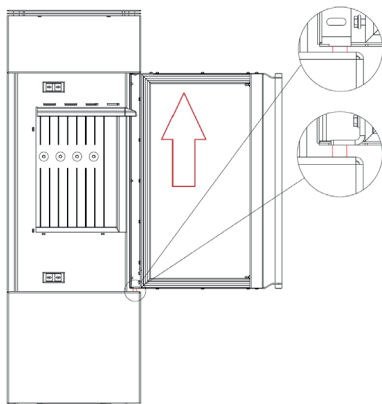


Fig. 17

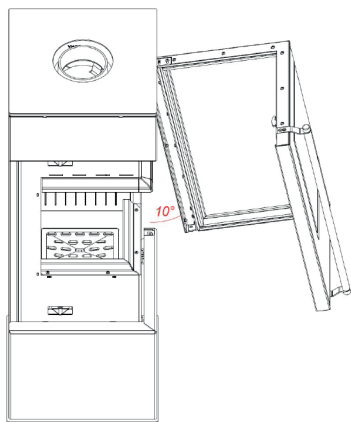


Fig. 18

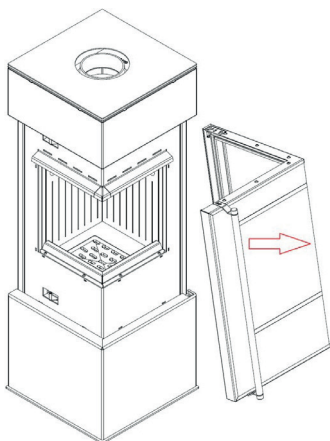


Fig. 19

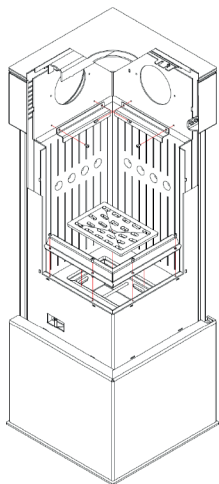


Fig. 20

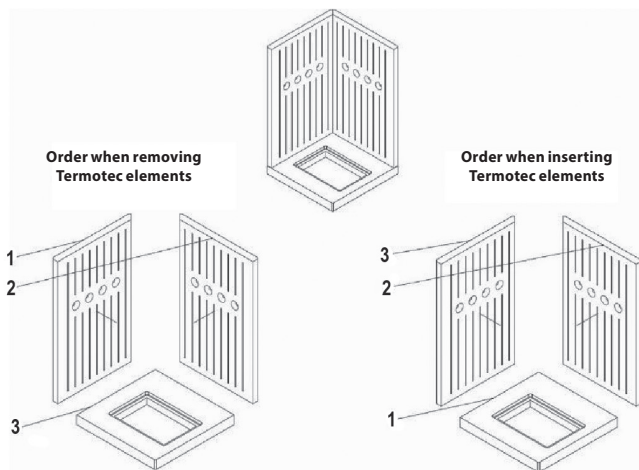


Fig. 21

Technical specifications

	STEFANIE	MARIE	LUISA	LILLI	CHRISTINE	FLORENCE
Energy efficiency class	A+	A+	A+	A+	A+	A+
Nominal output kW	6	6	6	6	6	5,5
Performance range kW	4,2 - 7,8	4,2 - 7,8	4,2 - 7,8	4,2 - 7,8	4,2 - 7,8	3,8 - 7,2
Thermal efficiency %	78,1	82	78,5	78,2	78	78
CO-Emission (13 % O ₂) %	0,0735	0,0981	0,0989	0,0877	0,10	0,10
Dust emission (13 % O ₂) mg/m ³	20	27	14	13	37	35
Exhaust mass flow g/s	6,77	5,41	6,56	7,3	8,5	8,2
Exhaust gas temperature °C	269	250	268	244	265	280
Flue tube Ø mm	150	150	150	150	150	150
Supply air connection Ø mm	125	125	125	125		
Weight kg	139	137	160	132	125	139

SELLER	
Name:	Date, stamp and signature of seller:
Address:	
Tel./Fax	
Date of sale:	
SUMMARY	
<p>The stove has been installed by a qualified installer in accordance with building regulations, national regulations and rules. The specifications from the operating instructions have been observed and applied by a professionally trained and recognized craftsman. I have read and understood the operating instructions before commissioning.</p> <p>I am aware that the operating instructions contain important information on the operation of the stove and that non-compliance will result in the loss of the guarantee and warranty claims.</p>	Date and legible signature of the buyer:
INSTALLER	
Installer company name:	
Installer address:	
Tel./Fax:	
Start-up date:	
<p>I certify that the stove installed by my company meets the requirements of the instruction manual and has been installed in accordance with applicable standards, building codes and fire safety regulations.</p> <p>The installed stove is ready for safe use.</p>	Date and legible signature of the installer:
MAINTENANCE SERVICE	

LIST OF INSPECTIONS OF THE SMOKE PIPE

Inspection when installing the stove	Date, signature and stamp of the chimney sweep master
Inspection when installing the stove	Date, signature and stamp of the chimney sweep master
Inspection when installing the stove	Date, signature and stamp of the chimney sweep master
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FRAM
GmbH

FRAM GmbH
Industriestraße 12/22
49324 Melle
GERMANY
www.fram-gmbh.de