INSTALLATION GUIDE **EN**

WOOD-BURNING STOVES

ASKO Le06 - Le08 - Le10 - Le12
ST.MORITZ Le06 - Le08 - Le10 - Le12
CHAMONIX Lf10 - Le11
CORTINA Le09 - Le10 - Lf11

Translation of the original instructions

ARCO

8901503800

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INTRODUCTION

Dear Customer,
our products are designed and manufactured in compliance with European reference Standards for construction products (EN13240 wood-burning stoves, EN14785 pellet-burning appliances, EN13229 fireplaces/wood-burning inserts, EN 12815 wood-burning cookers), with high quality materials and extensive experience in the transformation processes.
To get the best performance, we suggest you read the instructions in this manual carefully.
This installation and use manual forms an integral part of the product: ensure that the manual is always supplied with the device, even if the boiler changes owner. If the manual is lost, you can request another copy from the local technical service or download it directly from the company website.
All local regulations, including those regarding national and European regulations, must be respected when the device is installed.
In Italy, for the installation of devices with biomass lower than 35KW, refer to ministerial decree 37/08, and the qualified installation technician with the appropriate requisites must issue a certificate of compliance for the system installed. (By system one means Stove+Chimney+Air inlet).

REVISIONS TO THE PUBLICATION

The content of this manual is strictly technical and the property of CORRADI CUCINE S.r.l.
No part of this manual may be translated into other languages, adapted or reproduced, even in part, in other mechanical or electronic forms, photocopies, recordings or other, without the prior written authorisation from CORRADI CUCINE S.r.l. The company reserves the right to make changes to the product at any time without prior notice. The proprietary company reserves its rights according to the law.

CARE OF THE MANUAL AND HOW TO CONSULT IT

- Take care of this manual and keep it in an easily accessible place.
- Should the manual be misplaced or ruined, request a copy from your retailer or directly from the authorised Technical Assistance Department. It can be downloaded from the company website.
- The "**text in bold**" must be read with particular care.
- The "*text in italics*" draws attention to other sections in this manual or clarifications.
- "NOTE" provides the reader with additional information.

SYMBOLS USED IN THE MANUAL

	**ATTENTION:** Read the relative message with care as **failure to observe the information provided could result in serious damage to the product and put the persons who use it at risk**.
	**INFORMATION:** failure to comply with these provisions will compromise the use of the product.
	**OPERATING SEQUENCES:** sequence of buttons to be pressed to access the menus or change settings.
	**MANUAL** carefully read this manual or the relative instructions.

⚠SAFETY PRECAUTIONS

- **Installation, electrical connection, function test and maintenance must only be carried out by authorised and qualified personnel.**
- **Install the product in accordance with all local and national legislation and regulations in force in the region or state.**
- Only use the fuel recommended by the manufacturer. The product must not be used as an incinerator.
- It is strictly forbidden to use alcohol, petrol, liquid fuel for lanterns, diesel, bio-ethanol, fluids for lighting charcoal or similar liquids to light/rekindle the flame in these devices. Keep these flammable liquids well away from the appliance when in use. Do not insert fuel other than wood in the combustion chamber.
- Do not insert fuel other than wood in the combustion chamber.
- The instructions provided in this manual must always be complied with to ensure the product and any electronic appliances connected to it are used correctly and accidents are prevented.
- **This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children must not play with the appliance. Cleaning and user maintenance shall not be carried out by children without supervision.**
- The user, or whoever is operating the product, must read and fully understand the contents of this installation guide before performing any operation. Errors or incorrect settings can cause hazardous conditions and/or poor operation.
- Do not climb on or lean on the product.
- Do not put linen on the product to dry. Any drying racks or similar objects must be kept at a safe distance from the product. **Fire hazard.**
- *All liability for improper use of the product is entirely borne by the user and relieves the Manufacturer from any civil and criminal liability.*

1-WARNINGS AND WARRANTY CONDITIONS

- Any type of tampering or unauthorised replacement with non-original spare parts could be hazardous for the operator's safety and relieves the company from any civil and criminal liability.
- Many of the surfaces of the product get very hot (door, handle, glass, smoke extraction pipes, etc.). **Avoid coming into contact with these parts without adequate protective clothing or suitable means, such as gloves with thermal protection** or "cold handle" operating systems.
- **It is forbidden to operate the product with the door open or the glass broken.**
- **The doors/covers on the appliance must remain closed when it is not used.**
- The product must be powered by an electrical system that is equipped with an effective earthing system.
- Do not wash the product with water.
- Do not stand for a long time in front of the product in operation. Do not overheat the room you are in and where the product is installed. This could cause injuries and health problems.
- Install the product in a location that does not present a fire hazard and is equipped with power and air supplies and smoke extractors.
- Do not use water to put the fire out.
- In the event the chimney catches fire never open the fuel loading door. Then contact the competent authorities.
- The product and the cladding must be stored in a dry place and must not be exposed to weathering.

1-WARNINGS AND WARRANTY CONDITIONS

- It is recommended not to remove the feet that support the product in order to guarantee adequate insulation, especially if the flooring is made of flammable materials.
- Special maintenance must only be performed by authorised and qualified personnel.
- Assess the static conditions of the surface on which the weight of the product will rest and provide suitable insulation if it is made of flammable material (e.g. wood, fitted carpet or plastic).

1-WARNINGS AND WARRANTY CONDITIONS

INFORMATION:

Please contact the retailer or qualified personnel authorised by the company to resolve a problem.

- You must only use the fuel specified by the manufacturer.
- When the product is switched on for the first time it is normal for it to emit smoke due to the paint overheating. Therefore make sure the room in which it is installed is well ventilated.
- Store this installation and use manual with care as it must accompany the product for the duration of its useful life. If the product is sold or transferred to another user, ensure the manual is also handed over.

INTENDED USE

This product was designed for cooking food inside homes and not for professional use.

WARRANTY CONDITIONS

The company guarantees the product, **with the exception of elements subject to normal wear** listed below, for a period of **2 (two) years** from the date of purchase attested by:

- a document to serve as proof of purchase (invoice and/or receipt) that shows the name of the vendor and the date on which the purchase was made;
- forwarding of the completed certificate of guarantee within 8 days of purchase;

Furthermore, the product must be installed and started by specialised personnel who must, where provided, issue a declaration of conformity of the plant and of the proper functioning of the product, for the warranty to be valid and effective.

We recommend testing the product before completion with the relative finishes (claddings, painting of walls, etc.).

Installations not meeting the current standards, improper use and lack of maintenance as expected by the manufacturer, void the product warranty.

The guarantee is valid on the condition that the instructions and warnings contained in the use and maintenance manual are observed, and therefore the product is used correctly.

The replacement of the entire system or the repair of one of its components does not extend the guarantee period, and the original expiry date remains unchanged.

The guarantee covers the replacement or free repair **of parts recognised as being faulty at source due to manufacturing defects.**

To benefit from the guarantee, in the event of a fault, the customer must have the guarantee certificate and present it with the proof of purchase document to the Technical Assistance Office.

1-WARNINGS AND WARRANTY CONDITIONS

EXCLUSIONS

The guarantee does not cover malfunctions and/or damage to the appliance that arise due to the following causes:

- Damage caused during transportation or relocation
- all parts that develop faults due to negligence or improper use, incorrect maintenance, installation that does not comply with the manufacturer's instructions (always refer to the installation and use manual provided with the appliance)
- incorrect dimensioning with regards to the use or faults in the installation or failure to adopt the necessary devices to guarantee proper execution
- improper overheating of the equipment, use of fuels not conforming to the types and quantities indicated in the instructions provided
- further damage caused by incorrect user interventions in an attempt to fix the initial fault
- worsening of the damage due to the continued use of the equipment by the user, once the defect has been noticed
- in the presence of a boiler, any corrosions, incrustations or breaks caused by water flow, condensation, hardness or acidity of the water, improperly performed descaling treatments, lack of water, mud or limescale deposits
- inefficiency of chimneys, flues or parts of the plant affecting the equipment
- damage due to appliance tampering, weathering, natural disasters, acts of vandalism, lightning, fire
- defects of the electrical and/or hydraulic system.
- Failure to have the annual stove maintenance performed by an authorised technician or qualified personnel will result in the loss of the warranty.

Also excluded from this guarantee are:

- parts subject to normal wear such as gaskets, glass, claddings and cast iron grids, painted, chrome-plated or gilded parts, handles and electric cables, bulbs, indicator lights, knobs, all parts which can be removed from the hearth.
- Variations in colour of the painted or ceramic/serpentine parts and craquelure ceramics as they are natural characteristics of the material and product use.
- masonry work
- plant parts (if present) not supplied by the manufacturer

Any technical interventions on the product to eliminate the above-said defects and consequent damages must be agreed upon with the Technical Assistance Centre, who reserves the right to accept the relative appointment or not. However, said interventions will not be carried out under warranty but as technical assistance to be granted at part of any eventual and specific agreed conditions and in accordance with the fee in force for the work to be carried out.
The user will also be charged for any costs incurred to remedy the incorrect technical interventions, tampering or damage to the appliance, not attributable to original faults.
Save for the legal or regulatory limits, the guarantee does not cover the containment of atmospheric and acoustic pollution.

The company declines all liability for any damage which may be caused, directly or indirectly, to persons, animals or objects as a consequence of non compliance with any prescription specified in the manual, especially warnings regarding installation, use and maintenance of the appliance.

1-WARNINGS AND WARRANTY CONDITIONS

SPARE PARTS

In the event of a malfunction, consult the retailer who will forward the call to the Technical Assistance Service.

Use only original spare parts. The retailer or service centre can provide all necessary information regarding spare parts.
We do not recommend waiting for the parts to be worn before having them replaced. It is important to perform regular maintenance.

The company declines all liability if the product and any other accessory is used improperly or modified without authorisation.
All parts must be replaced with original spare parts.

WARNINGS FOR THE CORRECT DISPOSAL OF THE PRODUCT.

The owner is the sole party responsible for demolishing and disposing of the product. This must be performed in compliance with laws related to safety and environmental protection in force in his/her country.
At the end of its working life, the product must not be disposed of as urban waste.
It must be taken to a special differentiated waste collection centre set up by the local authorities or to a retailer that provides this service. Separating and recycling prevents potential negative effects on the environment and health (often caused by inappropriately disposing of product parts). It also allows materials to be recovered in order to obtain significant savings in energy and resources.

2-INSTALLATION INSTRUCTIONS

The instructions in this chapter refer explicitly to the Italian installation regulation UNI 10683. In any case, always observe the domestic regulations in force.

FUEL

Below are some useful instructions for the correct use of the product

- Only burn natural, untreated wood with maximum humidity of 20%, which corresponds to cut wood with 2 years of correct drying (FIG.A).
- All types of wood are suitable, both hard and soft: beech, maple, oak, birch, acacia, fir, pine, larch, etc.
- Always use wood that is of the right size and not intact, because a whole log impedes the supply of air inside.
- Always burn the wood horizontally and not standing up
- For each load, always use the amount of wood indicated by the manufacturer and do not load one piece after another, because the flame would never reach a sufficient temperature for proper combustion.
- Do not insert an amount above that indicated to prevent excessive flames with excessively high smoke and wall temperatures.
- The thickness and length of the wood must always comply with the manufacturer's indications: the size must be about 7-10 cm and the length (25 or 30cm) depends on the size of the hearth in the combustion chamber. (FIG.B)

Below are some useful indications for the correct storage of the wood:

- stored wood must already be sized for use.
- optimal drying requires a minimum of 2 years (longer times would not lead to a increased drying).

Storage must be:

- well ventilated and aired (FIG.C)
- covered to protect from rain and protected from sunlight, because the wood would lose quality
- not resting directly on the floor but at a distance of about 20-30 cm to prevent rotting.
- At a distance of about 5-10 cm from walls.
- Possibly outside, otherwise in rooms or cellars that are well ventilated, preventing the formation of mould (always leave the window open!).
- Wood must always be stored at a sufficient safe distance from the combustion unit - always comply with the fire and safety regulations.

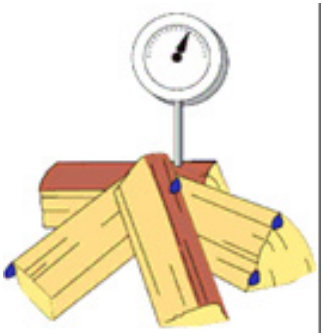


FIG.A - MAX HUMIDITY 20%

FIG.B - MAX SIZE 7-10 CM

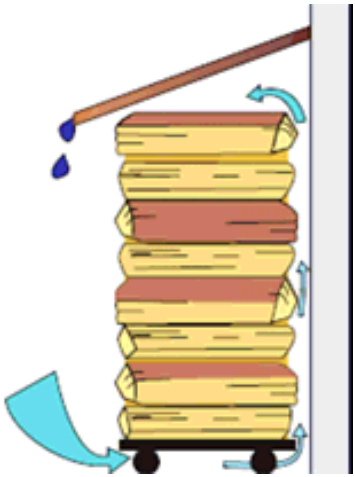


FIG.C - WOOD STORAGE

2-INSTALLATION INSTRUCTIONS

WOOD

In order to achieve maximum efficiency from your product, it is of utmost importance to use wood with suitable characteristics.
Heating wood can be used, such as **oak-beech-ash-robinia-common oak** or non-resinous pressed wood logs. **The latter has a high calorific value and must be used with caution to avoid harmful overheating of the product.** Fuels such as poplar-pine-lime tree-chestnut have a low calorific value as they are soft wood, i.e. tender. The humidity content is fundamental for all types of wood listed.

Wood drying time (e.g. beech)	**Moisture %**	**Calorific value Kcal/kg**
Freshly cut	50	/
3 Months	40	2410
6 Months	35	2700
9 Months	30	2900
12 Months	25	3150
15 Months	20	3400
18 Months	15	3710
21 Months	10	3980

A high percentage of moisture causes condensation in the smoke duct, causing an alteration to the draught and generating smoke and considerable soot deposits in the firebox, on the glass of the door and on the chimney, with the subsequent risk of this catching fire. It also leads to a much lower overall efficiency.

The use of moist or treated wood releases a greater amount of smoke, which could soil the glass more quickly. Poor chimney performance can also compromise the cleanliness of the glass, as the smoke remains in the combustion chamber longer than usual.

Do not use treated fuels (painted or lacquered wood) or non-compliant fuels (plastic or derivatives), which could release toxic or polluting substances.
Do not burn waste.
The gasses produced by combustion of unsuitable fuel could damage the product and the chimney, pollute and compromise your health.

2-INSTALLATION INSTRUCTIONS

FOREWORD

The installation position must be chosen according to the room, to the smoke extraction system, to the chimney flue. Check with local authorities whether there are any restrictive regulations in force regarding the combustion air inlet, the smoke outlet system, the flue or the chimney cap. The manufacturer declines all responsibility in the event of installations that do not comply with the laws in force, incorrect room air exchange, electrical connection non-compliant with the standards and inappropriate use of the appliance. The installation must be carried out by a qualified technician, who must issue a declaration of conformity of the system to the purchaser and will assume full responsibility for final installation and consequent good operation of the product.
In particular one must ensure that:

- there is a suitable combustion air inlet and smoke outlet in compliance with the type of product installed
- other installed appliances or devices do not cause a depression in the room where the product is installed
- when the product is switched on there is no reflux of smoke in the room
- fumes extraction takes place in total safety (sizing, smoke seal, distances from flammable materials..).

We especially recommend to check the data tags of the flue for the safety distances that must be observed in presence of combustible materials and the type of insulating material to be used. These indications must be followed strictly to prevent serious harm to people and the integrity of the home. The installation of the appliance must ensure easy access to clean the appliance itself, the smoke outlet pipes and the flue. **It is forbidden to install the product in rooms with a fire hazard. Installation in studio flats, bedrooms and bathrooms is only allowed with sealed or closed appliances equipped with suitable combustion air ducting directly outside. Always maintain adequate distance and protection in order to prevent the product from coming into contact with water.**
In the event there are several appliances installed, the external air inlet must be sized accordingly.

MINIMUM DISTANCES

It is recommended to install the stove detached from any walls and/or furniture, with a minimum clearance to allow effective aeration of the appliance and a good distribution of heat in the room. Observe the distances from flammable or heat-sensitive objects (sofas, furniture, wood panelling, etc.) as specified in the technical data table. The frontal distance from flammable materials must be at least as specified in the product's technical data table.
If particularly delicate objects are present, such as furniture, curtains or sofas, increase the stove clearance accordingly.

If the floor is made of wood, it is recommended to fit a floor protection sheet in compliance with the Standards in force in the country of installation.

If the floor is made of combustible material, it is recommended to use protection made of non-combustible material (steel, glass...) that also protects the front from falling combusted material during cleaning operations.
The appliance must be installed on a floor with adequate load capacity.
If the existing construction does not meet this requirement, one must take appropriate measures (for example a load distribution plate).

2-INSTALLATION INSTRUCTIONS

FOREWORD

This Flue chapter has been drawn up with reference to the provisions of European Standards (EN13384 - EN1443 - EN1856 - EN1457).
The chapter provides indications for installing an efficient and correct smoke flue but is under no circumstances to substitute the regulations in force, which the qualified technician must be in possession of. Check with local authorities whether there are any restrictive regulations in force regarding the intake of air for combustion, the smoke extraction system, the flue or the chimney.
The company declines all liability relating to the poor functioning of the oven if this is due to the use of an insufficiently sized flue in violation of the Standards in force.

SMOKE FLUE

The flue or chimney is of great importance for the proper operation of a solid fuel-burning heating appliance with natural draught, as modern heating appliances have high efficiency with cooler flue gas and consequently less draught, it is therefore essential that the flue is built to a high standard and always kept in perfect working order. A flue that serves a wood-burning appliance must be at least category T400 (or greater if the appliance requires so) and resistant to soot fires. Smoke must be extracted through a single flue made of insulated steel (A) or an existing flue that complies with the intended use (B).
A simple air shaft in cement must be suitably lined. In both solutions there must be an inspection cap (AT) and/or inspection hatch (AP) - FIG.1.
It is prohibited to connect more than one wood/pellet or any other type of appliance (vent cowling...) to the same flue.

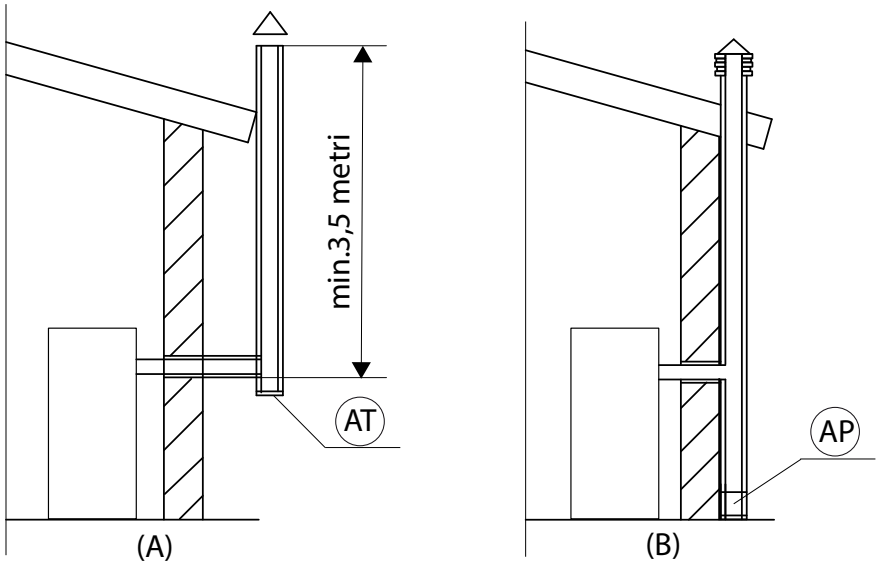


FIGURE 1 - SMOKE FLUE

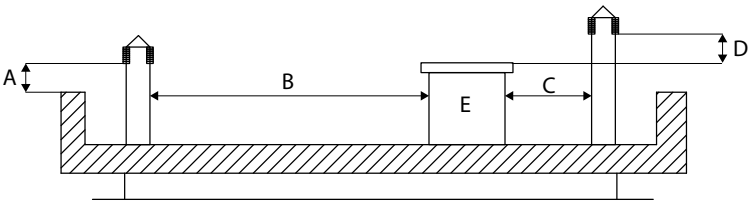
2-INSTALLATION INSTRUCTIONS

TECHNICAL CHARACTERISTICS

Have the efficiency of the flue checked by an authorised technician.

The flue must be sealed against flue gasses, in a vertical direction without narrowing, be made with materials impermeable to smoke, condensation, thermally insulated and suitable to resist normal mechanical stress over time (we recommend fireplaces made of A/316 or refractory material with insulated round section double chamber). Be suitably insulated externally to avoid condensation and reduce smoke cooling. It should be separated from combustible or flammable materials with an air gap or insulating materials: check the distance specified by the manufacturer of the fireplace according to EN1443. The chimney opening must be in the same room as the appliance, or at most in the adjoining room, and have a soot and condensation collection chamber beneath the opening, and be accessible via a sealed metal hatch.

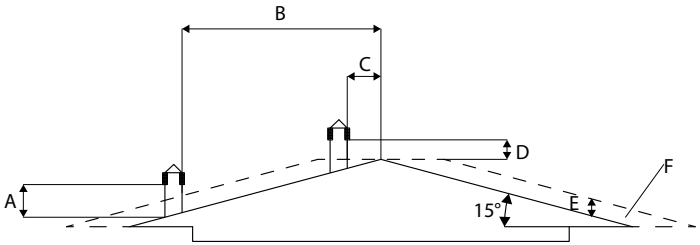
FLAT ROOF



A = 0.50 metres
B = DISTANCE > 2 metres
C = DISTANCE < 2 metres
D = 0.50 metres
E = TECHNICAL VOLUME

FIGURE 2

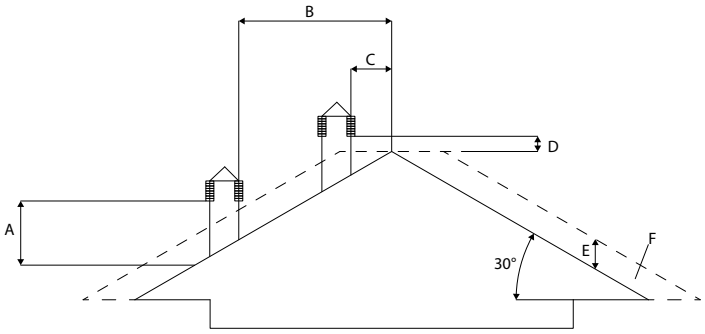
ROOF AT 15°



A = MIN. 1.00 metres
B = DISTANCE > 1.85 metres
C = DISTANCE < 1.85 metres
D = 0.50 metres above highest point
E = 0.50 metres
F = REFLUX ZONE

FIGURE 3

ROOF AT 30°

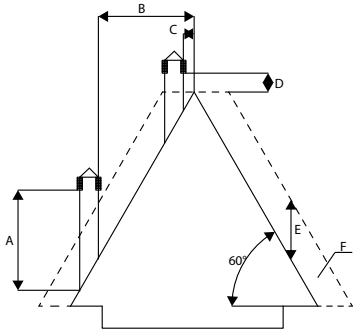


A = MIN. 1.30 metres
B = DISTANCE > 1.50 metres
C = DISTANCE < 1.50 metres
D = 0.50 metres ABOVE HIGHEST POINT
E = 0.80 metres
F = REFLUX ZONE

FIGURE 4

2-INSTALLATION INSTRUCTIONS

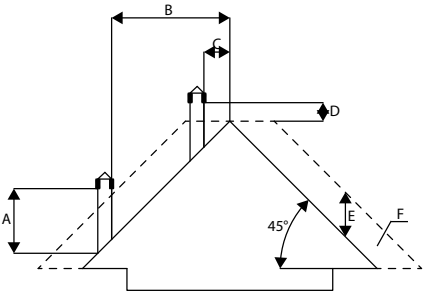
ROOF AT 60°



A = MIN. 2.60 metres
B = DISTANCE > 1.20 metres
C = DISTANCE < 1.20 metres
D = 0.50 metres ABOVE HIGHEST POINT
E = 2.10 metres
F = REFLUX ZONE

FIGURE 5

ROOF AT 45°



A = MIN. 2.00 metres
B = DISTANCE > 1.30 metres
C = DISTANCE < 1.30 metres
D = 0.50 metres ABOVE HIGHEST POINT
E = 1.50 metres
F = REFLUX ZONE

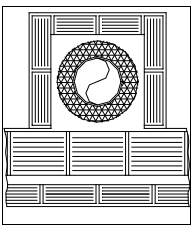
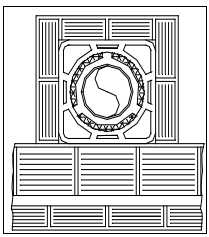
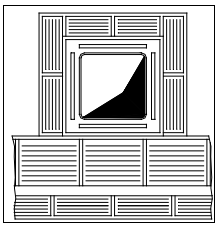
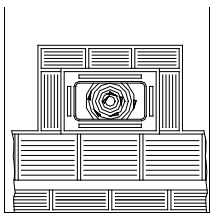
FIGURE 6

DIMENSIONING

The drop in pressure (draft) of a flue depends on its height. Check the drop in pressure with the values indicated in the technical characteristics. The minimum height of the chimney is 3.5 meters.

The interior cross-section of the flue can be circular (best variation), square or rectangular (the ratio between the interior sides must be ≤1.5) with the sides joined with a minimum radius of 20 mm. The size of the section must be at least equal to that of the appliance outlet (smaller diameters must be confirmed by an adequate system sizing calculation).
The cross-sections/lengths of the chimneys shown in the technical data tables are indications for correct installation. Any alternative configurations must be correctly dimensioned in accordance with the general method of calculation of UNI EN13384-1 or other proven efficiency methods.

Below is a list of some flues available on the market:

EXCELLENT	**GOOD**	**POOR**	**VERY POOR**
Steel chimney AISI 316 with double chamber insulated with ceramic fibre or equivalent resistant up to 400°C.	Refractory chimney with double insulated chamber and external lightweight concrete cladding with cellular material such as clay.	Traditional square-section clay chimney with insulating empty inserts.	Avoid products with an internal rectangular section where the larger side is 1.5 times the smaller side (e.g. 20x40 or 15x30).
			

2-INSTALLATION INSTRUCTIONS

MAINTENANCE

The flue must be kept clean, since the deposit of soot or unburned oils reduces the cross-section reducing the draught, thus compromising the efficient operation of the product and, if large build-ups accumulate, they can catch fire. The flue and chimneypot must be cleaned and checked by a qualified chimney sweep at least once a year. Once the inspection/maintenance has been performed, request a written report that the system is safe.
Failure to perform cleaning jeopardises the system's safety.

CHIMNEY

The chimney is a crucial element for the heating appliance to work properly: we recommend a wind proof chimney (A), see Figure 7.
The area of the opening for smoke extraction must be at least double the cross-section of the smoke duct/flue system, and arranged so that smoke extraction is ensured even in strong wind. The chimney must prevent rain, snow or animals from entering the chimney. The height of outflow into the atmosphere must be beyond the reflux zone created by the shape of the roof or any obstacles near the outlet (see Figures 2-3-4-5-6).

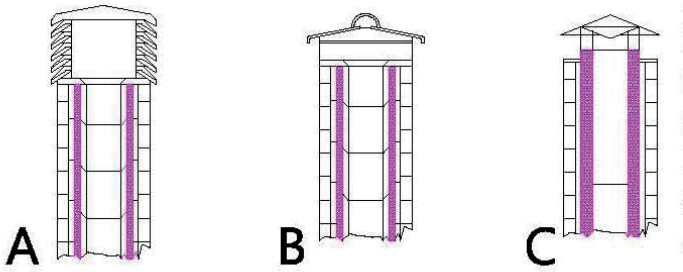
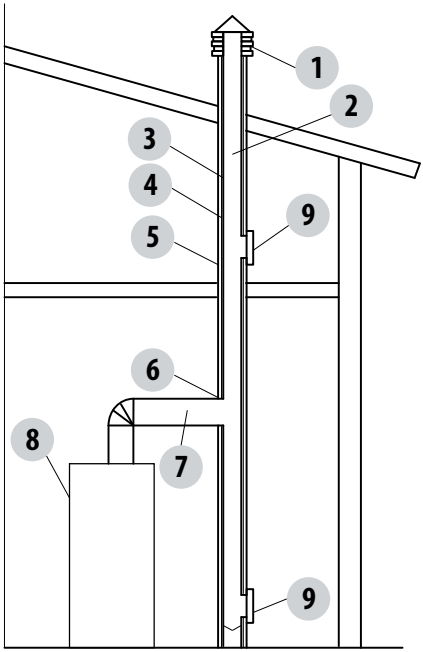


FIGURE 7

CHIMNEY COMPONENTS



KEY:
(1) CHIMNEY
(2) REFLUX CHANNEL
(3) SMOKE DUCT
(4) THERMAL INSULATION
(5) OUTSIDE WALL
(6) CHIMNEY CONNECTION
(7) SMOKE CHANNEL
(8) HEAT GENERATOR
(9) INSPECTION ACCESS PANEL

FIGURE 8

2-INSTALLATION INSTRUCTIONS

EXTERNAL AIR INLET

It is mandatory to provide an adequate external air intake that supplies the combustion air required for the product to work properly. The flow of air between the outside and the installation room may be direct, through an inlet in an external wall of the room; or indirect, via air intake from adjoining rooms and connecting permanently with the installation room (see Figure 9 b). Adjoining areas may not include sleeping areas, garages or general areas with a fire hazard. During installation one must check the minimum clearances required for air intake from outside. Take into account the presence of doors and windows that could interfere with the proper flow of air to the product (see diagram below).

The air inlet must have a minimum total net area of 100 cm2 (for stoves - 150 cm2 for fireplaces/inserts): the surface must be increased accordingly if within the room there are other active generators (for example: electric fan for stale air extraction, kitchen hood, other stoves, etc...), which could cause a depression in the room. It is required to check that, with all appliances on, the pressure drop between the room and the outside does not exceed the value of 4 Pa (also for Oyster appliances if the combustion air has not been suitably ducted outside. If necessary increase the intake section of the air inlet, which must be made at floor level and always protected with a bird-proof outer protection grid and in such a way that it cannot be obstructed by any object.

You can connect the air required for combustion directly to the external air inlet, with a non-compressible pipe (e.g. spiral). For air ducts up to 3 m, increase the cross-section by approximately 5%, longer ducts increase it by 15%.

FIGURE 9 A - DIRECTLY FROM OUTSIDE

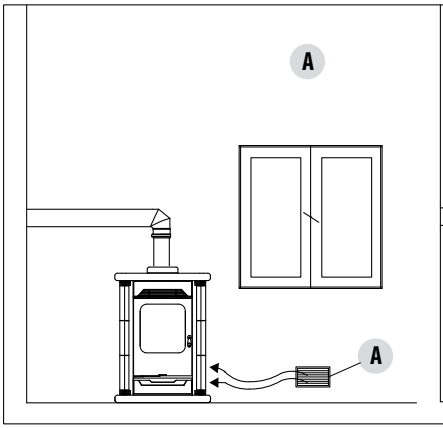
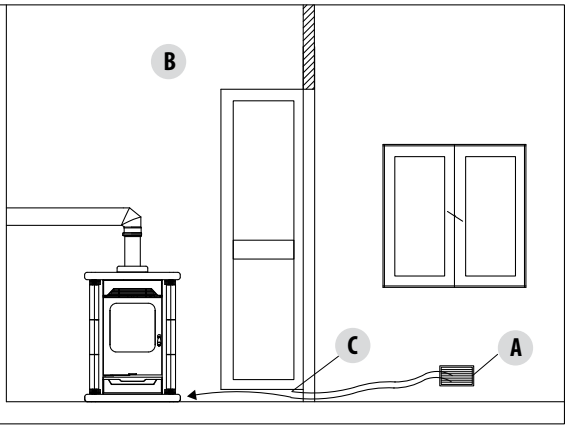


FIGURE 9 B - INDIRECTLY FROM THE ADJACENT ROOM



A=AIR INLET
B=ROOM TO BE VENTILATED
C=INCREASE OF THE GAP UNDER THE DOOR

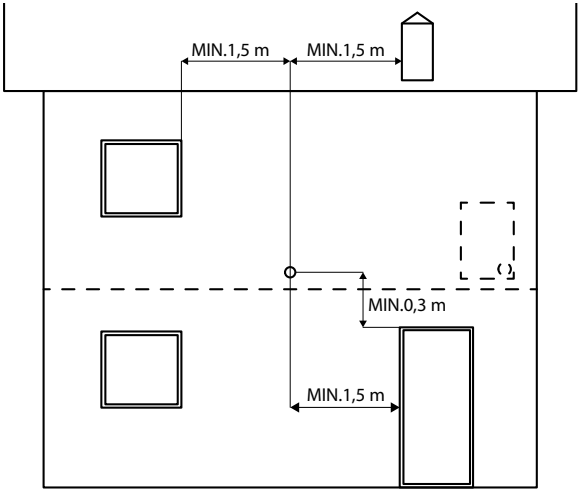


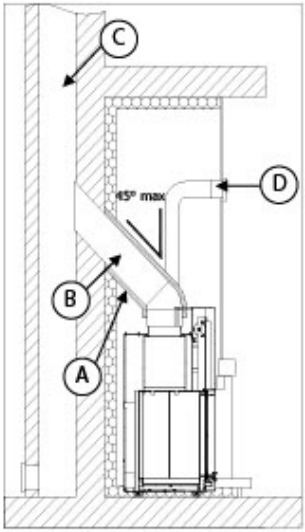
FIGURE 10

2-INSTALLATION INSTRUCTIONS

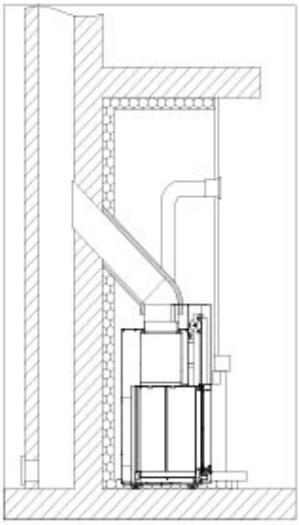
For appliances installed in studio flats, bedrooms and bathrooms (where allowed), it is mandatory to connect the combustion air to the outside. In particular for sealed products the connection must be sealed in order not to compromise the overall sealed characteristic of the system.

DISTANCE (metres)	The air inlet must be at a distance of:	
1.5 m	UNDER	Windows, doors, smoke outlets, cavities, ...
1.5 m	HORIZONTALLY	Windows, doors, smoke outlets, cavities, ...
0.3 m	ABOVE	Windows, doors, smoke outlets, cavities, ...
1.5 m	AWAY	from smoke outlet

CONNECTION TO FLUE



EXAMPLE OF HYDRO FIREPLACE FITTING
A. CERAMIC FIBRE INSULATION
B. SMOKE FITTING
C. CHIMNEY FLUE
D. HOOD GRID



TYPICAL DIAGRAM OF A CORRECTLY LAID CHIMNEY FLUE WITH, AT THE FOOT OF THE EXTERNAL UPDRAFT SECTION, THE POSITIONING OF A CHAMBER WITH A SEALED HATCH TO COLLECT AND REMOVE THE SOLID MATERIALS PRODUCED DURING COMBUSTION.

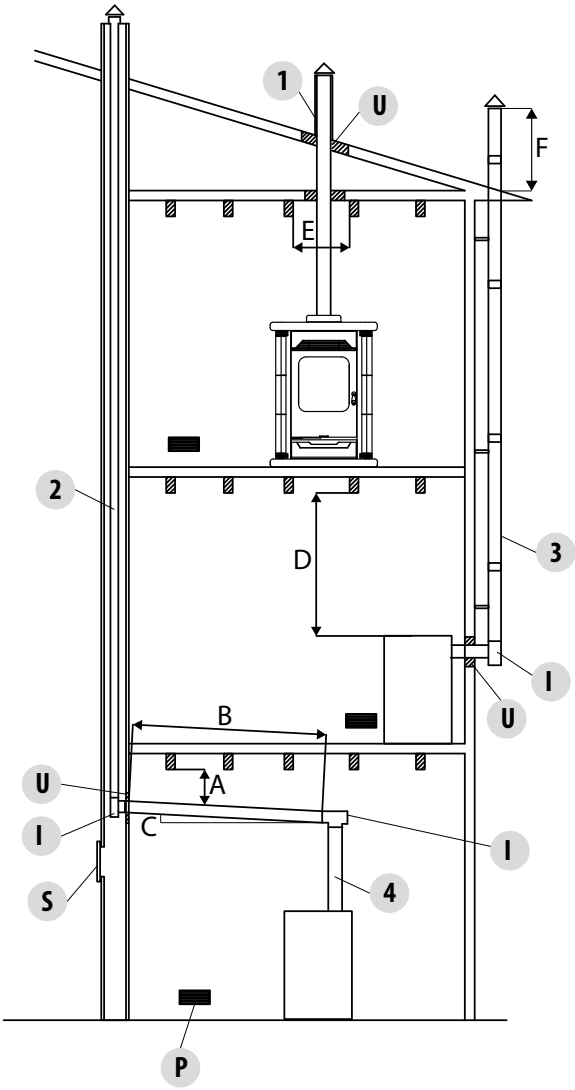
The connection between the flue and the appliance must be via a smoke duct that conforms with EN 1856-2. To connect the fireplace to the chimney flue or to a ceiling connection that is not coaxial to the unit's smoke outlet, changes of direction must be made using open bends no greater than 45° with respect to the vertical.
For stoves the connecting section to the flue must extend no more than 2 m horizontally, with a minimum slope of 3% and with a maximum of 3 90° bends (accessible for inspection - do not count the T fitting at the unit outlet).
The diameter of the smoke duct must be equal to or greater than that of the appliance outlet. A possible increase/reduction of the cross-section is only allowed when the flue is connected (in particular the reduction must be confirmed by an adequate system sizing calculation).

2-INSTALLATION INSTRUCTIONS

TYPE OF DEVICE	SMOKE DUCT
Minimum vertical length	1.5 metres
Maximum length (with 1 accessible 90° bend)	4.5 metres
Maximum length (with 3 accessible 90° bends)	2.5 metres
Maximum number of accessible 90° bends	3
Horizontal sections (minimum incline 3%)	2 metres

Use smoke ducts that are able to withstand the unit operating temperatures (min. T400). **The use of flexible metal tubes in fibre cement or aluminium is prohibited. For direction changes, we always recommend the use of a T joint** with an inspection cap allowing easy access for cleaning the tubes. Always ensure that the inspection cap is replaced and hermetically sealed with the seal in tact after cleaning.
It is prohibited to connect more than one appliance to the same smoke duct, or the discharge from overhead cowling. It is prohibited to extract the products of combustion directly through the wall, whether into indoor spaces or outdoors.
The smoke duct must be installed observing the safety distances from flammable materials as specified on its rating plate (e.g. G400= 400 mm).

EXAMPLES OF CORRECT INSTALLATION



1. Installation of Ø200mm flue with hole for the passage of the pipe increased by:
minimum 100 mm around the tube if next to non flammable parts such as cement, brick, etc.; or
minimum 400mm around the pipe (or as required by data tags) if next to flammable parts such as wood etc.
In both cases, install suitable insulation between the flue and the ceiling.
Always check and respect the data tags on the flue, in particular the minimum safety distances from combustible materials.
The previous rules also apply for holes made in walls.
2. Old flue, minimum tube Ø150mm with the inclusion of an external access door for chimney cleaning.
3. External flue made of insulated stainless steel tubes, i.e. with double walls minimum Ø150mm: all securely mounted to the wall. With wind-proof chimney. See fig. 7 type A.
4. Ducting system using T fittings that allow easy access for cleaning without having to remove the pipes.

NOTE: in the event of hydro fireplaces maintain the safety distance indications with the included insulation indications.

FIGURE 11

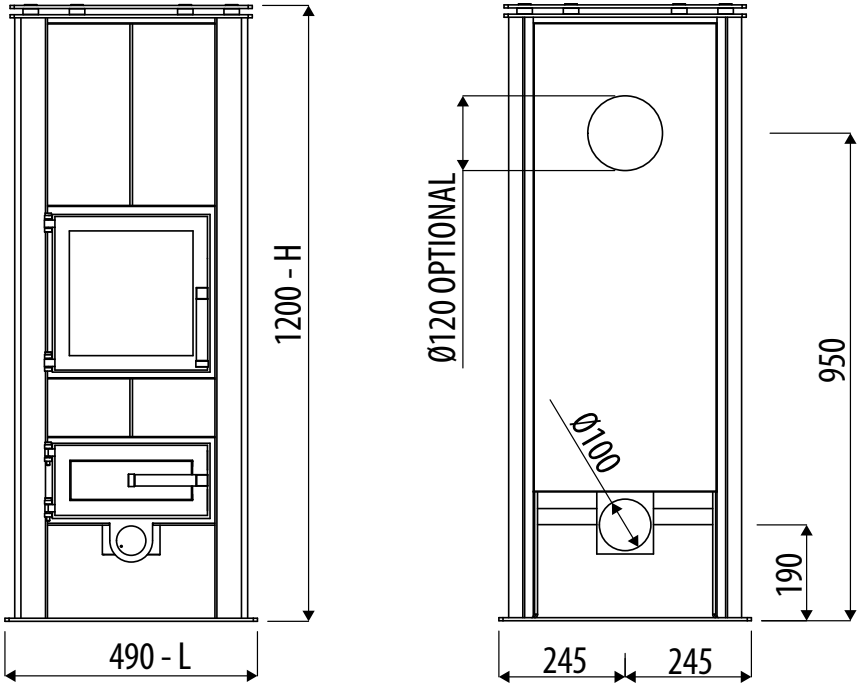
U = INSULATING
I = INSPECTION CAP
S = INSPECTION ACCESS PANEL
P = AIR INLET

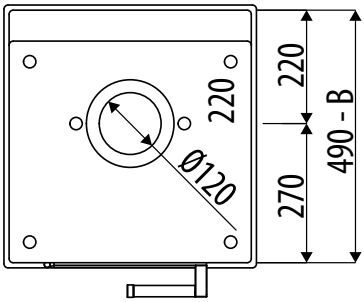
A = MINIMUM 40 MM
B = MAXIMUM 2 M
C = MINIMUM 3°
D = MINIMUM 400 MM
E = HOLE DIAMETER
F = SEE FIG.2-3-4-5-6

3-DIMENSIONS AND TECHNICAL FEATURES

ASKO LINE

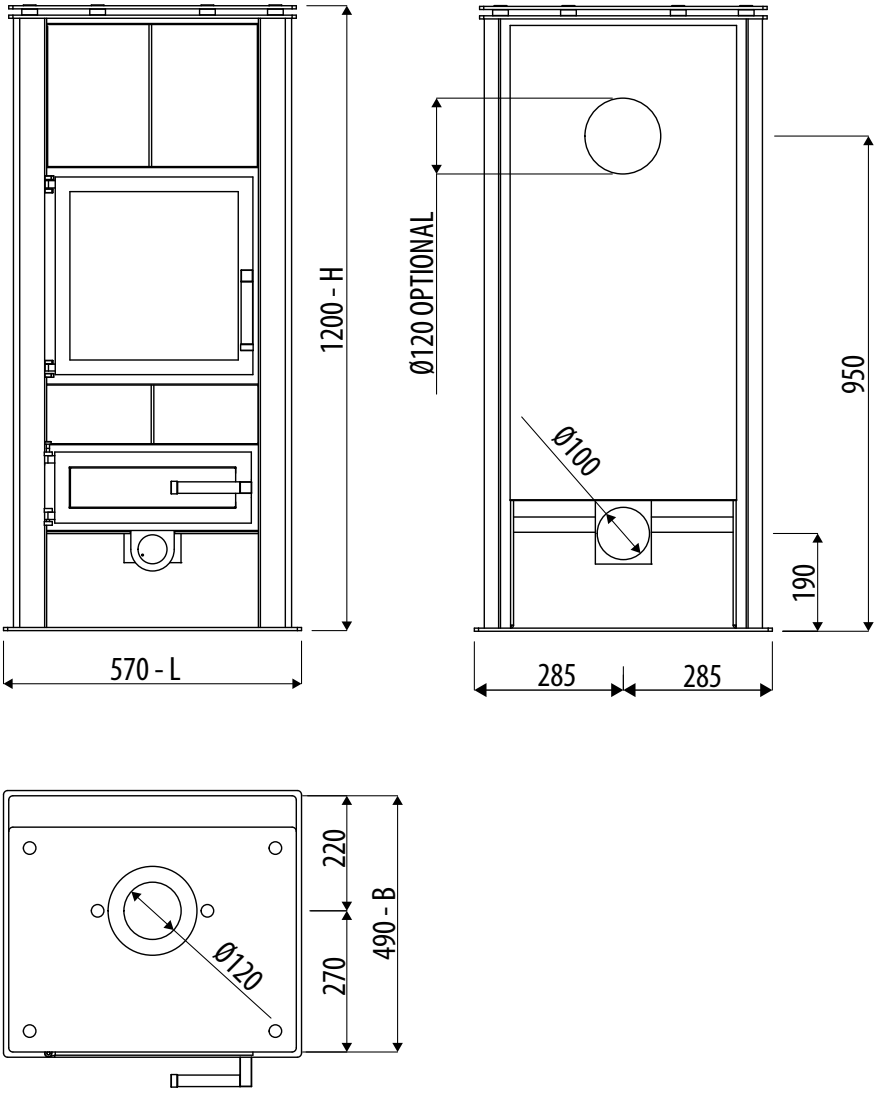
ASKO Le06





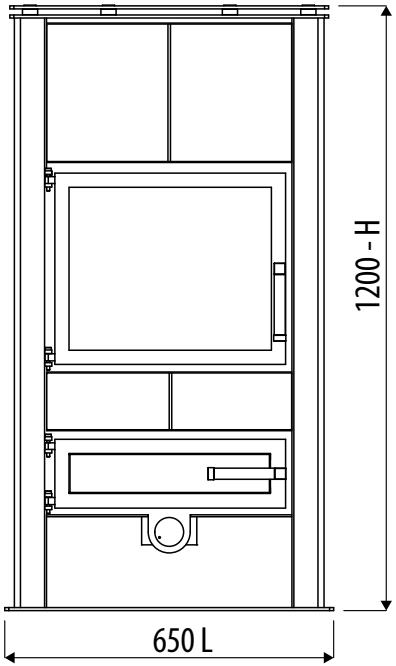
3-DIMENSIONS AND TECHNICAL FEATURES

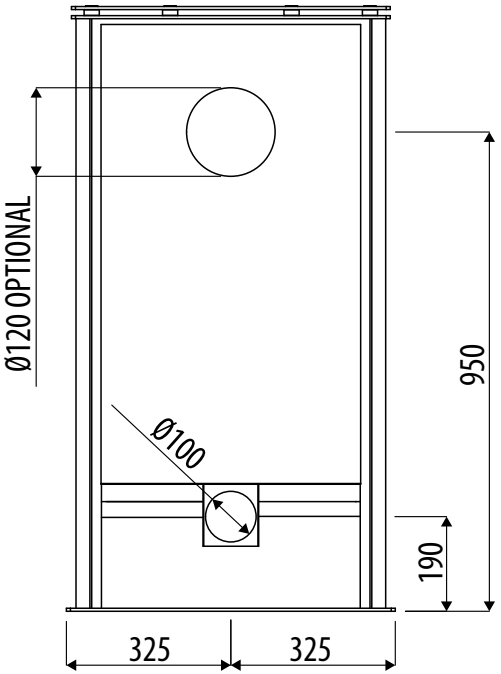
ASKO Le08

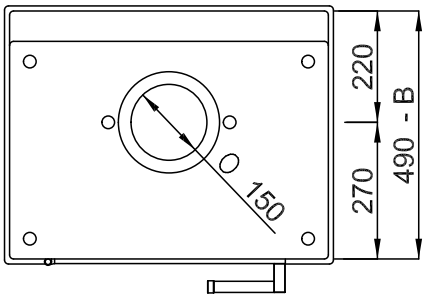


3-DIMENSIONS AND TECHNICAL FEATURES

ASKO Le10

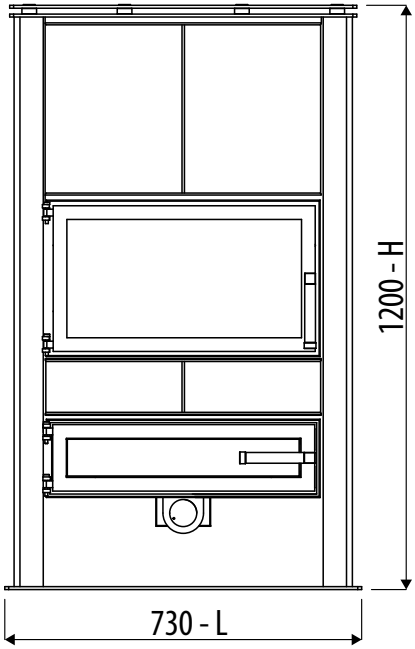


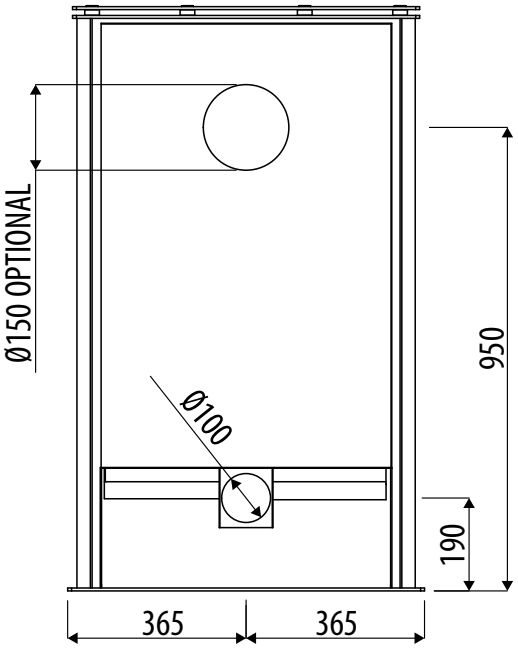


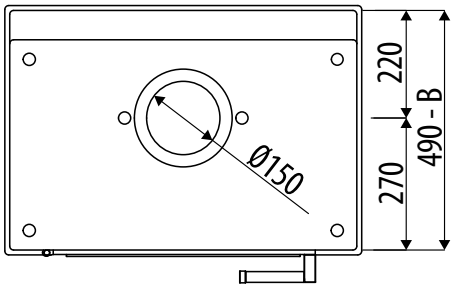


3-DIMENSIONS AND TECHNICAL FEATURES

ASKO Le12



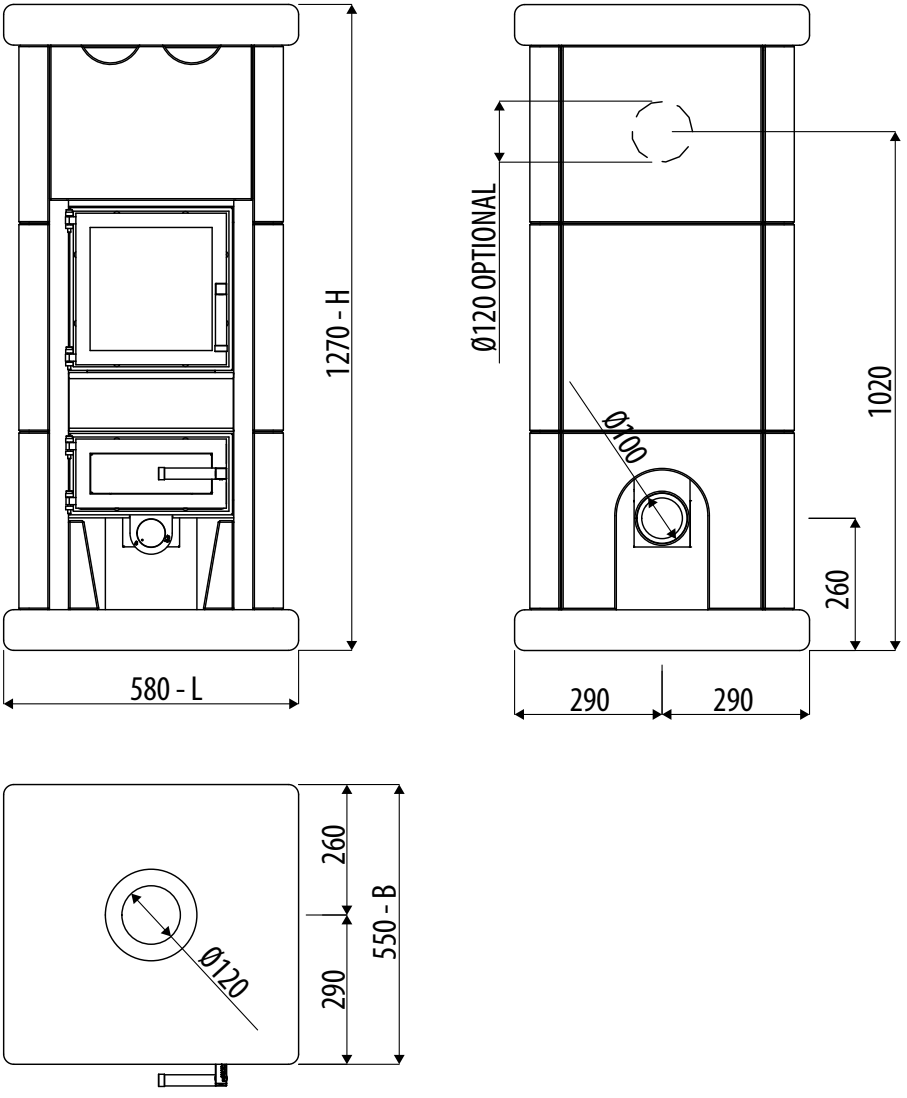




3-DIMENSIONS AND TECHNICAL FEATURES

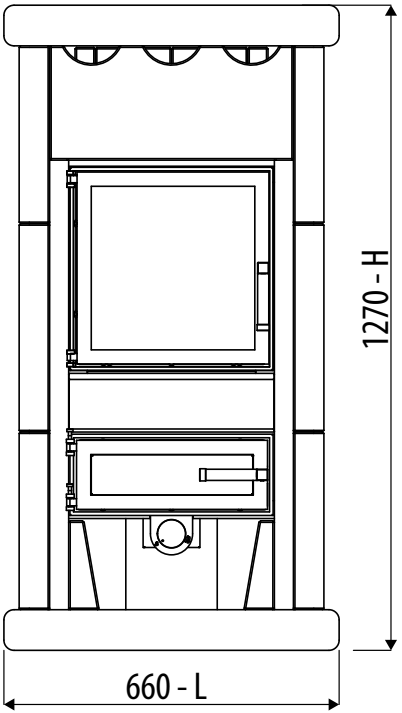
ST.MORITZ LINE

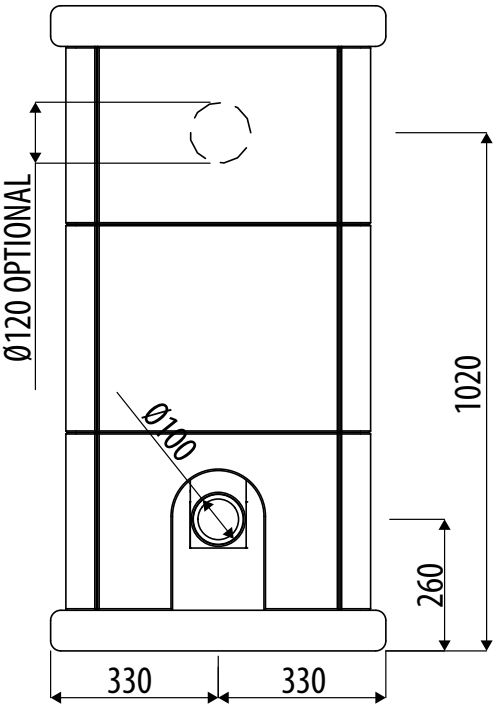
ST.MORITZ Le06

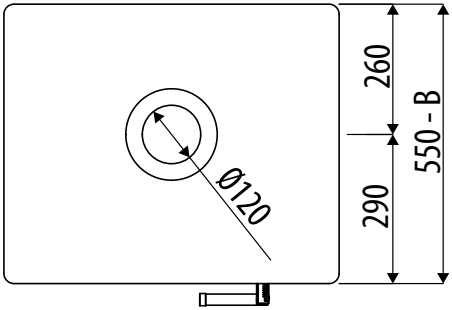


3-DIMENSIONS AND TECHNICAL FEATURES

ST.MORITZ Le08

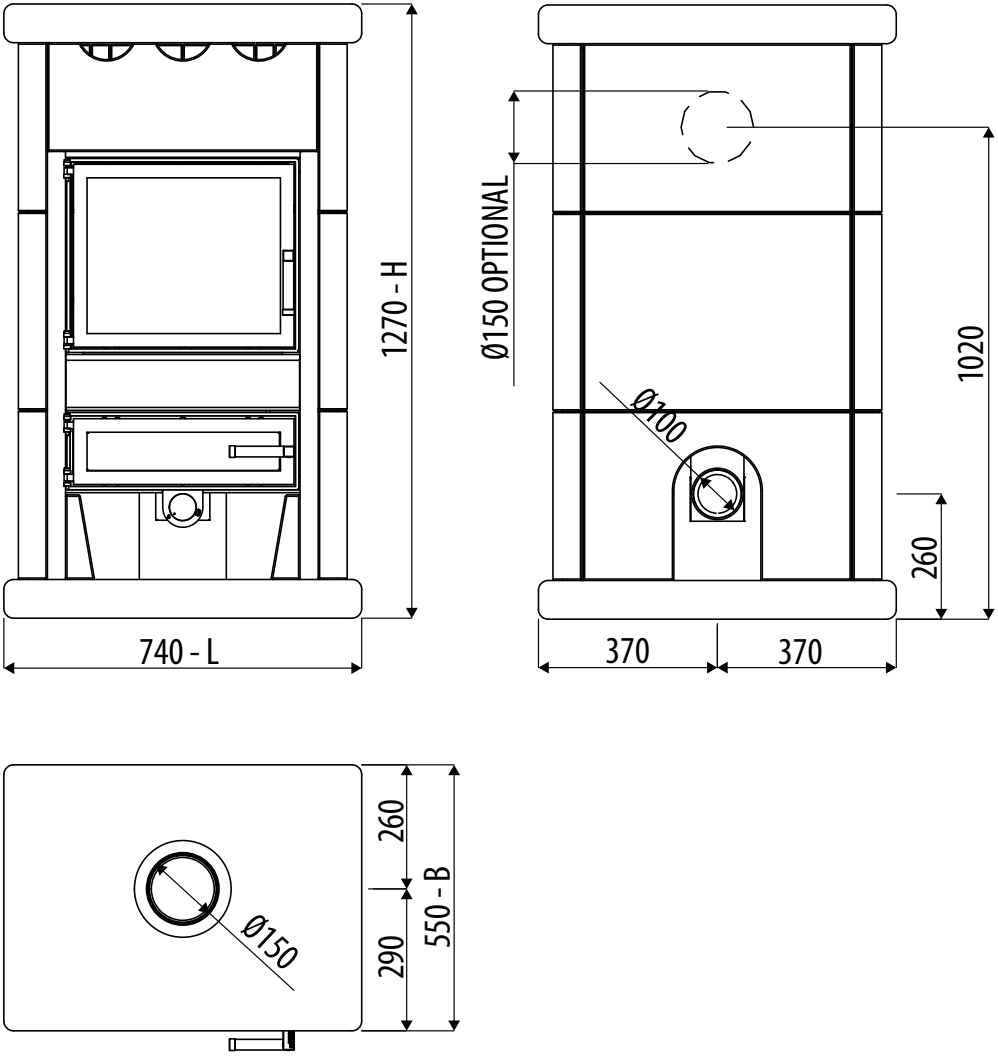






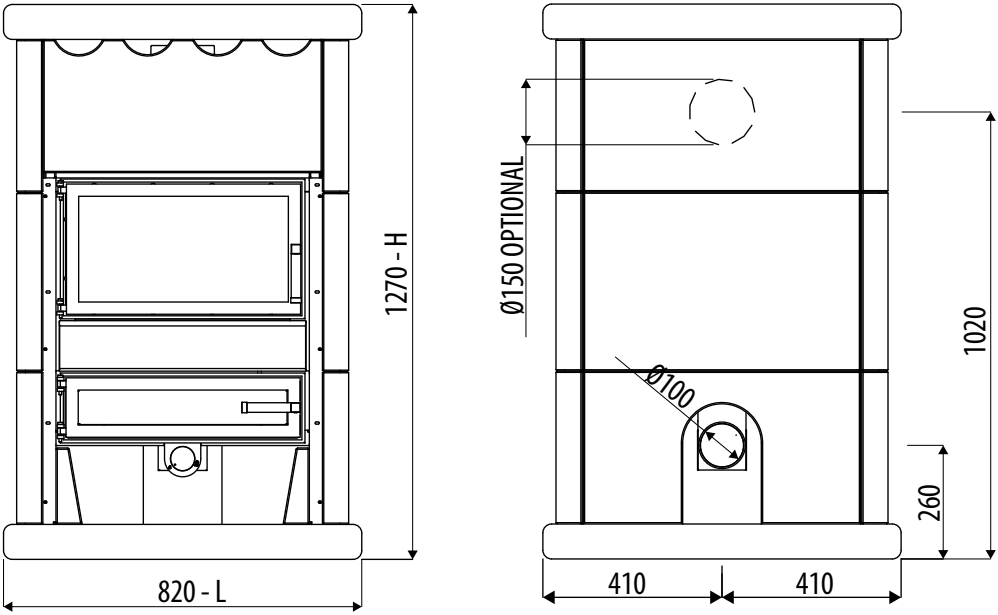
3-DIMENSIONS AND TECHNICAL FEATURES

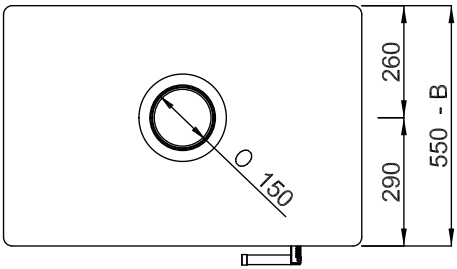
ST.MORITZ Le10



3-DIMENSIONS AND TECHNICAL FEATURES

ST.MORITZ Le12

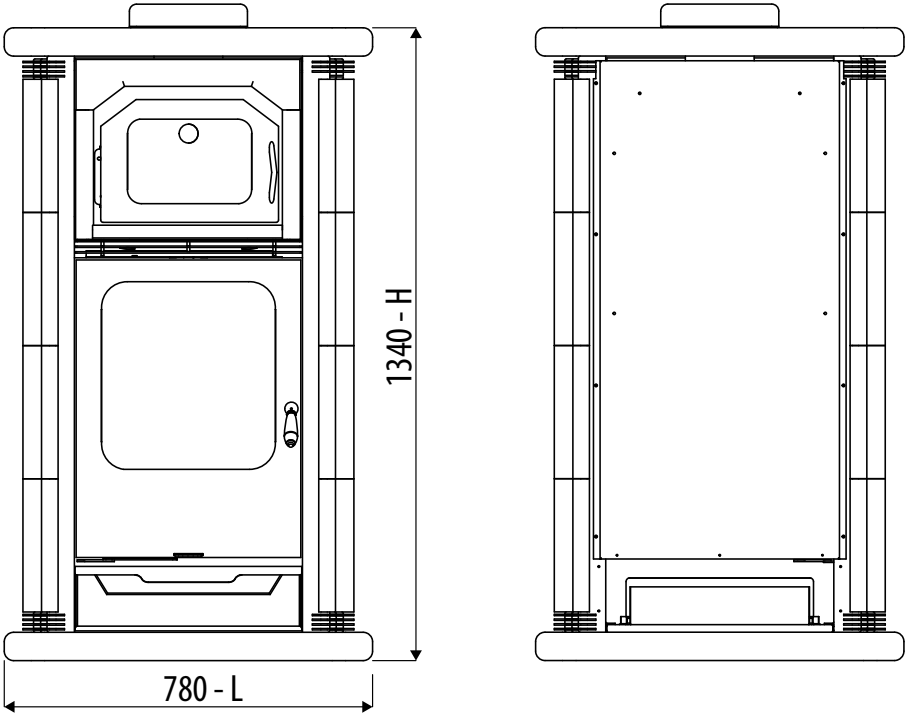


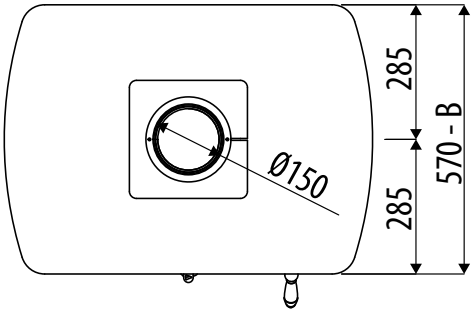


3-DIMENSIONS AND TECHNICAL FEATURES

CHAMONIX LINE

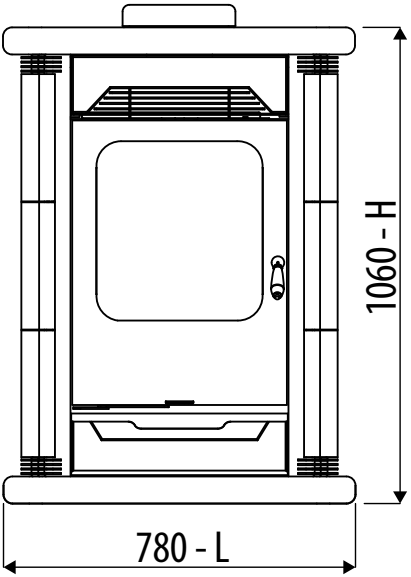
CHAMONIX Lf10

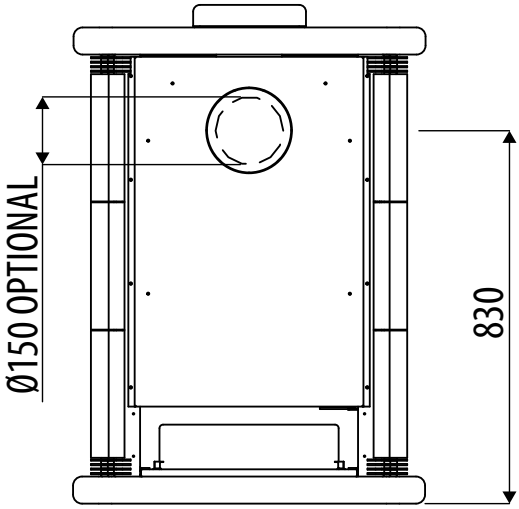


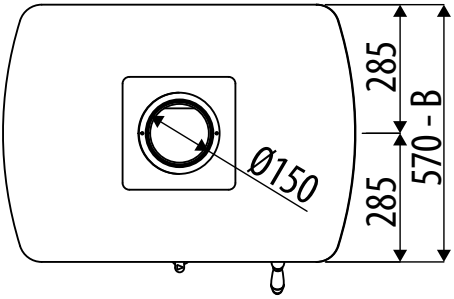


3-DIMENSIONS AND TECHNICAL FEATURES

CHAMONIX Le11



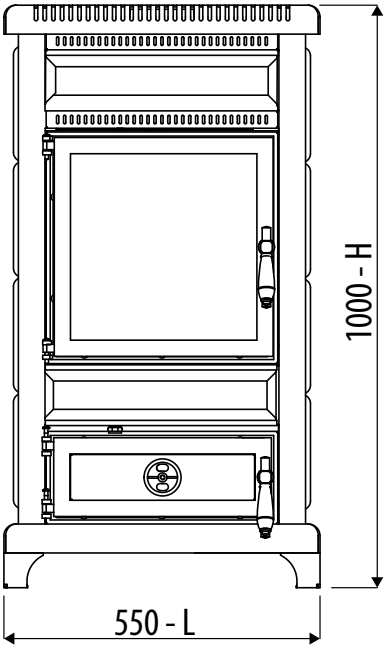


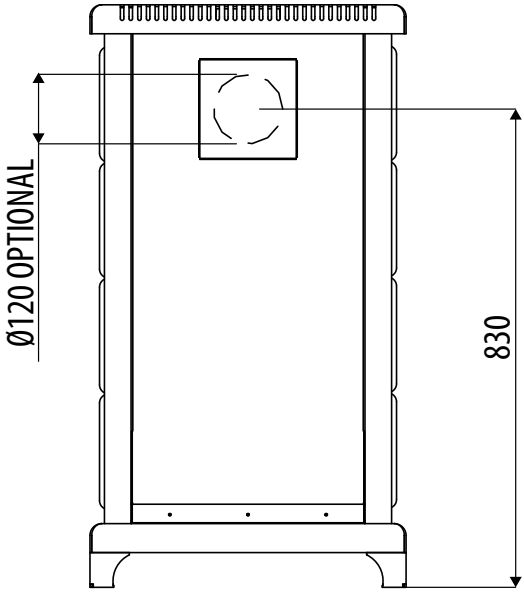


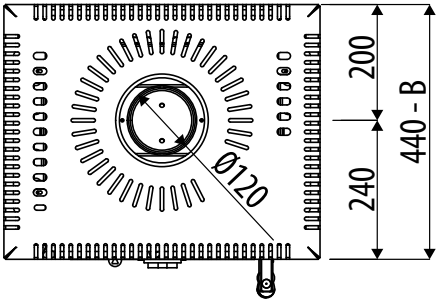
3-DIMENSIONS AND TECHNICAL FEATURES

CORTINA LINE

CORTINA Le09

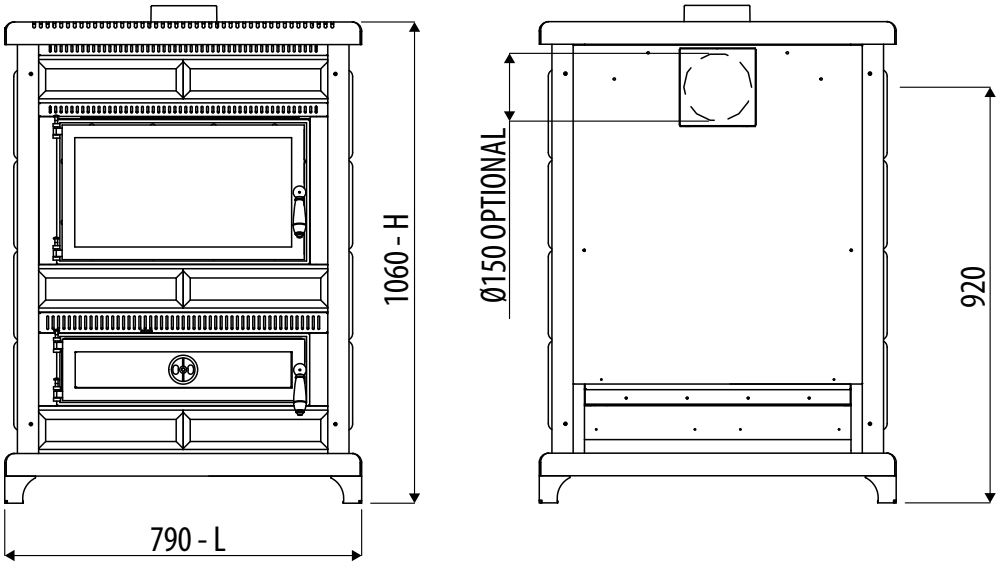


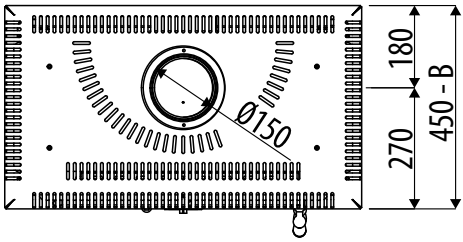




3-DIMENSIONS AND TECHNICAL FEATURES

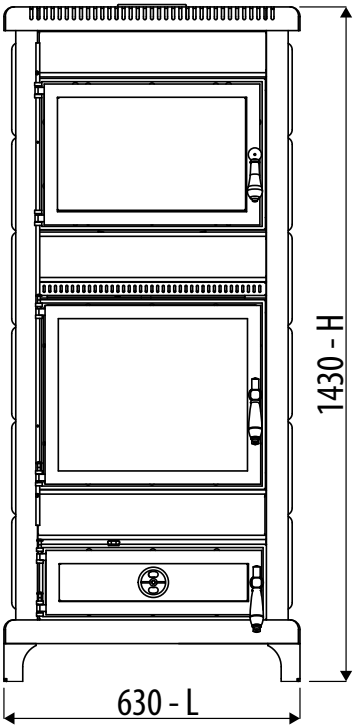
CORTINA Le10

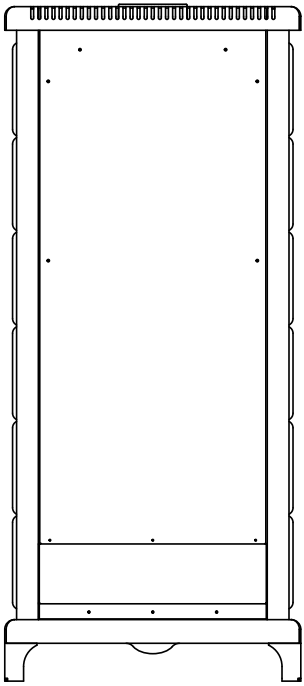


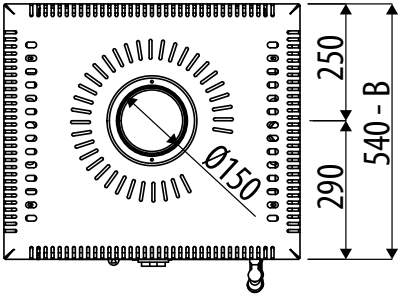


3-DIMENSIONS AND TECHNICAL FEATURES

CORTINA Lf11







3-DIMENSIONS AND TECHNICAL FEATURES

TECHNICAL CHARACTERISTICS		ASKO			
		Le06	***Le08***	***Le10***	***Le12***
Type of fuel		Wood	Wood	Wood	Wood
Hourly consumption		1.9 kg/h	2.2 kg/h	2.7 kg/h	3.4-1.7 kg/h
Reloading/load time		45 min / 1.4 kg	45 min / 1.7 kg	45 min / 2.0 kg	45 min / 2.6 kg
Nominal output power		7.0 kW (6020 kcal/h)	8.0 kW (6880 kcal/h)	9.5 kW (8170 kcal/h)	12.0 kW (10320 kcal/h)
Minimum power output		-	-	-	6,0 kW (5160 kcal/h)
Efficiency		87,5%	85,0%	85,0%	84,5%
CO emission in fumes (13% O_2)		0.08%	0.06%	0.05%	0.10%
Particulate/OGC/Nox (13%O_2)		11-14-53 mg/Nm3	14-12-54 mg/Nm3	14-12-54 mg/Nm3	27-19-84 mg/Nm3
Smoke mass flow rate		4.7 g/s	6.1 g/s	7.4 g/s	8.8 g/s
Smoke temperature		193°C	205°C	217°C	227°C
Recommended draught		0.12 mbar - 12 Pa	0.12 mbar - 12 Pa	0.12 mbar - 12 Pa	0.12 mbar - 12 Pa
Heatable volume m3		151/40 - 172/35 - 201/30*	172/40 - 197/35 - 229/30*	204/40 - 233/35 - 272/30*	258/40 - 295/35 - 344/30*
Smoke outlet		Ø12 cm	Ø12 cm	Ø15 cm	Ø15 cm
Net weight		210 kg (48 kg stone)	232 kg (49 kg stone)	255 kg (50 kg stone)	276 kg (51 kg stone)
External air inlet		100 cm2	100 cm2	100 cm2	100 cm2
Distance from flammable material (back)		300 mm	300 mm	300 mm	300 mm
Distance from flammable material (side)		400 mm	400 mm	400 mm	400 mm
Distance from flammable material (underneath)		0 mm	0 mm	0 mm	0 mm
Dimensions	L	490 mm	570 mm	650 mm	730 mm
	B	490 mm	490 mm	490 mm	490 mm
	H	1200 mm	1200 mm	1200	1200 mm
Flue					
Up to 5 m		20x20 cm Ø20	20x20 cm Ø20	20x30 cm Ø22	20x30 cm Ø22
Between 5 and 7 m		18x18 cm Ø18	18x18 cm Ø18	20x20 cm Ø20	20x20 cm Ø20
Beyond 7 m		15x15 cm Ø15	15x15 cm Ø15	18x18 cm Ø18	18x18 cm Ø18
Notes					
Intermittent combustion appliance. * Volume that can be heated based on the power requirement per m3 (respectively 40-35-30 kcal/h per m3)					

Tested according to EN 13240 in accordance with European regulation for Construction Products (EU 305/2011).

3-DIMENSIONS AND TECHNICAL FEATURES

TECHNICAL CHARACTERISTICS		ST.MORITZ			
		Le06	*Le08*	*Le10*	*Le12*
Type of fuel		Wood	Wood	Wood	Wood
Hourly consumption		1.9 kg/h	2.2 kg/h	2.7 kg/h	3.4-1.7 kg/h
Reloading/load time		45 min / 1.4 kg	45 min / 1.7 kg	45 min / 2.0 kg	45 min / 2.6 kg
Nominal output power		7.0 kW (6020 kcal/h)	8.0 kW (6880 kcal/h)	9.5 kW (8170 kcal/h)	12.0 kW (10320 kcal/h)
Minimum power output		-	-	-	6,0 kW (5160 kcal/h)
Efficiency		87,5%	85,0%	85,0%	84,5%
CO emission in fumes (13% O_2)		0.08%	0.06%	0.05%	0.10%
Particulate/OGC/Nox (13%O_2)		11-14-53 mg/Nm3	14-12-54 mg/Nm3	14-12-54 mg/Nm3	27-19-84 mg/Nm3
Smoke mass flow rate		4.7 g/s	6.1 g/s	7.4 g/s	8.8 g/s
Smoke temperature		193°C	205°C	217°C	227°C
Recommended draught		0.12 mbar - 12 Pa	0.12 mbar - 12 Pa	0.12 mbar - 12 Pa	0.12 mbar - 12 Pa
Heatable volume m3		151/40 - 172/35 - 201/30*	172/40 - 197/35 - 229/30*	204/40 - 233/35 - 272/30*	258/40 - 295/35 - 344/30*
Smoke outlet		Ø12 cm	Ø12 cm	Ø15 cm	Ø15 cm
Net weight		505 kg (380 kg stone)	525 kg (395 kg stone)	573 kg (413 kg stone)	647 kg (460 kg stone)
External air inlet		100 cm2	100 cm2	100 cm2	100 cm2
Distance from flammable material (back)		300 mm	300 mm	300 mm	300 mm
Distance from flammable material (side)		400 mm	400 mm	400 mm	400 mm
Distance from flammable material (underneath)		0 mm	0 mm	0 mm	0 mm
Dimensions	L	520 mm	600 mm	680 mm	760 mm
	B	510 mm	510 mm	510 mm	510 mm
	H	1200 mm	1200 mm	1200 mm	1200 mm
Flue					
Up to 5 m		20x20 cm Ø20	20x20 cm Ø20	20x30 cm Ø22	20x30 cm Ø22
Between 5 and 7 m		18x18 cm Ø18	18x18 cm Ø18	20x20 cm Ø20	20x20 cm Ø20
Beyond 7 m		15x15 cm Ø15	15x15 cm Ø15	18x18 cm Ø18	18x18 cm Ø18
Notes					
Intermittent combustion appliance. *Volume that can be heated based on the power requirement per m3 (respectively 40-35-30 kcal/h per m3)					

Tested according to EN 13240 in accordance with European regulation for Construction Products (EU 305/2011).

3-DIMENSIONS AND TECHNICAL FEATURES

TECHNICAL CHARACTERISTICS		CHAMONIX	
		Lf10	***Le11***
Type of fuel		Wood	Wood
Hourly consumption		3.1 kg/h	2.8 kg/h
Reloading/load time		45 min / 2.3 kg	45 min / 2.1 kg
Nominal output power		10.0 kW (8600 kcal/h)	11.5 kW (9890 kcal/h)
Minimum power output		-	-
Efficiency		75.0%	80.0%
CO emission in fumes (13% O_2)		0.21%	0.32%
Particulate/OGC/Nox (13%O_2)		-	-
Smoke mass flow rate		12.4 g/s	8.3 g/s
Smoke temperature		320°C	350°C
Recommended draught		0.12 mbar - 12 Pa	0.12 mbar - 12 Pa
Heatable volume m3		215/40 - 246/35 - 287/30*	247/40 - 283/35 - 330/30*
Smoke outlet		Ø15 cm	Ø15 cm
Net weight		508 kg (338 kg stone)	508 kg (338 kg stone)
External air inlet		100 cm2	100 cm2
Distance from flammable material (back)		300 mm	200 mm
Distance from flammable material (side)		200 mm	200 mm
Distance from flammable material (underneath)		0 mm	0 mm
Dimensions	L	780 mm	780 mm
	B	570 mm	570 mm
	H	1340 mm	1060 mm
Flue			
Up to 5 m		20x30 cm Ø22	20x30 cm Ø22
Between 5 and 7 m		20x20 cm Ø20	20x20 cm Ø20
Beyond 7 m		18x18 cm Ø18	18x18 cm Ø18
Notes			
Intermittent combustion appliance. * Volume that can be heated based on the power requirement per m3 (respectively 40-35-30 kcal/h per m3)			

Tested according to EN 13240 in accordance with European regulation for Construction Products (EU 305/2011).

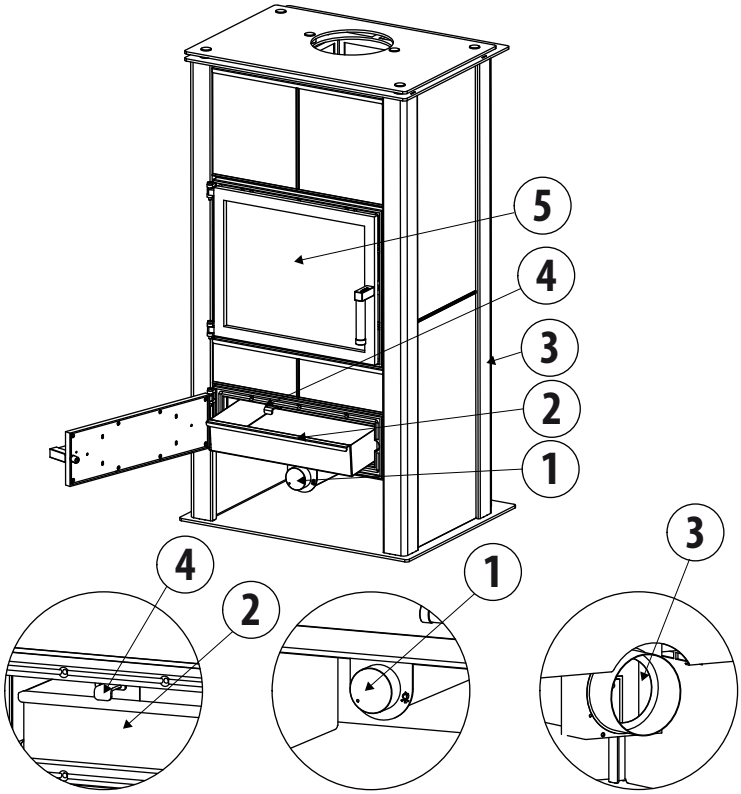
3-DIMENSIONS AND TECHNICAL FEATURES

TECHNICAL CHARACTERISTICS		CORTINA		
		Le09	***Le10***	***Lf11***
Type of fuel		Wood	Wood	Wood
Hourly consumption		2.7 kg/h	2.9 kg/h	4.5 kg/h
Reloading/load time		45 min / 2.0 kg	45 min / 2.2 kg	45 min / 3.4 kg
Nominal output power		9.0 kW (7740 kcal/h)	10.0 kW (8600 kcal/h)	11.5 kW (9890 kcal/h)
Minimum power output		-	-	-
Efficiency		76.0%	75.5%	77.0%
CO emission in fumes (13% O_2)		0.28%	0.21%	0.30%
Particulate/OGC/Nox (13%O_2)		-	-	-
Smoke mass flow rate		9.1 g/s	9.1 g/s	11.3 g/s
Smoke temperature		390°C	320°C	365°C
Recommended draught		0.12 mbar - 12 Pa	0.12 mbar - 12 Pa	0.12 mbar - 12 Pa
Heatable volume m3		194/40 - 221/35 - 258/30*	215/40 - 246/35 - 287/30*	247/40 - 283/35 - 330/30*
Smoke outlet		Ø12 cm	Ø15 cm	Ø15 cm
Net weight		151 kg (38 kg stone)	201 kg (44 kg stone)	255 kg (57 kg stone)
External air inlet		100 cm2	100 cm2	100 cm2
Distance from flammable material (back)		300 mm	300 mm	300 mm
Distance from flammable material (side)		300 mm	300 mm	300 mm
Distance from flammable material (underneath)		0 mm	0 mm	0 mm
Dimensions	L	550 mm	790 mm	630 mm
	B	440 mm	450 mm	540 mm
	H	1000 mm	1060 mm	1430 mm
Flue				
Up to 5 m		20x20 cm Ø20	20x30 cm Ø22	20x30 cm Ø22
Between 5 and 7 m		18x18 cm Ø18	20x20 cm Ø20	20x20 cm Ø20
Beyond 7 m		15x15 cm Ø15	18x18 cm Ø18	18x18 cm Ø18
Notes				
Intermittent combustion appliance. * Volume that can be heated based on the power requirement per m3 (respectively 40-35-30 kcal/h per m3)				

Tested according to EN 13240 in accordance with European regulation for Construction Products (EU 305/2011).

4-DESCRIPTION OF PARTS

ASKO LINE



DESCRIPTION OF ASKO LINE STOVE PARTS

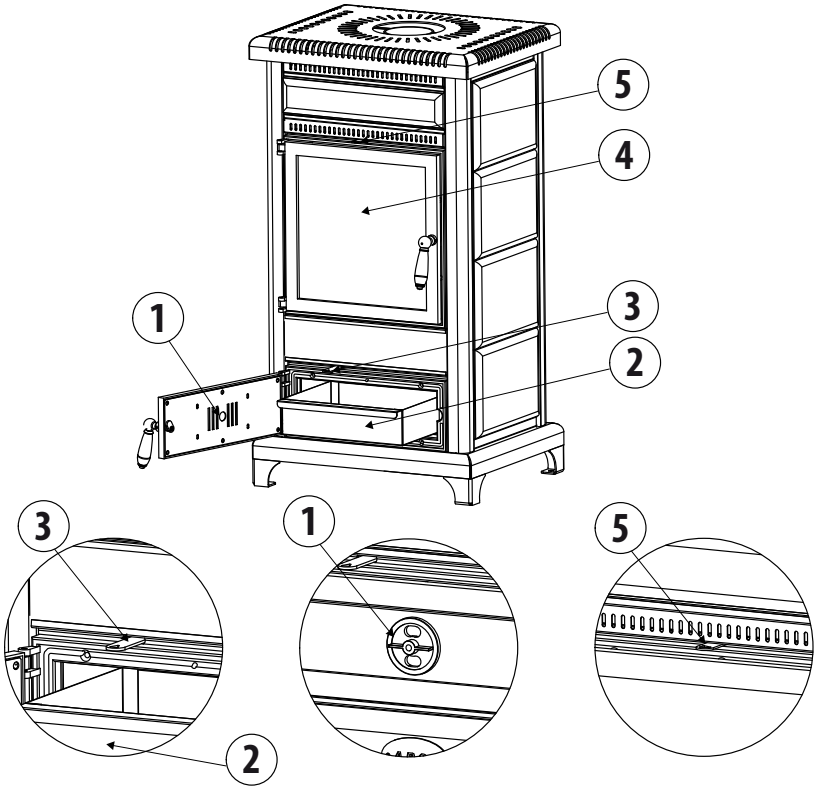
1	PRIMARY COMBUSTION AIR CONTROL	4	ASH SHAKER ROD
2	ASH PAN	5	COMBUSTION CHAMBER
3	PRIMARY COMBUSTION AIR INTAKE Ø100 mm		

EQUIPMENT

• POKER	• OVEN MITTEN

4-DESCRIPTION OF PARTS

CORTINA LINE LE09 - LE10



DESCRIPTION OF CORTINA LINE STOVE PARTS

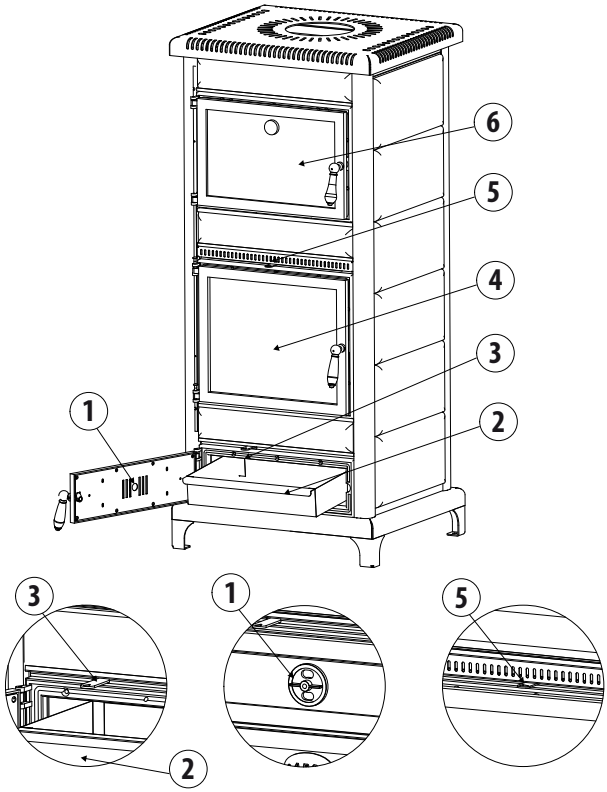
1	PRIMARY COMBUSTION AIR CONTROL AT THE FRONT OF THE DOOR LEAF	4	COMBUSTION CHAMBER
2	ASH PAN	5	SECONDARY AIR CONTROL FOR GLASS CLEANING
3	ASH SHAKER ROD		

EQUIPMENT

• POKER	• OVEN MITTEN

4-DESCRIPTION OF PARTS

CORTINA LINE LF11



DESCRIPTION OF CORTINA LINE STOVE PARTS

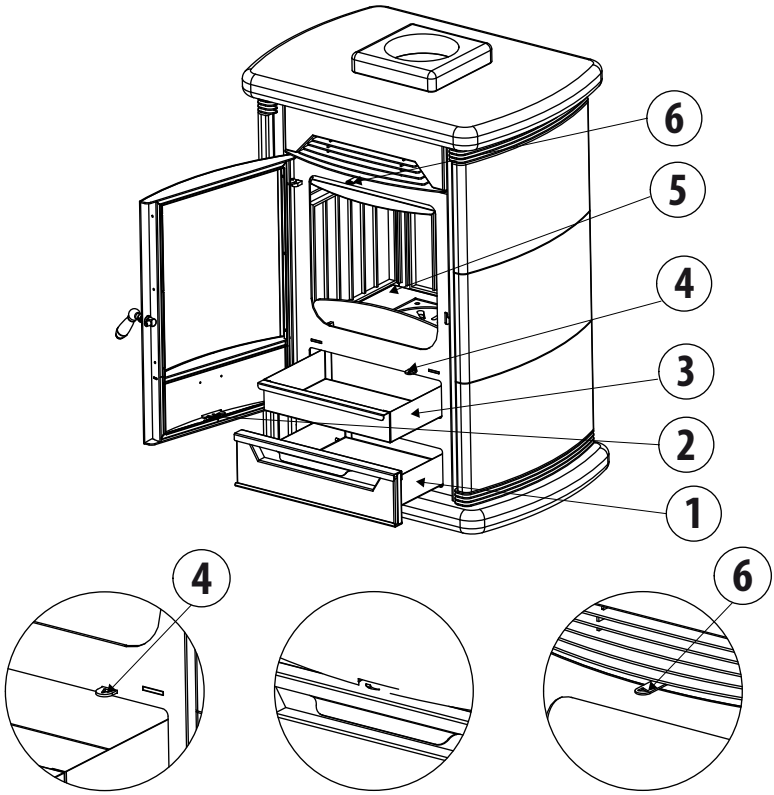
1	PRIMARY COMBUSTION AIR CONTROL AT THE FRONT OF THE DOOR LEAF	4	COMBUSTION CHAMBER
2	ASH PAN	5	SECONDARY AIR CONTROL FOR GLASS CLEANING
3	ASH SHAKER ROD	6	SMALL BAKING OVEN

EQUIPMENT

• POKER	• OVEN MITTEN

4-DESCRIPTION OF PARTS

CHAMONIX LINE LE11



DESCRIPTION OF CHAMONIX LINE STOVE PARTS

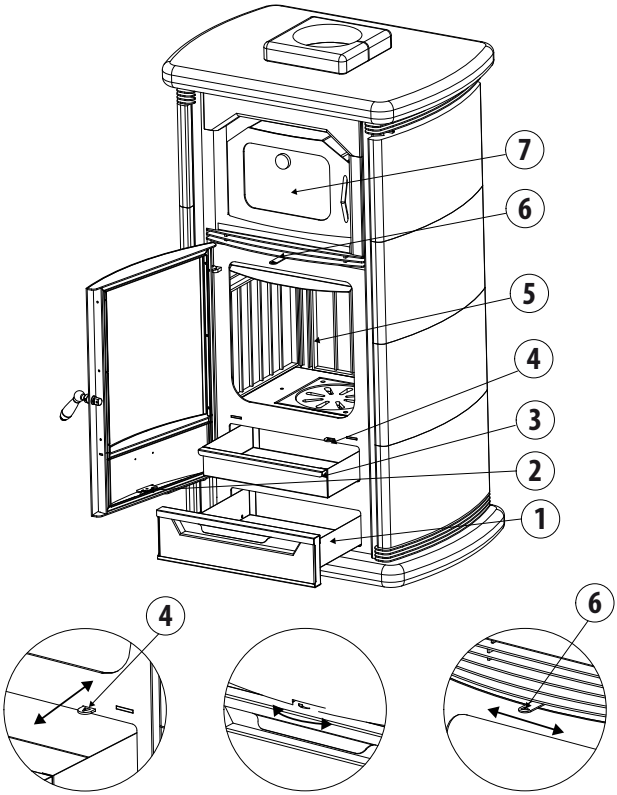
1	STORAGE COMPARTMENT	4	ASH SHAKER ROD
2	PRIMARY COMBUSTION AIR CONTROL AT THE FRONT OF THE DOOR LEAF	5	COMBUSTION CHAMBER
3	ASH PAN	6	SECONDARY AIR CONTROL FOR GLASS CLEANING

EQUIPMENT

• POKER	• OVEN MITTEN

4-DESCRIPTION OF PARTS

CHAMONIX LINE LF10



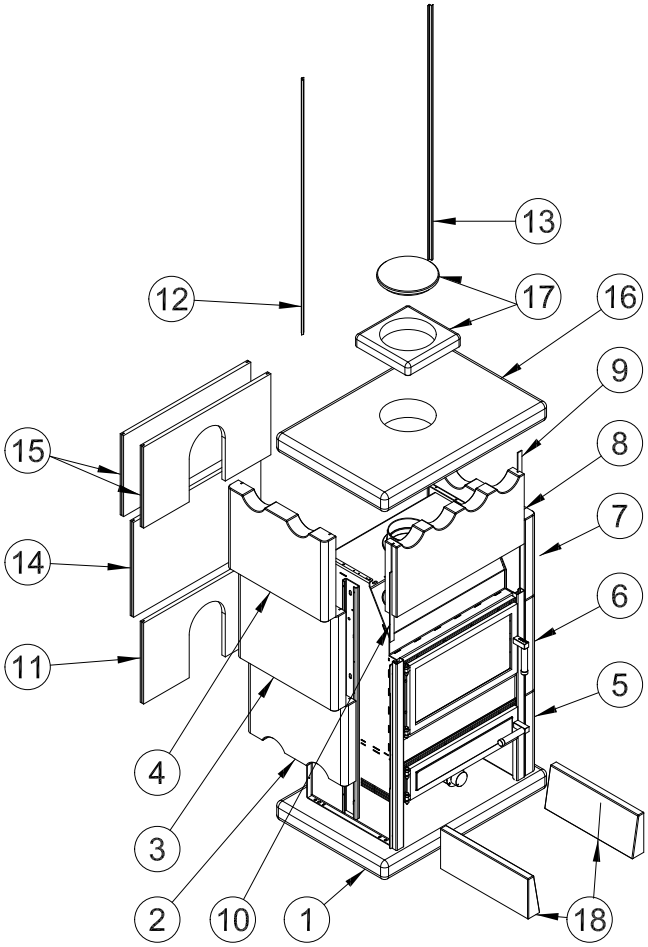
DESCRIPTION OF CHAMONIX LINE STOVE PARTS

1	STORAGE COMPARTMENT	5	COMBUSTION CHAMBER
2	PRIMARY COMBUSTION AIR CONTROL AT THE FRONT OF THE DOOR LEAF	6	SECONDARY AIR CONTROL FOR GLASS CLEANING
3	ASH PAN	7	SMALL BAKING OVEN
4	ASH SHAKER ROD		

EQUIPMENT

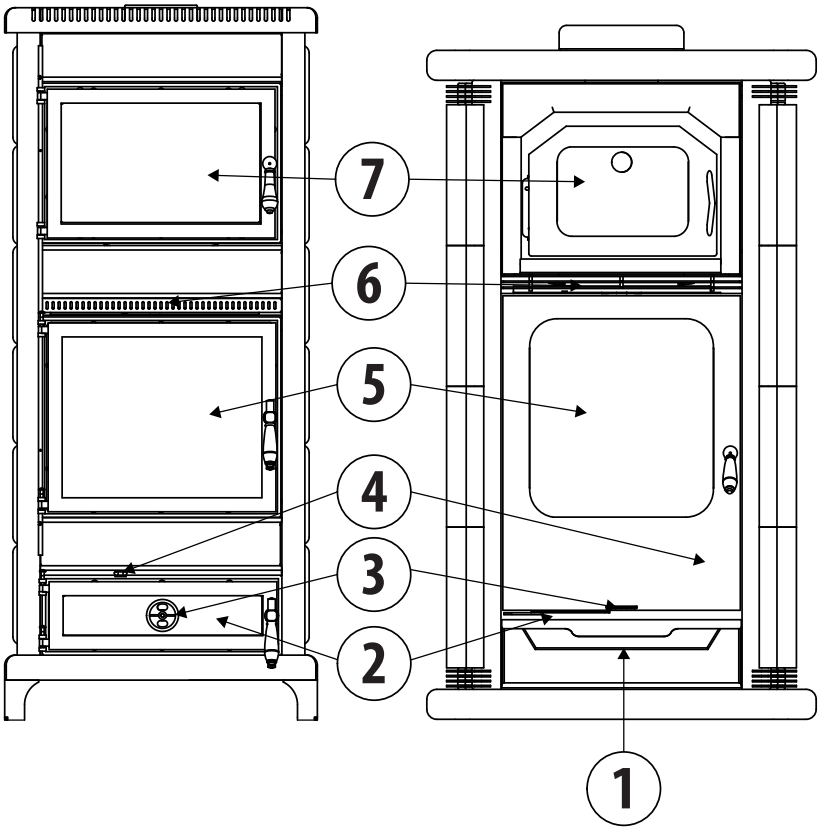
• POKER	• OVEN MITTEN

5-SERPENTINE STONES ASSEMBLY DIAGRAM



- Position the base (1)
- Place the stove on the base, fasten it with the four pegs supplied and add silicone as needed
- Resume positioning the other stones in progressive order as per drawing above

6-LIST OF PARTS AND OPERATION



1	STORAGE COMPARTMENT - DO NOT INSERT FLAMMABLE MATERIAL	5	WOOD BURNING FIREBOX
2	ASH PAN	6	SECONDARY COMBUSTION AIR CONTROL LEVER
3	PRIMARY COMBUSTION AIR CONTROL VALVE	7	SMALL BAKING OVEN (WHERE PROVIDED)
4	ASH SHAKER ROD		

6-LIST OF PARTS AND OPERATION

START-UP

Completely open primary air (3), pull out lever (4) and pull to the left secondary air lever (6).
To start, we recommend using the commercially available solid fire lighters placing them at the centre of the grid, on which a small amount of wooden sticks or twigs of seasoned wood and some small wood logs are placed. Light the fire and wait for all the wood to inflame well, therefore heating the flue and its draw. (On certain low pressure days it may be useful to leave the ash pan door (2) ajar by a few cm to aid lighting). After a few minutes, when combustion is well under way, add some medium sized logs. Wait for the fire to catch well then start closing the primary air damper (3) and the ash shaking lever (4). About 20/30 minutes after lighting, load with large logs every 3-4 hours on the bed of embers (it may be useful to move lever (6) to the left). This manner of utilisation affords the best yield (higher than 75% on average) and long duration (continuous fire) of combustion.

Note: Do not forget to regularly clean the ash pan.

AVOID BIG FLAMES WHICH CAUSE SERIOUS DAMAGE AND IMMEDIATE REVOCATION OF THE WARRANTY.

OPERATION

The stove is able to provide intermittent combustion.
By adjusting the combustion air with valve (3) and combining it with opening secondary air (6), you can increase or decrease the rate of combustion and thus adapt the various heating and cooking needs.

WHEN IN OPERATION THE APPLIANCE IS VERY HOT, KEEP CHILDREN AT A DISTANCE USING SUITABLE GUARDS.

Use of wood food warmer where provided

The temperature displayed by the thermometer on the door glazing may certainly help you to heat your dishes.
Smoke distribution on all surfaces of the food warmer results in consistent temperature in its body. We recommend not letting the temperature go above 250°C, because you run the risk of quickly burning the food to be warmed.

9-MAINTENANCE AND CLEANING

All the cleaning operations of all parts must be performed with the product completely cold and the plug disconnected.

CLEANING UNDER THE USER'S RESPONSIBILITY

CLEANING PRODUCTS

The stainless steel finishes and the coloured details if not handled with care and with specific products may deteriorate beyond repair.
The fumes produced by some chemicals can create an aggressive cloud which can dull the finishes of the cooker such as the steel and the coloured panels, resulting in stains on the finishes similar to rust stains.
The occurrence of these stains will totally invalidate the product warranty.

CLEANING INSIDE THE FOOD WARMER COMPARTMENT

Let the food warmer compartment cool down and clean it thoroughly with a damp cloth soaked in warm water and non-abrasive detergent (or appropriate products on the market).
Do not use abrasive cloths or sponges or other products that could irreparably scratch the enamel.

ROUTINE CLEANING OF FURNACE AND ASH DRAWER

With cold stove it is advisable before firing to thoroughly clean the brazier by removing the ash and any unburned parts.
It is advisable to empty the ash collected in the ash pan underneath the firebox as well, ensuring there are no hot embers.
It is recommended to remove the ashes in the tray every 8 hours of operation. The maximum filling height of the hearth is half the height of the combustion chamber.

STOVE CLEANING - SMOKE SIDE

The smoke side of the stove must be cleaned whenever you notice any difficulty in lighting, combustion problems, tendency of smoke leaking out of the loading door which was not encountered beforehand. On average, it can be assumed that a properly installed stove, loaded with well seasoned wood needs to be cleaned about every two months (depending also on the length of the connecting pipes and the number of elbows fitted). To clean the connecting pipes and the inside of the stove, use brushes or other appropriate tools so as not to scratch and therefore damage enamelled or painted parts. Stoves with food warmer compartment are designed so that soot normally drops into the hearth. In other stoves it is required to lift up and shake the stainless steel baffle located above the hearth so any ash or soot drops into it.
In the event that the top plate is opened at the time of refitting it is well to replace the gasket.
The smoke duct and flue must be regularly cleaned. Check that these ducts aren't blocked following an extended period of inactivity.

OUTER CLEANING

Occasionally rub a cloth slightly moistened with warm water on the painted parts, on ceramics and majolicas. The ceramic glass must be cleaned with suitable liquids or sprays either purchased or supplied by us. Any traces of food or stains on the radiating plate must be removed with normal detergents, wire wool or similar for the hardest ones, then rub the plate with a cloth soaked in cooking oil.
In the event of deterioration of door painting or black-painted trims, only use silicone varnishes resistant to high temperatures for touching up and only with stove unlit.
For stone panels or plates it is recommended to use steam appliances with a cloth.

WHEN IN OPERATION THE APPLIANCE IS VERY HOT, KEEP CHILDREN AT A DISTANCE USING SUITABLE GUARDS.
AVOID BIG FLAMES WHICH CAUSE SERIOUS DAMAGE AND IMMEDIATE REVOCATION OF THE WARRANTY.

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