EN

WOOD STOVE

INSTALLATION, USE AND MAINTENANCE MANUAL



AURORA - SOLE



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MANUAL SIMBOLOGY

- The icons with the stylized figures indicates whom the subject dealt in the paragraph is addressed to (between the User and/or the Authorized Technician and/or the Specialized Stove-repairer).
- WARNING symbols indicates an important note.

| | USER |
|-----------------------------|---|
| - Contraction of the second | AUTHORISED TECHNICIAN (ONLY to interpret or the Stove-manufacturer or the Authorized Technician of Technical Assistance Service approved by the Stove- manufacturer) |
| | SPECIALIZED STOVE-REPAIRER |
| | CAUTION: READ CAREFULLY THE NOTE |
| | CAUTION: DANGER OR IRREVERSIBLE DAMAGE POSSIBILITY |

2 DEAR CUSTOMER

- Our products are designed and manufactured in compliance with standards EN 13240 for wood stoves, EN 14785 for pellet stoves, EN 13229 for fire places, EN 12815 for wood cooker stoves, C.P.R. 305/2011 for
- manufacturing products, Re n.1935/2004 for materials and objects which are in contact with foods, Dir. 2006/95/CEE for low tension, Dir.2004/108/EC for Electromagnetic compatibility.
- Read carefully the instruction contained in this manual to obtain the best efficiency.
- This instruction manual is an integral part of the product: make sure it is delivered with the appliance also in case of sold to others. In case of loss please ask a copy to your local Technical Assistance Service.
- All local regulations, including those referring to national European standards, must be respected during appliance installation.



In Italy biomass system installation below 35 kW must comply with MD 37/08. Every qualified installer who own these requirements, has to issue the certificate of conformity for the installed system ("system" means: stove + chimney + air inlet).

 According to (EU) No. 305/2011 regulation, the "Declaration of Performance" is available online at the web sites www.cadelsrl.com / www.free-point.it.

3 CAUTIONS

- All the pictures carried in this manual are only for indicative and explanatory purpose and could therefore slightly differ from your appliance.
- The referring appliance is those you purchased.
- In case of doubts or difficulties in the comprehension or for problems not described in this manual, please promptly contact your distributor or installer.
- It is forbidden to modify the appliance without authorization.

ΕN

WARRANTY CONDITIONS

ΕN

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.

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 caused by tampering with the appliance, atmospheric agents, natural disasters, vandalism, electrical discharges, fires, faults in the electric and/or hydraulic system.

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.

5 SPARE PARTS

For each repair or adjustment which should be necessary, please contact the dealer where you purchased your stove or your nearest Technical Assistance Service, specifying:

- Appliance model
- Serial number
- Type of problem

Use only original spare parts which you can find at our Technical Assistance Services.

6 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.



7.1 PACKAGING

- The packaging is made up of recyclable cardboard boxes according to RESY standards, recyclable expanded polystyrene inserts and wooden pallets.
- All packaging materials can be re-used for a similar use or eventually discharged as waste assimilable to the municipal solid ones, in accordance with current regulations.
- After having removed the packaging please assure you about the integrity of the product.



Packaging are not toys and could cause suffocation or strangulation and other health hazards! People (childreen included) with reduced mobility, psycological deseases or without experience and knowledge must be kept away from packaging. The stove is not a toy, please see **ATTENTION page 19**.

7.2 STOVE HANDLING

Both whether the stove is packed or not it is necessary to observe the following instructions for handling and transporting the stove from its sale point to its installation point and for any future movements:

- The stove must be handled with idoneous means paying attention to the existing safety regulations;
- do not turn the stove upside down and/or upset it on one side, but keep it in vertical position or as accorded with the constructor instructions;
- if the stove is made up of ceramic, stone, glass or any particularly fragile material components, all must be moved with the utmost care.

CHIMNEY FLUE

8.1 INTRODUCTION

This chapter about the Chimney Flue has been drawn up in cooperation with Assocosma (www.assocosma.org) and is based on European Standards (EN 15287 - EN 13384 - EN 1856 - EN 1443 - UNI 10683:2012). It provides instructions for a good and correct execution of the chimney flue but it does not absolutely replace the current standards which the qualified manufacturer/installer should comply with.



ΕN

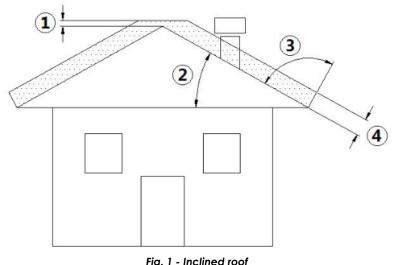
Please check with your local authorities if exists any restrictive regulation which regards the combustible air inlet, the fumes exhaust system, the chimney flue and the chimney pot.

The company declines any responsibility regarding the bad running of the stove if it is due to the use of a no correctly dimensioned chimney flue which does not respect current regulations.

8.2 CHIMNEY FLUE

- The chimney flue or chimney is of great importance for the correct running of the heating appliance.
- It is fundamental that the chimney flue is perfectly built and always maintained with a perfect efficiency.
- The chimney flue must be sole with insulated stainless-steel pipes or installed on the existing chimney flue.
- Both this solutions must be endowed with an inspection door.

8.3 TECHNICAL FEATURES



| Fim. | 2 | |
|------|---|--|

| LI | EGEND | Fig. 2 page 6 |
|----|-------|---|
| | 1 | Height over the ridge of the roof = $0,5$ mt |
| | 2 | Roof inclination ≥10° |
| | 3 | 90° |
| | 4 | Measured distance at 90° from the roof surface = 1,3 mt |

- The chimney flue must be sealed from fumes.
- It must have a vertical run without narrowing. It must be realized with fume and condensation resistant materials with thermal insulation and able to last against usual mechanical stresses.



It must be insulated to avoid condensation and to reduce fume cooling effects.

- The stove must be spaced out from fuels or flammable materials with an air gap or with insulating materials. Check the distance with the chimney manufacturer.
- The chimney entrance must be placed in the same room where the appliance is installed or otherwise in

the adjacent room and it must be provided with a solid and condensation collection chamber under the entrance, accessible through the sealed metal gate.

- The inner section of the chimney flue can be round (the best one) or square and the jointed sides must have • a minimum radius of 20 mm.
- The section dimension must be minimum Ø150 mm and maximum Ø240 mm.
- Made the efficiency of the chimney flue overhauled by an expert stove-repairer and if necessary cover the chimney flue with materials in compliance with current regulations.
- The flue system must be placed on the roof.
- The chimney flue must be provided CE in accordance with EN 1443 regulation. Please find attached an example of label:



Fig. 2 - Example of label

8.4 **HEIGHT-DEPRESSION**

The depression (draught) of a chimney flue depends also on its height. Check the depression with the values provided at FEATURES page 26. Minimum height 3,5 meters.

8.5 MAINTENANCE

- The chimney flue must be cleaned, since the soot and unburnt oil deposits reduce its section so blocking the • draught. In great quantities they can flare up.
- The fumes extraction pipes (fumes conduit + chimney flue + chimney pot) must always be cleaned, scrubbed and checked by an expert stove-repairer, in compliance with current regulations, with the instructions of the stove-manufacturer and the directives of your insurance company.
- In case of doubts, please follow the most restrictive regulations.
- Have your chimney flue and chimney pot checked and cleaned by an expert chimney sweep at least once a week. The chimney sweep has to release a written declaration about the security of the system.
- Not cleaning compromise safety.

CHIMNEY POT 8.6

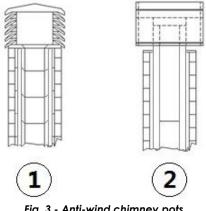


Fig. 3 - Anti-wind chimney pots

The chimney pot is important for the correct running of the heating appliance:

- We recommend using an anti-wind chimney pot, see Fig. 4 page 7.
- The hole width for fumes exhaust must be the double of the chimney flue width and fitted in a way that the fume exhaust is assured also in case of wind.
- It should prevent the infiltration of rain, snow and animals.
- The outlet height in the atmosphere must be away from the reflux area caused by the roof structure or by obstacles laying nearby (see **TECHNICAL FEATURES page 6**).

8.7 CHIMNEY COMPONENTS

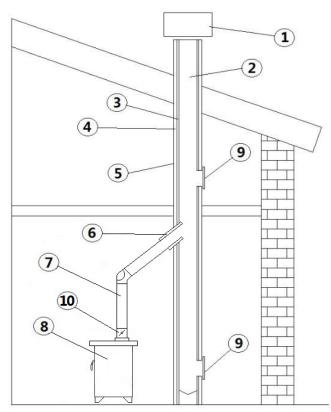


Fig. 4 - Chimney components

| LEGEND | Fig. 5 page 8 |
|--------|-------------------|
| 1 | Chimney pot |
| 2 | Fume outlet |
| 3 | Chimney flue |
| 4 | Termal insulation |
| 5 | External wall |
| 6 | Chimney union |
| 7 | Fume pipe |
| 8 | Heat generator |
| 9 | Inspection door |
| 10 | Damper |

8.8 EXTERNAL AIR INLET

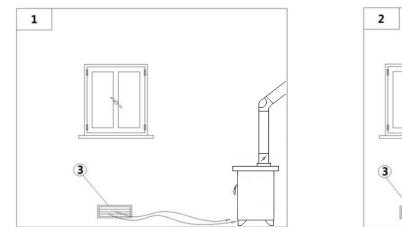


Fig. 5 - Direct air inflow

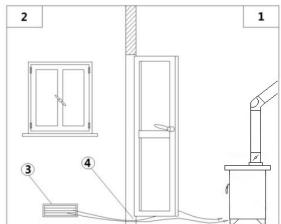


Fig. 6 - Indirect air inflow

LEGENDFig. 6 page 8-Fig. 7 page 81Room to ventilate2Adjacent room3External air inlet4Cleft under the door

- The room must be endowed with an external air recycling for a good climate in your ambient.
- The air inflow from outside to the inner occurs directly, through an opening on the external wall of the room (see Fig. 6 page 8); otherwise it occurs indirectly by air suction from rooms adjacent to the one to ventilate (see Fig. 7 page 8).
- Bedrooms, garages, and store of flammable materials are excluded.
- The air inlet should have a total net surface of 100 sqcm²: the aforesaid surface is to widen if inside the room there are other activated appliances (for example: electric ventilators for foul air suction, cooker hoods, other stoves, etc...) which depress the environment.
- At switched on appliance it is necessary to check that the pressure fall between the room and the outside does not exceed 4,0 Pa value: if necessary widen the air inlet (EN 13384).
- The air inlet must be realized at a height close to the floor with an external grid against birds. In such a way it cannot be obstructed by any object.
- In case of installation with sealed-chamber the air inlet is not necessary.

8.9 CHIMNEY FLUE CONNECTION

Your stove works through a natural draught. It is obligatory to check that all pipes are realized in compliance with the following regulation on material selection: EN 1856-1, EN 1856-2 e UNI/TS 11278. All must be effected by specialized personnel or companies as provided by UNI 10683:2012.

- The connection between the appliance and the chimney flue should be short in order to favor the draught and to avoid condensation in the pipes.
- The fume conduit should be equivalent or longer than the outlet joint ones.
- Some stove models are endowed with a lateral and/or back exhaust. Check that the unused exhaust is sealed with the plug given with standard equipment.

| SYSTEM TYPE | Ø150 mm PIPE | Ø240 mm PIPE |
|--|--------------|--------------|
| Minimum vertical length | 1,5 mt | 2 mt |
| Maximum length (with 1 union) | 6,5 mt | 10 mt |
| Maximum length (with 3 unions) | 4,5 mt | 8 mt |
| Maximum number of unions | 3 | 3 |
| Level section (minimum inclination 3%) | 2 mt | 2 mt |
| Installation at a height above 1200 m a.s.l. | NO | Obligatory |

- Use a specific plate pipe for stoves.
- It is forbidden to use metal, fibre cement or aluminium flexible pipes.
- For change of direction it is obligatory always to use a T-union (or a curve not with right angle) with inspection plug which enables an easy periodic cleaning of the pipes.
- Please assure you that after the cleaning the inspection plugs are sealed with its efficient gasket.
- It is forbidden to connect more appliances to the same fume conduit.
- It is forbidden to convey in the same fume conduit exhausts from overhanging cooker hoods.
- It is forbidden to exhaust flue gases directly from the wall towards the outside and closed spaces also at open top.
- It is forbidden to connect any other appliance (wood stoves, cooker hoods, boilers, etc...).
- The fume conduit must be placed at a distance of minimum 500 mm from flammable or heat-susceptible components.
- The fume conduit must be connected with stove exhaust in a fixed and tight manner, and if required with the insertion of a damper.

8.10 EXAMPLES OF CORRECT INSTALLATION

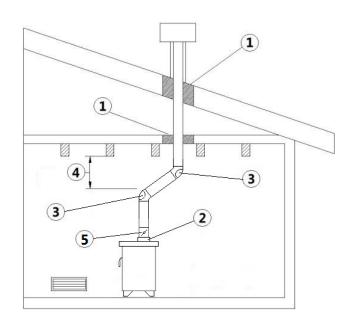


Fig. 7 - Example 1

| LEGEND | Fig. 8 page 10 |
|--------|----------------------------------|
| 1 | Insulating material |
| 2 | Reduction from Ø150 to Ø120 mm |
| 3 | Inspection plug |
| 4 | Minimum safety distance = 0,5 mt |
| 5 | Damper |

• Chimney flue installation Ø150 mm with an enlarged drilling for pipe transit.

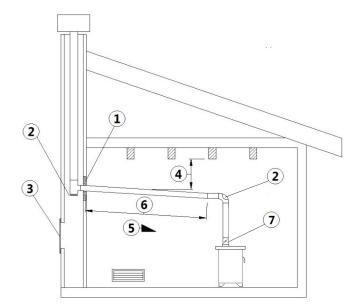


Fig. 8 - Example 2

| LEGEND | Fig. 9 page 10 |
|--------|-----------------------------------|
| 1 | Insulating material |
| 2 | Inspection plug |
| 3 | Chimney inspection entrance |
| 4 | Minimum safety distance = 0,5 mt |
| 5 | Inclination ≥ 3° |
| 6 | Level section $\leq 1 \text{ mt}$ |
| 7 | Damper |

• Old chimney flue with an inserted pipe of minimum Ø150 mm and with an external door which enables the chimney cleaning.

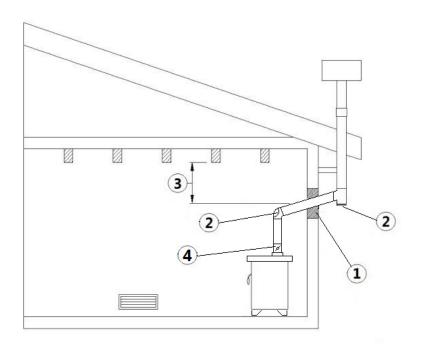


Fig. 9 - Example 3

| LEGEND | Fig. 10 page 11 |
|--------|----------------------------------|
| 1 | Insulating material |
| 2 | Inspection plug |
| 3 | Minimum safety distance = 0,5 mt |
| 4 | Damper |

- External chimney flue entirely made up of insulated stainless steel pipes, i.e. with double wall of minimum Ø150 mm: all must be firmly attached to the wall. For chimney against wind effects please (see Fig. 4 page 7).
- Ducting system through T-unions which enables an easy cleaning without disassembling the pipes.



We recommend to check with your chimney flue manufacturer the safety distances which must be respected and the type of insulating material. The aforesaid regulations are valid also for holes made on the wall (EN 13501 - EN 13063 - EN 1856 - EN 1806 - EN 15827).



9.1 FUEL

- The allowed fuel is firewood and its derivatives (lignite blocks, compressed sawdust, etc.) with a maximum water content of 20%.
- To obtain good firewood, it must be seasoned outside for at least 2 years in a place protected from the weather.
- Using humid wood or waste bark could create condension and creosote into the ductions and in the hearth. A heat yield of humid wood is great lower than dry wood.





Fig. 10 - Wood positioning

To know the lenght of wood log to use, check the dimensions of stove combustion chamber. It is advisable to place the wood in horizontal position (see Fig. 11 page 12) and adjust the air flow with the aid of the register.

To ignite proper ignitier products can be used.



It is forbidden to use any type of liquid combustible!



It is forbidden to burn wood processing waste containing glue or paint, waste in general and cardboard!

Here following some information about the quality of different type of woods: ٠

| TYPE OF WOOD | QUALITY | % PERFORMANCE |
|--------------|------------|---------------|
| Oak | Excellent | 100 |
| Hornbeam | Excellent | 100 |
| Ash | Very good | 92 |
| Maple | Very good | 91 |
| Birch | Good | 89 |
| Elm | Good | 84 |
| Beech | Good | 80 |
| Willow | Sufficient | 71 |
| Spruce | Sufficient | 70 |
| Red deal | Fair | 67 |
| Larch | Fair | 66 |
| Lime | Worst | 57 |
| Poplar | Worst | 50 |

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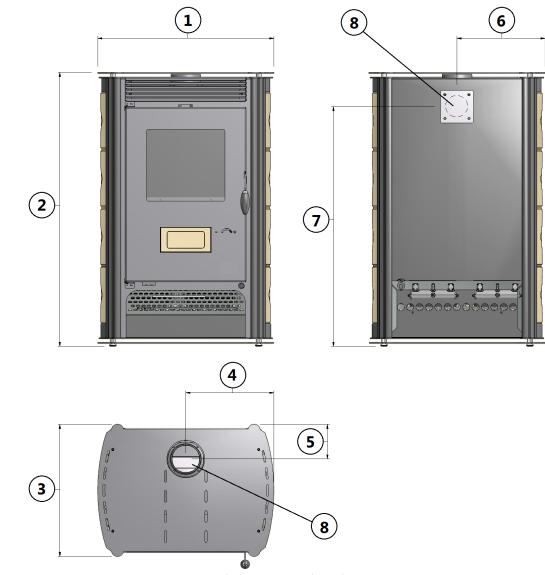


10.1 INTRODUCTION

- The assembly position dipends on on environment, exhaust, chimney flue.
- Check with local authorities if there are any restrictive regulations which regard the combustible air inlet, room ventilation, fume exhaust system together with chimney flue and chimney pot.
- The manufacturer declines any responsibility in case of installation which are not in compliance with current regulations, in case of a wrong room ventilation system, in case of an electric connection which is not in compliance with regulations and in case of a wrong use of the appliance.
- Intallation, electric connection, operation test and maintenance must be carried out by an authorized and skilled technician.
- Check if there is the combustible air inlet.
- Check the probable presence of other stoves or appliances which could depress the room (see EXTERNAL AIR INLET page 8).
- Check at switched on stove if there is the presence of CO in the room.
- Check if the chimney has the necessary draught.
- Check if during the fume passage all has been executed in safety (probable fume losses and distances from flammable materials, etc....).
- The installation of the appliance must enable an easy access for appliance, fume exhaust pipes and chimney flue cleaning.
- The installation must enable en easy access to the electric connection plug (see **ELECTRIC CONNECTION** page 18).
- It is forbidden to install the stove in bedrooms, bathrooms and in rooms used for storing combustible materials and in one-room flats.
- In any case the stove must not be installed in rooms where it can get in touch with water or water splashes because this can cause burn hazards and short-circuit.
- To install more appliances, the external air inlet must be correctly dimensioned (see **EXTERNAL AIR INLET page** 8).
- Only in room used as kitchen is possible to use appliances for cooking with its hood without steam extractor.
- Only type "C" appliances are allowed and not type "B": make reference to regulations active in the country where the appliance is installed.

10.2 OVERALL DIMENSIONS (AURORA MODEL)

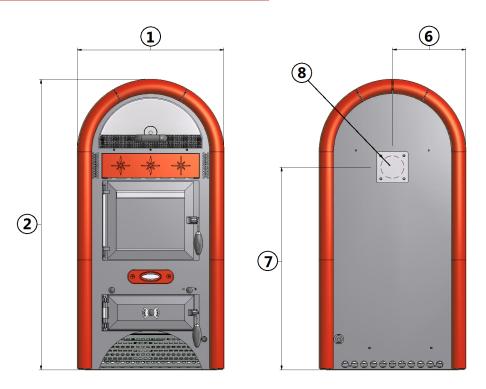
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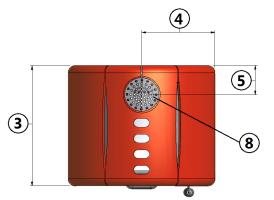


| Fig. | 11 | - | Overall | dimensions |
|------|----|---|---------|------------|
|------|----|---|---------|------------|

| LEGEND | Fig. 12 page 14 |
|--------|-----------------------|
| 1 | 70 cm |
| 2 | 109,5 cm |
| 3 | 53 cm |
| 4 | 35 cm |
| 5 | 12 cm |
| 6 | 35 cm |
| 7 | 92 cm |
| 8 | Exhaust fumes d.12 cm |

10.3 OVERALL DIMENSIONS (SOLE MODEL)





| Fia. | 12 - | Overall | dimensions |
|------|------|----------|------------|
| iig. | 12 - | Of Clair | annensions |

| LEGEND | Fig. 13 page 15 |
|--------|-----------------------|
| 1 | 60,3 cm |
| 2 | 121 cm |
| 3 | 50 cm |
| 4 | 30,1 cm |
| 5 | 12 cm |
| 6 | 30,1 cm |
| 7 | 85 cm |
| 8 | Exhaust fumes d.12 cm |

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10.4 GENERAL INSTALLATION

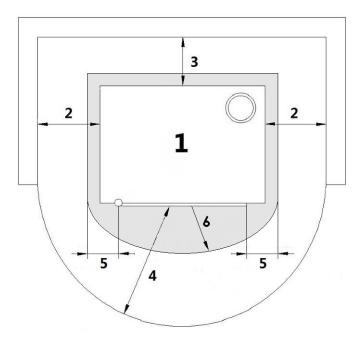


Fig. 13 - General installation

| LEGEND | Fig. 14 page 16 |
|--------|-----------------------------------|
| 1 | Stove |
| 2 | Minimum lateral distance = 500 mm |
| 3 | Minimum rear distance = 500 mm |
| 4 | Minimum front distance = 1000 mm |
| 5 | 300 mm |
| 6 | 500 mm |

- Please check that the floor has an adequate load capacity. If the existing one does not satisfy this requirement, appropriate measure should be provided (for example a plate for distributing the load).
- It is obligatory to install the stove away from walls and/or pieces of furniture, with a minimum air flow of 500 mm on the sides and 500 mm on the back, to enable an eficient appliance cooling and a good distribution of heat in the room (see Fig. 14 page 16).
- For safety fire regulations the distances from flammable or sensible to heat objects (sofas, pieces of furniture, wooden covering, etc...) must be respected, has described in Fig. 14 page 16.
- If there are highly flammable objects (curtains, fitted carpet, etc...), all these distances must be further increased with 1 meter.
- If the walls are made up of flammable materials, check the safety distances (see Fig. 14 page 16).
- At maximum power check that the wall temperature does not ever exceed 80°C. If it would be necessary please install a fire resistant plate on the concerned walls.
- In some countries also masonring load-bearing walls are considered flammable.

10.5 MAJOLICAS ASSEMBLY (AURORA MODEL)

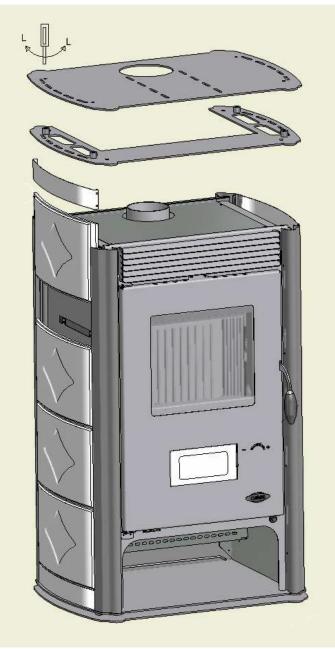


Fig. 14 - Aurora majolicas assembly

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10.6 MAJOLICAS ASSEMBLY (AURORA SOLE)

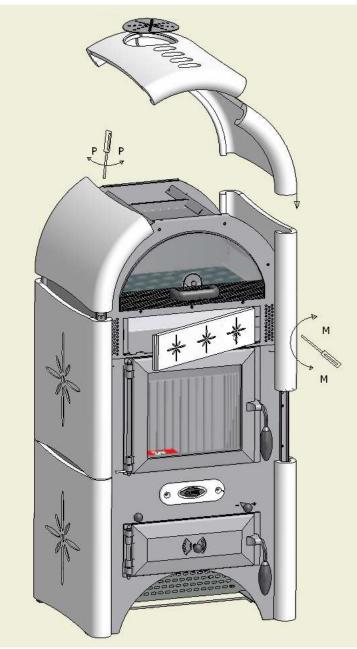


Fig. 15 - Sole majolicas assembly

10.7 ELECTRIC CONNECTION

Some wood stove models are endowed with a forced ventilation system, so they need an electric connection.



Warning: the appliance must be installed by an authorized technician!

- The electric connection occurs through a cable with plug put in an electric socket which is able to support
 charge and tension specific of every model, as described in the technical datas table (see FEATURES page
 26).
- The plug must be easily accessible when the appliance is installed.



The cable must not get in touch with the fume exhaust pipe and nor with every other part of the stove.

- Please further assure you that your network is endowed with an efficient earth connection: if it does not exist or if it is not efficient, please endow you with one in compliance with the law.
- Do not use extension cables.
- If the feeder cable is damaged, it must be replaced by an authorized technician.
- When the stove is not going to be used for a long period of time, it advisable to remove the plug from the socket on the wall.



11.1 ATTENTION



This appliance must not be used by people (childreen included) with reduced mobility, psycological deseases or without experience and knowledge except in case of supervision or instruction about the use of the appliance by people responsible for their safety.



Childreen must be constantly overseen in order to assure that they do not play with the appliance.



During its running, the stove reaches high temperatures: keep away childreen and animals and for your safety please use appropriate fireproof devices, such as heat-protecting gloves.

11.2 INTRODUCTION

To have the best performance with the lowest consumption please follow the here descripted instructions.

- Wood ignition occurs very easily if the installation is correct and if the chimney flue is efficient.
- By first ignition of the stove hold a slow fire for at least 4-5 hours in order to allow the material of which the heater and the hearth are made up of to adjust the inner mechanical stresses. This operation must be executed at least 3-4 times a year.
- Plant fat waste and varnishes can release bad smells and smoke during first working hours: it is advisable to ventilate the room because they can be noxious to people and animals.



Do not use flammable liquids during the ignition (alcool, petrol, oil, etc...).

11.3 IGNITION

- If inside the combustion chamber there are booklets, manuals, etc..., remove them.
- Check if the plug is correctly inserted in the electric socket (only for stoves with forced ventilation).
- Completely open the primary air inlet register and the damper.
- Put the fire-starter bars and seasoned wood logs into the burning pot.
- Ignite the bars and right after insert well seasoned wood logs and close the oven door.

For a better yield, as soon as there is a live flame, iti is advisable to close the primary air valve to the minimum and keep the damper at 45° in order to have the maximum performance (nominal output) with the lowest fuel consumption.

11.4 STOVE REFILLING



During stove refilling do not wear flammable or large clothing.



Do not open and close the fire door violently: the glass can brake!



Open the fire door with naked flames can be dangerous for user and/or home.



During operation some external parts can reach high temperatures. During refilling fases use proper protection gloves given as equipment.

- It is advisable to refill the stove only when on the firebox are only embers.
- Please proceed as follows: close the primary air valve, open the fire door slowly, shake the ash with the appropriate instrument, insert wood in the hearth, close the door and adjust again the primary air valve.



During regular working is dangerous to keep open the ash drawer and/or the fire box to increase air draught! There are appropriate instruments to adjust combustion air (primary air valve, register, etc...).

11.5 BAKING

Some models are endowed with a oven for the foods cooking.

When the stove has been working, close the start-up valve and wait till the oven reaches the needed temperature. We remind that the oven temperature is proportional to burning rate and needs a constant burning on order to avoid temperature leaps inside the oven.

Stove's ovens are endowed with a thermometer which checks the temperature in the position they are installed in. To have the real temperature in the inner of the oven the datas need to be increased of 20°C. If you want to sear food, you should place them in the upper side of the oven or in the centre.

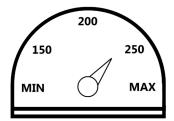


Fig. 16 - Oven thermometer

| THERMOMETER POSITION | CAKE | ROAST MEET | BREAD |
|-------------------------|--------|------------|--------|
| OVEN INNER TEMPERATURES | 115 °C | 180 °C | 240 °C |

11.6 VENTILATION

Some models are endowed with a forced ventilation system with a manual reset: turn it on and off through the switch.

The air blowed by fans keeps the stove at a lower temperature thus avoiding excessive stresses to materials of which the stove is made up and at the same time heats the environment homogeneously. Make periodically sure about the effective operation on the fan.



In case of black out or if the ventilation is out of order, the stove can work in the same way provided that using a low flame. Thus do not load the hearth with wood excessively. In case that the fan is out of order, contact an authorized technician who will replace it woth an original spare part.

11.7 ADVERSE WEATHER CONDITIONS

When the external temperatures are severe and/or there are adverse weather conditions (strong wind), the chimney is subjected to a lack in draught thus impeding a correct fume expulsion.

• Fill the heart with few wood logs and keep air register valves opened completely.

11.8 CREOSOTE DANGER

The use of humid and/or bad quality wood (for example resinous wood) cause creation of creosote along the chimney flue obstructing fume passages. The creosote is flammable and if amassed over the time it must be removed in order to prevent the risk of fire of the chimney flue.

- In case of fire close air register valves and contact immediately the firemen.
- When the chimney has stopped burning, have the chimney flue checked by an expert stove-repairer.

11.9 FIRE EXTINGUISHING IN CASE OF FIRE

In case it would be necessary to extinguish the fire emitted by the stove or by the chimney flue, use a fireextinguisher or contact the firemen. DO NOT use water to extinguish the fire inside the burning pot.



12.1 INTRODUCTION

For a long working life of the stove, have a periodic cleaning of the stove as described in the following paragrafs.

- Fume outlet pipes (fume conduit + chimney flue + chimney pot) must always be cleaned, scrubbed and checked by an authorized technician in compliance with local regulations, with the instructions of the manufacturer and those of your insurance company.
- If there are no local regulations and no instruction from your insurance company, it is necessary to have your fume pipe, chimney flue and chimney pot cleaned at least once a year.
- It is also necessary to have the combustion chamber, motors and fans cleaned and to have the gaskets and the electronical elements (if there are) checked at least once a year.



All these operations must be planned in time with your Autorized Technical Assistance Service.

- After a long ineffective time, before turning on the stove check if there are obstructions in the fume exhaust.
- If the stove had been using continuously and intensely, the whole system (chimney included), must be cleaned and checked more frequently.
- In case of replacement of damaged pieces please ask for the original spare part at the Autorized Retailer.



Before any movement let the fire inside the combustion chamber extinguish till the total cooling and always disconnect the plug from the socket (if there are).

12.2 BURNING POT AND ASH TRAY CLEANING 4



For a good combustion, before of every stove ignition, remove the ash which has settled in the burning pot. The abundant ash obstructes the primary air flow which is fundamental for a good combustion.

- Remove ash from the burning pot by shaking it to let it fall in the ash tray.
- If full, the sah tray must be empty.
- Ash must be kept in a metal container with sealed cap, the same container must not ever be in contact with flammable materials (for example lent over a wooden floor), as ash inside keeps embers glowing for a long time.
- Only when the ash is completely extinguished can be throuwn in the organic waste.
- Clean the ash also in the ash compartment.

12.3 FUME PIPES ANNUAL CLEANING



Clean once a year from soot with brushes.

The cleaning operation must be executed by a specialized stove-repairer who will provide for the cleaning of fume pipe, chimney flue and chimney pot. He will also check their eficiency and will release a written declaration of the safety of the appliance. This operation must be executed at least once a year.



12.4 FANS CLEANING

For models with ventilation, clean every year the room fan from ash or dust which can cause a blade unbalance and a greater noise.



As this operation is so delicate it must therefore be executed by an Authorized Technician.

12.5 GENERAL CLEANING

For cleaning external and inner parts of the stove do not use steel wools, muriatic acid or other corrosive and abrasive materials.

12.6 CLEANING OF PAINTED METAL PANELS

To clean painted metal panels use a soft cloth. Do not use degreasant agents like alcool, diluents, acetone, gasoline because these could irremediably damage the varnish.

12.7 CLEANING OF CERAMIC PANELS



Some stove models has an external lining made up of ceramic. These pieces are handmade therefore they could inevitably present crazings, seedinesses, shadings.

To clean ceramic panels use a soft and dry cloth. If using any cleaners this will seep through the crazings putting them in evidence.



12.8 FAN REPLACEMENT

For fan replacement proceed as follows:

- Extract the plug from the socket.
- Remove the ceramics to prevent breakage.
- Disconnect the chimney, tilt the stove and place it on the floor on the back side.
- Unscrew the 4 screws at the sides of the casing of the fan.
- Disconnect the faston and unscrew the failure fan screws.
- Replace the fan and repeat the inverse operation.



12.9 GASKET REPLACEMENT

In case of deterioration of fire door gasket and/or ash door gasket it is necessary to replace them by an autorized technician in order to guarantee the good running of the stove.



Use exclusively original spare parts.

12.10 GLASS CLEANING

The glass-ceramic of the fire door is able to stand till 700°C but not to thermal shocks. The probable cleaning with usual sale product for glass cleaning must be effected at cool glass in order to avoid explosions.

12.11 OVEN CLEANING

Some models are endowed with a oven for the foods cooking. Clean the oven inner after every cooking by using a soft cloth with hot water or appropriate products. Do not ever use a steel wool as they could irreparably damage the surfaces.



12.12 HEART BREAK

Probable cast iron or refractory heart break are due to an excessive overheating caused by too much fuel or by too much combustion air. Have the damaged elements immediately replaced in order to avoid feather damages to the stove.



Use exclusively original spare parts.

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In case of doubts regarding the use of the stove, please contact ALWAYS the Authorized Technician on order to avoi irreparable damages!

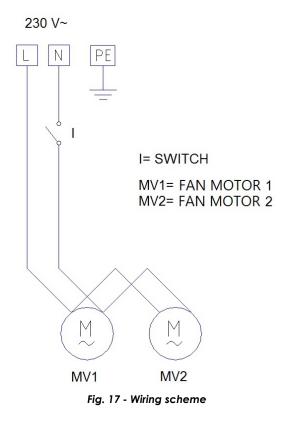
| PROBLEM | CAUSE | SOLUTION | INTERVENTION |
|--|---|---|--------------|
| | Too large wood | Use small and well dried wood logs during ignition, before bigger wood logs. | |
| Ignition difficulties | Too humid wood | Use well seasoned wood. | |
| igninon dinicomes | Lack of chimney draught | Open the registers completely. (If the problem persists, contact and expert stove repairer who will check the chimney flue efficiency). | |
| | Ambient without air recycling | Create immediately a ventilation grid. | A REAL |
| | Large chimney flue section | Reduce the chimney flue section with thermal insulater pipes. | |
| Creation of condensation | l (Over the chimnely the with including material | | |
| | | Open air registers in order to increase the fire and fume output temperature. | |
| | No insulated chimney flue | Cover the chimney flue with insulating material. | |
| Fume leakage from the heart | Adverse wheather conditions | No windproof chimney pot: have it replaced. | |
| Too humid wood Use well seasoned wood. | | Use well seasoned wood. | |

| PROBLEM | CAUSE | SOLUTION | INTERVENTION |
|---------------------------------------|----------------------------|---|--------------|
| The glass blackens | Lack of chimney draught | Open the registers completely. (If the problem persists, contact and expert stove repairer who will check the chimney flue efficiency). | |
| | Too humid wood | Use well seasoned wood | |
| excessively Too slow combustion | | Open air registers in order to increase the fire and fume output temperature. | |
| | Bad quality fuel | Use fuel described in FUEL page 11 | |



14.1 WIRING SCHEME

For models endowed with ventilation system, please follow the following wiring scheme:



14.2 FEATURES

| DESCRIPTION | AURORA 10,7 kW | SOLE 10,7 kW |
|--|----------------------|----------------------|
| WIDTH | 70 cm | 60,3 cm |
| DEPTH | 53 cm | 50 cm |
| HEIGHT | 109,5 cm | 121 cm |
| WEIGHT | 204 kg | 214 kg |
| NOMINAL THERMIC POWER (Max) | 10,7 kW | 10,7 kW |
| EFICIENCY (Max) | 77,2 % | 77,2 % |
| FUME TEMPERATURE (Max) | 332 °C | 332 °C |
| FUME MAXIMUM LOADING CAPACITY (Max) | 6,4 g/s | 6,4 g/s |
| CO EMISSIONS (13% O ₂) (Max) | 0,61 % | 0,61 % |
| CHIMNEY DEPRESSION (Max) | 11,3 Pa | 11,3 Pa |
| FUME OUTLET DIAMETER | Ø12 cm | Ø12 cm |
| FUME OUTLET POSITION | Upper/Back | Upper/Back |
| DAMPER REQUIRED | YES | YES |
| FUEL | WOOD | WOOD |
| WOOD HUMIDITY | < 12% | < 12% |
| HEATING VOLUME 18/20°C Coeff. 0,045 kW (Max) | 257 m ³ | 257 m ³ |
| HOURLY CONSUMPTION | 3,00 kg/h | 3,00 kg/h |
| BURNING POT VOLUME | 41,3 dm ³ | 41,3 dm ³ |
| BURNING POT OPENING | 9,2 dm ² | 9,2 dm ² |
| ASH TRAY CAPACITY | 6,3 dm ³ | 6,3 dm ³ |
| BURNING POT GRID SHAKER | YES | YES |
| ADJUSTABLE PRIMARY AIR | YES | YES |
| ADJUSTABLE SECONDARY AIR | YES | YES |
| FAN | YES | YES |
| SUPPLY | 230 V - 50 Hz | 230 V - 50 Hz |
| POWER INPUT (Max) | 170 W | 170 W |
| MINIMUM EXTERNAL AIR INLET (last effective area) | 100 cm ² | 100 cm ² |

| NOTE |
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CADEL srl

Via Foresto Sud, 7 31025 Santa Lucia di Piave (TV) - ITALY

> tel. +39.0438.738669 fax +39.0438.73343

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