



Riscalda la vita.



IT

UK

DE

FR

ES

**MANUALE UTENTE PRODOTTI A LEGNA**  
**WOOD PRODUCTS USER MANUAL**  
**BENUTZERHANDBUCH HOLZPRODUKT**  
**MANUEL UTILISATEUR PRODUITS À BOIS**  
**MANUAL DEL USUARIO PRODUCTOS DE LEÑA**

**MADE IN ITALY**  
design & production

**INSERTO 80 WIDE - 80 PRS WIDE - 100 WIDE**

6096106 - Rev.01



## ATTENTION



**SURFACES CAN BECOME VERY HOT!  
ALWAYS USE PROTECTIVE GLOVES!**

*During combustion, thermal energy is released that significantly increases the heat of surfaces, doors, handles, controls, glass, exhaust pipes, and even the front of the appliance. Avoid contact with those elements if not wearing protective clothing (protective gloves included). Make sure children are aware of the danger and keep them away from the stove during operation.*

## ENGLISH - CONTENTS

<b>INSTALLATION.....</b>	<b>3</b>
<b>WARNINGS.....</b>	<b>19</b>
<b>SAFETY.....</b>	<b>19</b>
<b>GENERAL PRECAUTIONS.....</b>	<b>20</b>
<b>DECLARATION OF CONFORMITY OF THE MANUFACTURER .....</b>	<b>20</b>
<b>INSTALLATION REGULATIONS.....</b>	<b>20</b>
<b>FIRE-FIGHTING SAFETY MEASURES .....</b>	<b>21</b>
FIRST-AID MEASURES .....	21
BEAM PROTECTIONS .....	21
<b>TECHNICAL DESCRIPTION .....</b>	<b>22</b>
<b>FLUE.....</b>	<b>22</b>
CHIMNEY CAP .....	23
CONNECTION TO THE FLUE.....	23
AIR FOR COMBUSTION .....	23
VENTILATION AND AERATION OF THE INSTALLATION PREMISES .....	24
<b>VENTILATION HOOD OR ADJACENT LOCAL .....</b>	<b>24</b>
<b>ALLOWED / NOT ALLOWED FUELS .....</b>	<b>25</b>
<b>LIGHTING .....</b>	<b>26</b>
LOW EMISSION FIRE LIGHTING.....	26
<b>NORMAL OPERATION .....</b>	<b>27</b>
OPERATION DURING TRANSITION PERIODS .....	27
<b>MAINTENANCE AND CARE.....</b>	<b>28</b>
PERIODIC CLEANING UNDER USER'S RESPONSIBILITY .....	28
GLASS CLEANING .....	28
CLEANING OUT THE ASHES.....	28
CLEANING THE FLUE .....	28
SUMMER STOP .....	28
<b>ROUTINE MAINTENANCE PERFORMED BY QUALIFIED TECHNICIANS .....</b>	<b>29</b>
GASKETS.....	29
CONNECTION TO THE FLUE.....	29
<b>CALCULATION OF THE THERMAL POWER .....</b>	<b>29</b>
<b>GUARANTEE TERMS.....</b>	<b>30</b>
<b>TECHNICAL DATA SHEET.....</b>	<b>82</b>
<b>DIMENSIONS SHEETS.....</b>	<b>84</b>

*We thank you for having chosen our company; our product is a great heating solution developed from the most advanced technology with top quality machining and modern design, aimed at making you enjoy the fantastic sensation that the heat of a flame gives, in complete safety.*

## WARNINGS

This instructions manual is an integral part of the product: make sure that it always accompanies the appliance, even if transferred to another owner or user, or if transferred to another place. If it is damaged or lost, request another copy from the area technician. This product is intended for the use for which it has been expressly designed. The manufacturer is exempt from any liability, contractual and extracontractual, for injury/damage caused to persons/animals and objects, due to installation, adjustment and maintenance errors and improper use.

**Installation must be performed by qualified staff, which assumes complete responsibility for the definitive installation and consequent good functioning of the product installed. One must also bear in mind all laws and national, regional, provincial and town council Standards present in the country in which the appliance has been installed, as well as the instructions contained in this manual.**

**The Manufacturer cannot be held responsible for the failure to comply with such precautions.**

After removing the packaging, ensure that the content is intact and complete. Otherwise, contact the dealer where the appliance was purchased.

All electric components that make up the product must be replaced with original spare parts exclusively by an authorised after-sales centre, thus guaranteeing correct functioning.

## SAFETY

- ♦ THE APPLIANCE MAY BE USED BY CHILDREN 8 YEARS OF AGE OR OLDER AND INDIVIDUALS WITH REDUCED PHYSICAL, SENSORY, OR MENTAL CAPACITIES OR WITHOUT EXPERIENCE OR THE NECESSARY KNOWLEDGE, PROVIDED THAT THEY ARE SUPERVISED OR HAVE RECEIVED INSTRUCTIONS ON SAFE USE OF THE APPLIANCE AND THAT THEY UNDERSTAND THE INHERENT DANGERS.
- ♦ THE GENERATOR MUST NOT BE USED BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY AND MENTAL CAPACITIES OR WHO ARE UNSKILLED PERSONS, UNLESS THEY ARE SUPERVISED AND TRAINED REGARDING USE OF THE APPLIANCE BY A PERSON RESPONSIBLE FOR THEIR SAFETY.
- ♦ THE CLEANING AND MAINTENANCE REQUIRED BY THE USER MUST NOT BE PERFORMED BY CHILDREN WITHOUT SUPERVISION.
- ♦ CHILDREN MUST BE CHECKED TO ENSURE THAT THEY DO NOT PLAY WITH THE APPLIANCE.
- ♦ DO NOT TOUCH THE GENERATOR WHEN YOU ARE BAREFOOT OR WHEN PARTS OF THE BODY ARE WET OR DAMP.
- ♦ THE SAFETY AND ADJUSTMENT DEVICES MUST NOT BE MODIFIED WITHOUT THE AUTHORISATION OR INDICATIONS OF THE MANUFACTURER.
- ♦ DO NOT PULL, DISCONNECT, TWIST ELECTRIC CABLES LEAVING THE PRODUCT, EVEN IF DISCONNECTED FROM THE ELECTRIC POWER SUPPLY MAINS.
- ♦ IT IS ADVISED TO POSITION THE POWER SUPPLY CABLE SO THAT IT DOES NOT COME INTO CONTACT WITH HOT PARTS OF THE APPLIANCE.
- ♦ DO NOT CLOSE OR REDUCE THE DIMENSIONS OF THE AIRING VENTS IN THE PLACE OF INSTALLATION. THE AIRING VENTS ARE ESSENTIAL FOR CORRECT COMBUSTION.
- ♦ DO NOT LEAVE THE PACKAGING ELEMENTS WITHIN REACH OF CHILDREN OR UNASSISTED DISABLED PERSONS.
- ♦ THE HEARTH DOOR MUST ALWAYS BE CLOSED DURING NORMAL FUNCTIONING OF THE PRODUCT.
- ♦ WHEN THE APPLIANCE IS FUNCTIONING AND HOT TO THE TOUCH, ESPECIALLY ALL EXTERNAL SURFACES, ATTENTION MUST BE PAID
- ♦ CHECK FOR THE PRESENCE OF ANY OBSTRUCTIONS BEFORE SWITCHING THE APPLIANCE ON FOLLOWING A PROLONGED PERIOD OF INACTIVITY.

- ♦ THE GENERATOR HAS BEEN DESIGNED TO FUNCTION IN ANY CLIMATIC CONDITION. IN PARTICULARLY ADVERSE CONDITIONS (STRONG WIND, FREEZING) SAFETY SYSTEMS MAY INTERVENE THAT SWITCH THE GENERATOR OFF. IF THIS OCCURS, CONTACT THE TECHNICAL AFTER-SALES SERVICE AND ALWAYS DISABLE THE SAFETY SYSTEMS.
- ♦ IN THE EVENT THE FLUE CATCHES FIRE, USE SUITABLE SYSTEMS FOR SUFFOCATING THE FLAMES OR REQUEST HELP FROM THE FIRE BRIGADE.
- ♦ THIS APPLIANCE MUST NOT BE USED TO BURN WASTE
- ♦ DO NOT USE ANY FLAMMABLE LIQUIDS FOR IGNITION
- ♦ THE MAJOLICAS ARE TOP QUALITY ARTISAN PRODUCTS AND AS SUCH CAN HAVE MICRO-DOTS, CRACKLES AND CHROMATIC IMPERFECTIONS. THESE FEATURES HIGHLIGHT THEIR VALUABLE NATURE. DUE TO THEIR DIFFERENT DILATION COEFFICIENT, THEY PRODUCE CRACKLING, WHICH DEMONSTRATE THEIR EFFECTIVE AUTHENTICITY. TO CLEAN THE MAJOLICAS, IT IS RECOMMENDED TO USE A SOFT, DRY CLOTH. IF A DETERGENT OR LIQUID IS USED, THE LATTER COULD PENETRATE INSIDE THE CRACKLES, HIGHLIGHTING THEM.

## GENERAL PRECAUTIONS

**La NORDICA S.p.A. responsibility is limited to the supply of the appliance.**

The installation must be carried out scrupulously according to the instructions provided in this manual and the rules of the profession. Installation must only be carried out by a qualified technician who works on behalf of companies suitable to assume the entire responsibility of the system as a whole.

**La NORDICA S.p.A. declines any responsibility for the product that has been modified without written authorisation as well as for the use of non-original spare parts.**

This appliance is not suitable for the use of inexperienced people (included children) or with physical, sensorial and mental reduced capacities. They have to be controlled and educated in the use of the appliance from a responsible person for their security. The children have to be controlled to be sure that they would not play with the appliance. (EN 60335-2-102/7.12).

**It is OBLIGATORY to respect the National and European rules, local regulations concerning building matter and also fireproof rules.**



**NO MODIFICATIONS CAN BE CARRIED OUT TO THE APPLIANCE. La NORDICA S.p.A. cannot be held responsible for lack of respect for such precautions.**

## DECLARATION OF CONFORMITY OF THE MANUFACTURER

Object: **Absence of asbestos and cadmium**

We declare that the materials used for the assembly of all our appliances are without asbestos parts or asbestos derivatives and that in the material used for welding, cadmium is not present, as prescribed in relevant norm.

Object: **CE n. 1935/2004 regulation.**

We declare that in all products we produce, the materials which will get in touch with food are suitable for alimentary use, according to the a.m. CE regulation.

## INSTALLATION REGULATIONS

Installation of the product and auxiliary equipment in relation to the heating system must comply with all current Standards and Regulations and to those envisioned by the law.

The installation and the relating to the connections of the system, the commissioning and the check of the correct functioning must be carried out in compliance with the regulations in force by authorised professional personnel with the requisites required by the law, being national, regional, provincial or town council present in the country within which the appliance is installed, besides these present instructions.

Installation must be carried out by authorised personnel who must provide the buyer with a system declaration of conformity and will assume full responsibility for final installation and as a consequence the correct functioning of the installed product.

Before installing the appliance, carry out the following checks:

- Verify if your structure can support the weight of the appliance. In case of insufficient carrying capacity it is necessary to adopt appropriate measures, La NORDICA responsibility is limited to the supply of the appliance (See chapter *TECHNICAL DESCRIPTION*).
- Make sure that the floor can support the weight of the appliance, and if it is made of flammable material, provide suitable insulation (*DIMENSIONS ACCORDING TO REGIONAL REGULATIONS*).
- Make sure that there is adequate ventilation in the room where the appliance is to be installed.
- Do not install the appliance in rooms containing collective ventilation ducts, hoods with or without extractor, type B gas appliances, heat pumps, or other appliances that, operating at the same time, can put the room in depression (ref. **UNI 10683 standard**)

- Make sure that the flue and the pipes to which the appliance will be connected are suitable for its operation. **It is NOT allowed the connection of various appliances to the same chimney.**
- The diameter of the opening for connection to the chimney must at least correspond to the diameter of the flue gas pipe. The opening must be equipped with a wall connection for the insertion of the exhaust pipe and a rosette.
- Always leave the recommended air pocket between the appliance and the walls, rear and side min. (see MARKING INFORMATION).
- Establish the type of ventilation (natural or forced) see chapter VENTILATION HOOD OR ADJACENT LOCAL.
- By means of the adjustable feet and using a level make sure that the device is perfectly levelled to allow a correct sliding of the door.

**After testing the proper working of the appliance, some days from the installation, it is possible to proceed with the construction of its aesthetic covering.**

**WARNING** - During the surround building operations it must be kept in mind possible and subsequent electrical installed parts maintenance (Fans, temperature probe, etc) and with hydraulic systems all parts connected to the product.



**WARNING - WHEN INSTALLING INSERTS, ACCESS MUST BE PREVENTED TO THE INTERNAL PARTS OF THE APPLIANCE AND IT MUST NOT BE POSSIBLE TO ACCESS LIVE PARTS DURING EXTRACTION OPERATIONS. ANY WIRING, FOR EXAMPLE THE POWER CABLE OR ROOM PROBE, MUST BE POSITIONED SO AS NOT TO BE DAMAGED DURING MOVEMENT OF THE INSERT AND MUST NOT COME INTO CONTACT WITH HOT PARTS.**



**La NORDICA S.p.A. declines all responsibility for damage to things and/or persons caused by the system. In addition, it is not responsible for any product modified without authorisation and even less for the use of non original spare parts.**

Your regular local chimney sweep must be informed about the installation of the appliance so that he can check the correct connection to the chimney.

## FIRE-FIGHTING SAFETY MEASURES

When installing the appliance, the following safety measures must be observed:

- In order to ensure sufficient thermal insulation, respect the minimum safety distance from objects or furnishing components flammable and sensitive to heat and from materials with flammable structure (see DECLARATION OF PERFORMANCE - **Picture 7 - A..**). **All the minimum safety distances are shown on the product data plate and lower values must not be used.**
- in front of the furnace door, in the radiation area, there must be no flammable or heat-sensitive objects or material at a distance of less than ... **Picture 7 - A..**. This distance can be reduced to 40 cm where a rear-ventilated, heat-resistant protection device is installed in front of the whole component to protect;
- If the product is installed on a not totally refractory floor, one must foresee a fireproof background. **The floors made of inflammable material**, such as moquette, parquet or cork etc., **must be covered** by a layer of non-inflammable material (size according to regional law, see **Picture 1**).

The ash drawer must always be inserted when the appliance is in operation.

The solid combustion residues (ashes) must be collected in a metal container that is hermetically sealed and fire resistant. The appliance must never be lit in the presence of gaseous emissions or vapours (for example: glue for linoleum, petrol, etc.). Do not place flammable materials in the vicinity of the appliance.



**During the combustion, thermal air is emitted by involving the heating of areas, door and glass hearth, of the door handles or controls, of the smokes pipe and, in case, of the front part of appliance. Avoid to touch those parts without a protective clothing or without accessory tools (gloves resistant to heat, control devices). Ensure children are aware of these dangers and keep them away from the furnace when it is on. Warn children that the device becomes very hot and that it must not be touched.**

When using the wrong fuel or one which is too damp, due to deposits present in the flue, a flue fire is possible.

## FIRST-AID MEASURES

Should any fire arise in the stack or in the flue:

- Close the feeding door.
- Close the registers of combustion air
- Extinguish the fire using carbon dioxide fire-fighting means (CO<sub>2</sub> dust).
- Seek immediate intervention of FIRE BRIGADE.

**DO NOT EXTINGUISH FIRE USING WATER JETS.** When the flue does not burn any more please arrange an examination by a specialist in order to find possible cracks and permeable points.

## BEAM PROTECTIONS

Considering the irradiation of the hearth, it is necessary to be particularly careful in protecting the beams while designing your stack. Consider the proximity of beams to the external surfaces of the hearth, on one side, and the irradiation of the glass door, usually very close to the beams, on the other side. In any case, it has to be considered that the internal or lower surfaces of this beam in flammable material must not come in contact with temperatures higher than 65 °C. **Picture 2** gives some examples of execution.



**WARNING: We cannot be made liable for a wrong operation of the plant, when it does not comply with the provisions of these instructions or when it uses additional products not suitable for this device.**

## TECHNICAL DESCRIPTION

The appliance La Nordica is suitable to heat living spaces for some periods. As fuel, wood logs are used. **The appliance works as an intermittent operating appliance.**

The appliance is made up of a steel chamber completely soldered and hermetic.

The hearth is totally sheathed with single cast-iron sheets and refractory plates (NORDIKER). Its back is extractable. Thanks to calibrated holes, made on the same back, it is guaranteed a supply of pre-heated air inside the hearth, thus obtaining a post-combustion which increases the efficiency and reduces the emission of the unburnt gases. Inside it there is a turning and extractable grate. The inside smoke plate, reflects the fire radiation and increases the internal temperature of the combustion chamber. This process together with the exhaust gases flows, makes optimal the combustion and improves the efficiency (see **Picture 11**).

The hearth is equipped with a panoramic door with ceramic glass (resistant up to 700 °C). This allows a wonderful view on the burning flames. Furthermore, it is thus avoided the output of sparks and smoke.

Below the hearth door will be found an extractable ash-drawer with a closing door.

**The heating of the environment is made by irradiation:** through the panoramic glass and the external hot surfaces of the stove, the heat is radiated into the environment (See chapter CALCULATION OF THE THERMAL POWER).

ACCESSORIES	POKER	GLOVE		
	SERIES	SERIES		

**The openings for the combustion air** (primary and secondary) **are managed by one single register.**

**SINGLE register PRIMARY air and SECONDARY air (Picture 8).**

The lever to adjust the combustion air is located underneath the fire-door

With the air register located under the door of the hearth, it is possible to adjust the air flow through the ash drawer and the grating in direction of the fuel.

The air is necessary for the combustion process during the ignition. The ash drawer has to be emptied regularly, so that ash cannot hinder the intake of air for the combustion. The air is also necessary to keep fire live.

With **the lever totally PULLED OUT** the **SECONDARY airflow is CLOSED** and the PRIMARY airflow is OPEN; with the lever **totally IN** the **PRIMARY airflow is CLOSED** and the SECONDARY airflow is OPEN.

**The adjustment of the registers necessary to reach the rated calorific yield** is the following one:

	Hourly wood consumption in kg/h	Combustion air	TERTIARY AIR
INSERTO 80 PRS WIDE	2,3	<b>Picture 8 - B</b>	PRE-ADJUSTED
INSERTO 80 WIDE	2,1	<b>Picture 8 - B</b>	PRE-ADJUSTED
INSERTO 100 WIDE	2,3	<b>Picture 8 - B</b>	PRE-ADJUSTED

**It is possible to get the combustion air directly from outside** through a flexible tube fireproof NOT furnished (see chapter VENTILATION HOOD OR ADJACENT LOCAL).

## FLUE

Essential requirements for a correct operation of the device:

- the internal section must be preferably circular;
- be thermally insulated and water-proof and produced with materials suitable to resist to heat, combustion products and possible condensates;**
- not be throttled and show a vertical arrangement with deviations not greater than 45°;
- if already used, it must be clean;
- all the sections of the flue gas duct must be accessible to inspection;
- inspection openings must be provided for cleaning.
- observe the technical data of the instructions manual;

Should the flues have a square or rectangular section, internal edges must be rounded with a radius not lower than 20 mm. For the rectangular section, the maximum ratio between the sides must be = 1.5.

A too small section causes a decrease of the draught. It is suggested a minimum height of 4 m.

The following features are **FORBIDDEN** and therefore they endanger the good operation of the device: asbestos cement, galvanized steel, rough and porous internal surfaces. In **Picture 3** gives some examples of execution.



**For a correct installation please respect the sections/lengths of the flue shown in the technical data table. By installations with different dimensions the flue must be suitably sized in accordance with EN13384-1.**

The draught created by the flue must be sufficient, but not excessive.

A too big flue section can feature a too big volume to be heated and consequently cause difficulties in the operation of the device; to avoid this, tube the flue along its whole height. A too small section causes a decrease of the draught.



**ATTENTION:** as far as concern the realisation of the flue connection and flammable materials please follow the requirements provided by UNI 10683 standard. The flue must be properly spaced from any flammable materials or fuels through a proper insulation or an air cavity.

It is **FORBIDDEN** to let plant piping or air feeding channels pass in the same flue. Moreover, it is forbidden to create movable or fixed openings on the same for the connection of further other devices (**Picture 4**).

## CHIMNEY CAP

**The draught of the flue depends also on the suitability of the chimney cap.**

Therefore, if it is handcraft constructed, the output section must be more than twice as big as the internal section of the flue (**Picture 5**). Should it be necessary to exceed the ridge of the roof, the chimney cap must assure the discharge also in case of windy weather (**Picture 6**).

The chimney cap must meet the following requirements:

- have internal section equivalent to that of the stack.
- have a useful output section twice as big as the flue internal one.
- be manufactured in such a way as to prevent the penetration of rain, snow, and any other foreign body in the flue.
- be easily checkable, for any possible maintenance and cleaning operation

## CONNECTION TO THE FLUE

The connection to the stack must be performed with stiff pipes in steel comply with all current Standards and Regulations and to those envisioned by the Law.



**It is FORBIDDEN to use metallic pipes or pipes in asbestos cement since they jeopardize the safety of the fitting itself, considering that they are subject to tears or breaks resulting in leaks of smoke.**

The exhaust pipe must be air-tight fastened to the stack and can have a maximum inclination of 45°; this to avoid excessive deposits of condensate produced in the initial start-up phases and/or the excessive gripping of soot and moreover it avoids the slowing down of the smokes at output.

The failed tightness of the connection can cause the malfunction of the device.

The internal diameter of the connection pipe must be equal to the external diameter of the smokes stub pipe of the device. This is assured by the pipes complying with DIN 1298.

**The chimney pressure (DRAUGHT) must be at least** (see chap. TECHNICAL DATA SHEET) . The measurement has always to be carried out with hot device (rated thermal performance).

When the depression exceeds 17 Pascal (=1.7 mm of column of water), it is necessary to reduce the same by installing an additional draught regulator (butterfly valve).



**IMPORTANT:** When using metallic pipes, they must be insulated with proper materials (coatings in insulating fibers resistant up to 600°C) in order to avoid deterioration of walls or of the counter-hood.

Before positioning the insert in the pre-existing fireplace, it is necessary to close the upper internal part of the stack using (properly pre-drilled) sheet metal or any other kind of fire-resistant material that can support very high temperatures without suffering any damage. (see **Picture 7** pos. 1 **Inserti** - **Picture 12**).

## AIR FOR COMBUSTION

It is necessary to ventilate continuously the space included between the upper part, the sides of the device and the deflector of the fire-proofing material of the hood.

For this reason, it is necessary to foresee an intake of air from the bottom (intake of fresh air) and a high output (output of hot air).

Each of these openings must be free and it should not be possible to obstruct it; moreover, they must have a minimum surface of at least 3 dm<sup>2</sup> (example: 30 x 10 cm grating).

**In this way, the following targets are achieved:**

- a greater safety
- an increase of the heat created by air circulation around the device.
- a better working of the appliance



**The heat vent grating** (**Picture 7** pos. 6 - **Picture 12**) has to be installed on the upper part of the hood at about 20 cm from the roof. This must always be installed since its function is that of letting the heat collected within the hood (overpressure) flow out into the room.



## VENTILATION AND AERATION OF THE INSTALLATION PREMISES

As the product draw their combustion air from the place of installation, it is **MANDATORY** that in the place itself, a sufficient quantity of air is introduced. If windows and doors are airtight (e.g. built according to energy saving criteria), it is possible that the fresh air intake is no longer guaranteed and this jeopardises the draught of the appliance and your health and safety.

**IMPORTANT:** For a better comfort and corresponding oxygenation of environment, the combustion air can be directly withdrawn at the outside through a junction which is to be connected with a flexible pipe. The connection pipe (not furnished) must be flat with a minimum diameter of **Picture 11**, a maximum length of 4 m and with no more than 3 bends. If there is a direct connection with the outside it must be endowed with a special windbreak.

There **MANDATORY** be sufficient quantity of air for combustion and re-oxygenation of the room to ensure the device will work properly. There should therefore be vents letting air in from outside the building and enabling circulation of air for combustion even when the doors and windows are closed.

The air inlets must meet the following requirements:

- they must be protected with grids, metal mesh, etc., but without reducing the net useful section;
- they must be made so as to make the maintenance operations possible;
- positioned so that they cannot be obstructed;
- Any extractor hoods in the room where the device is installed must not operate at the same time as this could cause smoke to enter the room, even with the fireplace's door closed.

The clean and non-contaminated air flow can also be obtained from a room adjacent to that of installation (indirect aeration and ventilation), as long as the flow takes place freely through permanent openings communicating with the outside.

The adjacent room cannot be used as a garage, or to store combustible material or for any other activity with a fire hazard, bathroom, bedroom or common room of the building.

Ventilation is deemed sufficient when the room is equipped with air inlets according to the table:

Appliance categories	Reference standard	Percentage of the net opening section with respect to the appliance fumes outlet section	Minimum net opening value of the ventilation duct
Fireplaces	UNI EN 13229	50%	200 cm <sup>2</sup>
Stoves	UNI EN 13240	50%	100 cm <sup>2</sup>
Cookers	UNI EN 12815	50%	100 cm <sup>2</sup>



Installation in premises with fire hazards is forbidden. Installation in residential premises in which, in any case, the depression measured during installation between the internal and external environment is greater than 4 Pa - reference for Italy according to standard UNI10683.

All national, regional, provincial and municipal laws and standards in force in the country where the appliance is installed must be complied with.

## VENTILATION HOOD OR ADJACENT LOCAL

On our products, it is possible to install **OPTIONAL - KIT WIND AIR** ventilation kits suitable to improve the distribution of heat by ventilation only either of the installation room or of the adjacent local.

*For the connection of the ventilation kit, please see the instructions manual KIT WIND AIR.*

The covering is provided with 2 outlets to connect the heat resistant pipes (see **Picture 10**).

- Perform the drilling on the walls or on the existing hood to allow the passage and the application of the (fire-resistant) equipped with related openings.
- Fasten the pipes by means of clamps to the related collars and openings.
- Each pipe must not exceed 1,5 m of length for natural ventilation and 8 m for forced ventilation; it must be insulated with insulating materials to avoid noise and dispersion of heat.
- The openings have to be positioned at a height not lower than 2 m from the floor to avoid that hot air at output meets people. **Please respect the distance of the convection openings according to the local construction norms;**
- The lengths of the canalization pipes must have the same length to avoid the distribution of differing quantities of air from each output.



## ALLOWED / NOT ALLOWED FUELS

Allowed fuels are logs. Use exclusively dry logs (max. content of water 20%). Maximum 3 logs should be loaded. The pieces of wood should have a length of ca. 20-30 cm and a maximum circumference of 30-35 cm.

**Compressed not worked-out wood briquettes must be used carefully to avoid overheating that may damage the device, since these have a very high calorific value.**

The wood used as fuel must have a humidity content lower than the 20% and must be stored in a dry place. Humid wood tends to burn less easily, since it is necessary a greater quantity of energy to let the existing water evaporate. Moreover, humid content involves the disadvantage that, when temperature decreases, the water condensates earlier in the hearth and therefore in the stack causing a remarkable deposit of soot with following possible risk of fire of the same.

Fresh wood contains about 60% of H<sub>2</sub>O, therefore it is not suitable to be burnt.

It is necessary to place this wood in a dry and ventilated place (for example under a roofing) for at least two years before using it.

**Besides others, it is not possible to burn: carbon, cuttings, waste of bark and panels, humid wood or wood treated with paints, plastic materials; in this case, the warranty on the device becomes void.**

Paper and cardboard must be used only to light the fire.

**The combustion of waste is FORBIDDEN** and would even damage the appliance and the flue, causing health damages and claims by the neighborhood owing to the bad smell.

The wood is not a fuel which allows a continuous operation of the appliance, as consequence the heating all over the night is not possible.

Variety	kg/mc	kWh/kg moistness 20%
Beech	750	4,0
Oak	900	4,2
Elm	640	4,1
Poplar	470	4,1
Larch*	660	4,4
Spruce*	450	4,5
Scots pine *	550	4,4

\* RESINOUS WOOD NOT SUITABLE FOR THE BURNING



**ATTENTION : the continuous and protracted use of aromatic wood (eucalyptus, myrtle etc.) quickly damages the cast iron parts (cleavage) of the product.**

*The declared technical data have been achieved by burning beech wood class "A1" according to the requirement UNI EN ISO 17225-5 and wood moisture content less than 20%. By burning a different kind of wood the efficiency of the product itself could change and some specific adjustments on the appliance could be needed.*

## LIGHTING

After the first ignition you can smell bad odours (owing to the drying of the glue used in the garnitures or of the paint) which disappear after a brief using of the appliance. A good ventilation of the room should always be guaranteed.



To light the fire, it is suggested to use small wood pieces together with paper or other traded lighting means.  
**It is FORBIDDEN to use any liquid substance as for ex. alcohol, gasoline, oil and similar.**

Open the primary air completely.

When wood starts to burn, it is possible to feed it again by opening slowly the door, in order to avoid leaks of smoke, and close the primary air register and control the combustion through the secondary air register according to the provisions of chapter TECHNICAL DESCRIPTION.



**Please always be present during this phase.**

**Never overload the appliance** (see cap. TECHNICAL DESCRIPTION - Hourly consumption).

**Too much fuel and too much air for combustion can cause overheating and therefore damage the same.**

**Never switch on the device when there are combustible gases in the room.**

To perform a correct first lighting of the products treated with paints for high temperature, it is necessary to know the following information:

- the construction materials of the involved products are not homogeneous, in fact there are simultaneously parts in cast iron, steel, refractory material and majolica;
- the temperature to which the body of the product is subject is not homogeneous: from area to area, variable temperatures within the range of 300°C - 500°C are detected;
- during its life, the product is subject to alternated lighting and extinguishing cycles in the same day, as well as to cycles of intense use or of absolute standstill when season changes;
- the new appliance, before being considered seasoned has to be subject to many start cycles to allow all materials and paints to complete the various elastic stresses;
- in detail, initially it is possible to remark the emission of smells typical of metals subject to great thermal stress, as well as of wet paint. This paint, although during the manufacture it is backed at 250 °C for some hours, must exceed many times and for a given period of time the temperature of 350 °C before becoming completely embedded in the metallic surfaces.

Therefore, it is extremely relevant to take these easy steps during the lighting:

1. Make sure that a strong air change is assured in the room where the appliance is installed.
2. During the first starts, do not load excessively the combustion chamber (about half the quantity indicated in the instructions manual) and keep the product continuously ON for at least 6-10 hours with the registers less open than the value indicated in the instructions manual.
3. Repeat this operation for at least 4-5 or more times, according to your possibilities.
4. Then load more and more fuel (following in any case the provisions contained in the installation booklet concerning maximum load) and, if possible, keep the lighting periods long avoiding, at least in this initial phase, short ON/OFF cycles.
5. During the first starts, no object should be leaned on the appliance and in detail on enamelled surfaces. Enamelled surfaces must not be touched during heating.
6. Once the «break-in» has been completed, it is possible to use the product as the motor of a car, avoiding abrupt heating with excessive loads.



**After testing the proper working of the appliance, some days from the installation, it is possible to proceed with the construction of its aesthetic covering.**

**WARNING:** During the surround building operations it must kept in mind possible and subsequent electrical installed parts maintenance (Fans, temperature probe, etc) and with hydraulic systems all parts connected to the thermo-fireplace.

## LOW EMISSION FIRE LIGHTING

Smokeless combustion is a way of lighting a fire able to significantly reduce the emission of harmful substances. The wood burns gradually from the top downwards, so combustion is slower and more controlled. Burnt gases pass through the high temperatures of the flame and therefore burn almost completely.

Place the logs in the hearth a certain distance apart as shown in the **Picture 9**. Arrange the largest at the bottom and the smallest at the top, or vertically in the case of tall narrow combustion chambers. Place the fire starter module on top of the pile, arranging the first logs in the module at right angles to the pile of wood.

### Fire STARTER MODULE

This fire starter module replaces a paper or cardboard starter.

Prepare four logs, 20 cm long with a cross section of 3 cm by 3 cm **Picture 9**. Cross the four logs and place them on top of the pile of wood at right angles, with the fire lighter (wax impregnated wood fibre for example) in the middle. The fire can be lit with a match.

If you want, you can use thinner pieces of wood. In this case, you will need a larger quantity.

Keep the flue gas exhaust valve and combustion air regulator open (**1A - 2A**). After lighting the fire, leave the combustion air regulator open in the position shown in the Picture.

### IMPORTANT:

- do not add further wood between one complete load and the next;
- do not suffocate the fire by closing the air intakes;
- regular cleaning by a chimney sweep reduces fine particle emissions.

*These instructions are backed by ENERGIA Legno SVIZZERA [www.energia-legno.ch](http://www.energia-legno.ch)*

## NORMAL OPERATION

After having positioned the registers correctly, insert the indicated hourly wood load avoiding overloads that cause anomalous stresses and deformations. **You should always use the product with the door closed in order to avoid damages due to overheating (forge effect). The inobservance of this rule makes the warranty expire.**

With the registers located on the front of the device, it is possible to adjust the heat emission of the same. They have to be opened according to the calorific need. The best combustion (with minimum emissions) is reached when, by loading the wood, most part of the air for combustion flows through the secondary air register.



**Never overload the appliance. Too much fuel and too much air for the combustion may cause overheating and then damage the product.**

You should always use the appliance with the door closed in order to avoid damages due to overheating (forge effect).

The adjustment of the registers necessary to reach the rated calorific yield with a depression at the stack of Pascal (see chap. TECHNICAL DATA SHEET) is the following one: see chap. TECHNICAL DESCRIPTION. **The appliance works as an intermittent operating appliance.**

Besides the adjustment of the air for the combustion, the intensity of the combustion and consequently the thermal performance of the device is influenced by the stack. A good draught of the stack requires a stricter adjustment of air for combustion, while a poor draught requires a more precise adjustment of air for combustion.

To verify the good combustion, check whether the smoke coming out from the stack is transparent.

If it is white, it means that the device is not properly adjusted or the wood is too wet; if instead the smoke is gray or black, it signals that the combustion is not complete (it is necessary a greater quantity of secondary air).



**WARNING:** When fuel is added onto the embers in the absence of a flame, a considerable amount of fumes may develop. Should this happen, an explosive mixture of gas and air may form, and in extreme cases an explosion may occur. For safety reasons it is advisable to perform a new lighting procedure with the use of small strips.

## OPERATION DURING TRANSITION PERIODS

During transition periods when the external temperatures are higher, if there is a sudden increase of temperature it can happen that the combustion gases inside the flue cannot be completely sucked up.

The exhaust gases do not come out completely (intense smell of gas). In this case, shake the grating more frequently and increase the air for the combustion. Then, load a reduced quantity of fuel in order to permit a rapid burning (growing up of the flames) and the stabilization of the draught.



Then, check that all openings for the cleaning and the connections to the stack are air-tight. **In case of doubt, do not operate the product.**

## MAINTENANCE AND CARE

### ALWAYS FOLLOW THE INSTRUCTIONS IN COMPLETE SAFETY!

- Make sure that the power cord is unplugged (if present).
- That the generator is cold all over.
- The ashes are completely cold.
- Ensure efficient air exchange in the room during the product cleaning operations.
- Poor cleaning will compromise correct operation and safety!

## PERIODIC CLEANING UNDER USER'S RESPONSIBILITY

The periodic cleaning operations, as indicated in this use and maintenance manual, must be performed with the utmost care after reading the instructions, procedures and frequency described in this use and maintenance manual.

Check the external air intake, by cleaning it, at least once a year. The stack must be regularly swept by the chimney sweeper.

Let your chimney sweeper in charge of your area check the regular installation of the device, the connection to the stack and the aeration.



**IMPORTANT: THE MAINTENANCE AND CARE MUST BE CARRIED OUT ONLY AND EXCLUSIVELY WITH COLD DEVICE** .You should only use spare parts approved and supplied by **La NORDICA S.p.A.** . Please contact your specialized retailer if you require spare parts.  
**YOU MUST NOT MAKE ANY CHANGES TO THE DEVICE!!!**

## GLASS CLEANING

Thanks to a specific inlet of secondary air, the accumulation of dirty sediments on the glass-door is reduced with efficacy. Nevertheless this can never be avoided by using solid fuels ( particularly wet wood ) and it has not to be understood as a defect of the appliance.



**IMPORTANT: The cleaning of the sight glass must be carried out only and exclusively with cold device to avoid the explosion of the same.** For the cleaning, it is possible to use specific products or a wet newspaper paper ball passed in the ash to rub it.  
**Do not use cloths, abrasive or chemically aggressive products by cleaning the hearth glass.**

The correct lighting phase, the use of proper quantities and types of fuels, the correct position of the secondary air regulator, enough draught of the chimney-flue and the presence of combustion air are the essential elements for the optimal functioning of the appliance and for the cleaning of the glass.



**BREAK OF GLASSES:** Given that the glass-ceramic glasses resist up to a heat shock of 750°C, they are not subject to thermal shocks. Their break can be caused only by mechanic shocks (bumps or violent closure of the door, etc.). Therefore, their replacement is not included in the warranty.

## CLEANING OUT THE ASHES

All the devices are equipped with a hearth grating and an ash drawer for the collection of the ashes.

It is suggested to empty periodically the ash drawer and to avoid it fills completely in order not to overheat the grating. Moreover, it is suggested to leave always 3-4 cm of ash in the hearth.



**CAUTION: The ashes removed from the hearth have to be stored in a container made of fire-resistant material equipped with an air-tight cover. The container has to be placed on a fire-resistant floor, far from flammable materials up to the switching off and complete cooling.**

## CLEANING THE FLUE

The correct lighting phase, the use of proper quantities and types of fuels, the correct position of the secondary air regulator, enough draught of the chimney-flue and the presence of combustion air are the essential elements for the optimal functioning of the appliance.

The device should be completely cleaned at least once a year or every time it is a needed (in case of bad working and low yield). An excessive deposit of soot can cause problems in the discharge of smokes and fire in the flue.



**The cleaning must be carried out exclusively with cold equipment.** This operation should be carried out by a chimney sweeper who can simultaneously perform an audit of the flue (checking of possible deposits).

During the cleaning, it is necessary to remove the ash drawer, the grating, and the smoke deflectors from the device in order to ease the fall of the soot. The deflectors can be easily extracted from their seats since they are not fastened using screws. Once the clearing has been carried out, place them back in their seats (**Picture 11**).



**CAUTION: The lack of the deflectors causes a strong depression, with a too fast combustion, an excessive consumption of wood with related overheating of the device.**

## SUMMER STOP

After cleaning the hearth, chimney and hood, totally eliminating the ash and other eventual residues, close all the doors of the hearth and the relevant registers; in case you disconnect the appliance from the chimney you must close its openings in order to let work others possible appliances connected to the same flue.

We suggest performing the cleaning operation of the flue at least once per year; verifying in the meantime the actual status of the rope seals,

which cannot ensure the good operation of the equipment if they are not in good condition and are not making a good seal! In this case the seals must be replaced.

In presence of dampness in the room where the stove has been placed, we advise you to put absorbent salts into the hearth.



If you want to keep for long the aesthetic look of the cooker it is important to protect its internal walls in row cast iron with neutral Vaseline.

## ROUTINE MAINTENANCE PERFORMED BY QUALIFIED TECHNICIANS

**Routine maintenance must be performed at least once a year.**

Using wood as solid fuel, the generator requires annual routine maintenance, which must be performed by a **qualified technician, using only original spare parts.**

Failure to comply can jeopardise the safety of the appliance and make the warranty null and void.

Respecting the frequencies of cleaning reserved for the user described in the use and maintenance manual, the generator is guaranteed correct combustion over time, preventing any anomalies and/or malfunctioning that could require more interventions of the technician. Requests for routine maintenance are not contemplated in the product warranty.

### GASKETS

The gaskets guarantee the tightness of the stove and its consequent good functioning.

They must be controlled periodically. They must be replaced immediately if they are worn or damaged.

These operations must be carried out by a qualified technician.

### CONNECTION TO THE FLUE

Vacuum and clean the pipe that leads to the flue yearly or any time that it is necessary. If there are horizontal tracts, the residue must be removed before it can prevent the passage of the fumes.

## CALCULATION OF THE THERMAL POWER

There is not an absolute rule for calculating the correct necessary power. This power is given according to the space to be heated, but it depends also largely on the insulation. On an average, the calorific value necessary for a properly insulated room is **30 kcal/h per m<sup>3</sup>** (for an external temperature of 0°C).

Given that **1 kW corresponds to 860 kcal/h**, it is possible to adopt a value of **35 W/m<sup>3</sup>**.

Let's suppose one wishes to heat a room of 150 m<sup>3</sup> (10 x 6 x 2.5 m) in an insulated apartment. In this case, it is necessary to have 150 m<sup>3</sup> x 35 W/m<sup>3</sup> = 5250 W or 5,25 kW. As main heating, a 8 kW device is therefore sufficient.

		Approximate combustion value		Required quantity in relation to 1 kg of dry wood
Fuel	Unit	kcal/h	kW	
Dry wood (15% humidity)	kg	3600	4.2	1,00
Wet wood (50% humidity)	kg	1850	2.2	1,95
Wood briquettes	kg	4000	5.0	0,84
Brown coal briquettes	kg	4800	5.6	0,75
Normal anthracite	kg	7700	8.9	0,47
Coke	kg	6780	7.9	0,53
Natural gas	m <sup>3</sup>	7800	9.1	0,46
Naphtha	L	8500	9.9	0,42
Electricity	kW/h	860	1.0	4,19

## GUARANTEE TERMS

**1.** La Nordica S.p.A. products are guaranteed, within the European community, for 24 months from the date of purchase. Purchase has to be proved by means of a valid fiscal document issued by the seller (receipt, invoice or shipment document) identifying the purchased product and its purchase and/or delivery date.

**WARNING: This conventional guarantee does not replace the guarantee regulated by the European legislation on consumer rights.**

The conventional guarantee is only applicable to the Italian region and to those areas, within the European Community, where the Authorised Technical Assistance Centres are active (see the [www.lanordica-extraflame.com](http://www.lanordica-extraflame.com) website)

It is also limited to the state of residence of the consumer, which must coincide with the premises and/or registered office of the seller of the La Nordica S.p.A. product

These regulations do not apply if the product is purchased within commercial, entrepreneurial, or professional circumstances. In these cases the product guarantee will be limited to a period of 12 months from the date of purchase.

### ITALIAN GUARANTEE

What must be done if there is a product malfunction:

Consult the instructions manual to make sure the malfunction cannot be solved by using the product correctly. Make sure the malfunction is included in those covered by the guarantee; otherwise the cost of the intervention will be borne entirely by the consumer. When requesting the intervention of the Assistance service at the Authorised Assistance Centre, always specify: - type of malfunction - model of the appliance - complete address - phone number

### EUROPEAN GUARANTEE

What must be done if there is a product malfunction:

Consult the instructions manual to make sure the malfunction cannot be solved by using the product correctly. Make sure the malfunction is included in those covered by the guarantee; otherwise the cost of the intervention will be borne entirely by the consumer. Request the intervention of the Assistance service or the address of the Authorised Technical Assistance Centre to the seller; always specify: type of malfunction, model of the appliance, complete address and phone number

***If the malfunction arises in the first 6 months of the product's life, the consumer has the right to have the product repaired with no expense. From the seventh to the twenty-fourth month, if a malfunction arises, the consumer will bear the cost of the call, while the seller will pay for the manpower and for any spare parts used.***

**2.** If the malfunction is linked to external events and/or conditions such as, including but not limited to, insufficient capacity of the systems; wrong installation and/or maintenance by the personnel which hasn't got the skills prescribed by the laws of the country of residence of the consumer; negligence; inability to use the product and wrong maintenance by the consumer, with respect to what is reported and recommended by the instructions manual of the product, which is part of the sales contract, this guarantee will be void.

Damage to the product that cannot be related to manufacturing defects are also not included in this guarantee. Similarly are excluded defects related to incorrect operation of the flue, according to the legislation in force in the country at the moment of purchase. Other exclusions include all product defects due to carelessness, accidental breakdown, tampering and/or damage during transport (scratches, dents, etc.), interventions carried out by unauthorised personnel and further damage caused by incorrect interventions by the consumer trying to arrange the initial malfunction.

The following consumables are excluded by the guarantee: gaskets, ceramic or tempered glasses, cast iron grilles or coatings, refractory materials (e.g. Nordiker or others), painted, chrome-plated or golden parts, majolica ware, handles, the brazier and its related components. For Idro products the heat exchanger is not covered by the guarantee if a suitable condensation-proof circuit is not set up to ensure a return temperature of the device of at least 55°C. The guarantee excludes all the external components on which the consumer can directly operate during use and/or maintenance or that can be subject to wear and/or rust and stains on steel due to aggressive detergents.

If malfunctions are signalled which are not later confirmed during check by an authorised technician, the cost of the intervention will be borne entirely by the consumer.

**3.** If it is not possible to restore product conformity by repairing it, the product/component will be replaced, the guarantee expiration date and conditions will remain the same established when the product/component to be replaced has been purchased.

**4.** La Nordica S.p.A. cannot be held liable for injury or damage which may - either directly or indirectly - be caused to persons, animals and property ensuing from failure to observe all the instructions provided in the relevant instruction manual and the warnings regarding installation, use and maintenance of the product, that can also be downloaded on the website.

**5.** Interventions for adjusting and/or regulating the product for the type of fuel or other reasons are excluded by the guarantee.

**6.** If the product is repaired in one of the Authorised Technical Assistance Centres indicated by La Nordica S.p.A. and if the product is replaced, transport will be free of charge. If the technician can repair the product at the user's place of residence and they refuse, transport to the workshop and redelivery will be paid by the consumer.

**7.** After the 24 months of the guarantee have elapsed any repair intervention cost will be completely borne by the consumer.

**8.** In the case of disputes the only competent court is that of the La Nordica S.p.A. registered office - (Vicenza-Italy)

#### **ADDITIONAL WARNINGS**

- Only use the fuel recommended by the manufacturer. The product must not be used as an incinerator.
- Do not use the product as a ladder or supporting structure.
- Do not place laundry on the product to dry it. Any clothes-horse or similar objects must be kept at due distance from the product. Danger of fire or damage to the coating.
- The user is fully liable for any incorrect use of the product. The manufacturer bears no civil or criminal liability for incorrect use.
- Unauthorised tampering of any nature or replacement of spare parts of the product with non-original parts may endanger the operator and the manufacturer bears no civil or criminal liability for this.
- Large parts of the surface of the product can get very hot (door, handle, glass, smoke outlet pipes, etc.). Please therefore avoid coming into contact with these parts without wearing suitable protective clothing or using appropriate measures, such as heat protective gloves.
- DO NOT use the product with the door open or if the glass is broken.
- The product must be electrically connected to a system equipped with an operational earthing system.
- Turn off the product in the event of a failure or malfunctioning.
- Do not wash the product with water. Water may penetrate into the unit and cause faults in the electrical insulation. This can cause electric shocks.
- Installations not complying with the regulations in force, as well as incorrect use and failure to comply with the maintenance scheduled by the manufacturer, will invalidate the guarantee.