



EN - Installation, use and maintenance manual

EFREM 700 - 800 FLY
EFREM 700 - 800 CLASSIC



**WARNING****PERICOLO
DI
USTIONE**

SURFACES CAN BECOME **EXTREMELY HOT** - ALWAYS OBSERVE DUE PRECAUTIONS AND WEAR SUITABLE PROTECTIONS.

Dear Customer, Thank you for choosing a product from our range.

To make the most of the stove and all its features in total safety, we invite you to read this manual carefully before starting to use the product.

This manual contains all information necessary for correct installation, start-up, use, cleaning and maintenance of the product.

Keep this manual in a suitable place after reading it carefully.

Improper installation, maintenance or use of the product indemnify the Manufacturer from any liability deriving from damages caused to people or things.

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1 INTRODUCTION

The product by Nobis was designed and manufactured in compliance with the reference standards for the manufacturing products (EN 16510-2-1 wood stoves, EN 16510-2-6 pellet appliances, EN 16510-2-2 fireplaces/wood-burning inserts, EN 16510-2-3 wood-burning cookers), with high quality materials. The products also comply with the essential requirements of the Directive 2014/35/EU (Low Voltage) and the Directive 2014/30/EU (Electromagnetic Compatibility).

Printing, translation and reproduction - even partial - of this manual must be authorized by the manufacturer. Also, contents related to the product functioning and illustrations are not for reproduction. Always consult authorized technicians in case of doubts and/or perplexities about the functioning of the product.

The manufacturer reserves the right to modify specifications and technical and/or functional characteristics of the product at any time without prior notice.

1.1 SYMBOLS

This manual contains symbols highlighting the importance of particular descriptions or concepts:

	INFORMATION: Complying with the instructions contained in this manual guarantees the correct functioning of the product.
	WARNING: Symbol used to identify information of particular relevance.
	DANGER: This symbols require utmost attention, to guarantee user safety and product integrity.

1.2 INTENDED USE

The product covered by this manual is a fireplace for domestic use, fuelled exclusively by wood (manual loading).

The product is designed and built to work safely under the following conditions:

- installation performed by specialized technicians in compliance with specific reference standards;
- use within the limits stated on the product sheet and in this manual;
- compliance with the technical procedures described in the manual;
- carrying out ordinary maintenance as per instructions illustrated in this manual;
- timely execution of extraordinary maintenance in case of need (malfunctioning);
- activity and maintenance of safety devices (do not remove or deactivate these devices).

1.3 IMPROPER USE

The product must not be intended for uses other than that for which it was expressly made. Otherwise, the manufacturer cannot be held liable for any damages to people, animals or things.

"Improper use" means:

- using the product as an incinerator;
- using the product with fuel other than that described in the paragraph "Wood features";
- using the product with liquid fuels;
- using the product with the fire door open and/or broken glass and/or ash pan removed.

Any other use of the appliance other than that envisaged must be previously authorized in writing by the Manufacturer.

Furthermore, the Manufacturer declines any liability related to improper installation, adjustments, use and maintenance of the product.

1.4 IMPORTANCE OF THE MANUAL

This manual aims at providing the basic rules for proper installation, use and maintenance of the product.

STORAGE: Keep the manual in an easily accessible place;

DETERIORATION OR LOSS: Visit Nobis' official website to download a digital version;

TERMINATION OF USE: In case of private sale of the product, it is mandatory for the owner to deliver the generator together with this manual, as it is an integral part of the product.

1.5 GENERAL SAFETY WARNINGS

Failure to comply with the instructions in this manual can cause damage to people, animals or things.

- Installation, system check and product functional test must be carried out by qualified and authorized personnel only;
- The product must be connected to a single flue duct which guarantees the draft declared by the Manufacturer and which complies with the installation standards envisaged in the place of assembly of the same;
- The room where the product is installed must be suitably oxygenated (air intake);
- To avoid burns, always wear suitable safety equipment before touching the hot surfaces of the product;
- When in operation, the external surfaces of the product reach high temperatures;
- It is prohibited to make changes to the product unless expressly authorized in writing by the Manufacturer;



In the event of fire in the flue, contact the Fire Brigade immediately;

- The product cannot be used by a minor, a person incapable of giving consent, or by a person with reduced sensory, physical or mental capabilities. Furthermore, it must not be used by persons who, despite the aforementioned capacity, have not had adequate training on use and maintenance, or who - in any case - have not read this manual in its entirety.
- Children must be kept away from the generator, especially during operation and maintenance, and they must be prevented from accessing the product to play, even if the appliance is switched off and cold.
- Cleaning and ordinary maintenance which can be carried out by the user must not be performed by a minor, persons not capable of giving consent or persons with reduced sensory, physical or mental capabilities. Furthermore, it must not be carried out by persons who, despite the aforementioned capacity, have not had adequate training on use and maintenance, or who - in any case - have not read this manual in its entirety.



- Do not place clothes or linen on the product, neither dry nor wet. - **Fire hazard**;
- Any combustible or heat-sensitive material (e.g., sofas, tables, chairs, curtains, etc.) must be kept at a safe distance from the product (see the table in the "Safety distances" chapter for further information) - **Fire hazard**.
- Do not place the drying rack in front of the generator at a distance lower than that indicated in the "Safety distances" chapter - **Fire hazard**.
- While in operation, the product's fireplace door must always be closed;
- The product must be electrically connected to a system equipped with an effective earthing system;
- Do not touch the generator if you are barefoot and/or with wet and/or damp parts of the body;
- Do not pull, disconnect, or twist the electric cables connected to the product - where present - even if disconnected from the power grid, and avoid contact with hot parts and/or smoke outlet;
- The product can be installed in a suitable room with a minimum volume of 50 m³.
- For the non-airtight product, it is prohibited to install the product in bedrooms, bathrooms, toilets and studio apartments;
- It is prohibited to install the product in environments with explosive atmosphere, places exposed to fire hazard, warehouses of combustible materials.
- Installation in rooms for which there is no heating/ not to be heated is not permitted;
- Check the product for any clogging before using it following a long period of non-use.

1.6 LEGAL WARRANTY

In order to enforce the legal guarantee, the user must scrupulously observe the instructions

indicated in this manual. In particular, the user must:

- always operate within the limits of use of the product;
- carry out routine maintenance in due time;
- authorize use to people of proven ability, aptitude and adequately trained for the purpose;
- use original spare parts specific for the product model.

It is also necessary to provide the following:

- fiscal receipt proving the date of purchase;
- certificate of conformity of the installation, issued by authorized staff.

Failure to comply with the instructions contained in this manual will result in immediate forfeiture of the warranty, both of the product and of any spare parts fitted at a later time.

1.7 WARRANTY EXCLUSIONS

All malfunctions and/or damage to the appliance due to the following causes are excluded from the warranty:

- damage caused by transport and/or handling;
- negligence, careless use, improper maintenance, or installation which does not comply with the manufacturer's specifications (always refer to this manual);
- further damages caused by wrong interventions by the user in an attempt to remedy the initial malfunctioning;
- increased damage caused by further use of the appliance by the user once the defect has occurred;
- in the presence of hydronic generators, any corrosion, encrustations or due to stray currents, condensation, aggressive or acid water, improper descaling treatments, lack of water, mud or limescale deposits;
- damage deriving from using the product as a chafing dish;
- inefficiency of chimneys, flues, or parts of the system on which the appliance depends and which generate condensate;
- damage caused by tampering, atmospheric agents, natural disasters, acts of vandalism, electric shocks, fires, defects in the electrical and/or hydraulic system;
- damage caused by prolonged excessive fuel load (see the paragraph "Wood features" for more information).

The following are also excluded from the product warranty:

- parts subject to normal wear and tear such as gaskets, glasses, coverings and cast-iron grids, painted, chromed or gilded details, handles, electric cables, lamps, ignition resistors, lights,

knobs, and all parts that can be removed from the hearth (e.g., refractory panels, brazier, baffle) and/or directly exposed to fire;

- colour changes in the paint of ceramic parts, as well as cracks of the ceramic, as they are natural features of the material and naturally deriving from normal use;
- masonry;
- other system details (if any) not supplied by the manufacturer.

Any technical interventions aimed at restoring the product must be agreed with the Authorized Technical Assistance Centre, which reserves the right to accept the assignment or not. Technical interventions are subject to fees according to the rates in force.

Moreover, any expenses needed for remedying incorrect technical interventions, tampering or, in any case, factors harmful to the appliance and not attributable to manufacturing defects will also be charged to the user.

Without prejudice to the limits imposed by laws or regulations, any guarantee of containment of atmospheric and noise pollution is also excluded.

1.8 SPARE PARTS

Use only original spare parts.

Do not wait for components to wear out before replacing them.

In the event of product malfunction, this helps to prevent accidents caused to people, animals or things.

To replace spare parts, consumables, and to carry out extraordinary maintenance, it is recommended to contact an authorized technician.

1.9 IDENTIFICATION PLATE

An identification plate, to be found on the back of the product, shows all the product technical information, including the Manufacturer's data, serial number and CE marking.

1.10 PRODUCT DISPOSAL

Responsibility for the demolition and disposal of the product is borne solely by the owners, who must act in compliance with the laws in force in their country with regard to safety and environmental protection.

At the end of its useful life, the product must not be disposed of together with municipal waste.

It can be delivered to the local separate waste collection centres provided by the municipal administrations, or to the retailers providing such service.

Disposing of the product through separate waste collection helps to avoid possible negative consequences for both environment and health

which can derive from inappropriate disposal. This also allows the recycling of materials and obtain significant savings in terms of energy and resources.

1.11 HERMETIC PRODUCT

The products built with a perfectly air-tight structure do not consume room oxygen, as they take the air from outside the building (if properly installed) and can, therefore, be placed inside all houses with a high degree of insulation, such as "passive houses" or highly energy-efficient. Thanks to such technology, there is no risk of smoke emissions into the environment and, therefore, there is no need for ventilation grids.

Hermetic products can also be installed in the presence of forced ventilation or in rooms where pressure can be lower if compared to the outside.

2 WOOD FEATURES



For the products in the range, the Manufacturer prescribes the use of certified class A1+ or A1 fuel, in compliance with UNI EN ISO 17225-5:2014 standard.

Permitted fuels: wood logs. Only dry wood logs (max. water content: 20%) must be used. It is recommended to use long-lasting essences such as beech, oak or elm. *Avoid very aromatic essences or essences with high content of resin (myrtaceae, eucalyptus, pine, fir) which can cause problems, even serious ones, to the product.*

When choosing the size of the wood to be purchased, refer to the dimensions of the combustion chamber. For further information, see the chapter dedicated to wood loading, ignition and product operation.

Suggested fuel: BEECHWOOD

- calorific value: about 4.6 kWh/kg;
- ideal humidity level: from 15% to 20%;



Wood logs must be stored in a dry and not excessively cold place. It is also advisable to keep a quantity of wood logs sufficient for 2/3 days of operation in the room where the product is used, so as to allow any moisture present to dry out. Neglecting this aspect will result in lower efficiency of the fuel and, as a consequence, more maintenance to be carried out.



Should you decide to use pressed logs, be careful, as they have a high calorific value, which can damage the product by overheating.

Prohibited fuels

We recommend not to use the following fuels, as they could be harmful to health and environment, thus **invalidating the warranty**:

- very damp wood
- treated wood (chipboard, lacquered, varnished, glued, etc.)
- treated paper and cardboard (varnished, oiled, impregnated kitchen paper, etc.)
- woodworking residues, such as shavings and/or sawdust
- liquid fuels
- coal and other fossil derivatives
- rubbish, plastic and/or - more generally - anything that releases toxic and polluting substances through combustion.
- Fruit pits, pomace, corn, shells, mixtures of the above with wood pellets, pellets NOT produced with sawdust only.

3 INSTALLATION



Installation and use must take place in compliance with all the respective ISO, EN, UNI reference standards in force and pursuant local and national laws.

Product installation and its connection to both the flue and heating systems must be carried out by a qualified technician, according to the laws in force (in Italy, e.g., see Ministerial Decree 37/08 and subsequent amendments, and Legislative Decree 28/11 and subsequent amendments).



The manufacturer is not liable for any claim for compensation for damages due to installation which does not comply with the technical standards and all the legislative provisions in force, or for installation carried out non-competent and non-authorized persons, as indicated in the previous paragraph.

3.1 INSTALLATION ROOM

- Product position (before assembly) must be chosen according to the following: installation environment; presence of a suitable flue or its possibility to build one; presence of a compliant electrical system; according to the presence of an aeraulic or hydraulic system (if applicable); the possibility to have direct, indirect ventilation or air ducting (if applicable).
- The room must be suitable for installation (see also the technical standards in force, e.g., UNI10683). It must not be: a room exposed to the risk of fire, a potentially dangerous room, a deposit of combustible material, a non-heatable room (should the appliance heat the installation room).
- Evaluate the attic/floor capacity before placing the product. If the existing construction does not

meet this requirement, appropriate measures should be taken (e.g., installing a load distribution plate). It is recommended to consult a professional on the subject.

- The installation room must have a minimum volume of 50 m³
- Minimum safety distances for fire prevention must be taken into consideration when installing the appliance in the room. In the presence of combustible materials and/or heat-sensitive materials (furniture, curtains, sofas, wooden walls and surfaces, building insulation, etc.) adjacent to the generator, minimum free space must be observed as per values shown in the relevant table of the "Safety distances" chapter.
- The use of a protective platform made of suitable material (steel, glass...) is required. Such platform must also protect the front part from any falling combustion materials during loading/cleaning operations;
- The installation of the appliance must take into consideration any presence of other heat generators or suction systems (e.g., hoods, extractor fans, etc.) for the following purposes:
 - summation of the powers, for fire-prevention purposes;
 - possible coexistence, e.g., with non-airtight gas-and/or diesel-fuelled appliances (see technical standard UNI10683). It is prohibited to install non-airtight biomass appliances in rooms connected with other premises where there is a type A or type B gas or diesel generator;
 - suitability assessment of the direct and/or indirect room ventilation system to serve the suction systems and appliances installed;
- The installer must analyse the technical specifications of the appliance to verify its compatibility with the energy requirements of the room(s) served and the coexistence with any other appliances.

3.2 VENTILATION - AMBIENT AIR INTAKE

- The installation room of non-hermetic appliances must be sufficiently ventilated with special openings, with particular attention to their position, which has to ensure air to recirculate. Remember that non-hermetic appliances feed the fire by consuming the oxygen present in the installation room.
- Ventilation is considered sufficient when the room is equipped with air intakes according to the table:

APPLIANCE CATEGORY	REFERENCE STANDARD	% NET CROSS-SECTION COMPARED TO STOVE SMOKE OUTLET CROSS-SECTION	VENT. DUCT OPENING MIN. NET VALUE
Fireplaces	UNI EN 16510-2-2:2022	50%	200 cm ²
Stoves	UNI EN 16510-2-1:2022	50%	100 cm ²
Cookers	UNI EN 16510-2-3:2022	50%	100 cm ²
Pellet stoves	UNI EN 16510-2-6:2022	-	80 cm ²
Pellet boilers	UNI EN 303-5	-	6cm2 x kW

- If the ventilation intake is made in an adjacent room directly connected with the outside, the hole between the ventilation room and the installation room must be doubled at each passage (see UNI10683). The hole to the external environment must be equal to what is prescribed in the previous point. Pay attention to any other suction systems to prevent that negative pressure occurs in the ventilation room and/or installation room.
- The maximum pressure difference allowed between the outside and the installation room is always and in any case 4Pa (that is, room negative pressure).
- Ventilation air for the installation rooms cannot be taken from rooms exposed to the risk of fire, e.g., garages, bedrooms, bathrooms and toilets, shared premises.
- Combustion air cannot be drawn from crawl spaces, or from less than half a metre from the return/delivery vents of the crawl spaces.
- Ventilation holes can be closed with grids as long as they do not reduce their useful section, and do not hinder ordinary maintenance operations.
- The ventilation inlets must NEVER be obstructed by any type of material, not even partially, which could jeopardize the occupants' health.
- The ventilation outlets must comply with the relevant technical standards and any current local and national regulations, specifically with regard to their section, position, type and characteristics.
- Ventilation holes are not made necessary in the case of installation of airtight appliances (which are equipped with their specific ventilation duct).
- In the presence of a CMV system (Controlled Mechanical Ventilation), installation with combustion air drawn from the installation room is not permitted - see the "Ventilation ducting" chapter;
- The manufacturer is not liable for any claim for compensation for damages due to non-compliant installation of the ventilation outlets with respect to the above, and to the technical standards and all the legislative provisions in force.

3.2.1 VENTILATION DUCTING

- To channel combustion air from the outside to a traditional appliance or, in case of airtight installation (hermetic appliance), it is necessary to install a ventilation duct.
- The ventilation duct must have a section equal to or greater than the combustion air connection of the appliance.
- The ventilation duct must have the same section along its entire length. Narrowing the duct is only allowed at the generator inlet;
- The ventilation ducts and relative grids must comply with the technical standards and any current local and national regulations, specifically with regard to their section, position, type and characteristics.

- The manufacturer is not liable for any claim for compensation for damages due to non-compliant installation of the ventilation ducts with respect to the above, and to the technical standards and all the legislative provisions in force.
- In the presence of a CMV system (Controlled Mechanical Ventilation) the installation of hermetic appliances or appliances with a closed hearth is permitted as long as combustion air is drawn directly from the outside via a ventilation duct.

3.3 SMOKE CHANNEL AND FITTINGS

The term "smoke duct" refers to the set of pipes and elements connecting the appliance to the chimney/flue to convey the products of combustion towards the outside.

Smoke ducts are very important sections that must be installed correctly for the whole system to work correctly.

- All smoke ducts must be sized using a thermo-fluid dynamic calculation, in compliance with EN13384-1;
 - Smoke ducts must be installed in compliance with Technical Standard UNI10683;
 - Metal ducts must comply with Product Standard EN1856-2;
 - The sub-horizontal sections must have a minimum upward slope of 3%;
 - The length of the sub-horizontal section must be minimal and its floor projection must not exceed 2 m;
 - There cannot be more than 3 changes in direction, including that of the chimney/flue connection and, in the case of appliances with rear outlet, excluding the T-joint or bend at the generator connection. Changes in direction must not have an angle greater than 90° (bends of max. 45° are recommended);
 - The section diameter must be constant or greater from the fireplace outlet to its connection with the flue;
 - It is prohibited to use flexible metal pipes, even non-telescopic ones;
 - The smoke duct for appliances equipped with a smoke fan must ensure the seal of the combustion products and have the seal class at minimum pressure P1;
 - In any case, the smoke ducts must seal any combustion products and condensate, as well as be insulated if they present sections extending outside the installation room;
-  With regard to the smoke duct, it is necessary to create a first vertical section, at least 1 metre long, to guarantee proper fume discharge;
- The smoke ducts must not cross rooms in which the installation of combustion appliances is prohibited, rooms at risk of fire, fireproof rooms, rooms exposed to a specific risk of fire, or non-inspectable spaces;
 - The smoke duct must maintain, throughout its length, safety distances from flammable materials

as per specifications given by the smoke duct manufacturer.

- It is prohibited to install manual draft adjustment devices on forced draft appliances;
- It is necessary to provide the sampling point for both draft measurement and fume analysis, as per standards UNI10683 and UNI10389-2.

3.4 FIREPLACE/FLUE

The term chimney/flue refers to the section of the smoke exhaust system going from the connection to the generator or smoke duct up to the roof.

When building the chimney/flue, the following requirements must be applied:

- Metal ducts must comply with product standard EN 1856-1;
- All chimneys/flues must be sized using a thermo-fluid dynamic calculation, pursuant EN13384-1.
- Chimneys/flues must be installed according to technical standard UNI10683. Both chimney systems and internal flue ducts are permitted.
- Operation under positive pressure is not permitted. Chimney systems and internal flue ducts must operate with negative pressure with respect to the environment, as per product technical data sheet.
- The flue must be made with suitable materials to guarantee resistance to normal thermal and mechanical stress, it must have suitable resistance to corrosion caused by solid fuels, and be properly insulated to avoid condensation (i.e., thermal insulation);
- The flue must be predominantly vertical and free of bottlenecks along its length;



- Be properly spaced by air gap and isolated from flammable materials. In the case of installation of a composite chimney, to verify surface temperatures for fire-prevention purposes, the thermal calculation must be performed in compliance with EN15287;

- If a chimney system is installed, safety distances from flammable materials must be assessed as per the product designation given in the CE marking, in the DoP and on the chimney plate;
- Changes of direction must be max. 2 and with an angle not exceeding 45°;
- The flue inside the house must in any case be insulated, and can be inserted in a shaft, provided that it complies with the regulations relating to ducting;
- The smoke duct must be connected to the flue by means of a "T" fitting equipped with an inspectable collection chamber (necessary for collecting combustion residue and, above all, condensate);
- The chimney/flue must expel smoke above the roof, as required by the standard UNI10683.



- It is prohibited to connect the appliance to a fireplace/flue shared with other appliances or in the presence of extractor hoods or other aspirators. Collective flues are not permitted. It is forbidden to expel exhaust directly from the wall or into closed

spaces, or in any other way not envisaged by the legislation in force in the country of installation (e.g., in Italy, only roof outlet is permitted).

- It is possible to use the air from the interspace of the chimney stack, in compliance with the provisions of UNI10683;
- In case of multiple ducting, avoid mutual interference and pay attention to the pressures, distances and coexistence of the various ducts, in compliance with standard UNI10683;
- In case of wet operation, set up the condensate drainage system by scrupulously following the provisions set by standard UNI10683;

3.5 CHIMNEY TOP

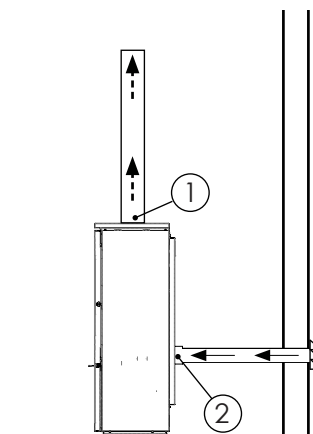
UNI10683 prescribes that the chimney pot must comply with the following requirements:

- The smoke outlet section must be at least double if compared to the internal section of the chimney;
- It must be shaped in such a way as to prevent water or snow from penetrating;
- A windproof cap must be provided to ensure proper smoke outlet even in case of wind;
- The smoke outlet level (which is measured between the lower side of the roof covering and the lower point of the fume outlet section) must be outside the reflux area;
- It must always be placed away from antennas or satellite dishes, and must never be employed to support other objects;
- It must ensure regular maintenance;
- It must be installed at a safe distance from other chimneys, or obstacles with and without openings (e.g., doors, windows, dormer windows, skylights, etc.), in compliance with UNI10683.

3.6 HERMETIC PRODUCT INSTALLATION

In case of hermetic products, you can follow the example below:

fume exhaust (1) and recovery of combustion air directly from the outside (2)



3.7 EXAMPLES OF PROPER INSTALLATION

Always refer to the standard UNI 10683 when product installation has to be carried out by a qualified professional, who is required to issue the INSTALLATION CERTIFICATE OF CONFORMITY on the whole Italian territory. Examples: (A) horizontal section needed for connection to an existing flue. Observe a minimum upward slope (3-5%) to reduce the quantity of ash deposit in the horizontal section of the pipe - which must not exceed 2m (1). The existing flue must be inspectable (2).

The installation of the product (B) requires an insulated flue (3), as the entire smoke pipe has been mounted outside the building.

Example (C) shows a single-wall smoke duct (4) for the indoor section. With regard to the part located in the attic, outside the room where the generator is installed, it is necessary to install an insulated section, with double crossing of the slab and the roof; the passing holes of the pipe must respect the minimum safety distances indicated on the labels of the sections of the flue pipe itself, paying attention to the possible contact with the material crossed, as is the case with:

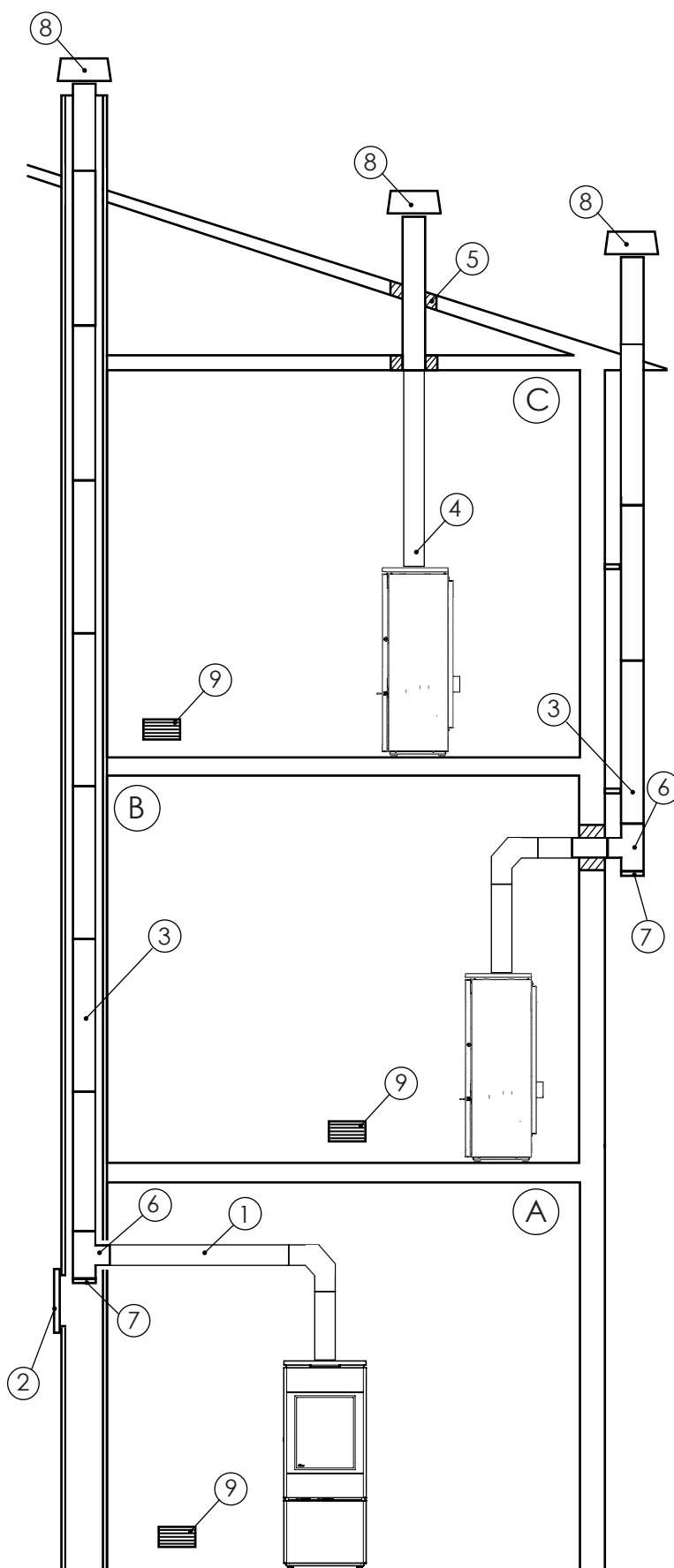
- if in contact with concrete, bricks, etc.;
 - if in contact with wood, composite materials, etc.
- In both cases, insert a suitable roof passage (5) between the flue and the attic.

It is recommended to check and respect the data on the flue plate, paying particular attention to safety distances from combustible materials.

The previous rules also apply to connection holes drilled on the wall.

In the lower part of the flue pipe, a "T" type connector (6) with inspection plug (7) has been fitted for the all the types of installation.

In the upper part of the flue, for all 3 examples, a windproof chimney pot (8) has been mounted. For all the 3 types of installations, a grate (9) has been provided to ensure good oxygenation of the room where the product has been placed. In case of hermetically sealed appliance, equipped with direct outdoor connection of the air-intake system, a grate is not required.



3.8 DOCUMENTS TO BE ISSUED

After installation, the installer must hand over to the user the following:

- use and maintenance manual of the appliance (supplied by the manufacturer);
- technical documents of the accessories used and subject to maintenance;
- the documentation relevant to the evacuation system of combustion products;
- System booklet;
- the documentation certifying installation and functional test;

The useful documentation for the installer's liability must include:

- a detailed description (also including photographs) of the presence of other heat generators;
- Declaration of Conformity of the system to standard (M.D. 37/08);
- general description, or diagram, or photographic documentation of the changes made to the system, if intervention was necessary during installation;
- Use of certified material with the CE mark (305/2011);
- any other relevant information useful for warranty purposes;
- date and signature of the installation technician;

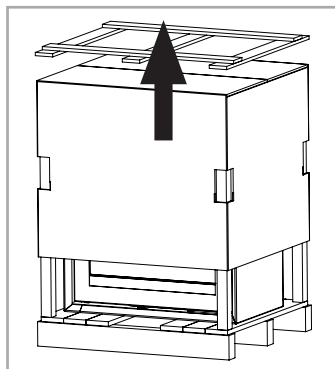


NOBIS SRL cannot be held liable in the event of non-compliance with any installation and startup standards.

3.9 UNPACKING THE PRODUCT

The packaging is composed of boxes in recyclable cardboard, according to RESY standards, and wooden pallets. All packaging materials can be re-used for similar use or, if necessary, disposed of as urban waste, in compliance with legislation in force.

Cut the strap binding the pallet to the packaging and lift the cardboard; remove the plastic bag around the product, ensuring it is intact.



The body must always be moved in a vertical position using trolleys.

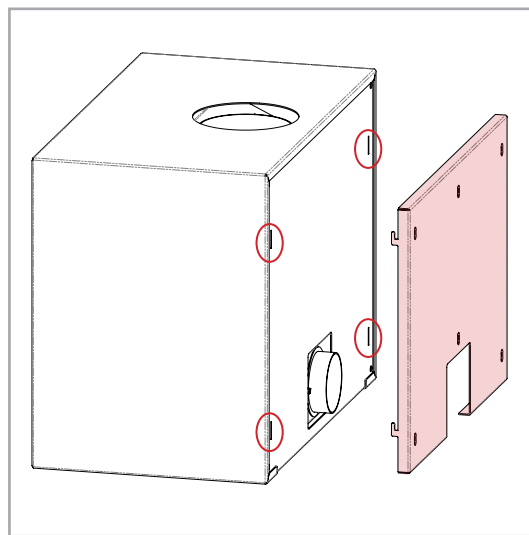
Pay particular attention so that the door and its

glass are protected against mechanical impacts which would compromise their integrity.

If possible, unpack the product near the area where it will be installed.

EFREM 700 - 800 FLY

Fix the support to the wall using 6 M8 anchors, taking into account that the product weighs approximately 80kg. If necessary, use chemical anchors.



Once the structure has been fixed to the wall, insert the 4 hooks into the appropriate slots and hook the product.

If you want to install the air intake directly outside, connect the pipe to the flange of the appliance.

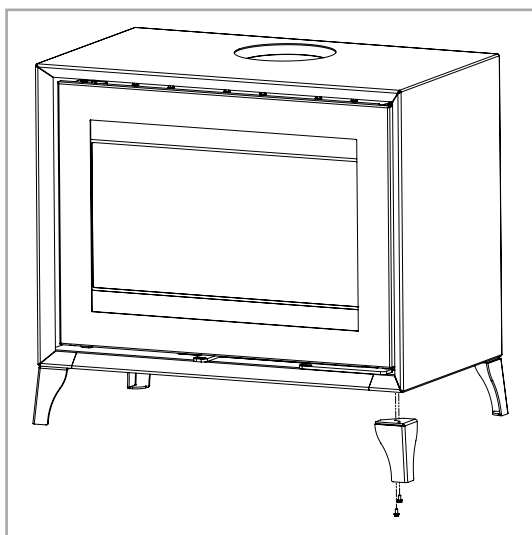


If you want to take air from the room, it is necessary to remove the flange, as the air intake would close when in contact with the wall, hindering the passage of oxygen needed for combustion.

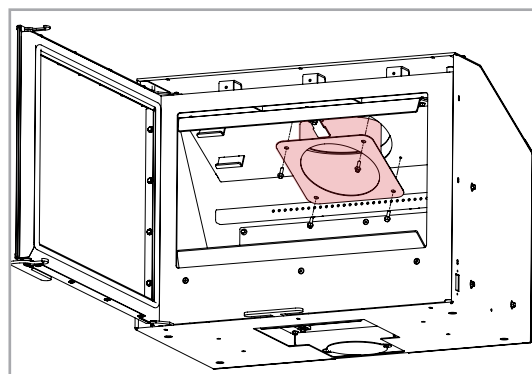
EFREM 700 - 800 CLASSIC

Fix the 4 feet to the base of the product using the 8 mm wrench (both feet and screws are supplied with the appliance).

Fix the 4 feet to the base of the product using the 7 mm wrench (both feet and screws are supplied with the appliance).



Place the appliance and connect it to the flue pipe.



PAY ATTENTION TO THE SECTION OF THE SMOKE DUCT, WHICH MUST WITHSTAND TEMPERATURES THAT CAN EASILY REACH 600°C. NEGATIVE PRESSURE IN THE SMOKE EXHAUST SYSTEM MUST RESPECT THE VALUE OF 12Pa.

3.10 FUME EXHAUST ASSEMBLY

Below you will find the instructions for proper installation of the upper smoke outlet.

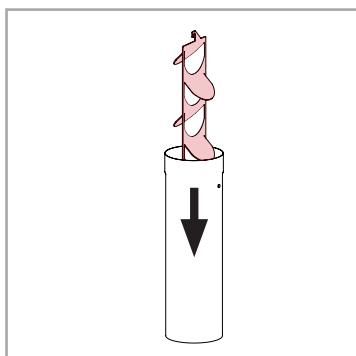


This chapter also deals with non-standard installation options. Pipes for non-standard installations are not provided and have to be purchased from your trusted dealer/assistance centre.



Installation, disassembly/reassembly of the appliance must be carried out by qualified personnel authorized by Nobis Srl. Please note that opening the appliance by unauthorized personnel will invalidate the product warranty.

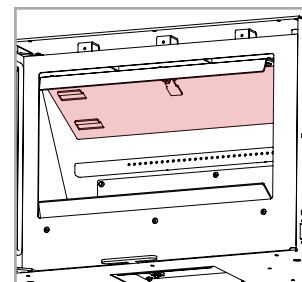
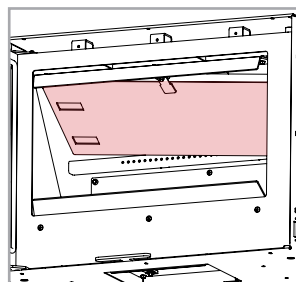
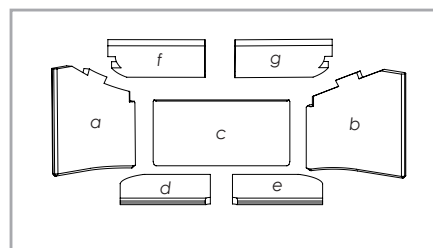
After placing the turbulator, install the pipe (supplied with the product) as the last section of the smoke channel before the connection to the insert.



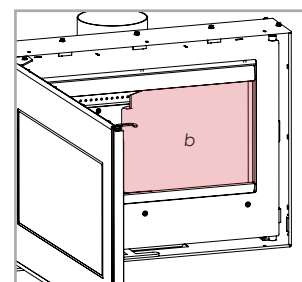
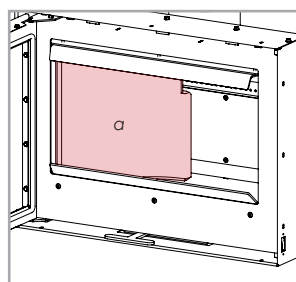
For easier installation of the appliance, the collar connecting the product to the smoke duct can be assembled either before or after placing the product in the shaft. Open the product door and fix the collar using 4 M5 x 16 hex head screws.

3.11 CERAMIC REFRACTORY PANEL ASSEMBLY

Below you will find the instructions for proper installation of the ceramic refractory panel.

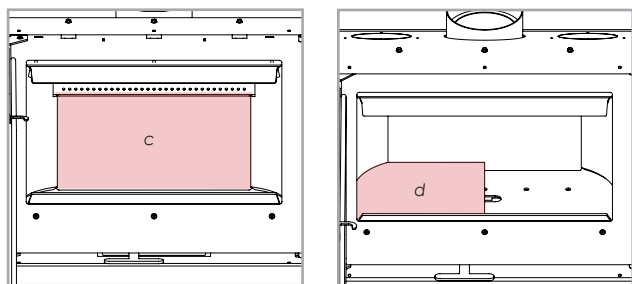


After installing the collar for connection to the smoke duct, mount the rectangular plate (supplied with the product), tilting it and then sliding it into the 4 support hooks to prevent it from moving.

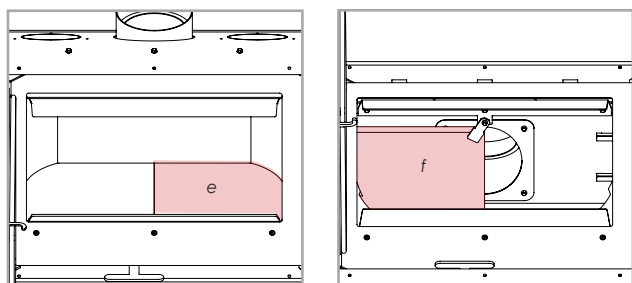


Take the left (a) and right (b) refractory panels out

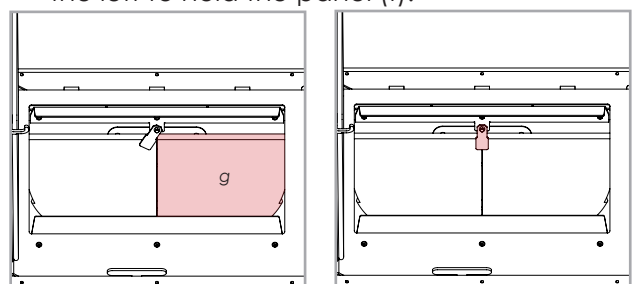
of their packaging and place them at the bottom of the combustion chamber, turning them slightly outwards to ease the insertion of the central panel (c).



Place the central panel (c) at the bottom of the combustion chamber, and turn the left (a) and right (b) panels back again to block it. Place the refractory flat panels (d) and (e).



Place the upper refractory panel (f) so as to make it fit between panels (a) and (c). Turn the flap to the left to hold the panel (f).



Place the upper refractory panel (g) so as it fits with panel (f) when placing panels (b) and (c). Turn the flap back to central position to complete the assembly.

4 TESTING AND MAINTENANCE

Testing and maintenance operations, with the exception of ordinary cleaning (see related section in this manual), must be carried out by an authorized technician. Before carrying out any operation on the product, take the following precautions:

- all parts of the product must be "cold";
- make sure that there is no form of combustion (e.g., ash and embers still hot);
- dump the ash into a metal container;

- always use protective devices;

4.1 TESTING AND START-UP

Before starting up the product make sure to test proper functioning of the following elements: connection to the smoke exhaust system; check that all the materials for the construction of the smoke duct, flue and chimney pot are compliant with the law and fit for use. The test is successful only when all the operating parts have been verified without detecting anomalies.

4.2 CHIMNEY SYSTEM MAINTENANCE

The flue pipe must always be clean, as deposits of soot or unburned residues can clog its section, thus reducing draft and compromising proper functioning of the product. Moreover, if present in large quantities, they can catch fire. It is mandatory to have the flue and chimney pot cleaned and checked by a qualified chimney sweep at least once a year or after a prolonged inactivity. At the end of the check/maintenance, get a report certifying that the system is safe.

Neglecting to clean the product jeopardizes the safety of the system.

4.3 PRODUCT MAINTENANCE

To be done at least once a year. During maintenance, the authorized technician will have to:

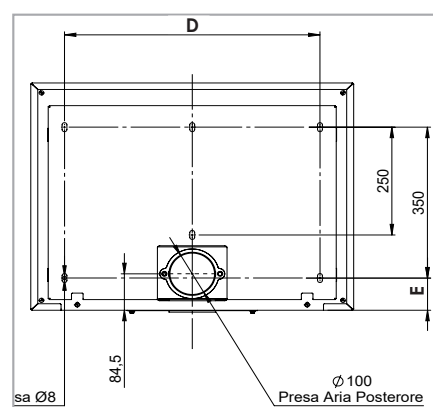
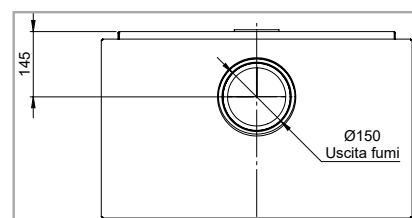
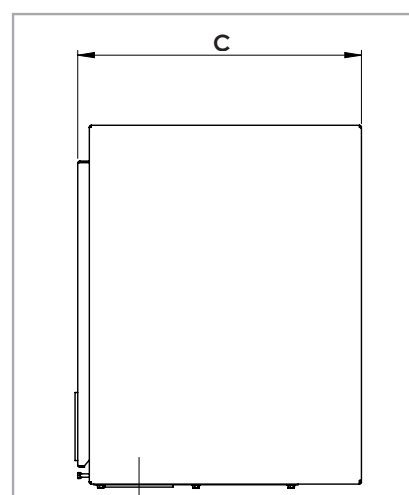
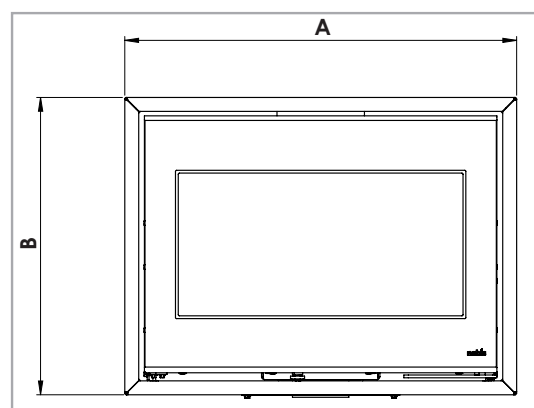
- carry out a complete and thorough cleaning of the smoke duct;
- reassemble the appliance in all its parts;
- check the tightness of all seals and gaskets;
- check proper functioning and combustion.

5 PRODUCT TECHNICAL DATA

This chapter provides the end user with all the information relating to the technical data of the product: overall dimensions, installation dimensions and minimum mandatory distances to be kept from walls, furniture and any flammable objects that can be found in the premises where the product is installed.

5.1 PRODUCT DETAILS

PRODUCT DETAILS		
EU 2015/1186		
Brand	Nobis	
Model	EFREM 700 FLY EFREM 700 CLASSIC	EFREM 800 FLY EFREM 800 CLASSIC
Energy efficiency class	A+	A+
Direct heating output (kW)	8.5	9.7
Indirect heating output (kW)	-	-
Energy efficiency index	114	114
Useful efficiency (rated pwr. %)	85.9	85.2
Please observe the warnings, installation procedures and guidelines for regular maintenance contained in this manual.		



5.2 TECHNICAL FEATURES

Model	EFREM 700 FLY / CLASSIC	EFREM 800 FLY / CLASSIC
Product weight (Kg)	80	90
Ø air inlet (mm)	100	100
Ø smoke outlet pipe (mm)	150	150
Heating max. vol.* (m³)	209	238
Input power (kW)	10.0	11.4
Output power (kW)	8.5	9.7
Yield (%)	85.9	85.2
CO with 13% of O ₂ (mg/m³)	602	602
Wood hourly consumption (kg/h)	2.36	2.67
Exhaust gas flow (g/s)	6.8	7.8
Min. draft (Pa)	12	12
Smoke temperature (°C)	251	262

* this value may vary from the type of energy class of the house and from the type of pellets used.

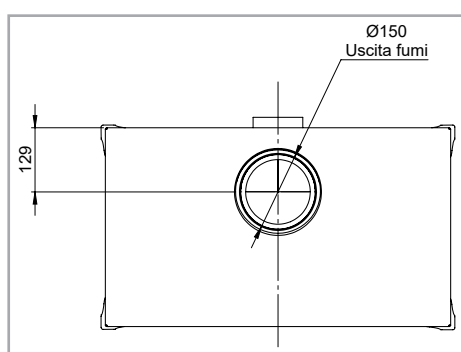
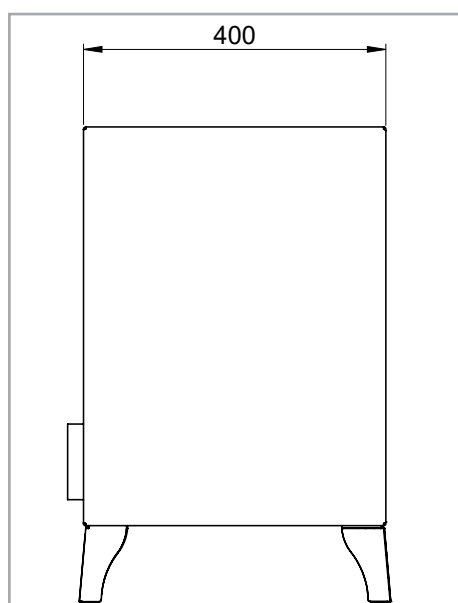
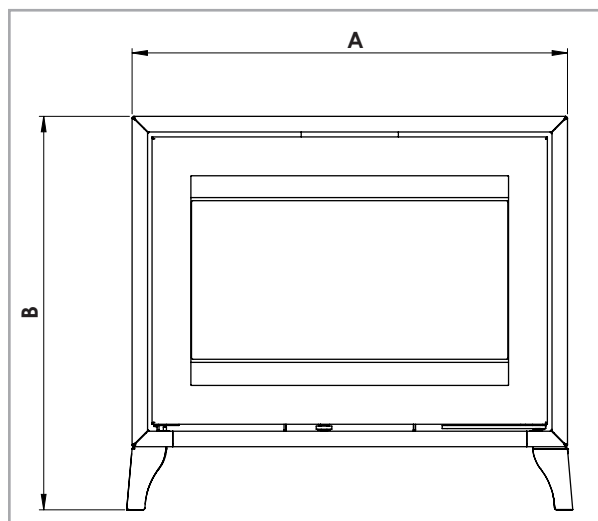
The data shown are indicative and not binding. Also, they may vary depending on the type of wood used. The manufacturer reserves the right to make any modifications to improve the performance of the products.

5.3 PRODUCT DIMENSIONS

EFREM 700 - 800 FLY

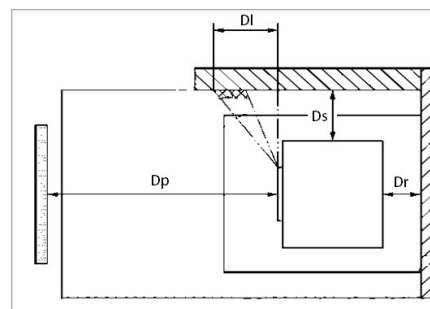
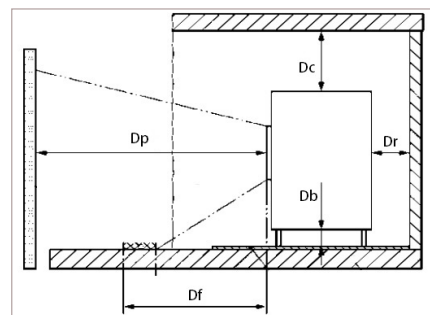
FLY	A	B	C	D	E
EFREM 700	695	530	415	550	75
EFREM 800	795	590	417	650	135

EFREM 700 - 800 CLASSIC



CLASSIC	A	B
EFREM 700	695	630
EFREM 800	795	690

5.4 SAFETY DISTANCES



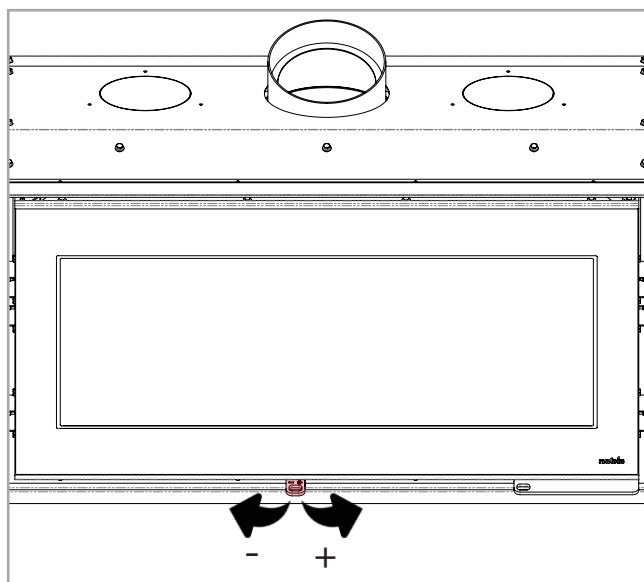
Fire safety - protection of combustible materials		
Dc	Ceiling	>750 mm
Dp	Front	900 mm
Df	Front on floor	380 mm
Db	Back	0 mm
DI	Side radiation	410 mm
Ds	Side	400 mm
Dr	Rear	150 mm

6 OPERATING PROCEDURES

This chapter shows how to best operate the product: ignition and optimal combustion adjustments.

6.1 COMMAND FUNCTIONS

The air supply for combustion is controlled by a valve operated by its specific control handle. Therefore, it is possible to control oxygenation with one single handle both when igniting the product and adjusting combustion. When igniting the product, the combustion chamber needs to get as much air as possible, i.e., the lever has to be fully turned to the right (+). When combustion has propagated completely, the air intake can be delicately closed by sliding the lever (-) to the left.



Likewise, while the product is functioning, the air intake is fully open when the handle is turned to the right (+), and it can be reduced when the handle is turned to the left (-).

To verify proper combustion, check the colour of the flame. If the flame tends to darken, generating soot in the combustion chamber and black puffs of smoke, this is an indicator of bad combustion due to lack of air. To improve combustion, it will, therefore, be necessary to add air by turning the lever to the right (+).

Please also note that the logs must measure max. 50cm in length and no more than 8cm in diameter; wood humidity must be less than 18-20%.

6.2 PRODUCT SWITCH-ON

This chapter highlights a series of operations to be carried out when switching on the appliance for the first time.



When the product is switched on for the first time, unpleasant odours or fumes may be generated due to the evaporation or drying of some of the materials used. Such phenomenon disappears after a few hours of use. During this period, it is advisable to keep the premises well ventilated.

Below is the sequence of operations to be performed to optimize the product start-up:

1. Clean the surface of the combustion chamber, removing any residues left from previous use.
2. Set the air handle on the right (+);

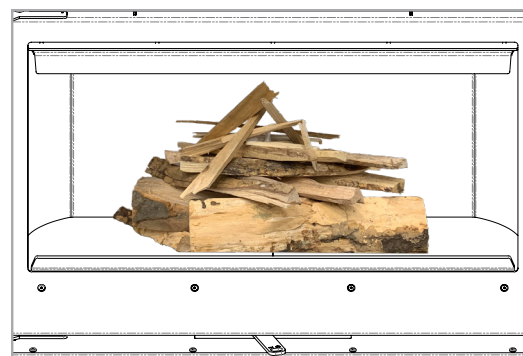


Below are the dimensions of the combustion chamber:

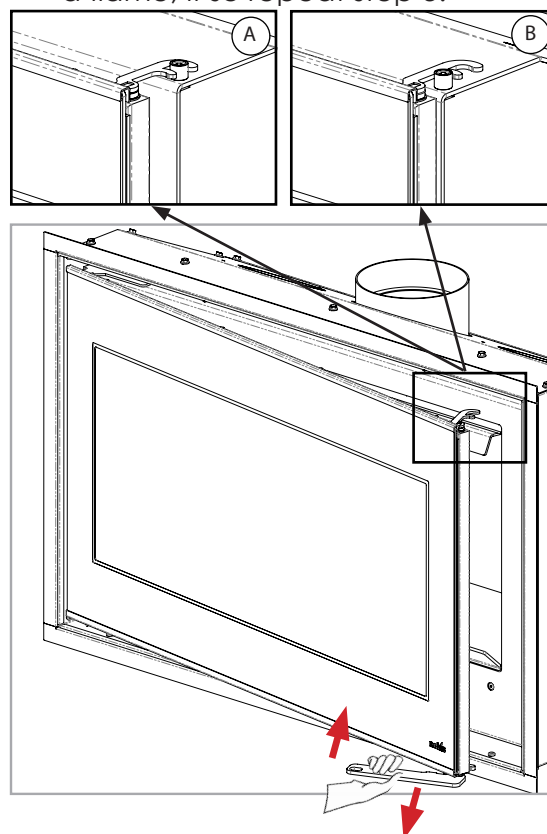
Width:	53 cm (700.49/700.55)
	63 cm (800.49/800.55)
	73 cm (900.49/900.55)
Height:	30 cm (700.49/800.49/900.49)
	36 cm (700.55/800.55/900.55)
Depth:	28 cm (700.49/700.55)

3. On the shelf of the combustion chamber, prepare a multi-level ignition module as follows:

- 2 dry logs on the shelf, about 45-50 cm long and weighing about 0.7 kg each;
- 2 levels of thin pieces of firewood (about 20-25 cm long) to ignite the flame, as shown in the figure.



4. Place the natural firelighter (flame) on top of the ignition module.
5. Using the door handle, move to position (A) in the following figure to allow the flame to develop, so that combustion can easily spread to the top row of wood. The timing of this operation may vary depending both on the quality of the wood and the type of installation.
6. Close the door by moving to position (B) in the figure below, checking that there is still a flame, if so repeat step 5.





Do not overload the appliance. The tertiary air holes on the back of the combustion chamber must never be blocked. Exceeding the recommended refill quantities may damage product, thus voiding the warranty. An excessive load, will result in poor combustion and will lead to excessive smoke temperatures, which can damage the product, the smoke duct and flue.



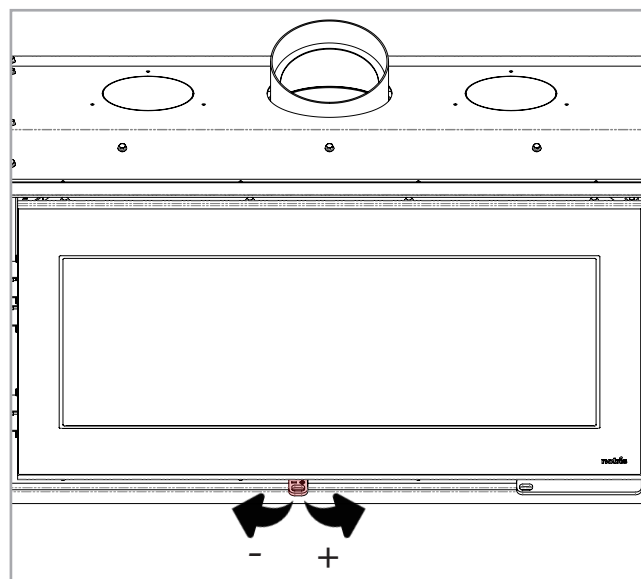
All the external surfaces of the product reach high temperatures. Always remember to use all due precautions when touching the product surface.

It is recommended to keep the combustion-air handle open for the entire duration of the first load (after ignition) to allow both the combustion chamber and the smoke duct to heat up to the right temperature, and to prevent the flame from extinguishing.



When the stove is running and - above all - during the heating and cooling phases, ticking noises may be heard. These are due to thermal expansion/contraction of the materials due to changes in temperature throughout operation.

Do not keep the fire door open during operation. The fire door can be opened only for the time needed to load the wood. To avoid excessive leakage of combustion smoke into the room, it is recommended to open the door slowly.



Maximum performance can be obtained by loading two 350 mm logs of beech wood for a total weight of 1.8 kg and setting the stove accordingly. Air intake has to be open as shown in the figure.

Combustion is efficient and "clean" when the flame looks pale yellow. If the flame tends towards red, or if you notice black smoke in the combustion chamber, turn the handle to the right (+) to slightly increase air intake.

To learn how to adjust combustion correctly, an initial period of use is required.

6.3 COMBUSTION ADJUSTMENTS

Once both the combustion chamber and the entire flue pipe have reached the right temperature, it is possible to optimize combustion by adjusting the airflow. The combustion rate (and, therefore, the thermal power generated) is regulated both by the quantity of firewood in the combustion chamber and the amount of air. When the flame burns too fast, it will shorten firewood wood burntime, thus lowering the performance of the product. Therefore, during operation, combustion adjustments must be carried out by acting on the air handle gradually.



When fuel is added above the embers in the absence of flame, a large amount of smoke could develop. In such event, an explosive mixture of gas and air could form which - in extreme cases - could result in an explosion. For safety reasons, it is advisable to carry out a new ignition procedure using small strips.

7 PRODUCT CLEANING



To ensure easy access to the appliance and the flue, remember to leave enough room to carry out cleaning and maintenance operations when installing the product.



For proper cleaning, please follow the instructions below carefully. Non-compliance with the following instructions could cause malfunctioning.

Take the following precautions before carrying out any cleaning operation:

- Make sure all parts of the appliance are cool to the touch;
- Make sure the ash is completely extinguished and cool to the touch;
- Always be properly equipped when you carry out

maintenance;

- After maintenance, reinstall all the removed parts, in the same way, before putting the product back into service.

Use a wet rag moisturised with water and soap to clean painted metal surfaces.

The use of harsh detergents or thinners will damage to the product surfaces.



The quality of the firewood, the way the stove is used and the combustion adjustment settings can influence the frequency of maintenance interventions.

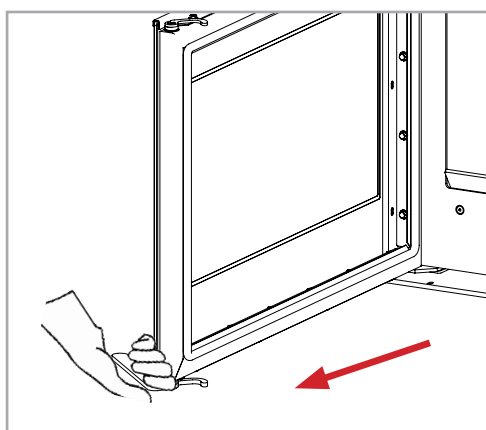
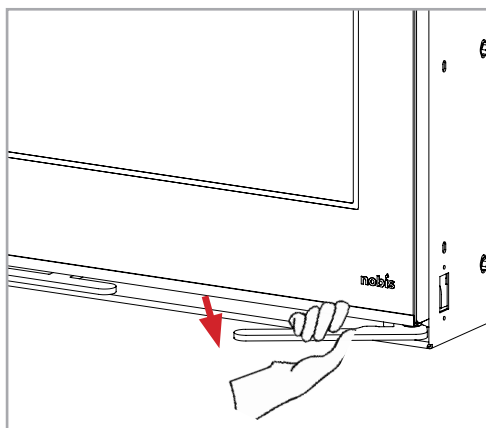
7.1 CLEANING THE FIRE COMPARTMENT AND DRAWER

Open the door using the handle on the right side of the product and:

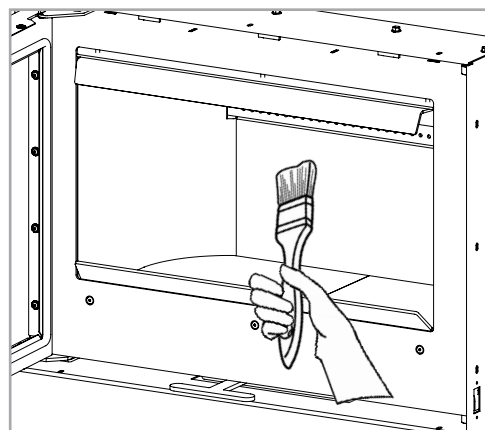
- Vacuum the residues present in the combustion chamber with a suitable ash vacuum cleaner, making sure that the ash is completely extinguished;
- The refractory panel does not require cleaning. In any case, to remove soot particles, only use a soft brush.

OPERATING PROCEDURE:

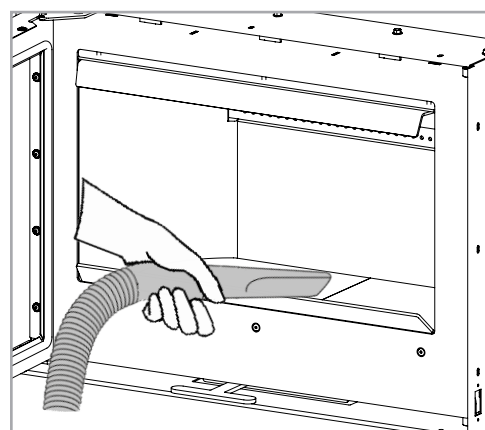
Open the door as illustrated below:



With a soft brush, remove the combustion dust, dumping it onto the underlying surface.



Vacuum the firewood support surface, taking care not to hit the refractory panel with the nozzle of the vacuum cleaner.



7.2 CLEANING THE GLASS

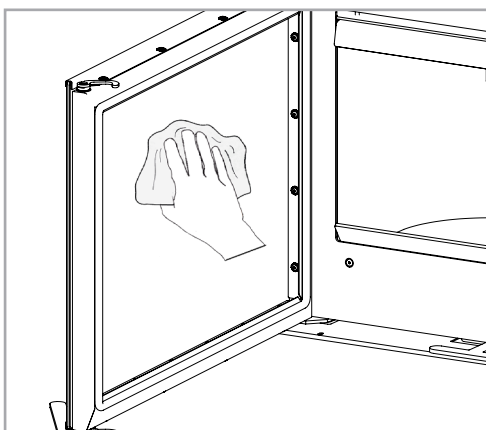
Use a cotton cloth or a kitchen towel to clean the glass. It is recommended to clean the glass using a cloth dampened with water and combustion ash (which has an abrasive function), avoiding the use of detergent additives which could, over time, deteriorate seals, glass and paint.



Do not turn on the appliance if you notice any damage to the glass. Contact the Service Centre for replacement.

OPERATING PROCEDURE:

Clean with a cotton cloth as shown in the following figure:



CLEANING CYCLE TABLE

The control and/or maintenance interventions indispensable for the correct functioning of the appliance are summarized below.

PARTS	FREQUENCY
Glass	2-3 DD
Combustion chamber	1 DD
Door gasket*	1 SE
Chimney*	1 SE
Internal smoke duct*	1 SE

LEGEND:

* - operations to be carried out by
a manufacturer-approved technician;
DD - days
SE - season



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