Extraflame

Stufe a Pellet

User Manual

COMFORT IDRO

Read the instructions carefully before installation, use and maintenance.
The instruction book is an integral part of the product.

Congratulations! You are now the owner of an Extraflame stove!

The Extraflame pellet stove is an ideal heating solution. It utilises the most advanced technology and is manufactured to the highest standards with a contemporary design, allowing you to enjoy the ambience and warmth of a natural flame in complete safety.

This manual tells you how to use your stove correctly. Please read the entire manual carefully before using your stove.

IMPORTANT

Make sure that the dealer completes the following box with the details of the authorised specialist who will help you if you have any problems in using your new pellet stove.

AUTHORISED SPECIALIST

COMPANY _____
Full name _____
Address _____ No. _____
Postal Code _____ City _____ County. _____
TEL. _____ FAX _____

All Extraflame products are manufactured according to the following directives:

- **89/106 CEE (Construction Products)**
- **89/366 CEE (EMC Directive)**
- **2004/108 CE (EMC Directive)**
- **2006/95 CE (Low Voltage Directive)**

And the following standards:

- **EN 14785**
- **EN 60335-1**
- **EN 60335-2-102**
- **EN 61000-3-2**
- **EN 61000-3-3**
- **EN 50366**
- **EN 55014-1**
- **EN 55014-2**

Index

WARNINGS AND SAFETY DEVICES

The stoves produced by our establishment are built with attention to the individual components in a way to protect both the user and the installer from any accidents. It is therefore recommended that after any intervention on the product, authorised staff pay particular attention to the electric connections, especially the stripped parts of the wires. These must not escape from the terminal board in any situation, thus preventing possible contact with the live parts of the wire.

Installation must be carried out by authorised staff, who must provide the buyer with a declaration of conformity for the system and will assume full responsibility for final installation and as a consequence the correct functioning of the installed product. It is necessary to bear in mind all laws and national, regional, provincial and town council Standards present in the country the appliance has been installed.
Extraflame S.p.A. cannot be held responsible for the failure to comply with such precautions.

The instruction manual is an integral part of the product: make sure that it always accompanies the appliance, even if transferred to other owners or user or is transferred to another place. If it is damaged or lost, request another copy from the area technician.
This stove must be destined for the use for which it has been expressly realised. 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.
After the packaging has been removed, check the integrity and completeness of the contents. If this does not comply, contact the dealer where the appliance was purchased.
All electric components that make up the stove must be replaced with original spare parts exclusively by an authorised after-sales centre, thus guaranteeing correct functioning.

The stove must be serviced at least once a year, programming it in advance with the technical after-sales service.
Nota bene: In case of thermo product or boiler, the product or system venting is not covered by the warranty.

For safety reasons, remember that:

- ❖ The stove must not be used by children or unassisted disabled persons.
- ❖ Do not touch the stove when you are barefoot or when parts of the body are wet or humid.
- ❖ 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 stove, even if disconnected from the electric power supply mains.
- ❖ Do not close or reduce the dimensions of the airing vents in the place of installation. The airing vents are indispensable 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.
- ❖ Avoid direct contact with parts of the appliance that tend to heat up during functioning.
- ❖ Check for the presence of any obstructions before switching the appliance on following a prolonged standstill period.
- ❖ The stove has been designed to function in any climatic condition (also critical). In particularly adverse conditions (strong wind, freezing) safety systems may intervene that switch the stove off. If this occurs, contact the technical after-sales service and always disable the safety system.
- ❖ If the flue should catch fire, be equipped with suitable systems for suffocating the flames or request help from the fire service.

MAJOLICAS
The company had chosen majolica tiles, which are the result of high-quality artisan work and therefore the majolica may present crackles, speckles, and shadings. These characteristics certify their precious origin.
Enamel and majolica, due to their different coefficient of dilatation, produce microcrackles, which show their authentic feature.
For the cleaning of the majolica we suggest you use a soft and dry cloth; if you use a detergent or liquid, the latter might soak in and make the crackles more visible.

TECHNICAL FEATURES

Features	U.M.	Value
Weight	kg	140
Height	mm	664
Width	mm	640
Depth	mm	746
Flue exhaust pipe diameter	mm	80
Air intake pipe diameter	mm	50
Max. global heat output	kW	14.0
Max. useful heat output	kW	12.6
- useful output power to the air	kW	4.6
- useful output power to the water	kW	8.0
Min. useful heat output	kW	3.8
- useful output power to the air	kW	1.3
- useful output power to the water	kW	2.5
Min. hourly fuel consumption	kg/h	0.8
Max. hourly fuel consumption	kg/h	2.8
Feed-box capacity	kg	~ 22
Recommended flue draught	Pa	~ 10
Flue draught at max. useful heat output	Pa	12
Flue draught at min. useful heat output	Pa	10
Nominal electric output	W	310
Nominal voltage	Vac	230
Nominal frequency	Hz	50
Water inlet/outlet pipe diameter	"	¾
Automatic exhaust pipe diameter	"	½
Pump head	m	-
Max. working water pressure accepted	bar	2.5

Tests performed using wooden pellets as fuel with calorific value of 4.9 kW/h/kg.

The data given above is indicative and not binding. The manufacturer reserves the right to make any modifications in order to improve product performance.

Comfort Idro with optional front pellet feed kit

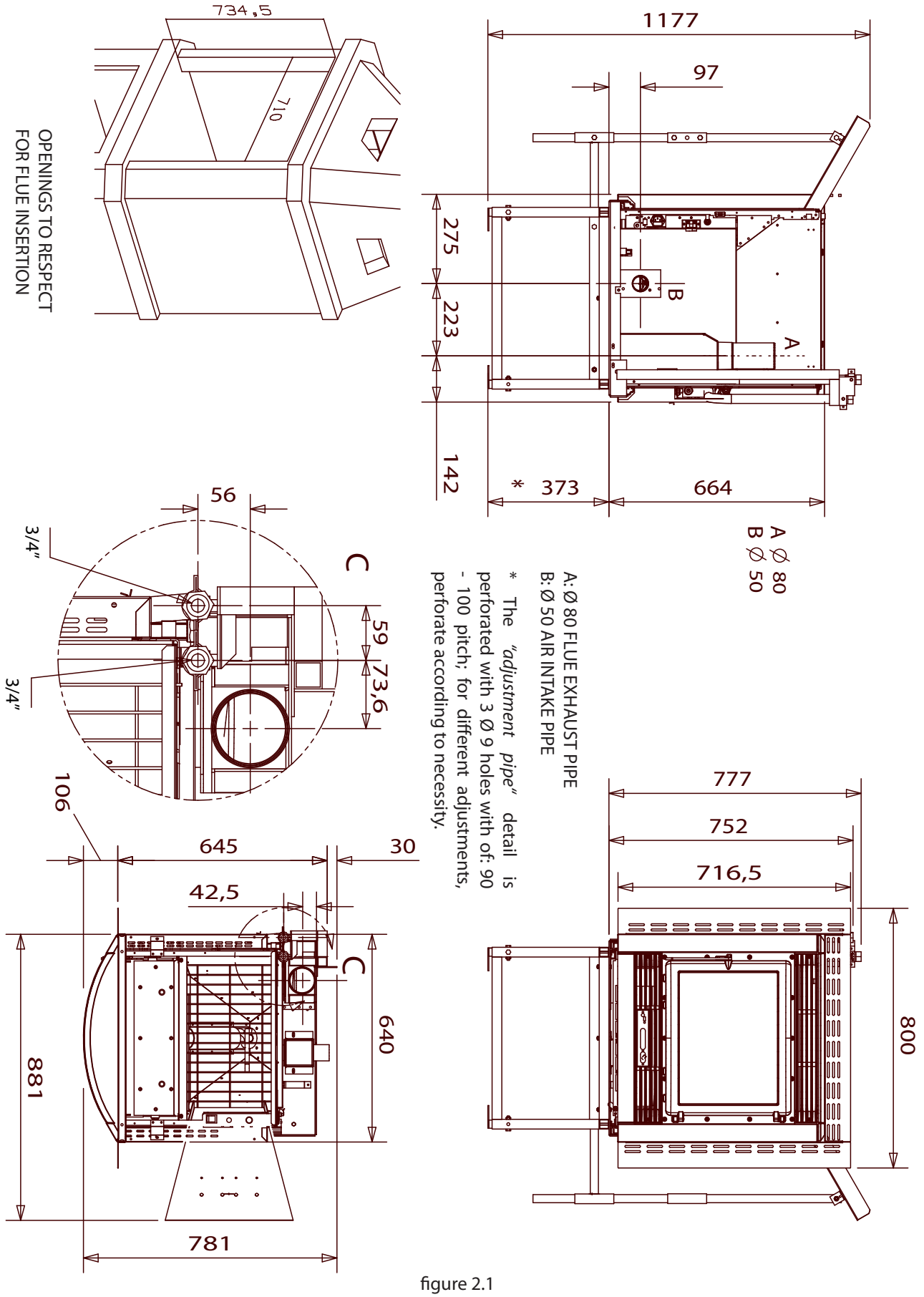


figure 2.1

Comfort Idro with optional support and lateral pellet loading kit

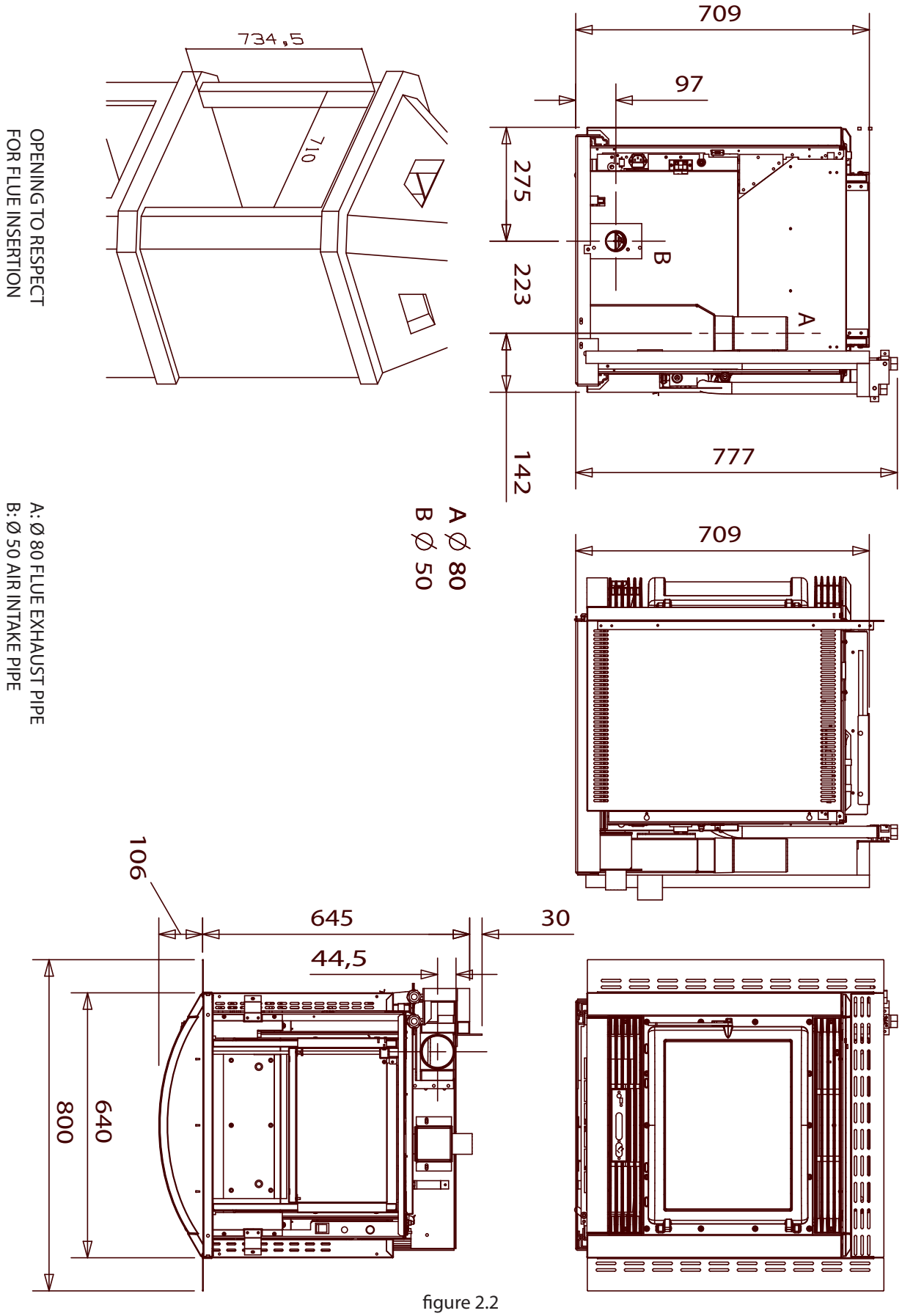


figure 2.2

WHAT IS THE PELLET?

Pellets are realised by subjecting wood shavings i.e. the rejects of pure wood (without paint), sawmill, carpenter products and products from other activities connected to working and transforming wood, to very high pressures.
This type of fuel is absolutely ecological as no glues are used to hold it together. In fact, the compactness of the pellets is guaranteed through time by a natural substance that is found in wood: lignite.
As well as being an ecological fuel, as wood residues are made the most of, the pellet also has technical advantages.
While wood has a calorific value of 4.4 kW/kg (with 15% humidity, therefore after about 18 months seasoning), that of the pellet is 5.3 kW/kg.
Pellet density is about 650 kg/m3 and water content is equal to 8% of its weight. For this reason the pellet does not have to be seasoned in order to obtain a sufficiently adequate heat yield.
The pellet used must comply with the features described by the Standard:

- ❖ Ö-Norm M 7135
- ❖ DIN plus 51731
- ❖ UNI CEN/TS 14961

Extraflame recommends the use of pellets with a diameter of 6mm with its products.


WARNINGS!!!

THE USE OF EXPIRED PELLETS OR ANY OTHER MATERIAL DAMAGES THE FUNCTIONS OF YOUR STOVE AND CAN DETERMINE THE INVALIDITY OF THE WARRANTY AND THE ANNEXED RESPONSIBILITY OF THE MANUFACTURER.

PELLET STORAGE

To guarantee combustion without problems, the pellets must be kept in a dry place.

PELLET FEEDING

Use the most congenial system to the type of installation made to feed the pellets:

- ❖ with OPTIONAL SUPPORT KIT WITH LATERAL PELLET FEEDING
- ❖ with FRONT PELLET FEEDING OPTIONAL KIT
- ❖ supplied as standard

OPTIONAL SUPPORT KIT WITH LATERAL PELLET FEEDING

If installation has been performed using this optional kit, the insert can be extracted or, more comfortably, use the appropriate lateral chute whenever a relevant opening has been made in the covering of the appliance.

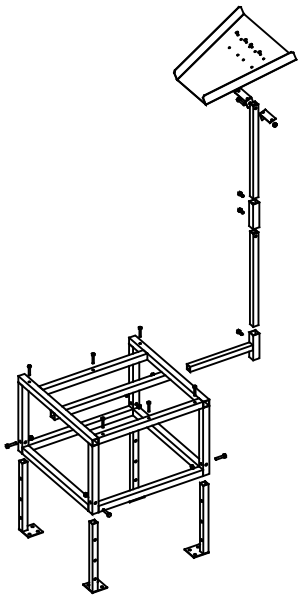


figure 1

FRONT PELLET FEEDING OPTIONAL KIT

The use of this optional kit allows to feed the pellets into the feed-box from the front without extracting the flue, therefore without switching it off.

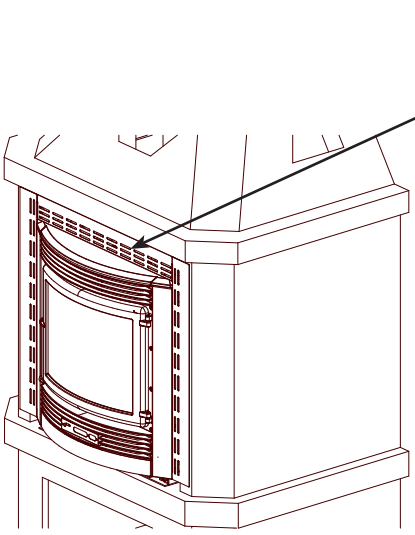


figure 2

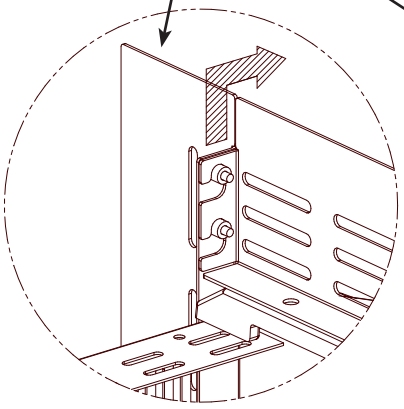


figure 3

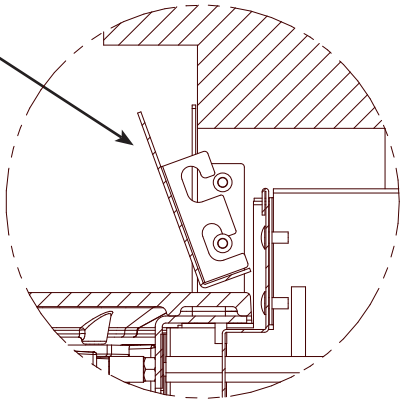
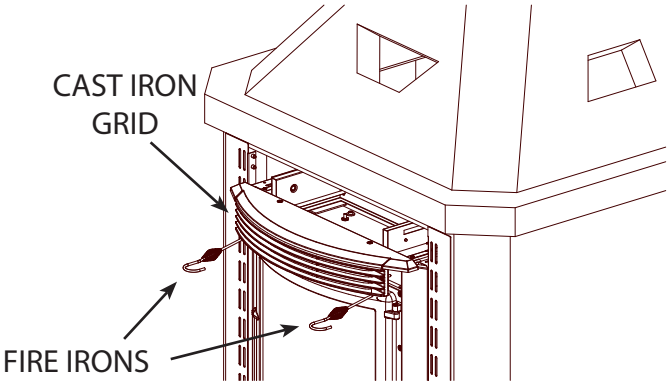


figure 4

First, remove the front, upper frame by unhooking it from the 2 lateral frames: to do this, lift it by about 10 mm and then pull it towards yourself.
The frame must be picked-up using protection for the hands as it could have over-heated during functioning.

Take the supplied fire irons, attach them to the slots in the drawer and pull to maximum extension.
Take the supplied Allen wrench, insert it into the relevant seat and turn in an anti-clockwise direction until fully home.
If this operation has been carried out correctly the drawer will be blocked and cannot be moved forwards or backwards.
At this point, take the internal drawer and pull it towards yourself to maximum opening: carry out this operation by attaching the two fire irons to the lateral holes in the drawer.



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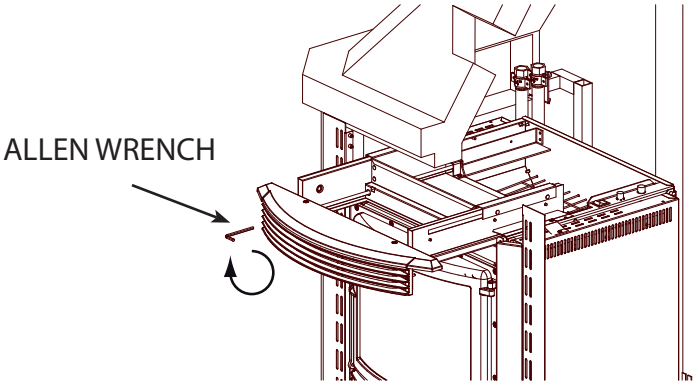

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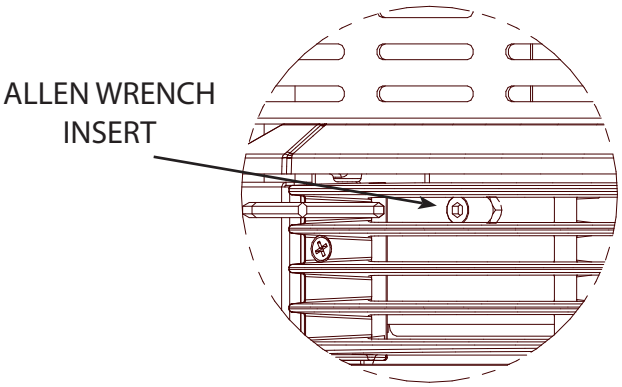


figure 7

At this point, take the internal drawer and pull it towards yourself to maximum opening: carry out this operation with the aid of a common protection for the hands or an oven glove in order to prevent burns due to normal over-heating of the metal parts during functioning of the appliance.
Pour the pellet into the drawer and use the scraper to push it into the flue tank, making sure that it does not remain in the drawer.

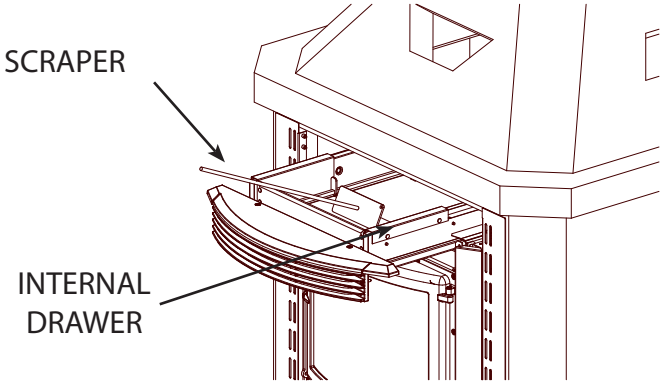


figure 8

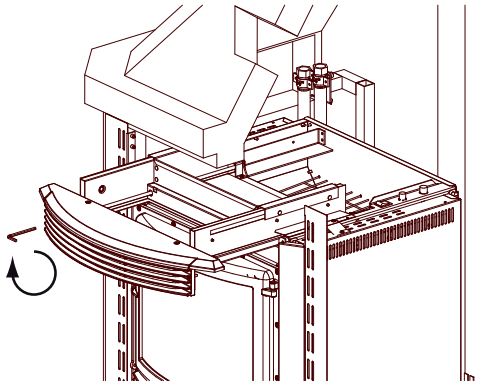


figure 9

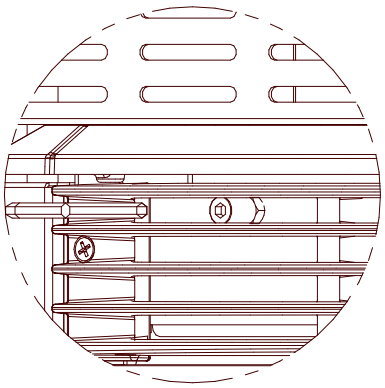


figure 10

After having filled the feed-box, repeat the operations in the reverse order to make the product go back to its original state.

During normal functioning the flue must always be as illustrated in the figure i.e. with the drawer completely closed. the front pellet loading drawer must only be open for the loading time in order to prevent product over-heating.

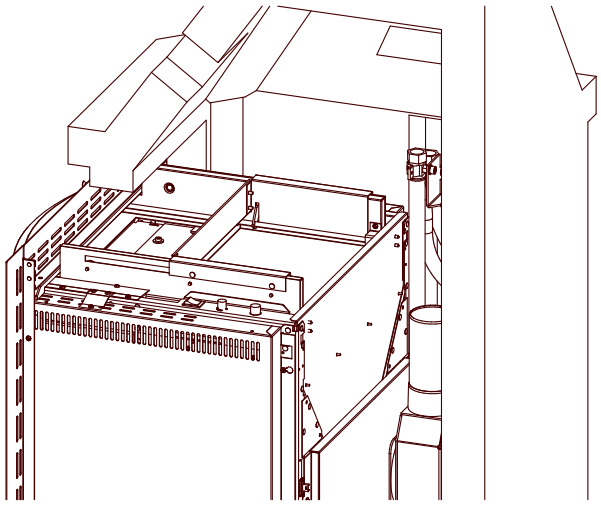


figure 11

STANDARD SUPPLY

Installation of the insert with the standard supply envisions switch-off and extraction of the flue for every pellet feed.

SAFETY DEVICES

FLUE EXHAUST BREAKAGE
If the suction device stops, the circuit board immediately blocks the pellet supply.

PELLET FEED MOTOR BREAKAGE
If the motor reducer stops, the stove continues to function until the minimum cooling level is reached.

NO IGNITION
If a flame is not developed during the ignition phase, the appliance automatically attempts ignition again, this time without pellet feeding.
If no flame develops also in this case, the appliance will signal "**NO ACC**" on the display. When trying to re-ignite the machine, it will indicate "**ATTE**" on the display, which means "wait".
This function reminds that before performing ignition, it must be ensured that the brazier is completely free and clean.

TEMPORARY POWER CUT
After a brief power cut, the appliance re-ignites automatically. When there is no electricity, the stove may give of a minimum amount of smoke inside the case for a period from 3 to 5 minutes.
THIS DOES NOT REPRESENT ANY RISK REGARDING SAFETY.

ELECTRIC SAFETY
The stove is protected against strong current changes by a master fuse that is found in the rear part of the stove. (2,5A 250V Delayed).

FLUE EXHAUST SAFETY DEVICE
An electronic pressure switch blocks stove functioning and takes it to alarm conditions.

PELLET TEMPERATURE SAFETY DEVICE
If there is over-heating inside the feed-box this device blocks stove functioning; restoration is manual and must be performed by an authorised technician.

PLANT PRESSURE SAFETY DEVICE
A mechanical pressure switch blocks any plant over-pressures.
Restoration of the safety device is manual and must be performed by an authorised technician.

WATER BOILING SAFETY DEVICE
If there is a lack of water or only a small amount, it blocks pellet feeding. Restoration of the safety device is manual and must be performed by an authorised technician.

DEVICES NOT ON THE LIST
During installation of the stove it is MANDATORY to adjust the plant using a manometer to display the water pressure and an automatic vent valve calibrated at 3 bar.

INSTALLATION AND SAFETY DEVICES

The installation, relative plant connections, commissioning and inspection of correct functioning must be carried out perfectly, in total compliance with Standards in force, both national and regional, as well as these instructions.
For Italy, installation must be carried out by authorised professional staff (law dated 5 March 1990 n°46).
Extraflame S.p.A. declines all liability for damage/injury to objects/persons caused by the plant.

Safety devices for open vessel plant
According to the UNI 10412-2 (2006) Standard in force in Italy, the plants with open expansion vessel must have:

- ❖ Open expansion vessel
- ❖ Safety pipe
- ❖ Feed pipe
- ❖ Pump control thermostat (excluded for natural circulation plants)
- ❖ Circulation system (excluded for natural circulation plants)
- ❖ Acoustic alarm activation device
- ❖ Acoustic alarm
- ❖ Temperature indicator
- ❖ Pressure indicator
- ❖ Automatic circuit breaker switch (block thermostat)

The temperature safety sensors must be in place on the machine at a distance no greater than 30 cm from the flow connection.

Whenever the thermo products lack a device, those missing can be installed on the thermo product flow pipe, within a distance no greater than 1m from the thermo product.

SAFETY DEVICES FOR CLOSED VESSEL PLANT

According to the UNI 10412-2 (2006) Standard in force in Italy, the closed plants must have:

- ❖ Safety valve
- ❖ Pump control thermostat
- ❖ Acoustic alarm activation thermostat
- ❖ Temperature indicator
- ❖ Pressure indicator
- ❖ Acoustic alarm
- ❖ Adjustment automatic circuit breaker switch
- ❖ Automatic circuit breaker switch (block thermostat)
- ❖ Circulation system
- ❖ Expansion system
- ❖ Safety dissipation system incorporated with the generator with thermal safety valve (self-activated), whenever the appliance does not have a temperature self-adjustment system

The temperature safety sensors must be in place on the machine at a distance no greater than 30 cm from the flow connection.

Whenever the thermo products lack a device, those missing can be installed on the thermo product flow pipe, within a distance no greater than 1m from the thermo product.

Domestic type heating appliances with automatic feed must have a fuel block thermostat or a cooling circuit prepared by the manufacturer of the appliance, activated by a thermal safety valve such as to guarantee that the limit temperature set by the Standard is not exceeded. Connection between the power supply unit and the valve must be free from interceptions. The pressure upstream from the cooling circuit must be at least 1.5 bar.

ASSEMBLY AND INSTALLATION INSTRUCTIONS

The installation must comply with:

- *UNI 10683 (2005) heat generators fed with wood and other solid fuels: installation.*

The chimneys must comply with:

- *UNI 9731 (1990) chimneys: classification according to thermal resistance.*
- *EN 13384-1 (2006) calculation method of the thermal and fluid-dynamic features of the chimney.*
- *UNI 7129 point 4.3.3 provisions, local rules and prescriptions of the fire brigade.*
- *UNI 1443 (2005) chimneys: general requirements.*
- *UNI 1457 (2004) chimneys: internal ducts in terracotta and ceramics.*

GLOSSARY

CLOSED HEARTH DEVICE
Heat generator that can only be opened to load fuel during use.

BIOMASS
Material of organic origin, excluding the material incorporated in geological formations and fossilised.

BIOFUEL
Fuel produced directly or indirectly from biomass.

FLUE or CHIMNEY
Vertical duct for collecting and expelling combustion products from a single appliance at a suitable height from the floor.

EXHAUST CHANNEL OR PIPE
Duct or connecting element between the heat generating device and the chimney for extracting the combustion products.

INSULATION
The series of measures taken and materials used to prevent heat transmission through a wall dividing rooms at different temperatures.

CHIMNEY CAP
Device located at the top of the chimney that facilitates dispersion of the combustion products in the atmosphere.

CONDENSATE
Liquid products that form when the temperature of the combustion gas is lower than or equal to the dew point of the water.

HEAT GENERATOR
Device that permits the production of thermal energy (heat) by the rapid transformation of the chemical energy of the fuel by means of combustion.

AIR LOCK
Mechanism for modifying the dynamic resistance of the combustion gasses.

EXHAUST VENTING SYSTEM
A system for fume exhaust venting that is independent from the appliance, composed of a pipe or channel, chimney or single flue, and chimney cap.

FORCED DRAUGHT
Air circulation by means of a fan driven by an electric motor.

NATURAL DRAUGHT
Draught resulting in a chimney/flue due to the difference in the volume mass existing between the (hot) fumes and the surrounding atmospheric air, without any mechanical suction aid installed inside or on top of it.

RADIANCE AREA
Area immediately adjacent to the hearth in which the heat produced by combustion is diffused; this area must not contain any objects made of combustible material.

REFLUX AREA
Area in which the combustion products come out from the appliance towards the room in which it is installed.

INSTALLATION

Before carrying out installation, it is necessary to check the positioning of the chimneys, flues or exhaust terminal ducts of the appliance, keeping in mind the following:

- ❖ Installation prohibitions
- ❖ Legal clearances
- ❖ Limitations set forth by local administrative regulations or specific regulations of the authorities.
- ❖ Common limitations deriving from building regulations, and easement or contract regulations.

ADMISSIBLE INSTALLATIONS

In the room in which the heat generator is to be installed, any existing or installed appliances must be airtight to the room and must not cause depression in the room with respect to the external environment.
Appliances used for cooking foods and the related hoods without extractor can only be installed in rooms used as kitchens.

PROHIBITED INSTALLATIONS

The room in which the heat generator is to be installed must not contain any of the following devices, either pre-existing or installed:

- ❖ Hoods with or without extractor;
- ❖ Ventilation ducts of the collective type.

Should these devices be located in adjacent rooms communicating with the installation room, it is forbidden to use the heat generator simultaneously where there is the risk that one of the two rooms may be subject to depression with respect to the other.

CONNECTION TO THE EXHAUST VENTING SYSTEM

EXHAUST CHANNEL OR PIPE

For the assembly of the exhaust channels it is imperative to use non-flammable materials that are resistant to combustion products and any condensates.
It is forbidden to use flexible metal pipes and asbestos cement for connecting the stove to the flue, also for pre-existing exhaust channels.
There must be continuity between the exhaust channel and the flue so that the flue does not lean on the stove.
The exhaust channels must not pass through rooms in which the installation of combustion devices is forbidden.
The assembly of the exhaust channels must be carried out in such a way as to ensure that they are airtight for the operating conditions of the appliance, as well as to limit the formation of condensates and prevent them from being conveyed towards the appliance.
The assembly of horizontal sections must be avoided where possible.
Where roof or wall exhaust outlets have to be reached that are not coaxial in relation to the exhaust outlet from the appliance, the direction changes must be made using open elbows no greater than 45° (see figures below).

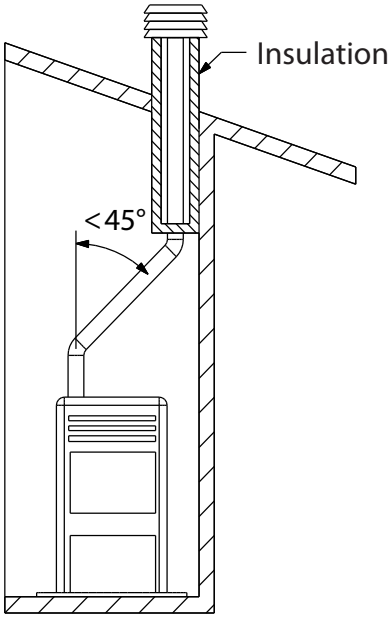


figure 5.1

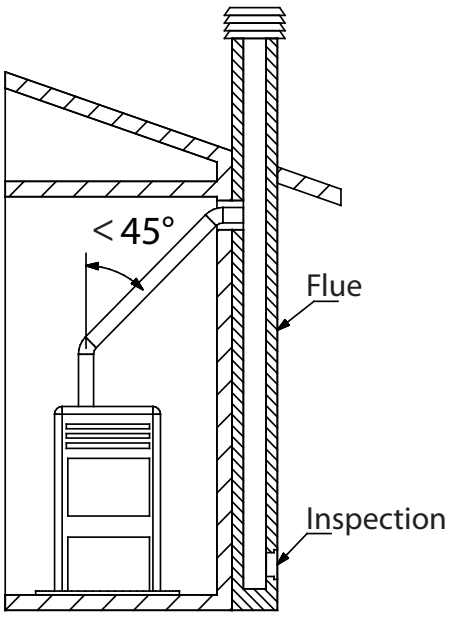


figure 5.2

For heat generating devices equipped with an electric exhaust fan, i.e. all products made by Extraflame, it is necessary to observe the following instructions:

- ❖ Horizontal sections must have a minimum slope of 3% upwards.
- ❖ The length of the horizontal section must be as short as possible, and in any case no greater than 3 meters.
- ❖ No more than four direction changes may be used, including the one resulting from the use of the "T"-element. (When four bends are used, use double wall piping with a 120 mm diameter.)

In any case, exhaust channels must be sealed in relation to combustion products and condensates, as well as insulated, if they pass outside the installation room.
It is forbidden to use elements in counter-slope.
The exhaust channel must allow soot recovery and cleaning using a swab.
The exhaust channel must have a constant cross-section. Any changes in cross-section are allowed only at

the flue connection.
It is forbidden to run other air feed channels or piping for utilities inside the exhaust channels, even if they are oversized. It is also forbidden to fit manual draught adjustment devices on the forced draught appliance.

CHIMNEY OR SINGLE FLUE

The chimney or flue must meet the following requirements:

- ❖ be airtight to combustion products, waterproof and properly insulated according to the usage conditions;
- ❖ be made of materials suitable to resist normal mechanical stress, as well as heat and the action of combustion products and any condensates;
- ❖ have a predominantly vertical layout with deviations from the axis no greater than 45°;
- ❖ be situated at a proper distance from combustible or flammable materials by means of an air gap or suitable insulation material;

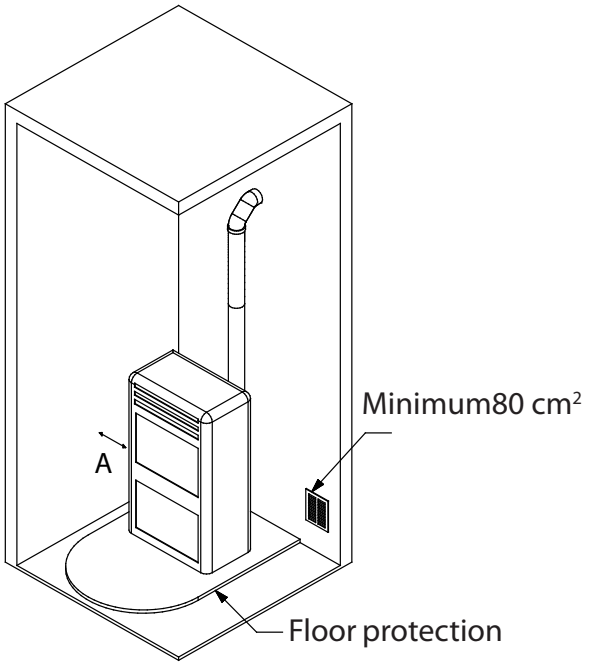


figure 5.3

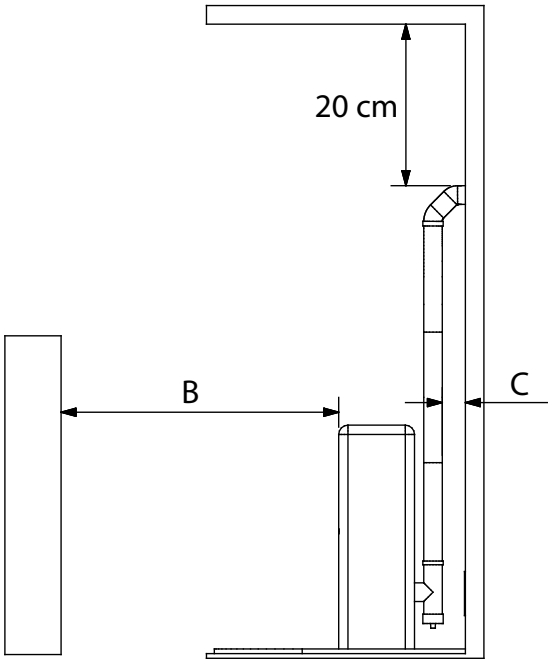


figure 5.4

REFERENCES	Flammable objects	Non-flammable objects
A	200	100
B	1500	750
C	200	100

- ❖ preferably have a round internal section: square or rectangular sections must have rounded edges with radius no less than 20 mm;
- ❖ have a constant, free and independent internal section;
- ❖ have rectangular sections with a maximum ratio between sides of 1.5.

The exhaust duct should be equipped with a chamber for the collection of solid materials and any condensates located below the mouth of the exhaust channel, so that it is easy to open and inspect from the airtight hatch.

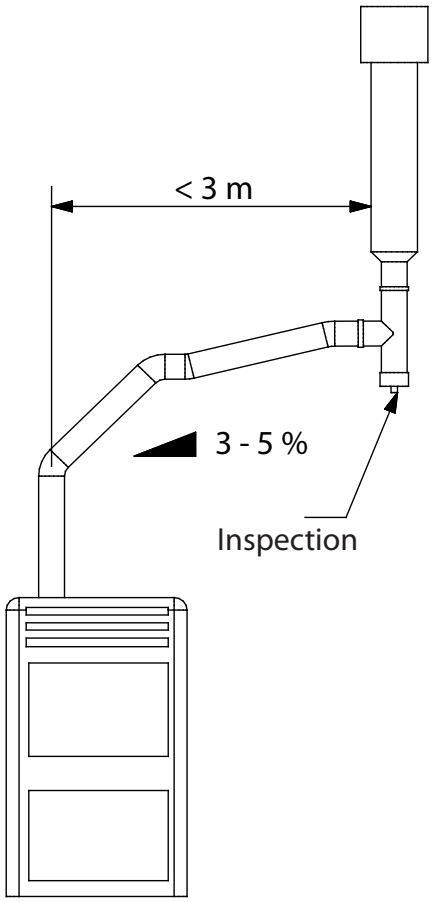


figure 5.5

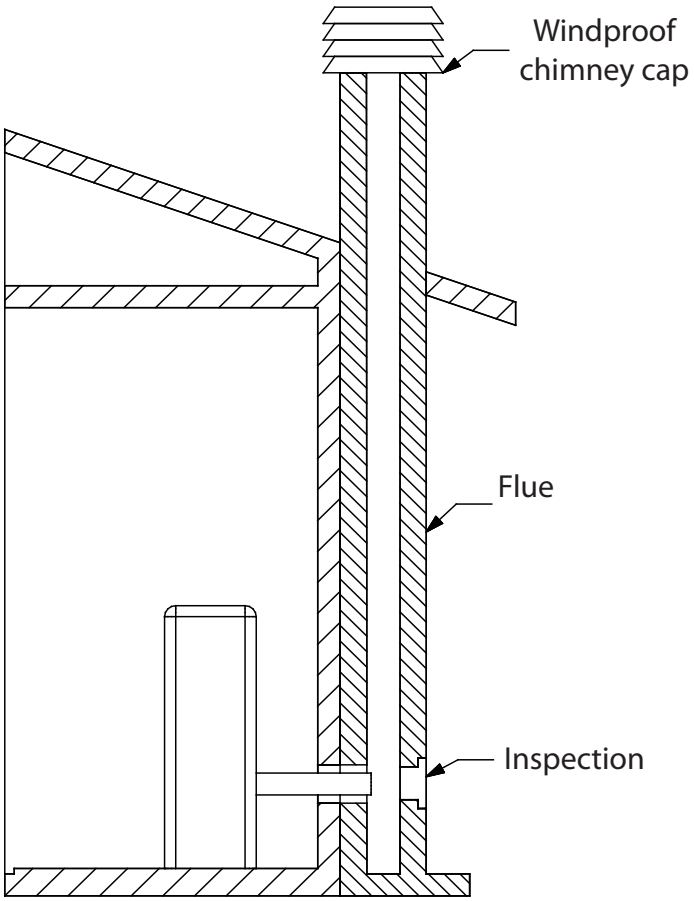


figure 5.6

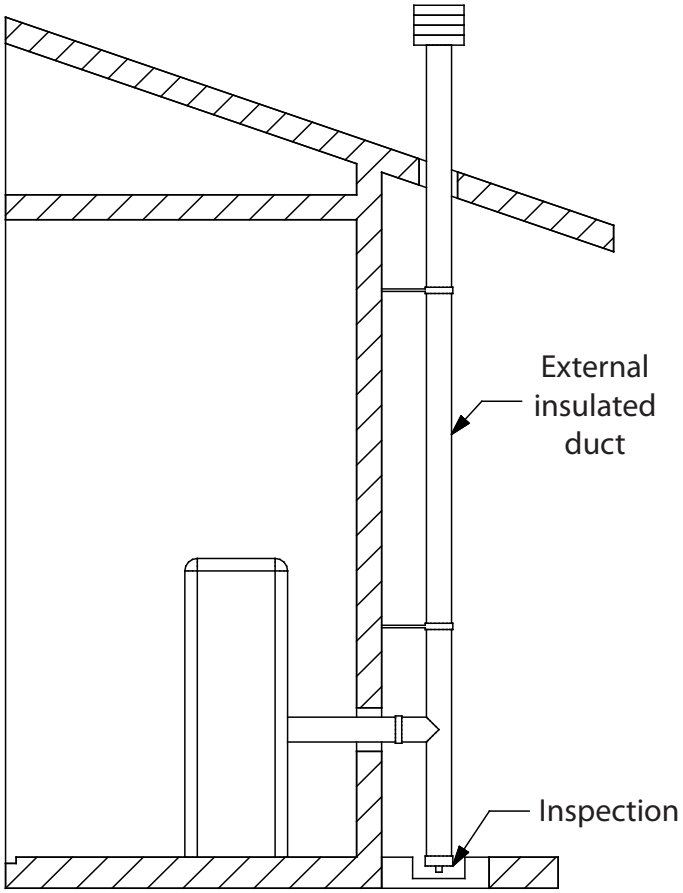


figure 5.7

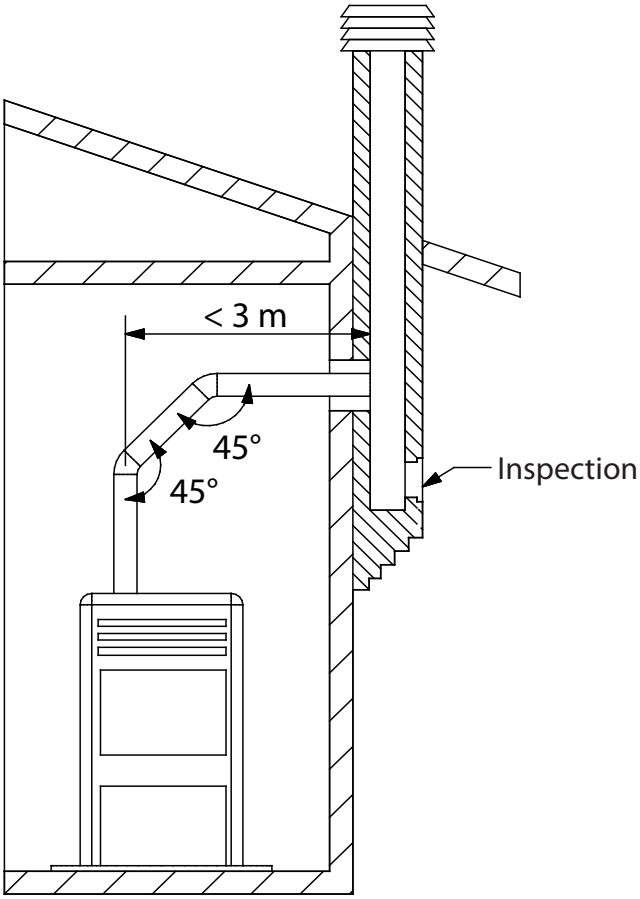


figure 5.8

CONNECTION TO THE FLUE AND COMBUSTION PRODUCT EXHAUST VENTING

The flue must receive exhaust from a single heat generator.
Direct discharge towards enclosed areas, even when roofless, is forbidden.
Direct discharge of combustion products must take place on the roof and the exhaust duct must have the features set forth in the section "Chimney or single flue".

CHIMNEY CAP

The chimney cap must meet the following requirements:

- ❖ have an internal section equivalent to that of the chimney;
- ❖ have a useful outlet section no less than twice the internal section of the chimney;
- ❖ be constructed in such a way as to prevent the penetration of rain, snow and foreign bodies into the chimney, as well as to assure the discharge of the combustion products also in the presence of winds coming from any direction and at any angle.
- ❖ be positioned in such a way as to assure proper dispersion and dilution of the combustion products and, in any case, outside the reflux area in which the formation of counter-pressure is most likely to occur. This area has different sizes and shapes depending on the slope of the roof; therefore, it is necessary to use the minimum heights indicated in the figures below.
- ❖ The chimney cap must not have any mechanical suction devices.

FLAT ROOF

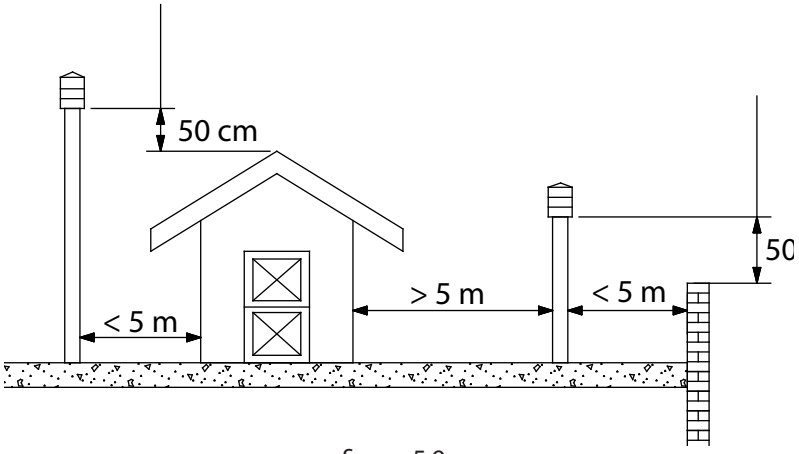


figure 5.9

SLOPED ROOF

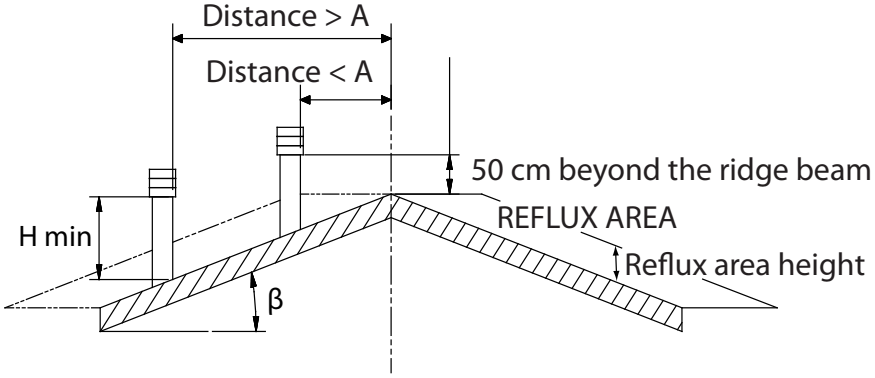


figure 5.10

CHIMNEYS, DISTANCES AND POSITIONING		
Roof pitch	**Distance between the crown and the chimney**	**Minimum height of the chimney (measured from the outlet)**
β	**A (m)**	**H (m)**
15°	< 1,85	0,50 m beyond the crown
	> 1,85	1,00 m from the roof
30°	< 1,50	0,50 m beyond the crown
	> 1,50	1,30 m from the roof
45°	< 1,30	0,50 m beyond the crown
	> 1,30	2,00 m from the roof
60°	< 1,20	0,50 m beyond the crown
	> 1,20	2,60 m from the roof

CONNECTION TO EXTERNAL AIR INTAKES

To ensure correct operation, the appliance must have sufficient air available by means of external air intakes, which must meet the following requirements:

1. They must have a total free section of at least 80 cm^2.
2. They must be protected by a grate, metal mesh, or other suitable protection provided that it does not reduce the minimum section as per point a) and that it is positioned in such a way as to prevent the intakes from being obstructed.

If the combustion air is collected directly from the outside by means of a pipe, it is necessary to fit a downward bend or a wind hood on the outside. In addition, no grating or similar device should be positioned. (Extraflame S.p.A. suggests creating an air intake directly communicating with the installation room, even if air is collected from outside by means of a pipe).
Air inflow can also be obtained from a room adjacent to the installation room, provided that the flow can occur freely through permanent openings communicating with the outside.
The adjacent room must not be subject to depression with respect to the outside as a result of the opposing draught caused by the presence of another utility device or suction device in this room.
In the adjacent room, the permanent openings must meet the requirements described above.
The adjacent room cannot be used as a garage, storage area for combustible material, or for activities involving fire hazards.

INSULATION, TRIMS, FACINGS, AND SAFETY PRECAUTIONS

The facings, no matter what type of material they are made of, must constitute a self-bearing structure with reference to the heating assembly and not in contact with it.
The beam and the trims in wood or combustible materials must be positioned outside of the radiant area of the hearth or be properly insulated.
If the space above the heat generator has coverings made of combustible or heat-sensitive material, a protective membrane made of non-combustible insulating material must be placed between it and the generator.
All elements made of combustible or flammable material, such as wooden furnishings, curtains, etc., that are directly exposed to the radiance of the hearth must be placed at a safe distance.
The installation of the appliance must guarantee easy access for cleaning the appliance itself, of the waste gas pipes and the flue.

NATIONAL, REGIONAL, PROVINCIAL AND MUNICIPAL LAWS

All the national, regional, provincial ad municipal laws of the country where the appliance has been installed must be taken into consideration.

COMFORT IDRO INSTALLATION

The Comfort Idro model is supplied with an iron sliding base that allows to install it in a pre-existing flue.
This sliding base allows the easy extraction of the insert both for pellet feeding inside the feed-box and for any maintenance or cleaning at the end of the season. If there is no pre-existing flue, one can be built using the insert-holder pedestal (optional kit); in fact, the latter fixes the insert to the floor.

Component description:
- Sliding base
- Rail
- Flue exhaust pipe
- Primary air intake pipe
- Socket
- Adaptation frame

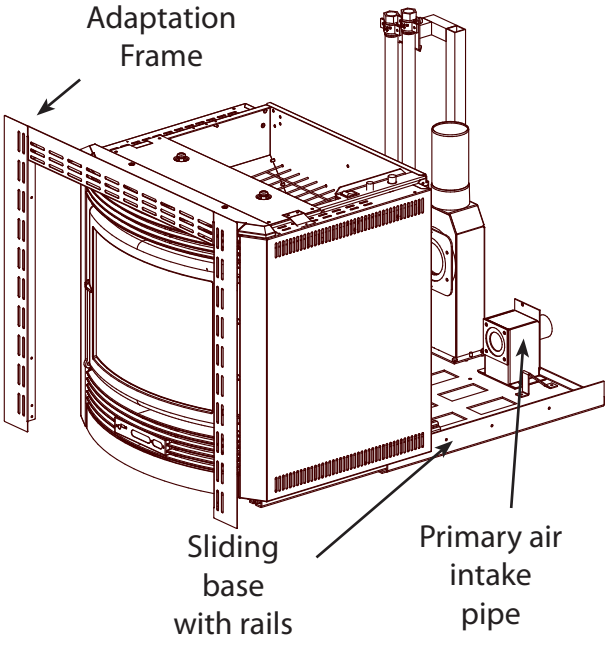


figure 6.1

POSITIONING

Before assembly of the appliance, the correct position must be evaluated.
The minimum height stated in the figure below must be considered that to be respected, so as to guarantee correct movement of the flexible pipes: with closed flue, they create a natural loop that must not be obstructed in any way.

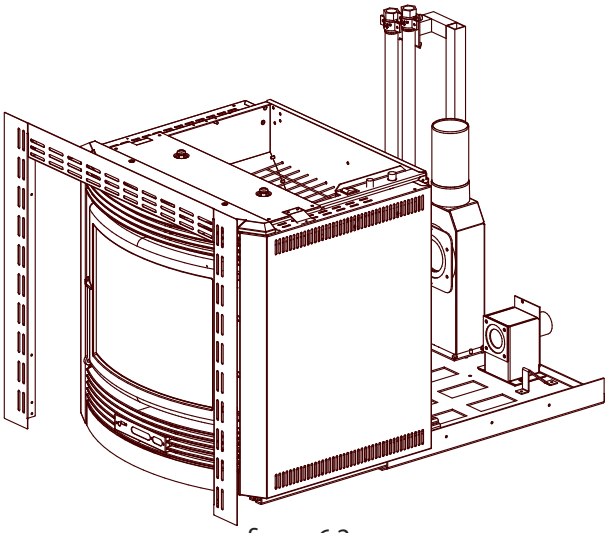


figure 6.2

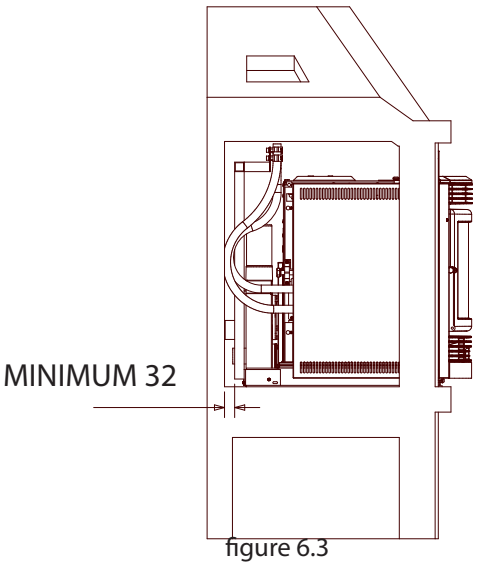


figure 6.3

ASSEMBLY

The insert can be positioned on an existing base or using the support and feeding kit (figure 30).

ASSEMBLY ON EXISTING BASE

First of all, check the presence of a current socket on the rear of the insert so that the socket is accessible once installation is completed.
After having evaluated the correct position, the machine body must be detached in order to fix the sliding base:
Use the supplied Allen wrench to turn the lockbolt clockwise (figure 6.4).
Slide the insert out (figure 6.5).
Tilt it to release it from the rails (figure 6.6).

Use chalk to mark the blocking points of the base; then make 8 mm holes for the steel expansion inserts.
Make a hole measuring 60 mm in correspondence with the air intake.

The air vent must be made outside the flue as it must not suck heated air.

Fix the base using the locking screws.
Appropriately connect the conveyor to the flue evacuation piping and the air intake box to the relative intake pipe.
Re-position the machine body by repeating the operations carried out previously in the reverse order.
Finally, use the Allen wrench to turn the lockbolt anti-clockwise to block movement.
To understand whether the insert is correctly attached to the base, connect the plug to the socket and set the master switch at position 1: the display should switch on.

The lower grill of the insert must lie at least 1 cm above the fire surface in covering marble.

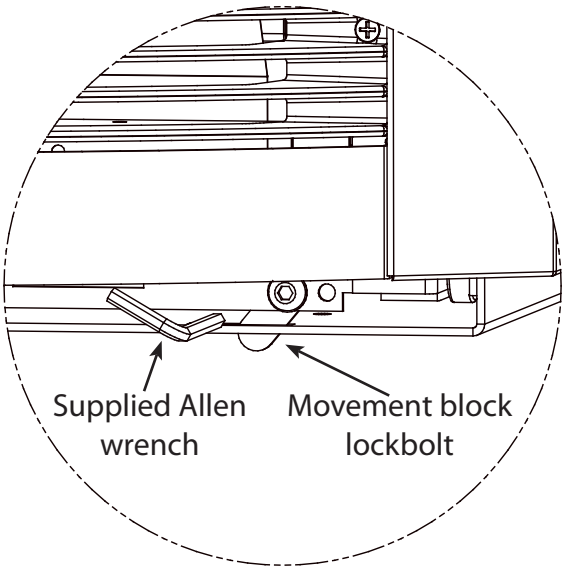


figure 6.4

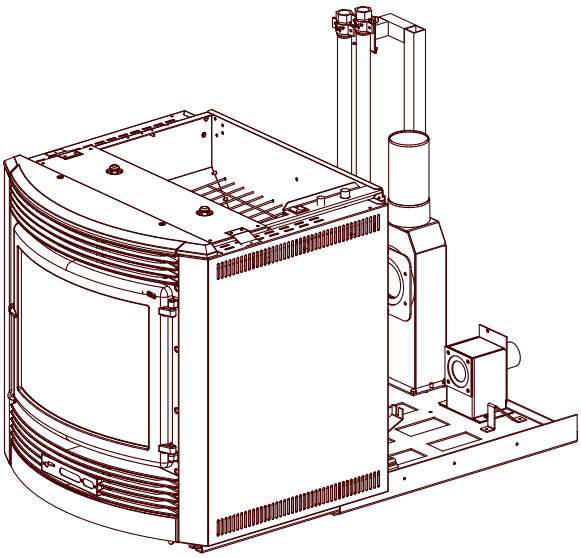


figure 6.5

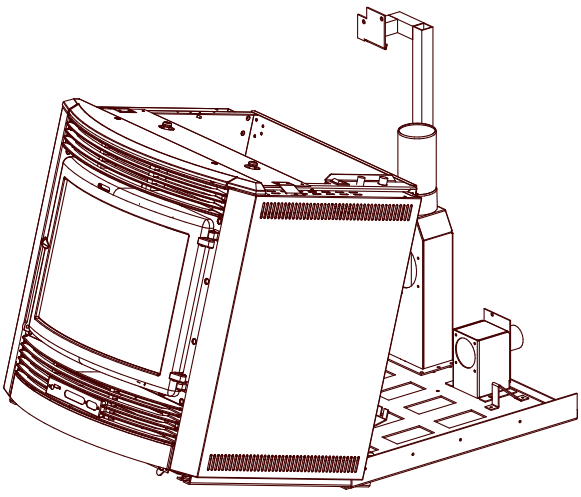


figure 6.6

ASSEMBLY WITH SUPPORT AND FEED KIT

This type of installation can be used when there is no base onto which the insert can be rested.
Proceed by positioning the base in the desired point and use the feet to adjust the height (the bolts are positioned in the four external sides of the pedestal in the lower part).
Check the presence of a current socket on the rear of the insert so that the socket is accessible once installation is completed.
After having evaluated the correct position, the machine body must be detached in order to fix the sliding base:

- ❖ Use the supplied Allen wrench to turn the lockbolt clockwise(figure 6.4).
- ❖ Slide the insert out (figure 6.5).
- ❖ Tilt it to release it from the rails (figure 6.6).

Fix the pedestal to the floor using strong steel plugs with a diameter of 8 mm.
Fix the sliding base to the frame using bolts.
Make a hole measuring 60 mm in correspondence with the air intake.

The air vent must be made outside the flue as it must not suck heated air.

Fix the base using the locking screws.
Appropriately connect the conveyor to the flue evacuation piping and the air intake box to the relative intake pipe.
Re-position the machine body by repeating the operations carried out previously in the reverse order.
Finally, use the Allen wrench to turn the lockbolt anti-clockwise to block movement.

To understand whether the insert is correctly attached to the base, connect the plug to the socket and set the master switch at position 1: the display should switch on.
Mount the hopper support for the pellet and insert it into the relevant coupling.

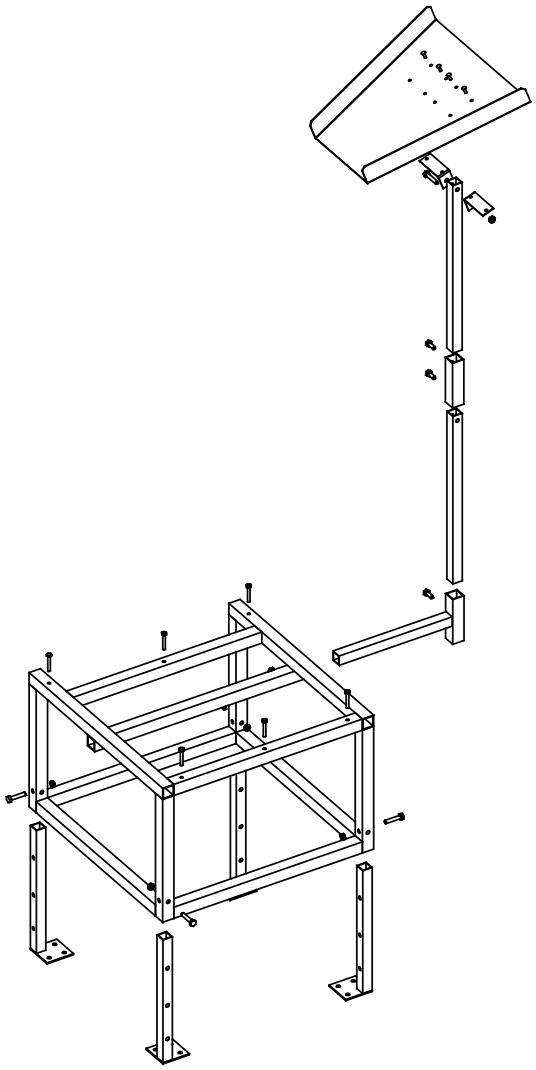


figure 6.7

N.B. If our pedestal is used, a slot must be created in the flue that allows to check the pellet level in the feed-box, thus preventing escape during filling.

The hopper support can be mounted in both sides of the insert.

Adjust the height and the inclination of the hopper on the basis of the flue that will be built.

The lower grill of the insert must lie at least 1 cm above the fire surface in covering marble.

INSTALLATION OF THE HYDRAULIC PART

For the hydraulic connections it is possible to proceed in various ways in relation tot he presence or not of the insert covering structure.

NO COVERING PRESENT

When covering is performed after the product has been installed, the connections to the hydraulic plant are made easier due to freedom of movement.
Before positioning the base in its definitive location, mount the following parts:

- ❖ the flexible pipe support rod, as indicated in figure 30 by the means of one M5 x 16 screw, the respective galvanised M5 nut and the burnished 3.9 x 22 self-threading screw (the latter must be unscrewed as it is already used to fix the flue conveyor pipe).
- ❖ The 2 collars with washer and burnished TCEI M8 x 10 screw as the latter can only be reached from the rear.

At this point it is possible to fix the base as described previously. Re-position the machine body and connect 2 flexible pipes to the rear support rod using the supplied screws; they will be successively connected to the hydraulic plant. The position of the 2 flexible pipes in the collars must be rigorously respected in order to prevent problems during handling.

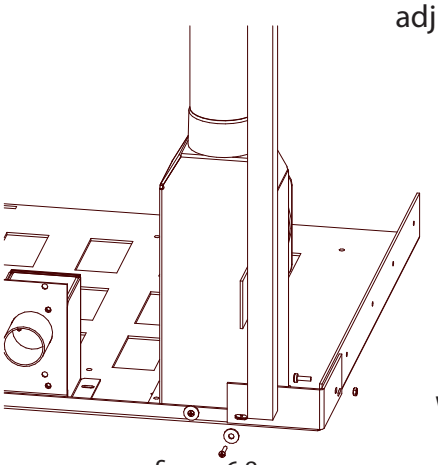


figure 6.8

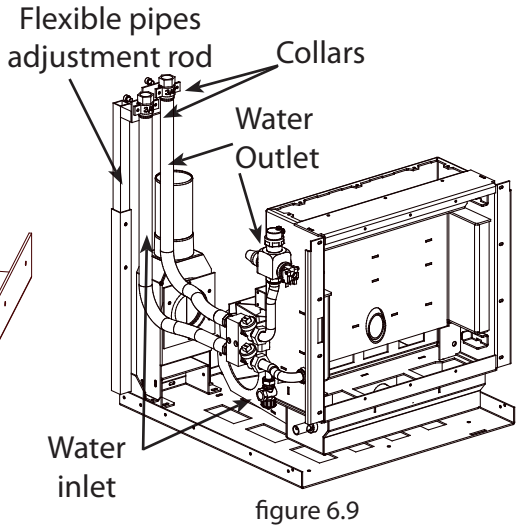


figure 6.9

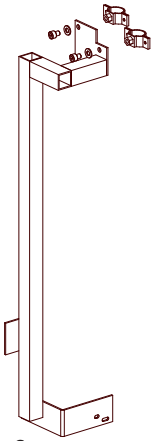


figure 6.10

ALREADY EXISTING COVERING

If the insert is installed inside an existing covering it is possible to proceed in 2 different ways:

- ❖ Create a lateral opening on the left side of the covering in a way to access the flexible pipes at the height of the collars.

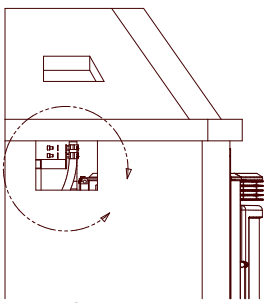


figure 6.11

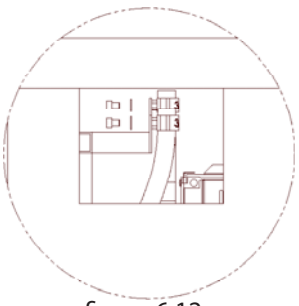


figure 6.12

❖ If it is not possible to make a lateral opening in the covering, follow the procedure given below.

Release the machine body from the base with the sliding rails using the sequence described previously and fix the base, having already previously positioned the rod for the flexible pipes. Remove the painted cover by means of the 2 screws in the upper part that fix it and also remove the fixing bracket on the left side (see figure 6.14 and 6.15).

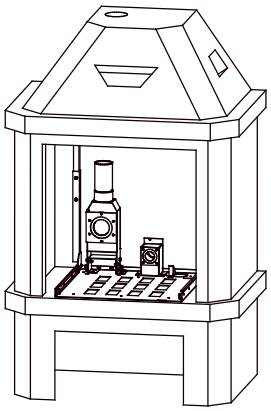


figure 6.13

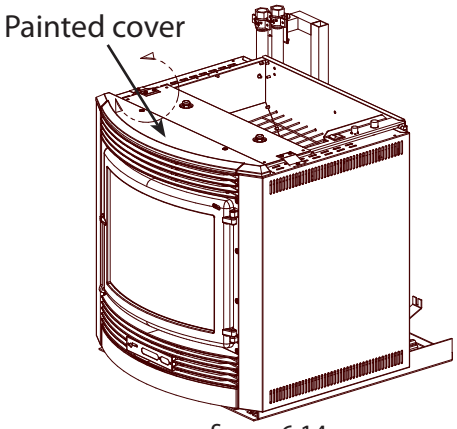


figure 6.14

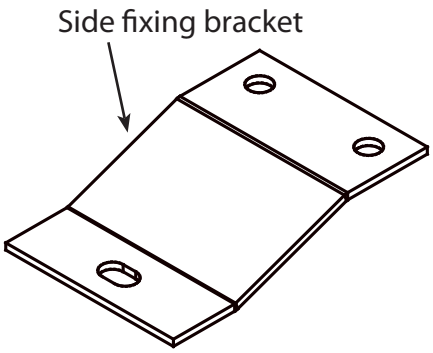


figure 6.15

Remove the left side by pushing it forward: during this operation the rear side must be removed from the screws by slight rotation, using the slots as illustrated in figure 6.18.

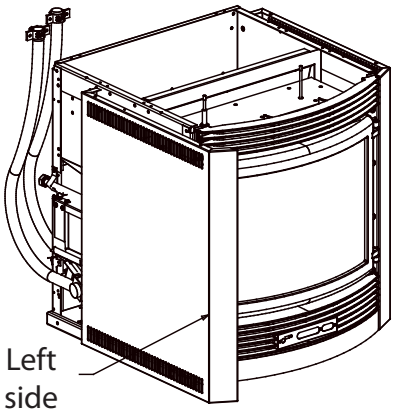


figure 6.16

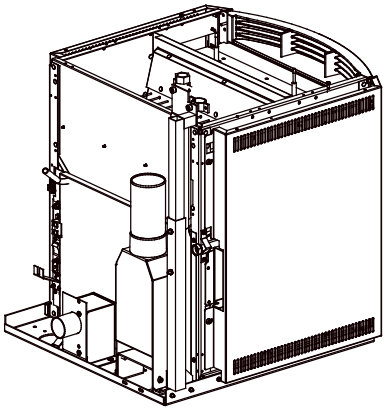


figure 6.17

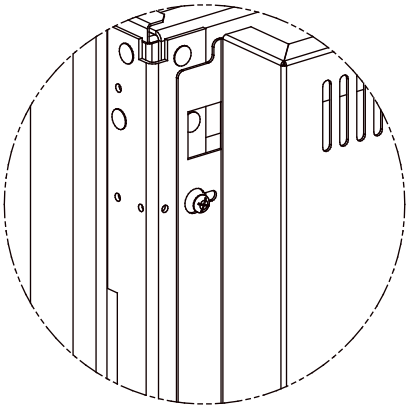


figure 6.18

Remove the flexible pipe guide bracket by removing the 2 screws that fix it

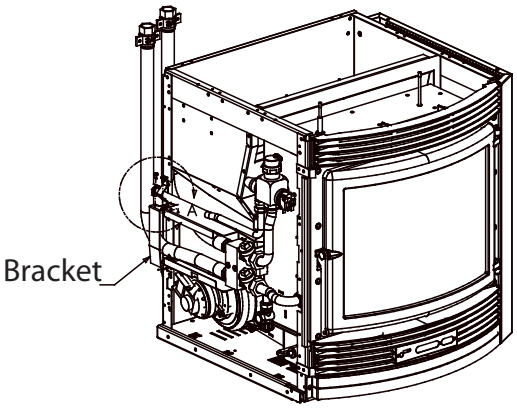


figure 6.19

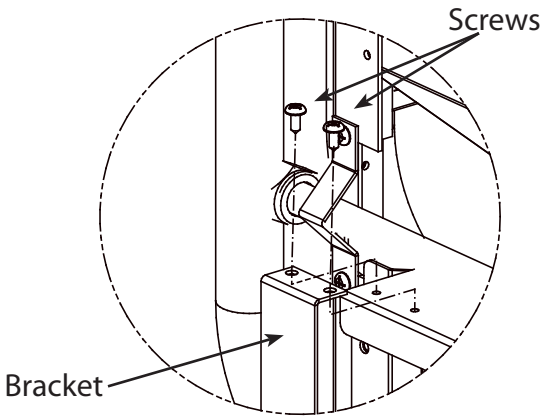


figure 6.20

Loosen the ring nuts on the 2 copper pipes and remove the metric screw that fixes the brass block to the machine body. At this point it is possible to separate the brass block with the pipes from the rest of the insert (figure 6.22).

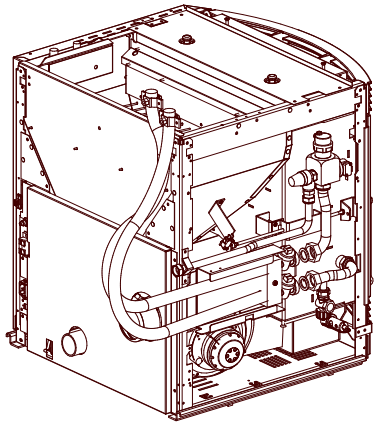


figure 6.21

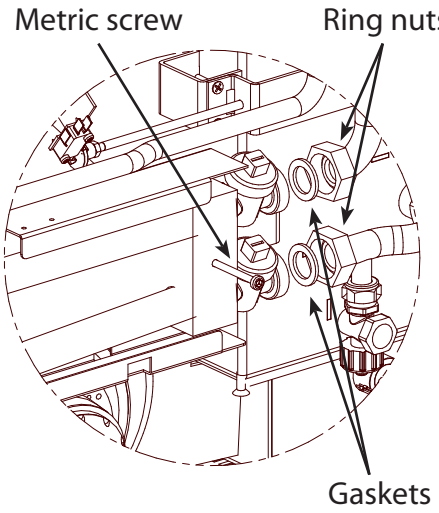


figure 6.22

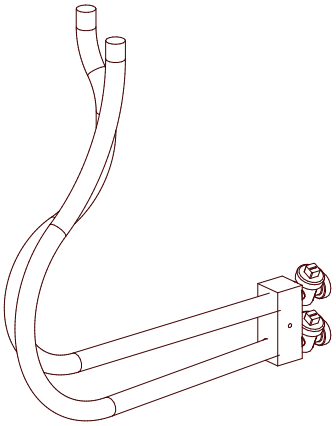


figure 6.23

Proceed by connecting the pipes to the support rod and consequently to the plant. Re-position the insert into the rails and restore the initial brass block situation, repeating the operations described above in the reverse order (first fix the block using the metric screw and then connect the ring nuts paying attention to the gaskets)
Re-mount the flexible pipe guide bracket, the left side with the relative blocking rod and the upper cover.

AIR CIRCULATION PIPES

It is necessary to create air recirculation inside the structure that covers the insert for correct functioning. This prevents the appliance from over-heating.
To guarantee this, just realise one or more openings in the lower part and in the upper part of the covering.
The following measurements must be respected:

- **Lower part (cold air inlet) ⇨ total minimum surface cm².**
- **Upper part (hot air outlet) ⇨ total minimum surface 500 cm².**

This ventilation system is totally independent from the air intake for combustion!!

To protect from any over-heating, the Comfort P80 is supplied with a probe that analyses the temperature inside the structure and intervenes by reducing the functioning power.

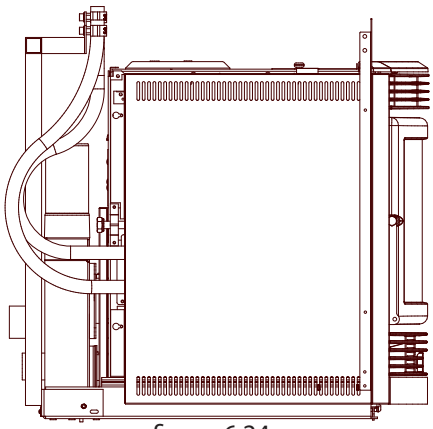


figure 6.24

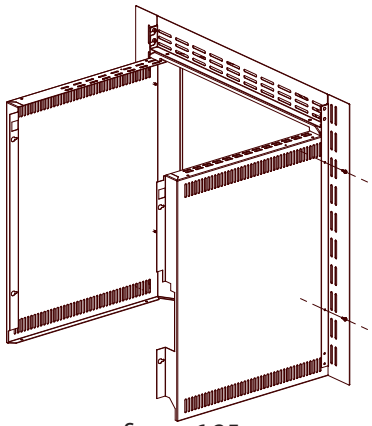


figure 6.25

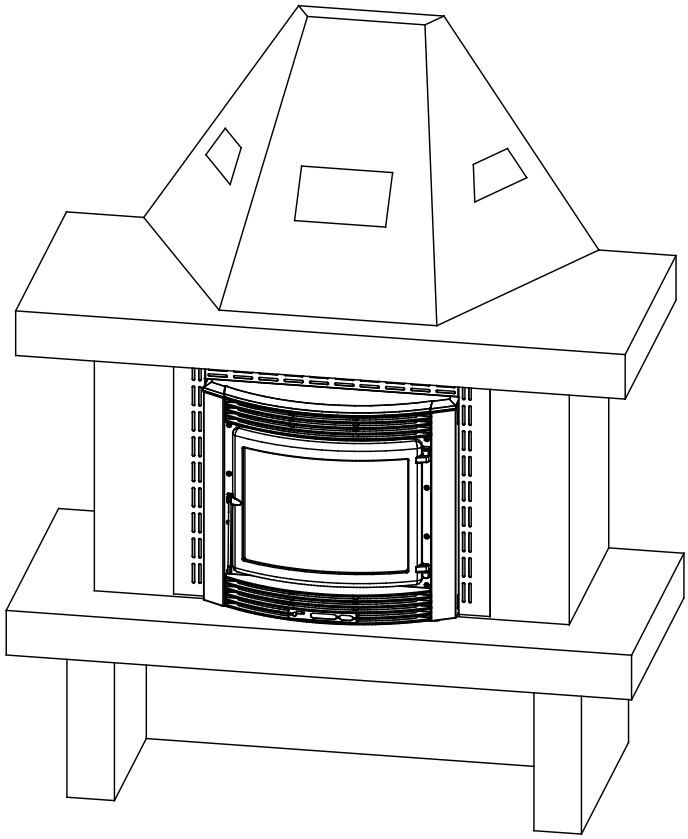


figure 6.26

The lateral frames must be fixed using the 2 supplied burnished 4.2 x 9.5 self-threading screws per side.
The 2 sides are already perforated for fixing the frames themselves.

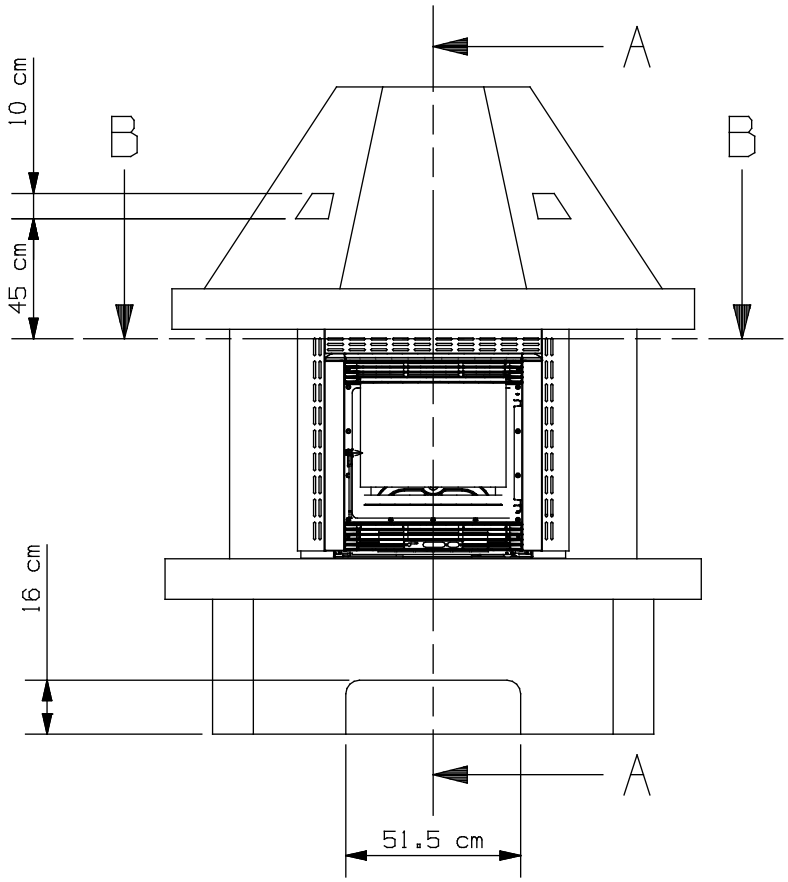


figure 6.27

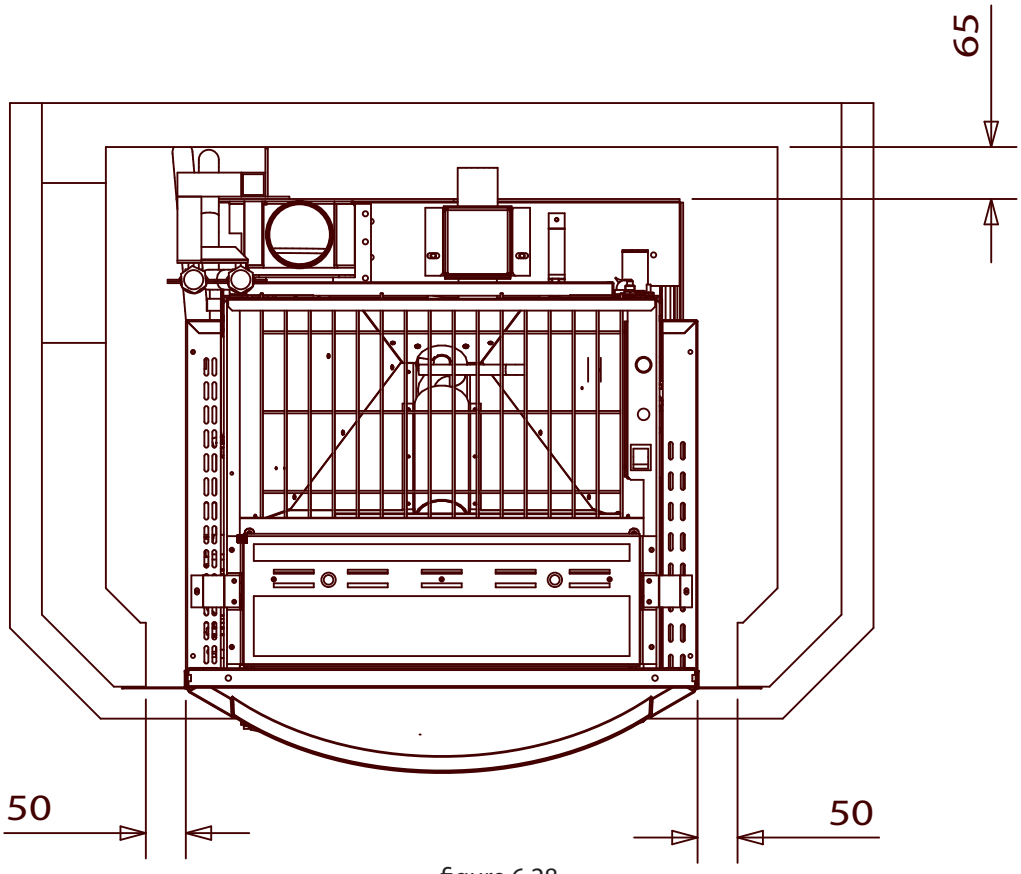
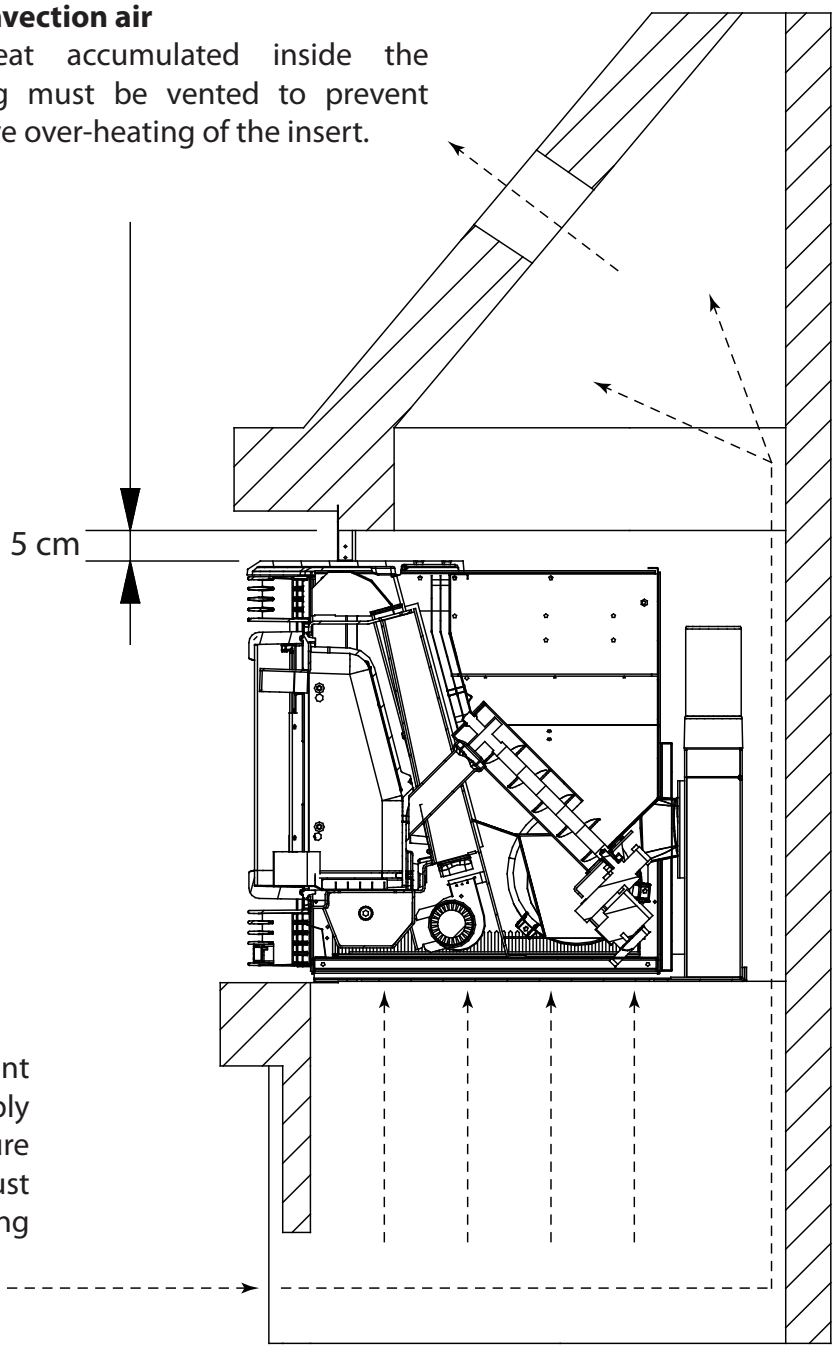


figure 6.28

Hot convection air
The heat accumulated inside the covering must be vented to prevent excessive over-heating of the insert.



Air inlet from the environment
To allow air recirculation an air inlet point must be envisioned, which is preferably positioned in the lower part of the structure in order to favour convection. The air must be withdrawn from the machine's working environment.

figure 6.29

For correct functioning of the insert, during construction of the flue the measurements between the insert and internal walls of the flue must be respected.
From the clearance measurements of the stove given in the technical features, it is necessary to consider at least 50 mm of air in the upper part and on the 2 sides.

The flue outlet pipe must always maintain a minimum distance of 50 mm from inflammable parts.

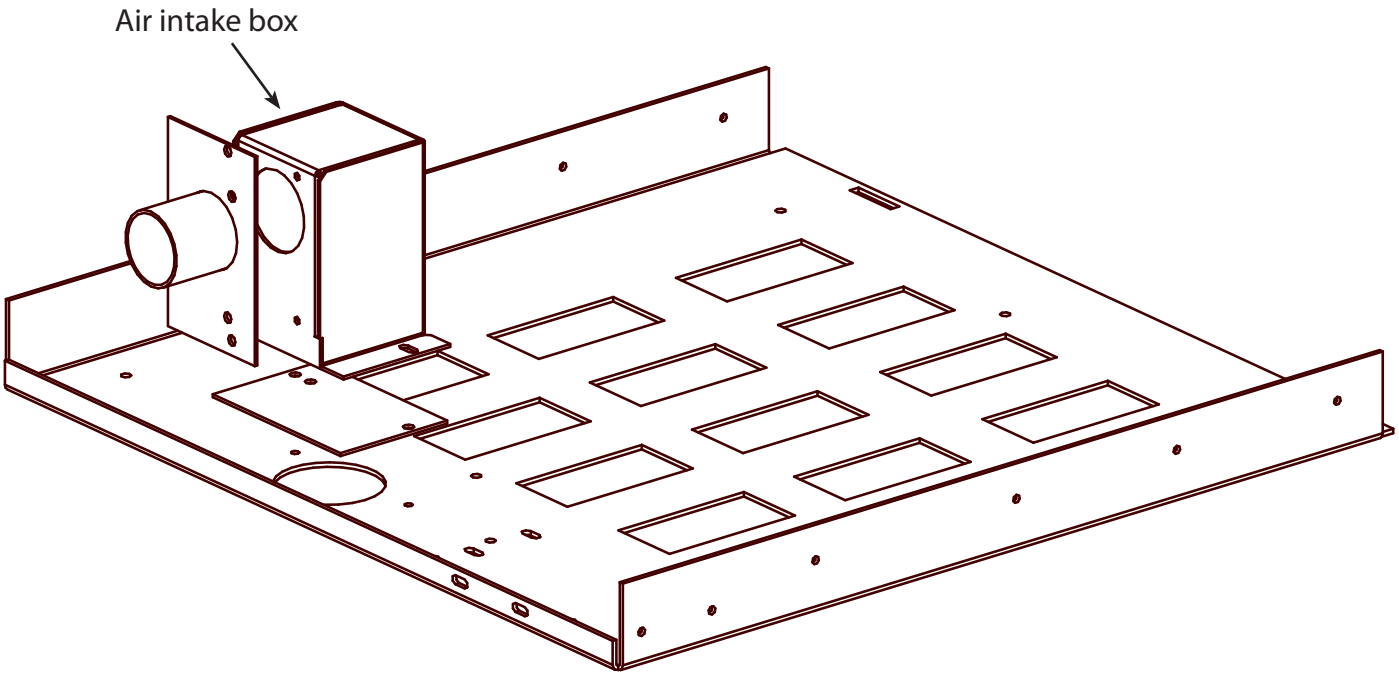


figure 6.30

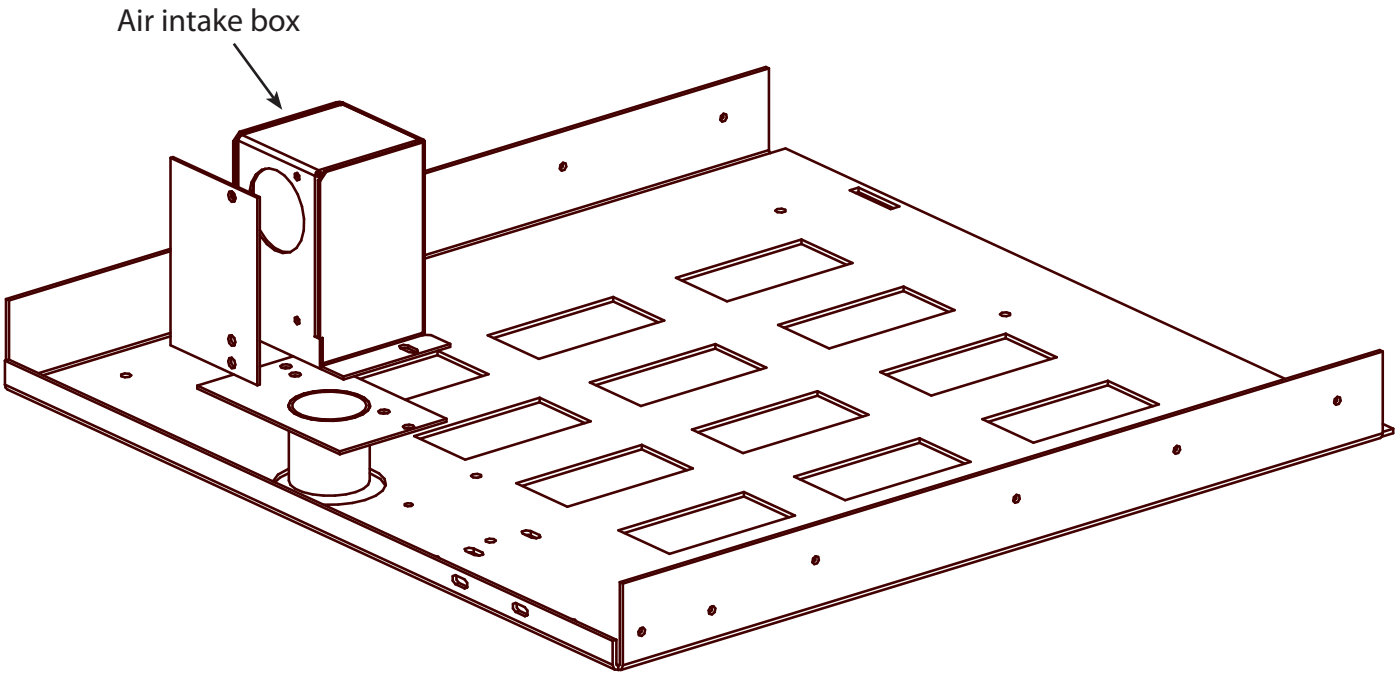


figure 6.31

Regarding the air intake box, it is possible to apply the intake pipe above the base (see figure above) or below (see figure below) depending on requirements.

These operations must be carried out by an authorised technician.

PRODUCT FUNCTIONALITY

CONTROL BOARD

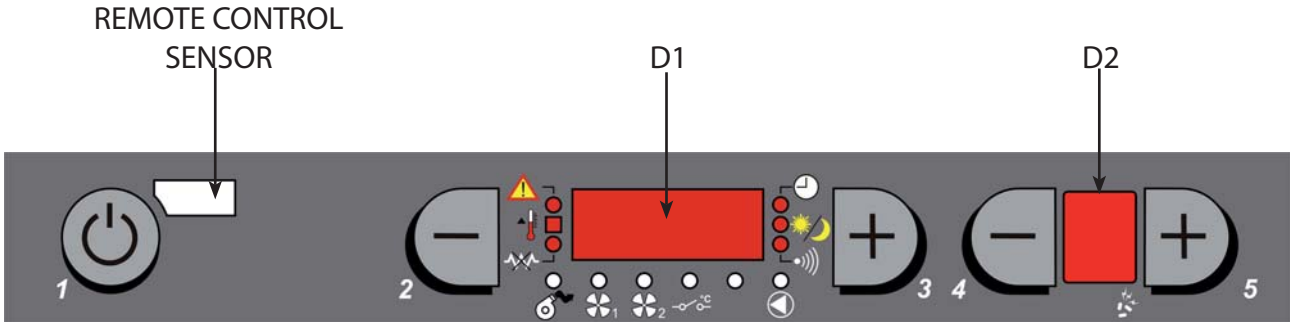


figure 7.1

1 ⇨ ON/OFF BUTTON

By pressing button 1 it is possible to switch the stove on and off automatically.

2-3 ⇨ AIR TEMPERATURE SETTING

Buttons 2 and 3 are used to adjust the room temperature inside the house.

4-5 ⇨ FUNCTIONING POWER

The heat power can be adjusted using buttons 4 and 5

Display D1 to view the various messages.
Display D2 to view the power set.

CURRENT TIME ADJUSTMENT

Controls procedure

1. Remove and restore the stove power supply using the master switch or using the power supply cable.
2. The stove will first display the microprocessor version (**ID_40** or successive), "**TIME**", "**LI 3**" and then "**OFF**".
3. When "**TIME**" appears, press button 5 to access the adjustment mode.
4. Display D1 will show the current time, the hours flashing while the minutes are fixed: use keys 2 and 3 to adjust the time and then confirm using key 5.
5. At this point the hours will become fixed and the minutes will start to flash: use keys 2 and 3 to adjust the minutes.

To go back to selection of the hours, press button 4 again or escape and confirm using button 1.

FUNCTIONING CYCLE

BASIC INSTRUCTIONS

The stove you have purchased uses pellet fuel. This type of material is obtained from natural waste from the machining of wood. By means of a special process that does not require the use of any binding agent and additive, the waste is compressed in industrial machinery under high pressure and they become solid wooden pellets. IT IS PROHIBITED to burn non-pelletised raw materials inside our stoves. The failure to comply with these prescriptions voids all guarantees and could jeopardise the safety of the appliance.

The following recommendations must be followed the first two or three times the stove is ignited:

- ❖ It is possible that slight odours are produced due to the drying of the paints and silicones used.
- ❖ Do not remain in the environment for long periods.
- ❖ Do not touch the surfaces as they could still be unstable.
- ❖ Air the room well several times.
- ❖ The hardening of the surfaces is terminated after several heating processes.
- ❖ This appliance must not be used to burn waste.

IGNITION

1. Before switching the stove on the following points must be verifiedi:
   - ❖ the feed-box must be full of pellets
   - ❖ the combustion chamber must be clean
   - ❖ The brazier must be completely free and clean
   - ❖ check the hermetic closure of the fire door and the ash drawer
   - ❖ make sure the power supply cable is connected correctly
   - ❖ the bipolar switch in the rear right part must be positioned on 1

2. Press button 1 for 3 seconds: display D1 will show "**AT 08**" decreasing by one number every second. In the phase the appliance performs self-analysis to check the functionality of each individual electric component. When this cycle has been completed, display D1 will show "**AC 15**" (these are the minutes when the stove attempts the ignition phase and decreases by 1 every minute that passes).

*The first time the product is used, even if the feed-box is full, there is the possibility that the pellets are not distributed into the combustion chamber for the first 15 minutes. This is because the pellet feed worm screw is empty. If no flame has developed in the stove after 15 minutes D1 will show "**NO ACC**".*

3. If points 1 and 2 have been performed correctly, when the flame is developed the stove will pass to start mode ("**AU 07**").

4. On termination of the start phase the stove will pass to normal functioning: display D1 will show the room temperature while display D2 will show the work power.

ATTENTION!!!

1. DO NOT USE ANY INFLAMMABLE LIQUIDS FOR IGNITION
2. DO NOT ALLOW THE BAG OF PELLETS TO COME INTO CONTACT WITH THE BOILING HOT STOVE DURING THE FILLING PHASE
3. IN THE CASE OF CONTINUOUS NO IGNITION, CONTACT AN AUTHORISED TECHNICIAN

NORMAL FUNCTIONING

When ignition has taken place, the user can adjust the heating power using buttons 4 and 5. By pressing button 4 the heat power is decreased and therefore also the consumption of pellets per hour, vice versa by pressing 5 the heating power is increased and as a consequence also pellet consumption. As well as the adjustment of flow rate it is also possible to adjust the room temperature directly from the control board, using buttons 2 and 3. To set the plant water temperature, see the "Water temperature adjustment" chapter.
Check the content of the feed-box in order to prevent the fire going out due to the lack of fuel.

ATTENTION!!!

1. The bags of pellets must be kept at least 1.5 metres from the stove.
2. It is recommended that the feed-box is always half full.
3. Make sure the appliance is off before filling the pellet feed-box.

SWITCH-OFF

Press button 1 for 3 seconds:
When the operation has been performed, the appliance automatically enters the switch- off phase, blocking the supply of pellets; display D1 will alternatively show "**OFF**", current time and room temperature.
The flue exhaust motor will remain on until the stove temperature has fallen sufficiently.

REMOTE CONTROL

The heat setting, the room temperature, and automatic start/stop of the stove can be remote controlled.

S = Luminous warning light that indicates which keys have been pressed.

Correspondence of display keys with remote control keys

1 = p3+p5
2 = p2
3 = p3
4 = p4
5 = p5

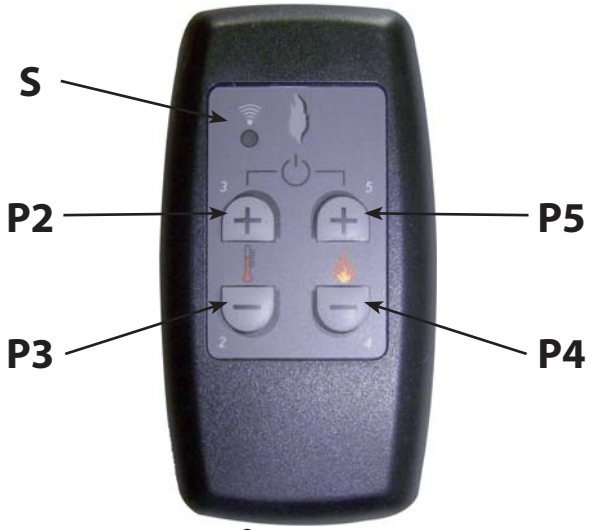


figure 8.1

To light the stove, press buttons 3 and 5 at the same time and hold for three seconds (Fig. 21); the stove automatically enters the lighting stage. This is followed by the start-up phase, which allows the stove to develop and settle the flame. When the lighting stage is complete, the stove goes into normal operation.
The heat setting can be adjusted using the buttons 5 and 4, and the room temperature setting can be adjusted using buttons 2 and 3.
To switch off the stove, press buttons 3 and 5 at the same time and hold for three seconds. Display D1 will show the message "**OFF**".
The remote control operates with an MN21 12V battery (the kind used for gate openers).
To replace the batteries, open the cover in the rear part as illustrated below.


figure 8.2


figure 8.3

Open by pressing the part circled in the figure

ROOM THERMOSTAT

DIGITAL THERMOSTAT (AS PER STANDARD)

The appliance can check the room temperature using a digital thermostat and show it on the display.

1. When the insert is started and has entered normal functioning mode, display D1 will show a number (e.g. 21°C); this value indicates the room temperature.
2. Use buttons 2 or 3 to enter the thermostat setting and the display will show a flashing word that alternates at every impulse with "**SET**" and the temperature to be set; by pressing 2 the value decreases and by pressing 3 it increases.
3. Let "**SET**" disappear from the display.
4. Adjust the desired heating power using buttons 4 and 5.

When the appliance reaches the temperature set in display D1, the relative luminous indicator will switch off.

MECHANICAL THERMOSTAT (OPTIONAL)

N.B. :Installation must be performed by an authorised technician

It is possible to thermostat a room adjacent to the room where the stove is positioned: just connect a mechanical thermostat (boiler type) following the procedure described in the next point (it is recommended to position the optional mechanical thermostat at a height of 1.50m from the ground).

MECHANICAL THERMOSTAT INSTALLATION (OPTIONAL)

N.B. : Installation must be performed by an authorised technician

1. Switch the appliance off using the master switch positioned on the rear of the stove.
2. Remove the plug from the socket.
3. Refer to the wiring diagram to connect the two thermostat cables onto the relative clamps positioned don the rear of the machine< one is red and the other black.

MECHANICAL THERMOSTAT FUNCTIONING IN STDBY MODE (TO ALSO BE USED FOR TELEPHONIC ACTUATOR)

The Stdby function is also used to further reduce fuel consumption by switching the stove off when the desired temperature is reached. On the contrary, if the temperature drops, the stove automatically switches back on, going to normal working conditions.

1. Set the desired heating power using buttons 4 and 5.
2. Using button 2, take the room temperature to minimum until "**LOU**" appears in display D1 with "**SET**" flashing.
3. At this point until "**SET**" with "**LOU**" continues to flash, press key 1 for three seconds and "**STBY**" will appear in the display. The energy saving function is now activated.

At this point the external thermostat will control stove functioning in the following way:

- ❖ Closed contact thermostat ⇨ the stove switches on and works at the set power, showing "**T ON**" on display D1.
- ❖ Open contact thermostat ⇨ the stove switches off or stays off showing "**STBY**" on display D1.
- ❖ This function can be suspended temporarily by pressing key 1:
- ❖ If from "**STBY**" ⇨ the stove will remain off alternatively showing "**STBY**", "**OFF**" and current time on the display D1.
- ❖ If from "**T ON**" ⇨ the stove switches off alternatively showing "**T ON**", "**OFF**" and current time on the display D1.

To go back to using the function, press button 1 again.
To definitively exclude the function just raise the temperature of the stove thermostat using button 3.

USER PARAMETERS

USER PARAMETERS		
WATER TEMPERATURE ADJUSTMENT		
Display D1	**Display D2**	**Function**
70°C		Water Temperature Adjustment
WEEKLY PROGRAMMER		
Display D1	**Display D2**	**Function**
off	0	Activation/deactivation of the weekly programmer
00:00	1	Time 1st switch-on
00:00	2	Time 1st switch-off
off 1	3	Ignition/switch-off consents for various days
00	4	Installer parameter
00:00	5	Time 2nd switch-off
00:00	6	Time 2nd switch-off
off 1	7	Ignition/switch-off consents for various days
00:00	8	Time 3rd switch-on
00:00	9	Time 3rd switch-off
off 1	A	Ignition/switch-off consents for various days
DAY-NIGHT TEMPERATURE FUNCTION		
Display D1	**Display D2**	**Function**
06:00	B	Start of day time/end of night time
22:00	C	Start of night time/end of day time
25	D	Day time max. temperature
20	E	Night time max. temperature
PELLET FEED ADJUSTMENT		
Display D1	**Display D2**	**Function**
00	F	% pellet feed adjustment

WATER TEMPERATURE ADJUSTMENT

This function allows to set the desired water temperature. To access this parameter, press button 3 and holding it down also press button 5 and then release both keys 2 at the same time.
Display D1 will show 2 flashing messages "**H2O**", i.e. water and "**70°C**", which corresponds to the value that can be modified. Nothing appears on display D2.
Using buttons 2 and 3 adjust the desired temperature with a maximum travel of 65 to 80°C. Press button 1 to confirm.

WEEKLY PROGRAMMER

The weekly programmer allows to program 3 time spans within a day to use every day of the week. The ignition and switch-off times must be within the arc of one day, from 0 to 24 and not over several days:

E.g. switch-on 07:00/switch-off 18:00 OK
switch-on 22:00/switch-off 05:00 ERROR

First of all the current day and time must be set using the "*current day and time adjustment*" sequence to give a reference to the function itself.

To switch programming on press 3, hold it down and press 5 and then release both keys together. Move using key 5 until a flashing "0" appears on display D2.
The following table gives all weekly programmer function parameters.

Parameter Display D2	Function	Adjustment Keys	Value Display D1	Confirmation Key
0	Act. /deact. weekly programmer	2 or 3	ON/OFF	5
1	Time 1st switch-on	2 or 3	OFF or from 00:00 to 23:50	5
2	Time 1st switch-off	2 or 3	OFF or from 00:00 to 23:50	5
3	Ign./switch-off consents for the various days	2 or 3	ON/OFF 1, ON/OFF 2, ... ON/OFF 7	5
4	Installer parameter	2 or 3	00	5
5	Time 2nd switch-on	2 or 3	OFF or from 00:00 to 23:50	5
6	Time 2nd switch-off	2 or 3	OFF or from 00:00 to 23:50	5
7	Ign./switch-off consents for the various days	2 or 3	ON/OFF 1, ON/OFF 2, ... ON/OFF 7	5
8	Time 3rd switch-on	2 or 3	OFF or from 00:00 to 23:50	5
9	Time 3rd switch-off	2 or 3	OFF or from 00:00 to 23:50	5
A	Ign./switch-off consents for the various days	2 or 3	ON/OFF 1, ON/OFF 2, ... ON/OFF 7	1

Let's suppose that the weekly programmer function is to be used and 3 time periods are to be used in the following way:
1st time span: from 08:00 to 12:00 every day of the week excluding Saturday and Sunday
2nd time span: from 15:00 to 22:00 only Saturday and Sunday
3rd time span: not used
Let's set the weekly programmer.

Parameter 0 (D2=0(flashing); D1=ON)
Use buttons 2 and 3 to activate the weekly programmer by setting the value at ON.

Parameter 1 (D2=1(flashing); D1=E.g. "08:00")
Use buttons 2 or 3 to set "08:00", which corresponds to the switch-on time of the 1st time span. To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 2 (D2=2(flashing); D1=E.g. "12:00")
Use buttons 2 or 3 to set "12:00:", which corresponds to the switch-off time of the 1st time span. To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 3 (D2=3 (flashing); D1=OFF 1)
Activate the first time span for every day of the week except Saturday and Sunday. To do this use keys 2 and 3 in the following way:
a. key 3 - scroll the various days
b. key 2 - enable/disable (ON/OFF) the 1st time span for that day

Example:

Day	Initial value	Function key 2	Final value	Function key 3
MONDAY	OFF 1	OFF 1 to ON 1 and vice versa	OFF 1(time deactivated)	Go to next day
TUESDAY	OFF 2	OFF 2 to ON 2 and vice versa	OFF 2(time deactivated)	Go to next day
WEDNESDAY	OFF 3	OFF 3 to ON 3 and vice versa	OFF 3(time deactivated)	Go to next day
THURSDAY	OFF 4	OFF 4 to ON 4 and vice versa	OFF 4(time deactivated)	Go to next day
FRIDAY	OFF 5	OFF 5 to ON 5 and vice versa	OFF 5(time deactivated)	Go to next day
SATURDAY	OFF 6	OFF 6 to ON 6 and vice versa	ON 6(time active)	Go to next day
SUNDAY	OFF 7	OFF 7 to ON 7 and vice versa	ON 7(time active)	Go to next day

To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 4 (D2=4 (flashing); D1=00)
N.B. This parameter is reserved for the after-sales service and must not be modified.

Parameter 5 (D2=5 (flashing); D1=E.g. "15:00")
Use buttons 2 or 3 to set "15:00", which corresponds to the switch-on time of the 2nd time span. To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 6 (D2=6 (flashing); D1=E.g. "22:00")
Use buttons 2 or 3 to set "22:00", which corresponds to the switch-off time of the 2nd time span. To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 7 (D2=7(flashing); D1=E.g. "OFF 1")
Activate the second time span only Saturday and Sunday. To do this use keys 2 and 3 in the following way:
a. key 3 - scroll the various days
b. key 2 - enable/disable (ON/OFF) the 1st time span for that day

Example:

Day	Initial value	Function key 2	Final value	Function key 3
MONDAY	OFF 1	OFF 1 to ON 1 and vice versa	OFF 1(time deactivated)	Go to next day
TUESDAY	OFF 2	OFF 2 to ON 2 and vice versa	OFF 2(time deactivated)	Go to next day
WEDNESDAY	OFF 3	OFF 3 to ON 3 and vice versa	OFF 3(time deactivated)	Go to next day
THURSDAY	OFF 4	OFF 4 to ON 4 and vice versa	OFF 4(time deactivated)	Go to next day
FRIDAY	OFF 5	OFF 5 to ON 5 and vice versa	OFF 5(time deactivated)	Go to next day
SATURDAY	OFF 6	OFF 6 to ON 6 and vice versa	ON 6(time active)	Go to next day
SUNDAY	OFF 7	OFF 7 to ON 7 and vice versa	ON 7(time active)	Go to next day

To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 8 (D2=8 (flashing); D1=E.g. "OFF")
Set at "off" using buttons 2 or 3, which is found before the time "00:00", in a way to disable the switch-on of the 3rd time period.
To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 9 (D2=9 (flashing); D1=E.g. "OFF")
Set at "OFF" using buttons 2 or 3, which is found before the time "00:00", in a way to disable the switch-off of the 3rd time period.
To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter A (D2=A (flashing); D1=E.g. "OFF 1")
At this point the values introduced in this parameter have no value as the ignition and switch-off of the 3rd time period have been disabled.
To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.
Press button 1 to escape.

Nota bene: The relative indicator light on the control board will switch on when the weekly programmer is active (see display table description).

TO DEACTIVATE THE WEEKLY PROGRAMMER enter user programming by pressing key 3 and holding, press key 5, a flashing "0" will appear on display D2. Set "off" in the display D1 using keys 2 and 3. Then press key 1 to confirm and escape.
The manual controls, from the display or remote control, always remain priority with respect to programming.

DAY-NIGHT TEMPERATURE FUNCTION

The day-night temperature function allows to switch the appliance on/off automatically on the basis of two pre-selected temperatures.
This is very useful when the stove exceeds the room thermostat setting (e.g. due to between-season conditions or over-sized stove with respect to the room).
The system allows to set one temperature during the day and another one during the night.
First of all the current day and time must be set using the current day and time adjustment sequence to give a reference to the function itself.
To access the day-night temperature function parameters, press 3, hold it down and press 5 and then release both keys together: once entered, press button 5 and move to parameter b (D2=ut b).

Parameter b (D2=b; D1=E.g. "06:00")
Using buttons 2 and 3 it allows to adjust the day time start/night time end.
To confirm and continue programming, press button 5.

Parameter c (D2=C; D1=E.g. "22:00")
Using buttons 2 and 3 it allows to adjust the day time end/night time start.
To confirm and continue programming, press button 5.

Parameter d (D2=D; D1=E.g. "25°C")
Using buttons 2 and 3 it allows to adjust the day time maximum temperature.
To confirm and continue programming, press button 5.

Parameter E (D2=E; D1=E.g. "20°C")
Using buttons 2 and 3 it allows to adjust the night time maximum temperature.
To confirm and continue programming, press button 1.

Once exiting the programming, to activate/deactivate the function press 4, hold it down and press 5 and then release both keys together.

The relative luminous indicator will appear/disappear on the control board (see display table description).

The various parameters must only be set with the stove off!

Summary table

Display D1	Display D2	Function
06:00	B	Start of day time/end of night time
22:00	C	End of day time/start of night time
25°C	D	Day time max. temperature
20°C	E	Night time max. temperature

Once the function is activated the machine must be ignited using key 1.
When the stove switches off due tot he maximum temperature reached, "**DOFF**" will appear on display D1.
The stove switches back on automatically when the room temperature lowers by 3°C with respect to the maximum temperature set.

E.g. State of the stove – **DOFF**
Maximum temperature set - 25°C

When the room temperature falls below 22°C (25 – 3 = 22 °C), the stove will re-start automatically.

The stove can only re-ignite from the "DOFF" state and not from the "OFF" state.

The manual controls, from the display or remote control, always remain priority with respect to programming.

PELLET FEED ADJUSTMENT

If the stove has functioning problems owing to the quantity of pellets, adjust pellet feeding directly from the control board.
The problems correlated tot he amount of fuel can be divided into 2 categories:

LACK OF FUEL:

- ❖ the stove can never develop a suitable flame, tending to remain very low even at high powers.
- ❖ at minimum power the stove tends to almost switch off taking the stove into alarm conditions "**NO PELL**".
- ❖ when the stove displays the "**NO PELL**" alarm, there may be non-burned pellets inside the brazier.

EXCESS FUEL:

- ❖ the stove develops a very high flame even at low power.
- ❖ the panoramic glass is very dirty, obscuring it almost totally.
- ❖ the brazier tends to become encrusted, blocking the holes for air intake due to the excessive pellet feed, as it is only burned partially.

If the problem occurs after only a few months working, check that routine cleaning stated in the stove booklet, has been carried out correctly.

The regulation to be performed is a percentage. Therefore a modification of this parameter will lead to a proportional variation of all stove feeding speeds.
To access the percentage adjustment of pellet feeding, enter the user programming by pressing key 3 and, holding this down, press key 5.

At this point use key 5 to move within the menu until a flashing "**F**" appears on display D2.
If, inadvertently, progress is made beyond this parameter, exit using key 1 and repeat the operation. The value "**00**"will appear on display D1: keys 2 and 3 can be used to adjust the percentage increase/decrease desired by 5 points per time (the parameter can be varied with a maximum travel from –50 to +50).

Adjustment table

LACK OF FUEL	Increase the percentage value by 5 points and try the stove with the new calibration for at least half an hour. If the problem is attenuated, but not solved, increase by another 5 points. Repeat the operation until the problem is solved. If the problem cannot be resolved, contact the after-sales service.
EXCESS FUEL	Decrease the percentage value by 5 points and try the stove with the new calibration for at least half an hour. If the problem is attenuated, but not solved, decrease by another 5 points. Repeat the operation until the problem is solved. If the problem cannot be resolved, contact the after-sales service.

When the adjustment has been made, press button 1 to conform and escape.

CLEANING

Maintenance operations guarantee correct functioning of the product through time.
Failure to comply with these operations can jeopardise the safety of the product.

CLEANING THE BRAZIER

The brazier must be cleaned every day.

- ❖ remove the brazier from the relevant compartment and free the holes using the appropriate fire irons supplied (see figure 59)
- ❖ remove the ash from the brazier using a suction device
- ❖ suck the ash deposited in the brazier compartment

figure 12

ATTENTION!!!

Removal of the divider jeopardises the safety of the product and leads to the immediate voiding of the warranty period. In the case of wear or deterioration request after-sales assistance for replacement of the part (replacement that is not under guarantee as the component is subject to wear).

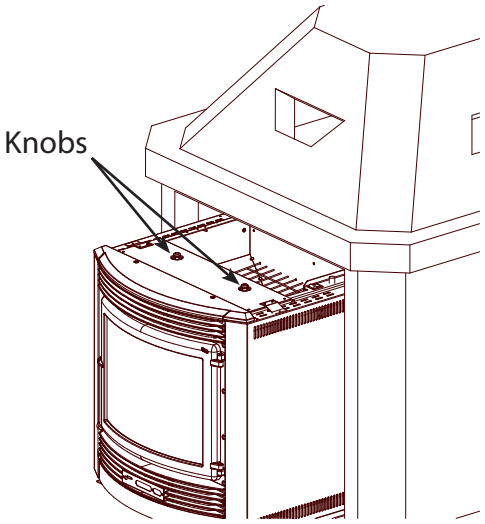


figure 13

USING THE SCRAPERS

Cleaning of the heat exchangers allows to guarantee constant heat output through time. This type of maintenance must be performed at least once a day. To do this, just use the relevant scrapers positioned in the upper part of the stove, making upward movements and vice versa several times.
To make the operation easier make the movement simultaneously for both rods.

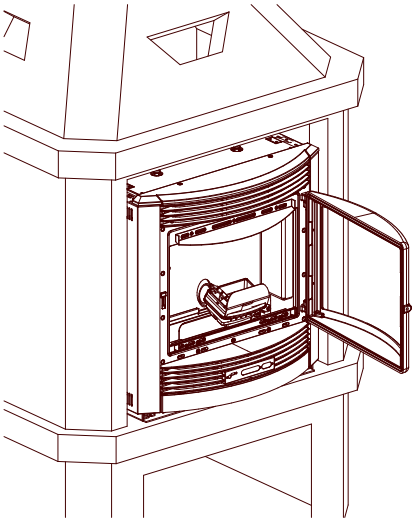


figure 14

CLEANING THE ASH COLLECTOR TRAYS

The ash collector trays, positioned at the sides of the brazier, must be emptied when required using a suction device.

CLEANING THE HEAT EXCHANGER (MONTHLY)

The heat exchangers chamber must be cleaned every month as the soot deposited on the rear of the cast iron hearth wall blocks the regular flow of fumes.
To access the heat exchangers, remove the central piece from the hearth wall, following the operations described below:

- ❖ Remove the brazier from its location
- ❖ Manually rotate the 2 lockbolts, shown in figures 63 and 64, outwards.
- ❖ Hold the extractable cast iron and pull it downwards.
- ❖ Finally, slide it from the combustion chamber by pulling it towards yourself, paying attention to the 2 lateral cast iron hooks below.

Once the heat exchanger compartment can be accessed use the supplied fire irons to remove and scrape the soot deposited and only then use the suction device to completely remove the ash (figure 66). When cleaning has been completed, re-position the extractable cast iron with the opposite movement used to remove it. When the hearth wall has been positioned, turn the lockbolt to take it to its original position.

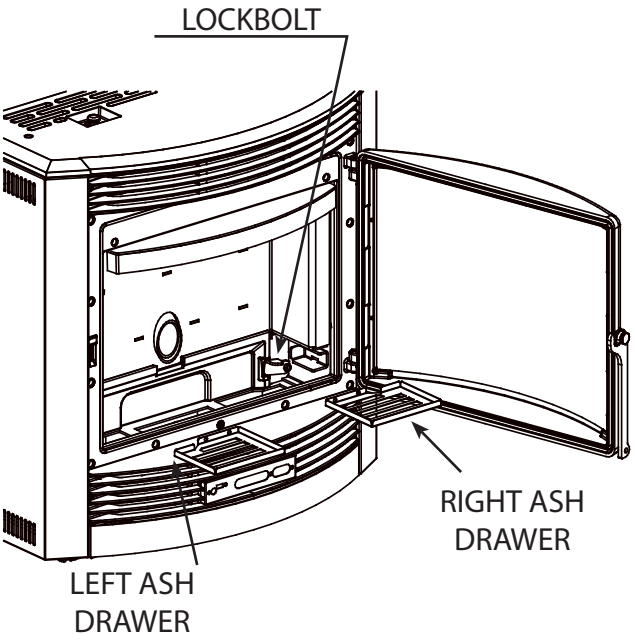


figure 15

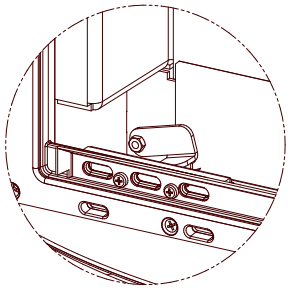


figure 16

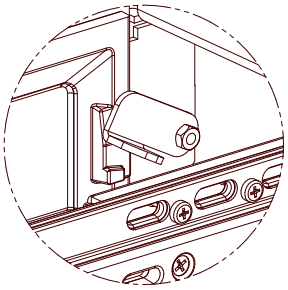


figure 17

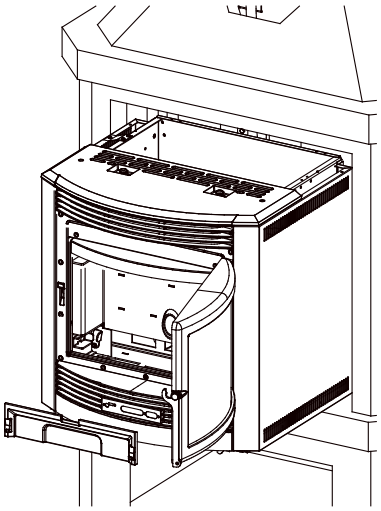


figure 18

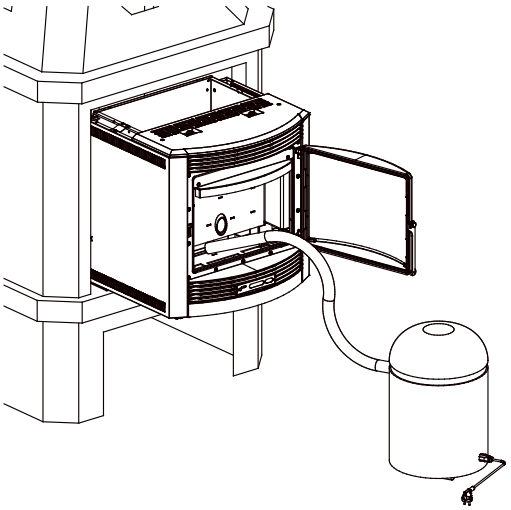


figure 19

DOOR, ASH DRAWER AND BRAZIER GASKETS

The gaskets guarantee the tightness of the stove and its consequent good functioning.
These must be checked regularly: if they should be worn or damages they must be replaced immediately.
These operations must be carried out by an authorised technician.

For correct functioning, the stove must undergo routine maintenance by an authorised technician, at least once a year.

If the power supply cable is damaged, it must be replaced by the after-sales service or by a similarly qualified person, so as to avoid al risks.

CONNECTION TO THE FLUE

Suck and clean the pipe that leads to the flue yearly or anytime that it is necessary. If there are horizontal tracts the residues must be removed before they can obstruct flue passage.

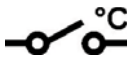
NON-CLEANING jeopardises safety.

PRODUCT DISPLAY TABLES

SIGNALS		
Signals Display	**Reason**	**Solution**
ATTE	A new ignition is attempter when the stove has just been switched off (normal switch-off or caused by an alarm).	When the stove switches off (normal or caused by an alarm) it is necessary to wait until it cools down completely, therefore clean the brazier. The stove can only be re-ignited when these operations have been performed.
HOT	Function not available for this product.	Function not available for this product.
LOU	Function not available for this product.	Function not available for this product.
T ON	Function not available for this product.	Function not available for this product.
STBY	Stove off waiting for re-ignition.	In this mode the machine can be switched on/off using an additional thermostat (see "*Mechanical thermostat function in energy saving mode*"). To exclude the following function just raise the room temperature using button 3.
DOFF	Stove off due to "*Day-night temperature function*" and in Stand-by to re-ignite.	To exclude the re-ignition of the stove due to the "*Day-night temperature function*" just hold button 1 down for 3 seconds, taking the stove to **OFF**. To exclude the function completely, press button 4 and, holding it down, press 5.
HOFF	The temperature of the water has exceeded the set threshold by more than 5°C.	Check the correct functioning of the hydraulic plant. On lowering of the water temperature (5° below the set threshold) the machine will re-start in automatic mode. To exclude any stove re-ignition just hold down button 1 for 3 seconds, taking the stove to off.
RAF / BLAC OUT	No current on the main power supply.	After the complete switch-off cycle the stove will re-ignite automatically.
PUL	Automatic brazier cleaning is in progress.	The automatic brazier cleaning is performed at pre-established intervals of continued working. The automatic cleaning does not start if the stove is in 1st power.

ALARMS		
Signals Display	**Reason**	**Solution**
	Indicates the presence of an alarm	It is on in the presence of one of the alarms described below and is accompanied by the relative signal in display D1, which identifies the cause. To reset the alarm, just hold key 1 down for 3 seconds when the stove is completely cold.
FUM FAIL	Fault correlated to the flue exhaust motor.	**The restoration operations must be carried out by an authorised technician.**
FUMI TC	Fault correlated to the flue probe	**The restoration operations must be carried out by an authorised technician.**
HIGH TEMP	Excessive pellet feed.	Adjust pellet flow (see "*Pellet feed adjustment*"). **Other restoration operations must be carried out by an authorised technician.**
DEPR FAIL	The door is not closed correctly. The ash drawer is not closed correctly. The depression sensor is faulty. The combustion chamber is dirty. The flue exhaust pipe is blocked.	Check hermetic door closure. Check cleanliness of the flue pipe and the combustion chamber. **Other restoration operations must be carried out by an authorised technician.**
NO ACC	The pellet feed-box is empty. Pellet feed calibration in adequate.	Check for the presence of pellets in the feed-box. Adjust pellet flow (see "*Pellet feed adjustment*"). Check the procedures described in the "Ignition" chapter. **Other restoration operations must be carried out by an authorised technician.**
NO ACC BLAC OUT	No current during the ignition phase	Take the stove to off conditions using key 1 and repeat the procedure described in the "Ignition" chapter. **Other restoration operations must be carried out by an authorised technician.**
NO PELL	The pellet feed-box is empty. No pellet feed. The motor reducer does not feed pellets.	Check for the presence of pellets in the feed-box. Adjust pellet flow (see "*Pellet feed adjustment*"). **Other restoration operations must be carried out by an authorised technician.**
HIGHT H2O	Insufficient plant pressure. Presence of air in the system. The circulation pump is blocked.	Check the hydraulic plant pressure. Bleed the air from the plant. **Other restoration operations must be carried out by an authorised technician.**
ATTE + ALLARME	Attempt to release the alarm with stove still in cooling mode	Every time the stove displays one of the alarms listed above it will switch-off automatically. The stove will block any release attempt during this phase, showing the alarm itself and **ATTE** alternately on the display. The alarm can only be released using button 1 when it switch-off has been completed.
NR. TELEFONO - - - - - - - - - -	Telephone number display.	During the display of an alarm, the type of alarm detected and the telephone number of the After-sales Centre will flash alternatively. If the number has not been introduced the display will show hyphens.

LUMINOUS INDICATORS

Signals Display	Reason	Solution
	It indicates weekly programmer functioning	It is on when the weekly programmer is active. For all settings relative to the following function see the "Weekly programmer" function.
	It indicates the Room thermostat function	It is on/off when the room temperature is below/above the set threshold. To modify the temperature threshold, use keys 2 and 3 during normal functioning.
	It indicates the Day-night temperature function	It is on when the Day-night temperature function is active. To enable/disable the Day-night temperature function just press button 4, and holding it down, press button 5. For all settings relative to the following function, see the Day-night temperature function paragraph.
	It indicates deactivation of the ignition electrode	It is on when the electrode is deactivated. **To restore the functioning of the component, contact an authorised technician.**
	It indicates functioning of the flue motor	It is on when the flue exhaust motor is active. **If it flashes, contact an authorised technician.**
	It indicates functioning of the pellet feed motor	It is on/off when the pellet feed motor is activated/ deactivated. During normal functioning the following indicator switches on flashing.
	It indicates functioning of the tangential fan	It is on/off when the tangential fan is activated/deactivated.
	Not used	Not used
	Not used	Not used
	It indicates pump functioning	It is on when the circulation pump is active.
	It indicates the communication between remote control and stove	Every time a key is pressed on the remote control the indicator must switch on. If the indicator is always on it indicates that the communication between remote control and stove is blocked. **To restore the functioning of the component, contact an authorised technician.**

WARRANTY

EXTRAFLAME S.p.A. is the owner of the rights described by Legislative Decree no. 24 of 2 February 2002, and the following warranty does not alter such rights.

This warranty offered by Extraflame S.p.A., based in Montecchio Precalcino (VI), Italy, in Via dell'Artigianato, 10, covers all the parts of the stoves supplied by Extraflame S.p.A., and includes repair or replacement, free of charge, of any faulty part, if:

- ❖ the defect is detected within 2 YEARS from delivery date and is reported to an Extraflame Technical Assistance Centre within 2 months of its detection;
- ❖ an Extraflame Technical Assistance Centre acknowledges the problem as a defect.

If necessary interventions by an Extraflame Technical Assistance Centre are covered by the warranty certificate, they shall be provided free of charge.

WARRANTY CONDITIONS

The warranty is considered valid on condition that:

1. the appliance is installed by an authorized technician according to the requirements stated in the booklets provided with the products and to current norms;
2. the customer sends the warranty card, entirely filled in and validated by the vendor or by an Extraflame Technical Assistance Centre;
3. the warranty certificate, filled in and including the purchase receipt, is duly kept and presented to Extraflame Technical Assistance Centre personnel in case of intervention.

The warranty is not considered valid if:

1. the warranty conditions above have not been respected.
2. installation has not been carried out according to norms and to the requirements stated in the booklets.
3. fault is due to client's negligence or failure to perform maintenance operations.
4. electric and/or hydraulic plants are not compliant with current norms.
5. damage is due to atmospheric, chemical, electrochemical agents, to improper use of the product, to alterations or tampering with the product, to inefficiency and/or inadequacy of the flue and/or other causes not due to product manufacture.
6. damage is caused by normal corrosion phenomena or typical deposit found in heating plants (condition applies for water products only).
7. damage is caused by using non original parts or by interventions carried out by technical personnel not authorised by Extraflame S.p.A.
8. the stove has been used improperly or negligently.
9. damage is caused by transport. It is therefore advisable to accurately check the goods upon delivery and to immediately report to the vendor in case of damage, writing a note on the transport document and on the copy kept by the carrier.

Extraflame S.p.A. is not liable for any direct or indirect damage to persons, things or pets caused by failure to follow the indications in this booklet or the current norms regarding installation and maintenance of the appliance.

The warranty excludes:

- ❖ Seals, all the ceramic and tempered glass parts, casings and grills in cast iron or Ironker, painted, chromed, or gilded parts, the majolica ceramics, the handles and electrical cables.
- ❖ Chromatic variations, tiny cracks in the glaze, and slight dimensional differences in the majolica parts shall not constitute reasons for claims, as they are natural characteristics of these materials.
- ❖ Building works.
- ❖ For thermo-products: the parts of the plumbing system not supplied by EXTRAFLAME S.p.A..
- ❖ The heat exchanger is not covered by warranty in case no suitable anti-condensation circuit is present (water products only).
- ❖ The warranty excludes any calibrations or adjustments of the product based on the type of fuel or the type of installation.

Further clauses

If any defective or malfunctioning part is found during normal use of the appliance, the part shall be replaced free of charge by the vendor from which the appliance was purchased, or at our local Technical Assistance Centre.
For products sold outside Italy, such problems shall also be solved free of charge, with the exception of particular conditions agreed during negotiation with our external dealer.
The warranty is not extended if parts are replaced.
No compensation is acknowledged for the period of inefficiency of the product.
This is the only valid warranty and no-one is authorised to supply others in the name of or on behalf of EXTRAFLAME S.p.A.

Advised testing (to be paid for)

Extraflame advises a functional testing to be carried out by an Extraflame Authorised Technical Assistance Centre, which will supply all information necessary for correct usage.

SERVICE UNDER WARRANTY

The service request must be forwarded to the vendor.

RESPONSIBILITY

EXTRAFLAME S.p.A. shall not be liable for any direct or indirect damage caused by or depending on the product.

COMPETENT COURT

For any controversy, the competent court shall be the court of Vicenza, Italy.

Notas

Extraflame

Stufe a Pellet

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Questo documento è a vostra disposizione all'indirizzo www.extraflame.it/support

004275330 - ING
Manuale utente Comfort Idro
REV 005 08/10/09