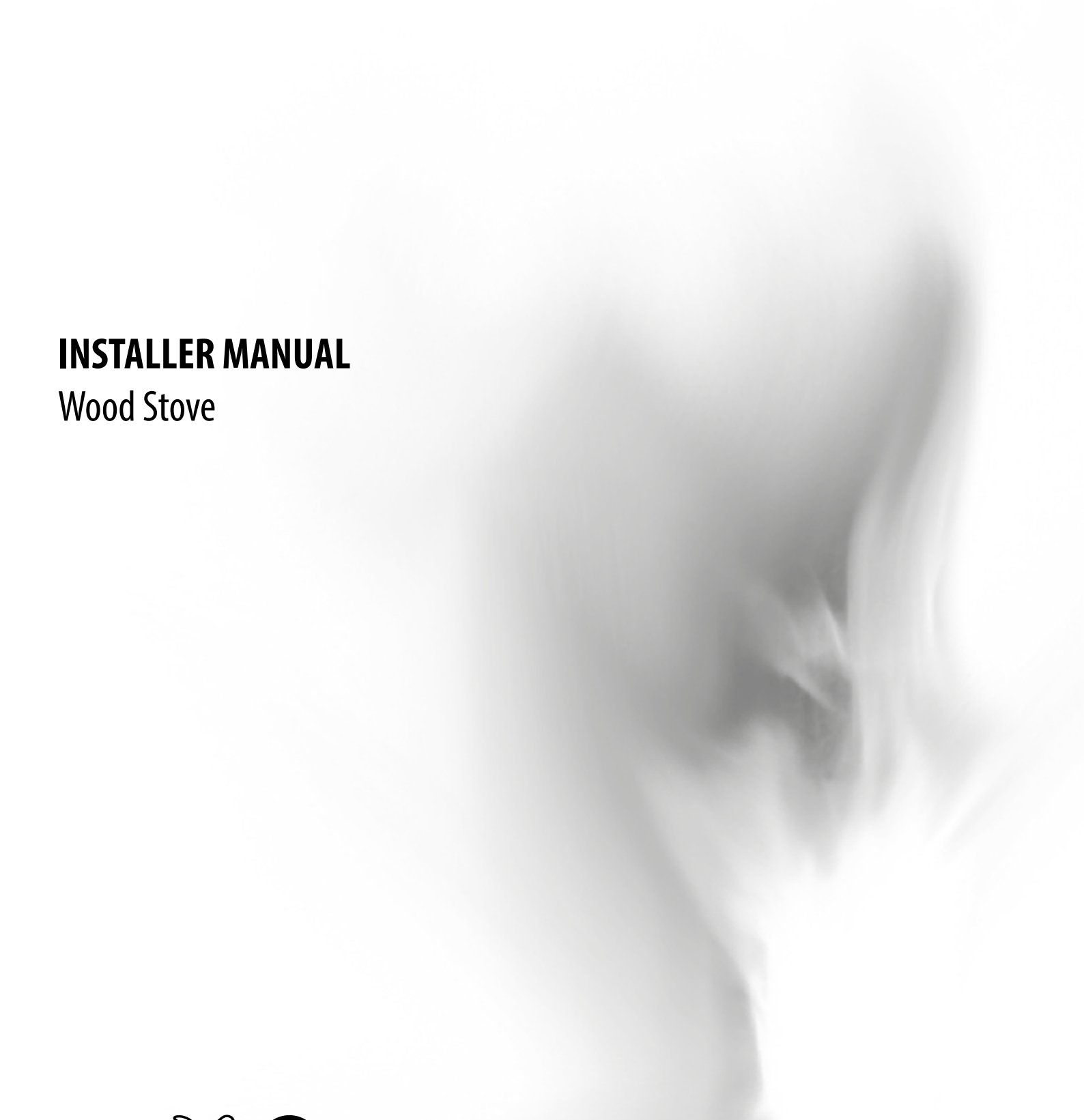
INSTALLER MANUAL

Wood Stove



EN

SPIN wood - EOS wood

SUMARY

1 MANUAL SIMBOLOGY

	**USER**
	**PLEASE READ AND FOLLOW THE INSTRUCTIONS FOR USE CAREFULLY**
	**AUTHORISED TECHNICIAN (ONLY to interpret or the Stove-manufacturer or the Authorized Technician of Technical Assistance Service approved by the Stove-manufacturer)**
	**SPECIALIZED STOVE-REPAIRER**
	**CAUTION: READ CAREFULLY THE NOTE**
	**CAUTION: DANGER OR IRREVERSIBLE DAMAGE POSSIBILITY**

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

2 PACKAGING AND HANDLING

2.1 PACKAGING

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

2.2 REMOVING THE STOVE FROM THE PALLET

Proceed as follows:

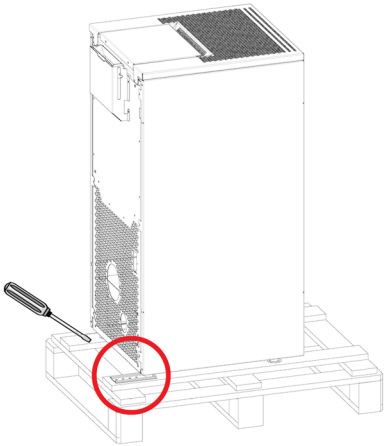


Fig. 1 - Bracket removal

- Remove the brackets which secure the feet of the stove (see **Fig. 1**). Then remove the stove from the pallet.

2.3 STOVE HANDLING

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

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

Two people are needed for handling operations of the stove. It is strongly recommended to reduce the weight by removing: cook top, fire door, oven door, drawer firewood holder and refractorty of the fire place (see **MAINTEINANCE a pag. 13**).

3 CHIMNEY FLUE

3.1 PREPARING THE SMOKE EXPULSION SYSTEM

The combustion product expulsion system is a particularly important element for the proper operation of the appliance and must be correctly sized according to EN 13384-1, EN 15287-1, EN 15287-2.
Its creation/adaptation/verification must always be carried out by a legally qualified operator and must comply with the regulations in force in the country where the appliance is installed.
The Manufacturer declines all liability for malfunctions caused by a badly sized and non-compliant smoke expulsion system.

3.2 CHIMNEY COMPONENTS

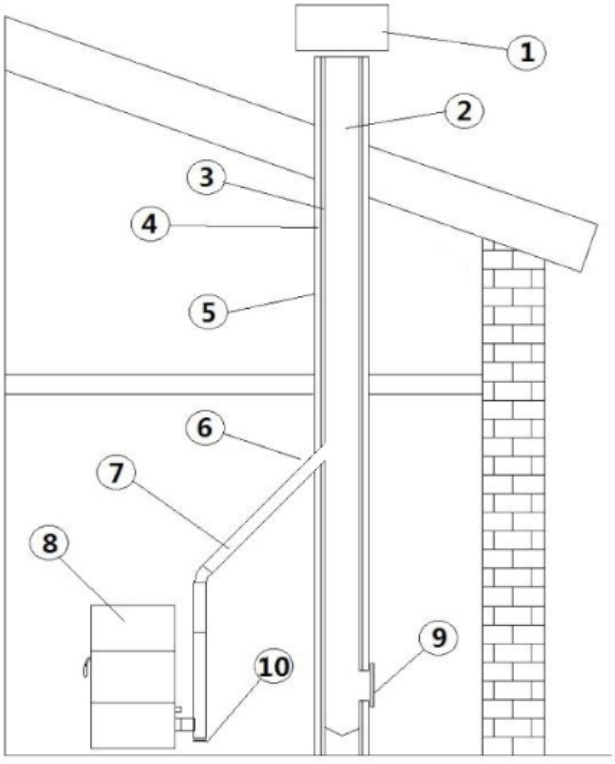


Fig. 2 - Chimney components

LEGEND	*Fig. 2*
1	*Chimney pot*
2	*Fume outlet*
3	*Chimney flue*
4	*Termal insulation*
5	*External wall*
6	*Chimney union*
7	*Fume pipe*
8	*Heat generator*
9	*Inspection door*
10	*T-union with inspection plug*

3.3 SMOKE DUCT (SMOKE FITTING) Ø 150 MM

The smoke duct is the pipe that connects the appliance to the flue.
This smoke fitting must comply in particular with the following requirements:

- comply with product standard EN 1856-2, EN 15287-1, EN 15287-2;
- its cross-section must be of constant diameter **and no less** than that of the appliance outlet, from the firebox outlet up to the connection in the flue;
- the horizontal section must be as short as possible and extend no more than 4 metres;
- the horizontal sections must have a minimum upward slope of 3%;
- changes of direction must have an angle no greater than 90° and be easy to inspect
- the number of changes of direction, including that for entry into the flue, and exclusion of the T in the event of a side or rear outlet, must not exceed 3;
- it must be insulated if it passes outside the installation room
- it must not in any case cross rooms in which it is forbidden to install combustion appliances.
- the use of flexible metal and fibre cement or aluminium hoses is forbidden;

SYSTEM TYPE	TUBO Ø 150 mm	TUBO Ø180 mm
Minimum vertical length	1,5 mt	2 mt
Maximum length (with 1 union)	6,5 mt	10 mt
Maximum length (with 3 unions)	4,5 mt	8 mt
Maximum number of unions	3	3
Level section (minimum inclination 3%)	2 mt	2 mt
Installation at a height above 1200 m a.s.l.	NO	Obligatory

3.4 FLUE (CHIMNEY OR PIPED DUCT)

When creating the flue, in particular comply with the following requirements:

- comply with the applicable product standard (EN 1856, EN 1857 EN 1457, EN 1806, EN 13063, EN 15287, EN 14989..)
- be made with suitable materials to ensure resistance to normal mechanical, chemical, thermal stresses and have adequate thermal insulation in order to limit the formation of condensate;
- have a predominantly vertical configuration and be free of choke points along its entire length;
- be correctly spaced by air gaps and isolated from combustible materials;
- the flue inside the house must still be insulated and can be inserted in an air shaft provided it complies with the regulations for piping;
- the smoke duct must be connected to the flue by means of a Tee fitting with an inspectable collection chamber for the collection of soot and any condensate.
- Where the sizing provides for wet operation, a suitable condensate collection and siphon discharge system must be set up.

We recommend checking the data plates of the flue for the safety distances that must be observed in the presence of combustible materials and, if necessary, the type of insulating material to be used.
It is forbidden to connect the stove to a collective or shared flue with other combustion appliances or with hood outlets.
It is forbidden to use the direct drain on the wall or towards indoor spaces and any other form of drain not provided for by the regulation in force in the country of installation.

- The chimney flue must be provided CE in accordance with EN 1443 regulation. Please find attached an example of label:

Fig. 3 - Example of label

3.5 CHIMNEY POT

The chimneypot, meaning the end part of the flue, must meet the following characteristics:

- the smoke outlet section must be at least double the internal section of the chimney;
- prevent the penetration of rain or snow;
- ensure the outlet of smoke even in the event of wind (windproof chimneypot);
- the height of outflow must be beyond the reflux area **(**)** (refer to national regulations to identify the reflux area);
- always be built at a distance from antennas or dishes, and never be used as a support.

(**) *unless there are specific national derogations (clearly specified in the corresponding instruction manual in English) which under appropriate conditions allow it; in this case, strictly follow the product/installation requirements of the relative regulations/technical specifications/legislation in force in that country.*

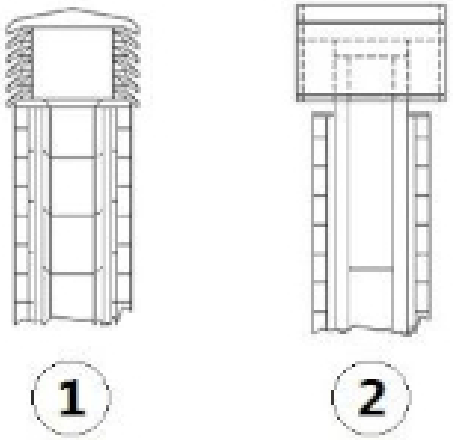


Fig. 4 - Anti-wind chimney pots

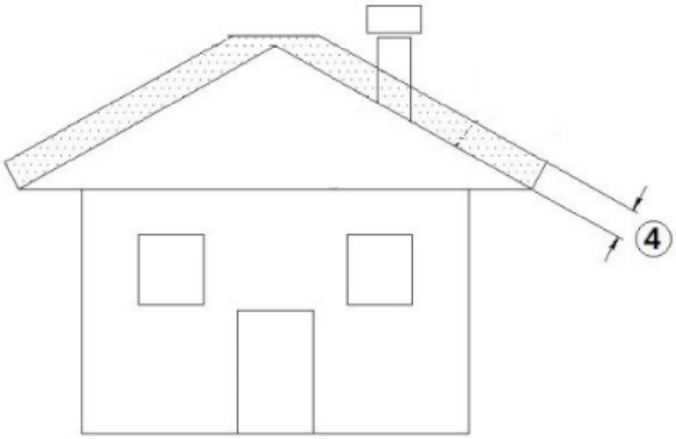


Fig. 5 - Reflux area

3.6 MAINTENANCE

- The fumes extraction pipes (fumes conduit + chimney flue + chimney pot) must always be cleaned, scrubbed and checked by an expert stove-repairer, in compliance with current regulations, with the instructions of the stove-manufacturer and the directives of your insurance company.
- In case of doubts, please follow the most restrictive regulations.
- Have your chimney flue and chimney pot checked and cleaned by an expert chimney sweep at least once a week. The chimney sweep has to release a written declaration about the security of the system.
- Not cleaning compromise safety.

4 COMBUSTION AIR

4.1 AIR INLET

It is mandatory to provide an adequate external air inlet that supplies the combustion air required for the product to work properly. The flow of air between the outside and the installation room can take place with a free air inlet or by channelling the air directly to the outside **(***)**.
The free air inlet must be:

- be made at floor level and in any case not higher than the height of the appliance;
- always be protected with an outer grille and in such a way that it cannot be obstructed by any object;

- have a minimum total free area of 100 cm^2 (net of the grille);

The presence of other suction devices (e.g.: vmc, electric fan for stale air extraction, kitchen hood, other stoves, etc.), in the same room,or in communicating rooms of the same housing unit, could cause negative pressure in the room. In this case, with the exception of sealed installations, one must verify that, with all the equipment on, no more than 4 Pa of negative pressure is created inside the installation room with respect to the outside. If necessary, increase the air inlet section.
It is possible to duct the air required for combustion to the outside by connecting the external air inlet directly with the combustion air inlet which is usually found on the back of the appliance.
The external ducted air vents must be:

- made close to the floor and anyway not higher than the appliance
- protected by a grille that guarantees a clear surface equal to the cross-section of the duct and made so that it cannot be obstructed by any object
- The air vent can be made directly on a wall of the installation room communicating with the outside, or indirectly in adjacent rooms that permanently communicate with the installation room, according to that set forth by standards in force.

The minimum size of the installation room must be at least 80 m^3.
The duct must comply with the following dimensions (each 90° bend is equivalent to one linear metre):

(***) *In the event the combustion air is ducted on unsealed products, still verify that no more than 4 Pa of negative pressure is created inside the installation room with respect to the outside, otherwise provide for an additional air intake in the room.*

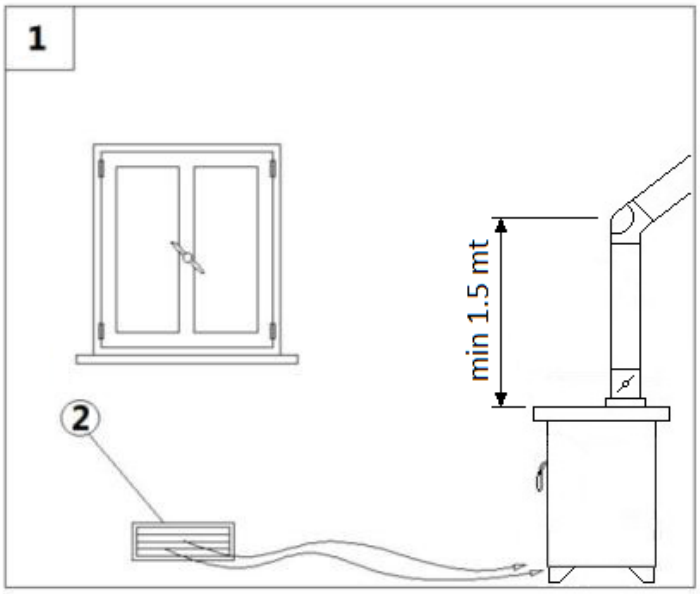


Fig. 6 - Direct air inflow

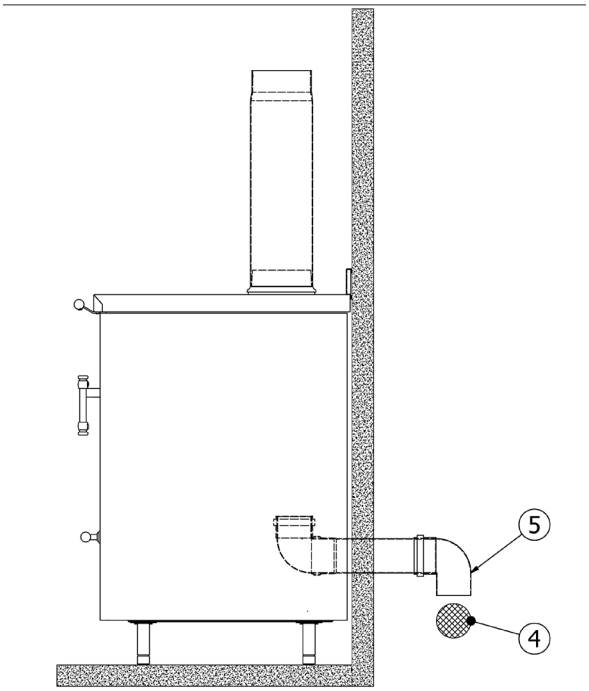


Fig. 7 - installation

LEGEND	*Fig. 6|Fig. 7*
1	*Room to ventilate*
2	*External air inlet*
4	*Shield grid*
5	*Curve inlet to turn downwards*

5 EXAMPLES OF CORRECT INSTALLATION

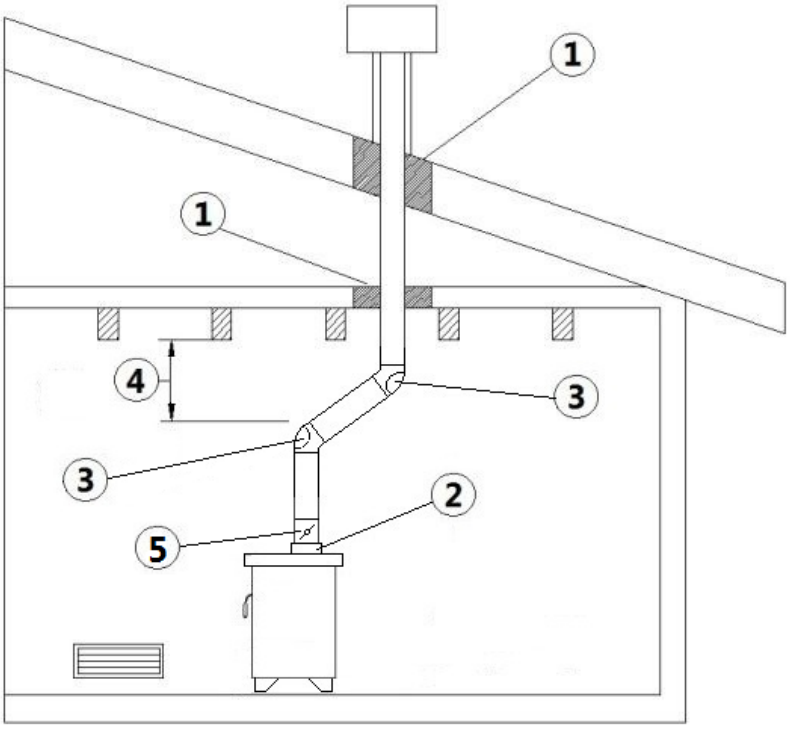


Fig. 8 - Example 1

LEGEND	*Fig. 8*
1	*Insulating material*
2	*Exhaust stub pipe*
3	*Inspection plug*
4	*Minimum safety distance = 0,5 mt*
5	*Damper*

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

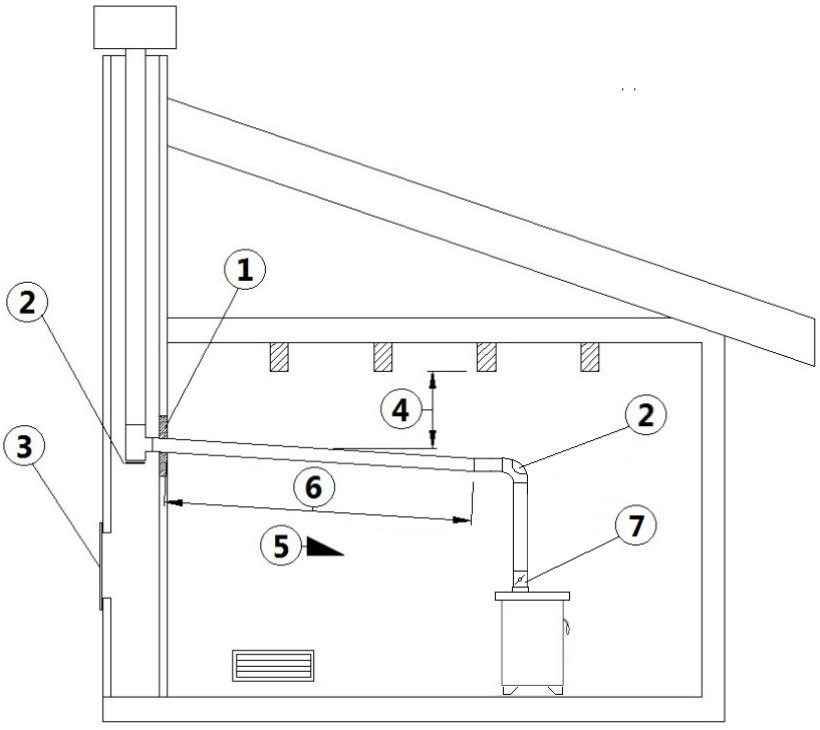


Fig. 9 - Example 2

LEGEND	Fig. 9
1	Insulating material
2	Inspection plug
3	Chimney inspection entrance
4	Minimum safety distance = 0,5 mt
5	Inclination ≥ 3°
6	Level section ≤ 1 mt
7	Damper

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

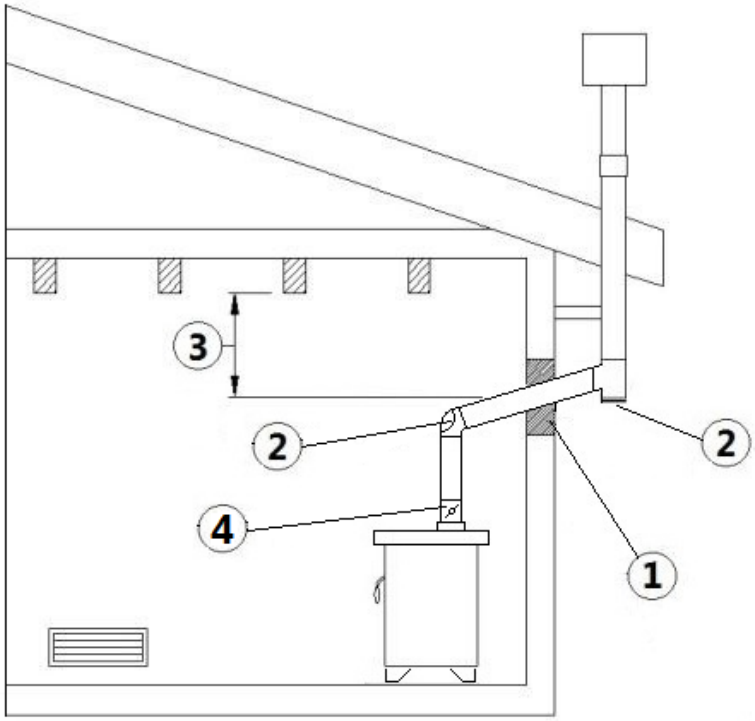


Fig. 10 - Example 3

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

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

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

6 INSTALLATION

6.1 INTRODUCTION

The heating system (generator + combustion air supply + combustion product expulsion system + any hydraulic/ aeraulic system) must be installed in compliance with the laws and regulations in force (*), and carried out by a qualified technician, who must issue a declaration of conformity of the system to the system manager and shall undertake full responsibility for final installation and consequent good operation of the product.

The manufacturer declines all responsibility in the event of installations that do not comply with the laws and regulations in force and inappropriate use of the appliance.
In particular one must ensure that:

- the environment is suitable for installing the appliance (floor load-bearing capacity, presence or possibility of creating an adequate electrical/hydrauic/aeraulic system when required, volume compatible with the appliance characteristics, etc.);
- the appliance is connected to a smoke expulsion system correctly sized according to EN 13384-1, which is resistant to soot fire and which complies with the distances prescribed by the combustible materials indicated on the plate data;
- there is a suitable combustion air flow to the appliance;
- other combustion appliances or extraction devices installed do not cause a negative pressure of more than 4 Pa in the room where the product is installed compared to the outside (only sealed appliances are allowed a maximum of 15 Pa of negative pressure in the room).

(*) *The national reference standard for the installation of domestic appliances is UNI 10683 (IT) - DTU NF 24.1 (FR) - DIN 18896 (DE) - NBN B 61-002 (BE) - Real Decreto 1027/2007 (ES) - Paesi Bassi (NL) Bouwbesluit - Danmark (DK) BEK n° 541 del 27/04/2020.*

In particular, it is recommended to strictly observe the safety distances from combustible materials to avoid serious harm to people and to the integrity of the home.

Installation of the appliance must ensure easy access to service the appliance itself, the smoke channels and the flue.
Always maintain adequate distance and protection in order to prevent the product from coming into contact with water.

It is forbidden to install the stove in rooms with a fire hazard.
With the exception of sealed installations, it is also forbidden for liquid fuel appliances with continuous or intermittent operation that draw the combustion air from the room they are installed in or B-type gas heating appliances, with or without the production of domestic hot water, to coexist in the same room or in interconnecting rooms.

Sealed installation means that the product is certified as sealed and its installation (ducting of the combustion air and connection to the chimney) is airtight with respect to the installation environment.

A sealed installation does not consume the room's oxygen because it draws all the air from the outer environment (if suitably ducted) and makes it possible to install the product in all houses that require a high degree of insulation such as "passive" or "high energy efficiency" houses. Thanks to this technology there is no risk of smoke emissions in the room and no air inlets - hence not even the relevant ventilation grilles - are required in the installation premises.
Consequently, there will be more draughts of cold air in the room, thus making it more comfortable and increasing the overall efficiency of the system. The sealed stove in a sealed installation is compatible with the presence of forced ventilation or premises that might have negative pressure with respect to the outside.

6.2 MINIMUM DISTANCES

Observe the distances from flammable objects (sofas, furniture, wood panelling, etc..) as specified in the following diagram.
If objects considered to be particularly sensitive to heat are present, such as furniture, curtains or sofas, as a precaution, increase the stove clearances substantially to avoid possible deterioration due to the effect of heat.

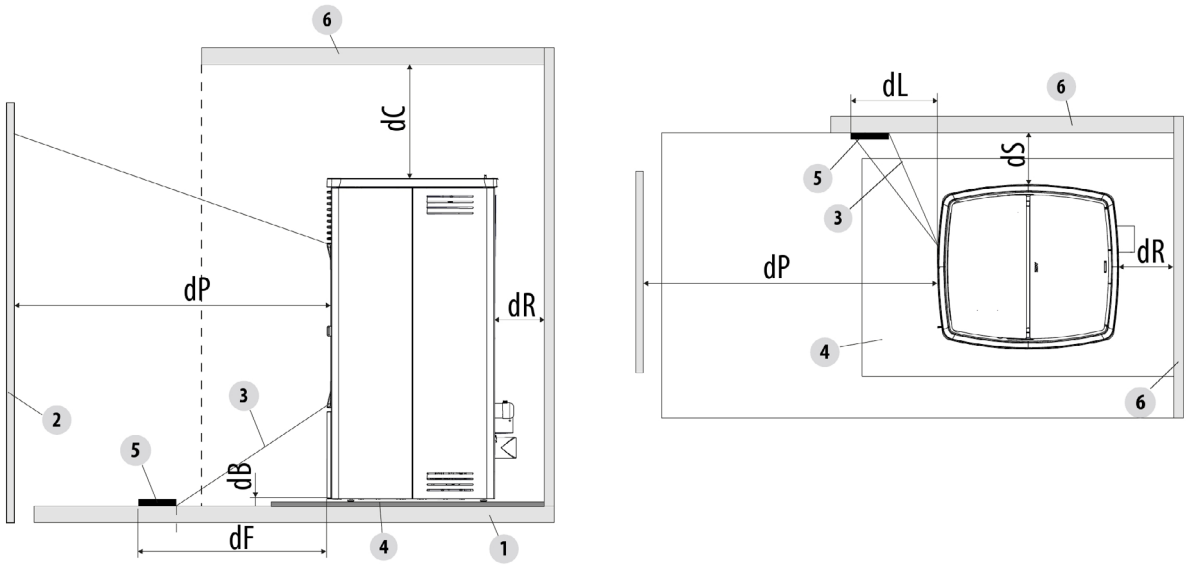


Fig. 11 - .

.LEGENDA	***Fig. 11***
dR (rear distance)	*200 mm*
dS (side distance)	*350 mm*
dB (lower distance)	*0*
dC (upper distance)	*800 mm*
dP (front radiation)	*1200 mm*
dF (floor radiation)	*600 mm*
dL (side radiation)	*400 mm*
1	*FLOOR*
2	*FRONT FLAMMABLE MATERIAL*
3	*AREA SUBJECT TO RADIATION*
4	*FLOOR GUARD*
5	*RADIATED SURFACE TO BE PROTECTED*
6	*REAR/SIDE/UPPER FLAMMABLE SURFACE*

If the floor is made of combustible material, use a protection made of non-combustible material (steel, glass...) that also protects the front from any falling combusted material during cleaning operations.

Always fit a floor guard if the floor is made of flammable material.

Install the stove also detached from any non-combustible walls/surfaces, observing a minimum clearance of **200mm** (back) and **350mm** (side) to allow effective aeration of the appliance and a good distribution of heat in the room.

In any case, ensure adequate distance to facilitate access during cleaning and extraordinary maintenance. If this is not possible, it must still be possible to distance the product from adjacent walls/elements.
This operation **(*)** must be performed by a technician qualified to disconnect the combustion product expulsion ducts and their subsequent restoration.

For generators connected to the hydraulic system, a connection must be provided between the system itself and the product so that, during extraordinary maintenance, carried out by a qualified technician, it is possible to move the generator 1 by at least 50 cm from adjacent walls without emptying the system (e.g. by using a double shut-off gate or suitable flexible connection).
(*) The national reference standard for the installation of domestic appliances is UNI 10683 (IT) - DTU NF 24.1 (FR) - DIN 18896 (DE) - NBN B 61-002 (BE) - Real Decreto 1027/2007 (ES) Paesi Bassi (NL) Bouwbesluit - Danmark (DK) BEK n° 541 del 27/04/2020.

6.3 OVERALL DIMENSIONS

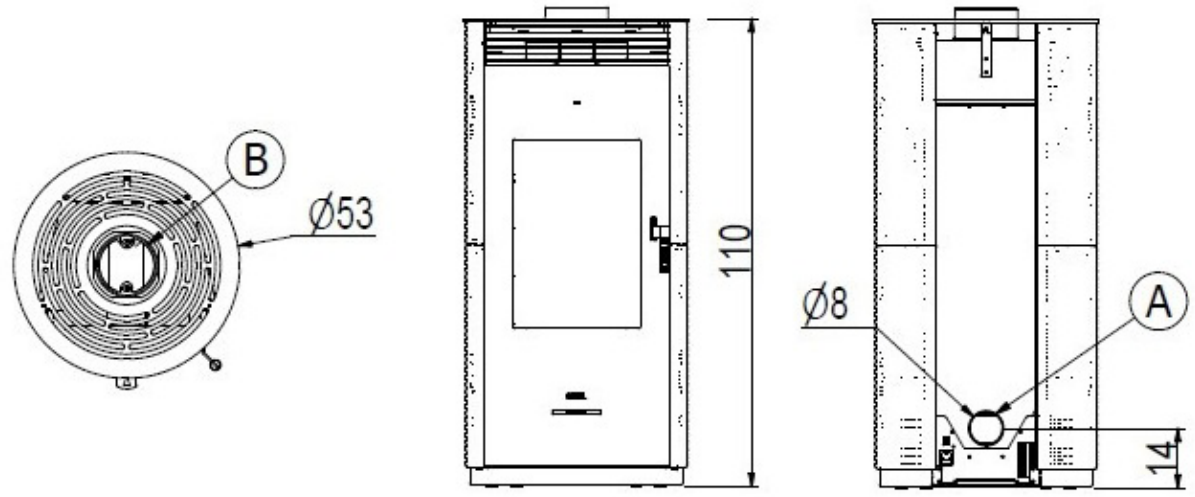


Fig. 12 - SPIN Wood

POS.	*Fig. 12*
A	*Hole combustion air inlet Ø 8cm*
B	*Exhaust fumes Ø 15cm*

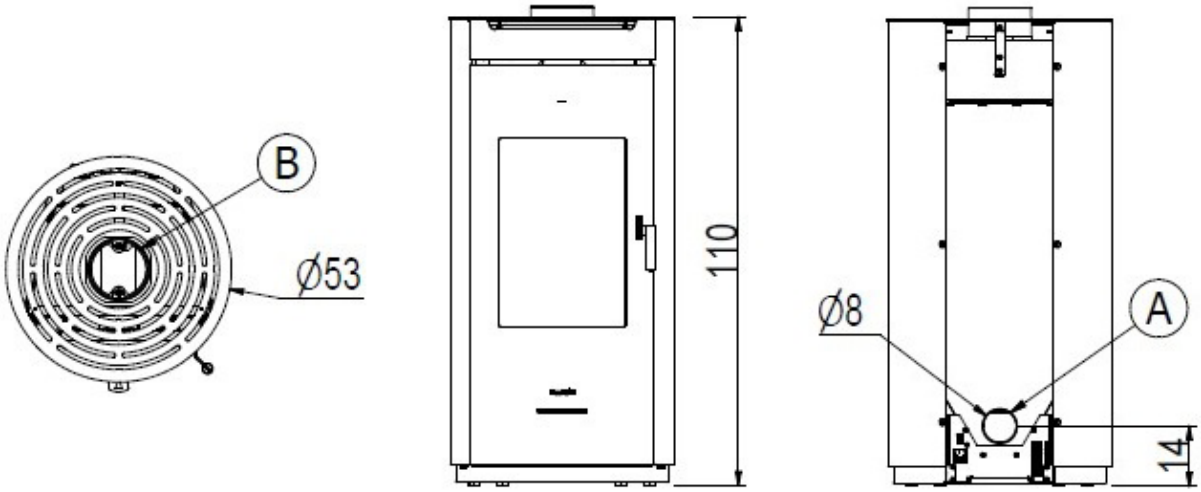


Fig. 13 - EOS Wood

POS.	*Fig. 13*
A	*Hole combustion air inlet Ø 8cm*
B	*Exhaust fumes Ø 15cm*

6.4 ELECTRIC CONNECTION

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

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

- The electric connection occurs through a cable with plug put in an electric socket which is able to support charge and tension specific of every model, as described in the technical datas table (ERRORE Destinazione riferimento incrociato 1_16852 non trovato).
- The plug must be easily accessible when the appliance is installed.

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

- Please further assure you that your network is endowed with an efficient earth connection: if it does not exist or if it is not efficient, please endow you with one in compliance with the law.
- Do not use extension cables.
- If the feeder cable is damaged, it must be replaced by an authorized technician.
- When the stove is not going to be used for a long period of time, it advisable to remove the plug from the socket on the wall.
- Voltage - Power frequency: 230V - 50Hz

7 MAINTEINANCE

7.1 INTRODUCTION

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

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

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

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

7.2 FUME PASSAGES CLEANING (WOOD) SPIN - EOS

Clean on a yearly basis (and if necessary every month) the inside of the oven flue gas pass.

Fig. 14 - .

Fig. 15 - .

- Pull out the top tile (see **Fig. 14**).
- Remove the internal smoke deflector (see **Fig. 15**).

Fig. 16 - .

Fig. 17 - .

Clean the combustion chamber (see **Fig. 16**).
Open the door and clean the inside of the smoke outlet (see **Fig. 17**).

7.3 FANS CLEANING

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

- Remove the plug from the mains.
- Remove the screws of the carter that contain the fans.

7.4 REPLACING THE FAN

To replace the fan proceed as follows:

- Remove the plug from the socket.
- Disconnect the fastons and remove the screws from the faulty fan.
- Replace the fan and repeat the operation in the reverse order.

7.5 GASKET REPLACEMENT

The appliance CANNOT be used if the door seals are damaged.
They must be replaced by an authorised technician to ensure the proper functioning of the stove.

Use exclusively original spare parts.

8 IN CASE OF ANOMALY

8.1 PROBLEM SOLVING

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

PROBLEM	CAUSE	SOLUTION	INTERVENTION
Ignition difficulties	Too large wood	Use small and well dried wood logs during ignition, before bigger wood logs.	
	Too humid wood	Use well seasoned wood.	
	Lack of chimney draught	Open the registers completely. (If the problem persists, contact and expert stove repairer who will check the chimney flue efficiency).	
	Ambient without air recycling	Create immediately a ventilation grid.	
Creation of condensation	Large chimney flue section	Reduce the chimney flue section with thermal insulater pipes.	
	No insulated chimney flue	Cover the chimney flue with insluating material.	
	Too slow combustion	Open air registers in order to increase the fire and fume output temperature.	
Fume leakage from the heart	No insulated chimney flue	Cover the chimney flue with insulating material.	
	Adverse wheather conditions	No windproof chimney pot: have it replaced.	
	Too humid wood	Use well seasoned wood.	
The glass blackens excessively	Lack of chimney draught	Open the registers completely. (If the problem persists, contact and expert stove repairer who will check the chimney flue efficiency).	
	Too humid wood	Use well seasoned wood	
	Too slow combustion	Open air registers in order to increase the fire and fume output temperature.	
	Bad quality fuel	Use fuel described in	
Cooker overheating	Too much wood in the heart (red coloured plate or oven over 300°C)	Close all registers and open the oven door in order to have a faster cooling.	

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