

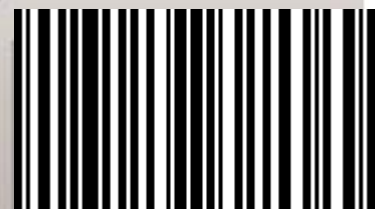
MCZ

STAR-EGO-SUITE-CLUB-MUSA _ mod.HYDRO

EN

USE AND MAINTENANCE MANUAL

PART 1 - REGULATIONS AND ASSEMBLY



8901505700

INTRODUCTION	3
1. WARNINGS AND GUARANTEE CONDITIONS	4
1.1. SAFETY INSTRUCTIONS	4
1.2. OPERATING WARNINGS.....	5
1.3. WARNINGS FOR THE CORRECT DISPOSAL OF THE PRODUCT	6
1.4. GUARANTEE CONDITIONS	7
1.4.1. Limitations.....	7
1.4.2. Exclusions.....	7
2. THEORETICAL NOTIONS FOR INSTALLATION.....	9
2.1. Pellets.....	9
2.2. PRECAUTIONS FOR INSTALLATION	10
2.3. OPERATING AREA.....	11
2.4. CONNECTION TO THE EXTERNAL AIR INTAKE	11
2.5. CONNECTION OF SMOKE DISCHARGE PIPE.....	12
2.6. CONNECTION TO THE FLUE PIPE	14
2.7. CONNECTION TO AN EXTERNAL FLUE WITH INSULATED OR DOUBLE-WALL PIPE.....	14
2.8. OPERATING PROBLEMS CAUSED BY DRAUGHT DEFECTS IN THE FLUE	15
2.9. PLUMBING CONNECTION	16
3. INSTALLATION AND ASSEMBLY	17
3.1. DRAWINGS AND TECHNICAL CHARACTERISTICS.....	17
3.1.1. EGO HYDRO Dimensions	17
3.1.2. STAR HYDRO Dimensions	17
3.1.3. Dimensions of the HYDRO 15-22 version CLUB without domestic hot water production kit	18
3.1.4. Dimensions of the HYDRO 22 version CLUB equipped with kit for domestic hot water production. .	18
3.1.5. Dimensions of the HYDRO 15-22 version SUITE without domestic hot water production kit	19
3.1.6. Dimensions of the HYDRO 22 version SUITE equipped with kit for domestic hot water production.	19
3.1.7. Dimensions of the HYDRO 15-22 version MUSA without domestic hot water production kit	20
3.1.8. Dimensions of the HYDRO 22 version MUSA equipped with kit for domestic hot water production.	20
3.1.9. Technical characteristics	21
3.2. PREPARATION AND UNPACK ING	24
3.3. LATERAL CLADDING ASSEMBLY.....	27
3.3.1. Assembly of profiles for inserting the steel sides-EGO.....	27
3.3.2. Assembly of profiles for inserting the ceramic and soapstone sides-STAR.....	28
3.3.3. Assembly of the lower panel – Suite and Club Stoves	29
3.3.4. Installation of side tiles - Suite and Club Stoves	30
3.3.5. Installation of ceramic top - Suite and Club Stoves	30
3.3.6. Assembly of sides on the MUSA stove.....	31
3.4. PLUMBING SYSTEM CONNECTION	32
3.4.1. Connections to the system.....	34
3.4.2. System filling	35
3.4.3. Water characteristics.....	35
3.5. KIT FOR DOMESTIC HOT WATER PRODUCTION (Optional) Only for Suite/Club/Musa stoves	36
3.6. EXAMPLE INSTALLATION DIAGRAMS	37
3.6.1. Installation diagram for heating system without domestic hot water kit (EGO/STAR/SUITE/CLUB/MUSA).....	37
3.6.2. Installation diagram for heating system with domestic hot water kit (SUITE/CLUB/MUSA)	38
3.6.3. Heating installation diagram in combination with a boiler.....	39
3.6.4. Heating installation in combination with a storage tank.....	39
3.7. INSTALLATION OF AIR FILTER	44
3.8. OPENING/CLOSING THE DOOR	44
3.9. MAKING THE ELECTRICAL CONNECTIONS	44

INTRODUCTION

Dear Customer,

We wish to thank you for choosing an MCZ product, specifically a stove of the MCZ pellet line.

In order to get the best performance from your stove and to enjoy to the full the warmth and the sense of well-being which the flame will diffuse through the home, we recommend that you read this booklet carefully before lighting the stove for the first time.

While thanking you again, may we remind you that the stove **MUST NOT** be used by children, and that they must always be kept at a safe distance from it!





Revisions to the publication

In order to improve the product, to keep this publication up to date the manufacturer reserves the right to make modifications without any advance notice. Any reproduction, even in part, of this manual without the consent of the manufacturer is prohibited.

Care of the manual and how to consult it

- Take good care of this manual and keep it in a place which can easily and quickly be reached.
- If this manual should be lost or destroyed, or if it is in poor condition, ask for a copy from your retailer or directly from the manufacturer, providing product identification data.
- Information which is essential or that requires special attention is shown in **bold text**.
- *Italic text* is used to call your attention to other paragraphs in the manual or for any additional clarifications.

SYMBOLS USED IN THE MANUAL

	<p>ATTENTION</p> <p>This warning sign indicates that the message to which it refers should be carefully read and understood, because failure to comply with what these notices say can cause serious damage to the stove and put the user's safety at risk.</p>
	<p>INFORMATION</p> <p>This symbol is used to highlight information which is important for proper stove operation. Failure to comply with these provisions will compromise use of the stove and its operation will not be satisfactory.</p>
	<p>OPERATING SEQUENCES:</p> <p>Indicates a sequence of buttons to be pushed to access menus or to make adjustments.</p>
	<p>MANUAL</p> <p>Indicates that you should carefully read this manual or the related instructions.</p>

1. WARNINGS AND GUARANTEE CONDITIONS

1.1. SAFETY INSTRUCTIONS

- **Installation of the stove, making the electrical connections, checking its operation, and maintenance are all tasks which should be carried out by qualified and authorised personnel.**
- **Install the stove in accordance with the regulations in force in your local area, region and country.**
- **This apparatus cannot be used by people (including children with limited physical, sensorial or mental abilities or with little experience and know-how unless they have been viewed or instructed on the use of the apparatus by the person responsible for its safety.**
- **A bad use or improper maintenance of the product can bring to a serious risk of explosion in the combustion chamber.**
- For the correct use of the stove and of the electronic apparatus connected to it, and to prevent accidents, the instructions given in this booklet must always be followed.
- Use, adjustment and programming must be carried out by adults. Errors or incorrect settings may cause hazardous conditions and/or poor operation.
- Before beginning any operation, the user, or whoever is preparing to operate on the stove, must have read and understood the entire contents of this instruction booklet.
- The stove is to be used only for its intended purpose. Any other use is to be considered improper and therefore hazardous.
- Do not use the stove for standing on or as any kind of support.
- Do not put clothes to dry on the stove, any clothes hangers and suchlike must be kept a suitable distance from the stove. **Danger of fire.**
- All responsibility for improper use is taken entirely by the user and such use relieves MCZ of any civil or criminal responsibility.
- Any kind of tampering or unauthorised substitution of non-original spare parts can be hazardous for the safety of the operator and relieves MCZ of any civil or criminal responsibility.
- Most of the surfaces of the stove are extremely hot (the door, the handle, the glass, smoke discharge pipes etc.). Avoid coming into contact with these parts, therefore, without adequate protective clothing or suitable implements, such as gloves with thermal protection or implements which keep the hands cool.
- **Under no circumstances should the stove be run with the door open or the glass broken.**
- Do not touch the stove with wet hands, in view of the fact that it is an electrical appliance. Always disconnect the supply cable before doing anything to the unit.
- Before carrying out any cleaning or maintenance operation, make sure in advance that the stove is

disconnected from the mains electricity supply, by turning off the main switch located on the back of the stove, or by unplugging the supply cable.

- The stove must be connected to an electrical system which is equipped with an earth conductor.
- The system must be of adequate rated capacity for the stated electrical power of the stove.
- Incorrect installation or faulty maintenance (not conforming to the requirements set out in this booklet) can cause harm to people, animals or property. In such cases MCZ is absolved from any civil or criminal responsibility.
- Live electrical parts: only power the product after completing assembly.
- Disconnect the product from the 230V power supply before performing any maintenance operation.
- **IF ANY SMOKE SPILLAGE IS SEEN WITHIN THE ROOM OR THE APPLIANCE SUFFERS FROM AN EXPLOSIVE IGNITION PLEASE TURN OFF THE APPLIANCE, VENTILATE THE ROOM AND CONTACT THE INSTALLER/ SERVICE ENGINEER IMMEDIATELY.**

1.2. OPERATING WARNINGS



- **Shut the stove down in the event of a breakdown or bad running and contact the engineer immediately.**
- **Pellets must not be fed manually into the burner – this wrong behaviour can generate an abnormal amount of unburned gas, with a risk of explosion in the chamber.**
- **Accumulated unburnt pellets in the burner after a failed ignitions must be removed before lighting.**
- Failure to clean and maintain the brazier can result in improper running and explosions within the stove. Make sure you remove and clear the holes in the brazier and any loose encrustations every time you empty the ash from the stove or every time you have a failed ignition. Make sure that the holes in the brazier are never reduced in size as this will affect the safe performance of the stove if not maintained.
- Do not wash the inside of the stove with water.
- Do not wash the stove with water. The water could get inside the unit and damage the electrical insulation and cause electric shocks.

- **A carbon monoxide alarm must be fitted in the room where the appliance is sited Refer too ADJ part 2.34 through too 2.36 page 41**

ONLY FOR UK

- Do not expose your own body to hot air for extended periods. Do not overheat the room you are in and where the stove is installed. This could cause injuries and health problems.
- Do not expose plants or animals directly to a current of hot air. Both plants and animals could be harmed by it.
- Do not put any fuels in the hopper but wood pellets.
- Install the stove in a location which is suitable for firefighting, and equipped with all services such as air

and electricity supply and provision for discharging combustion gases.

- **If there is a fire in the flue pipe, extinguish the stove, disconnect it from the power supply and never open the door. Then contact the competent authorities.**
- If the stove and the ceramic cladding are in storage, it should be in a place that is free of damp, and they should not be exposed to extremes of temperature.
- It is inadvisable to base the stove directly on the floor, and if the floor is made of flammable material, it must be suitably insulated.
- **Do not light the stove with flammable materials if the ignition system breaks down.**



INFORMATION

- **In case of any problems, get in touch with your dealer, or a qualified engineer authorised by MCZ, and if a repair is necessary, insist on the use of original spare parts.**
- Use only the fuel recommended by MCZ (for Italy pellets with a diameter of 6 mm and for other European countries with a diameter of 6-8 mm) and provided only with an automatic supply system.
- Periodically check and clean the smoke outlet ducts (connection to the flue pipe).
- Accumulated unburnt pellets in the burner after repeated failed ignitions must be removed before lighting.
- The pellet stove is not a cooking appliance.
- Always keep the cover of the fuel hopper closed.
- Keep this instruction manual carefully because it must stay with the stove throughout its working life. If the stove is sold or transferred to another user, always make sure that the booklet goes with the product.
- If it gets lost, ask MCZ or your authorised dealer for another copy.

1.3. WARNINGS FOR THE CORRECT DISPOSAL OF THE PRODUCT

The owner is the sole party responsible for demolishing and disposing of the product. This must be performed in compliance with laws related to safety and environmental protection in force in his/her country.

At the end of its working life, the product must not be disposed of as urban waste.

It must be taken to a special differentiated waste collection centre set up by the local authorities or to a retailer that provides this service.

Separating and recycling prevents potential negative effects on the environment and health (often caused by inappropriately disposing of product parts). It also allows materials to be recovered in order to obtain significant savings in energy and resources.

1.4. GUARANTEE CONDITIONS



MCZ guarantees the stove, **excluding the components which are subject to normal wear and tear**, for a period of two years from the date of purchase, as proved by a supporting document which gives the name of the vendor and the date on which the sale took place. The guarantee is conditional on the guarantee certificate being filled in and returned within 8 days, and requires that the product be installed and tested by a specialised installer, according to the detailed instructions given in the instruction booklet supplied with the product.

The term 'guarantee' is to be understood to denote the free-of-charge replacement or repair of **parts recognised to have been defective at the start by reason of manufacturing defects**.

In order to activate the product warranty the commissioning document which is supplied with the appliance and also is available as a download from the Specflue website must be filled in correctly and returned within 14 days.

ONLY FOR UK

1.4.1. Limitations

The above guarantee does not cover components relating to electrical and electronic parts, or fans, on which the guarantee period is 1 year from the purchase of the product, documented as specified above. The guarantee does not cover parts subject to normal wear such as gaskets, glass, and any parts which can be removed from the firebox.

The replacement parts will be guaranteed for the remainder of the guarantee period starting from the date of purchase of the product.

1.4.2. Exclusions

Variations in colour in the painted or ceramic parts, and crackling of the glaze on the ceramics, do not constitute grounds for a claim under the guarantee, as they are natural characteristics of the material and of the use of the product.

The guarantee does not cover any parts which may be found to be faulty as a result of negligence or carelessness in use, or of incorrect maintenance, or of installation not complying with MCZ's specification (see the relevant chapters in this user manual).

MCZ refuses to accept any responsibility for any damage which may be caused, directly or indirectly, by persons, animals or things in consequence of the failure to observe all the prescriptions laid down in the instruction booklet, especially those concerning warnings on the subject of installation, use and maintenance of the appliance.

If the product does not perform correctly, contact your local retailer and/or importer.

Damage caused by transport and/or handling is excluded from the guarantee.

For installation and use of the product, reference must be made exclusively to the booklet supplied.

The guarantee will be invalidated in the event of damage caused by tampering with the appliance, atmospheric agents, natural disasters, electrical discharges, fire, defects in the electrical system, and caused

by lack of, or incorrect, maintenance in terms of the manufacturer's instructions.

**CLAIMS UNDER THE GUARANTEE**

the request for action under the guarantee must be addressed to the retailer, who will forward the claim to MCZ's technical assistance service.



MCZ refuses to accept any responsibility in the event that the stove or any other accessory have been improperly used or modified without authorisation.

For all replacement of parts, only original MCZ spare parts must be used.

2. Theoretical notions for installation

The instructions contained in this chapter explicitly refer to the regulations of the Italian installation Standard UNI 10683. In any case, always comply with the regulations in force in the country of installation.

2.1. Pellets

Wood pellets are manufactured by hot-extruding compressed sawdust which is produced during the working of natural dried wood. The compactness of the material is guaranteed by the lignin contained in the wood itself and allows pellets to be produced without glue or binders.

The market offers different types of pellets with characteristics that vary according to the wood mixtures used. The most common diameter on the market is 6 mm (although 8 mm diameter is available too) with a length, on average, of between 3 and 40 mm. A good quality pellet has a density of between 600 and 750 or more kg/metres cubed and a water content that accounts for 5 to 8% of its weight.

Pellets have technical advantages besides being an ecological fuel, as the wood residue is used completely, thereby achieving cleaner combustion than that of fossil fuels.

Good-quality wood has a calorific value of 4.4 kW/kg (15% moisture, after about 18 months of seasoning), whereas that of pellets is 4.9 kW/kg. To ensure good combustion, the pellets must be stored in a dry place and protected from dirt. Pellets are usually supplied in 15 kg bags, therefore, storing them is very convenient.

Good quality pellets guarantee good combustion, thereby decreasing harmful emissions into the atmosphere.



The poorer the quality of the fuel, the more often the internal parts of the brazier and combustion chamber must be cleaned.

The main quality certifications for pellets currently available on the European market guarantee that the fuel complies with class A1/A2 according to ISO 17225-2. (formerly EN 14961). These certifications include, for example, **ENplus**, **DINplus**, **Ö-Norm M7135**, and in particular, guarantee the following characteristics:

- calorific value: 4.6 ÷ 5.3 kWh/kg.
- Moisture content: ≤ 10% of the weight.
- Percentage of ash: max 1.2% of the weight (A1 less than 0.7%).
- Diameter: 6±1/8±1 mm.
- Length: 3÷40 mm.
- Content: 100% untreated wood without the addition of binding substances (max 5% bark).
- Packaging: in sacks made from ecologically compatible or biologically decomposing material.



The company strongly recommends using certified fuel for its products (ENplus, DINplus, Ö-Norm M7135).

Poor quality pellets or others that do not comply with the characteristics specified previously may compromise the operation of your product and can therefore render the guarantee and product liability invalid.



Fuel pellets



15 Kg sack of fuel

2.2. PRECAUTIONS FOR INSTALLATION



IMPORTANT!

Installation and assembly of the stove must be carried out by qualified personnel.

The stove must be installed in a suitable position to allow the normal operations of opening and ordinary maintenance.

The site must be:

- capable of providing the environmental conditions for operation
- equipped with power supply 230V 50 Hz
- capable of taking an adequate system for smoke discharge
- provided with external ventilation
- provided with an earth connection complying with CEI

The stove must be connected to a flue pipe or an internal or external vertical duct conforming to EN 1856-1-2 to suit the appliance and types of fuels to be burnt – refer to detailed guidance in sections 2, 3 and 4 in ADJ (ONLY FOR UK).

The stove must be positioned in such a way that the electrical plug is accessible.



IMPORTANT!

The stove must be connected to a flue pipe or a vertical duct which can discharge the fumes at the highest point of the building.

The fumes are however derived from the combustion of wood products, and if they come into contact with or close to walls, they can make dirty marks.

Also take care because the fumes are very hot but almost invisible, and can cause burns on contact.

The holes for the passage of the smoke pipe and for the intake of air from outside should be made before positioning the stove unit.

2.3. OPERATING AREA

For proper functioning and a good temperature distribution, the stove should be positioned in a location where it is able to take in the air necessary for combustion of the pellets (about 40 m³/h must be available), as laid down in the standard governing the installation and in accordance with local national standards.

The volume of the room must not be less than 30 m³.

The air must come in through permanent openings made in walls (in proximity to the stove) which give onto the outside, with a minimum cross-section area of 100 cm².

These openings must be made in such a way that it is not possible for them to be obstructed in any way.

Alternatively, the air can be taken from rooms adjacent to the one which needs ventilating, as long as they are provided with an air intake from the outside, and are not used as bedrooms or bathrooms, and provided there is no fire risk such as there is for example in garages, woodsheds, and storerooms, with particular reference to what is laid down in current standards.



It is not permissible to install the stove in bedrooms, bathrooms, or in a room where another heating appliance is installed (fireplace, stove etc.) which does not have its own independent air intake.

Locating the stove in a room with an explosive atmosphere is prohibited.

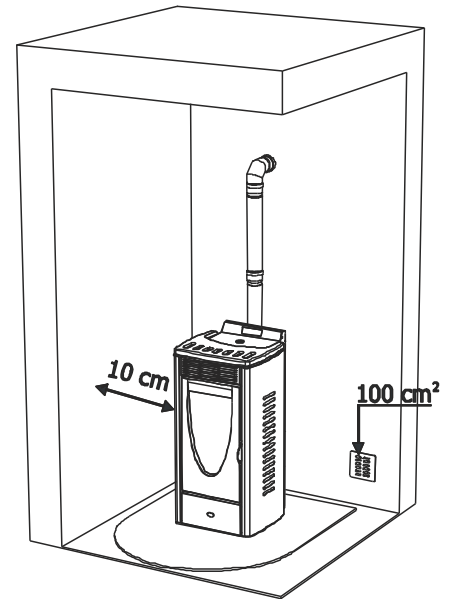
The floor of the room where the stove is to be installed must be strong enough to take its weight.

If walls are flammable, maintain a minimum distance of 10cm at the rear (A), 10cm at the side (B) and 100 cm at the front.

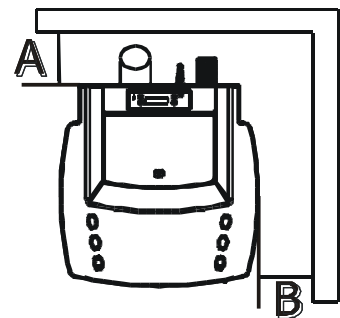
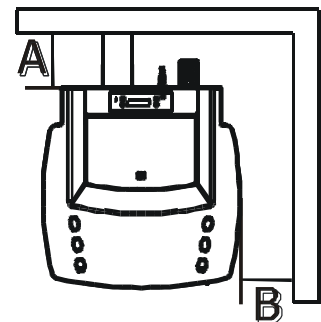
If the room contains objects which are believed to be particularly delicate, such as drapes, sofas and other furniture, their distance from the stove should be considerably increased.



If the flooring is made of wood, provide a floor protection surface in compliance with current national standards.



Example of pellet stove installation



Example of pellet stove installation

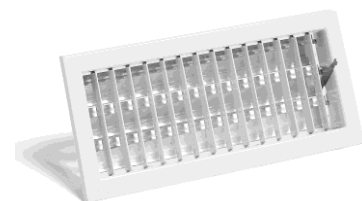
2.4. CONNECTION TO THE EXTERNAL AIR INTAKE

It is essential that at least as much air must be able to flow into the room where the stove is installed as is required for proper combustion in the appliance and for the ventilation of the room. This can be effected by means of permanent openings in the walls of the room to be ventilated, which give onto the outside, or by single or collective ventilation ducts.

For this purpose, on the external wall near the stove, a hole must be made with a minimum free cross-section of 100 cm². (equivalent to a round hole of 12 cm diameter or a square hole 10x10 cm), protected by a grille on the inside and the outside.

The air intake must also:

- communicate directly with the room where the stove is installed



- Be protected by a grille, metal mesh or suitable guard, as long as this does not reduce the area below the minimum.
- be positioned in such a way as to be impossible to obstruct

2.5. CONNECTION OF SMOKE DISCHARGE PIPE

We recommend the use 100mm single wall connecting flue pipe.

All exterior flue or flue used internally above 1.8m should be twin wall insulated pipe installed in accordance with ADJ reference page 23 section 1.31 and 1.32 and 1.33 & Hetas regulations.

The combustion chamber works in low pressure. The smoke duct for the discharge of fumes will also be under low pressure when connected to an efficient flue pipe as directed.



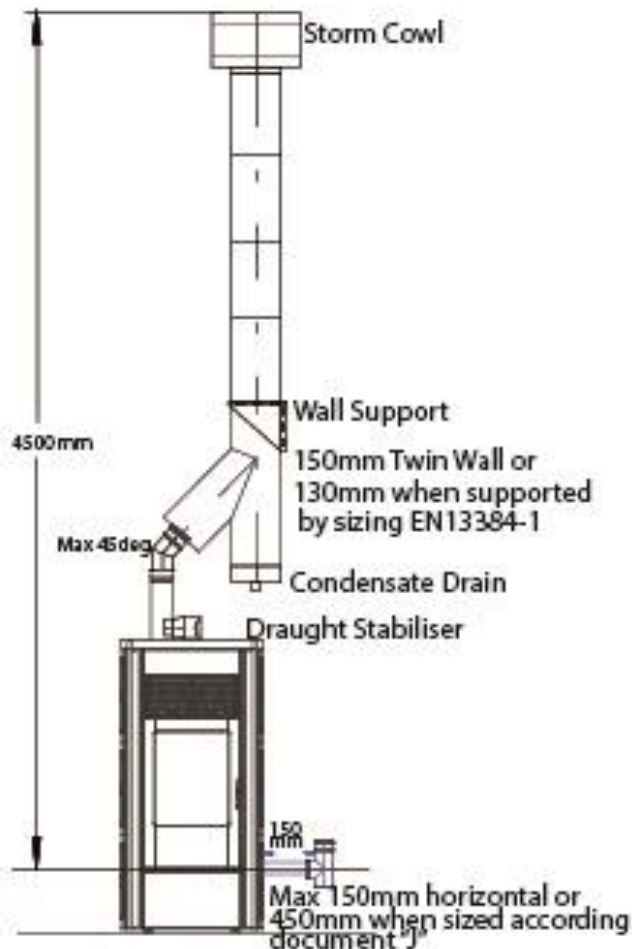
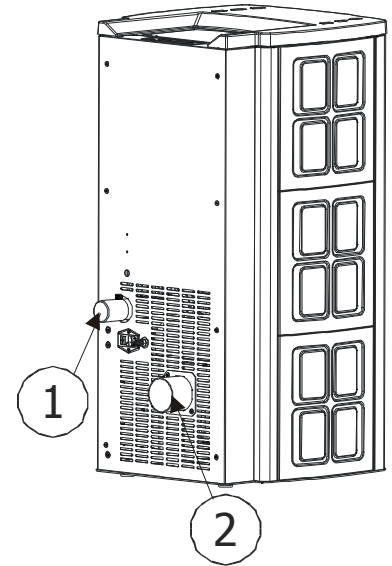
Pipes and unions with suitable gaskets must always be used, to guarantee a hermetic seal.



All sections of the smoke duct must be inspectable and removable to enable periodic internal cleaning. Tee connectors with inspection caps should be used.

Position the stove bearing in mind all the instructions and considerations above.

ONLY FOR UK



Example of pellet stove installation

**IMPORTANT!**

A 90 degree change of direction in the flue pipe must be fitted with suitable tee connectors to allow the possibility of inspection. (see accessories for pellet stove)

It is absolutely prohibited to fit a grille on the end of the discharge pipe, because it could lead to poor running of the stove.

FOR CONNECTION TO THE FLUE PIPE, NOT MORE THAN 150mm OF HORIZONTAL PIPE MUST BE USED AND NOT MORE THAN 4 x 45° bends MUST BE USED. In accordance with UK Building Regulations.

ONLY FOR UK

2.6. CONNECTION TO THE FLUE PIPE

. In the event of larger dimensions, or of the flue pipe being in poor condition (for example cracks, poor insulation, etc.), it is advisable to fit a stainless steel pipe of suitable diameter inside the flue pipe throughout its length, right up to the top.

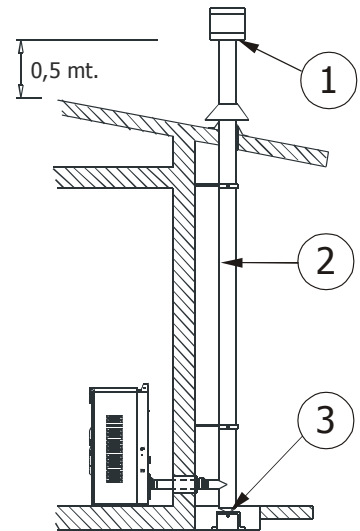
At the bottom of the flue pipe, provide an inspection cap to allow periodic checking and cleaning, **which must be done annually**.

Make a gas-tight connection to the flue pipe, using pipes and connectors as recommended by us.

You must ensure that a windproof cowl should be fitted which complies with the standards in force.



This type of connection ensures the evacuation of the fumes even in the event of a temporary power cut.



- 1) Windproof cowl
- 2) Flue pipe
- 3) Inspection

2.7. CONNECTION TO AN EXTERNAL FLUE WITH INSULATED OR DOUBLE-WALL PIPE

The external fluepipe must have internal dimensions of a minimum of 150mm, and maximum 180mm.

Check with suitable instruments that there is a minimum draught of 5 Pa. on low fire and 10pa on high fire. The flue must always run under negative pressure and a cold flue pull of $- 2 > 3$ pascals must be secured.

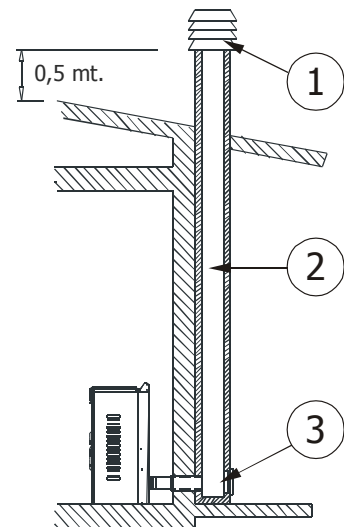
The only type of pipe which is permissible is insulated (double-walled) stainless steel, smooth on the inside, fixed to the wall. At the bottom of the flue pipe, provide an inspection cap to allow periodic checking and cleaning, **which must be done annually**. Make a gas-tight connection to the flue pipe, using pipes and connectors as recommended by us.

You must ensure that a windproof cowl should be fitted which complies with the standards in force.



This type of connection ensures the evacuation of the fumes even in the event of a temporary power cut.

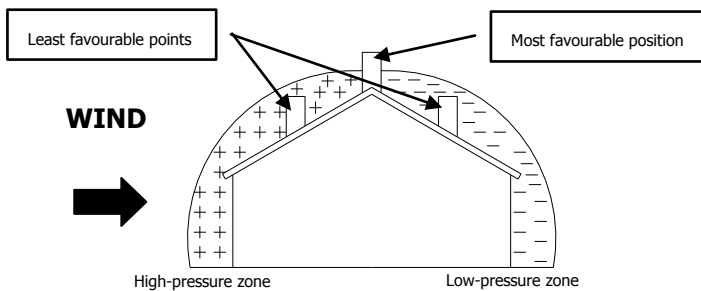
ONLY FOR UK



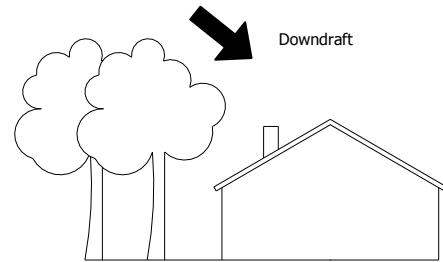
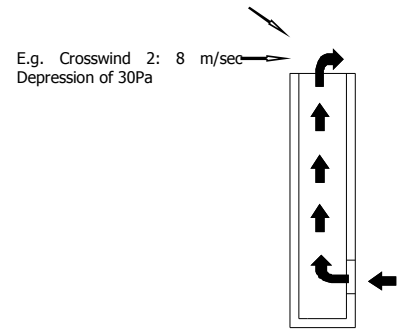
- 1) Windproof cowl
- 2) Flue pipe
- 3) Inspection

2.8. OPERATING PROBLEMS CAUSED BY DRAUGHT DEFECTS IN THE FLUE

Of all the weather and geographical conditions which affect the operation of a flue pipe (rain, fog, snow, altitude a.s.l., exposure to sunlight, direction of facing), the **wind** is unquestionably the most decisive. In fact, along with thermal depression caused by the difference in temperature inside and outside of the chimney, there is another type of depression or over-pressure: dynamic pressure caused by the wind. An updraft always increases depression and hence draught. A crosswind increases depression provided the cowl has been installed properly. A downdraft always decreases depression, at times inverting it.

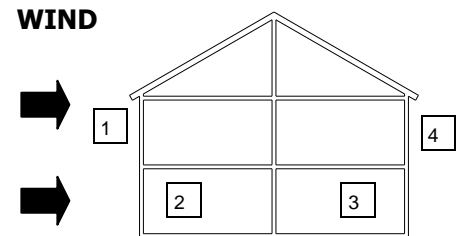


E.g. Downdraft at 45° of 8m/sec. Overpressure of 17 Pa



Besides the direction and force of the wind, the position of the flue and the cowl with respect to the roof of the building and the surrounding landscape is important.

The wind also influences the operation of the chimney indirectly by creating high-pressure and low-pressure zones, not only outside the building but inside as well. In rooms directly exposed to the wind **(2)**, an indoor high-pressure area can be created which can augment the draught in stoves and fireplaces, but it can be counteracted by the external high pressure if the cowl is situated on the side exposed to the wind **(1)**. On the other hand, in the rooms on the opposite side from the direction of the wind **(3)**, a dynamic depression can be created which competes with the natural thermal depression developed by the chimney, but this can be compensated for (sometimes) by locating the flue on the opposite side from the direction of the wind **(4)**.



1-2 = High-pressure zones
3-4 = Low-pressure zones



IMPORTANT!

The operation of the pellet stove is noticeably sensitive to the conformation and position of the flue which is adopted.

Hazardous conditions can only be overcome by suitable setting-up of the stove carried out by qualified MCZ personnel.

2.9. PLUMBING CONNECTION



IMPORTANT!

The connection of the stove to the plumbing system must be carried out **ONLY** by specialized personnel who are capable of carrying out installation properly, in compliance with current standards in the country of installation.

It is important that ONLY qualified engineers are used to fit and commission the appliance in ALL cases. The installing engineer MUST hold a QCF recognised biomass qualification. Any company using sub-contractors MUST ensure they also hold the relevant qualifications.

ONLY FOR UK

If installation of the stove will involve interaction with another, pre-existing system complete with heating equipment (gas boiler, methane boiler, fuel oil boiler, etc.), it is even more advisable to call in qualified personnel, who subsequently will be responsible for conformity of the system with current applicable law.

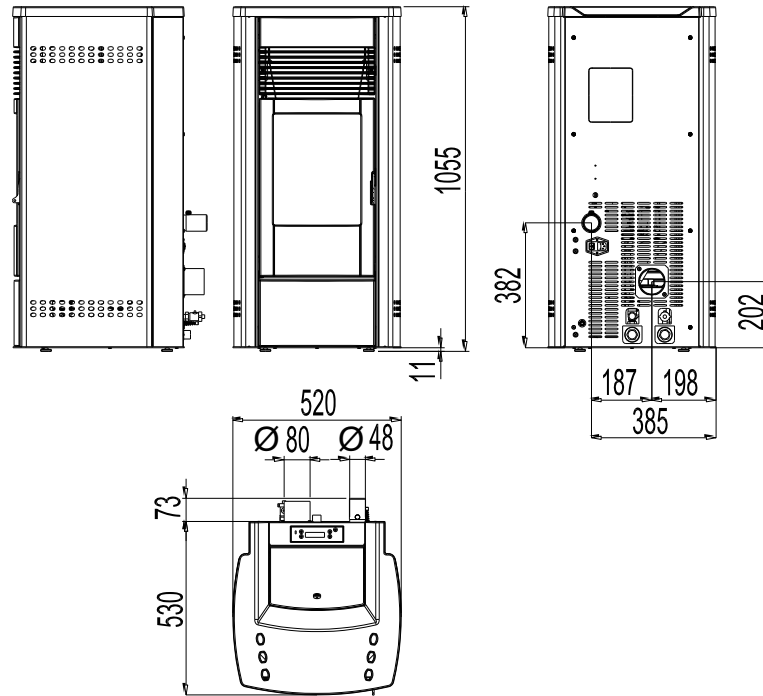
MCZ will not be held responsible for damage to persons or things in the event of failed or incorrect operation if the aforementioned warnings are not complied with.

For connection of the plumbing system to the stove, the user should refer to chapter 3, INSTALLATION AND ASSEMBLY; specifically, paragraph 3.4, CONNECTION TO PLUMBING SYSTEM

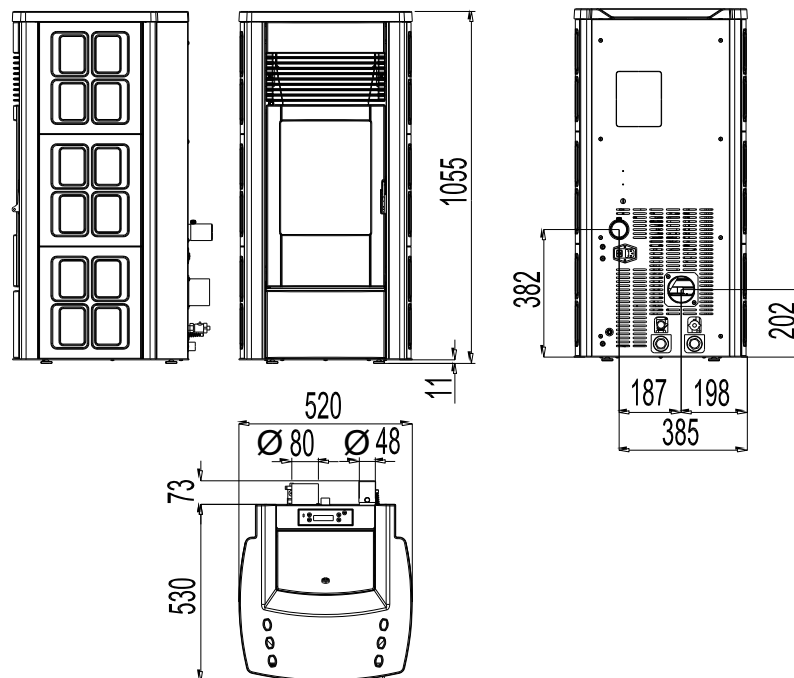
3. INSTALLATION AND ASSEMBLY

3.1. DRAWINGS AND TECHNICAL CHARACTERISTICS

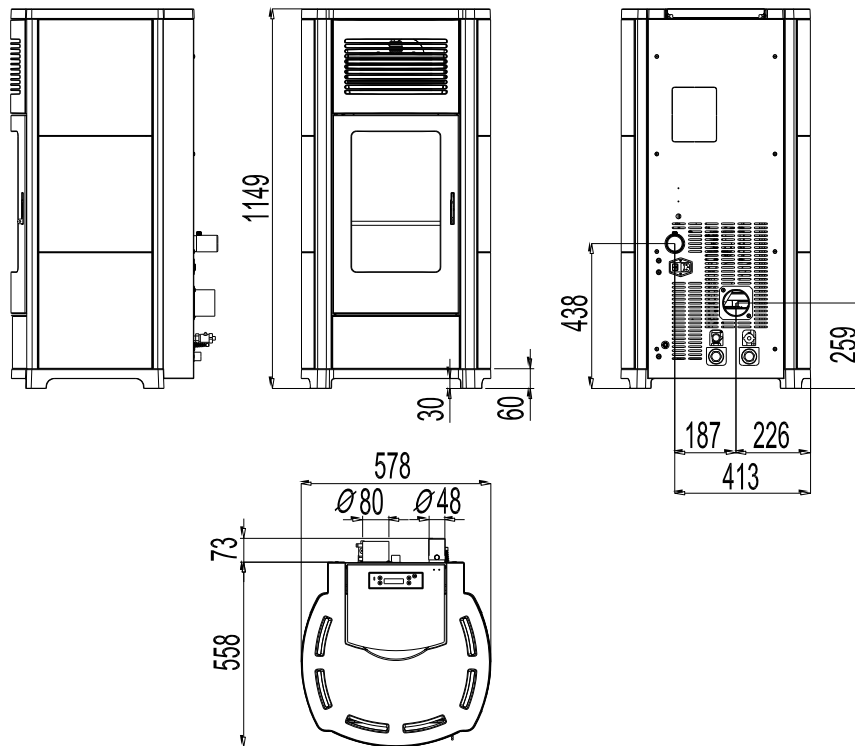
3.1.1. EGO HYDRO Dimensions



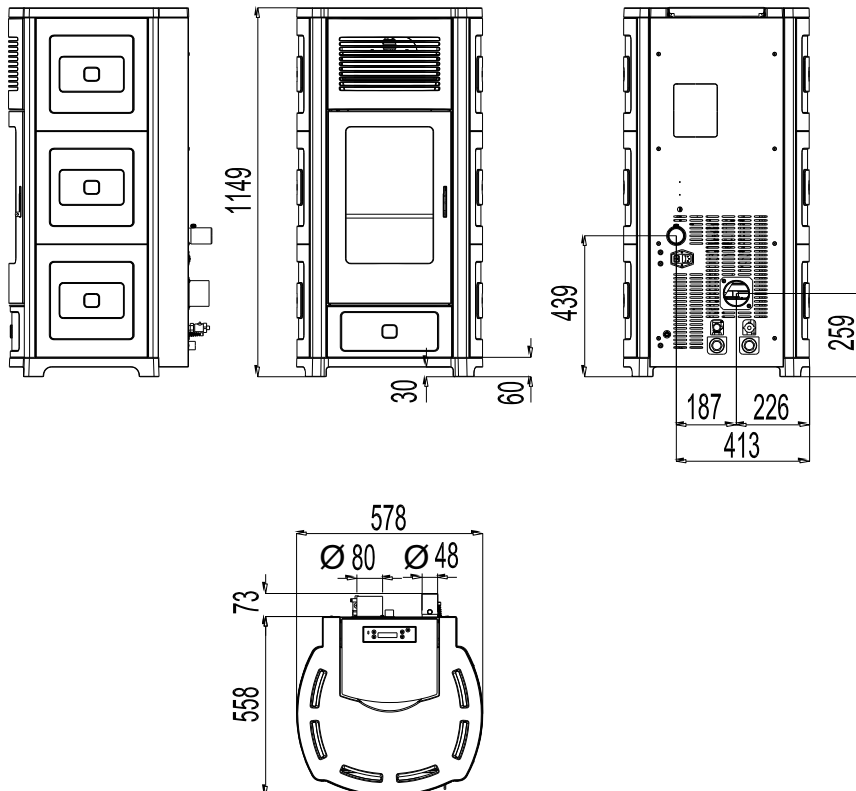
3.1.2. STAR HYDRO Dimensions



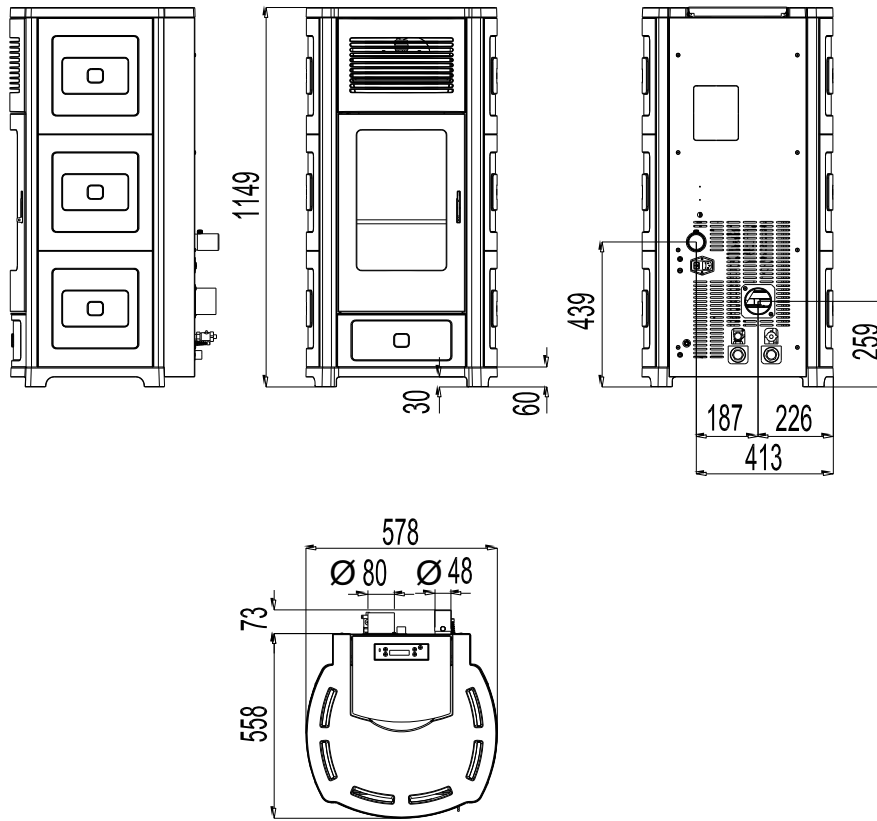
3.1.3. Dimensions of the HYDRO 15-22 version CLUB without domestic hot water production kit



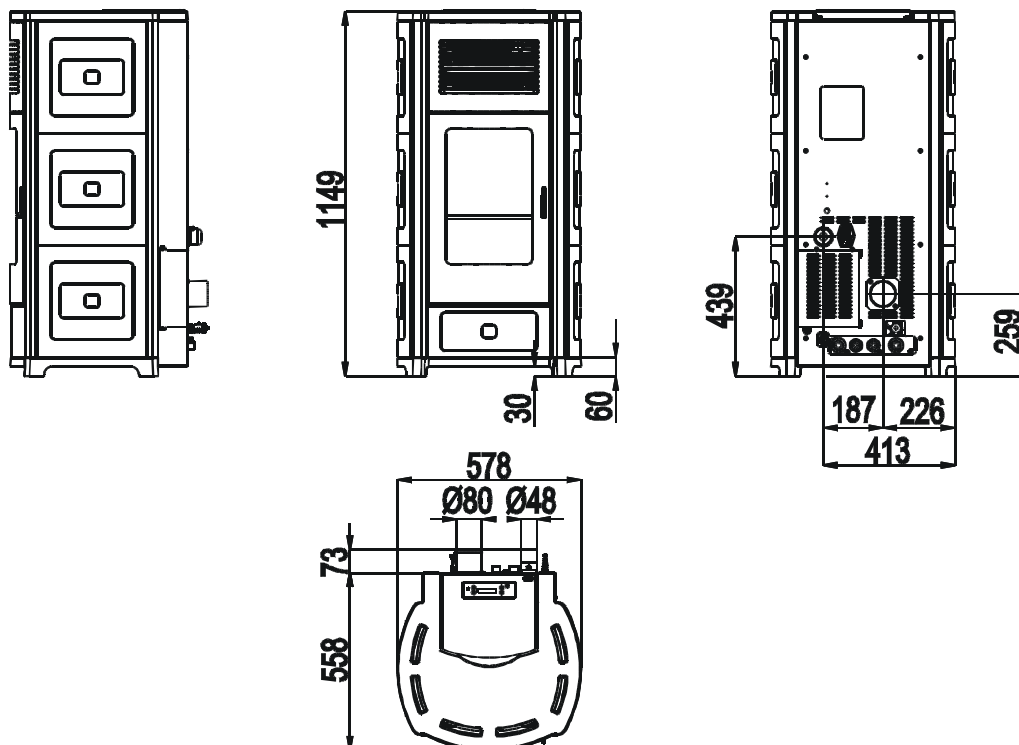
3.1.4. Dimensions of the HYDRO 22 version CLUB equipped with kit for domestic hot water production.



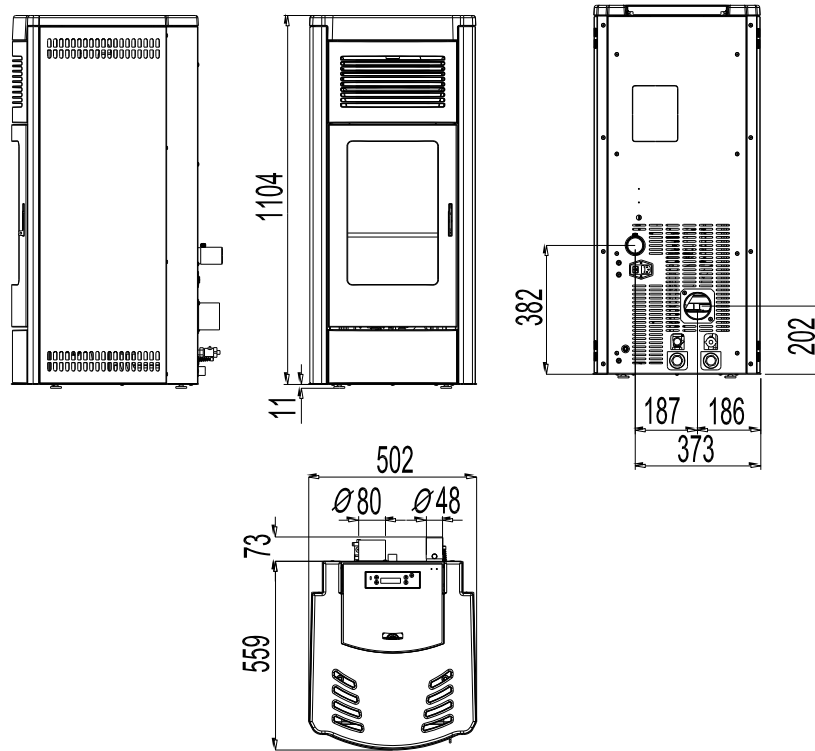
3.1.5. Dimensions of the HYDRO 15-22 version SUITE without domestic hot water production kit



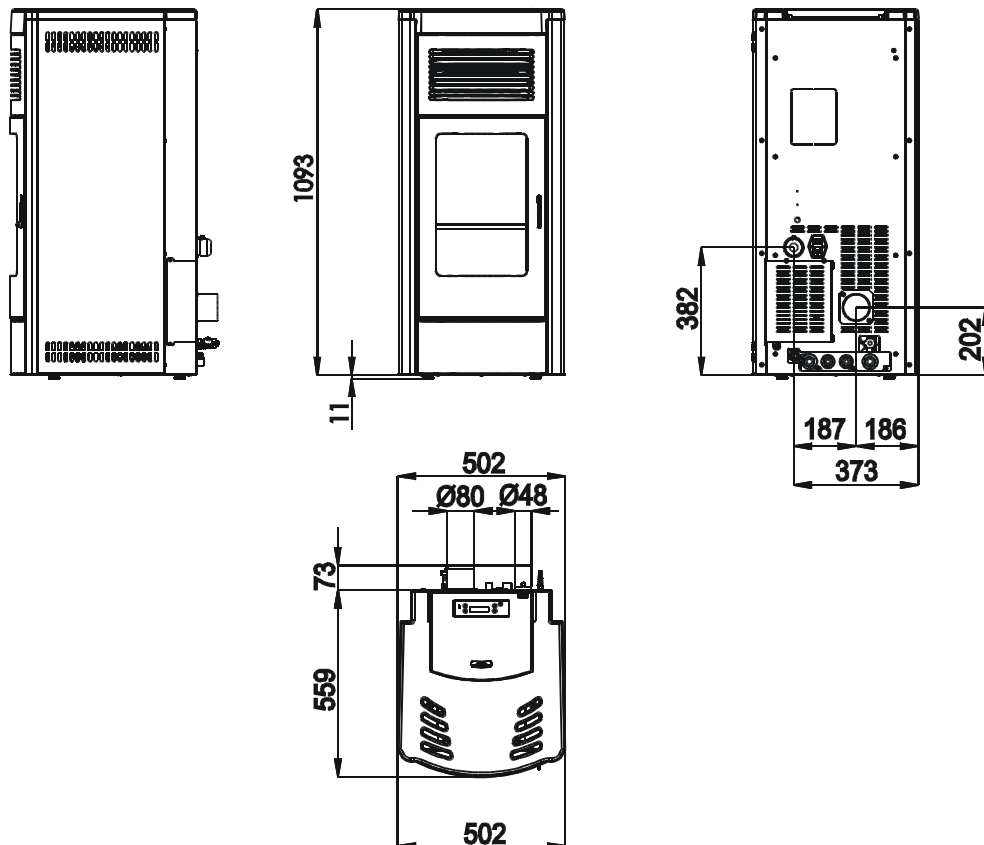
3.1.6. Dimensions of the HYDRO 22 version SUITE equipped with kit for domestic hot water production.



3.1.7. Dimensions of the HYDRO 15-22 version MUSA without domestic hot water production kit



3.1.8. Dimensions of the HYDRO 22 version MUSA equipped with kit for domestic hot water production.





FOR THE HYDRAULIC PIPE OUTPUT DRAWINGS, SEE PAGES 31-32

3.1.9. Technical characteristics

Technical characteristics	Ego Hydro / Star Hydro
Nominal thermal power	11,6 kW (9976 kcal/h)
Nominal output power (H2O):	10,0 kW (8600 kcal/h)
Minimum output power	3,6 kW (3096 kcal/h)
Minimum output power (H2O)	2,5 kW (2150 kcal/h)
Yield at maximum	91,5%
Yield at minimum	96,0%
Temperature of exhaust smoke at maximum	140°C
Temperature of exhaust smoke at minimum	70°C
Particulate/OGC / Nox (13%O ₂)	11 mg/Nm ³ - 3 mg/Nm ³ - 168 mg/Nm ³
CO at 13%O ₂ at minimum and maximum	0,034 — 0,011%
CO ₂ at minimum and maximum	6,7% – 8,7%
Mass of smoke	9,4 g/sec
Maximum water pressure	2,5 bar - 250 kPa
Recommended draught at Max*** power	0,10 mbar – 10 Pa***
Minimum draft allowed at minimum power	0,02 mbar – 2 Pa
Hopper capacity	37 litres
Fuel pellet type	Pellet diameter 6-8 mm. Length range 3-40 mm
Pellet consumption per hour	Min ~ 0,8 kg/h * Max. ~ 2,5 kg/h *
Operating time between re-fuelling	At min ~ 36 h * At max. ~ 10 h *
Heatable volume m ³	249/40 – 285/35 – 333/30 **
Combustion air inlet	External diameter 50 mm.
Smoke outlet	External diameter 80 mm.
Air inlet	80 Cm ²
Rated electrical power (EN 60335-1)	120 W (Max 420 W)
Power supply frequency and voltage	230 Volts / 50 Hz
Net weight	175 kg
Weight with packaging	185 Kg
Distance from combustible material (rear):	100 mm
Distance from combustible material (sides):	100 mm

* Data that may vary depending on the type of pellets used

** Volume that can be heated, according to the power requirement per m³ (respectively 40-35-30 Kcal/h per m³)

***Value recommended by the manufacturer (non-binding) for optimal product operation

Tested according to EN 14785 in accordance with European regulation for Construction Products (EU 305/2011).

Technical characteristics	Suite 15 Hydro / Club 15 Hydro / Musa 15 Hydro
Nominal thermal power	15,4 kW (13244 kcal/h)
Nominal output power (H2O):	13,0 kW (11180 kcal/h)
Minimum output power	4,4 kW (3784 kcal/h)
Minimum output power (H2O)	3,0 kW (2580 kcal/h)
Yield at maximum	92,1%
Yield at minimum	95,0%
Temperature of exhaust smoke at maximum	145°C
Temperature of exhaust smoke at minimum	71°C
Particulate/OGC / Nox (13%O ₂)	1,5 mg/Nm ³ – 0,32 mg/Nm ³ - 123 mg/Nm ³
CO at 13%O ₂ at minimum and maximum	0,040 — 0,011%
CO ₂ at minimum and maximum	7,03% – 11%
Maximum water pressure	2.5 bar - 250 kPa
Mass of smoke	10,4 g/sec
Recommended draught at Max*** power	0,10 mbar – 10 Pa***
Minimum draft allowed at minimum power	0,02 mbar – 2 Pa
Hopper capacity	44 litres
Fuel pellet type	Pellet diameter 6-8 mm. Length range 3-40 mm
Pellet consumption per hour	Min ~ 0,9 kg/h * Max. ~ 3,4 kg/h *
Operating time between re-fuelling	At min ~ 32 h * At max. ~ 9 h *
Heatable volume m ³	332/40 – 379/35 – 443/30 **
Combustion air inlet	External diameter 50 mm.
Smoke outlet	External diameter 80 mm.
Air inlet	80 Cm ²
Rated electrical power (EN 60335-1)	120 W (Max 420 W)
Power supply frequency and voltage	230 Volts / 50 Hz
Net weight	190 kg
Weight with packaging	200 Kg
Distance from combustible material (rear):	100 mm
Distance from combustible material (sides):	100 mm

* Data that may vary depending on the type of pellets used

** Volume that can be heated, according to the power requirement per m³ (respectively 40-35-30 Kcal/h per m³)

***Value recommended by the manufacturer (non-binding) for optimal product operation

Tested according to EN 14785 in accordance with European regulation for Construction Products (EU 305/2011).

Technical characteristics	Suite 22 Hydro / Club 22 Hydro / Musa 22 Hydro
Nominal thermal power	22,3 kW (19178 kcal/h)
Nominal output power (H2O):	18,0 kW (15480 kcal/h)
Minimum output power	4,4 kW (3784 kcal/h)
Minimum output power (H2O)	3,0 kW (2580 kcal/h)
Yield at maximum	92,5%
Yield at minimum	95,0%
Temperature of exhaust smoke at maximum	160°C
Temperature of exhaust smoke at minimum	71°C
Particulate/OGC / Nox (13%O ₂)	2 mg/Nm ³ – 0,2 mg/Nm ³ - 132 mg/Nm ³
CO at 13%O ₂ at minimum and maximum	0,040 – 0,012%
CO ₂ at minimum and maximum	7,03% – 12,49%
Maximum water pressure	2,5 bar - 250 kPa
Mass of smoke	12,6 g/sec
Recommended draught at Max*** power	0,10 mbar – 10 Pa***
Minimum draft allowed at minimum power	0,02 mbar – 2 Pa
Hopper capacity	44 litres
Fuel pellet type	Pellet diameter 6-8 mm. Length range 3-40 mm
Pellet consumption per hour	Min ~ 0,9 kg/h * Max. ~ 4,9 kg/h *
Operating time between re-fuelling	Al min ~ 28 h * Al max. ~ 5 h *
Heatable volume m ³	481/40 – 550/35 – 642/30 **
Combustion air inlet	External diameter 50 mm.
Smoke outlet	External diameter 80 mm.
Air inlet	80 Cm ²
Rated electrical power (EN 60335-1)	120 W (Max 420 W)
Power supply frequency and voltage	230 Volts / 50 Hz
Net weight	190 kg
Weight with packaging	200 Kg
Distance from combustible material (rear):	100 mm
Distance from combustible material (sides):	100 mm

* Data that may vary depending on the type of pellets used

** Volume that can be heated, according to the power requirement per m³ (respectively 40-35-30 Kcal/h per m³)

***Value recommended by the manufacturer (non-binding) for optimal product operation

Tested according to EN 14785 in accordance with European regulation for Construction Products (EU 305/2011).

3.2. PREPARATION AND UNPACKING

STAR and EGO stoves are delivered with two different packagings:

- ✓ The **EGO and MUSA** stove has one packaging
 - It contains the stove and the steel sides with the profiles (Fig.1)
- ✓ The **STAR** stove has two packagings
 - One contains the stove and the profile for the ceramic or the soapstone
 - One contains the ceramic (fig.2). In this case there will be a single packaging for the structure (the cardboard with the ceramics will be placed above the packaging with the structure)
 - or Soapstone (fig.3) (in this case there are two packagings structure + soapstone pallet)
- ✓ **SUITE and CLUB** stoves are delivered in two packages placed on top of each other:
 - the first contains the stove
 - The second contains the ceramic cladding. (Fig. 2)

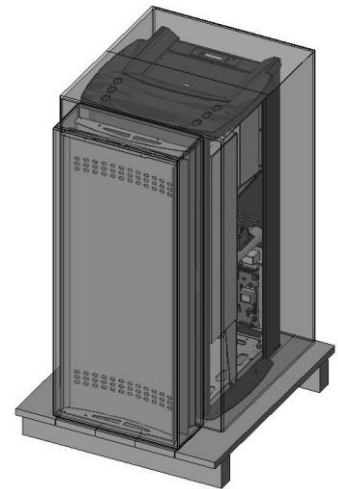


Figure 1 – Example of packaging stove + steel sides (Ego stove)

EGO/STAR and MUSA stoves

Open the packaging, remove the four screws that secure the base of the stove to the pallet, two to the right and two to the left (see figure 4), and position the stove in the selected place, ensuring that it complies with the above instructions.

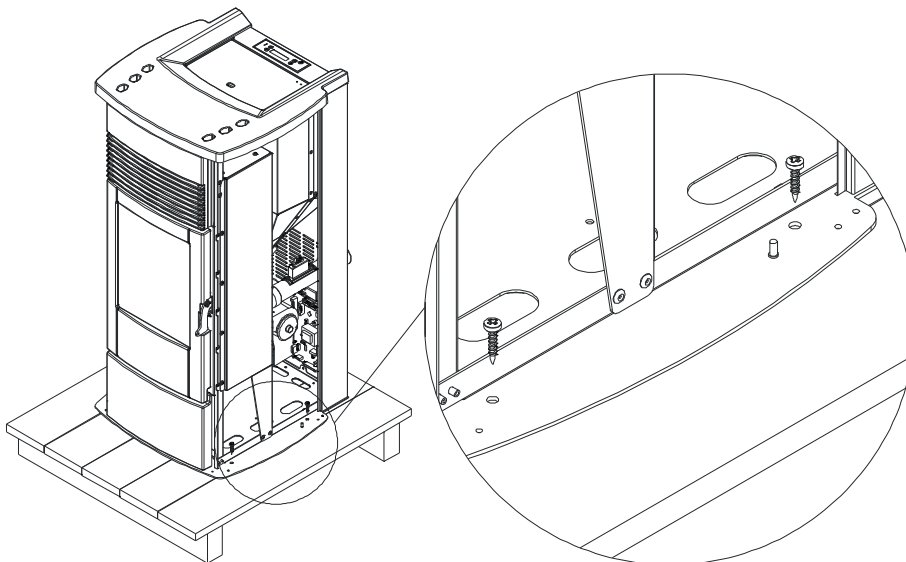


Figure 4 - Removing packaging screws (in figure Ego stove)



Figure 2 - Example of packing for ceramics

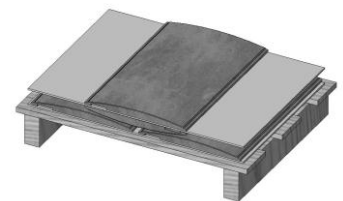


Figure 3 - Example of soapstone packaging

SUITE and CLUB stoves

Open the packaging, remove the two brackets that lock the stove to the pallet (one on the right and one on the left side-fig.5)

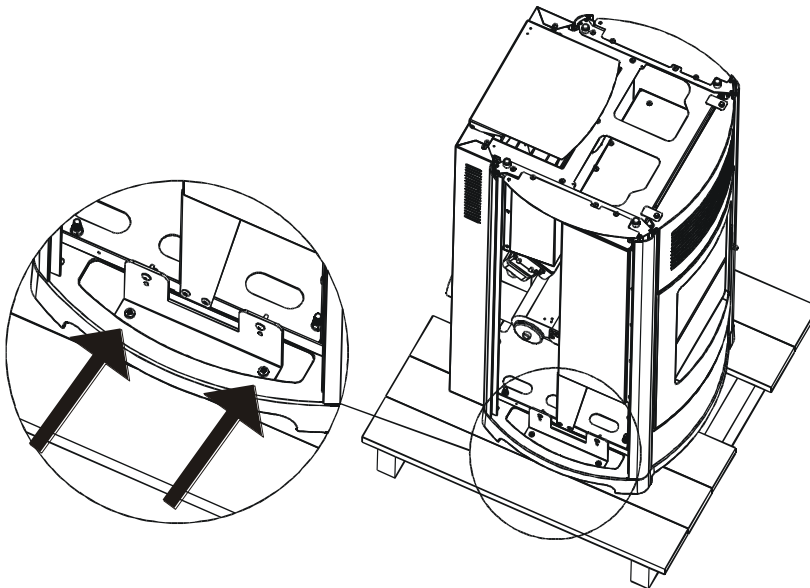


Figure 5 - Removing the packaging screws
(in figure Suite stove)

The stove body or unit must always be kept in a vertical position when moved, and moved only using carts. Special care must be used to protect the door and the glass from impacts that would damage them. Moving the product must always be done with care. If possible, unpack the stove in the area where it is going to be installed.

The materials which make up the packaging are not toxic or harmful, so no special procedures for disposal by required.

Their storage, disposal or possible recycling are therefore the responsibility of the final user, in compliance with current legislation on the subject.

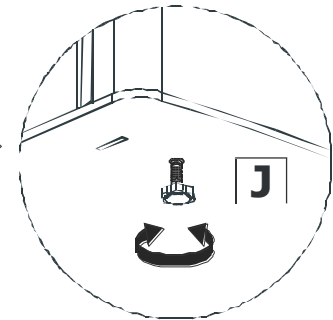
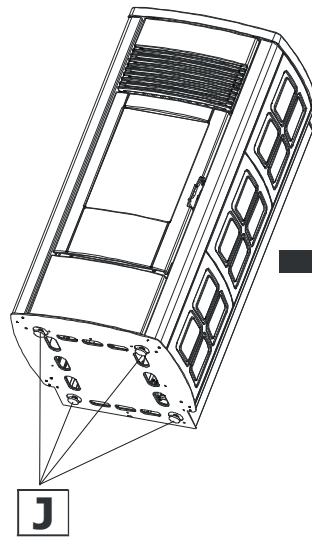
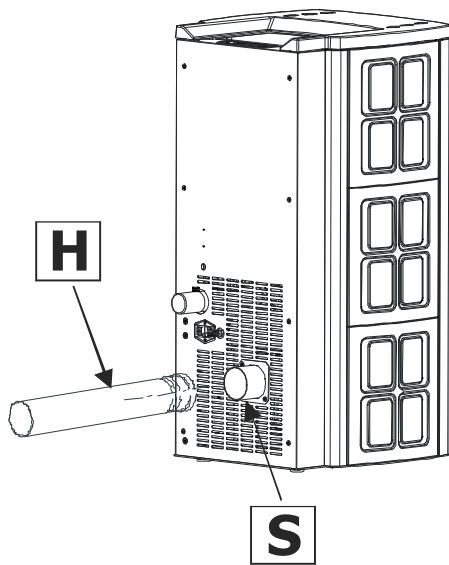
Do not store the stove unit or its cladding without their packaging.

Position the stove without its cladding and connect it to the flue pipe. Use the four adjustable feet **(J)** to get the stove correctly levelled so that the smoke outlet **(S)** is lined up with the connecting pipe **(H)**. Once the operations for connection are complete, assemble the cladding (ceramics or steel sides).

If the stove needs to be connected to a discharge pipe which goes through the rear wall (to connect up with the flue), take the greatest care to make sure that the joint is not stressed.



If the smoke outlet of the stove is forced or used improperly to lift it or position it, the operation of the stove can be damaged irreparably.



1. Turn the feet clockwise to lower the stove
2. Turn the feet counter-clockwise to lower the stove

3.3. LATERAL CLADDING ASSEMBLY



THE 6 CERAMICS AND THE 4 SIDES MADE OF SOAPSTONE THAT ARE LATERAL TO THE STAR STOVE ARE ALL THE SAME.

3.3.1. Assembly of profiles for inserting the steel sides-EGO

Remove, on the upper part, the cast iron top (A).

Take the two profiles (B) to be assembled on the front part of the stove (one to the right and one to the left). Make sure that the profile (B) at the bottom enters the hole predisposed on the base for securing purposes, and along the side enters the blade (B1) predisposed in the stove along its entire height. Once this operation is performed, take the piece (C) with the two screws (D and E) and secure the profile on the top part of the stove. The screw (D) must be secured on the upper sheet metal of the stove, while the screw (E) must be secured on the area predisposed on the profile (B2).

Take the side (I) and secure it to the upper sheet metal of the stove with the two screws (G and H) provided.

In the front part it must be inserted in the housing (B3) of the profile (B).

Repeat the same operation for both sides. Reposition the cast iron top. (fig.6)

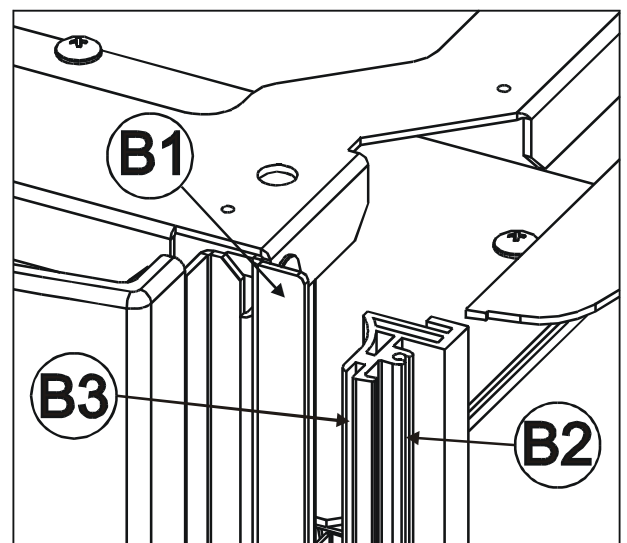
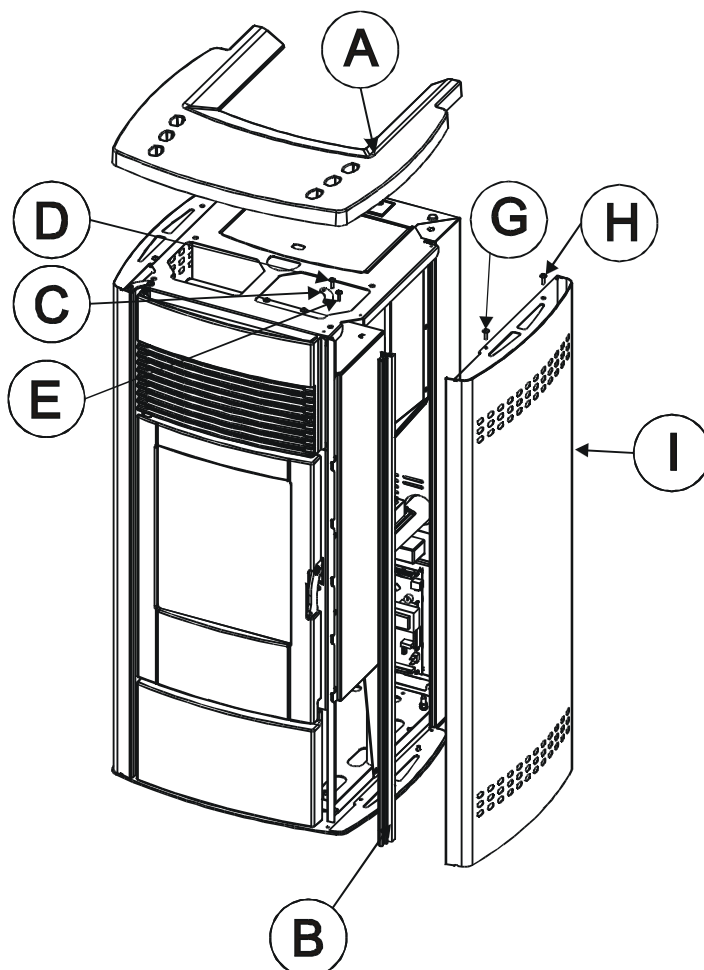
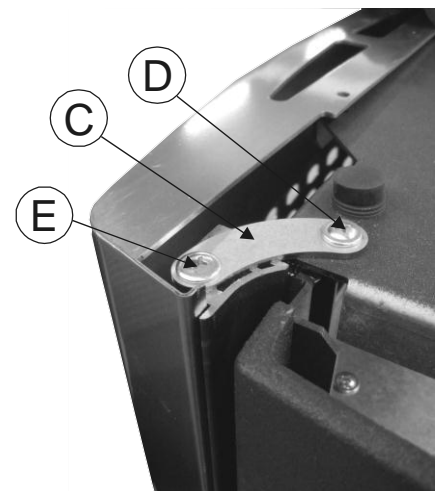
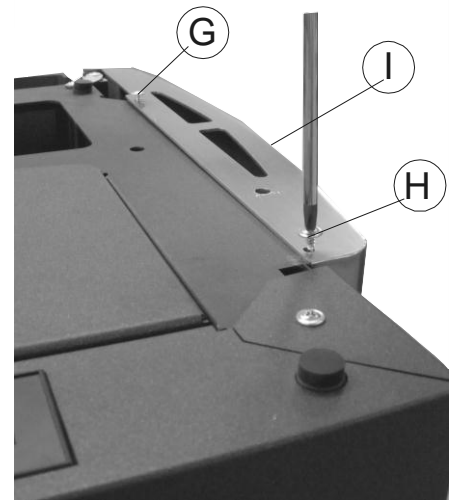


Figure 6 - EGO stove steel sides

3.3.2. Assembly of profiles for inserting the ceramic and soapstone sides-STAR

Remove, on the upper part, the cast iron top (A).

Take the four profiles (B) to be assembled on the front and rear part of the stove (two to the right and two to the left). Make sure that the profile (B) at the bottom enters the in correspondence to the two holes predisposed on the base for securing purposes, and along the side enters the blade (B1) predisposed in the stove along its entire height. Once both profiles are assembled on one side, take the piece (C) with the four screws (D-E-F-G) and secure it on the upper part of the stove (F-D) and in correspondence to the element predisposed on the profile (B2) for screws G-E.

At this point take the ceramics (3 per side) or the soapstone (2 per side) and insert them on the profile (B) in correspondence to the element (B3) from above downwards. (fig.7)

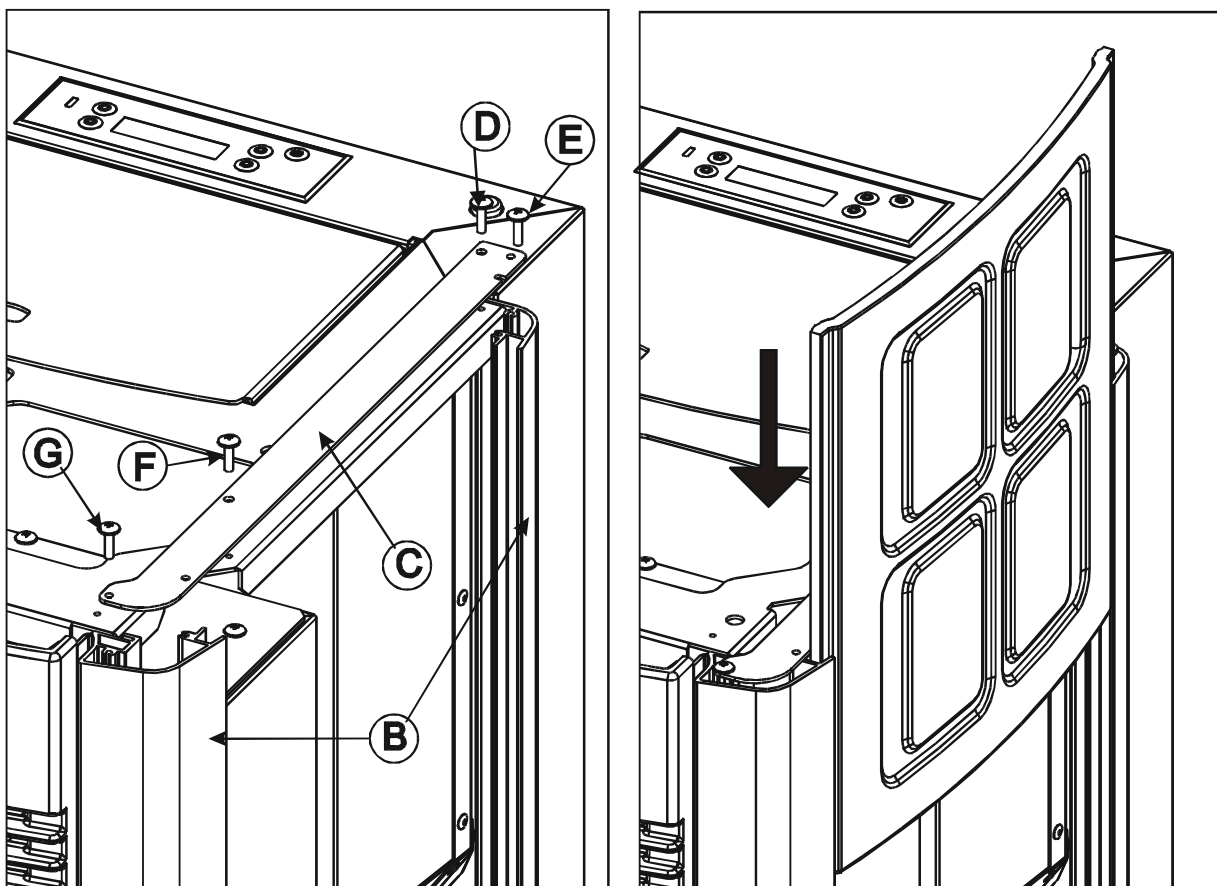


You are advised to use small felt pads (two on the right and two on the left) to be applied at the tips of the ceramics (inwards) in correspondence to the part of the tile that comes into contact with the sheet metal profile (B3).

This prevents the ceramic from coming into contact with the metallic parts of the structure and compensates any differences in thickness of the tile.

Repeat the same operation for both sides. Reposition the cast iron top.

Figure 7 - STAR stove sides



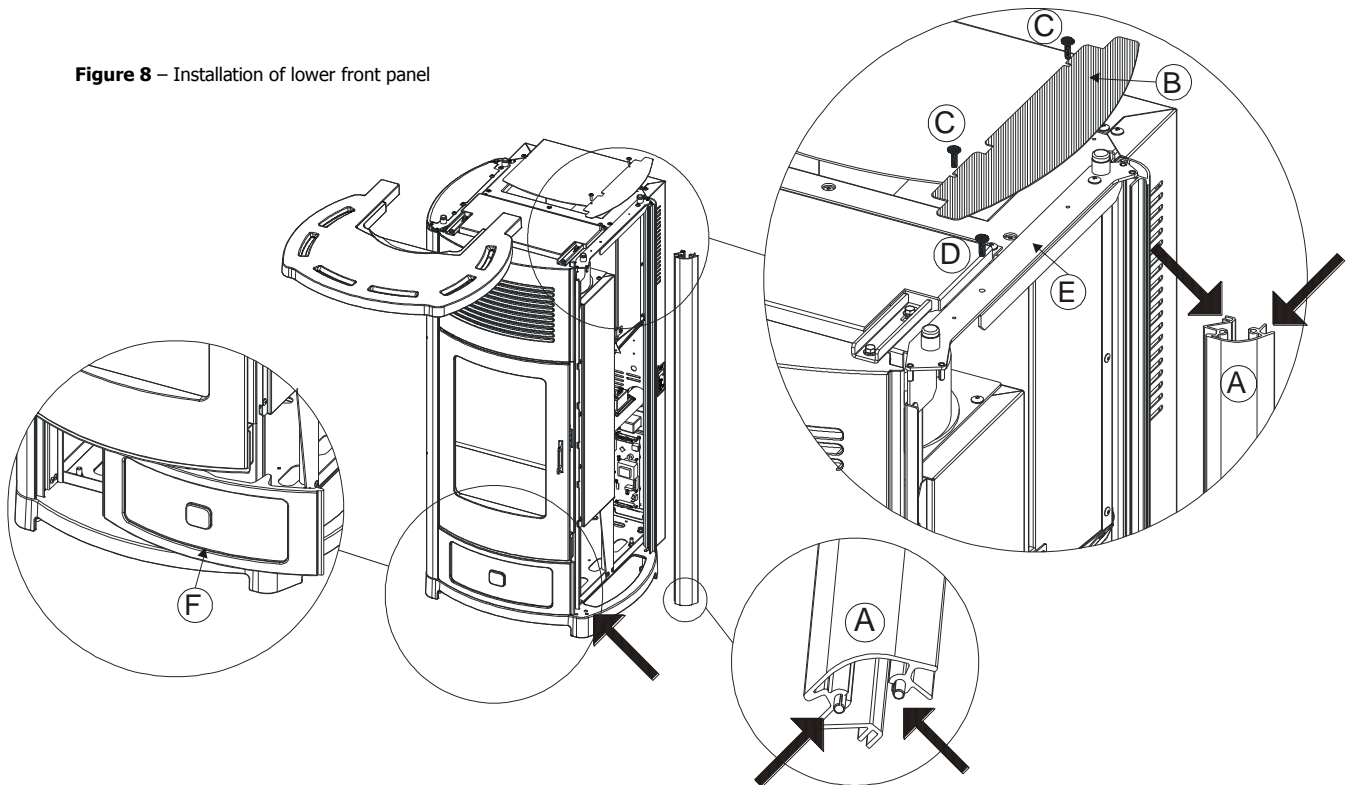
3.3.3. Assembly of the lower panel – Suite and Club Stoves

The stove is delivered with all the ceramics packed. Therefore, before assembling the side tiles and the top, it is necessary to insert the lower panel.

Proceed in the following way:

- Remove the micro-perforated sheet metal grill **B** on the right side (handle side) on the upper part by removing the two screws **C**.
- Remove the screw **D** on the sheet metal **E** in a way that the profile **A** is no longer locked.
- At this point slightly lift the sheet metal **E** and remove the profile **A**.
- To remove the profile **A** lift it (sliding it from the base) and tilt it slightly in a way that the plugs inserted on the base come out.
- Take the lower panel **F** and insert it from the right (handle side) towards the left in a way that it enters exactly in the housings
- Reinsert the profile **A** making the plugs enter the case, and lift the sheet metal **E** in a way to realign the profile "A". Work in a way that the upper plugs of the profile "A" are inserted in the housings of the sheet metal "E".
- With the screw **D** close the sheet metal **E** that keeps profile **A** **locked** (fig.8)
- Before refitting the grill **B** with the two screws **C**, also insert the side tiles (See par.3.3.4)

Figure 8 – Installation of lower front panel



3.3.4. Installation of side tiles - Suite and Club Stoves

Remove the micro-perforated grill **B** and insert the three side tiles, making them slide from the top towards the bottom on the runners of the profiles **A**. On the upper and lower part of the tile it is advisable to place small felt pads. Level the bubbles of the tiles. At this point it is possible to retighten the micro-perforated grill **B** to the structure and position the ceramic top. (fig.9)

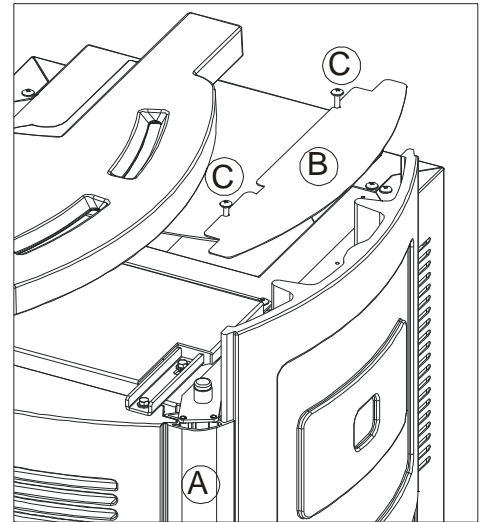


Figura 9 – Installation of side tiles

3.3.5. Installation of ceramic top - Suite and Club Stoves

Install the top by setting it on the four upper protuberances of the stove. The part underneath is provided with four small cavities at the rubber supports indicated in the figure. (fig.10)

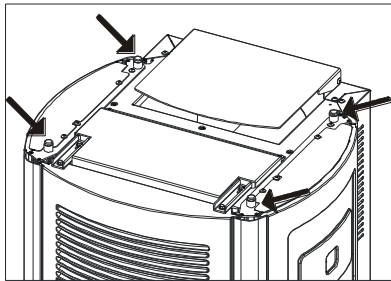


Fig.10 - Supports for installation of ceramic top

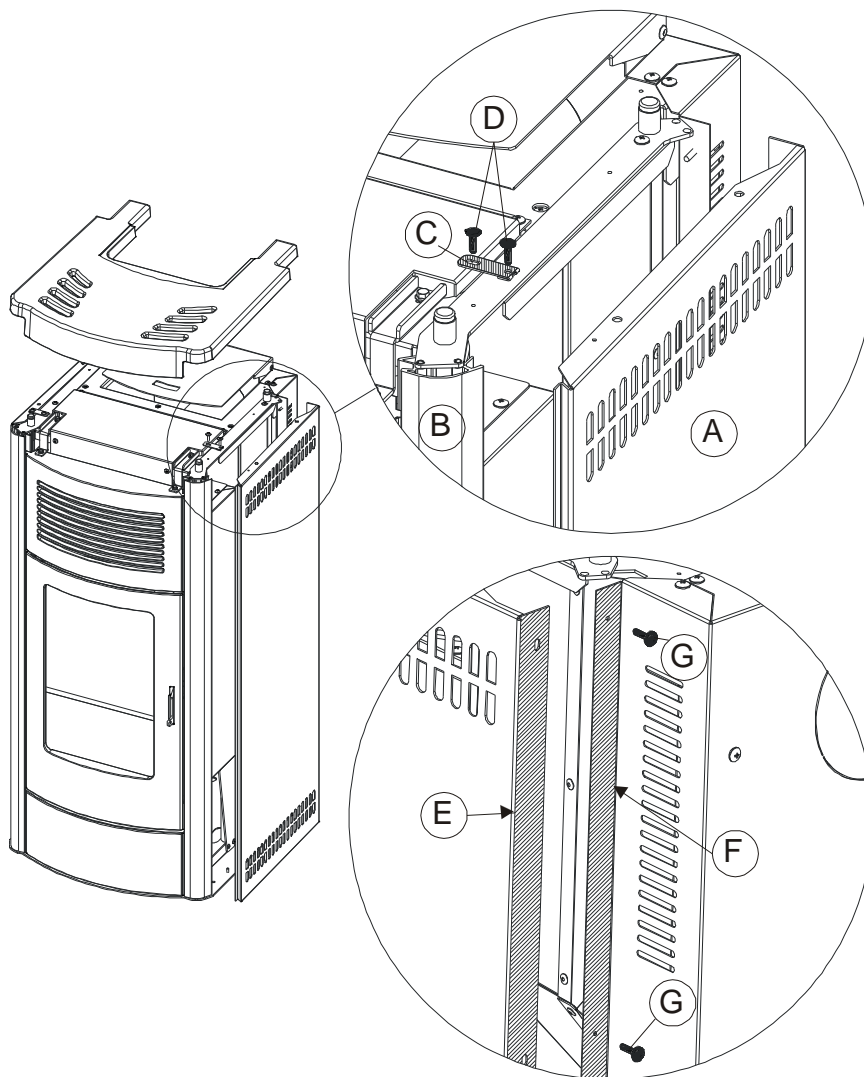
3.3.6. Assembly of sides on the MUSA stove

Remove the cast iron top, take the sides **A** (one for the right side and one for the left) and insert them on the runners of the profile **B** paying attention that the rear part of the side **E** (the one with a 90° bend) overlaps with the sheet metal bend of the structure **F** and that the lower part of the side enters in the plugs on the base.

Take the plate **C** provided and fix it with the two screws **D**, on the upper part in correspondence to the structure and the side.

The rear side must be fixed to the stove's structure using the four screws **G** provided.

When both steel sides **A** are assembled, replace the cast iron top.



REAR VIEW

3.4. PLUMBING SYSTEM CONNECTION

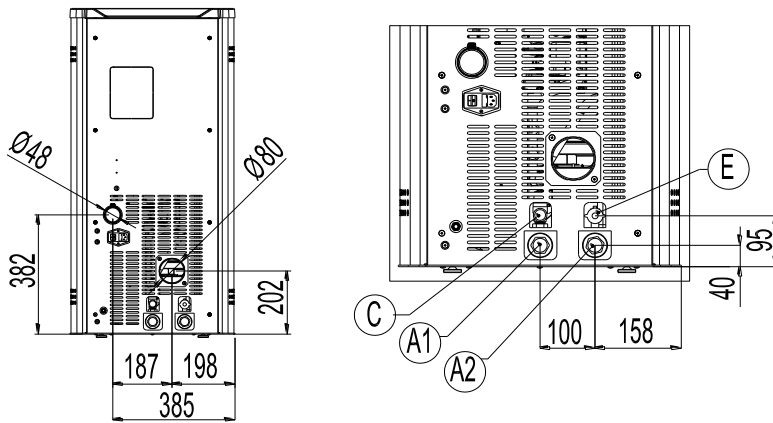


IMPORTANT!

The connection of the stove to the plumbing system must be made **ONLY** by specialized personnel who are capable of carrying out installation properly, in compliance with current standards in the country of installation.

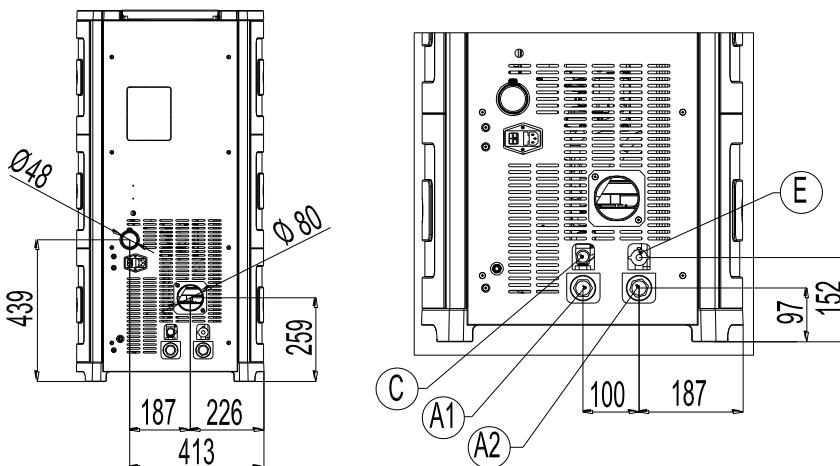
MCZ will not be held responsible for damage to persons or things in the event of failed operation if the aforementioned warning is not complied with.

CONNECTION DIAGRAM FOR EGO-STAR HYDRO STOVE



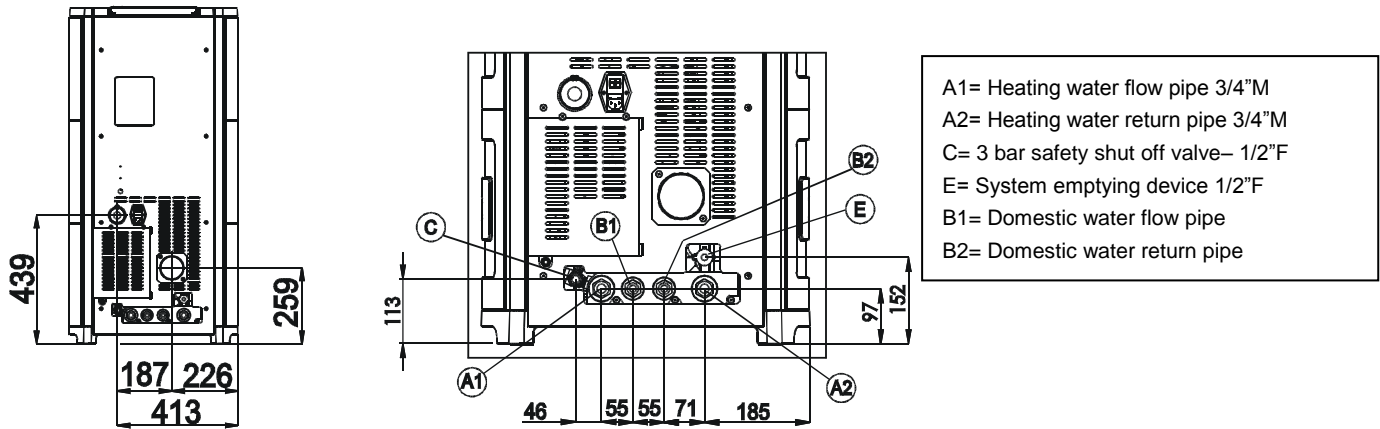
- A1=Heating water delivery 3/4" M
- A2=Heating water return 3/4" M
- C=Safety valve 3 bar – 1/2" F
- E=System emptying 1/2" F

CONNECTION DIAGRAM FOR SUITE-CLUB HYDRO STOVE

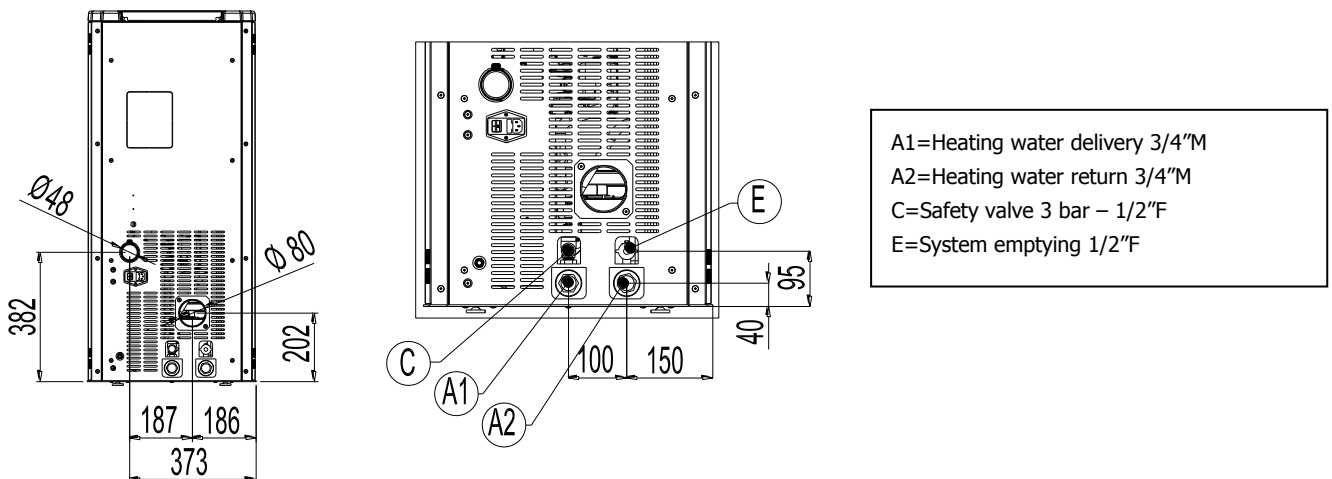


- A1=Heating water delivery 3/4" M
- A2=Heating water return 3/4" M
- C=Safety valve 3 bar – 1/2" F
- E=System emptying 1/2" F

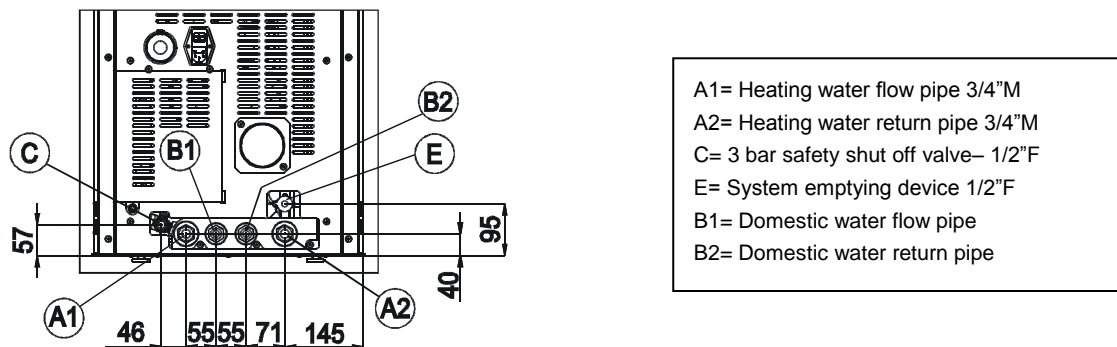
CONNECTION DIAGRAM FOR THE SUITE-CLUB HYDRO STOVE EQUIPPED WITH KIT FOR DOMESTIC HOT WATER PRODUCTION



CONNECTION DIAGRAM FOR MUSA HYDRO STOVE



CONNECTION DIAGRAM FOR THE MUSA HYDRO STOVE EQUIPPED WITH KIT FOR DOMESTIC HOT WATER PRODUCTION



3.4.1. Connections to the system

Make the connections to the corresponding fittings shown in the diagram on the previous page. Make sure the pipes are not placed under tension or undersized.



IMPORTANT

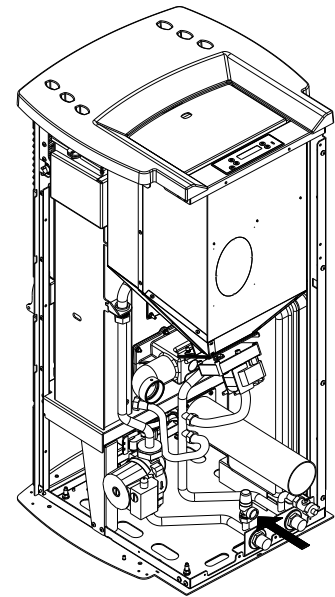
IT IS STRONGLY RECOMMENDED TO FLUSH THE ENTIRE SYSTEM BEFORE CONNECTING IT IN ORDER TO GET RID OF RESIDUES AND DEPOSITS.

Upstream from the stove, always install valves so as to disconnect it from the plumbing system should it be necessary to move it, or when it requires routine and/or special maintenance.

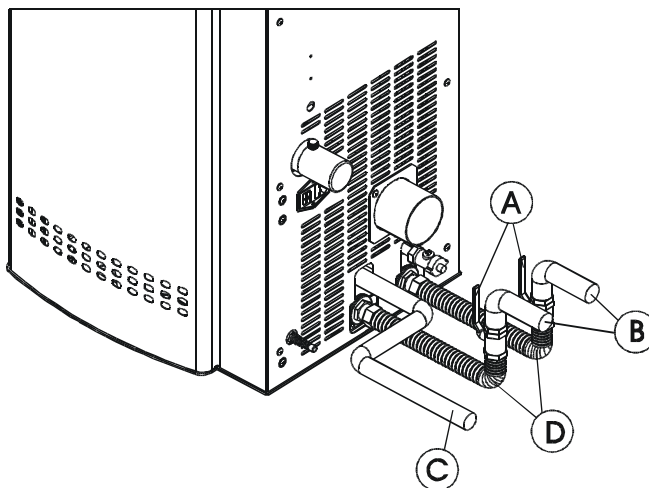
Connect the stove using flexible hoses so that the stove is not too strictly connected to the system, and to allow slight movements.



The pressure discharge valve (C) is always connected to a water drain pipe. The pipe must be adequate to support the water's high temperature and pressure.



Pressure discharge valve (3 bar)



- A = TAP
- B = DOMESTIC SYSTEM
- C = PRESSURE DISCHARGE
- D = FLEXIBLE PIPES

3.4.2. System filling

To fill the system, the stove can be equipped with an end piece (*optional*) with a non-return valve (**D**), for manual filling of the heating system (if the *optional* is not installed, the filling tap on the main boiler will be used). During this operation, any air in the system is released from the automatic vent valve located under the top.

To ensure the valve vents correctly, it is advisable to loosen the grey cap one turn and to keep the red cap blocked (*see figure*)

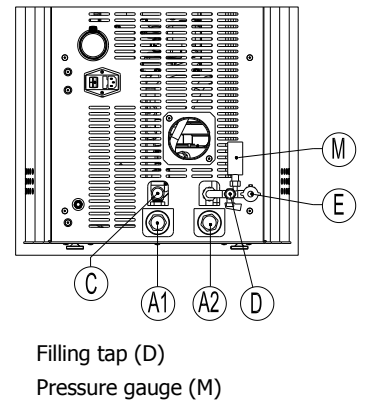
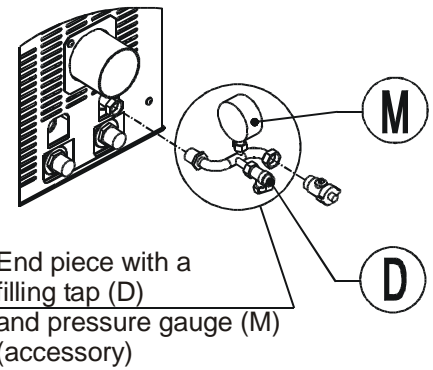
The filling pressure of the system **WHEN COLD** must be **1 bar**.

During operation, if the system pressure drops (due to evaporation of dissolved gases in the water) to values lower than the minimum indicated above, the user must use the filling tap to bring the pressure back up to its normal pressure.

For proper operation of the stove **WHEN HOT**, the pressure in the boiler must be **1.5 bar**.

To monitor system pressure, the end piece (*optional*) is equipped with a pressure gauge (M).

Upon completion of this operation, **always** close the tap.



3.4.3. Water characteristics

The characteristics of the water used to fill the system are very important to prevent the build-up of mineral salts and the formation of incrustations along the pipes, in the boiler and in the heat exchangers.

Therefore, please GET YOUR PLUMBER'S ADVICE CONCERNING:



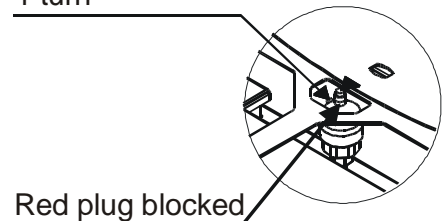
- Hardness of water circulating in the system, to prevent problems of incrustation and limescale, especially in the domestic water heat exchanger. (> 25° French)
- Installation of a water softener (if water hardness exceeds 25° French)
- Filling the system with treated water (demineralised).
- Possibly providing an anti-condensation circuit.
- Installation of plumbing bumpers to prevent banging along the fittings and pipes.

If you have very extensive systems, with a large amount of water, or which require frequent refilling, the installation of water softening systems.



It should be remembered that incrustations drastically reduce performance due to low thermal conductivity.

Grey plug loosened
1 turn



Vent valve under the top

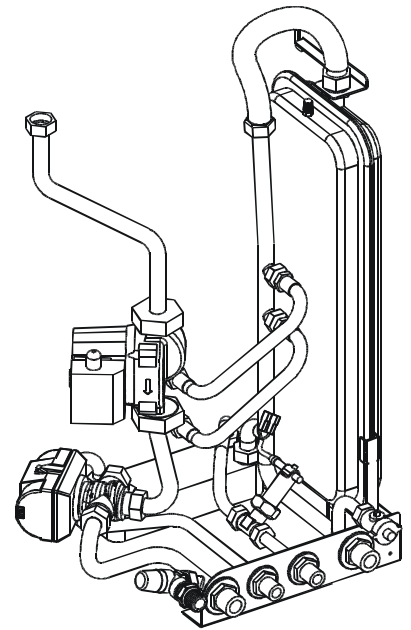
3.5. KIT FOR DOMESTIC HOT WATER PRODUCTION (Optional) Only for Suite/Club/Musa stoves

SUITE – CLUB and MUSA stoves can also be equipped with a full kit for the production of domestic hot water. This kit comprises:

- A plate heat exchanger
- A three-way diverter valve
- Water flow switch
- Pipes and unions for connection

The kit is designed to heat domestic water directly from the home water supply system. MCZ supplies the kit ready-assembled.

When the tap is turned on and hot water is needed, the internal water flow switch will send a signal to the diverter valve to channel the hot water from the boiler (where it is stored) to the plate heat exchanger. The temperature of the domestic water depends a great deal on the temperature of the water inside the heating system. This can be calculated to a good degree of accuracy by taking 10°-15°C away from the value shown on the control panel of the stove (which is the temperature of the water in the boiler).



If hot domestic water is needed while the stove is 'Off' or in 'off ECO-STOP' mode, the stove will automatically and immediately begin the start-up process to heat the water inside the boiler, followed by the domestic hot water.



To ensure that the plate heat exchanger continues to operate correctly over time, it is important that you know the water hardness of your system to prevent deposits from forming.

If the water in your home is very hard, you are advised to install a softening system upstream (see chapter 3.4.3)

You are advised to maintain the plate heat exchanger annually to eliminate calcium sediments and mineral salts or to replace heating plates with new ones. MCZ supplies these replacement parts.

3.6. EXAMPLE INSTALLATION DIAGRAMS



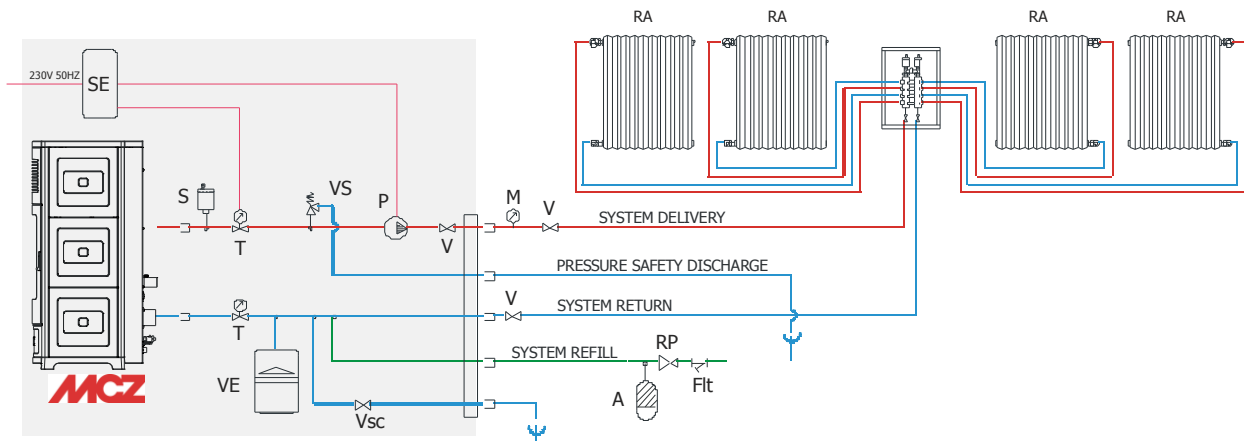
The following diagrams are to be used only as a guideline. For proper connection, always follow the notes for the plumbing and heating installer. The plumbing system must meet local, regional or national requirements. Installation and verification of operation is to be performed only by specialized, authorized personnel.

MCZ will not be held liable for non-compliance with the provisions listed above.

3.6.1. Installation diagram for heating system without domestic hot water kit (EGO/STAR/SUITE/CLUB/MUSA)

PERFORMANCE:

HEATING WITH STOVE



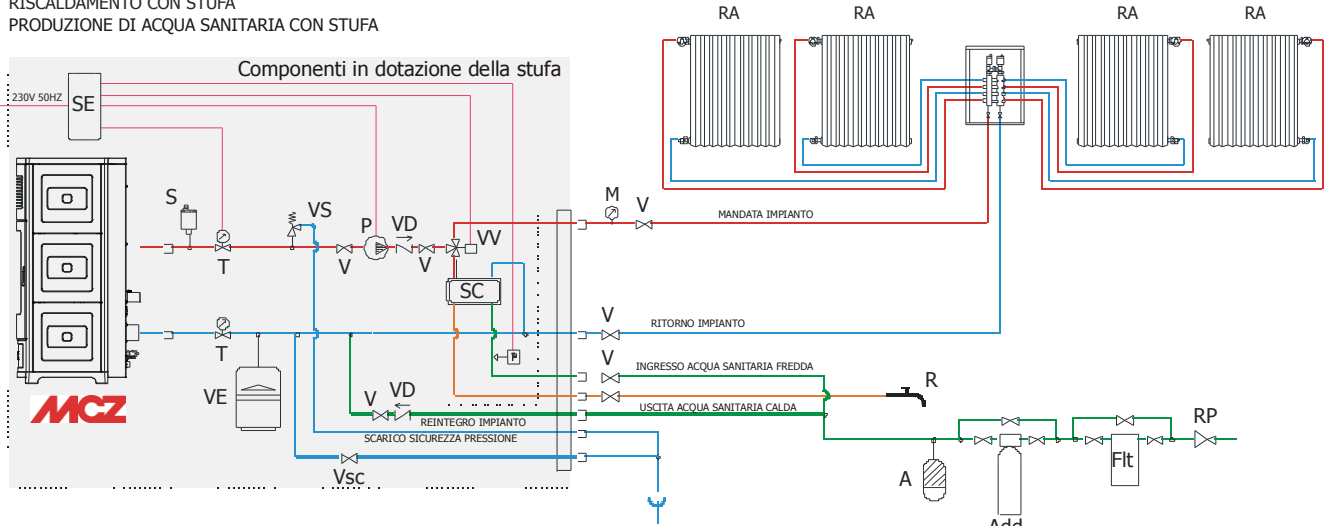
CONFIGURATION: STAR/EGO/SUITE/CLUB/MUSA WITH DOMESTIC HOT WATER KIT
SYSTEM OF SYSTEM WITH CLOSED TANK ONLY FOR HEATING BY MEANS OF RADIATORS

SIGNATURFORKLARING:

SE Electronic card	VD One-way valve	C Methane gas boiler	A Pounding absorber
S Automatic vent	T Measurement of boiler temperature	B Boiler	RP Pressure reduction valve
M Pressure gauge	VE Expansion tank, 1.5 bar of 6 l	BA Storage boiler	Vsc Boiler/system discharge valve
VS Vent valve, 3 bar	W 3-way motorized valve	RA Radiators	Fit System filter
V Valve	SC Plate heat exchanger	PR Radiant panels	Add Softener
P Pump	F Flow switch	PS Solar panels	

3.6.2. Installation diagram for heating system with domestic hot water kit (SUITE/CLUB/MUSA)

PRESTAZIONI:
RISCALDAMENTO CON STUFA
PRODUZIONE DI ACQUA SANITARIA CON STUFA



CONFIGURAZIONE: SUITE/CLUB/MUSA CON KIT SANITARIO

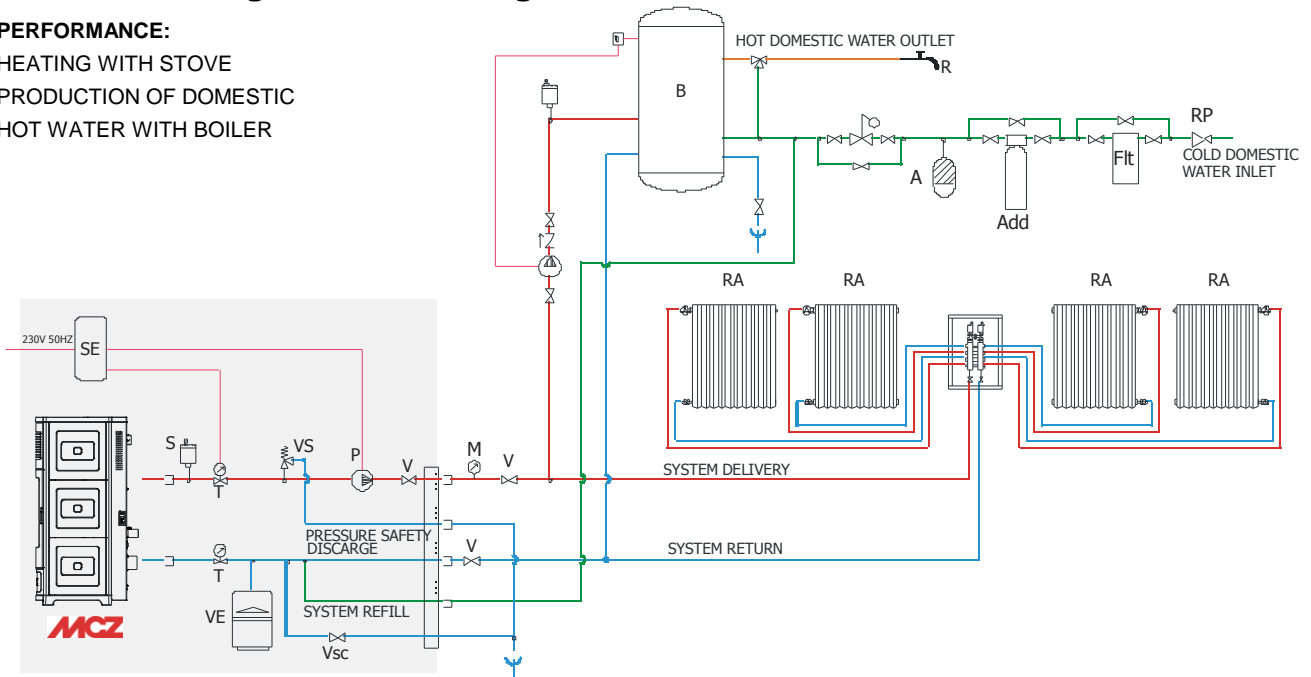
SCHEMA IMPIANTO A VASO CHIUSO PER RISCALDAMENTO MEDIANTE RADIATORI O PRODUZIONE DI ACQUA CALDA SANITARIA

LEGENDA:

SE	Scheda elettronica	VD	Valvola unidirezionale	C	Caldaia a gas metano	A	Ammortizzatore colpi d'ariete
S	Sfiato automatico	T	Misurazione temperatura caldaia	B	Bollitore	RP	Valvola riduttrice di pressione
M	Manometro	VE	Vaso di espansione 1,5 bar da 6 lt	BA	Bollitore ad accumulo	Vsc	Valvola scarico impianto/caldaia
VS	Valvola di sfiato 3 bar	VV	Valvola a 3 vie motorizzata	RA	Radiatori	Flt	Filtro impianto
V	Valvola	SC	Scambiatore a piastre	PR	Pannelli radianti	Add	Addolcitore
P	Pompa	F	Flussostato	PS	Pannelli solari		

3.6.3. Heating installation diagram in combination with a boiler

PERFORMANCE:
HEATING WITH STOVE
PRODUCTION OF DOMESTIC
HOT WATER WITH BOILER



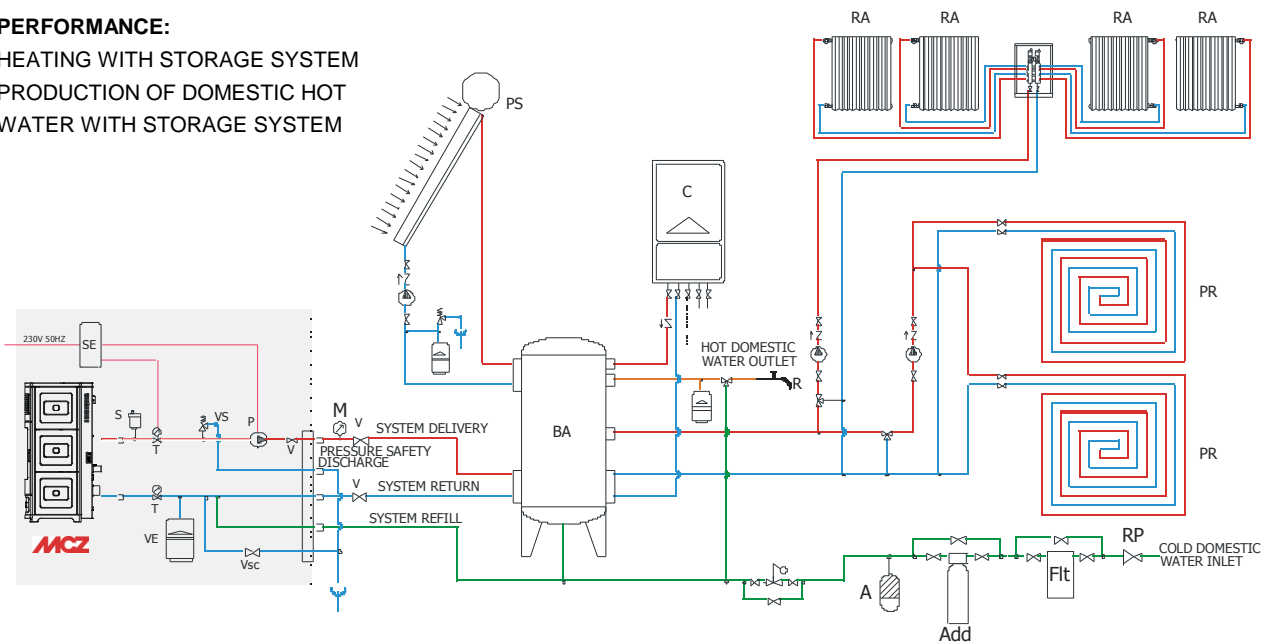
CONFIGURATION: STAR/EGO/SUITE/CLUB/MUSA WITHOUT DOMESTIC HOT WATER KIT COMBINED WITH BOILER
HEATING WITH STORAGE SYSTEM PRODUCTION OF DOMESTIC HOT WATER WITH STORAGE SYSTEM

SIGNATURFORKLARING:

SE Electronic card	VD One-way valve	C Methane gas boiler	A Pounding absorber
S Automatic vent	T Measurement of boiler temperature	B Boiler	RP Pressure reduction valve
M Pressure gauge	VE Expansion tank, 1.5 bar of 6 l	BA Storage boiler	Vsc Boiler/system discharge valve
VS Vent valve, 3 bar	W 3-way motorized valve	RA Radiators	Fit System filter
V Valve	SC Plate heat exchanger	PR Radiant panels	Add Softener
P Pump	F Flow switch	PS Solar panels	

3.6.4. Heating installation in combination with a storage tank

PERFORMANCE:
HEATING WITH STORAGE SYSTEM
PRODUCTION OF DOMESTIC HOT
WATER WITH STORAGE SYSTEM



CONFIGURATION: STAR/EGO/SUITE/CLUB/MUSA WITHOUT DOMESTIC HOT WATER KIT COMBINED WITH STORAGE SYSTEM WITH BOILER AND SOLAR PANELS
SYSTEM DIAGRAM WITH CLOSED TANK FOR HEATING WITH RADIATORS OR RADIANT PANELS AND FOR THE PRODUCTION OF DOMESTIC HOT WATER

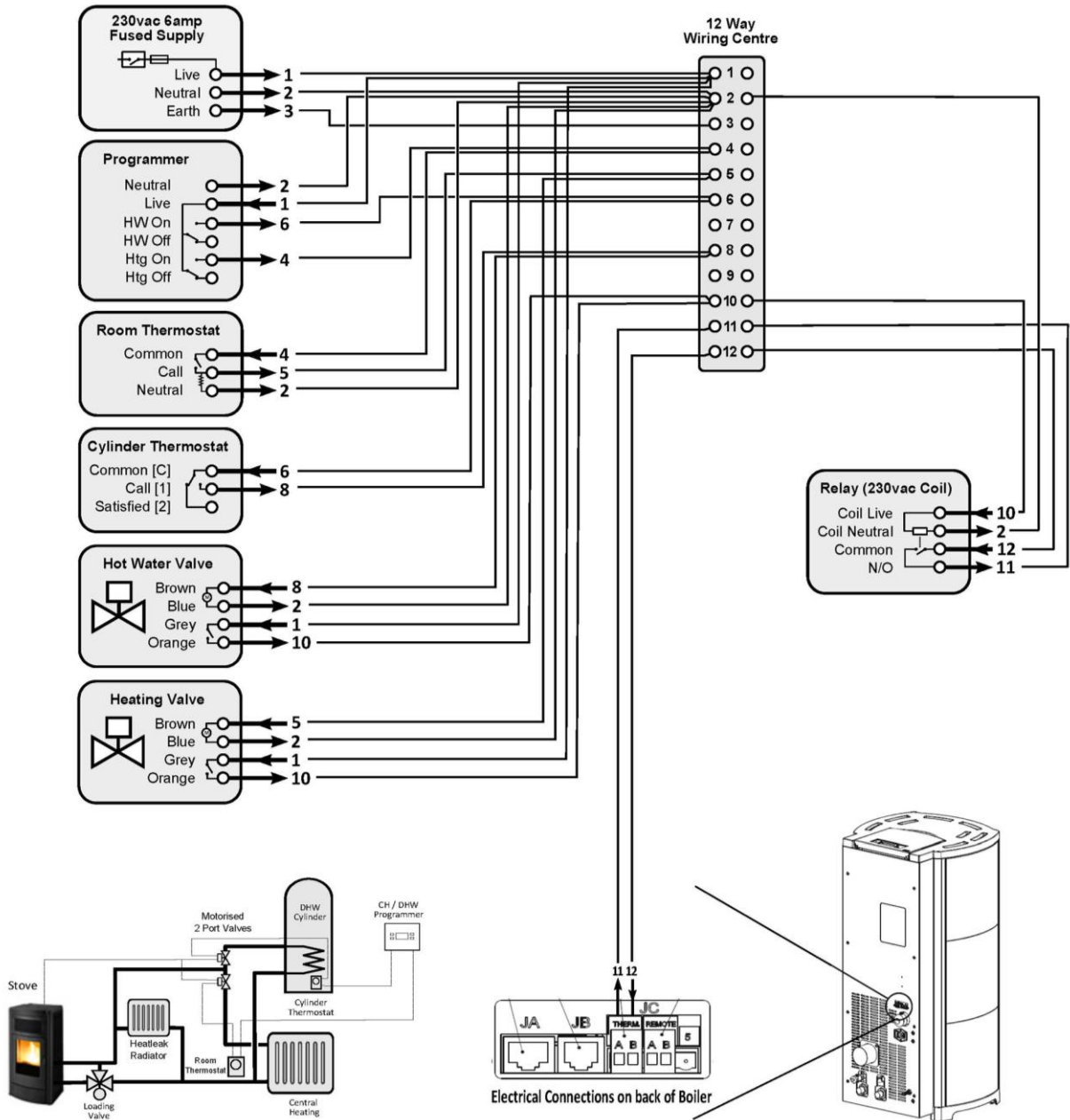
SIGNATURFORKLARING:

SE Electronic card	VD One-way valve	C Methane gas boiler	A Pounding absorber
S Automatic vent	T Measurement of boiler temperature	B Boiler	RP Pressure reduction valve
M Pressure gauge	VE Expansion tank, 1.5 bar of 6 l	BA Storage boiler	Vsc Boiler/system discharge valve
VS Vent valve, 3 bar	W 3-way motorized valve	RA Radiators	Fit System filter
V Valve	SC Plate heat exchanger	PR Radiant panels	Add Softener
P Pump	F Flow switch	PS Solar panels	

ONLY FOR UK

**MCZ Hydro Stoves (Active System)
Ego; Star; Suite; Club; Musa; Vivo 80 Hydro
Wiring for S-Plan Systems**

These notes must be read in conjunction with the full installation instructions



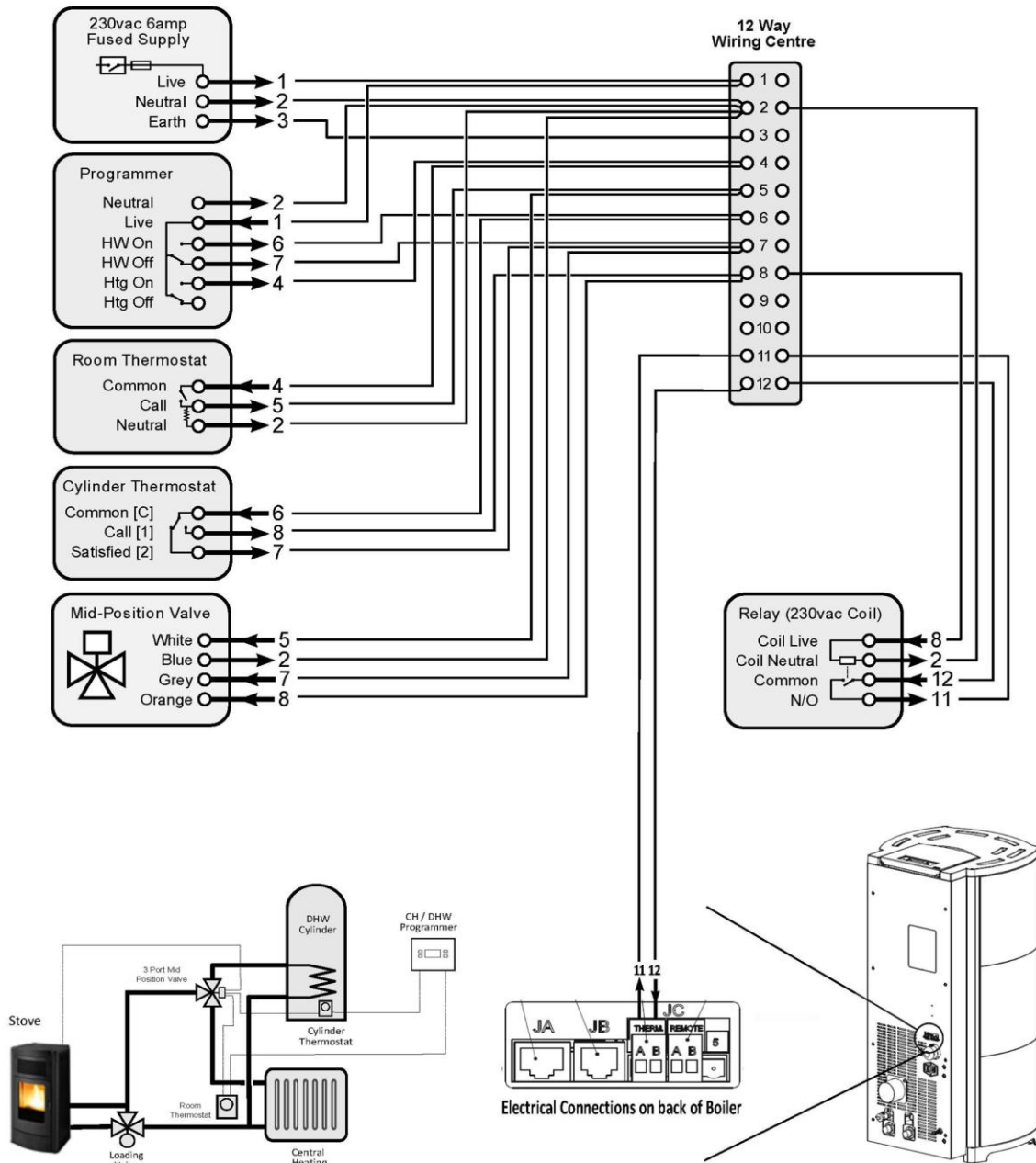
Simplified Schematic of S-Plan System

WARNING: The external thermostat terminals on MCZ stoves and boilers are volt-free.
On no account must a mains voltage signal be connected.

ONLY FOR UK

MCZ Hydro Stoves (Active System) Ego; Star; Suite; Club; Musa; Vivo 80 Hydro Wiring for Y-Plan Systems

These notes must be read
in conjunction with the full
installation instructions



WARNING: The external thermostat terminals on MCZ stoves and boilers are volt-free.
On no account must a mains voltage signal be connected.

ONLY FOR UK

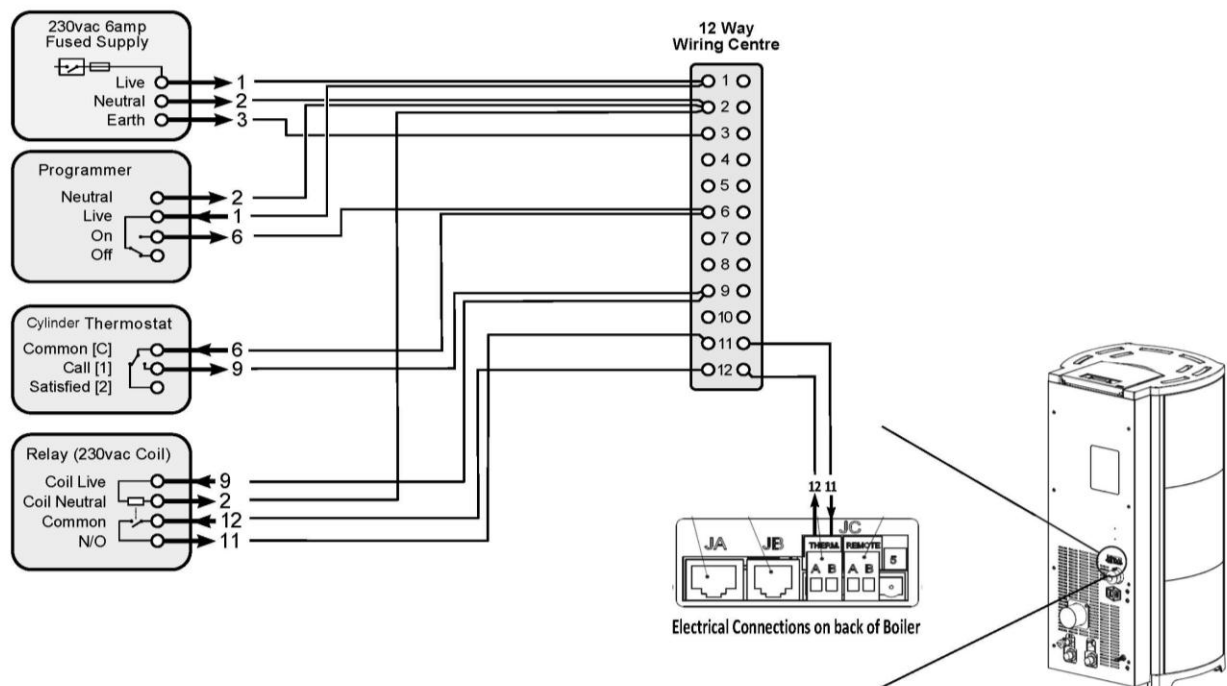
MCZ Hydro Stoves (Active System)

Ego; Star; Suite; Club; Musa; Vivo 80 Hydro

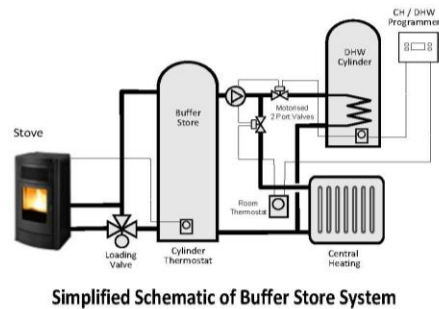
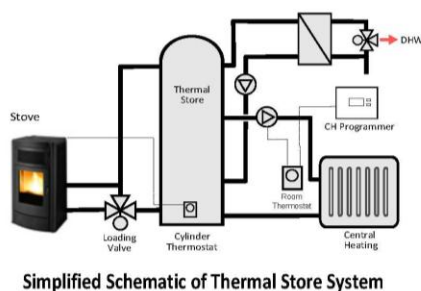
Wiring for Thermal Store or Buffer Systems where time control is by use of external programmer.

These notes must be read in conjunction with the full installation instructions

Note: Separate controls are required for operation of the Central Heating and DHW zones (not shown), and those controls are not interlocked with the stove and cylinder thermostat.



WARNING: The external thermostat terminals on MCZ stoves and boilers are volt-free. On no account must a mains voltage signal be connected.

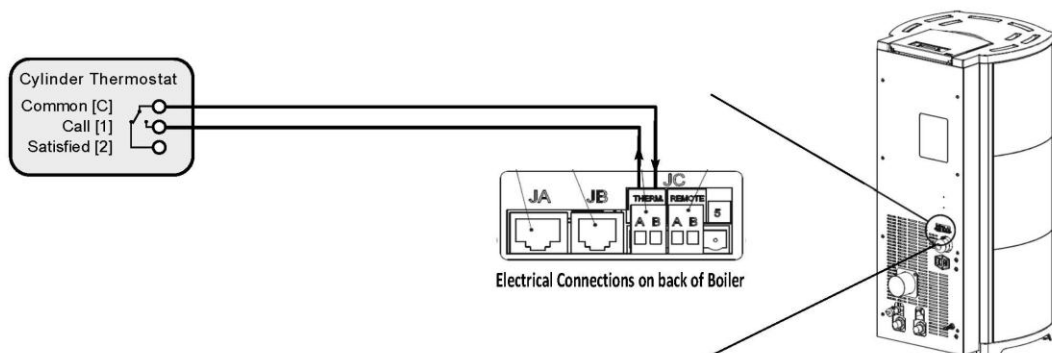
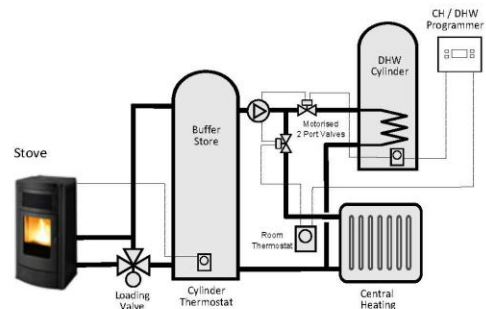
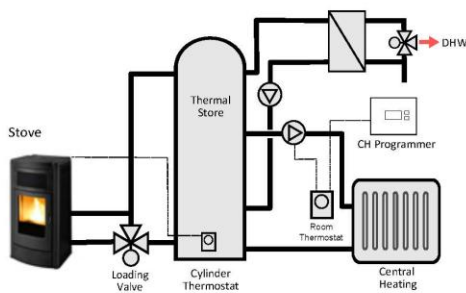


ONLY FOR UK

**MCZ Hydro Stoves (Active System)
Ego; Star; Suite; Club; Musa; Vivo 80 Hydro
Wiring for Thermal Store or Buffer Systems where
time control is by use of onboard programmer in stove.**

These notes must be read
in conjunction with the full
installation instructions

**Note: Separate controls are required for operation of the
Central Heating and DHW zones (not shown), and those controls
are not interlocked with the stove and cylinder thermostat.**



WARNING: The external thermostat terminals on MCZ stoves and boilers are volt-free.
On no account must a mains voltage signal be connected.

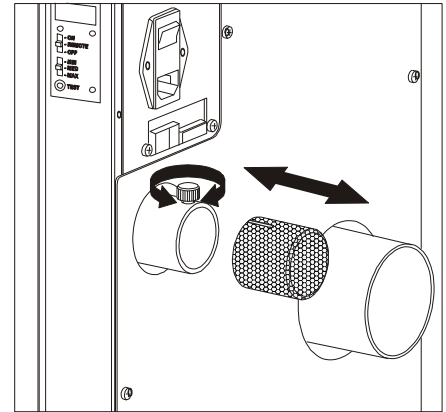
3.7. INSTALLATION OF AIR FILTER

Before placing the stove near the wall for connection to the flue pipe and to the electrical mains, install the air filter provided with the stove.

The cylindrical filter is composed of a metallic net and is already installed on the stove

The filter must be inserted on the air inlet pipe \varnothing 5 cm.

To remove it, slightly loosen the screw with the knob on the air inlet, insert the filter matching it with the filter groove with the screw of the knob and then secure it by tightening the knob.



Installation/removal of air filter



ATTENTION!

Never operate the stove without the air filter. Please ensure this is serviced each year to prevent any blockage of air flow to the appliance. MCZ shall not be held liable for damage to internal components if this instruction is not followed.

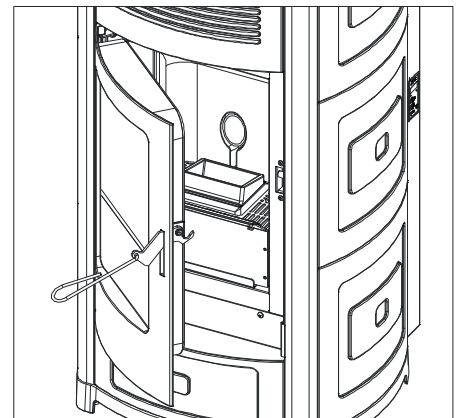
3.8. OPENING/CLOSING THE DOOR

The door is opened with the hook on the door, which must be lifted using the cool hand provided.



WARNING!

In order for the stove to operate correctly, it is essential that the door be closed completely.



Opening/closing the door

3.9. MAKING THE ELECTRICAL CONNECTIONS

Connect the supply cable first at the rear of the stove and then to an electrical outlet on the wall.

The main switch located on the rear of the stove should be switched on only when you want to light the stove.



If you do not intend to use the stove, it is advisable to keep it switched off.



Electrical connection of the stove



MCZ GROUP S.p.A.

Via La Croce n°2

33074 Vigonovo di Fontanafredda (PN) – ITALY

Telephone: 0434/599599 r.a.

Fax: 0434/599598

Internet: www.mcz.it

e-mail: mcz@mcz.it