



NIREAS

WATER HEATING FIREPLACE



**INSTALLATION
& USER MANUAL**



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1. ARTE® FIREPLACE - A GREEK QUALITY PRODUCT

Thank you for buying an ARTE® fireplace - we believe that you will have as much pleasure from our product as we have.

Your ARTE® fireplace is made in such a way, to extract the maximum possible energy from the wood with the minimum possible emissions, using the most innovative technology and the most robust design - made in Greece!

These instructions contain interesting and informative facts and all you need to know about the subjects of heating, wood, and operating your ARTE® fireplace. Please read these instructions carefully before using your fireplace for the first time and keep them in a safe place.



The manuals which are enclosed with the product must be kept throughout the product's entire service life.

2. FACTS ABOUT WOOD AND THE ENVIRONMENT

2.1. Why use wood?

With proper forest management, burning wood does not deplete the earth's resources. Heating with wood usually does not contribute to global warming. The young trees that replace the trees in your fireplace absorb carbon dioxide from the air. Burning firewood releases only as much CO₂ as the tree has absorbed from the atmosphere during its growth. Wood rotting in the forest generates the same amount of CO₂ as the same wood burning.

Besides being environmentally friendly, the heat from a fireplace warms you like the warming rays of the sun during the sunny winter days. It is the radiated heat that transmitted by electromagnetic waves in the infrared range. Even when the air is very cold you can feel the warm rays of the sun on your skin.

Another advantage to wood is that it is produced locally, which creates local employment, and more tax revenues stay in the province.

2.2. Buying firewood

Where can I get my firewood?

Regenerated ready-to-burn firewood can be purchased from dealers:

- ① Fireplace ready, stored for at least two years
- ① Pre-dried, stored for one year
- ① Fresh from the forest

Whether you have cut your own wood or bought it, the important thing is: **the wood should be dried for at least two years before it is burned.**



The ideal residual moisture is 12 - 15% and should be no higher!

2.3. Storing your wood

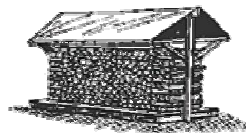
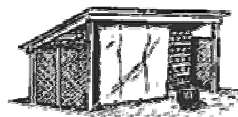
The full potential for heat will not be realized if you neglect the simple chore of piling and protecting your wood. Proper storage is essential to avoid moisture, bacteria, and insect problems in your home.

To avoid problems with insects and moisture, store the wood as far from your house as is practical. Do not store wood in your basement; one cord of wood can give off more than 500 liters of water. The basic rule is to hide the wood from water, but not from the sun or wind (**Pic. 2.3.1 & 2.3.2**) Green wood will dry slowly or not at all if unprotected, while seasoned wood left unprotected may become unseasoned.

There are three basic rules to follow when storing wood:

- ① Allow air circulation by piling one tier wide if possible
- ① Protect wood from rain and snow by covering with a tarp or woodshed roof.
- ① Pile wood off the ground on scrap lumber or wooden pallets.

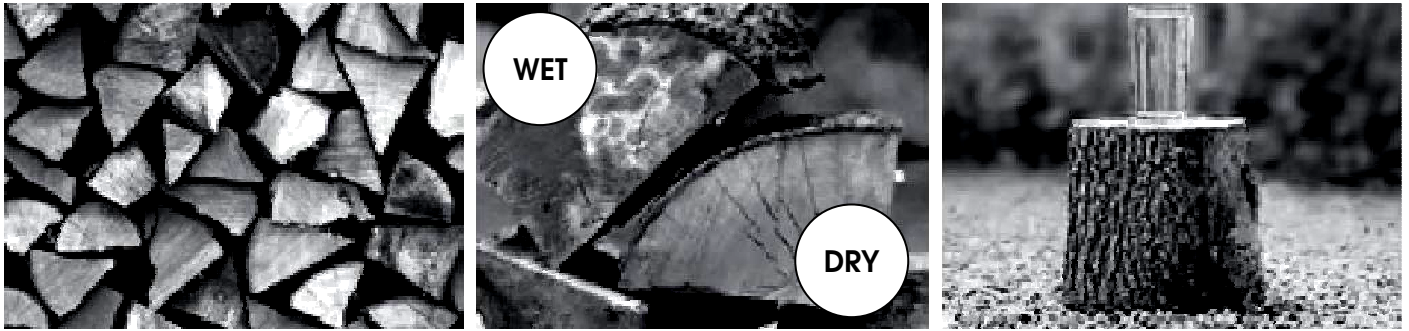
The time-honored way to cure wood is to buck, split, and stack wood off the ground for one full year. How-ever, wood can generally be reduced to 20 per cent moisture content in two to three months. The ideal 10% to 15% may take longer (almost 18 months).



Pic. 2.3.1



Pic. 2.3.2



2.4. Wood types and calorific value

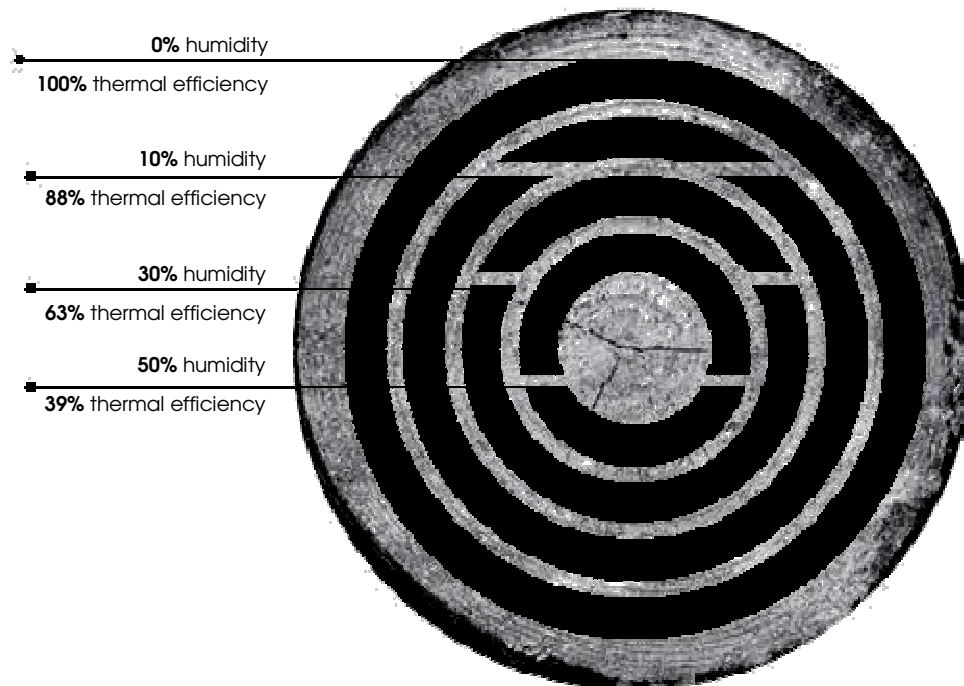
A wood's efficiency does not depend only on its type, but also on its humidity, as well as the temperature of the combustion chamber.

For more efficient and longer burning, without emission of hazardous substances, woods must be dry. Ideally, their humidity percentage must not exceed 10% to 15%.

If this percentage is over 20%, the wood is not burned properly, whereas if the piece of wood has been cut recently, the humidity is over 60% making it unsuitable for burning. The reason for that is that the fire will be weak and pale and will produce dense smoke, unburned tar and creosote, soiling the ceramic glass and the flu.

It is preferable to get your wood supplies during the summer months and store them, to ensure better combustion quality during the winter.

Useful tips



- ① Always choose dry firewood.
- ① Avoid wood that pops (chestnut, conifers such as cedar, spruce and pine), as they may damage your fireplace or the flue.
- ① Pay attention to the size of the logs. Good firewood must have been cut at least twice.
- ① You should prefer oak, beech, olive wood, which is hard wood with high density since they will burn for longer.

Briquettes

They ignite very easily, and burn slowly. They are economically advantageous because you will burn smaller quantities compared to common firewood and they are easily stored. Also, you have less quantity of ashes vs. to wood.

Birch

It's a soft wood that ignites easily with great thermal energy production. It produces less smoke and ash compared to other wood and burns silently. The same characteristics apply for lime and chestnut.

Beech

Hard wood is ideal for firewood but requires a high temperature to ignite. It weights a lot; it is dense and burns with a calm and long fire for a

longer time. Best when well seasoned. The same applies for oak, but seasoned for 2-3 years.

The various wood types have various calorific values

Wood type	Thermal capacity (Kcal/h-1Kg)
Briquette	5.000
Birch	4.800
Walnut	4.731
Oak	4.619
Beech	4.578
Fir	4.588
Common Oak	4.548
Pine	4.457
Olive	4.100
Poplar	4.022



Table 2.4.1

$860Kcal/h = 1 kW/h$

The values are based on 15% residual wood moisture.



An ARTE® fireplace can be fired with all of the above wood types

2.5. Determining the heat output

There is not a specific rule that enables the calculation of the required heat output. This depends on the amount of space that is required to be heated and mostly on its insulation. In average the required heat output for a properly insulated room and with external temperature of 0° is 40 kCal/h per m³.

Taking into account that 1kW equals 860 kCal/h an equivalent of 50W/m³ can be used. For example, to heat a 50 m³ room (10 x 6 x 2.5m) in an insulated residence, the output required is 150m³ x 50W/m³ = 7500W or 7.5 kW.

So for the main heating, a 10kW appliance is enough.

Fuel	Unit	Indicative combustion value with efficiency ~80%		Required amount relative to 1kg dry wood
		kCal	kW	
Firewood (moisture 15%)	kg	3600	4.2	1.00
Firewood (moisture 50%)	Kg	1850	2.2	1.95
Wood briquettes	Kg	4000	5.0	0.84
Coal briquettes	Kg	4800	5.6	0.75
Coal	Kg	7700	8.9	0.47
Coke	Kg	6780	7.9	0.53
Gas	m³	7800	9.1	0.46
Diesel	L	8500	9.9	0.42
Electricity	kW/h	860	1.0	4.19

Table 2.5.1

3. ENDORSEMENTS & CERTIFICATIONS

3.1. Endorsement

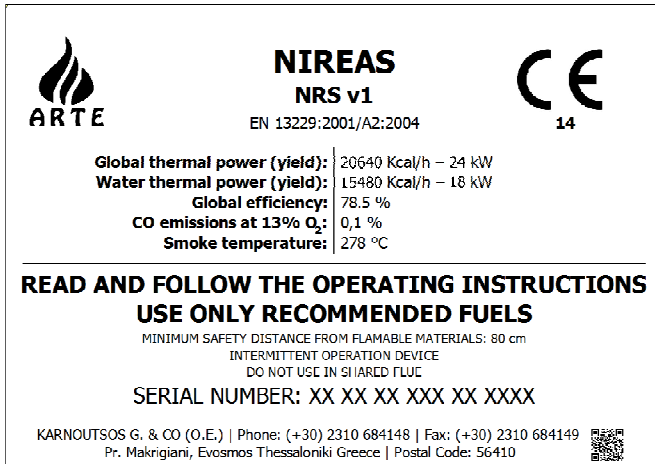
The ARTE® fireplace you chose has been tested according to **EN13229**.

3.2. Declaration of Performance CE

The constructor G. Karnoutsos & Co. declares that ARTE® fireplaces meet the requirements of the standard **EN 13240**, also the product's performance according to the quality specifications are monitored on a permanent basis.

3.3. Features marking plate

ARTE® fireplace's feature marking plate is located on the right side of the appliance.

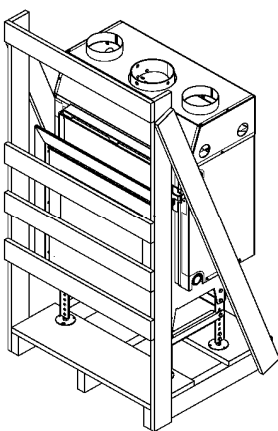


4. PACKAGING

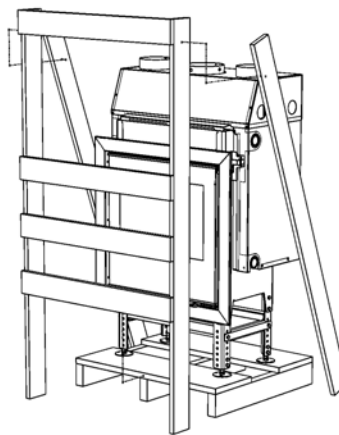
ARTE® is devoted in protecting the environment, so we use as much recyclable materials as possible and the least amount of packaging materials without compromising the secure transfer of our products.

4.1. Unpacking the fireplace

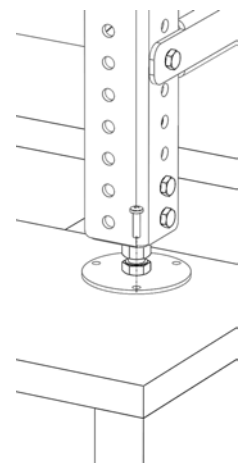
1. The product will be delivered on a wooden palette which is lined with wooden side panels and top panel. **(Pic. 4.1.1)**
2. Firstly remove the side panels. **(Pic. 4.1.2)**
3. Carefully remove the plastic membrane and the waterproof plastic film and also all the polystyrene on the outside and inside of the product.
4. Unscrew the 4 screws located on the bottom side of the product, in order to release the fireplace from the palette. **(Pic. 4.1.3)**
5. Carefully pick up the product and place it on the installation point, making sure that the floor can withstand the weight of the device. If the existing construction cannot withstand the weight of the device, a load distributing plate is necessary. Also, make sure you provide proper insulation in case the floor is built using flammable materials.



Pic. 4.1.1



Pic. 4.1.2

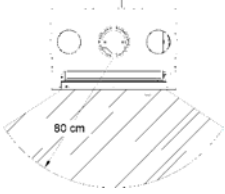


Pic. 4.1.3

5. FIRE SAFETY

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

The installation **MUST** be inspected by a qualified auditor, prior to lighting the fireplace. Also the appropriate local authorities must be informed.



5.1. Safe distances

The combustion chamber opening must be **AT LEAST 80cm** away from any flammable materials that are inside the heat radiation zone.

5.2. Wooden beams protection

Given its properties, heat is transmitted through radiation. In case there are any wooden beams inside the radiation zone or in the way of the hot air, they **MUST** be properly insulated because the continuous exposure in high temperatures can make them deteriorate faster or even cause self ignition. Use proper insulation materials that are in accordance with European rules or, in case of high thermal stress you can also use metal linings.

5.3. General security instructions

- ① Never leave children alone or without supervision near the fireplace when it is lit.
- ① Teach children how to operate the fireplace correctly and safely.
- ① Never touch the external surfaces of the fireplace or the glass when it is lit. There is a high risk of burns!
- ① Due to the self closing door, you have to be extra careful when you are filling the fireplace.
- ① It is forbidden to use the fireplace as a waste incinerator.
- ① Don't use burned or used wood as fuel.
- ① Remove the ash only after it has completely cooled off.
- ① Ash should be placed outdoors or be disposed in a place where there is no risk of ignition.
- ① Immediately inform your specialized local supplier if you find any malfunction.
- ① Don't use chemicals or liquids as fire starters.
- ① Do not use ANY fuel other than the recommended.



Follow the operating instructions supplied with the product to help prevent fire and protect the environment.

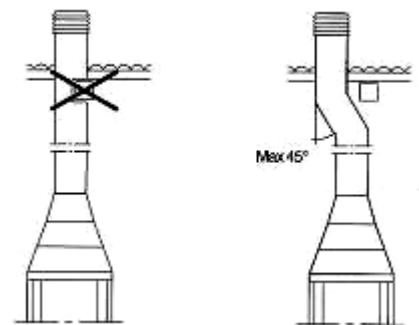
5.4. Flue security instructions

Prior to installing the fireplace ARTE® the chimney sweep or a qualified technician should check the condition and operation of your chimney in accordance with the standards EN13384-1 & EN13384-2.

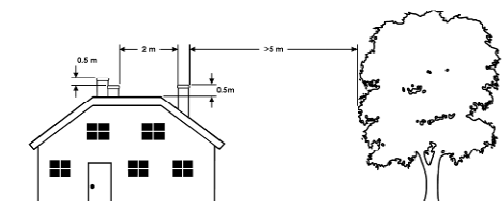
This way you ensure the best conditions for heating without issues.

5.4.1. Basic requirements for proper flue operation

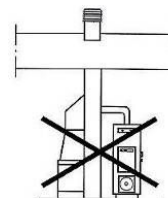
- ① The internal section of the flue must preferably be circular. In a case of square or rectangular flue, the internal corners should have a radius of at least 20mm. In case of rectangular flue, the ratio of the sides should be at maximum 1: 1.5.
- ① The flue must be properly insulated and waterproof and constructed of materials with thermal resistance and resistance to combustion products and any deposits.
- ① The flue must have no constrictions; it must have a vertical path and it should not change in direction that exceeds 45°. (**Pic. 5.4.1.1**)
- ① In case of an existing flue the construction material should be checked. Materials such as cement with lime, galvanized steel and rough or porous materials are contraindicated as they create issues in the correct operation of the fireplace. Also, a proper study for the flue size must be conducted because often old flues have quite large diameters. This means that the amount of air draft is not proportional to the heat generated by the fireplace and by extension means that you consume more wood than necessary and will spend more time on maintenance. The solution proposed in these cases is the connection of an inner tube inside the flue. This tube should extend over the whole length of the flue and at no point should exceed in diameter the outlet flue of the fireplace. If the existing flue has the desired diameter a proper cleaning by qualified personnel should be done.



Pic. 5.4.1.1



Pic. 5.4.2.1



Pic. 5.4.2.2

Inserting the pipe along the outer wall must be properly studied to avoid heat loss. This solution, however, is contraindicated, as positioning the flue inside the house warms more spaces as heat of the flue remains in the house

5.4.2. Chimney placement

The placement of the chimney on the roof is a particularly decisive factor in the convection of the fireplace.

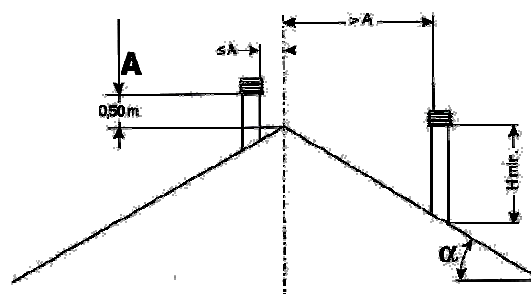
An incorrectly fitted chimney may generate reimbursement of exhaust into the heating space due to down flow of the air.

Follow the instructions below to ensure proper dissipation of smoke. **(Pic. 5.4.2.1)**

- ① The ending of the chimney must be at least 50cm above the top of the roof.
- ① If there is more than one chimney on the roof, they must be positioned at least 2m apart.
- ① If there are two adjacent chimneys, their ends must be at least 50cm apart.
- ① If there is a tall building or tree next to the house, then you should place the chimney at a distance greater than 5m from the obstacle.
- ① It is prohibited to connect several devices to the same chimney. Every chimney should be autonomous. **(Pic. 5.4.2.2)**
- ① In case of an inclined roof, the height of the chimney is defined depending on the inclination and the distance of the chimney from the ridge according to the following table. **(Pic. 5.4.2.3)**

Inclination α°	RIDGE – CHIMNEY DISTANCE	MIN HEIGHT ABOVE THE RIDGE
	A (m)	H (m)
15°	< 1,85 m	0,50 m OVER THE RIDGE
	> 1,85 m	1,00 m OVER THE ROOF
30°	< 1,50 m	0,50 m OVER THE RIDGE
	> 1,50 m	1,30 m OVER THE ROOF
45°	< 1,30 m	0,50 m OVER THE RIDGE
	> 1,30 m	2,00 m OVER THE ROOF
60°	< 1,20 m	0,50 m OVER THE RIDGE
	> 1,20 m	2,60 m OVER THE ROOF

Table 5.4.2.1



Pic. 5.4.2.3

5.4.3. Chimney cap

The chimney draft depends broadly on the adequacy of the cap.

So, in case the chimney is built, its exhaust diameter should be at least twice the inside diameter of the chimney. Knowing that it is necessary to protrude from the ridge of the roof, the cap must ensure the proper smoke dissipation in case of strong wind.

A chimney cap must meet the following requirements:

- ① Internal diameter must be equal to the diameter of the chimney.
- ① Exhaust diameter be at least twice the inside diameter of the chimney.
- ① It should be constructed in such a way as to avoid the entrance of rain, snow and any foreign body in the chimney.
- ① It can be checked, maintained and cleaned easily.



Industrial style cap with protective net

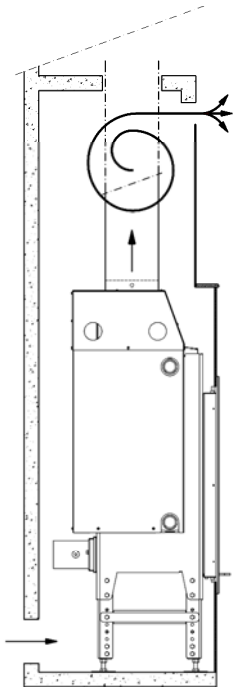


Cap with fan. It provides very good smoke dissipation even in case of weak winds



Cap with deflector. It leans according to the wind and it provides very good smoke dissipation

5.4.4. Connecting the fireplace with the flue



Pic. 5.4.4.2

It is necessary that the flue gas tube is connected to a certified conduit with the same diameter as the fireplace, by following the dimensions of the adjacent image. **(Pic. 5.4.4.1)**. For fireplace NIREAS the diameter of the flue is 180mm. The flue must be properly insulated with stone wool with thickness of 4cm with external aluminum foil. **Do not use fiberglass or paper based insulation**. Also, do not use flexible thin walled metallic tubes or asbestos tubes. This tube should be perfectly sealed and well insulated throughout its length.

To install the flue, you must place it on the fireplace outlet and then seal it using the appropriate sealant.

The space extending around and over the device up to the deflector must be ventilated continuously. For this reason you must allow cool air from a lower spot, for example, the bottom and the outlet of the hot air from above. **(Pic. 5.4.4.2)**

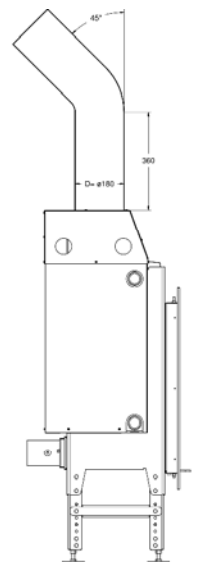
These openings must remain free and not able to be covered. They must also have a minimum surface of 300 cm², for example, a grille with size 30x10cm.

This way you achieve:

- ① greater security
- ① increase on the heat of the room, due to the air circulating around the device.

The hot air extract grille must be placed on top of the trunk approximately 20cm from the ceiling. The grille must always be installed, as its purpose is to allow, the heat that builds up inside the trunk to be released in the room and also to relieve the pressure created.

The hot air extract grille can also serve as a visiting slot in order for the installer or the user to have access to the electronics box of the air regulator (STANDARD type) and be able to perform maintenance, like changing the rechargeable batteries.



Pic. 5.4.4.1

5.4.5. Malfunction - Secure fireplace shutdown

In rare occasions even a test fire may not cause sufficient draft in the flue. In this case contact your chimney sweep.

Under no circumstances should you try to light a larger fire. If smoke escapes from the fireplace, ventilate the room immediately and contact your chimney sweep. **DON'T LIGHT THE FIREPLACE!**

6. CONNECTING NIREAS TO THE CENTRAL HEATING INSTALLATION

ARTE® NIREAS fireplace can be installed to work individually or in collaboration with any another water heating device to be used for central or floor heating.



The installation is made by using 1 1/4" hoses.

To ensure the safety of the device you must install an overheating safety valve **(Pic. 6.1)**, in order to protect the system against possible overheating. Also in case of floor heating, it is necessary to use a buffer tank **(Pic. 6.2)** and a thermal mixing valve **(Pic. 6.3)** to ensure constant temperature of the water in the floor pipes.



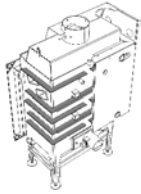
Pic. 6.1



Pic. 6.2



Pic. 6.3



Pic. 6.4

The construction of the fireplace allows you to use any combination of water supply and return and always gives you the maximum water temperature. This is achieved thanks to the special partitioning of the water chamber that causes the water to follow certain paths from the intake to the outlet of the water chamber. **(Pic. 6.4)**. Thus the hottest water located around the upper part of the water chamber is not mixed with the less hot water that is below. This enables you to connect the return and supply of water in any combination you want and not only diametrically opposite as is common in these types of installations.

6.1. Connecting the water supply and return

ARTE® NIREAS provides you with 4 different water supply intakes and 4 return outlets. In order to connect the fireplace with the water circuit you must use 1¹/₄" pipe joints. **(Pic. 6.1.1)**. The fireplace is delivered with 6 out of 8 joints already closed. In order to correctly connect the pipes to the circuit or seal (if applicable) the remaining joints you must use hemp or/and thread glue.

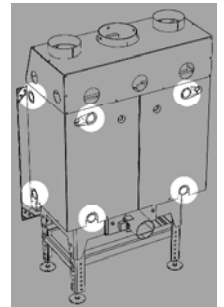


NEVER connect or use the fireplace without it being connected to the water heating circuit!

In any case the installation must be made by a qualified technician and in accordance **local law and the regulations of each country, including all regulations referring to national and European standards.**

The installation can be set into operation only after it has been tested by a qualified inspector. Prior to installing the new fireplace please contact the appropriate local authorities.

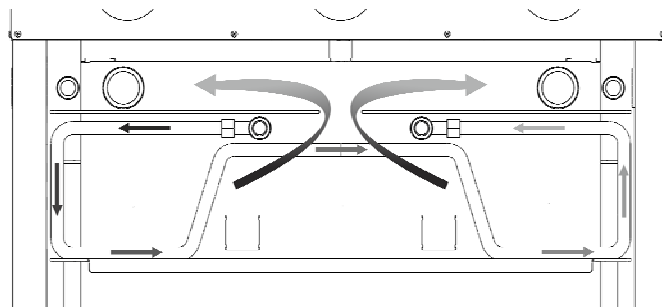
The following schemes in chapters **6.2.1**, **6.2.2** and **6.2.3**, show the various options for connecting the fireplace to the water heating circuit along with the proposed security devices.



Pic. 6.1.1

6.2. Overheating protection

In order to ensure the integrity of the device and the heating network, ARTE® provides you with an option to place a safety configuration to protect the water jacket from overheating.

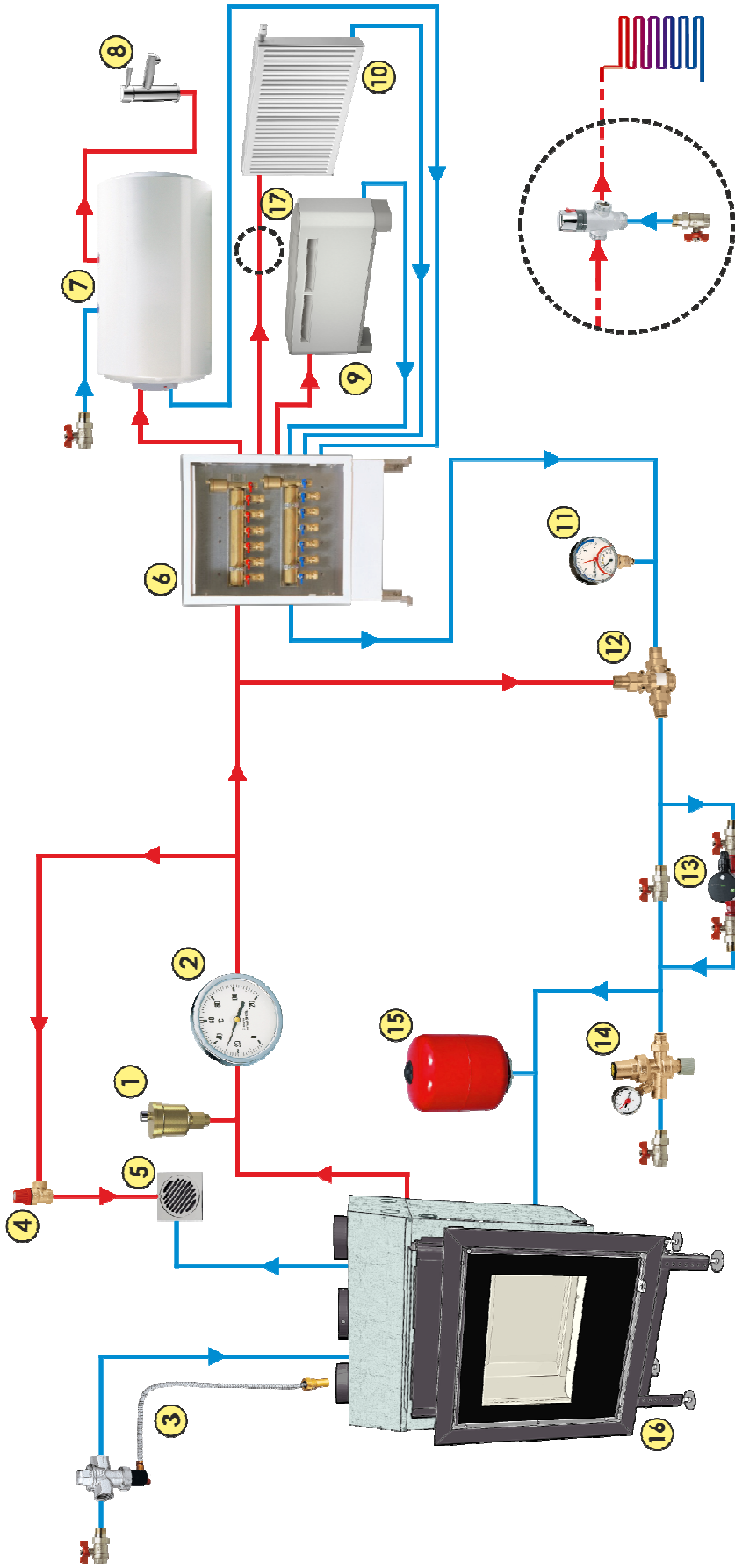


Pic. 6.2.1

On the back of the water jacket of ARTE® NIREAS fireplace there are cold water supply joints that are used by the overheating protection system **(Table 7.2.1, Line 9)**. You must install an overheating safety valve on the input joint **(Pic. 6.1)** and place its temperature sensor in the copper tube **(Table 7.2.1, Line 11)**.

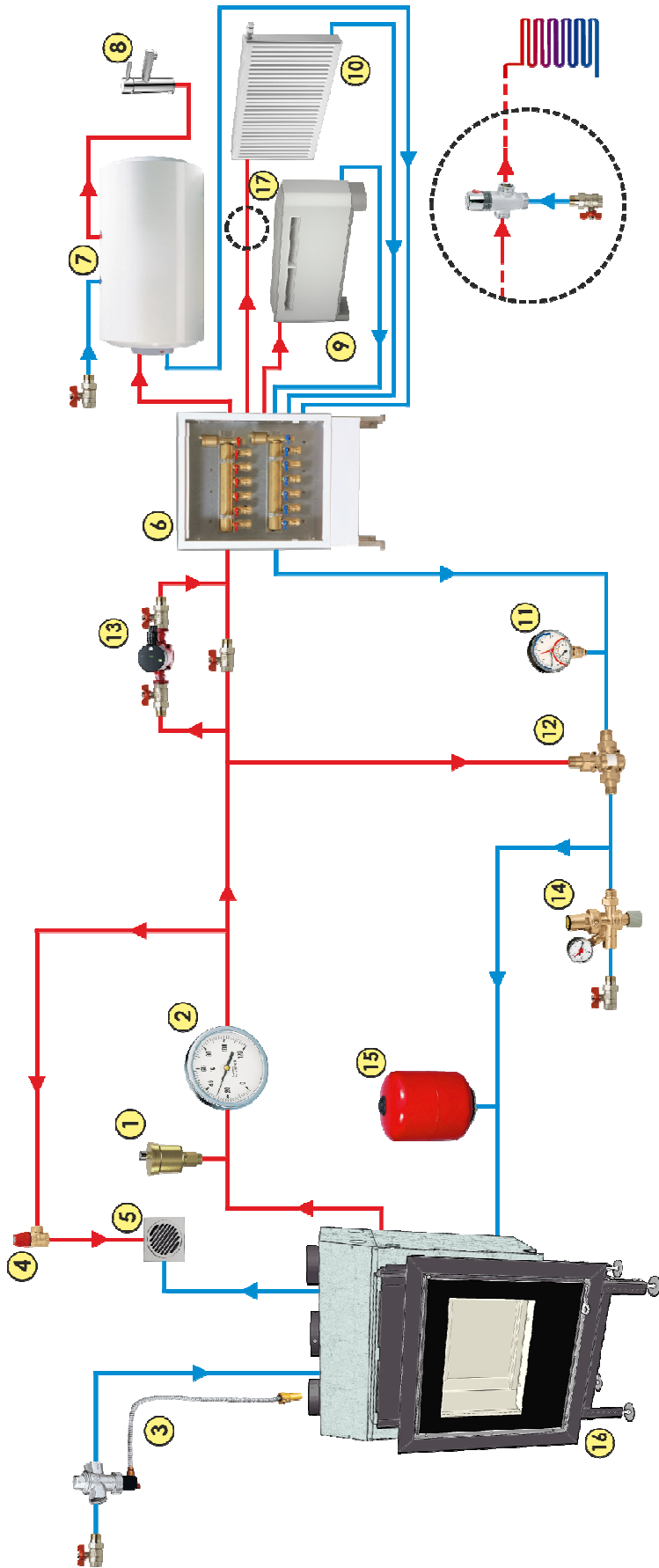
In case the water temperature in the jacket exceeds 95°C, the overheating safety valve will be activated and it will insert cold water in the independent overheating protection system located inside the water jacket, thus rapidly dropping the water temperature and preventing the possibility of destroying the device, without mixing the cold water with the water of the jacket **(Pic. 6.2.1)**.

6.2.1. System with closed expansion tank
when the fireplace is at the same level with the heaters



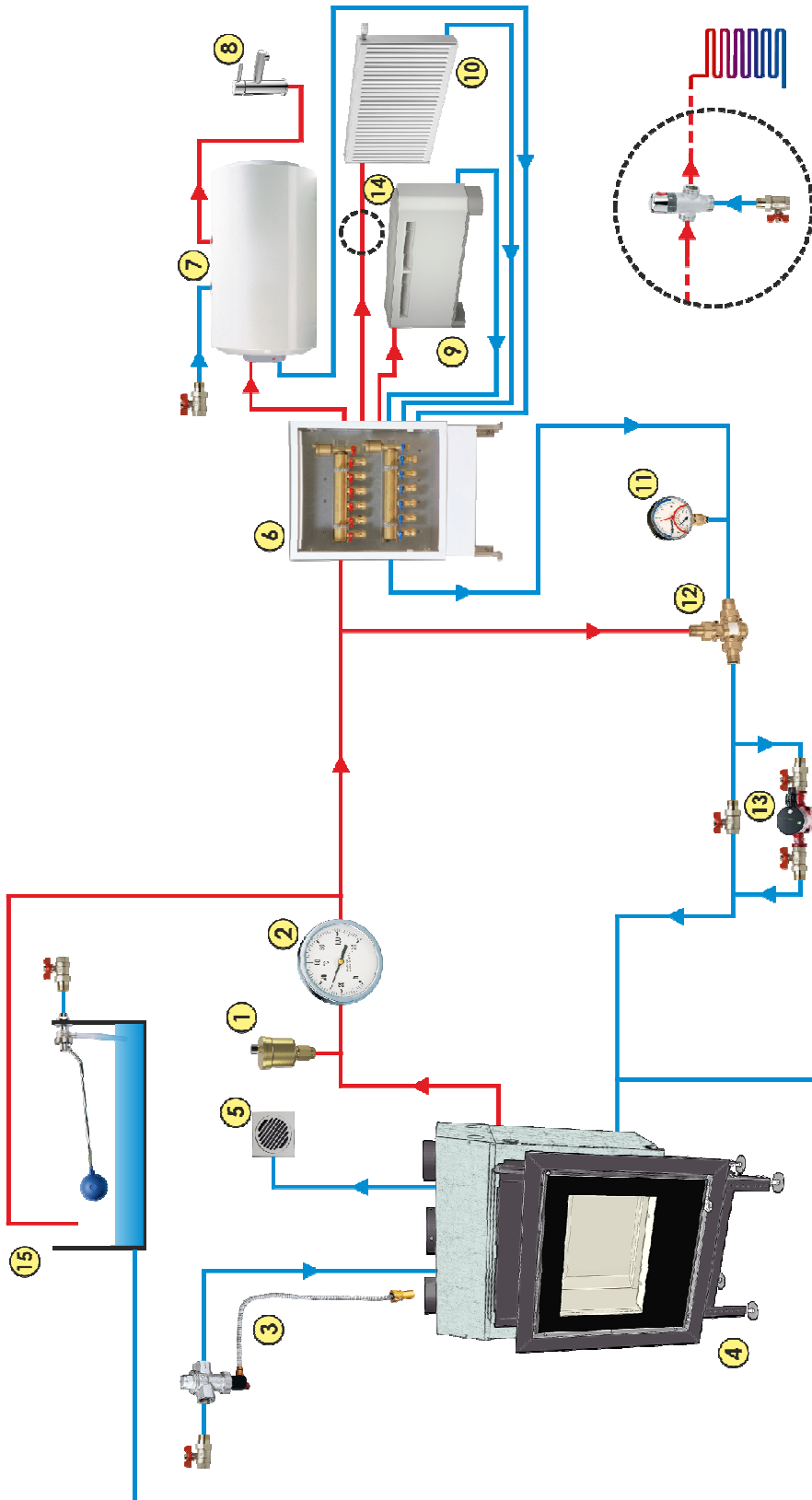
1. Automatic vent valve	5. Drainage	9. Fan coil heater	13. Water pump	17. Water mixing valve* *Used only in case of heater map installation
2. Thermometer	6. Water distribution box	10. Radiator or heater mat	14. Automatic filling valve	
3. Overheating safety valve	7. Buffer tank	11. Temperature/pressure gauge	15. Closed expansion tank	
4. Safety relief valve	8. Hot water	12. Three way valve for by-pass	16. ARTE® NIREAS fireplace	

6.2.2. System with closed expansion tank when the fireplace is below the heaters



1. Automatic vent valve	5. Drainage	9. Fan coil heater	13. Water pump	17. Water mixing valve* *Used only in case of heater map installation
2. Thermometer	6. Water distribution box	10. Radiator or heater mat	14. Automatic filling valve	
3. Overheating safety valve	7. Buffer tank	11. Temperature/pressure gauge	15. Closed expansion tank	
4. Safety relief valve	8. Hot water	12. Three way valve for by-pass	16. ARTE® NIREAS fireplace	

6.2.3. System with open expansion tank



1. Automatic vent valve	5. Drainage	9. Fan coil heater	13. Water pump
2. Thermometer	6. Water distribution box	10. Radiator or heater mat	14. Water mixing valve* *Used only in case of heater map installation
3. Overheating safety valve	7. Buffer tank	11. Temperature/pressure gauge	15. Open expansion tank
4. ARTE@ NIREAS fireplace	8. Hot water	12. Three way valve for by-pass	



ARTE@ NIREAS fireplace is delivered with a stainless steel cooling coil already installed in which you must install a cold water supply (**Table 7.2.1, Line 9**) so in case the water inside the water jacket exceeds 95°C the overheating safety valve (**Pic. 6.1**) will open and rapidly cool the water jacket.

7. OPERATING INSTRUCTIONS

7.1. Before using the ARTE® NIREAS fireplace for the first time

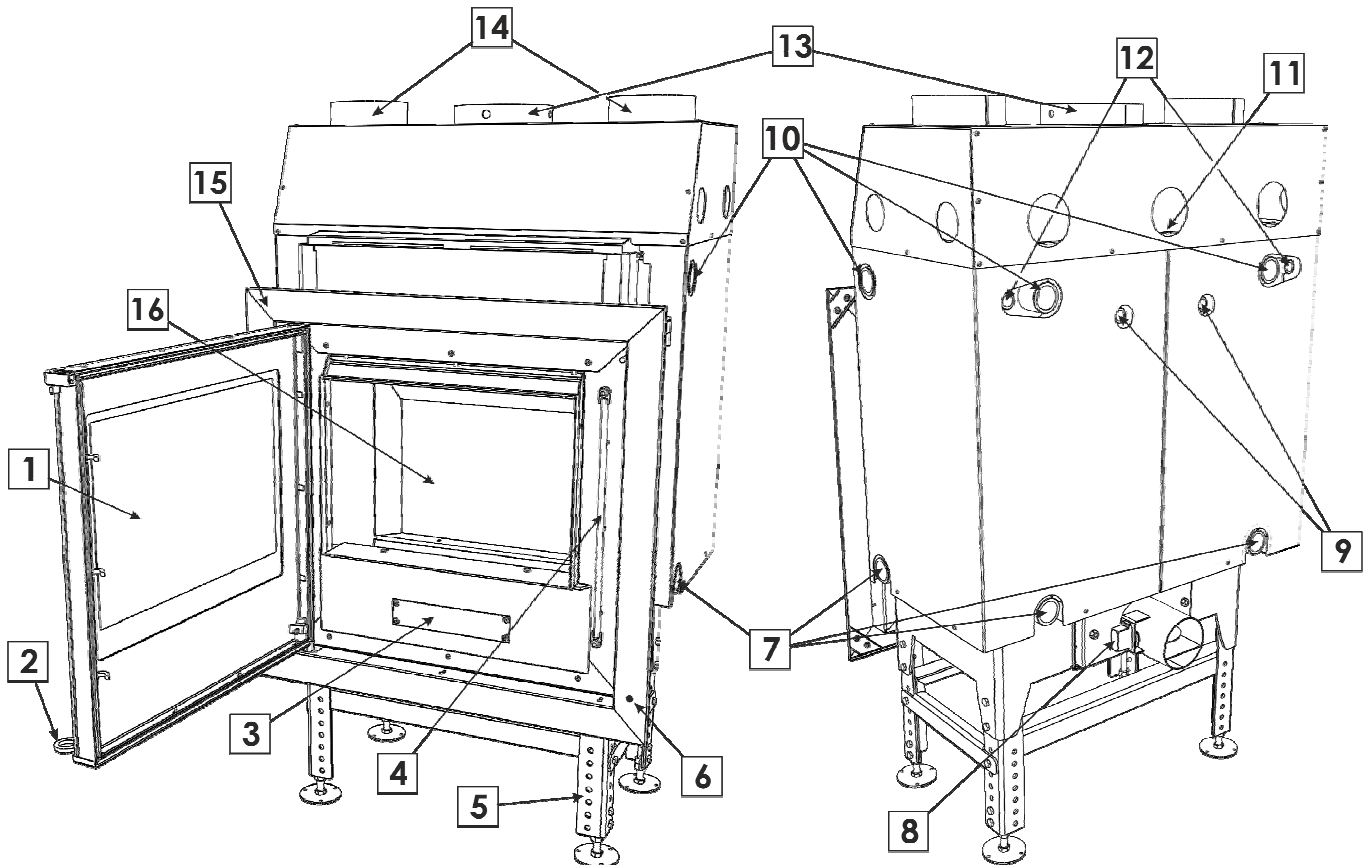
One of our qualified representatives has already provided you with instructions on how to operate the ARTE® NIREAS fireplace that you just acquired.

The operating instructions below describe in detail the steps to follow so you do not encounter any difficulties during the operation of the fireplace.

The qualified dealer in your area will be at your disposal to answer any questions. NIREAS fireplace is equipped with the following control systems:

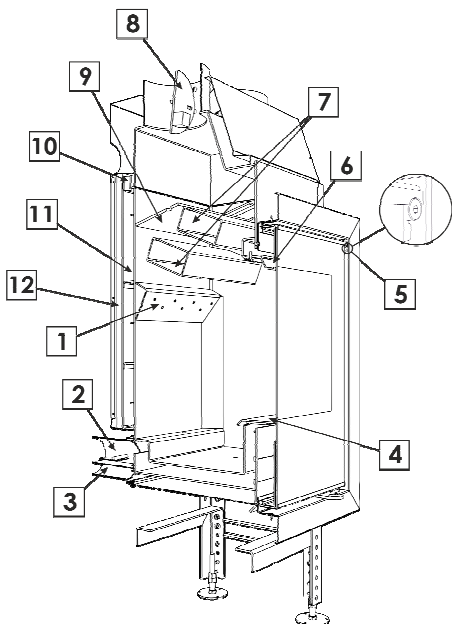
7.2. About ARTE® NIREAS fireplace

The fireplace that you just received is a device designed to offer excellent heating distribution in the area with a very high degree of efficiency and thus elevate the thermal coefficient of your house.



1	Main door with ceramic crystal	9	Overheating system joints
2	Main door opening handle	10	Hot water outlets
3	Cleaning port	11	Temperature sensor copper tube
4	Door lock rod	12	Joints for various safety valves and sensors
5	Fireplace base	13	Flue
6	Combustion air adjustment fader (STANDARD type)	14	Hot air outlets (natural flow)
7	Cold water intakes	15	Metal frame
8	Air regulator drive motor for primary combustion	16	Combustion chamber

Table 7.2.1



1	Secondary combustion air holes
2	Primary combustion air intake
3	Secondary combustion air intake
4	Lower air curtain
5	Automatic flue damper restore adjustor
6	Upper air curtain
7	Water heating tubes
8	Automated & adjustable flue damper
9	Flue gas baffle
10	Temperature sensor copper tube
11	Water jacket
12	Water jacket insulation

Table 7.2.2

7.3. General information

7.3.1. When the fireplace paint dries

ARTE ® products are painted in spray booth with as more environmentally friendly and ecological colors as possible. There is although a possibility that the first few times the fireplace is lighted, the paint emits an odor. Let the fire burn with intense convection until all traces of gas disappear and there is no longer a smell. The gas is not toxic, but the room should be well ventilated.

7.3.2. Incineration preparation

Prepare sufficient amount of chopped firewood, kindling and branches or torches. Before using the wood it is recommended to store them in a warm place for a few days.

7.3.3. Combustion air intake

Although the fireplace uses external air for combustion, make sure that the room is ventilated adequately when the fireplace operates with external fresh air. When you open the door of the combustion chamber for adding firewood there should be no pressure difference between outdoor and indoor air in the room, so it is good to keep the door open for about 1.5cm for 5-6 seconds and then fully open it.



The air intake must be positioned so as not to allow being covered.

The air intake must be communicating with the combustion space and protected by a grille.

The minimum surface of the air intake should not be less than ~110cm²

Avoid using air intakes connected with garages, kitchens,



If you want to import air from an external source, you must apply the corresponding 100mm diameter collar and clamps to mount a flexible conduit.

7.3.4. Power failure

In case of power failure, the automatic air intake regulator does not stop operating as it is also powered by rechargeable batteries that allow it to continue its operation for almost 12 hours. So, when the temperature drops to normal levels then the regulator smoothly feeds back air in the combustion chamber and the operation of the fireplace is continued. However the water pump must also operate. That's why it is suggested using an uninterruptible power supply unit (UPS) which will ensure the smooth operation of the pump and therefore the fireplace.



UNDER NO CIRCUMSTANCE SHOULD YOU OPERATE THE FIREPLACE WITH THE MAIN DOOR OPEN. YOU RUN A SERIOUS RISK OF DESTROYING THE DEVICE!!!

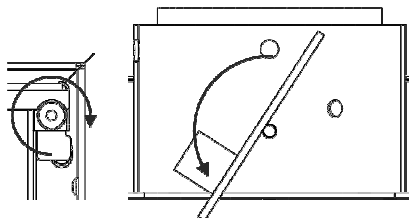
7.3.5. Heating during seasonal change or in adverse weather conditions

When there is high humidity or fog, with temperatures $\geq 15^{\circ}\text{C}$, but also during the transitional period between seasons, it is recommended to light a test fire before normally lighting the fireplace. This will displace the cold, heavy air that is inside the flue and create the right conditions for optimum smoke dissipation

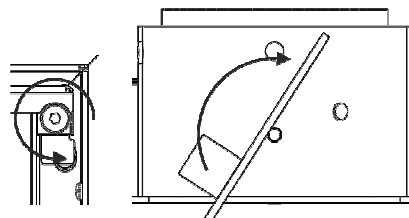
Also the automatic flue damper restore adjustor (**Table 7.2.2, Line 5**) enables you to adjust the damper to remain open in any position desired, even with the main door closed, in order to ensure adequate convection, depending on the season.

- During winter → Damper closed
- During spring/autumn → Damper open

Do adjust the damper restore use the provided N°6 hexagonal key. By turning the screw clockwise you open the damper while respectively by turning it counter clockwise you close it. (**Pic. 7.3.5.1 & 7.3.5.2**)



Pic. 7.3.5.1



Pic. 7.3.5.2

7.4. Adjusting the combustion air

ARTE® NIREAS fireplace gives you the opportunity to adjust the primary combustion air intake by 2 different ways. You can either use the fader (**Table 7.2.1, Line 6**) which is located on the frame (STANDARD system) or you can use the automatic control panel (AUTOMATIC system). In both cases the adjustment is made by controlling an electric motor where the changes made either on the fader or the control panel are transferred to the combustion air intake damper. To prevent overheating, they are equipped with a sensor positioned in the copper tube (**Table 7.2.2, Line 10**) of the water jacket where in the case of overheating the device closes the supply of combustion air.

7.4.1. Adjusting the combustion air with fader (STANDARD)

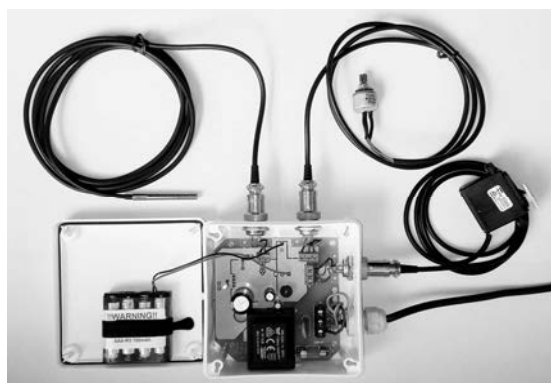
By adjusting the fader (**Table 7.2.1, Line 6**) the electronic board can adjust the fresh air intake damper in any position desired.

If the water temperature exceeds 85°C , the damper is closed in order to reduce the combustion air and is returned to the original setting when the water temperature drops to 75°C . In case the water temperature exceeds 90°C and for as long as it remains above this temperature the device emits an audible warning signal. The safety device operates on 220V power but it is also equipped with rechargeable batteries that in case of a power failure they continue the operation of the damper for 8-9 hours.

Changing the batteries

If the battery performance drops below a safe operating limit, the safety device will emit a double beep every 30 seconds, at which time they should be replaced by using the following procedure..

1. Disconnect the device from the power.
2. Carefully remove the box containing the electronic board and using a small screwdriver rotate half a turn the plastic screws and very carefully remove the lid (**Pic. 7.4.1.1**)
3. Open the Velcro fastener that holds the batteries in the cover and replace them with rechargeable batteries that have same features (AAA-R3 700mAh) (**Pic. 7.4.1.2**).
4. Reseal and place the box back in its place.



Pic. 7.4.1.1



Pic. 7.4.1.2

7.4.2. Automatic regulator of the heating circuit

for water heating fireplace with air intake control (RT-08G)



The regulator controls the intensity of the combustion in the fireplace by adjusting the combustion air damper, so as to maintain the water temperature in the fireplace to a desired, predetermined level.

This results in enabling the regulator, in a second phase, when the water reaches a predetermined temperature to activate the pump of the heating circuit (HC) as well as the domestic hot water circulating pump (DHW).

It regulates not only the start and end of the circulators but it also has the option, when the user wishes it, to give a periodic priority to the DHW pump in correlation to the HC pump. Recurrent priority means that it alternately activates the HC pump for 45 seconds and then suspends it for the next 4 minutes thus resulting in heating the DHW faster.

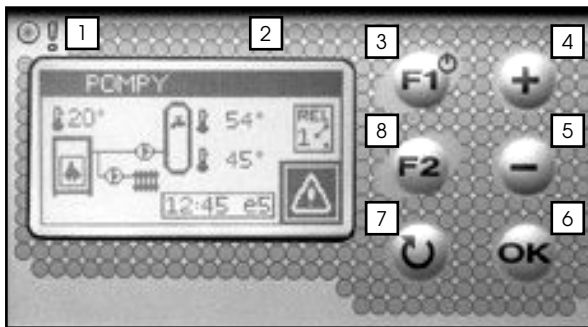
It also has the option to shut down another heat source (e.g. gas boiler) when operating the fireplace or to command an additional pump or motorized valve (solenoid) with a maximum power of 500W.

- ! The regulator has an **ANTI-FREEZE** system which protects the heating circuit from potential freezing when the measured temperature is below 4°C, by automatically activating the HC pump.
- ! The regulator has an **ANTI-CLOG** system which operates the heating circuit pumps for one minute per week during the period that the device is not used.

The regulator is equipped with its own emergency power source so a power supply interruption up to 8 seconds would not impair its smooth operation. In case of an outage longer than that, an uninterruptible power supply device can be used (UPS). For safety reasons, if the regulator is not receiving power, the damper closes completely and is automatically placed in the rest position (fully closed).

7.4.2.1. Using the regulator

All of the regulator functions can be controlled via the control panel (Pic. 15.1.1). When the regulator is not operating, the light (1) illuminates amber to notify that it is in standby mode and the screen displays the water temperature in the water jacket, the time and the time zone (if it is enabled). To activate the control panel press the F1 (F1) (3) key once. To disable it hold the same key pressed for about 1 second.



1	Operation light	Red → failure
		Amber → Stand by
		Green → Normal operation
		Flashing green → Manual operation
2	Graphic display screen	
3	F1 Key ON/OFF	
4	PLUS Key	
5	MINUS Key	
6	CONFIRM parameters Key	
7	TOGGLE parameters Key	
8	F2 Key (ESC- cancel + return to the main display)	

The device status is indicated in the graphic display screen (2) in the form of text and images. It also includes information on the operation of individual system components, temperature sensors and it allows changing parameters.

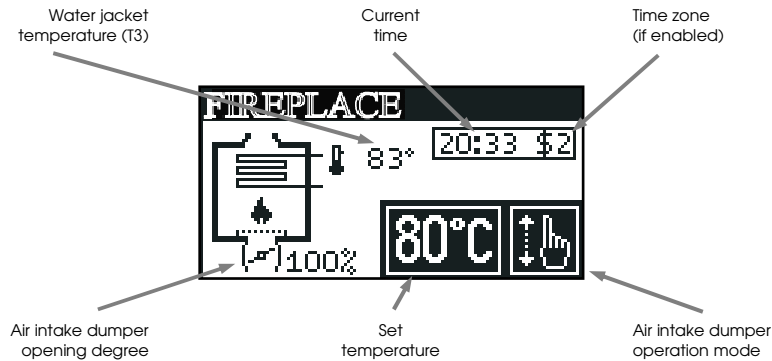
Switching between the different displays is done by the TOGGLE (7) key. When you are in a display that allows any parameter change you must press the CONFIRM (6) key. The parameter field will start flashing and you can now change the value by pressing the (+) (4) or (-) (5) keys. If any display has more than one parameter fields, move between them with the TOGGLE (7) key and by pressing the CONFIRM (6) key register that change.

- ! If you do not register the altered parameter within 10 seconds, it will be ignored by the regulator. The field will stop flashing and the parameter will revert to its previous value.

7.4.2.2. Screens

7.4.2.2.1. OPERATION screen

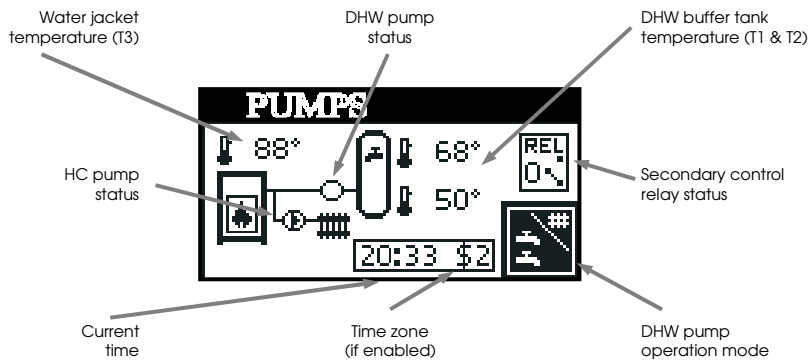
It displays the current temperature of the water in the water jacket of the fireplace and the degree of the air damper in percentage. This screen is fixed and to change it you must press the TOGGLE (7) key.



In this screen you can change the temperature in the water jacket of the fireplace. By pressing the CONFIRM (6) key the set temperature parameter field will start flashing. Press (+) (4) or (-) (5) to change the value and then press the CONFIRM (6) key in order to register the change.

Also in this screen, when the MANUAL mode is selected and the operation light (1) flashes green, you can manually adjust the position of the air intake damper position in 10% increments. By pressing the (+) (4) key it opens and by pressing the (-) (5) key it closes.

7.4.2.2.2. SYSTEM OPERATION screen



This screen is fixed and to change it you must press the TOGGLE (7) key.

7.4.2.2.3. MODE screen



It allows changing the way the fireplace operates and manages the DHW and HC pumps.

The table below presents the different modes of operation of the fireplace.

ICON	MODE	DESCRIPTION
	ON	The air intake damper is automatically adjusted in order to stabilize the temperature in the water jacket of the fireplace. If this mode is selected the operation light (1) illuminates green.
	MANUAL	Block automatic control and thus the air intake damper setting and consequently the temperature in the water jacket of the fireplace is made manually. If this mode is selected the operation light (1) flashes green.
	OFF	The air intake damper remains in the neutral position, i.e. completely closed. If this mode is selected the operation light (1) is off.
	AUTO	Activate the automatic cycle mode Ignition - Operation - Shutdown. If this mode is selected the operation light (1) illuminates green during the operation of the fireplace and it turns off when it detects shutdown.
	AUTO (start/finish)	This icon appears before the beginning and after the end of AUTO mode.

Press the F1 (3) key to activate AUTO mode. The air intake damper opens and light (1) turns on. Within the next 2 hours, the fireplace should be lit and the water temperature should have reached the specified desired value. From that moment on, a drop in the water temperature above 10 °C which is maintained for 30 minutes is treated as a shutdown of the fireplace.

If this occurs, the regulator terminates the cycle by setting the air intake damper to the neutral position (closed). If you press the F1 (3) key again, a new automatic cycle will begin.

The table below presents the different modes of management of the DHW and HC pumps.

ICON	MODE	PUMP	STATUS
	OFF	DHW	Closed
		HC	Open
	SUMMER	DHW	Open
		HC	Closed
	ON	DHW	Open
		HC	Open
	PRIORITY*	DHW	Open alternately DHW: 4' HC: 45"
		HC	

*When DHW ≥ 60°C, return to ON mode

7.4.2.3. TIME ZONES mode

The regulator allows you to operate your fireplace with automatic switching between modes based on certain time zones, using the CLOCK and SPECIAL modes.

CLOCK	SPECIAL

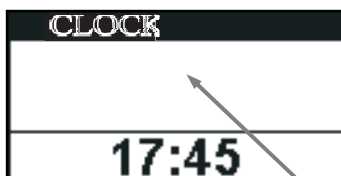
! The regulator time zones are not enabled. Activation and potential adjustment to the parameters must be made in agreement with the installer and if you understand the way they operate. Any careless changes can cause unstable and inefficient system operation..

7.4.2.4. SECONDARY CONTROL RELAY mode

	Relay deactivated(NO)
	Relay activated (NC)

The regulator is equipped with a secondary control relay system whose contacts can be used, for example, to stop the operation of another heat source (e.g. gas boiler) or to command an additional pump or solenoid when the water temperature reaches a predetermined value.

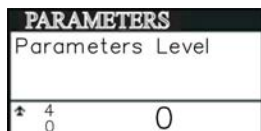
7.4.2.5. TIME ADJUSTMENT screen



Time zone (if enabled)

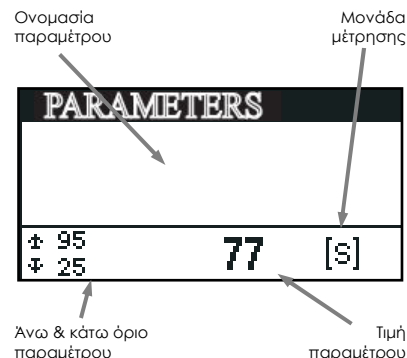
The screen displays the current time and the current time zone (when their feature is enabled). To adjust the hour press the CONFIRM (6) key, so the minutes field start flashing. Press the + (4) ή - (5) keys to change the value and the press the TOGGLE (7) key to switch to the time field. After you finish adjusting the hours field press the CONFIRM (6) button to register the change (the time field will stop blinking).

7.4.2.6. PARAMETERS SETTING screen



In the first view of the parameters display there is the definition of "Parameters Level" with the default value "0" which means that the parameters are not available.

After changing the level to "1", "2", "3" or "4", the following views on the display show the parameter values in the image on the right. The last screen displays "*****" which ends the definition of the operation parameters, followed by a return to the first screen.

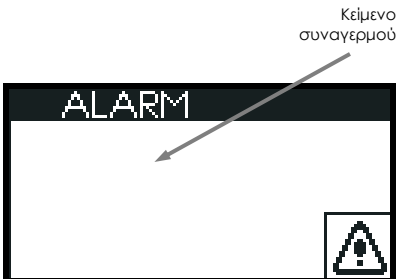


! The parameters adjust the regulator according to the properties of the fireplace and of the central heating installation. The new settings must be in agreement with the installer and the manufacturer of the fireplace. Any careless changes can cause unstable and inefficient system operation.

! If you make a change for which you are not sure and you have not registered, press the F2 (F2) (3) key to return to the main display.

7.4.2.7. ALARM screen

This screen is displayed when there is one of the following situations:



- Failure of the sensor on the top of the buffer tank (T1). The screen displays **WAW temp. sensor (T1) damaged**. If the sensor is not installed, the alarm is not activated.
- Failure of the sensor on the bottom of the buffer tank (T2). The screen displays **WAW temp. sensor (T2) damaged**. If the sensor is not installed, the alarm is not activated.
- Failure of the sensor on the water jacket of the fireplace (T3). The screen displays **Fplace temp. sensor (T3) damaged**.
- Exceed on the limit of the temperature in the water jacket of the fireplace. The screen displays **Too high temp. of the fireplace**.

The alarm is accompanied by an intermittent acoustic signal, which can be canceled by pressing the CONFIRM (CONF) (6) key. Also when there is a temperature exceeding alarm, the HC pump automatically starts in order to cool the fireplace down.

8. LIGHTING THE FIREPLACE

8.1. Traditional method of lighting

Every time you light the fireplace, it initially requires large volumes of air. When the fireplace is cold, leave the door slightly open in order for air to circulate around the door for the first few minutes and turn the fader (STANDARD system) clockwise (**Table 7.2.1, Line 6**) at the maximum open setting.



Don't leave the fireplace unattended as long as the door remains open

Due to the self-closing door you should be very careful for any accidents during the fueling of the fireplace.

To form an adequate layer of ash at the base of the fireplace, use 1-2 kg of dry kindling the first time you light it. If it is possible, constantly maintain a layer of ash with thickness of 2-3 cm at the base of the combustion chamber for added insulation.

1. Place 2-4 kindling tablets or 7-10 wrapped newspaper sheets beneath 1-2 kg dry kindling.
2. Turn the fader (STANDARD system) clockwise (**Table 7.2.1, Line 6**) at the maximum open setting.
3. After the the ignition of the tablets/wrapped sheets, leave the door slightly open, in order to ensure an adequate convection of the flue.
4. Once you ensure the flue is warm enough (after 5-10 minutes), close the door. If all required conditions are met, after 15-20 minutes a thick layer of cinder will be formed in the combustion chamber and the temperature will rise, which is essential for the continuation of combustion.
5. Once the requirement described in point 4 is met, place 2-3 logs with overall weight of 7.2kg, onthe cinder, with a distance of about 1cm from one another
6. Turn the fader (STANDARD system) (**Table 7.2.1, Line 6**) at the desired setting and close the door. The wood will begin to burn within 2-3 minutes. If not, open the door slightly in order for enough air for combustion to enter. Close the door again once the wood ignites.
7. Ensure there is adequate air supply (oxygen) to maintain the flame clear and powerful when you reduce the amount of combustion air and after.
8. As soon as the fire leaves a thick layer of cinder, you can add more firewood by repeating steps 5-7.



To avoid covering the glass with soot, it is important not to let logs lean against it.

8.2. Lighting without CO emissions (FROM TOP TO BOTTOM)

1. Turn the fader (STANDARD system) clockwise (**Table 7.2.1, Line 6**) at the maximum open setting. If needed, leave the door slightly in order to ensure an adequate convection of the flue.
2. Place logs with overall weight of 7.2 kg and 30-50 cm vertically, on the back of the fireplace.
3. Place 2-3 kindling tablets or 5-8 wrapped newspaper sheets between the logs.
4. Add a few twigs (1-2 kg) on the top in zigzag arrangement.
5. Finally, place a medium log on top of the stack and light the tablets/wrapped sheets.



The openings of the secondary air supply should not be covered by firewood.

6. Once you ensure the flue is warm enough (after 5-10 minutes), close the door.
7. Turn the fader (STANDARD system) (**Table 7.2.1, Line 6**) at the desired setting, so as to ensure there is adequate air supply (oxygen) to maintain the flame clear and powerful.
8. As soon as the fire leaves a thick layer of cinder, you can add more firewood.

Feed the fireplace often but with small amounts of firewood, at most 7.2kg, each time. If the fireplace is overly full, the generated heat may cause excessive strain on the flue or heat the water very much. The supply of firewood should be done in moderation.



The fire should be vigorous and the smoke exiting from the flue must be almost unnoticeable. The fire should not be smoldering because it is causing more pollution.

If the door remains slightly open, fire gases and flames may escape from the opening of the fireplace causing a risk of fire or asphyxiation. It is recommended installing a smoke detector in the room where the fireplace is located.

Under no circumstance should you operate the fireplace with the main door open. You run a serious risk of destroying the device!!!

DO NOT OVERHEAT THE FIREPLACE! There is risk of fire or permanent damage. If any part of the fireplace starts glowing, then the device is overheating.

Wood combustion rules

- ① If you want less heat, put a smaller quantity of wood in the fireplace and reduce the amount of air. It is however important to maintain an adequate layer of cinder.
- ① Less heat = Less wood = Less air.
- ① More heat = More wood = More air.
- ① When the fireplace operates at excessively low power or if the wood is not sufficiently dry, soot might deposit on the glass.

9. TERTIARY COMBUSTION

The three combustion points

The combustion of wood requires a process of primary, secondary, and tertiary combustion to be efficient.

1. Primary combustion

Primary combustion is the initial wood burning at relatively low temperatures. During the primary combustion, large amounts of soot, creosote and gas are produced due to the existence of water in the wood. Creosote, in primary combustion, contains 60% of the potential energy of wood, but it is deposited in the form of soot inside the fireplace and the flue without imparting any heating.

2. Secondary combustion

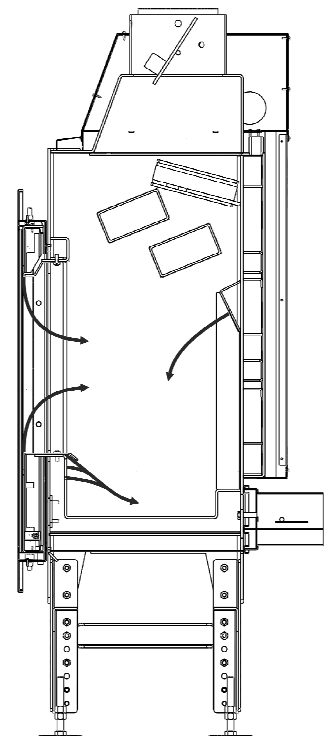
The combustion chamber is insulated so as to increase the temperature of the core and by providing just the right amount of oxygen necessary to 600 °C, the creosote ignites spontaneously. This creates a chain reaction that increases the temperature inside the fireplace from 600 °C to about 870 °C without having to add any more fuel. This is the secondary combustion.

Thereby, the more proper secondary combustion is achieved the higher temperatures are produced and the less residue is left (gas and particles). The vast majority of secondary combustion is only done in the upper part of the chamber near the outlet of the flue. Thus a large part of the heat that is achieved, is discharged directly through the draft of the flue to the exterior and not in the heating area.

ARTE® NIREAS' chamber manages to provide the maximum secondary combustion performance. An automatic air intake regulating system that inserts air from below in cooperation with the intake of secondary air from the back of the combustion chamber results in the fire receiving the right amount of preheated oxygen throughout the combustion chamber which together with the upper and lower air curtain of the ceramic glass result in every place of the combustion chamber to receive the proper amount of air (Pic. 9.1.1). This way the whole area of the chamber is converted in a secondary combustion chamber, not only the upper part, and thus its performance dramatically increases and inversely gas residue reduces.

3. Tertiary combustion

The tertiary combustion occurs when the coal that remains on the bottom burns in a proper and coordinated way. Coal contains a large amount thermal energy that when used provides a large amount of heat. Proper air flow directly on the coals within such a hot room, results in almost complete consumption and minimizing the amount of ash that collects on the bottom



Pic. 9.1.1

10. CLEANING & MAINTAINING THE FIREPLACE



When performing maintenance on the fireplace, always protect yourself, using safety goggles and gloves

10.1. External maintenance

The fireplace surface is painted with heat-resistant paint. It is best kept clean by vacuuming with a soft brush attachment or by wiping with a lint-free cloth. Over a period of time, the painted surface may become slightly grey. A canister of touch-up ARTE® spray paint should be available from your fireplace supplier. This can be applied - in accordance with the instructions - in just a few minutes. When first firing, after touching up, the fireplace will give off a slight smell as the paint cures. Make sure to ventilate the room well during this phase.

10.2. Internal maintenance



Due to the self-closing door you should be very careful for any accidents during the maintenance of the fireplace

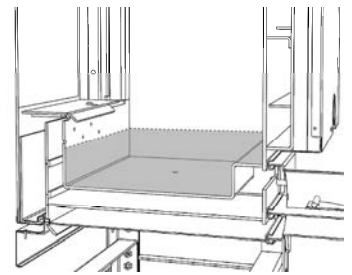
10.2.1. Ash disposal

Empty the excess ash as often as necessary in order for the level to remain below the appropriate **(Pic. 10.2.1.1)**. SOL fireplace is designed to produce the least amount of ash, almost 1Kg for every 100Kgs of firewood. It is recommended to constantly maintain a layer of ash with thickness of 1-2 cm at the base of the combustion chamber for added insulation.

Dispose the ash by following these steps:

- ① Open the main door and use a small shovel or a scoop to remove the excess ash.
- ① Dispose the ash in a metallic container with a tight lid

The closed container with the ash should be placed on a nonflammable floor or on the ground, away from flammable materials until the final disposal of the ash. The ash must be stored in a closed container until cooled down, or buried on the ground or dispersed somewhere.



Pic. 10.2.1.1



***Never empty a fireplace while in use.
Never use your household or shop vacuum cleaner to remove ash from the fireplace.
Always remove and dispose of the ash properly.***

10.2.2. Glass

ARTE® NIREAS fireplace has a single ceramic glass in the window of the combustion chamber in order to receive as much heat as possible by radiation. If the fireplace is generally operated at the correct temperature, there should be little or no soot on the glass.

For normal cleaning, moisten a paper towel with warm water and add some ash from the combustion chamber. Rub it over the glass and then clean the glass with clean water and dry it well. For heavier deposits that cannot be cleaned, use glass cleaner, applied when the glass is cold, in accordance with the instructions.

Never use abrasive cleaners on the glass surface.

Reasons for the presence of dirt on the glass

- ① Firewood is too wet
- ① Logs are too large or not split
- ① Combustion temperatures are too low



***To reduce the risk of breaking the glass, avoid striking the glass or slamming the door.
Replace broken glass IMMEDIATELY.
Do not operate the fireplace if the glass in the door is damaged.***

If there is a need to replace the glass, it should be replaced with the high temperature ceramic glass supplied by ARTE®. For more information, please contact your local ARTE® dealer.

10.2.3. Gasket

The gasket around the perimeter of the door may harden over a period of time. It should be replaced if it becomes difficult to close the door or if air starts to leak in around the perimeter of the doors, causing the fire to become a little less controllable. An ARTE® rope gasket kit is available on your local ARTE® dealer.

10.2.4. Internal parts that need maintenance

The components that are in the flame route - consisting of the vermiculites, the ceramic glass, flue collar and stainless steel baffle - are subject to extreme stress because of the heat produced by the fire. Occasionally, some of these parts may have to be replaced as part of routine maintenance.



Components in the flame route, the gasket and the paint finish are not covered by the warranty.

All of these service parts can be bought from your ARTE® dealer, and we recommend that damaged parts are replaced as soon as possible to avoid consequential damage.

Should the baffle be distorted by overheating, the fireplace will still function, although its efficiency may be compromised. Please replace it as soon as possible.

Internal wear accelerating factors

- ① Regular overheating
- ① Accumulated soot and ashes

Cleaning the fireplace and the flue

When wood is burned slowly, it produces tar and other organic vapors, which combine with emitted moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire.

Initially, do a monthly check for the presence of soot above the deflector plate and around the outlet flue. If the fireplace suddenly start operating slowly check for intense presence of soot around the flue collar or in the flue / chimney.



The flue and its connector should be inspected at least once every two months during the operating season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire

Clean the flue/chimney all the way from the fireplace to the flue end point above the house. A good practice is to clean the flue after each operating season and to inspect it prior to the start to ensure that bird's nests or other blockages have not occurred during the off season.

10.2.5. Chimney sweeping

Inspect the fireplace regularly during the operating season as part of a regular maintenance schedule.

To inspect the chimney, let the fireplace cool completely. Then inspect the chimney through the flue collar by using a mirror. If you cannot inspect the flue system this way, the fireplace must be disconnected to provide better viewing access

Clean the chimney using a brush with the same size and shape as the flue. Run the brush up and down the flue, causing any deposits to fall to the bottom of the fireplace where they can be removed the same way as the ash.

If you cannot inspect or clean the chimney by yourself, contact your local ARTE® dealer or a professional chimney sweep.

If you experience a chimney fire, act promptly and:

- ① Close the air regulation
- ① Evacuate the house
- ① Call the Fire Department

10.2.6. Annual maintenance

Before the operating season starts, perform a thorough cleaning, inspection and repair:

- ① Thoroughly clean the chimney and flue connector
- ① Inspect the chimney for damage and deterioration. In case of prefabricated chimney, replace any weak sections. In case of a masonry chimney, have a mason make any needed repairs
- ① Check the ceramic glass for any cracks and replace if needed
- ① Check the door and handle for tightness. Adjust if needed.

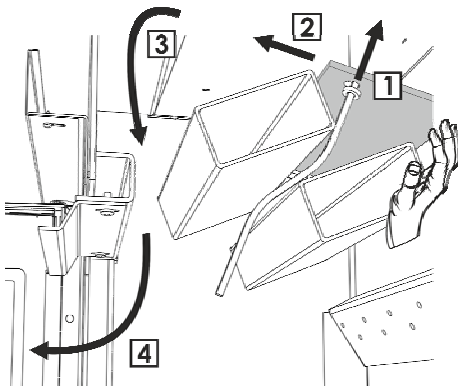
10.2.7. How to clean the inside parts of ARTE® NIREAS fireplace

During the annual visit of your local chimney sweep and during the cleaning of internal parts of the fireplace, it is recommended to remove all internal parts of the combustion chamber to be also cleaned. (Κεφάλαιο 10.4)



Maintenance on the fireplace must be done ONLY when the device is cold.

10.3. Internal parts removal



Removal of steel baffle

To remove the metal baffle place the supplied handle into the hole of the baffle and push to lift it (1). Then move it towards your side and with the other hand catch it from the outside of the water heating beams. Continue pulling towards you and simultaneously push with your other hand from behind (2) and when you meet the inner side of the fireplace, turn it down (3) to release it and remove it from the main door (4).

10.4. Inactive fireplace for prolonged periods

IMPORTANT NOTICE: If the fireplace is not used for some time, clean it thoroughly and let the air control layout slightly open in order to let the air circulate. Ensure that the rainwater cannot infiltrate from the flue. Place a chimney cap that does not completely block the flue.

These actions should ensure there is a slight movement of air through the fireplace, and that the body and combustion chamber remain dry, right into the corners.

Ash that remains in the fireplace, when not in use, can absorb moisture like blotting paper. If moisture settles inside the fireplace, it forms rust which expands the more it settles. This can cause excessive pressure on the fireplace joints, thus causing damage.

NOTE: It is recommended to thoroughly clean the fireplace at the end of the operating season. Adding desiccant in the combustion chamber, such as cat litter, helps absorb moisture during the summer. Make sure to remove it before the beginning of the operating season.



We hope you enjoy many years of carefree warmth with ARTE® NIREAS fireplace. Some initial experimentation with loading and operating techniques will help you decide your normal routine. If you have any problems after this short learning period, please contact your local ARTE® dealer. In case, for any reason, they can't help, please contact us in writing at the address on the front of this manual.

11. TIPS & TRICKS FOR RESOLVING ISSUES

The wood does not ignite by lighting the fireplace. The fire just smokes. The fire burns out

- ① Open the air supply
- ① You are not using proper kindle
- ① The wood is too wet
- ① The logs are too thick
- ① The ash is over the appropriate limit

Intense smoking in the combustion chamber, intense soot deposition on the glass

- ① Open the air supply
- ① Small quantity of wood
- ① The wood is too wet
- ① The logs are too thick

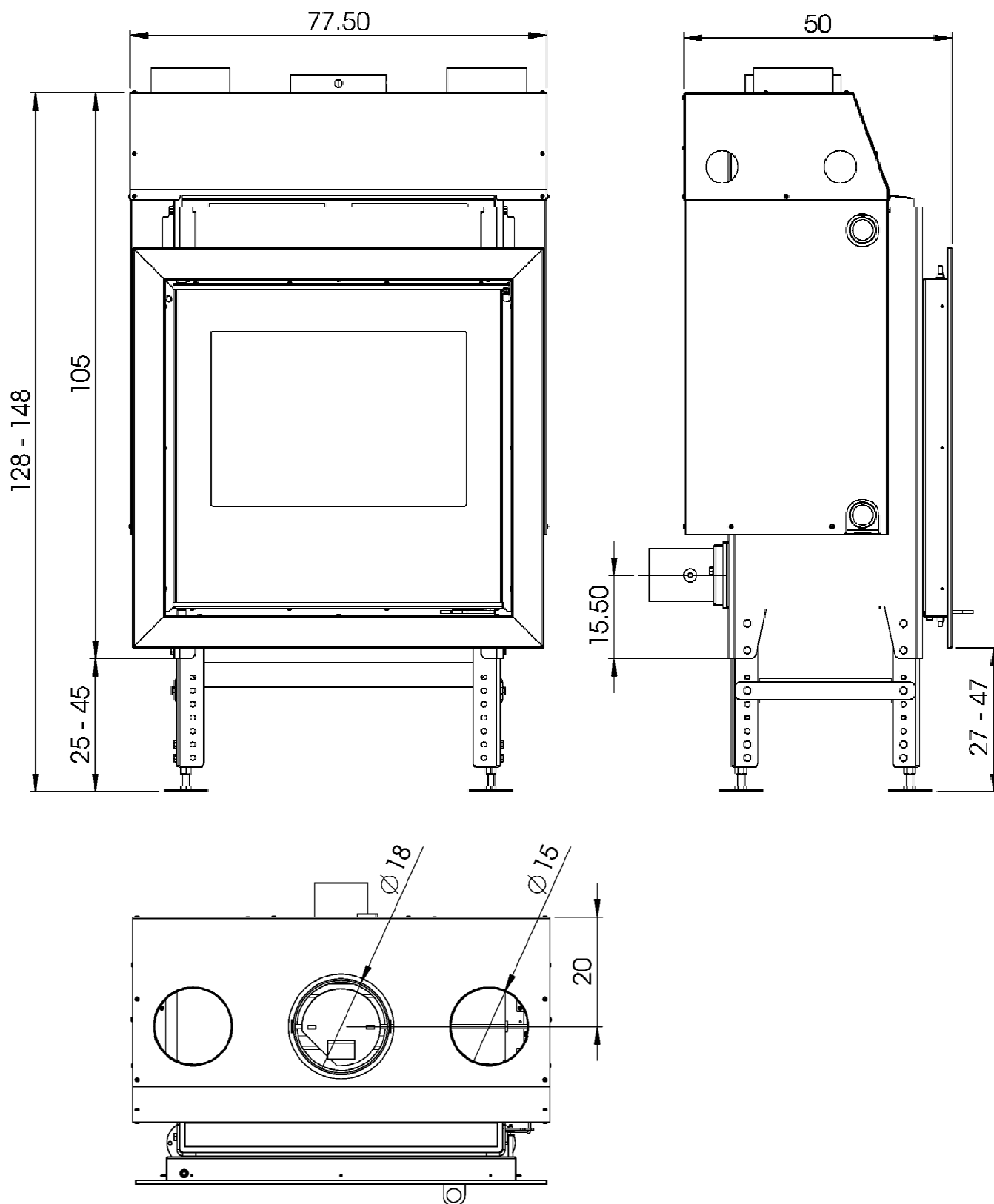
There is smoke coming out of the fireplace

- ① Check if there is adequate draft into the flue, light a test fire
- ① Make sure there is sufficient air supply



The qualified dealer in your area is available to answer any of your further questions

12. DIMENSIONS



13. TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS	UNITS	
* Total heat output	Kcal/h	20889
	kW	24.29
* Total heat output in water	Kcal/h	15738
	kW	18.3
Water tank capacity	lt	36
Maximum operating pressure	bar	2.5
Recommended hourly consumption of firewood	Kg/h	7
Heat output	%	78.5
Exhausts temperature	°C	231
CO emissions (by providing O ₂ at 13%)	%	0.1
Yield range (minimum - maximum)	kW	10.5 - 30
Fuel	-	Wood, Briquette
Device dimensions (W x D x H)	cm	77.5/50/128
Combustion chamber dimensions (W x D x H)	cm	60/32/42
Flue draft	Pa	12
Heated area	m ²	55 - 200
Weight	kg	208
External air inlet. The section must be increased by 20% for each additional meter after 1 m	cm	Ø10
Smoke outlet diameter	cm	Ø18
**Minimum flue height	m	4
Minimum heating area	m ²	55
* The fireplace operates with intermittent combustion technology. In this case intermittent combustion means the normal use of the fireplace, e.g. new firewood is added as soon as the previous are burned, forming a sufficient amount of cinder.		
** The internal section of the flue must be increased by 10% per 500m altitude above sea level.		

Table 13.1

14. WARRANTY

We grant a two year warranty for your new ARTE® SOL fireplace. The warranty period begins on the day the fireplace is installed and tested by a qualified dealer. We also grant a one year warranty for all the electrical parts (if any are installed).

Warranty claims become valid when the purchase price for the fireplace has been paid in accordance with the agreement and the warranty certificate has been completed and returned within thirty days to ARTE® G. Karnoutsos & CO.

If any of these conditions is not fulfilled the minimum warranty of six months applies.

14.1. Warranty terms

- ① Proper installation by a qualified dealer
- ① The fireplace is operated in accordance with these operating instructions
- ① No continuous firing
- ① No overheating
- ① Regular maintenance / cleaning (at least once a year)
- ① There must be no modifications to the fireplace structure: these can cause malfunctions and permanent damage

14.2. Excluded from the warranty

- ① Wearing parts like gaskets, vermiculite panels and glass
- ① Smoke and soot damage
- ① Natural discoloration or deviating colors on the outer cladding
- ① Cracks in the combustion chamber that have no effect on the safe functioning of the ARTE® SOL fireplace
- ① Damage incurred through failure to follow these operating instructions
- ① Damage covered by an insurance policy or other agreement

14.3. Responsibility

Upon delivery of this manual ARTE® declines all liabilities, both civil and penal, for any accidents that may derive from the total or partial failure to comply with the specifications contained in it.

ARTE® also declines all responsibility resulting from an improper use of the appliance, incorrect use by the user, from unauthorized alterations and/or repairs, or the use of non-original or non-specific spare parts for this particular fireplace.

14.4. Emergency maintenance

Emergency maintenance on the fireplace model to which this manual refers, must be carried out by qualified personnel.

14.5. Responsibility for installation

It is not the responsibility of ARTE® to carry out the work needed to install this fireplace. Such works are entirely up to the installer who is requested to check the flue and air intake and to check if the installation solutions proposed are feasible. All applicable standards and local, national and European legislation in force in the country where the fireplace is installed must be respected.

14.6. Usage

Use of the appliance is subject to compliance with all the safety standards established by the relevant laws in force in the place of installation, in addition to the instructions contained in this manual.

14.7. Legal guarantee

The user may only make use of the legal guarantee, as under the EEC directive 1999/44/CE, if he has scrupulously complied with the regulations indicated in this manual, and more specifically:

- ① To work always within the fireplace limits of use
- ① Maintenance must be constant and careful
- ① Only allow people who are capable and who have been suitably trained to use the fireplace

Failure to comply with the instructions provided in this manual will invalidate the guarantee immediately



In order for the warranty to be applicable, please fill out the form on this manual's last page

NOTES

S/N:



Εργοστάσιο - Έδρα
Προέκταση Μακρυγιάννη
Εύοσμος | Θεσσαλονίκη

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