

The quality of our products goes beyond aesthetics. We have managed to increase the thermal efficiency and decrease the gas consumption by 20%. This has many advantages from different aspects:

- 1-The cost of product will be restored in a short time by low gas consumption and subsequently less bill.
- 2-Low Consumption, Green Environment.
- 3-Gas, as a natural valuable source of energy, will be saved more.

**To economize the gas consumption, please be attentive to below items:**

- Choose the right size of heater for your room.
- Switch off the heating appliances in unoccupied rooms.
- Get the most of sun light during the day by drawing curtains aside & lowering the flame of heater.
- Switch off heating appliances when leaving the house.
- Get the heater serviced regularly as recommended by manufacturer.

Dear Customer, following the instructions in this guide book is essential and a must. Please read it carefully, and for your own and your family's sake observe its guide lines.



*The Right Choice ,  
For A Better Living*

GAS SPACE HEATERS'  
**USER GUIDE**



*It's the Noble Name  
That Will Remain*



**NICALA**

**IMS**  
GERMANY

ISO 9001  
ISO 14001  
OHSAS 18001



*We began with the Name of God  
& Continue with His Name*

**Dear Consumer:**

Nicala gas heaters have not only been approved by the Institute of Standards and Industrial Research of Iran but have also been awarded several valid international Quality Certificates for their industrial design, excellent quality of components, compliance with technical requirements, safety systems, and pleasant heating, and conformity with national and international standards. Now by receiving four important and credible International certificates ( ISO 9001 Quality Management System, ISO 14001 Environmental Management System OHSAS 18001 Occupational Health & Safety System) & CE Standard for exportation to European countries. and also the TSE Standard Emblem that has a special credibility in the joint markets of Turkey and the northern neighboring countries, We have put more emphasis on manufacturing products continually with mentioned standards and less negative impacts on the environment.

By increasing the heat efficiency of products according to the grade A of European Standards (EN-613), now Nicala products presents the highest output for the consumers by more efficiency and less fuel consumption.

In spite of the mentioned points, customer satisfaction is the main goal of this Industrial Complex and will be obtained when you exactly consider the **Security Notes** and the instructions of this manual brochure and observe them carefully.

From now on you are a dear member of the great family of Nicala Company. Therefore we are patiently waiting to receive your valuable views and suggestions by letter or by yellow sheets that are enclosed to the guarantee through Post Box No. 31585-1774 in Karaj. (0098 26) 34111 & 34702271-5.

*Many thanks and congratulations for your best choice,*



[www.nicala.com/info@nicala.com](http://www.nicala.com/info@nicala.com)



**First of all pay attention to the Security Notes.**

**Remember them and follow them carefully:**

Acquaintance with the purchased product ... **vented gas heater:**

As it is obvious from the product's name, it is a gas heater with vent or chimney. Therefore in order to install this system a proper and correct chimney is required.

The authorized servicemen of Nicala Company are in charge of correct installation of gas heaters.

**⊘ If you do not have a proper chimney, never use the heater.**

The chimney system inside the building should be designed and constructed perfectly to exhaust gases of ignition products from the building to the outside by proper suction.

**⊘ Dear Consumer:**

Since there are nonstandard and fake parts in market, in case of any error in our product and its parts, please contact with our authorized service center only for original parts. Unless otherwise NO responsibility is acceptable.

*Nicala heaters are equipped with a natural suction system. By proper installation of our products, proper chimney and sufficient ventilation inside the room, the gas of carbon monoxide (CO) will never be produced and the flow of combustion gases will exhaust out completely via chimney.*





### Identify the chimney of your heater & be acquaintance with its specifications:

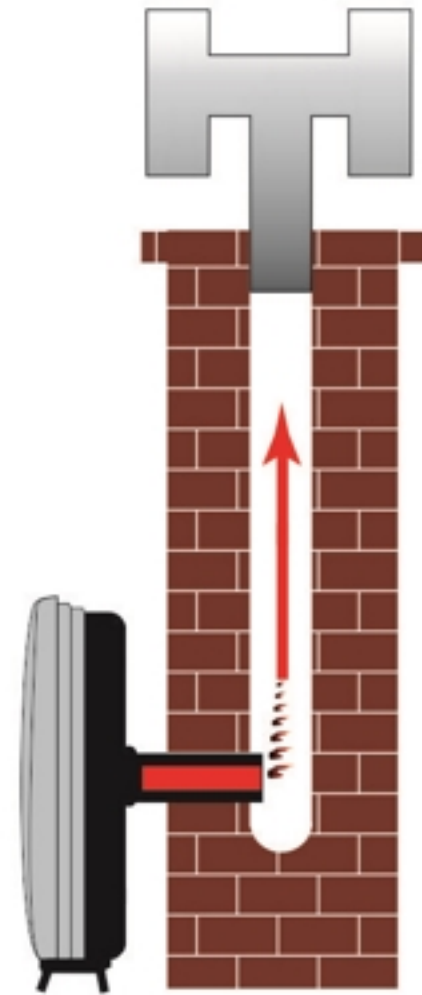
Although the authorized servicemen of Nicala Company are in charge of gas heater installation and identifying the type of its chimney, but it is better for you to be aware of the details yourself due to its importance.

#### Chimney:

In any gas utilization, ten square meters gases of ignition products are the result of burning one square meter of natural gas that are so dangerous for breathing (such as CO, NO<sub>x</sub> and unburned gases) these gases must be exhausted outside the building by a chimney.

#### Material of the chimney:

A proper chimney should have enough strength and resistance against heat, corrosion and rustiness, which result from ignition gases. May be galvanized pipes are the best kind of chimneys. Please do not use corrosion, rustiness, tin or flexible pipes in the chimney system. The thickness of galvanized sheet of chimney pipe is about 0.3 millimeters at minimum.

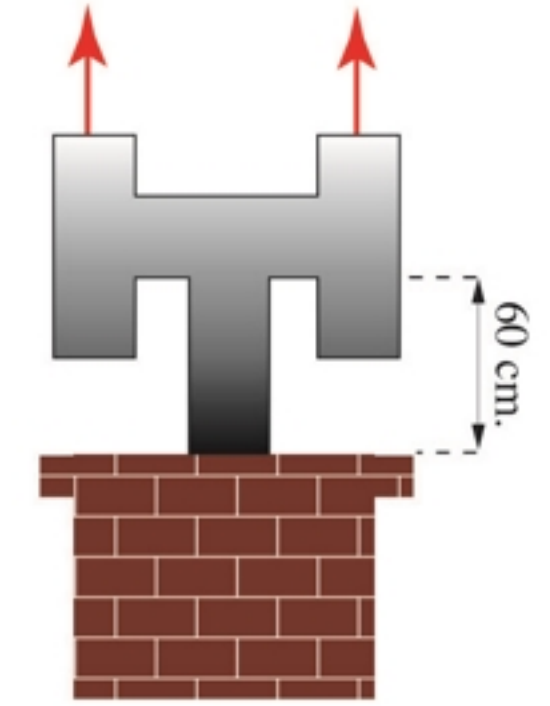


#### Fixtures of chimney:

You must be sure about the tight fixtures and connections of the chimney devices together and to the heater, also be confident about the building chimney devices connections (as required you can use a bolt or a rivet).

All pipes and fixtures of chimney should be tight about 5 centimeters inside each other.

End of the chimney pipe (on the roof) should be adjusted minimum 60 centimeters above the highest point of the roof and about one meter around the chimney must be free from it. (Buildings with gable roofs are not exception).

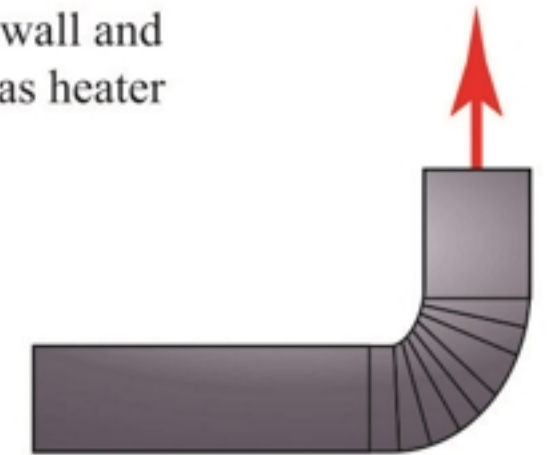


- ⊘ If a gas heater is installed in a building near higher buildings, so the height of the chimney should be 60 centimeters higher than the roof of the highest building.

The end of the chimney pipe on the roof should be connected and tight by a (H) shape cap and must be checked timely (especially when there is a storm).

Most of the chimney duct should be inside the building or inside the wall and if possible use least number of fixtures and connections in the gas heater chimney (Maximum 3 joints).

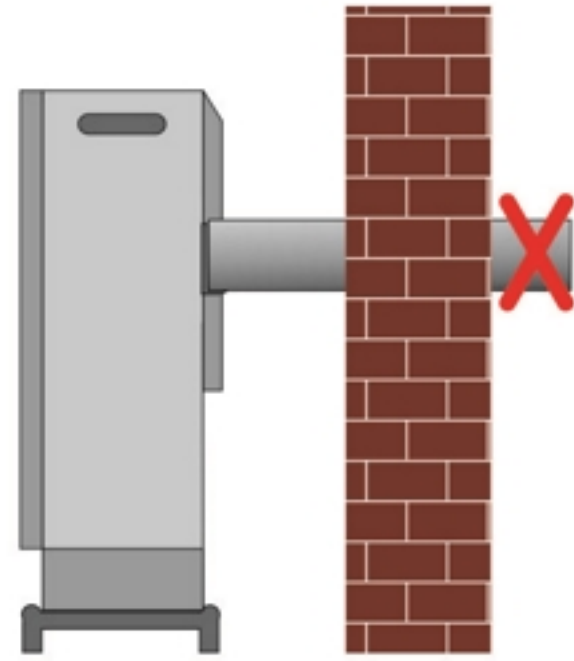
**Note:** Last joint of the chimney connections should be upward.



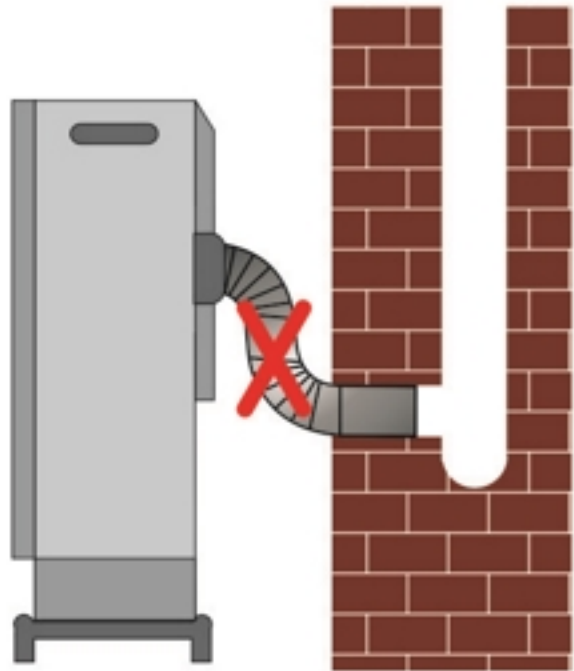




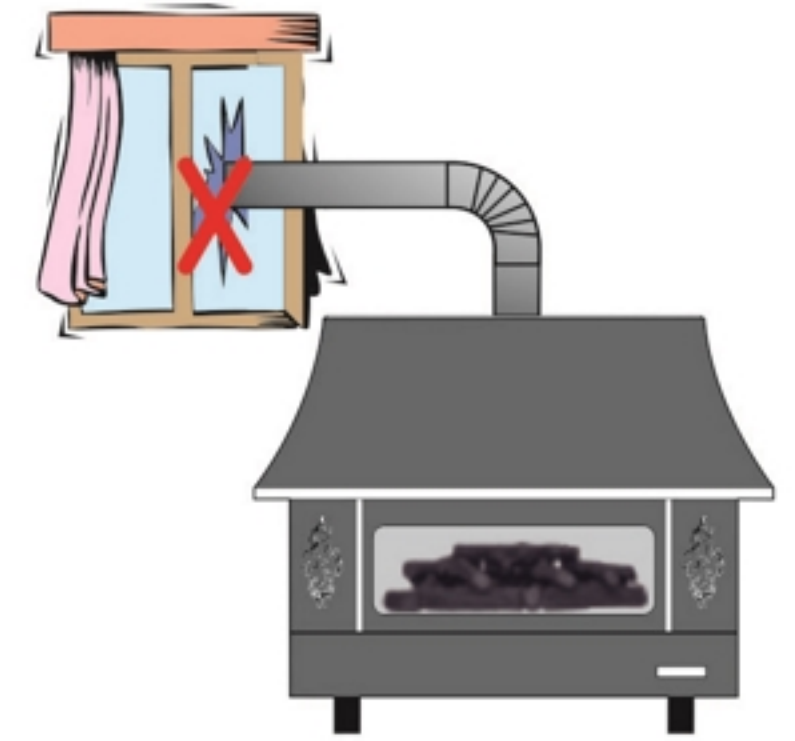
- ⊘ Metal chimney should not be conducted to the outside of the building directly and freely. For exhausting gases of ignition, minimum 2 meters of the chimney pipe should be warmed completely.



- ⊘ Under no condition the level of the chimney inside the building should not be lower than the level of the heater pipe. Otherwise the installation of the heater by the servicemen will be prohibited, unless an authorized person makes it correct.



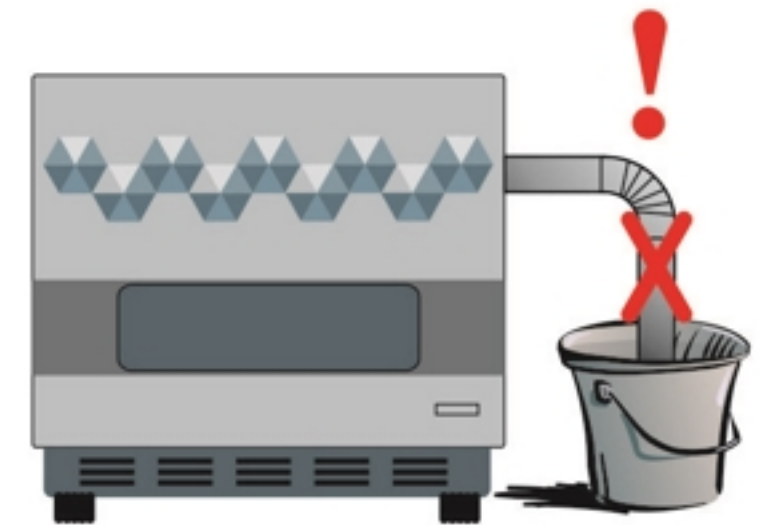
- ⊘ Do not pass the chimney pipe from the glass of a window since the chimney become warm so the glass may be cracked or broken and the heater chimney will be fall down.



- ⊘ Each heater should have its independent chimney, so do not connect more than one heater or other gas, oil or gasoline utilizations to one chimney.

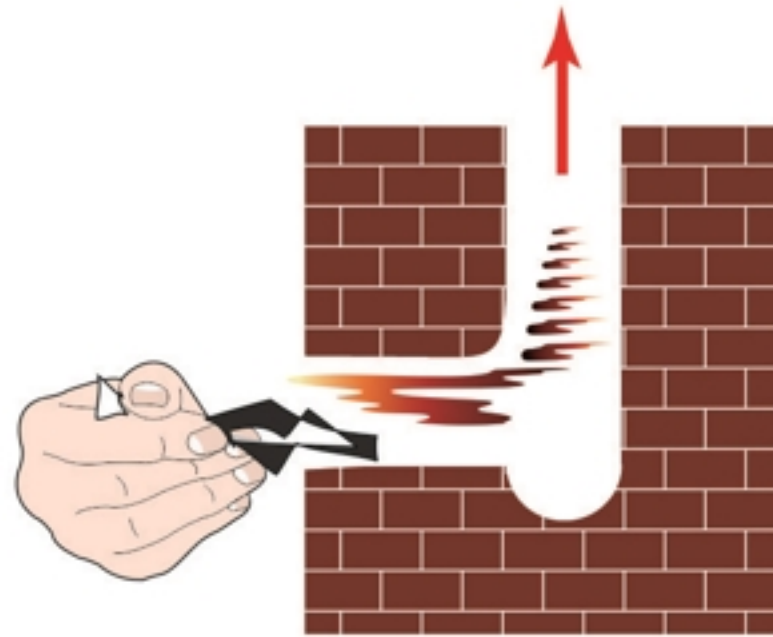
- ⊘ **Warning:**

As some people do not have any chimney at the place of heater installation, so they put the end of the chimney duct in a bucket of water. It is very dangerous; so do not put the end of the chimney inside a bucket of water.





The chimney duct of the building has to be checked, before installation of the heater chimney make sure the chimney duct is quite open. You can test it by burning some paper at the entrance of the duct and observe the smoke must flow, whether suck in or out, then remove the problem.



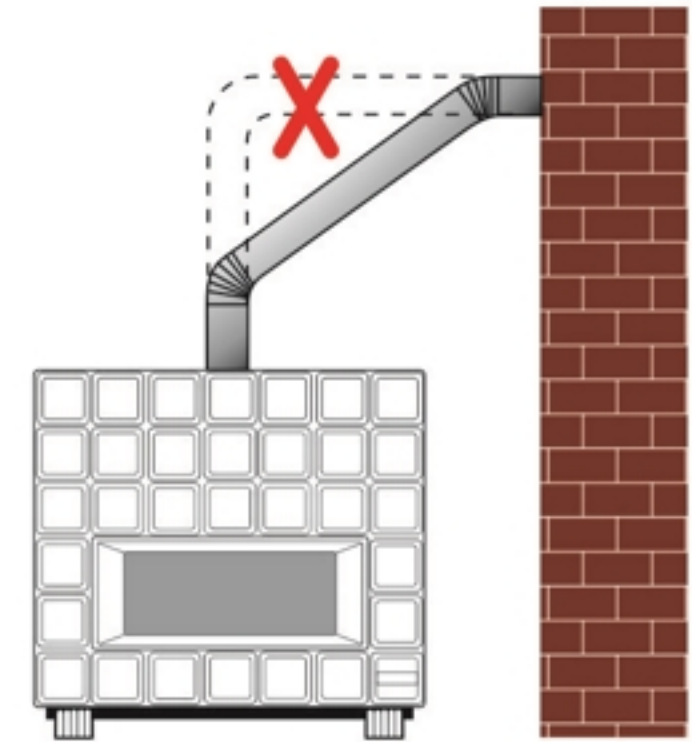
- ⊘ **If the chimney of the building is not proper for installation, the servicemen should not install the heater, unless an authorized person corrects the chimney of the building.**

Attention:

Most of the time in spring and summer, it is seen that birds make a nest at the end of the chimney duct (on the roof) that results to obstruction in it. Therefore, when you want to operate the heater in a cold season, it is necessary to check the end of the chimney duct carefully and clean it to be sure that the chimney duct is quite open and without any obstruction.



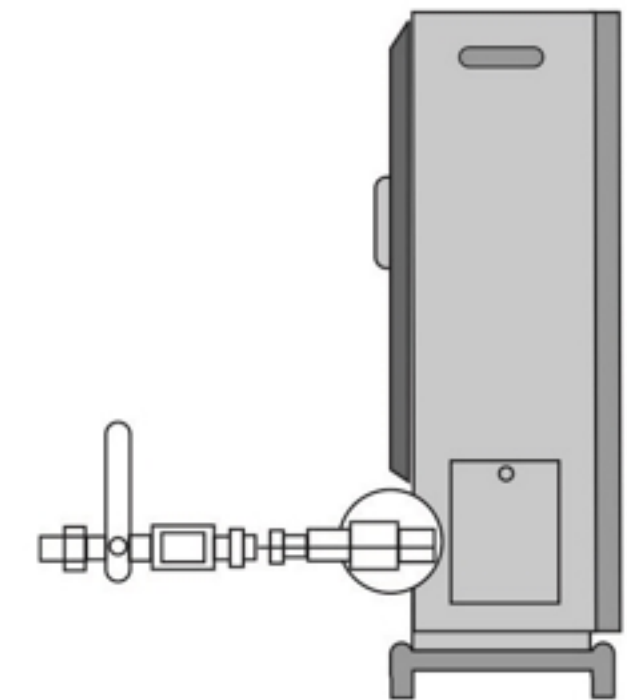
The chimney of the heater inside the building should not be placed horizontally and should have a minimum 45-degree angel from the floor of the room.



- ⊘ One of the correct operation signs of a heater chimney system and a building chimney is that when heater operates (maximum 5 minutes after operation) the metal chimney will become warm. So it is better to check the heater chimney sometimes to be sure it is warm. If the chimney duct is cold, **turn off the heater** and contact your nearest authorized servicemen.

It is urgent to put an On/Off ball valve between the house pipe and the gas heater connection pipe to turn On/Off the gas flow immediately, when required.

**(This ball valve should be available completely.)**







### The method of installing & connecting the heater to the gas pipeline of the building:

It is recommended to have an authorized person to install the heater and strictly avoid unskilled persons.

Put the heater in a place that has the least distance from the chimney of the building.

Be sure the gas heater is installed on a flat surface and is quite level. The proper and minimum standard distance between the gas heater and the surrounding walls is 30 centimeters, please consider it.

Be sure to use standard semi-hard pipes (like copper or aluminum pipes) and suitable fixtures, to connect the gas heater to the house pipe. Length of the semi-hard pipe should not exceed more than 2 meters.

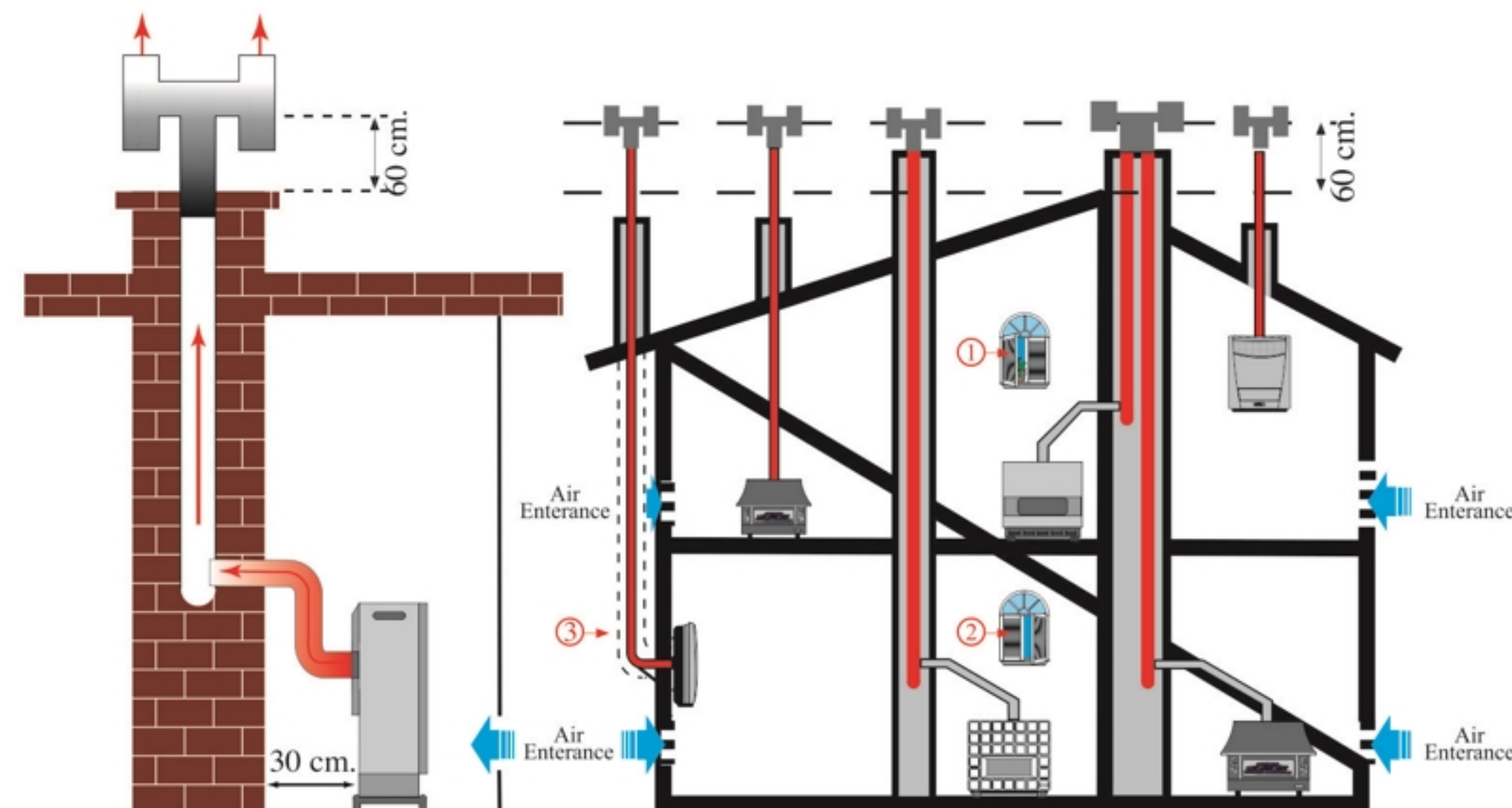
Also it is possible to connect the gas heater to the house pipe with a special gas pipe and metal fittings. The length of a special gas pipe should not exceed more than 1.5 meters and it should be changed once in every 3 years.

#### ⊗ Warning:

**Never use a water hose instead of a gas pipe for a heater.**

**It is really dangerous.**

### Correct chimney installation:



Since the required air for the operation of this type of gas heater is provided from inside the building, so the building or the room that gas heater is installed should have a proper ventilation system in a way that fresh air flow inside easily.

If no suitable opening exists for air admission into the room, the room door or windows should be kept open as required. (Figs 1&2)

If the chimney is extended to roof from outdoor, it must be insulated by glass fibers.(Fig 3)





## Security Notes

That should be observed

- 1-Incorrect use of this manual will result in improper operation of the gas heater (and cause danger).**
- 2-Installer of the gas heater should explain this manual clearly for the customers and mention the security notes also give them a copy.
- 3-This heater should be installed in a room with a ventilation system.**
- 4-The pressure and the type of consumed gas should be according to the unit specifications and if required, necessary changes will be done by authorized servicemen.
- 5-Do not cover the surface of the heater with aluminum foil or ... The heater needs a proper heat exchange.**
- 6-The heater must be placed at least 30 centimeters away from the walls.
- 7-Before and after lightening the heater, make sure no flammable material exist near the heater.**
- 8-No curtain should be installed above a heater.

- 9- For better performance, the heater must be selected in proportion with the room space. Therefore, seriously avoid installing high-capacity heaters in small rooms. please find the table on pages 27 & 28.**
- 10- Do not expose the heater against wind and cold air as it cause the pilot shout down.
- 11- Avoid children or old come near or touch the hot surface of the heater.**
- 12- Avoid putting water kettle on the gas heater.
- 13- Avoid putting wet shoes or clothes on the heater and never use the heater as a dryer.**
- 14- In case the glass of the heater is cracked or broken, do not use the heater unless the glass will be changed.
- 15- In order to increase the permanence of the heater's glass, turn up/down the heater gradually and slowly.**
- 16- When gas is smelt, turn off the gas flow quickly and avoid lightening matches, lighter and electricity, do not use telephone, open the windows and turn off the house electricity by original electricity counter. Then refer to the relating organizations.
- 17- In case you will not be at home for a long time or go to a journey, turn off the main valve of the gas flow.**
- 18-For changing the orifice from city gas to PLG or otherwise (since some changes should be made in the fuel system) just call for Nicala authorized servicemen.



- 19-In case of using liquid gas capsule, be sure to keep it away from the heater and in vertical position ( meanwhile the capsule should be equipped with standard low pressure regulator).**
- 20-Once in every three months, check the gas heater connections and inlets with soap foam for any gas leakage.**
- 21-In annual and periodic audits, servicemen are authorized to use only the main spare parts of Nicala Company for replacement.**
- 22-Use wet cotton cloth for cleaning the heater (never use rough materials).**
- 23-Clean the surface of the heater when it is cold.**
- 24-For more security, all of the house gas pipeline systems and gas appliances should be checked entirely by specialists and skilled persons at least once a year to prevent any dangerous adventures.**
- 25-It is recommended to check the heater once a year by authorized servicemen. Since referring to servicemen is more in the cold season , please contact them at the end of the summer.**
- 26-In case if the serviceman cannot fix the problem, please call customer-care center: (0098) 26 34111, (0098) 26 34705336**

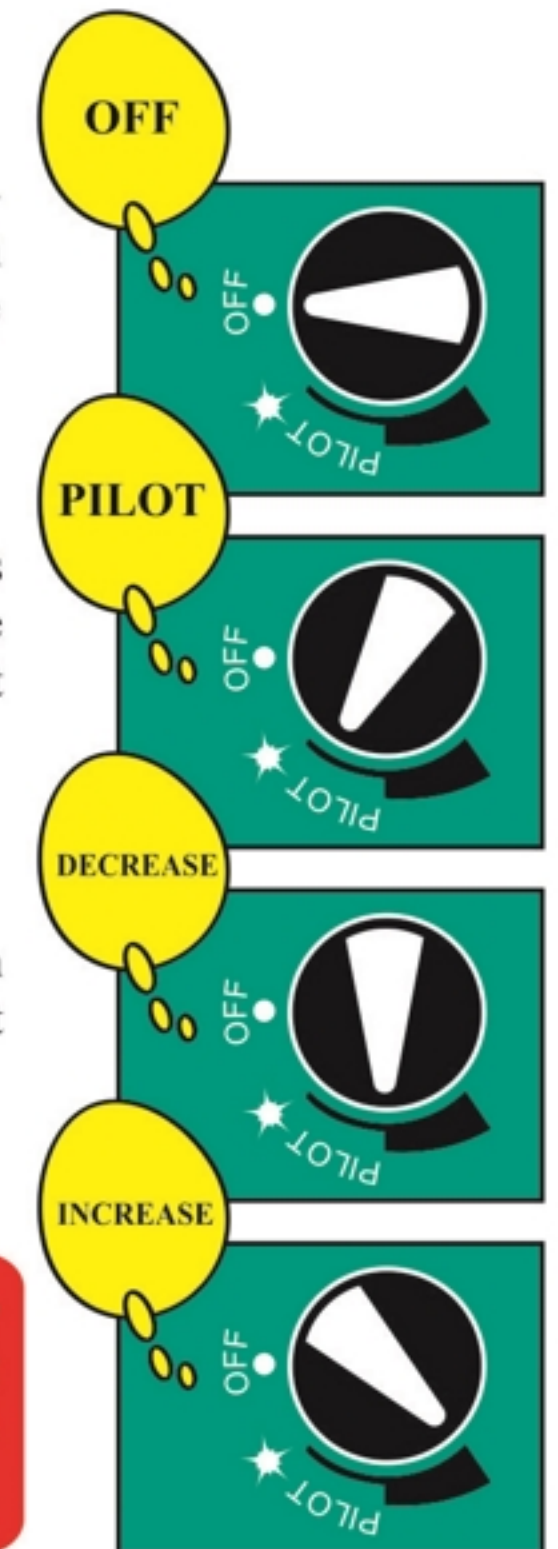
## Manual for lightening the heater

**Igniting the pilot:** Push down the original gas control knob and turn it in counterclockwise till spark, hold it for few seconds, after air evacuation and gas exhaustion then repeat this until the pilot ignites, hold it 20-30 seconds until the thermocouple warmed, then release the knob, pilot stay alight.

**Lightening the main flames of the heater:** After pilot is ignited, turn the main gas control knob slowly in counterclockwise. This is the minimum flame size, for more flames; just turn the knob more at the same direction. This knob is adjustable to get ideal flame.

**To put off the main flame and pilot:** Turn the main gas control knob slowly in clockwise to the pilot position, here the main flame put off then for putting the pilot off, press the knob and turn it in clockwise to the off position, then pilot put off.

**In case of sudden gas flow interruption, the heater shuts down. For lighting it again, wait 10 minutes, then act as above. If you could not ignite the pilot, you can open the small door of the ignition chamber and stick a match or use an electrical lighter to ignite the pilot.**





### How to set the fireplace ceramic logs:

- 1-Remove the front glass frame (first of all push the glass frame upward till the pin sides became free then take out the glass frame).
- 2-Open up the fitting of the glass then lose the down fitting of the glass, take out the glass.
- 3-Set the fireplace ceramics logs according to the numbers carves under them (same as the picture). Notice to the adjustment of ceramic log holes and bridges to be adjusted together.
- 4-Close the glass pins slowly and do not fasten them so strictly.
- 5-Put the glass frame on its place again.



#### Note:

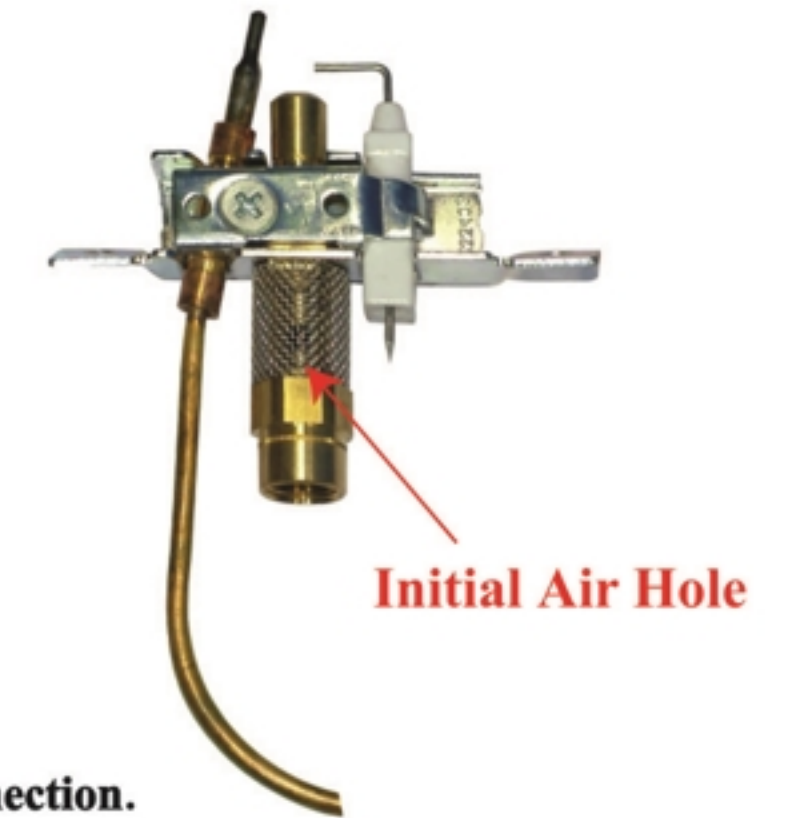
The ceramic log setting is designed as to display most of the flame flash toward the glass and also less of the flame touch with the back of the ignition hot chamber. If the ceramics replaced based of wrong order so it would cause defects on the ignition hot chamber and fireplace glass and burning on the outside surface:

- \* **Note: Falling ceramics on the Burner flame will result to produce carbon monoxide gas , please pay due attention to displacement of ceramics while moving and transferring fireplace.**

### Oxygen Depletion System (ODS) .

The Nicala products are equipped with a security system (ODS):

In case of decreasing the oxygen amount of the room atmosphere that heater is installed, (ODS) will shut down the gas flow completely to prevent any danger. Then open the windows for 1 minute and you can turn on the heater again when fresh air flow inside the room and remember to provide adequate air required constantly for operation of heater and fireplace.



**Authorized service technicians of Nicala can help you in this connection.**

#### Security points about (ODS):

The system of the (ODS) should not be reset by the servicemen or installer.

The system of the (ODS) should not be exited from the circuit.

In case of several shut down of gas flow by the security system of (ODS), you must have a skilled serviceman (Nicala) to repair it.

- \* **Since the (ODS) system is very sensitive, so in case of any defect in its devices, it is recommended to replace the whole (ODS).**
- \* **In case of changing the use of heater from city gas to liquid gas, you should assemble a liquid gas pilot on the heater.**

- \*\* **Note: The inflowing initial air hole of ODS might get clogged due to dust and fuzz. When clogged, please clean them and/or contact Nicala Company**



## Gas Pressure Stabilizers (Governors):

Nicala products are equipped with governors. Please note the following points for your information and introduction to the performance of this device and its better functioning.

Governor is a device for adjustment of gas pressure. If variation in pressure of inlet or outlet gas is created, governor shall maintain the outlet pressure within a certain limit.

Governor is capable of keeping the gas pressure at standard level when pressure of gas entering the heater exceeds above permitted level (178 mm of water column) and prevents increase in pressure and potential damages to gas heater.

### Warning:

**Avoid tampering or adjusting the governor under any circumstances.**

Governor has been installed for your safety and protection. In case of any problem in this connection, please contact the nearest authorized service center of Nicala Company.

## Note: Learn more about carbon monoxide

This is a highly toxic colorless and odorless gas that is created by improper use of heater (in-complete burning, incorrect installation or improper use). Density of carbon monoxide even in low level is dangerous and fatal. Therefore, be very careful when installing any heater and its chimney and use them correctly.

### Carbon monoxide gas (CO) generating factors in gas burning heaters:

- 1- Increase of gas pressure in consumption network.
- 2- Non-performance of annual service of heater and blockage of holes on torch head that causes the flames to burn in yellow color.
- 3- Reduction of oxygen in the air around the heater due to incorrect ventilator at installation location of heater.
- 4- Installation of unsuitable jet or nozzle in heater.
- 5- Existence of wind and strong storms, which causes the chimney to get cold.
- 6- Placement of any object on the flame (such as fireplace logs falling on flames).

### Symptoms of existence of CO toxic gas in living environment:

If the density of gas is low, signs similar to flue appear in persons which is accompanied with weariness, headache, dizziness and vomiting in which case the heater should be turned off immediately and windows and doors should be opened to let the fresh air coming into the room and then authorized service center of company should be contacted.



### The Classification of Nicala heaters according to thermal efficiency:

Group A	Group B	Group C	Group D
Houshmand <b>AB7</b>	Ideal <b>MN9</b>	Marjan <b>MN12</b>	New Ghousi Fireplace <b>MC100 - 110</b> Simin Fireplace <b>MC26</b> Zarrin Fireplace <b>MC28</b> Nafis Fireplace <b>MC30</b>
Sahar <b>MN6</b>	Maryam <b>MN9-A</b>	Almaseh <b>MN12-A</b>	
Saba <b>MN6-A</b>	Nahid <b>AB15</b>	Ceramic <b>CE14</b>	
Roya <b>AB10</b>	Sima Fireplace <b>MC22</b>	Keyvan <b>KN16</b>	
	Azar Fireplace <b>MC24</b>	Aftab <b>AF18</b>	
	Samin Fireplace <b>MC25</b>	Mahtab <b>MB20</b>	

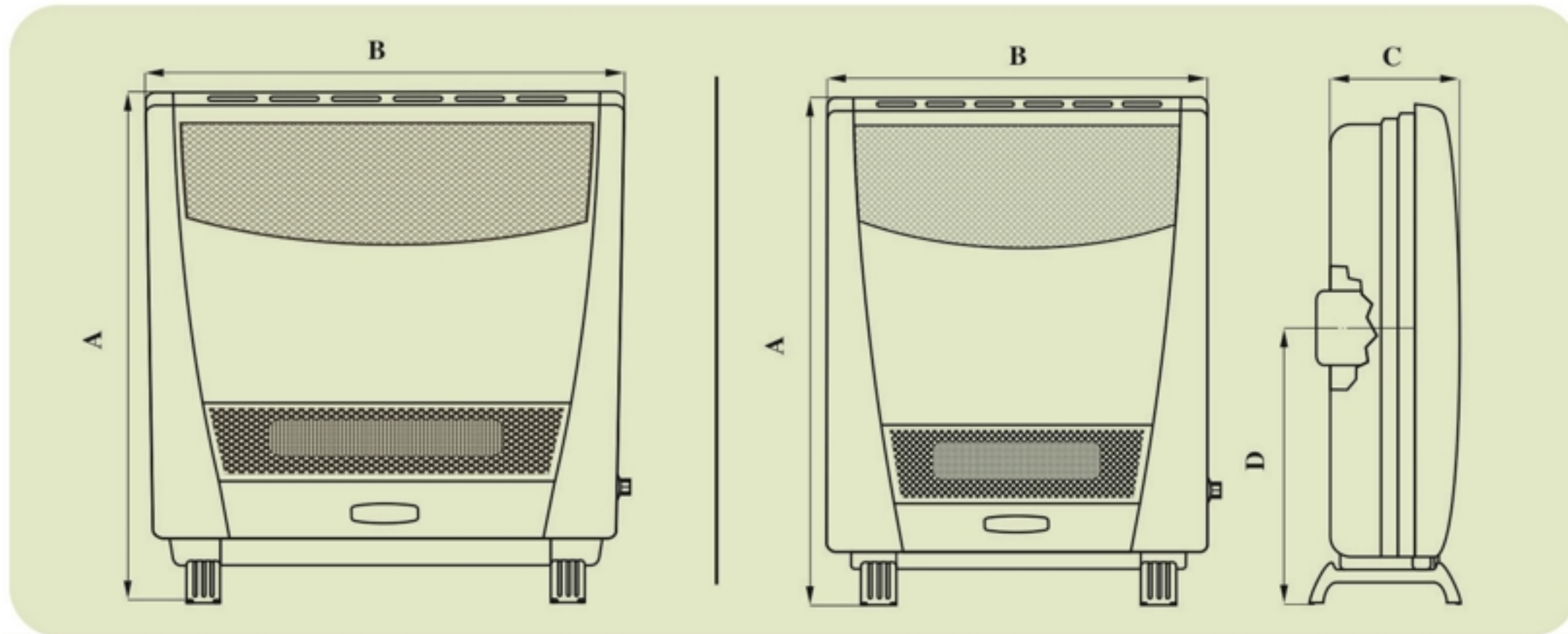
Number and type of heaters may be varied with consideration of insulation conditions of building, number of windows installed, style of architecture and other conditions as assessed by service center or company's expert.

### The selection of suitable heater for your building area

Very Cold Regions	Cold Regions	Modrate Regions	Recommended Heater
Less than 15 m2	Less than 20 m2	Less than 25 m2	<b>1 heater, group A</b>
15-30 m2	20-40 m2	25-50 m2	<b>1 heater, group B</b>
30-45 m2	40-55 m2	50-70 m2	<b>1 heater, group C</b>
45-55 m2	55-65 m2	70-80 m2	<b>1 heater, group D</b>
55-65 m2	65-85 m2	80-90 m2	<b>1 heater, group A + 1 heater, group C</b>
65-80 m2	70-90 m2	-	<b>1 heater, group B + 1 heater, group C</b>
80-90 m2	-	-	<b>2 heaters, group C</b>
For areas larger than 100 m2			<b>Add heaters as required</b>



## Houshmand Gas Heater



### Specifications :

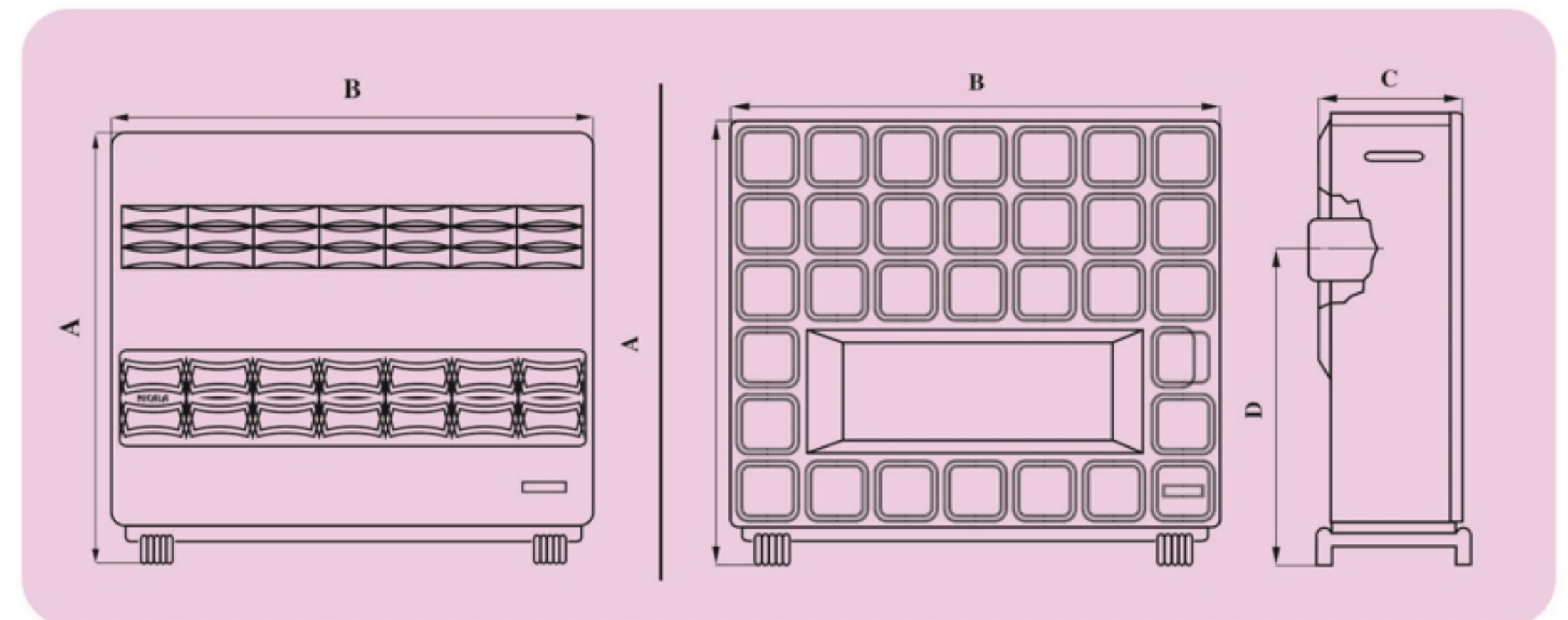
Model	Heat power (kcal/h)		City Gas		Chimney Diameter Ø mm	Dimensions (mm)				Weight (kg)		Liquid Gas (Capsules)	
	Max	Min	Gas Pressure mm/W.Col	Nozzle Diameter Ø mm		A	B	C	D	Net	Gross	Gas Pressure mm/W.Col	Nozzle Diameter Ø mm
<b>AB15</b>	5900	2900	178	2.1	100	685	640	327	500	22.5	25	270	1.1
<b>AB7</b>	3500	1800	178	1.5	100	675	500	200	415	14.2	17	270	0.9

This heater is set by the **city gas**. In case to use liquid gas (capsule) some changes should be done in the fuel system (pilot, nozzle ...).

**Skilled servicemen of Nicala Company are authorized to do that.**

## Keyvan Gas Heater

## Ceramic Gas Heater



### مشخصات :

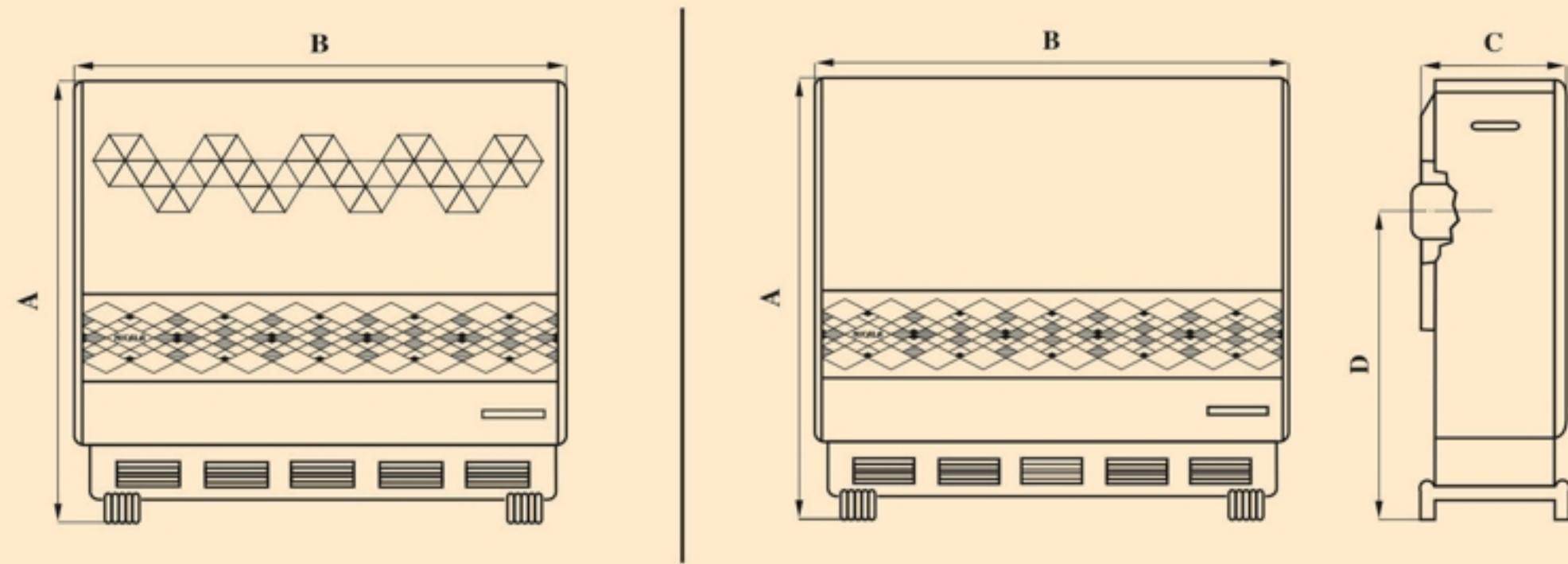
Model	Heat power (kcal/h)		City Gas		Chimney Diameter Ø mm	Dimensions (mm)				Weight (kg)		Liquid Gas (Capsules)	
	Max	Min	Gas Pressure mm/W.Col	Nozzle Diameter Ø mm		A	B	C	D	Net	Gross	Gas Pressure mm/W.Col	Nozzle Diameter Ø mm
<b>CE14</b>	8000	3800	178	2.5	100	755	840	280	510	30	34	270	1.3
<b>KN16</b>	8000	3800	178	2.5	100	755	840	305	510	30.3	35	270	1.3

This heater is set by the **city gas**. In case to use liquid gas (capsule) some changes should be done in the fuel system (pilot, nozzle ...).

**Skilled servicemen of Nicala Company are authorized to do that.**



## Almaseh Gas Heater



### Specifications :

Model	Heat power (kcal.h)		City Gas		Chimney Diameter mm	Dimensions (mm)				Weight (kg)		Liquid Gas (Capsules)	
	Max	Min	Gas Pressure mm/W.Col	Nozzle Diameter mm		A	B	C	D	Net	Gross	Gas Pressure mm/W.Col	Nozzle Diameter mm
<b>MN12-12A</b>	8000	3800	178	2.5	100	755	780	275	540	29.3	33.6	270	1.3
<b>MN9-9A</b>	5900	2900	178	2.1	100	685	640	275	500	22.7	26.3	270	1.1
<b>MN6-6A</b>	3500	1800	178	1.5	100	685	500	260	415	17.6	20.5	270	0.9

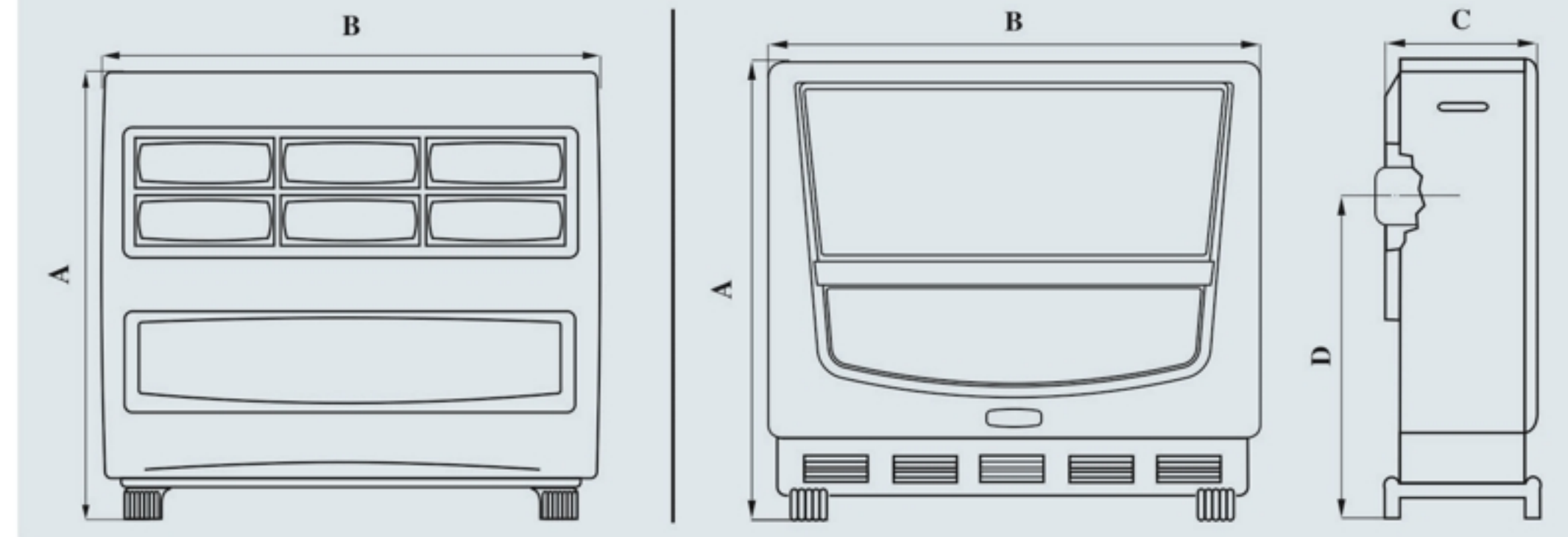
This heater is set by the city gas. In case to use liquid gas (capsule) some changes should be done in the fuel system (pilot, nozzle ...).

**Skilled servicemen of Nicala Company are authorized to do that.**

## Aftab Gas Heater



## Mahtab Gas Heater



### Specifications :

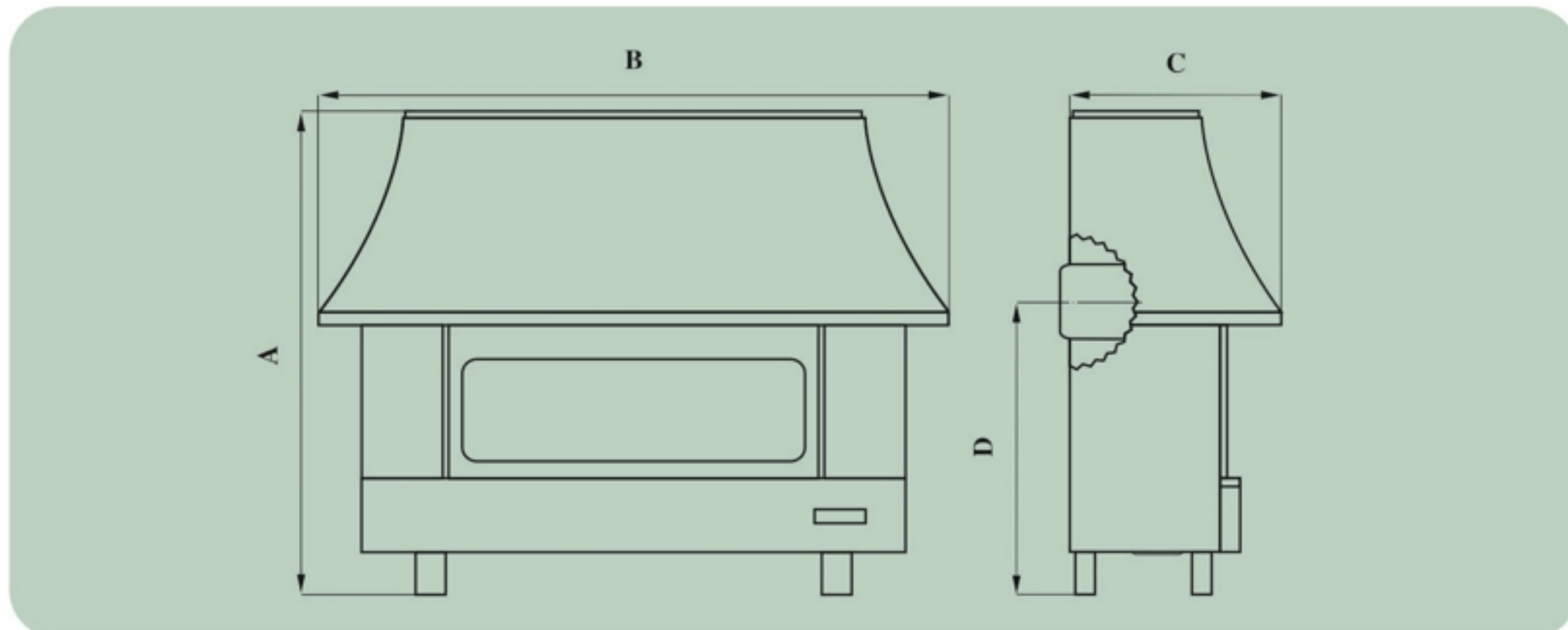
Model	Heat power (kcal.h)		City Gas		Chimney Diameter mm	Dimensions (mm)				Weight (kg)		Liquid Gas (Capsules)	
	Max	Min	Gas Pressure mm/W.Col	Nozzle Diameter mm		A	B	C	D	Net	Gross	Gas Pressure mm/W.Col	Nozzle Diameter mm
<b>AF18</b>	8000	3800	178	2.5	100	755	780	275	540	30.3	35	270	1.3
<b>MB20</b>	8000	3800	178	2.5	100	755	840	305	510	30.3	35	270	1.3

This heater is set by the city gas. In case to use liquid gas (capsule) some changes should be done in the fuel system (pilot, nozzle ...).

**Skilled servicemen of Nicala Company are authorized to do that.**



## Modern Gas Fireplace



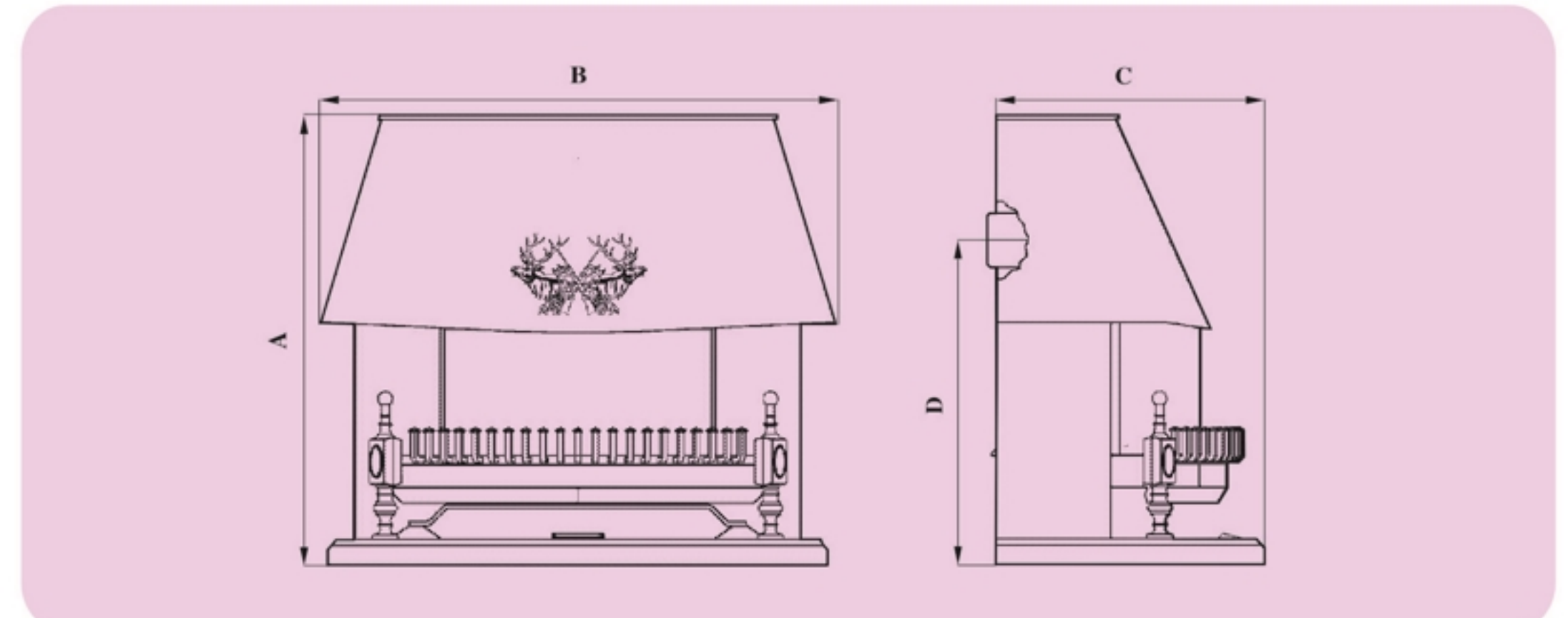
### Specifications :

Model	Heat power (kcal.h)		City Gas		Chimney Diameter Ø mm	Dimensions (mm)				Weight (kg)		Liquid Gas (Capsules)	
	Max	Min	Gas Pressure mm/WCol	Nozzle Diameter Ø mm		A	B	C	D	Net	Gross	Gas Pressure mm/WCol	Nozzle Diameter Ø mm
MC26-28-30	8000	3800	178	2.5	100	805	1025	360	500	38.6	48	270	1.3
MC22-24-25	5900	2900	178	2.1	100	710	840	320	547	27	33	270	1.1

This heater is set by the city gas. In case to use liquid gas (capsule) some changes should be done in the fuel system (pilot, nozzle ...).

**Skilled servicemen of Nicala Company are authorized to do that.**

## Classic Gas Fireplace



### Specifications :

Model	Heat power (kcal.h)		City Gas		Chimney Diameter Ø mm	Dimensions (mm)				Weight (kg)		Liquid Gas (Capsules)	
	Max	Min	Gas Pressure mm/WCol	Nozzle Diameter Ø mm		A	B	C	D	Net	Gross	Gas Pressure mm/WCol	Nozzle Diameter Ø mm
MC 110	8500	3800	180	2.5	100	845	960	510	605	42.3	51.3	270	1.5

This heater is set by the city gas. In case to use liquid gas (capsule) some changes should be done in the fuel system (pilot, nozzle ...).

**Skilled servicemen of Nicala Company are authorized to do that.**

**Attention:** use a piece of oily cloth (swing machine s oil) to clean the whole exterior surfaces of your gas fire place.