

### Introduction

# Technical service

The Dealer can solve any technical problem regarding installa-

tion. Do not hesitate to contact him in case of doubt.

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This oven has been designed with the utmost care and un-
dergone rigorous tests in our laboratories and for this reason
we guarantee its absolute safety and functionality.

The installation must be carried out by **professionally qualified** staff, that can take responsibility for the installation and guarantee the best safe operating conditions.

Before the installation, read the content of this manual **care-fully:** it contains important information regarding product assembly and safety regulations.

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# 1 CHECKS BEFORE PURCHASING

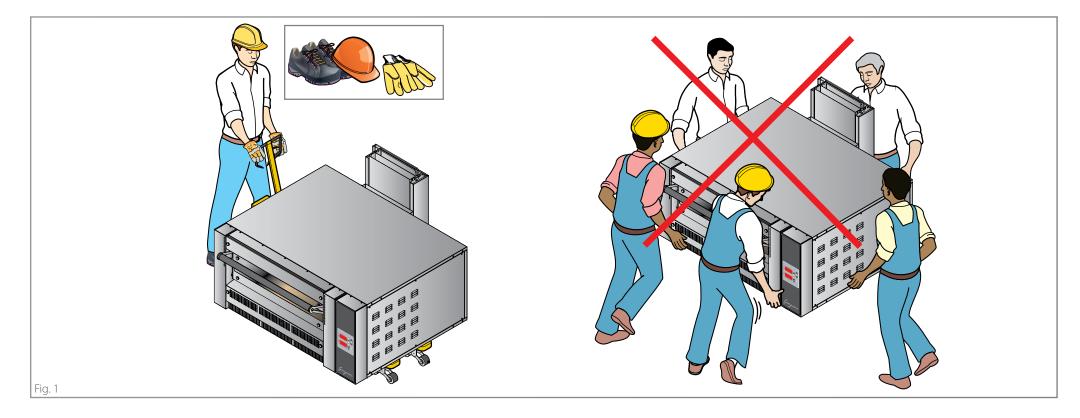
Before purchasing the oven and before its installation, **check and agree with the owner** that, on installation, all the following conditions are met; they are indispensable for the correct and safe installation, operation and maintenance of the oven.

- A Check with the owner if in the place of installation there are the tools to handle the oven easily Fig. 1
- $\sqrt{}$  To handle the oven correctly, it is necessary to:
  - have personal protection equipment available (e.g. safety shoes, gloves, etc.)
  - have lifting equipment available that can handle the appliance safely (check weight and dimensions in the following pages), together with staff qualified to carry out this operation.

#### **B** Check the dimensions of the selected oven and accessories

#### $\sqrt{}$

- check that the dimensions of the selected oven are suitable to the available space in the installation room.
- check that the cooking chamber capacity is adequate to the owner's needs.
  - The "Technical data" section from page **8** contains the weights and dimensions of the cooking chamber.



Survey the installation room to make sure it С is adequate.

#### Make sure that Fig. 2

 the floor of the installation room is fireproof, perfectly level and capable of withstanding the weight of the appliance.

WEIGHT	GR435	GR635			
Net	176 kg/388 lbs	219 kg/482.8 lbs			
WEIGHT	GR635L	GR935			

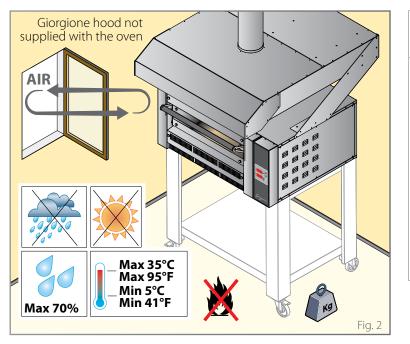
- The oven must be placed on a base, built by the Manufacturer or by yourself that:
- is flame and heat resistant:
- is perfectly stable and level;
- withstands the weight of the appliance.
- the installation room:
- is dedicated and suitable to cooking food;
- has adequate air ventilation;
- contains no flammable or explosive elements;
- · complies with the current regulations on health and safety and systems in the workplace;
- is protected from the weather:
- has a maximum temperature of between +5° (41°F) and +35°C (104°F);
- has a maximum humidity of 70%.
- the appliance passes through the doorways easily.



When choosing the positioning room, take into account that the appliance must be

easy to move for any extraordinary maintenance: be careful that any brickwork after installation (e.g.: wall construction, replacement of a door with a narrower one, renovations, etc.) do not hamper movements.

• there are NO other sources of heat (i.e. grills, fryers, etc.), highly flammable substances or fuels (i.e. gasoline, petrol, bottles of alcohol, etc...) in the vicinity of the appliance.



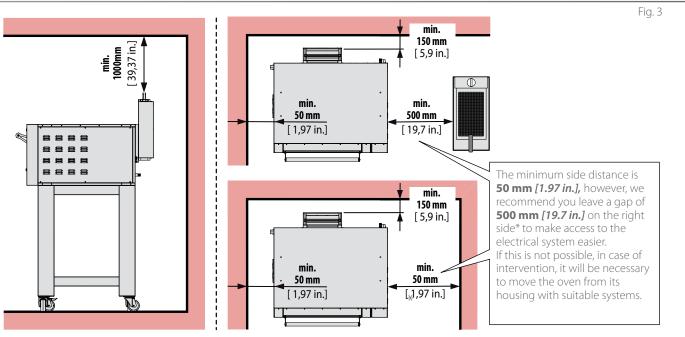
• there is **adequate ventilation** according to the regulations in force in the Country of installation.

It is possible to maintain the following minimum distances between the oven and the walls, other appliances, objects and combustible materials shown in Fig. 3.

In case of proximity to hot or cold equipment, keep a distance of 500 mm [19.97 in.]



It is absolutely necessary to comply with the minimum stated safety distances. Distances must be increased in case of obiects in heat-sensitive materials.



D Check with an inspection how to evacuate the fumes and gases of the oven

Make sure that

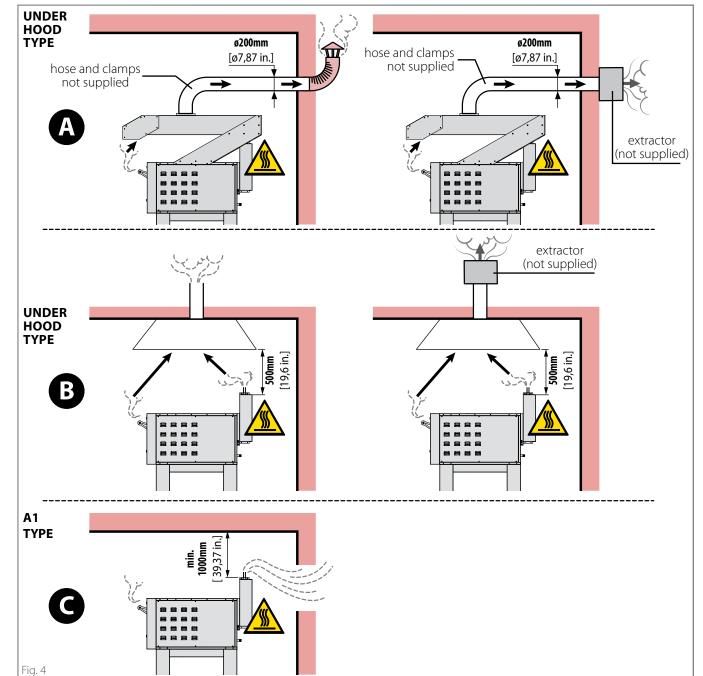
**Fig. 4** The oven is equipped with a smoke outlet located at the back for the evacuation of the vapours from the cooking chamber and the gases (you can find its exact position in the "Technical data" section starting on page <u>8</u>).

The gases from the cooking chamber and from the door opening can be evacuated:

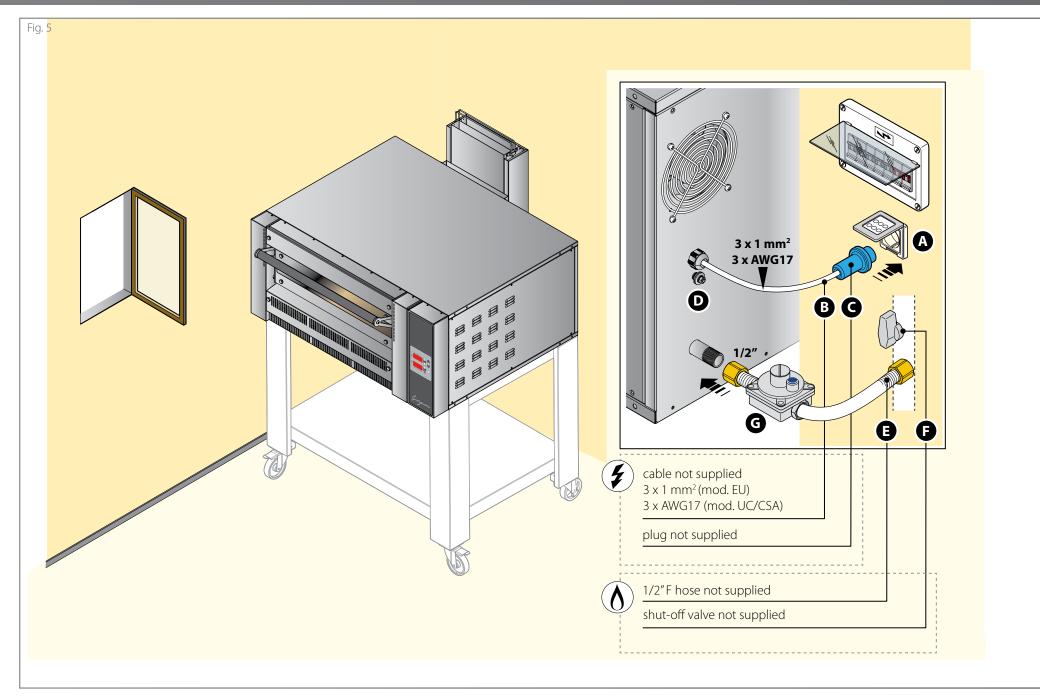
• outside through the manufacturer's hood (under hood type). Using metal clamps (not supplied), connect to it a Ø200mm [Ø7.87in] evacuation tube (not supplied). The evacuation tube must be for the exclusive use of the equipment, in stainless steel resistant to high temperatures and must comply with the current regulations. The hood is not equipped with a suction motor, however it is possible to connect it to a **suitable user suction system** (the extractor, the evacuation tube and the clamps are NOT supplied by the manufacturer).

**B** outdoors by means of a user's hood, of adequate capacity; the choice of the model to be mounted is the responsibility of the installer who will have to choose it based on the oven to be installed, the size of the room and the reference standards; in any case, always maintain a minimum distance of 500 mm [19.69 in.] between the oven chimney and the hood filter system.

**C** directly in the installation room (type A1). In this case it is essential that there is **adequate ven-tilation** according to the regulations in force in the country of installation.



E	Inform the owner about the necessary electrical arrangements (activities to be carried out by a qualified electrician)	F	Inform the owner about the necessary electrical arrangements (activities to be carried out by a qualified electrician)
	For a correct electrical connection Fig. 5:	$\checkmark$	For a correct gas connection Fig. 5:
	• provide sockets A connecting to the electrical network near the oven. If there are two ovens, one on top of the other, there must be two connecting sockets.		have the authorization for installation issued by the gas supplier;
	The "Technical data" section from page $\underline{8}$ contains all the electrical data as well as the positions of the supply cable and equipotential terminal.		<ul> <li>provide:</li> <li>a gas supply fitting near the oven, compliant with the regulations in force in the country of use; the connection to the gas train (compliant with the EN 10226-1)</li> </ul>
	• use a connection cable <b>B</b> and a plug <b>C</b> : appliances are supplied without ei- ther power cable or plug: they must both be fitted by qualified personnel. The cable		standard for the EU and ANSI Z83.11/CSA 1.8 ed. 4:2016 for UL/CSA versions) must be done with:
	must be only <b>of the type stated</b> and the plug fitted to it must be suitable for the consumption and connection of the oven to the electrical mains.		- a 1/2" F stainless steel flexible hose (not supplied) 🕒 that complies with the UNI-CIG standard for EU versions;
	<ul> <li>check that the systems in the room comply with the legal provisions in force in the country of use and meet the specifications on the serial number plate. For a correct electrical connection, the appliance must:</li> </ul>		<ul> <li>a stainless steel hose (not supplied) E, NGO type - American cylindrical national thread for gas discharges or NGS - American cylindrical national thread for gas;</li> <li>a gas supply shut-off valve F (not supplied);</li> </ul>
	• be included in an <b>equipotential system</b> in compliance with the legislation in force. This connection must be made between the various devices with the terminal		<ul> <li>a pressure regulator G (American/Canadian market only, natural gas or propane models).</li> </ul>
	<ul> <li>marked with the equipotential symbol ().</li> <li>The cable must have a maximum cross-section of 10 mm<sup>2</sup> (in compliance with IEC EN 60335-2-42:2003-09) and must be yellow-green;</li> <li>must be grounded () to the mains (green-yellow wire);</li> <li>must be connected to a thermal differential switch in compliance with the regulations in force (0.03A A type);</li> <li>must be connected to an omnipolar circuit breaker allowing complete disconnection in overvoltage III category conditions.</li> </ul>		<ul> <li>during installation arrange for a qualified gas connection technician to be present who:</li> <li>checks that the gas declared on the supplementary serial number plate complies with that of the system; if this is not the case, an adapter is required (see chapter "Transformation and adaptation to other gas types" on page 39).</li> <li>connects the oven to the system of the installation room;</li> <li>at the end of the connection and with the operating pressure, checks the tightness of the fittings to avoid the presence of leaks; please remember that this operation must be done using non-corrosive foaming substances and NOT using open flames.</li> </ul>



# **2** OVEN TECHNICAL DATA

### **Electrical data**

А

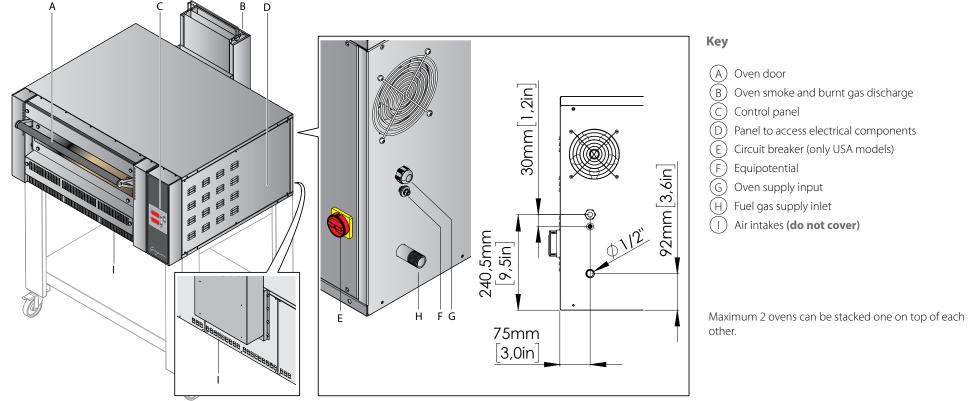
Model	Power supply (V)	Maximum absorbed power (W)	Connecting cable (Nxmm²)	Customer panel protection (nxA)	Model	Liquid gas consumption (G30) kg/h	Natural gas consumption (G20) m³/h	Natural gas consumption (G25) m³/h	Natural gas consumption (G25.1) m³/h	Natural gas consumption (G25.3) m³/h	Heat output
GR435	AC 230 (EU vers.) 50/60Hz AC 208 (UL/CSA vers.) 50/60Hz	150 W	3 x 1 mm <sup>2</sup> 3 x AWG17	2x10	GR435	1.18	1.58	1.84	1.84	1.80	15 kW - 51182.12 Btu/h
GR635	AC 230 (EU vers.) 50/60Hz AC 208 (UL/CSA vers.) 50/60Hz	150 W	3 x 1 mm <sup>2</sup> 3 x AWG17	2x10	GR635	1.45	1.95	2.21	2.21	2.16	18.5 kW - 63124.62 Btu/h
GR635L	AC 230 (EU vers.) 50/60Hz AC 208 (UL/CSA vers.) 50/60Hz	150 W	3 x 1 mm <sup>2</sup> 3 x AWG17	2x10	GR635L	1.45	1.95	2.21	2.21	2.16	18.5 kW - 63124.62 Btu/h
GR935	AC 230 (EU vers.) 50/60Hz AC 208 (UL/CSA vers.) 50/60Hz	150 W	3 x 1 mm <sup>2</sup> 3 x AWG17	2x10	GR935	1.93	2.59	3.01	2.76	3.01	24.5 kW - 83597.47 Btu/h

Gas data

Caution! The stated values refer to an oven chamber.

Double ovens have 2 inlets and therefore 2 different lines.

В



# Oven technical data

### Categories

				Connection pressure				
Country	Category	Gas	Туре	Rated (mbar)	Minimum (mbar)	Maximum (mbar)		
LU - PL	I2E	G20	Natural gas	20	17	25		
BE	I2E+	G20/G25	Natural gas	20/25	17/20	25/30		
NO	I2H	G20	Natural gas	20	17	25		
LU	13+	G30/G31	LPG	28-30/37	20/25	35/45		
CY - HU - MT - NL - NO	I3B/P	G30/G31	LPG	28-30	25	35		
HU	I3B/P	G30/G31	LPG	50	42.5	57.5		
PL	I3B/P	G30/G31	LPG	37	25	45		
		G20/G25	Natural gas	20/25	17/20	25/30		
BE - FR	II2E+3+	G30/G31	LPG	28-30/37	20/25	35/45		
		G20	Natural gas	20	17	25		
DE	II2ELL3B/P	G25	Natural gas	20	18	25		
		G30/G31	LPG	50	42.5	57.5		
		G20	Natural gas	20	17	25		
:S - GB - GR - IE - IT - PT - SK	II2H3+	G30/G31	LPG	28-30/37	20/25	35/45		
CZ - DK - EE - FI - HR		G20	Natural gas	20	17	25		
LT - LV - RO - SE - TR	II2H3B/P	G30/G31	LPG	28-30	25	35		
		G20	Natural gas	20	17	25		
AT - CH	II2H3B/P	G30/G31	LPG	50	42.5	57.5		
	I2EK	G20/G25.3	Natural gas	20/25	17/20	25/30		
NL		G20/G25.3	Natural gas	20/25	17/20	25/30		
	II2EK3B/P	G30/G31	LPG	28-30	25	35		
		G20	Natural gas	25	18	33		
HU	II2HS3B/P	G25.1	Natural gas	25	18	33		
		G30/G31	LPG	28-30	25	35		

#### **Europe nozzles**

GAS G30 TYPE 28-30 mbar 28-30/37 mbar			30 nbar	_	30 nbar	G20 20 mbar				G25 20 mbar		G25.1 25 mbar		G25.3 25 mbar		
Model	Nozzle 1/100	Primary air (mm)														
GR435	200	30	185	20	180	15	290	15	275	10	320	10	320	10	310	10
GR635	220	12	210	12	200	10	340	7	320	7	360	7	360	7	330	7
GR635L	220	11	210	11	200	9	340	7	320	7	360	7	360	7	330	6
GR935	250	24	250	24	230	24	380	12	360	12	420	12	420	10	380	10

#### **USA/CANADA** nozzles

GAS TYPE		PROP	ANE	NATURAL	. GAS	
Model	Nozzle 1/100	Primary air (mm)	Pu	Nozzle 1/100	Primary air (mm)	Pu
GR435	215	30 (1.181 inch)	26.0 mbar / 10.45 inH <sub>2</sub> O	420	15 (0.59 inch)	5.0 mbar / 2 inH <sub>2</sub> O
GR635	235	12 (0.472 inch)	26.0 mbar / 10.45 inH <sub>2</sub> O	500	7 (0.276 inch)	4.5 mbar / 1.81 inH <sub>2</sub> O
GR635L	235	12 (0.472 inch)	26.0 mbar / 10.45 inH <sub>2</sub> O	500	7 (0.276 inch)	4.5 mbar / 1.81 inH <sub>2</sub> O
GR935	275	24 (0.945 inch)	26.0 mbar / 10.45 inH <sub>2</sub> O	580	12 (0.472 inch)	5.0 mbar / 2 inH <sub>2</sub> O

The values in the table (primary air distance and nozzle to be used) are valid on condition that:

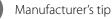
<u>natural gas</u>: the inlet pressure of the oven is 4 inH<sub>2</sub>O (10mbar) and the valve output must be adjusted to the pressure shown in the table. <u>propane</u>: the inlet pressure is 11 inH<sub>2</sub>O (27.5mbar) and the pressure at the valve outlet must be adjusted, completely excluding the pressure regulator (screw completely screwed in).

### Symbols used in the manual and on the labels applied to the machine



Indicates that caution is required when performing an operation described in a paragraph that bears this symbol. The symbol also indicates that maximum operator awareness is required in order to avoid unwanted or dangerous consequences

Reference to another chapter where the subject is dealt with in more detail.





Indicates that the surfaces marked with this symbol may be hot and must therefore be touched carefully

#### Dangerous voltage



The symbol identifies the terminals which, connected to each other, carry the various parts of a device or system to the same potential (not necessarily the earth potential)

Indicates that it is necessary to read carefully the paragraph marked with this symbol before installing, using and maintaining the equipment

### **Safety instructions**

- Read this guide carefully before installing the appliance, and keep it with care in an accessible place for any future consultation by the various operators.
- Moreover, the manual must always accompany the product through its life, even in case of transfer.
- · Before any movement or installation, check that the room is suitable and systems comply with the installation country standards and the specifications indicated on the appliance rating plate.
- All installation, assembly and non-routine maintenance operations must be performed exclusively by qualified technicians that are authorised by the Dealer, in compliance with the regulations in force in the user country, and with the regulations on work safety.
- The connection to the electricity and gas supply network and the connection systems must comply with the regulations in force in the country of installation of the equipment and must be performed by qualified personnel authorized by the Dealer. Failure to follow these regulations may cause damage or injuries, invalidates the guarantee and relieves the Manufacturer of all liability.
- These appliances are intended to be used for commercial applications, for example in restaurant kitchens, canteens, hospitals and commercial companies such as bakeries, butcher shops, etc., but not for the continuous and mass production of food. A use other than the stated one

is considered improper, potentially dangerous for people and animals and might permanently damage the appliance. The improper use of the equipment shall void the warranty

- Before performing any maintenance, replacing components or carrying out any routine/extraordinary cleaning, disconnect the electricity and gas supplies.
- Unauthorised actions, tampering or modifications that do not follow the information provided in this manual can cause damages, injuries or fatal accidents and null and void the warranty.
- It is forbidden to install the oven in environments at risk of explosion.
- Installation or maintenance that fails to comply with the instructions in this manual may cause damage, injury or fatal accidents.
- Persons not involved with the appliance installation may not pass through or stand in the work area during appliance assembly.
- The serial plate provides important technical information. This is vital in case of a request for maintenance or repair of the equipment: please do not remove, damage or modify it.
- Failure to follow these regulations may cause damage or even fatal injury, subsequently invalidating the guarantee and relieving the Manufacturer of all liability.
- ATTENTION To reduce the risk of fire, the appliance must be installed only in environments that meet the safety requirements of the current regulations and the gas company. Such environments must have adequate and constant

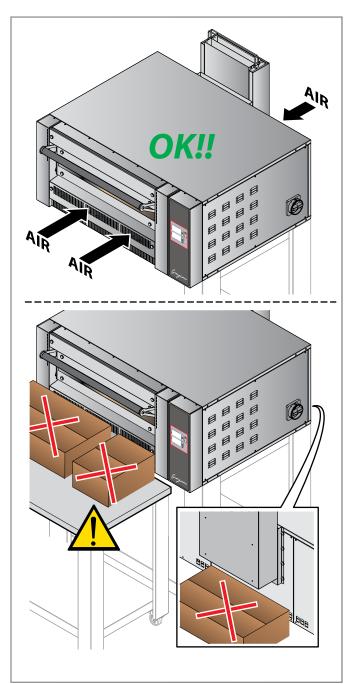
ventilation. Make sure that there is a continuous exchange of air from the outside to ensure proper combustion and to prevent the formation of volatile substances harmful to health (danger of suffocation!). The installation environments must be NON-combustible, without combustible materials within about 46 cm (18 inches) from the sides, front or rear of the appliance or within about 102 cm (40 inches) above the appliance. The appliance must be mounted on floors of non-combustible structures with non-combustible floors and surface finishes and without combustible materials in contact with the lower side, or on non-combustible plates or arches without combustible material in contact with the lower side. This structure must in any case extend no less than about 31 cm (12 inches) beyond the equipment on all sides.

- Before connecting the oven to the gas supply check:
- that the systems comply with the regulations in force in the country of use;
- on the additional plate, that the oven is set up and tested for the type of gas available;
- that the ventilation openings and the flue gas discharge of the equipment are not obstructed (e.g. by objects or walls);
- that the hose for connection to the oven gas fitting has adequate characteristics and diameter;
- that the components, not supplied by the Manufacturer, used for installation comply with the regulations in force in the country of use;

- that the gas system pressure complies with that indicated in the chapter "Heat output check" on page <u>37</u>.
- At the end of the connection and with the operating pressure, checks the tightness of the fittings to avoid the presence of leaks; please remember that this operation must be done using non-corrosive foaming substances and NOT using open flames.
- At the first start-up, a qualified technician authorized by the Dealer must perform an exhaust gas analysis, documenting the oven values found.

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### Transport

#### Fig. 6

Fitted with personal protection equipment, transport the appliance to the installation location.

Use a suitable vehicle capable of withstanding the weight of the same.

WEIGHT	GR435	GR635		
Net	176 kg/388 lbs	219 kg/482.8 lbs		
WEIGHT	GR635L	GR935		
Net	210 kg/463 lbs	271 kg/597.4 lbs		

Persons not involved with the appliance installation may not pass through or stand in the work area during the transport of the appliance. During the transport, pay particular attention to passing through openings and/or doors.

### **Preliminary operations**

#### Fig. 7

Carefully remove the protective film.

If any glue residue is left on the surfaces, remove it with soapy water but without any corrosive or abrasive products or sharp or pointed instruments.



Check that all the parts making up the oven are in good condition and without any faults or breakages, if that is not the case, contact the Manufacturer for the proce-

dures to follow and do not proceed with the installation.

### Packaging disposal

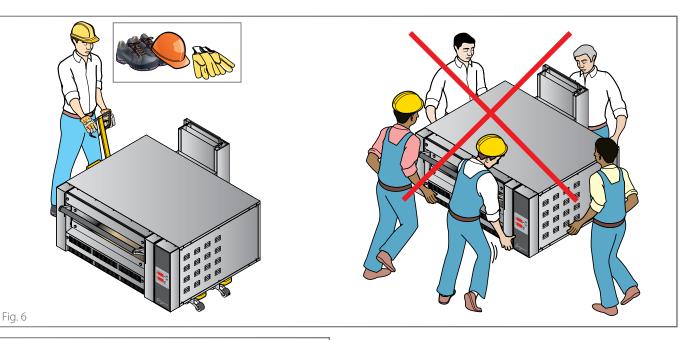
Before starting to install the oven, dispose of the packaging in accordance with the regulations in force in the country of installation.

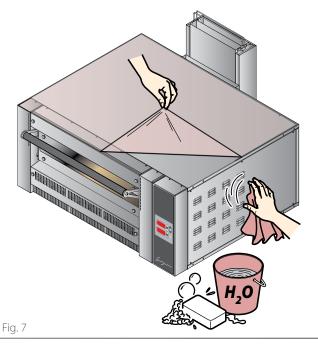


/!\

Caution, suffocation hazard! If left unattended, packaging could be potentially dangerous for both children and animals.

Caution, hindrance hazard! If left unattended, packaging could hinder vehicles and installers during assembly operations.





# Preparing the oven

Before installing the oven, it is necessary to fit the **rear flue** and the **light box cover** on the left side of the oven. The fixing and Allen screws required for assembly are contained in the bag supplied with the oven.

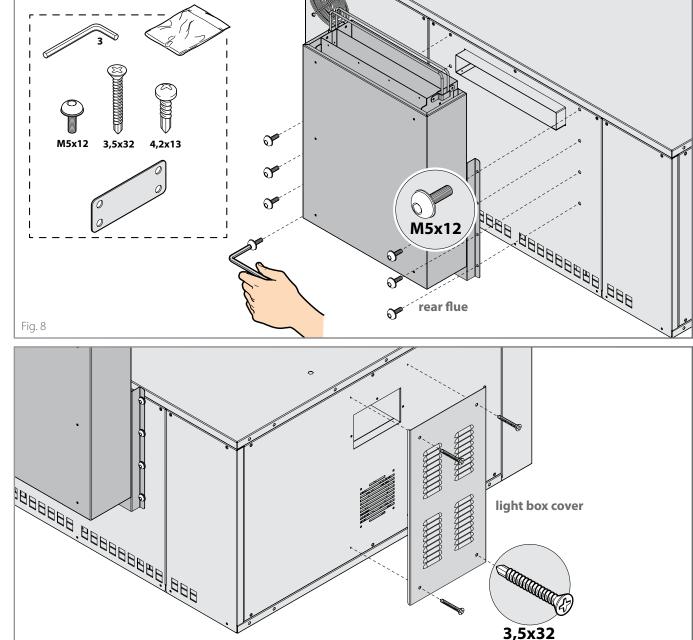
### Positioning

Fig. 10 Fig. 11

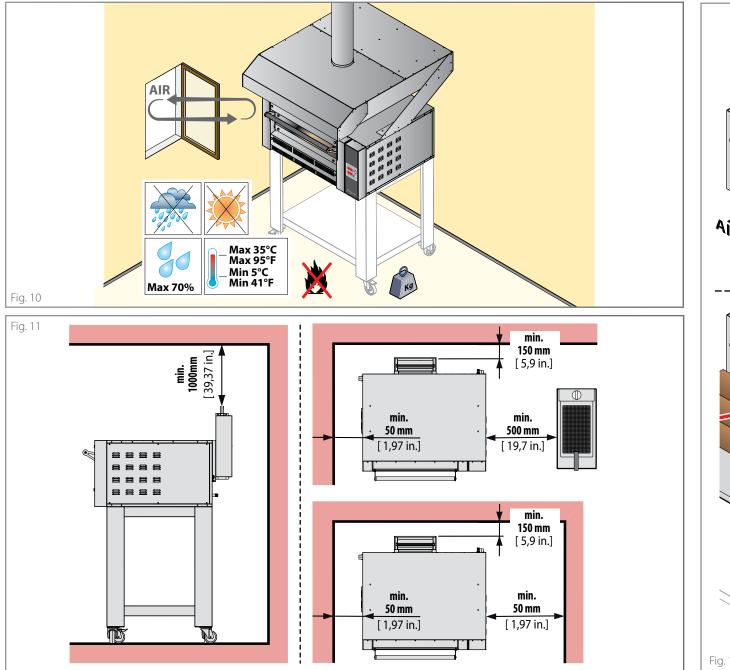
Make sure the installation room is adequate and comply with the minimum distances of the oven from **walls**, other **appliances**, **objects** and **combustible materials** (see page <u>5</u>). The minimum side distance is 50 mm [1.97 in.], however we recommend you leave a gap of 500 mm [19.7 in.] on the right side to make access to the electrical system easier. If this is not possible, in case of intervention, it will be necessary to move the oven from its housing with suitable systems.

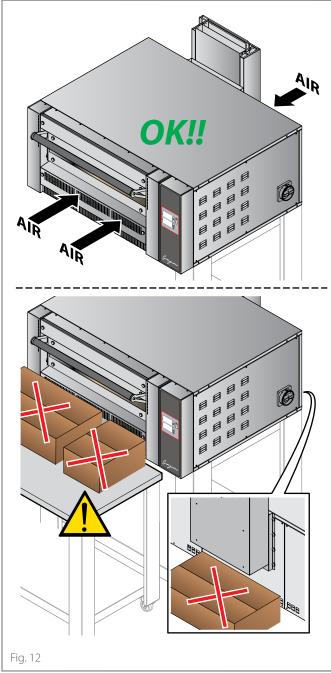
#### Fig. 12

Always make sure that the front and rear slits are free from objects, dust or anything else that could obstruct the flow of air through them.



26





#### Fig. 13

The oven must be placed on a base, built by the Manufacturer or by yourself that:

- is flame and heat resistant;
- is perfectly stable and level;
- withstands the weight of the appliance.

WEIGHT	GR435	GR635
Net	176 kg/388 lbs	219 kg/482.8 lbs
WEIGHT	GR635L	GR935
Net	210 kg/463 lbs	271 kg/597.4 lbs

(only for the American market)

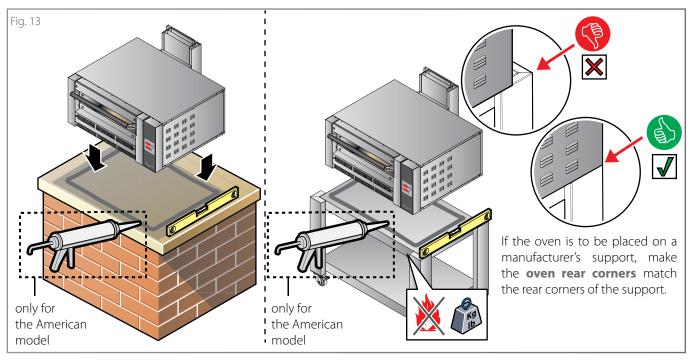
For a correct installation it is necessary to seal the gap created between the base of the oven and the support surface, using silicone, authorized for applications in the food sector, to be placed along the contour of the base of the oven and such as to prevent the accumulation of dirt where it is not possible to carry out regular cleaning given the small size of the access to the areas involved in the deposit of dirt.

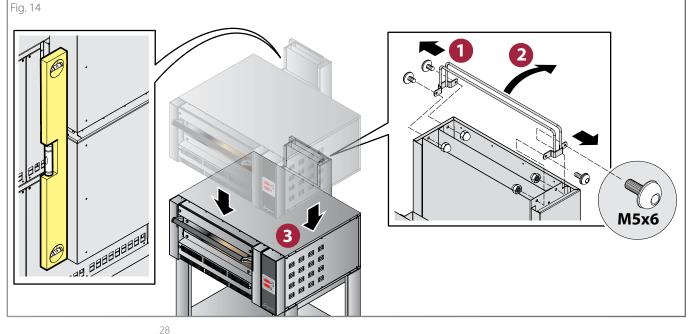
On request, supports ensuring perfect compatibility with the oven are available from the Manufacturer. For their correct assembly and fastening to the oven, please refer to the instruction sheet accompanying them.

### Positioning stacked ovens

Fig. 14
If stacked ovens need to be installed:
1 2 remove the "U" -shaped fall arrest bracket from the lower oven;

**3** stack the top oven so that the flues are perfectly aligned.





#### Fig. 15

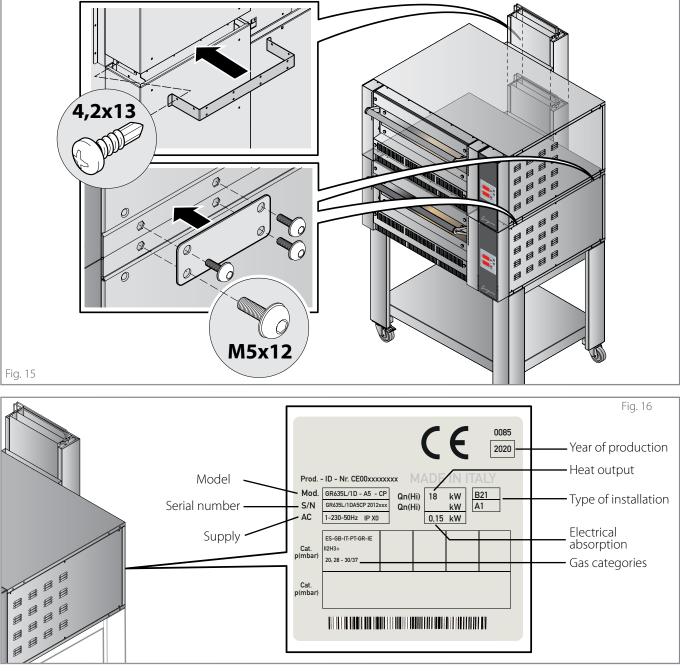
Then fit:

- the rear bracket blocking it with 12 screws 4.2x13 supplied;
- the 4 **side brackets** fixing the ovens (use the M5x12 screws supplied).

### Serial number plate reading

The serial number is on the right hand side of the appliance. It provides important technical information that is vital in case of a request for maintenance or repair of the appliance: please do not remove, damage or modify it.

The additional plate contains all the information relating to the gas connection. If changes have been made to the oven (e.g. change of nozzles to adapt to a different type of gas), they must be copied on this additional plate.



### **Smoke extraction**

#### Fig. 17 Fig. 18

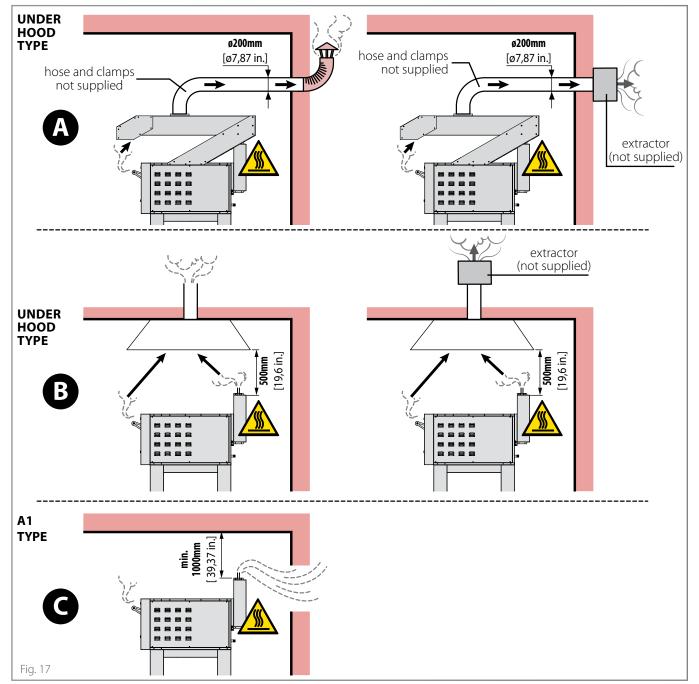
The oven is equipped with a smoke outlet located at the back for the evacuation of the vapours from the cooking chamber and the gases (you can find its exact position in the "Technical data" section starting on page <u>8</u>).

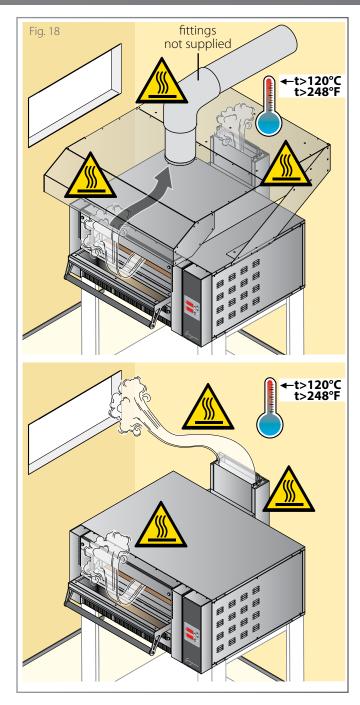
The gases from the cooking chamber and from the door opening can be evacuated:

A outside through the manufacturer's hood (under hood type). Using metal clamps (not supplied), connect to it a Ø200mm [Ø7.87in] evacuation tube (not supplied). The evacuation tube must be for the exclusive use of the equipment, in stainless steel resistant to high temperatures and must comply with the current regulations. The hood is not equipped with a suction motor, however it is possible to connect it to a **suitable user suction system** (the extractor, the evacuation tube and the clamps are NOT supplied by the manufacturer).

**B** outdoors by means of a user's hood, of adequate capacity; the choice of the model to be mounted is the responsibility of the installer who will have to choose it based on the oven to be installed, the size of the room and the reference standards; in any case, always maintain a minimum distance of 500 mm [19.69 in.] between the oven chimney and the hood filter system.

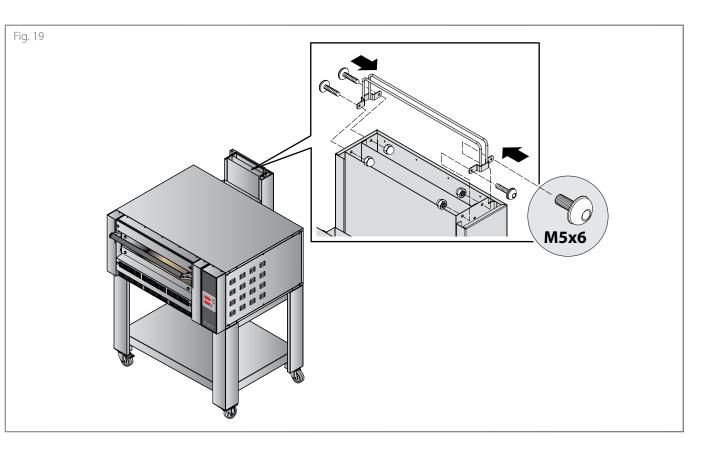
**G** directly in the installation room (type A1). In this case it is essential that there is **adequate ventilation** according to the regulations in force in the country of installation.





#### Fig. 19

To prevent the flue from being inadvertently covered, there is a "U"-shaped anti-fall bracket on the oven. If there isn't one, fit it by fixing it with screws as shown in the figure.



### **Electrical connection**

#### Fig. 20

The electrical connection must be carried out **exclusively** by qualified personnel after reading the safety warnings at the beginning of the manual.

Before installing the appliance, **check that systems comply with the regulations in force** in the country where it is going to be used and **with the specifica**-

tions indicated on the appliance rating plate on the RH side of the oven.

Appliances are supplied without either power cable **B** or plug **C**: they must both be fitted by qualified personnel. The cable must be only **of the type stated** and the plug fitted to it must be suitable for the consumption and connection of the oven to the electrical mains.

If there are two ovens, there are two power cables and two plugs to be connected A

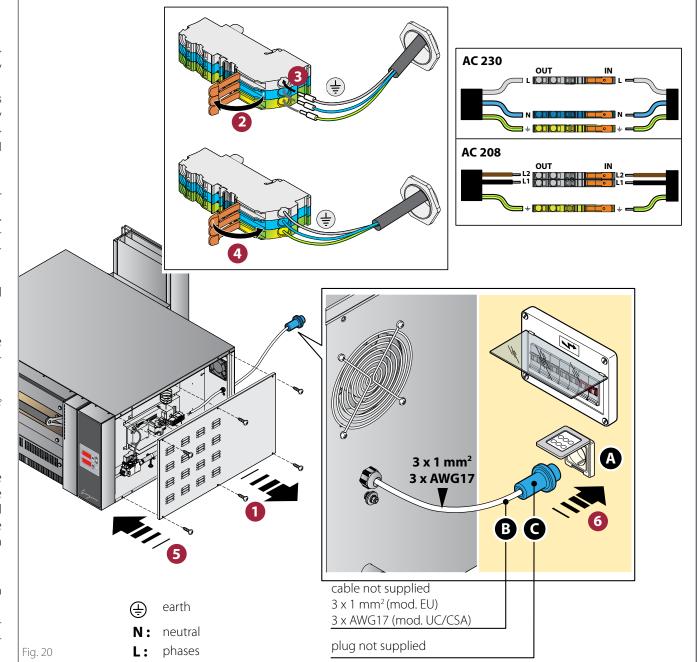
To connect the cable to the appliance, remove the RH side panel of the oven, let the cable through the cable gland provided and connect it to the terminal block correctly.

The following pages show the electrical diagrams: please refer to the one of the specific model to connect.

#### Fig. 21

For a correct electrical connection, the appliance must:

- be included in an equipotential system in compliance with the legislation in force. This connection must be made between the various devices with the terminal marked with the equipotential symbol . The cable must have a maximum cross-section of 10 mm<sup>2</sup> (in compliance with IEC EN 60335-2--42:2003-09) and must be yellow-green;
- must be **grounded** (=) to the mains (green-yellow wire);
- must be connected to a **thermal differential switch** in compliance with the regulations in force (0.03A A type);
- must be connected to an **omnipolar circuit breaker** allowing complete disconnection in overvoltage III category conditions.



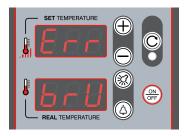
The Manufacturer accepts no liability for failure to comply with the above.

If required, the cable can be replaced by the Dealer or its technical service or by a person with similar qualifications to prevent any risk.

#### "Err brU" error

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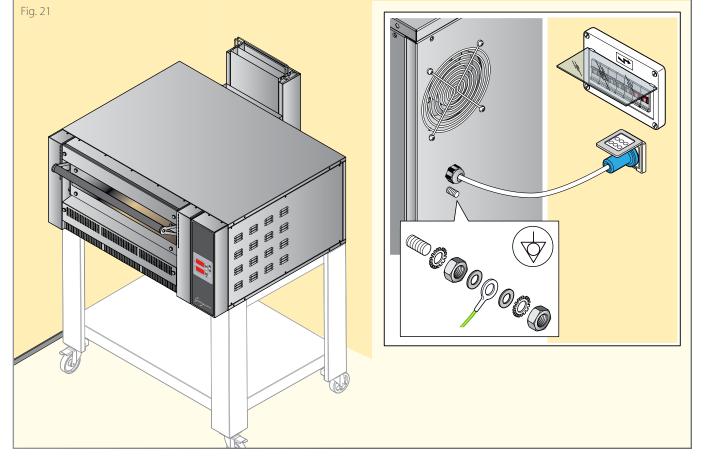
A safety system checks that the oven has ignited correctly: otherwise, three more ignition attempts are made automatically, at the end of which, if the oven does not ignite yet, the message **"Err brU"** appears on the displays and the burner goes into lockdown.



How to solve the problem:

- check that the system's gas stop-cock is open;
- press the **reset (burner reset)** button: the oven tries to turn on again;
- disconnect the power plug from the socket and reconnect it by turning it upside down (inversion between phase and neutral) or, in the case of an industrial plug, invert the phase and neutral on the plug itself, or on the terminal board of the oven electrical panel.

Model	Power supply (V)	Maximum absorbed power (W)	Connecting cable (Nxmm <sup>2</sup> )	Customer panel protection (nxA)	Heat output kW
GR435	AC 230 (EU vers.) 50/60Hz AC 208 (UL/CSA vers.) 50/60Hz	150 W	3 x 1 mm² 3 x AWG17	2x10	15 kW - 51182.12 Btu/h
GR635	AC 230 (EU vers.) 50/60Hz AC 208 (UL/CSA vers.) 50/60Hz	150 W	3 x 1 mm² 3 x AWG17	2x10	18.5 kW - 63124.62 Btu/h
GR635L	AC 230 (EU vers.) 50/60Hz AC 208 (UL/CSA vers.) 50/60Hz	150 W	3 x 1 mm <sup>2</sup> 3 x AWG17	2x10	18.5 kW - 63124.62 Btu/h
GR935	AC 230 (EU vers.) 50/60Hz AC 208 (UL/CSA vers.) 50/60Hz	150 W	3 x 1 mm <sup>2</sup> 3 x AWG17	2x10	24.5 kW - 83597.47 Btu/h



### **Gas connection**

#### Fig. 22

- The gas connection must be carried out **exclusively** by qualified personnel after reading the safety warnings at the beginning of the manual.
- Before connecting the oven to the gas supply:
- check that the systems comply with the regulations in force in the country of use;
- check on the additional plate that the oven is set up and tested for the type of gas available and that the nozzles are suitable for the type of gas. If that is not the case, check the chapter "Transformation and adaptation to other gas types" on page <u>39</u>.
- check that the ventilation openings and the flue gas discharge of the equipment are not obstructed (e.g. by objects or walls);

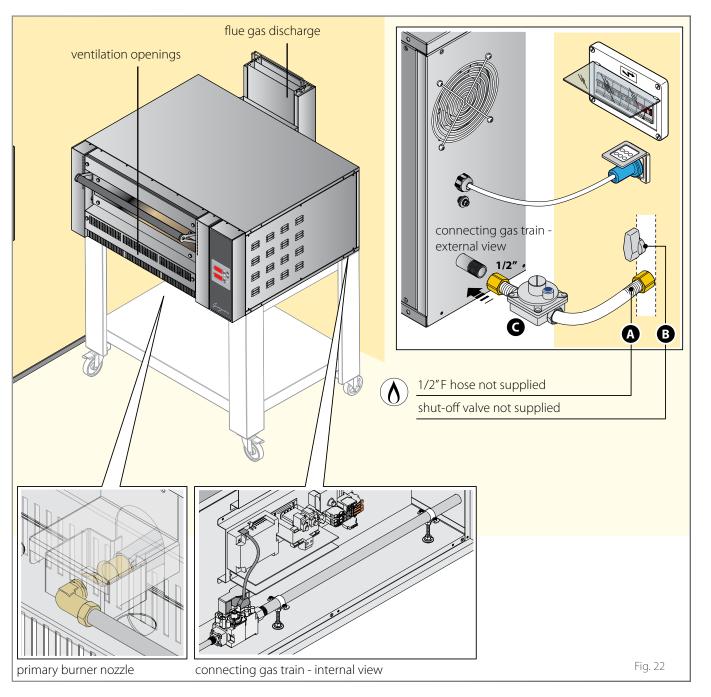
Connection to the gas distribution network must be made via a flexible stainless steel pipe (A) (not supplied) with the following characteristics:

- (EU versions) 1/2" F hose that complies with the UNI-CIG standard;
- (UL/CSA versions) NGO hose cylindrical American national thread for gas discharges or NGS hose cylindrical American national thread for gas.

Furthermore, the following components must be provided upstream of the connection near the oven (before installing them, make sure that they comply with the regulations in force in the country of use):

- a gas supply **shut-off valve B** (not supplied);
- a **pressure regulator (**American/Canadian market only, natural gas or propane models).

At the end of the connection and with the operating pressure, check the tightness of the fittings to avoid the presence of leaks; please remember that this operation must be done using non-corrosive foaming substances and **NOT using open flames.** 



#### Heat output check

With a gas meter and a chronometer it is possible to measure the heat input, calculated according to the following formula: **Heat output = power: operating heat value** (to be reguested from the local gas supply company).

It is important that the power is measured when the device is in a state of inertia.

Check that the detected heat output corresponds to that indicated in the table below.

#### **Supply pressure control**

Operation with the heat output resulting from the insertion of the nozzles provided and in relation to the pressure available in the network is permitted.

Fig. 23

Measure the supply pressure with a **pressure gauge** (e.g. U-tube, resolution 0.1 mbar min., definition 0.1 mbar min.) inserted on the **valve pressure plug.** 

To access it:

- remove the right side panel;
- remove the valve sealing screw and connect the pressure gauge;
- start the appliance and check if the reproduced pressure falls within the range of the allowed pressures; if the pressure in the network is not within the values shown below, notify the system operator and do not proceed with the commissioning of the oven before the cause has been discovered and eliminated.
- once the measurement has been completed, disconnect the pressure gauge;
- replace the sealing screw, check for any leaks then refit the right side panel.

#### Liquid gas or LPG

The operation is:

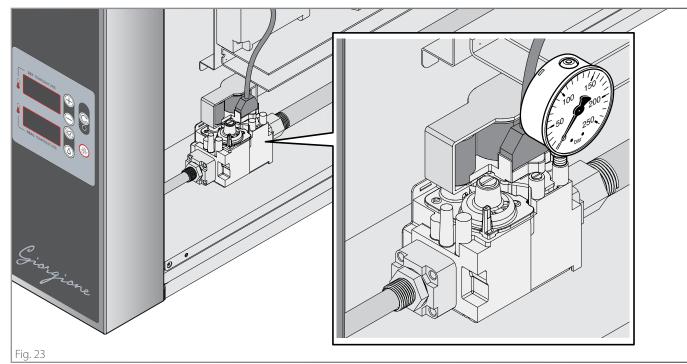
- allowed for a network pressure **between 20/25** and **35/45** mbar
- NOT allowed for a network pressure **lower than 20/25** mbar or higher than 35/45 mbar.

#### Group H natural gas (high heat output)

The operation is:

- allowed for a network pressure between 17 and 25 mbar,
- NOT allowed for a network pressure lower than 17 mbar or higher than 25 mbar.

Model	Liquid gas consumption (G30) kg/h	Natural gas consumption (G20) m³/h	Natural gas consumption (G25) m³/h	Natural gas consumption (G25.1) m <sup>3</sup> /h	Natural gas consumption (G25.3) m <sup>3</sup> /h	Heat output
GR435	1.18	1.58	1.84	1.84	1.80	15 kW - 51182.12 Btu/h
GR635	1.45	1.95	2.21	2.21	2.16	18.5 kW - 63124.62 Btu/h
GR635L	1.45	1.95	2.21	2.21	2.16	18.5 kW - 63124.62 Btu/h
GR935	1.93	2.59	3.01	2.76	3.01	24.5 kW - 83597.47 Btu/h



### Categories

					Supply pressure	
Country	Category	Gas	Туре	Rated (mbar)	Minimum (mbar)	Maximum (mbar)
LU - PL	I2E	G20	Natural gas	20	17	25
BE	I2E+	G20/G25	Natural gas	20/25	17/20	25/30
NO	I2H	G20	Natural gas	20	17	25
LU	13+	G30/G31	LPG	28-30/37	20/25	35/45
CY - HU - MT - NL - NO	13B/P	G30/G31	LPG	28-30	25	35
HU	I3B/P	G30/G31	LPG	50	42.5	57.5
PL	13B/P	G30/G31	LPG	37	25	45
		G20/G25	Natural gas	20/25	17/20	25/30
BE - FR	II2E+3+	G30/G31	LPG	28-30/37	20/25	35/45
	II2ELL3B/P	G20	Natural gas	20	17	25
DE		G25	Natural gas	20	18	25
		G30/G31	LPG	50	42.5	57.5
	II2H3+	G20	Natural gas	20	17	25
ES - GB - GR - IE - IT - PT - SK		G30/G31	LPG	28-30/37	20/25	35/45
CZ - DK - EE - FI - HR		G20	Natural gas	20	17	25
LT - LV - RO - SE - TR	II2H3B/P	G30/G31	LPG	28-30	25	35
		G20	Natural gas	20	17	25
AT - CH	II2H3B/P	G30/G31	LPG	50	42.5	57.5
	I2EK	G20/G25.3	Natural gas	20/25	17/20	25/30
NL		G20/G25.3	Natural gas	20/25	17/20	25/30
	II2EK3B/P	G30/G31	LPG	28-30	25	35
		G20	Natural gas	25	18	33
HU	II2HS3B/P	G25.1	Natural gas	25	18	33
		G30/G31	LPG	28-30	25	35

# Transformation and adaptation to other gas types

The type of gas for which the oven is designed and tested is stated on the additional data plate.

If the gas available is of another type, it is necessary to carry out some operations explained below.

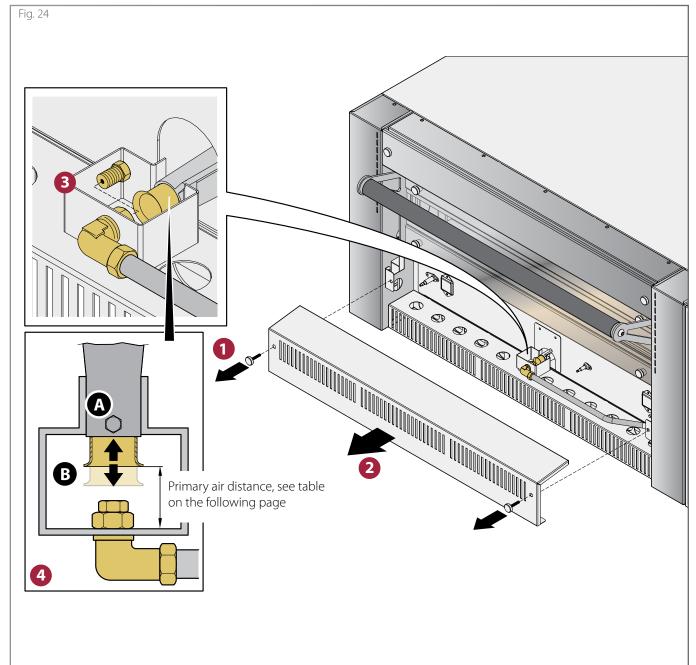
Fig. 24

**1 2** Remove the panel positioned under the oven door after unscrewing the screws that hold it.

**3** replace the main burner nozzle removing it with a suitable wrench; check in the following table the nozzle size suitable for the **oven model** and the **type of gas** you intend to use: the nozzle you need can be requested from the Reseller who will also supply a new sticker to update the additional rating plate with the type of gas used.

4 adjust the primary air flow unscrewing the fixing screw
A of the component B and move it forward or backward until the primary air distance indicated in the table on the next page is reached; then retighten the fixing screw.

After the adaptation, update the additional plate with the data of the gas used and carry out a new check of the oven (pressure measurement, flame check, etc.).



#### **Europe nozzles**

GAS TYPE	28-30	30 mbar 37 mbar		30 nbar	_	30 nbar		20 nbar		20 nbar		25 nbar	G2 25 r	5.1 nbar		5.3 nbar
Model	Nozzle 1/100	Primary air (mm)														
GR435	200	30	185	20	180	15	290	15	275	10	320	10	320	10	310	10
GR635	220	12	210	12	200	10	340	7	320	7	360	7	360	7	330	7
GR635L	220	11	210	11	200	9	340	7	320	7	360	7	360	7	330	6
GR935	250	24	250	24	230	24	380	12	360	12	420	12	420	10	380	10

#### **USA/CANADA** nozzles

GAS TYPE		PROP	ANE	NATURAL GAS				
Model	Nozzle 1/100	Primary air (mm)	Pu	Nozzle 1/100	Primary air (mm)	Pu		
GR435	215	30 (1.181 inch)	26.0 mbar / 10.45 inH <sub>2</sub> O	420	15 (0.59 inch)	5.0 mbar / 2 inH <sub>2</sub> O		
GR635	235	12 (0.472 inch)	26.0 mbar / 10.45 inH <sub>2</sub> O	500	7 (0.276 inch)	4.5 mbar / 1.81 inH <sub>2</sub> O		
GR635L	235	12 (0.472 inch)	26.0 mbar / 10.45 inH <sub>2</sub> O	500	7 (0.276 inch)	4.5 mbar / 1.81 inH <sub>2</sub> O		
GR935	275	24 (0.945 inch)	26.0 mbar / 10.45 inH <sub>2</sub> O	580	12 (0.472 inch)	5.0 mbar / 2 inH <sub>2</sub> O		

The values in the table (primary air distance and nozzle to be used) are valid on condition that:

natural gas: the inlet pressure of the oven is 4 inH<sub>2</sub>O (10mbar) and the valve output must be adjusted to the pressure shown in the table. propane: the inlet pressure is 11 inH<sub>2</sub>O (27.5mbar) and the pressure at the valve outlet must be adjusted, completely excluding the pressure regulator (screw completely screwed in).

### Pre-testing and final inspection

The oven is checked and tested in the Manufacturer's plant before being delivered to the customer.

After installing the appliance, check and mark with a " $\sqrt{"}$ " all the boxes of the table on the side: this will confirm the installation is complete and correct.

### **Checking the operation**

Start the appliance following the instructions in the "Use and Maintenance" manual and monitor it during the whole test. **The first time you use the oven**, we recommend you set the temperature at **150°C - 302°F** for at least **8 hours, without placing any food inside.** 

In this first phase, because of the humidity evaporating from the insulating materials, the oven will give out unpleasant smells and fumes that will gradually

disappear during the following operating cycles.

Finish off explaining to the user how to use the appliance in an optimal and safe way and how to carry out ordinary maintenance and cleaning.

 Positioning checks									
Is the installation room adequate and compliant with regulations? (correct ventilation, maximum/minimum tempera- ture, etc.)									
Is the appli	ance perfectly level?								
Is the appli	ance resting on the b	ase underneath and i	s this suitable to supp	ort the weight of the	oven?				
Have the m	ninimum distances sta	ated been complied v	vith?						
Has the pro	otective film been ren	noved from the surfac	ces?						
Are there any non-compliant objects in the oven chamber (e.g. installation tools, user manuals, packaging, etc.)? If so, remove them!									
		Electrical che	cks (before the igni	tion)					
Does the m	nains voltage match t	he data on the rating	plate?						
Do electric connections meet current regulations in the country of installation and follow the diagrams supplied?									
		Gas connectio	on checks (after igni	tion)					
	start-up, a qualified te alues found.	echnician authorized b	by the Dealer must pe	rform an exhaust gas	analysis, documenting				
Using for example the volumetric method, check if the gas flow detected after starting the burners for about 10 mir utes (operating condition) corresponds to what is shown in the table:									
Model	Liq. gas consumption (G30) kg/h	Natural gas consumption (G20) m3/h	Natural gas consumption (G25) m3/h	Natural gas consumption (G25.1) m3/h	Natural gas consumption (G25.3) m3/h				
GR435	1.18	1.58	1.84	1.84	1.80				
GR635	1.45	1.95	2.21	2.21	2.16				
GR635L	1.45	1.95	2.21	2.21	2.16				
GR935	1.93	2.59	3.01	2.76	3.01				

Check the appearance of the flame and the distance of the primary air. Checking the appearance of the flame must be carried out after about 15 minutes of operation at maximum power. **The flame must be blue**, it must not show yellow tips and it must be stable at the base. A flame tending to yellow or a short flame tending to detach from the burner highlights an incorrect adjustment of the primary air.

	act non the burner nightights at theoreet adjustment of the printary at.						
$\checkmark$	Smoke outlet checks						
	Is the appliance positioned correctly under a suitable hood?						
	Is the current chimney flue adequate and does it comply with the current regulations?						
$\checkmark$	Miscellaneous						
	Does the user have all the documentation relative to the oven?						
	Has the user been correctly trained on the use and maintenance of the oven?						

### Alarms

In the event of faults or malfunctions, the board displays can show the following error messages:

DISPLAYED MESSAGE		PROBABLE CAUSES	SOLUTIONS
		The thermocouple is disconnected. If this alarm appears, the burner is deactivated.	<ul> <li>Check the correct position of the thermocouple connector.</li> <li>Check the connection of the cables on the thermocouple connector.</li> <li>If the first two solutions are not effective, replace the probe and position it so that it protrudes up to the middle of the square positioned at the rear of the oven chamber (rear probe support).</li> </ul>
Thermocouple alarm The lower display shows <b>"Err".</b>			
<b>Board temperature probe alarm</b> The top display shows <b>"Err"</b> and the bottom shows <b>"rEF".</b>	SET TEMPERATURE	The NTC probe for measuring the board and cold joint temperature is faulty.	Replace the board.

DISPLAYED MESSAGE	PROBABLE CAUSES	SOLUTIONS
Board temperature pre-alarm The top display shows "ALL" and the bottom shows "ntC".	Overtemperature pre-alarm detected on the board. In the event of this pre-alarm occurring, the board continues to operate normally.	<ul> <li>Check the minimum distances of the oven from the walls (minimum 5cm) and the absence of other hot equipment (e.g. ovens, fryers) near the control board.</li> <li>Check that the fan is working correctly.</li> </ul>
Board temperature error The top display shows "Err" and the bottom shows "ntC".	Overtemperature error detected on the board. If this error appears, the burner is deactivated.	<ul> <li>Check the minimum distances of the oven from the walls (minimum 5cm) and the absence of other hot equipment (e.g. ovens, fryers) near the control board.</li> <li>Check that the fan is working correctly.</li> </ul>
The top display shows <b>"Err"</b> and the bottom	A safety system checks that the oven has ignited correctly: otherwise, three more ignition attempts are made automatically, at the end of which, if the oven does not ignite yet, the message "Err brU" appears on the displays and the burner goes into lockdown.	<ul> <li>Check that the system's gas stop-cock is open;</li> <li>press the reset (burner reset) button: the oven tries to turn on again;</li> <li>if the error persists: disconnect the power plug from the socket and reconnect it by turning it upside down (inversion between phase and neutral).</li> <li>In the case of an industrial plug, reverse phase and neutral on the plug, or reverse phase and neutral on the terminal board of the oven electrical panel.</li> <li>Press the reset button again (burner reset): the oven tries to turn on again.</li> </ul>