

GBS **COMBISTAR** **FX**

INSTALLATION GUIDE

FX61G2
FX101G2
FX82G2
FX122G2

PROFESSIONALS REQUIRED:

ATTENTION : GAS FITTER

**GAS REGULATOR MUST BE
INSTALLED ON OVEN**

- **PLUMBING – ALL DOCUMENTS / COMPONENTS INSIDE OVEN**

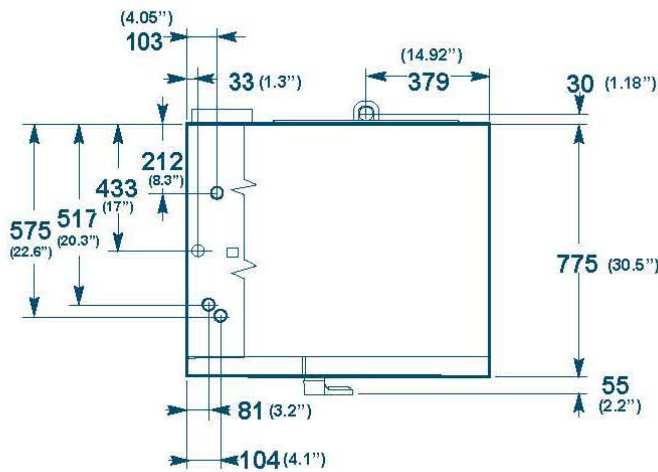
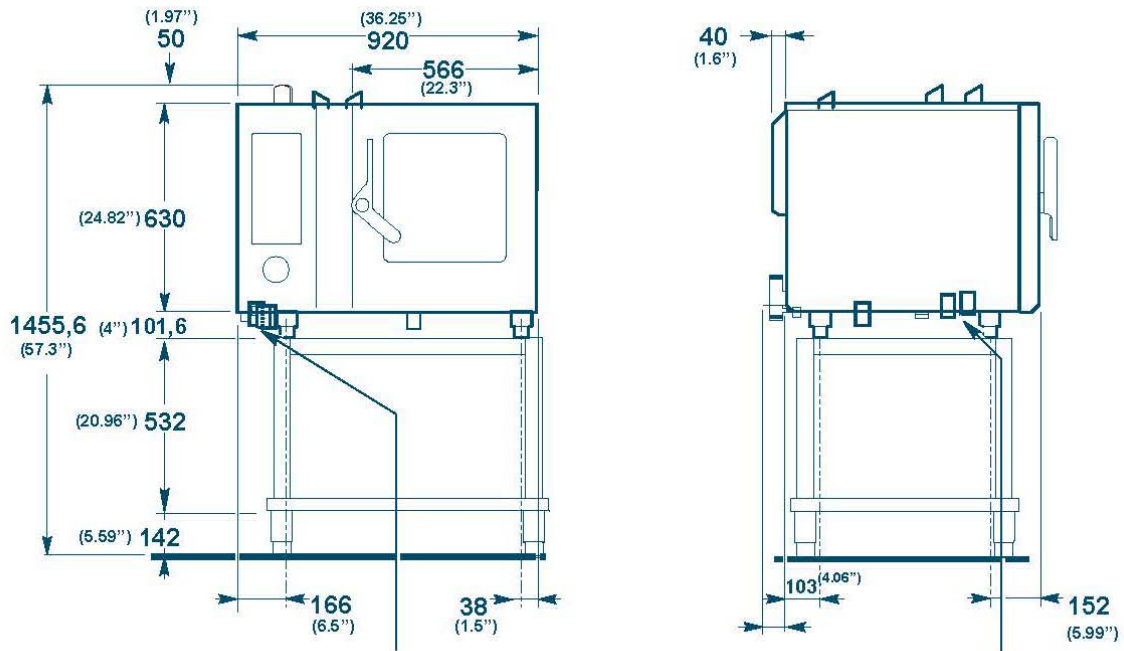
- **ELECTRICIAN**

COPPER PLUMBING ONLY

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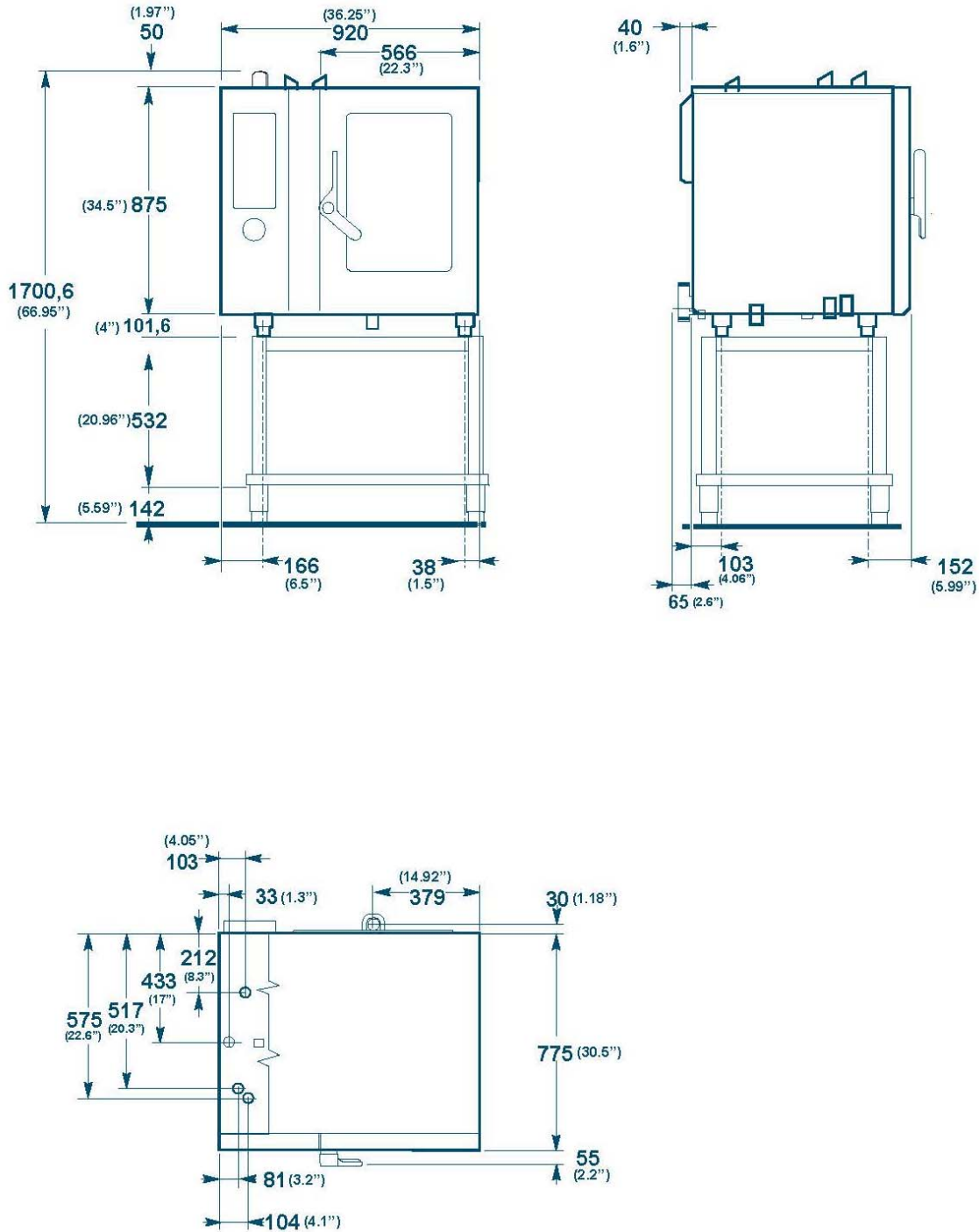
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MODEL NO: GBS FX61G2



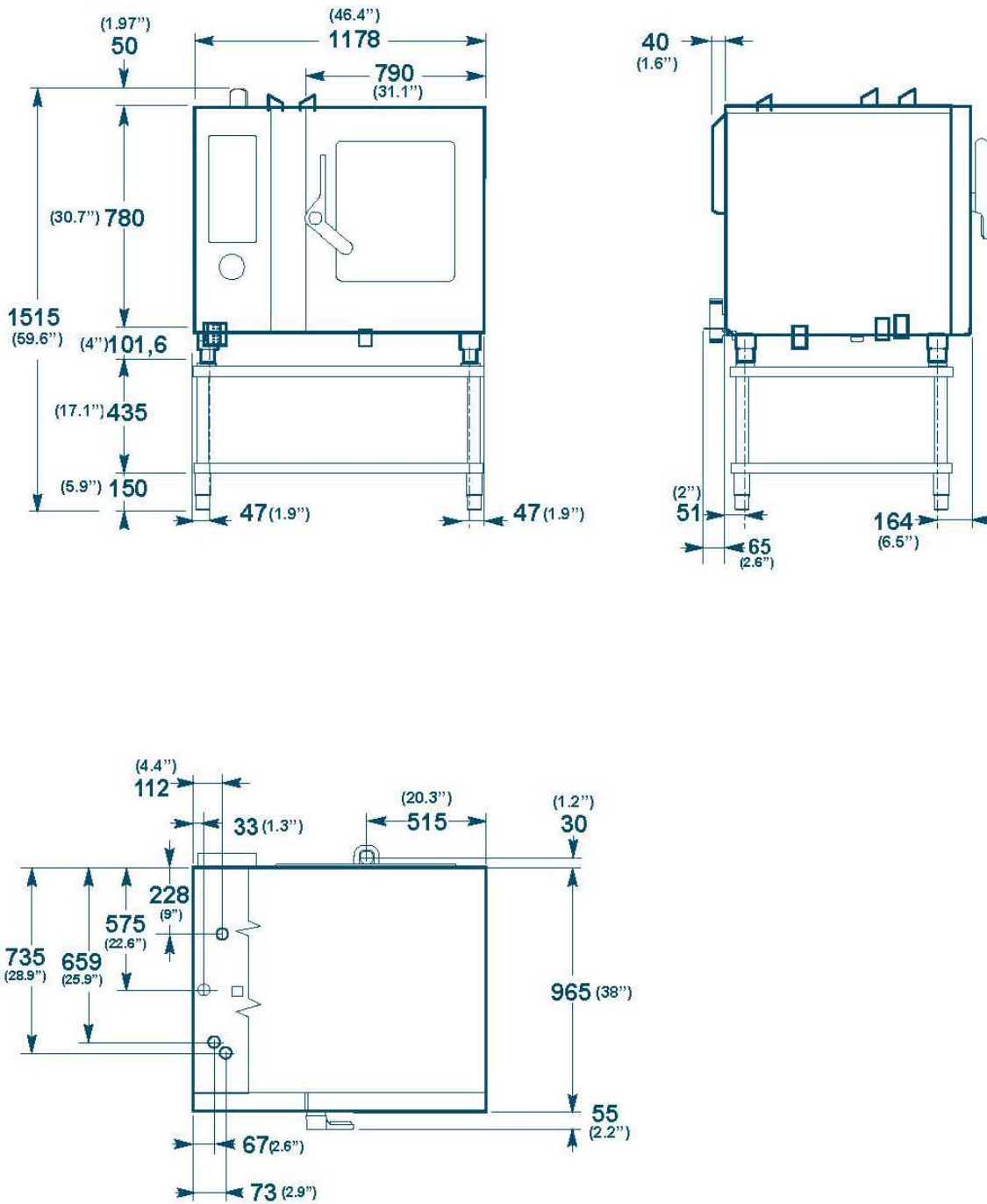
Oven Dimensions:	920 x 776 x 1455.6 (mm)	36.25 x 30.57 x 51.37 (in.)
Cooking Chamber Dimensions:	645 x 650 x 510 (mm)	25.41 x 25.61 x 29.73 (in.)
Crated Dimensions:	1010 x 965 x 1016 (mm)	39.8 x 38 x 40 (in.)
Electrical Supply:	120 V, 576 W, 4.8 A, 60 Hz, 1 ph	
Rated Power:	50,000 BTU	
Weight Net:	140 kg	
Crated Weight:	152 kg	
Capacity:	G/N containers: 6 1/1	

MODEL NO: GBS FX101G2



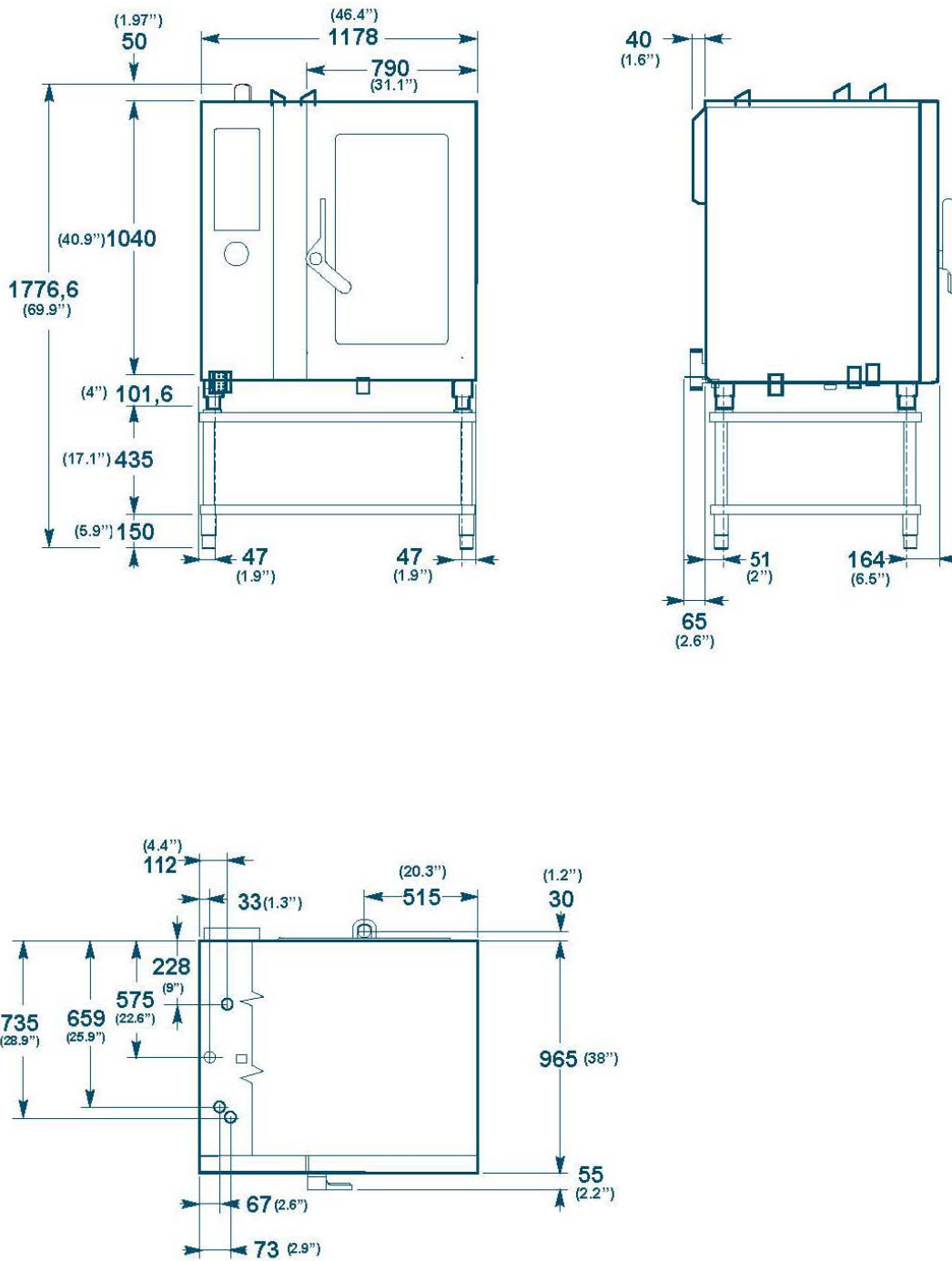
Oven Dimensions:	920 x 776 x 1700.6 (mm)	36.25 x 30.57 x 66.96 (in.)
Cooking Chamber Dimensions:	645 x 650 x 755 (mm)	25.41 x 25.61 x 29.75 (in.)
Crated Dimensions:	1010 x 965 x 1256 (mm)	39.77 x 38 x 49.45 (in.)
Electrical Supply:	120 V, 828 W, 6.9 A, 60 Hz, 1 ph	
Rated Power:	71,000 BTU	
Weight Net:	170 kg	
Crated Weight:	182 kg	
Capacity:	G/N containers: 10 1/1	

MODEL NO: GBS FX82G2



Oven Dimensions:	1178.2 x 965 x 1516.6 (mm)	46.4 x 38 x 59.7 (in.)
Cooking Chamber Dimensions:	890 x 825 x 665 (mm)	35.07 x 32.51 x 26.2 (in.)
Crated Dimensions:	1180 x 1316 x 1648 (mm)	46.45 x 51.82 x 64.9 (in.)
Electrical Supply:	20 V, 900 W, 7.5 A, 60 Hz, 1 ph	
Rated Power:	92,500 BTU	
Weight Net:	243 kg	
Crated Weight:	263 kg	
Capacity:	G/N containers: 8 2/1 16 1/1	

MODEL NO: GBS FX122G2



Oven Dimensions:	1178 x 965 x 1776.6 (mm)	46.4 x 38 x 69.94 (in.)
Cooking Chamber Dimensions:	90 x 825 x 925 (mm)	35.07 x 32.51 x 36.45 (in.)
Crated Dimensions:	1320 x 1180 x 1900 (mm)	51.97 x 46.45 x 74.80 (in.)
Electrical Supply:	120 V, 960 W, 11.5 A, 60 Hz, 1 ph	
Rated Power:	115,000 BTU	
Weight Net:	260kg	
Crated Weight:	300kg	
Capacity:	G/N containers: 12 2/1 ; 24 1/1	

Positioning:

Left side clearance: 19.7 inches (50 cm)
 Right : 4 inches (10 cm)
 Back : 4 inches (10 cm)

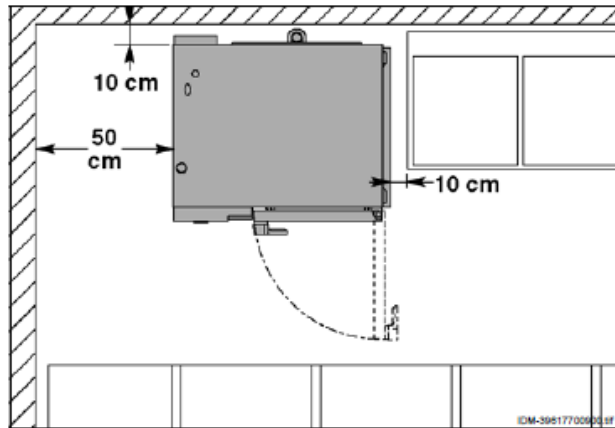
i Important

Install the appliance on a stand (available as an optional) and position it as shown in the diagram (For version FX61-101-82-122 only).

If the oven is installed in the middle of the room, please leave at least a distance of 50 cm between its back and other appliances.

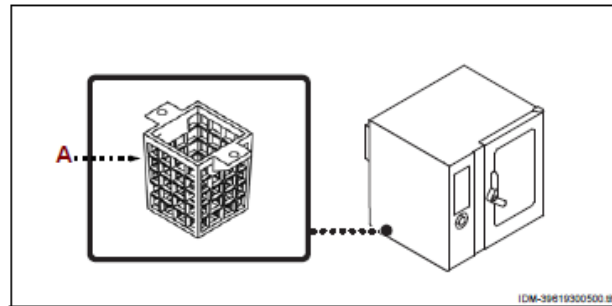
i Important

All clearance requirements are the same for combustible or non combustible constructions. Suitable for installation on combustible floors.

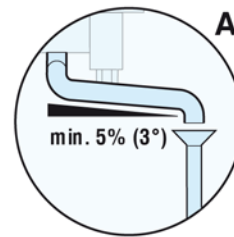
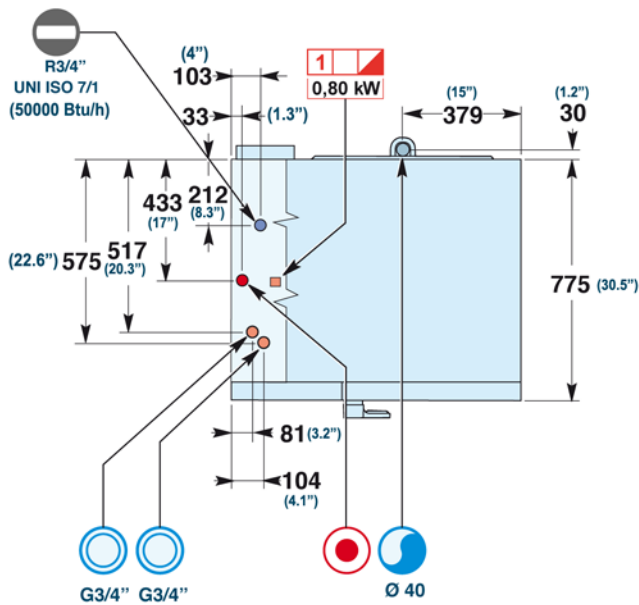
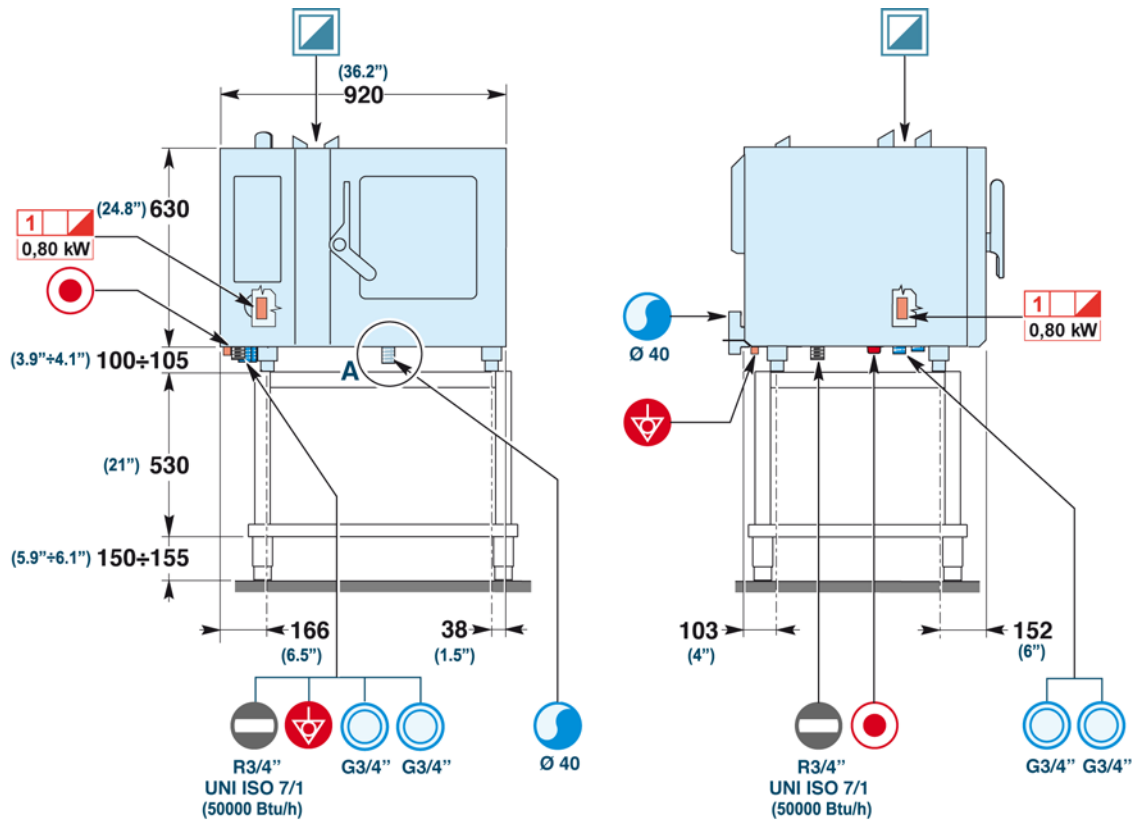


i Important

During installation of the appliance, take care to prevent all possible obstruction of the combustion air intake (A).



OVEN CONNECTION DIAGRAM (GBS FX61G2)



Gas input
Entrée Gas

Electric connection
Branchement électrique

Cold water input
Entrée eau froide

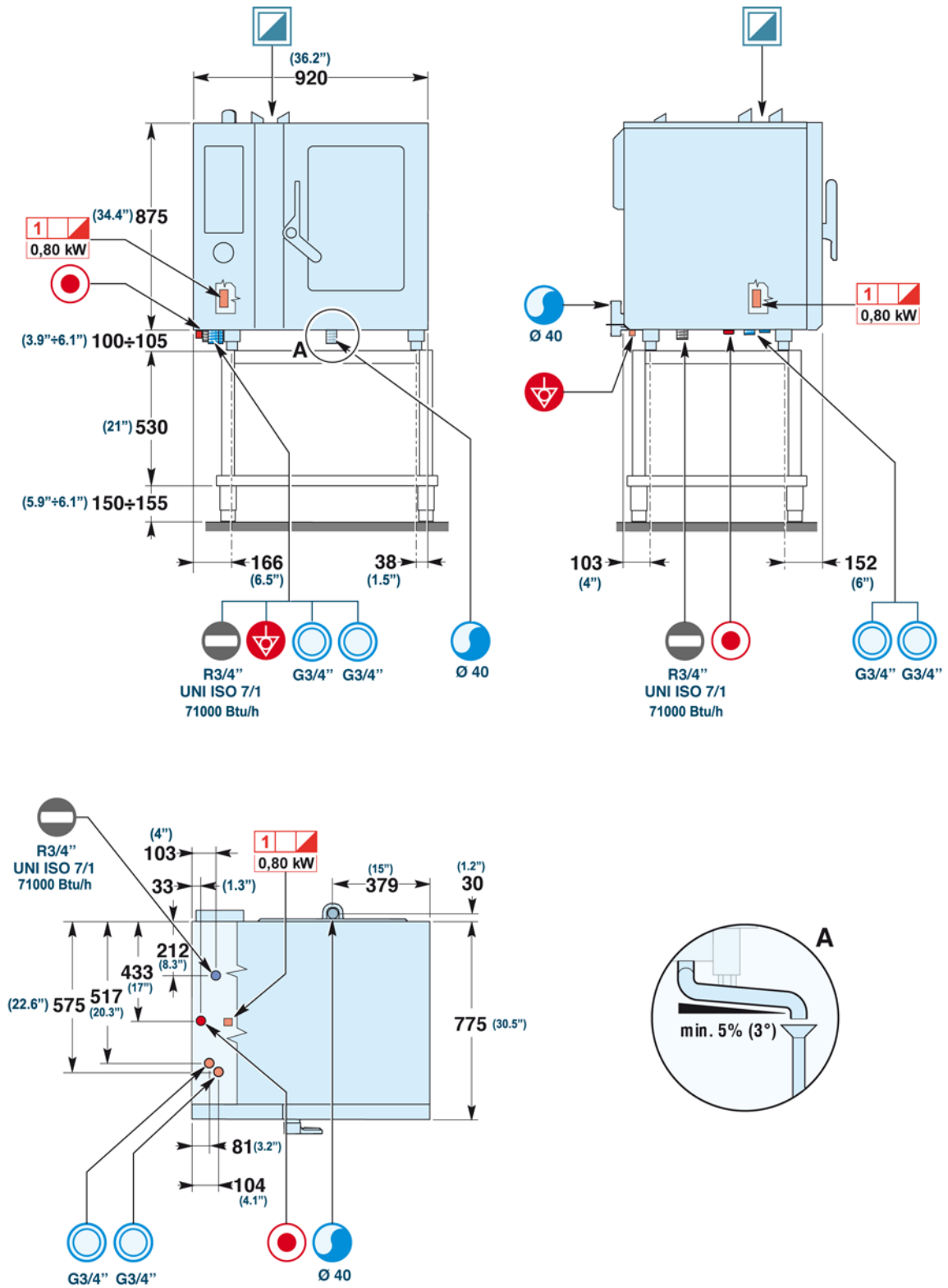
Terminal board
Plaque à bornes
1-N 120 V

Flue gas drain
Degagement gas brules

Equipotential terminal
Borne équipotential

Water drain
Vidage eau

OVEN CONNECTION DIAGRAM (GBS FX101G2)



Gas input
Entrée Gas

Electric connection
Branchement électrique

Cold water input
Entrée eau froide

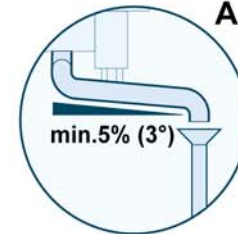
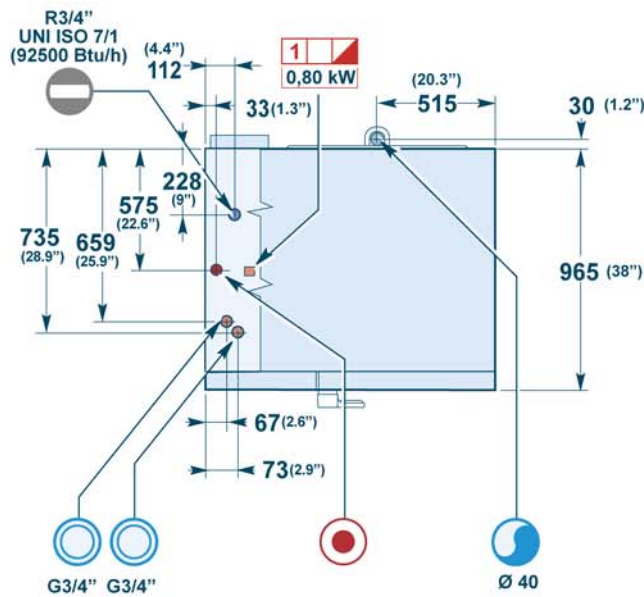
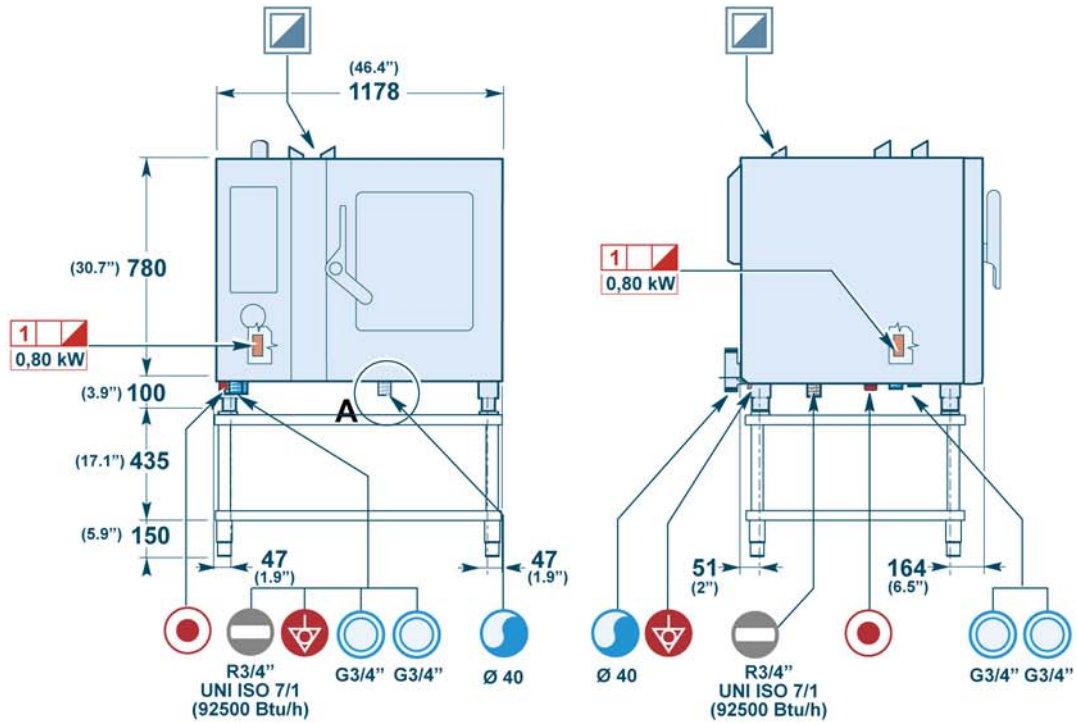
Terminal board
Plaque à bornes
1-N
120 V

Flue gas drain
Degagement gas brules

Equipotential terminal
Borne équipotentiel

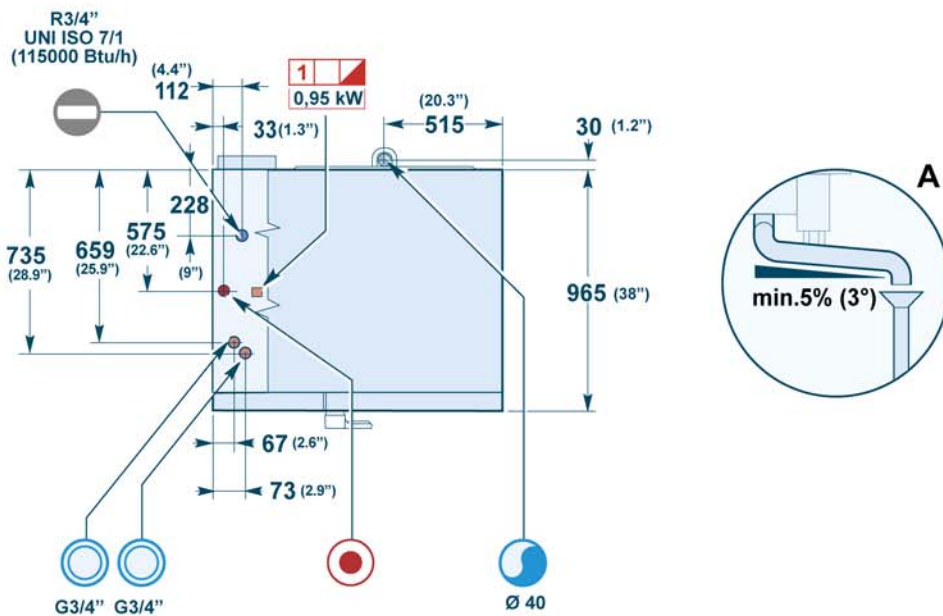
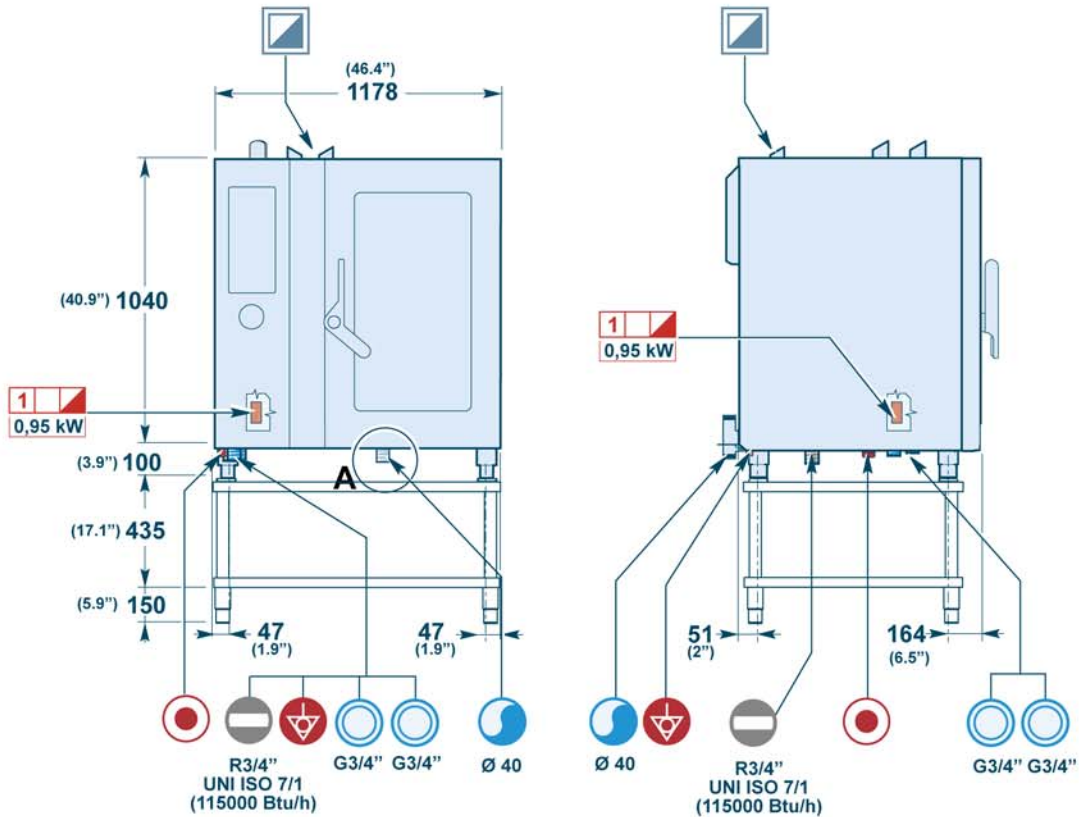
Water drain
Vidage eau

OVEN CONNECTION DIAGRAM (GBS FX82G2)



- Gas input
Entrée Gas
- Cold water input
Entrée eau froide
- Electric connection
Branchement électrique
- Terminal board
Plaque à bornes
1-N 120 V
- Flue gas drain
Degagement gas brules
- Water drain
Vidage eau
- Equipotential terminal
Borne équipotiel

OVEN CONNECTION DIAGRAM (GBS FX122G2)



- Gas input
Entrée Gas
- Cold water input
Entrée eau froide
- Electric connection
Branchement électrique
- Terminal board
Plaque à bornes
1~ N ⊥
120 V
- Flue gas drain
Degagement gas brules
- Water drain
Vidage eau
- Equipotential terminal
Borne équipotentiel

WATER CONNECTION -- ADJUST WATER PRESSURE

Caution - warning

Make the connection in compliance with the relevant legal requirements, using appropriate and recommended materials.

Water supply connection

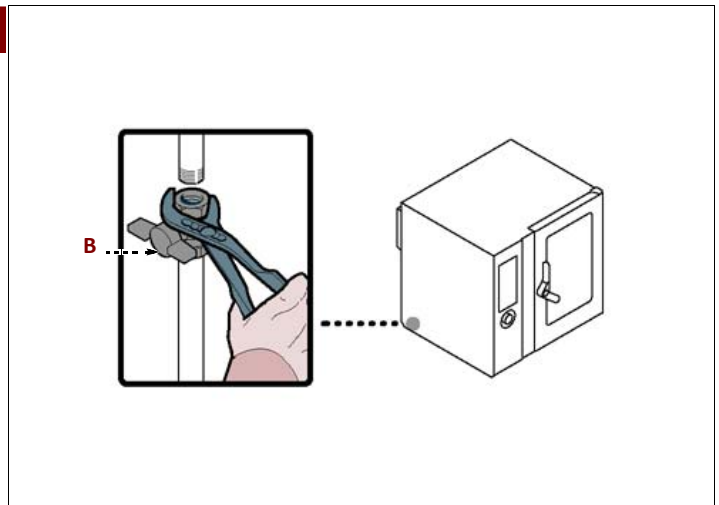
Important

This appliance is to be installed to comply with the applicable federal, state, or local plumbing codes having jurisdiction.

Connect the mains line to the appliance's connection pipe, fitting a shut-off tap **(B)** to allow the watersupply to be cut off when necessary.

Important

The tap **(B)**, not supplied with the appliance, must be installed in an easily accessible position and its status (on or off) must be obvious at a glance.



Caution - warning

The appliance must be supplied with drinking wa-ter having the characteristics shown in the table. If these characteristics are not complied with the appliance might suffer damage; a water treat-ment device should therefore be installed.

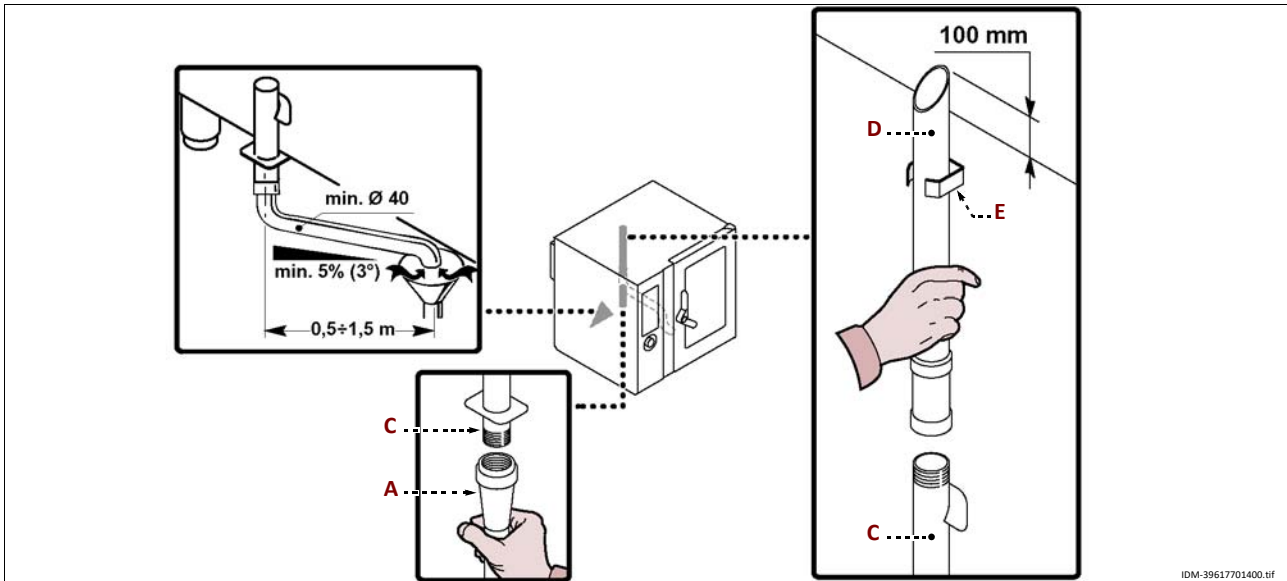
Description	Value
Pressure	200÷400 kPa (2÷ 4 bar) (*)
Water flow rate (l/h)	9 l/h (FX 61) (*)
	12 l/h (FX 101) (*)
	17,5 l/h (FX 82) (*)
	17,5 l/h (FX 122) (*)
	24 l/h (FX 201) (*)
	32 l/h (FX 202) (*)
pH	7÷7.5
Conductivity	< 200µS/cm
Hardness	9÷13°f (5÷7°d, 6.3÷8.8°e, 90÷125 ppm)
Salt and metallic ion content	
Chlorine	<0,1 mg/l
Chlorides	< 30 mg/l
Sulphates	< 40 mg/l
Iron	< 0,1 mg/l
Copper	< 0.05 mg/l
Manganese	< 0,05 mg/l

(*) The value refers to the amount of water needed for steam production inside the cooking chamber.

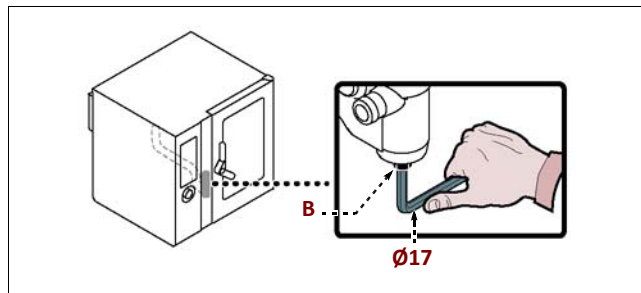
WATER DRAIN CONNECTION

To carry out this operation, proceed as follows.

1. Connect the mains water pipe (A) to the appliance's connection pipe (C).
2. Connect the vent pipe (D) to the appliance connection pipe (C) and fix it to the support (E).



The appliance's drain line is fitted with the plug (B) allowing discharge of the waste deposited.



ELECTRICAL CONNECTION

The appliance must be connected grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Ca-nadian Electrical Code, CSA C22.2.

Important

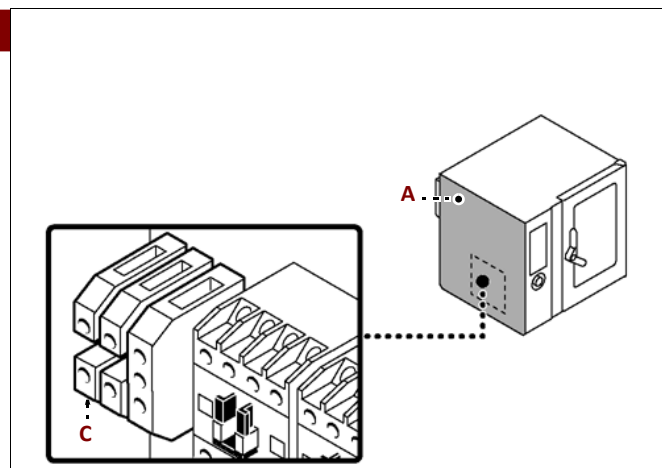
The connection must be made by authorised, skilled personnel, in accordance with the relevant legal requirements, using appropriate and specified materials. The appliance is supplied with operating voltage 208V/3 or 240V/3 (available on request only for model FX61-101-82-122-201) or 480V/3 for FX202 (available on re-quest only for model FX101-82-122) (see attached wiring diagrams).

Caution - warning

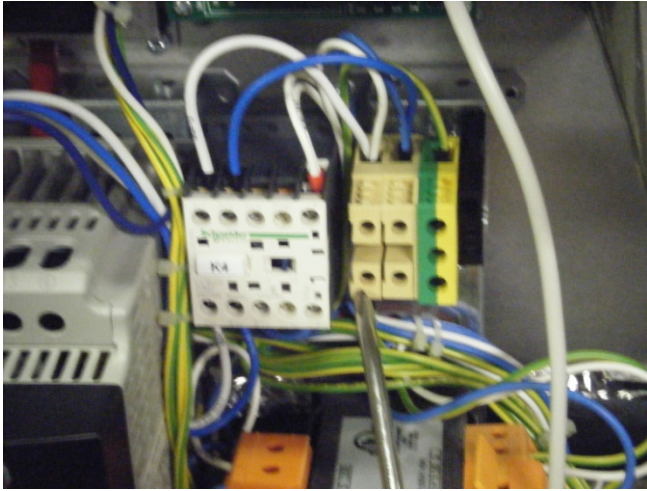
Before doing any work, cut off the mains electricity supply.

Connect the appliance to the mains electricity supply as follows.

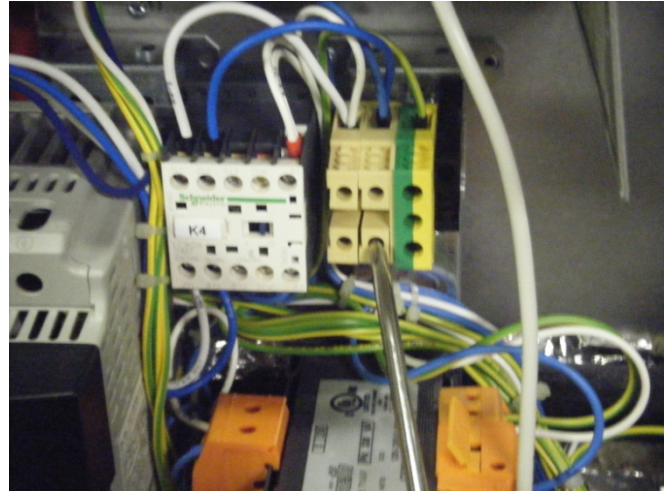
1. Undo the screws and remove the side panel (A).
2. Connect field wires to the appliance's terminal board (C), in accordance with the electrical system di-agram provided at the back of the manual and using a cable with the following characteristics.
 - a. Temperature of use: $\geq 75^{\circ}\text{C}$ (167°F).
3. Replace the panel (A) and retighten the screws when the operation is complete.



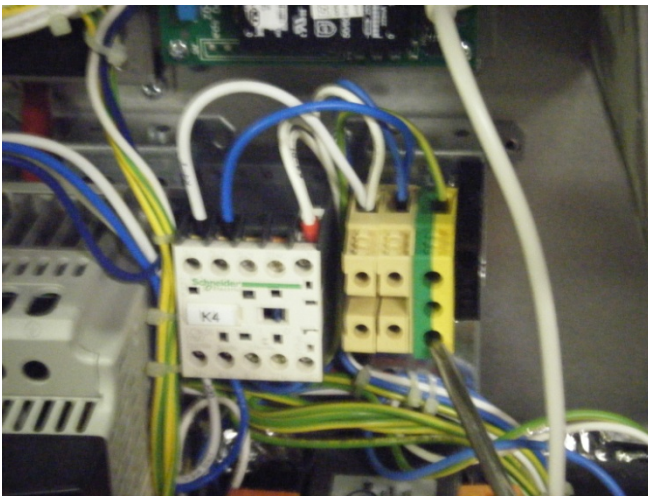
ELECTRICAL CONNECTION – FX GAS OVENS



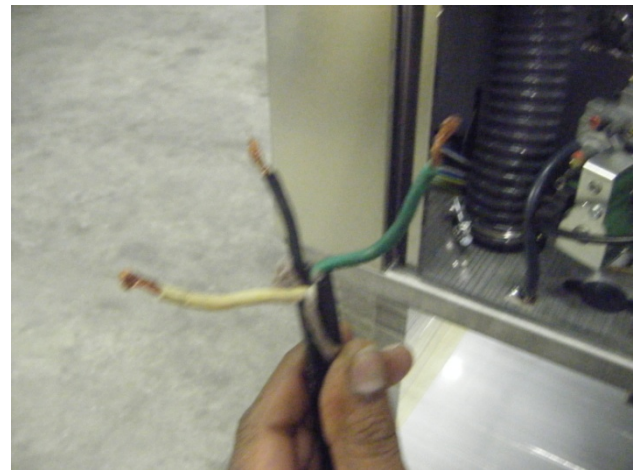
LIVE WIRE POSITION



NEUTRAL WIRE POSITION



GROUND WIRE POSITON



3 WIRE CONNECTION
 IN A 3 WIRE CONNECTION – THE BLACK WIRE IS USUALLY THE LIVE WIRE, THE WHITE WIRE IS USUALLY THE NEUTRAL AND THE GREEN WIRE IS USUALLY THE GROUND.

IMPORTANT

THESE OVENS ARE VERY SENSITIVE SO THE WIRE CONNECTION MUST BE CORRECT.

YOU MUST CHECK THE 3 WIRE CONNECTION CABLE TO DETERMINE WHICH WIRE IS THE LIVE AND WHICH WIRE IS THE NEUTRAL.

THIS IS DONE BY USING YOUR MULTI-METER. TOUCH ONE OF THE LEADS TO THE BLACK WIRE AND THE OTHER LEAD TO A GROUND POSITION ON THE OVEN. IF YOU GET 120V, THE BLACK WIRE IS THE 'LIVE' WIRE. IF THE READING IS '0', THE BLACK WIRE IS THE NEUTRAL WIRE.

i Important

Cooking chamber convection fan can rotate in a clockwise and anti-clockwise verse.

TESTING OF THE APPLIANCE

i Important

Before it is put into service, the system must be tested to check the operating conditions of every single component and identify any malfunctions. In this stage, it is important to check that all health and safety requirements have been complied with in full.

To test the system, make the following checks.

1. Turn on the water supply tap and make sure that the connection is watertight.
2. Make sure that the mains voltage is the same as that of the appliance.
3. Check the water pressure and adjust if necessary (see page 27).
4. Check that the safety device is operating correctly.
5. Carry out a cooking cycle without food to ensure that the appliance is operating correctly.

After testing, if necessary instruct the user in all the skills necessary for putting the appliance into operation in conditions of safety, in accordance with legal requirements.

ADJUSTMENTS

RECOMMENDATIONS FOR ADJUSTMENTS

i Important

Before making any type of adjustment, activate all the safety devices provided and decide whether staff at work and those in the vicinity should be informed. In particular, turn off the water supply tap, cut off the electricity supply using the master switch and prevent access to all devices that might cause unexpected health and safety hazards if turned on.

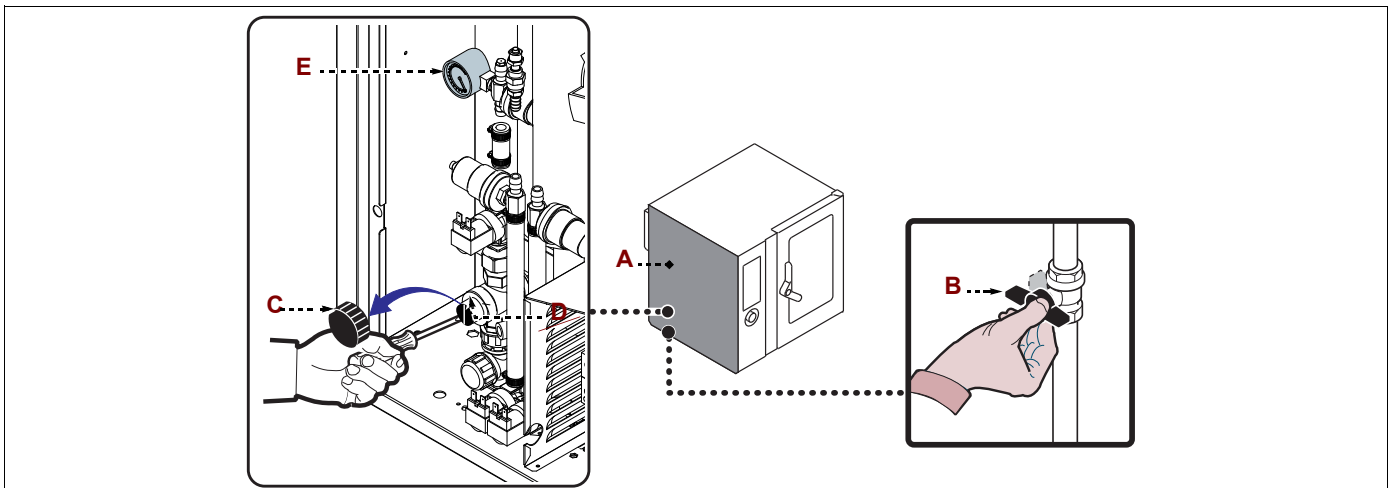
ADJUSTING THE WATER PRESSURE

To carry out this operation, proceed as follows.

1. Undo the screws to remove the side panel (A).
2. Turn on the water supply tap (B).
3. Unscrew the ring nut (C).
4. Turn the cooking chamber water intake screw (D) to bring the pressure reading on the pressure gauge (E) to 1 bar.

If the water pressure is too low, install a device to increase the pressure.

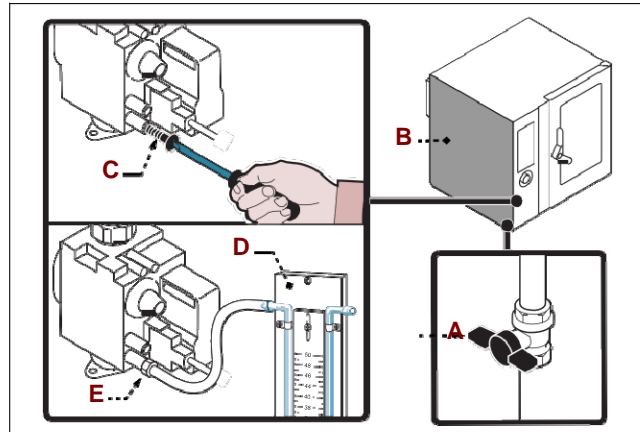
5. Retighten the ring nut (C).
6. Replace the panel (A) and screw the screws back into place.
7. Turn the water supply tap (B) back off when the operation is complete.



CHECKING GAS PRESSURE

To carry out this operation, proceed as follows.

1. Turn off the gas supply tap (A).
2. Undo the screws to remove the side panel
3. Unscrew the screw (C).
4. Connect the pressure gauge (D) to the test point (E).
5. Turn the gas supply tap (A) back on.
6. Switch on the appliance (see page 13) out a cooking cycle without food at the maximum temperature.
7. Check that the pressure gauge reading with the values (see table at above).
8. Switch off the appliance, turn off the gas supply tap (A), and disconnect the pressure gauge (D) and retighten the screw (C).
9. Replace the panel (B) and retighten the screws when the operation is complete.

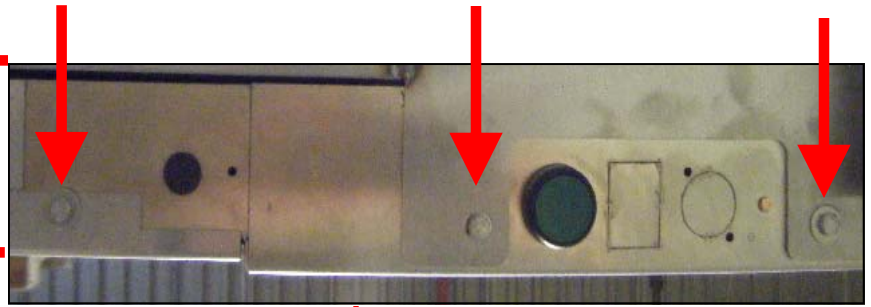


Gas type	Pressure in kPa (Inches Water Column)		
	rated	minim	maxim
Natural gas	1.74 (7")	0.87 (3.5")	2.61 (10.5")
Propane	2.74 (11")	1.99 (8")	3.23 (13")

HOW TO ACCESS PCB's and FUSES



**REMOVE
SCREWS
and/or
BOLTS**



BOLTS LOCATED BENEATH PANEL



**GENTLY
LIFT
PANEL
AND
SWING
OPEN**



Reverse Osmosis Water Filter Installation

PLEASE MAKE NOTE OF THE FOLLOWING

The sediment pre filters in the Reverse Osmosis filtration system **MUST** be changed at least every six* (6) months to ensure proper operating conditions. Failure to change these pre-filters on a timely basis may lead to the failure of the internal membranes of the filter.

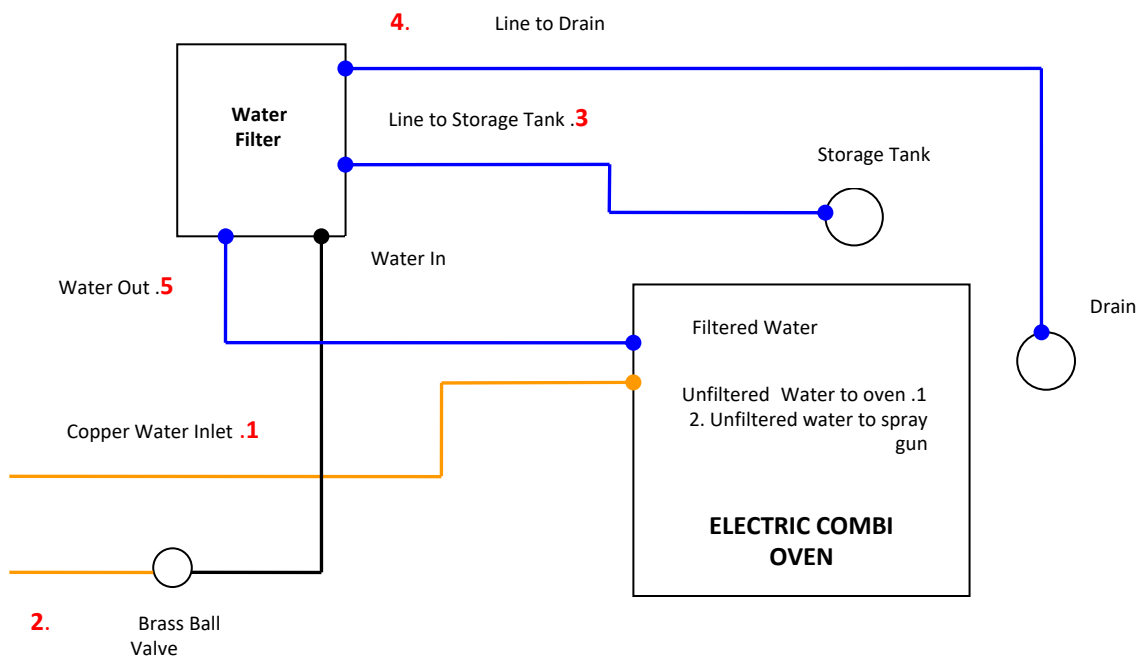
Failure to replace these sediment pre-filters will void the warranty on the filter itself. If this filter has been purchased in conjunction with any GBS FX CombiStar combination oven, and such purchase has extended the warranty of the oven, failure to replace the sediment pre-filters as prescribed above, will extinguish any warranty extension.

*if water conditions exceed those specified in the Installation Manual more frequent sediment pre-filter changes may be warranted. GBS always suggests that the operator have the water tested to determine the proper frequency of sediment pre-filter changes.

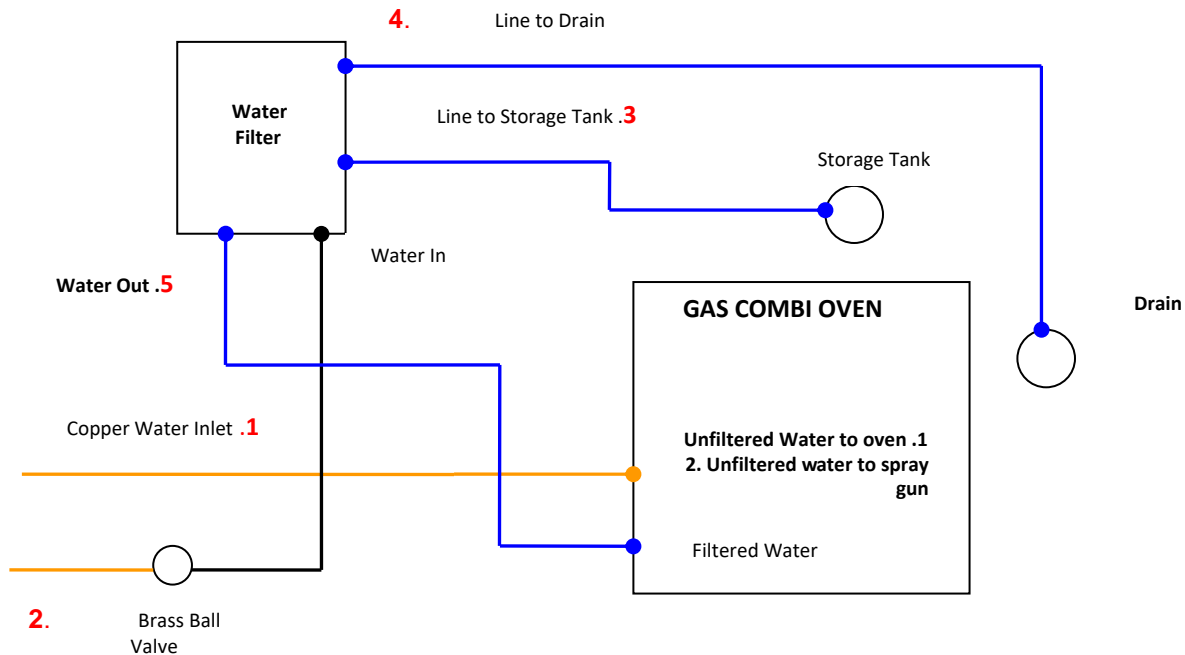
IMPORTANT:

- ALL PLUMBING SHOULD BE OF COPPER CONSTRUCTION.
- THERE SHOULD BE NO PLUMBING UNDERNEATH THE OVEN
- MAKE SURE THAT NO POLY TUBING IS RUN UNDERNEATH THE OVEN
- ENSURE POLY TUBING DOES NOT COME INTO CONTACT WITH ANY HEAT SOURCE
 - LOCATED ON THE LEFT HAND UNDERSIDE OF THE OVEN

ELECTRIC COMBI OVEN CONNECTION DIAGRAM



GAS COMBI OVEN CONNECTION DIAGRAM



Vertically mount unit on wall beside the oven no more than 6 feet high. Utilize the mounting plates affixed to the interior of the water filter cabinet (located top centre and bottom centre) to secure the cabinet to the wall.

Unit must be easily accessible for future filter change outs

Pressurized storage tank must be located behind the oven on the right hand side of the unit away from the heat source.

You will need two fresh water supplies.

The solenoids are clearly labeled on the oven “FILTERED” AND “UNFILTERED”

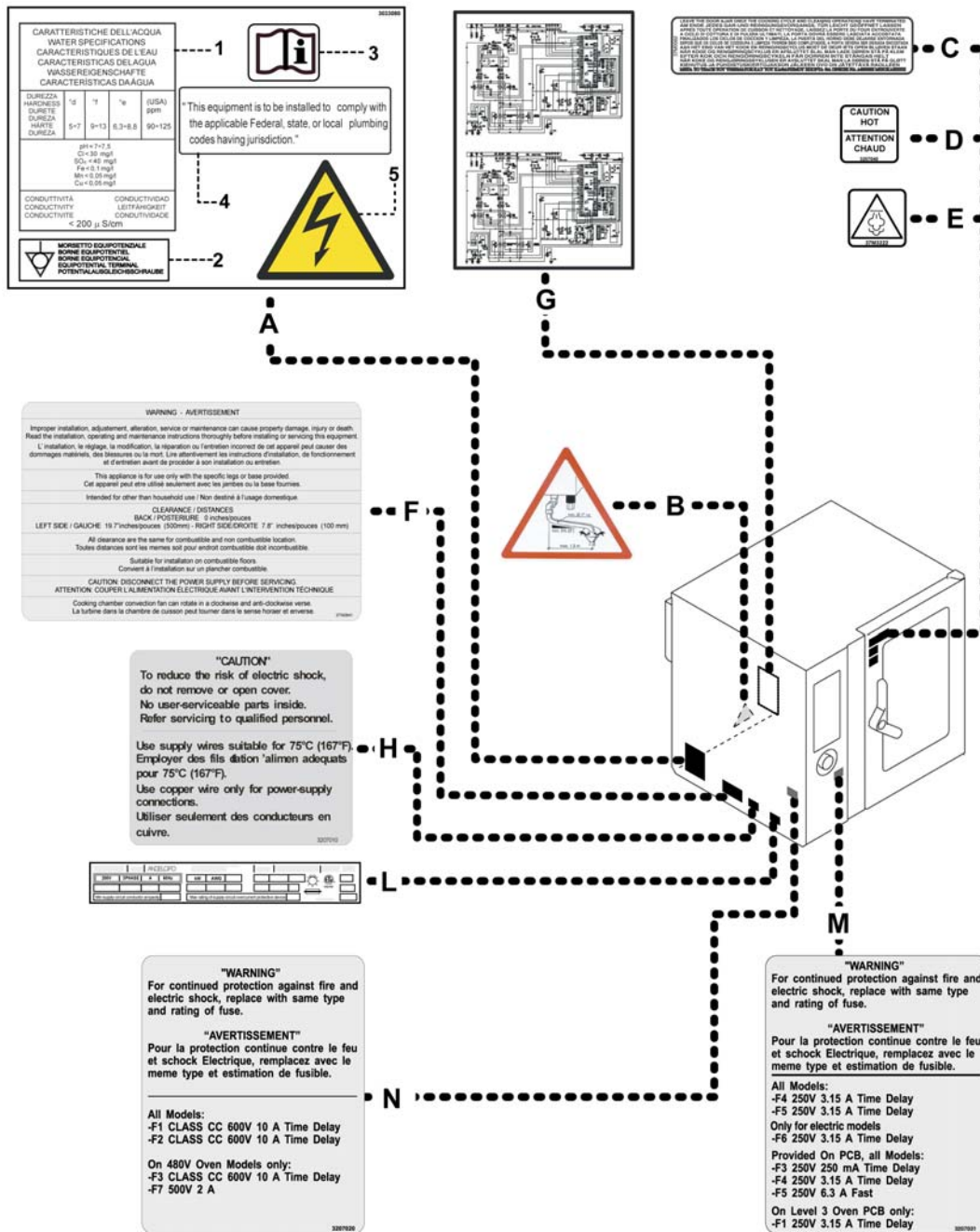
1. Connect one of the main water supplies (unfiltered) to the combi oven using a brass coupling .connection. (Spray gun attaches to this unfiltered water connection)
2. Connect the second main water supply to the filter using a brass ball valve. Attach one end of plastic tubing to poly tube connector. Attach the other end to the “water in” coupler on the water filter
3. Attach one length of plastic tubing from the coupler on the filter labeled “tank” to the pressurized storage tank.
4. Attached one length of plastic tubing from the coupler on the filter labeled “drain” to the copper drainage pipe
5. Attach one length of plastic tubing from the coupler on the filter labeled “water out” to the combi oven using a brass coupler and poly tube connector

IMPORTANT

- **MAKE SURE THAT NO POLY TUBING IS RUN UNDERNEATH THE OVEN**
- **ENSURE POLY TUBING DOES NOT COME INTO CONTACT WITH ANY HEAT SOURCE – LOCATED ON THE LEFT HAND UNDERSIDE OF THE OVEN**

ANNEXES

SAFETY AND INFORMATION SIGNS



- A)
 1. Water specifications (Hardness, pH, Conductivity)
 2. Equipotential terminal
 3. Read the manual
 4. This equipment is to be installed to comply with the applicable Federal, state, or local plumbing codes having jurisdiction.
 5. DANGEROUS VOLTAGE
- B) FAN EXHAUST
- C) Leave the door ajar once the cooking cycle and cleaning operations have terminated
- D) Caution: hot surfaces
- E) Caution: very hot steam
- F) Warning: Improper installation, adjustment alteration, service or maintenance can cause property damage, injury or death. Read the installation operating and maintenance instructions thoroughly before installing or servicing the equipment; This appliance is for use only with the specific legs or base provided; Intended for other than household use. CLEARANCE / BACK / 0 inches / LEFT SIDE 19.7" inches (500 mm) - RIGHT SIDE 7.8" inches (100 mm); All clearance are the same for combustible and non combustible location; Suitable for installation on combustible floors; CAUTION: DISCONNECT THE POWER SUPPLY BEFORE SERVICING; Cooking chamber con-vection fan can rotate in a clockwise and anti-clockwise verse.
- G) ELECTRIC DIAGRAM - S
- H) CAUTION: To reduce the risk of electric shock, do not remove or open cover. No user-serviceable parts inside. Refer servicing to qualified personnel. For continued protection against fire and electric shock, replace with same type and rating of fuse. Use supply wires suitable for 75°C (167°F).
- I) NAME PLATE
- M) Warning: Type and rating of fuse
- N) Warning: Type and rating of fuse

ELECTRICAL SYSTEM DIAGRAM (GBS FX 61-101-82-122 G2_120V 1N)

