FORNO BRAVO
THE WORLD'S FINEST PIZZA OVENS

Installation and Operating Manual

Commercial Ovens

Professionale, Roma, Modena2G, Napoli Ovens

Forno Bravo, LLC
Installation and Operating Manual

Commercial Professionale and Modena2G Refractory Ovens, including:

Professionale110-W-OK, Professionale110-W-FA, Roma110-W-FA
Professionale120-W-OK, Professionale120-W-FA, Roma120-W-FA
Professionale110-G-OK, Professionale110-G-FA, Roma110-G-FA
Professionale120-G-OK, Professionale120-G-FA, Roma120-G-FA

Modena2G120-W-OK, Modena2G120-W-FA, Napoli120-W-FA
Modena2G140-W-OK, Modena2G140-W-FA , Napoli140-W-FA
Modena2G160-W-OK, Modena2G160-W-FA
Modena2G180-W-OK, Modena2G180-W-FA
Modena2G120-G-OK, Modena2G120-G-FA, Napoli120-G-FA
Modena2G140-G-OK, Modena2G140-G-FA , Napoli140-G-FA
Modena2G160-G-OK, Modena2G160-G-FA
Modena2G180-G-OK, Modena2G180-G-FA

A MAJOR CAUSE OF OVEN-RELATED FIRE IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS OVEN BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

IF THIS OVEN IS NOT PROPERLY INSTALLED, A FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THESE INSTALLATION INSTRUCTIONS.

Contact the factory, factory representative or a local service company to perform maintenance and repairs.

For additional copies of this manual and responses to service/maintenance questions please contact Forno Bravo, LLC

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WARNING. Improper installation, adjustment, alteration, service, or maintenance can result in property damage, injury, or death. Please read this entire manual and the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

DANGER — IF YOU SMELL GAS:

1. **Shut off gas to the oven.**
2. **Extinguish any open flame.**
3. **Open door.**
4. **If odor continues, keep away from the oven and immediately call your gas supplier or your fire department.**

In a prominent location, please post a statement outlining this procedure (or an alternate procedure to follow in the event that you smell gas, available from your local gas supplier.)

WARNING — FOR YOUR SAFETY:

1. **Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.**
2. **An LP cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.**
3. **Always keep the area under and around this appliance free and clear of any and all combustible materials.**

Installation must conform to local codes. Contact your local building or fire officials about codes, restrictions, and installation inspection in your area. In the absence of local codes, installation must conform to the *National Fuel Gas Code*, ANSI Z223.1/NFPA 54, *Natural Gas and Propane Installation Code*, CSA B149.1, or *Propane Storage and Handling Code*, B149.2, as applicable. It is recommended that this oven be installed, maintained and serviced by authorized professionals.

IMPORTANT: When installed, your gas-fueled pizza oven must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1. Electrical diagrams for the controller are located inside the front panel of the burner controller box. Additional electrical diagrams for other burner system components are located inside the burner enclosure. (Electrical diagrams are also available in Appendix 1 and 2.)

Always disconnect the power supply to the oven before servicing or cleaning.

Forno Bravo Professionale and Modena2G oven cores have been tested and are compliant with: UL737-2011, UL2162-2014, NSF-4, ANSI-Z83.11-2016, CSA 1.8-2016, ULC S627-2000, and ULC/ORD 2162-2013.

For more information about our certifications, click here: https://www.fornobravo.com/ul-certified

Intertek Intertek

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WARNING

READ ALL INSTRUCTIONS BEFORE INSTALLING AND USING THE APPLIANCE. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.

When this oven is not properly installed, a fire may result. To reduce the risk of fire, follow the installation instructions. It is essential to use only building and insulation materials designed for the purpose.

Use proper safety equipment when installing this oven, including gloves and professional breathing masks.

Contact your local building or fire officials for clarification on any restrictions on installation of this oven in your area, or need for inspection of the oven installation.

HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.

DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS.

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

Keep children and pets away from hot oven.

Use firewood for burning only. DO NOT use charcoal, pressure treated lumber, chipped wood products, sappy wood such as pine, laminated wood or any material other than dry medium or hard firewood.

DO NOT USE liquid fuel (firelighter fluid, gasoline, lantern oil, kerosene or similar liquids) to start or maintain a fire.

BEWARE of very high temperatures in the oven and use long oven gloves and mitts to handle pots and tools. DO NOT put unprotected hands or arms inside oven while it is lit.

Dispose of ashes using a metal shovel and place in a metal bin with a tightly fitting lid. The container should be stored on a non-combustible surface, away from all combustible materials. Ensure ashes are completely cold before disposing of them appropriately.

BEWARE of flying sparks from mouth of oven. Ensure that no combustible materials are within range of oven at any time.

DO NOT close the oven door fully while a fire is in the oven. Closing the door fully will cut off oxygen to the fire, causing the fire to erupt suddenly when the door is removed. Always keep door tilted to allow air to circulate in the oven. When using the powered P250 gas burner and wood together, all wood, coals, and ash MUST be removed from the oven before fully closing the door to protect the burner.

DO NOT use water to dampen or extinguish fire in the oven.

DO NOT pack required air spaces with insulation or other materials.

When the curing of the refractories is not done as part of the manufacturing process, the manufacturer's recommended curing process shall be specified. Follow the instructions for curing the oven. Failure to follow the curing schedule can cause damage to the oven, and void the oven warranty.

SAVE THESE INSTRUCTIONS

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1. List of Supplied Items

Oven Kit (OK)—assembly required

Oven dome with integral vent;

Firebrick tile cooking floor;

Complete ceramic fiber board floor insulation;

Complete ceramic fiber blanket dome insulation;

Insulated metal door with thermometer;

Gas burner with electronic controls (gas oven);

Optional brick arch;

Optional venting pipe or Forno Bravo Type 1 hood.

Knocked Down Oven (KD)—assembly required

Oven dome with integral vent;

Firebrick tile cooking floor;

Complete ceramic fiber board floor insulation;

Complete ceramic fiber blanket dome insulation;

Insulated metal door with thermometer;

Metal oven tray, stand and surround;

Gas burner with electronic controls (gas oven);

Optional brick arch;

Optional venting pipe or Forno Bravo Type 1 hood.

Fully Assembled Oven (FA)

Fully assembled and insulated oven with metal stand, surround, stainless steel tile guard, and brick arch;

Insulated metal door with thermometer;

Gas burner with electronic controls (gas oven);

Optional venting pipe or Forno Bravo Type 1 hood.

Professionale OK

Modena2G OK

Roma

Napoli

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2. Unpacking and Moving the Oven

The Forno Bravo Commerical ovens must be removed from the delivery truck with a forklift and set on the ground.

DO NOT USE A LIFTGATE TO LOWER THE OVEN FROM THE DELIVERY TRUCK TO THE GROUND.

Be sure to use a forklift rated to lift more than the oven weight. Fork length must be at least 6 feet, if not, fork extensions should be used. The oven is very top heavy so spread the forks as far apart as possible.

Oven Crated Weights

Oven	Weight (lbs.)	Forklift Rating
Professionale110-FA	3,090	4,000
Professionale120-FA	3,303	4,000
Roma110-FA	3,600	5,000
Roma120-FA	4,000	6,000
Modena2G120-FA	3,090	5,000
Modena2G140-FA	3,830	5,000
Modena2G160-FA	3,950	6,000
Modena2G180-FA	4,212	6,000
Napoli120-FA	5,315	6,000
Napoli140-FA	5,614	6,000

Use a forklift to set the oven chamber on the included stand. Line up the stand openings on the oven tray to fit over the stand.

Do not attempt to roll or drag the oven.

THE OVEN IS VERY TOP HEAVY. MOVING THE OVEN UP OR DOWN A RAMP ON A PALLET JACK IS NOT SAFE.

DO NOT TURN THE OVEN ON ITS SIDE!

3. Oven Clearances

It is essential to maintain clearance space between the oven components and any combustible material, such as walls and ceilings. Failure to maintain these clearances can result in fire.

Combustible Wall Clearance

The oven must have a minimum 1" (25mm) clearance to combustibles from all sides, and 14" (356mm) clearance to combustibles from the top.

If building materials will contact the oven, they must be completely noncombustible. Please note that standard drywall (or sheet rock) is considered a combustible.

The area directly above the doorway and 6" (152mm) to each side of the doorway must be covered with non-combustible material.

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Non-combustible construction may contact the oven and must then maintain 1" (25mm) clearance to combustibles.

Install this oven only on a non-combustible floor, which extends at least 36" (914mm) in front of and 30" (762mm) to either side of the door.

If the space between the legs of the stand or under the oven is used to store wood or other materials, it is recommended that they be stored in a covered container or box to prevent sparks or embers from making contact with the stored materials, and causing a fire. An 8-1/2" (eight and one-half inch) air space clearance is required between the bottom of the oven and any storage container.

If the oven installation uses a Type 1 Hood, there must be a minimum of 3 inches of clearance between the hood and any combustible surface.

4. Sanitation

Forno Bravo commercial ovens carry an ETL Sanitation listing. The oven interior only is listed to NSF/ANSI Standard 4. This means that the surfaces of the oven which are meant to be left exposed after the facade has been put in place, have been evaluated from the standpoint of sanitation and food safety and complies with NSF/ANSI Standard 4. To operate the oven in accordance with NSF/ANSI Standard 4, only pizza and bread products may be cooked directly on the floor of the oven. Other types of food may be cooked on or in pans, or other suitable containers to prevent spillage onto the oven deck.

Any facade above and/or within 6 inches to the side of the doorway must be constructed of non-combustible building materials.

If using an exhaust hood over the oven, make sure your facade allows for the proper access for removal of the hood filters.

IMPORTANT NOTE: If you are enclosing the oven behind a partition wall, you must allow access to UL Marking label attached to the oven stand.

Outdoor Installations

Forno Bravo Commercial ovens are ETL approved for outdoor installation. When installed outdoors, the open area beneath the oven must be enclosed. The oven may be installed in a weatherproof enclosure. Be sure to maintain all clearances and adhere to the installation requirements included in this manual. Keep the area around and beneath the oven clear of grass, leaves, and other combustible materials.

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5. Ventilation

This information is provided to assist in safe and functional installation of Forno Bravo commercial ovens. The oven must be installed in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

It is never appropriate to use “B-vent” in any part of an exhaust system connected to a Forno Bravo oven. Due to the possibility of sparks entering the duct, exhaust systems serving Solid Fuel equipment SHOULD NOT be combined with exhaust systems serving other (non-solid-fuel) cooking equipment. Submit you venting plans to your local authorities before proceeding with your installation, as there may be additional requirements in your area.

There are two venting options for Forno Bravo Commercial ovens. These methods are Direct Connection of a Grease Duct or UL103 Type HT listed chimney (Direct Venting) and a Type 1 Exhaust Hood installed according to NFPA 96 and the UMC with Grease Duct venting.

VERY IMPORTANT! SUBMIT YOUR VENTING PLANS TO LOCAL CODE AUTHORITIES BEFORE PROCEEDING WITH INSTALLATION.

Most cities accept the UL listed Direct Connection method, however a few cities will require the use of a Type I grease hood over the oven opening and vent. Check with your local building department to determine which method or methods are acceptable.

1. Direct Connection.

An 8" (inside diameter) Listed UL103 Type HT or Grease Duct/Building Heating Appliance Chimney may be connected to the integral refractory vent at the top of the Forno Bravo Commercial ovens. A field built grease duct, constructed and installed to the specifications of a grease duct as detailed in NFPA 96 or the International Mechanical Code, may also be used. For Grease Duct installation requirements refer to the Selkirk Metalbestos Model PS and IPS Grease Duct Installation Instructions or Metal-Fab IPIC Installation Instructions. For UL103 Type HT installation requirements, refer to the Simpson DuraTech (or equivalent) chimney system installation instructions.

2. Type-1 Exhaust Hood Installed per NFPA 96.

(For commercial applications only)

If required, a Type 1 hood can be installed above the oven opening and set on the top of the oven as shown in the illustration in Appendix 4. This installation method meets the standard for ventilation control and fire protection for commercial cooking operations. The exhaust hood dimensions must be 48" wide, 38" deep, 24" high.

Duct Velocity 1500-2500 FPM - Volume: 800-1000 CFM

The grease filters must be positioned at the rear of the exhaust hood and must be of the steel baffle type (Mesh type grease filters must not be used).

The front of the exhaust hood must set forward 20" from the front of the oven face. The face of the filter must be a minimum of 42" from the oven heath per the Uniform Mechanical Codes. (UMC) or 48" per NFPA 96. The sides of the exhaust hood must extend a minimum of 6" to either side of the oven door opening.

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There must be a minimum of 3" of clearance between the hood and any combustible surface.

See illustration in Appendix 4 on hood installation.

FIRE SUPPRESSION

Check with your local code officials to see if fire suppression is required in your area. If fire suppression is required, you must vent the oven using a Type 1 hood, constructed and installed in accordance with NFPA 96. Forno Bravo offers UL Listed Exhaust hoods for our ovens that are pre-piped for ANSUL R-102 fire suppression. We do not recommend aiming any fire suppression nozzles into the cooking chamber of the oven. All installations are subject to the approval of the local authority having jurisdiction.

IMPORTANT SAFETY CONSIDERATIONS

Solid-fuel exhaust contains creosote and other substances that accumulate in ducting, creating a risk of fire. The rate of accumulation will vary with respect to flue gas temperature, wood type and moisture content. Frequent, regularly scheduled, thorough flue cleaning is the best way to minimize the risk of flue fires.

PROPER AIRFLOW (gas models)

Building your oven into a decorative enclosure can create the potential for venting problems and can result in poor burner performance and damage to oven components.

There are four basic airflow guidelines to follow regarding oven venting that will help ensure proper operation and performance of the oven burners. These guidelines will help prevent damage to the oven gas and electrical components due to improper venting and installation. See the illustrations below on proper venting airflow.

Proper Venting

The ONLY opening for air to enter the space beneath the oven should be at the front of the oven. This will eliminate the chance of air movement or cross drafts beneath the oven that can disrupt the oven burners.

Improper Venting #1

DO NOT block the flow of air underneath the oven. It is necessary to provide combustion air to the oven burners. Airflow MUST be provided through an opening underneath the front of the oven.

Improper Venting #2

DO NOT install an enclosure around the oven that is open to the attic at the top. This can result in air movement that can disrupt proper burner operation, and can cause backward airflow through the burner causing significant damage to the oven.

Improper Venting #3

DO NOT install an enclosure around the oven chamber that has two air intake openings. Air moving equipment outside the oven enclosure can create a low pressure zone that can result in air movement that can disrupt proper burner operation. Altered airflow can cause backward airflow through the burner causing significant damage to the oven.

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Proper Venting

Opening under the oven provides sufficient air intake. Enclosure provides equal air pressure inside and outside the enclosure for proper air movement.

Improper Venting #1

Blocked air intake prevents combustion air from reaching the burner, resulting in potential burner damage and poor burner performance.

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Improper Venting #2

The sealed oven enclosure is open at the top allowing connection to air flow in the attic. The resulting air movement can disrupt proper burner operation and can result in backward airflow through the burner causing significant damage to the oven.

Improper Venting #3

The oven enclosure has a second opening in the wall behind the oven. The resulting air movement can disrupt proper burner operation and can result in backward airflow through the burner causing significant damage to the oven.

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6. Assembly

Oven Stand

The oven can be installed on a custom concrete masonry unit (CMU) stand, on a custom metal stand, or on the stand provided with the oven.

Oven Assembly

Lay the insulating boards on the hearth and spread a thin bed of fine sand on top of the boards. Set the floor tiles on the sand, tapping them flush and level with a rubber mallet. Assemble the oven dome pieces and seal the OUTSIDE of the oven joints with a 2" wide x 3/4" deep band of FB mortar, a special high temperature mortar.

DO NOT PUT MORTAR INSIDE THE INTERLOCKING OVEN DOME PIECES.

Attach the optional brick arch using standard mason's mortar, and then wrap the oven in 4" of insulating blanket on the side and 6" insulation on top of the oven.

If you are installing your oven with Direct Connection venting, install the chimney anchor plate on the oven vent using concrete screws.

If you are using the Forno Bravo surround, attach the enclosure panels using supplied rivets.

Attach the Burner

Attach the burner and burner control unit using supplied nuts and bolts, according to the illustrations in Section 9.1 or Appendix 2.

Concrete block stand and stucco installation.

Forno Bravo stand and enclosure installation.

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Top View

7. Partition Wall

The oven can be installed behind a decorative partition wall.

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DO NOT PUT WOOD AND DRYWALL IN CONTACT WITH THE OVEN. IF YOU NEED TO ENCLOSE YOUR OVEN, USE NON-COMBUSTIBLE METAL STUDS AND CONCRETE BACKER BOARD.

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8. Gas Specifications (Gas Models with the Wayne P250 Burner)

When installing a Forno Bravo Commercial Gas oven, have a licensed gas installer provide the hook-up and test all fittings and pipe connections for leaks. Use approved gas leak detectors (soap solutions or equivalent) over and around the fittings and pipe connections.

DO NOT USE FLAME TO TEST FOR LEAKS!

The burner manifold pressures have been adjusted and tested at the factory. A variety of factors can influence these pressures, so be sure to test the individual burner manifold pressures and adjust the valves as necessary to achieve the required pressures. Note: The gas valves are shipped in the "ON" position.

Gas Supply Pressure

Natural Gas: 6.5" min - 14" max WC

Liquid Propane (LP): 11.5" min - 14" max WC

The Wayne P250 is a self modulating burner with an iHeat feature that can be set to modulate with a 5:1 turndown. The Wayne P250 has a minimum range of 15,000 BTU/hr, and a max range of 175,000 BTU/hr (Professionale and Roma ovens) or 200,000 BTU/hr (Modena and Napoli ovens).

Your gas supply must be able to provide the burner with the appropriate amount of BTU's at the listed pressures, as detailed in Appendix 1.

Forno Bravo recommends that the appliance's individual shutoff valve (supplied by others) be left readily accessible.

We advise making the final connection to the burner using a flexible hose. This makes the burner removal much easier when performing maintenance.

Forno Bravo also recommends that inspection and maintenance of the burners and gas piping connections of this appliance be performed at regularly scheduled intervals (every 8 months to 1 year) and only by professional gas appliance service agencies.

IMPORTANT: If at any time you feel that the burner is not operating properly, turn the oven off and call for service. Before servicing, disconnect the electrical supply at the breaker and turn off the gas supply at the appliance's individual gas shutoff valve.

In the event of a power failure, no attempt should be made to operate the oven.

Gas Code Limitations

The installation of this appliance must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, the Natural Gas installation Code CAN/CGA-B149.1, or the Propane Installation Code, CAN/CGA-B149.2, as applicable, including:

The appliance and its individual shutoff valve (supplied by others) must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.45 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve (supplied by others) during any pressure testing of the gas supply piping system at test pressure, equal to or less than 1/2 psi (3.45 kPa).

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9. Natural (NG)and Propane (LP) Gas (Gas Models using the Wayne P250 Burner)

9.1 Burner Installation Steps

A. Thermocouple Installation

CAUTION: Thermocouple must not come in contact with direct flames!

1. Install the thermocouple. (If you purchased a fully assembled unit, the thermocouple will be pre-installed and you can skip this step.) If an oven kit or knockdown version was purchased, you will need to install the thermocouple during the oven dome assembly.

1.1. The thermocouple temperature probe should be installed at 3 o'clock (right side) when looking at the oven floor from the top. The burner opening should be installed at 10 o'clock (left side), on the opposite side of the oven. Thermocouple life expectancy varies greatly from just a few hours to many years, so be sure to have a way to access the thermocouple for easy replacement.

1.2 The thermocouple hole will be pre-drilled by Forno Bravo using a 3/8 inch masonry bit eight to nine inches above the floor, centered in the oven dome piece.

1.3 Insert the tip of the thermocouple probe into the hole, so that probe is visible by no more than two inches when looking inside oven.

1.4 Attach the male / female connectors to connect the thermocouple probe to the burner control box.

1.5 **Caution: Do not place thermocouple near the gas burner, which is located at 10 o'clock, as the flame will cause the thermocouple to malfunction.**

B. Mounting the Burner

Before beginning the burner installation, read through this manual and have a licensed technician verify that you meet all of the electrical and gas requirements.

Mounting the P250 Burner to a Forno Bravo oven and stand is a very straightforward process. The burner enclosure box should be attached to the bottom of the oven tray or counter using a minimum of 2-4 bolts or screws that are capable of supporting a combined weight of 40 lbs.

There are multiple options for mounting the burner. The most common method is detailed below. Additional possible solutions can be found in Appendix 2.

Wood and gas fired oven decks are typically elevated to 38" - 52" using a counter or stand to achieve comfortable cooking ergonomics for most users. Whatever bracket you select to use should allow the top of the burner tube to extend 1" above the cooking surface of the oven. Any mount selected, including bracket mounts, should be installed below the floor tile, deck, and insulation levels to prevent heat transferring to the ignition cables and other components. Additionally, do not recess the electrical box chamber into the structure that contains the oven, both for accessibility and to reduce the negative impact of heat buildup on the electronics.

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Burner Elements Included:

- Wayne Combustion P250 Burner
- Wayne Combustion P250 iHeat Electronic Control Box
- Wayne Combustion P250 Instruction Manual (not shown; See Appendix 1)

Hardware Included:

- Forno Bravo Mounting Bracket - Qty 1
- Bracket to Burner Mounting Screws (10-24 x 1/2" Phillips Head Steel Machine Screw) - Qty 4
- Bracket to Oven Stand Bolts (not shown; Pre-installed on Oven Stand - Qty 2)
- Wayne Combustion Flange Mounting Bracket (not shown; Used on Commercial Kits or Countertop/Pedestal Mount Combinations Only)

*Mounting bracket may have additional bottom holes (not shown) to accommodate different mounting orientations. Use the four (4) holes that apply to your setup.

Common Installation Method (Standard Bracket Mount)

Step 1: Remove the four (4) screws from the top of the burner unit using an 8mm socket and discard. (They will not be used.)

Step 2: Place the Forno Bravo mounting bracket over the burner sleeve with the tabs facing up. Align the appropriate four (4) holes in the bracket base with the holes in the top of the burner enclosure to match your desired box orientation

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(typically front or left facing - as preferred and available, based on your oven stand.) The bracket tabs will be oriented pointing towards the front and back of the oven. Attach the bracket to the burner using the four (4) Philips head screws that are provided.

Step 3: Remove the two (2) nuts from the bottom of your fully assembled, Forno Bravo oven stand.

Step 4: Insert the burner tube into the hole in the oven's floor. Have a friend support the burner, while you secure the Forno Bravo Mounting Bracket to the underside of the oven using the two (2) nuts you removed in Step 3.

C. Electrical Connections:

Step 5: Connect the 4 connector plug (120 Vac) coming from the iHeat Control Box to the 4 connector plug port at the bottom of the burner enclosure.

Step 6: Connect the 2 connector plug (4-20 mA signal) from the control box to the 2 connector plug port at the bottom of the burner enclosure.

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Step 7: Connect the Thermocouple Wire coming from electronic control box to the metal braided Thermocouple Lead that has been installed in the side of your oven dome.

NOTE: If you purchased an oven kit or knock down version of our commercial ovens, the thermocouple will **NOT** come pre-installed and should be installed during the oven dome assembly. See Section A above for directions (*Thermocouple Installation.*)

Step 8: Plug the power cord from the burner assembly into an outlet (120V circuit.)

D. Gas connections:

Refer to the gas specification in Appendix 1 for information.

9.2 Gas Model Orifice Conversion

The Wayne P250 burner can be equipped with orifices sized for operation with Natural Gas (NG) or Liquid Propane (LP.) It will be set up for one or the other fuel source from the factory, as selected by the customer.

If you decide to change the type of gas you are using to fuel your oven, contact Forno Bravo Technical Support at support@fornobravo.com for a replacement orifice in the correct size before proceeding. Please include your invoice number with your request.

Steps for Changing the Burner Orifice

IMPORTANT: Assure the gas and electrical connections are disconnected before working on your oven.

Step 1: Use a standard flat head screwdriver to open the enclosure.

Step 2: Use a 1/2'' socket or wrench to loosen, but not remove the 2 black nuts at the base of the union.

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Step 3: Use a large crescent wrench to loosen the union.

Step 4: Use a 1/2'' socket or wrench to remove the 2 nuts to gain access to the orifice.

*Note: Do not lose the metal gasket!

Step 5: Use an 11/16" socket or wrench to remove the orifice.

Step 6: Review Table 4 in Appendix 1 to confirm you have selected the appropriate orifice for your gas type. Exchange the orifice. On reassembly, use Teflon tape or pipe dope and reverse the process outlined above.

IMPORTANT: CHECK FOR ANY GAS LEAKS BEFORE USE.

10. Electrical Specifications (Gas Models with Wayne P250 Burner)

Have a licensed electrician wire the transformer terminal strip with a 120V, 15 or 20 amp, 60Hz- 1 Phase lead.

Electrical Code Limitations

ELECTRICAL GROUNDING: This appliance must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical code, ANSI/NFPA 70.

Warning

Electrical Grounding Instructions

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

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11. Initial Operation (Gas Models with P250 Burner)

PV : Displays the current temperature inside your oven
SV : Displays the temperature your oven is set at

INDEX: advances the display to the next menu item.

UP ARROW: Increments a value or changes a menu item.

DOWN ARROW: Increments a value or changes a menu item.

ENTER: stores the value or item change.

***Please note the thermocouple is reading the ambient temperature and will vary from the floor surface temperature**

Note: The index and enter buttons are not used in typical operation and are for advanced adjustments. The controller also has optional alarms which are not used: “ALM1,” “ALM2,” “AT,” and “Out.” You may ignore these indicators.

12. Daily Operation (Gas Models using the Wayne P250 Burner)

If your oven was not pre-cured by Forno Bravo, you will need to complete the cure process before usage.

CAUTION: Failure to Properly Break-In Your Oven Can Cause Significant Damage and Void The Oven Warranty.

Small, "HAIRLINE" cracks are completely normal in refractory ovens and are almost unavoidable. They DO NOT affect the oven’s longevity. **If a crack larger than 1/8" occurs, or you are experiencing a difference in performance due to a crack, please contact technical support by emailing a photo of the crack, along with your invoice number to support@fornobravo.com.**

Starting the Oven

1. Confirm there are no leaks in the system, that the unit is plugged in, and the gas supply is on.

2. Remove the oven door and turn the switch on the front of the black metal control box to “ON.”

*If this is your first time starting the unit it will go through a 30 sec interpurge. During this period, it will appear as if nothing is happening. After 30 seconds, you will hear the ignition process start and your unit will ignite.

3. Use the up and down arrows on the controller to change the “SV” setpoint to the temperature you would like to use for cooking. (The

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controller's maximum temperature setting is 800°F.)

4. To decrease heat-up times, it helps to partially cover the oven mouth with the door. **Important Note:** Leave the door ajar 2" – 3"' to allow oxygen in for proper combustion.

WARNING: DO NOT OPERATE THE BURNER WITH THE DOOR COMPLETELY CLOSED AND SEALING OFF THE OVEN CHAMBER. THIS WILL CAUSE A BURNER SHUT DOWN.

WARNING: In an oven with the P250 gas burner option installed, remove any burning wood, coals, or remaining ash PRIOR to sealing the cooking chamber with the door. Failure to do this may significantly damage the burner unit.

Turning Off the Oven

1. Turn the Switch Selector to "OFF".

2. Always wait 5 minutes before relighting the oven

Curing Your Oven (Using Gas Only)

First Day Cure

1. Turn the switch to the "ON," Use the up/down arrows to change the "SV" window to 200°F.

2. Allow oven to operate at 200°F for one hour, then increase the temperature to 300°F, and allow the oven to operate at that temperature for 4 hours. Increase the temperature to 400°F and allow the oven to operate for 4 hours.

3. Turn the oven off then use the oven door to completely seal off the oven chamber and retain the heat overnight.

Second Day Cure

1. Remove the door (if still in place from the day before.)

2. Set the oven temperature to 400°F, and turn the oven on. Allow the oven to operate at 400°F for one hour.

3. Raise the oven temperature 100°F each hour until the oven temperature reaches 800°F.

4. Your oven is now ready for Daily Operations.

13. Initial Operation (wood models)

It is important at this point that you cure your oven slowly, by building a series of five increasingly larger fires, starting with a low temperature. If you begin building large fires in your oven right way, you will compromise your oven's longevity and ability to cook well, and cause damage, including cracking.

After you have installed your oven, there is still a great deal of moisture in the mortars, hearth concrete, vermiculite, and the oven chamber and vent. Each of these oven components was recently produced using an air-drying, water-based process. Simply letting the oven stand for a week does not "cure" the moisture out of them oven.

Before you start the curing process, let the complete oven sit for one week. Then, start a series of low and growing fires, using the analog temperature gauge provided in the oven door/frame. The temperature gauge reads the oven's air temperature. For a more accurate temperature reading of the oven's refractory surfaces, which can be used for many types of cooking, you can use the optional Digital Infrared Thermometer, which can be purchased in the Forno Bravo Store.

Day 1. Maintain a fire temperature of 300°F throughout the day and as long as possible into

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the evening.

Day 2. Repeat at 350°F.

Important Note. While it is difficult to maintain consistent, low temperature fires, it is critical for proper curing that you do not go above these temperatures during the first two days.

Day 3. Repeat at 400°F.

Day 4. Repeat at 450°F.

Day 5. Repeat at 500°F.

Close the oven door every evening to preserve dryness and heat.

Small "HAIRLINE" cracks CAN occur IN THE OVEN DOME with normal heating and cooling. They will not AFFECT the performance or LONGEVITY of the oven. If cracks of 1/8" or more develop, contact Forno Bravo.

Important Notes

Use solid wood fuels only. DO NOT use charcoal, pressure treated lumber, chipped wood products, sappy wood such as pine, laminated wood or any material other than dry medium or hard firewood.

Do not use products not specified for use with this oven.

DO NOT USE liquid fuel (firelighter fluid, gasoline, lantern oil, kerosene or similar liquids) to start or maintain a fire.

Never use water to lower temperature inside the oven, or to extinguish the fire.

There must be a period of time between completing the masonry work and beginning the actual firing cure. Longer is better than shorter, particularly for the actual dome cement. The cement and mortar must cure first and this process is actually improved by keeping the cement moist and not letting it dry out. Cement is exothermic and gives off heat. If you were to start the oven curing too soon, you drive this exothermic action the wrong way and damage the new cement.

Also, using a space heater can help, but only so far. It is not an alternative to fire curing. We tested a space heater in an assembled Forno Bravo precast oven for two days, then quickly heated the oven up, (don't do this at home -- it was an experiment to see what would happen to an oven that we have here) and we found that we created a very large amount of steam from the oven, mortars and vermiculite, which went on for hours and hours.

14. Daily Operation (wood models)

Oven bricks are intended for direct contact with bread and/or pizza products only. All other food products must not come into contact with brick surface, but should be contained within approved cookware.

Start your fire using a taste-free, odor-free fire starter and dry kindling. Build your fire up slowly, adding wood to the back and sides as the fire grows.

Continue to add wood until the oven reaches the desired temperature. Then, move the fire to one side and brush the oven floor. Only use a copper or brass brush, and do not use steel wire brushes, natural fiber brushes, or wet clothes to clean the oven floor.

The fire must be built directly on the oven floor. DO NOT ELEVATE the fire.

You can monitor your oven temperature using the analog oven air temperature gauge provided

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with the oven, or with an optional Digital Infrared Thermometer.

DO NOT over fire your oven, or build a fire where flame exits the oven door opening.

BEWARE of very high temperatures in the oven and use long oven gloves and mitts to handle pots and tools. DO NOT put unprotected hands or arms inside oven while it is lit.

BEWARE of flying sparks from mouth of oven. Ensure that no combustible materials are within range of oven at any time.

DO NOT close the oven door fully while a fire is in the oven. Closing the door fully will cut off oxygen to the fire, causing the fire to erupt suddenly when the door is removed. Always keep door tilted to allow air to circulate in the oven.

Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in the oven. Keep all such liquids well away from the oven when in use.

The oven should be operated only with the doors fully opened or fully closed. When doors are left partially open, gas and flame may be drawn out of the oven opening, creating the risk of both fire and smoke.

Keep the oven door opening free of all combustible materials when the oven is in operation.

Disposal of Ashes. Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a non-combustible floor, or on the ground, well away from all combustible materials pending disposal. When the ashes are disposed by burial in soil, or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

Wood can be stacked in the area under the oven hearth.

15. Daily Operation (Using Wood and the P250 Gas Burner Together)

Forno Bravo ovens outfitted with the optional Wayne P250 modulating gas burner are able to use both gas and wood fuels separately or together. When used together, the oven is designed to typically operate with the P250 gas burner as the primary fuel source, with wood serving as a supplemental fuel for flavor and ambiance. The P250 burner is a powered burner (or forced air burner.) This feature increases the burner's efficiency by up to 30%, boosting power and reducing fuel costs, however, this feature does come with some operational considerations as well.

Following are several pointers that will help you maximize the P250's duel-fuel feature, protect the burner, and create the best oven performance for your restaurant.

- The P250 gas burner is very powerful by itself! Do not over fire your oven by adding too much wood;
- Build and burn your wood fire away from the gas burner to balance the heat in the oven and keep sparks and ash away from the burner unit;
- Do not place your wood fire directly in front of the thermocouple. It can skew the readings that the gas burner needs to modulate correctly;
- Limit the amount of wood being burned at once to 3 lbs, when used in combination with gas;
- IMPORTANT - When closing your restaurant at night and prior to closing the oven door completely, turn off the gas, and remove any remaining wood, embers, or ash from

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the oven, storing them in a covered metal receptacle away from combustible materials. Failure to do this can cause severe damage to the burner components;

- Do not close the door completely with gas or wood or embers still burning inside.

Understanding Air Flow and Combustion / Shutting Down Your Oven

When fuel burns in a wood fired oven with the gas burner option, a continuous amount of combustion air is required to complete the burning process. As air is consumed, fresh air will enter the oven through the oven door and/or the gas burner opening. Additionally, as the wood or gas burns, the hot combustion gases and heated ambient air will expand and rise, exiting from the oven via the flue outlet, creating a continuous flow of air. (This movement of air creates the convection effect that accelerates your cooking.)

Wood Only:
In a wood-only unit, closing the door on embers is not a problem, as the wood will only burn as long as there is combustion air available. The fire will eventually burn out due to lack of air or lack of wood.

Gas Only:
In a gas-only unit, the temperature of the oven and air pressure will stabilize in the time between the gas being turned off and the door being placed over the oven mouth.

Wood/Gas in Combination:
However, in combination wood-gas ovens using a forced air burner (ex. P250), the burner mechanism is a closed unit, compared to a simpler, atmospheric burner which has a more open construction (ex. Drago P2 burner, a model formerly offered by Forno Bravo, see Appendix 3.) Sealing the chamber with the door blocks access to the flue. With the door closed, the burning coals have access to enough air from the gaps around the burner to keep burning, but the pressurized hot air has nowhere to escape, except through the burner tube. Hot, pressurized air exiting the oven through the tube will cause significant damage to the powered burner and is not covered by the warranty.

WARNING: Do not fully block the oven mouth while wood or gas is still burning in the oven. Closing the door fully will cut off oxygen to the fire, causing the fire to erupt suddenly when the door is removed, as well as potentially damaging the burner unit.

Instead, turn off the P250 burner, and leave the door ajar until any remaining wood or coals are completely consumed, and/or carefully remove all embers and wood to a covered metal container (stored away from combustible materials) before closing the oven for the night.

NOTE: Additional educational bulletins and advisements regarding the use of dual fuel in Forno Bravo wood/gas commercial ovens with the P250 modulating burner may be sent to owners at a later time, at the company's discretion.

Please see Appendix 3 for legacy information on the installation and operation of our previous atmospheric burner, the Drago P2, if applicable.

16. Maintenance and Cleaning

The oven can be inspected through the door opening. Allow the oven to completely cool before inspecting the vent and chimney pipe for creosote build up.

Have your chimney cleaned by a professional chimney sweep if you have doubts about your ability to clean it. Use a plastic, wood, or steel

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brush. Do not use a brush that will scratch the stainless steel liner of your chimney. Scrub the spark arrestor with a wire brush.

To remove the Chimney Cap for cleaning, either twist counter-clockwise to remove the entire cap, or unscrew the four (4) screws that attach the cap's support legs to the cap base. The Tee Cleanout Cap can be removed by turning counter-clockwise. Be sure to replace Tee Cleanout Cap when you are finished cleaning the chimney.

Creosote – Formation and need for removal. When wood is burned slowly, it produces tar and other organic vapors that combine with expelled moisture to form creosote. The creosote vapors condense in a relatively cook oven flue and exhaust hood of a slow burning fire. As a result, creosote residue accumulates on the flue lining and exhaust hood. When ignited, this creosote makes an extremely hot fire.

The oven flue should be inspected at least twice a year to determine when creosote buildup has occurred.

When creosote has accumulated, it should be removed to reduce risk of fire.

For installations that use a Type 1 Hood, refer to the exhaust hood manufacturer's recommendations for inspection, maintenance, and cleaning.

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Appendix 1: Wayne P250 Modulating Burner Specifications

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Manufacturer:
WAYNE COMBUSTION SYSTEMS
www.waynecombustion.com

Contact Forno Bravo
for all support questions
www.fornobravo.com

iHEAT SYSTEM

with

FACTORY ENCLOSURE

Manual 64551-001 | Revision E | Publication Date: 09/20/18
NOTE: Dimensions in () are informational only. English values take priority.

	P250
Maximum Input	250,000 Btu/hr (73 kW)
Minimum Input	15,000 Btu/hr (4.4 kW)
Turndown	5:1
Fuels	Natural & L.P. Gas
Maximum Inlet Pressure	14” w.c. Natural 14” w.c. LP
Minimum Inlet Pressure	6.5” w.c. Natural 11.5” w.c. LP

Electrical power supply: 120V/60Hz 1 Ph.

MOUNTING: Adjustable flange is standard.

READ THIS MANUAL BEFORE USING THIS PRODUCT. FAILURE TO FOLLOW THE INSTRUCTIONS AND SAFETY PRECAUTIONS IN THIS MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH. KEEP THIS MANUAL FOR FUTURE REFERENCE. INSTALLER: LEAVE THIS MANUAL WITH THE END USER.

INSTALLATION OF THE BURNER MUST BE DONE BY A QUALIFIED INSTALLER IN ACCORDANCE WITH REGULATIONS OF THE NATIONAL FUEL GAS CODE ANSI Z223.1/NFPA54, AND IN COMPLETE ACCORDANCE WITH ALL LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.

A QUALIFIED INSTALLER IS THE PERSON WHO IS RESPONSIBLE FOR THE INSTALLATION AND ADJUSTMENT OF THE EQUIPMENT AND WHO IS LICENSED TO INSTALL GAS-BURNING EQUIPMENT IN ACCORDANCE WITH ALL CODES AND ORDINANCES.

CSA CERTIFICATE NUMBER: 1156769

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INSTALLATION LOG			
BURNER MODEL:	SPECIFICATION NUMBER:	FUEL (NATURAL OR PROPANE):	GAS ORIFICE DRILLED SIZE:
INLET GAS PRESSURE (in. w.c.):	CO_2 (%):	O_2(%):	CO (PPM):
INSTALLER'S NAME:	CONTRACTOR NAME:	CONTRACTOR ADDRESS:	CONTRACTOR PHONE NUMBER:
CONTRACTOR LICENSE #:	DATE OF INSTALLATION:		
COMMENTS ABOUT INSTALLATION/START UP:			

BURNER/APPLIANCE SERVICE LOG				
SERVICE DATE	TECHNICIAN	COMPANY / ADDRESS	CONTRACTOR LICENSE #	WORK PERFORMED
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THESE INSTRUCTIONS SHOULD BE AFFIXED TO THE BURNER OR ADJACENT TO THE APPLIANCE.

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OVERVIEW OF SAFETY WARNING SYSTEM AND YOUR RESPONSIBILITIES

The safety of you and others depends upon you thoroughly reading and understanding this manual. If you have questions or do not understand the information presented in this manual, **please call Forno Bravo, LLC or reference www. Fprnpbravo.com or www.waynecombustion.com**.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. The meaning of this safety alert symbol is as follows: Attention! Become alert! Your safety may be at risk. The message that appears next to the warning which can be either written or pictorially presented. NEVER remove or tamper with the warning labels, safety devices or guards fitted on the unit.

Wayne Combustion System and Forno Bravo, LLC are NOT responsible for any bodily injury and/or property damage that may result from operation outside of the stated operating conditions for which this unit was intended.

Hazard Definitions:

DANGER — Indicates a hazardous situation, which, if not avoided, *will* result in **death or serious bodily injury.**

WARNING — Indicates a hazardous situation, which, if not avoided, *could* result in **death or serious bodily injury.**

CAUTION — Indicates a hazardous situation, which, if not avoided *may* result in **minor or moderate bodily injury.**

NOTICE — Indicates a situation that *may* result in equipment-related damage.

If any instructions in the manual are not clear, contact Forno Bravo, LLC at 1-800-407-5119 for assistance.

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Hazard Level	Pictogram	Type	Free Text
WARNING		Fire or Explosion	**Failure to follow safety warnings exactly could result in serious injury, death or property damage. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.** **WHAT TO DO IF YOU SMELL GAS:** • **Open windows.** • **Do not try to light any appliances.** • **Do not touch electrical switches; do not use any phone in your building.** • **Extinguish any open flame.** • **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.** • **If you cannot reach your gas supplier, call the fire department.**
WARNING		Electric shock or burn	Always disconnect power supply before working on the unit. Failure to follow safety warnings could result in serious injury or death.
WARNING		Overheating	**SHOULD OVERHEATING OCCUR:** • Shut off the manual gas control to the appliance. • DO NOT shut off power to the equipment, allow blower to continue running.
WARNING		Carbon Monoxide Poisoning	**CARBON MOXOXIDE IS A COLORLESS, ODORLESS GAS THAT CAN KILL. FOLLOW THESE RULES TO CONTROL CARBON MONOXIDE.** • Do not use this burner if in an unvented, enclosed area. Carbon monoxide may accumulate. • Do not adjust the pressure regulator. High pressures produce carbon monoxide. • Check flue gases for carbon monoxide. This check requires specialized equipment. • Allow only qualified burner service persons to adjust the burner. Special instruments and training are required. • Read the burner manual before using. CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness, weakness, nausea, vomiting, sleepiness, and confusion. If you suspect carbon monoxide poisoning, get outside to fresh air immediately, and then call 911. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes. Propane/LP gas and natural gas are both odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases can fade. Gas may be present even though no odor exists.
WARNING		Proposition 65 material	This product can expose you to chemicals, including lead, nickel, carbon monoxide and sulfur dioxide, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information, go to www.p65Warnings.ca.gov.

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DESCRIPTION OF SYSTEM AND COMPONENTS

System Description

iHEAT is an electronically controlled gas/air modulation system that can be utilized by P250 burners to provide a variable heat source for an appliance. The components of the system include: a fan-assisted gas burner, a modulating gas valve, and an electronic control module that varies the speed of the burner fan and the gas flow rate through the gas valve.

The automatic or manual controls maintain oven temperature by sending a variable electrical signal to the iHEAT control, which responds to the signal by adjusting the speed of the combustion air blower and by changing the gas flow to the burner via a variable voltage to the modulating gas valve. These changes in combustion air and gas flow result in a variable heat source that responds to the oven's call for heat.

Component Functions

iHEAT control – The control receives a 4-20 mA input signal from the thermostat or manual temperature device. Based on the value of this input, the control generates outputs to the combustion air blower (combustion air) and the modulating gas valve (gas flow). The proper ratio of combustion air to gas is specific for the type of gas used, natural or propane. The ratios are stored in the memory of the control and are selected by positioning dip switches accessed through an opening on the face of the iHEAT control. See setup information for the proper settings of the switches. The control also incorporates a series of lights that signify the operating state of the system and assist in the diagnosis of the system should it require repair. In the event of improper combustion air blower speed, the control will act to shut off the flow of gas by de-energizing the ignition control. The solenoid portion of the gas valve is powered by the ignition control and no gas will flow.

Combustion air blower – The purpose of the combustion air blower is to provide the proper amount of air to the heating zone of the burner. The speed of the combustion air blower is controlled and monitored by the iHEAT control. The RPM is measured through a 3-wire plug connecting the combustion air blower to the control. There is also an adjustable air shutter on the inlet side of the blower. Refer to the Setup section for the recommended air shutter setting.

Modulating gas valve – The gas valve used in the iHEAT system has two functions built into one valve body. The first function is a solenoid valve that, when energized, allows gas to flow to the burner. The second function is the modulation of gas flow to the burner. Based on an input voltage from the iHEAT control, the modulating portion of the valve will vary the gas flow between an upper set point and a lower set point. The valve is designed with flange connections on the inlet and outlet making it easy to service should this become necessary.

Control box – The control box is the part of the burner system responsible for controlling the firing rate of the burner. This can be done either automatically, through use of a thermostat, or manually, controlled by the user through a knob. The control box transmits this information to the burner via a 4-20 mA signal. The control box is powered with line voltage fed to it from the burner box. When the switch on the control box is turned on, it will return this power to the burner, powering it on.

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Mounting the Burner Enclosure

The burner ships with a mounting flange which grips the burner tube and has holes to bolt to the oven floor. The flange should not support the full weight of the burner and enclosure. Rather, proper installation requires the use of the mounting holes provided on the back or top face of the enclosure. The burner can be mounted with 3/8" support rods using the holes in the top or bolted to an oven's structural framework using the 1/4" holes on the back. An optional pedestal mount is also available, which will allow the burner to be supported from below by an adjustable pedestal. Dimensions for the flange are shown below.

NOTICE

Flange may not support the full weight of burners that have an attached enclosure. Use the mounting holes provided in the enclosure or the optional pedestal accessory for additional support to prevent equipment damage.

Figure 1 - Mounting Flange

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Mounting the Control Box

The control box has four ¼”-20 threaded holes on the back face of the box which can be used to mount the box to a bracket or flat surface on the appliance. Alternatively, the box can be flush mounted by making a cutout in a panel that accommodates the four #6-32 screws that hold the cover plate to the control box, then mounting the box behind the panel and screwing the cover over it.

Opening the Enclosure

To open the control box loosen the four #6-32 screws holding the cover plate on, slide the cover plate to the left, and pull the screw heads that had been holding the cover in place through the larger side of the cover plate mounting holes. While working on the control box, the cover plate can be reversed and held in place by the screws for convenient access to panel-mounted components. Do not allow the cover plate to dangle supported only by the wires routed between the cover and the box interior.

Sizing and Inspection of Gas Piping

WARNING

GAS LEAK HAZARD

Liquefied petroleum gas is heavier than air. All connections should be checked for leaks using a soapy solution applied to gas connections. Leaking gas will settle in low lying areas such as basements and trenches. Failure to comply with the precautions and instructions, can result in death, serious bodily injury or burns, property damage or loss from fire or explosion, and/or asphyxiation due to lack of adequate air supply or carbon monoxide poisoning.

The gas piping must be properly sized to deliver adequate gas pressure to the burner during operation of the burner and any other gas appliances. The information supplied herein is to be used as a guideline for the proper sizing and configuration of the gas piping system. All piping must comply with local codes and ordinances or the National Fuel Gas Code ANSI Z223.1/NFPA No. 54. A sediment trap or drip leg must be installed in the supply line to the burner. A union shall be installed in the gas line upstream from the control manifold and downstream from the sediment trap or drip leg (See Figure 3). A 1/8” NPT plugged tapping port accessible for test gauge connection shall be installed immediately upstream of the gas supply connection for the purpose of determining the gas supply pressure to the burner. A manual shutoff valve shall be installed in the gas supply line external to the appliance (See Figure 2).

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Figure 2 - Manual Shut off Valve and Pressure Tap

Location of union and drip leg for connecting burner to gas supply piping.

Figure 3 - Pipe Union and Fittings

The piping should be so installed as to be durable, substantial and gas tight. It should be clear and free from cutting burrs and defects in structure or threading. Aluminum tubing should not be used for the main gas supply. Joint compounds (pipe dope) should be used sparingly on male threads only and be approved for all gases.

Figure 4 - Proper Piping Practice

Pipe Size Inch (mm)	Effective Length of Thread Inch (mm)	Overall Length of Thread Inch (mm)
3/8 (9.525)	3/8 (9.525)	9/16 (14.29)
1/2 (12.7)	1/2 (12.7)	3/4 (19.05)
3/4 (19.05)	1/2 – 9/16 (14.29)	13/16 (20.64)
1 (25.4)	9/16 (14.29)	1 (25.4)

Table 1, Table 2, and Table 3 be used to determine the size pipe to use from the meter to the burner. The building structure should not be weakened by installation for the gas piping. The piping should not be supported by the other piping, but should be firmly supported with pipe hooks, straps, bands or hangers. Butt or lap welded pipe should not be bent. **Note: Each elbow, union, and tee adds approximately 2.5 feet of pipe.**

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The gas piping should be so installed as to prevent an accumulation of condensation and must be protected against freezing. A horizontal pipe should be pitched so that it grades toward the meter and is free from sags. The pipe should not be run through or in an air duct. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressure over 1/2 psig (3447 PaG). The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3447 PaG).

Pipe Sizing Chart for Natural Gas (0-0.5 psi) with Straight Schedule 40 Metal Pipe

This table is based on **0-0.5 psi** inlet pressure, specific gravity of **0.6**, and a pressure loss of **0.5" w.c.**

Maximum Capacity of Pipe Size in Btu per Hour

Length of Pipe (ft)	1/2"	3/4"	1"	1 1/4"	1 1/2"
10	175,000	360,000	680,000	1,400,000	2,100,000
20	120,000	250,000	465,000	950,000	1,460,000
30	97,000	200,000	375,000	770,000	1,180,000
40	82,000	170,000	320,000	660,000	990,000
50	73,000	151,000	285,000	580,000	900,000
60	66,000	138,000	260,000	530,000	810,000
70	61,000	125,000	240,000	490,000	750,000
80	57,000	118,000	220,000	460,000	690,000
90	53,000	110,000	205,000	430,000	650,000
100	50,000	103,000	195,000	400,000	620,000
150	40,000	84,000	160,000	325,000	500,000
200	35,000	72,000	135,000	280,000	430,000

Table 1 - Pipe Sizing Chart for Natural Gas (0-0.5 psi) with Straight Schedule 40 Metal Pipe

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Pipe Sizing Chart for Liquid Propane (11" w.c.) with Straight Schedule 40 Metal Pipe

The following chart is based on **11" w.c.** inlet pressure and a pressure drop of **0.5" w.c.**

Special use: Piping sizing between single or second stage (low pressure regulator) and appliance.

Maximum Capacity of Pipe Size in Btu per Hour

Pipe Size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	3"
Actual ID	0.622	0.824	1.049	1.38	1.61	2.067	3.068
Length of Pipe (feet)	Maximum Capacity in Btu/hr						
10	291,000	608,000	1,145,000	2,352,000	3,523,000	6,786,000	19,119,000
20	200,000	418,000	787,000	1,616,000	2,422,000	4,664,000	13,141,000
30	160,000	336,000	632,000	1,298,000	1,945,000	3,745,000	10,552,000
40	137,000	287,000	541,000	1,111,000	1,664,000	3,205,000	9,031,000
50	122,000	255,000	480,000	984,000	1,475,000	2,841,000	8,004,000
60	110,000	231,000	434,000	892,000	1,337,000	2,574,000	7,253,000
80	94,000	197,000	372,000	763,000	1,144,000	2,203,000	6,207,000
100	84,000	175,000	330,000	677,000	1,014,000	1,952,000	5,501,000
125	74,000	155,000	292,000	600,000	899,000	1,730,000	4,876,000
150	67,000	140,000	265,000	543,000	814,000	1,568,000	4,418,000
200	58,000	120,000	227,000	465,000	697,000	1,342,000	3,781,000
250	51,000	107,000	201,000	412,000	618,000	1,189,000	3,351,000
300	46,000	97,000	182,000	373,000	560,000	1,078,000	3,036,000
350	42,000	89,000	167,000	344,000	515,000	991,000	2,793,000
400	40,000	83,000	136,000	320,000	479,000	922,000	2,599,000

Table 2 - Pipe Sizing Chart for Liquid Propane (11" w.c.) with Straight Schedule 40 Metal Pipe

Pipe Sizing Chart for Liquid Propane (11" w.c.) with Copper Tubing

The following chart is based on **11" w.c.** inlet pressure and a pressure drop of **0.5" w.c.**

Maximum Capacity of Tube Size in Btu per Hour

Pipe Size	1/2"	5/8"	3/4"	7/8"
Length (feet)	Maximum Capacity in Btu/hr			
10	110,000	206,000	348,000	536,000
20	76,000	141,000	239,000	368,000
30	61,000	114,000	192,000	296,000
40	52,000	97,000	164,000	253,000
50	46,000	86,000	146,000	224,000
60	42,000	78,000	132,000	203,000
70	38,000	71,000	120,000	185,000
80	36,000	67,000	113,000	174,000
90	33,000	62,000	105,000	161,000
100	32,000	59,000	100,000	154,000

Table 3 - Pipe Sizing Chart for Liquid Propane (11" w.c.) with Copper Tubing

NOTE: Copper tubing shall comply with standard type K or L of ASTM B 88 or ASTM B 280.

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Before turning gas under pressure into piping, all openings from which gas can escape should be closed. Immediately after turning on gas, the system should be checked for leaks. This can be done by watching the 1/2 cubic feet test dial and allowing 5 minutes to show any movement, or by soaping each pipe connection and watching for bubbles. If a leak is found, make the necessary repairs and repeat the above test. Defective pipes or fittings should be replaced and not repaired. **Never use a flame** or fire in any form to locate gas leaks; always use a soap solution instead.

After the piping and meter have been checked completely, purge the system of air. Be sure to relight all the gas pilots on other appliances.

ELECTRICAL WIRING OF BURNER

The burner is shipped with an SJTOOW electrical supply cord that plugs into a standard 120 Vac outlet. The wiring to the utilized outlet must conform to the National Electric Code or the code legally authorized in the locality where the installation is being made. The burner, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the latest edition of the National Electrical Code, ANSI/NFPA No. 70. See wiring diagram section and picture below for reference on wiring and thermostat connection.

There are two plugs at the bottom of the burner enclosure to receive the appropriate wiring from the burner control box. The 4-connector plug transmits 120 Vac to and from the control enclosure. The 2-connector plug carries the 4-20 mA signal from the control enclosure to the iHEAT control located inside the burner enclosure. These connections must be made for the burner to operate. Do not alter these plugs or the wiring in any way. In addition to these connections, the control box will also have one or more thermocouples coming out from it. The thermocouple is the metal-sheathed cable. This sensor relays the temperature of the appliance to the control box and can be read out on the LCD display on the front cover of that box. The appliance manufacturer will have instructions about mounting the thermocouple for optimal consistency and accuracy in readings.

Figure 5 - External Wiring Connections

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SETUP

Proper setup of the burner system requires:

1. Installing the proper orifice
2. Setting the air shutter
3. Calibrating the blower
4. Setting the dip switches on the control board
5. Adjusting the modulating valve

The orifice, air shutter, and dip switches may all be set before installation. Adjusting the modulating valve and calibrating the blower require that power be connected to the burner system and gas be connected to the inlet pipe.

Orifice

If this burner is included in an oven, the manufacturer will have already installed the appropriate orifice and adjusted the air shutter to the proper position. Otherwise, you will need to select an orifice size and air shutter setting based on the expected maximum Btu/hr required for the application using the table on the following page. The high- fire rate produced by the iHEAT burner system in a given appliance will be determined by the size of the gas orifice installed in the burner. As an example, installing a #5 (0.2055") diameter orifice in a natural gas application will result in a high-fire rate of 140,000 Btu/hr. The iHEAT system is capable of a 5:1 turndown, thus the resulting low-fire rate with this orifice would be 28,000 Btu/hr.

Selecting the proper gas orifice size is important for optimal system performance. If the selected orifice produces a high-fire rate that is more than necessary for the appliance during loaded operation, the iHEAT system will operate at the very low end of the firing rate a majority of the time. The best system performance will be obtained when the selected orifice results in a firing rate that heats the appliance from a cold start to temperature in the longest acceptable time, and is able to maintain appliance temperature under max load conditions.

Air Shutter Setting

The air shutter settings given here (Table 4) are for use with dip switch settings 5 (natural gas) and 6 (propane gas). If using other dip switch settings, contact the appliance manufacturer for the correct air shutter setting. In all cases, when commissioning an appliance, some adjustment of the air shutter from these values is required for safe and efficient operation of the burner.

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WARNING

CARBON MONOXIDE HAZARD

A qualified technician must use a combustion analyzer to properly set up any burner system. Check flue gases for carbon monoxide. This check requires specialized equipment.

Orifice Sizes and Approximate Air Shutter Settings to Achieve a Given Firing Rate

Natural gas				Propane gas			
Btu/hr	Letter/ Number	Decimal (in.)	Air shutter	Btu/hr	Letter/ Number	Decimal (in.)	Air shutter
50,000	1/8	0.1250	0.50	50,000	45	0.0820	0.25
60,000	30	0.1285	0.50	60,000	44	0.0860	0.50
65,000	29	0.1360	0.50	65,000	43	0.0890	0.50
70,000	28	0.1405	0.50	70,000	3/32	0.0940	0.75
75,000	26	0.1470	0.50	75,000	40	0.0980	1.00
80,000	24	0.1520	0.50	80,000	37	0.1040	1.00
85,000	5/32	0.1562	0.50	85,000	36	0.1065	1.25
100,000	17	0.1730	1.00	100,000	35 (7/64)	0.1100	1.25
110,000	14	0.1820	1.25	110,000	31	0.1200	1.50
120,000	10	0.1935	1.50	120,000	3.1 mm	0.1220	1.50
130,000	7	0.2010	1.50	130,000	1/8	0.1250	2.00
140,000	5 (13/64)	0.2055	1.75	140,000	30	0.1285	2.50
150,000	4	0.2090	2.00	150,000	29	0.1360	2.75
160,000	3	0.2130	2.50	160,000	28 (9/64)	0.1405	2.75
170,000	1	0.2280	2.75	170,000	27	0.1440	3.00
175,000	A	0.2340	2.75	175,000	26	0.1470	3.00
185,000	B	0.2380	3.00	185,000	25	0.1500	3.25
190,000	C	0.2420	3.00	190,000	24	0.1520	3.25
200,000	E (1/4)	0.2500	3.25	200,000	22 (5/32)	0.1570	3.50
210,000	F	0.2570	3.50	210,000	20	0.1610	3.75
220,000	G	0.2610	3.75	220,000	19	0.1660	4.00
230,000	H	0.2660	4.00	230,000	18	0.1695	4.25
240,000	I	0.2720	4.00	240,000	11/64	0.1720	4.25
250,000	J	0.2770	4.25	250,000	16	0.1770	4.50

Table 4 - Table showing recommended orifice sizes and air shutter settings based on Btu/hr required. For example, an application running propane gas that needs 157,000 Btu/hr would use an orifice drilled with a #28 drill bit. This orifice would have a 0.1405" hole.

Air Shutter

If the burner is installed in an appliance, select an air shutter setting based on the manufacturer's

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recommendations. Otherwise, use Table 4, which was generated using the algorithms used by dip switch settings 5 and 6. Use a ¼" wrench to loosen the screw on the shutter's numerical scale. Position the shutter so that the center of the screw lines up with the desired number on the scale, then re-tighten the screw. The air shutter settings given above are intended as a starting point. A combustion analyzer must be used to set the shutter at the maximum firing rate.

Figure 6 - The air shutter is adjusted to the 1.5 position.

Calibrating the Blower

- Turn off power to the burner system, and wait for LEDs on the iHEAT board to go out.
- Position the dip switches on the iHEAT board such that dip switch 8 is on and all others are off.
- Turn on power to the burner system. The iHEAT control is now in a calibration mode. During this calibration process, the lights on the control board will illuminate in the following manner: FLASH – flash, T-INPUT – off, VALVE – off, BLOWER – on, 24V/CAL – flash. The calibration process will take about 8 minutes. The end of calibration is indicated by continuous illumination of the 24V/CAL light.

Figure 7 - Dip switch positions to calibrate blower – switch 8 on, all others off. Turn off power to the board before adjusting dip switches.

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Dip Switches

Note: When power is first applied to the iHEAT control system, a 30 second delay will occur before the system will initiate an attempt to light the burner. No gas will flow during this wait time.

The dip switches at the bottom right corner of the iHEAT board allow changes to the board's configuration to be made in the field without reprograming, including switching from natural gas to propane. To change these settings, turn off power to the board, then set the dip switches according to the table below.

Switch	Usage
1	OEM specific, manual control enclosure, natural gas
2	OEM specific, manual control enclosure, LP gas
3	OEM specific, automatic control enclosure, natural gas
4	OEM specific, automatic control enclosure, LP gas
5	Universal, natural gas
6	Universal, LP gas
7	Low fire setting used for gas pressure setting
8	Blower motor calibration

Table 5 - Dip Switch Usage

Modulating Valve

Adjusting the modulating valve requires that power be connected to the control board and gas be connected to the valve. Use a manometer to measure the outlet pressure. Set the high pressure setting before the low pressure setting. The valve must be mounted with the modulating coil horizontal.

NOTICE

The maximum rated inlet pressure to the gas valve is ½ psi (14" w.c.). The valve will be damaged if higher gas pressure is applied.

The gas valve controls the pressure of the gas supplied to the burner in order to adjust the burner's firing rate. The gas valve will not be able to supply enough gas to achieve the desired firing rate if the gas line feeding it does not have sufficient pressure. The table below lists the supply pressures necessary to support different firing rates.

Min. Inlet Pressure required for Natural Gas		
Orifice (in.)	Firing Rate (Btu/hr)	Min. Inlet Pressure (in. w.c.)
0.250	200,000	8.4
0.228	170,000	6.6
0.2055	140,000	6.3
0.193	120,000	5.9
0.186	115,000	5.6
0.182	110,000	5.5

Min. Inlet Pressure required for Propane Gas		
Orifice (in.)	Firing Rate (Btu/hr)	Min. Inlet Pressure (in. w.c.)
0.147	175,000	11.5
0.136	150,000	11.0
0.1285	140,000	11.0
0.122	120,000	11.0
0.120	110,000	11.0

Table 6 - Minimum Required Inlet Pressure to Achieve Full Firing Rate

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To measure the pressure:

- Locate the appropriate pressure tap: The pressure taps are on top of the valve near the modulating coil (see illustration). The manifold pressure is measured from the tap nearest to the valve outlet. The other tap can be used to check inlet pressure.
- Shut off gas to the appliance.
- Unscrew the manifold pressure tap screw 1.5 to 2 turns counterclockwise.
- Slip the measuring hose of the manometer over the tap.

Figure 8 - Manifold and Inlet Pressure Tap Locations

To set the high pressure setting:

- Determine the recommended manifold gas pressure setting based on table at right.
- Locate the 8mm high pressure adjustment nut. This is the larger nut located on the valve coil.
- Set the appliance to call for full fire.
- After the burner ignites, turn the high pressure nut counterclockwise until the outlet gas pressure is below the desired outlet gas pressure setting, then turn clockwise until desired pressure is achieved.
- Careful! Do not over-tighten. Stop if additional clockwise turning does not noticeably increase the outlet pressure.

	Natural gas	Propane gas
High pressure setting	4.5" w.c.	10.0" w.c.

Table 7 - Recommended manifold pressure settings for natural and propane

Figure 9 - Pressure Adjustment Nut Location

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To set the low pressure setting:

- Determine the recommended manifold gas pressure setting based on the table at right.

	Natural gas	Propane gas
Low pressure setting	0.2" w.c.	0.8" w.c.

Table 8 - Recommended manifold pressure settings for natural gas and propane

- Locate the 5mm low pressure adjustment nut. This is the smaller nut located on the valve coil.
- Set the appliance to call for full fire and run for five minutes.
- Turn off power to the burner, set the dip switches so that only #7 is on (see illustration), and turn burner power back on.
- Run in this low fire mode for one minute.
- Turn the low pressure nut counterclockwise to reduce the pressure; turn clockwise to increase the pressure. Adjust until the desired pressure setting is achieved.
- Careful! Reducing the pressure too much or too quickly may cause the burner to go out. If this happens, turn the small nut clockwise ¼ to ½ a turn then repeat the steps above.

Figure 10 - Dip switch positions to make the appliance fire at the lowest rate – switch 7 on, all others off. Turn off power to the board before adjusting dip switches.

After setting the high and low pressure settings:

- Turn off the appliance.
- Close the manual gas valve on the gas supply line.
- Remove the manometer hoses and tighten the pressure tap screws where the hoses were.

Final Steps of Setup

Turn off power to the burner system and wait for all lights on the iHEAT board to go off. Set the dip switches on the board in the proper positions for normal operation according to the table given in the Dip Switches section.

Run the appliance at full fire for ten minutes, and then check the burner exhaust with a combustion analyzer. For natural gas, it is desirable to set the burner to achieve a CO_2 reading between 8% to 10%, an O_2 reading of 3% or above, and a CO reading of less than 100 ppm. The CO reading should never be above 400 ppm. Increasing the air shutter opening will generally decrease the CO_2 and CO readings. The desired range for propane gas is a CO_2 reading of between 10% to 12%, an O_2 reading of 3% or above, and a CO reading of less than 100 ppm.

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The control box is powered by a large, black power cord from the burner box. When the power switch on the control box is turned on, 120 Vac is returned to the burner box to power the burner, and the thermostat and/or temperature reader powers on. This burner system can be controlled by either a manual or automatic control box. The automatic version uses a variable thermostat to automatically maintain the oven at the temperature selected by the user. The manual version uses a control knob to allow the user to manually adjust the heat output of the burner. Presence of a control knob indicates that a control box is a manual type unit. If there is no knob, the unit is an automatic type unit. In either case, a 4-20 milliamp signal is generated in the control box that modulates the firing rate of the burner.

Figure 11 - Side by Side Comparison Showing Automatic (left) and Manual (right) Control Boxes

When the iHEAT board detects a 4-20 milliamp signal through the 4-20 mA(+) and COM(-) terminals, it will turn on the blower and wait 30 seconds to prepurge combustible gas from the combustion chamber. After this time, it will open the gas valve's modulating coil and close a relay that supplies power to the ignition control. The speed of the blower and the amount the gas valve coil opens are based on the strength of the 4-20 milliamp signal, which is how the firing rate is modulated.

When the iHEAT board's relay closes its contacts, 24 Vac is supplied to the ignition control. When this happens, the ignition control's diagnostic LED will flash rapidly while the ignition control begins sparking. After successful ignition, the LED will light green and remain lit as long as a flame is detected. If the burner fails to light, the control will wait for the interpurge time, then spark again. During this time, the ignition control's diagnostic LED will flash green at a rate of twice per second. If the burner does not light after three trials for ignition, the

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ignition control will be locked out, and the diagnostic LED will flash red. If this happens, remove power from the control, then try again. The number of LED flashes indicates the type of failure that occurred (see table below). If the burner lights, but loses flame, the ignition control will attempt to relight immediately without a purge.

Number of flashes	Problem
1	No flame during trial for ignition
2	Flame sense fail
3	Gas valve relay failure
4	Multiple flame loss
7	Input voltage error

Trial for ignition	4 seconds
Interpurge time	30 seconds

Table 9 - Wayne Control Error Codes

AUTOMATIC CONTROL BOX FEATURES

The automatic control box has a thermostat that uses a PID control loop to generate a 4-20 mA signal, which is fed through the smaller gray cable into the burner box to control the firing rate of the burner. The current temperature is displayed on the top thermostat readout labeled “PV.” The setpoint that the thermostat will maintain is displayed below on the readout labeled “SV.” The setpoint can be adjusted using the up and down arrow buttons on the thermostat.

Automatic Control Box Components

Thermostat – The thermostat automatically controls the temperature of the appliance, holding it at the setpoint selected by the user. The temperature of the appliance is displayed in the LCD marked “PV” and the setpoint is displayed in the LCD marked “SV.” The setpoint can be adjusted using the up and down arrow buttons. The other two buttons are not used in normal operation.

On/Off Switch – This switch supplies power to all components in the control box and in the burner box.

Thermocouple – This sensor is responsible for the temperature readings displayed on the digital readouts on the box’s cover.

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MANUAL CONTROL BOX FEATURES

Using the knob on the front cover of the box, the user can control the firing rate of the burner. This information is encoded in a 4-20 mA signal, which is fed through the smaller gray cable into the burner box. The current temperature is displayed on the temperature readout.

Manual Control Box Components

Temperature Readout – This displays the temperature read by the thermocouple. Power wires for the burner are also run through this component, and it will cut power to the burner if it reads a temperature greater than 1,000°F. Buttons on the face of the readout are for configuration purposes and are not used in normal operation.

Control knob – This knob adjusts the firing rate of the burner. The highest firing rate is achieved when the knob is in the detent, or stop, position with the line on the knob pointing up. The lowest firing rate corresponds to the point half a turn away from high fire with the line on the knob pointing down. Points in between these two extremes yield firing rates between the high and low fire rate. It does not matter whether the knob is turned clockwise or counterclockwise. The firing rates achieved by turning it in one direction are the same as the firing rates that result from turning it to the same position the opposite direction.

Control box power supply – This supplies power to the control knob and temperature readout. It accepts line voltage as an input at the terminals marked “L,” “N,” and “FG.” It outputs 24 volts dc at the terminals marked “-V” and “+V.”

On/Off Switch – This switch supplies power to all components in the control box and in the burner box.

Thermocouple – This sensor is responsible for the temperature readings displayed on the digital readouts on the box’s cover.

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iHEAT BOARD FEATURES

On/Off Feature

In order to maintain temperature at the low end of the range of temperature set points, the iHEAT system incorporates an on/off feature. When the iHEAT system has modulated down to the minimum heat input, but the set temperature is not maintained, the iHEAT system will turn the burner off. This will be indicated by the Valve light, as it will flash during the burner off cycle. When the appliance temperature reduces a few degrees below the temperature set point, the iHEAT will bring the burner back on. The iHEAT system will continue to cycle the burner on and off to maintain the set temperature.

In some appliances, it may not be necessity for the iHEAT system to employ the on/off feature. This will depend upon the heat loss of the appliance, the load to be heated, the desired operating temperature, and the low firing rate of the iHEAT system in the particular application. The on/off feature is disabled when the iHEAT board's dip switches are set for a manual configuration (switch 1 or 2 on).

Diagnostic Lights

The iHEAT control provides 5 diagnostic lights that display the status of the iHEAT system and aid in diagnosing possible system component problems during the repair process. The lights and their functions are:

Flash – Flashing light indicates the control is functioning properly.

T-input – Each time the appliance is turned on, the control verifies an input signal from the thermostat. A solid light indicates the thermostat signal was verified upon start-up. A flashing light indicates a problem with the thermostat signal.

Valve – The control contains a set of contacts used to provide power to the ignition control. The Valve light indicates the position of the relay contacts; illuminated when the contacts are closed, and off when the contacts are open. A flashing light indicates that the board's on/off feature has turned the valve off. The valve contacts will open when an abnormal condition is sensed: combustion air blower RPM out of spec, either the line voltage or the 24 volt inputs to the iHEAT control are absent, the iHEAT control is in calibration mode, or the thermostat signal is absent upon start up.

Blower – The Blower light illuminates when the combustion blower is operating properly. A non-illuminated Blower light indicates: a bad electrical connection between the combustion blower and the iHEAT control, a bad motor on the combustion blower, or an absence of the line voltage or 24 volt inputs to the iHEAT control.

24V/CAL – This light serves two purposes. During the normal run mode, illumination of this light indicates that 24 volts AC is present at the 24 Vac connection to the iHEAT control. During the combustion air blower calibration, this light indicates status of the calibration process. A flashing light indicates calibration is occurring; a solid light indicates the calibration process is completed.

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TROUBLESHOOTING GUIDE

Symptom	Lights					Possible Corrections
	Flash	T-Input	Valve	Blower	24V/Cal	
Appliance runs but iHEAT system does not run; combustion motor does not turn on, no heat to appliance.	Off	Off	Off	Off	Off	Check to make sure burner switch is on.
						With burner switch on, check for 120 volts across L1 and Neutral terminals; repair if necessary.
						With burner switch on, check for 24 volts across 24 Vac terminals; repair if necessary.
	Flash	Flash	Off or Flash	Off	On	Indicates signal from t-stat is absent or not in proper range. Check wiring connections at COM(-) and 0-24V(+) or 4-20mA(+) terminals.
						Check t-stat for proper output.
	Flash	On	Off or Flash	Flash	On	Check wiring connections at MOTOR L and MOTOR N terminals.
						Check wiring connections at the three TACH terminals.
						3. Replace motor/blower.
	Flash	Off	Off	Off	Off	Check dipswitches for proper position.
	Flash	Off	Off	On	Flash	System is in calibration mode. Refer to appliance manual.

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Symptom	Lights					Possible Corrections
	Flash	T-Input	Valve	Blower	24V/Cal	
Appliance runs but iHEAT system does not run; combustion motor turns on, no heat to appliance	Flash	On	On	On	On	Check wiring connections at RELAY COM and RELAY N.O. terminals.
						Check wiring connections on ignition control. Verify 24 Vac input to ignition control and 24 Vac at valve terminals on ignition control during call for heat.
						Check wiring connections at VALVE (+) and VALVE(-) terminals on iHEAT control. Check wiring connections on white solenoid coil of gas valve.
						Check for proper connection of black rectifier plug on gas valve.
						Verify gas flow during ignition trial. If gas flows but ignition does not occur, correct ignition problem. If gas does not flow during ignition trial, diagnose problem with gas valve.
Appliance runs, temperature well over t-stat set point, will not control appliance temperature	Flash	On	On	On	On	Check wiring connections at 4-20 mA(+) and COM(-) terminals making sure + and - connections from the control enclosure are in the corresponding + and - connections at the iHEAT control.
						2. With the oven in the full fire condition, check the inlet gas pressure using the appropriate pressure tap on the gas valve. Check the adjustment of the modulating gas valve's high pressure setting. Refer to System Set-up, Modulating Gas Valve in appliance manual.

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Symptom	Lights					Possible Corrections
	Flash	T-Input	Valve	Blower	24V/Cal	
Appliance runs, oven temperature at or near t-stat set point, slowly increases above set point over time	Flash	On	On	On	On	Verify proper gas orifice size for model appliance and type of gas.
						Check low pressure setting of modulating gas valve; adjust as necessary.
Appliance runs, temperature at t-stat set point slowly decreases when appliance is loaded	Flash	On	On	On	On	Verify proper gas orifice size for model appliance and type of gas.
						Check high pressure setting of modulating gas valve; adjust as necessary.
Appliance runs, temperature cycling above and below t-stat set point by approximately +/- 5°F	Flash	On	On or Flash	On	On	This is normal operation for iHEAT control with V53 and later software. A flashing Valve light indicates the burner has been turned off to maintain appliance temperature.
						Verify proper dipswitch position for oven model and gas type.
						Check low pressure setting of manual gas valve; adjust as necessary.
Appliance runs and iHEAT system is running	Flash	Off	Flash	On	Flash	System is in low gas pressure calibration mode. Refer to appliance manual.

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Troubleshooting the Burner System's Most Common Issues

Symptom	Possible Corrections
Thermocouple readings are high, low, or inconsistent.	Check polarity of thermocouple. Yellow lead goes to the positive terminal; red lead goes to the negative terminal.
	Confirm good connection between thermocouple leads and temperature controller.
	Inspect thermocouple leads and sheath for damage. Replace if necessary.
Burner flame goes out before appliance reaches set point temperature.	Check the current signal going through the gray cable to the burner box. Current should read between 4 and 20 milliamps.
	Confirm good connection between thermocouple leads and temperature controller.
	Check the high and low pressure settings of the gas valve.
	Check current going into "Sense" terminal of ignition control. A current of at least .2 microamps is required to maintain a flame.
Temperature controller is calling for heat, but burner does not light.	Check the current signal going through the gray cable to the burner box. Current should read between 4 and 20 milliamps.
	Check for good connections of gray signal wire and black power cable.
	Check that the proper size orifice is installed and that the air shutter is adjusted properly.
Blower will not calibrate	Check that all leads from blower motor have good connection to iHEAT board.
	Check that blower turns freely and is not obstructed.

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Electrode Position – Factory Setting

Figure 12 - Electrode Positions, Factory Setting

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Figure 13 - Wiring Diagram for Burner Enclosure

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Figure 14 - Wiring Diagram for Manual Control Box

Figure 15 - Wiring Diagram for Automatic Control Box

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Exploded View

PARTS LIST (*Starred parts not pictured)			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	64209-001	VENTURI ASM.-W/GUARD	1
3	62261	ELECTRODE, ASM-DI P250AF	1
4	62556-002	BRACKET, ELECTRODE MOUNT-DI	1
5	62715-409	TUBE/HOUS-11"	1
9	64503-001	MOTOR/BLOWER	1
11	63566-001	SHUTTER, AIR ASM-(PIE STYLE)	1
18	64411-002	WIRE, IGNITOR LEAD-12" 5MM	1
*20	62411-161	WIRE, SENSOR-14" 18GA BLUE	1
*25	64050-007	GAS TRAIN, GAS/AIR MOD	1
26	62371-033	ORIFICE	1
27	63256-002	PLATE, BACK HOUSING P250/265	1

Figure 16 - Burner Exploded View

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Figure 17 - Burner Box Components

PARTS LIST			
ITEM	PART NUMBER	DESCRIPTION	QTY
2	64528-001	CONTROL, IGN -WAYNE-0 PREPURGE	1
3	64054-006	IHEAT, CONTROL BOARD GAS/AIR	1
4	60186-004	TRANSFORMER 120V/24V/30VA	1
5	63592-003	TERMINAL BLOCK, 3 POLE LC	2

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Figure 18 - Manual Control Box

PARTS LIST (*Starred parts not pictured)			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	64559-001	BOX ASSY., CONTROL-8" X 10"	1
2	64558-001	PLATE, COMPONENT MTG-8" X 10"	1
3	64554-001	CONVERTER, AC/DC 24V 50W	1
6	64557-001	PLATE, COVER-8" X 10"	1
7	64544-001	BOARD, 4-20 mA GENERATOR	1
8	64587-001	SWITCH, DIGITAL TEMPERATURE	1
9	63745-001	SWITCH, ROCKER-ON/OFF 20A 125V	1
15	64545-001	KNOB, iHEAT, - 8" X 10"	1
16	31954-001	STRAIN RELIEF-LOW PROFILE	3
23	64529-001	THERMOCOUPLE	1
*25	101412-002	CONNECTOR, PUSH WIRE-2 WIRE	1

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Figure 19 - Automatic Control Box

PARTS LIST (*Starred parts not pictured)			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	64559-001	BOX ASSY., CONTROL-8" X 10"	1
2	64558-001	PLATE, COMPONENT MTG-8" X 10"	1
4	64557-002	COVER, ENCLOSURE-8" X 10" AUTO	1
5	63745-001	SWITCH, ROCKER-ON/OFF 20A 125V	1
7	31954-001	STRAIN RELIEF-LOW PROFILE	3
14	64529-001	THERMOCOUPLE	1
20	64588-001	CONTROL, TEMP PANEL AUTO	1
*22	101412-003	CONNECTOR, PUSH WIRE-3 WIRE	1

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Appendix 2: Alternative Mounting Methods for the Wayne P250 Burner

In cases where a Forno Bravo Bracket Mount (standard) is not the best solution for mounting your burner due to a countertop installation, lack of a tray, space limitations, or other issues, Forno Bravo offers a Pedestal Mount Option. This is typically used in conjunction with the Flange Mount from Wayne Combustion, which grips the burner tube and has holes to bolt the burner to the oven/counter floor.The flange is used to align the burner in the oven and should be set so that one inch of burner tube extends above the cooking floor surface.

Caution! The flange mount is not designed to bear the whole weight of the burner and enclosure and is not UL Certified for this purpose. Rather, proper installation requires use of the additional mounting holes provided on the back or top face of the enclosure. The burner can be mounted with 3/8” support rods using the holes in the top or bolted to an oven’s structural framework using the 1/4” holes on the back. It can also use the optional pedestal mount, which allows the burner to be supported from below by an adjustable pedestal. See Appendix 1 for the flange mount dimensions. The flange (or other mount) and enclosure box should be installed below the floor tile, deck, and insulation levels to prevent heat transferring to the ignition cables and other burner components.

For safety, the flange must be used in combination with a pedestal mount or other mechanism able to support 40 lbs.

Installing a Pedestal Mount

Overview:

- Item 1 - Burner Enclosure (Qty 1)
- Item 2 - Pedestal Mount (Qty1)
- Item 3 - Lock Washer (Qty 2)
- Item 4 - 1/4-20 Screw (Qty 2)

Step 1: Attach the burner and enclosure to the bottom of your oven, utilizing your prefered method (flange, bracket mount, or other method.) The burner tube should extend 1” above the cooking floor surface for best performance.

Step 2: Place the bottom of the pedestal bracket flat against the floor next to the right side of the burner enclosure. Orientate the pedestal

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to extend under the burner, and at the right height and placement to align the two vertical channels with the two holes on the enclosure box. Important reminder, position the enclosure box such that its door can be opened for maintenance, repairs, or other access.

Step 3: Insert and secure the provided screws through the lock washers and the channels into the enclosure box.

Note: Four (4) holes are provided in the bottom of the pedestal bracket to allow for attachment to the floor, if desired, for additional stability.

To complete installation, continue with the steps for *9.1.C. Electrical Connections* and 9.1.*D. Gas Connections* found on page 17 of this manual.

C. Alternate Burner Bracket Mount (Overlapping 2 Piece Bracket)

The Forno Bravo two piece, overlapping, burner bracket mount is typically used with a tray and stand setup, and was shipped with the P250 burner prior to the development of the new standard mounting bracket. Installation instructions are detailed below.

Burner Elements Included:

- Wayne Combustion P250 Burner
- Wayne Combustion P250 iHeat Electronic Control Box
- Wayne Combustion P250 Instruction Manual (not shown; See Appendix 1)
- Wayne Combustion Mounting Bracket (not shown; used on Commercial Kits)

Hardware Included:

- Forno Bravo Top Mounting Bracket - Qty 1
- Forno Bravo Bottom Mounting Bracket - Qty 1
- Bracket to Burner Mounting Screws (#10-24 x 1/2" Phillips Head Steel Machine Screw) - Qty 4
- Bracket to Bracket Screws (#10-16 x 3/4" Phillips Head #3 Point Steel Self-Drilling Screw) - Qty 4

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Step 1: Remove the four (4) Screws from the top of the burner unit using an 8mm socket. (*They will not be used*.)

Step 2: Place the "Forno Bravo Bottom Mounting Bracket" over the burner sleeve with tabs facing up. Be sure to align all four (4) holes in the bracket base, then attach the bottom bracket to the burner using the four (4) bracket to burner screws.

Step 3: With its flaps pointing down and on the outside of the "Forno Bravo Bottom Mounting Bracket" flaps (which are pointing up,) place the "Forno Bravo Top Mounting Bracket" over the burner sleeve. Align the four (4) screw holes on the flaps. Using the four (4) bracket to bracket screws, join the top and bottom mounting brackets together.

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Step 4: Remove the four (4) nuts from the bottom of your fully assembled Forno Bravo oven stand.

Step 5: With the label on the burner facing the front of the oven, have a friend hold the burner, while you attach the Forno Bravo Top Mounting Bracket to the underside of oven using the four (4) nuts you removed in Step 4.

To complete installation, continue with the steps for *9.1.C. Electrical Connections* and *9.1.D. Gas Connections* found on page 17 of this manual.

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Appendix 3: Drago P2 Dual Burner Specifications and Installation

The following information pertains to the Drago P2 Natural Gas and Propane Gas Burners. This burner was the original commercial burner used on Forno Bravo ovens and was replaced by the Wayne P250 Modulating Burner in early 2019 on all new gas-fueled commercial pizza oven purchases.

Contact Customer Service for enquiries on purchasing the burner retrofit package if you would like to upgrade your Drago P2 burner to the Wayne P250 burner.

The information in Appendix 2 is intended as a reference guide for customers using the original Drago P2 burner model only. For information on gas oven models using the Wayne P250 burner, please reference Sections 8 – 12 of this manual, along with Appendix 1.

Gas Specifications (Gas Models with the Drago P2 Burner)

When installing a Forno Bravo Commercial Gas oven, have a licensed gas installer provide the hook-up and test all fittings and pipe connections for leaks. Use approved gas leak detectors (soap solutions or equivalent) over and around the fittings and pipe connections.

DO NOT USE FLAME TO TEST FOR LEAKS!

The burner manifold pressures have been adjusted and tested at the factory. A variety of factors can influence these pressures, so be sure to test the individual burner manifold pressures and adjust the valves as necessary to achieve the required pressures. Note: The gas valves are shipped in the "ON" position.

Gas Supply Pressure

Natural Gas: 5 to 8 inches WC

Liquid Propane (LP): 11 to 15 inches WC

The gas supply must be capable of providing at least 125,000 BTU at listed pressures.

Forno Bravo recommends that the appliance's individual shutoff valve (supplied by others) be left readily accessible.

We advise making the final connection to the burner using a flexible hose. This makes the burner removal much easier when performing maintenance.

Forno Bravo also recommends that inspection and maintenance of the burners and gas piping connections of this appliance be performed at regularly scheduled intervals (every 8 months to 1 year) and only by professional gas appliance service agencies.

Gas Code Limitations

The installation of this appliance must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, The Natural Gas installation Code CAN/CGA-B149.1 or the Propane Installation Code, CAN/CGA-B149.2, as applicable including:

> The appliance and its individual shutoff valve (supplied by others) must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.45 kPa).
>
> The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve (supplied by others) during any pressure testing of the gas supply piping system at test pressure, equal to or less than 1/2 psi (3.45 kPa).

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Natural (NG)and Propane (LP) Gas (Gas Models with Drago P2 Burner)

Drago P2 Burner Installation Steps

CAUTION: Thermocouple does NOT come pre-installed if you purchase an oven kit or knockdown version of our commercial ovens and will need to be installed at the time of DOME ASSEMBLY. *See thermocouple installation instructions in Step 6 below for details.

WARNING: The burner may not light during the first try, due to air in the gas line. Please cycle the unit 2-3 times and try again. If the burner fails to light, please see our FAQ page on the website for common fixes. If it is still not working properly, email support@fornobravo.com for additional assistance.

1. Bolt the Burner Assembly flange to the mounting plate located at the bottom of the oven stand.

Note: The top of the burner head must be level with the top of the oven cooking floor.

2. Attach the Burner Assembly to the gas line.

3. Bleed air from the line.
4. Mount the Control Box for easy access.

5. Snap the Quick Disconnect connectors together.

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6. Install the thermocouple.

6.1 The thermocouple temperature probe should be installed at 3 o'clock (right side) looking at the oven floor from the top. The burner opening should be installed at 10 o'clock (left side), on the opposite side of the oven. Thermocouple life expectancy varies greatly from just a few hours to many years, so be sure to have a way to access the thermocouple for easy replacement.

6.2. Thermocouple hole will be pre-drilled by Forno Bravo using a 3/8 inch masonry bit eight to nine inches above the floor, centered in the oven dome piece.

6.3. Insert the tip of the thermocouple probe into the hole, so that probe is visible two inches inside oven.

6.4 Attach the male / female connectors to connect the thermocouple probe to the burner control box.

Caution: Do not place thermocouple near gas burner, which is located at 10 o'clock, as the flame will cause the thermocouple to malfunction.

7. Attach Power Cord to Control Box, plug unit into a 120V outlet.

NOTE: Control Box has been preprogrammed to 200° F to begin the curing process.

8. Turn Control Box to "ON". It will calibrate once the initial cycle is complete. If does not light the first time, repeat two to three times.

9. Once the burner is lit, turn to "HEAT".

Gas Model Orifice Conversion

The Drago P2 burner can be equipped with orifices sized for operation with Natural Gas (NG) or Liquid Propane (LP.) It will be set up for one or the fuel source from the factory.

Orifice sizes necessary for:

- Natural Gas: Primary 3.25, Secondary 4.0
- Liquid Propane: Primary 2.5, Secondary 2.5

If you need to convert the burner orifices in order to change the fuel type being used, contact Forno Bravo Technical Support for assistance and instructions.

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Electrical Specifications (Gas Models using Drago P2 Burner)

Have a licensed electrician wire the transformer terminal strip with a 120V, 15 or 20 amp lead.

Electrical Code Limitations

ELECTRICAL GROUNDING: This appliance must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical code, ANSI/NFPA 70.

Warning

Electrical Grounding Instructions

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

Initial Operation (Gas Models)

First Day

1. Confirm that the unit is plugged in,and the gas supply is on.

2. Rotate front panel selector switch to “ON” and confirm that the controller display is illuminated and read a temperature in the “PV” window (no error indicator).

3. When ready to start the oven burners, set temperature by pressing the left button the controller once to indicate “SP1” on display. Press the Up and Down arrows until the temperature displayed in the “SV” window reaches 200°F. Press the right key to enter the temperature.

4. Rotate the selector switch to “HEAT” and the burners will ignite.

5. If “FLAME FAIL” light comes on, wait 5 seconds and push “RESET” button to reset the igniter. If “FLAME FAIL” light comes on more than three times, do not use the oven and consult a qualified repair person.

First Day Cure

1. Allow oven to operate at 200°F for one hour, then increase the temperature to 300°F, and allow the oven to operate at that temperature for 4 hours. Increase the temperature to 400°F and allow the oven to operate for 4 hours.

2. Turn the oven off and close the oven door.

Second Day Cure

1. Set the oven temperature to 400°F, and turn the oven on. Allow the oven to operate at 400°F for one hour.

2. Raise the oven temperature 100°F each hour until the oven temperature reaches 800°F.

3. Your oven is ready for Daily Operation.

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Caution

Take Care to Follow the INITIAL OPERATION Instructions. Failure to Properly Break-In Your Oven Can Cause Significant Damage and Void The Oven Warranty.

Small "HAIRLINE" cracks CAN occur IN THE OVEN DOME with normal heating and cooling. They will not AFFECT the performance or LONGEVITY of the oven. If cracks of 1/8" or more develop, contact Forno Bravo Customer Service.

Daily Operation (Gas Models using the Drago P2 Burner)

Daily Start Up

1. Remove the oven door and follow the Initial Operation instructions for turning on the oven.

2. Set the oven to the desired cooking temperature and allow it time to reach the selected temperature.

Turning Off the Oven

1. Turn the Switch Selector to “OFF”.

2. Always wait 5 minutes before relighting the oven

NEVER OPERATE THE OVEN WITH THE OVEN DOOR CLOSED.

IMPORTANT: If at any time you feel that the burner is not operating properly, turn the oven off and call for service. Before servicing, disconnect the electrical supply at the breaker and turn off the gas supply at the appliance’s individual gas shutoff valve.

In the event of a power failure, no attempt should be made to operate the oven.

Additional Settings and Important Notes

1. Pressing the Left Hand selection button a second time in secession will allow “SP2” to be adjusted. The temperature setting indicated is the temperature BELOW the Set Point “SP1” that the secondary burner (used for initial heating and for high throughput baking) will shut off. The shipped setting is “Minus 10°F”. For example, if Set Point “SP1” is 600°F, upon reaching 590°F, the secondary burner will shut off and the primary burner will continue to run until the “SP1” of 600°F is reached. In the event that the oven temperature falls more than 10°F below the desired temperature, the secondary burner will turn on.

2. On initial oven start-up after initial installation, or after retrofitting the gas line, there may be sufficient air introduced into the gas line that repeated “FLAME FAIL” indications may occur until all air is removed from the line. Seek competent professional assistance to resolve the problem.

3. The maximum temperature setting on the controller is set to 800°F.

4. The controller has optional alarms, “AL1” and “AL2” which are not used. Ignore the “AL1” and “AL2” lights.

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Wiring Diagram (For Gas Models using the Drago P2 Dual Burner)

REV2 (6X6X4 80X)

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Appendix 4: Listing Labels

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SERIAL NO. [ ]

MANUFACTURED [ ]

Intertek 3178150 Intertek 3178150

PROFESSIONALE / ROMA SERIES OR MODENA2G / NAPOLI SERIES REFRACTORY OVENS

OVEN MODEL AND SIZE: FUEL: WOOD ☐ GAS ☐

PROFESSIONALE / ROMA SERIES ☐ SIZE: 110 ☐ 120 ☐

MODENA2G / NAPOLI SERIES ☐ SIZE: 120 ☐ 140 ☐ 160 ☐ 180 ☐

THIS APPLIANCE CAN BE USED WITH NG OR LP GAS / CET APPAREIL FONCTIONNE AU GAZ NATUREL (GN) OU AU PROPANE LIQUIDE (LP)

INSTALL AND USE ONLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS. CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE. USE ONLY WITH A LISTED TYPE HT FACTORY-BUILT CHIMNEY, GREASE DUCT CHIMNEY, OR TYPE 1 HOOD. FOLLOW INSTRUCTIONS FOR PASSING CHIMNEY THROUGH COMBUSTIBLE WALLS AND CEILINGS.

MAINTAIN 1" (25MM) CLEARANCE (AIR SPACE) ON ALL SIDES AND 14" (354MM) ON TOP FROM COMBUSTIBLE MATERIALS. DO NOT FILL REQUIRED AIR SPACE WITH INSULATION OR OTHER MATERIALS.

COVER AREA ABOVE THE DOORWAY AND 6" (152MM) TO EACH SIDE WITH NON-COMBUSTIBLE MATERIAL. 30" (762MM) SIDE AND 36" (914MM) FRONT MINIMUM HEARTH EXTENSION AREAS FROM THE OPENING TO COMBUSTIBLE FLOORS.

TO REDUCE RISK OF CREOSOTE FIRE, INSPECT OVEN TWICE MONTHLY AND CLEAN WHEN NECESSARY. DO NOT OVERFIRE; WHEN FLAME SPILLS OUT OF THE OVEN, YOU ARE OVERFIRING. DO NOT USE GRATE OR ELEVATE FIRE; BUILD FIRE DIRECTLY ON HEARTH. DO NOT OPERATE WITH OVEN DOOR CLOSED. FOR USE WITH SOLID FUEL ONLY.

THIS COOKING EQUIPMENT CAN BE INSTALLED WITH AN EXHAUST HOOD TESTED FOR COMPLIANCE WITH THE STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS, NFPA 96, OR WITH THE REQUIREMENTS IN THE STANDARD FOR EXHAUST HOODS FOR COMMERCIAL EQUIPMENT, UL 710. HOOD MUST BE INSTALLED IN ACCORDANCE WITH NFPA 96, AND ALL LOCAL APPLICABLE CODES.

FRONT LOWER EDGE OF HOOD ABOVE TOP OF OPENING 24 3/4" MAX. MINIMUM MOUNTING HEIGHT FROM FLOOR TO FRONT LOWER EDGE OF HOOD 6'8". MAINTAIN 3" (75MM) CLEARANCE (AIR SPACE) ON ALL SIDES OF THE HOOD FROM COMBUSTIBLE MATERIALS. DO NOT FILL REQUIRED AIR SPACE WITH INSULATION OR OTHER MATERIALS. 875 CFM EXHAUST VENTILATOR.

DO NOT REMOVE OR COVER THIS LABEL. CERTIFIED TO: ANSI STD Z83.11-2016, CSA 1.8-2016, UL 737-2011, UL 2162-2014, NSF/ANSI4-2007, ULC S627-2000, AND ULC/ORD 2162-2013. REFER TO THE INTERTEK DIRECTORY OF BUILDING PRODUCTS (HTTPS://BPDIRECTORY.INTERTEK.COM) FOR DETAILED INFORMATION.

INSTALLEZ ET UTILISAZ EN CONFORMITÉ AVEC LES INSTRUCTIONS DE FONCTIONNEMENT ET D'INSTALLATION DU FABRICANT VEUILLEZ ENTRER EN CONTACT AVEC VOTRE REPRESENTANT DU POSTE DE POMPIERS LE PLUS PRÉS AU SUJET DES INSPECTIONS AU SUJET DEW RESTRICTIONS ET DE L'INSTALLATION DANS VOTRE LOCALITÉ.

NE PAS CONNECTER CETTE UNITÉ A UNE FLUTE DE CHEMINÉE DESSERVANT UN AUTRE APPAREIL. UTILISEZ SEULEMENT AVEC UNE CHEMINÉE CONSTRUITE EN USINE DE TYPE HT RÉPERTORIÉ, GRAISSER LE CONDUIT DE LA CHEMINÉE OU LA HOTTE DE TYPE 1. SUIVEZ LES INSTRUCTIONS POUR PASSER LA CHEMINÉE AU TRAVERS DES MURS ET PLAFOND COMBUSTIBLES.

MAINTENEZ UN DÉGAGEMENT DE 1 PO (25MM) DE TOUS LES COTES ET DE 14 PO (354MM) AU DESSUS DES MATÉRIAUX COMBUSTIBLES. NE PAS REMPLIR L'ESPACE VIDE REQUISE AVEC UN ISOLANT OU AVEC D'AUTRES MATÉRIAUX. COUVREZ L'AIRE AU-DESSUS DE LA PORTE ET 6 PO (152MM) DE CHAQUE COTE AVEC DU MATÉRIAL NON-COMBUSTIBLE. DES AIRES DE 20 PO (762MM) DE COTE ET DE 36 PO (9214MM) DEVANT AU MINIMUM POUR AGRANDIR DE L'OUVERTURE AUX SEUILS COMBUSTIBLE.

AFIN DE RÉDUIRE LES RISQUES DE FEU CAUSE PAR LA CRÉOSOTE, EFFECTUER UNE INSPECTION BIMENSUELLE ET NETTOYER LORSQUE REQUIS. NE PAS SURCHAUFFER; VOUS SURCHAUFFEZ LORSQUE LES FLAMMES SORTENT DU FOUR. NE PAS FAIRE DE FEU EN LONG OU ENCOURE EN HAUTEUR; CONSTRUISEZ VOTRE FEU DIRECTEMENT DANS LE FOYER. NE PAS FAIRE FONTIONNER AVEC LA PORTE FERMÉE.

CET APPAREIL DE CUISSON PEUT ÊTRE INSTALLÉE AVEC UNE HOTTE CONFORME AUX NORMES SURE LE CONTROLE ET LA PROTECTION INCENDIE DES INSTALLATIONS COMMERCIALES DE CUISSON, NFPA 96, OU ENCORE SELON LES EXIGENCES DEW NORMES POUR LES HOTTES POUR TOUTES ÉQUIPEMENTS DE CUISSON COMMERCIAL, UL 710. LA HOTTE DOIT ÊTRE INSTALLÉE SELON NFPA 96 ET TOUS LES CODES APPLICABLES.

DU BORD INFERIEUR DE LA HOTTE AU-DESSUS DE L'OUVERTURE SUPÉRIEUR DE 24 3/4 PO MAX. LA HAUTEUR MINIMALE DE MONTAGE DU PLANCHER AU BORD INFÉRIEUR DE LA HOTTE DOIT ÊTRE DE 6 PI. 8 PO. MAINTENIR 3 PO. (75MM) DE DÉGAGEMENT (DÉGAGEMENT D'AIR) DE TOUS LES CÔTÉS DE LA HOTTE DES MATÉRIAUX COMBUSTIBLES. NE PAS REMPLIR LE DÉGAGEMENT D'AIR AVEC UN ISOLANT OU TOUT AUTRE VENTILATEUR DE 875 CFM.

NE PAS ENLEVER OU COUVRIR CETTE ÉTIQUETTE. CERTIFIÉ À : ANSI STD Z83.11-2016, CSA 1.8-2016, UL 737-2011, UL 2162-2014, NSF/ANSI4-2007, ULC S627-2000, ET ULC/ORD 2162-2013. REPORTEZ-VOUS AU RÉPERTOIRE DES PRODUITS DE CONSTRUCTION D'INTERTEK (HTTPS://BPDIRECTORY.INTERTEK.COM) POUR OBTENIR DES INFORMATIONS DÉTAILLÉES.

CAUTION: HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, CLOTHING, AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS. SEE NAMEPLATE AND INSTRUCTIONS.

ATTENTION: CHAUD ALORSQU'IL EST EN FONCTION. NE PAS TOUCHER. GARDER ENFANT, VÉTEMENT ET MEUBLE A L'ÉCRT. TOUT CONTACT PEU CAUSER DES BRULURES DE LA PEAU. VOIR LA PLAQUE SIGNALITIQUE ET LES INSTRUCTIONS.

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Commercial Ovens

Professionale, Roma, Modena2G, Napoli Ovens

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13525 BLACKIE RD.
CASTROVILLE, CA 95012
WWW.FORNOBRAVO.COM

SERIAL NO. [ ]

MANUFACTURED [ ]

Intertek 3178150 | Intertek 3178150

GAS BURNER FOR PROFESSIONALE / ROMA SERIES AND MODENA2G / NAPOLI SERIES OVENS

OVEN MODEL: PROFESSIONALE / ROMA SERIES ☐ MODENA2G / NAPOLI SERIES ☐

TYPE OF GAS EQUIPPED FOR: / TYPE DE GAZ EQUIPE POUR: NAT. ☐ LP ☐

NORMAL HOURLY BTU INPUT RATING (MODULATING 5:1):

85,000 BTU ☐ 100,000 BTU ☐ 110,000 BTU ☐ 120,000 BTU ☐

INSTALL AND USE ONLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS. CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

THIS APPLIANCE CAN BE USED WITH NATURAL OR PROPANE (LP) GAS. FOR YOUR SAFETY REFER TO INSTALLATION INSTRUCTIONS FOR CONVERSION PROCEDURE.

FOR NATURAL GAS WHEN EQUIPPED WITH DRILL SIZE ORIFICE: NO. 5/32 (85,000 BTU), NO. 17 (100,000 BTU), NO. 14 (110,000 BTU), OR NO. 10 (120,000 BTU). FOR PROPANE (LP) GAS WHEN EQUIPPED WITH DRILL SIZE ORIFICE: NO. 36 (85,000 BTU), NO. 35 (7/64) (100,000 BTU), NO. 31 (110,000 BTU), OR NO. 3.1MM (120,000 BTU).

NATURAL GAS MANIFOLD PRESSURE: 4 INCHES WC; PROPANE (LP) GAS MANIFOLD PRESSURE: 10 INCHES WC.

GAS SUPPLY MUST PROVIDE AT LEAST 120,000 BTU AT LISTED PRESSURES.

INTENDED FOR OTHER THAN HOUSEHOLD USE.

REQUIRES 120 VOLT, 60 HZ, SINGLE PHASE 15 AMP ELECTRIC SUPPLY. MUST BE PROPERLY GROUNDED. LOVE 8C-5 TEMPERATURE CONTROLLER. AC 100-240V, 50/60 HZ, 5VA.

DO NOT REMOVE OR COVER THIS LABEL. CERTIFIED TO ANSI STD Z83.11-2016, CSA 1.8-2016, UL737-2011, UL 2162-2014, NSF/ANSI4-2007, ULC S627-2000, AND ULC/ORD 2162-2013. REFER TO THE INTERTEK DIRECTORY OF BUILDING PRODUCTS (HTTPS://BPDIRECTORY.INTERTEK.COM) FOR DETAILED INFORMATION.

INSTALLER ET UTILISER SEULEMENT CONFORMÉMENT AUX INSTRUCTIONS D'INSTALLATION ET DE FONTIONNEMENT DU FABRICANT. CONTACTEZ VOS FONCTIONNAIRES LOCAUX OU DES INCENDIES SUR LES RESTRICTIONS ET L'INSPECTION DE L'INSTALLATION DANS VOTRE ESPACE.

CET APPAREIL PEUT ÊTRE UTILISÉ AVEC GAZ NATUREL OU PROPANÉ (LP). POUR VOTRE SÉCURITÉ, CONSULTEZ LES INSTRUCTIONS D'INSTALLATION POUR LA PROCEDURE DE CONVERSION.

POUR L'UTILISATION DE GAZ NATUREL LORSQUE L'APPAREIL EST POUVRVU D'UN ORIFICE : N° 5/32 (85.000 BTU), N° 17 (100.000 BTU), N° 14 (110.000 BTU), OU N° 10 (120.000 BTU). POUR L'UTILISATION DE GAZ PROPANE (LP) LORSQUE L'APPAREIL EST POUVRVU D'UN ORIFICE : N° 36 (85.000 BTU), N° 35 (7/64) (100.000 BTU), N° 31 (110.000 BTU), OU N° 3,1MM (120.000 BTU).

PRESSION DE COLLECTEUR DE GAZ NATUREL: 4 POUCES WC; PROPANE (LP) CAPTEUR DE GAZ PRESSION: 10 POUCES WC.

L'APPROVISIONNEMENT DE GAZ DOIT ENVOYER AU MOINS 120.000 BTU AUX PRESSIONS ÉCLAIRÉES.

DESTINÉ À L'UTILISATION QUE L'UTILISATION DES MÉNAGES.

DEMANDE 120 VOLT, 60HZ, UNIQUE PHASE 15 AMP ALIMENTATION ÉLECTRIQUE. DOIT ÊTRE CORRECTEMENT TERRIBÉ. LOVE 8C-5 REGULATEUR DE TEMPERATURE. AC 100-240V, 50/60 HZ, 5VA.

NE PAS ENLEVER OU COUVRIR CETTE ÉTIQUETTE. CERTIFIÉ À : ANSI STD Z83.11-2016, CSA 1.8-2016, UL 737-2011, UL 2162-2014, NSF/ANSI4-2007, ULC S627-2000 ET ULC/ORD 2162-2013. REPORTEZ-VOUS AU RÉPERTOIRE DES PRODUITS DE CONSTRUCTION D'INTERTEK (HTTPS://BPDIRECTORY.INTERTEK.COM) POUR OBTENIR DES INFORMATIONS DÉTAILLÉES.

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Commercial Ovens

Professionale, Roma, Modena2G, Napoli Ovens

Appendix 5: Forno Bravo Type 1 Hood Diagrams

Professionale 72
Roma 73
Modena 74
Napoli 75

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ENGINEERING DATA

Mechanical Requirements

The amount of exhaust volume required is dependent upon the type of cooking equipment and the type and volume of cooking. Contact factory for exhaust volumes, duct sizes, and static pressures.

Electrical

A Gaylord stop/start switch, Model C-150, may be provided as an option for each exhaust fan. Lights to be on separate circuit, 120 volt standard, 220/240 volt optional.

The manufacturer reserves the right to modify the materials and specifications resulting from a continuing program of product improvement or the availability of new materials

Ventilator Lengths

Ventilator unit length is 62"L x 48"W x 24"T. For greater lengths, join two or more sections together. Check to ensure that there is adequate access into building and kitchen area.

Hanging Weight

Ventilator Width		62"
Ventilator Wt. / Lineal Ft.	Lbs.	450

Form No. EL- ND- CL- S-MP- SPA-0516

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ENGINEERING DATA

Mechanical Requirements
The amount of exhaust volume required is dependent upon the type of cooking equipment and the type and volume of cooking. Contact factory for exhaust volumes, duct sizes, and static pressures.

Electrical
A Gaylord stop/start switch, Model C-150, may be provided as an option for each exhaust fan. Lights to be on separate circuit, 120 volt standard, 220/240 volt optional.

The manufacturer reserves the right to modify the materials and specifications resulting from a continuing program of product improvement or the availability of new materials

Ventilator Lengths
Ventilator unit length is 62"L x 48"W x 24"T. For greater lengths, join two or more sections together. Check to ensure that there is adequate access into building and kitchen area.

Hanging Weight

Ventilator Width		62"
Ventilator Wt. / Lineal Ft.	Lbs.	450

Form No. EL- ND- CL- S-MP- SPA-0516

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ENGINEERING DATA

Mechanical Requirements

The amount of exhaust volume required is dependent upon the type of cooking equipment and the type and volume of cooking. Contact factory for exhaust volumes, duct sizes, and static pressures.

Electrical

A Gaylord stop/start switch, Model C-150, may be provided as an option for each exhaust fan. Lights to be on separate circuit, 120 volt standard, 220/240 volt optional.

The manufacturer reserves the right to modify the materials and specifications resulting from a continuing program of product improvement or the availability of new materials

Ventilator Lengths

Ventilator unit length is 62"L x 48"W x 24"T. For greater lengths, join two or more sections together. Check to ensure that there is adequate access into building and kitchen area.

Hanging Weight

Ventilator Width		62"
Ventilator Wt. / Lineal Ft.	Lbs.	450

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ENGINEERING DATA

Mechanical Requirements

The amount of exhaust volume required is dependent upon the type of cooking equipment and the type and volume of cooking. Contact factory for exhaust volumes, duct sizes, and static pressures.

Electrical

A Gaylord stop/start switch, Model C-150, may be provided as an option for each exhaust fan. Lights to be on separate circuit, 120 volt standard, 220/240 volt optional.

The manufacturer reserves the right to modify the materials and specifications resulting from a continuing program of product improvement or the availability of new materials

Ventilator Lengths

Ventilator unit length is 62"L x 48"W x 24"T. For greater lengths, join two or more sections together. Check to ensure that there is adequate access into building and kitchen area.

Hanging Weight

Ventilator Width		62"
Ventilator Wt. / Lineal Ft.	Lbs.	450

Form No. EL- ND- CL- S-MP- SPA-0516

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Commercial Ovens

Professionale, Roma, Modena2G, Napoli Ovens

Appendix 6: Oven Dimensions

Professionale110-W-OK....77
Professionale110-W-FA....80
Roma 110-W-FA....83
Professionale120-W-OK....86
Professionale120-W-FA....89
Roma 120-W-FA....92
Professionale110-G-OK....95
Professionale110-G-FA....98
Roma 110-G-FA....101
Professionale120-G-OK....104
Professionale120-G-FA....107
Roma 120-G-FA....110
Modena2G 120-W-OK....113
Modena2G120-W-FA....116
Napoli 120-W-FA/FA-NS....119
Modena2G140-W-OK....123
Modena2G140-W-FA....126
Napoli 140-W-FA/FA-NS....129
Modena2G160-W-OK....133
Modena2G160-W-FA....136
Modena2G180-W-OK....139
Modena2G180-W-FA....142
Modena2G120-G-OK....145
Modena2G 120-G-FA....148
Napoli 120-G-FA/FA-NS....151
Modena2G140-G-OK....155
Modena2G140-G-FA....158
Napoli 140-G-FA/FA-NS....161
Modena2G160-G-OK....165
Modena2G160-G-FA....168
Modena2G180-G-OK....171
Modena2G180-G-FA....174

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Front View

Side Elevation

SECTION A-A

Shown with non combustible concrete hearth

Top View

Clearance to combustibles:

Allow 1" clearance all the way around side walls;

14" above completed dome assembly;

30" Side clearance from door opening;

Non combustible concrete hearth;

Allow 36" from front of oven landing to combustibles;

Specifications:

Wood fuel can be upgraded to gas unit. Refer to gas model for specifications;

Check local codes for venting requirements. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 48"W x 54"D x 62"H;

Approx weight 2085 lbs.;

Lift gate service provided.

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	N/A
Brick Landing	Usually 8"	Preference
Stucco	Approx. 1"	Approx. 2"
Tile	Approx. 1"	Approx. 2"
Stone/Brick Veneer	Check Material Spec.	
Brick or Masonary non veneer	Check Material Spec.	
UL-2162, UL-737, CAN/CGA-1.8, ANSI-Z83.11 Listed		
For more information: www.fornobravo.com		

Intertek

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Made in the U.S.A. *Commercial Wood Fired Pizza Oven*

FORNO BRAVO®
THE WORLD'S FINEST PIZZA OVENS

Professionale 110W
Wood Fired Pizza Oven

Architect Drawings *SKU: FPRO110-WOK*

Revision 05/10/2016 *Sheet: 1 of 3*

5 4 3 2 1

ISO View

Top View

Professionale 110W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clarity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

For more information: www.fornobravo.com

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Professionale 110W
Wood Fired Pizza Oven Pad
Architect Drawings

Revision 05/10/2016	*Sheet: 2 of 3*

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Professionale 110W

Pizza Oven Floor Tile Layout

Architect Drawings *SKU:FPRO110-WOK*

Revision 05/10/2016 *Sheet: 3 of 3*

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Front View

Side Elevation

Top View

SECTION A-A

Shown with non combustible metal hearth

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships: 68"W x 71"D x 84"H;
Oven weight: 3090 lbs.

Fork truck or dock access required upon delivery.

For more information: www.fornobravo.com

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Professionale 110W
Wood Fired Oven

Architect Drawings — SKU: FPRO110-WKD/WFA

Revision 03/31/2016 — Sheet: 1 of 3

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ISO VIEW

Top View

Professionale 110W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

For more information: www.fornobravo.com

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Professionale 110W
Pizza Oven Pad
Architect Drawings

Revision 03/31/2016	*Sheet: 2 of 3*

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

For more information: www.fornobravo.com

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Commercial Wood Fired Pizza Oven

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Professionale 110W

Pizza Oven Floor Tile Layout

SKU: FPRO110-WKD/WFA

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Front View

Side Elevation

SECTION A-A

Shown with non combustible metal hearth

Top View

Clearance to combustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Check local codes for venting requirements.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 71"W x 73"D x 84"H, up to 3600 lbs..

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Commercial Wood Fired Pizza Oven

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Roma 110W
Wood Fired Pizza Oven

Architect Drawings

SKU: FR110-WFA

Revision 6/16/2016

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ISO View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clarity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

Roma 110W oven stand footprint

Side Elevation

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Commercial Wood Fired Pizza Oven

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THE WORLD'S FINEST PIZZA OVENS

Roma 110W
Wood Fired Pizza Oven
Architect Drawings

Revision 6/16/2016

Sheet: 2 of 3

For more information: www.fornobravo.com

5 4 3 2 1

ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

For more information: www.fornobravo.com

Intertek

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Made in the U.S.A. *Commercial Wood Fired Pizza Oven*

FORNO BRAVO®
THE WORLD'S FINEST PIZZA OVENS

Roma 110W
Pizza Oven Floor Tile Layout

Architect Drawings	*SKU: FR110-WFA*
Revision 6/16/2016	*Sheet: 3 of 3*

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Front View

Side Elevation

SECTION A-A

Shown with non combustible concrete hearth

Top View

Clearance to combustibles:

Allow 1" clearance all the way around side walls;

14" above completed dome assembly;

30" Side clearance from door opening;

Non combustible concrete hearth;

Allow 36" from front of oven landing to combustibles;

Specifications:

Wood fuel can be upgraded to gas unit. Refer to gas model for specifications;

Check local codes for venting requirements. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 48"W x 54"D x 66"H;

Approx weight 2300 lbs.;

Lift gate service provided.

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	N/A
Brick Landing	Usually 8"	Preference
Stucco	Approx. 1"	Approx. 2"
Tile	Approx. 1"	Approx. 2"
Stone/Brick Veneer	Check Material Spec.	
Brick or Masonary non veneer	Check Material Spec.	
UL-2162, UL-737, CAN/CGA-1.8, ANSI-Z83.11 Listed		
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Commercial Wood Fired Pizza Oven

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THE WORLD'S FINEST PIZZA OVENS

Professionale 120W
Wood Fired Oven

Architect Drawings

SKU: FPRO120-WOK

Revision 02/24/2016

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5 4 3 2 1

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ISO View

Top View

Professionale 120W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Professionale 120W
Pizza Oven Pad
Architect Drawings

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ISO View

When ordering replacent tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Professionale 120W

Pizza Oven Floor Tile Layout

SKU: FPRO120-WOK

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Front View

Side Elevation

Top View

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 84"W x 84"D x 84"H;
Oven weight: 3303 lbs.

SECTION A-A

Shown with non combustible metal hearth

Fork truck or dock access required upon delivery.

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Professionale 120W
Wood Fired Oven

Architect Drawings

SKU: FPRO120-WKD/WFA

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ISO VIEW

Top View

Professionale 120W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Professionale 120W
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ISO View

When ordering replacent tiles reference tile number and pizza oven model.

Top View

Side Elevation

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Professionale 120W

Pizza Oven Floor Tile Layout

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Front View

Side Elevation

SECTION A-A

Shown with non-combustible metal hearth

Top View

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non-combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 84"W x 89"D x 84"H, Oven weight: 4000 lbs.

For more information: www.fornobravo.com

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Roma 120W

Wood Fired Pizza Oven

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ISO View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

Roma 120W oven stand footprint

Side Elevation

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Roma 120W

Wood Fired Pizza Oven Pad

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Roma 120W

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Front View

Side Elevation

SECTION A-A

Shown with non combustible concrete hearth

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air and access requirements

Gas burner cutout

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

Non combustible concrete hearth

Allow 36" from front of oven landing to combustibles

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 48"W x 52"D x 62"H;

Approx weight 2085 lbs.

Lift gate service provided.

Intertek

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Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	N/A
Brick Landing	Usually 8"	Preference
Stucco	Approx. 1"	Approx. 2"
Tile	Approx. 1"	Approx. 2"
Stone/Brick Veneer	Check Material Spec.	
Brick or Masonary non veneer	Check Material Spec.	
UL-2162, UL-737, CAN/CGA-1.8, ANSI-Z83.11 Listed		
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Professionale 110G
Gas Fired Pizza Oven

Architect Drawings *SKU: FPRO110-GOK*

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ISO View

Top View

Professionale 110G oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clarity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Professionale 110G

Pizza Oven Floor Tile Layout

Architect Drawing

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Front View

Side Elevation

SECTION A-A

Shown with non combustible metal hearth

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

30" Side clearance from door opening

Allow 36" from front of oven landing to combustibles

Non combustible concrete hearth

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements.
Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;
Crate ships 68"W x 71"D x 84"H, Oven weight: 3090 lbs.

Fork truck or dock access required upon delivery.

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Gas Fired Oven

Architect Drawings

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ISO VIEW

Top View

Professionale 110G oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Professionale 110G

Pizza Oven Floor Tile Layout

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Front View

Side Elevation

SECTION A-A

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Clearance to combustibles:

Allow 1" clearance all the way around side walls;

14" above completed dome assembly;

30" Side clearance from door opening;

Allow 36" from front of oven landing to combustibles;

Non combustible concrete hearth.

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements.
Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 71"W x 73"D x 84"H, Oven weight: 3700 lbs.

Shown with non combustible metal hearth

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Roma 110G
Gas Fired Pizza Oven

Architect Drawings | SKU: FR110-GFA

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ISO View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

Roma 110G oven stand footprint

Side Elevation

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Pizza Oven Floor Tile Layout

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Front View

Side Elevation

SECTION A-A

Shown with non combustible concrete hearth

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Gas burner cutout

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

Non combustible concrete hearth

Allow 36" from front of oven landing to combustibles

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 48"W x 52"D x 66"H;

Approx weight 2300 lbs.

Lift gate service provided.

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	N/A
Brick Landing	Usually 8"	Preference
Stucco	Approx. 1"	Approx. 2"
Tile	Approx. 1"	Approx. 2"
Stone/Brick Veneer	Check Material Spec.	
Brick or Masonary non veneer	Check Material Spec.	
UL-2162, UL-737, CAN/CGA-1.8, ANSI-Z83.11 Listed		
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Professionale 120G
Gas Fired Oven

Architect Drawings

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ISO View

Top View

Professionale 120G oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Front View

Side Elevation

SECTION A-A

Shown with non combustible metal hearth

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

30" Side clearance from door opening

Allow 36" from front of oven landing to combustibles

Non combustible concrete hearth

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 84"W x 84"D x 84"H, up to 3303 lbs.

Fork truck or dock access required upon delivery.

For more information: www.fornobravo.com

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Gas Fired Oven

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ISO VIEW

Top View

Professionale 120G oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Pizza Oven Floor Tile Layout
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Front View

Side Elevation

SECTION A-A

Shown with non combustible metal hearth

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Clearance to combustibles:

Allow 1" clearance all the way around side walls;

14" above completed dome assembly;

30" Side clearance from door opening;

Allow 36" from front of oven landing to combustibles;

Non combustible concrete hearth.

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 84"W x 89"D x 84"H, up to 4100 lbs.

For more information: www.fornobravo.com

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Roma 120G
Gas Fired Pizza Oven

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ISO View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

Roma 120G oven stand footprint

Side Elevation

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the floor.

No more than 3/8" filler around landing or door may not fit.

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Roma 120G
Pizza Oven Floor Tile Layout
SKU: FRO120-GFA

Revision 6/16/2016

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Front View

Side Elevation

Recommended Minimum with no arch / landing

Section A-A

Shown with non combustible Concrete Hearth

Top View

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

Non combustible concrete hearth

Allow 36" from front of oven landing to combustibles

Specifications:

Wood fuel can be upgraded to gas unit. Refer to gas model for specifications;

Check local codes for venting requirements. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 78"W x 82"D x 80"H;

Approx weight 3090 lbs.

Fork truck or dock access required upon delivery

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	N/A
Brick Landing	Usually 8"	Preference
Stucco	Approx 1"	Approx 2"
Tile	Approx 1"	Approx 2"
Stone/Brick Veneer	Check Material Spec	Approx 2"
Brick or Masonary non veneer		
UL-2162, UL-737, NSF-4, CAN/CGA-1.8, ANSI-Z83.11 Listed		
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Modena2G 120W
Architect Drawings
SKU: FM2G120-WOK

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ISO View

Top View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

Side Elevation

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Mondena2G 120W Foundation

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 120W

Floor Tile Layout

SKU: FM2G12O-WOK

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Front View

Side Elevation

SECTIONA-A

Top View

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;
Crate ships 78"W x 82"D x 80"H, up to 3090 lbs.

Fork truck or dock access required upon delivery.

Shown with non combustible metal hearth

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Modena2G 120W
Wood Fired Pizza Oven

Architect Drawings *SKU: FM2G120-WKD/WFA*

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ISO View

Top View

Modena2G 120W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Modena2G 120W
Wood Fired Pizza Oven Pad
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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 3/8" mortar, sairset or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 120W

Pizza Oven Floor Tile Layout

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Front View

Side Elevation

SECTION A-A

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening

36" clearance from front landing.

Non combustible metal hearth

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Available with or without the stand;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 76"W x 87"D x 84"H, up to 6000 lbs.

Fork truck or dock access required upon delivery.

Top View

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Napoli 120W
Wood Fired Oven

Architect Drawings

SKU: FN120W

Revision 02/22/2016

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Front View

Side Elevation

SECTION A-A

Shown with non combustible
Concrete Hearth

Top View

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening

36" clearance from front landing.

Non combustible metal hearth

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Available with or without the stand;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 76"W x 87"D x 84"H, up to 6000 lbs.

Fork truck or dock access required upon delivery.

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Napoli 120W
Wood Fired Oven

Architect Drawings *SKU: FN120W-NS*

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ISO View

Top View

Napoli 120W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Napoli 120W Foundation

Pizza Oven Pad

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset ,or #60 mesh sand to level the floor.

No more than 3/8" filler around landing or door may not fit.

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Napoli 120W
Pizza Oven Floor Tile Layout
SKU: FN120W

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Front View

Side Elevation

Section A-A

Shown with non combustible Concrete Hearth

Top View

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

Non combustible concrete hearth

Allow 36" from front of oven landing to combustibles

Specifications:

Wood fuel can be upgraded to gas unit. Refer to gas model for specifications;

Check local codes for venting requirements. Product UL listed for UL 103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 78"W x 82"D x 80"H;

Approx weight 3300 lbs.

Fork truck or dock access required upon delivery

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	Approx 3"
Brick Landing	Usually 8"	Preference
Stucco	Approx 1"	Approx 2"
Tile	Approx 1"	Approx 2"
Stone/Brick Veneer	Approx 1"	Approx 2"
Brick or Masonary non veneer	Check Material Spec	

UL-2162, UL-737, NSF-4, CAN/CGA-1.8, ANSI-Z83.11 Listed

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Modena2G 140W
Architect Drawings
SKU: FM2G140-WOK

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ISO View

Top View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

Side Elevation

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Modena2G 140W Foundation

Architect Drawings

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5 4 3 2 1

ISO View

When ordering replacement tiles reference tile number and oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level floor.

Specifications:

Floor is NSF-4 rated with 2-1/2" thick surface.

Use 3/8" mortar, sairset, or #60 mesh sand to level the floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 140W

Floor Tile Layout

SKU: FM2G140-WOK

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Front View

Side Elevation

SECTION A-A

Top View

Shown with non combustible metal hearth

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 84"W x 83"D x 84"H, up to 3830 lbs.

Fork truck or dock access required upon delivery.

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Modena2G 140W

Wood Fired Pizza Oven

Architect Drawings *SKU: FM2G140-WKD/WFA*

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ISO View

Top View

Modena2G 140W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

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Modena2G 140W
Wood Fired Pizza Oven Pad
Architect Drawings

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 140W

Pizza Oven Floor Tile Layout

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Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

36" clearance from front landing.

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Available with or without the stand;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 76"W x 87"D x 84"H, up to 6000 lbs.

Fork truck or dock access required upon delivery.

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Napoli 140W
Wood Fired Oven

Architect Drawings

SKU: FN140W

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Front View

Side Elevation

SECTION A-A

Shown with non combustible
Concrete Hearth

Top View

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening

36" clearance from front landing.

Non combustible metal hearth

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Available with or without the stand;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 76"W x 87"D x 84"H, up to 6000 lbs.

Fork truck or dock access required upon delivery.

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Napoli 140W
Wood Fired Oven

Architect Drawings *SKU: FN140W-NS*

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ISO View

Top View

Napoli 140W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Napoli 140W Foundation
Pizza Oven Pad
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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level thepizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Napoli 140W
Pizza Oven Floor Tile Layout
SKU: FN140W

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Front View

Side Elevation

Section A- A

Shown with non combustible Concrete Hearth

Top View

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

Non combustible concrete hearth

Allow 36" from front of oven landing to combustibles

Specifications:

Wood fuel can be upgraded to gas unit. Refer to gas model for specifications;

Check local codes for venting requirements. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 78"W x 82"D x 80"H;

Approx weight 3600 lbs.

Fork truck or dock access required upon delivery

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	Approx 3"
Brick Landing	Usually 8"	Preference
Stucco	Approx 1"	Approx 2"
Tile	Approx 1"	Approx 2"
Stone/Brick Veneer	Approx 1"	Approx 2"
Brick or Masonary non veneer	Check Material Spec	

UL-2162, UL-737, NSF-4, CAN/CGA-1.8, ANSI-Z83.11 Listed

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Modena2G 160W

Architect Drawings

SKU: FM2G160-WOK

Revision 02/18/2016

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ISO View

Top View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

Side Elevation

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Architect Drawings

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ISO View

When ordering replacement tiles reference tile number and oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level floor.

Specifications:

Floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 160W

Floor Tile Layout

SKU: FM2G160-WOK

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Front View

Side Elevation

SECTION A-A

Top View

Shown with non combustible metal hearth

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit. Refer to gas model for specifications;

Check local codes for venting requirments. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 92"W x 80"D x 84"H, up to 3950 lbs.

Fork truck or dock access required upon delivery.

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Modena2G 160W

Wood Fired Pizza Oven

Architect Drawings *SKU: FM2G160-WKD/WFA*

Revision 03/11/2016	*Sheet: 1 of 3*

5 4 3 2 1

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ISO View

Top View

Modena2G 160W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

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Modena2G 160W

Wood Fired Pizza Oven Pad

Architect Drawings

Revision 03/11/2016	*Sheet: 2 of 3*

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 160W

Pizza Oven Floor Tile Layout

Architect Drawings SKU: FM160-WKD/WFA

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Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	Approx 3"
Brick Landing	Usually 8"	Preference
Stucco	Approx 1"	Approx 2"
Tile	Approx 1"	Approx 2"
Stone/Brick Veneer	Approx 1"	Approx 2"
Brick or Masonary non veneer	Check Material Spec	
UL-2162, UL-737, NSF-4, CAN/CGA-1.8, ANSI-Z83.11 Listed		
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ISO View

Top View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

Side Elevation

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Modena2G 180W Foundation

Architect Drawings

Revision 02/18/2016

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5 4 3 2 1

ISO View

When ordering replacement tiles reference tile number and oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level floor.

Specifications:

Floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 180W
Floor Tile Layout
SKU: FM2G180-WOK

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Front View

Side Elevation

SECTION A-A

Shown with non combustible metal hearth

Top View

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit. Refer to gas model for specifications;

Check local codes for venting requirments. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 99"W x 80"D x 84"H, up to 4212 lbs.

Fork truck or dock access required upon delivery.

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Modena2G 180W

Wood Fired Pizza Oven

Architect Drawings *SKU: FM2G180-WKD/WFA*

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ISO View

Top View

Modena2G 180W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Modena2G 180W

Wood Fired Pizza Oven Pad

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Pizza Oven Floor Tile Layout

Architect Drawings SKU: FM2G180-WKD/WFA

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Front View

Side Elevation

Section A-A

Shown with non combustible Concrete Hearth

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Gas burner cutout

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

Non combustible concrete hearth

Allow 36" from front of oven landing to combustibles

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements. Product UL listed for UL 103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 78"W x 82"D x 80"H;

Approx weight 3090 lbs.

Fork truck or dock access required upon delivery

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	N/A
Brick Landing	Usually 8"	Preference
Stucco	Approx 1"	Approx 2"
Tile	Approx 1"	Approx 2"
Stone/Brick Veneer	Check Material Spec	Approx 2"
Brick or Masonary non veneer		
UL-2162, UL-737, NSF-4, CAN/CGA-1.8, ANSI-Z83.11 Listed		
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Modena2G 120G

Architect Drawings

SKU: FM2G120-GOK

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ISO View

Top View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

Side Elevation

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Mondena2G 120G Foundation

Architect Drawings

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5 4 3 2 1

ISO View

When ordering replacement tiles
reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh
sand to level pizza oven floor

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 120G
Floor Tile Layout
SKU: FM2G120-GOK

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Front View

Side Elevation

SECTIONA-A

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Clearance to combustibles:

Allow 1" clearance all the way around side walls;

14" above completed dome assembly;

30" Side clearance from door opening;

Allow 36" from front of oven landing to combustibles;

Non combustible concrete hearth.

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements.
Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 78"W x 82"D x 80"H, up to 3090 lbs.

Fork truck or dock access required upon delivery.

Shown with non combustible metal hearth

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Modena2G 120G

Gas Fired Pizza Oven

Architect Drawings SKU: FM2G120-GKD/GFA

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ISO View

Top View

Modena2G 120G oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Modena2G 120G

Gas Fired Pizza Oven Pad

Architect Drawings

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 120G

Pizza Oven Floor Tile Layout

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SKU: FM120-GKD/GFA

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Front View

Side Elevation

SECTION A-A

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air return & access requirements

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood, liquid gas, or propane fuel;

Available with or without the stand;

Check local codes for venting requirments.
Product UL listed for UL 103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 76"W x 78"D x 78"H, up to 6000 lbs.

Fork truck or dock access required upon delivery.

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Napoli 120G
Gas Fired Oven

Architect Drawings *SKU: FN120G*

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Front View

Side Elevation

SECTION A-A

Shown with non combustible
Concrete Hearth

Gas Requirements:

Refer to Gas Burner Drawing for
air return & acess requirements

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Available with or without the stand;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 76"W x 87"D x 84"H, up to 6000 lbs.

Fork truck or dock access required upon delivery.

Top View

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Napoli 120G
Gas Fired Oven

Architect Drawings SKU: FN120G-NS

Revision 02/19/2016 Sheet: 2 of 4

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ISO View

Top View

Napoli 120W oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Pizza Oven Pad
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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset ,or #60 mesh sand to level the floor.

No more than 3/8" filler around landing or door may not fit.

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Napoli 120G
Pizza Oven Floor Tile Layout
SKU: FN120G

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Front View

Side Elevation

Section A-A

Shown with non combustible Concrete Hearth

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Gas burner cutout

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

Non combustible concrete hearth

Allow 36" from front of oven landing to combustibles

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 78"W x 82"D x 80"H;

Approx weight 3300 lbs.

Fork truck or dock access required upon delivery

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	Approx 3"
Brick Landing	Usually 8"	Preference
Stucco	Approx 1"	Approx 2"
Tile	Approx 1"	Approx 2"
Stone/Brick Veneer	Approx 1"	Approx 2"
Brick or Masonary non veneer	Check Material Spec	

UL-2162, UL-737, NSF-4, CAN/CGA-1.8, ANSI-Z83.11 Listed

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Modena2G 140G

Architect Drawings

SKU: FM2G140-GOK

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ISO View

Top View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

Side Elevation

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Modena2G 140G Foundation

Architect Drawings

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ISO View

When ordering replacement tiles reference tile number and oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level floor.

Specifications:

Floor is NSF-4 rated with 2-1/2" thick surface.

Use 3/8" mortar, sairset, or #60 mesh sand to level the floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 140G

Floor Tile Layout

SKU: FM2G140-GOK

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Front View

Side Elevation

SECTION A-A

Top View

Shown with non combustible metal hearth

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Clearance to combustibles:

Allow 1" clearance all the way around side walls;

14" above completed dome assembly;

30" Side clearance from door opening;

36" from front of oven landing to combustibles;

Non combustible metal hearth.

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements.
Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 84"W x 83"D x 84"H, up to 3830 lbs.

Fork truck or dock access required upon delivery.

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Modena2G 140G

Gas Fired Pizza Oven

Architect Drawings *SKU: FM2G140-GKD/GFA*

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ISO View

Top View

Modena2G 140G oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

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Modena2G 140G
Gas Fired Pizza Oven Pad
Architect Drawings

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 140G

Pizza Oven Floor Tile Layout

Architect Drawings

SKU: FM0140-GKD/GFA

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Front View

Side Elevation

SECTION A-A

Gas Requirements:

Refer to Gas Burner Drawing for air return & access requirements

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood, liquid gas, or propane fuel;

Available with or without the stand;

Check local codes for venting requirments.
Product UL listed for UL 103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 76"W x 87"D x 84"H, up to 6000 lbs.

Fork truck or dock access required upon delivery.

Top View

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Napoli 140G
Gas Fired Oven

Architect Drawings

SKU: FN140G

Revision 02/22/2016

Sheet: 1 of 4

5 4 3 2 1

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Front View

Side Elevation

SECTION A-A

Shown with non combustible
Concrete Hearth

Gas Requirements:

Refer to Gas Burner Drawing for
air return & acess requirements

Clearance to comustibles:

Allow 1" clearance all the way around side walls;

14" clearance above completed dome assembly;

30" Side clearance from door opening;

36" clearance from front landing;

Non combustible metal hearth;

Specifications:

Wood fuel can be upgraded to gas unit.
Refer to gas model for specifications;

Available with or without the stand;

Check local codes for venting requirments.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 76"W x 87"D x 84"H, up to 6000 lbs.

Fork truck or dock access required upon delivery.

Top View

For more information: www.fornobravo.com

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Commercial Gas Fired Pizza Oven

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Napoli 140G
Gas Fired Oven

Architect Drawings SKU: FN140G-NS

Revision 02/22/2016 Sheet: 2 of 4

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ISO View

Top View

Napoli 140G oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Napoli 140G Foundation
Pizza Oven Pad
Architect Drawings

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 3/8" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Napoli 140G

Pizza Oven Floor Tile Layout

SKU: FN140G

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Front View

Side Elevation

Section A- A

Shown with non combustible Concrete Hearth

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Gas burner cutout

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

Non combustible concrete hearth

Allow 36" from front of oven landing to combustibles

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 78"W x 82"D x 80"H;

Approx weight 3600 lbs.

Fork truck or dock access required upon delivery

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	Approx 3"
Brick Landing	Usually 8"	Preference
Stucco	Approx 1"	Approx 2"
Tile	Approx 1"	Approx 2"
Stone/Brick Veneer	Approx 1"	Approx 2"
Brick or Masonary non veneer	Check Material Spec	

UL-2162, UL-737, NSF-4, CAN/CGA-1.8, ANSI-Z83.11 Listed

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Modena2G 160G

Architect Drawings

SKU: FM2G160-GOK

Revision 02/18/2016

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ISO View

Top View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

Side Elevation

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Modena2G 160G Foundation

Architect Drawings

Revision 02/18/2016

Sheet: 2 of 3

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5 4 3 2 1

ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 160G

Floor Tile Layout

SKU: FM2G160-GOK

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Front View

Side Elevation

SECTION A-A

Top View

Shown with non combustible metal hearth

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Clearance to combustibles:

Allow 1" clearance all the way around side walls;

14" above completed dome assembly;

30" Side clearance from door opening;

Allow 36" from front of oven landing to combustibles;

Non combustible concrete hearth.

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 92"W x 80"D x 84"H, up to 3950 lbs.

Fork truck or dock access required upon delivery.

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Modena2G 160G

Gas Fired Pizza Oven

Architect Drawings *SKU: FM2G160-GKD/GFA*

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ISO View

Top View

Modena2G 160G oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

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Modena2G 160G

Gas Fired Pizza Oven Pad

Architect Drawings

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ISO View

When ordering replacement tiles
reference tile number and pizza oven model

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh
sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 160G
Pizza Oven Floor Tile Layout

Architect Drawings | SKU: FM2G160-GKD/GFA

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Front View

Side Elevation

Section A-A

Shown with non combustible Concrete Hearth

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Gas burner cutout

Clearance to combustibles:

Allow 1" clearance all the way around side walls

14" above completed dome assembly

Non combustible concrete hearth

Allow 36" from front of oven landing to combustibles

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements. Product UL listed for UL103HT direct vent, Grease Duct or Type 1 Hood;

Crate ships 78"W x 100"D x 85"H;

Approx weight 3900 lbs.

Fork truck or dock access required upon delivery

Decorative Facade Allowances	Depth	Width
Brick Arch	Usually 5"	Approx 3"
Brick Landing	Usually 8"	Preference
Stucco	Approx 1"	Approx 2"
Tile	Approx 1"	Approx 2"
Stone/Brick Veneer	Approx 1"	Approx 2"
Brick or Masonary non veneer	Check Material Spec	
UL-2162, UL-737, NSF-4, CAN/CGA-1.8, ANSI-Z83.11 Listed		
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Modena2G 180G

Architect Drawings

SKU: FM2G180-GOK

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ISO View

Top View

Top View

Specifications:

Minimum 5-1/2" deep concrete pad;

Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than oven stand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoil to reach stable substrate.

Side Elevation

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Modena2G 180G Foundation

Architect Drawings

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5 4 3 2 1

ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Floor Tile Layout

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Front View

Side Elevation

Top View

Gas Requirements:

Refer to Gas Burner Drawing for air, & access requirements

Clearance to combustibles:

Allow 1" clearance all the way around side walls;

14" above completed dome assembly;

30" Side clearance from door opening;

Allow 36" from front of oven landing to combustibles;

Non combustible concrete hearth.

Specifications:

Wood, liquid gas or propane fuel;

Check local codes for venting requirements.
Product UL listed for UL103HT direct vent,
Grease Duct or Type 1 Hood;

Crate ships 78"W x 100"D x 85"H, up to 3900 lbs.

Fork truck or dock access required upon delivery.

SECTION A-A

Shown with non combustible metal hearth

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Modena2G 180G

Gas Fired Pizza Oven

Architect Drawings SKU: FM2G180-GKD/GFA

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ISO View

Top View

Modena2G 180G oven stand footprint

Side Elevation

Specifications:

Minimum 5-1/2" deep concrete pad;

*Reinforced with 1/2" rebar and wire mesh. * wire mesh is not shown in some views for print clearity;*

Cut rebar and wire mesh short to conceal inside concrete pad;

Slab dimensions:

Minimum 8" wider than oven stand and hearth;

Minimum 10" deeper than ovenstand and hearth;

Finished slab should be 2" to 3" above ground level;

Refer to local building codes for recommendations regarding soil compaction, frost line and other considerations. Depending on local conditions, you may have to excavate down 18" or more of topsoilto reach stable substrate.

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Modena2G 180G

Gas Fired Pizza Oven Pad

Architect Drawings

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ISO View

When ordering replacement tiles reference tile number and pizza oven model.

Top View

Side Elevation

1/4" mortar, sairset, or #60 mesh sand to level pizza oven floor.

Specifications:

Pizza oven floor is NSF-4 rated with 2-1/2" thick surface.

Use 1/4" mortar, sairset, or #60 mesh sand to level the pizza oven floor.

No more than 3/8" filler around landing or door may not fit.

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Modena2G 180G

Pizza Oven Floor Tile Layout

Architect Drawings SKU: FM2G180-GKD/GFA

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FORNO BRAVO
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Installation and Operating Manual

Commercial Ovens

Limited Warranty

Forno Bravo, LLC Ovens and Fireplaces

THE WARRANTY

Forno Bravo, LLC, a producer and importer of quality ovens and fireplaces, warrants its refractory ovens and fireplaces (herein referred to as Product) to be free from defects in materials and workmanship on the major structural Product component (dome, firebox), for a period of five (5) years from the date of shipment. Warranty may be invalidated if Product is not correctly installed, cured, operated, and maintained according to all supplied instructions.

Forno Bravo, LLC warrants its Products' support components (floor, venting system, gas burner components, factory-installed finishes, stand, door, and accessories) to be free from defects in materials and workmanship for a period of one (1) year from the date of shipment.

QUALIFICATIONS TO THE WARRANTY

The complete Product Warranty outlined above does not apply under the following circumstances:

(1) The Product was not installed in accordance with Forno Bravo installation instructions and local building codes.

(2) This Warranty does not apply to any hairline cracking caused by over-firing or the failure to follow a proper curing schedule. See Product Manual for a detailed explanation of this curing schedule.

(3) The Product has been subjected to non-standard use, including but not limited to, tossing or throwing firewood into the oven with force, addition of non-approved appliances or burners, burning fuels with abnormal burning characteristics, including: driftwood, coal, plywood, and wood products using a binder that may burn at excessive temperatures, causing damage to the Product.

(4) The Product has been subjected to icing or wet-mopping the oven while it is still heated (which can cause damage/cracking to the oven floor.) Improper chemicals or liquids have been used to clean or sanitize the interior of the oven.

(5) This Warranty does not cover damage caused by storing any materials on the top of a fully assembled oven or on the dome of an unfinished kit oven.

(6) This Warranty does not apply to normal wear and tear of the Product, or on parts that would be worn or replaced under normal conditions, including:

(a) Normal, minor cracking due to expansion and contraction stress relief in the refractory materials of either the dome or floor tiles.

(b) Discoloration of exterior finishes in areas repeatedly exposed to smoke, as this is considered normal wear on wood fired pizza ovens and fireplaces.

(7) This Warranty does not cover damage to, or failure of the Product, resulting from natural or other catastrophes, such as flood, fire, wind, or storm.

(8) In the event that the UL Listing Plate (if applicable) has been removed, altered, or obliterated.

LIMITATION ON LIABILITY

It is expressly agreed and understood that Forno Bravo's sole obligation, and Purchaser's exclusive remedy under this Warranty, and under any other Warranty, expressed or implied otherwise, shall be limited to replacement, repair, or refund up to the original purchase price of the Product, excluding shipping costs, as specified above. Such liability shall not include, and Purchaser or other third parties, specifically renounces any rights to recover special, incidental, consequential, or other damages of any kind whatsoever, including, but not limited to, injuries to persons or damage to property, loss of profits or anticipated profits, damage to business reputation or goodwill, all costs incurred receiving, unloading, moving at your location, and installing Forno Bravo Products, or loss of use of the Product.

In no event shall Forno Bravo be responsible for any incidental or consequential damages caused by defects in its Products, whether such damage occurs, or is discovered before or after replacement or repair, and whether or not such damage is caused by Forno Bravo. The duration of any Warranty with respect to this Product is limited to legitimate claims received within the duration of the foregoing Warranty.

Warranty of replacement parts or Product shall only be from the original purchase date of Product, not the date of repair or replacement covered under this Warranty. Parts to be replaced under the Warranty will be repaired or replaced with new or functionally sound parts at Forno Bravo's option.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages, or the duration of an implied warranty, so the above exclusion or limitations may not apply to you.

INVESTIGATION OF CLAIMS AGAINST WARRANTY

Forno Bravo reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

Before any Product is returned, Forno Bravo, or its authorized representative, must provide Purchaser with written return authorization and instructions for preparation of the shipment. Failure to properly package Product for return may result in Purchaser being billed by Forno Bravo. Forno Bravo reserves the right to bill Purchaser for return freight if Product was found to be damaged through negligence or Warranty was voided, as outlined in this Warranty. Reference your original Terms of Sale Agreement for additional details.

DEALERS HAVE NO AUTHORITY TO ALTER THIS WARRANTY

Forno Bravo's employees and dealers have no authority to make any Warranties, nor to authorize any remedies in addition to, or inconsistent with, those stated above.

HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this Warranty to be valid, Forno Bravo must be notified of the claimed defect by either:

- Telephone at 1-800-407-5119, or outside the U.S. at +1 (408) 317-0124,
- Writing to Forno Bravo,13525 Blackie Rd, Castroville, CA 95012, or
- Please fill out our easy-to-use technical support form for claims against the warranty.

All claims against this Warranty should include the Product model, original invoice number, date of installation, a description of the defect, photographs of the area of concern, and a full description of the circumstances giving rise to the Warranty Claim, if known. Please examine all of the contents of your delivery as soon as possible after receipt and inform Forno Bravo within ten (10) days if any items are missing, incorrect, or damaged.

Updated 4/5/21

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