



Installation and Operation Manual

FIRE DECK SERIES

Stone Hearth Oven
Commercial European Models



FIRE DECK

WS-FD-6045-CE

FIRE DECK

WS-FD-8645-CE

WoodStone

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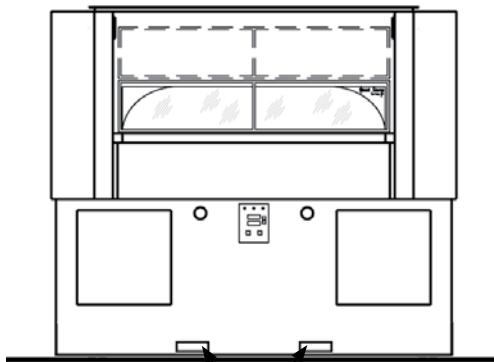
INSTALLATION AND OPERATION MANUAL FOR WOOD STONE FIRE DECK OVENS

**WS-FD-8645-RFG-(LR, L, R)-(IR)-CE-(NG,LP)
AND WS-FD-6045-RFG-(L,R)-IR-CE-(NG,LP)**

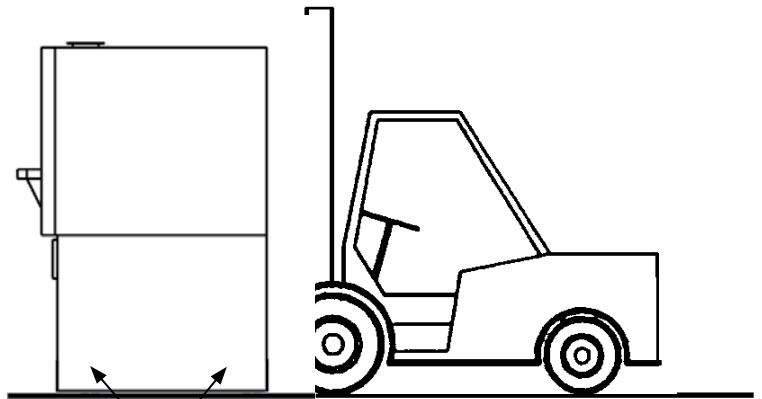
**EUROPEAN MODEL NATURAL GAS OR PROPANE FUELED
STONE HEARTH OVENS**



This appliance is for professional use by qualified personnel. This appliance must be installed by qualified persons in accordance with the regulations in force. This appliance must be installed with sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health in the room in which it is installed. This appliance needs an unobstructed flow of fresh air for satisfactory combustion and must be installed in a suitably ventilated room in accordance with current regulations. This appliance should be serviced by qualified personnel at least every 12 months, or sooner if heavy use is expected.



Forklift pockets

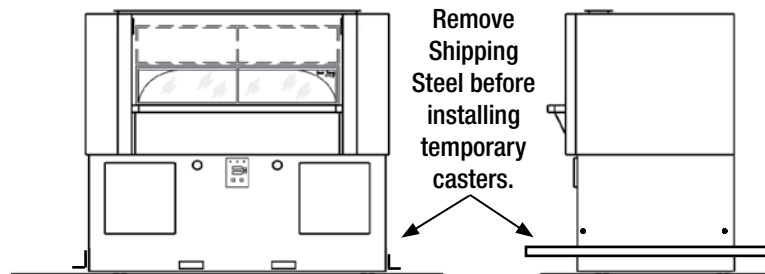


Forklift pockets

Always use the forklift pockets; lifting the oven any other way will result in damage. The Wood Stone Fire Deck 8645 weighs approximately 2000 Kg, the 6045 weighs approximately 1500 Kg, and they are top-heavy. Use extreme caution and make sure that the forks extend all the way through the pockets provided. If it is necessary to approach the oven from the front, be sure that the mast does not contact the stainless steel mantle (shelf).

DO NOT TURN THE OVEN ON ITS SIDE!

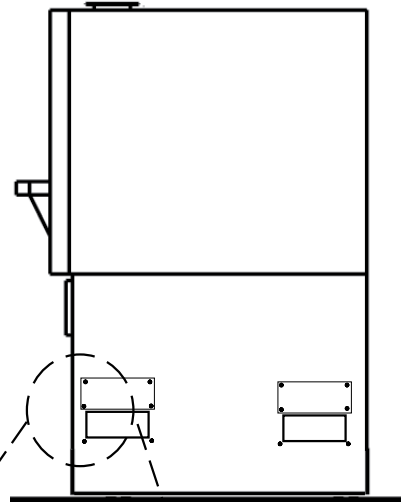
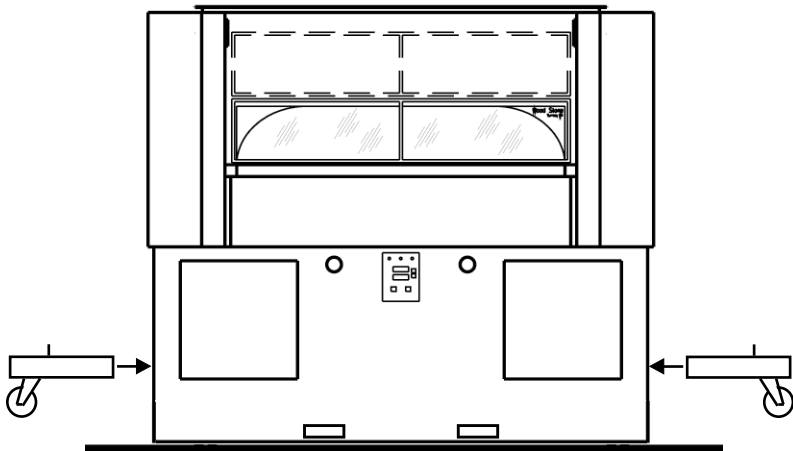
Once the oven is on a smooth, flat floor it can be easily rolled on its optional heavy-duty, temporary shipping casters (see next page for details). **Do not attempt to manually roll the oven up or down a ramp. Do not position yourself between the moving oven and an immovable object or surface (wall or door frame).**



IF YOU ARE PLANNING TO USE A CRANE TO UNLOAD THE OVEN, PLEASE SPECIFY A FLATBED TRUCK DELIVERY!

Moving a Wood Stone oven can present interesting challenges to even the most experienced riggers. Take your time, use your head, secure the proper equipment and make safety your first priority. Please don't hesitate to call the factory for technical support.

DELIVERY NOTE: The customer will receive an Oven Shipping Notification when the oven leaves the Wood Stone factory. This will include a PRO# and a trucking company contact number. Wood Stone recommends that you confirm the delivery date/time with the trucking company before committing to heavy equipment and/or labor. Our goal is a smooth and safe delivery. Thank you.



USE OF OPTIONAL TEMPORARY CASTERS

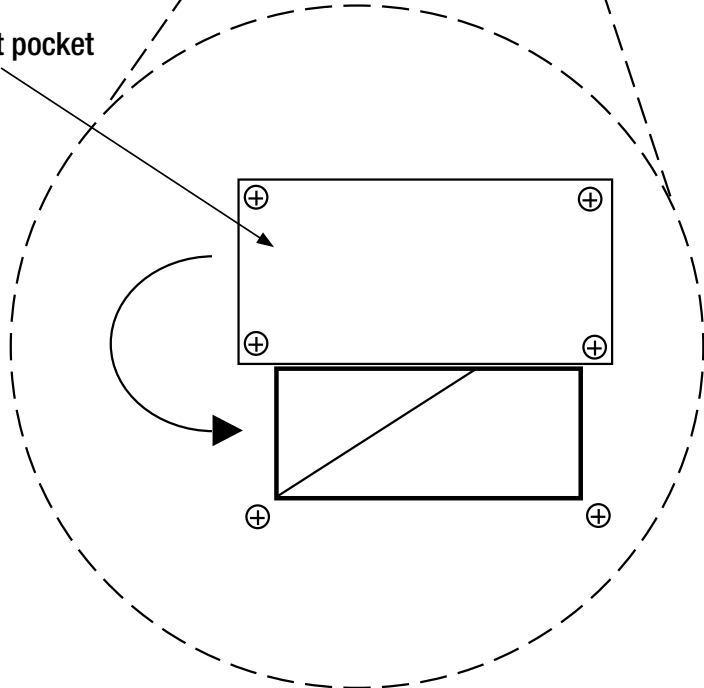
With the oven supported by a forklift or pallet jack, slide and secure the caster assemblies into the end forklift pockets. Once the oven is in place, support the unit using a pallet jack and remove the caster and its support. Be sure to seal the side and front forklift pockets using the covers provided.

Once the front and side forklift pockets are no longer needed, they must be closed using the metal covers provided.

Forklift pocket cover

NOTE: Be sure to replace all screws and bolts after removal of the shipping steel and covering of the forklift pockets.

NOTE: This oven is designed to be sealed to the floor upon installation. Use a silicone sealant acceptable to the local health official.





WARNING: Do Not pack required air space (clearance) with insulation or other materials. When non-combustible building materials contact the body of the oven, the clearances to combustibles are transferred to those non-combustibles.

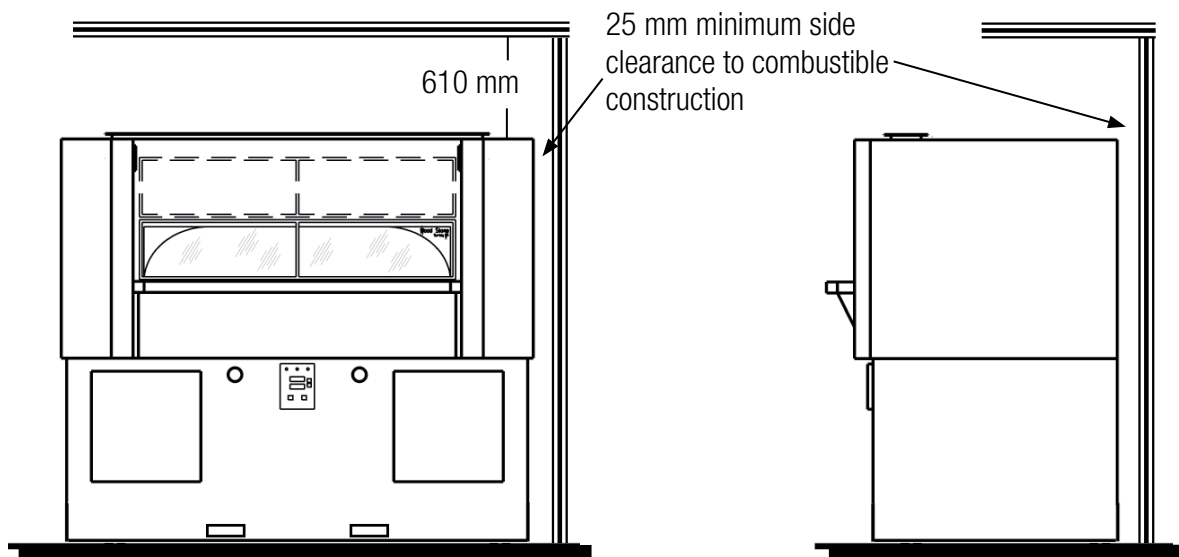
IF THIS OVEN IS NOT PROPERLY INSTALLED A FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THESE INSTALLATION INSTRUCTIONS. A MAJOR CAUSE OF OVEN RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS OVEN BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.



WARNING: Installation and servicing of this product could expose you to glasswool/ceramic fibers as well as Calcium Silicate dust. ALWAYS WEAR RESPIRATORY AND EYE PROTECTION WHEN INSTALLING OR SERVICING THIS APPLIANCE. Please read this entire manual before you install the oven. Failure to follow instructions may result in property damage, bodily injury or even death. Contact your local building or fire officials about restrictions and installation inspection in your area.

CLEARANCES

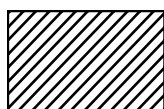
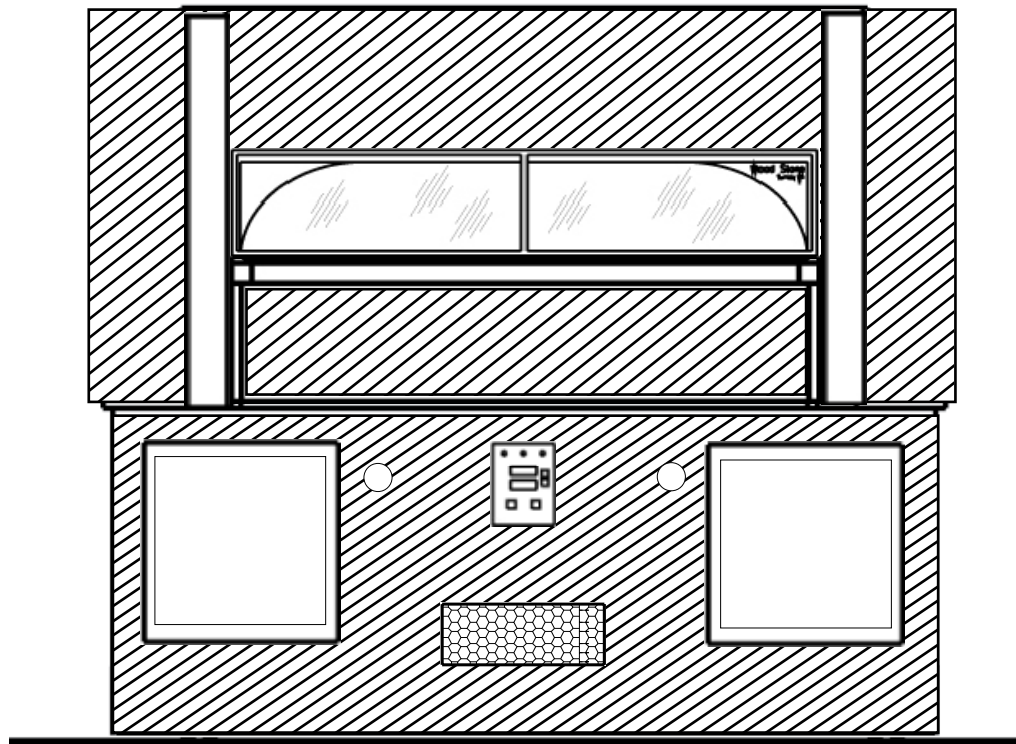
- The Wood Stone Fire Deck oven should have a **minimum 25 mm clearance to combustibles from all sides, and 610 mm clearance to combustibles from the top**. If building a facade that will contact the oven, use completely non-combustible materials*. Please note that standard drywall (or sheet rock) is considered a combustible.
- This oven is suitable for installation on a combustible floor. *When noncombustible building materials contact the body of the oven, the respective clearances are transferred to those non-combustibles.**





The facadable front Fire Deck features cement board already installed on the front surfaces of the oven. **ANY MATERIALS AFFIXED TO THE CEMENT BOARD MUST NONCOMBUSTIBLE.**

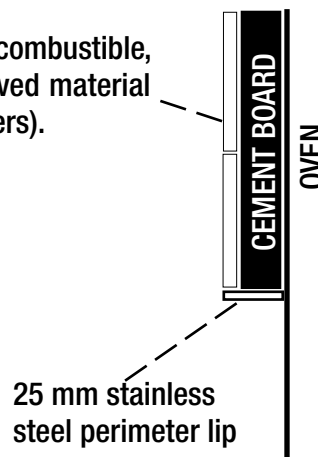
WS-FD-8645



The hatching represents surfaces of the oven that are covered with cement board. All parts of the oven which are meant to be left exposed are not hatched.

A 25 mm wide stainless steel lip is provided, around the doorway opening and around the air intake vent. This is provided so that the noncombustible, sanitation approved materials used to cover the cement board can be neatly terminated at these points.

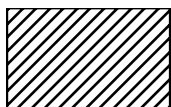
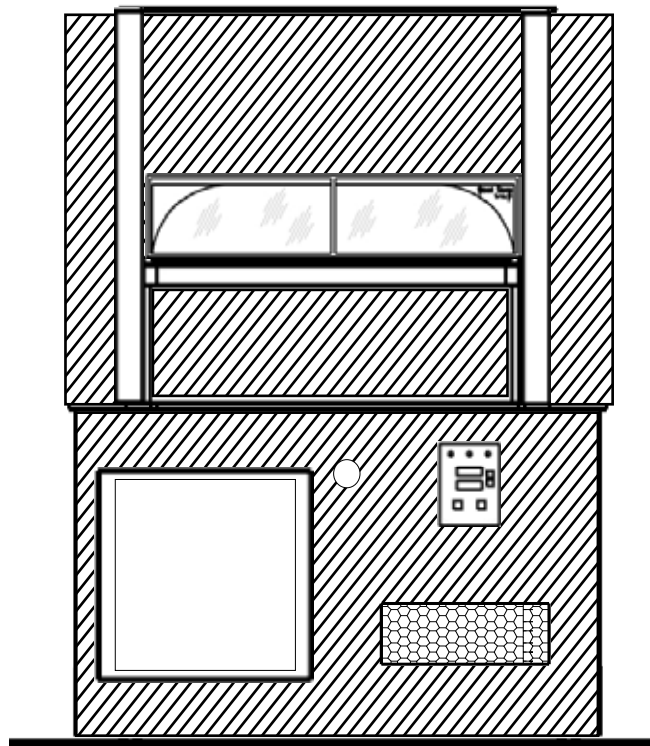
Tile or other noncombustible, sanitation approved material (supplied by others).





The facadable front Fire Deck features cement board already installed on the front surfaces of the oven. **ANY MATERIALS AFFIXED TO THE CEMENT BOARD MUST NONCOMBUSTIBLE.**

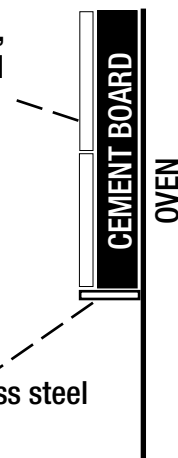
WS-FD-6045



The hatching represents surfaces of the oven that are covered with cement board. All parts of the oven which are meant to be left exposed are not hatched.

A 25 mm wide stainless steel lip is provided, around the doorway opening and around the air intake vent. This is provided so that the noncombustible, sanitation approved materials used to cover the cement board can be neatly terminated at these points.

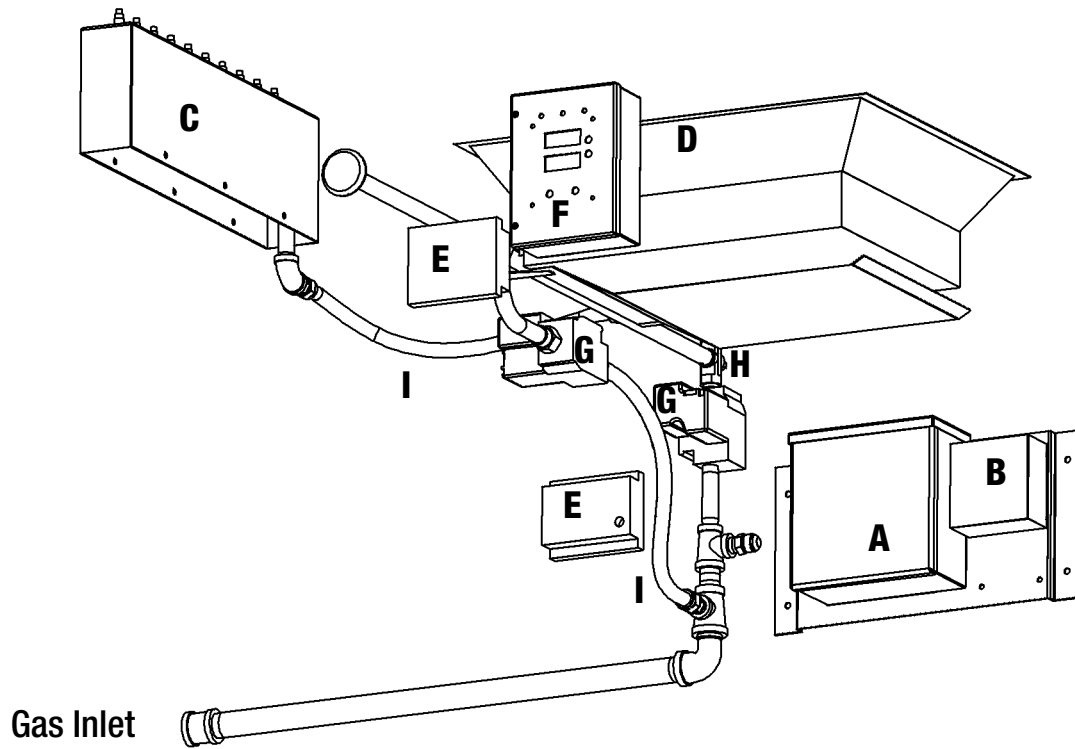
Tile or other noncombustible, sanitation approved material (supplied by others).



25 mm stainless steel perimeter lip



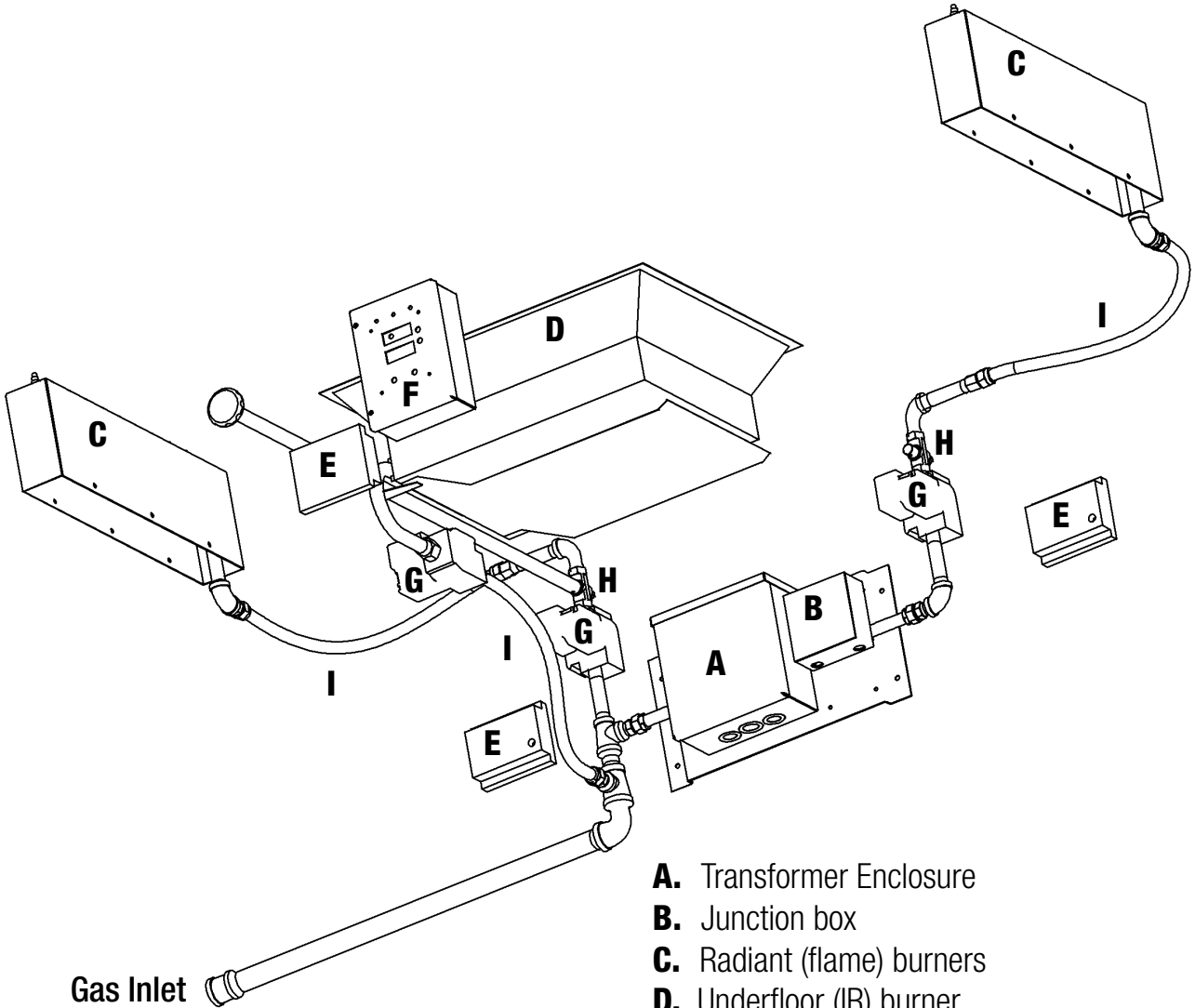
FIRE DECK 6045 COMPONENT SCHEMATIC



- A.** Transformer Enclosure
- B.** Junction box
- C.** Radiant (flame) burner
- D.** Underfloor (IR) burner
- E.** Ignition Module
- F.** Controller Circuit Board
- G.** Gas Control Valve
- H.** Manual Flame Height Control Valve
- I.** Flex Conduit



FIRE DECK 8645 COMPONENT SCHEMATIC



- A.** Transformer Enclosure
- B.** Junction box
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- E.** Ignition Module
- F.** Controller Circuit Board
- G.** Gas Control Valve
- H.** Manual Gas Control Valve
- I.** Flex Conduit



GAS

The Wood Stone WS-FD-8645 and WS-FD-6045 are equipped with a 3/4-inch (19 mm) female ISO-7 gas connection. **Have a licensed gas installer provide the hookup 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!

SV-1, SV-2 and SV-3 are the gas control valves that operate under floor infrared burner and the interior radiant burner(s), respectively. **NOTE: Some models are only equipped with two valves.**

The manifold pressure test port for the infrared under floor burner (always served by SV-1) is a plugged nipple tap located on the outlet side of the valve. The manifold pressure test port(s) for the radiant burner(s), served by SV-2 and SV-3, is a plugged nipple tap located at the base of the T-junction between the valve and the radiant/interior burner. All the gas valves have an additional plugged nipple tap on the inlet side. **The burner manifold pressures have been adjusted and tested at the factory.**

Factory specified individual burner manifold pressure(s) (expressed in mbar) for Fire Deck models equipped to burn Natural Gas (I_{2H} @ 20 mbar and I_{2L} or I_{2E} at 25 mbar).

Model	SV-1 (if equipped)	SV-2 (if equipped)	SV-3 (if equipped)
WS-FD-8645-RFG-(LR, L, R)-CE-NG	9 mbar	11.5 mbar	11.5 mbar
WS-FD-6045-RFG-(L, R)-IR-CE-NG	9 mbar	11.5 mbar	N/A

Factory specified individual burner manifold pressure(s) (expressed in mbar) for Fire Deck models equipped to burn Propane (I_{3P} , I_{3+} and $I_{3(B/P)}$).

Model	SV-1 (if equipped)	SV-2 (if equipped)	SV-3 (if equipped)
WS-FD-8645-RFG-(LR, L, R)-(IR)-CE-LP	18.9 mbar	19.7 mbar	19.7 mbar
WS-FD-6045-RFG-(L, R)-IR-CE-LP	18.9 mbar	19.7 mbar	N/A

Maximum Gas Input Rates for Wood Stone Fire Deck ovens for various European gas types

Model	I_{2H} , I_{2L} and I_{2E}	I_{3P} , I_{3+} and $I_{3(B/P)}$
WS-FD-8645-RFG-LR-IR-CE	69.68 kW	62.36 kW
WS-FD-8645-RFG-(L or R)-IR-CE	44.85 kW	37.92 kW
WS-FD-8645-RFG-LR-CE	49.66 kW	48.88 kW
WS-FD-6045-RFG-(L or R)-IR-CE	44.85 kW	37.92 kW

Wood Stone recommends that the oven be equipped with an individual shutoff valve and that this individual shutoff valve (supplied by others) be left easily accessible. Wood Stone also recommends that inspection and maintenance of the burners and gas piping connections of this appliance be performed at regularly scheduled intervals and only by professional gas appliance service agencies.



EN 437 Gas Group	I _{2H}	I _{2E} and I _{2L}	I ₃₊	I _{3B/P(30)}	I _{B/P(50)}	I _{3P}
Inlet Pressure (mbar)	20	25	28-30/37/50	30	50	30/37/50

NATURAL GAS (METHANE)

I_{2H(20)} for use in: AT, BG, CZ, DK, EE, FI, GR, HR, HU, IS, IE, IT, LV, LT, NO, PT, RO, SK, SI, ES, SE, CH, TR, AND GB

I_{2E(20/25)} for use in: DE AND PL

I_{2E+(20/25)} for use in: BE and FR

I_{2L(25)} for use in: NL

I_{2HS(25)} for use in: HU

PROPANE AND PROPANE BLENDS

I_{3P(37)} for use in: FI, DE, GR, IE, HR, LU, NL, PL, SK, SI, ES, CH, TR and GB

I_{3P(50)} for use in: CY, CZ, MT and SK

I_{3+(28-30,37)} for use in: BE, CY, CZ, EE, FR, GR, IE, IT, LT, LU, LV, PT, RO, SK, ES, CH and GB

I_{3B/P(30)} for use in: BG, CY, CZ, DK, EE, FI, GR, HR, LV, LT, LU, MT, NL, NO, SK, SI, SE and TR

I_{3B/P(37)} for use in: PL

I_{3B/P(50)} for use in: AT, DE, HU, SK and CH



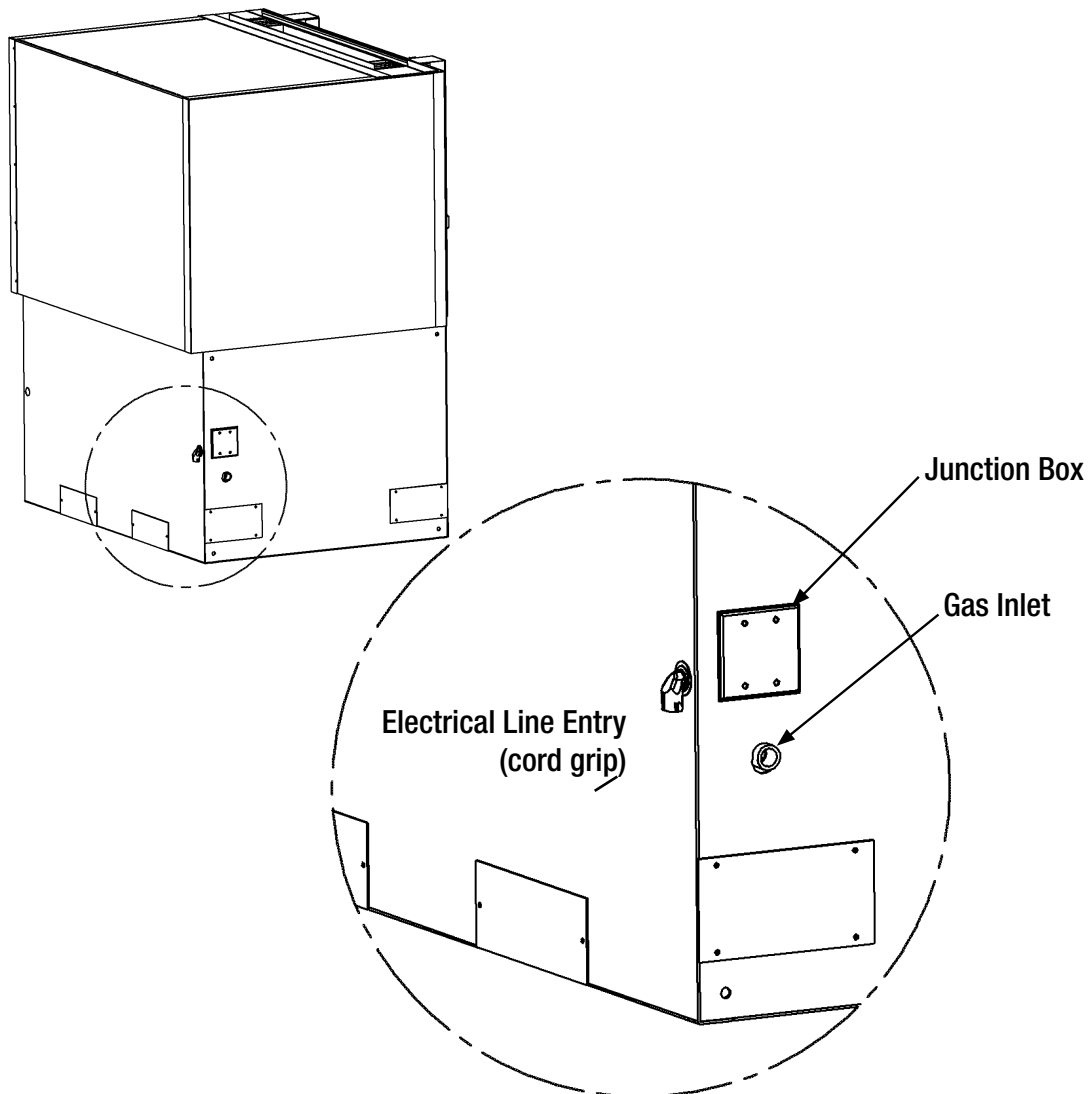
ELECTRICAL

Have a licensed electrician wire the transformer terminal strip with a 230 Volt, 5 amp lead (unit is rated at 0.42 Amps). Electrical diagrams are located on the back of the removable service/air intake panel of the appliance and also at the end of this manual.



ELECTRICAL GROUNDING: This appliance must be electrically grounded (earthed).

PROVIDE DISCONNECT DEVICE: This appliance must be provided with an all-pole type disconnect device in the incoming power supply so that the appliance can be completely isolated from the power supply.





Wood Stone ovens should be vented in accordance with pertinent national, regional and local codes concerning Type A appliances; check venting plans with the authority having jurisdiction before proceeding with installation.

The above statement taking precedence, Wood Stone Corporation recommends the following:

Wood Stone gas fired ovens must be vented using an approved exhaust hood. All ducting (whether insulated or not) used in exhaust systems venting Wood Stone ovens should meet the construction requirements of a **grease duct**. Take care to maintain proper clearances from the duct to combustible construction.

Fire Deck model numbers containing a **-W** (other than the first letter of the model number) should be vented in accordance with codes concerning solid fuel appliances. Due to the dangers of creosote buildup and of sparks entering the duct, these models should be vented separately from all other kitchen equipment or in such a manner as is acceptable to the authority having jurisdiction. The Wood Stone customer support staff is available to answer any questions concerning installation and venting of the oven; call 1-800-988-8103 for assistance and technical support.

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.

CREOSOTE - AND THE NEED FOR ITS REMOVAL

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool oven flue of a slow-burning fire. As a result, creosote residue accumulates in the duct. When ignited, this creosote makes an extremely hot fire. The duct serving this oven should be inspected at least twice a month during the first two months of operation, to establish rate of creosote buildup and necessary cleaning schedule. If creosote or soot has accumulated, it should be removed to reduce the risk of a flue fire.

WOOD STONE RECOMMENDS THAT THE OPERATOR REFER TO THE EXHAUST HOOD MANUFACTURERS FOR INSPECTION, MAINTENANCE AND CLEANING.



INITIAL OVEN STARTUP

FIRST DAY

1. Make sure main gas supply is on (valve parallel with gas line).
2. Push I/O button on controller. It may take a while for the gas to purge all the air from the gas lines.
3. Allow oven to operate at **FACTORY SETTINGS** for 1 hour (thermostat set at 93 degrees Celsius, radiant flame at its lowest setting).
4. After one hour, raise radiant flame(s) to 25% (~16 cm flame), hold this setting for 4 hours.
5. After 4 hours at 25% flame, raise to 50% flame and hold for at least another 4 hours. **The oven can be left at this setting all night.**

SECOND DAY

1. Set the floor temperature to 260 degrees C.
2. Turn the radiant flame(s) to 75% height. The floor temperature should reach 260 degrees C within about an hour. The oven is now ready for cooking, go to it!

GENERAL DAILY OVEN OPERATION

END OF THE DAY

Push I/O button, all gas will go off, even the pilots.

BEGINNING OF THE DAY

Push I/O button, set controller to desired floor temperature and turn the radiant flame to its highest setting. Oven should be stabilized at or above the set point within two hours.

CLEANING THE OVEN

1. As needed (twice per hour), use the floor brush to sweep stray food debris to the doorway, where it can be easily removed with a dough cutter or spatula.
2. As needed, swab the deck using an damp (not wet) rag wrapped around the floor brush.



NEVER PLACE ANYTHING IN OR ABOVE THE RADIANT FLAME

HOW TO READ FLOOR TEMPERATURE



The floor temperature is continuously displayed by the controller in the upper window. This reading is being taken by a thermocouple about an inch below the floor surface, so the actual surface temperature may be somewhat different, and is best measured using a non-contact (IR) thermometer.

HOW TO ADJUST THE FLOOR TEMPERATURE (SET POINT)

To adjust the oven's thermostatic floor temperature setting, simply press the arrow button corresponding to the direction in which you would like the setting to go. If the thermostatic set point is raised above the actual hearth temperature, the underfloor burner should activate.



DETAILED DAILY OVEN OPERATION



IMPORTANT: If at any time you feel that either or both of the burners are 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.

1. DAILY STARTUP

Press the I/O button to start the oven.

The Radiant Flame will ignite. The infrared under floor burner will ignite if the actual floor temperature is below the set point temperature to which the controller is adjusted.



Indicates the system is energized.



Indicates the pilot flame for the radiant flame burner is lit.



Indicates that the pilot flame for the infrared (under-floor) burner is lit. This light will go off whenever the actual floor temperature is above the thermostatic set point. (See Controller diagram on page 17).

2. TURNING OFF THE OVEN

Push the I/O button on the controller to turn the oven off.

Both burners will go out and the digital readout on the controller will go out.

3. ADJUSTING THE RADIANT (DOME) FLAME

To adjust the radiant flame(s): The radiant flame(s) is (are) always on (when the oven is operating) and can be adjusted to any flame intensity between its highest and lowest setting; simply turn the control knob. This burner is the primary heat source for the oven. The infrared under floor burner will act as an assist, to maintain desired floor temperatures during periods of high food production.

4. ADJUSTING THE FLOOR SET-POINT

To adjust the oven's thermostatic floor temperature setting, simply press the arrow button corresponding to the direction in which you would like the setting to go. If the thermostatic set point is raised above the actual hearth temperature, the underfloor burner should activate.

* It is only possible to program the floor's thermostatic hearth set point to temperatures from 93 degrees C to 371 degrees C. Once proper temperatures for your application have been established, there should be little or no need to change the hearth set point.



OVEN INTERIOR

Wood Stone recommends the use of a long-handled, brass bristled brush for sweeping aside excess food particles that will accumulate on the floor of the oven during use. **The oven floor can be cleaned with a damp rag. DO NOT USE ICE OR EXCESSIVE WATER ON THE FLOOR; THIS IS TO PREVENT THERMAL SHOCKING OF THE STONE.**

There are stainless steel burner guards to prevent food from falling on and thereby obstructing the gas orifices of the radiant flame. **If food gets into the radiant flame well and the flame is visibly obstructed, turn the oven off immediately, and call for service.**

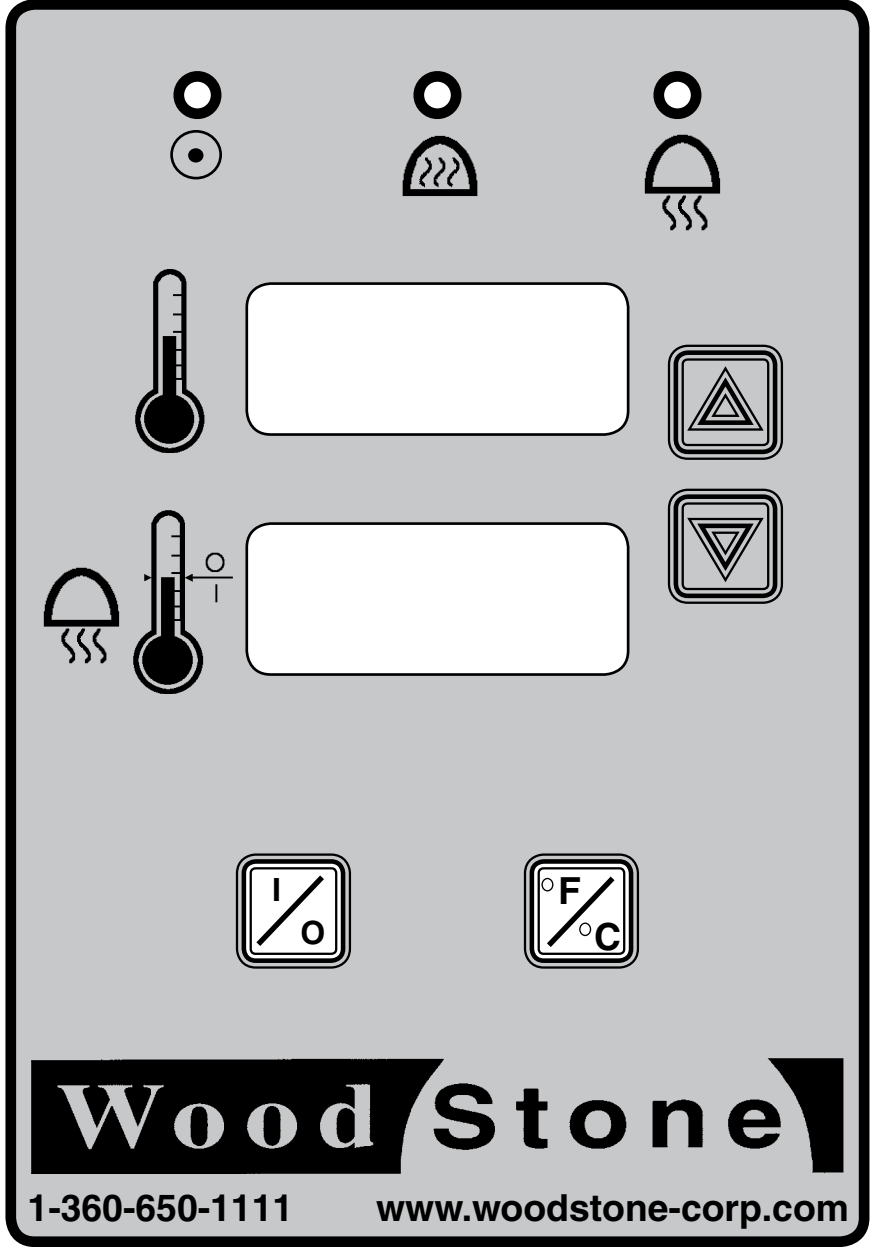
OVEN EXTERIOR

All painted and stainless steel surfaces should be cleaned as necessary using an approved mild detergent, hot water and a soft cloth or sponge. Stubborn residues may be removed using a nonmetallic scouring pad. **When scouring stainless steel surfaces, scrub with the grain of the metal to prevent scratching.**

IMPORTANT: Do not use excessive amounts of liquid when wiping on or around the control box.

MAKE SURE THE TOP OF THE OVEN IS KEPT CLEAR AND THAT ANY GREASE CATCHES OR HOODS ARE CLEANED FREQUENTLY. DO NOT ALLOW GREASE TO ACCUMULATE ON TOP OF THE OVEN.

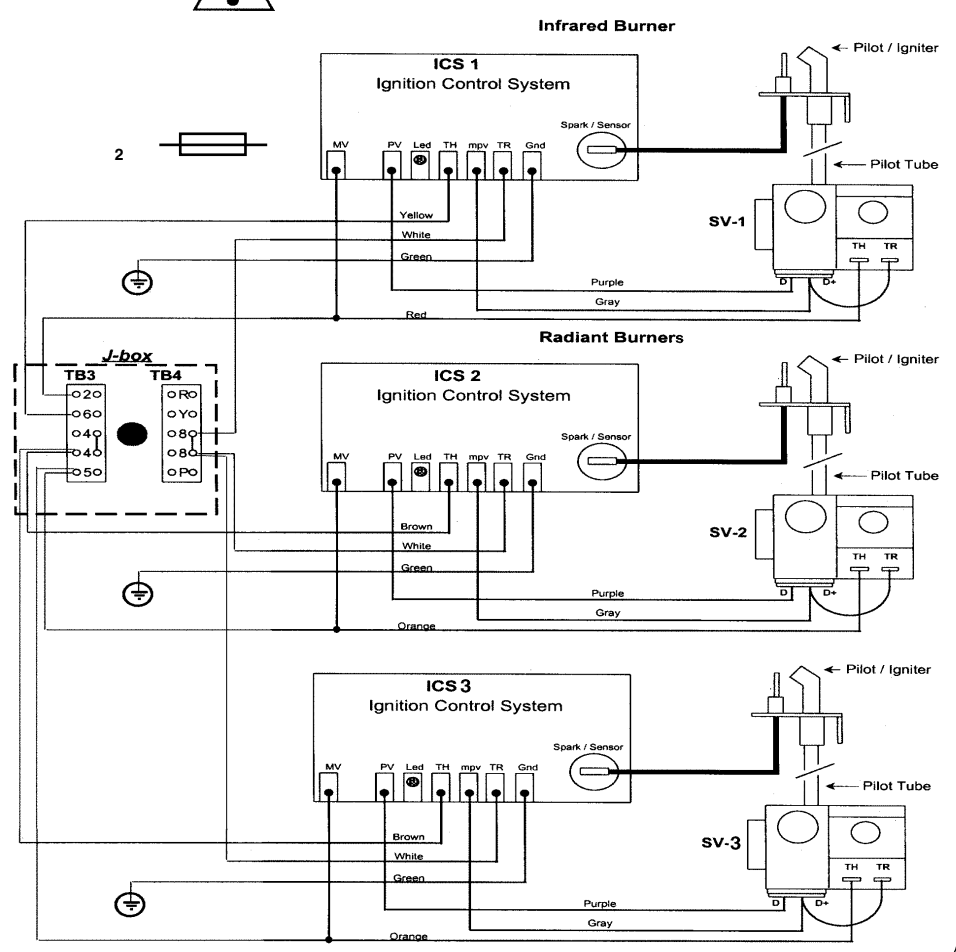
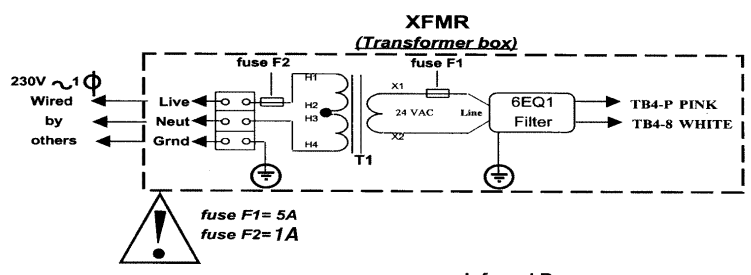
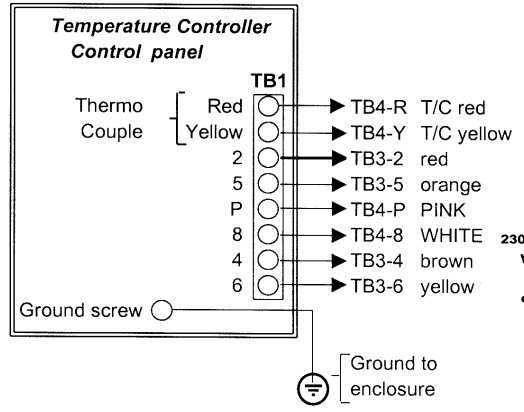
DO NOT USE THE RADIANT BURNER WELL AS A DUMP FOR DEBRIS OR TRASH INCINERATION; MAKE EVERY ATTEMPT TO KEEP DEBRIS FROM DROPPING INTO THE WELL.





FIRE DECK 8645-RFG-LR-IR-CE-(NG, LP)

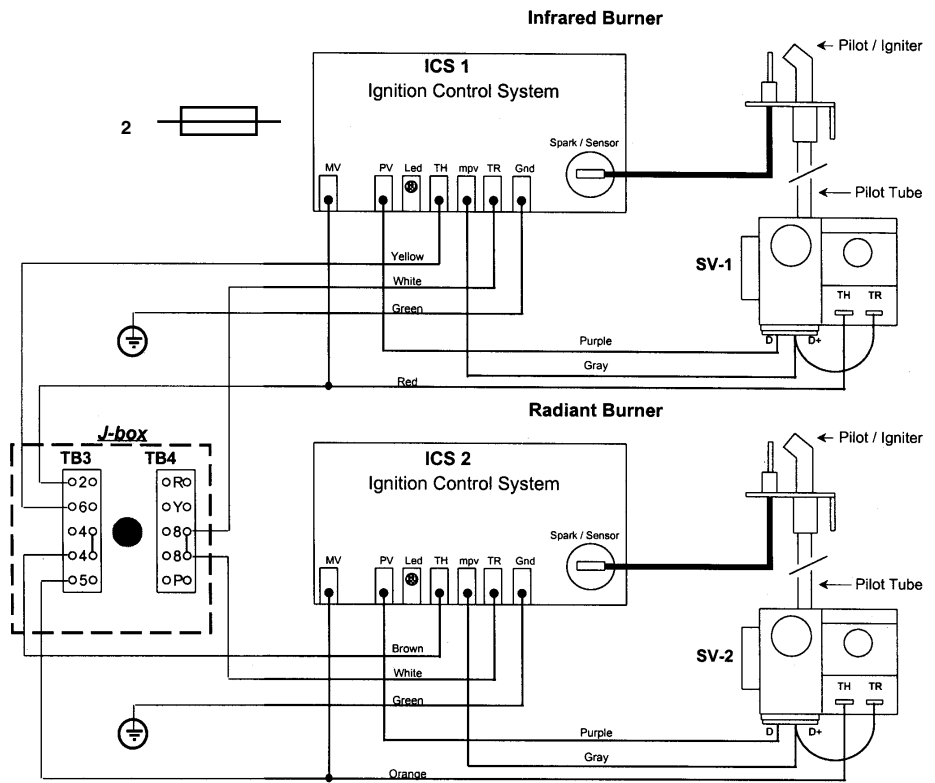
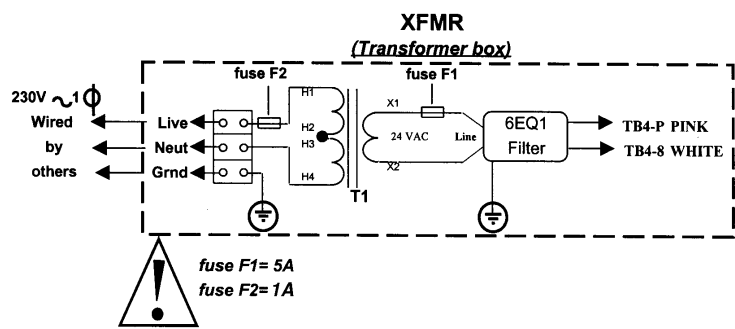
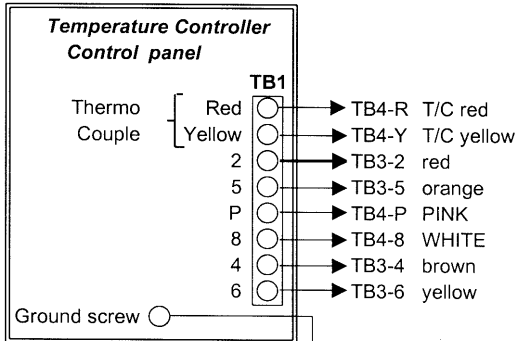
CE Oven Control Panel G/G & RFG





FIRE DECK 6045-RFG-IR-CE-(NG, LP)

CE Oven Control Panel G/G & RFG





**ALL WARRANTY SERVICE MUST BE PRE-APPROVED BY WOOD STONE
PLEASE CONTACT YOUR LOCAL DISTRIBUTOR FIRST**

Local Distributor:

EXCLUSIONS

The warranties provided by Wood Stone do not apply in the following instances:

1. In the event that the equipment is improperly installed. Proper installation is the responsibility of the installer; proper installation procedures are prescribed by the Wood Stone installation manual.
2. In the event the equipment is improperly maintained. Proper maintenance is the responsibility of the user; proper maintenance procedures are prescribed in the Wood Stone installation manual.
3. In the event that the failure or malfunction of the appliance or any part thereof is caused by abnormal use or is otherwise not attributable to defect in material or manufacture.
4. In the event that the appliance, by whatever cause, has been materially altered from the condition in which it left the factory.
5. In the event that the rating plate has been removed, altered or obliterated.
6. On parts that would be normally worn or replaced under normal conditions.
7. Normal cracking due to expansion and contraction stress relief in either the dome or oven deck.
- 8. In the event that pressed log products of any type have been burned in the equipment.**

If any oral statements have been made regarding this appliance, such statements do not constitute warranties and are not part of the contract of sale. This Limited Warranty constitutes the complete, final and exclusive statement with regard to warranties.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OR WARRANTY AGAINST LATENT DEFECTS

LIMITATIONS OF LIABILITY:

In the event of warranty claim or otherwise, the sole obligation of Wood Stone shall be the repair and/or replacement, at the option of Wood Stone, of the appliance or component or part thereof. Such repair or replacement shall be at the expense of Wood Stone with the exception of travel over 100 miles or two hours, overtime, and holiday charges which shall be at the expense of the purchaser. Any repair or replacement under this warranty does not constitute an extension of the original warranty for any period of the appliance or for any component or part thereof. Parts to be replaced under this warranty will be repaired or replaced at the option of Wood Stone with new or functionally operative parts. The liability of Wood Stone on any claim of any kind, including claims based on warranty, expressed or implied, contract, negligence, strict liability or any other theories shall be solely and exclusively the repair or replacement of the product as stated herein, and such liability shall not include, and purchaser 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, or loss of use of the product.

TO SECURE WARRANTY SERVICE:

Contact your local distributor.