

Installation and Operation Manual



DESIGNER SERIES 1

Stone Hearth Oven

*Gas-Fired, Gas/Wood Combination
with Broiler Option Models*

DESIGNER SERIES 1 6348 WS-DS1-6348

DESIGNER SERIES 1 7248 WS-DS1-7248

Wood Stone

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INSTALLATION AND OPERATION MANUAL FOR THE WOOD STONE DESIGNER SERIES OVEN

NATURAL GAS OR PROPANE FUELED STONE HEARTH OVEN DESIGNER SERIES MODELS WS-DS1-(6348,7248)-(RFG)-(MB)-(NG, LP)-(W) (-MB MODELS WITH BROILER OPTION)

ADDITIONAL COPIES AVAILABLE UPON REQUEST



Shown: WS-DS1-7248-RFG-BB-IR-MB



INSTALLATION AND OPERATING INSTRUCTIONS FOR THE WOOD STONE DESIGNER SERIES 1 OVEN WITH BROILER OPTION

RETAIN THIS MANUAL FOR FUTURE REFERENCE

Additional copies of this manual at woodstone-corp.com.

For prompt responses to service/maintenance questions, call us at @ 1-800-988-8103.

READ ALL INSTRUCTIONS BEFORE INSTALLING AND USING 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.

IMPORTANT: Consult your local gas supplier for a statement outlining a procedure to be followed in the event you smell gas. Post the statement in a prominent location.

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

It is recommended that this oven be installed, maintained and serviced by authorized professionals.

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

WARNING: Improper installation, adjustment, alteration, service or maintenance can result in property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

AVERTISSEMENT: L'installation, le réglage, la modification, la réparation ou l'entretien incorrect de cet appareil peut causer des dommages matériels, de blessures ou la mort. Lire attentivement les instructions d'installation, de fonctionnement et d'entretien avant de procéder à son installation ou entretien.

WARNING: Do not pack required air spaces (clearance) with insulation or other material.

EN AVERTISSANT: N'emballez pas les espaces aériens requis avec l'isolation ou tout autre matériel.

When non-combustible building materials contact the body of the oven, the clearances to combustibles are transferred to those non-combustibles.



A MAJOR CAUSE OF OVEN RELATED FIRES IS A FAILURE TO MAINTAIN REQUIRED CLEARANCES TO COMBUSTIBLE MATERIAL. IT IS OF UTMOST IMPORTANCE THAT THIS OVEN BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

POUR VOTRE SÉCURITÉ: Ne pas entreposer ni utiliser d'essence ou d'autres vapeurs de liquides inflammables ou des liquides dans les environs de ce ou de tout autre appareil.

DO NOT USE PRODUCTS NOT SPECIFIED FOR USE WITH THIS OVEN.

**DISCONNECT POWER TO THE OVEN BEFORE SERVICING OR CLEANING.
NO ATTEMPT SHOULD BE MADE TO OPERATE THIS APPLIANCE DURING A POWER FAILURE**

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

SAVE THE INSTRUCTIONS

Wood Stone's Designer Series ovens have been tested and approved by Intertek Testing Services and are ETL listed to ANSI Z83.11:2016 Ed. 4 / CSA 1.8:2016 Ed. 4, UL Subject 2162, UL 737, ULC-S627-00 and to NSF/ANSI 4:2016.



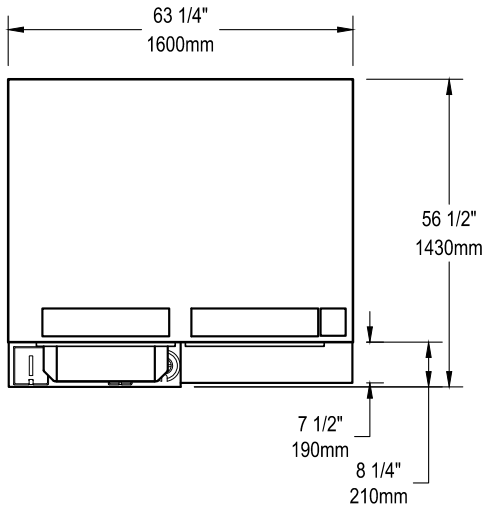
Intertek
ANSI Z83.11:2016 Ed.4
CSA 1.8:2016 Ed.4





Intertek
ANSI/NSF STD 4



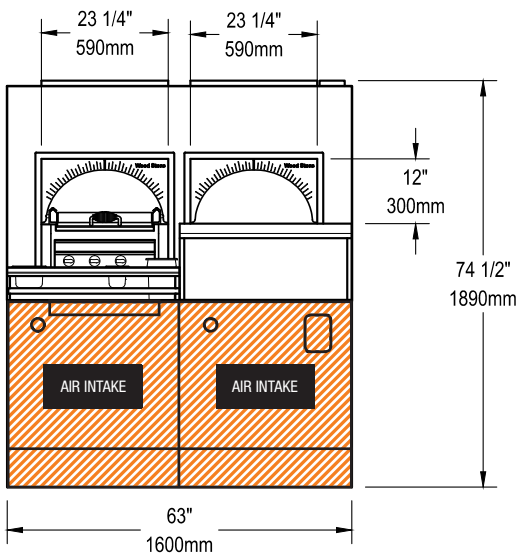
Plan view



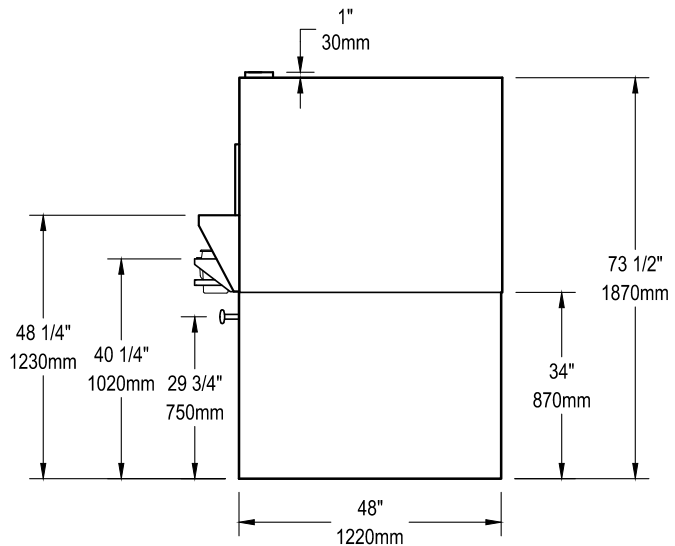
SHOWN WITH OPTIONAL BROILER

-  Air intake: Do not facade or cover over
 -  Must be left removable for service
- Utility connections shown in left side configuration.

Front view



Side view



Shipping weight: 4,200 lbs / 1,905 kgs

UTILITIES SPECIFICATIONS

Gas ⚡G

3/4 inch FNPT gas inlet

Varies depending upon configuration

47,000 BTU/hr: IR Burner (ea)

50,000 BTU/hr: Radiant Flame Burner (ea)

57,000 BTU/hr: Broiler (ea)

Maximum gas inlet pressure

1/2 psi (14 inches W.C.)

Electrical ⚡

120 VAC, 1.2 A, 50/60 Hz

Optional: 240 VAC, 1.2 A, 50/60 Hz
Gas inlet available on both sides of oven.

Electrical connection side variable—specify at time of order.

Refer to the data plate when installing.



Venting

Designer Series ovens must be vented using a Listed Type 1 exhaust hood, or a hood constructed and installed in accordance with NFPA 96 and all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

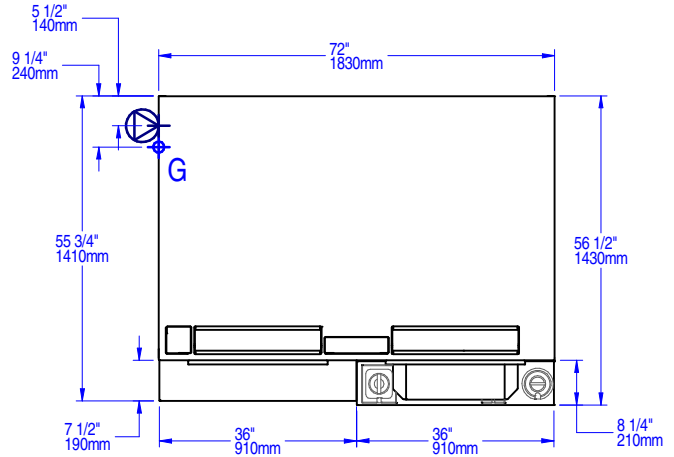
IMPORTANT: Models with "-W" in the model number must be vented as a solid fuel appliance.



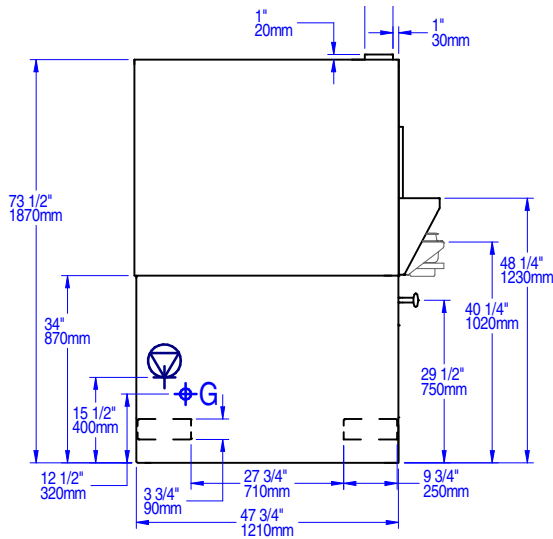
SHOWN WITH OPTIONAL BROILER

-  Air intake: Do not facade or cover over
 -  Must be left removable for service
- Utility connections shown in left side configuration.

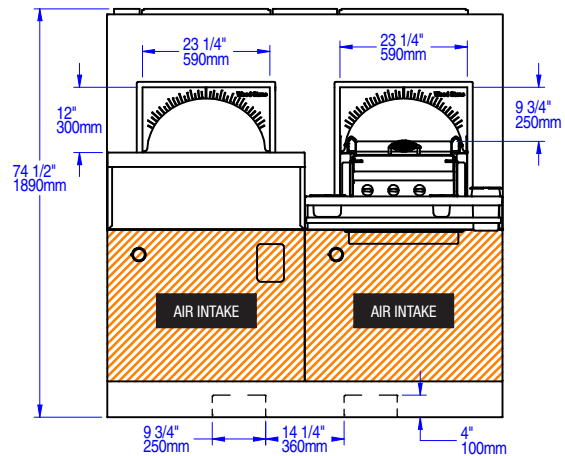
Plan view



Side view



Front view



Shipping weight: 4,450 lbs / 2,018 kgs

UTILITIES SPECIFICATIONS

Gas ϕ G

3/4 inch FNPT gas inlet

Varies depending upon configuration

47,000 BTU/hr: IR Burner (ea)

50,000 BTU/hr: Radiant Flame Burner (ea)

57,000 BTU/hr: Broiler (ea)

Maximum gas inlet pressure:

1/2 psi (14 inches W.C.)

Electrical ϕ

120 VAC, 1.2 A, 50/60 Hz

Optional: 240 VAC, 1.2 A, 50/60 Hz

Gas inlet available on both sides of oven.

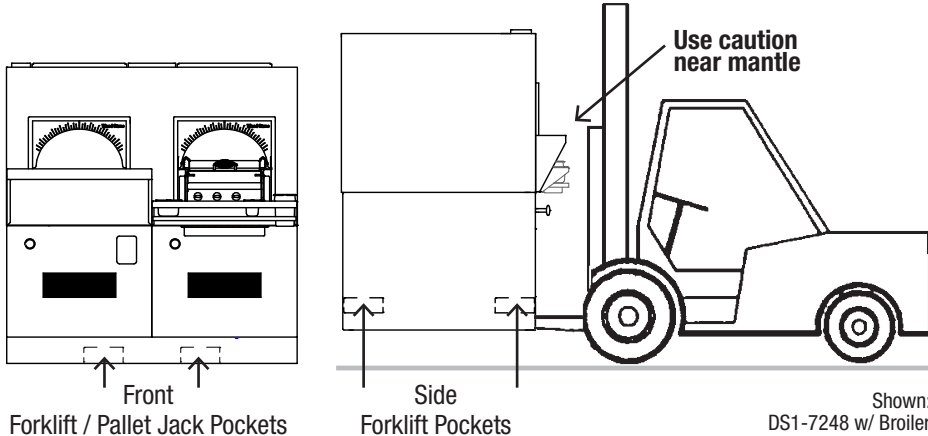
Electrical connection side variable—specify at time of order.

Refer to the data plate when installing.

Venting

Designer Series ovens must be vented using a Listed Type 1 exhaust hood, or a hood constructed and installed in accordance with NFPA 96 and all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

IMPORTANT: Models with -W in the model number must be vented as a solid fuel appliance.



⚠ WARNING Minimum Required Forklift Capacities	
6' FORKS MINIMUM	
Model	Lifting from Front, Rear or Sides
DS1-6348-(MB)	6,000 lbs
DS1-7248-(MB)	7,000 lbs

USING A FORKLIFT

The Wood Stone Designer Series DS1-6348 and DS1-7248 ovens weigh approximately 4,500 lbs. and are top-heavy.

Use a forklift with adequate fork lengths and lifting capacity. When using a forklift, always use the forklift pockets. Lifting the oven any other way with a forklift may result in damage. Use extreme caution and make sure that the forks extend all the way through the pockets provided. Fork length must be at least 6' long. If it is necessary to approach the oven from the front, be sure the mast does not contact the mantle (shelf).

There are fork pockets at the front and sides of the oven.

USING A PALLET JACK

The oven may also be moved with a Pallet Jack using the front or rear fork pockets only. Once the oven is on a **smooth, flat** floor it can be rolled to its final position. **DO NOT ATTEMPT TO MANUALLY ROLL THE OVEN UP OR DOWN A RAMP OR INCLINE.** Do not position yourself between the moving oven and an immovable object or surface such as a wall or door frame.

DO NOT TURN THE OVEN ON ITS SIDE!

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

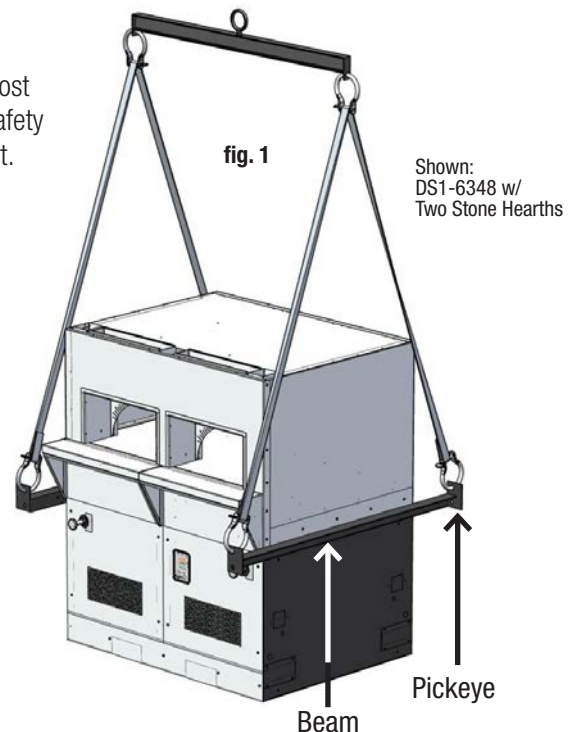
USING A CRANE

If you are planning to use a crane to unload the oven, specify a flatbed truck delivery.

Use the pick-eyes provided on the sides of the oven to lift the oven with a crane. The spreader bar should be of a sufficient length to keep the sling from contacting the oven, and oriented as shown in fig. 1.

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.





WARNING: Do not pack required air spaces (clearance) with insulation or other material.

EN AVERTISSANT: N'emballez pas les espaces aériens requis avec l'isolation ou tout autre matériel.

When non-combustible building materials contact the body of the oven, the clearances to combustibles are transferred to those non-combustibles.

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.

1. The Wood Stone Designer Series Oven must have a minimum 1-inch clearance to combustibles from all sides, 7 inch clearance to combustibles from the top. If building a facade that will contact the oven, use completely non-combustible materials. Any facade wall on the front of the oven must be of non-combustible construction.
Any walls perpendicular to the front of the oven in the area 30 inches to either side of the doorway and 36 inches in front of the oven should have a non-combustible surface. Please note that standard Drywall (or Sheetrock) is considered a combustible.
2. This oven should be installed on a non-combustible floor surface. For use only on noncombustible floors (installér sur un plancher incombustible seulement). The non-combustible floor surface must extend 36 inches in front of and 30 inches to either side of the oven doorway.
3. If equipped, do not cover the glass viewing windows. If constructing a facade wall around the oven, provide openings for the viewing windows. Seal the openings to the oven using a non-combustible insulation and an appropriate flashing, (i.e. steel or ceramic tile). Facade materials 6 inches on each side and above the window must be non-combustible.

WARNING: DO NOT FILL REQUIRED AIR SPACE WITH INSULATION OR OTHER MATERIALS.

DO NOT BLOCK AIR INTAKE AREA ON SERVICE PANELS AT FRONT OF THE OVEN.

DO NOT BLOCK SERVICE PANELS.

THESE MUST REMAIN REMOVABLE TO ALLOW ACCESS FOR MAINTENANCE AND SERVICE.



All Wood Stone Designer Series 1 ovens must be vented using a Listed Type 1 exhaust hood or one that is constructed and installed in accordance with all relevant local and national codes. Wood Stone offers eyebrow-type hoods designed specifically for Wood Stone ovens. The hood should be installed in accordance with the hood manufacturer's instructions, and with the Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96 and/or the applicable local and national codes. Solid fuel burning ovens must be vented separately from non-solid fuel burning equipment.

It is never appropriate to use "B vent" in any part of an exhaust system connected to a Wood Stone oven. All duct material must be manufactured to the specifications of a grease duct. Due to the possibility of sparks entering the duct, exhaust systems serving solid fuel equipment **MUST** not be combined with exhaust systems serving other (non-solid fuel) equipment. The venting system should be cleaned and inspected at least every 3 months, and at least monthly with wood-fired applications.

WOOD BURNING MODELS

Designer Series ovens with model numbers containing a -W should be vented in accordance with codes concerning solid fuel appliances, NFPA 96. 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 at 1-800-988-8103 for technical support.

Solid fuel exhaust contains creosote and other substances that accumulate in ducts, 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. **Wood Stone recommends cleaning and inspection at least monthly on any ventilation system serving solid fuel equipment.**

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. The interior floor and dome of the oven do not require creosote or soot removal. The oven flue and exhaust system will require inspection and cleaning. The exhaust system should be inspected and cleaned per the manufacturer's and or local code official's recommendations. **Wood Stone recommends cleaning and inspection at least monthly on any ventilation system serving solid fuel equipment.**

Wood Stone recommends that you refer to the exhaust hood manufacturer's recommendations for inspection, maintenance and cleaning.

Wood Stone recommends that you consult with a qualified mechanical engineer and submit your venting plans to local code authorities before proceeding with installation.

Contact local building or fire officials concerning any installation restrictions or need for inspection of the oven installation.



FACTORY SPECIFIED INDIVIDUAL BURNER MANIFOLD PRESSURES (W.C.) FOR WS-DS1 MODELS

Model	Natural Gas (NG)			Propane (LP)		
	SV-1 IR Burner	SV-2 Radiant Burner	Broiler	SV-1 IR Burner	SV-2 Radiant Burner	Broiler
All DS1 Models	3.5" W.C.	5" W.C.	4"	9" W.C.	9.5" W.C.	10"

MAXIMUM HOURLY BTU INPUT RATES FOR WS-DS1 MODELS

See data plate for your specific model.

This oven requires no modifications or adjustments for use at high altitudes.

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 or The Natural Gas Installation Code CAN/CGA-B149.1 as applicable.

SV-1 is the gas control valve that operates the Underfloor IR Burner. SV-1 is the gas control valve that operates the Underfloor Infrared (IR) burner. The manifold pressure is checked at the outlet port on the SV-1 gas valve.

SV-2 (and SV-3 if equipped) are the gas control valve(s) that operates the interior Radiant Burner(s). The manifold pressure(s) are checked at the outlet port on the individual gas valve.

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 CONNECTION

Wood Stone Designer Series 1 ovens are equipped with a 3/4-inch FNPT gas connection (see page 13 for exact location). 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!**

All gas piping up to the oven must have a minimum inside diameter of 3/4", including all fittings and shut off valves, which should be of the full flow type.

Wood Stone recommends that the Designer Series oven be equipped with a manual, individual shutoff valve, located between the oven and the main gas supply, and that this shutoff valve (supplied by others) be left readily 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.

Maximum inlet gas pressure must not exceed 14" W.C. (1/2 psi)

**GAS INLET PRESSURE**

For ovens running on natural gas, an inlet pressure of 7 to 10" W.C. is recommended to ensure optimum oven performance. Incoming gas pressure below this range will affect oven performance, the lower the pressure the greater the negative impact. If the gas supply pressure is greater than 14" W.C. (1/2 psi), an external regulator, supplied by others, is REQUIRED to lower the gas pressure to the acceptable range. Issues caused by low or high gas pressure are installation issues, and will not be covered under the Warranty.

For ovens running on LP, the recommended inlet pressure to ensure optimum oven performance is 10 to 12" W.C. Incoming gas pressure below this range will affect oven performance, the lower the pressure the greater the negative impact. If the gas supply pressure is greater than 14" W.C. (1/2 psi), an external regulator, supplied by others, is REQUIRED to lower the gas pressure to the acceptable range. Issues caused by low or high gas pressure are installation issues, and will not be covered under the Warranty.

For all installations, follow best practices for proper gas line pipe sizing for the line serving the oven. To insure proper operation, all gas piping and fittings leading up to the oven should have an inside diameter equal to or greater than that of the oven gas connection. Also make sure that a readily accessible shut off valve (supplied by others) is installed near the oven, and in accordance with all applicable codes. Shut off valves must be of the full-flow type, and not introduce any restriction into the gas line.

The connection to the oven should be hard-piped whenever feasible. If this is not possible, use a properly sized flexible connector approved for this application. When using a flexible connector make sure that its design does not present any reduction in pipe diameter or other restriction. Oven issues caused by improper pipe sizing, improper shut off valves, restrictive connectors, or any other deficiency in the gas supply design or installation will not be covered under the oven warranty.

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 or The Natural Gas Installation Code CAN/CGA-B149.1 as applicable.

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 14" W.C. (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 14" W.C. (1/2 psi) (3.45 kPa).



ELECTRICAL CONNECTIONS

A junction box is provided on one side of the oven (specified at time of order) towards the back of the oven. The incoming power is connected to oven at this junction box. Check the equipment data plate to verify proper voltage before connecting the oven. If needed, the location of the junction box may be easily relocated to the opposite side of the oven by the installer.

This appliance must be electrically grounded in accordance with local code, or in the absence of local code, with the national electrical code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.2, as applicable.

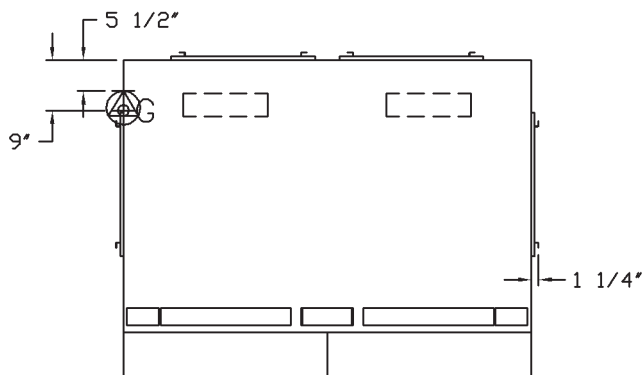
An electrical diagram is provided inside the oven control box, and on the transformer box beneath the oven as well, and at the end of this manual.

GAS CONNECTION

Connect the incoming gas supply to the 3/4 inch FNPT gas inlet located on one side of the oven. A gas inlet is available on each side of the oven. Both inlets are plugged at the factory. Remove the plug from the inlet to which the connection will be made. Verify that the unused inlet remains plugged. A 3/4 inch full-flow gas shut-off valve (supplied by others) must be installed on the gas supply near the oven in such a way that it is readily accessible.

UTILITY LOCATIONS

Utility locations shown below as left-side configuration. Right-side configuration would mirror left-side configuration.





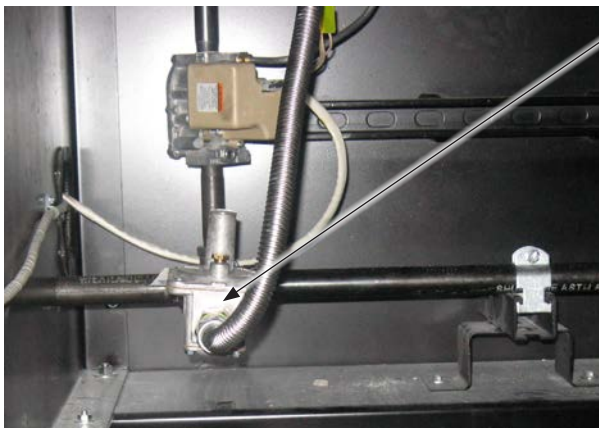
FACTORY SPECIFIED INDIVIDUAL BURNER MANIFOLD PRESSURES (W.C.) FOR OPTIONAL BROILER MODELS

Model	Natural Gas (NG)	Propane (LP)
Broiler	4"	10"

Pressure adjustments for the broiler are made at the regulator located beneath the oven. This regulator serves the broiler only and does not effect the oven burners. A pressure tap is located on the broiler manifold, behind the broiler faceplate.

This information can also be found on the data plate located beneath the oven.

Broiler pressure tap
Located behind the broiler faceplate at the front of the oven



Broiler pressure regulator
Located underneath the broiler, accessed behind the front service panel

Broiler pressure regulator
Close-up view





TYPE 4 CONTROLLER

RFG, RFG-W models

Hearth Temperature

The hearth (floor) temperature will be displayed when the oven is turned on. Display will read "LO" when the temperature is below 38 °C (100 °F).



Temperature units

Press and hold to switch between Fahrenheit and Celsius.

ON/OFF button

Press to turn display on and off.

TYPE 2 CONTROLLER

RFG-IR,
RFG-IR-W models

Power indicator light

Indicates the oven is turned ON.

Dome Flame indicator light

Indicates the pilot for Radiant flame has lit.

Hearth Heat indicator light

Indicates that the pilot for the underfloor IR burner is lit. This light will go off whenever the hearth temperature is above the Hearth Set Point.

Hearth Temperature display

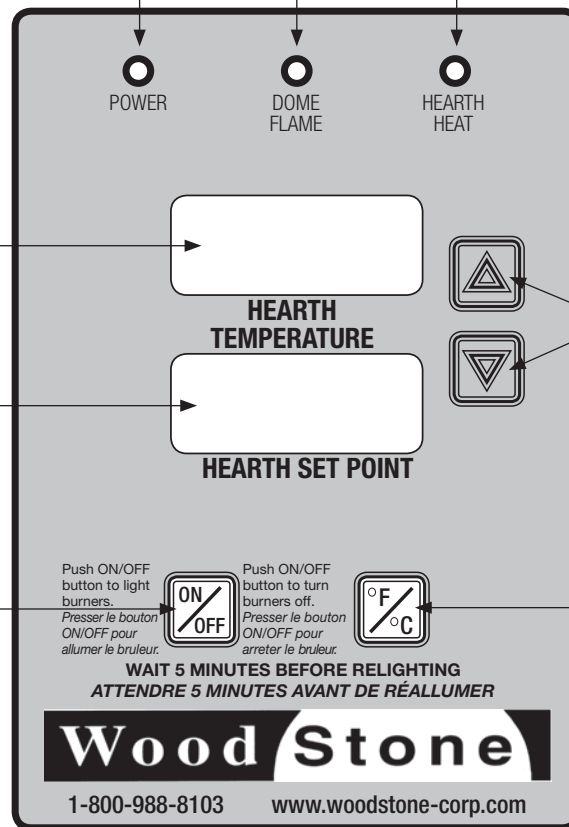
Displays temperature of oven floor (hearth). Sensor is embedded 1" below hearth surface.

Hearth Set Point display

Indicates Hearth Set Point temperature of Underfloor IR burner

On/Off button

Press to turn oven on/off



Arrow buttons

Pressing appropriate directional arrow to adjust Hearth Set Point temperature up or down.

Temperature unit selector

Toggles between Fahrenheit and Celsius temperature scales in display screens



INITIAL OVEN START-UP

NOTE: The ceramic materials used in the construction of your Wood Stone oven will absorb moisture if exposed to high humidity or damp conditions during shipment from the factory or extended periods of storage before installation. Occasionally, through the course of the Initial Start-Up, as the oven heats up it is possible that you will see some water dripping from the sides of the oven as moisture is driven out of the ceramic. This is not a defect in the oven, and once the oven has been fully saturated with heat, the moisture will be driven fully from the oven. After this initial process, you will not see any additional moisture from the oven unless the oven is not used for an extended period of time AND it is exposed to excessive moisture or high humidity.

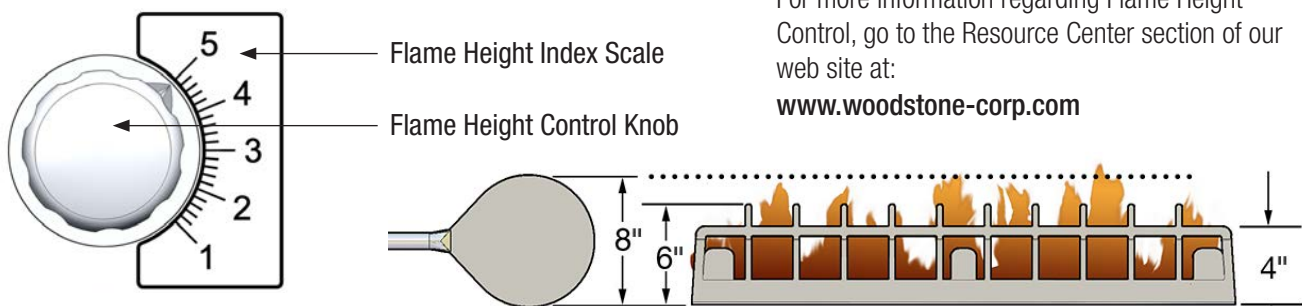
FIRST DAY

1. Make sure exhaust fan is properly wired and interlocked to the appliance and main gas supply is ON (valve parallel with gas line).
2. Push I/O button on Controller(s), leaving Broiler off during the Start-Up process. (See BROILER OPERATION section for Broiler Lighting instructions.) It may take a while for the gas to purge all the air from the gas lines. The exhaust fan should come on as well.
3. Once the burner ignites, make sure the flame is at its lowest setting, "1" and allow the appliance to operate at this setting for about 1 hour.
4. After 1 hour, raise Radiant flame to 25% (~5-inch flame, or ~2 on the Flame Height Control Index Scale) and hold this setting for 4 hours.
5. After 4 hours, raise radiant flame height to 50% (~3 on the Flame Height Index Scale) and hold another 4 hours. The oven can be left at this setting all night.
6. At this point, the oven is ready for use.

NOTE: Small "crazing" cracks will occur with normal heating and cooling. They will not affect the performance or durability of the oven. If cracks of 1/8" wide or more develop, contact Wood Stone for evaluation.

FLAME HEIGHT INDICATOR

Comprised of two parts



For more information regarding Flame Height Control, go to the Resource Center section of our web site at:

www.woodstone-corp.com

**INITIAL RFG-IR OVEN START-UP**

NOTE: The ceramic materials used in the construction of your Wood Stone oven will absorb moisture if exposed to high humidity or damp conditions during shipment from the factory or extended periods of storage before installation. Occasionally, through the course of the initial start-up, as the oven heats up it is possible that you will see some water dripping from the sides of the oven as moisture is driven out of the ceramic. This is not a defect in the oven, and once the oven has been fully saturated with heat, the moisture will be driven fully from the oven. After this initial process, you will not see any additional moisture from the oven unless the oven is not used for an extended period of time AND it is exposed to excessive moisture or high humidity.

FIRST DAY

1. Make sure exhaust fan is properly wired and interlocked to the appliance and main gas supply is ON (valve parallel with gas line).
2. Light pilots for the broiler, but leave broiler off at this time. (See BROILER OPERATION section for lighting instructions.)
3. Push I/O button on Controller. There may be more than one Controller, depending on how your oven is configured. The exhaust fan should come on as well.
4. Use the arrows on the Controller to set the Hearth Set Point to 100 °F. It may take a while for the gas to purge all the air from the gas lines.
5. Once the Radiant burner ignites, using the Flame Height Control Knob(s) (depending upon configuration), set the Radiant flame to its lowest setting, "1" on the Flame Height Index Scale, and allow the oven to operate at this setting for about 1 hour. (See previous page for Flame Height Indicator details.)
6. After 1 hour, raise radiant flame to 25% (~5-inch flame, or ~2 on the Flame Height Index Scale) and hold this setting for 4 hours.
7. After 4 hours, raise radiant flame height to 50% (~3-inch flame, or ~3 on the Flame Height Index Scale) and hold another 4 hours. The oven can be left at this setting all night.
8. At this point, the oven is ready for use.

NOTE: Small "crazing" cracks will occur with normal heating and cooling. They will not affect the performance or durability of the oven. If cracks of 1/8" wide or more develop, contact Wood Stone for evaluation.



DAILY OVEN OPERATION

The oven floor temperature is displayed on the Controller readout.

DO NOT OVER FIRE! WHEN FLAMES SPILL OUT OF THE DOOR, OR IF THE OVEN FLOOR (HEARTH) TEMPERATURE EXCEEDS 700 °F, YOU ARE OVER FIRING THE OVEN.

END OF THE DAY

Push I/O button on the Controller. All gas will go off, even the pilots, in the oven. Broiler pilots can be left on overnight in the stand by position (Check with your local jurisdiction for proper safety requirements.) When the oven is turned off, use the Night Heat Retention Door(s) to help retain heat in the oven. The night door is placed into the oven doorway. **IMPORTANT:** Do not cook with the Night Heat Retention Door(s) in place. Remove before starting the oven.

BEGINNING OF THE DAY

1. Push the On/Off button on the Controller to start the oven. **IMPORTANT:** Make certain Night Heat Retention doors have been removed.
2. Set the Hearth Set Point temperature to desired temperature—typically 500 °F, using the Up or Down arrow on the controller.
3. Turn Temperature Control Knob(s) (depending upon configuration) to “5” on the Flame Height Index Scale – the heat up flame position.
4. Wait until Hearth Temperature on the controller reaches 500 °F. Heat up time from room temperature will be approximately 2 hours, 40 minutes.
5. Maintain temperature range—typically 500–530 °F, using a holding flame of 3.2-ish (approximately a 10" flame) on the Flame Height Index Scale(s).
6. When cooking, adjust flame upwards 2-3 inches. Return to holding flame after removing product.

See woodstone-corp.com for detailed information on cooking in your Wood Stone oven.

DURING THE DAY

Wood Stone recommends the use of long-handled brushes for sweeping up surface debris that will accumulate on the floor of the oven during use. Use a natural fiber brush—always brushing away from the radiant burner well. For deeper cleaning, use a brass bristled brush. The oven floor can be then cleaned with a damp rag wrapped around the brass bristled brush head. (Wood Stone offers an assortment of oven brushes available through your dealer. Specification sheets may be viewed on the Wood Stone website under Tools & Accessories.)



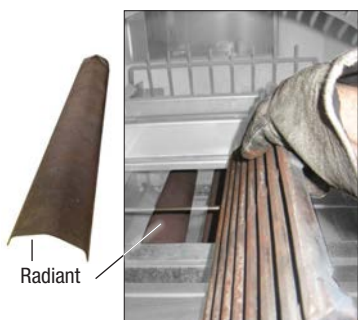
OPTIONAL BROILER LIGHTING INSTRUCTIONS

OVERVIEW

The broiler utilizes a standing pilot ignition system. This system incorporates a pilot flame and pilot sensor for each of the (3) broiler burners. If a pilot goes out or cannot be detected by the sensor, the system will shut down the gas supply to that broiler burner. Each pilot must be lit manually. Pilots can be left on overnight in the 1 o'clock stand by position. However, check with your local jurisdiction for proper safety requirements.

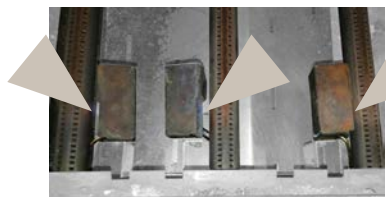
NOTE: The broiler operates independently of the oven controls, turning the oven controller ON or OFF has no effect on the broiler. When turning the oven off, turn the broiler off as well.

Lighting the broiler pilot lights



a. Removing broiler grates & radiants

1. Remove the 3 broiler grates and 3 radiants from the broiler (photo a). The radiants are the sheet metal pieces that sit over each burner strip. The pilots are located towards the front of each burner, accessible through a cut out section of the rectangular metal cover (b).



b. Pilot access holes

2. Use a long neck lighter that will reach the pilot. Ignite the lighter, then turn the corresponding Broiler Control Knob to the pilot (1 o'clock) position. You'll feel the stop. Push the knob and hold it in (c).



c. Depressing Broiler Control Knob in the 1 o'clock position

3. Light the pilot and continue to hold the knob in once the pilot has ignited for approximately one minute to ensure the pilot remains lit.



d. Broiler Control Knobs in standby position

4. Release the knob. If the pilot does not remain lit after the knob is released, wait for 5 minutes before repeating the pilot lighting procedure. Note: The 1 o'clock position is also the burner standby position (d).



e. Broiler Control Knobs in cooking position

5. Replace the radiants and broiler grates once all 3 pilots are lit.

6. Turn the burner knobs counterclockwise to adjust the burners (e).



f. Broiler Control Knob in pilot OFF position

End of day

Turn off oven by pushing the On/Off button on the controller (Power indicator light on the controller will turn off). Turning off the oven has no effect on the broiler.

To turn Broiler pilots OFF, push in and rotate each Broiler Control Knob clockwise as far as it will turn (f).

If a pilot goes out, wait five minutes before attempting to relight it. Do not attempt to relight the pilot if you smell gas. Turn off the oven and broiler until the gas smell clears. If you suspect a problem with the oven or broiler, contact the Wood Stone Service Department immediately. Do not attempt to run the oven or the broiler until the problem is identified and corrected.

**OVEN INTERIOR**

Wood Stone recommends the use of long-handled brushes for sweeping up surface debris that will accumulate on the floor of the oven during use. Use a natural fiber brush—always brushing away from the radiant burner well. For deeper cleaning, use a brass bristled brush. The oven floor can be then cleaned with a damp rag wrapped around the brass bristled brush head.

Wood Stone offers an assortment of oven brushes available through your dealer. Specification sheets may be viewed on the Wood Stone website under Tools & Accessories.

DO NOT POUR OR SPRAY LIQUIDS ONTO THE OVEN DECK OR INTO THE OVEN INTERIOR AS THIS CAN DAMAGE THE CERAMIC AND WILL VOID THE WARRANTY.

There is a stainless steel burner guard 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.

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.**OVEN EXTERIOR**

All painted and stainless steel surfaces should be cleaned as necessary using a 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. Do not use any type of scouring pad on glass surfaces.

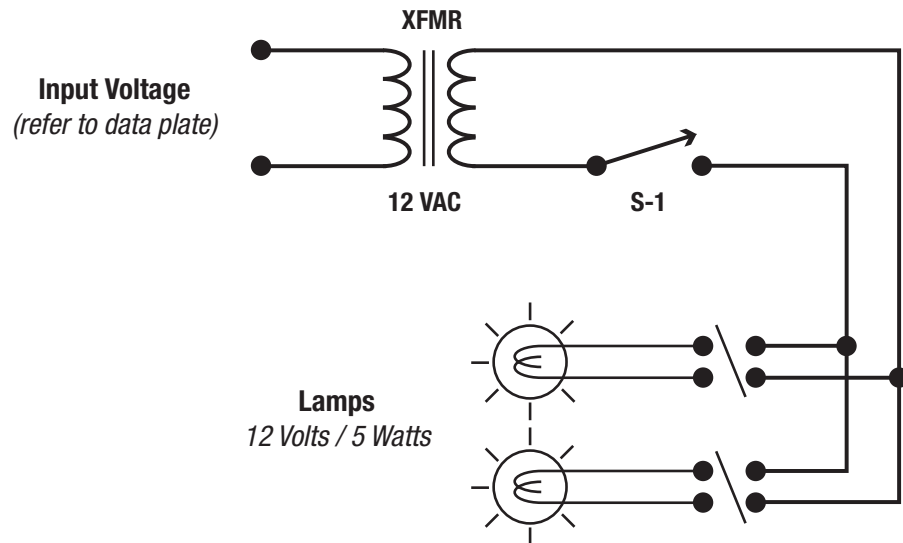


PROBLEM	CAUSE/SOLUTION
Controller will not turn on	<ol style="list-style-type: none"> 1. Incoming power to oven turned off. Check circuit breaker for circuit supplying the oven. Check that any wall switches external to the oven that control oven power are turned on. Check that any interlocks external to the oven are turned on. 2. If controller still does not turn on, please contact Wood Stone for assistance.
Flame does not light	<ol style="list-style-type: none"> 1. Is gas turned on to the oven? Is gas shut-off valve turned all the way on? 2. Debris in burner. Burner may require cleaning. Contact Wood Stone for assistance. 3. Damaged igniter or gas valve. Contact Wood Stone for assistance. If the oven is being started for the first time: <ul style="list-style-type: none"> - Has all air been bled from the gas line? - Is the switch on the SV-2 valve in the ON position? <p>NOTE: Valve is locate on the back of the control box, beneath the oven.</p>
Flame cuts out	<ol style="list-style-type: none"> 1. Debris in burner. 2. Oven is being run with the night door in place. Night Heat Retention Door must be removed whenever the oven is turned on. 3. Wind blowing into the oven, or other venting issues.
Display reads "OPEN"	<ol style="list-style-type: none"> 1. Thermocouple is not plugged into control box. 2. Damaged thermocouple. Contact Wood Stone for assistance.

Please contact Wood Stone at 1-800-988-8103 should service be necessary, or if you have any questions about your oven. Our service hours are 8am to 5pm Pacific time. Follow the recorded instructions for Emergency Service if you require assistance during non-business hours. A Wood Stone technician will promptly respond to your call.



OPTIONAL INTERIOR LIGHT CIRCUIT

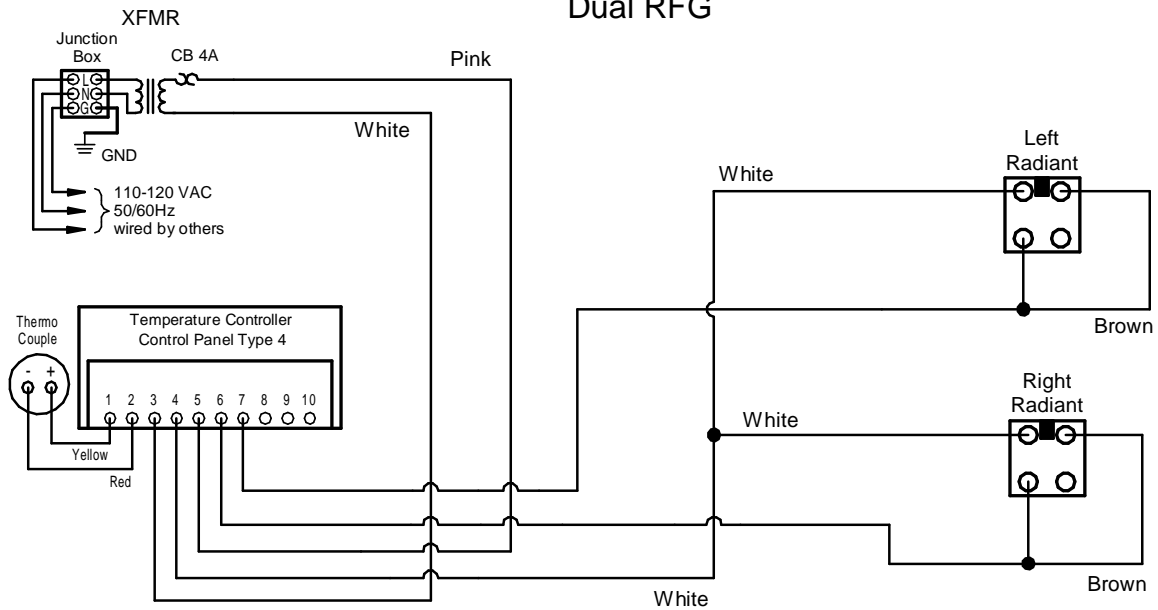




2 RADIANT BURNERS TYPE 4 CONTROLLER

120 VAC

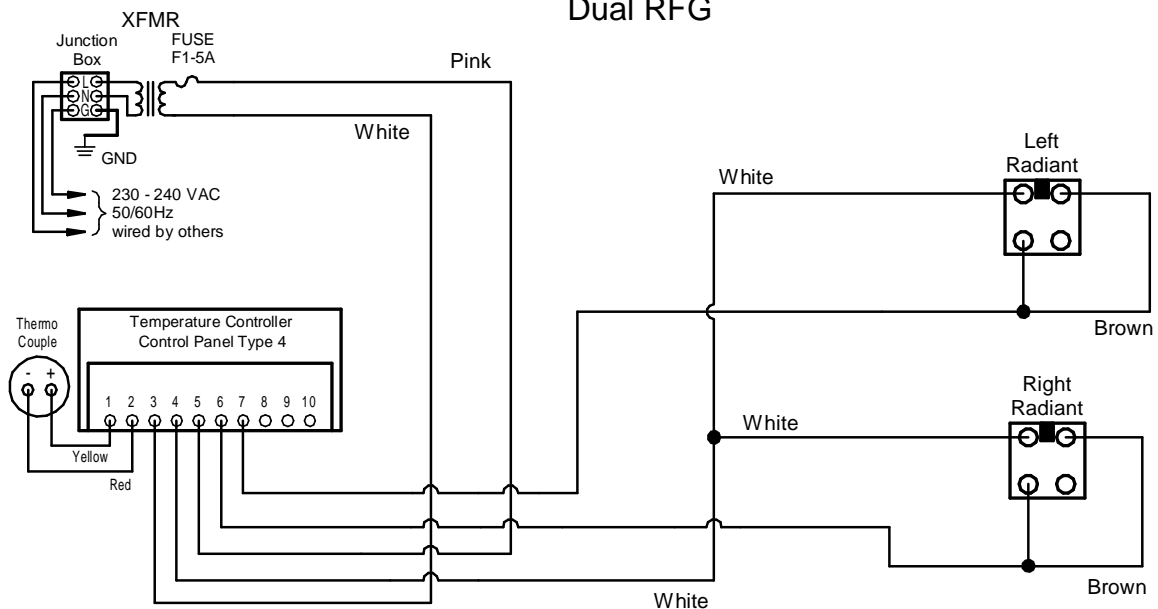
Dual RFG



DIAG #: WD082 Rev. 0
DATE: 4/24/2014

240 VAC

Dual RFG

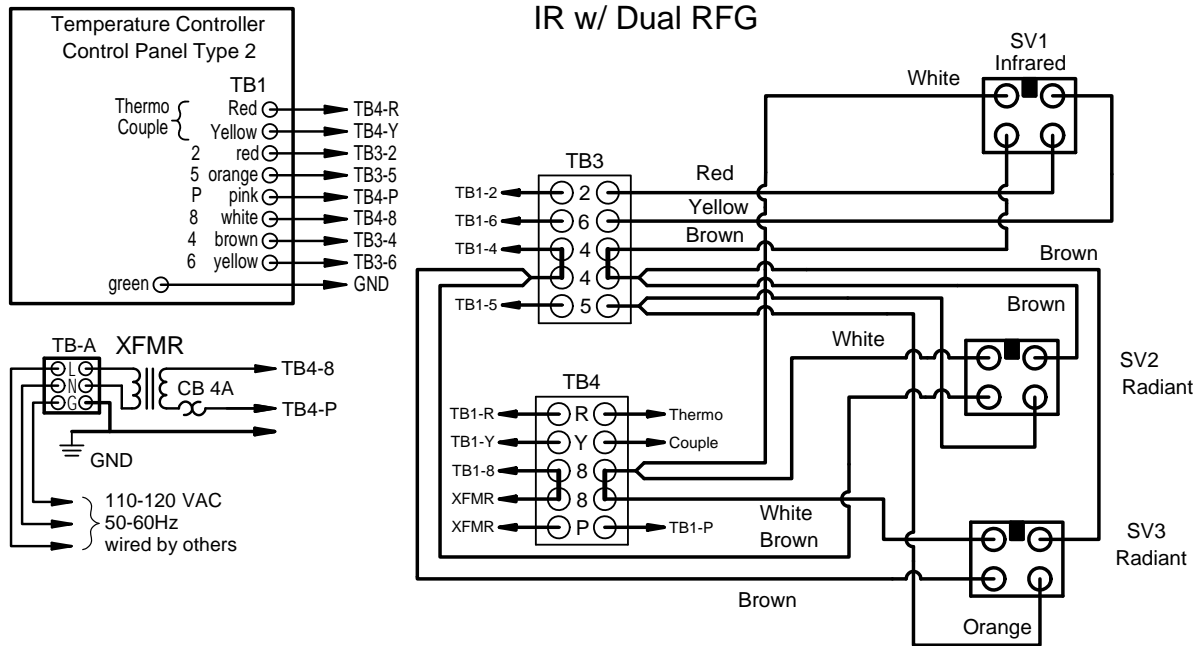


DIAG #: WD083 Rev. 1
DATE: 11/2/2015



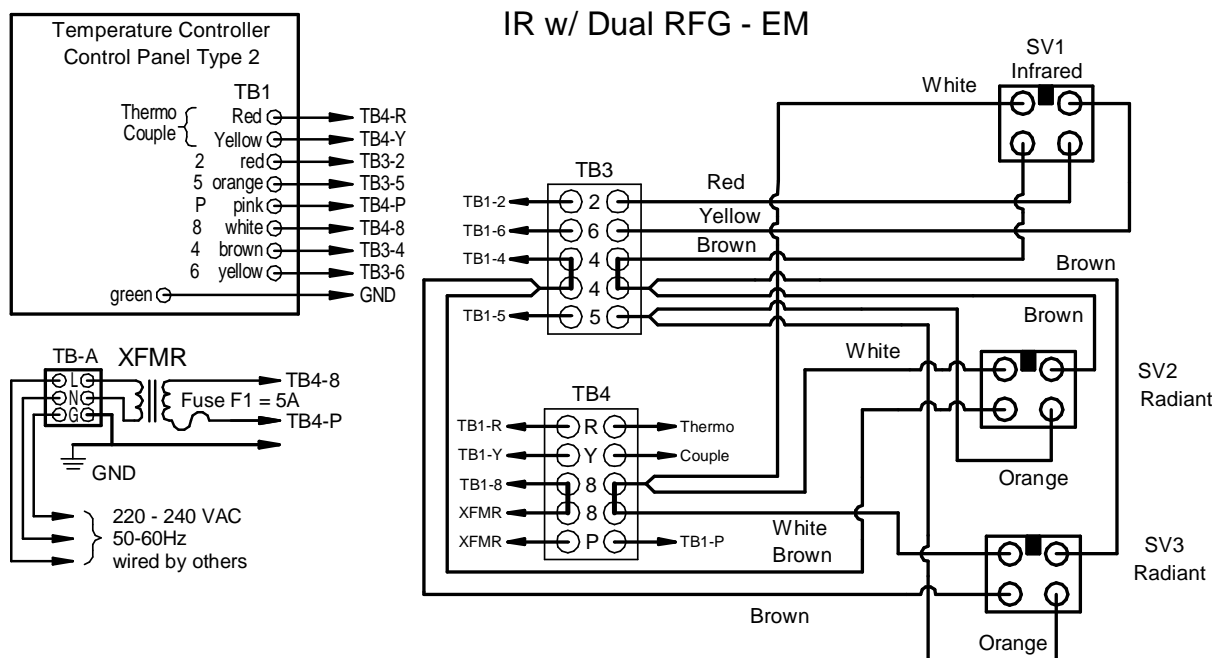
1 RADIANT BURNER - IR BURNER TYPE 2 CONTROLLER

120 VAC



DIAG #: WD079 Rev. 0
DATE: 3/27/2014

240 VAC



DIAG #: WD080 Rev. 1
DATE: 7/10/2014



ALL WARRANTY SERVICE MUST BE PRE-APPROVED BY WOOD STONE

Wood Stone warrants its equipment to the original purchaser against defects in material or manufacture for a period of one year from the original date of purchase, subject to the following exclusions and limitations.

Please contact the factory first at 1.800.988.8103 or 1.360.650.1111, seven days a week. Our normal business hours are 8am to 5pm Pacific Time Monday–Friday. If calling during non-business hours, follow the recorded instructions for emergency service and a Wood Stone technician will get back to you promptly.

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 and Operation Manual.
2. In the event the equipment is improperly or inadequately maintained. Proper maintenance is the responsibility of the user; proper maintenance procedures are prescribed in the Wood Stone Installation and Operation Manual. Burner problems resulting from debris or ash in the burner well will not be covered by the warranty. Call with questions regarding maintenance frequency.
3. In the event that the failure or malfunction of the appliance or any part thereof is caused by abnormal or improper 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 the ceramic firebox.
8. In wood-fired equipment configurations, in the event that pressed log products of any type have been burned in the equipment.
9. In coal-fired oven configurations, in the event any type of coal other than anthracite coal fuel has been used.
10. Damage resulting from the use of chemical cleaning products in the oven, as well as any damage from liquids or chemicals, including water, being poured or sprayed into the oven.

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

If you claim a defect covered by this Limited Warranty, contact:

Wood Stone Corporation, Attn: Service Department, 1801 W. Bakerview Rd., Bellingham, WA 98226 USA
Phone 1.800.988.8103 or 1.360.650.1111

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Tel 360.650.1111

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An ongoing program of product improvement may require us to change specifications without notice.