

Installation and Operation Manual



FIRE DECK SERIES

Stone Hearth Oven

Gas-Fired, Gas/Wood Combination Models

FIRE DECK 9660 WS-FD-9660

FIRE DECK 11260 WS-FD-11260

Wood Stone

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TABLE OF CONTENTS

FIRE DECK FD-9660 & FD-11260	3
CAUTIONS & WARNINGS	4
FD-9660 SPECIFICATIONS	6
FD-11260 SPECIFICATIONS	7
UNLOADING & MOVING THE OVEN	8
OPTIONAL TEMPORARY CASTER INSTALLATION	9
PLACING & INSTALLATION	10
FACADE GUIDELINES	11
FACADE REQUIREMENTS	12
VENTING	13
HOOD SPECIFICATIONS	15
HOOD SPECIFICATIONS	16
GAS SPECIFICATIONS.	17
ELECTRICAL SPECIFICATIONS.	19
CONTROLLER	20
INITIAL START-UP	21
DAILY OVEN OPERATION.	22
FLAME HEIGHT CONTROL	23
USE OF WOOD IN OVEN	24
DAILY MAINTENANCE.	25
PERIODIC THERMAL CLEANING	26
FUELWOOD FACTS.	27
ELECTRICAL DIAGRAMS.	28
DECORATIVE FLAME BURNER.	31
INTERLOCK DIAGRAM	32
TROUBLESHOOTING.	33
LIMITED WARRANTY	34



INSTALLATION AND OPERATION MANUAL FOR THE WOOD STONE FIRE DECK

STONE HEARTH COOKING EQUIPMENT

WS-FD-9660-(RFG)-(LR, L, OR R)-(IR)-(NG, OR LP), WS-FD-9660-RFG-(LR, L OR R)-IR-W-(NG OR LP),

WS-FD-9660-RFG-(LR, L, OR R)-(NG OR LP), WS-FD-9660-RFG-(LR, L, OR R)-W-(NG OR LP),

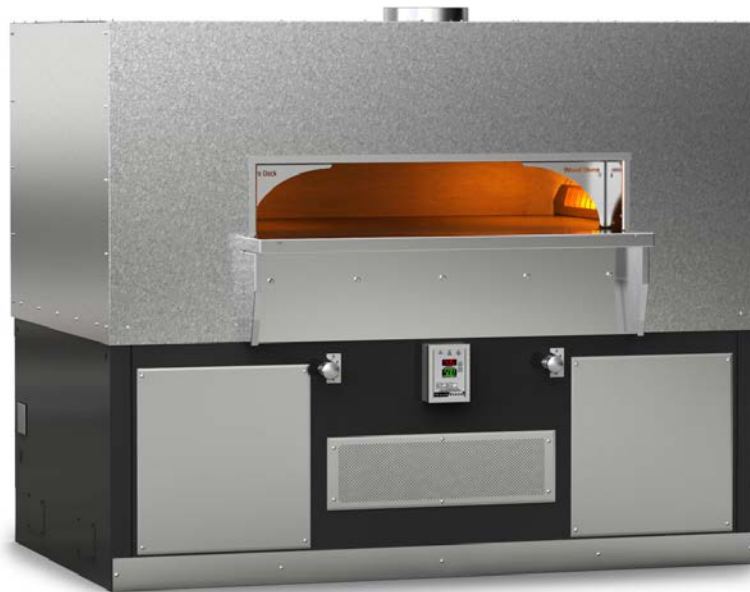
WS-FD-9660-W-IR-(NG OR LP)

WS-FD-11260-RFG-(L OR R)-IR, WS-FD-11260-RFG-(L)-IR,

WS-FD-11260-RFG-(R)-IR, WS-FD-11260-W-IR, WS-FD-11260-W

GAS AND GAS / WOOD-FIRED MODELS

ADDITIONAL COPIES AVAILABLE UPON REQUEST



Shown: FD-9660-LR

**WOOD STONE WS-FD-9660 AND WS-FD-11260 FIRE DECK
INSTALLATION AND OPERATING INSTRUCTIONS****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.

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 THE UTMOST IMPORTANCE THAT THIS OVEN BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

Always keep the area under and around this appliance free and clear of any and all combustible materials.

FOR YOUR SAFETY: 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.

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

ESURE DE SÉCURITÉ: Ne pas entreposer ni utiliser de'essence ni autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause 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, des blessures ou la mort. Lire attentivement les instructions d'installation, de fonctionnement et d'entretien avant de procéder à son installation ou entretien.



WARNING: In the event of a power failure, no attempt should be made to operate this appliance

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

CAUTION: DISCONNECT POWER TO THE OVEN BEFORE SERVICING OR CLEANING.

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 gas and gas-wood ovens were tested and approved by Intertek Testing Services and ETL Listed to ANSI Z83.11:2016 Ed. 4, CSA 1.8:2016 Ed. 4, UL 737, ULC-S627-00, UL Subject 2162 and to ANSI/NSF Standard 4.





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



Intertek
ANSI/NSF STD 4



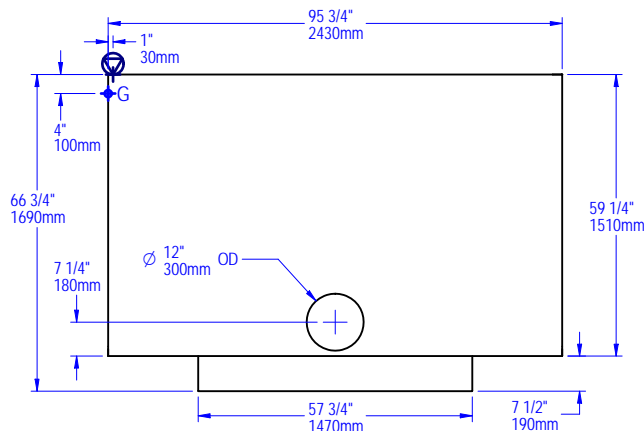
 Air intake: Do not facade or cover over

 Must be left removable for service

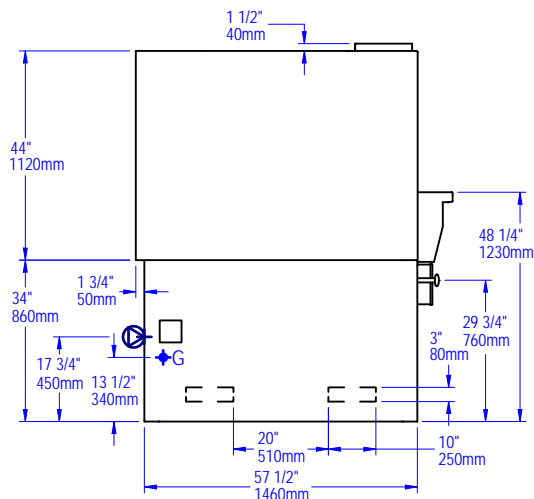
**Shipping weight: 6,000 lbs.
2,722 kg**

NOTE: Using the optional temporary casters will add 3" to the total height of the oven, for a total of 82-1/2".

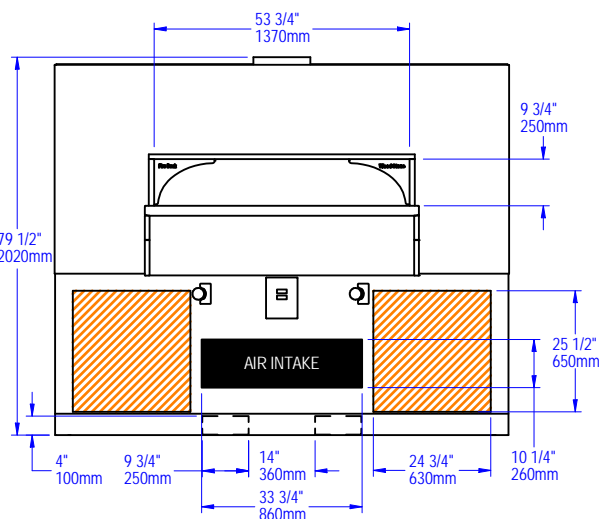
Plan view



Side view



Front view



UTILITIES SPECIFICATIONS

Gas: 1 inch FNPT gas inlet \oplus
350,000 BTU/hr Natural Gas (NG)

OR

369,000 BTU/hr Propane (LP)

Optional Decorative Flame

Adds 15,000 BTU/hr

Maximum gas inlet pressure:

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

Electrical $\opl�$

120 VAC, 2 A, 50/60 Hz

Utility connections made underneath the oven.

Refer to data plate when installing.

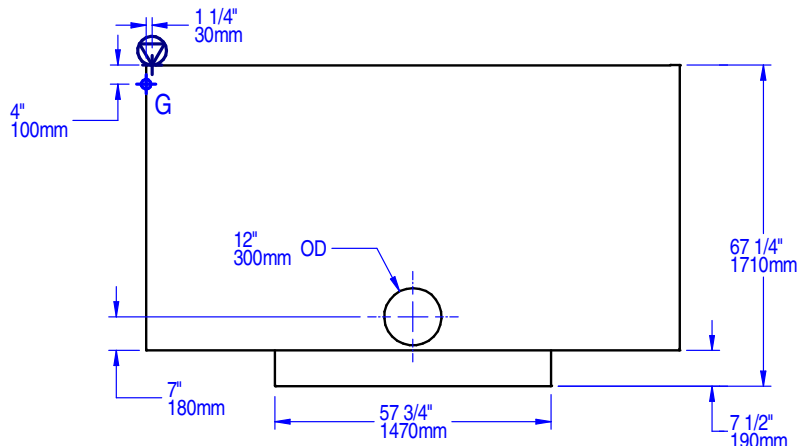
Venting


The Fire Deck 9660 can be direct connected to a power-ventilated, grease-rated chimney or can be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The oven must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

IMPORTANT: Ovens with model numbers containing a -W must be vented as a solid fuel appliance.



Plan view



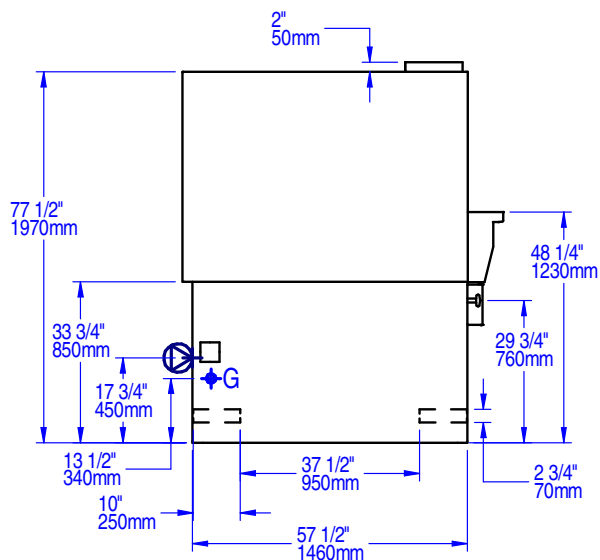
 Air intake: Do not facade or cover over

 Must be left removable for service

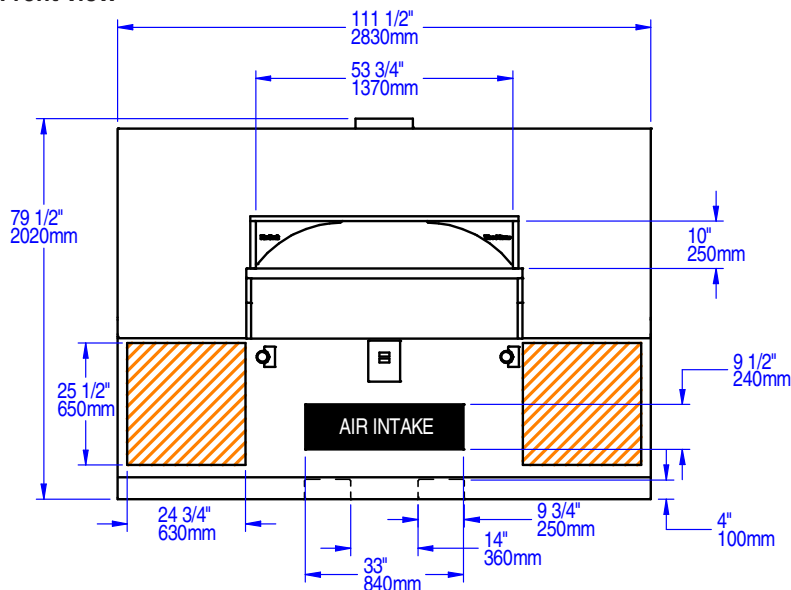
**Shipping weight: 6,800 lbs.
3,084 kg**

NOTE: Using the optional temporary casters will add 3" to the total height of the oven, for a total of 82-1/2".

Side view



Front view



UTILITIES SPECIFICATIONS

Gas: 1 inch FNPT gas inlet ϕ
350,000 BTU/hr Natural Gas (NG)

OR

350,000 BTU/hr Propane (LP)

Optional Decorative Flame

Adds 15,000 BTU/hr

Maximum gas inlet pressure:

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

Electrical ϕ

120 VAC, 2 A, 50/60 Hz

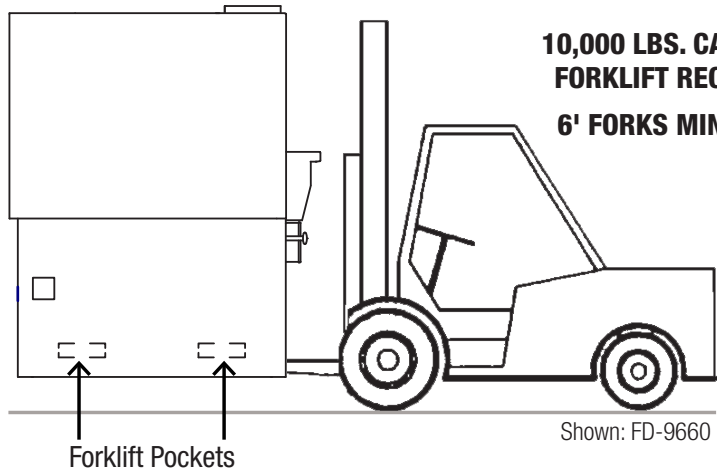
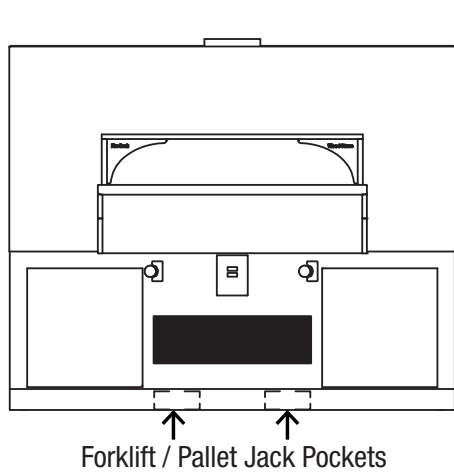
Utility connections made underneath the oven.

Refer to data plate when installing.

Venting

The Fire Deck 11260 can be direct connected to a power-ventilated, grease-rated chimney or can be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The oven must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

IMPORTANT: Ovens with model numbers containing a -W must be vented as a solid fuel appliance.



USING A FORKLIFT OR PALLET JACK

The Wood Stone Fire Deck 9660 weighs approximately 6,000 lbs., and the Fire Deck 11260 weighs approximately 6,800 lbs. Both are top heavy. When using a forklift, always use the forklift pockets. Lifting the oven any other way with a forklift will 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 not, fork extensions must be used). There are fork pockets at the front and sides of the oven. If it is necessary to approach the oven from the front, be sure the mast does not contact the stainless steel mantle (shelf). The fork pockets accommodate forks up to 9" wide.

Once the oven is on a smooth, flat floor it can be rolled on its optional heavy-duty, temporary shipping Casters (see next page for details). The oven may also be moved with a Pallet Jack using the front or rear fork pockets only. **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 (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.

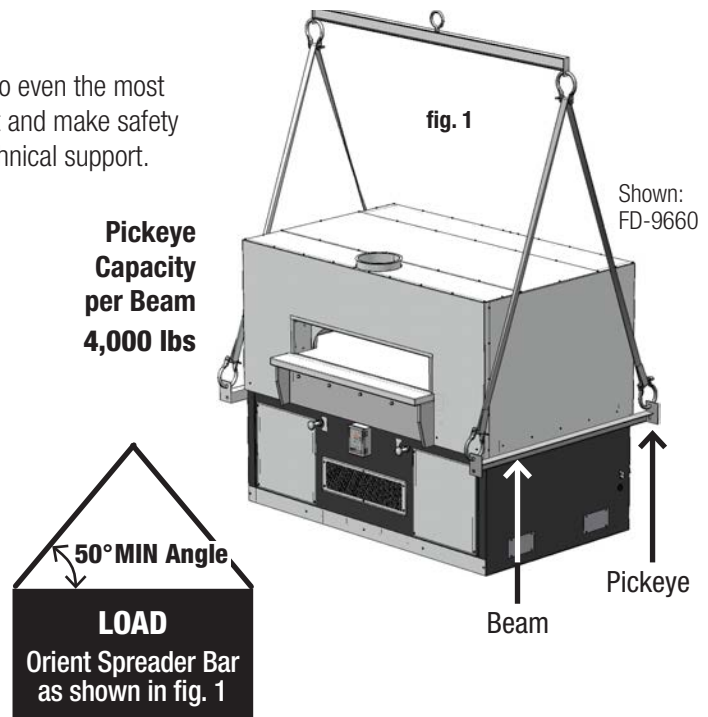
USING A CRANE

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.





INSTRUCTIONS FOR INSTALLING AND REMOVING OPTIONAL OVEN CASTERS

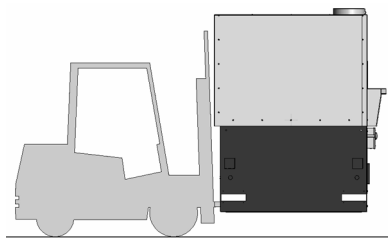
DANGER: The Fire Deck 9660 weighs approximately 6,000 lbs. and the Fire Deck 11260 about 6,800 lbs.

Do not attempt to move the oven over any type of grade or sloped surface when using the Casters or Pallet Jack.

Failure to follow these instructions may result in severe injury or death. **BE SAFE.**

If you have any questions call Wood Stone at 800.988.8103.

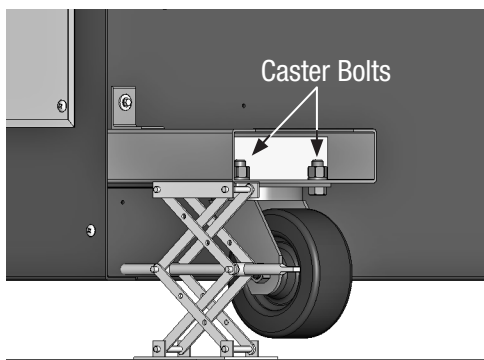
NOTE: The casters will add 3" to the total height of the oven, for a total of 82-1/2".



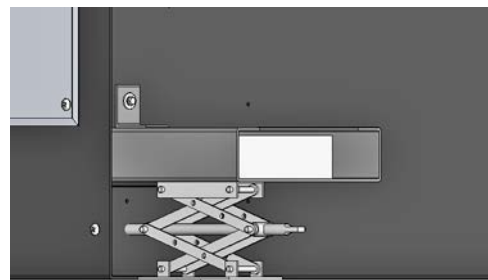
- 1 Use a forklift (or pallet jack) to raise the oven.



- 2 Insert a Caster Assembly into each of the side fork pockets and secure it to the oven with a Self-Drilling Screw and washer.
 - Install the screw through the Mounting Tab.
 - Once the Caster Assemblies are installed, lower the oven.
 - It may then be rolled over a **FLAT** surface to its final destination.



- 3 Once at final destination, use two scissor jacks (or pallet jack) to lift the one side of the oven by placing one jack under each caster assembly.
 - Raise the oven just high enough so the wheels clear the floor.
 - Unbolt each Caster and remove it and install Fork Pocket Covers.



- 4 Lower the oven back to the ground.
 - Remove the Self-Drilling Screw and slide the rest of the Caster Assembly out of the fork pocket.
 - Repeat steps 3 and 4 for the other side of the oven.
 - This oven is designed to be sealed to the floor upon installation using a silicone sealant acceptable to the local health official.



PLACING THE OVEN

The oven must be installed on a flat level surface. The weight of the oven is carried by the full perimeter of the oven stand. If it is necessary to shim the oven for leveling purposes, it is critical that the shim material be metal, and that the shims are installed in such a way that the full perimeter of the stand is solidly supported. Any gaps created by shimming between the oven and the floor must be sealed to prevent airflow issues beneath the oven. **Failure to solidly support the full perimeter of the oven stand can result in costly damage to the oven and will void the warranty.** The floor design and construction must be adequate to handle the weight of the oven.

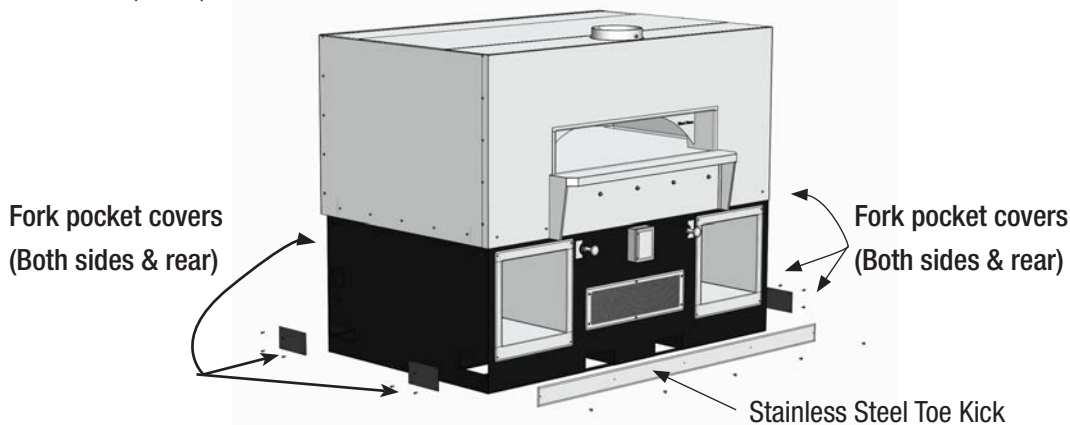
See woodstone-corp.com/installation_footprints.htm for floor loading information.

TOE KICK AND FORK POCKET COVERS

Once the oven is in place, the Toe Kick must be installed along the front, and the Fork Pockets on the sides and back of the oven using the screws provided. The area under the oven must be enclosed in order to prevent pests from entering this space and to prevent air flow issues which can detrimentally effect burner operation.

FACADE READY OVENS: If the lower front of the oven is shipped facade ready, the toe kick will not be included. Instead, fork pocket covers and pre-cut blocks of cement board to cover the pocket covers will be included.

If the sides and/or rear of the oven is shipped facade ready, the Fork Pocket Covers will not be included. Pre-cut blocks of cement board or other facade material will be shipped instead of the Fork Pocket Covers. The blocks must be inserted into the fork pockets before the oven facade is put in place.



FORK POCKET COVER INSTALLATION

REAR FORK POCKETS	NON-GAS INLET SIDE FORK POCKETS
<p>Pocket covers arrive fastened in temporary UP position.</p> <p>Unfasten, lower over each fork pocket, and refasten.</p>	<p>Pocket covers arrive fastened in temporary UP position.</p> <p>Unfasten, lower over each fork pocket, and refasten.</p>
<p>Note: Additional Tek screws supplied in hardware kit.</p>	
GAS INLET SIDE FORK POCKETS	
<p>Two pocket covers will arrive fastened in temporary UP position above front-most fork pocket.</p>	<p>Unfasten, place one cover over each fork pocket, and refasten.</p>



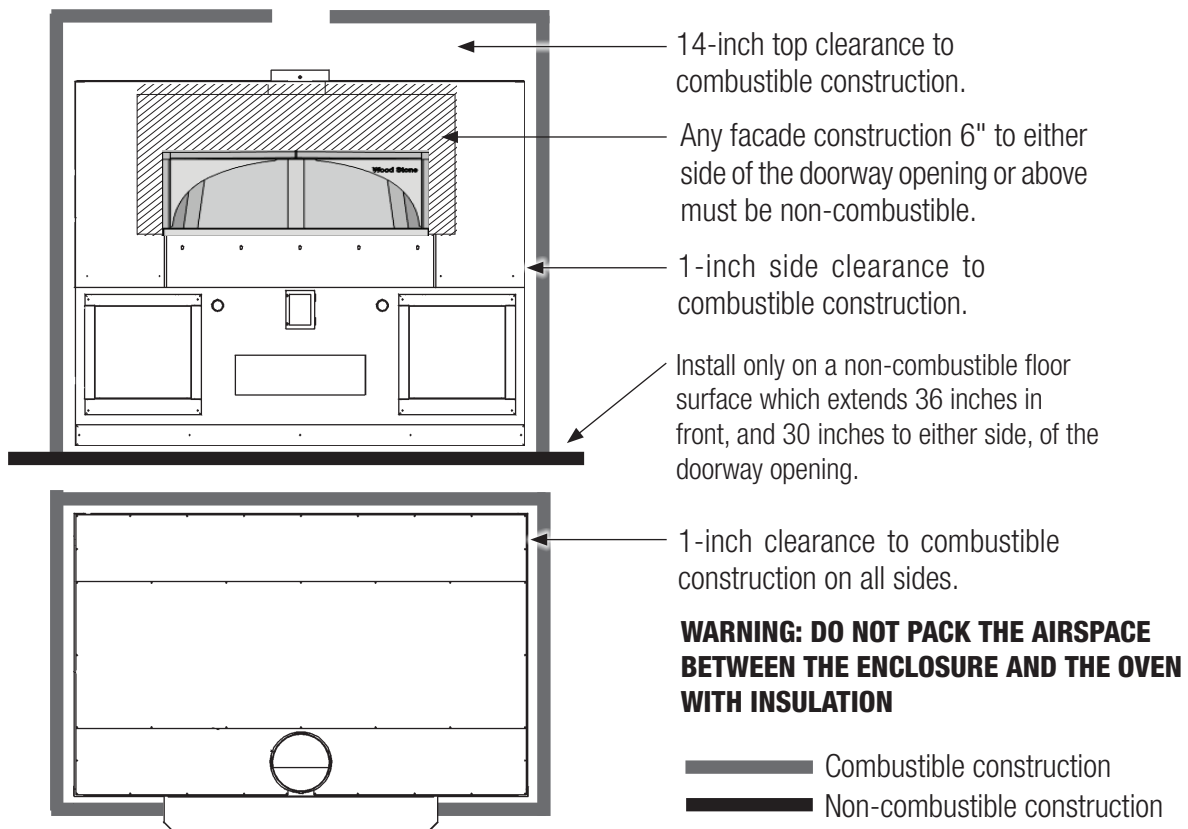
WARNING: Do not pack required air space (clearance) with insulation or other materials. When non-combustible building materials contact the body of the oven, the clearances to combustibles are transferred to those non-combustibles.

1. The Wood Stone Fire Deck 9660 and Fire Deck 11260 ovens must have a minimum 1-inch clearance to combustibles from all sides, and 14-inch clearance to combustibles from the top (see figures below). Any construction 6 inches to either side of the doorway and above must be non-combustible. If building a facade that will contact the oven, use completely non-combustible materials*. Please note that standard Drywall (or Sheetrock) is considered a combustible. Any openings between the enclosure and the oven must be sealed using non-combustible building materials.
2. Install this oven only on a non-combustible floor surface. (Cet appareil doit être installé sur une surface de plancher non-combustible.) The non-combustible floor surface should extend 36" out in front of the oven, and extend 30" to either side of the oven doorway.

Wood-fired ovens must be installed on non-combustible floor surface AND provided with a non-combustible floor covering at least 30" to each side of door opening and 36" in front of the door opening.

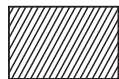
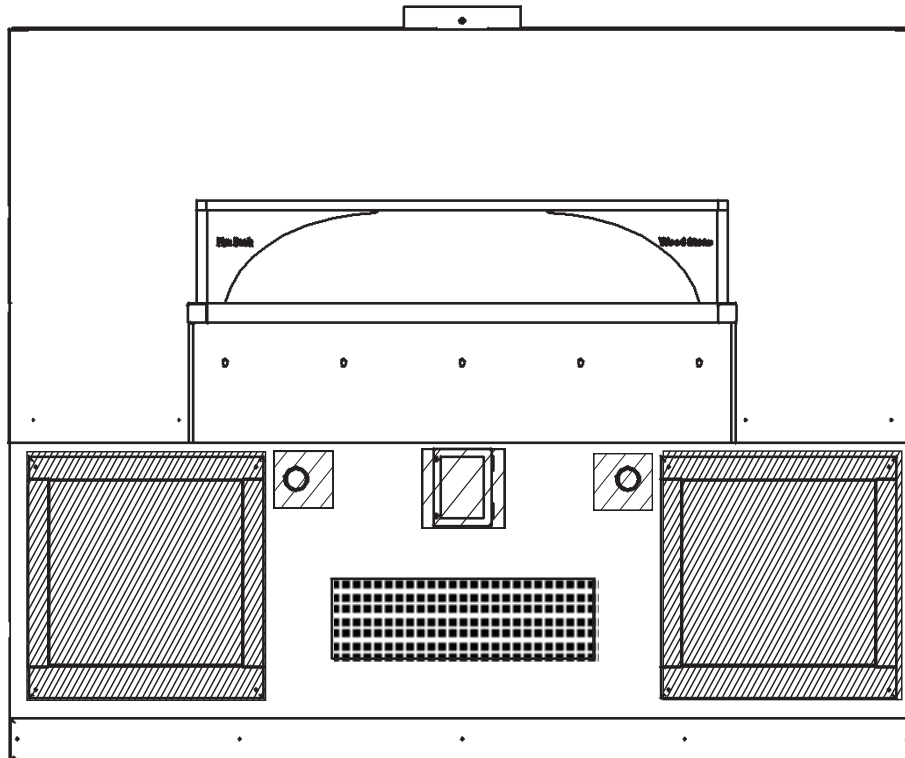
3. Any combustibles within 3 feet of the oven doorway must be protected in a manner acceptable to the authority having jurisdiction.

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

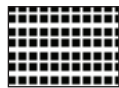




INSTALLATION CLEARANCES OPERATIONAL ACCESS, SERVICE ACCESS AND CRITICAL AIR INTAKE VENTILATION



Area which **MUST** left accessible for servicing the oven.



Area which **MUST** left **UNOBSTRUCTED** to allow proper intake ventilation for the gas burners.



Areas which **MUST** be left open for normal operation of critical oven controls (oven Controller and gas throttle valves).

ABOUT FACADE MATERIALS

Fire Deck Series ovens can be finished with any non-combustible decorative material that can be easily affixed to the oven surface, including tile, stone or brick. It is always advisable to consult with the appropriate authority having jurisdiction before proceeding as there may be regulations regarding the suitability of various materials. Temperatures above the oven doorway can reach over 200 °F. Select materials and adhesives suitable for that temperature.



OVEN VENTING FOR FIRE DECK MODELS FD-9660 & FD-11260

It is never appropriate to use “B vent” in any part of an exhaust system connected to this oven. The venting system should be inspected and cleaned at least every 3 months or as necessary, more frequently with wood fired applications. Wood Stone Ovens with model numbers containing a suffix -W (wood) or -CL (coal) must be vented as a solid fuel appliance in accordance with NFPA 96. All combustion products and cooking vapors from the Wood Stone Fire Deck 9660 and 11260 vent through a 12-inch OD flue collar located on the top of the oven, above the doorway.

Due to the dangers of creosote buildup and of sparks entering the duct, these models must 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. 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.

THE FOLLOWING ARE THE MANUFACTURER’S REQUIREMENTS FOR VENTING THE FD-9660 AND FD-11260 OVENS. THERE ARE TWO OPTIONS SHOWN BELOW.

1. A Listed building heating appliance chimney, also listed as a grease duct connected directly to the oven flue collar and provided with a power ventilator listed for restaurant appliance exhaust and rated for operation at a minimum of 350 °F (450 °F for units burning solid fuel). Use a stack or curb mounted fan. Wood Stone does not recommend the use of an in-line fan. A field built grease duct installed and constructed according to the requirements spelled out in NFPA 96, or the International Mechanical Code may also be used.

A static pressure of -0.1 inches water column (-0.14 inches water column for models burning solid fuel) is necessary at the oven flue collar to ensure that gas temperatures do not exceed 300 °F (450 °F for solid fuel models) at the fan inlet. This measurement may be taken by inserting the probe of the magnahelic gauge through the oven doorway, upwards to the oven flue collar. The CFM required to attain this static pressure will be approximately 600 CFM for gas only models. Models burning solid fuel will require approximately 750 CFM.

If using direct connect, it must be on its own duct system. Do not tie a duct direct connected to an oven into a duct system serving hoods due to balancing and potential code issues. Also note that if fire suppression is required, a Type 1 hood should be used due to the higher flue temperatures associated with the direct connect type of install.

NOTE: Double door ovens (models ending in -DD), have two flue collars. Both must be connected and a static pressure of negative 0.1 inches must be maintained at each collar.

OR

2. A listed Type 1 Exhaust Hood or one that is constructed and installed in accordance with NFPA 96 and all relevant local and national codes. Solid fuel burning equipment must be vented in accordance with NFPA 96. Wood Stone offers eyebrow-type hoods designed specifically for Wood Stone ovens. Wood Stone does not recommend the use of an in-line fan.

NOTE: Double door ovens (models ending in “-DD”), have two flue collars. Both must be vented with a Listed Type 1 exhaust hood.

VERY IMPORTANT! Refer to the exhaust hood manufacturer’s instructions for additional inspection, maintenance and cleaning information. Wood Stone Recommends that YOU SUBMIT VENTING PLANS TO LOCAL CODE AUTHORITIES BEFORE PROCEEDING WITH INSTALLATION.



FIRE DECK VENTING

Fire Deck model numbers containing a -W (other than the “W” in the beginning of the model number) 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.

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. 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 THAT THE OPERATOR REFER TO THE EXHAUST HOOD MANUFACTURER’S FOR INSPECTION, MAINTENANCE AND CLEANING. WOOD STONE RECOMMENDS THAT YOU SUBMIT YOUR VENTING PLANS TO THE AUTHORITY HAVING JURISDICTION BEFORE PROCEEDING WITH INSTALLATION OF ANY GAS AND/OR SOLID FUEL BURNING APPLIANCE.

FIRE SUPPRESSION – WOOD-FIRED OVENS

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. The fusible link in the hood must be rated at 450 °F minimum. Wood Stone offers UL Listed Exhaust Hoods for our ovens that are pre-piped for ANSUL R-102 fire suppression. All installations are subject to the approval of the local authority having jurisdiction.

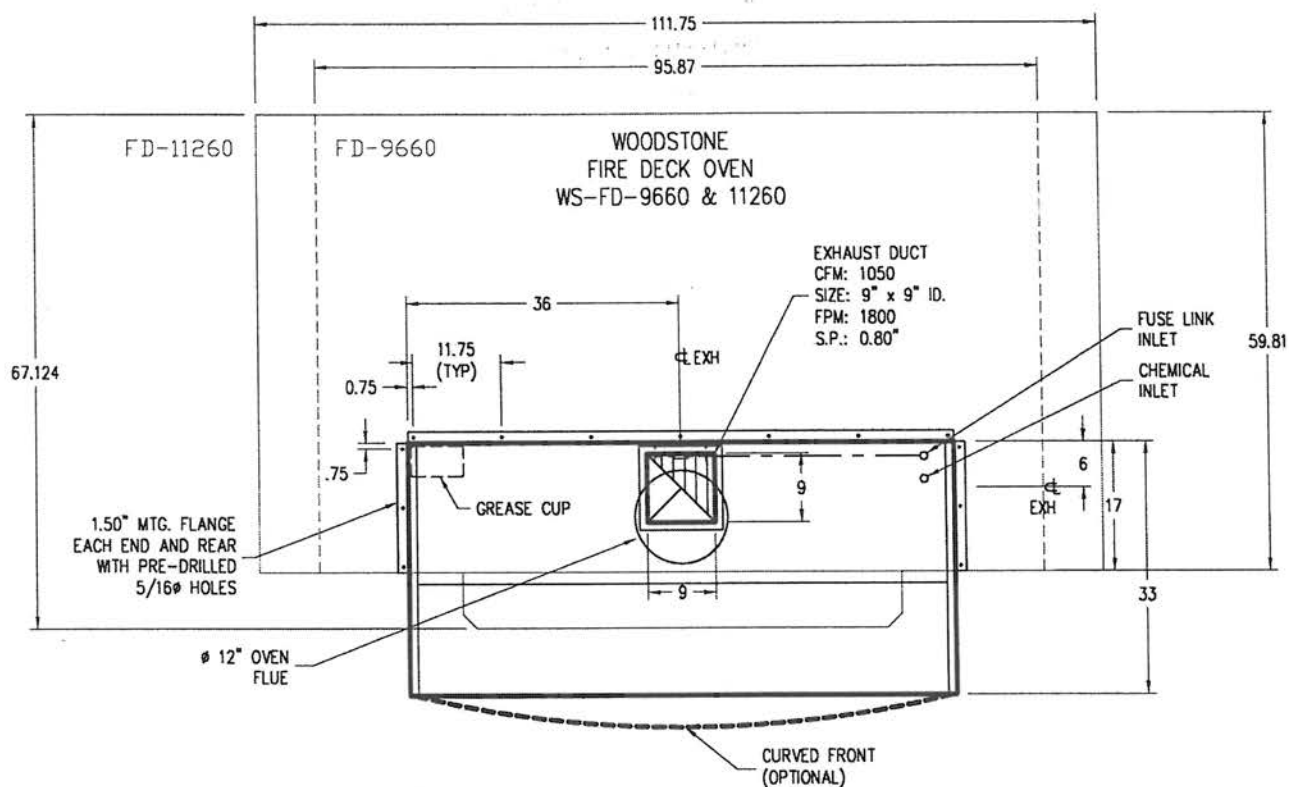
FIRE SUPPRESSION – GAS-FIRED OVENS

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. If fire suppression is required, Wood Stone recommends providing protection for the hood and duct plenum. The fusible link in the hood must be rated at 450 °F minimum. Wood Stone offers UL Listed Exhaust hoods for our ovens that are pre-piped for ANSUL R-102 fire suppression. **Wood Stone does 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.



9660 / 11260 HOOD - PLAN VIEW

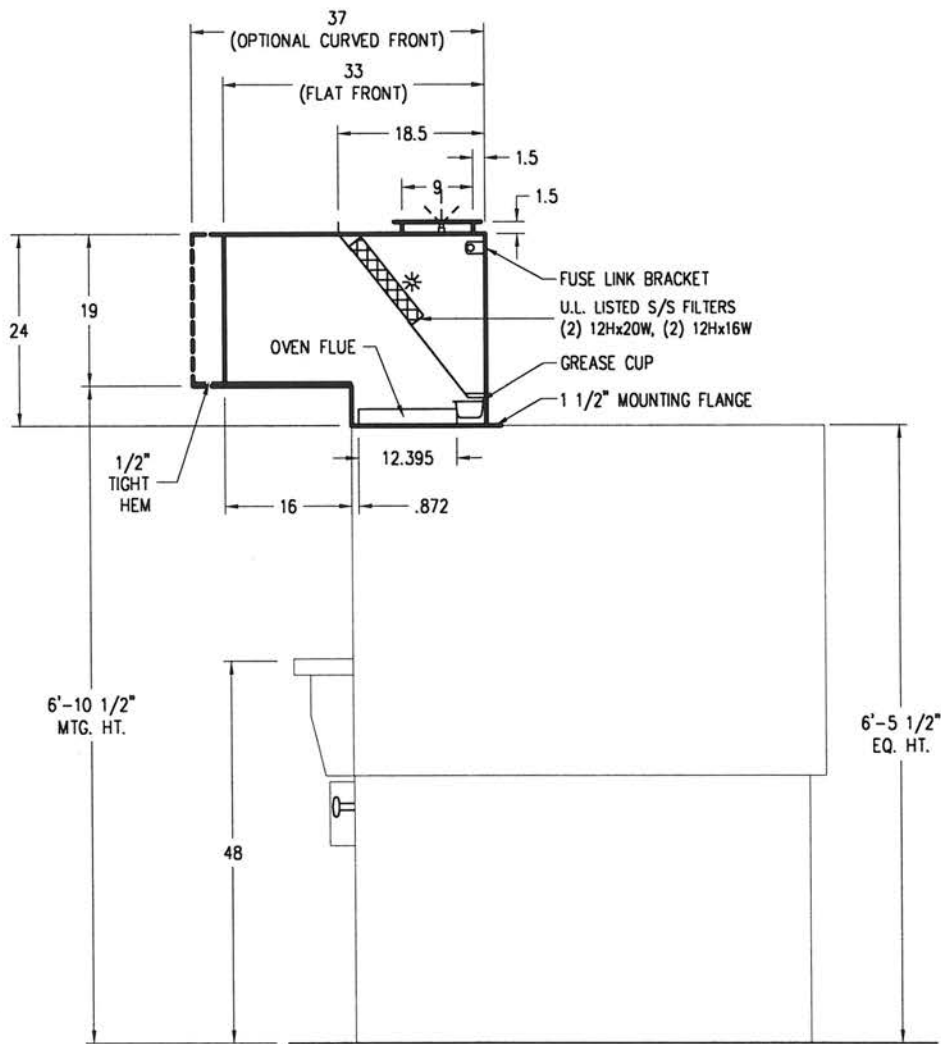
Wood Stone Hoods by Gaylord Specifications
 Required CFM: 1050 CFM
 Static Pressure: 0.80" W.C.
 Duct Collar: 9" x 9" I.D.





9660 / 11260 HOOD - SIDE VIEW

Wood Stone Hoods by Gaylord Specifications
 Required CFM: 1050 CFM
 Static Pressure: 0.80" W.C.
 Duct Collar: 9" x 9" I.D.





GAS SPECIFICATIONS

The Fire Deck 9660 and the Fire Deck 11260 are equipped with a 1-inch FNPT gas connection (see SPECIFICATIONS section for exact location). 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 A FLAME TO TEST FOR LEAKS!**

SV-1 is the gas control valve that operates the Underfloor IR Burner. SV-2 and SV-3 are the gas control valves that operate the interior Radiant Burner. 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.

Wood Stone recommends that the Fire Deck 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.

NOTE: Maximum inlet gas pressure: 1/2 psi (14 inches W.C.)

Factory specified valve outlet pressures:

UNDERFLOOR IR BURNER (SV-1)

Natural Gas (NG): 3.5" W.C.

Propane (LP): 9" W.C.

RADIANT BURNERS (SV-2 AND SV-3)

Natural Gas (NG): 5" W.C.

Propane (LP): 10" W.C.

OPTIONAL DECORATIVE FLAME BURNER (-DF)

Natural Gas (NG): 5" W.C.

Propane (LP): 10" W.C.

Decorative Flame adds 15,000 BTU/hr to total rated input.

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 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).



Models	Underfloor IR Burner	Left Side Flame Burner	Right Side Flame Burner	Wood Fire Optional	Wood Fire Mandatory	Natural Gas	Liquid Propane	Maximum Gas BTU/hr Input	Valve Outlet Pressure (W.C.)		
									SV-1	SV-2	SV-3
WS-FD-(9660 or 11260)-RFG-L/R-IR	1	1	1			NG		350,000	3.5"	5"	5"
	1	1	1				LP	350,000	9"	10"	10"
WS-FD-(9660 or 11260)-RFG-L-IR	1	1		-W		NG		225,000	3.5"	5"	
	1	1		-W			LP	225,000	9"	10"	10"
WS-FD-(9660 or 11260)-RFG-R-IR	1		1	-W		NG		225,000	3.5"	5"	
	1		1	-W			LP	225,000	9"	10"	
WS-FD-(9660 or 11260)-W-IR	1				X	NG		100,000	3.5"		
	1				X		LP	100,000	9"		
WS-FD-(9660 or 11260)-RFG-L-W		1		X		NG		125,000		5"	
		1		X			LP	125,000		10"	
WS-FD-(9660 or 11260)-RFG-R-W			1	X		NG		125,000		5"	
			1	X			LP	125,000		10"	
WS-FD-(9660 or 11260)-W					X			N/A			
					X			N/A	N/A		
*Optional Decorative Flame Burner						NG		+15,000			5"
							LP			10"	
Optional Second IR Burner (only on FD-11260)						NG		+100,000	3.5"		
							LP		9"		



NORTH AMERICAN MODELS

Have a licensed electrician provide the oven with appropriate 120 VAC circuit, 2 A required for models configured with 1–3 burners, 4 A for 4 burner models, in accordance with all relevant local and national codes. Electrical diagrams are located on the back side of the oven as well as at the end of this manual. Always check the equipment data plate beneath the oven to verify the proper voltage requirement.

OUTSIDE NORTH AMERICA

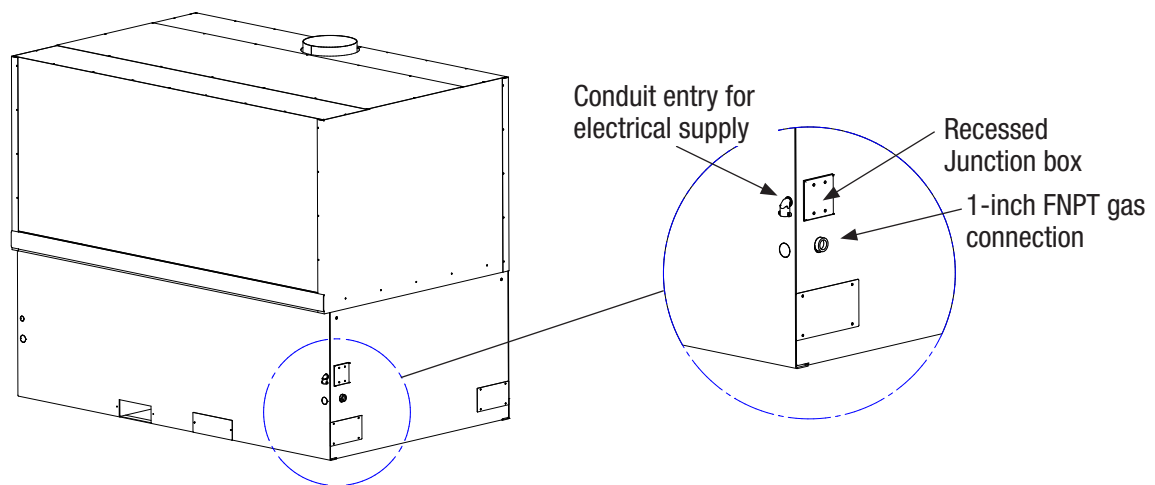
Ovens shipped outside of North America may be configured for 240 VAC, 1 A required for models configured with 1–3 burners, 2 A for 4 burner models, in accordance with all relevant local and national codes. Electrical diagrams are located on the back side of the oven as well as at the end of this manual. Always check the equipment data plate beneath the oven to verify the proper voltage requirement.

CONNECTION LOCATION

The electrical connection is made in the recessed junction box, located on the left side of the oven (toward the rear). There is a hole in the rear of the oven (equipped with a flex conduit elbow connector) through which the incoming electrical service should be run.

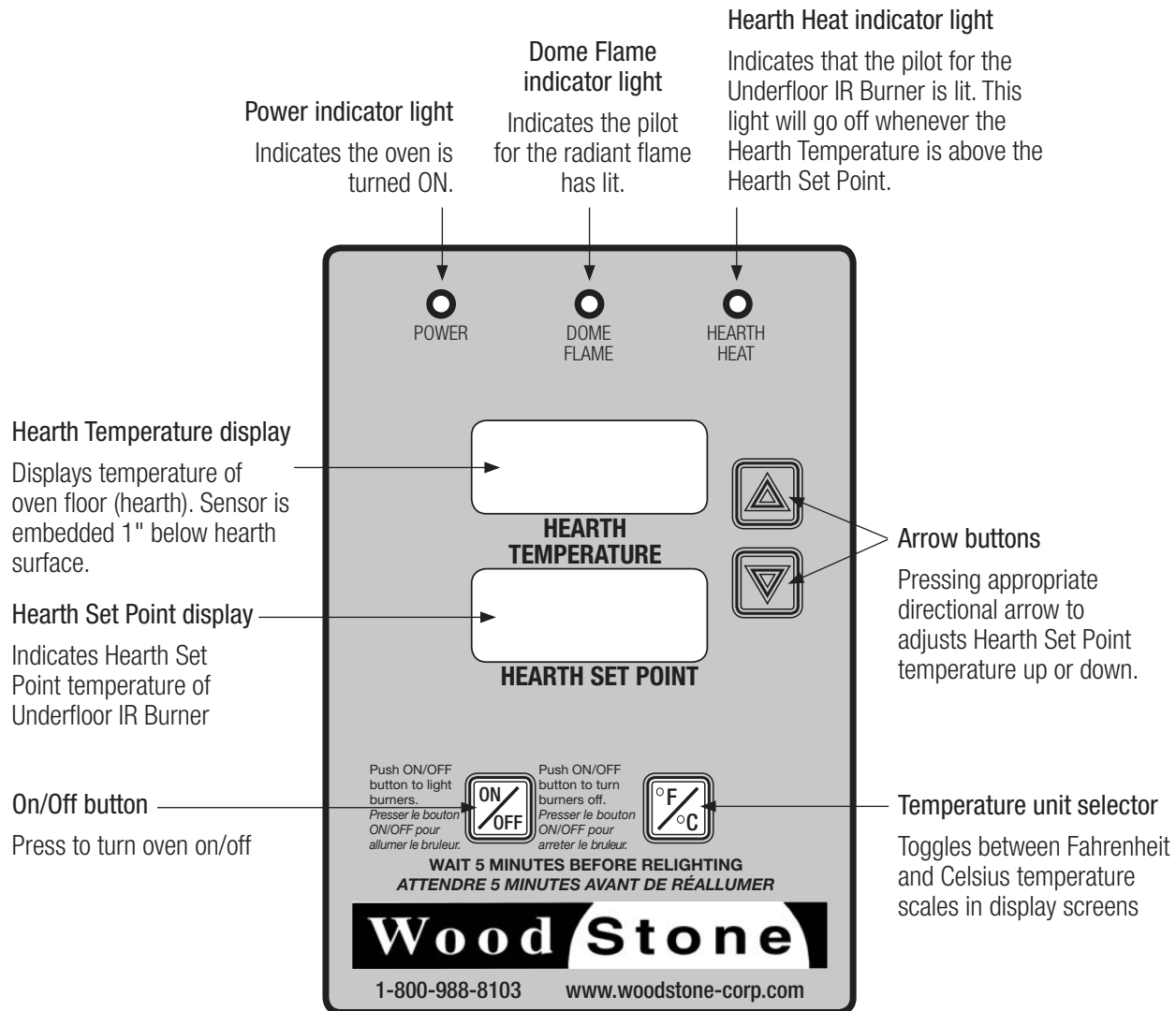
ELECTRICAL CODE LIMITATIONS

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 or the Canadian Electrical Code, CSA C22.1 as applicable.





CONTROLLER FUNCTIONS



**INITIAL OVEN START-UP PROCEDURE**

Your oven was cured at the factory. However, in the course of shipment, storage on-site, etc. the ceramic materials will have absorbed moisture. It is critical that the initial oven startup procedure below be followed to ensure that this moisture is driven from the ceramic in a controlled fashion. This will minimize cracking and prevent damage to the oven that could otherwise occur by bringing the oven to temperature rapidly the first time it is used. This initial oven start-up procedure needs only be followed the first time the oven is fired and/or if the oven has not been used for an extended period of time.

1. Make sure main gas supply is on (valve parallel with gas line).
2. Make sure the switch on the Honeywell control gas valve is in the ON position.
3. Remove the night door(s). Push ON/OFF button on Controller. It may take a while for the gas to purge all the air from the gas lines.
4. Allow oven to operate at factory settings for 1 hour (Hearth Set Point at 100 °F; radiant flame at lowest setting).
5. After one hour, raise dome flame to 25% (~5 inch flame), hold this setting for 4 hours.
6. After 4 hours at 25% flame, raise to 50% flame and hold for at least another 4 hours until the temperature reaches 500 °F.

GENERAL DAILY OVEN OPERATION**END OF THE DAY**

1. Push ON/OFF button, all gas will go off, even the pilots.
2. Place the Night Heat Retention Door into the oven doorway to help retain heat in the oven overnight.

BEGINNING OF THE DAY

1. Remove the Night Heat Retention Door.
2. Push ON/OFF button, set Controller to desired floor temperature and turn the radiant flame to its highest setting. The oven should stabilize at your desired temperature typically within 1–2 hours. Go to www.woodstone-corp.com for detailed information on cooking in your Wood Stone oven.

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 a damp (not wet) rag wrapped around the floor brush.

NEVER PLACE ANYTHING IN OR ABOVE THE RADIANT FLAME**NEVER RUN THE OVEN WITH THE NIGHT DOOR IN PLACE. NIGHT HEAT RETENTION DOOR IS ONLY USED FOR HEAT RETENTION OR WHEN THE OVEN IS TURNED OFF**

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



GENERAL DAILY OVEN OPERATION

IMPORTANT: If at any time you feel that the burners are not operating properly, turn the oven off and call Wood Stone 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. This oven uses electronic ignition systems for the gas burners. In the event of a power failure, no attempt should be made to operate the oven.

TURNING ON THE OVEN

- Press the ON/OFF button to start the oven.
- The Radiant Flame Burner(s) will ignite. This is the burner with the visible flame located in the cooking chamber. The Underfloor IR Burner will ignite if the Hearth Temperature is below the Hearth Set Point to which the Controller is adjusted.

Power light: Indicates the oven is turned ON.

Dome Flame light: Indicates the pilot for the radiant flame has lit.

Hearth Heat 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.

ADJUSTING THE HEARTH SET POINT

- The Hearth Set Point controls the operation of the Underfloor IR Burner. This thermostatically controlled burner is intended to act as an assist during heat-up, and to help maintain the desired Hearth Temperature. Generally, once a workable Hearth Set Point is determined based upon your style of cooking, there is no reason to change it.
- To adjust the Hearth Set Point, use the arrows to raise or lower the setting accordingly. When the Hearth Set Point is above the actual Hearth Temperature, the Underfloor IR Burner should activate, and the Heart Heat indicator light will illuminate.
- It is possible to program the floor's thermostatic Hearth Set Point to temperatures from 100–800 °F. Once proper temperatures for your application have been established, there should be little or no need to change the Hearth Set Point.

ADJUSTING THE RADIANT (DOME) FLAME(S)

- To adjust the Radiant Flame Burner, turn the Temperature Control Knob(s) located near the Controller. The Radiant Burners are the primary heat sources for the oven. The radiant flame is always on whenever the Controller is turned on and can be adjusted to any flame height between the highest and lowest settings.

HOW TO READ FLOOR TEMPERATURE

- The floor temperature is continuously displayed by the Controller in the window labeled "Hearth Temperature". 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.

TURNING OFF THE OVEN (GAS BURNERS & PILOTS)

- Press the ON/OFF button on the Controller to turn the oven off. The burners and pilots will go out and the digital readout on the Controller will go blank. **Always wait 5 minutes before attempting to relight the oven.**



DETERMINING THE APPROPRIATE FLAME HEIGHT

For each specific configuration of oven there is a system that determines what the desired flame height will be. Each flame height corresponds to a saturated floor temperature. Several factors need to be accounted for in order to determine this relationship for each oven.

NOTE: The settings recommended on the Flame Height Index Scale for specific flame heights below are based on ovens that have been installed according to specifications. Individual results may vary slightly.

FLAME HEIGHTS & COOKING ZONES

Heat-Up Flame:

- Set Temperature Control Knob(s) to maximum flame height ("5" on the Flame Height Index Scale) until desired Hearth Temperature is read on Controller.
- Then turn both Radiant Flames down to the appropriate Holding Flame height.

Holding Flame:

- Set the Flame Height Control Knob for a ~4–5" flame (approximately "2" on the Flame Height Index Scale) to "hold" a desired temperature of 450–480 °F.

Cooking Flame:

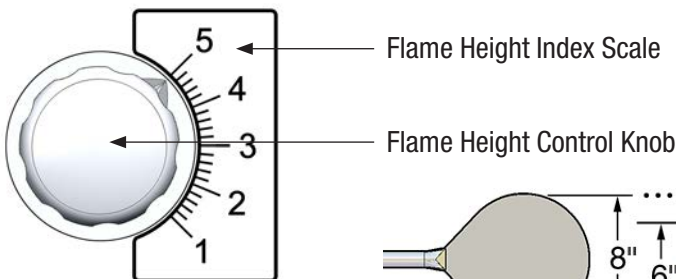
- After introducing the pizza/product into the oven, visually raise the flame approximately 3 inches higher than the Holding Flame. This now becomes the hottest side of the oven—the **Searing Zone**.
- Pizzas will be landed on the opposite side of the oven from this higher Cookig Flame flame—in the **Landing Zone**
- Pizzas are finished in the area between the **Searing** and **Landing Zones**—the **Finishing Zone**.
- Return to Holding Flame height after removing pizza/product from the oven.**

THE COOKING FLAME HAS TWO PURPOSES

1. To help bake the top of the pizza/product as fast as the bottom of the pizza/product.
2. To help replace heat to the floor (hearth) that is lost during production cooking.

FLAME HEIGHT INDICATOR

Comprised of two parts



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

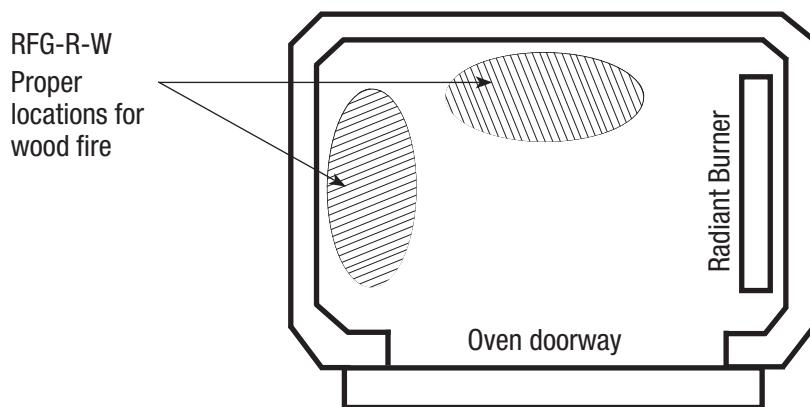
www.woodstone-corp.com

TIP: Visually measure each suggested flame height using the Wood Stone utility peel, which is 8" tall when standing on edge in front of the flame. Then relate height to the corresponding number on the Flame Height Index Scale.



Fire Deck 9660 and 11260 models Listed for wood burning will have a “-W” in the model number. When burning wood in a Wood Stone Fire Deck equipped with Radiant Flame Burners (“-RFG” in the model number), the fire should be located on side of the oven chamber opposite the radiant gas burner. The fire may be burned at the back of the oven at the center provided the coal bed is kept at least 12 inches away from the Radiant Burner. Wood may be burned at a rate not to exceed 15 lbs. per hour.

Be aware that if wood is burned in the oven, more frequent maintenance (cleaning) of the Radiant Burners may be required due to the ash and dust that the fire introduces into the oven. Make every effort to keep ash and other debris out of the Radiant Burner well. Do not use the Radiant Burner as a “backstop” when shoveling ash and/or coals out of the oven. Using the oven floor brush and ash shovel, remove coals and ash through the oven doorway and dispose of safely.



NOTE: Model WS-FD-9660-IR-W has no Radiant Burners so wood may be burned on either sides of the oven at a rate of up to 15 lbs. per hour.

Wood should be stored and handled in accordance with the recommendations outlined in NFPA 96. 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.

DISPOSE OF ASH PER THE FOLLOWING:

Place ashes into a metal container with a tight fitting lid. Place the closed container of ashes on a non-combustible floor or on the ground. Place the closed container of ashes well away from all combustible materials, pending final disposal. Retain the ashes in the closed container until all the cinders have thoroughly cooled. Ashes can then be disposed of safely

DO NOT USE THE RADIANT BURNER TO IGNITE WOOD OR SUPPORT THE WOOD FIRE

If at any time, you feel the gas components of the oven are not operating properly, turn the oven off, shut off the gas supply and call Wood Stone at 1-800-988-8103 to arrange servicing of the oven.

**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 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.

TAKE CARE NOT TO BRUSH DEBRIS INTO THE RADIANT FLAME BURNER(S).

OVEN EXTERIOR (DOORWAY AND MANTLE)

All exterior 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 non-metallic scouring pad. When scouring stainless steel surfaces, scrub with the grain of the metal to prevent scratching.

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.

IMPORTANT: DO NOT USE EXCESSIVE AMOUNTS OF LIQUID WHEN WIPING ON OR AROUND THE OVEN CONTROL BOX.

**ESTABLISHING A THERMAL CLEANING SCHEDULE**

Wood Stone ovens are typically operated at temperatures which preclude the need for cleaning of the interior walls and ceiling (the dome) of the oven. If however, you routinely operate the oven at floor temperatures lower than 450 °F, **AND ARE BURNING WOOD IN THE OVEN**, you may notice a buildup on the interior walls and/or ceiling of the oven. If this is the case, use the following procedure to periodically clean the oven. The frequency of thermal cleaning will be determined by the amount of buildup experienced. The amount and rate of buildup will largely be determined by the type of wood burned to fuel the oven, and by how long the oven is operated at temperatures low enough to allow buildup to occur.

PERIODIC THERMAL CLEANING PROCEDURE**GAS-FIRED OVEN**

If a Wood Stone gas-fired oven is operated at low temperatures (below 400 °F), it is possible that grease from food could condense on the walls and ceiling of the oven. To remove the grease that has accumulated on the walls and ceiling of the oven, simply turn the radiant flame to its highest setting. Monitor the floor temperature displayed on the Controller. When the floor reaches 600 °F, lower the flame slightly so as to maintain the oven floor temperature near 600 °F for about an hour. Once the oven dome appears clean, allow the oven to return to normal operating temperatures and continue normal operation.

Ovens that are run at lower temperatures may also develop a buildup on the floor that is usually black in color. To remove this buildup bring the oven temperature up to 600 °F as described above, and maintain that temperature for at least a few hours. If there is still buildup remaining, it may need to be removed by scraping. Contact Wood Stone for instructions.



WHAT TYPE OF WOOD SHOULD YOU USE TO FIRE YOUR SOLID FUEL COOKING EQUIPMENT?

The answer to this question depends on several considerations: geographical location, availability and relative cost of various fuelwood species and individual preferences regarding the flavor qualities of various wood types. There are a wide variety of good fuelwood species in all geographic locations. Each species of wood has different characteristics. The table below should help weigh the pros and cons of various types of wood. Wood from conifers (pine trees) is not recommended due to its poor fuelwood characteristics (low weight, low-med heat, poor coaling, high sparking and high residual creosote).

Wood Type	Heat	Lb/Cord	Lighting	Coaling	Sparks	Fragrance*
Alder	Med-Low	2,500	Fair	Good	Moderate	Slight
Apple	High-Med	4,400	Fair	Excellent	Few	Excellent
Ash	High	3,500	Fairly Difficult	Good-Excellent	Few	Slight
Beech	High	3,800	Difficult	Excellent	Few	Good
Birch (white)	Medium	3,000	Easy	Good	Moderate	Slight
Cherry	Medium	2,000	Fair	Excellent	Few	Excellent
Elm	High	2,300	Very Difficult	Good	Very Few	Fair
Hickory	Very High	4,200	Fairly Difficult	Excellent	Moderate	Excellent
Maple (red)	High-Med	3,200	Fairly Difficult	Excellent	Few	Good
Maple (sugar)	High	3,700	Difficult	Excellent	Few	Good
Mesquite	Very High		Very Difficult	Excellent	Many	Excellent
Oak (live)	Very High	4,600	Very Difficult	Excellent	Few	Fair
Oak (red)	High	3,700	Difficult	Excellent	Few	Fair
Oak (white)	Very High	4,200	Fairly Difficult	Excellent	Few	Fair
Pecan	High		Fair	Good	Few	Good

*The desirability of various fragrances is largely a matter of personal preference.

Whichever type of wood you use, **MAKE SURE YOU KNOW THE MOISTURE CONTENT.** Properly seasoned wood contains 20% moisture or less. If wood contains more than 20% moisture, it should not be accepted for use. Wood should be stored off the ground and out of the rain in an environment that allows good air circulation so that the drying process can continue. Wet wood is the most common operational difficulty associated with wood-fired cooking equipment. Wood Stone's optional Mini-Ligno E Wood Moisture Meter can save you from paying for water when you thought you were paying for wood (see the Tools & Accessories section of woodstone-corp.com, contact your dealer or Wood Stone).

Calculate your approximate monthly, daily and hourly fuel-wood costs using the following formulas:
The cost of well-seasoned hardwood varies greatly with geographical location.

$$\text{Cost per month} = A \times C \quad \text{Cost per day} = \frac{A \times C}{30} \quad \text{Cost per hour} = \frac{A \times C}{\frac{30}{12 \text{ hr day}}}$$

A = Cost/cord (from wood supplier)

B = lb/cord (from above table)

C = Cords/mth (from experience, or call Wood Stone for an estimate)

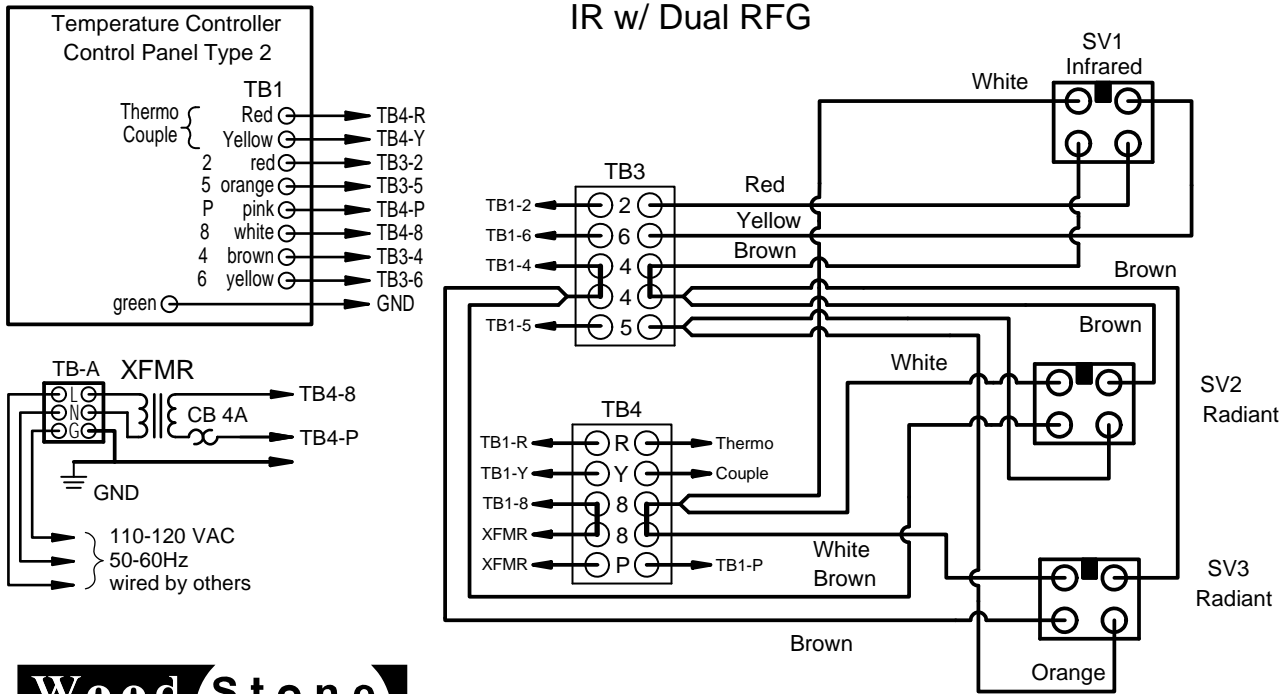
When burned, a pound of any wood releases approximately 6,500 BTU/hr, so it is better to compare the price of wood by the pound rather than by the cord. A full cord of wood measures 4' x 4' x 8' when stacked.

$$\text{Cost per lb} = \frac{A}{B}$$

Do not use pressed wood products in Wood Stone equipment. They may damage the ceramics and void the warranty.



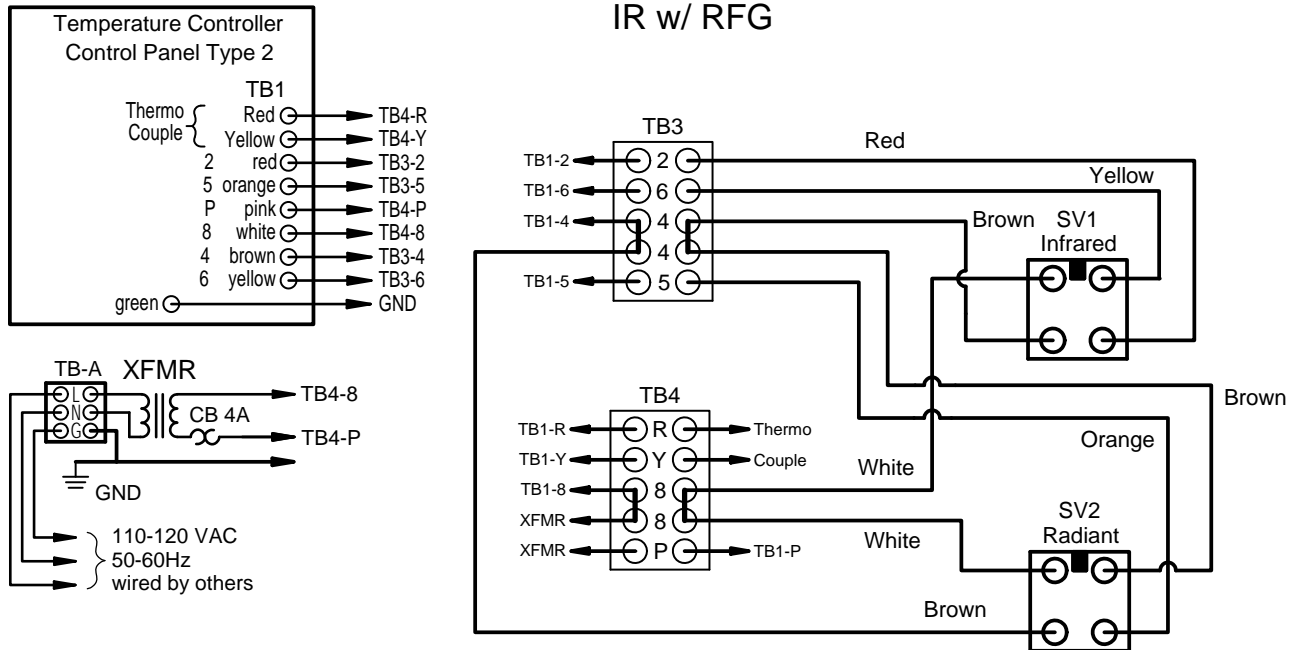
FD-9660, FD-11260
120 VAC MODEL
RFG-(LR)-IR
TYPE 2 CONTROLLER



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

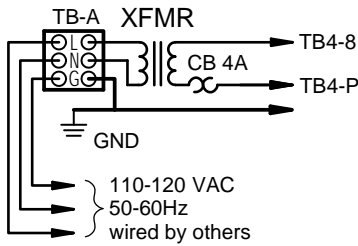
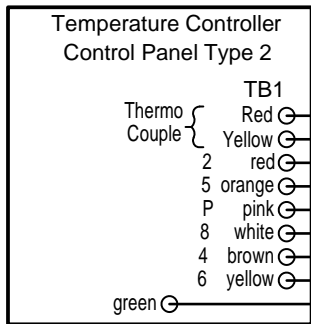


FD-9660, FD-11260
120 VAC MODEL
RFG-(L or R)-IR
TYPE 2 CONTROLLER

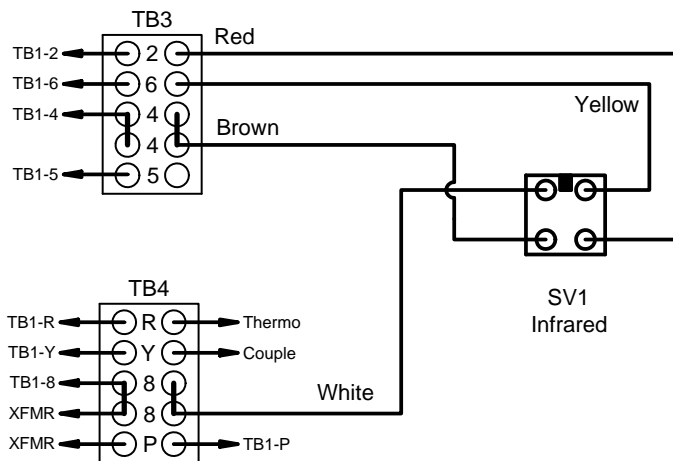




FD-9660, FD-11260
120 VAC MODEL
W-IR
TYPE 2 CONTROLLER



IR Only (W-IR)





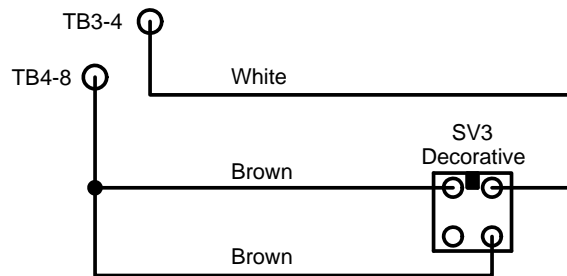
OPTIONAL DECORATIVE FLAME BURNER

For custom series Fire Deck ovens equipped with a decorative flame burner; the decorative flame turns on automatically when the oven Controller is turned on.

IMPORTANT: DO NOT USE THE DECORATIVE FLAME BURNER TO IGNITE WOOD OR SUPPORT THE WOOD FIRE. TAKE CARE NOT TO BRUSH DEBRIS INTO THE DECORATIVE FLAME BURNER WELL.

Do not use the burner well for dumping debris. Make every effort to keep ash and other debris out of the decorative flame burner well. Do not use the decorative flame burner as a “backstop” when shoveling ash and/or coals out of the oven. Using the oven floor brush and ash shovel, remove coals and ash through the oven doorway and dispose of safely. Use the brushes provided to remove debris from around the Radiant Burner wells. See electrical diagram below.

+ Decorative Flame

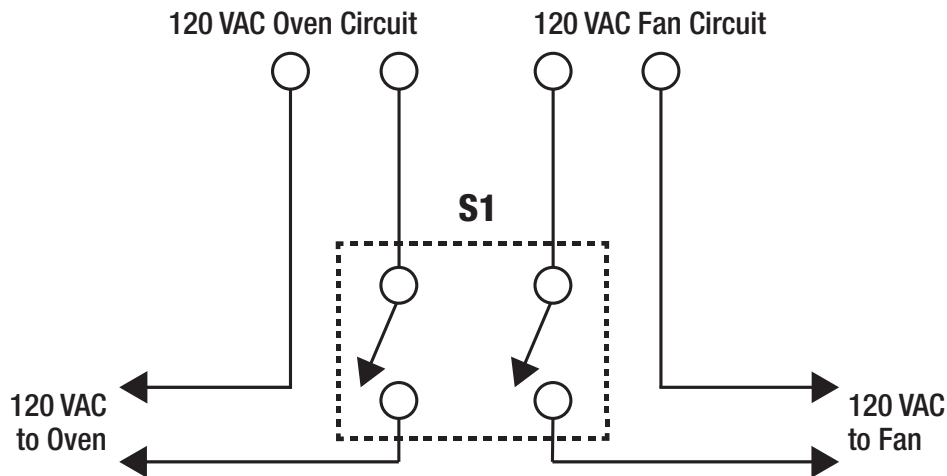




INTERLOCK OF OVEN CONTROL TO AN EXHAUST FAN

This connection is intended to interrupt power to the oven until the fan is turned on.

Wired by others



S1 is a Double Pole, Single Throw (DPST) switch provided by others.

S1 is a double pole, single throw switch (provided by others) that interrupts in-coming power to both the oven and the fan. The intent is to prevent the operation of the oven in the event the fan is shut off.

Any interruption of the power to the oven will cause the oven (including all burners and pilots) to shut off, and it will be necessary to restart the oven by pressing the start switch once power is restored.

For additional interlock options, see the Wood Stone Interlock Options supplement in the Manuals section on the website, woodstone-corp.com, or contact Wood Stone for additional information.



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 control still does not turn on, please contact Wood Stone for assistance.
Either or both radiant flames do 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 located beneath the oven at the rear, towards the side where the Radiant Burner is located.</p>
Underfloor IR Burner is not running. "Hearth Heat" light is off.	Hearth Temperature is above the Hearth Set Point.
"Chec" display on Controller	Underfloor IR Burner did not fire when the floor temperature dropped below the Hearth Set Point. 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 PST. 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.



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 PST 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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WOOD STONE CORPORATION

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www.woodstone-corp.com

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