Installation and Operation Manual





FIRE DECK SERIES

Stone Hearth Oven

Gas-Fired, Gas/Wood Combination Models

FIRE DECK 9690 WS-FD-9690

FIRE DECK 11275 WS-FD-11275

FIRE DECK 11290 WS-FD-11290

FIRE DECK 90-112 WS-CS-90-112



WOOD STONE CORPORATION

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FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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An ongoing program of product improvement may



FIRE DECK SERIES

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



INSTALLATION AND OPERATION MANUAL FOR THE **WOOD STONE FIRE DECK**

STONE HEARTH COOKING EQUIPMENT

WS-FD-9690-(RFG)-IR-(W), WS-FD-11275-(RFG)-IR-(W), WS-FD-11290-(RFG)-IR-(W) AND WS-CS-90-112-(RFG)-IR-(W) (BAGEL OVEN) MODELS **GAS-FIRED / WOOD-FIRED MODELS**

ADDITIONAL COPIES AVAILABLE UPON REQUEST



Shown: WS-FD-9690-RFG-RR-IR

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.



CAUTIONS & WARNINGS

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



WOOD STONE WS-FD-9690, WS-FD-11290, WS-FD-11275 AND WS-CS-90-112 FIRE DECK INSTALLATION AND OPERATING INSTRUCTIONS

DO NOT THROW THIS MANUAL AWAY

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.

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.

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 proximté de cet appareil ou de tout autre appareil.

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

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.

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

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

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.

Wood Stone's Fire Deck Gas-Fired 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, ULC-S627-00, UL 737, and to NSF/ANSI 4:2016.





An ongoing program of product improvement may

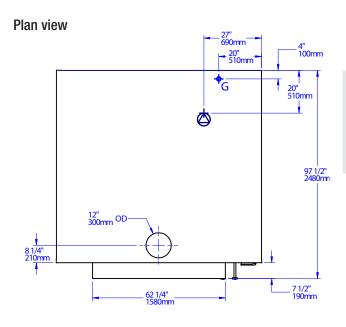
require us to change specifications without notice.

TOLL FREE 800.988.8103 TEL 360.650.1111 FAX 360.650.1166 **E-MAIL** info@woodstone-corp.com woodstone-corp.com

FD-9690 SPECIFICATIONS

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual





VERY IMPORTANT!!

Oven is shipped with casters. Height with casters to the top of the flue collar is 87 3/4". Once the oven is in place, the casters must be removed.

Utility connections are made underneath the oven. Shown: Right side burner configuration. Left side configuration mirrors right side configuration.



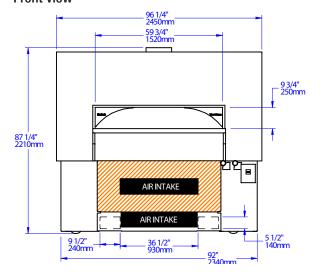
Air intake: Do not facade or cover over



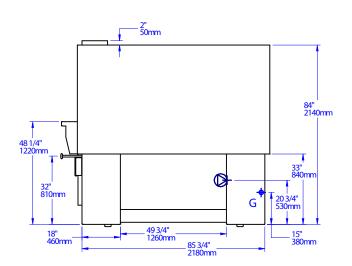
Must be left removable for service

Shipping weight: 10,000 lbs.

Front view



Side view



UTILITIES SPECIFICATIONS

Gas →

1 inch FNPT gas inlet 347,000 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

120 VAC, 4 A, 50/60 Hz 240 VAC, 2 A, 50/60 Hz

All utility connections made underneath the oven. Shown: Right side burner configuration. Left side configuration mirrors right side configuration.

Refer to data plate when installing.

Venting

The Fire Deck 9690 can be direct connected to a power-ventilated, greaserated 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

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

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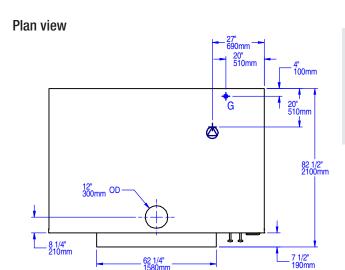
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FD-11275 SPECIFICATIONS

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual





VERY IMPORTANT!

Oven is shipped with casters which add 1-1/2". Height with casters to the top of the flue collar is 87 ¾". Once the oven is in place the casters <u>must</u> be removed.

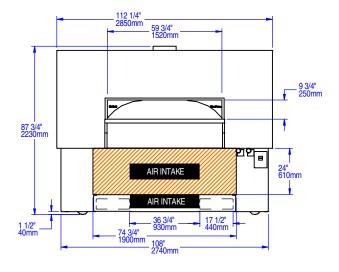
Utility connections are made underneath the oven and indicated on the Plan View to illustrate geographic location only.

Shown: Right side burner configuration. Left side configuration mirrors right side configuration.

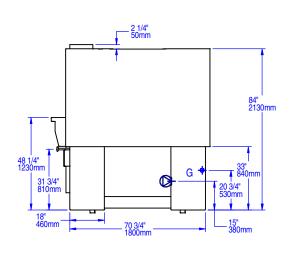


Shipping weight: 10,000 lbs.

Front view



Side view



UTILITIES SPECIFICATIONS

Gas +

1 inch FNPT gas inlet 315,000 BTU/hr Natural Gas (NG) or 310,000 BTU/hr Propane (LP) *Optional Decorative Flame* Adds 15,000 BTU/hr

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

Electrical

120 VAC, 4 A, 50/60 Hz 240 VAC, 2 A, 50/60 Hz

All utility connections made underneath the oven. Shown: Right side burner configuration. Left side configuration mirrors right side configuration.

Refer to data plate when installing.

Venting

The Fire Deck 11275 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.

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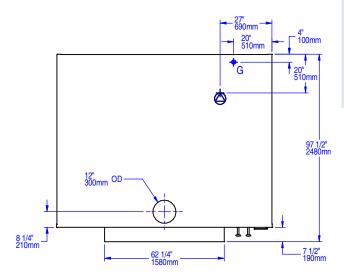
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FD-11290 SPECIFICATIONS

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



Plan view



VERY IMPORTANT!

Oven is shipped with casters which add 1-1/2". Height with casters to the top of the flue collar is 87 3/4". Once the oven is in place the casters must be removed.

Utility connections are made underneath the oven and indicated on the Plan View to illustrate geographic location only.

Shown: Right side burner configuration. Left side configuration mirrors right side configuration.



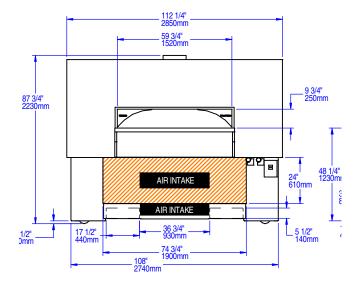
Air intake: Do not facade or cover over



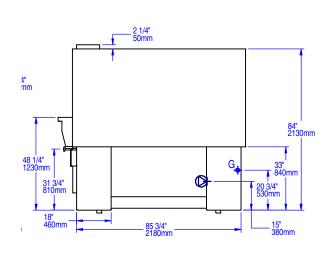
Must be left removable for service

Shipping weight: 11,500 lbs.

Front view



Side view



UTILITIES SPECIFICATIONS

Gas →

1 inch FNPT gas inlet 347,000 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

120 VAC. 4 A. 50/60 Hz 240 VAC, 2 A, 50/60 Hz

All utility connections made underneath the oven. Shown: Right side burner configuration. Left side configuration mirrors right side configuration.

Refer to data plate when installing.

Venting

The Fire Deck 11290 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.

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CS-90-112 SPECIFICATIONS

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



VERY IMPORTANT!

Oven is shipped with casters which add 1-1/2". Height with casters to the top of the flue collar is 87 ¾". Once the oven is in place the casters <u>must</u> be removed.

Utility connections are made underneath the oven and indicated on the Plan View to illustrate geographic location only.

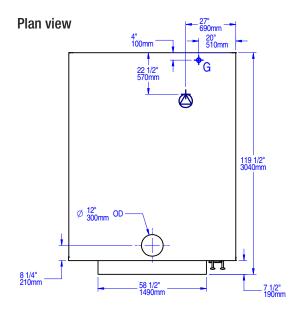
Shown: Right side burner configuration. Left side configuration mirrors right side configuration.

Air intake: Do not facade or cover over

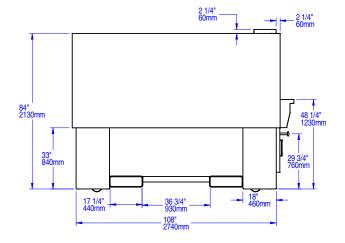


Must be left removable for service

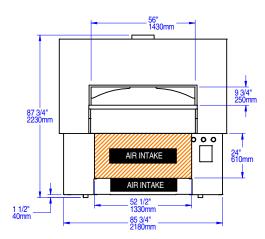
Shipping weight: 11,500 lbs.



Side view



Front view



UTILITIES SPECIFICATIONS

Gas +

1 inch FNPT gas inlet 244,000 BTU/hr Natural Gas (NG)

Optional Decorative Flame Adds 15,000 BTU/hr

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

Electrical

120 VAC, 4 A, 50/60 Hz 240 VAC, 2 A, 50/60 Hz

All utility connections made underneath the oven.

Refer to data plate when installing.

Ventina

The CS-90-112 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 irrisdiction

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

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UNLOADING & MOVING

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



WARNING: THE OVEN IS EXTREMELY TOP HEAVY.

DO NOT ATTEMPT TO MOVE THE OVEN WITHOUT THE PROPER EQUIPMENT AND EXPERIENCE. BE SAFE.

ALWAYS USE A FORKLIFT OR CRANE TO LIFT THIS OVEN.

DO NOT ATTEMPT TO USE A LEVER OF ANY TYPE TO RAISE THIS OVEN.

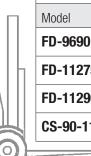
THE OVEN IS EQUIPPED WITH CASTERS AND CAN BE ROLLED ACROSS A SMOOTH. FLAT SURFACE ONLY.

Once the oven is in place, the casters must be removed. See the CASTER REMOVAL section of the manual. DO NOT DROP THIS OVEN ABRUPTLY.

Moving a Wood Stone Fire Deck oven can present 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 at **1-800-988-8103**.

USING A FORKLIFT

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 may result in damage. There are fork pockets only at the front and back of the oven. The oven may also be rolled across a **smooth flat** surface on the temporary casters.

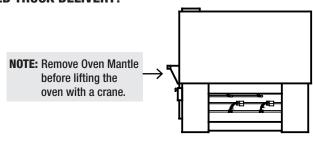


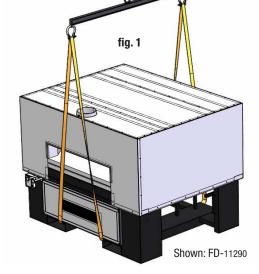
AWARNING Minimum Required Forklift Capacities 8' FORKS MINIMUM Shipping Weight Lifting from Front or Rear FD-9690 24,000 lbs 10,000 lbs FD-11275 9,500 lbs 20,000 lbs FD-11290 11,500 lbs 26,000 lbs CS-90-112 11,500 lbs 26,000 lbs

USING A CRANE

When craning a Wood Stone oven, use a Spreader Bar with a two-legged sling rigged on each end. Suitable lifting straps can be run through the fork lift pockets on the oven. The Spreader Bar should be of a sufficient length to keep the sling from contacting the oven and oriented as shown in (fig. 1).

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





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.

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CASTER REMOVAL

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



The oven is shipped with casters which add 1-1/2". Height with casters to the top of the flue collar is 87-3/4".

TO MAINTAIN THE OVEN WARRANTY, SHIPPING CASTERS **must be removed** when the oven is installed.

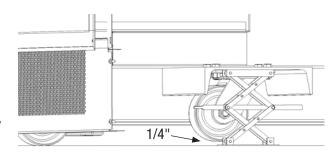
The oven must be installed on a flat level surface. The weight of the oven is carried by the oven stand. If it is necessary to shim the oven for leveling purposes, it is critical that the shim material be metal, and that the shims are installed in such a way that the stand is solidly supported. **Failure to solidly support 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.

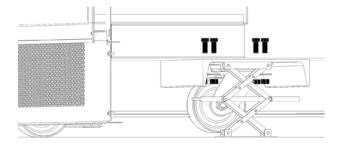
Please see **woodstone-corp.com/resources/downloads/loads-footprints** for floor loading information.

IMPORTANT: DO NOT JACK THE FRAME ANY HIGHER THAN THE MINIMUM NECESSARY TO REMOVE THE CASTER.

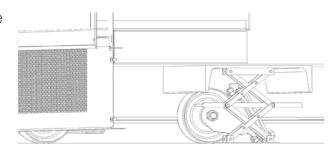
- 1 ☐ Position a scissor jack under the oven frame near the caster to be removed.
 - ☐ Use the jack to raise the caster so that it clears the floor slightly (1/4" should be sufficient).



2 Remove the nuts and bolts retaining the caster to the oven frame.



- **3** □ Rotate the caster in the direction of the fork legs to remove from oven.
 - □ Lower the jack and proceed to the next caster and repeat procedure.



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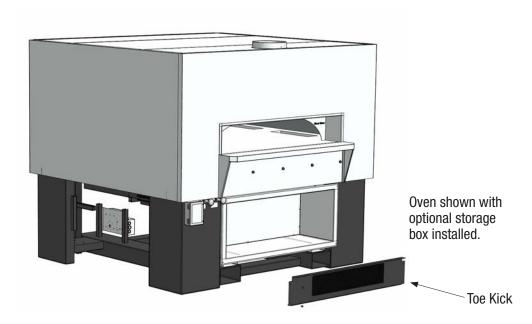


TOE KICK INSTALLATION

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



TOE KICK INSTALLATION



Once the oven is in place, the Toe Kick must be installed along the front 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.

If the front of the oven is shipped facade ready, the Toe Kick will not be included. Pre-cut pieces of cement board will be shipped to cover the fork pockets. The pieces must be installed once the oven is in place.

INSTALLATION CLEARANCES

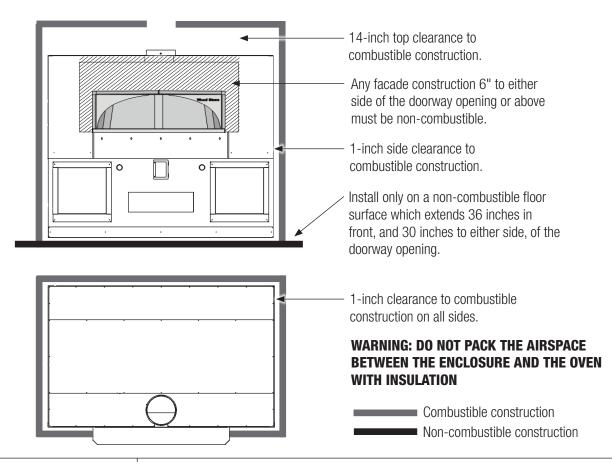
FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual





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

- 1. The Wood Stone Fire Deck 9690, Fire Deck 11275, Fire Deck 11290, Fire Deck CS-90-112 and Fire Deck CS-96-90 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 or 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. If sealing an opening between the enclosure and the oven, use 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 noncombustible.) 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 should 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.



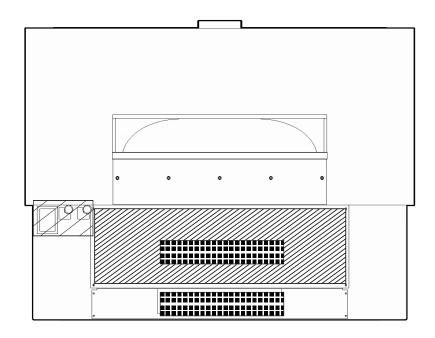


INSTALLATION CLEARANCES

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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 200 °F. Select materials and adhesives suitable for that temperature.

VENTING

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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) must be vented as a solid-fuel appliance in accordance with NFPA 96. All combustion products and cooking vapors from the Wood Stone FD-9690, FD-11275, FD-11290, CS-90-112 and CS-96-90 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, models burning solid fuel must 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 with 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 RECOMMENDATIONS FOR VENTING THE FIRE DECK 9690, FIRE DECK 11290, 11275, FIRE DECK CS-90-112 AND FIRE DECK CS-96-90 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 300 °F or 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 proper flue temperatures at the fan. The airflow required to attain this static pressure will depend on the configuration of your particular installation but will be between 600 and 650 cfm, 700-750 cfm for units burning solid fuel. The exhaust fan must be turned on any time the oven is running. See instructions for optional interlocking of the oven to the fan at the end of this manual.

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 to a power ventilated duct as described. Airflow required at each duct connection is 600-650 cfm, 700-750 cfm for units burning solid fuel. The two ducts may be combined (pant legged).

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 equipment must be vented in accordance with NFPA 96. Wood Stone offers eyebrow-type hoods designed specifically for Wood Stone ovens. See specification sheet on ventilators for Wood Stone ovens.

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.



VENTING

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



FIRE SUPPRESSION - WOOD-FIRED / COAL-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 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.

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 or in such a manner as is acceptable to the authority having jurisdiction. The Wood Stone customer support staff is available to answer any questions concerning installation and venting of the oven; call 1-800-988-8103 for assistance and technical support.

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

CREOSOTE - AND THE NEED FOR ITS REMOVAL

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

FAX 360.650.1166



HOOD SPECIFICATIONS

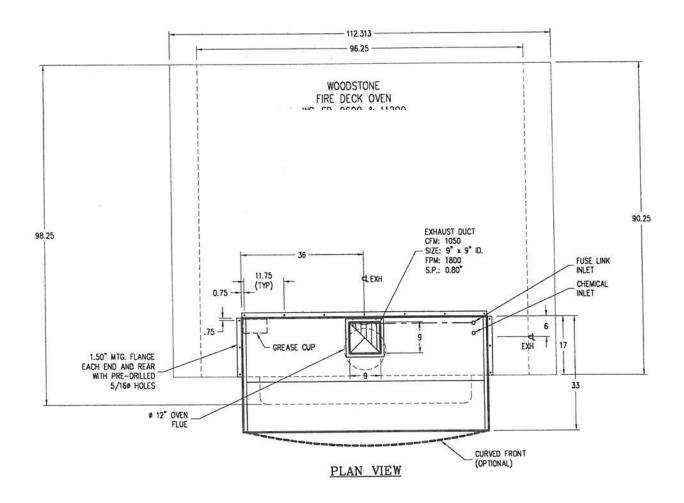
FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



9690 / 11290 / 11275 / 90-112 / 96-90 HOOD - TOP VIEW

Wood Stone Hoods by Gaylord Specifications

Required CFM: 1050 CFM Static Pressure: 0.80" W.C. Duct Collar: 9" x 9" I.D.





HOOD SPECIFICATIONS

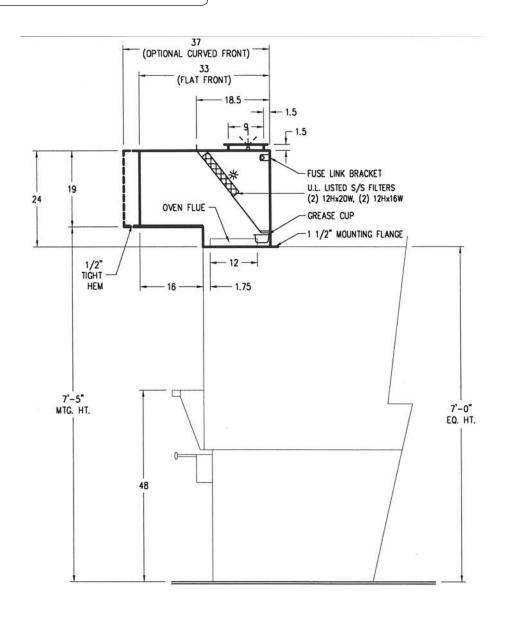
FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



9690 / 11290 / 11275 / 90-112 / 96-90 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.



FAX 360.650.1166

GAS SPECIFICATIONS

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



FACTORY SPECIFIED MAXIMUM HOURLY	_	er(s)			Flame				Valve Outlet Pressure (W.C.)		
BTU INPUT RATES / BURNER MANIFOLD PRESSURES Models	Underfloor IR Burner	Radiant Flame Burner(s)	Wood-Fire Optional	Wood-Fire Required	Optional Decorative Flame	Natural Gas (NG)	Propane (LP)	Maximum Gas BTU/hr Input	SV-1	SV-2	SV-3 / SV-4 / SV-5
FD-9690-RFG-LR-IR or	4	•				NG		347,000	3.5"	4.6"	4.6"
FD-11290-RFG-LR-IR	1	2					LP	369,000	9.2"	9.5"	9.5"
						NG		295,000	3.5"	4.6"	4.6"
FD-11275-RFG-LR-IR	1	2					LP	282,500	9"	9.5"	9.5"
FD-9690-RFG-(LL or RR)-IR-(W)	_		-W			NG		347,000	3.5"	4.6"	4.6"
or FD-11290-RFG-(LL or RR)-IR-(W)	1 1	2					LP	369,000	9.2"	9.5"	9.5"
		2	-W			NG		295,000	3.5"	4.6"	4.6"
FD-11275-RFG-(LL or RR)-IR-(W)	1						LP	282,500	9"	9.5"	9.5"
FD-9690-(L or R)-IR-(W) or	4	4	14/			NG		220,000	3.5"	4.6"	
FD-11290-RFG-(L or R)-IR-(W)	1	1	-W				LP	225,000	9.2"	9.5"	
ED 11075 DEO (L. D. ID (M)	1	1	-W			NG		187,500	3.5"	4.6"	
FD-11275-RFG-(L or R)-IR-(W)							LP	177,500	9"	9.5"	
FD-9690-IR-W or	1			Х		NG		97,000	3.5"		
FD-11290-IR-W	I						LP	85,000	9.2"		
FD-11275-IR-W	1			Х		NG		80,000	3.5"		
							LP	72,500	9"		
FD-9690-W or FD-11275-W or FD-11290-W				X		N <i>A</i>	4	NA		NA	
WO ED 44075 DEG 11 DD 12	D-11275-RFG-LLRR-IR 1	1 4				NG		510,000	3.5"	4.6"	4.6"
WS-FD-112/5-RFG-LLRR-IR							LP	492,500	9"	9.5"	9.5"
WS-CS-90-112-RFG-LL-IR-(W) or	1	2	-W			NG		347,000	3.5"	4.6"	4.6"
WS-CS-90-112-RFG-RR-IR-(W)							LP	369,000	9.2"	9.5"	9.5"
Optional Decorative Flame Burner					-DF	NG		+15,000 L			4.6"
The Optional Decorative Flame Burner adds 15,000 BTU/hr to total rated input.					-DF		LP	110,000 L			9.5"



GAS SPECIFICATIONS

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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

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

SV-2 (and SV-3 / SV-4, etc., if equipped) are the gas control valve(s) that operate the interior Radiant Burner(s). The manifold pressure is checked at the outlet port on the 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

The FD-9690, FD-11275, FD-11290, Fire Deck CS-90-112 and CS-96-90 are equipped with a 1-inch FNPT gas connection. 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!

All gas piping up to the oven must have a minimum inside diameter of 1", including all fittings and shut off valves, which should be of the full flow type.

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.

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

ELECTRICAL CONNECTION

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



POWER CONNECTION TO THE OVEN

Provide a 120 VAC, 15 A circuit to the terminal strip, located in the oven's transformer housing. The terminal strip is labeled L, N and G (Line, Neutral and Ground, respectively.)

Electrical diagrams are shown in the ELECTRICAL DIAGRAMS section of this manual. They can also be found on the oven, directly adjacent to the electrical connection.

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.

TOLL FREE 800.988.8103

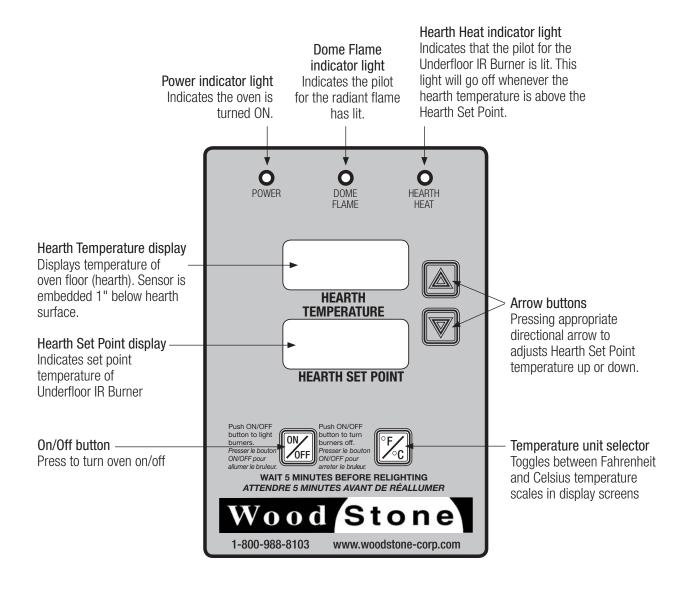


CONTROLLER

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



CONTROLLER FUNCTIONS



FAX 360.650.1166



INITIAL START-UP

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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.

BEFORE GETTING STARTED

- 1. Make sure the individual shutoff valve (supplied by others), between the oven and the main gas supply, is in the open position and that the line has been purged of air.
- 2. Make sure the Honeywell gas valves beneath the oven (SV-1, SV-2 and SV-3—depending on configuration) are in the ON position.
- **3.** Make sure that the venting system has been tested and approved for operation and is on.

FIRST DAY

- 1. Push the ON/OFF button on the Controller touchpad. It may take a while for all of the air to be purged from the gas lines. As the pilot flames for the gas burners ignite and are sensed, the corresponding indicator lights will illuminate. The burners should come on shortly.
- 2. Leave the Hearth Set Point at the factory setting (100 °F) and radiant flame at lowest setting.
- **3.** After one hour, raise dome flame to 25% (~5 inch flame), hold this setting for 4 hours.
- 4. After 4 hours at 25% flame, raise to 50% flame and hold for at least another 4 hours until the temperature reaches 500 °F.

SECOND DAY

- 1. You should arrive to an oven temperature of approximately 300 °F.
- 2. Increase the flame intensity to about one half of maximum and wait until the oven floor reaches your desired cooking temperature.
- 3. Adjust the Hearth Set Point to your desired cooking temperature.

THE OVEN IS NOW READY FOR COOKING.

YOU MAY NOTICE THE OVEN SHEDDING SOME WATER FOR A COUPLE OF DAYS. THIS IS NORMAL AND YOU SHOULD NOT BE ALARMED.

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-inch or more in width develop, contact Wood Stone for evaluation.

DAILY OVEN OPERATION

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



GENERAL 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 will ignite. This is the burner with the visible flame located in the cooking chamber. The infrared 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.

TURNING OFF THE GAS BURNERS

• 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.**

ADJUSTING THE RADIANT (DOME) FLAME(S)

To adjust the radiant flame burner, turn the Temperature Control Knob located near the Controller. These burners 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.

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. 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.

The stainless steel Night Heat Retention Doors are used to retain oven heat overnight. Never operate the oven with these doors in place.

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FLAME HEIGHT CONTROL

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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.

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 temperature is reached, then turn both flame down to the appropriate Holding Flame.

Holding Flame: Set the Flame Height Control Knob for a \sim 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 Cooking Flame, **the Landing Zone**, and 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.

NOTE: 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.

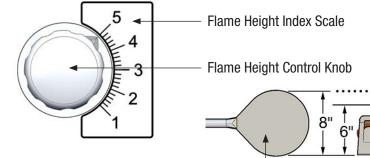
THE COOKING FLAME HAS TWO PURPOSES

- 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.

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

FLAME HEIGHT INDICATOR

Comprised of two parts



8" Utility Peel

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

www.woodstone-corp.com

TIP: You can visually estimate flame heights using the Wood T 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.

WOOD STONE CORPORATION

USE OF WOOD IN THE OVEN

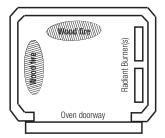
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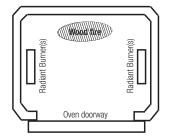


Fire Deck 9690, 11275, 11290, CS-90-112 and CS-96-90 models Listed for wood burning will have a "-W" in the model number. When burning wood in a Wood Stone Fire Deck equipped with radiant flame burners ("-RFG" in the model number), the fire should be located on side of the oven chamber **opposite** the radiant gas burner(s). 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.

For -W models which have radiant flame burners on each side ("-LR" in the model number), the wood fire may only be burned at the **rear** of the oven, away from the Radiant Burner. 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.

LOCATION OF WOOD FIRE IN RELATION TO RADIANT BURNERS





Two Radiant Burners on one side Radiant Burners on both sides

NOTE: The Fire Deck models FD-9690-**W-IR**, FD-11290-**W-IR**, FD 11275-**W-IR** and CS-90-112-**W-IR** have no Radiant Burners.

Wood may be burned on both sides of the oven at a rate of up to 25 lbs. per hour.

WOOD HANDLING

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.

DAILY MAINTENANCE & CLEANING

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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.



TROUBLESHOOTING GUIDE

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



PROBLEM	CAUSE/SOLUTION
Controller will not turn on	 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. If Controller still does not turn on, please contact Wood Stone for assistance.
Radiant flame does not light	 Is gas turned on to the oven? Is gas shut-off valve turned all the way on? Debris in burner. Burner may require cleaning. Contact Wood Stone for assistance. Damaged igniter or gas valve. Contact Wood Stone for assistance. If the oven is being started for the first time: Has all air been bled from the gas line? Is the switch on the SV-2 valve in the ON position? NOTE: Valve is located beneath the oven at the rear, towards the side where the radiant burner is located.
Underfloor burner is not running. "Hearth Heat" light is off.	Hearth temperature is above the Hearth Set Point.
Hearth Temperature is above the Hearth Set Point.	This is normal. Radiant (dome) flame can drive the temperature over the Hearth Set Point. The Hearth Set Point only controls the Underfloor IR burner. Turn down the dome flame if needed.
"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.
Flame cuts out	 Debris in burner. Oven is being run with the Night Heat Retention Door in place. Door must be removed whenever the oven is turned on. Wind blowing into the oven, or other venting issue.

Please contact Wood Stone at 1-800-988-8103 should service be necessary, or if you have any questions about your oven. Our normal service hours are Mon.—Fri., 8am—5pm Pacific time. If calling after hours, follow the recorded instructions for emergency service and a Wood Stone technician will get back to you promptly.

FUELWOOD FACTS

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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	2500	Fair	Good	Moderate	Slight
Apple	High-Med	4400	Fair	Excellent	Few	Excellent
Ash	High	3500	Fairly Difficult	Good-Excellent	Few	Slight
Beech	High	3800	Difficult	Excellent	Few	Good
Birch (white)	Medium	3000	Easy	Good	Moderate	Slight
Cherry	Medium	2000	Fair	Excellent	Few	Excellent
Elm	High	2300	Very Difficult	Good	Very Few	Fair
Hickory	Very High	4200	Fairly Difficult	Excellent	Moderate	Excellent
Maple (red)	High-Med	3200	Fairly Difficult	Excellent	Few	Good
Maple (sugar)	High	3700	Difficult	Excellent	Few	Good
Mesquite	Very High		Very Difficult	Excellent	Many	Excellent
Oak (live)	Very High	4600	Very Difficult	Excellent	Few	Fair
Oak (red)	High	3700	Difficult	Excellent	Few	Fair
Oak (white)	Very High	4200	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.

The cost of well-seasoned nardwood varies greatly with geographical location

Cost per month = A x C Cost per day = $\frac{A \times C}{30}$ Cost per hour =

 $\frac{30}{12}$ 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.

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

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

DECORATIVE FLAME BURNER

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



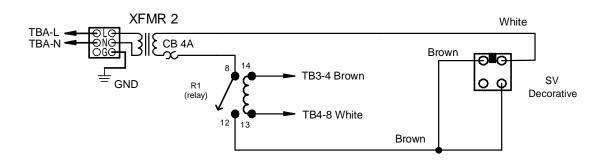
OPTIONAL DECORATIVE FLAME BURNER

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.

+ Decorative Flame





M0041.09 OCTOBER 2017

DIAG #: WD123 Rev. 0

DATE: 7/28/2014

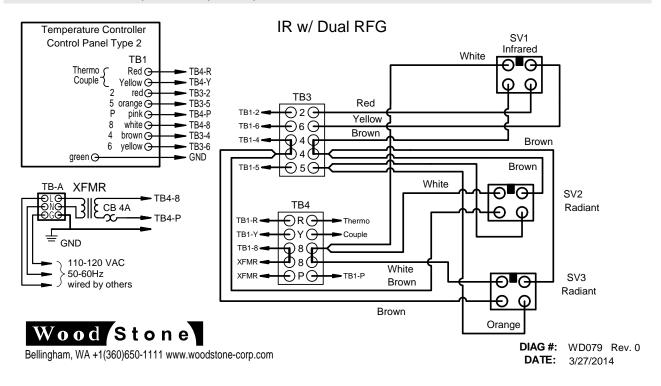


ELECTRICAL DIAGRAMS

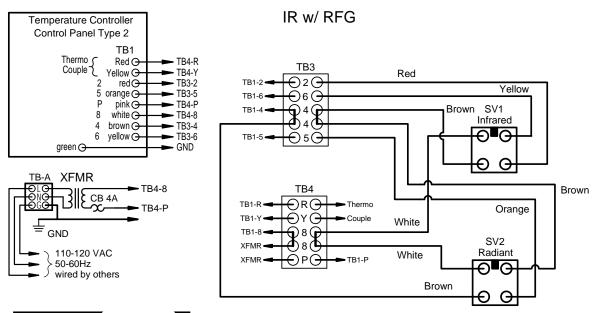
FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



TYPE 2 CONTROLLER FD-9690, FD-11275, 11290, AND CS-90-112 - 120 VAC MODELS - RFG-LR-IR



TYPE 2 CONTROLLER CS-96-90 - 120 VAC MODELS - RFG-(L OR R)-IR



WoodStone

Bellingham, WA +1(360)650-1111 www.woodstone-corp.com

DIAG #: WD064 Rev. 0 **DATE:** 3/28/2014



INTERLOCK DIAGRAM

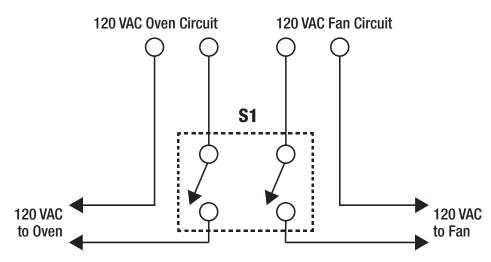
FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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's gas burner 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.

LIMITED WARRANTY

FD-9690, 11275, 11290 and CS-90-112 Installation and Operation Manual



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

TOLL FREE 800.988.8103