# Installation and Operation Manual

### **Mountain Home**

Stone Hearth Cooking Appliance Gas-Fired & Gas/Wood Oven Residential Models



**MOUNTAIN HOME 4', 5'** WS-MH-(4, 5)-RFG-(IR) WS-MH-(4, 5)-RFG-(IR)-(W)



# food, home & lifestyle

with a Wood Stone Home Oven

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

**F b N m** 



# **Table of Contents**



Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual

Cautions & Warnings .	•	•	•	•	•	•	•	. 3
MH-4 Specifications .	•							. 6
MH-5 Specifications .	•							. 7
Unloading and Moving	g							. 8
Clearances								. 9
Facade Details	•							11
Outdoor Installations .								12
Gas Specifications								13
<b>Electrical Specification</b>	ıs							15
Venting								16
Venting for Outdoors .								17
Assembly								18
Mounting a Mantle								19
Front Panel Assembly.								20
<b>Extension Panel Assem</b>	nk	oly	,					21
Stucco Application								23
Controller								24
Oven Start-up								25
Daily Operation								26
Flame Height Control.								27
Wood Burning								28
Daily Maintenance								29
Thermal Cleaning								30
Troubleshooting								31
Electrical Diagrams								32
Burner Operation Sequ	ue	en	ce					34
Fuelwood Facts								35
Limited Warranty								36

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tf. 800.578.6836 Bellingham, WA 98226 U.S.A. f. 360.734.0223

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## **Cautions & Warnings**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



# INSTALLATION AND OPERATION MANUAL FOR THE WOOD STONE HOME MOUNTAIN HOME STONE HEARTH COOKING APPLIANCE

- WS-MH-(4, 5)-RFG-(IR)-(NG OR LP) GAS-FIRED MODELS
- WS-MH-(4, 5)-RFG-(IR)-(W)-(NG OR LP) GAS/WOOD MODELS

#### DO NOT THROW AWAY THIS MANUAL. RETAIN THIS MANUAL FOR FUTURE REFERENCE.

Additional copies of this manual are available at woodstonehome.com. Prompt responses to service/maintenance questions are available from Wood Stone at (800) 578-6836

READ ALL INSTRUCTIONS BEFORE YOU INSTALLING AND USING THE APPLIANCE. 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.

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



**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.

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# **Cautions & Warnings**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch.
- Do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone.
- Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

**WARNING:** If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or even death.

**AVERTISSEMENT:** Si les informations contenues dans ce manuel ne sont pas suivies exactement, un incendie ou une explosion peut entraîner dommages matériels, des blessures ou même la mort.

#### INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY, OR THE GAS SUPPLIER.

Disconnect the power supply to this appliance before cleaning or servicing.

Installation and servicing of this product could expose you to glasswool/ceramic fibers as well as calcium silicate dust. ALWAYS WEAR RESPIRATORY AND EYE PROTECTION WHEN INSTALLING OR SERVICING THIS APPLIANCE.

#### **Air Quality Restrictions and Wood Burning Regulations**

Our wood-fired ovens and gas/wood combination ovens are usually classified as wood burning (solid fuel) cooking equipment and are often exempt from wood burning restrictions that pertain to wood stoves and other wood-fired heating appliances. If there are wood burning restrictions in your area, please check with the appropriate state or local air quality agency to determine what, if any, restrictions may apply to solid fuel burning cooking equipment. For areas where wood burning is restricted, our gas fired ovens are an exceptional alternative.

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# **Cautions & Warnings**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



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

It is a potential hazard using this appliance for storage space.



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

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

**POUR VOTRE SÉCURITÉ:** Ne pas stocker ni utiliser d'essence ou d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.

**AVERTISSEMENT:** Une installation, un réglage, une altération, un entretien ou une maintenance inappropriés peuvent causer des dommages matériels, des blessures ou la mort. Lisez attentivement les instructions d'installation, de fonctionnement et d'entretien avant d'installer ou d'entretenir cet équipement.



**WARNING** – Never use this appliance as a space heater to heat or warm the room. Doing so may result in carbon monoxide poisoning and overheating of the oven.

**AVERTISSEMENT:** Ne jamais utiliser cet appareil comme appareil de chauffage pour chauffer ou réchauffer la pièce. Cela peut entraîner l'empoisonnement au monoxyde de carbone et la surchauffe du four.

CAUTION: NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR LIQUIDS TO START OR FRESHEN-UP A FIRE IN THIS APPLIANCE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE OVEN WHEN IN USE.

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

#### SAVE THE INSTRUCTIONS.



This appliance has been tested and approved by Intertek Testing Services, and is ETL Listed to ANSI Z21.1: 2016; CSA C22.2#3 Issue: 1998 +G1;G2 (R2009); (R2014) CSA 2.17: 1991; and CSA 1.1: 2016.

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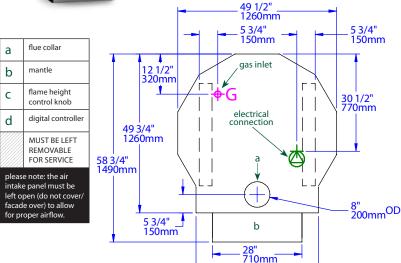
# **MH-4 Specifications**







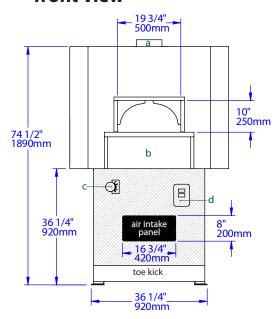
### plan view



### facade information

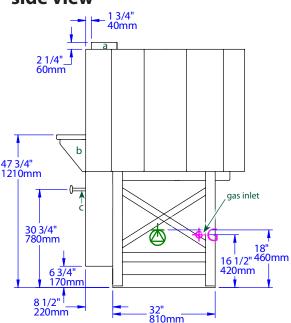
- All facades or enclosures are by others; all appliances require a 1-inch side clearance, and a 6-inch top clearance to combustible construction. Any construction above, and 6 inches to either side of the appliance doorway must be noncombustible. See installation manual for details.
- Any facade or enclosure below the mantle of Gas-Fired and Combination appliances must allow the following:
  - Unobstructed access 16 inches to each side of center line for removal of service/intake panel.
  - b. Easy access to all controls.
  - Sufficient combustion air for gas burners from the front; see installation manual for details.

### front view



... 38 1/4"\_ 970mm

#### side view



# gas G

Gas: ¾ inch gas inlet (FNPT) 115,000 BTU/hr Natural Gas (NG) OR

102,000 BTU/hr Propane (LP)

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

#### electrical 🛆

120 VAC, 1.1 A, 60 Hz All utility connections made on appliance as shown

WOOD-FIRED ONLY: 120 VAC, 2 A, 60 Hz Connection made to readout box

#### venting

This MH appliance vents through an 8-inch O.D. flue collar located above the doorway. Direct connect to a Listed building heating appliance chimney, also Listed as a grease duct, or a grease duct constructed in accordance with NFPA 96 and all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction. Most installations will require an exhaust fan. See Venting section for details.

unit shipping weight: 2,400 lbs.

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# **MH-5 Specifications**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual

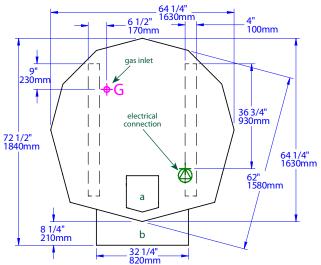




# plan view

a	flue collar		
b	mantle		
С	flame height control knob		
d	digital controller		
	MUST BE LEFT REMOVABLE FOR SERVICE		
please note: the air			

please note: the air intake panel must be left open (do not cover/facade over) to allow for proper airflow.



### facade information

- All facades or enclosures are by others; all appliances require a 1-inch side clearance, and a 6-inch top clearance to combustible construction. Any construction above, and 6 inches to either side of the appliance doorway must be noncombustible. See installation manual for details.
- Any facade or enclosure below the mantle of Gas-Fired and Combination appliances must allow the following:
  - Unobstructed access 16 inches to each side of center line for removal of service/intake panel.
  - b. Easy access to all controls.
  - Sufficient combustion air for gas burners from the front; see installation manual for details.

#### front view side view 2 1/2" 60mm 290mm 29 3/4"<sub>\_</sub> 750mm 40" 1020mn 11 1/4" b b **্** 78 3/4" 2000mm gas inlet 47 3/4" | 1210mm 30 3/4" 36 1/4" 920mm 17 1/2" | 440mm<sub>20 1/2</sub>" 8" 200mm toe kick 38" 970mm 5" 130mm 46 1/2" \_ 1180mm

#### utilities G

Gas: ¾ inch gas inlet (FNPT) 188,000 BTU/hr Natural Gas (NG) OR

159,000 BTU/hr Propane (LP)

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

#### electrical 🛆

120 VAC, 1.1 A, 60 Hz All utility connections made on appliance as shown

WOOD-FIRED ONLY: 120 VAC, 2 A, 60 Hz Connection made to readout box

#### venting

This MH appliance vents through an 10-inch O.D. flue collar located above the doorway. Direct connect to a Listed building heating appliance chimney, also Listed as a grease duct, or a grease duct constructed in accordance with NFPA 96 and all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction. Most installations will require an exhaust fan. See Venting section for details.



Note: A 10-inch O.D. flue adapter is included to facilitate connection to a round duct.

unit shipping weight: 3,600 lbs.

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# **Unloading and Moving**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual

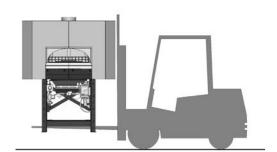


#### LIFTING THE APPLIANCE

#### 1. USING A FORKLIFT

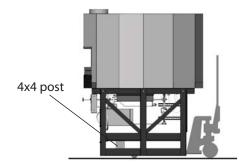
Be sure to use a forklift rated, and folks the minimum length, as shown below. If necessary, fork extensions must be used so the forks extend through the fork lift pockets to the opposite side of the stand. Lift from either side as shown. Do not lift from the front or the back. The appliance is very top heavy, so spread the forks as far apart as possible.

<b>AWARNING</b> Minimum Required Forklift Capacities						
Model	Approximate ship weight	Minimum fork length required	Required forklift capacity			
WS-MH-4	2,400 lbs.	4'	5,000 lbs.			
WS-MH-5	3,600 lbs.	5'	6,000 lbs.			



#### 2. USING A PALLET JACK

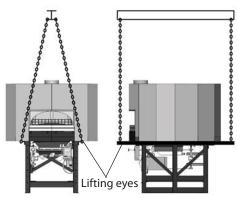
Once the appliance has been removed from the delivery vehicle, it can easily be moved on flat surfaces using a pallet jack. To lift the appliance with a pallet jack, remove the front and rear angle iron stabilizers from the base of the stand and place a stout 4x4 post through the fork pocket as shown. The appliance is VERY TOP-HEAVY, MOVING THE appliance UP OR DOWN A RAMP OR INCLINE ON A PALLET JACK IS NOT SAFE!



#### 3. USING A CRANE

The appliance arrives with four lifting eyes attached. When craning, use a spreader bar with a two-legged sling rigged on each end. The spreader bar should be of a sufficient length to keep the sling from contacting the unit.

NOTE: Once lifting eyes are no longer needed, remove the lifting eyes one at a time and be sure to replace the bolts that attach to the appliance stand.



#### DO NOT TURN THE APPLIANCE ON ITS SIDE!

Contact Wood Stone if the appliance must be turned on its side for specific instructions. Moving a Wood Stone appliance can present interesting challenges to even the most experienced riggers. Take your time, use your head, secure the proper equipment and make safety your first priority. Please don't hesitate to call the factory for technical support.

**DELIVERY NOTE:** The customer will receive a Shipping Notification when the unit 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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#### **Clearances**

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

#### **CLEARANCES**

- 1. The Wood Stone Mountain Home (MH) models require a minimum 1" clearance to combustibles from all sides, and 6" clearance to combustibles from the top. If building a facade that will contact the appliance, use completely non-combustible materials. Please note that standard Drywall (or Sheetrock) is considered a combustible. Side and top clearance to non-combustibles is 0".
- 2. Any facade 6" to either side of the appliance doorway and above must be constructed of non-combustible building materials. **WARNING:** Do not pack the required air spaces with insulation or other materials.
- 3. This appliance must be installed on a non-combustible floor surface (Cet appareil doit être installé sur une surface de plancher non-combustible). As with any cooking equipment, we suggest that care be taken when choosing the surfaces in front of the appliance to protect them from potential damage from hot, heavy items that may be removed from the cooking chamber.
- 4. For models that burn wood, the non-combustible floor surface should extend 36" out in front of the appliance, and extend 30" to either side of the appliance doorway.

**NOTICE**: For stucco-ready appliances (model numbers ending in "-S"), the same clearances as described above apply. Non-combustible stucco mix must be used and applied to a minimum thickness of 1". When non-combustible building materials contact the body of the appliance, the clearances to combustibles are transferred to those non-combustibles.



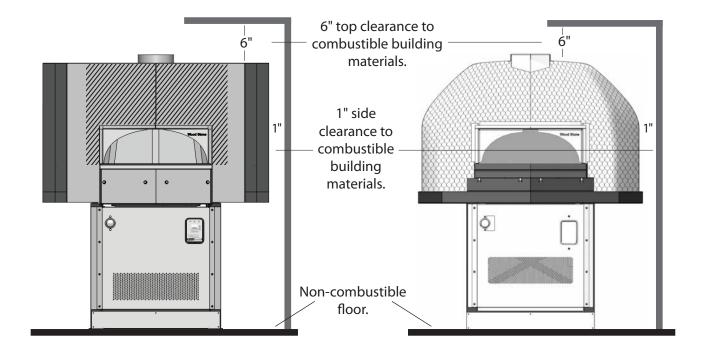
#### **Clearances**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### THE FOLLOWING CLEARANCE INFORMATION APPLIES TO ALL WOOD STONE MH SERIES APPLIANCES

**WARNING:** Do not pack required air spaces with insulation or other material. Any facade materials above and 6" to either side of the doorway of the appliance, must be NON-COMBUSTIBLE. Note: 0" side and top clearance to non-combustible materials, however the respective clearances to combustibles are transferred to those non-combustibles.



Hatched area represents area 6" to either side of the appliance doorway and above. Area must be constructed of non-combustible materials.

Combustible Building Material

Non-combustible Building Material

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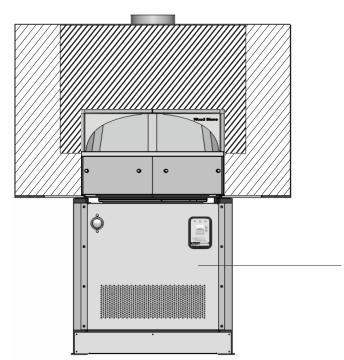




# **Facade Details**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual





Removable Service Panel. Allows access for service of gas and electrical components. If this panel is not used, access and air intake of equivalent dimensions MUST be provided in this same location at the front of the appliance.





Hatched areas shall not be exposed after installation of facade.



Any facade wall 6" to either side of the doorway and above must be constructed of non-combustible building materials. All surfaces in this area should also be easily cleanable.

Go to woodstonehome.com for detailed instructions for constructing a facade around a Wood Stone Appliance.

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

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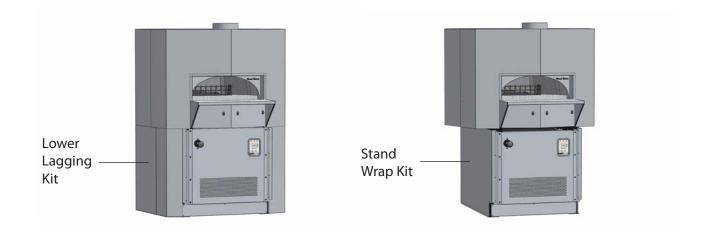
#### **Outdoor Installations**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



The Residential Mountain Series model appliances are ETL approved for outdoor installation. When installed outdoors, the open area beneath the appliance must be enclosed, with the exception of the perforated area on the front service panel for air intake. The appliance may be installed in a weatherproof enclosure. If so be sure to maintain all clearances and adhere to the installation requirements included in this manual.

Wood Stone also offers the following options to enclose the area beneath the appliance:



Keep the area around and beneath the appliance clear of grass, leaves and other combustible materials.

# **Gas Specifications**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### **GAS INLET PRESSURES**

It is the responsibility of the installer to verify proper gas inlet (supply) pressure to the oven. Problems caused by improper gas inlet pressure are not covered by the oven warranty. Proper gas inlet pressure is critical to the operation and performance of the oven.

Proper gas inlet pressures are as follows:

NATURAL GAS (NG) – 6.5" W.C. MIN TO 14" W.C. MAX PROPANE (LP) – 10.5" W.C. MIN TO 14" W.C. MAX

Inlet pressure must be within the above ranges when the oven is running, and when the oven is off. No external regulator is required when inlet pressures are within the ranges above. If inlet pressure exceeds 14"W.C. (1/2 psi), an external regulator, supplied by others, is required to prevent damage to the oven. If inlet pressure is below the minimum pressures shown above, adjustment or modifications to the supply system will need to be made by the pipe installer and or the gas supplier. This appliance requires no modifications or adjustments for use at high altitudes.

Incoming gas pressure (NG or LP) must not exceed 1/2 psi (14" W.C.) if incoming gas pressure exceeds 1/2 psi, an external regulator, provided by others, must be installed.

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

The Wood Stone Gas appliances are equipped with a 3/4" FNPT gas connection located at the rear left of the appliance. Have a licensed gas installer provide the hook-up and test all fittings and pipe connections for leaks. Use approved gas leak detectors (soap solutions or equivalent) over and around the fittings and pipe connections. DO NOT USE FLAME to test for leaks!

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

SV-1 and SV-2 are the gas control valves that operate under floor infrared burner and the interior radiant burner, respectively. SV-1 is located directly behind the service/intake panel and in front of the under floor infrared burner. SV-2 is located under the appliance to the rear left.

The manifold pressure test port for the SV-1 gas valve is the outlet port on the gas valve.

The manifold pressure test port for the radiant burner is a 1/8" NPT plugged tap located at the base of the T-junction between the SV-2 valve and the radiant/interior burner.

The burner manifold pressure has been adjusted and tested at the factory. A variety of factors can influence this pressure, so it may be necessary to test the burner manifold pressure and adjust the valve as necessary to achieve the specified pressure. Note: The gas control valves are shipped in the ON position.

#### Altitude information for Canada - All MH models

This appliance is approved for use, without modification, at altitudes of 0 to 4500 ft. (0 to 1370m)

Informations d'altitude pour le Canada – MH: Tous les modèles

Cet appareil est approuvé pour l'utilisation, sans modification, à une altitude de 0 à 4500 ft. (0 à 1370m)

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1801 W. Bakerview Rd. Bellingham, WA 98226 U.S.A. tf. 800.578.6836 f. 360.734.0223 woodstonehome.com info@woodstonehome.com

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# **Gas Specifications**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



Factory specified individual burner manifold pressures (W.C.) for RFG-(IR)-(W) models equipped to burn Natural Gas (NG)

Model	SV-1	SV-2
WS-MH-4-RFG-(IR)-NG	3.5"	5"
WS-MH-5-RFG-(IR)-NG	3.5"	4.75"

#### Hourly Natural Gas (NG) BTU/hr input rates

Model	RFG-(W)	RFG-IR-(W)
WS-MH-4-NG	68,000	115,000
WS-MH-5-NG	105,000	188,000

Factory specified individual burner manifold pressures (W.C.) for RFG-(IR)-(W) models equipped to burn Propane (LP)

Model	SV-1	SV-2
WS-MH-4-RFG-(IR)-LP	9"	7"
WS-MH-5-RFG-(IR)-LP	9"	8"

#### Hourly Propane (LP) BTU/hr input rates

Model	RFG-(W)	RFG-IR-(W)
WS-MH-4-LP	60,000	102,000
WS-MH-5-LP	94,000	159,000

For all installations, follow best practices for proper gas line pipe sizing for the line serving the oven. To ensure 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.

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. Leak testing of the appliance shall be conducted according to the manufacturer instructions.

#### **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 including:

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

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

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Rev date: January 2018



# **Electrical Specifications**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



Incoming power should be connected to the terminal strip located in the transformer junction box beneath the appliance. The standard model comes configured for connection to a 120 VAC circuit. Always refer to the equipment data plate beneath the appliance to verify the proper voltage. The voltage is also specified on the transformer box cover. Never connect an appliance rated 120 VAC to a 240 VAC circuit or vice versa. It is recommended that the appliance be connected to its own individual branch circuit. Have a licensed electrician connect the appliance to the appropriate 120 VAC circuit. Electrical diagrams are located directly to the right, behind the removable service/intake panel of the appliance as well as inside the control box. Electrical diagrams are also located in the **Electrical Diagrams** section. See page 16 of this manual for location of the transformer housing.

# **ELECTRICAL RATINGS:** 120 VAC, 2 A

**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.

#### FOR APPLIANCES EQUIPPED WITH A POWER CORD

**WARNING** – Electrical Ground Instructions: This appliance is equipped with a three-prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded receptacle. Do not cut or remove the grounding prong from the plug.

**AVERTISSEMENT** – Instructions de mise à la terre: Cet appareil est équipé d'une fiche de mise à la terre à trois broches pour votre protection contre les chocs électriques et doit être branché directement dans une prise correctement mise à la terre. Ne pas couper ni retirer la broche de mise à la terre de la fiche.

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# Venting

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



The following are the manufacturer's recommendations for venting the Wood Stone MH (Mountain Home Series) appliance. It is never appropriate to use "B vent" in any part of an exhaust system connected to a Wood Stone appliance. All duct material must be Listed to UL 1978, or fabricated to the specifications of a grease duct. Submit your venting plans to your local authorities before proceeding with your installation, as there may be additional requirements in your area. All residential venting systems should be inspected yearly and cleaned as necessary.

#### There are two options:

1. A power ventilated grease duct system listed to UL 1978 connected directly to the appliance flue collar. The power ventilator (fan) must be rated for a minimum of 300 °F, 450 °F for RFG-IR-W models that burn wood. Wood Stone offers fans that meet the above requirements. Please contact your dealer or the factory. Wood Stone does not recommend the use of an in-line fan. A field built grease duct, constructed and installed to the specifications of a grease duct as detailed in NFPA 96 or the International Mechanical Code, may also be used.

A static pressure of -0.1 inches W.C., (-0.14 inches W.C. for wood burning models,) is necessary at the appliance flue collar to ensure proper airflow. The CFM required to attain this static pressure will be approximately 500 CFM.

Note: For installations vented with a vertical exhaust run, with or without one or more offsets, a power ventilator is not required. However, if any part of the duct run is horizontal, a power ventilator IS required to ensure proper draft.

Note: When using a direct connection as described above, the duct must be attached to the appliance flue collar with a full perimeter weld, or an approved connector.

It is never appropriate to use "B vent" in any part of an exhaust system connected to a Wood Stone appliance. All duct material must be manufactured to the specifications of a grease duct. Install venting system in accordance with the duct manufacturer's instructions and in accordance with all local codes. All field built components should be built to the applicable codes and standards and are subject to the approval of the authority having jurisdiction.

2. A Listed Type 1 Exhaust Hood or one that is constructed and installed in accordance with all relevant Local and National Codes. Wood Stone offers eyebrow-type hoods designed specifically for Wood Stone appliances. See specification sheet on ventilators for Wood Stone appliances. If a hood is used, it must be installed in accordance with the Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations - NFPA 96. Refer to the hood manufacturers recommendations for inspection, maintenance and cleaning. Contact Wood Stone for more information about approved exhaust hoods.

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# **Venting for Outdoors**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



All Mountain Home ovens are approved for outdoor installation. The unit may be installed in a weatherproof enclosure. If so be sure to maintain all clearances and adhere to the installation requirements included in this manual.

For outdoor installations, the indoor installation methods mentioned previously in this manual may be used, OR when installed outdoors or in an open air outdoor structure such as a covered patio or similar structure, the oven may be vented without the use of an exhaust fan when the duct run includes no horizontal sections. A natural draft duct, listed or constructed to the requirements of a grease duct as described in NFPA 96 or the International Mechanical Code, attached directly to the oven flue collar may be used. The duct must be sufficient length and installed in such a manner that proper clearances from combustible construction and proper clearances in regards to the termination of the duct are maintained (i.e. clearances from roofs, window and door openings, etc.) All clearances must be in accordance with NFPA 96, the International Mechanical Code or the applicable local code in force. All manufactured duct systems must be installed in accordance with the duct manufacture's listing and instructions.

When the oven is installed free standing outdoors or in its own non-combustible enclosure, no fan is required, and a suitable metal, stone, clay or ceramic pipe may be used to extend the flue collar outlet above the oven.

Be aware that wind blowing directly at the oven can cause performance and reliability issues. When installing the oven outdoors choose a location that best minimizes wind exposure for the oven. Please note: Keep the area around and beneath the appliance clear of grass, leaves and other combustible materials.

The appliance is available with an optional collapsible chimney assembly with rain cap (shown below) for use with freestanding outdoor installations without a roof structure above the oven. Contact your dealer or Wood Stone for more information.

In the retracted position, the optional collapsible chimney assembly with rain cap closes off the flue opening to protect from water, leaves etc. getting into the oven when not in use.





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# **Assembly**

# Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



- 1. Mount the appliance mantle (if provided) using the hardware provided. (See figure on next page).
- 2. Mount the stainless steel toe kick to the front of the appliance stand, angle side down using the large self tapping screws. The holes are pre-drilled in the stand. If your appliance is equipped with a service panel extension or storage box, a toe kick is not necessary.
- 3. Mount the service/intake panel to the brackets on the front of the stand, directly below the doorway, using the screws provided. If your appliance was shipped with the optional facade extensions. you will find the brackets already on the extensions. **NOTE**: This panel is the only access for servicing the gas and electrical components of the appliance so it must be left accessible and removable.
- 4. Stucco finish appliances only (models ending with "-S"): Once the appliance has been set in place, cover wire mesh and metal lathing with no less than 1 inch of stucco.



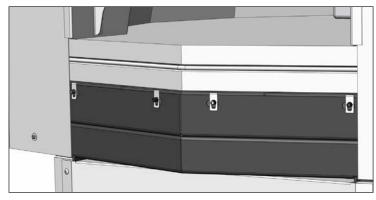


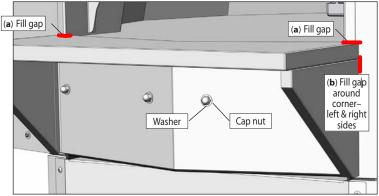
# Mounting a Mantle

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The initial steps are the same for mounting either a stainless mantle or a bracket for a granite mantle.





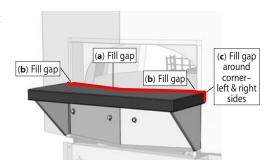
- **1.** Begin by installing the threaded studs into the clip nuts below the oven doorway (3 or 4 turns is sufficient).
- 2. 
  Position the mantle (or bracket) on the oven, making sure the rear flange rests on the floor of the oven (you may need an extra pair of hands).
  - Note: Do NOT remove the insulation taped to the back of the mantle.
- **3.** 

  Place one stainless steel washer and a cap nut onto each stud.
  - ☐ Tighten the cap nuts so the mantle is securely held in place.
- **4.** Using the high temperature silicone (provided), fill any gaps between the oven hearth and the mantle flange.
  - ☐ Gaps between the mantle flange and the stainless steel doorway frame may also need to be filled with a small amount of the silicone sealant.
  - $\square$  Clean up any sealant before it dries.

**INSTALLATION OF GRANITE** - After completing the steps outlined above, apply a generous amount of silicone sealant (provided) to the top of the steel mantle bracket.



- 1. Put the stone in place and apply light pressure to seat it properly.
- 2. Make sure that the angle in the granite lines up with the angle in the bracket.
- 3. Allow the sealant to set for several hours, then with the provided Silicon sealant fill any gap: (a) between the Stone slab and the Metal bracket along the front of the Doorway, (b) the Stone edge & stainless steel Doorway frame and (c) where the Stone upper corners touch the oven.
- 4. Clean up any sealant before it dries.



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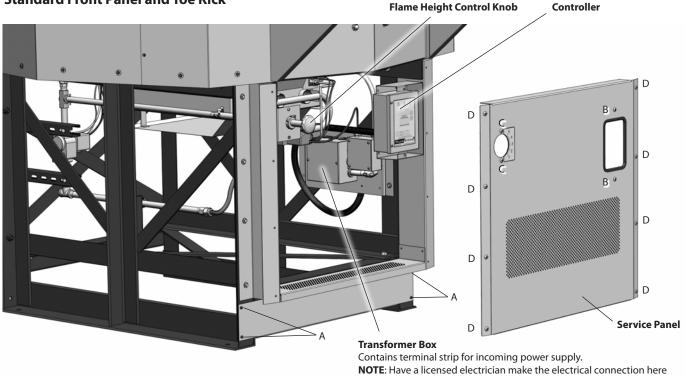


# **Front Panel Assembly**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual









Hex-head self-tapping screw. Used to attach toe kick. 4 total.



Phillips head 1/4-20 screw. Used to attach service panel to controller bracket. 2 total.



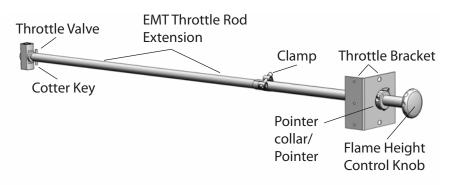
Phillips head #10 screw. Used to attach service panel to throttle knob bracket. 2 total.



Phillips head self-tapping screw. Used to secure the sides of the service panel. 8 total.

#### **Service Panel Throttle Assembly**

The throttle knob position can be adjusted inward or outward by loosening the clamp and sliding the throttle knob assembly to the desired position. Be sure to retighten the clamp once the throttle knob is in the desired position.



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# **Extension Panel Assembly**

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#### **Optional Lower Extension, Throttle Rod and Controller Assembly Instructions**



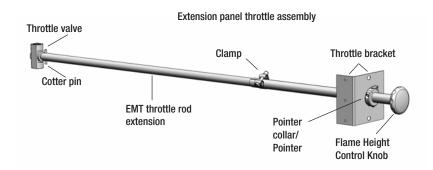
1. After the oven has been leveled, remove the throttle rod assembly which has been attached to the inside of the stand for shipping. Position the lower extension assembly onto the front of the oven. It will rest on the guides that are welded to the oven legs. Attach the assembly to the oven legs using the 1/4-20 nuts, bolts and washers.



2. Remove the access panel.



 Attach the controller to the mounting bracket of the extension using the 1/4-20 bolts provided.



4. Remove the throttle knob/pointer section from the throttle assembly. Slip the clamp off of the throttle knob assembly and slid it over the EMT throttle rod extension. Slip the front of the EMT throttle rod through the throttle rod bracket at the front of the oven, then slip the other end of the EMT onto the throttle valve at the back of the oven. **Note:** The end of the EMT that goes over the throttle valve is drilled to accept a cotter pin. Attach the EMT throttle rod extension to the throttle valve using the cotter pin and open the end of the pin slightly to prevent it from falling out. Make certain the valve is in the full open position by turning the attached throttle rod extension counterclockwise until it stops.

Continued

# **Extension Panel Assembly**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### Optional Lower Extension, Throttle Rod and Controller Assembly Instructions



- 5. Pass the throttle rod through the throttle bracket (already attached). Position the pointer in approximately the 2 o'clock position. Slide the clamp on the EMT over the end of the throttle rod/knob assembly and Attach the throttle rod to the EMT throttle rod extension using the compression clamp (5/16" nut). On curved façade extensions, make to leave at least 1/8" of space between the end of the pointer and the bracket when it is set to a horizontal position.
- 6. Reinstall the front panel. Secure the controller with a 1/4-20 screw at the top and bottom.

Use (2) #10 stainless steel sheet metal screws to secure the front panel to the throttle bracket.



#### 7. CALIBRATING THE POINTER

Loosen the pointer collar set screws using a 3/16" Allen wrench. Position the attached pointer to "5" on the Flame Height Index Scale. Tighten the pointer collar in this position. Make certain the tip of the pointer is at least 1/8" away from the index scale at the tightest point of the rotation of the knob so it does not scrape.

1/8" minimum clearance

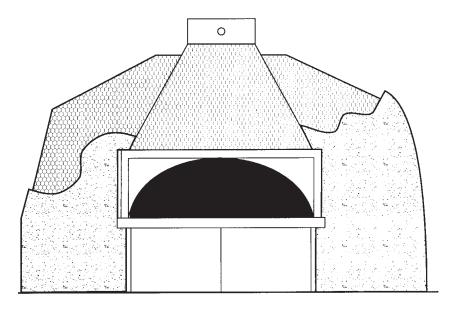
Pointer collar set screws



# **Stucco Application**

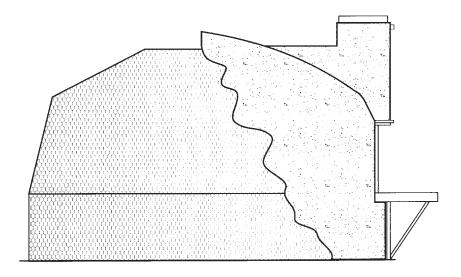
Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual





### **Front View**

NOT TO SCALE



#### **Side View**

NOT TO SCALE

This figure depicts the application of stucco on a Wood Stone appliance.

Use no less than one inch of stucco coating to cover all exposed metal lathing on the appliance.

Maintain a minimum of 14" clearance from top and 1" from side of the appliance to all combustible surfaces.

# TRADITIONAL STUCCO MIX

1 part masonry cement1 part regular cement

5 parts sand

Stucco premix is available at your local lumber yard or building supply store.

Follow stucco manufacturer's instructions for correct mixing information.

MINIMUM STUCCO APPLICATION THICKNESS IS 1"

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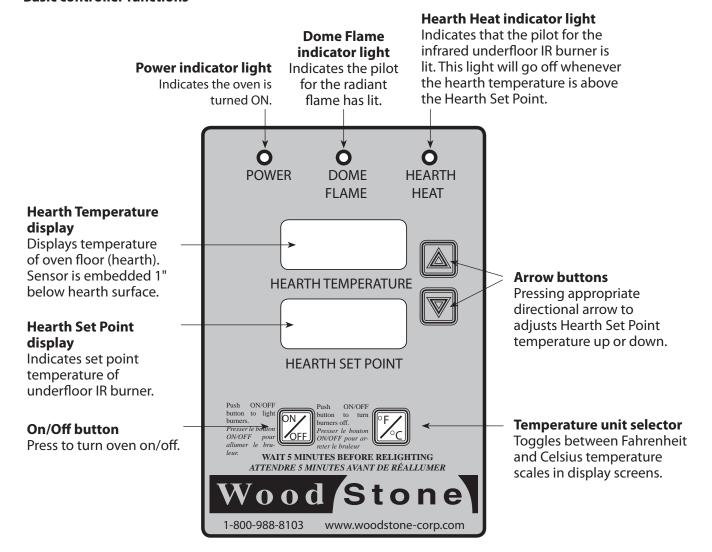


### **Controller**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### **Basic controller functions**







# **Oven Start-up**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



**IMPORTANT**: If at any time you feel that either or both of the burners are not operating properly, turn the oven off and call for service. Before servicing, disconnect the electrical supply at the breaker and turn off the gas supply at the appliance's individual gas shutoff valve. In the event of a power failure, no attempt should be made to operate the oven

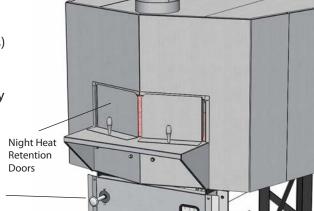
#### **INITIAL OVEN STARTUP PROCEDURE**

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 Startup procedure need 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 switches on the Honeywell control gas valves are in the ON position. These are located beneath the oven.
- 3. Remove the night door(s). Push ON/OFF button on controller. It may take awhile 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 its lowest setting, "1" on the Flame Height Control Knob). Leave the set point at 100°F throughout the entire first day.
- 5. After one hour, raise dome flame to 25% (~6 inch flame, "2" on the Flame Height Control Knob, hold this setting for 4 hours.
- 6. After 4 hours at 25% flame, raise to 50% flame ("3" on the Flame Height Control Knob) and hold for at least another 4 hours or until the temperature reaches 500°F.
- 7. Once the temperature reaches 500 °F the oven is ready for use. If you will be shutting the oven down, see the instructions that follow.
- 8. Turning Off The Oven: Push ON/OFF button, all gas will go off, including the pilots. Put oven night door(s) in place to retain heat.

#### **NOTE:**

- Always wait 5 minutes before restarting the oven.
- Never run the oven with the Night Heat Retention Door(s) in place.
- Small "crazing" cracks will occur with normal heating and cooling. They will not effect the performance or durability of the oven. If cracks 1/8" wide or more develop, contact Wood Stone for evaluation.



Flame Height Control Knob

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# **Daily Operation**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



- Remove the night door(s).
- 2. Push ON/OFF button. Using the arrows, adjust the set point on the control panel to the desired floor temperature. Using the Flame Height Control Knob, turn the radiant flame to its highest setting of "5". Check your temperature after approximately one hour. Once you are close to your desired temperature, reduce your flame to the holding flame setting that corresponds to your desired temperature. See the Flame Height Control section that follows to determine the proper setting that will correspond to your desired temperature. Note: It is only possible to program the hearth set point for the underfloor IR burner 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 hearth temperature readout will display "LO" until the oven floor reaches 100 °F. Go to woodstonehome.com for detailed information on cooking in your Wood Stone oven.

#### **CLEANING THE APPLIANCE**

- 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.

#### ADJUSTING THE RADIANT (DOME) FLAME

1. To adjust the radiant flame: The radiant flame is always on (when the oven is operating) and can be adjusted to any flame intensity between its highest and lowest setting. Simply turn the Throttle Knob located to the lower left of the doorway, beneath the mantle. This burner is the primary heat source for the oven. The underfloor IR burner acts as an assist, to speed heat-up and to maintain desired floor temperatures during periods of high food production.

#### **TURNING OFF THE OVEN**

- 1. Push ON/OFF button, all gas will go off, including the pilots.
- 2. Put oven night door(s) in place to retain heat.

#### NOTE:

Never place anything in or above the radiant flame.

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# **Flame Height Control**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### DETERMINING THE APPROPRIATE FLAME HEIGHT

For each specific configuration of appliance 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 appliance.

#### FLAME HEIGHT INDICATOR SETTINGS FOR WOOD STONE MOUNTAIN SERIES APPLIANCES

#### 1. Heat Up Flame:

Set Flame Height Control Knob to "5" (highest setting) on the Flame Height Index Scale until desired temperature is reached.

#### 2. Holding Flame:

Set Flame Height Control Knob to "3" ( $\sim$ 8–9" flame) for desired temperature of 570–600 °F. Set Flame Height Control Knob to "2" ( $\sim$ 5–6" flame) for desired temperature of 450–480 °F.

#### 3. Cooking Flame:

After introducing the pizza/product into the oven, visually raise the flame to approximately 3 inches higher than the Holding Flame.

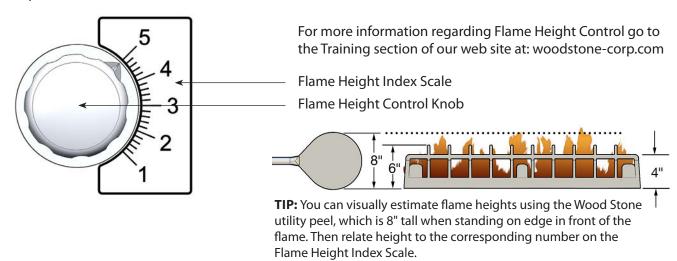
#### The Cooking Flame has two purposes:

- 1. To 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. Return the Flame Height Control Knob to the Holding Flame after removing the pizza/product from the oven.

**Note:** The settings recommended on the Flame Height Index Scale for specific flames are based on appliances that have been installed according to specifications. Individual results may vary slightly. When wood is burned in RFG-IR-W models, the wood fire will influence the temperature as well.

### Flame Height Indicator

Comprised of Two Parts



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Doc no: M0005.05 Rev date: Sept 2017



# **Wood Burning**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



MH-RFG-IR-W models allow for the optional burning of wood in conjunction with the gas burners. When burning wood in the appliance, the fire should be placed to one side of the chamber, as close to the door opening as is possible (this is often described as the 8 o'clock or 4 o'clock position). Burn a maximum of 15 lbs. of wood per hour. If flames spill out of the doorway, or the temperature exceeds 850 °F, you are over firing the appliance. Never not use gasoline, kerosene or any type of lighter fluid to ignite or freshen up a fire.

To start the fire, use a small amount of dry kindling. A paraffin/sawdust type (solid) fire starter may be used to help ignite the fire.

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 appliance. **Burner problems resulting from debris or ash in the burner well will not be covered by the oven warranty.** Using the floor brush and ash shovel, move debris only toward the appliance doorway and dispose of safely.

Note: Ovens burning solid fuel require a more frequent maintenance schedule. Call with questions regarding maintenance frequency.

See the Fuelwood Facts section at the end of this manual for more information on burning wood.

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

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

The interior floor and dome of the appliance do not require creosote or soot removal. The appliance flue and exhaust system will require inspection and cleaning. The exhaust system must be inspected and cleaned per the manufacturer's and or local code official's recommendations.

The rate of creosote and/or grease build up is highly dependent on the frequency of use. For most residential applications, a yearly inspection of the duct system should be sufficient.

Dispose of ash per the following:

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

If at any time, you feel the gas components of the appliance are not operating properly, turn the appliance off, shut off the gas supply and call Wood Stone to arrange for servicing of the appliance.

#### **Air Quality Restrictions and Wood Burning Regulations**

Our wood-fired ovens and gas/wood combination ovens are usually classified as wood burning (solid fuel) cooking equipment and are often exempt from wood burning restrictions that pertain to wood stoves and other wood-fired heating appliances. If there are wood burning restrictions in your area, please check with the appropriate state or local air quality agency to determine what, if any, restrictions may apply to solid fuel burning cooking equipment. For areas where wood burning is restricted, our gas fired ovens are an exceptional alternative.

Radiant Burner

Appliance Doorway

Two possible wood fire locations (8 o'clock or 4 o'clock)

rly,

Note: Wood Stone's

stainless steel ash

shovel and double

compartment ash

disposal system offer

a safe and convenient

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# **Daily Maintenance**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### **OVEN INTERIOR**

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

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

#### **OVEN EXTERIOR**

All exposed 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.

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

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

BURNER PROBLEMS RESULTING FROM DEBRIS IN THE BURNER WELL WILL NOT BE COVERED BY THE OVEN WARRANTY.

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# **Thermal Cleaning**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### THERMAL CLEANING

If a Wood Stone gas-fired appliance is operated at low temperatures (below 450°F), it is possible that grease residue from food could accumulate on the interior of the cooking chamber. To remove this accumulation, first remove all utensils, and wipe off any excess spillage. Then, simply turn the radiant flame to its highest setting. Monitor the floor temperature displayed on the controller. When the floor reaches 650°F, lower the flame slightly so as to maintain the appliance floor temperature near 650°F for about an hour. Once the interior appears clean, allow the appliance to cool to normal operating temperatures and continue normal operation.

#### **CAUTION:** Before starting thermal cleaning procedure:

- Remove all tools and utensils from the cooking chamber.
- Wipe off excess spillage.

#### **ATTENTION:** Avant de commencer la procédure de nettoyage thermique:

- Enlever tous les outils et ustensiles de la chambre de cuisson.
- Essuyez l'excès d'éclaboussure.





# **Troubleshooting**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



Problem	Cause/Solution
Controller will not turn on	<ol> <li>Incoming power to appliance turned off. Check circuit breaker for circuit supplying the appliance. Check that any wall switches external to the appliance that control appliance power are turned on. Check that any interlocks external to the appliance are turned on.</li> <li>If control still does not turn on, please contact Wood Stone for assistance.</li> </ol>
Flame does not light	<ol> <li>Is gas turned on to the appliance? Is gas shut-off valve turned all the way on?</li> <li>Debris in burner. Burner may require cleaning. Contact Wood Stone for assistance.</li> <li>Damaged igniter or gas valve. Contact Wood Stone for assistance. If the appliance is being started for the first time:         <ul> <li>Has all air been bled from the gas line?</li> </ul> </li> </ol>
	<ul> <li>Is the switch on the SV-2 valve in the ON position?</li> <li>Note: Valve is located beneath the oven at the rear, towards the side where the</li> </ul>
	radiant burner is located
Flame cuts out	<ol> <li>Debris in burner.</li> <li>Fan is turned on too high</li> <li>Wind blowing into the appliance, or other venting issues.</li> <li>Appliance is not vented properly - Call Wood Stone</li> </ol>
Display reads "OPEN"	<ol> <li>Thermocouple is not plugged into control box.</li> <li>Damaged thermocouple - call Wood Stone.</li> </ol>
Display reads "CHEC"	<ol> <li>Indicates that underfloor IR burner is not lighting.</li> <li>Make sure switch on SV-1 valve is ON, and that gas line has been purged of air.</li> <li>Exhaust fan is set too high, or other ventilation issues.</li> <li>Damaged igniter or gas valve. Contact Wood Stone for assistance.</li> </ol>
Flame and controller turn off. Unit will not turn back on.	<ol> <li>Check that power to the oven has not been turned off.</li> <li>High limit device has tripped. Allow the cooking chamber to cool and then turn the controller back on.</li> </ol>

Please contact Wood Stone at 1-800-988-8103 should service be necessary, or if you have any questions about your appliance.

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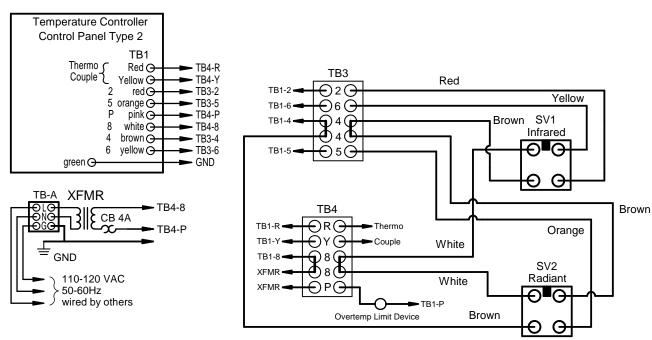


# **Electrical Diagrams**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### **RFG-IR 120 VAC MODELS**



Wood Stone

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

**DIAG #:** WD085 Rev. 0 **DATE:** 8/14/2014



# **Interlock Relay**

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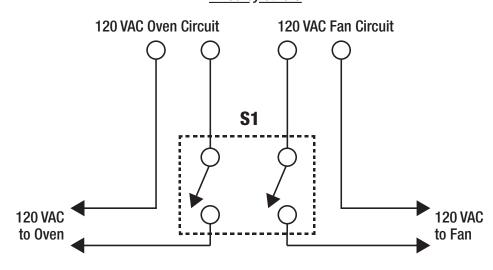


#### INTERLOCK OF APPLIANCE CONTROL TO AN EXHAUST FAN

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

**Note:** When oven used with an exhaust fan, an interlock must be provided.

#### 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 fan and the appliance. The intent is to prevent the operation of the appliance's gas burner in the event the fan is shut off.

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

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



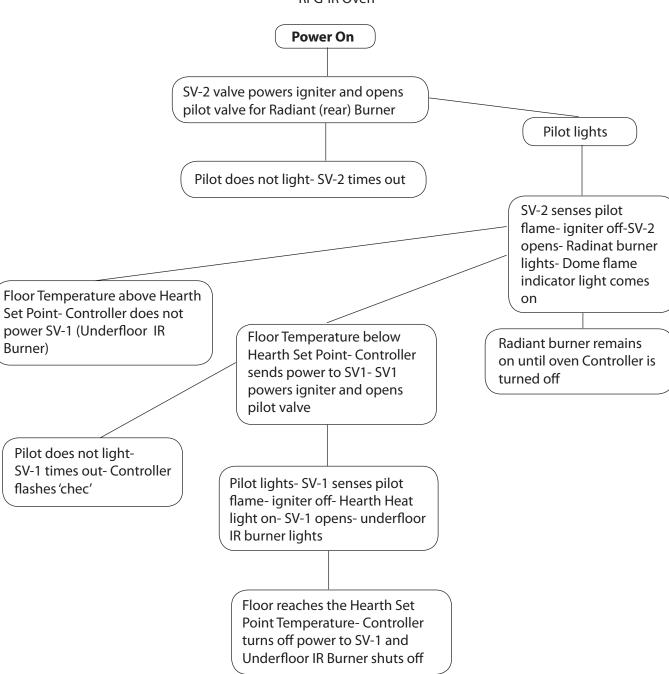
# **Burner Operation Sequence**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven Installation and Operation Manual



#### **BURNER OPERATION SEQUENCE**

RFG-IR Oven



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

**Wood Stone Corporation** 1801 W. Bakerview Rd. Bellingham, WA 98226 U.S.A.

tf. 800.578.6836 f. 360.734.0223 woodstonehome.com info@woodstonehome.com





#### **Fuelwood Facts**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven 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). **Do not use pressed wood products in Wood Stone food service equipment, they may damage the ceramics.** 

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

<sup>\*</sup>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 woodstonehome.com, contact your dealer or Wood Stone).

When burned, a pound of 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 = Cost per cord Lbs per cord (from above table)

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# **Limited Warranty**

Mountain Home Gas-Fired and Gas/Wood-Fired Oven 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. Our normal business hours are 8am to 5pm PST Monday–Friday.

#### **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 the event that pressed log products of any type have been burned in the equipment.
- 9. 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

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