



STONE-FIRED COOKING EQUIPMENT

RFG-W

Radiant Flame Gas/Wood Oven

Installation and Operation Manual

Additional Copies Available Upon Request

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www.woodstone-corp.com

Revised April 2005

Wood Stone WS-MS-(4,5,6,7)-RFG-W Gas Oven Installation and Operating Instructions

DO NOT THROW THIS MANUAL AWAY

RETAIN THIS MANUAL FOR FUTURE REFERENCE.

Additional copies of this manual and prompt responses to service/maintenance questions are available from Wood Stone @ 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.
Also, always keep the area under and around this appliance free and clear of any and all combustible materials.

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

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

Wood Stone's gas/wood-fired ovens were tested and approved by Intertek Testing Services (ETL SEMKO), as specified by ANSI Z83.11-2002, CSA 1.8-2002, UL Subject 2162 No.2-2001, and ULC Subject 1482-M1990. They are listed by NSF to ANSI/NSF Standard 4.

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 inspections in your area.

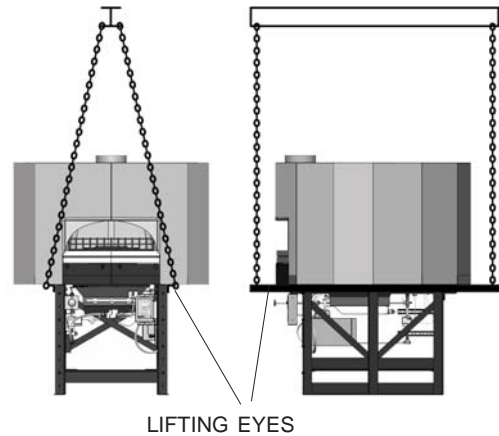
Wood Stone Corporation 1801 W. Bakerview Rd. Bellingham WA 98226

LIFTING THE OVEN

1. USING A CRANE

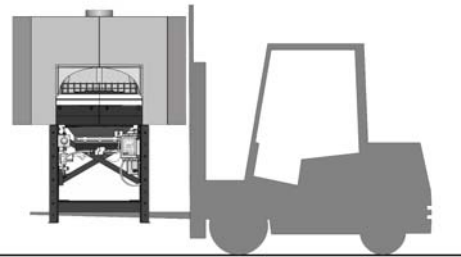
The oven arrives with four lifting eyes attached. When craning a Wood Stone oven, use a spreader bar with a two-legged sling rigged on each end. The spreader bar should be of a sufficient length to keep the sling from contacting the oven.

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 THE OVEN TO THE STAND.



2. USING A FORKLIFT

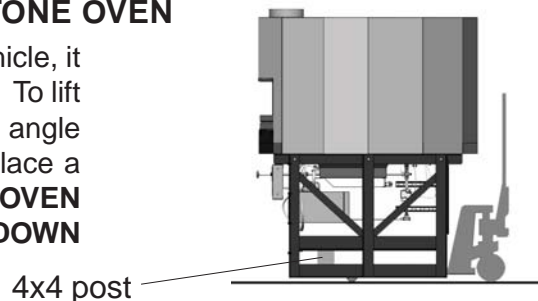
Be sure to use a forklift rated to lift more than the oven weighs as shown below. Fork length must be at least 6 feet, if not, fork extensions should be used. The oven stand is equipped with fork pockets just above the angle iron base. The oven is very top heavy so spread the forks as far apart as possible.



Model #	Oven	Approx. Weight	Req'd Forklift
WS-MS-4	Mt. Chuckanut	2,200 lbs.	5,000 lb.
WS-MS-5	Mt. Adams	3,300 lbs.	6,000 lb.
WS-MS-6	Mt. Baker	4,200 lbs.	6,000 lb.
WS-MS-7	Mt. Rainier	5,300 lbs.	9,000 lb.

USING A PALLET JACK TO MOVE A WOOD STONE OVEN

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



DO NOT TURN THE OVEN ON ITS SIDE!

Contact Wood Stone if the oven must be turned on its side for specific instructions. Moving a Wood Stone oven can present interesting challenges to even the most experienced riggers.

Take your time, use your head, secure the proper equipment and make safety your first priority. Please don't hesitate to call the factory for technical support (1-800-988-8103).

DELIVERY NOTE:

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

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

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

Please read this entire manual before you install the oven. Failure to follow instructions may result in property damage, bodily injury or even death. Contact your local building or fire officials about restrictions and installation inspection in your area.

CLEARANCES

- a. The Wood Stone RFG-W oven should have a **minimum 1" clearance to combustibles from all sides, and 14" clearance to combustibles from the top** . If building a facade that will contact the oven, use completely non-combustible materials*. Please note that standard dry-wall (or sheet rock) is considered a combustible.

- b. Any facade above and/or 6 inches to either side of the oven doorway, must be constructed of non-combustible building materials.

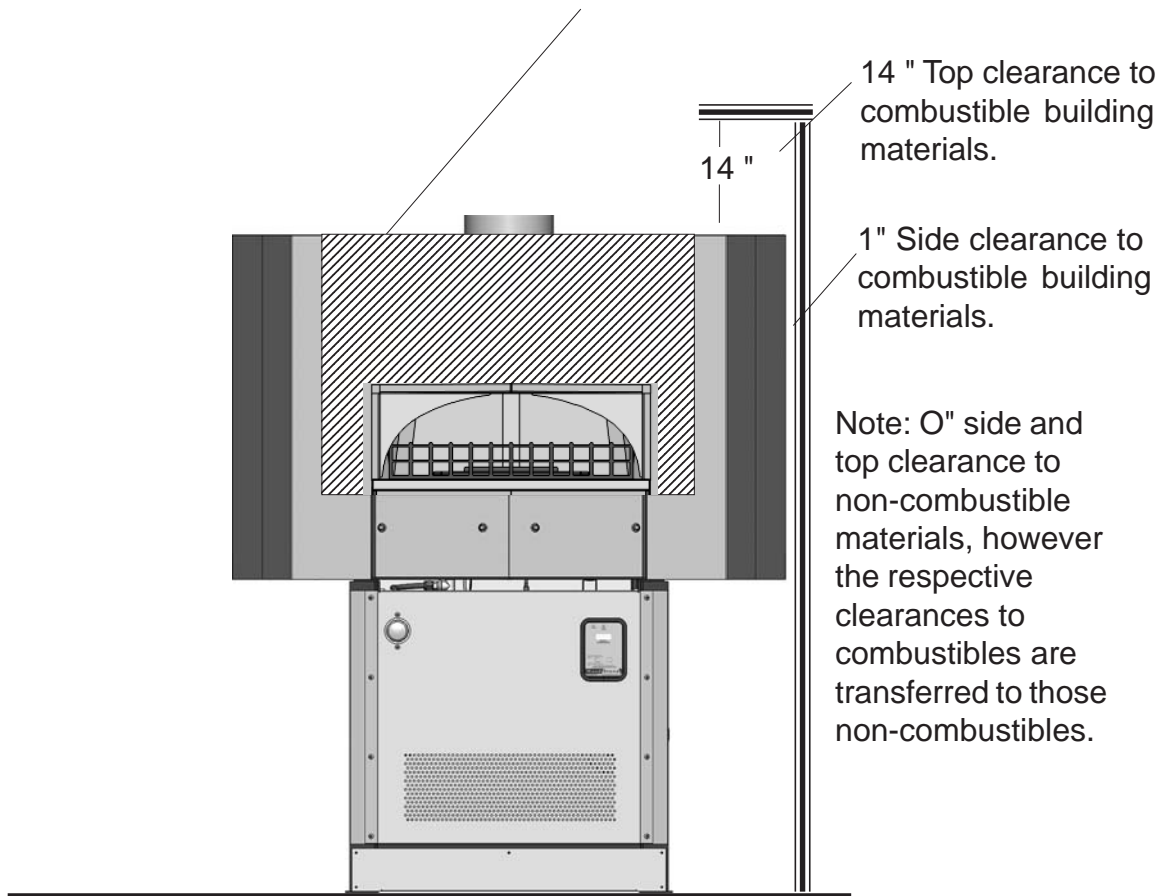
- c. Install this oven only on non-combustible floors. The non-combustible floor surface should extend 36 inches out in front of the oven, and extend 30 inches to either side of the oven doorway.

NOTICE: FOR STUCCO COVERED OVENS (MODEL NUMBERS ENDING IN "S"), 36" CLEARANCE TO COMBUSTIBLE BUILDING MATERIALS IS REQUIRED

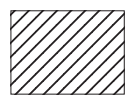
**When non-combustible building materials contact the body of the oven, the clearances to combustibles are transferred to those non-combustibles.*

The following clearance information applies to all Wood Stone Mountain Series(non-stucco) Ovens

Any facade materials above and 6" to either side of the doorway of the oven, must be **NON-COMBUSTIBLE**.



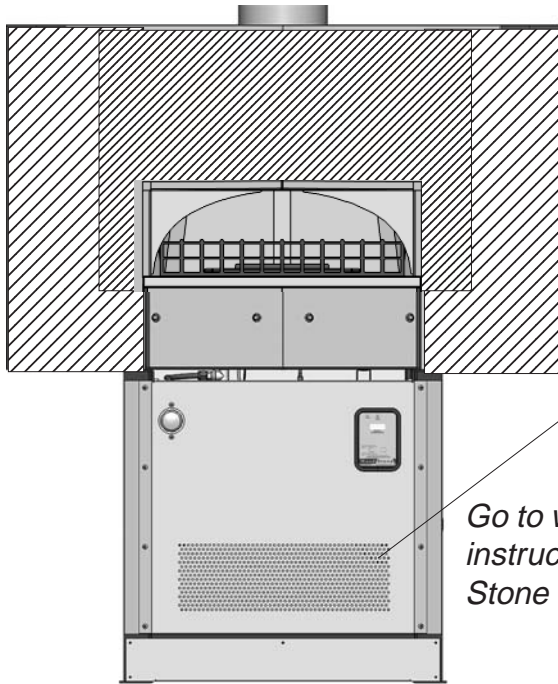
==== Combustible Building Material

 Hatched area represents area above and 6" to either side of the oven doorway.

FACADE DETAILS

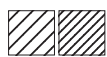
Wood Stone Mountain Series (MS) ovens carry an NSF/ANSI Standard 4 component listing. This means that the surfaces of the oven which are meant to be left exposed after the facade has been put in place, have been evaluated from the standpoint of sanitation and food safety and found to comply with NSF/ANSI Standard 4. To operate the oven in accordance with NSF/ANSI Standard 4, only pizza and bread products may be cooked directly on the floor of the oven. Other types of food may be cooked on or in pans, or other suitable containers to prevent spillage onto the oven deck.


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



Removeable 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 at the front of the oven.

Go to www.woodstone-corp.com for detailed instructions for constructing a facade around a Wood Stone Oven.

 Hatched areas shall not be exposed after installation of facade.

 Any facade above and/or within 6" to either side of the doorway must be constructed of non-combustible building materials

GAS

The Wood Stone Gas ovens are equipped with a 3/4" NPT gas connection located at the rear left of the oven. **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!**

SV-2 is the gas control valve that operates the interior radiant burner. SV-2 is located under the oven to the rear left.

The manifold pressure test port for the radiant burner is a 1/8" NPT plugged tapping located at the base of the T-junction between the SV-2 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 be sure to test the burner manifold pressure and adjust the valve as necessary to achieve the specified pressure. **Note: The gas valve is shipped in the 'on' position.**

Factory specified individual burner manifold pressures for RFG models equipped to burn Natural Gas.

MODEL	SV-2
WS-MS-4-RFG-NG	5"
WS-MS-5-RFG-NG	4.75"
WS-MS-6-RFG-NG	4.75"
WS-MS-7-RFG-NG	4.6"

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

MODEL	SV-2
WS-MS 4-RFG-LP	7"
WS-MS-5-RFG-LP	8"
WS-MS-6-RFG-LP	8"
WS-MS-7-RFG-LP	9.5"

**Hourly Natural Gas BTU input rates
for Wood Stone RFG gas ovens**

Model	Hourly BTU Input Rate
WS-MS-4-RFG-NG	68,000
WS-MS-5-RFG-NG	105,000
WS-MS-6-RFG-NG	105,000
WS-MS-7-RFG-NG	123,000

**Hourly Propane BTU input rates
for Wood Stone RFG gas ovens**

Model	Hourly BTU input Rate
WS-MS-4-RFG-LP	60,000
WS-MS-5-RFG-LP	94,000
WS-MS-6-RFG-LP	94,000
WS-MS-7-RFG-LP	142,000

Wood Stone recommends that the appliance's individual shutoff valve (supplied by others) be left readily accessible. Wood Stone also recommends that inspection and maintenance of the burner and gas piping connections of this appliance be performed at regularly scheduled intervals and only by professional gas appliance service agencies.

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, The Natural Gas installation Code CAN/CGA-B149.1 or the Propane Installation Code, CAN/CGA-B149.2, 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).

ELECTRICAL

Have a licensed electrician wire the transformer terminal strip with a 120V, 15 amp lead. Electrical diagrams are located directly to the right, behind the removable service/intake panel of the appliance as well as inside the control box and also on page 25 of this manual. See page 14 of this manual for location of the transformer housing.

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.

OVEN VENTING

The following are the manufacturer's recommendations for venting the Wood Stone MS (Mountain Series) RFG-W ovens. *It is never appropriate to use "B vent" in any part of an exhaust system connected to a Wood Stone oven.* All ducting material must be manufactured to the specifications of a grease duct and a listed building heating appliance chimney. This is a wood/gas combination oven and must be vented as a solid-fuel piece of equipment. Due to the possibility of sparks entering the system, exhaust systems serving solid fuel equipment must be vented separately from other non-solid fuel equipment. Submit your venting plans to your local authorities before proceeding with your installation, as there may be additional requirements in your area.

There are three options:

1. Direct connection.

A listed building heating appliance chimney, also listed as a grease duct as described in NFPA 96, connected directly to the oven flue collar and provided with a power ventilator listed for restaurant appliance exhaust. The power ventilator should be rated for a minimum of 450 degrees F. Wood Stone does not recommend the use of an in-line fan. A single wall chimney/duct connector may be used to connect the oven to a listed building heating appliance chimney also listed as a grease duct. The chimney /duct connector should be a minimum .044 inch stainless steel or 16 ga. mild steel (0.055 inch) and must maintain a minimum of 18 inches to combustibles.

A static pressure of negative 0.14 inches water column is necessary at the oven flue collar to ensure that flue gas temperatures do not exceed 450 degrees Fahrenheit at the fan inlet. The CFM required to attain this static pressure will depend on the configuration of your particular installation but will probably be between 500 and 700 CFM. Wood Stone provides a port in the flue collar of the oven for insertion of a magnehelic gauge so the installer can monitor the draft to ensure proper operation of the venting system. **NOTE: Double door ovens (Models ending in DD), have two flue collars, both must be connected and a static pressure of negative 0.14 inches must be maintained at each collar.**

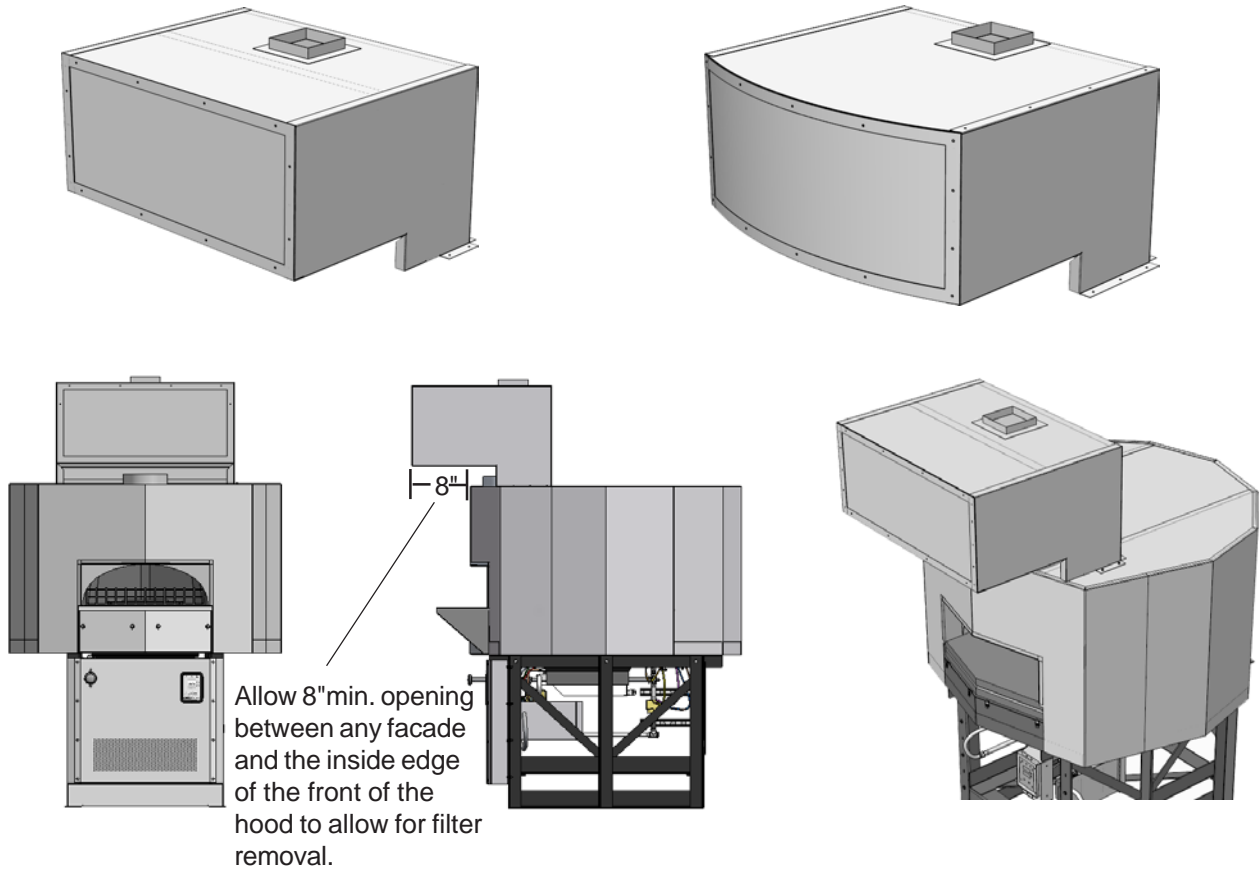
When using a direct connection as described above, the duct must be attached to the oven flue collar with a full perimeter weld or a listed connector approved for this application.

Oven Model Series	Flue Collar
Mt. Chuckanut WS-MS-4	8 inch I.D.
Mt. Adams WS-MS-5	10 inch I.D.
Mt. Baker WS-MS-6	10 inch I.D.
Mt Rainier WS-MS-7	10 inch I.D.
Sumas Mtn. WS-MS-8	10 inch I.D.

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 ovens. See specification sheet on ventilators for Wood Stone ovens.

Continued on next page.



Views of installation of a Wood Stone hood. Note that the notch of the hood is even with the front edge of the oven. Hood may be moved forward slightly if needed. The hood should be installed in accordance with the hood manufacturer's instructions, and with NFPA 96 and/or the applicable local and national codes.

- Exhaust from Wood Stone Wood/Gas combination ovens may be combined with exhaust from other solid-fuel equipment **ONLY**, provided that duct meets the requirements listed in #1.

It is never appropriate to use "B vent" in any part of an exhaust system connected to a Wood Stone oven. All ducting material must be manufactured to the specifications of a grease duct. Due to the possibility of sparks entering the duct, exhaust systems serving solid-fuel equipment **SHOULD NOT** be combined with exhaust systems serving other (non-solid-fuel) equipment.

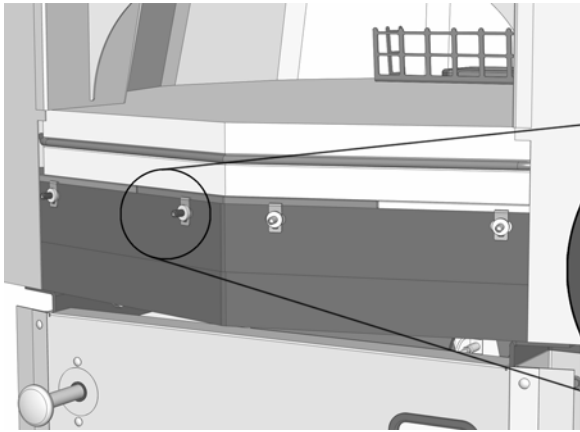
VERY IMPORTANT!

WOOD STONE RECOMMENDS THAT YOU SUBMIT YOUR VENTING PLANS TO LOCAL CODE AUTHORITIES BEFORE PROCEEDING WITH INSTALLATION.

ASSEMBLY

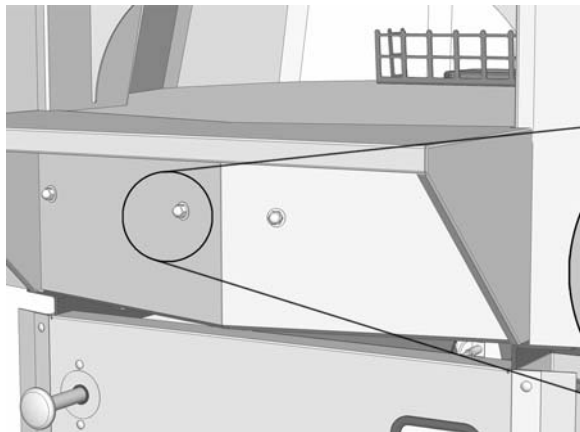
1. Mount the oven mantle (if provided) using the hardware provided on page 13).
2. Mount the stainless steel toe kick to the front of the oven stand, near the floor using the hardware provided (See figure on page 14). If your oven was shipped with a lower facade extension there is no toe kick required.
3. Mount the service/intake panel to the brackets on the front of the stand, directly below the doorway, using the hardware provided (See figure on page 14, if your oven was shipped with the optional facade extensions, see page 15).
 - a. Do not obstruct the flow of combustion and ventilation air between the toe kick and the bottom of the service/intake panel.
 - b. This panel is the only access for servicing the gas and electrical components of the oven so it must be left accessible and removable.
4. The following applies to stucco finish ovens only (Models ending with S):
 - a. Once the oven has been set in place, cover wire mesh and metal lathing with no less than one inch of stucco (see page 16 for diagram and stucco formulae).

Whether mounting a stainless mantle or a bracket for a granite mantle, the initial steps are the same.



1. Begin by installing the threaded studs into the clip nuts below the oven doorway (3 or 4 turns is sufficient).

2. Next, place two spacer washers on each stud.

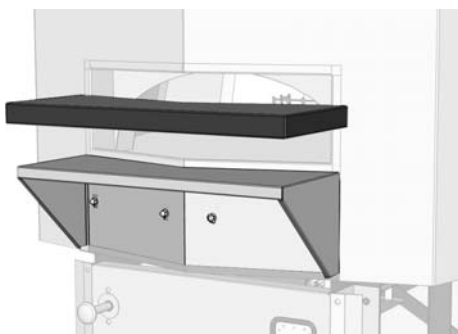


3. Position the mantle (or bracket) on the oven, making sure that the rear flange rests on the floor of the oven (you may need an extra pair of hands at this point).

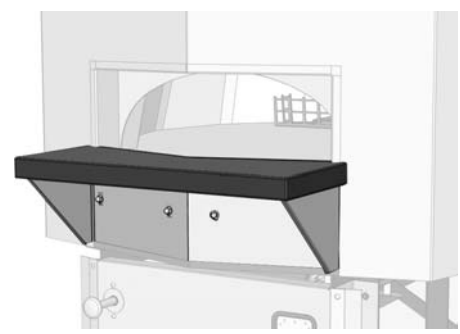
4. Lastly, place one final washer (stainless steel) and a cap nut on each stud. Tighten the cap nuts so that the mantle is securely held in place.

5. 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 compound.

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

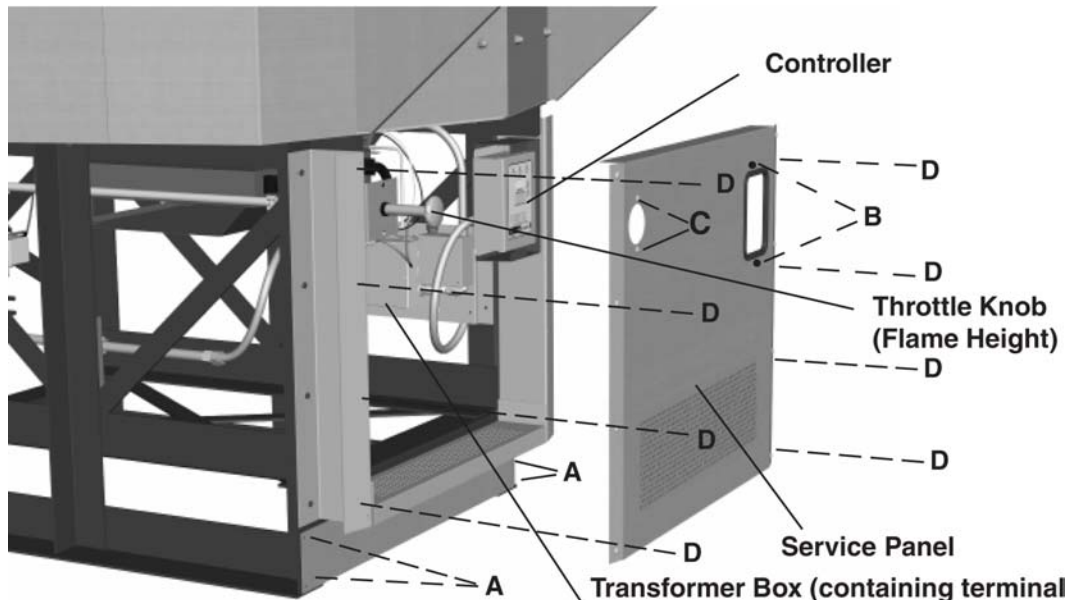


Put the stone in place and apply light pressure to seat it properly. Make sure that the angle in the granite lines up with the angle in the bracket. Allow the adhesive to set for several hours before filling any gap between the stone slab and the metal bracket with the silicone compound (provided). Clean up any adhesive and/or silicone before it dries!



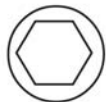
ASSEMBLY

Standard Front Panel and Toe Kick



Transformer Box (containing terminal strip for incoming power supply).

NOTE: Have a licensed electrician make the electrical connection here.



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



C - Phillips head #10 screw - Attaches service panel to throttle knob bracket. 2 total.



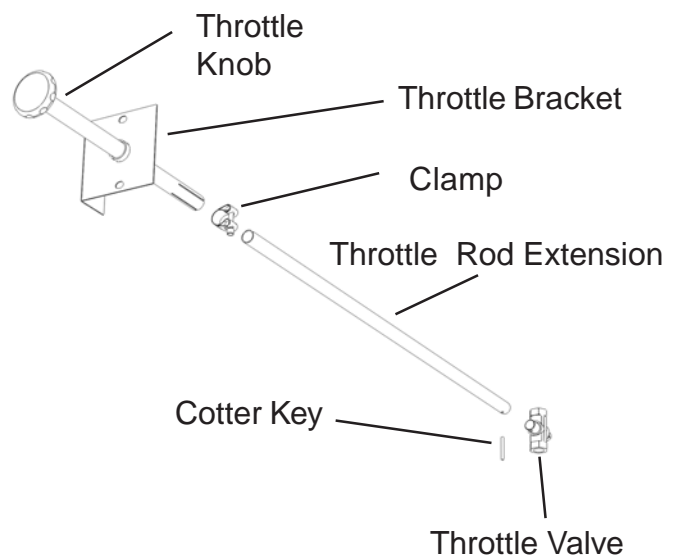
B - Phillips head 1/4-20 screw - Attaches service panel to controller bracket. 2 total.



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

View of Throttle Assembly

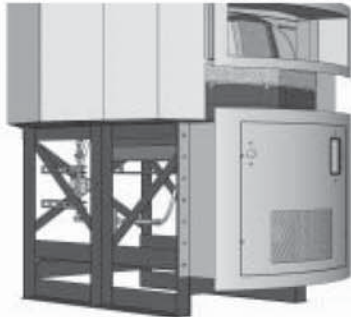
The throttle knob position can be adjusted inward or outward by loosening the clamp and sliding the throttle knob assembly to the desired position. Be sure to retighten the clamp once the throttle knob is in the desired position.



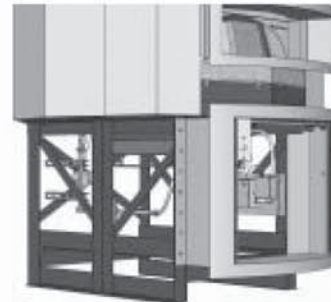
Wood Stone

MOUNTING INSTRUCTIONS

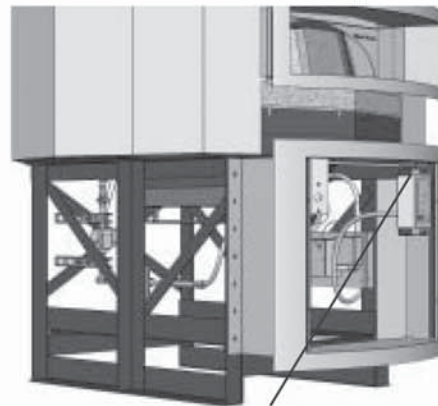
Lower extension, throttle rod and controller.



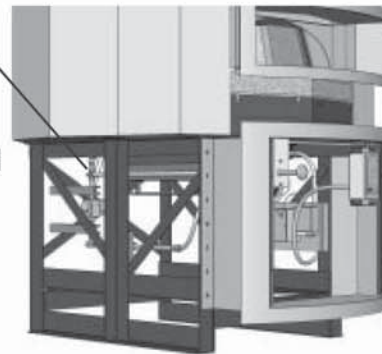
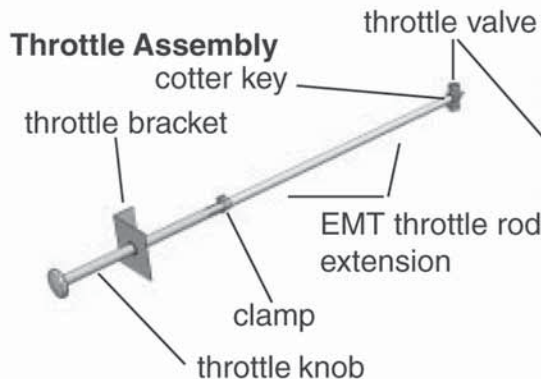
1. After the oven has been leveled, remove the throttle rod assembly which has been attached to the inside of the stand for shipping. Then position the lower extension assembly onto the front of the oven. It will rest on the guides that are welded to the oven legs. Attach the assembly to the oven legs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



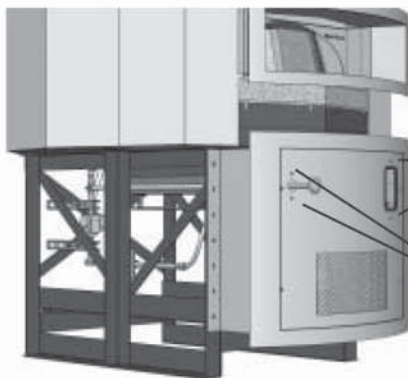
2. Remove the access panel.



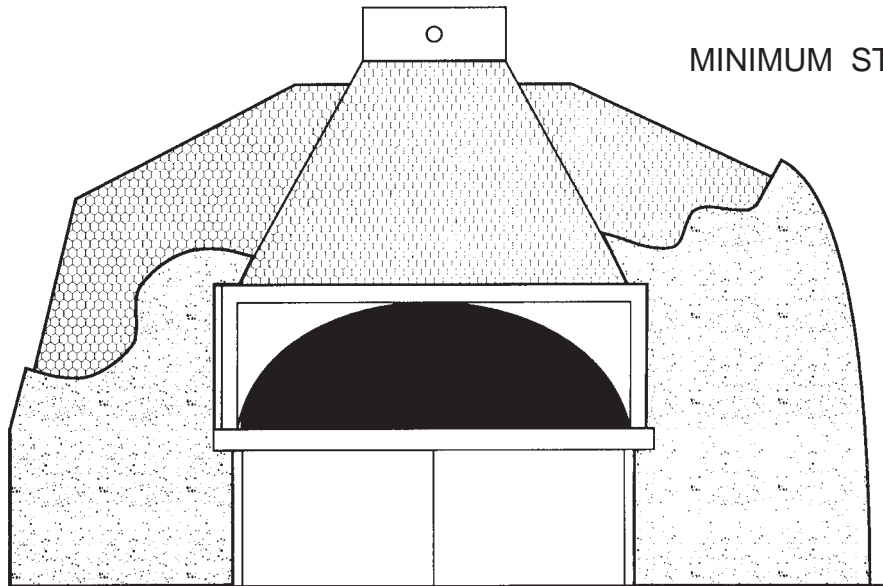
3. Attach the controller to the mounting bracket on the extension using 1/4-20 bolts.



4. Remove the throttle knob from the throttle assembly. Attach the EMT throttle rod extension to the throttle valve using the cotter key. Pass the throttle rod through the throttle bracket (already attached) and attach it to the EMT throttle rod extension using the clamp.



5. Reinstall the front panel. Secure the controller with a 1/4-20 screw at the top and bottom. Use 2 #10 SS sheetmetal screws to secure the front panel to the throttle bracket.

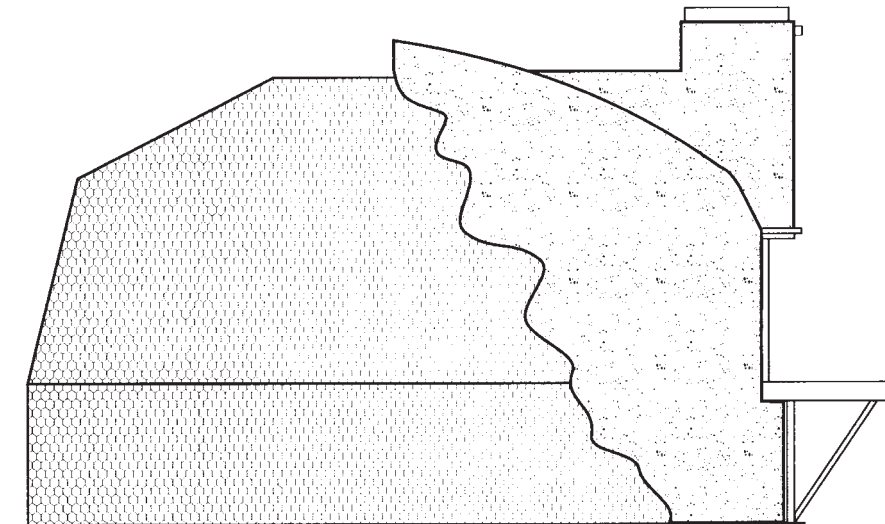


MINIMUM STUCCO APPLICATION IS 1"

TRADITIONAL
STUCCO MIX
1 part masonry cement
1 part regular cement
5 parts sand

Front View

NOT TO SCALE



STUCCO PREMIX IS
PROBABLY AVAILABLE
AT YOUR LOCAL
LUMBER YARD
OR BUILDING SUPPLY
1 part premix
2 parts sand

Side View

NOT TO SCALE

This figure depicts the application of stucco on a Wood Stone oven. Use no less than one inch of stucco coating to cover all exposed metal lathing on the oven.

INITIAL OVEN STARTUP

FIRST DAY

1. Make sure main gas supply is on (valve parallel with gas line).
2. Make sure the switch on the Honeywell control gas valve is in the ON position.
3. **Remove the night door(s). Push ON/OFF button on controller.** It may take a while for the gas to purge all the air from the gas lines.
4. Allow oven to operate with the radiant flame at its lowest setting for 1 hour.
5. After one hour, raise dome flame to 25% (~6 inch flame), hold this setting for 4 hours.
6. After 4 hours @ 25% flame, raise to 50% flame and hold for at least another 4 hours.
The oven can be left at this setting all night.

SECOND DAY

1. Turn the radiant flame to 75% height.
The floor temperature should reach 500 degrees in about an hour. The oven is now ready for cooking, go to it!!

General Daily Oven Operation

END OF THE DAY

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

BEGINNING OF THE DAY

1. Remove the night door(s).
2. Push ON/OFF button and turn the radiant flame to its highest setting. *Oven should stabilize at your desired temperature in 60 to 90 minutes.*

CLEANING THE OVEN

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

NEVER PLACE ANYTHING IN OR ABOVE THE RADIANT FLAME

HOW TO READ FLOOR TEMPERATURE

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

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

Never run the oven with the night door(s) in place.

OVEN OPERATION

IMPORTANT: *If at any time you feel that the burner is 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.*

This oven is equipped for the burning of solid fuel (wood). See following page for information on using wood in the oven.

See page 20 for an illustration of the oven controller.

1. DAILY STARTUP

Remove the Night Door(s).

Press the ON/OFF button to start the oven. The Radiant Flame will ignite.

POWER LIGHT: indicates the system is energized.

DOME FLAME LIGHT: indicates the pilot flame for the radiant burner is lit.

2. TURNING OFF THE OVEN

Push the ON/OFF button on the controller to turn the oven off.

The burner will go out and the digital readout will go blank

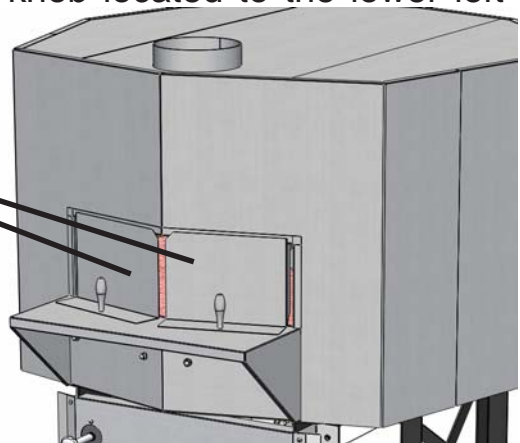
Always wait 5 minutes before relighting the oven.

3. ADJUSTING THE RADIANT (dome) FLAME

To adjust the radiant flame: The radiant flame is always on (when oven is operating) and can be adjusted to any flame intensity between its highest and lowest setting. Simply turn the knob located to the lower left of the doorway, beneath the mantle.

Night Doors

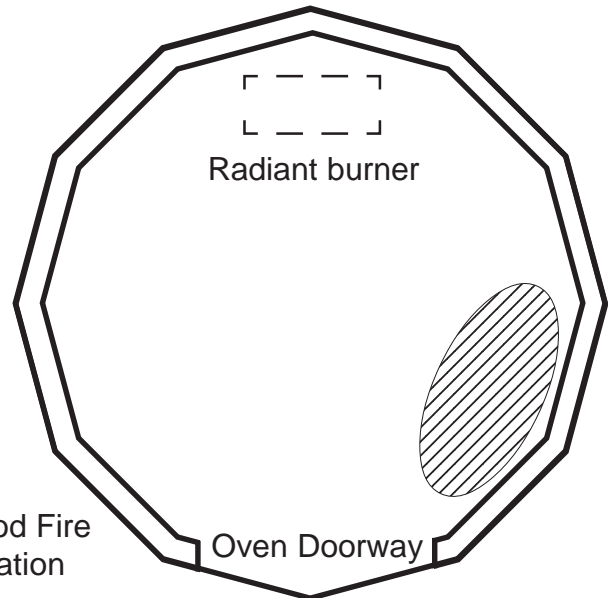
NIGHT DOORS: The door(s) are used for nighttime heat retention. **NEVER operate the oven with door(s) in place.**



When burning wood in a Wood Stone RFG-IR-W, (GGW) or RFGW model oven, the fire should be placed to one side of the oven 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 oven temperature exceeds 750 degrees F, you are over firing 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, move debris only toward the oven doorway and dispose of safely. See the [Fuelwood Facts](#) page at the end of this manual for more information on burning wood.

 Wood Fire Location



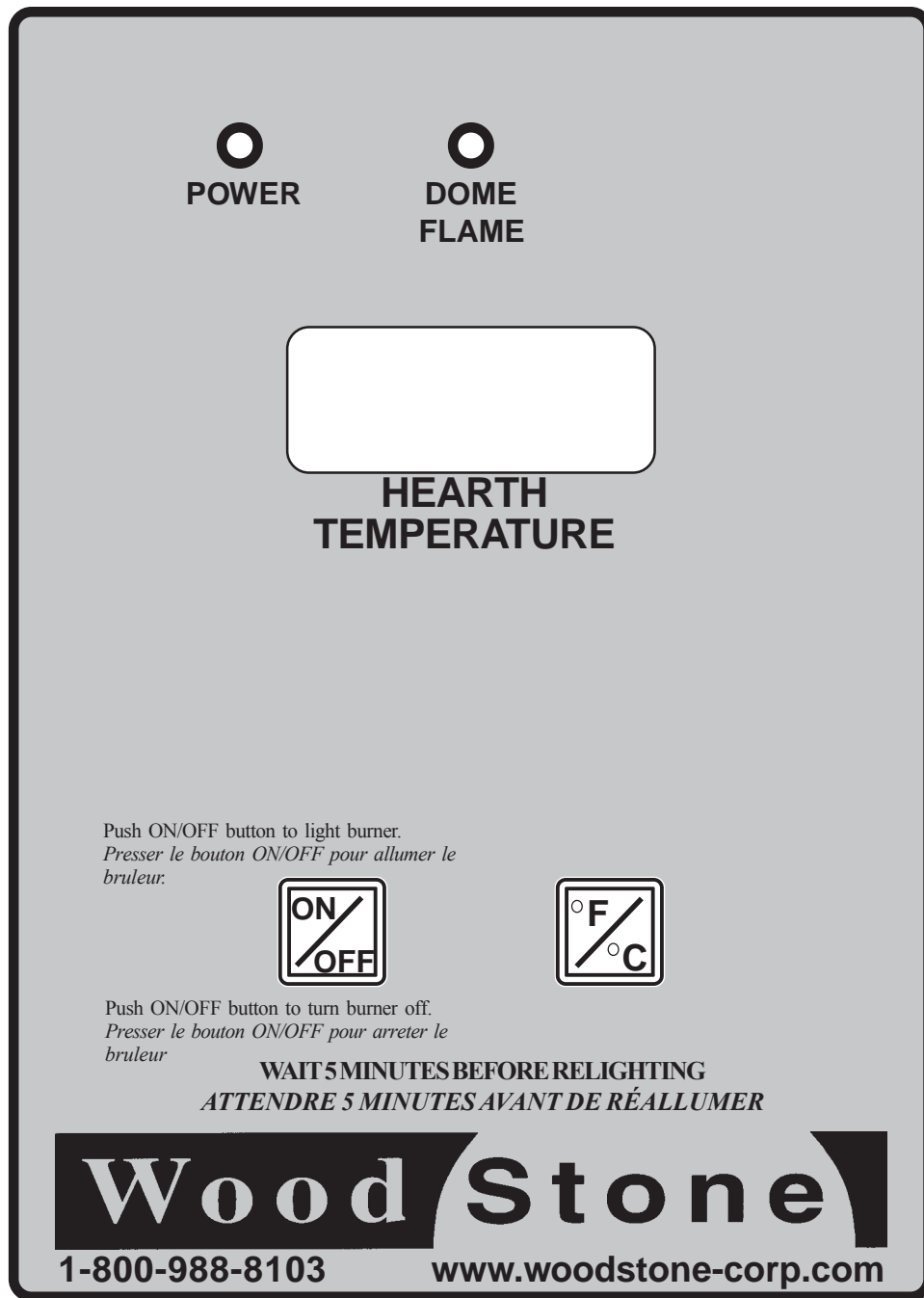
DO NOT USE THE RADIANT BURNER TO IGNITE WOOD OR SUPPORT THE WOOD FIRE.

Wood should be stored and handled in accordance with the recommendations outlined in section 11 of NFPA96.

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. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. They should be retained 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 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.



This figure shows the face of the RFG gas oven controller.

DAILY MAINTENANCE:**Oven Interior**

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

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

Oven Exterior

All 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.

ALSO

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. IF BURNING WOOD IN THE OVEN, THE WOOD FIRE MUST BE KEPT AWAY FROM THE BURNER. Locate the wood fire at the 4 or 8 O'clock position as shown earlier in this manual.

Burner problems resulting from debris may not be covered by the oven Warranty.

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 degrees Fahrenheit, you may notice a buildup of soot 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.

THERMAL CLEANING

Gas-fired Oven If a Wood Stone gas-fired oven is operated at low temperatures (below 400 degrees Fahrenheit), 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 degrees Fahrenheit, lower the flame slightly so as to maintain the oven floor temperature near 600 degrees for about an hour. Once the oven dome appears clean, allow the oven to return to normal operating temperatures and continue normal operation.

IMPORTANT SAFETY CONSIDERATIONS

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

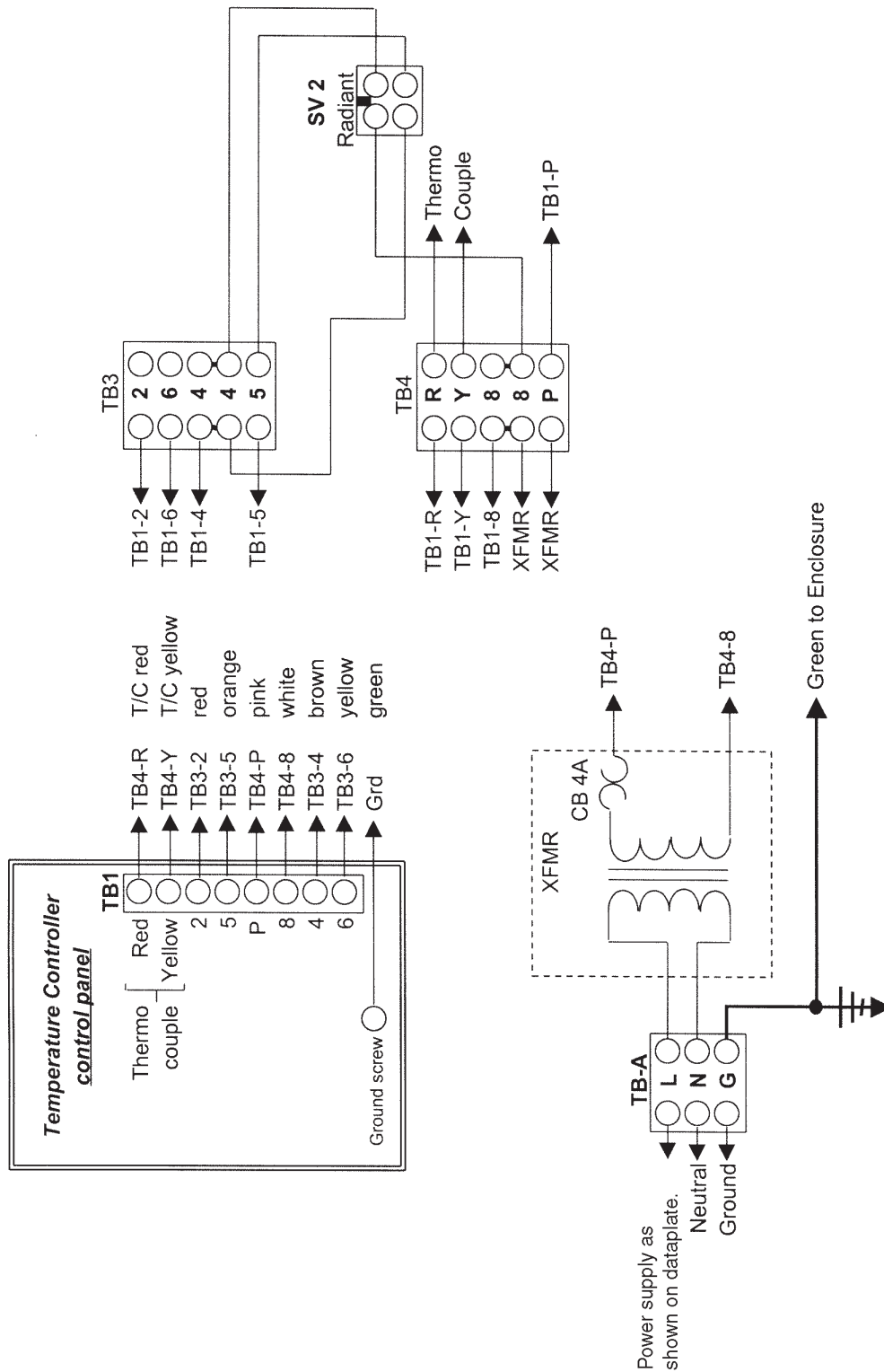
When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool oven flue of a slow-burning fire. As a result, creosote residue accumulates in the duct. When ignited, this creosote makes an 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.

Quick Troubleshooting Guide

Problem	Solution
Controller will not turn on.	1. Incoming power to oven turned off. Check circuit breaker for circuit supplying the oven. Check that any wall switches external to the oven that control oven power are turned on. Check that any interlocks external to the oven are turned on. and that exhaust fan is on. 2. If control still does not turn on, please contact Wood Stone for assistance.
Radiant flame does not light.	1. Is gas turned on to the oven? Is gas valve turned all the way on? 2. Debris in burner. Burner may require cleaning. Contact Wood Stone for assistance. 3. Damaged igniter or gas valve. Contact Wood Stone for assistance. If the oven is being started for the first time: Has all air been bled from the gas line? Is the switch on the SV-2 valve beneath the oven in the ON position?
'Chec' display on controller.	See 'Radiant flame does not light'.

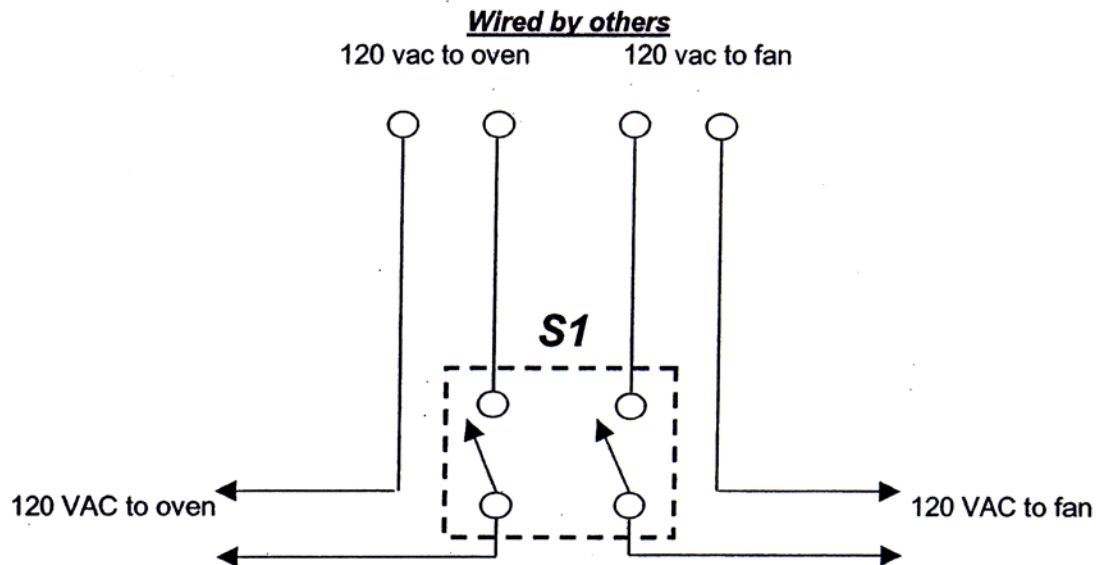
Please contact Wood Stone at 1-800-988-8103 should service be necessary, or if you have any questions about your oven. Our office hours are 8am to 4:30pm West Coast time. Follow the recorded instructions for Emergency Service if you require assistance during non-business hours. A Wood Stone technician will promptly respond to your call.

100/120 VAC RFG Electrical



Interlock of Oven Control to an Exhaust Fan

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



S1 is a double pole - single throw switch (provided by others) that interrupts incoming power to both the oven and the fan.

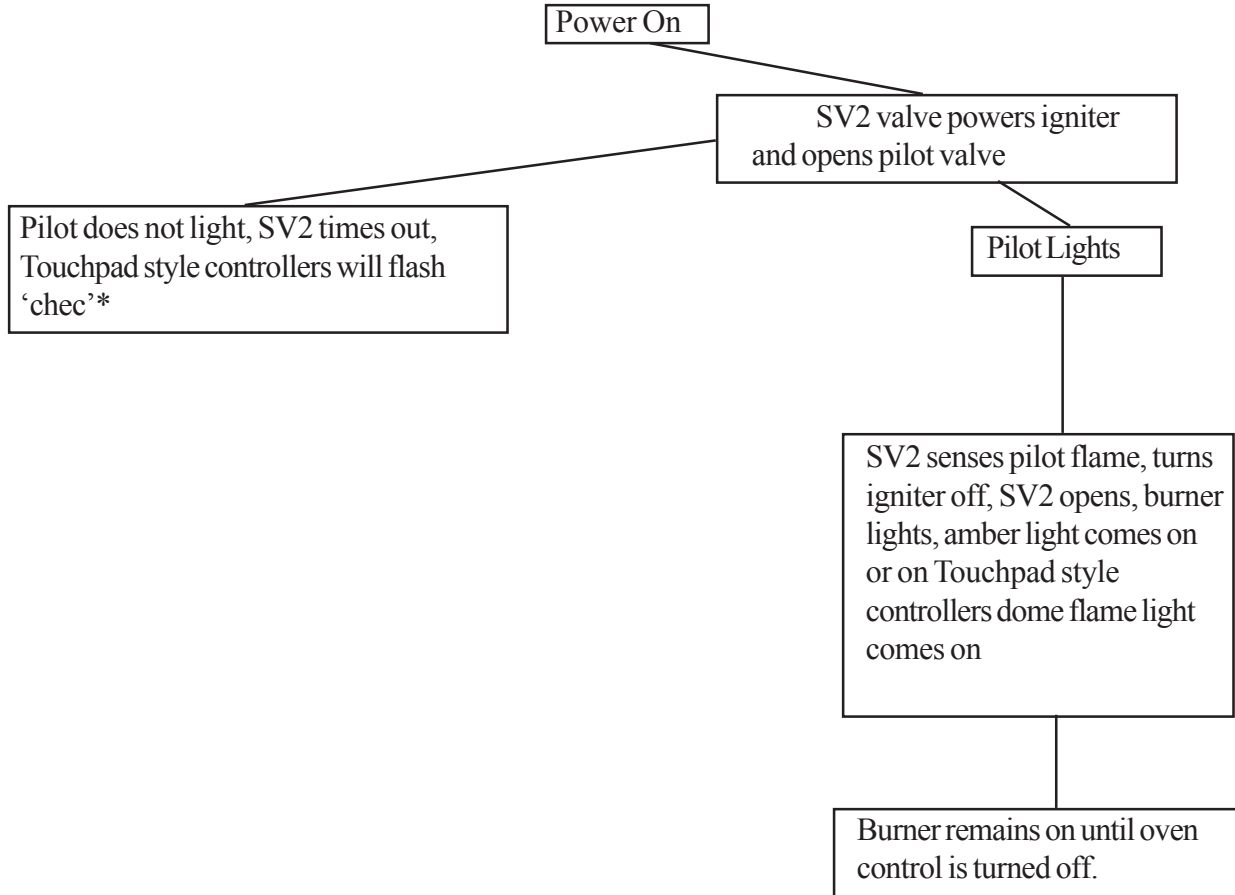
The intent is to prevent the operation of the oven in the event the fan is shut off.

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

No other connection to the oven control system is condoned by Wood Stone and may affect the oven warranty and cause damage to the oven controls.

Burner Operation Sequence

RFG Oven - All Controllers



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.

EXCLUSIONS

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

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

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

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

LIMITATIONS OF LIABILITY:

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

TO SECURE WARRANTY SERVICE:

If you claim a defect covered by this Limited Warranty, direct your claim to
Wood Stone Corporation 1801 W. Bakerview Rd. Bellingham, WA 98226 USA Attn: National Service Manager