Installation and Operation Manual





FIRE DECK SERIES - CE

Stone Hearth Oven

Gas-Fired, Gas/Wood Combination European Models

FIRE DECK 6045 WS-FD-6045-CE

FIRE DECK 8645 WS-FD-8645-CF

FIRE DECK 8645 WS-CS-REC-16-CE



WOOD STONE CORPORATION

1801 W. Bakerview Rd. Bellingham, WA 98226 USA Tel +1.360.650.1111 Fax +1.360.650.1166

www.woodstone-corp.com

DOC NO M0042.15 REVISED AUGUST 2023



TABLE OF CONTENTS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



TABLE OF CONTENTS

Fire Deck CE
Cautions & Warnings 4
FD-6045-CE Specifications 5
FD-8645-CE Specifications 6
Unloading & Moving the Oven 8
Optional Temp Caster Install 9
Placing & Installation
Venting
Facade Requirements
Gas Specifications
Electrical Specifications17
Controller
Initial Start-Up
Daily Oven Operation 20
Daily Maintenance 21
Burning Wood Safely
Managing the Oven Fire
Fuelwood Facts
Troubleshooting Guide 25
Operational Sequence
Component Schematic 27
Electrical Diagrams 28
Limited Warranty



FIRE DECK CE

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



INSTALLATION AND OPERATION MANUAL FOR WOOD STONE FIRE DECK OVENS

ORIGINAL INSTRUCTIONS

STONE HEARTH OVENS

EUROPEAN MODEL NATURAL GAS OR PROPANE FUELED

WS-FD-6045-RFG-(L, R)-IR-CE-(NG, LP)
WS-FD-8645-RFG-(LR, L, R)-IR-CE-(NG, LP)

ADDITIONAL COPIES AVAILABLE UPON REQUEST



Shown: WS-FD-8645-RFG-LR-IR-CE



This appliance is for professional use by qualified personnel. This appliance must be installed by qualified persons in accordance with the regulations in force. This appliance must be installed with sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health in the room in which it is installed. This appliance needs an unobstructed flow of fresh air for satisfactory combustion and must be installed in a suitably ventilated room in accordance with current regulations. This appliance should be serviced by qualified personnel at least every 12 months, or sooner if heavy use is expected.



CAUTIONS & WARNINGS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



WOOD STONE FIRE DECK SERIES CE GAS-FIRED OVEN OPERATING INSTRUCTIONS DO NOT THROW THIS MANUAL AWAY RETAIN THIS MANUAL FOR FUTURE REFERENCE

Additional copies of this manual at woodstone-corp.com. For prompt responses to service/maintenance questions, call your distributor.

READ ALL INSTRUCTIONS BEFORE INSTALLING AND USING THIS APPLIANCE

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

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

IMPORTANT: Do not connect this appliance to any gas network containing carbon monoxide or other toxic components.

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

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

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.



THIS APPLIANCE IS FOR PROFESSIONAL USE BY QUALIFIED PERSONNEL. THIS APPLIANCE MUST BE INSTALLED BY QUALIFIED PERSONS IN ACCORDANCE WITH THE REGULATIONS IN FORCE. THIS APPLIANCE MUST BE INSTALLED WITH SUFFICIENT VENTILATION TO PREVENT THE OCCURRENCE OF UNACCEPTABLE CONCENTRATIONS OF SUBSTANCES HARMFUL TO HEALTH IN THE ROOM IN WHICH IT IS INSTALLED. THIS APPLIANCE NEEDS AN UNOBSTRUCTED FLOW OF FRESH AIR FOR SATISFACTORY COMBUSTION AND MUST BE INSTALLED IN A SUITABLY VENTILATED ROOM IN ACCORDANCE WITH CURRENT REGULATIONS. THIS APPLIANCE SHOULD BE SERVICED BY QUALIFIED PERSONNEL AT LEAST EVERY 12 MONTHS, OR SOONER IF HEAVY USE IS EXPECTED.

This appliance is for professional use, and shall only be used by qualified people. Check appliance data plate to ensure appliance configuration is suitable for gas type and pressure, and suitable for the electrical supply. This appliance must be installed by a qualified installer. Any conversion to a different gas type must be performed by a qualified technician. Contact your distributor or Wood Stone for information on conversion kits.

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.

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

Wood Stone's gas-fired ovens have been tested and approved.



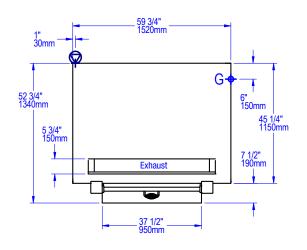


FD-6045-CE SPECIFICATIONS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



Plan view



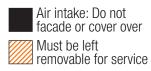
NOTES

This oven is available in a left or right side burner configuration. Gas connections will be on the same side of the oven as the radiant flame. Electrical connections are always on the left.

Shown: Right side burner.

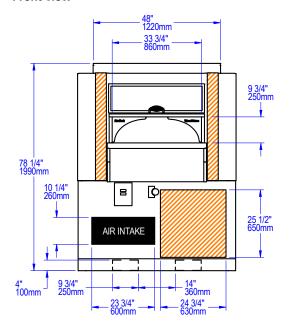
Shown: Right side burner configuration.

NOTE: Using the temporary optional casters will add 76 mm (3") to the height of the oven, for a total height of 1969 mm (77-1/2"). However, the 100 mm (3-3/4") vent shield on top can be removed temporarily if necessary.

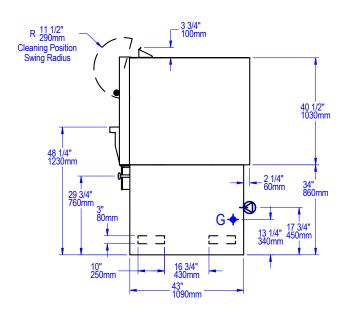


Unit Shipping Weight: 1450 Kg (3200 lbs.)

Front view



Side view



UTILITIES SPECIFICATIONS

Gas +

19mm (3/4") FBSPT female threaded gas inlet See Gas Specifications on pages 15 of this manual.

Maximum gas inlet pressure:

34 mbar (1/2 psi or 14" W.C.)

Electrical 🗣

230 VAC, 2 A, 50 Hz

All utility connections made beneath oven as shown.

Refer to data plate when installing.

Venting

The oven has been approved as a Type A appliance and may be vented using an approved exhaust hood. All exhaust system venting should meet the construction requirements of a grease duct. The oven must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction. See Venting section for further details.

Important: "-W" models must be vented as solid-fuel oven.



FD-8645-CE SPECIFICATIONS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual





Air intake: Do not facade or cover over



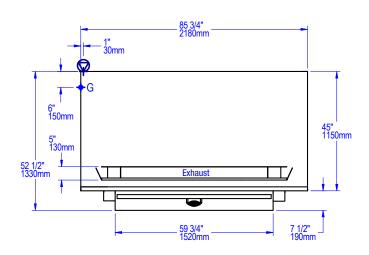
Shipping weight: 1975 Kg (4350 lbs.)

NOTES

This oven is available in a left, right or left and right side burner configurations. The utility connections will always be on the left side.

NOTE: Using the temporary optional casters will add 76 mm (3") to the height of the oven, for a total height of 2070 mm (81-1/2"). However, the 100 mm (3-3/4") vent shield on top can be removed temporarily if necessary.

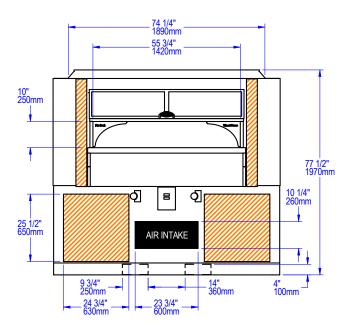
Plan view



Side view

3 1/4" R 300mm Cleaning Position Swing Radius 40 1/2" 1030mm 2" 48" 1220mm 17 3/4" 13 1/4" 250mm 17 3/4" 13 1/4" 250mm

Front view



UTILITIES SPECIFICATIONS

Gas +

19mm (3/4") FBSPT female threaded gas inlet See Gas Specifications on pages 15 of this manual.

Maximum gas inlet pressure:

34 mbar (1/2 psi or 14" W.C.)

230 VAC, 2 A, 50 Hz

All utility connections made beneath oven as shown.

Refer to data plate when installing.

Venting

The oven has been approved as a Type A appliance and may be vented using an approved exhaust hood. All exhaust system venting should meet the construction requirements of a grease duct. The oven must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction. See Venting section for further details.

Important: "-W" models must be vented as solid-fuel oven.



INSTALLATION CLEARANCES

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual





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.

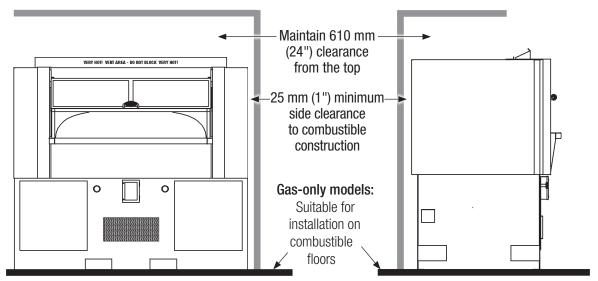
IF THIS OVEN IS NOT PROPERLY INSTALLED A FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THESE INSTALLATION INSTRUCTIONS. A MAJOR CAUSE OF OVEN RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS OVEN BE INSTALLED ONLY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

- 1. The Wood Stone Fire Deck oven must have a minimum 25 mm (1") clearance to combustibles from all sides, and 610 mm (24") clearance to combustibles from the top. If building materials will contact the oven, they must be completely non-combustible. Please note that standard Drywall (or Sheetrock) is considered a combustible. When non-combustible building materials contact the body of the oven, the respective clearances are transferred to those non-combustibles.
- 2. Any facade 152 mm (6") to either side of the oven doorway or above, must be constructed of non-combustible building materials.
- 3. For gas-only models, this oven is suitable for installation on combustible floors.
 For gas/wood combination models, this oven is suitable for installation on combustible floors. The minimum hearth extension area to be covered with a non-combustible floor surface must extend 914 mm (36") in front of and 762mm (30") to either side of the oven door opening.



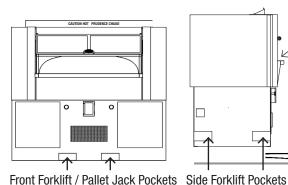
Gas/wood combination models: This oven is suitable for installation on combustible floors. The minimum hearth extension area to be covered with a non-combustible floor surface must extend 914 mm (36") in front of and 762 mm (30") to either side of the oven door opening.

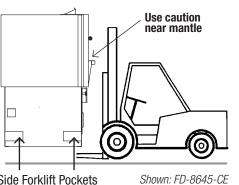


UNLOADING & MOVING THE OVEN

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual







I	AWARI Minimum R Forklift Cap	equired	
Model	Lifting from Front or Rear	Lifting from Sides	Min. Fork Length
FD-6045-CE	2722 kg /	6000 lbs	1.5m / 5'
FD-8645-CE	3629 kg / 8000 lbs	4082 kg / 9000 lbs	1.8m / 6'

USING A FORKLIFT

The Wood Stone Fire Deck 6045 weighs approximately 1450 Kg (3200 lbs), and the 8645 weighs approximately 1975 Kg (4350 lbs), and they are top-heavy.

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

There are fork pockets at the front and sides of the oven. **Note:** For the FD-8645-CE model, forklift capacity is different if lifting from the front/rear or the sides.

Once the oven is on a smooth, **flat** floor it can be rolled on its optional heavy-duty, temporary shipping Casters (details next page).

USING A PALLET JACK

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

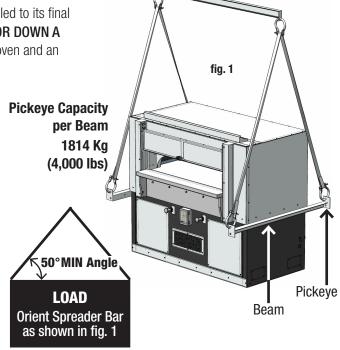
USING A CRANE

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

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

DO NOT TURN THE OVEN ON ITS SIDE!

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





OPTIONAL TEMP CASTER INSTALL

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



INSTRUCTIONS FOR INSTALLING AND REMOVING OPTIONAL OVEN CASTERS

Fire Deck ovens are VERY heavy.

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

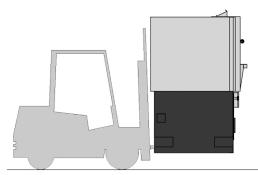
WARNING: Failure to follow these instructions may result in severe injury or death.

If you have any questions contact your local distributor.

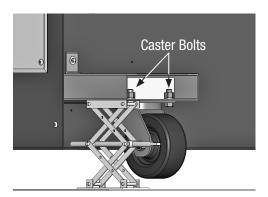
NOTE: The casters will add 76mm (3") to the total height of the oven.

The 100mm (3-3/4") Vent Shield on top can be removed temporarily if necessary.

Shipping Casters are for moving the oven only. THEY MUST BE REMOVED ONCE THE OVEN IS IN PLACE.



1 Use a forklift (or pallet jack) to raise the oven using the front or rear forklift pockets.

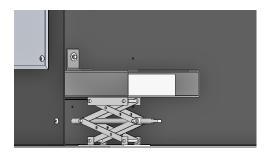


- **3** □ Once at final destination, use two scissor jacks (or pallet jack) to lift the one side of the oven by placing one jack under each caster assembly.
 - ☐ Raise the oven just high enough so the wheels clear the floor.
 - ☐ Unbolt each Caster and remove it.

Note: Casters are for moving oven only. They must be removed once the oven is in place.



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



- **4** □ Lower the oven back to the ground.
 - ☐ Remove the Self-Drilling Screw and slide the rest of the Caster Assembly out of the fork pocket.
 - ☐ Install Fork Pocket Cover.
 - ☐ Repeat steps **3** and **4** for the other side of the oven.
 - ☐ This oven is designed to be sealed to the floor upon installation using a silicone sealant acceptable to the local health official. See the Placing & Installation section of this manual.



PLACING & INSTALLATION

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



PLACING THE OVEN

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

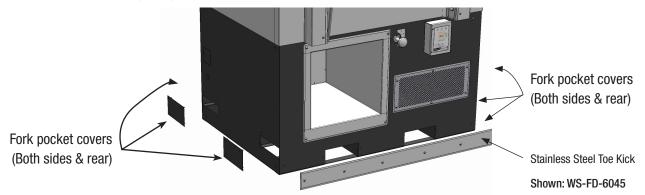
See **woodstone-corp.com** for floor loading information.

TOE KICK AND FORK POCKET COVERS

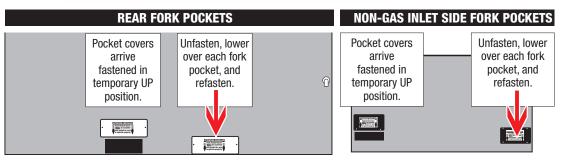
Once the oven is in place, the Toe Kick must be installed along the front, and the Fork Pockets on the sides and back of the oven using the screws provided. The area under the oven must be enclosed in order to prevent pests from entering this space and to prevent air flow issues which can detrimentally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

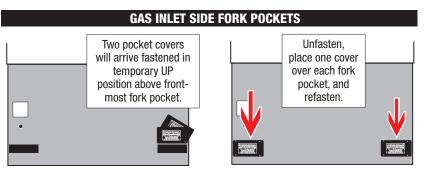
FACADE READY OVENS: If the lower front of the oven is shipped facade ready, the toe kick will not be included. Instead, fork pocket covers and pre-cut blocks of cement board to cover the pocket covers will be included.

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



FORK POCKET COVER INSTALLATION





Note: Additional Tek screws supplied in hardware kit.



VENTING

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



Wood Stone ovens should be vented in accordance with pertinent national, regional and local codes concerning such appliances; check venting plans with the authority having jurisdiction before proceeding with installation.

The above statement taking precedence, Wood Stone Corporation recommends the following options:

- This Wood Stone Fire Deck oven can be vented as a Type A appliance (with no flue connection), designed to be installed under an exhaust hood (canopy). The hood must be connected to a grease-rated duct system. The venting system must be designed and installed in accordance with all relevant codes pertaining to grease and smoke producing commercial cooking appliances. Ovens that utilize solid fuel must be vented separately from any non-solid fuel burning appliances. There may be requirements for interlocking the oven or its gas supply with the ventilation system. Check with your local code official. Airflow should be adjusted according to the requirements specified by the hood manufacturer and/or local codes.
- Model numbers containing a "-W" (other than the first letter of the model number) should be vented in accordance with codes concerning solid fuel appliances. Due to the dangers of creosote buildup and sparks entering the duct, these models should be vented separately from all other kitchen equipment or in such a manner acceptable to the authority having jurisdiction. 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.

Wood Stone recommends cleaning and inspection at least monthly on any ventilation system serving solid fuel equipment.

WOOD STONE RECOMMENDS THAT THE OPERATOR REFER TO THE EXHAUST HOOD MANUFACTURERS FOR INSPECTION, MAINTENANCE AND CLEANING. WOOD STONE RECOMMENDS CLEANING AND INSPECTION OF THE VENTILATION SYSTEM BY QUALIFIED PERSONNEL EVERY 3 MONTHS. APPLICATIONS UTILIZING SOLID FUEL IN ADDITION TO GAS WILL REQUIRE MORE FREQUENT INSPECTION AND CLEANING.

FAN TEMPERATURE RATING

The fan must be of a suitable temperature rating.

For gas-fired ovens without solid fuel, the fan must be rated for a minimum of 150 °C (300 °F) continuous.

For gas-fired ovens utilizing solid fuel, the fan must be rated for a minimum of 232 °C (450 °F) continuous.

INTERLOCK SYSTEM

There may be requirements for interlocking the oven or its gas supply with the ventilation system. Check with your local code official.



FACADE REQUIREMENTS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual

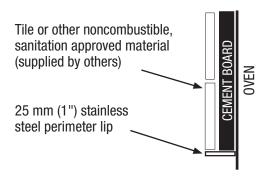


Wood Stone ovens are designed and tested to meet the requirements concerning the hygiene aspects of large kitchen appliances using gaseous fuels, so as to eliminate or minimize the risk of contagion, infection, illness or injury arising from the consumption of contaminated food. To operate the oven in accordance, 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 container to prevent spillage onto the oven deck.

ABOUT FACADE MATERIALS

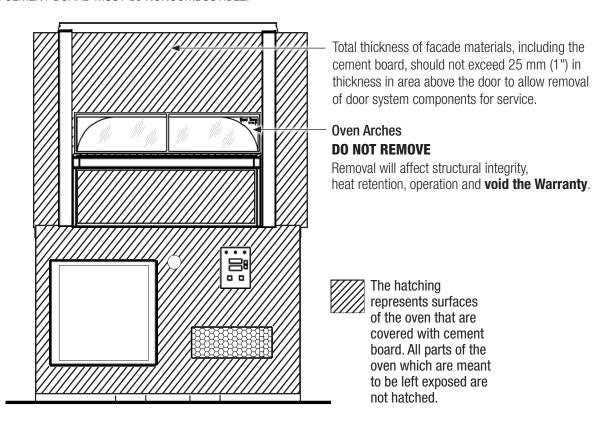
Fire Deck Series ovens can be finished with any non-combustible decorative material that can be easily affixed to the oven surface, including tile, stone or brick. It is always advisable to consult with the appropriate authority having jurisdiction before proceeding as there may be regulations regarding the suitability of various materials. Temperatures above the oven doorway can reach 90 °C (200 °F). Select materials and adhesives suitable for that temperature.

As an optioin, a 25 mm (1") wide stainless steel lip is provided around the doorway opening and around the air intake vent. This is provided so that the noncombustible, sanitation approved materials used to cover the cement board can be neatly terminated at these points.



WS-FD-6045-CE

The facade-ready front Fire Deck features cement board already installed on the front surfaces of the oven. ANY MATERIALS AFFIXED TO THE CEMENT BOARD MUST be NONCOMBUSTIBLE.





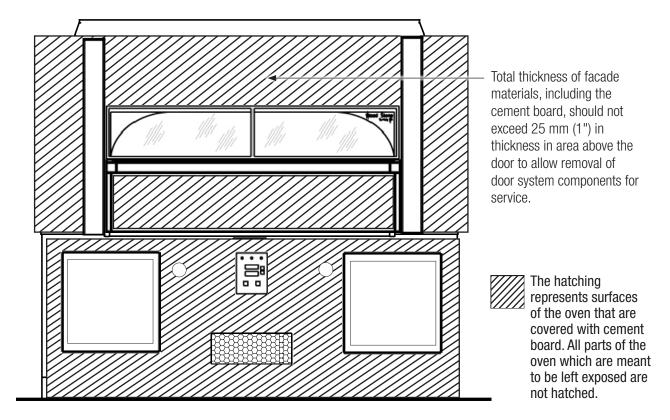
FACADE REQUIREMENTS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



WS-FD-8645-CE

The facade-ready front Fire Deck oven features cement board already installed on the front surfaces of the oven. ANY MATERIALS AFFIXED TO THE CEMENT BOARD MUST NONCOMBUSTIBLE.





GAS SPECIFICATIONS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



This is a stationary appliance, provided with a 19 mm (¾" FBSPT) threaded connection. Connect to the gas supply in accordance with local codes. Wood Stone recommends making the connection with rigid gas pipe, however, if a flexible catering hose is used, provide an approved 3/4" flexible catering supply hose not to exceed 2M in length. Gas connection is made at the rear left corner of the appliance.

The Wood Stone WS-FD-6045-CE and WS-FD-8645-CE are equipped with a 19 mm (3/4") FBSPT female thread gas connection. Have a licensed gas installer provide the hookup and test all fittings and pipe connections for leaks. Use approved gas leak detectors (soap solutions or equivalent) over and around the fittings and pipe connections to check for leaks. **DO NOT USE FLAME TO TEST FOR LEAKS!**

All gas piping up to the oven must have a minimum inside diameter of 19mm (3/4"), including all fittings and shut-off valves, which should be of the full flow type.

SV-1 is the gas control valve that operates the Underfloor Infrared (IR) Burner. The manifold pressure is checked at the outlet port on the SV-1 gas valve. SV-2 (and SV-3 / SV-4 if equipped) are the gas control valve(s) that operate the interior Radiant Burner(s). The manifold pressure is checked at the outlet port on the the individual gas valve.

The burner manifold pressures have been adjusted and tested at the factory. A variety of factors can influence these pressures, so be sure to test the individual burner manifold pressures and adjust the valves as necessary to achieve the required pressures.

Natural Gas (NG): Maximum inlet gas pressure must not exceed 34 mbar (14" W.C. or 1/2 psi)

Propane (LP): Maximum inlet gas pressure to the oven, after the external regulator (if used), must not exceed 34 mbar (14" W.C. or 1/2 psi)

GAS CONNECTION

SV-1 is the gas control valve that operates the Underfloor Infrared (IR) burner and SV-2 and SV-3 are the gas control valves that operate the interior radiant burner(s). **NOTE: Some models are only equipped with two valves.**

Wood Stone recommends that the Fire Deck be equipped with a manual, individual shut-off valve, located between the oven and the main gas supply, and that this shut-off valve (supplied by others) be left readily accessible. Wood Stone also recommends that inspection and maintenance of the burners and gas piping connections of this appliance be performed at regularly scheduled intervals and only by professional gas appliance service agencies.

GAS INLET PRESSURE

For ovens running on natural gas, an inlet pressure of 17.5 to 25 mbar (7 to 10" W.C.) is recommended to ensure optimum oven performance. Incoming gas pressure below this range will affect oven performance, the lower the pressure the greater the negative impact. If the gas supply pressure is greater than 34 mbar (14" W.C. or 1/2 psi), an external regulator, supplied by others, is REQUIRED to lower the gas pressure to the acceptable range. Issues caused by low or high gas pressure are installation issues, and will not be covered under the Warranty.

For ovens running on LP, the recommended inlet pressure to ensure optimum oven performance is 25 to 30 mbar (10 to 12" W.C.). Incoming gas pressure below this range will affect oven performance, the lower the pressure the greater the negative impact. If the gas supply pressure is greater than 34 mbar (14" W.C. or 1/2 psi), the supplied external regulator is REQUIRED to lower the gas pressure to the acceptable range. Issues caused by low or high gas pressure are installation issues, and will not be covered under the Warranty.

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

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



GAS SPECIFICATIONS: FD-6045-CE

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



NATURAL GAS (NG)

Gas Supply and Pressure

WS-FD-6045-RFG-(Lor R)-IR-CE-NG MODELS

EN 437 Gas Group		l _{2H}	l _{2L}	I _{2HS}	l _{2ELL}	I _{2EK}
Declared Input (kW)		41.39	41.39	41.39	41.39	35
Inlet Pressure	(mbar)	20	25	25	20	20/25
Declared Pressure at	SV-1	8.7	8.7	8.7	8.7	8.7
Gas Valve Outlet (mbar)	SV-2, 3	12.5	12.5	12.5	12.5	12.5

SCOPE OF APPROVALS

G20/G25.3 @ 20/25 mbar - I_{2EK(20)} - NL

G20 @ 20 mbar - I_{2H(20)} - AT, CH, CZ, DK, EE, ES, FI, GB, GR, HR, HU, IE, IT, LT, LV, NO, PT, RO, SE, SI, SK and TR

G20 @ 20 mbar - I_{2HS(20)} - HU

G20 @ 20 mbar - I_{2ELL} - DE

G20/25 @ 20/25 mbar - I_{2E+} - BE and FR

Natural Gas (NG): Maximum inlet gas pressure must not exceed 34 mbar (14" W.C. or 1/2 psi)

PROPANE (LP)

Gas Supply and Pressure

WS-FD-6045-RFG-(Lor R)-IR-CE-LP MODELS

EN 437 Gas Group		l ₃₊	I _{3B/P(30)}	I _{3B/P(50)}	I _{3P}
Declared Input (kW)		46.85	50	50	46.85
Inlet Pressure (mbar)		28-30/37/50*	30/37*	50*	30/37/50*
Declared Pressure at	SV-1	19.9	19.9	19.9	19.9
Gas Valve Outlet (mbar)	SV-2,3	19.9	19.9	19.9	19.9

SCOPE OF APPROVALS

G31 @ 37 mbar* - I_{3P(37)} - BE, CH, CZ, ES, FR, GB, GR, HR, IE, IT, LT, NL, PL, PT, SI, SK, TR

G31 @ 50 mbar* - I_{3P(50)} - AT, BE, CH, CZ, DE, ES, FR, GB, NL, SK

G30 @ 28-30 mbar, 37 mbar* - I_{3+(28-30/37)} - BE, CH, CY, CZ, ES, FR, GB, GR, IE, IT, LT, PT, SI, SK, TR

G30 @ 30 mbar - I_{3B/P(30)} - AT, BE, CY, CZ, DE, DK, EE, FR, GB, HR, HU, IT, LT, NL, NO, PL, RO, SE, SI, SK

G30 @ 50 mbar* - I_{3B/P(50)} - AT, CH, CY, CZ, DE, FR, SK

* Propane (LP): Maximum inlet gas pressure to the oven, after the external regulator (if used), must not exceed 34 mbar (14" W.C. or 1/2 psi).



GAS SPECIFICATIONS: FD-8645-CE

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



NATURAL GAS (NG)

Gas Supply and Pressure

WS-FD-8645-RFG-LR-IR-CE-NG MODELS

EN 437 Gas Group		l _{2H}	l _{2L}	I _{2HS}	l _{2ELL}	l _{2EK}
Declared Input (kW)		65.93	65.93	65.93	65.93	58
Inlet Pressure	(mbar)	20	25	25	20	20/25
Declared Pressure at	SV-1	8.7	8.7	8.7	8.7	8.7
Gas Valve Outlet (mbar)	SV-2, 3	12.5	12.5	12.5	12.5	12.5

SCOPE OF APPROVALS

G20/G25.3 @ 20/25 mbar - I_{2EK(20)} - NL

G20 @ 20 mbar - I_{2H(20)} - AT, CH, CZ, DK, EE, ES, FI, GB, GR, HR, HU, IE, IT, LT, LV, NO, PT, RO, SE, SI, SK and TR

G20 @ 20 mbar - I_{2HS(20)} - HU

G20 @ 20 mbar - I_{2ELL} - DE

G20/25 @ 20/25 mbar - I2E+ - BE and FR

Natural Gas (NG): Maximum inlet gas pressure must not exceed 34 mbar (14" W.C. or 1/2 psi)

PROPANE (LP)

Gas Supply and Pressure

WS-FD-8645-RFG-LR-IR-CE-LP MODELS

EN 437 Gas Group		l ₃₊	I _{3B/P(30)}	I _{3B/P(50)}	l _{3P}
Declared Input (kW)		65.93	70	70	65.93
Inlet Pressure (mbar) 28-30/3		28-30/37/50*	30/37*	50*	30/37/50*
Declared Pressure at	SV-1	19.9	19.9	19.9	19.9
Gas Valve Outlet (mbar)	SV-2,3	19.9	19.9	19.9	19.9

SCOPE OF APPROVALS

G31 @ 37 mbar* - I_{3P(37)} - BE, CH, CZ, ES, FR, GB, GR, HR, IE, IT, LT, NL, PL, PT, SI, SK, TR

G31 @ **50** mbar* - I_{3P(50)} - AT, BE, CH, CZ, DE, ES, FR, GB, NL, SK

G30 @ **28-30** mbar, **37** mbar* - I_{3+(28-30/37)} - BE, CH, CY, CZ, ES, FR, GB, GR, IE, IT, LT, PT, SI, SK, TR

G30 @ 30 mbar - I_{3B/P(30)} - AT, BE, CY, CZ, DE, DK, EE, FR, GB, HR, HU, IT, LT, NL, NO, PL, RO, SE, SI, SK

G30 @ 50 mbar* - I_{3B/P(50)} - AT, CH, CY, CZ, DE, FR, SK

* Propane (LP): Maximum inlet gas pressure to the oven, after the external regulator (if used), must not exceed 34 mbar (14" W.C. or 1/2 psi).



ELECTRICAL SPECIFICATIONS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



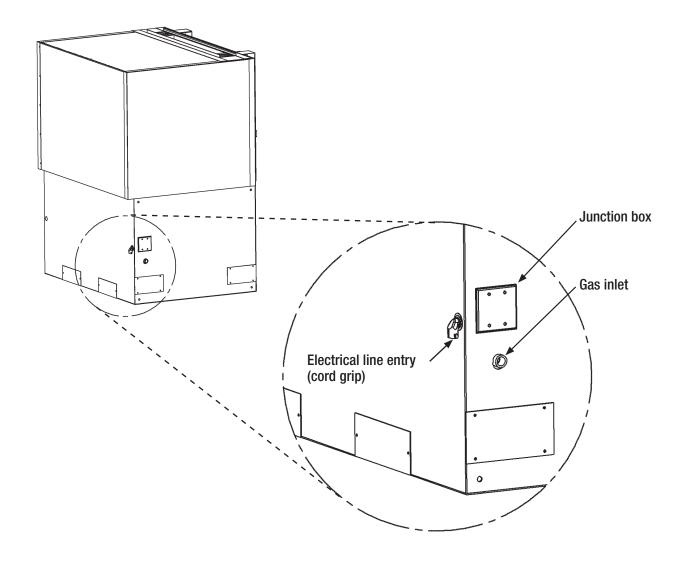
ELECTRICAL

The oven is rated at 230 VAC, 2 A, 50 Hz. The rating also appears on the data plate. Electrical diagrams are located on the junction box and also at the end of this manual.



Electrical Grounding: This appliance must be electrically grounded (earthed).

Provide Disconnect Device: This appliance must be provided with an all-pole type disconnect device in the incoming power supply so that the appliance can be completely isolated from the power supply.



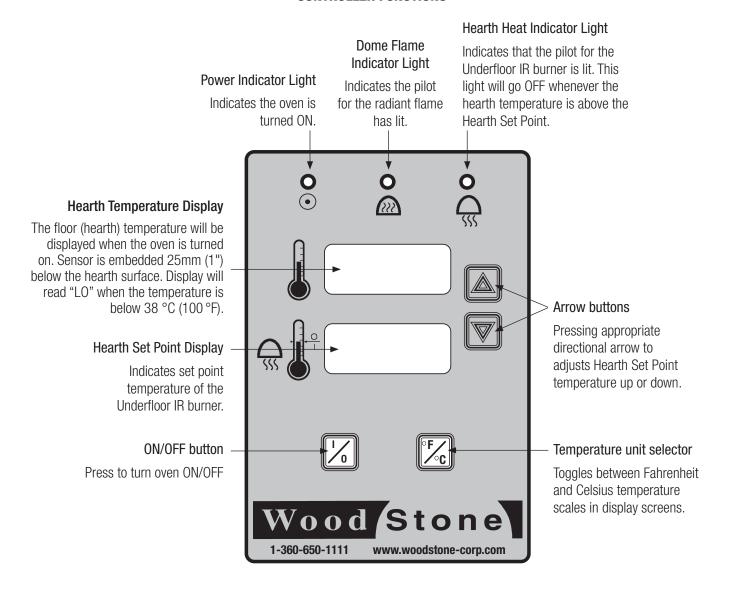


CONTROLLER

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



CONTROLLER FUNCTIONS





INITIAL START-UP

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



INITIAL OVEN START-UP

FIRST DAY

- 1. Make sure main gas supply is ON (valve parallel with gas line).
- 2. Push I/O button on controller. It may take a while for the gas to purge all the air from the gas lines.
- 3. Allow oven to operate at FACTORY SETTINGS for 1 hour (thermostat set at 38 °C (100 °F), radiant flame at its lowest setting).
- **4.** After one hour, raise radiant flame(s) to 25% (~10-13 cm / ~4-5" flame) and hold this setting for 4 hours.
- 5. After 4 hours at 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.** Set the floor temperature to 260 °C (500 °F).
- 2. Turn the radiant flame(s) to 100% height. The floor temperature should reach 260 °C (500 °F) within about an hour. The oven is now ready for cooking.

GENERAL DAILY OVEN OPERATION

END OF THE DAY

Push I/O button, all gas will go OFF, even the pilots.

BEGINNING OF THE DAY

Push I/O button, set Controller to desired floor temperature and turn the radiant flame to its highest setting. Oven should be stabilized at or above the set point within two hours.

CLEANING THE OVEN

- 1. As needed (twice per hour), use the natural fiber brush to sweep surface food debris away from the radiant burner(s) and towards the doorway, where it can be easily removed with a dough cutter or spatula.
- 2. As needed, swab the deck using an damp (not wet) rag wrapped around the brush head.



NEVER PLACE ANYTHING IN OR ABOVE THE RADIANT FLAME





The floor temperature is continuously displayed by the Controller in the upper window. 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:** The display will read "LO" when the temperature is below 38 °C (100 °F).

HOW TO ADJUST THE FLOOR TEMPERATURE (HEARTH SET POINT)



To adjust the oven's thermostatic floor temperature setting, simply press the arrow button corresponding to the direction in which you would like the setting to go. If the thermostatic Hearth Set Point is raised above the actual hearth temperature, the Underfloor IR burner should activate.

NOTE: You may notice some small "crazing" cracks in the ceramic dome and floor after a few heat-ups and cool-downs. This is normal and will not affect the longevity or performance of the oven. If cracks of 3 mm (1/8") wide or more develop, contact your local distributor for evaluation.



DAILY OVEN OPERATION

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



DETAILED DAILY OVEN OPERATION



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 shut-off valve. In the event of a power failure, no attempt should be made to operate the oven.

SEE PAGE 18 FOR AN ILLUSTRATION OF THE OVEN CONTROLLER

DAILY STARTUP

Press the I/O button to start the oven.

The radiant flame will ignite. The Underfloor Infrared (IR) burner will ignite if the actual floor temperature is below the set point temperature to which the controller is adjusted.



Green light indicates the system is energized.



Green light indicates the pilot flame for the radiant flame burner is lit.



Green light indicates that the pilot flame for the Underfloor IR burner is lit. This light will go OFF whenever the actual floor temperature is above the thermostatic Hearth Set Point (see CONTROLLER section).

TURNING OFF THE OVEN

Push the I/O button on the controller to turn the oven OFF.

Both burners will go out and the digital readout on the controller will go out.

ADJUSTING THE RADIANT (DOME) FLAME 🚳

The radiant flame(s) is (are) always ON when the oven is operating and can be adjusted to any flame intensity between its highest and lowest setting by simply turn the Flame Height Control Knob. This burner is the primary heat source for the oven. The Underfloor IR burner will act as an assist to maintain desired floor temperatures during periods of high food production.

ADJUSTING THE FLOOR HEARTH SET POINT (SYS)



To adjust the oven's thermostatic Hearth Set Point temperature, simply press the arrow button corresponding to the direction in which you would like the setting to go. If the thermostatic Hearth Set Point is raised above the actual hearth temperature, the Underfloor IR burner should activate.

Note: It is possible to program the floor's thermostatic Hearth Set Point to temperatures from 37–427 °C (100–800 °F). Once proper temperatures for your application have been established, there should be little or no need to change the floor Hearth Set Point.



DAILY MAINTENANCE

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



OVEN INTERIOR

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

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

DO NOT USE ICE OR EXCESSIVE WATER ON THE FLOOR. THIS IS TO PREVENT THERMAL SHOCKING OF THE STONE.

There are stainless steel burner guards to prevent food from falling on and thereby obstructing the gas orifices of the radiant flame. If debris gets into the radiant flame well or the flame is visibly obstructed, turn the oven OFF immediately and call for service.

OVEN EXTERIOR

All painted and 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 nonmetallic 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 controller box.

MAKE SURE THE TOP OF THE OVEN IS KEPT CLEAR AND THAT ANY GREASE CATCHES OR HOODS ARE CLEANED FREQUENTLY. DO NOT ALLOW GREASE TO ACCUMULATE ON TOP OF THE OVEN.

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.

CLEANING THE HEAT SHIELD DOOR

The glass heat shield is designed to allow for easy cleaning. It should be cleaned daily. The front of the heat shield can be cleaned in the lowered position using a soft cloth and mild soap and water solution.

To clean the back of the glass, first raise the shield to its up position. The shield can then be rotated up and over the roller blocks. which will support the shield in this position, allowing the back to be cleaned. Rotate back to the normal position for normal operation.

CAUTION: Do not use abrasive pads, which may etch or fog the glass. Avoid excessive water. Prevent dripping onto the ceramic hearth of the oven by placing sheet pans in the doorway to catch drips.

For excessive build up on glass, oven cleaner may be used on an **infrequent** basis. Take **extreme** care to prevent dripping onto the ceramic hearth by placing sheet pans in the doorway to catch drips.

COMMON REPLACEMENT PARTS (Contact your distributor or Wood Stone for parts inquiries)

CONTROL BOARD – FD AND MS MODELS	7000-0099
KEYPAD OVERLAY – RFG-IR MODELS (MS AND FD)	7000-0903
KEYPAD OVERLAY – RFG ONLY MODELS (MS AND FD)	7000-0904
GAS CONTROL VALVE (SPECIFY GAS TYPE)	70CE-0010
IGNITION MODULE	70CE-0022
IGNITER – SPARK TO PILOT – NG	70CE-0020
IGNITER – SPARK TO PILOT – LP	70CE-0020LP
IGNITER GASKET	7000-0777



BURNING WOOD SAFELY

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual

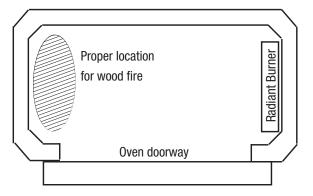


FIRE DECK MODELS LISTED FOR WOOD BURNING WILL HAVE A "-W" IN THE MODEL NUMBER.

When burning wood in a Wood Stone Fire Deck, the fire should be located on the side of the oven chamber opposite the radiant gas burner. Wood may be burned at a rate not to exceed 6.8 kg (15 lbs) per hour. Two models, "-W-IR" and "-W", have no radiant burners—wood may be burned on both sides of the oven chamber simultaneously. **DO NOT OVER FIRE.** If flames exit the doorway or exhaust opening, or if oven deck temperature exceeds 454 °C (850 °F), you are over firing.

Make every effort to keep ash and other debris out of the radiant burner well. Do not use the radiant burner as a "backstop" when shoveling ash and/or coals out of the oven. Using the oven floor brush and ash shovel, remove coals and ash through the oven doorway and dispose of safely.

USE SOLID WOOD FUEL ONLY. DO NOT USE PRODUCTS NOT SPECIFIED FOR THIS OVEN.



NOTE: Two configurations, "-W-IR" and "-W", have no radiant burners—wood may be burned on both sides of the oven chamber simultaneously.

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

IMPORTANT SAFETY CONSIDERATIONS WHEN BURNING SOLID FUEL

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.

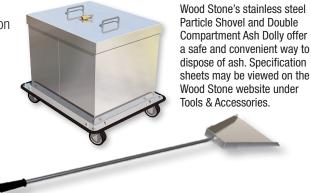
CREOSOTE - AND THE NEED FOR ITS REMOVAL

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.

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.





MANAGING THE OVEN FIRE

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



STARTING THE FIRE

Build a small kindling fire of 2.25–3 kg (5–7 lbs) of heavy, hardwood. We suggest using a fire starter (paraffin/sawdust stick) to start the fire. Begin with (3) small pieces of wood (about 25–76 mm (1–3") diameter and 356–406 mm (14–16") in length). The fire should be located on side of the oven chamber opposite the radiant gas burner. The fire may be burned at the back of the oven at the center provided the coal bed is kept at least 305 mm (1 ft.) away from the Radiant Burner. Wood may be burned at a rate not to exceed 6.8 kg (15 lbs) per hour.

Use only seasoned hardwoods with a moisture content of 20% or less. Use of soft woods, such as pine, cedar, hemlock etc., and wet or "green" wood, will cause a build-up of residue throughout the exhaust system. (See the FUELWOOD FACTS section later in this manual, or consult factory for information on what types of wood can be used for oven fuel.)

The fire should be ignited a couple of hours before the oven needs to be at cooking temperature. Once the oven is being used daily, the fire can be ignited using still glowing coals from the previous day's fire.

The oven is heated more evenly and effectively by the fire positioned on the side rather than in the rear of the oven. Adding about 2.25–3 kg (5–7 lbs) of wood per hour should bring the oven temperature up about 138 °C (100 °F) per hour (this will vary slightly depending on the type and moisture content of the wood and the size of the oven).

The floor temperature is indicated by the Digital Hearth Temperature Readout and should not exceed 454 °C (850 °F). Once the desired temperature is reached, maintain it by the addition of wood as needed. Do not toss or throw wood against back or side walls of oven—this may void the warranty. At the end of the work day, put removable Night Heat Retention Door(s) into door opening to hold heat in the oven overnight.

DO NOT OVER-FIRE THIS OVEN. IF FLAMES ARE SPILLING OUT OF THE DOOR OPENING, OR IF OVEN FLOOR TEMPERATURE EXCEEDS 454 °C (850 °F), THEN YOU ARE OVER-FIRING THE OVEN.

MANAGING THE FIRE / TEMPERATURE

These suggestions will normally produce an oven floor temperature of 260–315 °C (500–600 °F). If you need to achieve higher temperatures, use a little more wood. For lower temperatures, use a little less wood.

To maintain temperature: $1-1\frac{1}{2}$ logs with 203–305 mm (8–12") of open flame working on the coal bed.

IMPORTANT NOTES

- One pound of properly cured, heavy, hardwood produces the potential of 1.9 kW (6,500 BTU/hr).
- The temperature sensor (thermocouple) is located at the center of the floor, one inch under the surface. The thermocouple will give false readings if the fire is placed on top of it.
- If at anytime the oven is allowed to cool to room temperature for an extended period of time, this heat-up procedure will need to be repeated to avoid thermal shocking of the refractory stone which can cause excessive cracking.

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

NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR FRESHEN A FIRE IN THIS OVEN.

KEEP ALL SUCH LIQUIDS AWAY FROM THE OVEN WHILE IT IS IN USE.

DO NOT USE PRESSED WOOD PRODUCTS IN WOOD STONE EQUIPMENT AS THEY MAY DAMAGE THE CERAMICS.



FUELWOOD FACTS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



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

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

Wood Type	Heat	Lb/Cord	Lighting	Coaling	Sparks	Fragrance*
Alder	Med-Low	2500	Fair	Good	Moderate	Slight
Apple	High-Med	4400	Fair	Excellent	Few	Excellent
Ash	High	3500	Fairly Difficult	Good-Excellent	Few	Slight
Beech	High	3800	Difficult	Excellent	Few	Good
Birch (white)	Medium	3000	Easy	Good	Moderate	Slight
Cherry	Medium	2000	Fair	Excellent	Few	Excellent
Elm	High	2300	Very Difficult	Good	Very Few	Fair
Hickory	Very High	4200	Fairly Difficult	Excellent	Moderate	Excellent
Maple (red)	High-Med	3200	Fairly Difficult	Excellent	Few	Good
Maple (sugar)	High	3700	Difficult	Excellent	Few	Good
Mesquite	Very High		Very Difficult	Excellent	Many	Excellent
Oak (live)	Very High	4600	Very Difficult	Excellent	Few	Fair
Oak (red)	High	3700	Difficult	Excellent	Few	Fair
Oak (white)	Very High	4200	Fairly Difficult	Excellent	Few	Fair
Pecan	High		Fair	Good	Few	Good

^{*} Cord/Stere conversion 1 cord = 3.6 steres 1 stere = .27 cords

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

Calculate your approximate monthly, daily and hourly fuel-wood costs using the following formulas:

The cost of well-seasoned hardwood varies greatly with geographical location.

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

12 hr day

A = Cost/cord (from wood supplier)

B = kg/cord (from above table)

C = Cords/mth (from experience, or call local distributor for estimate)

When burned, a kilo of any wood releases approximately 4.2 kWh (14300 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 $1.2 \text{ m} \times 1.2 \text{ m}$ when stacked.

Cost per lb =
$$\underline{\mathbf{A}}$$

В

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



TROUBLESHOOTING GUIDE

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



PROBLEM	CAUSE/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.
	2. If Controller still does not turn on, please contact your local distributor for assistance.
Radiant flame does not light	1. Is gas turned on to the oven? Is gas shut-off valve turned all the way on?
	2. Debris in burner. Burner may require cleaning. Contact your local distributor for assistance.
	3. Damaged igniter or gas valve. Contact your local distributor for assistance.
	If the oven is being started for the first time:
	Has all air been bled from the gas line? Is the switch on the SV-2 valve in the "ON" position?
	NOTE: Valve is located beneath the oven at the rear, towards the side where the radiant burner is located.
Flame cuts out	1. Debris in burner.
	2. Oven is being run with the Night Heat Retention Door in place. Door must be removed whenever the oven is turned on.
	3. Wind blowing into the oven, or other venting issue.
Underfloor IR burner is not running. "Hearth Heat" light is OFF.	Hearth temperature is above the Hearth Set Point.
Hearth Temperature is above the Hearth Set Point.	Underfloor IR burner did not fire when the floor temperature dropped below the Hearth Set Point. Contact Wood Stone for assistance.
"Chec" display on Controller	Underfloor IR burner did not fire when the floor temperature dropped below the Hearth Set Point. Contact your local distributor for assistance.
"Chec" display on Controller	See "Radiant flame does not light" above.



OPERATIONAL SEQUENCE

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



RFG-(W) CE OVEN BURNER OPERATION SEQUENCE

ICS2 Module powers
Igniter and opens Pilot
valve.

Power ON.

Pilot does not light, ICS2 Module times out, Type 2 Controller flashes "chec". Pilot lights.

ICS2 Module senses Pilot flame, Turns OFF Igniter, Valve opens, Burner lights, Dome Flame light comes ON.

Burner remains ON until oven Controller is turned OFF.

Note: Ovens equipped with 2 Radiant burners will have an additional ignition module–ICS3, which will be powered at the same time as the ICS2 module described above. The operation sequence is identical to that of ICS2. However, as long as either radiant burner lights, the Dome Flame Indicator light will come on.

W-IR CE OVEN BURNER OPERATION SEQUENCE

Power ON.

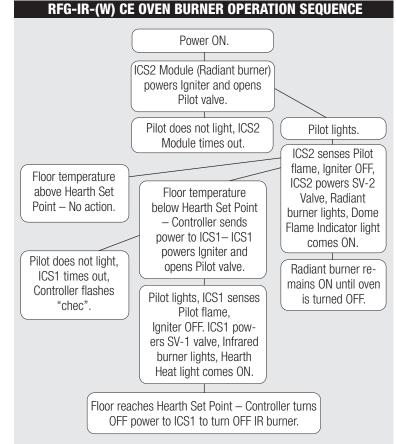
Pilot does not light, ICS1 Module times out. Type 2 Controller flashes "chec".

Pilot does not light, ICS1 Module times out, Type 2 Controller flashes "chec". Floor temperature below Hearth Set Point — Controller sends power to ICS1 Module, ICS1 powers Igniter and opens Pilot valve.

Pilot lights, ICS1 senses Pilot flame, Ignitor OFF, ICS1 powers SV-1 valve, Infrared burner lights, Hearth Heat light comes ON.

Floor reaches Hearth Set Point, Controller turns OFF power to ICS1 to turn OFF IR burner.

Note: Primary heat source for this model is the wood fire.



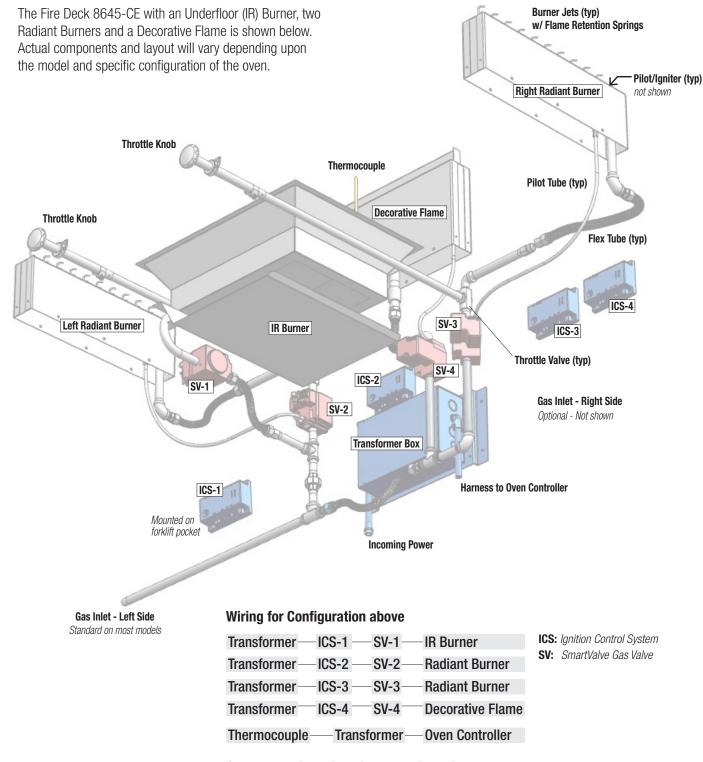
Note: Ovens equipped with 2 Radiant burners will have a third ignition module—ICS3, which will be powered at the same time as the ICS2 module described above. The operation sequence is identical to that of ICS2. However, as long as either radiant burner lights, the Dome Flame Indicator light will come ON and the Controller will power ICS1 as necessary.



COMPONENT SCHEMATIC

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual





General considerations for all configurations:

- SV-1 is reserved for the IR Burner.
- Additional Radiant Burner numbering begins on the left (facing oven) with SV-2.
- The Decorative Flame Burner is always numbered last.

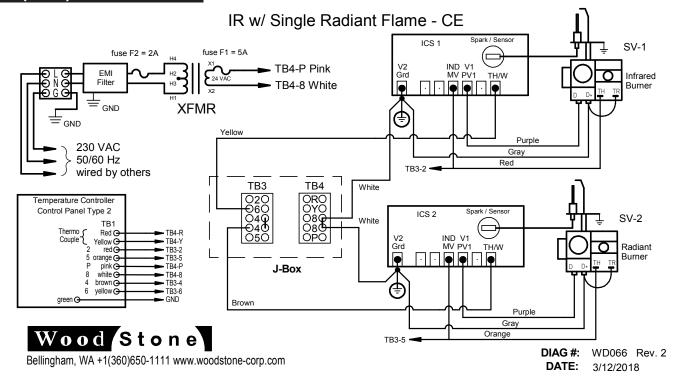


ELECTRICAL DIAGRAMS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual

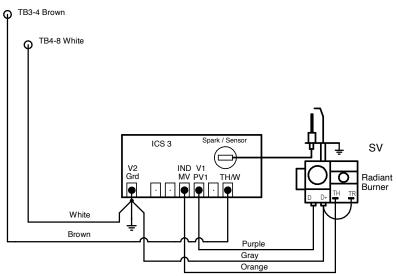


RFG-(L OR R)-IR-CE



ADD'L RFG FOR RFG-(LR)-IR-CE

+ Single RFG CE



WoodStone

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

DIAG #: WD102 Rev. 1 **DATE:** 7/12/2017



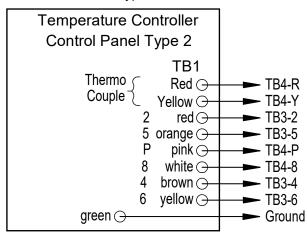
ELECTRICAL DIAGRAMS

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



TYPE 2 CONTROLLER-CE

Type 2 Controller



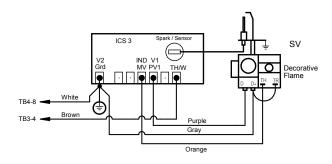
WoodStone

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

DIAG #: WD151 Rev. 0 **DATE:** 1/21/2014

DECORATIVE FLAME-CE

+ Decorative Flame CE



Wood Stone

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

DIAG #: WD124 Rev. 1 **DATE:** 3/1/2018



LIMITED WARRANTY

FD-6045-CE and FD-8645-CE Fire Deck Installation and Operation Manual



ALL WARRANTY SERVICE MUST BE PRE-APPROVED BY WOOD STONE PLEASE CONTACT YOUR LOCAL DISTRIBUTOR FIRST

Local Distributor:

EXCLUSIONS

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

- 1. In the event that the equipment is improperly installed. Proper installation is the responsibility of the installer; proper installation procedures are prescribed by the Wood Stone Installation and Operation Manual.
- 2. In the event the equipment is improperly or inadequately maintained. Proper maintenance is the responsibility of the user; proper maintenance procedures are prescribed in the Wood Stone Installation and Operation Manual. Burner problems resulting from debris or ash in the burner well will not be covered by the warranty. Call with questions regarding maintenance frequency.
- 3. In the event that the failure or malfunction of the appliance or any part thereof is caused by abnormal or improper use or is otherwise not attributable to defect in material or manufacture.
- 4. In the event that the appliance, by whatever cause, has been materially altered from the condition in which it left the factory.
- 5. In the event that the rating plate has been removed, altered or obliterated.
- 6. On parts that would be normally worn or replaced under normal conditions.
- 7. Normal cracking due to expansion and contraction stress relief in the ceramic firebox.
- 8. In wood-fired equipment configurations, in the event that pressed log products of any type have been burned in the equipment.
- 9. In coal-fired oven configurations, in the event any type of coal other than anthracite coal fuel has been used.
- 10. Damage resulting from the use of chemical cleaning products in the oven, as well as any damage from liquids or chemicals, including water, being poured or sprayed into the oven.

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

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

LIMITATIONS OF LIABILITY:

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

TO SECURE WARRANTY SERVICE:

Contact your local distributor.



WOOD STONE CORPORATION

1801 W. Bakerview Rd. Bellingham, WA 98226 USA Tel +1.360.650.1111 Fax +1.360.650.1166

www.woodstone-corp.com

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