

Installation and Operation Manual



MT. SHUKSAN

Charboilers

Solid Fuel Deep Box Charboilers

MT. SHUKSAN

WS-SFB-(34, 46, 58)-DB

WoodStone

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INSTALLATION AND OPERATION MANUAL FOR THE WOOD STONE MT. SHUKSAN CHARBROILER

**STONE-FIRED COOKING EQUIPMENT
SOLID FUEL, DEEP BOX CHARBROILER
WS-SFB-(34, 46, 58)-DB**

ADDITIONAL MANUAL COPIES AVAILABLE UPON REQUEST



Shown: SFB-34-DB



INSTALLATION AND OPERATING INSTRUCTIONS FOR THE WOOD STONE MODEL WS-SFB-DB MT. SHUKSAN CHARBROILER

RETAIN THIS MANUAL FOR FUTURE REFERENCE

Additional copies of this manual at woodstone-corp.com.

For prompt responses to service/maintenance questions, call us at @ 1-800-988-8103.

READ ALL INSTRUCTIONS BEFORE INSTALLING AND USING THIS APPLIANCE

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

WHEN THIS OVEN IS NOT PROPERLY INSTALLED, A FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THE INSTALLATION INSTRUCTIONS. 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.

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. Wood fuel should be stored in accordance with the Standard for Ventilation Control of Fire Protection of Commercial Cooking Operations, NFPA 96, and local authorities having jurisdiction.

CAUTION: Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or freshen up a fire in this oven. Keep all such liquids well away from this oven when in use. **DO NOT USE PRODUCTS NOT SPECIFIED FOR USE WITH THIS APPLIANCE. USE SOLID WOOD FUEL ONLY.**



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

CAUTIONS:

- (i) DO NOT INSTALL IN A MOBILE HOME.
- (ii) DO NOT CONNECT TO USE IN CONJUNCTION WITH ANY AIR DISTRIBUTION DUCTWORK UNLESS SPECIFICALLY APPROVED FOR SUCH INSTALLATIONS.
- (iii) DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE
- (iv) DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL.
- (v) HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.

SAVE THE INSTRUCTIONS

Wood Stone Mt. Shuksan Solid Fuel, Deep Box Charbroiler has been tested and approved by Intertek Testing Services and ETL Listed to ANSI/UL 1482, UL Subject 2162, ULC-S627-00 and ANSI/NSF Standard 4.



Intertek



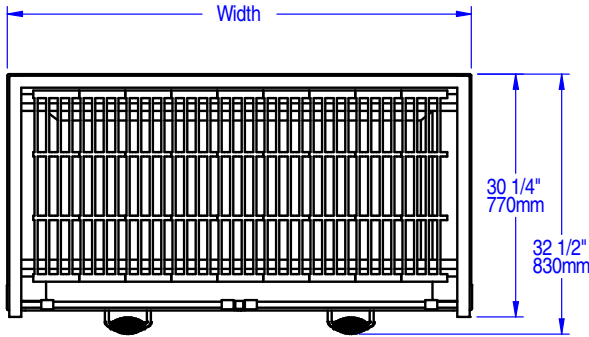
Intertek

SPECIFICATIONS

Mt. Shuksan Solid Fuel, Deep Box
Charbroiler Installation & Operation Manual

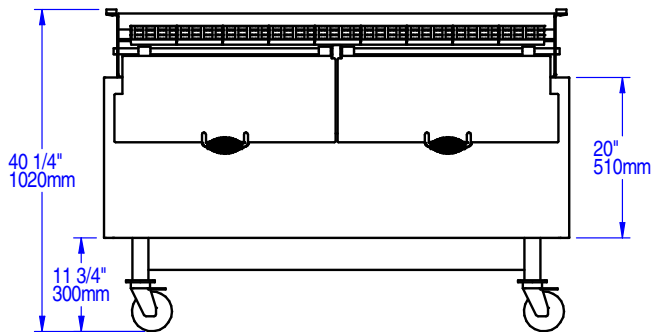


Plan view

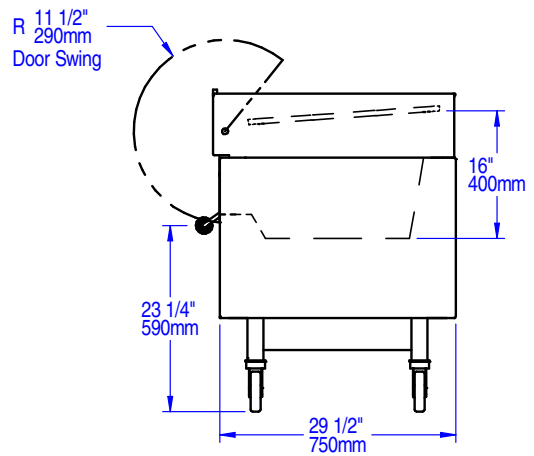


Model	Width	6x24 Grates	Shipping Weight
SFB-34-DB	34" (860mm)	5	1,100 lbs.
SFB-46-DB	46" (1170mm)	7	1,500 lbs.
SFB-58-DB	58" (1470mm)	9	1,700 lbs.

Front view



Side view



Venting: The Mt. Shuksan must be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The charbroiler must be vented as a solid fuel appliance in accordance with all relevant local and national codes, and in a manner acceptable to the authority have jurisdiction.



UNLOADING THE MOUNT SHUKSAN

Under no circumstances should manual unloading be attempted. If a receiving dock is available, a pallet jack should be sufficient to remove the crated unit from the delivery truck. The use of a forklift (2,000 lb.) is suggested when moving the unit from the delivery truck to ground level.



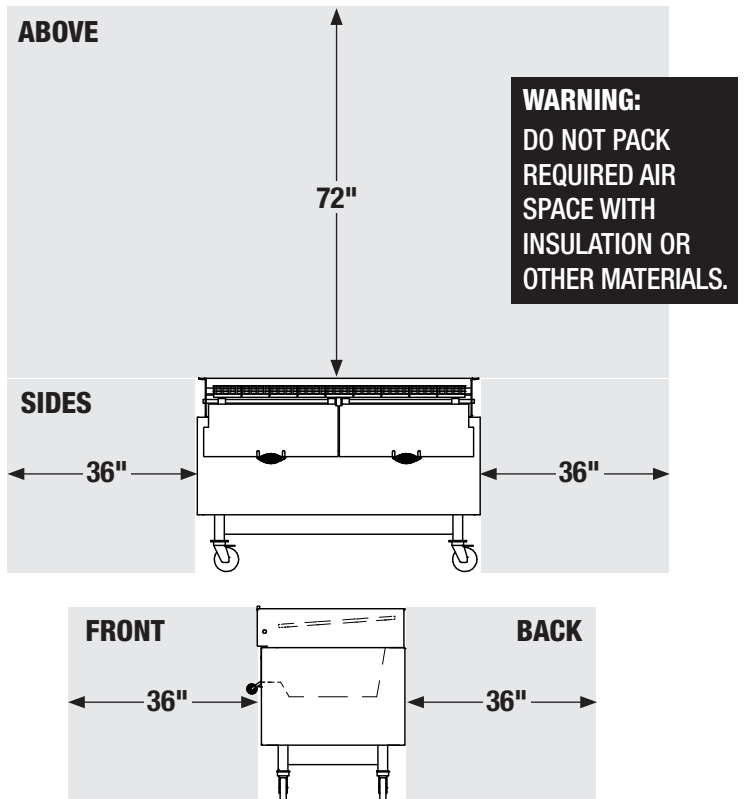
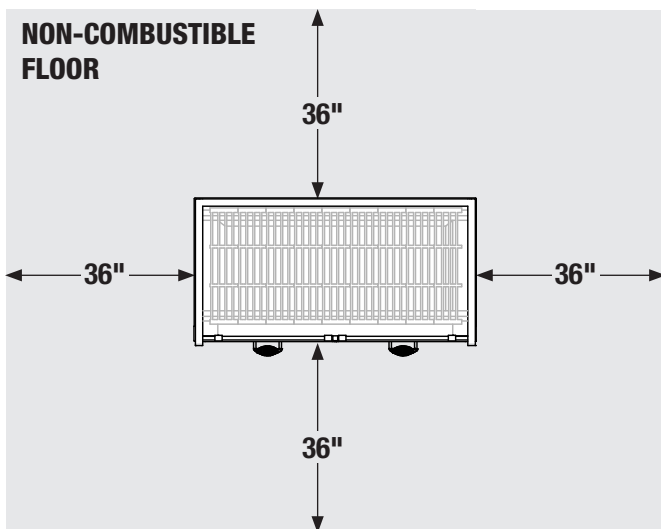
INSTALLATION CLEARANCES

Note: Unit must be installed beneath a Type 1 exhaust hood in accordance with NFPA 96. See Venting section below

Floor: For use on only on noncombustible floors (installér sur un plancher incombustible seulement). The Mt. St. Helens must be installed on a non-combustible floor extending 3 ft. in all directions from the appliance or one provided with a non-combustible covering acceptable to the authority having jurisdiction.

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

MINIMUM CLEARANCES TO COMBUSTIBLE CONSTRUCTION	SIDES, FRONT & BACK: 36" ABOVE: 72"
CLEARANCES TO NON-COMBUSTIBLE CONSTRUCTION*	0"



*Examples of non-combustible construction include: metal stud wall faced with cement board with a tile or metal finish; cement block with tile or metal finish.

VENTING

The Mt. St. Helens must be vented using a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The charbroiler must be vented as a solid fuel appliance, in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

As with all solid fuel cooking equipment and exhaust systems, **a regular inspection and cleaning schedule is needed to prevent the possibility of fire.** The frequency of inspection and cleaning will depend on hours of use and type and quality of fuelwood. Typically solid fuel installations will require cleaning and inspection at least monthly.

A fire protection system is required for safe installation of this piece of equipment. Refer to national and local codes for solid fuel cooking equipment.



THE FIRE

Make certain the ventilation system is turned on and operating properly. Start a fire in the rear section of the refractory firebox using small pieces of kindling at first and progressing to larger pieces of wood as the fire takes. As more wood is added, spread some of the coals toward the front of the firebox. After about an hour, the firebox should be full of coals and occasional addition of wood will keep showy flames licking up from the back of the firebox. The unit comes with movable grill grates. We suggest leaving one grate off and sliding that open position around to facilitate spreading the coals.

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

WOOD

Use only well seasoned hardwood to fuel the charbroiler. The wood should have a moisture content of less than 20%. For best results, pieces should be split so that the diameter does not exceed 3–5 inches. See Wood Stone's FUELWOOD FACTS section at the end of this manual.

WOOD STORAGE

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

DISPOSAL OF ASHES

Ashes should be placed in 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 the combustible materials, pending final disposal. When the ashes are disposed by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

The optional Wood Stone's Dual Compartment Ash Dolly is available through your dealer. The specification sheet may be viewed on the Wood Stone website under Tools & Accessories.



CHARBROILER CABINET

All exposed stainless surfaces of the unit should be wiped down as necessary (or daily) using an approved mild cleaning solution. Stubborn residues may be removed using a non-metallic scouring pad. When scouring stainless steel, scrub with the grain of the metal to avoid scratching the finish.

CHARBROILER GRILL

Scrub the cast iron grill grates (as necessary) with a wire brush to remove cooked on build-up. The stainless grill support rack can be removed and cleaned using hot water and an approved mild detergent.

CERAMIC FIREBOX

Remove excess ash from the firebox using the stainless shovel provided. **NEVER POUR WATER INTO THE CERAMIC FIREBOX.**

CREOSOTE: FORMATION AND NEED FOR REMOVAL

Creosote should be removed to reduce risk of fire. When wood is burned slowly, it produces tar and other organic vapors that combine with expelled moisture to form creosote. The creosote vapors condense in a relatively cool oven flue and exhaust hood of a slow burning fire. As a result, creosote residue accumulates on the flue lining and exhaust hood. When ignited, the creosote makes an extremely hot fire. The oven flue should be inspected twice monthly to determine when creosote build up has occurred. When creosote has accumulated, it should be removed to reduce risk of fire.



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

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

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

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

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

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

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

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

A = Cost/cord (from wood supplier)

B = lb/cord (from above table)

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

When burned, a pound of any wood releases approximately 6500 BTU/hr, so it is better to compare the price of wood by the pound rather than by the cord. A full cord of wood measures 4' x 4' x 8' when stacked.

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

Do not use pressed wood products in Wood Stone food service equipment, they may damage the ceramics.



ALL WARRANTY SERVICE MUST BE PRE-APPROVED BY WOOD STONE

Wood Stone warrants its equipment to the original purchaser against defects in material or manufacture for a period of one year from the original date of purchase, subject to the following exclusions and limitations.

Please contact the factory first at 1.800.988.8103 or 1.360.650.1111, seven days a week. Our normal business hours are 8am to 4:30pm PST Monday–Friday. If calling during non-business hours, follow the recorded instructions for emergency service and a Wood Stone technician will get back to you promptly.

EXCLUSIONS

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

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

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

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

LIMITATIONS OF LIABILITY

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

TO SECURE WARRANTY SERVICE

If you claim a defect covered by this Limited Warranty, contact:

Wood Stone Corporation, Attn: Service Department, 1801 W. Bakerview Rd., Bellingham, WA 98226 USA
Phone 1.800.988.8103 or 1.360.650.1111