

Hom Comfort

MODEL: PW100

**THIS IS NOT A UL
LISTED APPLIANCE**



**Contact your local building or fire officials about
obtaining permits, restrictions and installation inspection
requirements in your area.**

Save these instructions.

OWNER'S MANUAL

SAFETY NOTICE:

If this heater is not properly installed, a house fire may result. For your safety, follow the installation instructions. Never use make-shift compromises during the installation of this heater. Contact local building or fire officials about permits, restrictions and installation requirements in your area.

CAUTION!

Please read this entire manual before you install or use your new room heater. Failure to follow instructions may result in property damage, bodily injury, or even death. Improper Installation Could Void Your Warranty!

United States Stove Company • 227 Industrial Park Road • P.O. Box 151 • South Pittsburg, TN 37380 • www.usstove.com

FOR TECHNICAL ASSISTANCE: PHONE: (800) 750-2723 FAX: (423) 837-2129

Part No.: 852121

CONGRATULATIONS!

You've purchased an oven from North America's oldest manufacturer of wood burning products.

By cooking with wood you're helping to CONSERVE ENERGY!

Wood is our only Renewable Energy Resource. Please do your part to preserve our wood supply. Plant at least one tree each year. Future generations will thank you.

The instructions pertaining to the installation of your wood burning oven comply with NFPA 211.

Combustible :	Wood
Colors :	Metallic Black
Flue Pipe Diameter :	6" (15.3cm)
Flue Pipe Type: (Standard Single Wall or Double Wall):	Black or Blued Steel 2100°F (650°C)
Minimum Chimney Height :	12' (3.7m)
Maximum Log Length :	17
Dimensions	
Overall : Depth x Width x Height :	24.5 x 28.0 x 52.3
Combustion Chamber : Width x Depth :	19.7 x 14.5
Combustion Chamber Volume : Cubic Feet:	2.1
Door Opening : Width x Height:	16.4 x 10.0
Cooking Chamber : Width x Depth :	17.35 x 13.8
Cooking Chamber Volume : Cubic Feet:	2.1
Cooking Door Opening : Width x Height:	19.07 x 11.75
Pyroceramic Glass Door : (Viewing) Width x Height:	17.2 x 10.8
Weight (lbs):	425 lbs

CAUTIONS:

**HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.
CONTACT MAY CAUSE SKIN BURNS.**

DO NOT USE CHEMICALS OR FLUIDS TO IGNITE THE FIRE.

**DO NOT LEAVE THE OVEN UNATTENDED WHEN THE DOOR IS SLIGHTLY OPENED.
DO NOT BURN GARBAGE, FLAMMABLE FLUID SUCH AS GASOLINE, NAPHTHA
OR MOTOR OIL.**

ALWAYS CLOSE THE DOOR AFTER THE IGNITION.

**THIS MODEL NOT APPROVED FOR MANUFACTURED OR MOBILE HOME
INSTALLATION.**

SAFETY PRECAUTIONS

- △ **IMPORTANT:** Read this entire manual before installing and operating this product. Failure to do so may result in property damage, bodily injury, or even death. Proper installation of this oven is crucial for safe and efficient operation.
 - △ Install vent at clearances specified by the vent manufacturer.
 - △ Do not connect the vent to a vent serving any other appliance.
 - △ Do not install a flue damper in the exhaust venting system of this unit.
 - △ Contact your local building officials to obtain a permit and information on any additional installation restrictions or inspection requirements in your area.
 - △ Do not throw this manual away. This manual has important operating and maintenance instructions that you will need at a later time. Always follow the instructions in this manual.
 - △ This appliance is designed for the use of solid-wood fuel, The use of other fuels will void warranty.
 - △ 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 while it is in use.
 - △ A working smoke detector must be installed in the same room as this product.
 - △ Your oven requires periodic maintenance and cleaning (see "MAINTENANCE "). Failure to maintain your oven may lead to improper and/or unsafe operation.
 - △ Never try to repair or replace any part of the oven unless instructions for doing so are given in this manual. All other work should be done by a trained technician.
 - △ Do not operate your oven with the fuel feed door open. Under these circumstances a safety concern may arise from sparks or fumes entering the room.
 - △ Allow the oven to cool before performing any maintenance or cleaning.
 - △ Disposal of ashes - Ashes must be disposed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible surface or on the ground, well away from all combustible materials, pending final disposal.
 - △ The exhaust system should be checked monthly for any build-up of soot or creosote.
 - △ Do not touch the hot surfaces of the oven. Educate all children on the dangers of a high-temperature oven. Young children should be supervised when they are in the same room as the oven.
 - △ The oven will be hot during operation; therefore, you should always use some type of hand protection when refueling your oven.
 - △ Never block free airflow through the open vents of the unit.
 - △ Do not place clothing or other flammable items on or near this oven.
 - △ This appliance is not intended for commercial use.
 - △ **Warning:** Operate your oven only on a noncombustible floor or provide flooring protection adequate to provide ember protection around our oven.
 - △ **Creosote-Formation and need for removal.** 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 flue of a slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire.
 - △ When grease or creosote have accumulated, it should be removed to reduce the risk of fire.
 - △ Do not use accessories not specified for use with this appliance.
 - △ Verify that the oven is properly installed before firing the oven for the first time. After reading these instructions, if you have any doubt about your ability to complete your installation properly, you must obtain the services of a professional licensed installer familiar with all aspects of safe and correct installation. **DO NOT** use temporary or makeshift compromised during installation. There must be **NO DEVIATION OR ALTERATION OF ANY KIND** from the very specific instructions spelled out in this instruction manual as it pertains to the installation of this wood oven. **NO EXCEPTIONS.**
 - △ **NO NOT ELEVATE THE OVEN BY ANY MEANS.** (i.e. Bricks under legs, cement blocks) Oven must set directly upon the solid-surface non-combustible floor as specified in this manual.
 - △ **DO NOT MODIFY THIS OVEN IN ANY WAY!** Assemble only with original parts as supplied and shown in this manual. **DO NOT OPERATE AN OVEN THAT IS MISSING PARTS!** If any parts are missing or defective, please notify the dealer or manufacturer immediately. Replace missing, broken or worn parts with factory original or equivalent parts only.
 - △ Do not connect a wood burning appliance to an aluminum type B gas vent. This is not safe. Use approved masonry or a UL listed UL 103HT / ULC-S629 Residential Type and Building Heating Appliance chimney. Use a 6"/152mm diameter chimney, that is high enough to give a good draft. (See specifications in the VENTILATION section).
- Follow these guidelines to prevent this colorless, odorless gas from poisoning you, your family or others.**
- △ Know the symptoms of carbon monoxide poisoning: headache, dizziness, weakness, nausea, vomiting, sleepiness, and confusion. Carbon monoxide reduces the blood's ability to carry oxygen. Low blood oxygen levels can result in loss of consciousness and death.
 - △ See a doctor if you or others develop cold or flu-like symptoms while cooking or in the vicinity of this appliance. Carbon monoxide poisoning, which can easily be mistaken for a cold or flu, is often detected too late.
 - △ Alcohol consumption and drug use increase the effects of carbon monoxide poisoning.
 - △ Carbon monoxide is especially toxic to mother and child during pregnancy, infants, the elderly, smokers, and people with blood or circulatory system problems, such as anemia, or heart disease.

ASSEMBLY

ASSEMBLY INSTRUCTIONS

This appliance is offered with optional side tables. You must purchase the kit separately from your appliance dealer. Read and follow instructions in this manual and inside the kit to ensure proper assembly, installation and operation of your new appliance.

Caution! The appliance is very heavy.

The assistance from a second person is strongly suggested. Please use proper lifting technic when positioning the appliance for assembly and installation.

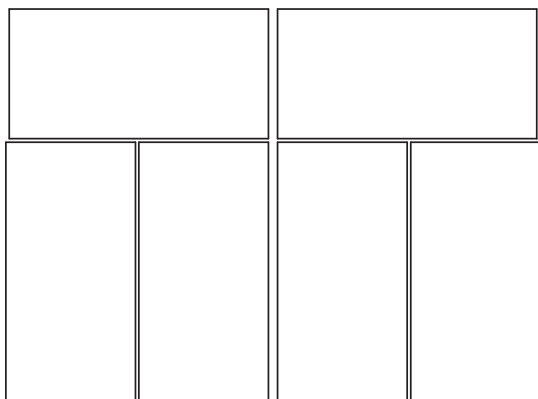
Before using your new appliance some assembly is required.

1. Check the combustion chamber and cooking chamber for proper brick alignment.
2. Install the side table (optional).

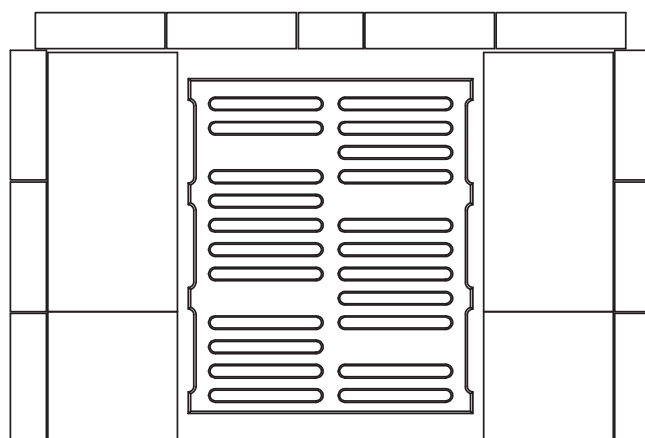
FIREBRICK INSTALLATION

The brick and ash grate for your appliance are installed at the factory. However, the brick may have shifted or moved during shipping. Ensure the brick is aligned, as shown, with no more than 1/8" (3.2mm) gaps between bricks. If there are broken or cracked bricks please contact your dealer or the manufacturer before using your appliance.

COOKING CHAMBER BRICK LAYOUT



FIRE BOX BRICK LAYOUT

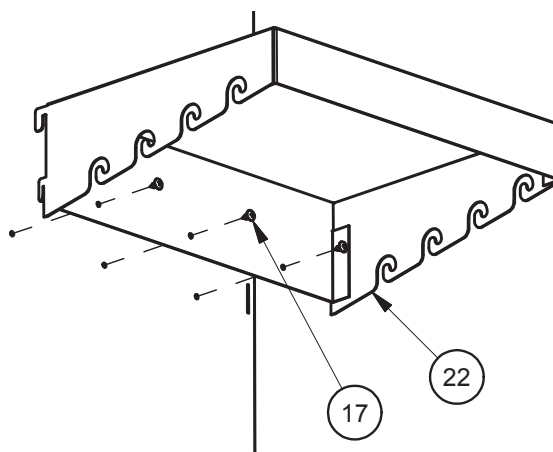


SIDE TABLE (Optional)

To install the side table follow the steps below:

1. Locate appliance properly as shown.
 - A) Ensure the appliance is in the final location before installing the side table to reduce possibility of damage.
2. Remove the side table from the packing and check for damage.
3. Slide the tabs on the side table into the slots on the side of the appliance and secure with the three (3) provided 1/2" sheet metal screws as shown.

SIDE TABLE ATTACHMENT



OVEN INSTALLATION

SAFETY NOTICE

- IF THIS OVEN IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THE INSTALLATION INSTRUCTIONS.
- CONSULT YOUR MUNICIPAL BUILDING DEPARTMENT OR FIRE OFFICIALS ABOUT PERMITS, RESTRICTIONS AND INSTALLATIONS REQUIREMENTS IN YOUR AREA.
- USE SMOKE DETECTORS IN THE ROOM WHERE YOUR OVEN IS INSTALLED.
- KEEP FURNITURE AND DRAPES WELL AWAY FROM THE OVEN.
- NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR “FRESHEN UP” A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.
- IN THE EVENT OF A CHIMNEY FIRE, KEEP THE AIR CONTROL FULL CLOSED TO DEPRIVE THE FIRE OF OXYGEN. CALL THE FIRE DEPARTMENT.
- A SOURCE OF FRESH AIR INTO THE ROOM OR SPACE SHALL BE PROVIDED WHEN REQUIRED.

POSITIONING THE OVEN

It is very important to position the wood burning oven as close as possible to the chimney. The oven must never be installed in a hallway or near a staircase, since it may block the way in case of fire or fail to respect required clearances.

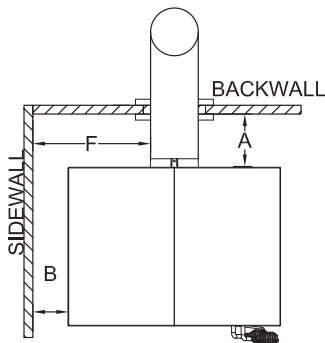
IMPROPER INSTALLATION: The manufacturer will not be held responsible for damage caused by the malfunction of an appliance due to improper venting or installation. Call (800) 750-2723 and/or consult a professional installer if you have any questions.

INSTALLATION CLEARANCES

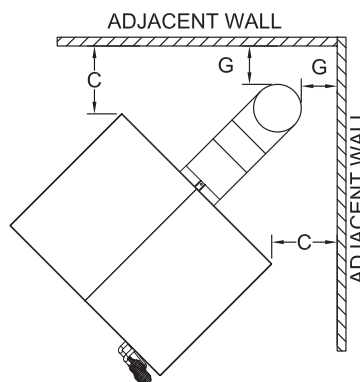
The clearances given are minimum dimensions by the NFPA. Installation of this appliance must comply with the latest edition of NFPA 211 and / or your local building code rulings. Use whichever is largest.

Your oven must be installed in residential applications in accordance with the clearances given below. For safety reasons, please adhere to the installation clearances and restrictions. Clearance to combustibles may NOT be reduced by any means.

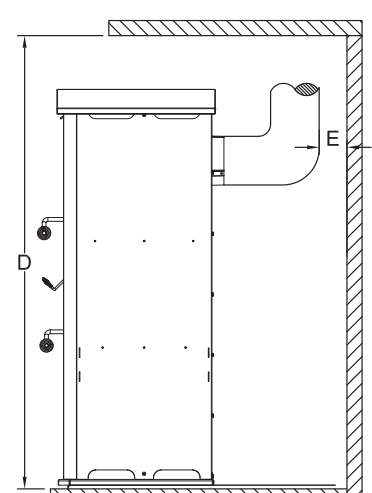
PARALLEL INSTALLATION CLEARANCES



ANGLED INSTALLATION CLEARANCES



SIDE VIEW CLEARANCES



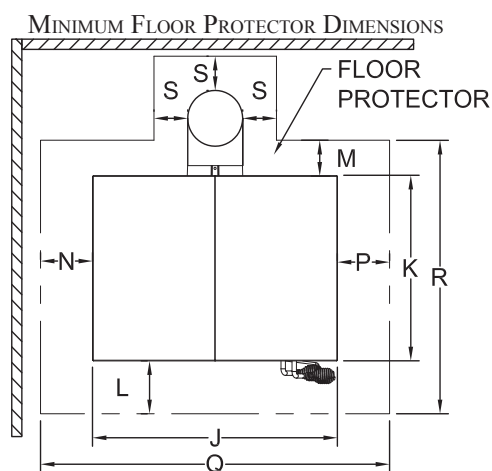
Dimension		Inch	mm
A	Backwall to Appliance	36	914
B	Sidewall to Appliance	36	914
C	Wall to corner (Angled Installation)	36	914
D	Ceiling Height	96	2438
E	Backwall to Flue	18	457
F	Sidewall to Flue	18	457
G	Wall to Flue (Angled Installation)	18	457

FLOOR PROTECTION

This heater must have a non-combustible floor protector (ember protection) installed beneath it if the floor is of combustible material. If a floor pad is used, it should be UL listed or equal. If the floor protector is not UL Listed then it must comply with NFPA 211. The requirements for NFPA 211 2010 Edition are:

1. The floor under the appliance is protected with closely spaced solid masonry units not less than 2" (51mm) in thickness.
2. The top surface of the masonry is covered with sheet metal not less than 24 gauge (0.024" (0.61mm)).
3. The floor protector extends not less than 18" (457mm) beyond the appliance on all sides.

Dimension		Inch	mm
J	Appliance Width	28	711
K	Appliance Depth	22	558
L	Front	18	457
M	Back	18	457
N	Left	18	457
P	Right	18	457
Q	Total Width	64	1625
R	Total Depth	58	1473
S	Around vent	2	51



VENTILATION

CHIMNEY CONNECTOR (STOVE PIPE)

Your chimney connector and chimney must have the same diameter as the appliance outlet (6"). If this is not the case, we recommend you contact your dealer in order to insure there will be no problem with the draft.

The stove pipe must be made of aluminized or cold roll steel with a minimum thickness of 0.021" or 0.53 mm. It is strictly forbidden to use galvanized steel.

Your smoke pipe should be assembled in such a way that the male section (crimped end) of the pipe faces down. Attach each of the sections to one another with three equidistant metal screws. Seal with furnace cement.

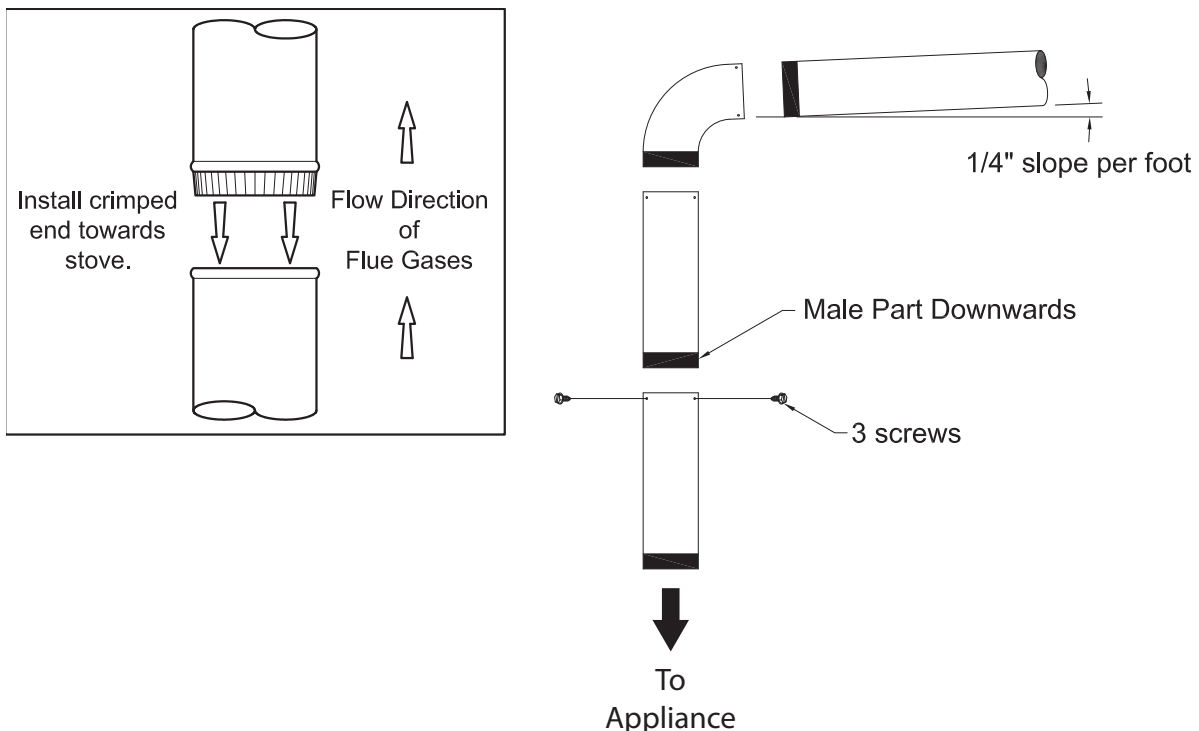
The pipe must be short and straight. All sections installed horizontally must slope at least 1/4 inch per foot, with the upper end of the section toward the chimney. Any installation with a horizontal run of chimney pipe must conform to NFPA 211. You may contact NFPA (National Fire Protection Association) and request the latest edition of the NFPA Standard 211.

To insure a good draft, the total length of the coupling pipe should never exceed 8' to 10' (2.4m to 3.04 m). (Except for cases of vertical installation, cathedral-roof style where the smoke exhaust system can be much longer and connected without problem to the chimney at the ceiling of the room).

There should never be more than two 90 degrees elbows in the smoke exhaust system.

Installation of a "barometric draft stabilizer" (fireplace register) on a smoke exhaust system is prohibited.

Furthermore, installation of a draft damper is not recommended. Indeed, with a controlled combustion wood appliance, the draft is regulated upon intake of the combustion air in the appliance and not at the exhaust.



CHIMNEY

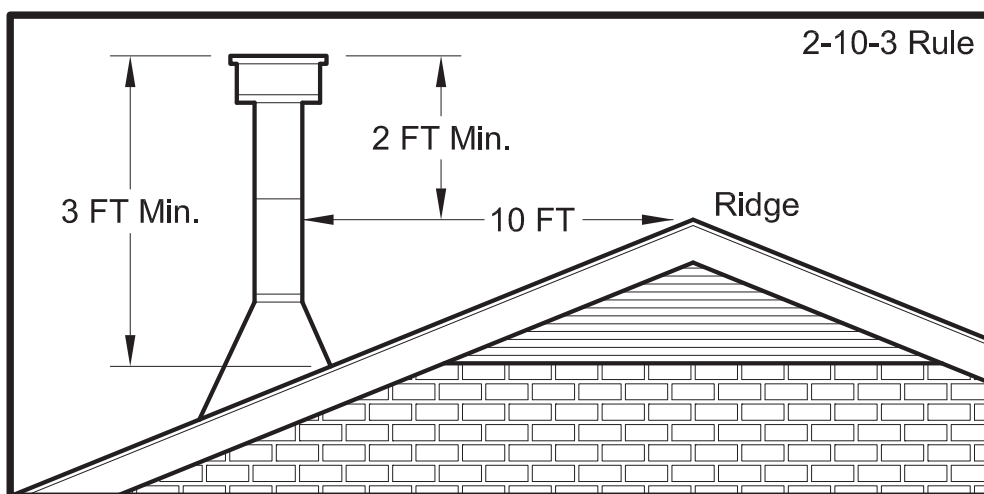
Your wood appliance may be hooked up with a 6" factory built or masonry chimney. If you are using a factory built chimney, it must comply with UL 103 or CSA-B365 standard; therefore it must be a Type HT (2100°F). It is extremely important that it be installed according to the manufacturer's specifications.

If you are using a masonry chimney, it is important that it be built in compliance with the specifications of the National Building Code. It must be lined with fire clay bricks, metal or clay tiles sealed together with fire cement. (Round flues are the most efficient).

The interior diameter of the chimney flue must be identical to the appliance smoke exhaust. A flue which is too small may cause draft problems, while a large flue favours rapid cooling of the gas, and hence the build-up of creosote and the risk of chimney fires. Note that it is the chimney and not the appliance which creates the draft effect; your appliance's performance is directly dependent on an adequate draft from your chimney.

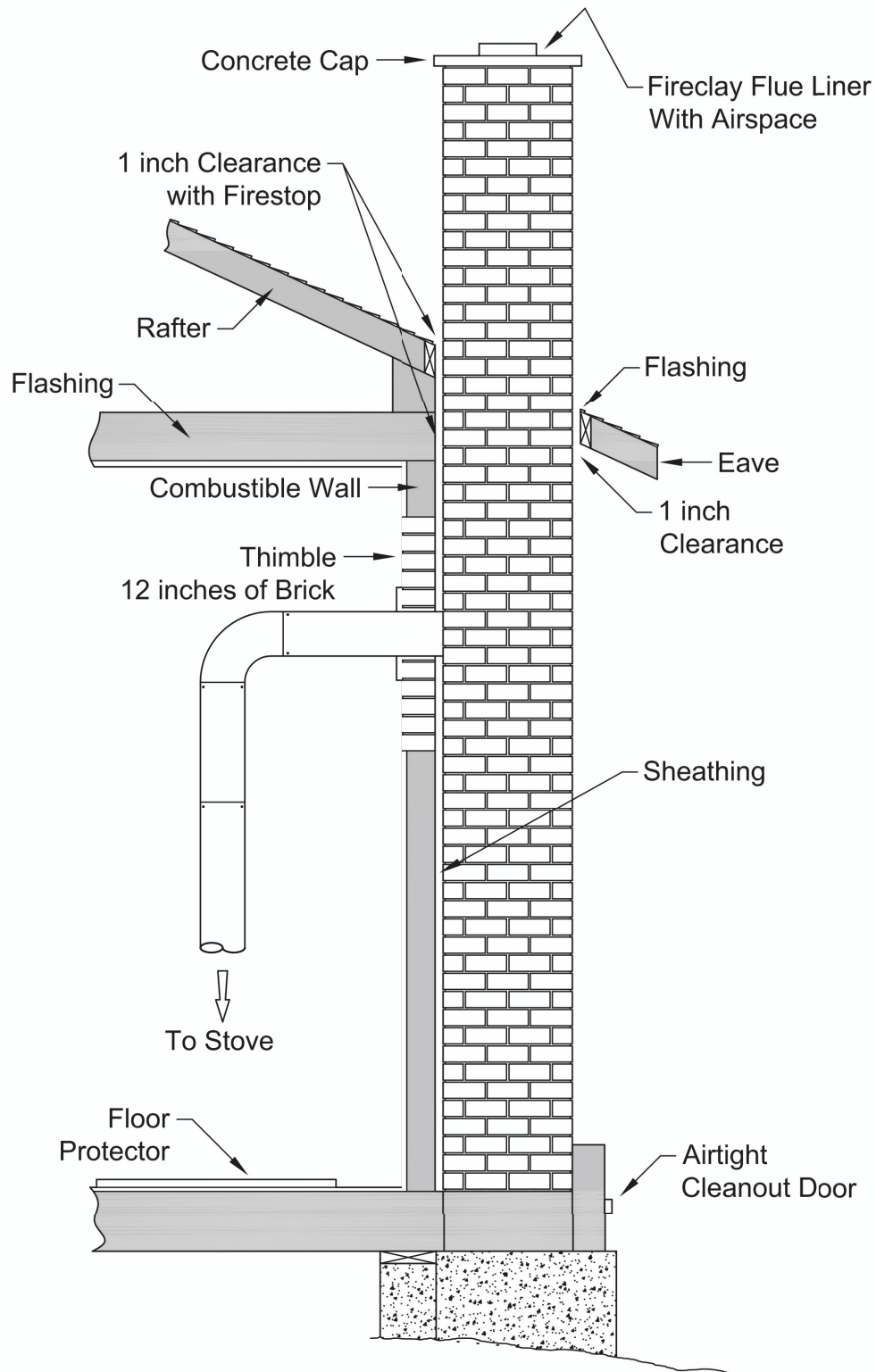
The following recommendations may be useful for the installation of your chimney:

1. Do not connect this unit to a chimney flue serving another appliance.
2. It must rise above the roof at least 3' (0.9m) from the uppermost point of contact.
3. The chimney must exceed any part of the building or other obstruction within a 10' (3.04m) distance by a height of 2' (0.6m).
4. Installation of an interior chimney is always preferable to an exterior chimney. Indeed, the interior chimney will, by definition, be hotter than an exterior chimney, being heated up by the ambient air in the house. Therefore the gas which circulates will cool more slowly, thus reducing the build-up of creosote and the risk of chimney fires.
5. The draft caused by the tendency for hot air to rise will be increased with an interior chimney.
6. Using a fire screen at the extremity of the chimney requires regular inspection in order to insure that it is not obstructed thus blocking the draft, and it should be cleaned when used regularly.
7. Exterior chimney should be double or triple wall.



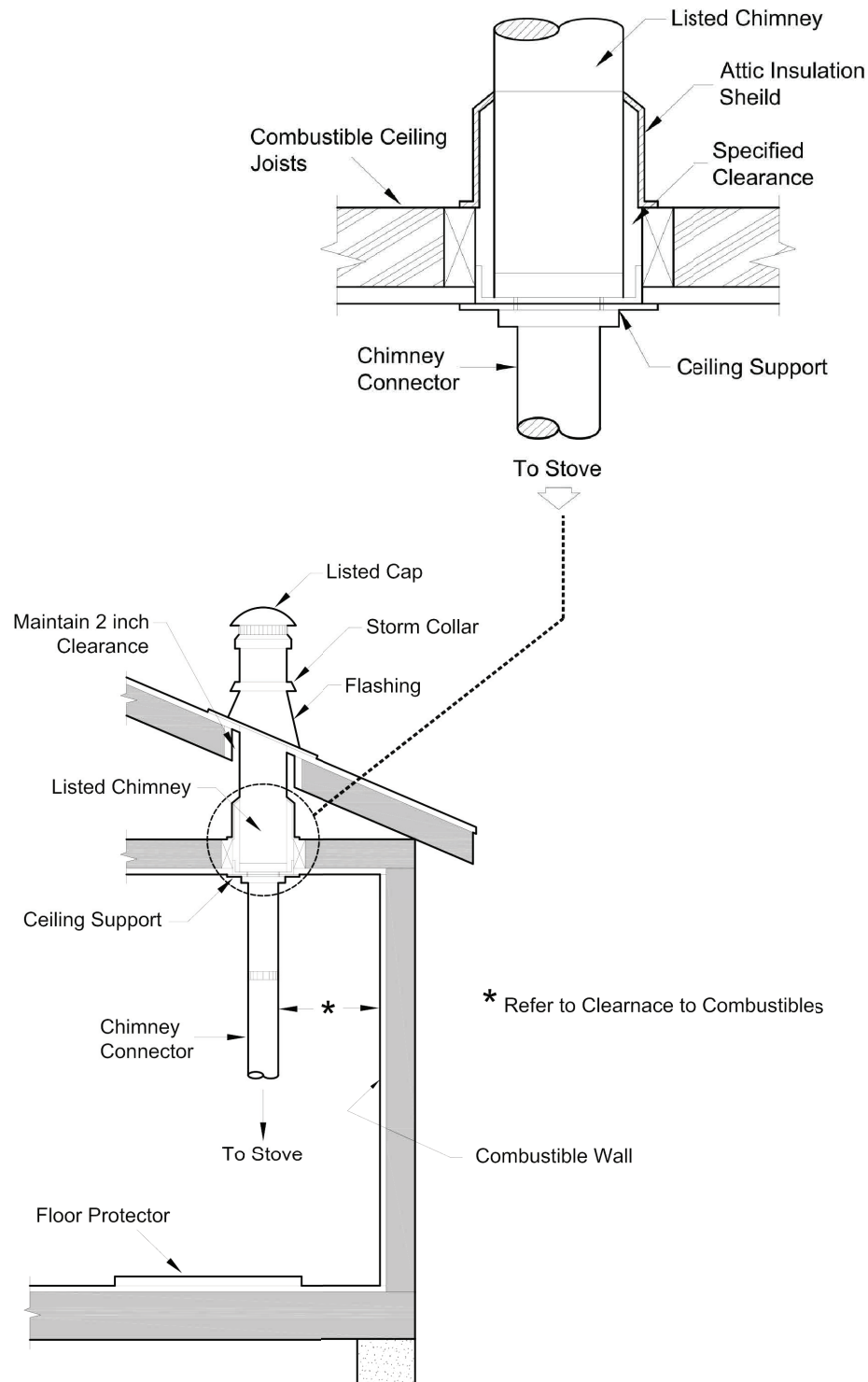
MASONRY CHIMNEY :

Ensure that a masonry chimney meets the minimum standards of the National Fire Protection Association (NFPA) by having it inspected by a professional. Make sure there are no cracks, loose mortar or other signs of deterioration and blockage. Have the chimney cleaned before the appliance is installed and operated. When connecting the appliance through a combustible wall to a masonry chimney, special methods are needed.

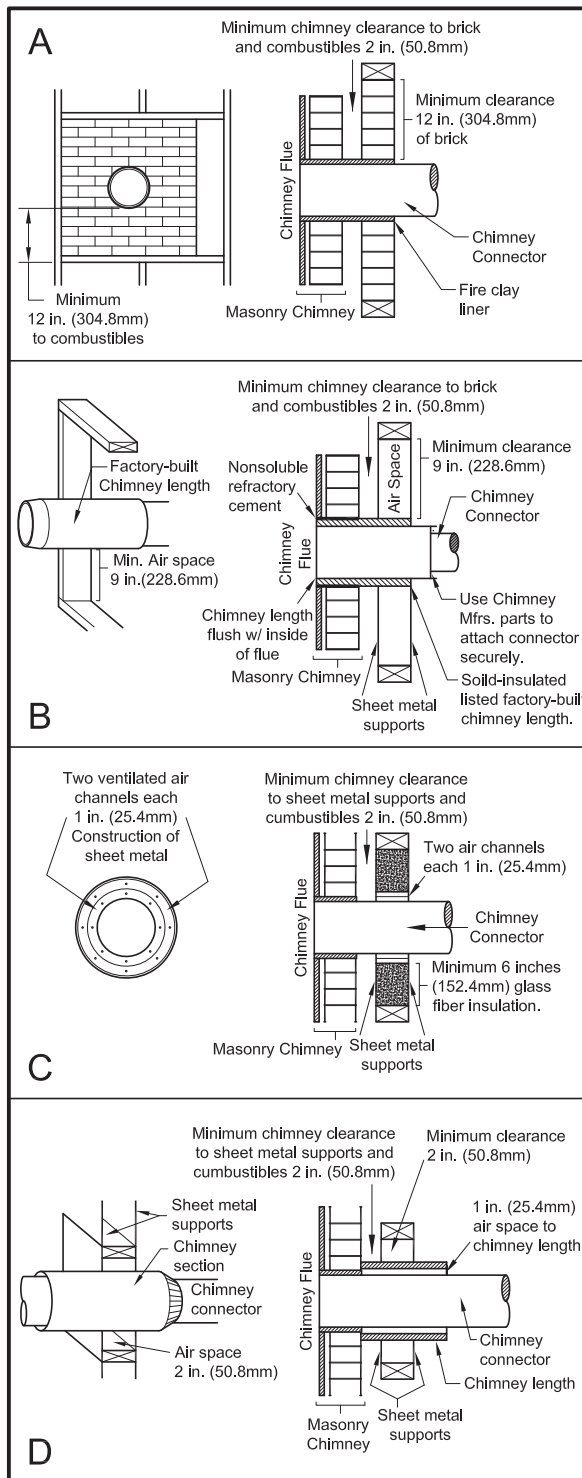


FACTORY BUILT CHIMNEY :

When a metal prefabricated chimney is used, the manufacturer's installation instructions must be followed. You must also purchase (from the same manufacturer) and install the ceiling support package or wall pass-through and "T" section package, firestops (where needed), insulation shield, roof flashing, chimney cap, etc. Maintain proper clearance to the structure as recommended by the manufacturer. The chimney must be the required height above the roof or other obstructions for safety and proper draft operation.



COMBUSTIBLE WALL CHIMNEY CONNECTOR PASS-THROUGHS



NOTES:

1. Connectors to a masonry chimney, excepting method B, shall extend in one continuous section through the wall pass-through system and the chimney wall, to but not past the inner flue liner face.
2. A chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor, or ceiling.

Method A. 12" (304.8 mm) Clearance to Combustible Wall Member: Using a minimum thickness 3.5" (89 mm) brick and a 5/8" (15.9 mm) minimum wall thickness clay liner, construct a wall pass-through. The clay liner must conform to ASTM C315 (Standard Specification for Clay Fire Linings) or its equivalent. Keep a minimum of 12" (304.8 mm) of brick masonry between the clay liner and wall combustibles. The clay liner shall run from the brick masonry outer surface to the inner surface of the chimney flue liner but not past the inner surface. Firmly grout or cement the clay liner in place to the chimney flue liner.

Method B. 9" (228.6 mm) Clearance to Combustible Wall Member: Using a 6" (152.4 mm) inside diameter, listed, factory-built Solid-Pak chimney section with insulation of 1" (25.4 mm) or more, build a wall pass-through with a minimum 9" (228.6 mm) air space between the outer wall of the chimney length and wall combustibles. Use sheet metal supports fastened securely to wall surfaces on all sides, to maintain the 9" (228.6 mm) air space. When fastening supports to chimney length, do not penetrate the chimney liner (the inside wall of the Solid-Pak chimney). The inner end of the Solid-Pak chimney section shall be flush with the inside of the masonry chimney flue, and sealed with a non-water soluble refractory cement. Use this cement to also seal to the brick masonry penetration.

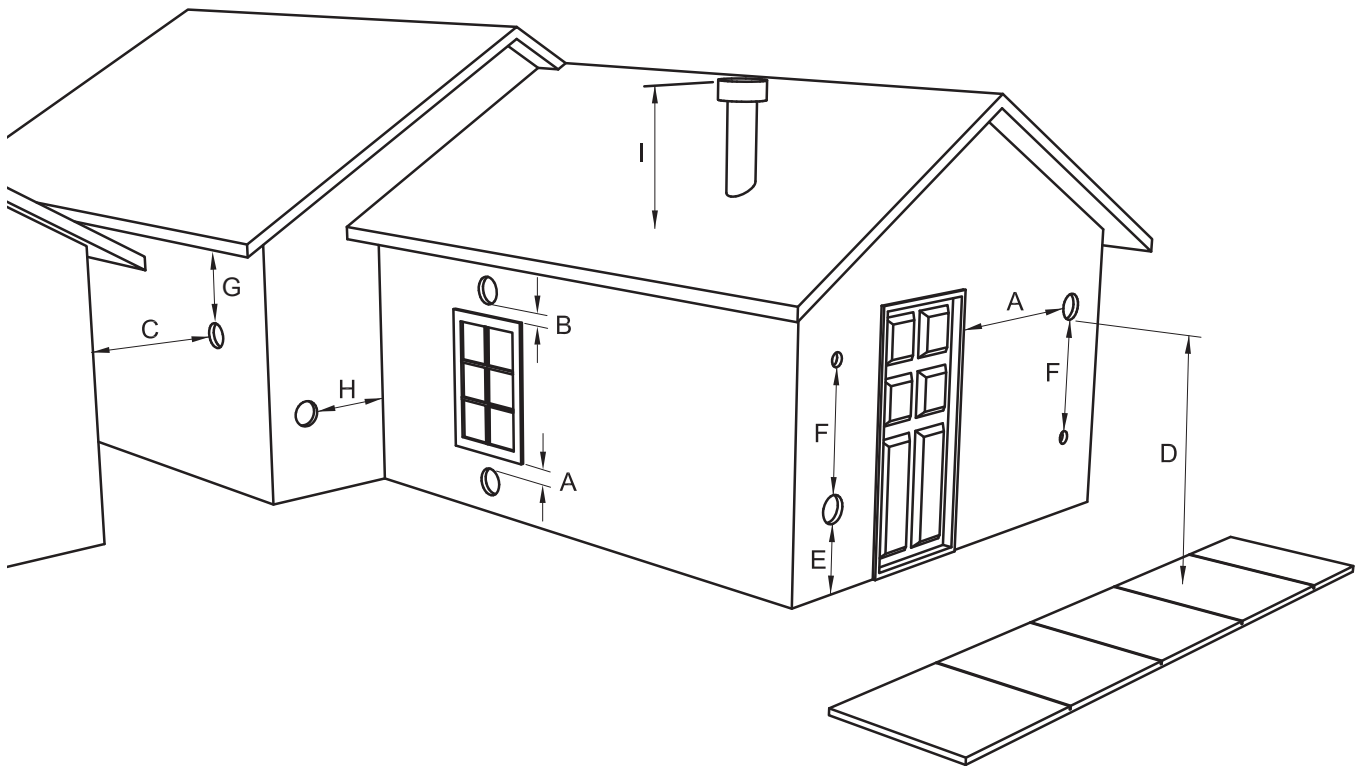
Method C. 6" (152.4 mm) Clearance to Combustible Wall Member: Starting with a minimum 24 gage (.024" [.61 mm]) 6" (152.4 mm) metal chimney connector, and a minimum 24 gage ventilated wall thimble which has two air channels of 1" (25.4 mm) each, construct a wall pass-through. There shall be a minimum 6" (152.4 mm) separation area containing fiberglass insulation, from the outer surface of the wall thimble to wall combustibles. Support the wall thimble, and cover its opening with a 24-gage minimum sheet metal support. Maintain the 6" (152.4 mm) space. There should also be a support sized to fit and hold the metal chimney connector. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure the metal chimney connector do not penetrate chimney flue liner.

Method D. 2" (50.8 mm) Clearance to Combustible Wall Member: Start with a Solid-Pak listed factory built chimney section at least 12" (304 mm) long, with insulation of 1" (25.4 mm) or more, and an inside diameter of 8" (2 inches [51 mm] larger than the 6" [152.4 mm] chimney connector). Use this as a pass-through for a minimum 24-gage single wall steel chimney connector. Keep solid-pak section concentric with and spaced 1" (25.4 mm) off the chimney connector by way of sheet metal support plates at both ends of chimney section. Cover opening with and support chimney section on both sides with 24 gage minimum sheet metal supports. See that the supports are fastened securely to wall surfaces on all sides.

VENT TERMINATION CLEARANCES:

- A) Minimum 4-foot (1.22m) clearance below or beside any door or window that opens.
- B) Minimum 1-foot (0.3m) clearance above any door or window that opens.
- C) Minimum 3-foot (0.91m) clearance from any adjacent building.
- D) Minimum 7-foot (2.13m) clearance from any grade when adjacent to public walkways.
- E) Minimum 2-foot (0.61m) clearance above any grass, plants, or other combustible materials.
- F) Minimum 3-foot (0.91m) clearance from an forced air intake of any appliance.
- G) Minimum 2-foot (0.61m) clearance below eaves or overhang.
- H) Minimum 1-foot (0.3m) clearance horizontally from combustible wall.
- I) Must be a minimum of 3 foot (0.91m) above the roof and 2 foot (0.61m) above the highest point or the roof within 10 feet (3.05m).

VENT TERMINATION CLEARANCES



OVEN UTILIZATION

Your oven was designed to burn wood only; no other materials should be burned. Waste and other flammable materials should not be burned in your oven. Any type of wood may be used in your oven, but specific varieties have better energy yields than others. Please consult the following table in order to make the best possible choice.

TYPE	WEIGHT (LBS. CU. FT., DRY)	PER CORD	EFFICIENCY RANKING	SPLITS	MILLIONS BTU's/CORD
Hickory	63	4500	1.0	Well	31.5
White Oak	48	4100	.9	Fair	28.6
Red Oak	46	3900	.8	Fair	27.4
Beech	45	3800	.7	Hard	26.8
Sugar Maple	44	3700	.6	Fair	26.2
Black Oak	43	3700	.6	Fair	25.6
Ash	42	3600	.5	Well	25.0
Yellow Birch	40	3400	.4	Hard	23.8
Red Maple	38	3200	.3	Fair	22.6
Paper Birch	37	3100	.3	Easy	22.1
Elm/Sycamore	34	2900	.2	Very Difficult	20.1
Red Spruce	29	1800	.1	Easy	16.1

It is EXTREMELY IMPORTANT that you use DRY WOOD only in your wood oven. The wood should have dried for 9 to 15 months, such that the humidity content (in weight) is reduced below 20% of the weight of the log. It is very important to keep in mind that even if the wood has been cut for one, two or even more years, it is not necessarily dry, if it has been stored in poor conditions. Under extreme conditions it may rot, instead of drying. This point cannot be over stressed; the vast majority of the problems related to the operation of a wood oven is caused by the fact that the wood used was too damp or has dried in poor conditions. These problems can be:

- Ignition problems
- Creosote build-up causing chimney fires
- Low energy yield
- Blackened windows
- Incomplete log combustion

Smaller pieces of wood will dry faster. All logs exceeding 6" in diameter should be split. The wood should not be stored directly on the ground. Air should circulate through the cord. A 24" to 48" air space should be left between each row of logs, which should be placed in the sunniest location possible. The upper layer of wood should be protected from the elements but not the sides.

TESTING YOUR WOOD

When the oven is thoroughly warmed, place one piece of split wood (about five inches in diameter) parallel to the door on the bed of red embers.

Keep the air control full open by sliding it right and close the door. If ignition of the piece is accomplished within 90 seconds from the time it was placed in the oven, your wood is correctly dried. If ignition takes longer, your wood is damp.

If your wood hisses and water or vapor escapes at the ends of the piece, your wood is soaked or freshly cut. Do not use this wood in your oven. Large amounts of creosote could be deposited in your chimney, creating potential conditions for a chimney fire.

THE FIRST FIRES

The fresh paint on your oven needs to be cured to preserve its quality. Once the fuel charge is properly ignited, only burn small fires in your oven for the first four hours of operation. Never open the air control more than necessary to achieve a medium burn rate.

Make sure that there's enough air circulation while curing the oven. The odors may be smelled during the first 3 or 4 fires. During curing people and animals with lung problems should take caution.

IGNITION

After making sure that the oven air intake controls are fully open (completely slide to the right), place several rumpled sheets of paper in the center of the combustion chamber. Place 8 to 10 pieces of small dry kindling wood over the paper in the form of a tent. You may also place a few pieces of cooking wood, but choose the smaller ones. No chemical product should be used to light the fire.

Before igniting the paper and kindling wood, it is recommended that you warm up the chimney. This is done in order to avoid back draft problems often due to negative pressure in the house. If such is the case, open a window slightly near the oven and twist together a few sheets of newspaper into a torch. Light up this paper torch and hold it as close as possible to the back of the combustion chamber to warm up the chimney. Once the updraft movement is initiated, you are ready to ignite the oven by lighting the paper and kindling wood inside the combustion chamber.

When you have achieved a good bed of hot embers, we recommend the following burn procedures:

CAUTION: Never alter the damper slide or the adjustment range to increase firing for any reason. Doing so could result in oven damage and will void your warranty.

DAMPERS

The oven has two air control dampers. The lower damper controls the Primary combustion air into the combustion chamber. The upper air damper controls the air wash across the combustion chamber window as well as allowing additional combustion air to enter the firebox. It is recommended that the air wash damper be adjusted so that the window remains free of soot buildup. Then, adjust the primary air damper to control the fire.

COOKING

Controlled combustion is the most efficient technique for wood cooking because it enables you to select the type of combustion you want for each given situation. The wood will burn slowly if the combustion air intake control is adjusted to reduce the oxygen supply in the combustion chamber to a minimum. On the other hand, wood will burn quickly if the air control is adjusted to admit a larger quantity of oxygen in the combustion chamber. Real operating conditions may give very different results than those obtained during testing according to the species of wood used, its moisture content, the size and density of the pieces, the length of the chimney, altitude and outside air temperature.

WARNINGS

NEVER OVERFIRE YOUR OVEN. IF ANY PART OF THE OVEN STARTS TO GLOW RED, OVER FIRING IS HAPPENING. READJUST THE AIR INTAKE CONTROL AT A LOWER SETTING.

THE INSTALLATION OF A LOG CRADLE or GRATES IS NOT RECOMMENDED IN YOUR WOOD OVEN. BUILD FIRE DIRECTLY ON FIREBRICK.

NEVER PUT WOOD ABOVE THE FIREBRICK LINING OF THE FIREBOX.

RELOADING

Once you have obtained a good bed of embers, you should reload the unit. In order to do so, open the air controls to maximum a few seconds prior to opening the oven's door. Then proceed by opening the door very slowly; open it one or two inches for 5 to 10 seconds, before opening it completely to increase the draft and thus eliminate the smoke which is stagnant in a state of slow combustion in the oven. Then bring the red embers to the front of the oven and reload the unit.

For optimal operation of your wood oven, we recommend you to operate it with a wood load approximately equivalent to the height of fire bricks.

It is important to note that wood combustion consumes ambient oxygen in the room. In the case of negative pressure, it is a good idea to allow fresh air in the room, either by opening a window slightly or by installing a fresh air intake system on an outside wall.

Creosote - Formation and Need for 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 chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire. The chimney connector and chimney should be inspected at least once every two months during the season to determine if a creosote build-up has occurred. If creosote has accumulated (3mm or more), it should be removed to reduce the risk of a chimney fire.

We strongly recommend that you install a magnetic thermometer on your smoke exhaust pipe, approximately 18" above the oven. This thermometer will indicate the temperature of your gas exhaust fumes within the smoke exhaust system. The ideal temperature for these gases is somewhere between 275°F and 500°F. Below these temperatures, the build-up of creosote is promoted. Above 500 degrees, heat is wasted since a too large quantity is lost into the atmosphere.

TO PREVENT CREOSOTE BUILD UP

- **Always burn dry wood. This allows clean burns and higher chimney temperatures, therefore less creosote deposit.**
- **Leave the air control full open for about 5 min. every time you reload the oven to bring it back to proper operating temperatures.**
- **Always check for creosote deposit once every two months and have your chimney cleaned at least once a year.**

If a chimney or creosote fire occurs, close all dampers immediately. Wait for the fire to go out and the oven to cool, then inspect the chimney for damage. If no damage results, perform a chimney cleaning to ensure there is no more creosote deposits remaining in the chimney.

ASH DISPOSAL

Ashes should be removed from the oven every few days or when ashes get to 2 to 3 inches deep. Always empty the oven when it is cold, such as in the morning. 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 all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the close container until all cinders have thoroughly cooled. Other waste shall not be placed in this container.

CAUTIONS:

- **ASHES COULD CONTAIN HOT EMBERS EVEN AFTER TWO DAYS WITHOUT OPERATING THE OVEN.**
- **THE ASH PAN CAN BECOME VERY HOT. WEAR GLOVES TO PREVENT INJURY.**
- **NEVER BURN THE OVEN WITH THE ASH TRAP OPEN. THIS WOULD RESULT IN OVER FIRING THE OVEN. DAMAGE TO THE OVEN AND EVEN HOUSE FIRE MAY RESULT.**

MAINTENANCE

Your wood oven is a high efficiency oven and therefore requires little maintenance. It is important to perform a visual inspection of the oven every time it is emptied, in order to insure that no parts have been damaged, in which case repairs must be performed immediately. Inspect and clean the chimney and connector pipe periodically for creosote buildup or obstructions.

GLASS

- Inspect and clean the glass regularly in order to detect any cracks. If you spot one, turn the oven off immediately. Do not abuse the glass door by striking or slamming shut. Do not use the oven if the glass is broken.
- If the glass on your oven breaks, replace only with the glass supplied from your dealer. Never substitute other materials for the glass.
- To replace the glass, remove the screws retaining the glass mouldings inside the door.
 - 1) Remove the mouldings and replace the damaged piece with a new one.
 - 2) Perform the procedure backwards after replacing. When replacing the glass, you should change the glass gasket to make sure you keep it sealed.
- Never wash the glass with a product that may scratch. Use a specialized product, available in the stores where wood ovens are sold. The glass should be washed only when cold.

GASKETING

It is recommended that you change the door gasket (which makes your oven door air tight) once a year, in order to insure good control over the combustion, maximum efficiency and security. To change the door gasket, simply remove the damaged one. Carefully clean the available gasket groove, apply a high temperature silicone sold for this purpose, and install the new gasket. You may light up your oven again approximately 24 hours after having completed this operation.

WARNING:

NEVER OPERATE THE OVEN WITHOUT A GASKET OR WITH A BROKEN ONE. DAMAGE TO THE OVEN OR EVEN HOUSE FIRE MAY RESULT.

COOKING CHAMBER BRICK

The fire brick in the cooking chamber is very porous and may absorb any cleaning chemicals used. For this reason, we recommend placing the cooking chamber fire brick in the combustion chamber and lighting a small fire to clean the fire brick. Doing this will burn off any food particulates and sanitize the brick for further use.

PAINT

Only clean your oven with a dry soft cloth that will not harm the paint finish. If the paint becomes scratched or damaged, it is possible to give your wood oven a brand new look, by repainting it with a 1200° F heat resistant paint. For this purpose, simply scrub the surface to be repainted with fine sand paper, clean it properly, and apply two (2) thin coats of paint successively.

SEASONAL START UP

Prior to starting the first fire of the heating season, check the outside area around the exhaust and air intake systems for obstructions. Clean and remove any fly ash from the exhaust venting system. Clean any screens on the exhaust system and on the outside air intake pipe. Turn all of the controls on and make sure that they are working properly. This is also a good time to give the entire appliance a good cleaning throughout.

SEASONAL SHUTDOWN

The exhaust system should be thoroughly cleaned. REMOVE ANY ASH OR UNBURNED WOOD. CLEAN COOKING CHAMBER

MAINTENANCE SCHEDULE

Use the following as a guide under average use conditions.

Gaskets around door and door glass should be inspected and repaired or replaced when necessary.

	Daily	Weekly	Monthly or as needed
Combustion Chamber		Brushed	
Ashes	Check		Empty
Interior Chambers			Vacuumed
Vent System			Cleaned
Gaskets			Inspected
Glass	Wiped	Cleaned	

TROUBLE SHOOTING GUIDE

When your appliance acts out of the ordinary, the first reaction is to call for help. This guide may save time and money by enabling you to solve simple problems yourself. Problems encountered are often the result of only five factors.

1. Poor fuel;
2. Poor operation or maintenance;
3. Poor installation;
4. Component failure;
5. Factory defect.

You can usually solve those problems related to 1 and 2. Your dealer can solve problems relating to 3, 4 and 5. Refer to diagrams on page 17 to help locate indicated parts

Never try to repair or replace any part of the oven unless instructions for doing so are given in this manual. All other work should be done by a trained technician.

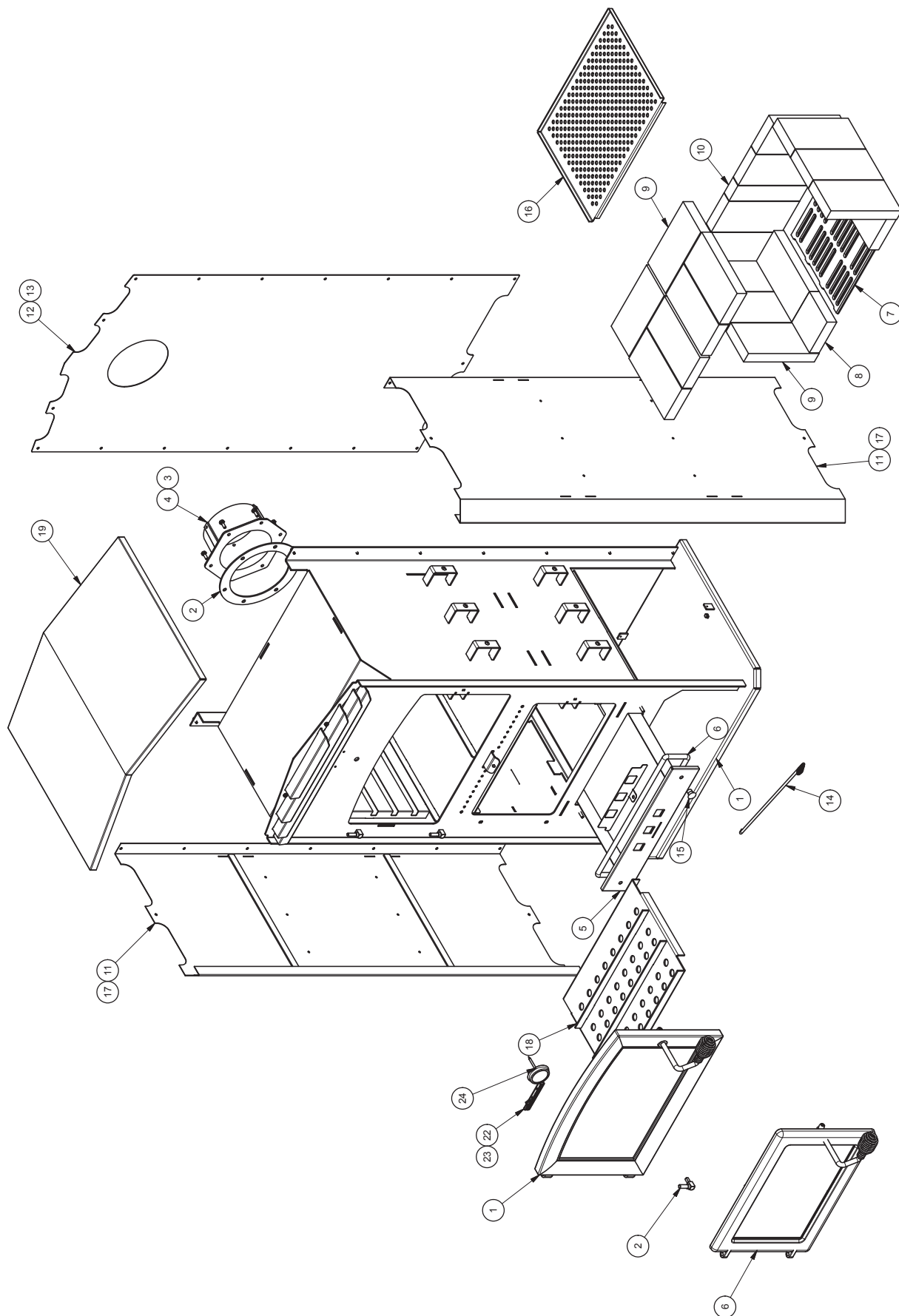
SMOKE SMELL COMING BACK INTO THE HOME

<u>Possible Causes:</u>	<u>Possible Remedies:</u>
1. There is a leak in the vent pipe system.	Inspect all vent pipe connections. Make sure they are sealed with RTV silicone that has a temperature rating on 500 degree F or higher. Also, seal joints with UL-181-AP foil tape. Also, make sure the square to round adapter piece on the combustion blower has been properly sealed with the same RTV.
Because it is a wood-burning device, your oven may emit a faint wood-burning odor. If this increases beyond normal, or if you notice an unusual soot build-up on walls or furniture, check your exhaust system carefully for leaks. All joints should be properly sealed. Also clean your appliance, following instructions in "MAINTENANCE". If problem persists, contact your dealer.	

- GLASS "SOOT'S" UP AT A VERY FAST RATE
- FLAME IS LAZY, DARK, AND HAS BLACK TIPS

<u>Possible Causes:</u>	<u>Possible Remedies:</u>
1. Appliance or vent pipe is dirty, which restricts airflow.	Follow all cleaning procedure in the maintenance section of the owner's manual.
2. Vent pipe installed improperly.	Check to make sure the vent pipe has been installed according to the criteria in the owner's manual.
3. Air damper is set too far left (closed) for a higher setting.	Slide the damper knob farther right and try to burn the unit again.
5. Air damper is broken.	Visually inspect the damper assembly. Make sure the damper plate is attached to the damper rod. When the damper rod is moved the plate should move with it.
6. Blockage in air intake pipe.	Visually inspect the air intake pipe that leads into the burnpot for foreign material.

REPAIR PARTS DIAGRAM

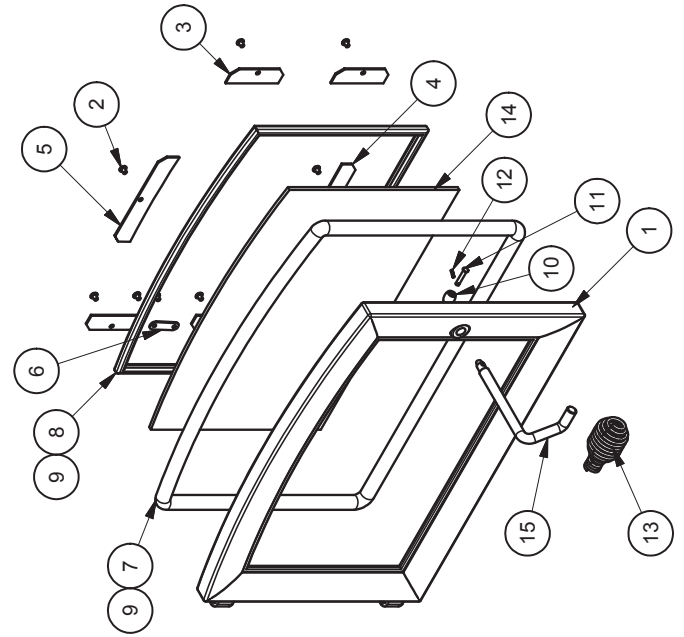


REPAIR PARTS LIST

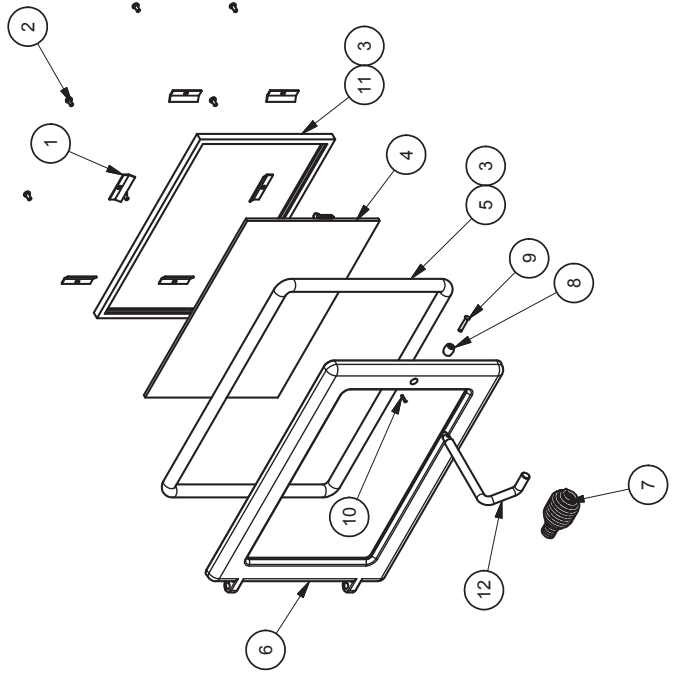
**IN ORDER TO MAINTAIN WARRANTY, COMPONENTS MUST BE REPLACED USING ORIGINAL MANUFACTURERS PARTS PURCHASED THROUGH YOUR DEALER OR DIRECTLY FROM THE APPLIANCE MANUFACTURER.
USE OF THIRD PARTY COMPONENTS WILL VOID THE WARRANTY.**

Key	Part No.	Description	Qty
1	69876	Main Weldment	1
2	88032	Gasket, Flue Collar	1
3	83339	1/4-20 X 3/4 Hex Bolt	6
4	40246	Flue Collar, 6" C.i.	1
5	69888	Ash Pan	1
6	88057	Thermocord 1/2	1
7	40076	Grate, Cast Iron	1
8	24103	Firebrick, Half (4-1/2 X 4-1/2)	2
9	89066	Firebrick (4-1/2 X 9)	18
10	891414	Half Firebrick	1
11	69884	Wrapper, Side	2
12	26461	Side Wrapper, Back	1
13	83343	#10X1/2 Hx Hd Dp Ox Black	20
14	69890	Adjusting Rod	1
15	891987	Plastic Knob	2
16	26457	Rack, Pizza Tray	1
17	83134	1/2 Inch Truss Head Tap Screw	15
18	69885	Baffle, Burn Chamber	1
19	69889	Wrapper Top Weldment	1
20	69887	Door Assembly (Cooking Chamber)	1
21	69886	Door Assembly (Burn Chamber)	1
22	851713	Logo, Homcomfort	1
23	83550	Pushnut Fastener (.125 Dia. Stud)	2
24	80653	Thermometer, 100-900° Stove	1

Cooking Chamber Door			
Key	Part No.	Description	Qty
1	40585	Large Viewing Glass Door	1
2	83362	10-24 X 1/4 Ms Ph Rd PIn	8
3	26312	Glass Clamp, Side	4
4	26311	Glass Clamp, Bottom	1
5	26310	Glass Clamp, Top	1
6	26314	Gasket Clamp	1
7	88082	3/4 Round Rope Gasket-Blk	1
8	88087	Glass Gasket (1 X 1/8)	1
9	89284	High Temp Silicone	1
10	891085	Handle Bearing	1
11	891086	Handle Clevis Pin	1
12	891087	Handle Spring Pin	1
13	891135	Handle, Spring (Lg-Nickel)	1
14	892204	Glass	1
15	26449	Handle Rod	1



Burn Chamber Door			
Key	Part No.	Description	Qty
1	25904	Clip, Glass	6
2	83202	10-24 X 3/8 Ph Pn Hd Ms	6
3	89284	Silicone Sealant (Black)	1
4	892038	Door Glass	1
5	88082	3/4 Round Rope Gasket-Blk	1
6	26450	Feed Door	1
7	891135	Handle, Spring (Lg-Nickel)	1
8	891085	Handle Bearing	1
9	891086	Handle Clevis Pin	1
10	891087	Handle Spring Pin	1
11	88087	1/8 X 1 Window Gasket W/Adhesive	1
12	26449	Handle Rod	1



NOTES

HOW TO ORDER REPAIR PARTS

This manual will help you obtain efficient, dependable service from your Oven, and enable you to order repair parts correctly.

Keep this manual in a safe place for future reference.

When writing, always give the full model number which is on the nameplate attached to the oven.

When ordering repair parts, always give the following information as shown in this list:

1. The part number _____
2. The part description _____
3. The model number: _____
4. The serial number: _____



Hom *Comfort*

227 Industrial Park Road
P.O. Box 151
South Pittsburg, TN 37380
(800) 750-2723
www.usstove.com

PLEASE SEAL WITH CLEAR TAPE BEFORE MAILING



Warranty Registration Form

Please take a moment and properly register your new stove within 10 days of purchase by completing this form.

You can also complete this form by visiting us at usstove.com

Owner: _____

Address: _____

City: _____ State: _____ Zip: _____

Email Address: _____

Phone: _____

Dealer/Store: _____

City: _____ State: _____ Zip: _____

Stove Model: _____

Serial Number: _____

Date Purchased: _____

Date Installed: _____

PLEASE COMPLETE THE SURVEY BELOW:

How do you currently heat your home?

☐ Electric ☐ Natural Gas ☐ Propane ☐ Heating Oil ☐ Wood ☐ Pellet

How did you hear about United States Stove Company?

☐ Internet ☐ Local Store ☐ Dealer ☐ Friends/Relatives ☐ Trade Show

☐ Other: _____

What were your reasons for selecting one of our products? (check all that apply)

☐ Convenience ☐ Salesperson ☐ Appearance ☐ Price ☐ Heating Bill Savings
☐ Performance ☐ Add On ☐ Quality

Where is your hearth appliance installed?

☐ Living Room ☐ Family Room ☐ Den/Office ☐ Bedroom ☐ Sun Room
☐ Outdoor ☐ Kitchen ☐ Bath ☐ Masonry Fireplace

Were you satisfied with the service of the dealer/store? ☐ YES ☐ NO

Did you find the unit you were looking for? ☐ YES ☐ NO

May we contact you regarding your dealer, your purchase or your unit? ☐ YES ☐ NO

Please rate your dealer/store on the following:

Product Knowledge	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
General Attitude	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Overall Service	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor

PLEASE SEAL WITH CLEAR TAPE BEFORE MAILING

United States Stove Company
227 Industrial Park Road
South Pittsburg, TN 37380
Attn: Registration Form

PLACE
STAMP
HERE
