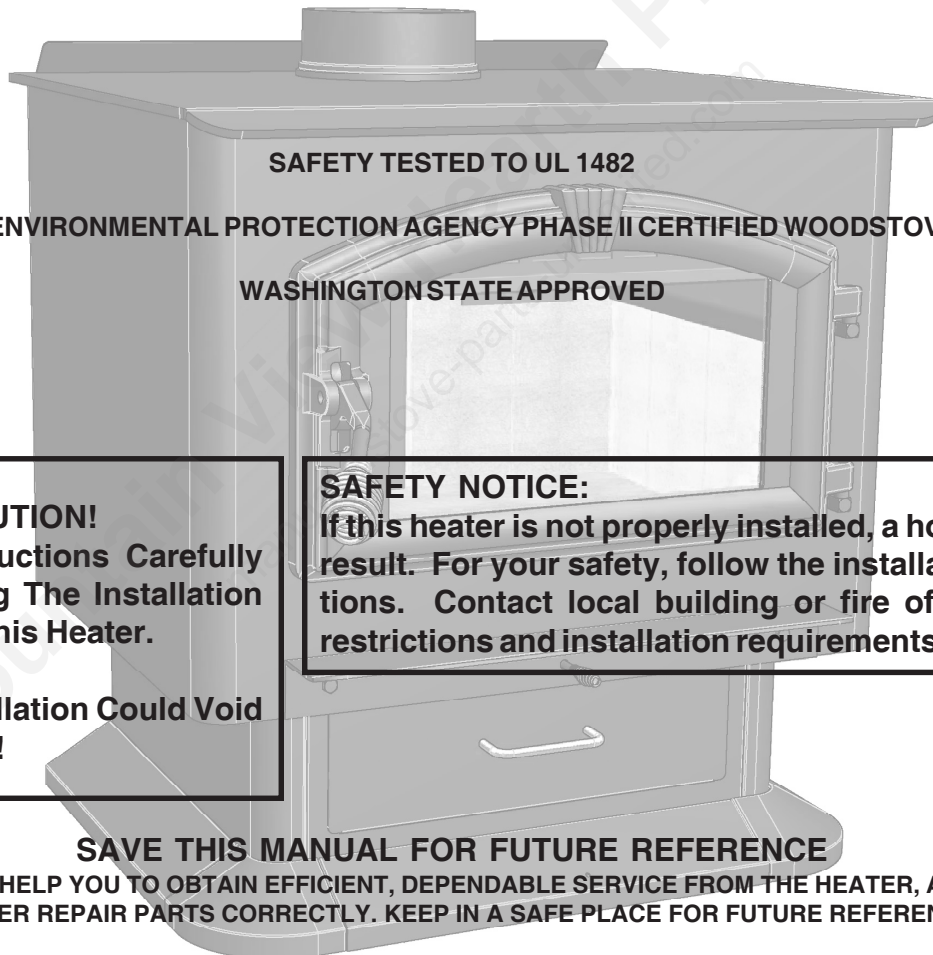


Owner's Operation and Instruction Manual



COUNTRY HEARTH

MODEL 2500



SAFETY TESTED TO UL 1482

US ENVIRONMENTAL PROTECTION AGENCY PHASE II CERTIFIED WOODSTOVE

WASHINGTON STATE APPROVED

CAUTION!

Read All Instructions Carefully Before Starting The Installation or Operating This Heater.

Improper Installation Could Void Your Warranty!

SAFETY NOTICE:

If this heater is not properly installed, a house fire may result. For your safety, follow the installation instructions. Contact local building or fire officials about restrictions and installation requirements in your area.

SAVE THIS MANUAL FOR FUTURE REFERENCE

THIS MANUAL WILL HELP YOU TO OBTAIN EFFICIENT, DEPENDABLE SERVICE FROM THE HEATER, AND ENABLE YOU TO ORDER REPAIR PARTS CORRECTLY. KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.



United States Stove Company

227 Industrial Park Road
P.O. Box 151
South Pittsburg, TN 37380



ASSEMBLY

Flue Collar Assembly:

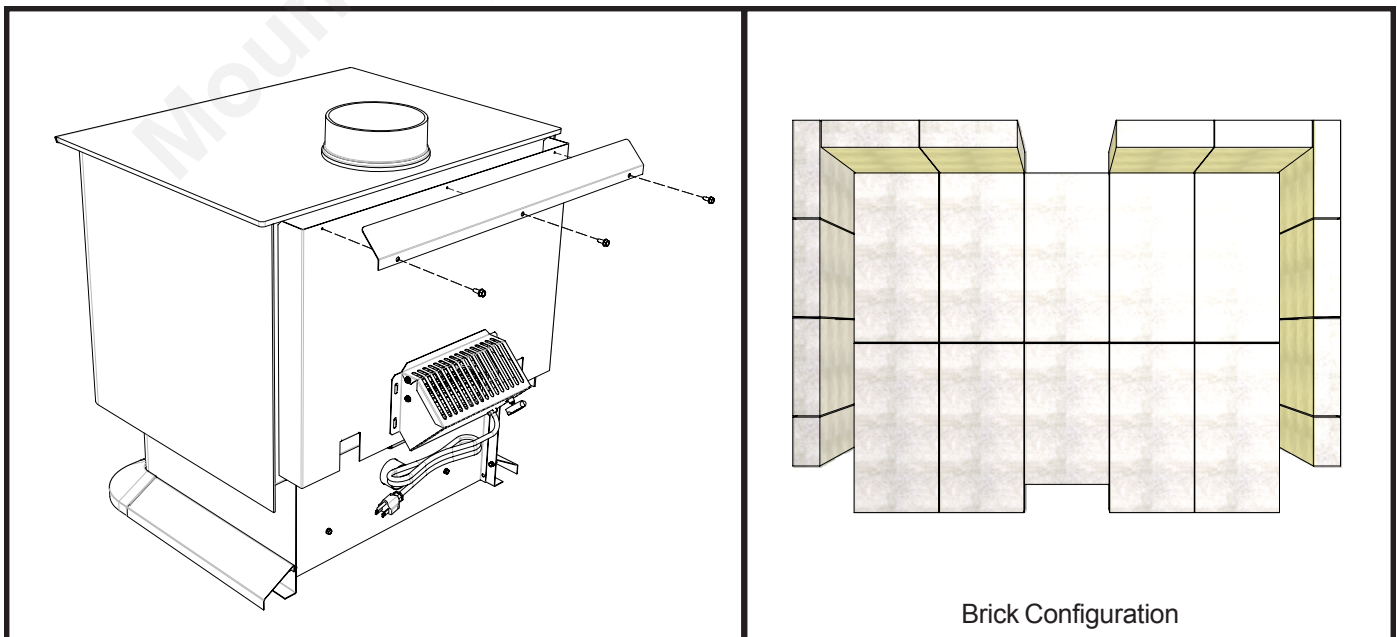
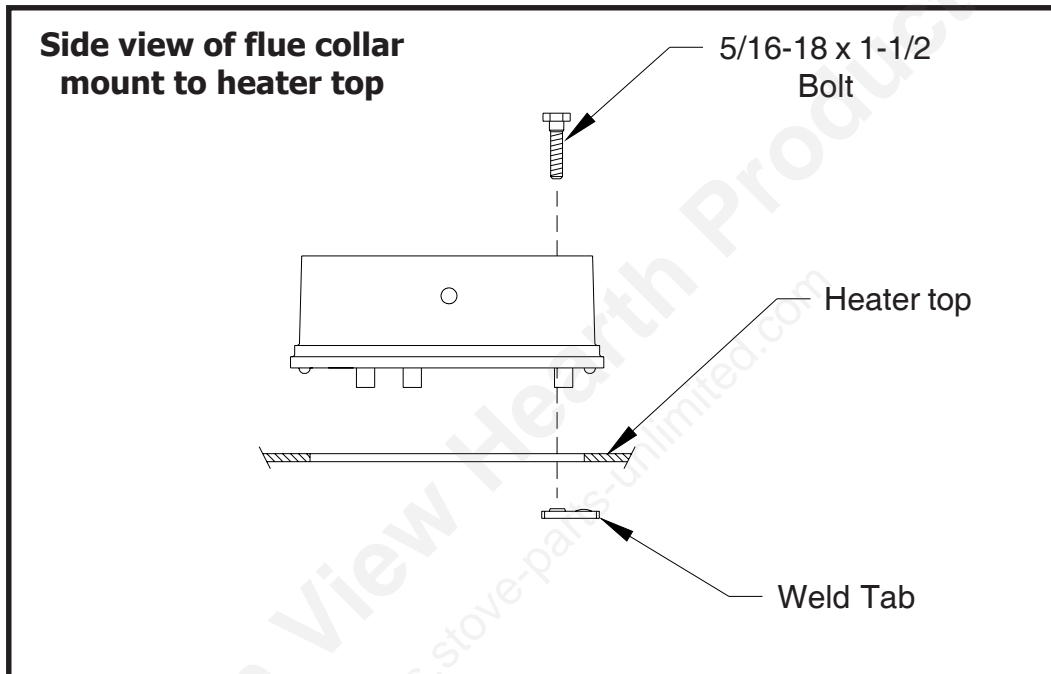
1. Mount the flue collar to the top of the unit as shown using the (3) 5/16-18 x 1-1/2 bolts, (3) washers, and (3) weld tabs provided in the parts box.

Room Air Deflector Assembly:

1. Locate the Room Air Deflector. Using the three (3) 1/2 Tek Screws provided, mount the deflector to the unit as shown in the diagram.

Firebrick Configuration:

1. Replace the Firebrick as shown in the illustration below.



BLOWER ASSEMBLY

ASSEMBLY INSTRUCTIONS

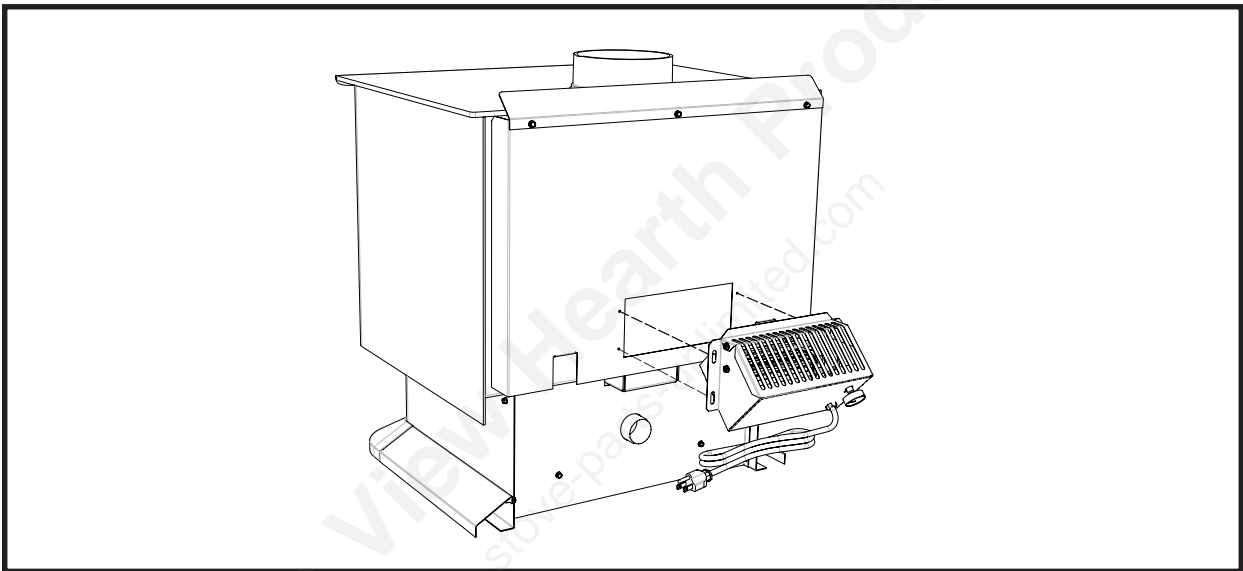
THE BLOWER ASSEMBLY MUST BE DISCONNECTED FROM THE SOURCE OF ELECTRICAL SUPPLY BEFORE ATTEMPTING THE INSTALLATION.

Step 1.

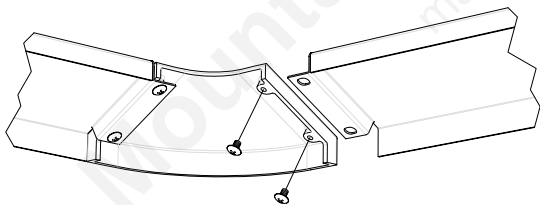
Fix the assembly to the back of the stove with the four screws provided.

THE BLOWER ASSEMBLY IS INTENDED FOR USE ONLY WITH A STOVE THAT IS MARKED TO INDICATE SUCH USE.

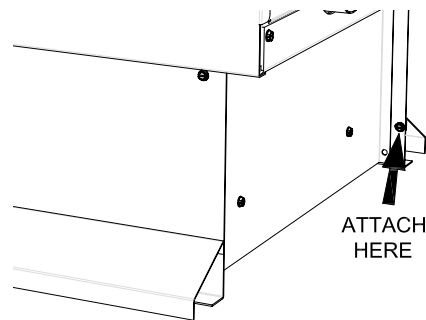
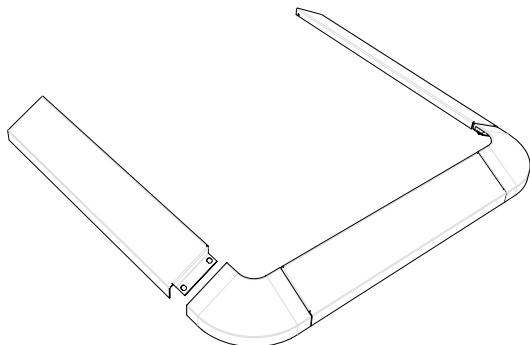
DO NOT ROUTE THE SUPPLY CORD NEAR OR ACROSS HOT SURFACES!



2500 PEDESTAL TRIM ASSEMBLY



Assemble trim pieces as shown with the screws provided in the parts bag.



After trim assembly, attach to the pedestal base at the location shown using the screws provided.

INSTALLATION

SAFETY NOTICE

- IF THIS STOVE IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THE INSTALLATION INSTRUCTIONS. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.
- CONSULT YOUR MUNICIPAL BUILDING DEPARTMENT OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATIONS REQUIREMENTS IN YOUR AREA.
- USE SMOKE DETECTORS IN THE ROOM WHERE YOUR STOVE IS INSTALLED.
- KEEP FURNITURE AND DRAPES WELL AWAY FROM THE STOVE.
- NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR “FRESHEN UP” A FIRE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE STOVE.
- IN THE EVENT OF A CHIMNEY FIRE, PUSH THE AIR CONTROL FULL CLOSED TO DEPRIVE THE FIRE OF OXYGEN. CALL THE FIRE DEPARTMENT.
- DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.
- A SOURCE OF FRESH AIR INTO THE ROOM OR SPACE HEATED SHALL BE PROVIDED WHEN REQUIRED.

POSITIONING THE STOVE

It is very important to position the wood stove as close as possible to the chimney, and in an area that will favor the most efficient heat distribution possible throughout the house. The stove must therefore be installed in the room where the most time is spent, and in the most spacious room possible. Recall that wood stoves produce radiating heat, the heat we feel when we are close to a wood stove. A wood stove also functions by convection, that is through the displacement of hot air accelerated upwards and its replacement with cooler air. If necessary, the hot air distribution from the stove may be facilitated by the installation of a blower.

The wood stove must not be hooked up to a hot air distribution system since an excessive accumulation of heat may occur.

A wood stove 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.

FLOOR PROTECTOR

Your wood stove should be placed on a 1 inch, non-combustible surface with a k factor of 0.84. For multiple layers, add R-values of each layer to determine the overall R-value. The R value for the required board is 1.2. The floor protector should be under the stove, twenty-six inches beyond the front and six inches beyond each side of the fuel loading and ash removal opening. If there is a horizontal section of chimney connector, the floor protector should go under it and two inches beyond each side

Convert specification to R-value:

k-factor is given with a required thickness (T) in inches: $R=1/k \times T$

C-factor is given: $R=1/C$

Example:

If the floor protector is 4" brick with a C-factor of 1.25 over 1/8" mineral board with a "k" factor of 0.29 the total R-value of the system is:

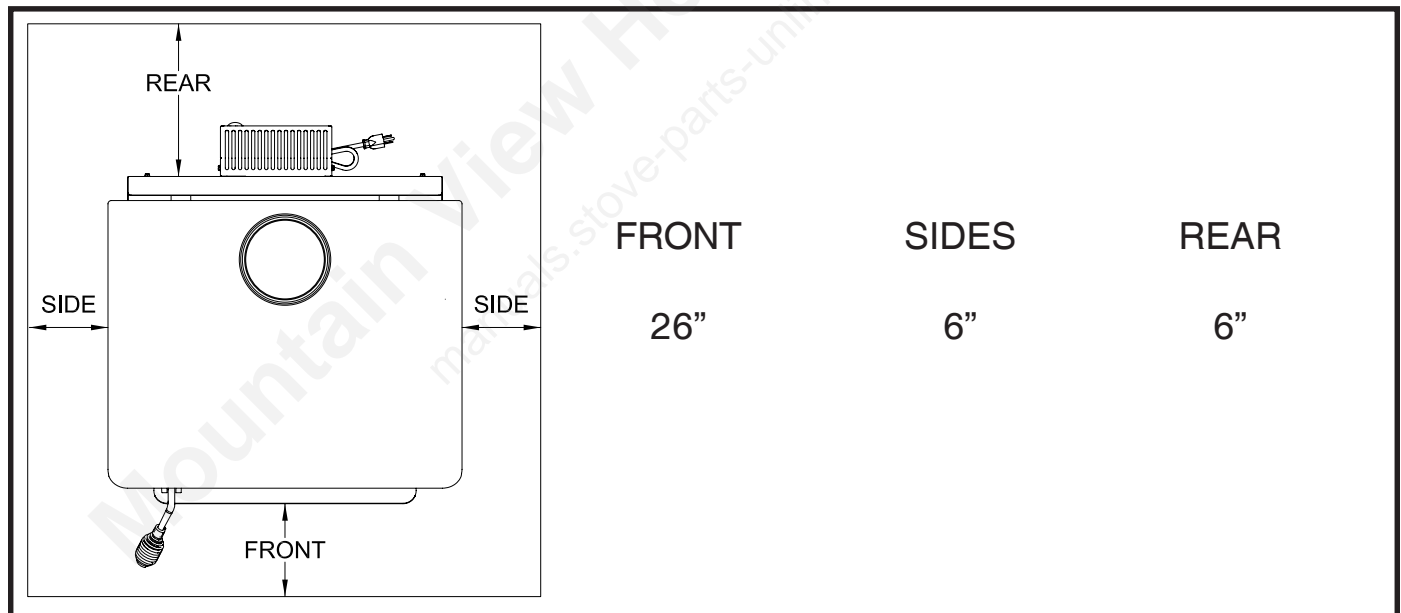
4" brick $C=1.25$, $R=1/1.25=0.8$

1/8" mineral board $K=0.29$, $R=1/0.29 \times 0.125=0.431$

Total $R = R_{brick} + R_{mineral} = 0.8 + 0.431 = 1.231$

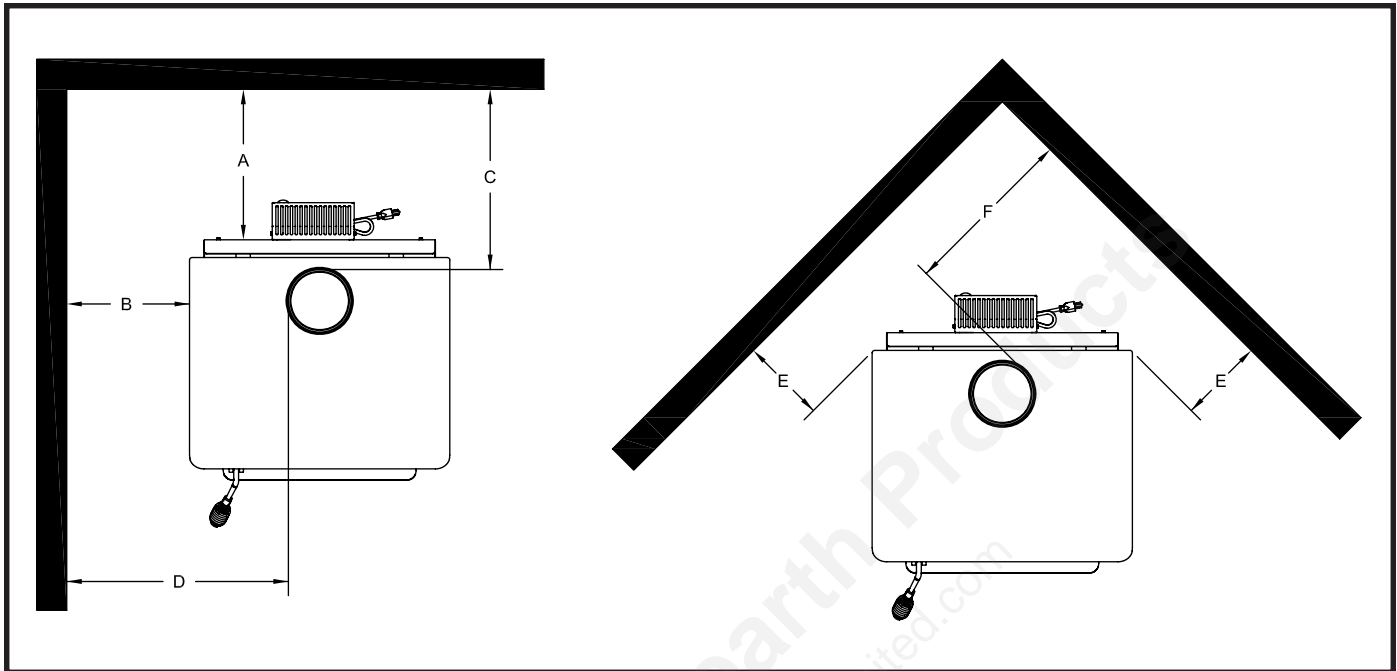
Total R is greater than 1.2, the system is acceptable.

The floor protector should exceed the stove as follows:



CLEARANCES TO COMBUSTIBLES

It is of utmost importance that the clearances to combustible materials be strictly adhered to during installation of the stove. Refer to the tables below :



Single wall pipe					
A	B	C	D	E	F
12	20	16	30	10.5	20

- Floor to ceiling height must be at least 7' (84") in all cases.
- The clearance between the flue pipe and a wall are valid only for verticle walls and for verticle flue pipe.
- The flue pipe must not go through roof trussing, an attic, a closet, a floor, a combustible partition, or similar spaces.
- A flue pipe crossing a combustible wall must have a minimum clearance of 18".
- To reduce flue clearances from combustible materials, contact your local safety department.

CHIMNEY

Your wood stove may be hooked up with a factory built or masonry chimney. If you are using a factory built chimney, it must comply with UL 103 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 stove 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 stove which creates the draft effect; your stove'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' (0.9 m) 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' (0.6 m).**
- 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 regularly.**

CHIMNEY CONNECTOR (STOVE PIPE)

Your chimney connector and chimney must have the same diameter as the stove outlet. 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 of the pipe faces down. Attach each of the sections to one another with three equidistant metal screws.

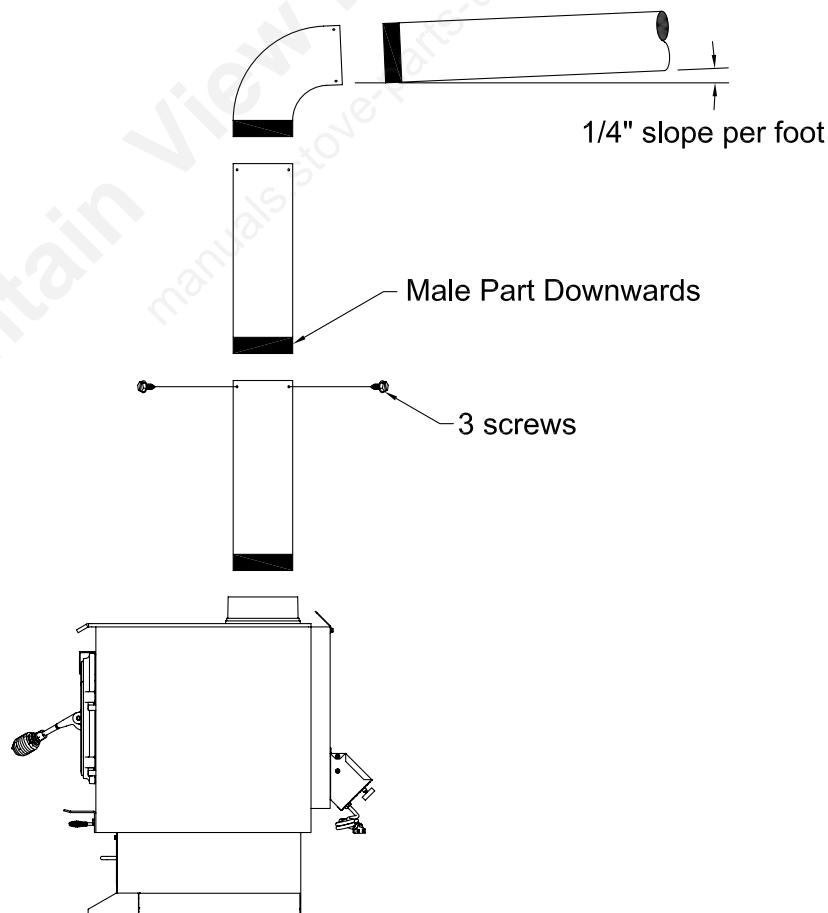
The pipe must be short and straight. All sections installed horizontally must slope at least 1/4 inch per foot, with the upper end of the section toward the chimney.

To insure a good draft, the total length of the coupling pipe should never exceed 8' to 10' (2.4 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.

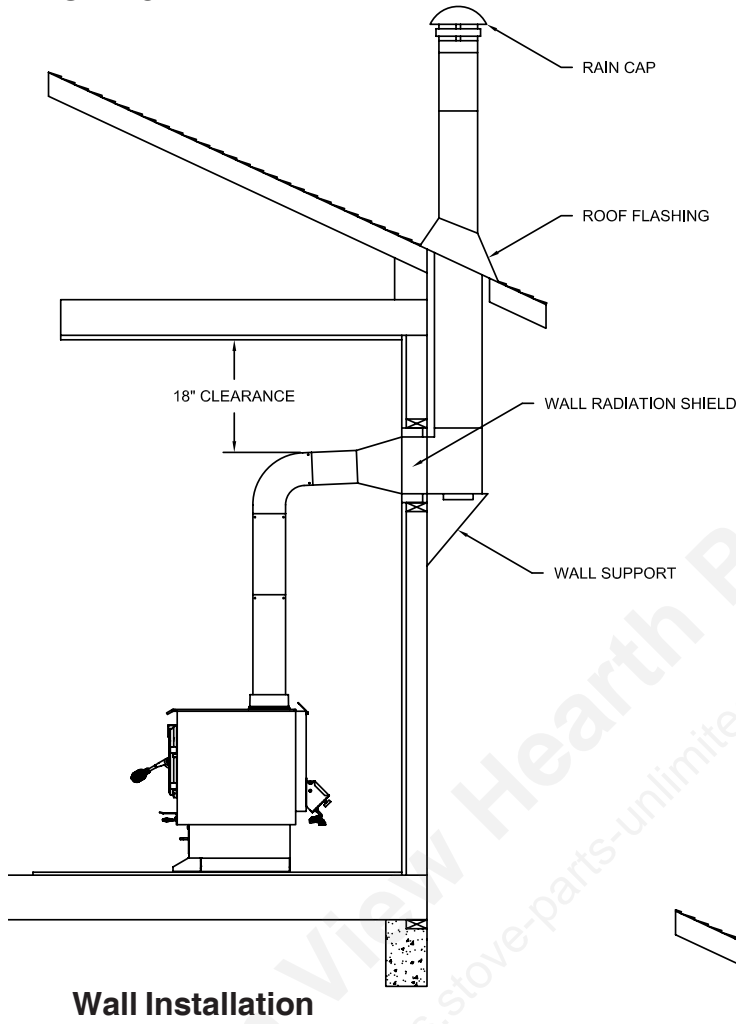
Installation of a "barometric draft stabilizer" (fireplace register) on a smoke exhaust system is prohibited.

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

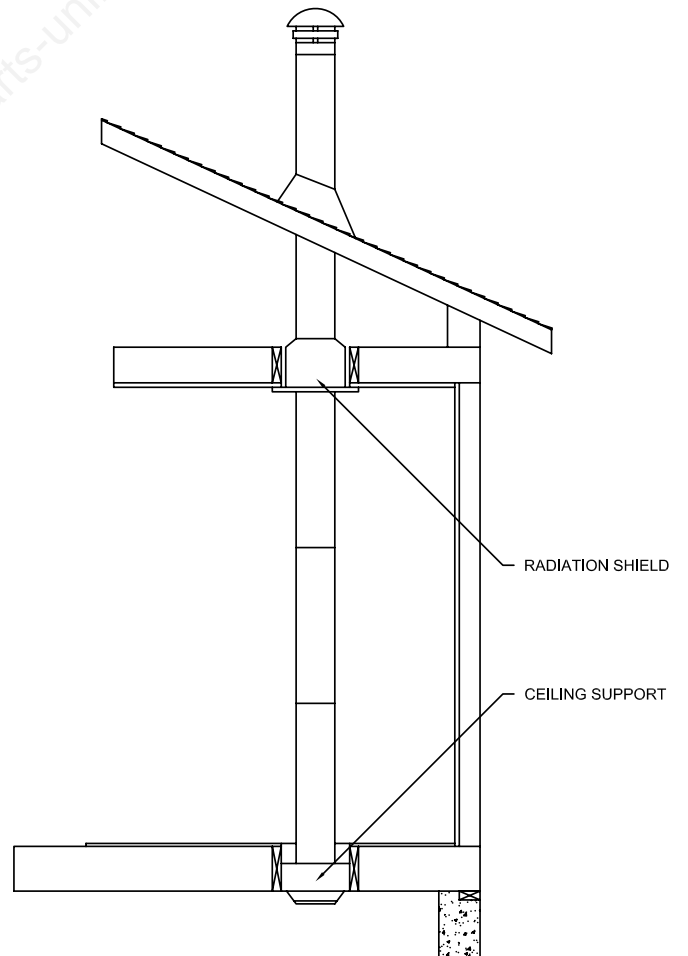


TYPICAL INSTALLATIONS

FACTORY BUILT CHIMNEY :



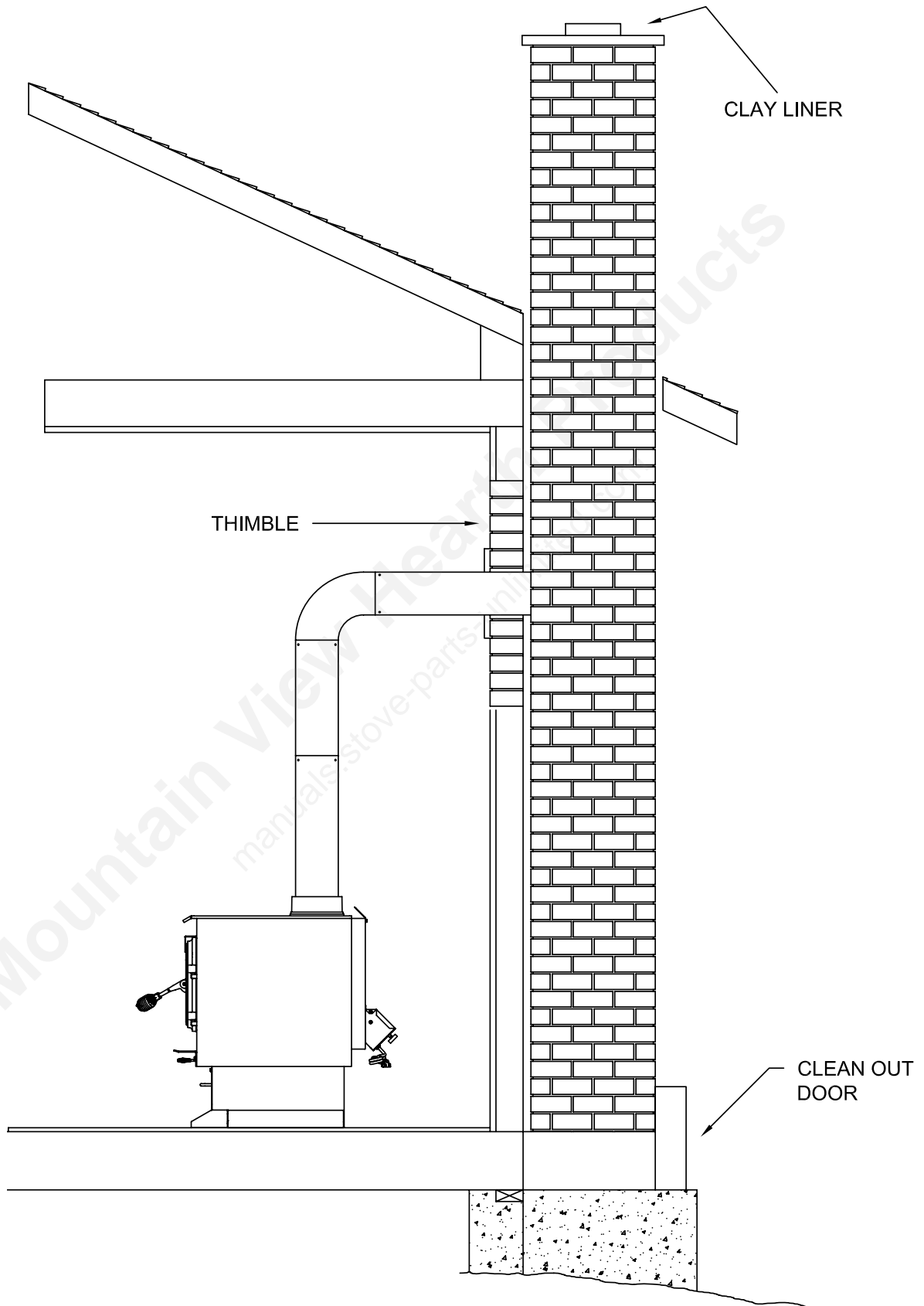
Wall Installation



Vertical Installation

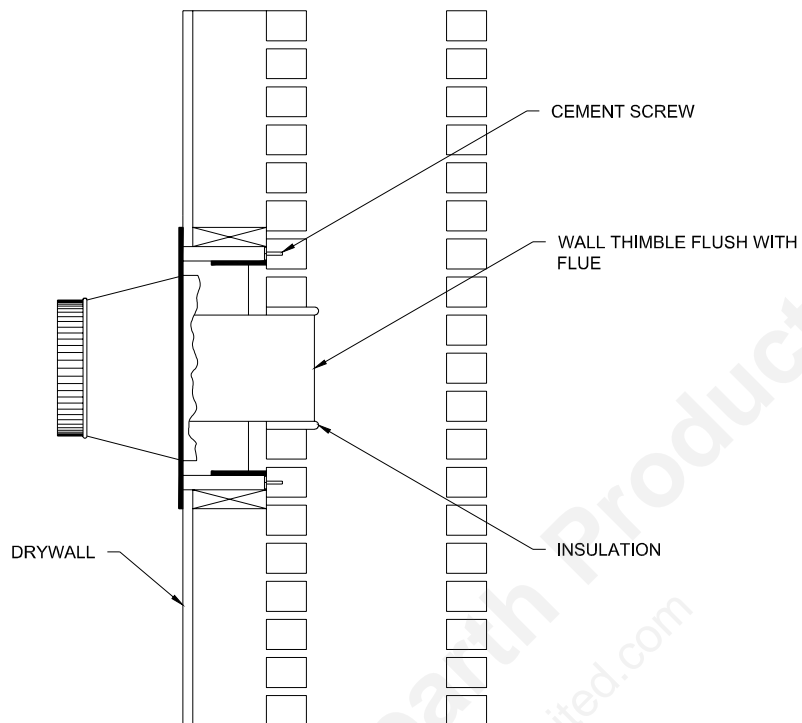
TYPICAL INSTALLATIONS continued...

MASONRY CHIMNEY :

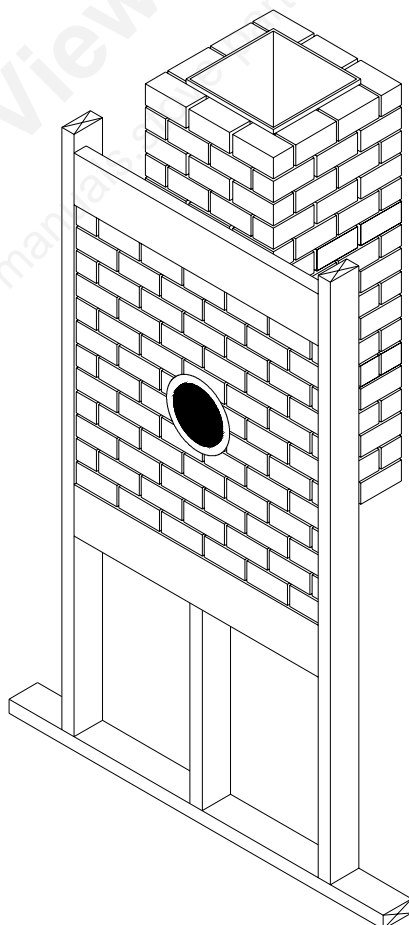


TYPICAL INSTALLATIONS continued...

FACTORY BUILT THIMBLE :



BUILT THIMBLE :



OUTSIDE COMBUSTION AIR

Your 2500 stove is approved to be installed with an outside air intake which is necessary for a mobile home. This type of installation is also required in air tight houses and houses with negative pressure problems. You can purchase this option through your heater dealer. Make sure to specify the part number mentioned in this booklet. Installation instructions are supplied with the air intake kit.

Outside combustion air may be required if :

1. Your stove does not draw steadily, smoke rollout occurs, wood burns poorly, or back-drafts occur whether or not there is combustion present.
2. Existing fuel-fired equipment in the house, such as fireplaces or other heating appliances, smell, do not operate properly, suffer smoke roll-out when opened, or back-drafts occur whether or not there is combustion present.
3. Opening a window slightly on a calm (windless) day alleviates any of the above symptoms.
4. The house is equipped with a well-sealed vapour barrier and tight fitting windows and/or has any powered devices that exhaust house air.
5. There is excessive condensation on windows in the winter.
6. A ventilation system is installed in the house.

WARNINGS for use in MOBILE HOMES:

- DO NOT INSTALL IN BEDROOM.
- THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL, AND CEILING/ ROOF MUST BE MAINTAINED.
- THE STOVE MUST BE ATTACHED TO THE STRUCTURE OF THE MOBILE HOME USING THE FIXATION HOLES ON THE BACK OF THE UNIT.
- INSTALL IN ACCORDANCE WITH 24 CFR, PART 3280 (HUD).
- USE A FACTORY BUILT CHIMNEY THAT COMPLY WITH UL 103 STANDARDS; THEREFORE IT MUST BE A TYPE HT (2100°F).

WOODSTOVE UTILIZATION

Your heating unit was designed to burn wood only; no other materials should be burned. Waste and other flammable materials should not be burned in your stove. Any type of wood may be used in your stove, 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 stove. 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 stove is caused by the fact that the wood used was too damp or had 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 element but not the sides.

TESTING YOUR WOOD

When the stove 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 pulling on it and close the door. If ignition of the piece is accomplished within 90 seconds from the time it was placed in the stove, your wood is correctly dried. If ignition takes longer, your wood is damp.

If your wood hisses and water or vapour escapes at the ends of the piece, your wood is soaked or freshly cut. Do not use this wood in your stove. 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 stove needs to be cured to preserve its quality. Once the fuel charge is properly ignited, only burn small fires in your stove 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 stove. The odors could be smelled during the 3 or 4 first fires. Never start your stove outside. You will not be able to see if you are over heating.

IGNITION

After making sure that the stove air intake controls are fully open (completely pull-out towards you), place several crumpled sheets of paper in the centre 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 heating 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 stove 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 mouth of the pipe inside the combustion chamber to warm up the chimney. Once the updraft movement is initiated, you are ready to ignite the stove 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:

Primary Air Settings (Slide Damper is located in center of stove under hearth plate) (Damper Adjustment: Pulling out on damper increases air)		Electric Blower Speed Setting (Variable) (Blower is on High when turned "ON", Rotate clockwise until stop for "LOW".)	
Burn Rate	Adjust Damper from fully closed	Burn Time	Blower Speed
Low	1/32"	@ 30 minutes	Low
Medium - Low	1/16"	@ 30 minutes	Low
Medium - High	5/16"	@ 30 minutes	Low
High	approx. 3"	all minutes	High

HEATING

Controlled combustion is the most efficient technique for wood heating because it enables you to select the type of combustion you want for each given situation. The wood will burn slowly if the wood stove 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. The air intake control on your stove is very simple. If you pull on it out completely towards you, it is fully open. If you push on it until it stops the combustion air is reduced to a minimum. 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 temperature.

WARNINGS

- NEVER OVERFIRE YOUR STOVE. IF ANY PART OF THE STOVE STARTS TO GLOW RED, OVER FIRING IS HAPPENING. READJUST THE AIR INTAKE CONTROL AT A LOWER SETTING.
- THE INSTALLATION OF A LOG CRADLE IS NOT RECOMMENDED IN YOUR WOOD STOVE.
- 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 stove'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 stove. Then bring the red embers to the front of the stove and reload the unit.

For optimal operation of your wood stove, 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.

When wood is burned slowly, it produces tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours 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. When burning wood, the chimney connector and chimney should be inspected at least once every two months during the heating season to determine if a creosote build-up has occurred.

We strongly recommend that you install a magnetic thermometer on your smoke exhaust pipe, approximately 18" above the stove. 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 275o F and 500o 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 stove to bring it back to proper operating temperatures. The secondary combustion can only take place if the firebox is hot enough.
- Always check for creosote deposit once every two months and have your chimney cleaned at least once a year.

ASH DISPOSAL

Ashes should be removed from the stove every few days or when ashes get to 2 to 3 inches deep. Always empty the stove when it is cold, such as in the morning. Always dispose of ashes in a metal container with a tight fitting lid. Place this container 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.

CAUTIONS:

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

MAINTENANCE

Your 2500 stove is a high efficiency stove and therefore require little maintenance. It is important to perform a visual inspection of the stove every time it is emptied, in order to insure that no parts have been damaged, in which case repairs must be performed immediately.

GLASS

- Inspect the glass regularly in order to detect any cracks. If you spot one, turn the stove off immediately. Do not abuse the glass door by striking or slamming shut. Do not use the stove if the glass is broken.
- **If the glass on your stove breaks, replace only with the glass supplied from your 2500 dealer.**
- To replace the glass, remove the screws retaining the glass mouldings inside the door. Remove the mouldings and replace the damaged piece with a new one. 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 stoves are sold.
- The glass should be washed only when cold.

GASKETING

It is recommended that you change the door gasket (which makes your stove 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 stove again approximately 24 hours after having completed this operation.

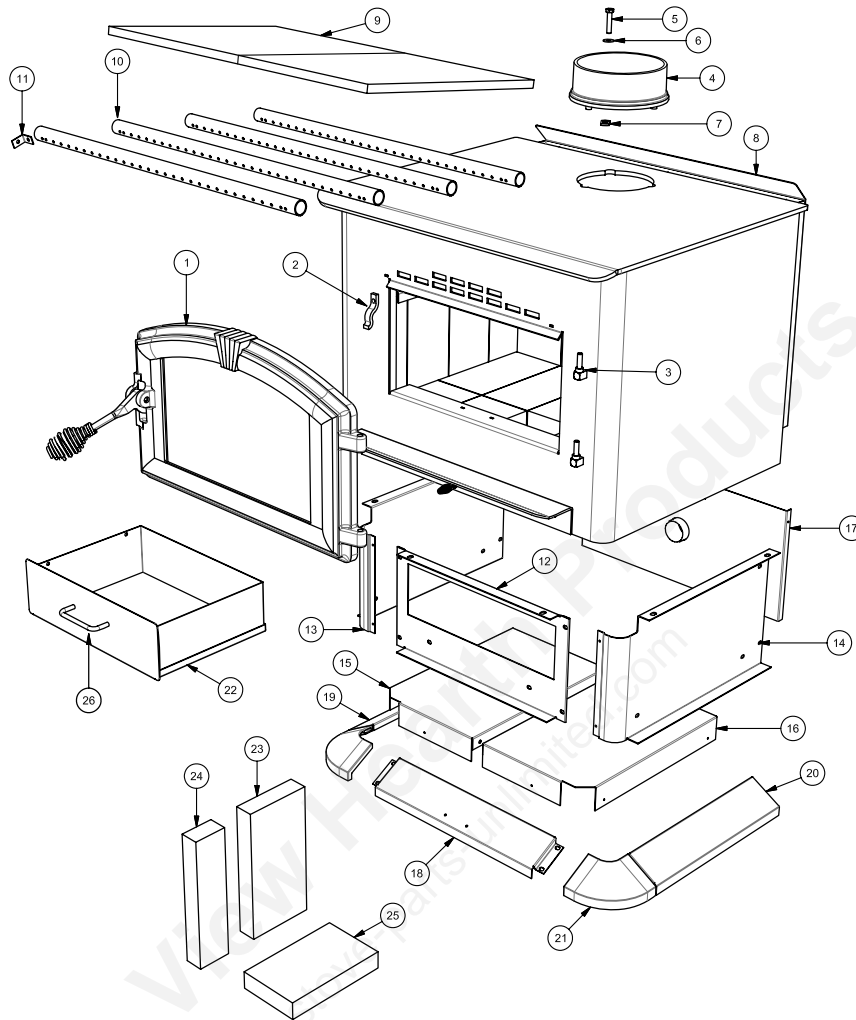
WARNING:

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

PAINT

Only clean your stove 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 stove 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 thin coats (2) of paint successively.

REPAIR PARTS



KEY	DESCRIPTION	PART NO.	QTY
1	Feed Door Assy.	69516MB	1
2	Feed Door Latch	25080B	1
3	Door Hinge	891373	2
4	Flue Collar	40292A	1
5	5/16-18 x 1-1/2 Bolt	83432	3
6	Washer	83045	3
7	Nut, 5/16-18	83431	3
8	Air Deflector	891528	3
9	Ceramic Fiber Board	88138	1
10	Secondary Tubes - Front	86643	2
•	Secondary Tubes - Rear	86645	2
11	Tube Retainer	891515	4
12	Pedestal Front	891518	1
13	Pedestal Left Side	891519	1
14	Pedestal Right Side	891520	1
15	Pedestal Bottom - Left	891521	1
16	Pedestal Bottom - Right	891522	1
17	Pedestal Back Weld.	891523	1
18	Front Trim (Pedestal)	891524	1
19	Left Trim (Pedestal)	891525	1
20	Right Trim (Pedestal)	891526	1
21	Trim, Corner	40496	2
22	Ash Pan Weldment	891527	1
23	Firebrick (Full)	89066	19
24	Firebrick (Half)	891414	2
25	Firebrick (4.5 x 7.5 x 1.25)	891530	1
26	Ash Pan Handle	891137	1

NOTES

Mountain View Hearth Products
manuals.stove-parts-unlimited.com

HOW TO ORDER REPAIR PARTS

THIS MANUAL WILL HELP YOU OBTAIN EFFICIENT, DEPENDABLE SERVICE FROM YOUR 2500 HEATER, 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 HEATER.

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: 2500
4. THE SERIAL NUMBER: _____



UNITED STATES STOVE COMPANY
227 INDUSTRIAL PARK ROAD
P.O. BOX 151
SOUTH PITTSBURG, TN 37380
(423) 837-2100
WWW.USSTOVE.COM

Ussc