hearthstone
the HEART of YOUR HOME

STARLET

Non-Catalytic Wood Stove

(Model 8550)

OWNER'S MANUAL

INSTALLATION & OPERATING INSTRUCTIONS

Warnock Hersey

C US

We recommend that our products be installed and serviced by professionals who are certified in the U.S. by NFI (National Fireplace Institute).
www.nficertified.org

PLEASE READ THIS ENTIRE OWNER'S MANUAL BEFORE YOU INSTALL AND USE YOUR NEW STARLET WOOD STOVE. To reduce the risk of fire, follow the installation instructions. Failure to follow these instructions may result in property damage, bodily injury, or even death.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE!

SAFETY NOTICE

IF THIS STOVE IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

TABLE OF CONTENTS

Introducing Your Starlet Wood Stove

Congratulations on your recent purchase of a HearthStone® woodburning stove. You have purchased perhaps the finest solid fuel, radiant/convection heater available today. Our unique design which incorporates the natural beauty of stone with the elegance of cast iron will give you years of service with minimal maintenance. We trust that you will appreciate the quality of our handcrafted product.

Please read this manual in its entirety. Its purpose is to familiarize you with your stove's safe installation, proper break-in, operation and maintenance. It contains information that will be useful to you now and in years to come, so keep it handy and refer to it as needed.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE!

The performance of your stove depends on many variables that make your installation unique. The sections on operating procedure and general information, therefore, can only serve as useful guidelines rather than hard and fast rules. Should you have any questions, do not hesitate to contact your dealer for additional information. You must return your warranty registration card to HearthStone within 30 days of purchase in order to validate your warranty.
This stove is manufactured and warranted by:

HearthStone®
Stafford Ave.
PO Box 1069
Morrisville, VT. 05661

Read and understand this Owner's Manual thoroughly before installing and using this stove.

CODES
When you install your Starlet wood stove, it is imperative that you adhere to all local codes, which can be obtained from either of the following two National sources:

American National Standards Institute, Inc. (ANSI)
1430 Broadway
New York, NY 10018

National Fire Protection Association, Inc. (NFPA)
Battery March Park
Quincy, MA 02269

If you are installing your Starlet in a mobile home, follow the guidelines described in the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 (United States).

SAFETY INFORMATION

*** * * * * * * * * ***

SAFETY NOTICE

IF THIS STOVE IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

*** * * * * * * * * ***

Make sure to install your stove:

- ❑ According to the manufacturer's recommendations.
- ❑ In accordance with all applicable codes.
- ❑ With the proper sized chimney.

When using your stove:

- ❑ Warn children and others unfamiliar with woodstoves of the danger of touching hot, radiating surfaces of your stove. For your additional safety, obtain hearth and stove guards through your local dealer.
- ❑ Follow recommended break-in procedure as outlined in this manual.
- ❑ Burn natural wood only. Higher efficiencies and lower emissions result when burning air-dried, seasoned wood, as compared to green or freshly cut wood.
- ❑ Use caution when loading firewood into a hot stove.
- ❑ Keep the front door closed at all times except when loading wood.
- ❑ Inspect the stovepipe, chimney connector and chimney, as recommended.

Follow these safety precautions:

- ❑ **Never** modify this stove in any way, especially the primary air control system.
- ❑ **Never** burn kiln dried wood, painted or treated wood, solvents, trash, plywood, colored or glossy paper, artificial logs, cardboard, coal, garbage or driftwood. *Especially, do not burn coal in this stove.*
- ❑ **Never** use gasoline type fuel, kerosene, charcoal lighter fluid, or other liquid fuels or solid fire starters to start or invigorate the fire. These fuels can possibly generate carbon monoxide, which can deplete the supply of oxygen. Keep all such materials away from the stove.
- ❑ **Never** use a wood grate or other device to elevate the fire.
- ❑ **Never** store wood within the installation clearances.
- ❑ **Do Not** allow logs to rest against or otherwise come in contact with the glass when the door is closed.
- ❑ **Do Not** slam the door or use the door to force wood in to the stove.
- ❑ **Never** over-fire your stove. (See page 18)
- ❑ **Never** put articles of clothing or candles on a hot stove.
- ❑ **Do Not** connect the stove to a flue that is serving another appliance.
- ❑ **Do Not** Expect the stove to heat more than 50% of the recommended volume if installed in a basement or in any area with a large portion of uninsulated masonry walls.

Other safety guidelines

- ❑ Keep all combustible items such as furniture, drapes, clothing, and other items, at least 36" (0.92 m) from the stove (See page8)
- ❑ Install a smoke detector, preferably in an area away from your wood stove.
- ❑ Keep a fire extinguisher handy. We recommend the type rated "A B C."
- ❑ Dispose of ashes properly. (See page 18)
- ❑ Keep children and pets away from the stove; they could be burned by touching a hot stove.

- ❑ Clean your chimney system as needed. (See page 19)

PERIODIC CHECKLIST

Perform each of these tasks at the specified intervals.

At the End of Every Week:
- Empty ashes from the firebox, sooner if the firebox begins to fill up.

At the Beginning of Every Other Month:
- A visual inspection of the chimney connector and chimney for creosote is recommended depending upon your use of the stove. (Please see page 19)
- Check door seals using the "dollar bill test." - When the fire is out and the stove is cool, shut the door on a dollar bill. If the bill pulls out without any resistance, then your stove's door isn't sealed properly. To tighten the seal, change the door gasket. (Refer to page 19.)

At the End of Every Season:
- Dismantle the chimney connector and clean it thoroughly. Replace any pieces that show signs of rust or deterioration.
- Inspect and, if necessary, clean your chimney.
- Thoroughly clean out the inside of the stove.
- Inspect all door gasket material and replace if worn, frayed, cracked or extremely hard.

EMERGENCY PROCEDURES

If you have a stovepipe or chimney fire, follow these instructions:

1. If the fire is too threatening, leave the area and call the fire department immediately! If not, perform the next three steps.
2. Close the primary air control.
3. Close the stovepipe damper (if present).
4. Keep the stove front door closed!

WARNING

DO NOT ATTEMPT TO PUT OUT A STOVEPIPE OR CHIMNEY FIRE BY THROWING WATER ONTO THE STOVE, STOVEPIPE, OR CHIMNEY. THE EXTREMELY HIGH TEMPERATURE ASSOCIATED WITH SUCH FIRES CAN CAUSE INSTANTANEOUS STEAM AND SERIOUS BODILY HARM.

Once the chimney fire has expired, leave the primary air control closed and let the fire in the stove die out completely. The stove should not be fired again until the stove, stovepipe, and chimney are all thoroughly inspected for any sign of damage. You must correct any damage before using your stove again.

SPECIFICATIONS

Maximum Heat Output 40,000 BTUs per hour of cordwood (based on independent laboratory test results).

Size Of Heated Area 800 to 1500 square feet.

Heat Life[2] 10 hours

Particulate Emissions 3.5 grams per hour

Firebox Capacity[3] 1.6 cubic feet (.0453 cubic meters) or 32 pounds of wood

Maximum Log Length 17" (430 mm)

Stove Dimensions

Height (no flue collar)	27" (68.6 cm)
Width	27" (68.6 cm)
Depth (no ash lip)	16" (61 cm)

Front Door Size 18" wide x 12" high (46 x 31 cm)

Stovepipe Size 6" (152 mm) diameter

Metal Chimney 6" (152 mm) inside diameter

Masonry Chimney 6" (15.2cm) inside diameter (round flue) 8" x 8" (20 x 20cm) (square flue)

Flue Exit 45° exit

Actual Weight 325 (147 kg) pounds

Shipping Weight 360 lbs (163 kg)

Crate Dimensions H-34" (87cm) W-30" (76 cm) L-24" (61 cm)

Optional Equipment Rear Flue Shield
Outside Air Kit
Optional Blower

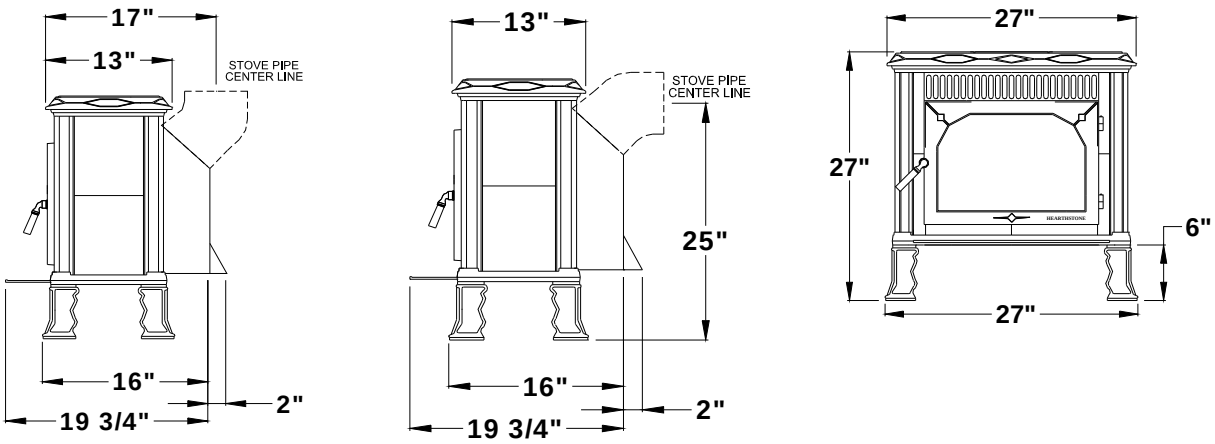
Stone Finish[1] orion black, soapstone, dakota red, autumn brown, and Aztec green

Castings Finish Painted Black Matte; and Porcelain Enamel (green, brown, Almond, Navy and Black)

[1]Polished gray soapstone is a natural product and will vary from stone to stone. Various amounts of gray, charcoal, blue and green will be evident according to the natural composition of the stone.

[2] Heat-Life is a trademark of NHC (HearthStone) and is defined as thermal capacitance or quantity of heat stored. Used here, it refers not just to burn time, but also to hours of usable heat obtained from a single load of fuel.

[3] The amount and weight of wood contained per cubic foot of firebox volume can vary from 15 to 36 lbs. per cubic foot depending on type of wood, moisture content, packing density and other factors. As a constant for comparison and test purposes, we are assuming 20 lbs. of seasoned hardwood per cubic foot of firebox volume.



Alcove with NFPA 211 Wall Protection

A: Sideshield to stove = 6" (150 cm)

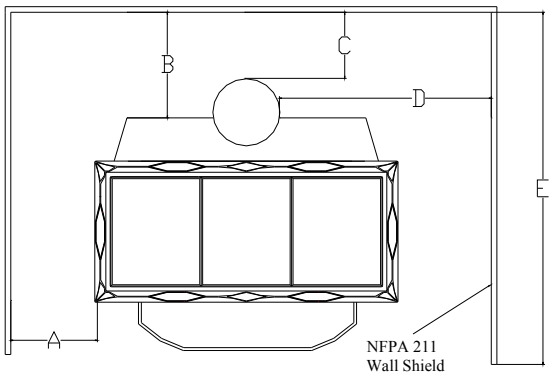
B: Backshield to stove = 9" (280cm)

C: Backshield to connector = 4" (100 cm)

D: Sideshield to connector = 16.5" (405 cm)

E: Maximum alcove depth = 26" (660 cm)

Top of stove to ceiling = 16" (405 cm)



Setting Up Your Starlet Wood Stove

UNPACKING

HearthStone Stoves packages your Starlet stove with the greatest care, so that it ships safely. Under certain circumstances, however, damage can occur during transit and handling. When you receive your stove, unpack it carefully, inspecting your stove and all parts for damage. Also, make sure that all parts are included in the box. If any parts are damaged or missing, please contact your dealer immediately.

INSTALLING YOUR STOVE

SAFETY NOTICE: IF THIS STOVE IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

Read these instructions completely before installing your stove. Avoid the possibility of a fire by installing this stove in accordance with these instructions as well as national, state, and local building codes such as NFPA 211 or CAN/CSA-B365. Be sure to maintain the designated stovepipe and stove clearances to walls, ceilings, hearth, and other combustible surfaces.

When locating your stove, consider safety, convenience, traffic flow, and the fact that the stove will need a chimney and chimney connector. Your stove should be located away from doors and hallways in an open area to allow for necessary clearances. Review the clearance illustrations for proper measurements from combustibles.

Keep furniture, drapes, curtains, wood, paper, and other combustibles far away from the stove. Never install the stove in locations where gasoline, kerosene, charcoal lighter, or any other flammable liquids are used or stored.

The stone walls of a HearthStone stone stove produces an even combination, radiant and convective heat. Locate the stove centrally in your living area to allow the heat to travel naturally to distant rooms. depending upon your installation you may want more convective heat. If that is so, an optional fan kit is recommended.

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE

The Starlet woodstove has been tested to UL 1482 and ULC 627 by Warnock Hersey, Inchcape Testing, Middleton, Wisconsin.

If you use a rear heat shield to obtain reduced clearances, you must use the rear heat shield manufactured by HearthStone, available through your local dealer. Clearances can be reduced either by using Double Wall pipe or using double wall pipe and a flue shield.

> Double wall connector pipe is air insulated connector pipe which must be used with a listed factory-built Type "H.T." chimney or a masonry chimney. When used in a mobile home, a spark arrester is required.

Clearances To NFPA 211 Protected Surfaces

You can reduce the clearances to combustible surfaces by using any National Fire Protection Agency (NFPA) approved wall protection system. Please refer to NFPA 211 for specifications and complete details. You can obtain this information directly from NFPA.

> National Fire Protection Agency
> Batterymarch Park
> Quincy, MA 02269
> 1-800-344-3555
> 1-617-770-3000

Handle Operation

A fixed handle is provided to operate the front loading door. The 10 o'clock position is open, the 7 o'clock position is latched.

OUTSIDE AIR SUPPLY

An outside air source may be connected directly to this stove using an optional outside air kit. The advantage of providing outside air directly to the stove is that the air used by the stove for combustion is taken from outside of the residence rather than from within the room where the stove is located. With outside air supplied directly to the stove, drafts within the room and air infiltration within the building are reduced. Use of the outside air kit may also improve stove performance in a particularly air tight house.

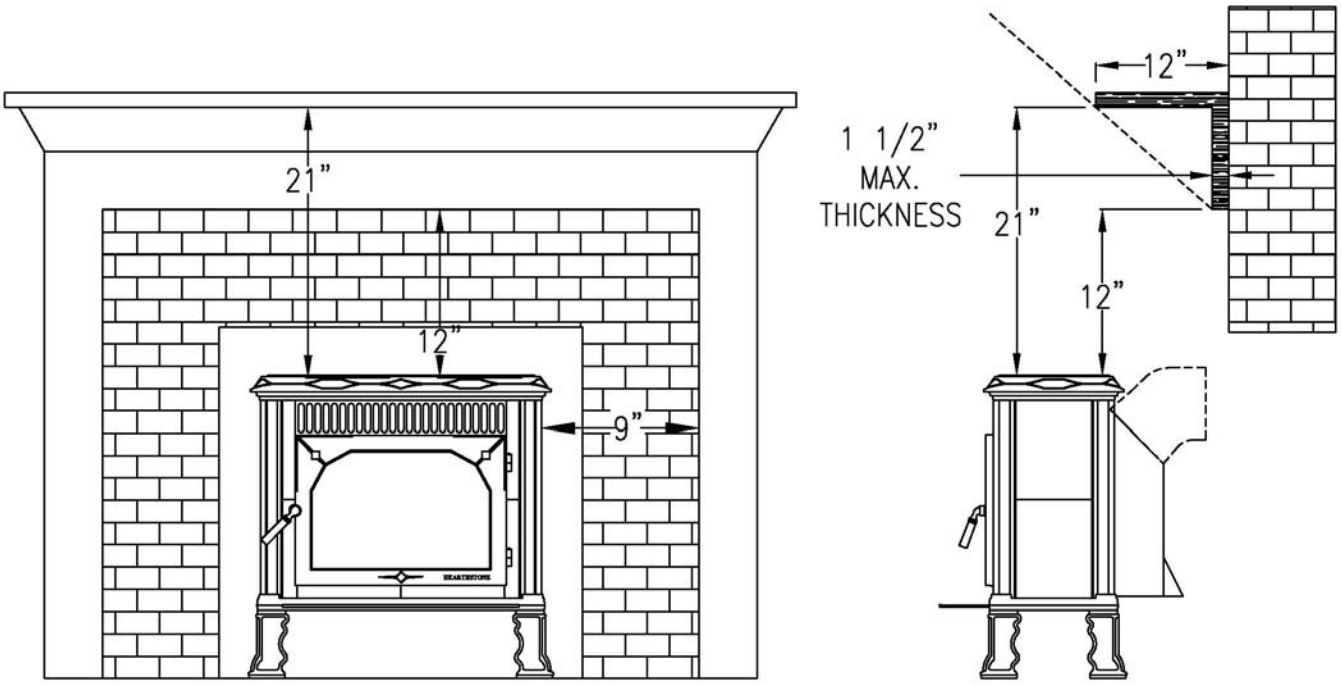
The outside air kit for this stove allows for the direct connection of the stove's air intake to a minimum 3" (76 mm) diameter duct (supplied by others) which leads to the outside of the house. When considering placement of the duct from the outside of the house to the hearth keep in mind the need to avoid structural members of the house and that the duct should terminate at the lower, center portion of the hearth. Connection of the duct to the stove is made on the lower center section of the stove. The termination of the duct on the outside wall of the stove should be located in such a manner so as to preclude the possibility of obstruction by snow, leaves or other material and should be screened against animals and insects. ¼" x ¼" mesh rodent screen and be covered with a rain/wind proof hood (flex pipe, outside termination, mesh, and hood supplied by others) Contact your dealer for availability.

CLEARANCES TO COMBUSTIBLES

It is very important to follow minimum clearances for chimney connectors to combustibles such as walls and ceilings when installing the stove near non-combustible surfaces.

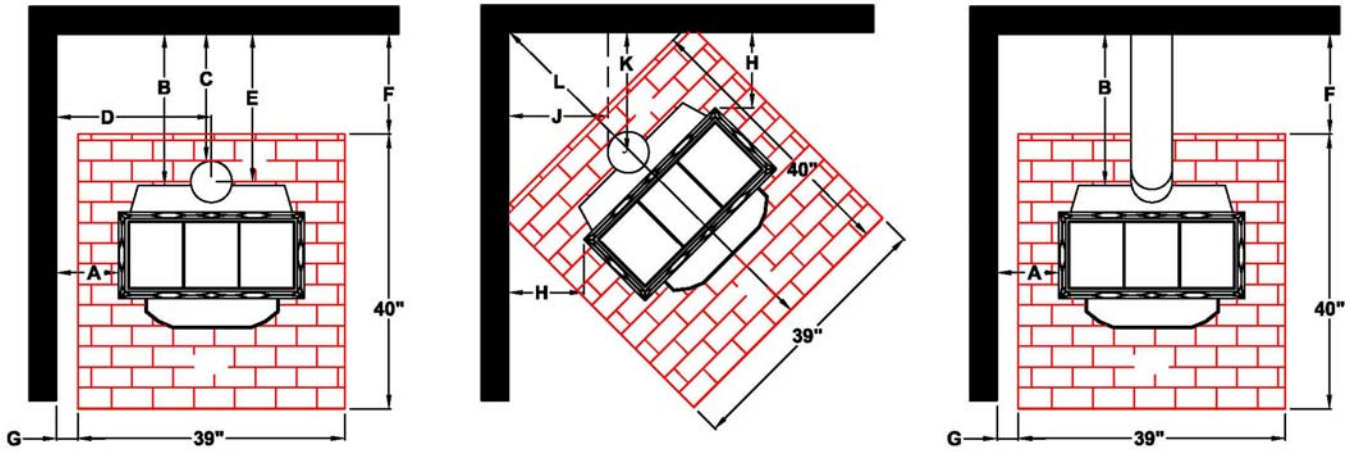
Clearaces *(inches)*	Parallel							Corner			
	A	B	C	D	E	F	G	H	J	K	L
Single wall connector; no heat shield	9	22	18	22 5/8	21 1/2	14 5/8	3 1/8	11	16	17 1/2	57 3/4
Double wall connector; no heat shield	9	15	10	22 5/8	14 1/2	7 5/8	3 1/8	9	13	15 1/2	55
Double wall connector + rear heat shield	10	11	6	23 5/8	10 1/2	3 5/8	4 1/8	9	13	15 1/2	55

FIREPLACE MANTLE TRIM



PARALLEL INSTALLATION:

A: Side wall to stove: 13” (33.0 cm)
B: Top trim to stove: 21” (53.3 cm)
C: Side trim to stove: 8” (20.3 cm)
D: Stove to Mantle: 25” (63.5 cm)
E: Stove front to floor protector:
16” (50.6 cm)US 18” (45.7 cm)CAN
F: Stove side to floor protector: 3.5” (8.9 cm)
G: Stove front to wall: 20” (50.8 cm)



CLEARANCES TO PROTECTED SURFACES

Clearances to combustible surfaces can be reduced by using any NFPA approved wall protection system. REFER TO NFPA 211 FOR SPECIFIC AND COMPLETE DETAILS:

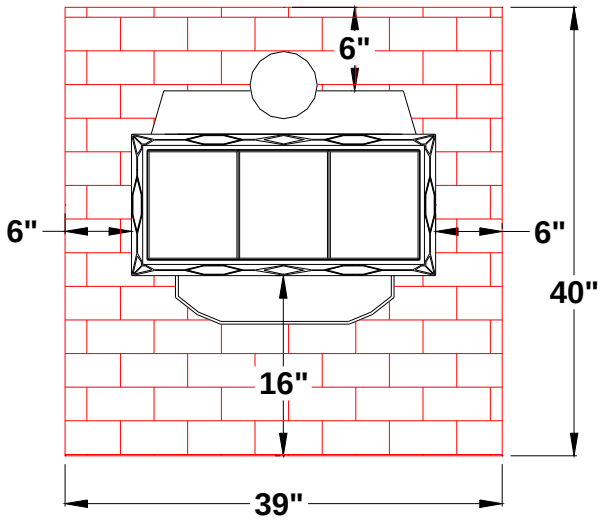
National Fire Protection Agency
Battery March Park
Quincy, MA 02269
1-800-344-3555
1-617-770-3000

HEARTH REQUIREMENTS AND FLOOR PROTECTION

The stove must be placed on a floor protector if the floor is wood or other combustible flooring. If carpeting is present, it must be removed. The floor protector must not be placed on carpet. An acceptable floor protector is a 3/8" (10 mm) minimum thickness non-combustible or listed floor protector with an "R" factor of 2.2. The floor protector must have minimum dimensions of 35"W x 38"D (889 X 965 mm) and must extend beyond the body of the stove at minimum as follows:

SIDE:	6" (152 mm)
REAR:	6" (152 mm)**
FRONT:	16" (406 mm)*

* Installations in Canada require 18” (45.72 cm) of floor protection in the front.
** Rear clearance required only if stovepipe runs horizontally back from the top of the stove.



VENTING COMPONENTS AND CONFIGURATION

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE

- Single wall connector is 24 MSG or 25 MSG blued steel stovepipe.

- Double wall connector (close clearance pipe) which must be used with a listed factory-built "Type HT" chimney also may be used with a masonry chimney to reduce clearances, is available from several manufacturers, your dealer can help you choose. Some air insulated connector pipe models available are Simpson Dura Vent DVL and Metalbestos DS. Security, GSW and Ameritec also have acceptable close clearance connector pipe.

- When used in a mobile home, a spark arrester is required. (See page 13)

- Chimney connector shall not pass through floor or ceiling, nor any attic or roof space, closet or similar concealed space. Where passage through a wall or partition of combustible construction is desired, the installation shall conform to NFPA 211 or CAN/CSA - B365.

- It is very important to follow minimum clearances for chimney connectors to combustibles such as walls and ceilings when installing the stove near non-combustible surfaces. Typical chimney connector clearances are outlined below. The single wall clearances are generic; the Double wall clearances are for Simpson Dura Vent DVL.

CHECK THE SPECIFICATIONS FROM THE MANUFACTURER OF YOUR CONNECTOR.

Components of a Venting System

The complete venting system consists of several components: chimney connector, wall thimble, wall pass-through, chimney, and liner. It is *absolutely necessary* that you install all of these components within the clearances to combustibles discussed earlier to install your stove safely.

To protect against the possibility of a house fire, you *must properly install and constantly maintain the venting system*. Upon inspection, immediately replace rusted, cracked, or broken components.

- The *chimney connector* is the stovepipe from the woodstove to the chimney. The chimney connector stovepipe must be 6" (152 mm) diameter, 24 MSG or 25 MSG blued steel connector pipe. *Do not use aluminum or galvanized steel pipe* - they cannot withstand the extreme temperatures of a wood fire.

- A *thimble* is a manufactured (or site-constructed) device installed in combustible walls through which the chimney connector passes to the chimney. It keeps the walls from igniting. You must use a wall thimble when installing a chimney connector through a combustible wall to the chimney.

- A *wall pass-through* (or chimney support package) also keeps the walls from igniting. You must use one when connecting through a wall or ceiling to a prefabricated chimney.

- Only install this stove to a *lined masonry chimney* or an approved high temperature *prefabricated residential* type building heating appliance chimney. *Do not* connect this stove to a chimney serving another appliance; you will compromise the safe operation of both the wood stove and the connected appliance.

WARNING:
DO NOT CONNECT THIS APPLIANCE TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

- A *liner* is the UL 1777 or ULC S635 (for factory built fireplace or masonry) chimney.

You must connect your stove to a chimney comparable to those recommended in this manual. *Do not use stovepipe as a chimney*. Use stovepipe for freestanding installations only to connect the stove to a proper chimney.

This stove may be connected to a code approved lined *masonry chimney* or UL 103 (ULC SB29) listed high temperature Type "H.T." *prefabricated residential* type building heating appliance chimney. Do *not* connect this stove to a chimney serving another appliance as doing so will affect the safe operation of both appliances. Do not connect this appliance to any chimney or ducting of an air distribution system.

Installing a Venting System

Stovepipe sections must be attached to the stove and to each other with the crimped end toward the stove. If creosote builds up, this allows the creosote to run into the

stove and not the outside of the stovepipe and onto the stove.

Secure all joints, including attaching the stovepipe to the stove's flue collar, with three sheet metal screws. Install #10 x 1/2" (3 mm x 13 mm) sheet metal screws into the holes pre-drilled in the flue collar. Leaving off the screws can cause joints to separate from the vibration that results from a creosote chimney fire.

You can simplify connecting stovepipe by using additional accessories such as telescoping pipes, slip-connectors or clean-out tees. These accessories ease the inspection of your chimney, as well as allow you to easily dismantle the stovepipe (without moving the stove) when you periodically inspect the stovepipe connection and chimney.

Install the stove as close as practical to the chimney, while maintaining all proper clearances. Install stovepipe that is as short and as straight as possible. Horizontal runs of stovepipe should always rise away from the stove a minimum of 1/4" per foot (21mm/m).

Long runs of stovepipe to increase heat dispersal are not recommended. Using longer lengths of stovepipe or more connecting elbows than necessary increase the chances of draft resistance and the accumulation of creosote buildup.

In general, you do not need to install a stovepipe damper with the Starlet. Some installations, however, could benefit from a stovepipe damper, such as a tall chimney which can create a higher than normal draft. In such cases, a damper can help regulate the draft. The Starlet requires a draft between 0.06" wc and 0.1" wc. For drafts above 0.1" wc, install a stovepipe damper. This should be checked at installation time.

Remember, the NFPA has recommended, minimum clearances for chimney connectors to combustibles such as walls and ceilings. Once the stove is installed at safe distances from these combustible surfaces, it is important to maintain these connector clearances for the remainder of the installation.

Connecting Your Wood Stove

You can install your Starlet to a prefabricated metal chimney or a masonry chimney.

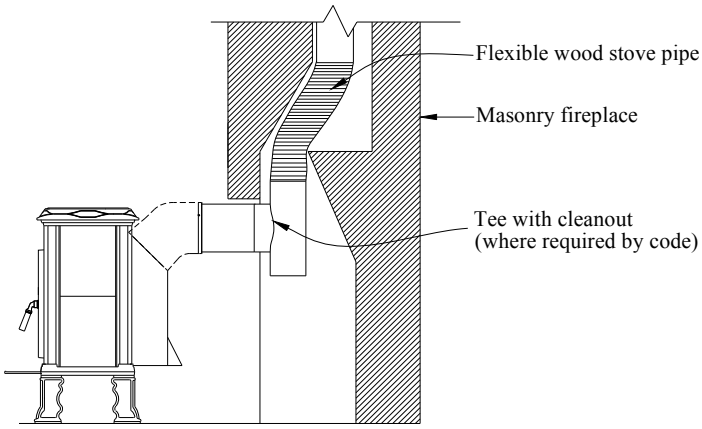
Connecting to a Prefabricated Metal Chimney

There are two ways to install a prefabricated metal chimney:

- An *interior* installation where the chimney passes inside the residence through the ceiling and roof.
- An *exterior* installation where the chimney passes through the wall behind the stove then up the outside of the residence.

Whenever possible, choose an interior chimney. An interior chimney heats up more quickly and retains its heat; thus promotes a better draft and discourages the formation of creosote. An exterior chimney does not benefit from the warmth of being surrounded by the building, so it typically operates at lower flue temperatures than an interior chimney. An exterior chimney's draft is not as strong and may experience increased creosote accumulation.

When connecting the Starlet to a prefabricated metal chimney, you must follow, precisely, the manufacturer's



installation instructions. Use only Type HT (2100 deg. F), prefabricated metal chimneys listed per UL 103 or ULC S629 standards.

WARNING:
DO NOT CONNECT THE STOVE TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

Make sure the size of the chimney's flue is appropriate for the Starlet. The Starlet requires a 6" (152 mm) inside diameter flue for new installations. A 6" diameter flue provides adequate draft and performance. You can use an 8" (203 mm) diameter existing flue with a reducer. An oversized flue contributes to creosote accumulation. (In this case, bigger is NOT better.)

When purchasing a prefabricated chimney to install with your stove, be sure to also purchase from the same manufacturer the wall pass-through (or ceiling support package), "T" section package, fire-stops (when needed), insulation shield, roof flashing, chimney cap, and any other needed accessories. Follow the manufacturer's instructions when installing the chimney and accessories. In addition, be sure to maintain all manufacturers' recommendations for the proper clearances to the chimney.

Exterior chimney requirements:

- ❑ At least 1" (25 mm) clearance to combustible structure.

Chimney height requirements: (See Illustration)

- ❑ At least 3 feet (0.9 m) higher than the highest part of the roof opening through which it passes.
- ❑ At least 2 feet (0.6 m) higher than any part of the roof within 10 feet (3 m) measured horizontally from the top of the chimney.

This stove requires a minimum chimney height of 13 feet (4 m). The maximum allowable chimney height is 30 feet (9m).

Connection To A Masonry Chimney

Consider two primary elements when connecting your stove to a masonry chimney: the chimney itself and the thimble where the stovepipe connects to the chimney. Use only Code approved masonry chimneys with a flue liner.

Before connecting to a masonry chimney, hire a professional to examine the chimney for cracks, loose mortar, and other signs of deterioration and blockage. If the chimney needs repair, complete them before installing and using your stove. Do not install your stove until the chimney is safe for use.

Make sure the chimney's cleanout is complete and working properly. To avoid a loss of draft, the cleanout must close off completely. If allowed to cool, your stove will perform poorly and creosote will build up in the chimney.

Make sure the size of the chimney's flue is appropriate for this stove and that it is not too large. Use a masonry chimney with an 8" x 8" (203 mm x 203 mm) tile size for best results. An oversized flue will contribute to the accumulation of creosote.

Use the following checklist to ensure that your masonry chimney meets these minimum requirements:

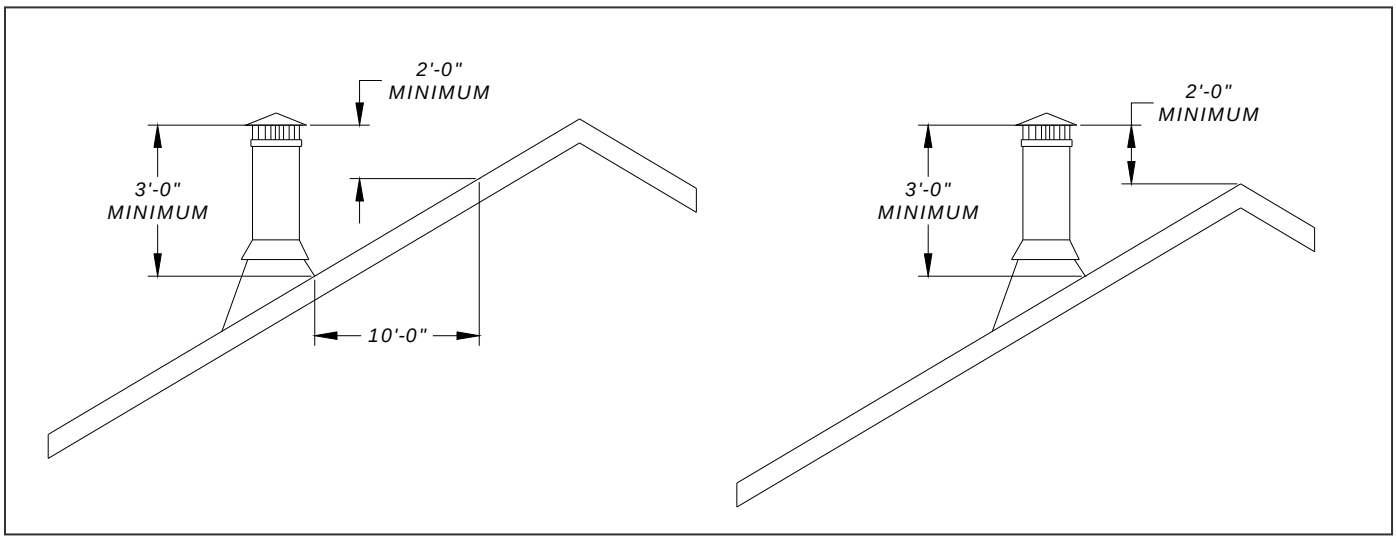
Chimney wall construction:

- ❑ Brick or modular block at least 4" (102 mm) thick.
- ❑ A rubble or stone wall.

Flue liner:

- ❑ Minimum thickness of 5/8" (16 mm).
- ❑ Installed with refractory mortar.
- ❑ At least 1" (25 mm) air space.
- ❑ An equivalent flue liner must be a listed chimney liner system meeting type HT requirements or other approved material. Interior chimney requirements:
- ❑ At least 2" (51 mm) clearance to combustible structure
- ❑ Fire stops must be installed at the spaces where the chimney passes through floors and/or ceiling.
- ❑ Insulation must be 2" (51 mm) from the chimney.

Exterior chimney requirements:



- ❑ At least 1" (25 mm) clearance to combustible structure.

Chimney height requirements: (See Illustration)
- ❑ At least 3 feet (0.9 m) higher than the highest part of the roof opening through which it passes.
- ❑ At least 2 feet (0.6 m) higher than any part of the roof within 10 feet (3 m) measured horizontally from the top of the chimney.

This stove requires a minimum chimney height of 13 feet (4 m). The maximum allowable chimney height is 30 feet (9m).

INSTALLING IN A MOBILE HOME

Follow these special requirements for installing your stove in a mobile home.

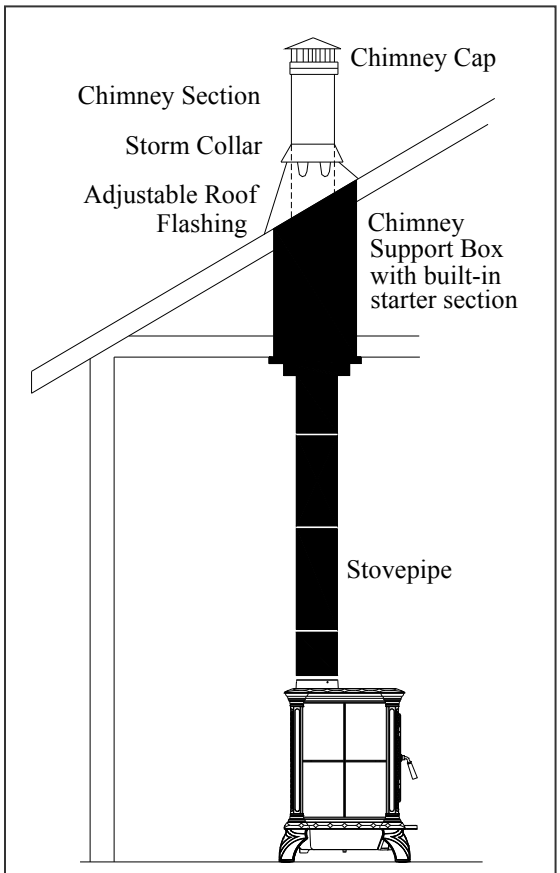
WARNING:
DO NOT INSTALL IN A SLEEPING ROOM

- Install the stove in accordance with 24 CFR, Part 3280 (HUD)
- Permanently attach the stove to your mobile home's floor. Use 1/4" holes in each leg base to bolt down the stove.
- Chimney must be removed when transporting Mobile Home.
- Install one of the following Dura-Vent Mobile Home Chimney & Connector Kits:
  6DP-MH 6" Diameter S/N 9096N
  7DP-MH 7" Diameter S/N 9196N
  8DP-MH 8" Diameter S/N 9296N

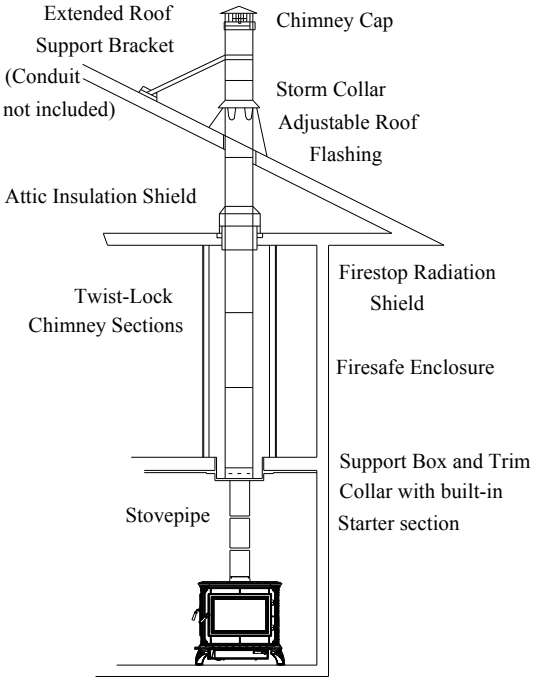
Each kit includes:
Stainless spark arrester cap, storm collar, Adjustable vented flashing – 0/12 – 6/12, Two 24" Dura/Plus* chimney pipes, 24"support box with built-in starter section and trim.

* (UL or ULC approved equipment is acceptable)

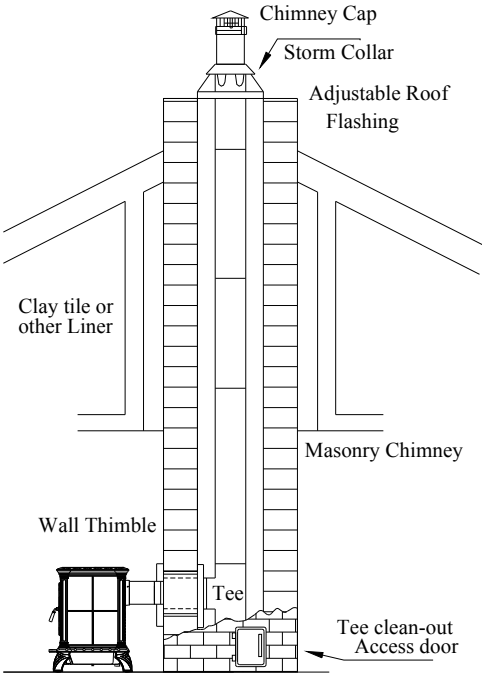
CAUTION:
MAINTAIN THE STRUCTURAL INTEGRITY OF THE MOBILE HOME WALLS, FLOOR, CEILING, AND ROOF WHILE YOUR STOVE IS INSTALLED AND IN USE.



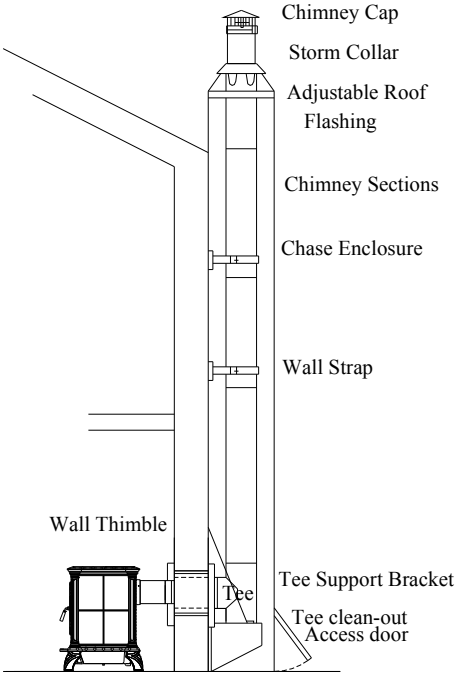
Typical Mobile Home installation.
Chimney supported by ceiling.



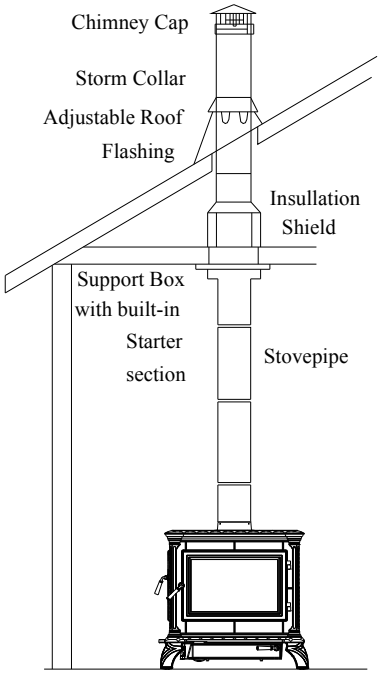
Two story house installation with attic.



Chimney pipe through Clay tile
or other Lined Masonry Chimney



Chimney through outer wall with enclosed chase.
Chimney is supported by Tee Support Bracket.



One story house installation with attic.
Chimney is supported by Ceiling.

Operating Your Starlet Wood Stove

Once your Starlet has been set in place, connected, and assembled, you are ready to light a fire. HearthStone Stoves tests each wood stove before we ship, so you should be able to easily light your first fire.

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

Please read this entire chapter before lighting your first fire. It explains the controls and features of your wood stove, how to choose firewood, and how to break-in your stove and use it on a daily basis.

CONTROLS AND FEATURES

You should become familiar with the location and operation of your stove's controls and features. Do not modify these features in any way.

PRIMARY AIR CONTROL: Located on the lower left side of the stove, under the ash lip, the primary air control regulates the amount of air entering the firebox. Generally speaking, the more air allowed into the firebox, the faster and hotter the rate of burn. It slides forward for more air, and back for less.

FRONT DOOR HANDLE; A fixed handle is provided to operate the front loading door. The 10 o'clock position is open, the 7 o'clock position is latched.

CHOOSING FIREWOOD

Your Starlet Wood Heater is designed to only burn firewood-also known as cordwood.

CAUTION:
DO NOT USE CHEMICALS OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA, KEROSENE, CHARCOAL LIGHTER FLUID OR ENGINE OIL TO START A FIRE. DO NOT USE CHARCOAL, PELLETS, COAL, ARTIFICIAL LOGS OR ANY OTHER MATERIALS AS FUEL; THEY ARE NOT SAFE. DO NOT BURN GARBAGE.

The quality of your firewood affects heat output, duration of burn and performance of your stove. Softwoods generally burn hotter and faster, while hardwoods burn longer and produce more coals. Density and moisture content are two critical factors to consider when purchasing wood for your stove.

The following is a list of wood species and their relative BTU (British Thermal Unit) content. The higher the BTU the longer the burn. Firewood with higher BTUs is generally considered ideal for a wood stove.

HIGH: Apple, Black Birch, Hickory, Locust, White Oak, Black Beech, Mesquite

MEDIUM HIGH: White Ash, Beech, Yellow Birch, Sugar Maple, Red Oak

MEDIUM LOW: Black Ash, White Birch, Grey Birch, Elm, Norway Pine, Pitch Pine, Black Cherry, Soft Maple, Tamarack

LOW: White Pine, White Cedar, Balsam Fir, Spruce, Aspen, Basswood, Butternut, Hemlock

Moisture content also plays a key role in the performance of your stove. Wood freshly cut from a living tree (green wood) contains a great deal of moisture. To properly season green wood, it should be split, stacked and allowed to air dry for a period of one year.

Ideally, firewood should be stacked on skids or blocks to keep it off the ground, and only the top of the stack should be covered. Plastic or tarps that cover the sides of the woodpile trap moisture and prevent the wood from drying. As for stacking, an old Vermonter said, "The spaces between the logs should be large enough for a mouse to get through, but not for the cat that's chasing it."

Firewood should not be stored within the stove's specified clearances to combustible materials.

Building A Fire

Once you understand the controls of your wood stove and have chosen the appropriate firewood, you are ready to start a fire.

BREAKING IN YOUR WOOD STOVE

It is imperative that your stove be "broken in" slowly. Stones must be "seasoned"; over-firing a new stove may cause stones to crack or may damage other stove parts.

Moisture in the stones must be driven out slowly to minimize the "shock" to the stone of its first exposure to high firebox temperatures. In addition, the asbestos-free furnace cement must be cured slowly to insure adequate sealing and bonding.

The bottom layer of firebrick in your firebox is intended to prevent thermal stress and should remain in place in the firebox at all times. Do not use a grate to elevate the fire. Build the wood fire directly on the hearth.

When you light your first fires, the wood stove will emit some smoke and fumes. This is normal "off-gassing" of the paints and oils used when manufacturing the wood stove. If you find it necessary, open a few windows to vent your room. The smoke and fumes will usually subside after 10 to 20 minutes of operation. The odor and smoke will end once the stove is "cured".

The first fires may produce other odors from impurities that exist in the area immediately surrounding the stove. Some of these impurities can be cleaning solvents, paint solvents, cigarettes, smoke, pet hair, dust, adhesives, a new carpet, and new textiles. These odors will dissipate over time. You can alleviate these odors by opening a few windows or otherwise creating additional ventilation around your stove. If any odor persists, contact your dealer or an authorized service technician.

If you adhere to the following break-in procedure, as well as all other operating procedures in this manual, the cast iron and stone components of your stove will give you many years of trouble-free use. With use, the color of the soapstone may change and small fractures may appear on the surface of the stone. These changes will only add character and distinction to your stove.

Avoid the following conditions that can cause the stone or cast iron pieces to break:

- Do not throw wood into the stove.
- Do not use the doors as leverage to force wood into the stove.
- Do not load wood that is encrusted with ice into a burning stove as the thermal shock can cause damage.
- Do not use a manufactured grate. Burn the fire directly on the firebrick that lines the bottom of the firebox.

BREAK IN FIRE

1. Open the door and place five or six double sheets of tightly twisted newspaper in the center of the firebox. Arrange kindling in a criss-cross pattern over the newspaper. Kindling should be approximately ten pieces, 1/2" (13 mm) in diameter and 10" to 18" (254 mm to 457 mm) long.

2. Fully open the primary air control by pulling the control handle fully forward.

3. Light the paper under the kindling. Leave the front door slightly ajar momentarily until the kindling has started to burn and draft begins to pull.

4. Close the door and allow the fire to burn. Keep the door closed while the stove is in use.

5. KEEP A WATCHFUL EYE ON YOUR STOVE to maintain a steady, low-heat fire. Your first and subsequent break-in fires should make the stove warm but not hot to the touch. At most, a few small pieces of wood should be added to the fire to reach safe break-in temperatures.

6. Once the stove is warm but not hot to the touch close the primary air control and allow the fire to die out completely.

7. Let the stove return to room temperature.

Your first three break-in fires should be built and maintained as outlined above. Your patience will be rewarded by a properly seasoned stove.

NOTE: Because of the cool flue gas temperatures present during the break-in procedure, creosote may build up quickly. We recommend a visual inspection (and cleaning if necessary) of your stovepipe and chimney once the break-in procedure is completed.

NORMAL OPERATION

If your stove is not used continuously or has not been used in quite some time, follow the break-in procedure at least once to minimize the stress of a hot fire on a cold stove before proceeding with normal operation. We recommend one break-in fire at the start of each heating season. Prior to loading the stove, make sure the ashes have been removed from the stove.

BUILDING A FIRE FOR EVERYDAY USE

1) Open the front or side door and place five or six double sheets of tightly twisted newspaper in the center of the firebox. Arrange kindling in a crisscross pattern over the newspaper. Kindling

should be approximately ten pieces, 1/2" (13 mm) in diameter and 10" to 18" (254 to 457 mm) long.

2) Fully open the primary air control by sliding it forward

3) Light the paper under the kindling. Leave the front door slightly ajar momentarily until the kindling has started to burn and draft begins to pull.

4) Close the door and allow the fire to burn.

5) Once the kindling is burning, open the front door and add logs, small at first, to build the fire up. Make sure to keep the logs away from the glass in front in order for the air-wash system to work properly. Otherwise, keep the door closed while the stove is in use.

6) Once the fire is burning well, use the primary air control to regulate the desired rate of burn. Sliding the handle forward opens the PRIMARY AIR CONTROL for a high rate of burn or pushing it back for a low rate of burn.

Note: When opening the door to reload or re-arrange logs, it is advisable to open the door just a crack, pause for a moment then open the door completely. This procedure will allow the firebox to clear of smoke before the door is opened fully. Also, reloading on a bed of hot, red coals reduces smoking time and will bring fresh fuel up to a high temperature rapidly.

BURN RATE

This stove is designed to burn firewood efficiently. The following operational tips will provide you with information on how to obtain the most heat possible with minimal creosote build-up and emitted pollutants.

HIGH BURN: Fully load the firebox with wood on a bed of hot coals or on an actively flaming fire and fully open the primary air control. A high burn rate is recommended once or twice a day to fully heat the stovepipe and chimney which will help minimize creosote accumulation. Do not burn the stove so hot as to cause the stove to glow red. This will shorten the life of the stove. Once the temperature of the room is at a comfortable level, subsequent loadings of the stove should be of smaller quantities of wood. Burning smaller amounts of wood at a high rate of burn will result in the most efficient burn, the least emissions of pollutants and the least accumulation of creosote in the chimney.

MEDIUM BURN: Set the primary air control to a mid-range setting appropriate for the heating needs of the area being heated. A medium burn rate should be the typical setting and is preferable if the stove is to be left unattended.

LOW BURN: Close the primary air control for a low burn rate A low burn rate over extended periods of time is not advisable as it may promote the accumulation of creosote. The venting system should be inspected frequently if low burn rates are maintained consistently.

Once familiar with the operational characteristics of the stove in your particular setting you will easily engage the stove in the high burn mode without risk to the stove or chimney.

OVERNIGHT BURN: The stove and chimney must be hot with an established fire prior to attempting an overnight burn. For an overnight burn, completely load the firebox with wood and, with the primary air control in the fully open position, allow the fire to burn intensely for 20 to 30 minutes. Now lower the primary air control to close to its lowest setting; the fire should settle into a low burn pattern with a small flame burning at a slow rate. The fire will now burn at a slow, steady rate depending on the primary air control setting, the type of wood being burned, the strength of the chimney draft and other variables which vary from installation to installation.

In the morning you should find a bed of hot coals buried within the ashes. The stove should be warm to the touch but not hot. To restart the fire without relighting, simply stir and rake the ashes with a poker until the hot coals have come to the surface. Place a handful of kindling on the coals, close the door and fully open the primary air control. The fire should reignite within 5 to 10 minutes. Place a few logs on the burning kindling, close the door, leave the primary air control fully open and allow the logs to ignite. Once the fire is burning briskly, regulate the primary air control to a medium setting for a moderate burn rate.

As it is recommended that you burn a hot fire at least once a day to burn off accumulated creosote from within the stove and venting system, it is good practice to burn the stove hot for 20 minutes or so every morning, especially after an overnight burn at a low rate of burn. This practice of a hot fire once a day will not only promote a clean stove and chimney, it will also help keep the glass clean for easy viewing of the fire within.

OVER-FIRE CAUTION

Over-firing means the stove is operating at temperatures above the recommended temperatures outlined above in the *BURN RATE* section. Over-firing should be carefully avoided since it will cause damage to the stove. Symptoms of over-firing include short burn times, a roaring sound in the stove or stovepipe, and discoloration of the stovepipe.

Over-firing can be caused by excessive draft, inappropriate fuel, and operator error. Correct an over-fire situation as follows:

EXCESSIVE DRAFT: Contact your dealer to have a draft reading taken. Any draft in excess of 0.1 wc requires a damper in the stovepipe. Some installations may require more than one damper.

INAPPROPRIATE FUEL: Do not burn coal, kiln dried lumber, wax logs or anything other than natural cordwood.

OPERATOR ERROR: Make sure all the gaskets are in good condition. Replace worn out or compressed gaskets. Do not burn the stove with the front door open.

Monitoring the temperature of the surface of the top stones is the best way to determine if the stove is over-firing. If you suspect that your stove is over-firing, contact your dealer immediately. **Damage done by over-firing is not covered by your warranty.** Results of over-firing can include: warped or burned out internal parts, cracked stones, discolored or warped external parts, and damaged enamel.

NOTE: ANY SYMPTOMS OF OVER-FIRING WILL VOID YOUR WARRANTY!!

REMOVAL AND DISPOSAL OF ASHES

Do not remove all ashes from the firebox as the ash level should be maintained at the proper level. Too much ash will inhibit the efficient and complete combustion of the firewood whereas too little ash will expose the bottom of the firebox to excessive direct heat from the fire. The firebox should ideally contain a 1-to-2" (25-to-51 mm) layer of ash on top of which the fire burns.

Ashes should be removed when the stove is cold. Use protective fireplace gloves. Exercise extreme caution when handling, storing or disposing of ashes.

Ashes should be dumped into a metal container with a tight fitting lid. Do not place any other items or trash into the metal container. Replace the lid onto the container and allow the ashes to cool. Do not place the ash disposal container on a combustible surface or vinyl flooring as the container will be hot!

Pending disposal, place the closed ash container on a noncombustible floor or on the ground, well away from all combustible materials. Ashes should be retained in the closed container until all cinders have thoroughly cooled.

Ashes should NEVER be placed in wooden or plastic containers, or in paper or plastic bags, no matter how long the fire has been out. Even after removal from the firebox, coals within a bed of ashes can remain hot for several days.

EMERGENCY PROCEDURES

If you have a stovepipe or chimney fire, follow these instructions:

1. If the fire is too threatening, leave the area and call the fire department immediately! If not, perform the next three steps.
2. Close the primary air control.
3. Close the stovepipe damper (if present).
4. Keep the stove door closed!

WARNING

DO NOT ATTEMPT TO PUT OUT A STOVEPIPE OR CHIMNEY FIRE BY THROWING WATER ONTO THE STOVE, STOVEPIPE, OR CHIMNEY. THE EXTREMELY HIGH TEMPERATURE ASSOCIATED WITH SUCH FIRES CAN CAUSE INSTANTANEOUS STEAM AND SERIOUS BODILY HARM.

Once the chimney fire has expired, leave the primary air control closed and let the fire in the stove die out completely. The stove should not be fired again until the stove, stovepipe, and chimney are all thoroughly inspected for any sign of damage. You must correct any damage before using your stove again.

MAINTENANCE

MONITORING STOVE TEMPERATURES

Monitor the stove temperatures with a stove thermometer (available from your dealer) placed on the top center stone of the stove. The thermometer could read as high as 500°F(260°C) on High Burn and 200-300°F(93-149°C) on low burn. Maintaining temperatures in excess of 600°F(316°C) will cause the stones to crack and other damage to the stove.

Do not over-fire the stove. (refer to page 17).

Damage done by over-firing will void the warranty.

CREOSOTE FORMATION AND NEED FOR REMOVAL

When wood is burned, it produces tar, water vapor, and other organic vapors. These vapors condense and form creosote on the walls of chimneys which are cool due to newly started fires, low burn rates or poor chimney design. If ignited, this creosote residue makes an extremely hot fire which may damage the chimney or even destroy the house.

To prevent the buildup of creosote:

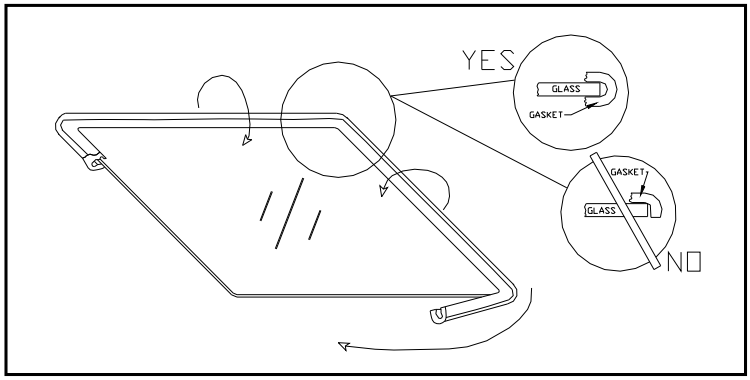
1. Burn the stove at a high burn rate for 35 to 45 minutes daily to burn out creosote deposits from within the stove and the venting system.

2. After reloading with wood, burn the stove at a high burn rate for 20 to 30 minutes. This manner of operation ensures early engagement of the secondary combustion system which, when engaged, minimizes creosote buildup in the chimney.

The stovepipe connector and chimney should be inspected at least twice monthly during the heating season to determine if a creosote build-up has occurred. If a creosote residue greater that 1/4" (6 mm) has accumulated, it should be removed to reduce the risk of a chimney fire.

The venting system must be inspected at the stove connection *and* at the chimney top. Cooler surfaces tend to build creosote deposits quicker, so it is important to check the chimney at the top (where it is coolest) as well as from the bottom near the stove.

Accumulated creosote should be removed with a cleaning brush specifically designed for the type of chimney in use. A chimney sweep can perform this service.



It is also recommended that before each heating season the entire system be professionally inspected, cleaned and repaired, if necessary.

GASKETS

Gasket material should normally be replaced every two to three seasons, depending on stove use. If the door seal is loose, a new gasket will assure a tight seal and improved stove performance. Contact your dealer for a gasket kit which includes instructions and gaskets for your stove.

To replace door gaskets, first remove the old gaskets with a utility or putty knife. Clean all gasket channels with a wire brush. Apply gasket cement to the channels and push the new gasket into place without stretching the gasket material. The door should be shut immediately to fully press the gasket into place assure a positive seal.

We require the use of the following gaskets:

GLASS:3/4" (19 mm) Wide, Adhesive Backed Black Tape

DOOR:1/4" (6 mm) Diameter, Low Density Black Tube

GLASS

Do not operate stove with broken door glass. Do not abuse front door by striking or slamming. The door glass should be replaced immediately if broken. Contact your local dealer for replacement glass.

Important: scratching or etching the glass will weaken the integrity of the glass. Do not use a razor blade, steel wool, or any other abrasive material to clean the glass. Use low alkaline content cleaners only.

The glass can be cleaned with commercial stove glass cleaners (such as Heatsafe). Do not use abrasive cleaners. Do not clean while the glass is hot. The edge of a new utility knife blade can be used to scrape stubborn creosote from the glass surface.

The front door glass is a ceramic, shock-resistant glass, made specifically for use in woodstoves. Do NOT use any replacement glass other than glass supplied by N.H.C., Hearthstone.

The procedure for glass and glass gasket replacement is as follows:

1. Remove the door by lifting it straight up off the hinges with the hinge pins remaining in the door.
2. Place the door face down on a flat, smooth surface.
3. Remove the window frame screws to separate the window frame from the door.
4. Carefully lift the glass from the door.
5. Apply the new gasket to the new glass as illustrated to form a cushion on one side of the glass.
6. Place the gasketed glass onto the door with the cushion of gasket facing down towards the door.
7. Screw the window frame back on the door.
8. Install the door.

STONE

Occasional cleaning is all that should be necessary to maintain the natural beauty of your stove's polished stone finish. Clean the stone with water, any non-abrasive cleaner and a soft cloth. Wipe dust from the stone with a clean cloth. Do not use chemical agents to wash the stone; do not use waxes or any polishing agents on the stone.

Care must be taken not to scratch or chip the stone. Do not set items, which can scratch or chip the stone (or enamel finish), on top of your stove.

Often, with use and over time, subtle earth tones of brown, red, and yellow appear on the soapstone. This is a natural reaction in the soapstone. Surface or hairline fractures may appear in the stone after a stove has been used. Such changes are normal and do not affect the operation or the integrity of the stove and do not require replacement. If you observe a completely broken stone, contact your dealer for service

CAST IRON

Exterior cast iron parts are either painted with black, high-temperature stove paint or porcelainized with an enamel finish in various colors.

Use black, high-temperature stove paint (satin black by Stovebright) to touch up and maintain the original appearance of painted cast iron. Use a damp sponge to wipe clean. Dry the cast iron thoroughly to prevent rusting.

Enamel castings can be cleaned with a standard glass cleaner. With time and use, a very fine, subtle network of crazed lines may appear seemingly beneath the surface of the enamel. Crazing is a natural predictable process and does not represent a flaw.

PERIODIC CHECKLIST

EVERY WEEK

-Empty ashes from the firebox.

EVERY TWO WEEKS

-Visually inspect chimney connector and chimney for creosote; clean accordingly.

EVERY EIGHT WEEKS

-Check door seals using the "dollar bill test." When the fire is out and the stove cool, shut the door on a dollar bill. If the bill pulls out easily, the door isn't sealed properly. Change the door gasket.

AT SEASON'S END

-Dismantle chimney connector and clean thoroughly; replace any pieces that show signs of rust or deterioration.
-Inspect and, if necessary, clean your chimney.
-Thoroughly clean out the inside of the stove.
-Inspect all door gasket material and replace if worn, frayed, cracked or extremely hard

TROUBLESHOOTING

Your Heating Needs

Virtually all woodstove operators experience basic common problems at one time or another. Most are correctable and generally require only a minor adjustment of the stove, installation, or operating technique. In cases where weather conditions dramatically affect stove performance, the problems are typically temporary and solve themselves once the weather changes.

If you question whether your stove is producing adequate heat, the best way to troubleshoot the problem is to monitor the temperature of the stack. A 400 degree F (200 degree C) stovepipe confirms the stove is supplying sufficient heat. Keep in mind that your house itself will regulate room/house temperatures. How well the walls, floors and ceilings are insulated, the number and size of glass windows, the tightness of outside doors, and the construction or style of your house (vaulted ceilings or other open spaces which collect large percentages of heat, ceiling fans, etc.) all are determining factors of room temperature.

Your stove's performance is also dependant on its installation. One common cause of poor performance is an oversized chimney flue. Oversized chimney flues result in decreased draft, which prevents the smoke from rising out the chimney. Oversized flues are also more difficult to heat effectively, especially when burning a high efficiency stove. Cool flue temperatures inhibit the establishment of a strong draft (and encourage the accumulation of creosote). The lack of a strong draft will cause the fire to die down and may even force the smoke to pour into the room.

If your chimney is the proper size and a strong draft is not easily established, there is the possibility of the chimney being too cold. Again, hot chimneys promote a stronger draft.

Other draft guidelines are as follows:

AN **"AIRTIGHT" HOUSE:** If your home is super-insulated or especially well sealed, the (infiltration) air supply to the interior of the house may be inadequate. This phenomenon of air starvation within the building can be exacerbated if exhaust fans, such as clothes dryers, bathroom fans or cookstove exhaust fans, are in operation within the home. Outfitting your stove with the optional outside air supply adaptor connected to an air duct which leads to the outside of the building should correct this problem.

TALL TREES OR BUILDINGS: These obstructions, when located in proximity to the top of the chimney can cause chronic or occasional downdrafts. When selecting a site for a new chimney, take care to consider the placement of other objects near the proposed chimney location.

WIND VELOCITY: Generally, the stronger and steadier a wind, the stronger (better) the draft. However, "gusty" wind conditions may cause erratic downdrafts.

BAROMETRIC PRESSURE: Chimney drafts are typically sluggish on balmy, wet or muggy days. This is a weather-related phenomenon, which generally is self-correcting as the weather changes.

BRISKNESS OF FIRE: The hotter the fire in your stove, the hotter your chimney and, therefore, the stronger the draft.

BREAKS IN THE VENTING SYSTEM: An unsealed clean-out door at the bottom of the chimney, leaky stovepipe joints, a poor stovepipe-to-thimble connection, missing caps, or a leaky chimney may cause inadequate draft.

SEASONAL FACTORS: Early fall and late spring are generally difficult seasons in which to establish proper drafts. The colder the outside air is (relative to room temperatures) the stronger the draft.

OPERATING THE STOVE

There are days when a draft is not easily established. As outlined above, seasonal factors or a cold chimney may be the cause. Try starting the fire by using small kindling and fuel to obtain a quick, hot fire. Tend the fire frequently with small fuel until the chimney is hot and the draft is well established.

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
STOVE SMOKES	Operating Technique	Fully open the primary air control one minute before opening doors.
	Cold Chimney	Preheat the chimney when first starting a fire.
	Blocked Chimney	Examine the chimney and stovepipe for blockage or creosote accumulations.
	Oversized Chimney	Reline the chimney to the appropriate diameter
	Undersized Chimney	Install a draft inducer or replace the chimney.

	Chimney Too Short	Lengthen the chimney.
	Air Infiltration Into The Chimney	Seal chimney connections and openings in clean-out doors.
	More Than One Appliance Connected to the Flue	Disconnect all other appliances and seal openings.
BACK-PUFFING OR GAS EXPLOSIONS	Operating Technique	Fully open the primary air control one minute before opening the door and keep it fully open for a few minutes after reloading.
	Extra Low Burn Rate	Burn the stove at a higher burn rate.
	Chimney Down-draft	Install a chimney cap.
	Excessive Ash Build-up	Empty ashes more frequently.
UNCONTROLLED OR SHORT BURN	Unsealed or Open Door	Close the door tightly or replace the gaskets.
	Excessive Draft	Check the installation. Operate at LOW BURN. Install stovepipe damper.
	Deteriorated Cement Seals	Reseal the stove with furnace cement.
	Extra Long Chimney	Shorten the chimney. Install stovepipe damper.
	Oversized Chimney	Reline the chimney to the proper diameter.
	High Winds or Hilltop Location:	Install a chimney cap.
	Excessive Draft	Draft in excess of 0.1 wc should be corrected with a stovepipe damper
INSUFFICIENT HEAT	Poor Quality or Green Wood	Use only air-dried wood, preferably dried at least one year.
	Low Burn Rate	Operate the stove at a higher burn rate.
	Air Insulated Chimney	Replace with a pre-fabricated insulated chimney system or a properly sized masonry chimney.
	Cold Exterior Chimney	Reline or insulate the chimney.
	Leaky Stovepipe or Chimney	Check the installation.
	Too Much Heat Loss From House	Caulk windows, seal openings in home.
BLISTERING OF ENAMEL CASTING	Operating Technique	Do not over-fire the stove. Monitor stove temperatures. Use seasoned wood only.
	Excessive Draft	Check the draft. A damper may be required. Operate the stove at a LOW BURN range.

REPLACEMENT PARTS & OPTIONAL ACCESSORIES

Part #	Description	Part #	Description
	Cast		**Steel cont.**
2421-316	RETAINER FRAME: GLASS	5500-2409	CLIP: STONE,SIDE,STG
2510-220	DOOR: MATTE	5550-140	SPRING: SUPPORT,SHUTTER,PRI AIR
2510-303	FOOT: MATTE	5550-150	SHUTTER: AIR CONTROL,PRIMARY
2510-401	TOP: MATTE	5550-155	BUSHING: SHUTTER,PRI AIR,1/4"x3/8"
2510-402	BOTTOM: MATTE	5550-160	LEVER: CONTROL,PRI AIR,STA
2510-403F	GRILLE: MATTE	5550-165	BUSHING: LEVER,PRI AIR,5/16"x7/16"
2510-412	FRAME: DOOR	5550-310	SUPPORT: BAFFLE,STA
2510-413	LEG: SIDE	5550-360	BAFFLE: FIREBOX,"A",9"x5-3/4"x1/4"
2610-016	COLLAR: FLUE	5550-361	BAFFLE: FIREBOX,"B",9"x14"x1/4"
	Stones	5550-500	FIREBOX:
1546-462	STONE: POL,8"x9-1/2",4 BEVEL	5550-510	HEATSHIELD:
1546-462A	STONE: POL,8"x9-1/2",2 BEVEL	5550-551	PIPE: AIR,SECONDARY,#1
1546-463	STONE: POL,3-1/2"x9-1/2",3 BEVEL	5550-552	PIPE: AIR,SECONDARY,#2
1546-464	STONE: POL,2-1/2"x8-1/2",2 BEVEL		**Misc.**
3060-426	FIREBRICK: 4-1/2"x9"x1-1/4"	3030-025	GLASS: 11-5/16"x15-19/32"x5mm
3060-430	FIREBRICK: 4"x9"x1-1/4"	3110-057	GASKET: ROPE,3/8" (1632')
	Steel	3120-906	BOARD: CERAMIC,9"x6"x1/2"
5400-2207	LATCH: DOOR	3120-914	BOARD: CERAMIC,9"x14"x1/2"
5400-2208	CRANK: HANDLE,45 deg,	3160-080	GASKET: TAPE,3/4"x1/16"(1985' PER BOX)
		3900-177	HANDLE: WOOD,BLACK

Safety Label

MODEL# 8550-

SERIAL#

Listed Solid Fuel burning Appliance Suitable For Use In Residential, Alcove, Mobile Home, or Masonry Installations.

Model Name:	Tested To:	Type of Fuel:
STARLET	UL 1482 & ULC 627	Solid Wood Only

PREVENT HOUSEFIRES - Install and use only in accordance to the Starlet Owner's Manual. Contact your local building or fire officials about restrictions and installation inspection in your area. Refer to local building codes and the chimney manufacturer's instructions for precautions required for passing a chimney through a combustible wall or ceiling. Do not run a chimney connector through a combustible wall or ceiling. Do not connect this unit to a chimney flue serving another appliance. Clearances may be reduced by methods specified in NFPA 211, or other methods approved by local building or fire officials. Do not obstruct the space beneath the heater.

INSTALLATION REQUIREMENTS

STANDARD RESIDENTIAL INSTALLATIONS REQUIRE: 6" diameter, minimum 24 MSG black or 25 MSG blued steel connector, with listed (type HT) factory built chimney, suitable for use with solid fuels or masonry chimney.

ALCOVE INSTALLATIONS REQUIRE: A listed double wall connector listed below. See owner's manual for alcove dimensions and clearances.

MOBILE HOME AND REDUCED CLEARANCE INSTALLATIONS REQUIRE: One of the listed double wall connectors shown below. In addition, installations require an outside air inlet. Use optional outside air kit.

CLOSE CLEARANCE PIPE - Duravent, Ameri-Tec, Security, Metal-Fab, GSW.

OPTIONAL EQUIPMENT: Blower, Flue Shield, Outside Air Kit.

Replace glass only with HearthStone supplied ceramic glass (5mm).

For use with solid wood fuels only (cord wood). Operates with door closed- open to feed fire only.

Minimum Clearances to Combustible Materials

Floor protector must be 3/8" minimum thickness non-combustible material or equivalent with a minimum R-value of 2.2, extending beneath heater and to the front / sides/ rear as indicated.

CLEARANCES	STANDARD RESIDENTIAL INSTALLATION WITH SINGLE WALL CONNECTOR	MOBILE HOME, ALCOVE AND RESIDENTIAL WITH DOUBLE WALL CONNECTOR	MOBILE HOME, ALCOVE AND RESIDENTIAL WITH DOUBLE WALL CONNECTOR AND FLUE SHIELD
A. SIDEWALL TO UNIT	9" (230mm)	9" (230mm)	10" (255mm)
B. BACKWALL TO UNIT	22" (560mm)	15" (380mm)	11" (280mm)
C. WALL TO UNIT	11" (280mm)	9" (230mm)	9" (230mm)
D. SIDEWALL TO CONNECTOR	19.5" (495mm)	19.5" (495mm)	19.5" (495mm)
E. BACKWALL TO CONNECTOR	18" (460mm)	10" (255mm)	6" (150mm)
F. WALL TO CONNECTOR	16" (405mm)	13" (330mm)	9" (230mm)

NOTE: See owner's manual for NFPA 211 reduced alcove clearances.

U.S. ENVIRONMENTAL PROTECTION AGENCY
Certified to comply with July, 1990 particulate emissions standards.

Manufactured by: HearthStone, Morrisville, VT 05661

Date of Manufacture

1999 2000 2001 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

DO NOT REMOVE THIS LABEL Made in USA 3300-608

CAUTION: **HOT WHILE IN OPERATION. DO NOT TOUCH. CONTACT MAY CAUSE SKIN BURNS. KEEP FURNISHINGS AND COMBUSTIBLE MATERIAL A CONSIDERABLE DISTANCE AWAY. SEE NAMEPLATE AND INSTRUCTIONS. DO NOT OVERFIRE. IF HEATER OR CHIMNEY CONNECTOR GLOWS, YOU ARE OVERFIRING. INSPECT AND CLEAN CHIMNEY FREQUENTLY. UNDER CERTAIN CONDITIONS OF USE, CREOSOTE BUILDUP MAY OCCUR RAPIDLY. BUILD WOOD FIRE DIRECTLY ON HEARTH. OPERATE ONLY WITH FIREBRICK IN PLACE. OPERATE ONLY WITH DOOR CLOSED. OPEN DOOR TO FEED FIRE ONLY. USE OF OTHER FUELS MAY DAMAGE THE HEATER AND CREATE A HAZARDOUS CONDITION. TYPE OF FUEL: SOLID WOOD ONLY!**

Install with a minimum of 9" clearance to combustible sidewall, 4" to side and 12" to top trim, 21" from top of insert to mantel. Floor protector must be 3/8" minimum non-combustible material or equivalent with a minimum R-value of 2.2, extending 18" in front of insert and 4" to both sides. When used as an insert stove, install only in a masonry fireplace to accomodate insert. Use flue outlet with a direct connector. Remove and clean behind unit frequently, as creosote buildup may occur rapidly.

HEARTHSTONE WOODSTOVE LIMITED WARRANTIES

These warranties give you specific legal rights. You may also have other rights which vary from State to State.

HearthStone Quality Home Heating Products, Inc. (HearthStone) warrants **to the original purchaser only** (the "Original Purchaser") the new woodstove manufactured by HearthStone and purchased by the Original Purchaser (the "Woodstove") against any of the occurrences listed in this document that result from defects in material or workmanship. All obligations of HearthStone under this document commence on the date the Original Purchaser purchases the Woodstove (the "Purchase Date").

LIMITED LIFETIME WARRANTY

HearthStone warrants the following parts of the Woodstove against the following occurrences that result from defects in material and workmanship:

- All cast iron parts – against breakage, cracking or burn-through.
- All stones – against cracking or breakage due to thermal stress, **excluding** surface and hairline cracks and scratches that do not affect the operation or safety of the Woodstove.
- Primary and secondary air supply systems, including riser tubes, air wash system, secondary air manifold and stainless steel secondary air supply tubes – against breakage, cracking or burn-through.
- Glass – against breakage due to thermal shock.

LIMITED FIVE-YEAR WARRANTY

HearthStone warrants the following parts of the Woodstove against the following occurrences that result from defects in material and workmanship:

- Refractory brick – against breakage and deterioration ***not*** resulting from physical damage or over-loading of the Woodstove.
- Firebox baffle (the baffle above the secondary air tubes) – against breakage, cracking or burn-through.

- Door handles and latch mechanisms – against breakage.

This warranty expires on the fifth (5th) anniversary of the Purchase Date.

LIMITED ONE-YEAR WARRANTY

HearthStone warrants the following parts of the Woodstove against the following occurrences that result from defects in material and workmanship:

- Enamel Finish – against peeling or fading, **excluding** chipping, mechanical abrasion, chemical abrasion or crazing.
- Stove cement and all gaskets – against breakage or deterioration.
- Accessories and electrical components such as blowers, switches and thermo discs, **excluding** venting components, hearth components, electrical components and other components or accessories used in conjunction with the installation of the Woodstove ***not*** manufactured or supplied by HearthStone – against breakage or malfunction.

This warranty expires on the first (1st) anniversary of the Purchase Date.

EXCLUSIONS

The warranties contained in this document do not cover, nor is HearthStone responsible for:

1. Damage resulting from installation or operation of the Woodstove in a manner contrary to the owner's manual.
2. Damage to the Woodstove or cracking of stones due to improper break-in firing procedures.
3. Damage or non-performance resulting from faulty or incomplete setup, installation and start-up or mishandling, abuse, or misuse of the Woodstove, including but not limited to over-firing.
4. Damage resulting from installation, modification, alteration, repair or service of the Woodstove by any party other than HearthStone or an authorized HearthStone dealer (a "Dealer").
5. Damage resulting from the use as fuel of driftwood, treated wood, wax, artificial or manufactured logs, coal or other material other than natural wood.
6. Damage due to water or due to installation of the Woodstove in a damp or high condensation area.
7. Damage due to installation of the Woodstove in an atmosphere contaminated by damaging chemicals, including but not limited to chlorine, fluorine or salts.
8. Scratches on glass, enameled surfaces or stones due to mechanical abrasion.
9. Standard wear and tear of the Woodstove resulting from normal usage over time.
10. Damage resulting from operational-related problems such as over-firing, downdrafts, smoke spillage, or use of corrosive driftwood.
11. Damage or inadequate performance caused by site, installation or environmental conditions beyond HearthStone's control, including but not limited to nearby trees, rooftops, buildings, wind, hills, mountains, inadequate or excessive venting, insufficient make up air, or negative air pressure whether or not caused by mechanical systems such as furnaces, exhaust fans, clothes dryers, etc.
12. A defect in any part of the Woodstove if the Original Purchaser fails to comply with HearthStone's or a Dealer's request to ship the part or the Woodstove to HearthStone or a Dealer, as the case may be.

THE WARRANTIES CONTAINED IN THIS DOCUMENT ARE EXCLUSIVE AND ARE GIVEN BY HEARTHSTONE AND ACCEPTED BY THE ORIGINAL PURCHASER IN LIEU OF ALL OTHER EXPRESS WARRANTIES AND ANY OBLIGATIONS, LIABILITIES, RIGHTS, CLAIMS, OR REMEDIES IN CONTRACT OR TORT, WHETHER OR NOT ARISING FROM HEARTHSTONE'S NEGLIGENCE, ACTUAL OR IMPUTED. ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE GIVEN **ONLY** TO THE EXTENT REQUIRED BY FEDERAL OR STATE LAW. EXCEPT AS OTHERWISE REQUIRED BY STATE LAW, UPON THE EXPIRATION OF THE EXPRESS LIMITED WARRANTIES CONTAINED HEREIN, **NO**

IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO THE SUBJECT WOODSTOVE. **SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.**

THE WARRANTIES CONTAINED IN THIS DOCUMENT EXTEND **ONLY** TO THE ORIGINAL PURCHASER OF THE WOODSTOVE WARRANTED HEREUNDER. THEY DO NOT EXTEND TO ANY SUBSEQUENT OWNERS.

UNDER NO CIRCUMSTANCES SHALL HEARTHSTONE BE LIABLE TO THE ORIGINAL PURCHASER OR ANY OTHER PERSON FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGE TO PROPERTY OR PERSONAL INJURIES, WHETHER ARISING OUT OF BREACH OF WARRANTY, TORT, OR OTHERWISE, EVEN IF HEARTHSTONE HAS BEEN APPRAISED OF THE POSSIBILITY OF SUCH DAMAGES. **SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.**

QUALIFYING FOR WARRANTY COVERAGE

To obtain performance of any obligation under this document, the Original Purchaser must, **within the applicable warranty time period**, contact HearthStone, at the address listed in the Warranty Registration section below or at **(802) 888-5235**, or a Dealer for instructions regarding the return of defective parts for repair, the return of the Woodstove for repair, or a Dealer service call. The Original Purchaser should refer to the Dealer network search engine contained on HearthStone's Web site (www.hearthstonestoves.com), or call HearthStone at (802) 888-5235, to find a Dealer nearest the Original Purchaser's location.

REMEDY

The remedy for any breach of the foregoing warranties will consist of repair or replacement, at HearthStone's option, of any covered defect in the Woodstove. When the Original Purchaser contacts HearthStone or a Dealer, HearthStone or the Dealer, as the case may be, will instruct the Original Purchaser to **either** return the defective part, or the entire Woodstove (if needed), with shipping prepaid, to HearthStone or a Dealer **or** allow a Dealer to make a service call at the place where the Woodstove is located. In the event the Original Purchaser refuses to allow a Dealer to make a service call, HearthStone or a Dealer, as the case may be, will request that the Original Owner return the defective part, or the entire Woodstove (if needed), with shipping prepaid, to HearthStone or a Dealer. **Notwithstanding any other provision of this document, the Original Purchaser shall pay for any travel fees and service charges related to a Dealer's service call**.

Parts: HearthStone will replace defective parts covered by the foregoing warranties at no charge.
Labor: Within the first (1st) year after the Purchase Date, HearthStone will pay for warranty labor performed by a Dealer at HearthStone's published labor rates in effect at the time the labor is performed. Thereafter, the Original Purchaser is responsible for the cost of labor.
Shipping cost for parts: Within the first ninety (90) days after the Purchase Date, HearthStone will pay for the shipping of Woodstove parts covered by any of the foregoing warranties to and from HearthStone or a Dealer, as the case may be. Thereafter, the Original Purchaser is responsible for all shipping costs related to shipping Woodstove parts to and from HearthStone or a Dealer, as the case may be.
Shipping cost for the Woodstove: Within the first (1st) year after the Purchase Date, if the Original Purchaser is instructed to return the Woodstove to HearthStone or a Dealer for repair, HearthStone will pay fifty percent (50%) and the Original Purchaser will pay fifty percent (50%) of the shipping costs related to shipping the Woodstove to and from HearthStone or a Dealer, as the case may be. Thereafter, the Original Purchaser is responsible for one hundred percent (100%) of all of the shipping costs related to shipping the Woodstove to and from HearthStone or

a Dealer, as the case may be. Notwithstanding any other provision of this document, in no event will HearthStone pay for any Dealer fees or other fees for pick up or delivery of the Woodstove returned for repair; the Original Purchaser shall be responsible for any such fees.

WARRANTY REGISTRATION

The Original Purchaser may send a completed and signed Warranty Registration Form, which is enclosed in the Woodstove warranty packet, to the following address:

HearthStone Quality Home Heating Products, Inc.
Warranty Department
317 Stafford Avenue
Morrisville, VT 05661

NOTE: SENDING IN THE SIGNED WARRANTY REGISTRATION FORM IS *NOT* A CONDITION OF WARRANTY COVERAGE OR HEARTHSTONE'S PERFORMANCE.

Notes: