



# **Castleton**

(Model 8030 AU)

# Woodstove OWNER'S MANUAL

Installation And Operating Instructions





#### KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

PLEASE READ THIS ENTIRE OWNER'S MANUAL BEFORE YOU INSTALL AND USE YOUR NEW CASTLETON WOOD STOVE.

If this room heater is not properly installed, a house fire may result.

To reduce the risk of fire, follow the installation instructions.

Failure to follow these instructions can result in property damage, bodily injury, or even death.

Conforms to AS/NZS 2918: 2001

CONTACT LOCAL AUTHORITIES WITH JURISDICTION (BUILDING DEPARTMENT or FIRE OFFICIALS), ABOUT PERMITS REQUIRED, RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

REFER TO COMPLIANCE LABEL – DISREGARD ANY CONTRADICTORY FUEL TYPE INFORMATION IN INSTRUCTION MANUAL

WARNING: THE APPLIANCE & FLUE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH AS/NZS 2918:2001 AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES.

WARNING: APPLIANCES INSTALLED IN ACCORDANCE WITH THIS STANDARD SHALL COMPLY WITH THE REQUIREMENTS OF AS/NZS 4013:2014 WHERE REQUIRED BY THE REGULATORY AUTHORITY, I.E. THE APPLIANCE SHALL BE IDENTIFIABLE BY A COMPLIANCE PLATE WITH THE MARKING "TESTED TO AS/NZS 4013:2014".

WARNING: DO NOT US FLAMMABLE LIQUIDS OR AEROSOLS TO START OR REKINDLE THE FIRE.

WARNING: DO NOT US FLAMMABLE LIQUIDS OR AEROSOLS IN THE VICINITY OF THIS APPLICANCE WHEN IT IS OPERATING.

WARNING: DO NOT STORE FUEL WITHIN THE HEATER INSTALLATION CLEARANCES.

WARNING: WHEN OPERATING THIS APPLICANCE AS AN OPEN FIRE USE A FIRE SCREEN.

WARNING: OPEN AIR CONTROL (AND DAMPER WHEN FITTED) BEFORE OPENING FIRING DOOR.

CAUTION: THIS APPLIANCE SHOULD NOT BE OPERATED WITH A CRACKED GLASS.

CAUTION: THIS APPLIANCE SHOULD BE MAINTAINED AND OPERATED AT ALL TIMES IN ACCORDANCE WITH THESE INSTRUCTIONS.

CAUTION: THE USE OF SOME TYPES OF PRESERVATIVE-TREATED WOOD AS A FUEL CAN BE HAZARDOUS.

CAUTION: MIXING OF APPLIANCE OR FLUE SYSTEM COMPONENTS FROM DIFFERENT SOURCES OR MODIFYING THE DIMENSIONAL SPECIFICATION OF COMPONENETS MAY RESULT IN HAZARDOUS CONDITIONS. WHERE SUCH ACTION IS CONSIDERED, THE MANUFACTURER SHOULD BE CONSULTED IN THE FIRST INSTANCE.

CAUTION: CRACKED AND BROKEN COMPONENTS, e.g. GLASS PANELS OR CERAMIC TILES, MAY RENDER THE INSTALLATION UNSAFE.

ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED TO BE IN BREACH OF THE APPROVAL GRANTED FOR COMPLIANCE WITH AS/NZS 4013:2014. THE APPLIANCE OR FLUE SYSTEM SHOULD NOT BE MODIFIED IN ANY WAY WITHOUT THE WRITTEN APPROVAL OF THE MANUFACTURER.

Supplied by:
Castworks Pty Ltd
57 Industrial Drive
Braeside VIC 3195

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#### Introduction

Thank you for purchasing a Castleton woodstove from Hearthstone Quality Home Heating Products. This stove will provide years of comfortable heat. This stove also provides the benefits of advanced technology in wood burning without the cost and maintenance requirements of a catalytic device. The Castleton blends modern technology with the unique beauty and qualities of cast iron. We trust that you will appreciate the quality of this handcrafted product.

Your Castleton woodstove burns very efficiently, and produces a large amount of heat. However, you should not consider your Castleton the primary heat source for your home. The Castleton's large glass window allows you to enjoy the fire from a variety of locations in the room.

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 extremely important information so keep it handy and refer to it often.

A qualified heating technician may need this owner's manual as a reference when installing this stove in your home. There are national, state, and local building codes that direct the technician on how to install your stove. These codes stipulate the dimension of stovepipe and clearances to walls, ceilings, hearth, and other combustible surfaces. The codes exist to reduce the risk of fire. Failure to follow these instructions can result in fire, property damage, bodily injury, and even death.

Install the stove in a safe, open area, away from traffic flow, doors, and hallways. If possible, try to install the stove near an existing chimney and chimney connector. It is extremely important to install this stove with the proper clearance from combustible surfaces. You can purchase specific connector pipe and special wall coverings as specified by this manual and AZ/NZ 2918:2001 to protect combustible surfaces. As a general rule, keep furniture, drapes, curtains, wood, paper, and other combustibles at least 36 inches (92 cm) away from the stove. Never install the stove in or near a storage location for gasoline, kerosene, charcoal lighter fluid or any other flammable liquids.

Install the stove in your central living area to allow heat to radiate naturally to distant rooms. Do not install your stove in a poorly insulated area. This is inefficient and would likely result in higher fuel usage.  SAFETY NOTICE: AN IMPROPERLY INSTALLED STOVE CAN RESULT IN A HOUSE FIRE. FOR YOUR SAFETY, CAREFULLY FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

The safety of your stove will depend on many factors, some of which include: distance to combustible objects, correct venting, and adequate chimney maintenance. Should you have any questions, do not hesitate to contact your dealer for additional information.

Contact your dealer for any necessary warranty service. This Castleton Model 8030 AU stove is warranted by:

Hearthstone Quality Home Heating Products, Inc® 317 Stafford Ave.

Morrisville, Vermont 05661, USA www.Hearthstonestoves.com

#### Codes

When you install your Castleton woodstove, it is imperative that you adhere to all Federal and local codes. Obtain these codes from the following sources:

- National Building Regulations and standards
- AS/NZ 2918:2001
- Australian Home Heating Association
- Local Building Control Office

#### SAFETY INFORMATION

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

#### 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, follow these safety precautions:

- Never modify this stove in any way.
- Never burn kiln dried, painted or treated wood in this stove.
- DO NOT BURN GARBAGE. Never burn garbage or trash, colored or glossy paper, solvents,

plywood, artificial logs, cardboard, or driftwood, in this stove.

- Never burn coal in this stove.
- DO NOT BURN FLAMMABLE FLUIDS.
- DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE. Never use gasoline, kerosene, charcoal lighter fluid, or other flammable fluids to start or invigorate the fire. These fuels will cause dangerous burning conditions in the stove. Keep all such materials away from the stove.
- Never use a wood grate or other device to elevate the fire.
- Never allow logs in the firebox to hit the glass when the door is closed.
- **Never** slam the door or use the door to force wood in to the stove.
- **Never** over-fire your stove. (See page 20)
- Never put articles of clothing or candles on a hot stove
- Never connect the stove to a flue used by another appliance.

#### 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 page 7)
- 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 20)
- Keep children and pets away from the stove when it is burning; they could be seriously injured by touching a hot stove.
- Clean your chimney system as needed. (See page 22)

Outside combustion air may be required if:

- This solid-fuel-fired appliance does not draw steadily, smoke rollout occurs, fuel burns poorly, or back-drafts occur whether or not there is combustion present.
- 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-draft 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 vapor 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.

If these or other indications suggest that

infiltration air is inadequate, additional combustion air should be provided from the outdoors. Outside combustion air can be provided to the appliance by using the optional outside air kit #90-53300

#### 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 is full.

#### At the Beginning of Every Other Month:

- Depending upon your use of the stove, visually inspect the chimney connector and chimney for creosote. (see page 22)
- Check door seals using the "dollar bill test." When the stove is cool, shut the door on a dollar
  bill. If the bill pulls out without any resistance, then
  your stove's door is not sealing properly. To
  tighten the seal, adjust the door latch mechanism
  or change the door gasket. (Refer to page 22.)

#### 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.
- Clean out the inside of the stove thoroughly.
- 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 OF SUCH FIRES CAN CAUSE INSTANTANEOUS STEAM AND SERIOUS BODILY HARM.

Once the chimney fire expires, leave the primary air control closed and let the fire in the stove die out completely. Inspect the stove, stovepipe, and chimney thoroughly for any sign of damage before firing the stove again. You must correct any damage before using your stove again.

# **Specifications**

#### **Maximum Heat Output:**

8.9KW per hour of cordwood (based on independent laboratory test results).

#### Floor Size of Heated Area:

Up to a maximum of 1,500 square feet. Factors unique to your home can reduce the square footage the stove will heat. Home insulation value, number and efficiency of windows, floor plan, stove placement, quality of the fuel and other conditions may limit the heating ability of the stove.

#### **Firebox Capacity:**

1.9 cubic feet.

Maximum Log Length: Up To 18" (45.7cm).

Emissions: 1.4g/kg

Efficiency: 60% average across all burn rates

Burn Time: Up to 8+ hrs. (Heat Life™: Up to 10 hours) Note: The amount and weight of wood contained per cubic foot of firebox volume can vary from 4 to 12kg. per cubic foot depending on type of wood, moisture content, packing density and other factors.

#### **Stove Dimensions:**

Height:27 1/2" (69.8cm)Width:25 1/2" (64.7cm)Depth:21 7/8" (55.5cm)Weight:464 lbs. (210 kg)

Connector Size: 6" (152 mm) diameter

Metal Chimney: 6" (152 mm) inside diameter

Masonry Chimney: 6" (152 mm) inside diameter

(round flue), 8" x 8" (203 x 203 mm) (square

flue)

**Crate Dimensions:** H-39" W-29" L-36" or 99x73.7x 91.5cm (add 4" or 10.2cm for pallet).

#### **Optional Equipment:**

 Outside Air Kit
 90-53300

 Blower
 90-57300

 Spark Screen
 90-69300

 Rear Heat Shield
 90-68300

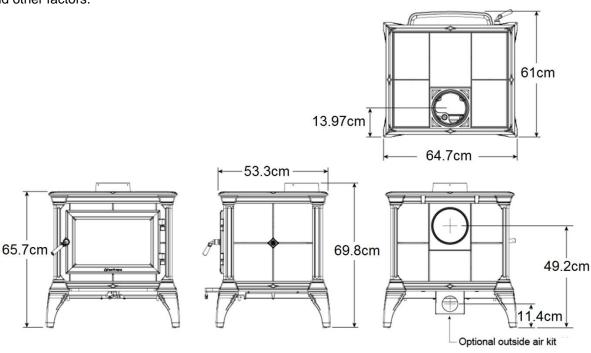


Figure 1 - Castleton Dimensions

#### Installation

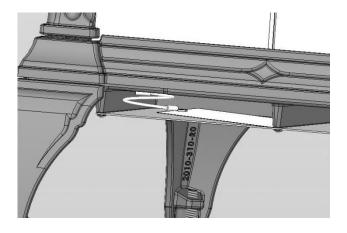
#### **UNPACKING**

Hearthstone packages your Castleton woodstove with the greatest care so that it ships safely. Under certain circumstances, however, damage may occur during transit and handling. When you receive the Castleton, carefully unpack and inspect the stove and all accompanying parts. Ensure that all parts are included in the ash pan. If any parts are damaged or missing, please contact your authorized Hearthstone dealer immediately.

#### **PACK LIST**

Castleton Model 8030 AU Woodstove Owner's Manual

The label is attached by a cable to the bottom of the stove. Take care when lifting the stove not to damage the label or cable. After final positioning of the stove, the label may be stored between the bottom of the stove and the bottom heat shield.



#### **INSTALLING YOUR STOVE**

Choose a place to install your Castleton woodstove. Inspect this location to make sure that the stove and stovepipes will have the required clearance from combustible materials that are near the stove. Combustibles include walls, floor, ceiling, and chimney chase. You must carefully consider the clearances to all of these combustibles before actually connecting your stove.

If the floor is made of combustible material, then a non-combustible floor protector is required between the floor and the stove. An example of a non-combustible floor protector is a hearth constructed with a continuous layer of tile, brick, slate, glass or another non-combustible facing. The floor protector must have a minimum R-value of .1m<sup>2</sup> K/W

The venting diagrams in this manual are for reference only. Venting installations must meet the requirements of the BCA (NCC) and the AS2918

#### **HEARTH REQUIREMENTS & FLOOR PROTECTION**

Ensure you protect combustible flooring with a covering of noncombustible material. The floor protector must have a minimum R-value of 0.1m<sup>2</sup>.K/W.

A minimum 1025mm deep x 830mm wide x 9mm thick floor protector (Bellis Board) should be used under and in front of the appliance base when installing the appliance (see joint AS/NZS 2918:2001 3.3.2).

The floor protector should extend 300mm in front of the appliance fuel loading door and be placed centrally in the 830mm width.

The minimum floor protection must be met under the stove and extend beyond the stove as follows:

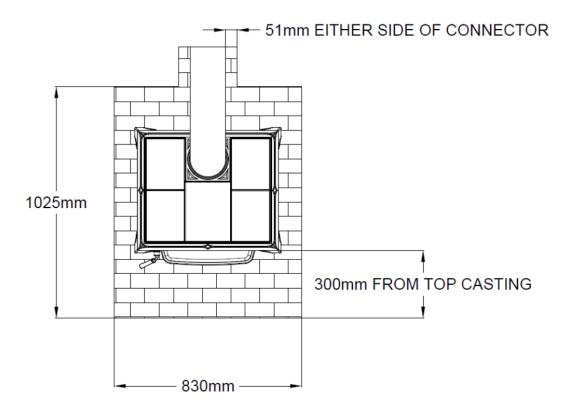
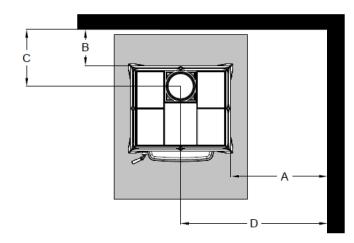


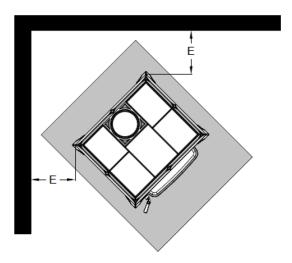
Figure 2 - Hearth Dimensions

#### COMBUSTIBLE SURFACE REQUIRED CLEARANCES

**Note:** Dimensions shown in the following figures are from the top casting unless otherwise indicated. Clearances to combustible walls may be reduced as shown below with 1140 mm wide by 1800 mm high Skamotec panels applied directly to the side and rear walls.

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





	Parallel				Corner
Clearances	Α	В	O	D	Е
Triple Wall Connector – No Skamotec	600mm	225mm	353mm	913mm	275 mm
Triple Wall Connector – 25mm Skatmotec	250mm	100mm	228mm	563mm	100 mm

Figure 3 - Clearance to Combustibles

#### **OUTSIDE AIR SUPPLY**

(Optional Kit #90-53300)

You can connect an outside air source 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 the residence rather than from within the room where the stove is located.

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. The outside air kit attaches to the underside of the stove. Refer to the instructions provided with the kit for installation.

\*An adaptor for 4" duct is available if needed. KIT #90-53308

The International Residential Code (IRC) does not allow the outside air duct to terminate higher than the appliance. Some building officials also do not

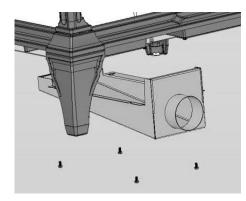


Figure 4 - Outside Air Kit Detail

like to see any vertical rise in the duct's termination. Hearthstone recommends the termination be at the same level, or lower than the air intake on the stove.

Locate the termination of the duct on the outside wall of the home in such a manner to avoid the possibility of obstruction by snow, leaves or other material. Screen the termination using  $\frac{1}{4}$ " x  $\frac{1}{4}$ " mesh rodent screen and cover it with a rain/wind proof hood (flex pipe, outside termination, mesh, and hood supplied by others) Contact your dealer for availability.

# VENTING COMPONENTS & CONFIGURATION REQUIREMENTS

#### **FLUES AND CHIMNEYS**

WARNING: THE APPLIANCE AND FLUE-SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH AS/NZS2918 AND THE APPROPRIATE REQUIREMENTS OF THE RELEVENT BUILDING CODES.

WARNING: APPLIANCES INSTALLED IN ACCORDANCE WITH THIS STANDARD SHALL COMPLY WITH THE REQUIREMENTS OF AS/NZS 4013 WHERE REQUIRED BY THE REGULATORY AUTHORITY, I.E. THE APPLIANCE SHALL BE IDENTIFIABLE BY A COMPLIANCE PLATE WITH THE MARKING 'TESTED TO AS/NZS 4013.

ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IS CONSIDERED TO BE IN BREACH OF THE APPROVAL GRANTES FOR COMPLIANCE WITH AS/NZS 4013

CAUTION: MIXING OF APPLIANCE OR FLUE-SYSTEM COMPONENTS FROM DIFFERENT SOURCES OR MODIFYING THE DIMENSIONAL SPECIFICATION OF COMPONENTS MAY RESULT IN HAZARDOUS CONDITIONS. WHERE SUCH ACTION IS CONSIDERED, THE MANUFACUTRER SHOULD BE CONSULTED IN THE FIRST INSTANCE.

The flue or chimney system must be in good condition. It must be inspected by a competent person and passed for use with the appliance before installation.

Products of combustion entering the room can cause serious health risks.

#### You must check the following:

- The construction of masonry chimneys, flue block chimneys and connecting flue pipe system must meet the requirements of the Building Regulations and the rules in force.
- A flexible flue liner system must be certified for use with solid fuel systems and installed to Building Regulations and the manufacturer's instructions. The flue liner must be replaced when an appliance is replaced unless proven to be recently installed and in good condition.
- If it is necessary to fit a register plate it must conform to the Building Regulations and the rules in force.
- Ensure the connecting flue pipe is kept a suitable distance from any heat sensitive material and does not form part of the supporting structure of the building.
- Make provision to remove the appliance without the need to dismantle the chimney.
- Any existing flue must be confirmed as suitable for the new intended use as defined in the Building Regulations and the rules in force.
- The flue or chimney systems must be inspected and swept to confirm the system is structurally sound and free from obstructions.
- If the appliance is believed to have previously served an open fire the chimney must be swept a second time within a month 01 regular use after installation to clear any soot falls that may have occurred due to difference in combustion levels.
- The flue exit from the building must comply with local building control rules.
- Do not connect or share the flue or chimney system with another heating appliance.

- Do not connect to systems containing large voids
- You must provide suitable access to enable the collection and removal of debris.
- You must sweep and inspect the flue when the appliance is installed. Note: the design 01 this appliance allows the chimney to be swept through the appliance.

The following must be adhered to:

#### AS/NZS 2918:2001:4.9.1

- The flue pipe shall extend not less than 4.6m above the top appliance.
- The minimum height of the flue system within 3m distance from the highest point on the roof shall be 600mm above that point.
- The minimum height of a flue system further than 3m from the highest point of the roof shall be "a minimum" 1000mm above roof penetration.
- No part of any building lies in or above a circular area described by a horizontal radius of 3m about the flue system exit.

N.B. in extreme wind areas it may be necessary to consult your local agent for further technical assistance.

 If flue is concealed in a chase, allow for air vents (2 x 80mm diam. or equivalent) at the highest possible point on the chimney chase or alternatively, allow a min 25mm air space between the casing cover spigot and the outer casing.

#### **VENTILATION**

- Increase air supply provisions where a room contains multiple appliances.
- If vents open into adjoining rooms or spaces there must be an air vent of at least the same size direct to the outside.
- If the appliance is installed directly onto the floor, it must stand on a heat resistant constructional floor protector of the minimum dimensions shown and meet the requirements of AS/NZS 2918:2001, section 3.3.
- Site the vents where cold draught is unlikely to cause discomfort. This can be avoided by placing vents near ceilings or close to the appliance (see diagram below).
- Additional ventilation is required. This must be provided using a permanently open-air vent, of

the size listed, which is positioned so that it is not liable to be blocked both inside and outside the building.

Allowances MUST be made for air replacement vents to be located near the fireplace to aid combustion.

A minimum of one pair of air vents is recommended or one large vent.

Allowance is to be made for a minimum of 2 inlet ducts from outside to internal vent location.

Note: DO NOT USE FIREPLACE CAVITY VENTILATION AS A METHOD OF AIR REPLACEMENT.

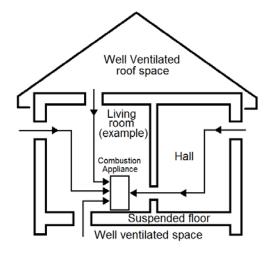


Figure 5 – Air replacement

- Extractor fans or cooker hoods must not be placed in the same room or space as this can cause the appliance to emit fumes into the
- If any of these checks reveal problems do not proceed with the fitting of the appliance until they have been rectified.
- If the appliance is installed directly onto the floor it must stand on a heat resistant constructional floor protector of the minimum dimensions shown and meet the requirements of AS/NZS 2918:2001, section 3.3
- The building must have a suitable loadbearing capacity for the floor protector and appliance. Consult a structural engineer for advice before proceeding.
- When fitting into an existing floor protector check that the floor protector complies with current construction regulations and is at least the minimum sizes shown.

If there is no existing fireplace or chimney, it is
possible to construct a suitable heat resistant
housing and floor protector setting. The flue
must be installed in accordance with all local
and national regulations and current rules in
force.

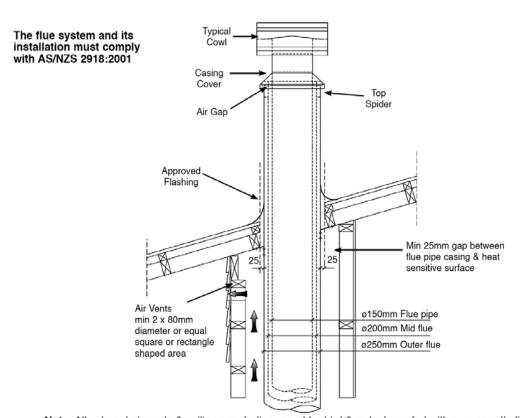
#### **Fire Surround Clearances**

 If the appliance is to be fitted with a fire surround use the minimum clearances (see diagram, Section 4) between any point of the appliance and any heat sensitive material.

If stone I granite I marble or any other natural material is used to construct the fire surround, or any part of it, provision should be made for expansion and movement of the parts due to heating and cooling.

If you are in any doubt about the installation requirements, or suitability of fire surrounds contact your Hearthstone dealer.

- We recommend you obtain expert *advice* before proceeding with work of this nature.
- Some finishes may discolor with heat and some lower quality products may distort, or crack, when in use.
- All fire surrounds should be suitable for use with solid fuel heating products.



Note: All external air vents & ceiling penetrations must be bird & rodent proofed with permanently fixed screens

Figure 6 - Flue System and is components

#### Air Ventilation Through Chimney Chase

#### Air Ventilation Through Top Flashing

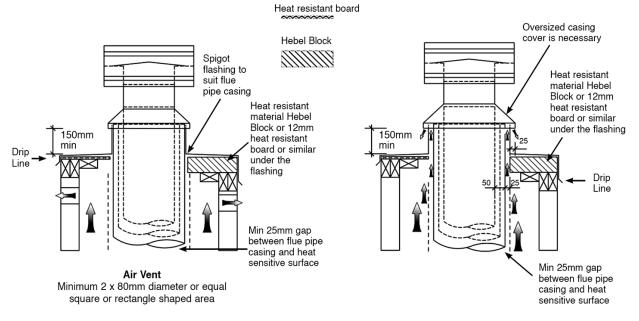


Figure 7 – Air ventilation through chimney chase

Figure 8 – Air ventilation through top flashing

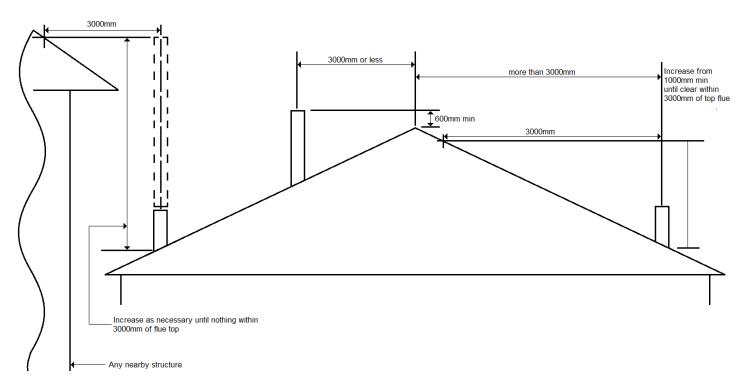
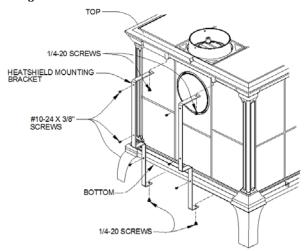


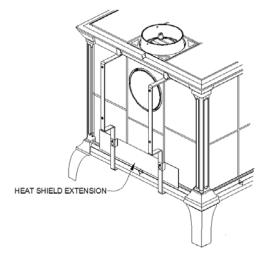
Figure 9 - Minimum flue height as per AS/NZS 2918:2001

# INSTALLING THE REAR HEAT SHIELD AND BLOWER

The blower for the *Castleton 8030* must be used in conjunction with the accessory rear heat shield (90-68300). *Use this blower only with the products intended and which have markings to indicate such use.* The blower will force air up through the convection chamber that is formed between the back of the stove and the heat shield. The lip on the top of the heat shield will then direct the heated air out across the top of the stove.

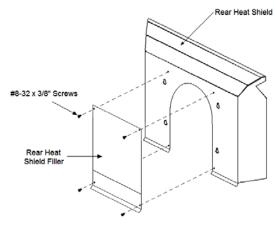
- Install the heat shield mounting brackets, first locate the four holes in the back of the stove, two on the underside of the top and the other two just under the edge of the bottom about 6" either side of center (see illustration on page 2). Place the brackets on the stove so that they line up with the threaded holes on the back of the stove and with the larger hooked portion of the brackets on top, extending upwards. Use the (4) 1/4-20 Phillips screws provided to secure the brackets.
- 2) Place the 6 screws (10-24 x 3/8") into the brackets leaving them loose enough to slide the heat shield and extension over them. Hold the heat shield extension up to the brackets (as shown in illustration) align the two holes on the shield with the two lowest screws and adjust to pass screws through the holes. Once both screws are through the holes slide the heat shield down to catch the screws in the slots then tighten to the brackets



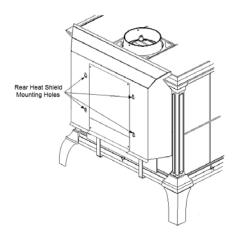


**Note:** If your stove is installed with the top exit configuration, proceed to step 3. If your stove is installed with the rear exit configuration proceed to step 4.

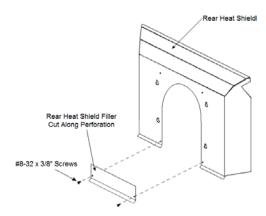
3) If the rear heat shield filler plate is not attached to the rear heat shield, do so now. Align the holes in the filler plate with the holes on the heat shield and attach using the #8-32 screws provided. Align the holes in the heat shield with the (4) screws on the heat shield mounting bracket (already installed on stove). Pass the screws through the heat shield holes and slide the heat shield down to catch the screws into the slots. Tighten the screws to hold the heat shield securely in place (see illustrations below).



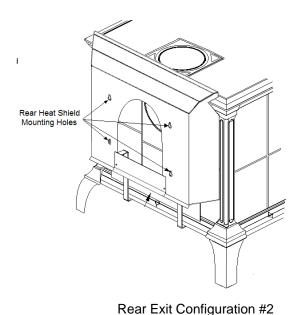
Top Exit Configuration #1



Top Exit Configuration #2



Rear Exit Configuration #1



4) If the rear heat shield filler plate is attached to the rear heat shield remove it now. The upper (larger) portion of the filler plate needs to be removed to allow for connector pipe clearance. Cut or break the filler plate at the perforation line and discard the upper portion.

- 5) Attach the filler plate to the heat shield. Align the holes in the filler plate with the holes on the heat shield and attach using the #8-32 screws provided. (NOTE: if the chimney connector pipe is already installed the filler plate must be reattached after the heat shield is installed.) Align the holes in the heat shield with the (4) screws on the heat shield mounting bracket (already installed on stove). Pass the screws through the heat shield holes and slide the heat shield down to catch the screws into the slots. Tighten the screws to hold the heat shield securely in place (see illustration on previous page).
- 6) Attach the blower to the lower part of the rear heat shield bracket (see illustration below). Secure with a #2 Phillips screwdriver. If the rear shield is already installed, remove it before installing blower.
- 7) Loosen the screws that mount the heat shield extension (Figure 10).
- 8) With the perforated screen facing away from the stove back (as illustrated below), position the blower so that the screws securing the heat shield extension pass through the key holes in the back of the blower, then push down to catch the screws (Figure 11).

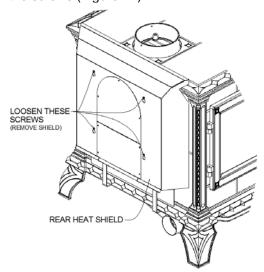


Figure 10

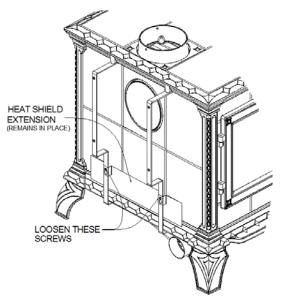


Figure 11

- 9) Tighten the screws. The snap switch should now touch the stove. If the snap switch does not touch, simply bend the blower bracket up until contact is made with the stove. If required, remove the blower and make the appropriate corrections.
- 10) Attach the heat shield.
- 11) Plug power cord into a grounded, 230 v, 50-cycle 3-prong receptacle. Route the cord away from hot surfaces. Ensure the cord is not pinched in any way.

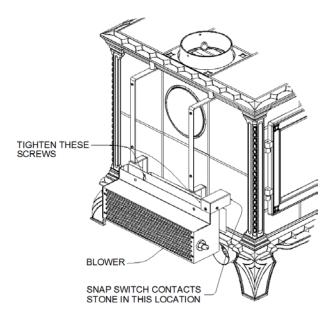


Figure 12

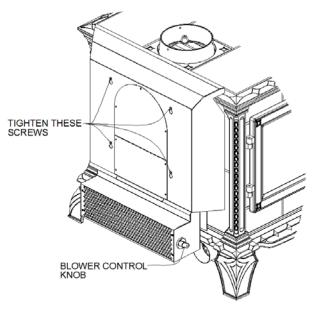


Figure 13

#### **BLOWER OPERATION:**

The snap switch located on the top of the blower housing activates the blower. It will take several minutes for the heat of the stove to activate the snap switch (about 120 degrees F). A rheostat controls the blower fan speed. The rheostat knob is located on the right hand side of the blower housing. Turn the knob clockwise to the on position. The fan is on the highest setting when first turned on. Continue to turn the knob clockwise to reduce the fan speed until it reaches its lowest setting. If the fan does not operate at the lowest setting, the rheostat requires adjustment. Contact your dealer for rheostat adjustment. To turn the blower off, turn the knob fully counterclockwise until it clicks into the off setting.

# **Operation**

Once your Castleton is installed, you are ready to light a fire.

Every installation, season's firewood, and operator's technique varies. Learn how to use your stove most efficiently for your installation. We can give you the basic principles, but only you can ensure maximizing the potential of your stove while also operating it safely.

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

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 use your stove on a daily basis.

#### **CONTROLS AND FEATURES**

Before lighting any fires, become familiar with the location and operation of your stove's controls and features and learn how to use them (See Figure 14). For your own safety, do not modify these features in any way. We recommend you use fireplace gloves when the stove is in operation and hot.

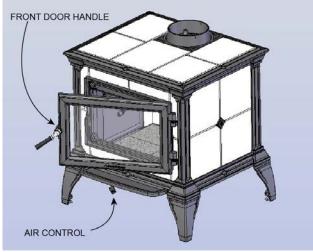


Figure 14 - Controls & Features

FRONT DOOR HANDLE: The firebox door allows you to load wood into your stove; a wood handle operates the door. To open the door, pull up on the handle and swing the door away from the stove. To latch the door, push the door tightly towards the firebox then continue to push the handle in and down until it latches shut. Gently pull on the door handle to make sure it is properly latched.

**PRIMARY AIR CONTROL:** The primary air control lever is located under the center of the ash lip. The primary air control allows you to regulate the amount of air entering the firebox. Generally, the more air allowed into the firebox, the faster the rate of burn; conversely, less air creates a slower burn. For maximum air flow, move the lever to the left as far as possible; move the lever as far right as possible for minimum air flow (does not close completely).

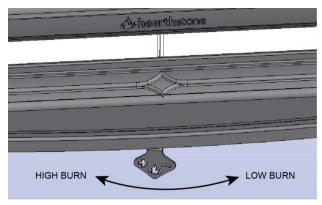


Figure 4 – Air Control

#### **CHOOSING FIREWOOD**

Burn only natural firewood (known as cordwood) in the Castleton 8030 Wood Heater. This stove is not designed to burn other fuels.

- CAUTION: DO NOT USE CHEMICALS OR FLAMMABLE FLUIDS TO START THE FIRE. DO NOT USE CHARCOAL, PELLETS, COAL, ARTIFICIAL LOGS OR ANY OTHER MATERIALS AS FUEL; THEY ARE NOT SAFE. DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS.
- THE USE OF UNAUTHORIZED FUEL SUCH AS COAL COULD PRODUCE HIGH LEVELS OF CARBON DIOXIDE IN THE LIVING SPACE. AT HIGH LEVELS CARBON DIOXIDE COULD RESULT IN PERSONAL INJURY OR DEATH.

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

The following is a list of some wood species and their relative BTU (British Thermal Unit) content. The higher the BTU content, the longer the burn.

Firewood with higher BTUs is generally ideal for a wood stove.

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. As you might expect, green wood burns poorly. You must season green wood before using it in your wood stove. To season green wood properly, split, stack, and allow it to air dry for a period of one year. Green wood may provide less than 2000 Btu per pound, whereas dry wood can provide up to 7000 Btu per pound.

Stack the firewood on skids or blocks to keep it off

the ground, cover only the top of the stack. 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."

 CAUTION: DO NOT STORE FIREWOOD WITHIN THE STOVE'S SPECIFIED CLEARANCES TO COMBUSTIBLE MATERIALS.

Firewood Species	Forest type	Heat Available per Unit Volume %	D	ity (Air ery) kg/m²	Splitting	Ignitability	Coals	Sparks	Availab ility	(Air	c Value Dry) lb Mj/K
Eucalyptus spp. Malee Roots	Mallee	100	N.A.		Difficult	Poor	Excellent	Few	Limited		
Casuarinna supp. Belah, Buloke	Mallee, Box- Ironbark	100	70	1121	Good	Poor	Excellent	Few	Limited	7400	17.2
Eucalyptus microcarpa Grey Box	Box- Ironbark	100	70	1121	Difficult	Poor	Excellent	Few	Good	7400	17.2
Eucalyptus laryiflorens	Box- Ironbark	100	69	1105	Difficult	Poor	Excellent	Few	Limited		
Eucalyptus sideroxylan Red Ironbark	Box- Ironbark	97	69	1105	Difficult	Poor	Excellent	Few	Good		
Eucalyptus milliodora Yellow Box	Box- Ironbark	91	65	1041	Difficult	Poor	Excellent	Few	Good		
Eucalyptus Poiyanthemos Red Box	Box- Ironbark	91	67	1073	Difficult	Poor	Excellent	Few	Good	7400	17.2
Eucalyptus Leucoxlyon Yellow Gum	Box- Ironbark	90	62	993	Difficult	Poor	Excellent	Few	Good		
Eucalyptus camaldulensis Red River Gum	Red River Gum	80	56	897	Difficult	Poor	Excellent	Moderate	Good	7600	17.7
Eucalyptus globulus Blue Gum	Foothill	80	61	977	Fair	Fair	Good	Few	Good		
Eucalyptus macrorhyncha Red Stringybark	Foothill	72	54	865	Good	Good	Good	Few	Good		
Eucalyptus radiata Narrow Leaved Peppermint	Foothill	68	50	801	Excellent	Good	Good	Few	Good		
Eucalyptus obliqua Messmate	Foothill	68	45	721	Good	Good	Good	Few	Good		
Eucalyptus regnans Mountain Ash	Mountain	53	42	673	Excellent	Excellent	Fair	Moderate	Good		
Callitris columellaris White Cypress Pine	Box- Ironbark	60	42	673	Good	Excellent	Poor	Many	Limited	8000	18.6
<i>Pinus Radiata</i> Radiata Pine	Foothill Plantations	45	32	512	Fair	Excellent	Poor	Many	Good	7000	17.9

#### **BUILDING A FIRE**

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

 WARNING: NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR 'FRESHEN UP' A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.

#### **Breaking In Your Wood Stove**

It is imperative that your stove is "broken in" gradually. Soapstone must be "seasoned"; over-firing a new stove may cause soapstone to crack or may damage other stove parts. Natural moisture in the freshly quarried soapstone 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 ensure adequate sealing and bonding.

When you light your first fires, the woodstove will emit some smoke and fumes. This is normal "offgassing" of the paints and oils used when manufacturing the woodstove. 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 few fires of the season may produce other odors from impurities that exist in the area immediately surrounding the stove. Some potential impurities are cleaning solvents, paint solvents, cigarette smoke, and soot from scented candles, 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 operating procedures in this manual, the steel, cast iron, and soapstone 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. These changes do not affect the function of the stove. If a panel breaks completely, it must be replaced

Avoid the following conditions that can cause the glass, soapstone, steel or cast iron pieces to break:

Do not throw wood into the stove.

- Do not use the door as a lever to force wood into the stove.
- Do not load wood encrusted with ice into a burning stove - the thermal shock can cause damage.
- Do not use a manufactured log grate or otherwise support the fuel. Burn the fire directly on the floor of the firebox.

#### **BUILDING A BREAK IN FIRE**

- Open the front 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 mm to 457 mm) long.
- Fully open the primary air control by pushing the control handle fully to the left, away from the firebox.
- 3) Light the paper under the kindling. Leave the door slightly ajar momentarily until the kindling has started to burn and draft begins to pull.
- 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 fire should make the stove warm but **not hot to the touch**. Visible steam, or boiling moisture and hissing indicate the soapstone is too hot. At most, a few small chunks 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 by pushing it fully to the right to allow the fire to die out completely.
- 7) Let the stove return to room temperature.

Your first fire and first fire each season thereafter should be built and maintained as outlined above. Your patience will be rewarded by a properly seasoned stove.

 NOTE: The cool flue gas temperatures present during the break-in procedure may cause rapid creosote build-up. The door glass may also get dirty. A good hot fire will clean it. We recommend a visual inspection (and cleaning if necessary) of your stovepipe and chimney once the break-in procedure is completed.

#### **NORMAL OPERATION**

#### **BUILDING A FIRE FOR EVERYDAY USE**

- Open the front door and place five or six double sheets of tightly twisted newspaper in the center of the firebox. Arrange kindling in a tee-pee configuration over the newspaper. Use approximately 10 pieces of kindling, 1/2" (13 mm) in diameter and 10" to 16" (254 mm to 406 mm) long.
- Fully open the primary air control by moving the lever completely to the left.
- Light the paper under the kindling. Leave the front door slightly ajar momentarily until the kindling begins 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. Ensure you keep the logs away from the glass in front in order for the air-wash system to work properly. Keep the front door 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. Move the handle to the left to open the primary air control for a high rate of burn; or move it to the right for a low rate of burn. The air control does not close completely.

**Note:** When opening the front door to reload or rearrange logs, it is advisable to open the door just a crack, pause for a moment then open the door completely. This procedure allows the firebox to clear of smoke before the door is open fully. In addition, reloading on a bed of hot, red coals reduces smoking time and brings fresh fuel up to a high temperature rapidly.

#### **BURN RATE**

**LOW BURN:** Move the air control lever all the way to the right. (See figure 16). This closes the air shutter to its minimum opening. A low burn rate over extended periods is not advisable as it can promote the accumulation of creosote. Inspect the venting system frequently if using low burn rates consistently.

**MEDIUM BURN:** Any setting from low to high will deliver varying rates of burn depending on the chimney setup, fuel and other local conditions. It is best to experiment to find the most comfortable setting for your situation.

HIGH BURN: Completely open the primary air control by moving it all the way to the left. Fully load the firebox with wood on a bed of hot coals or on an actively flaming fire. To minimize creosote accumulation, run the stove on high once or twice daily for 35 to 45 minutes to fully heat the stovepipe and chimney.

**OPEN DOOR BURNING:** Before using the optional screen (90-69300) a fire should be built to warm the stove and establish a good draft. Burning the stove with a screen will need additional makeup air. Be sure to provide adequate ventilation for the stove such as an open window. Air may be pulled through other vents and appliances in the house causing them to ice up or malfunction.

**CAUTION:** Do not burn fuel other than cord wood in your stove.

Maximum recommended fuel load should be limited to the amount of wood that can be freely placed inside the firebox without using force while also allowing enough space between the fuel and the secondary manifold that no part of the fuel load touches the manifold components.

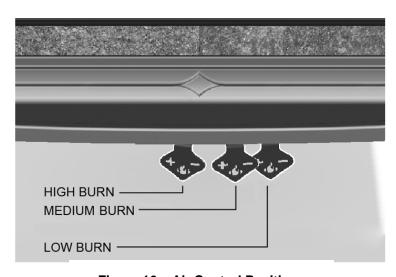


Figure 16 – Air Control Positions

#### **OVER-FIRE CAUTION**

Over-firing means the stove is operating at temperatures above normal temperatures reached during High Burns outlined in the *BURN RATE* section. Carefully avoid over-firing, as it will damage the stove. Symptoms of chronic over-firing can include warped components, short burn times, a roaring sound in the stove or stovepipe, and discoloration of the stovepipe. A properly installed stove using fuel and following operating procedures as outlined in this manual should not over-fire.

Excessive draft, inappropriate fuel, and operator error can cause over-firing. Correct an over-fire situation as follows:

- EXCESSIVE DRAFT: Contact your local 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, compressed wood or anything other than natural cordwood.
- OPERATOR ERROR: Ensure all the gaskets are in good condition. Replace worn out or compressed gaskets. Do not burn the stove with the door in the partially open position.

If you suspect that your stove is over-firing, discontinue use and contact your dealer immediately. **Damage caused by over-firing is not covered by your warranty**. Results of over-firing can include warped or burned out internal parts, cracked refractory panels, discolored or warped external parts, and damaged finish.

ANY SIGNS OF OVER-FIRING WILL VOID YOUR WARRANTY!

#### IN THE EVENT OF A SOOT OR CREOSOTE FIRE

In the unlikely event of a chimney fire, immediately close the front door, turn the air control to the minimum burn rate setting described above and contact the local fire department.

 THE FRONT DOOR MUST REMAIN CLOSED WHEN IN OPERATION EXCPET FOR OPEN DOOR VIEWING WITH OPTIONAL SCREEN (90-69300) INSTALLED OR START UP AND LOADING.

#### REMOVAL AND DISPOSAL OF ASHES

You can leave a thin layer of ashes in the firebox if preferred. Allow fire to die down or go out completely. It is important to prevent ashes from building up around the front door opening or they will spill out, or they can pack into the gasket channel and prevent proper sealing. To remove ashes, use a fireplace shovel. Avoid removing large live coals by pushing them to the side and removing only the finer ash with a shovel.

Disposal of ashes - Ashes should be placed directly into a <u>metal</u> container with a tight fitting lid. Do not place any other items or trash into the metal container. Do not pour water into the container. Replace the container's lid and allow the ashes to cool. Never place the ash disposal container on a combustible surface or vinyl flooring, as the container could be **hot!** 

Pending disposal, place the closed ash container on a noncombustible floor or on the ground outside, well away from all combustible materials, liquid fuels, or vehicles. Retain ashes in the closed container until all coals thoroughly cool.

If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

 NEVER place ashes in wooden or plastic containers, in trashcans with other trash, or in paper or plastic bags, no matter how long the fire has been out. Coals within a bed of ashes can remain hot for several days once removed from the firebox.

#### **Maintenance**

#### **GLASS REPLACEMENT PROCEDURES**

 WARNING: DO NOT OPERATE THIS APPLIANCE WITH THE GLASS PANEL REMOVED, CRACKED, OR BROKEN. DO NOT SUBJECT THE DOOR TO ABUSE, SUCH AS STRIKING OR SLAMMING SHUT. ONLY A QUALIFIED SERVICE PERSON SHOULD REPLACE THE GLASS PANEL.

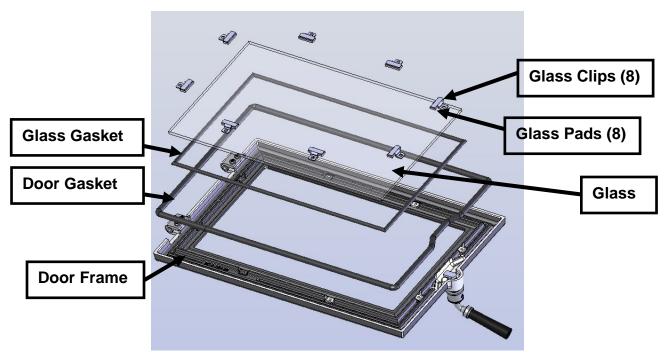


Figure 5: Front Door assembly

- 1. Follow the instructions included with the replacement glass kit.
- 2. Remove the door.
- 3. Remove the screws from the glass retainer (use penetrating oil if necessary) lift the retainer off the glass. Set aside for reinstallation.
- 4. Carefully lift the damaged glass out of the door and discard.
- 5. Remove any remaining glass and old gasket material.
- 6. Clean the screw holes and place a small amount of anti-seize compound in each one.
- 7. Place the new glass onto the door. Ensure sticker indicating the coated side is on the exterior face of the glass.
- 8. **Important! Center the glass** and ensure that the edges of the glass are parallel with the edges of the opening.
- 9. Check glass position again (centered, and parallel), then screw the glass retainer clips with the glass pads back on the door using a crisscross pattern. Tighten the screws no more than 1/8<sup>th</sup> of a turn after they seat. The glass will break at this point if not positioned correctly.
- 10. Apply a light film of anti-seize lubricant on the door's hinge pins if needed.
- 11. Install the door.
- 12. After 5 or 6 fires, check the glass retainer screws, and retighten if necessary.

**Required Glass Kit:** Part Number: 90-58300. Use only 5mm x 241mm x 390mm Ceramic IR, or Neoceram IR glass. Contact your Hearthstone dealer.

#### **CREOSOTE FORMATION & REMOVAL**

When wood burns slowly at low temperatures, it may produce tar and other organic vapors, which combine with expelled moisture to form creosote. These creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire, which may damage the chimney or even destroy the house. When burning wood, inspect the chimney connector and chimney at least once every two months during the heating season to determine if there is a creosote buildup.

If a creosote build-up occurs, inspect the stovepipe connector and chimney more often, at least monthly during the heating season to monitor the accumulation. If a creosote residue greater that 1/4" (6 mm) accumulates, remove it to reduce the risk of a chimney fire.

#### Prevention

Burn the stove with the primary air control fully open for 35 - 45 minutes daily to burn out creosote deposits from within the stove and the venting system.

After reloading with wood, burn the stove with the primary air control fully open for 15 to 20 minutes. This manner of operation ensures early engagement of the secondary combustion system that minimizes creosote buildup in the chimney.

If your glass always remains dirty, your operating temperatures are too low or your wood is wet; therefore, there is a higher risk of creosote buildup.

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

#### Cleaning

Remove accumulated creosote with a cleaning brush specifically designed for the type of chimney in use. We recommend you use a certified chimney sweep to perform this service. Contact your dealer for the name of a certified chimney sweep in your area (your dealer may be a certified sweep!).

We recommend that before each heating season you have the entire system professionally inspected, cleaned and repaired, if necessary.

#### **GASKETS**

Replace door gasket material every two to three seasons, or whenever it becomes deteriorated or loose, depending on stove use. If the door seal leaks, a new gasket will ensure a tight seal and improve stove performance.

We recommend you only use Hearthstone replacement gaskets when you need to replace your door gasket. Contact your dealer for a gasket kit that includes instructions, and the gasket for your stove.

#### GLASS

The glass used in our stoves is actually not plain glass, but a tough, clear ceramic material capable of operating at temperatures up to 2300° F. Do not operate the stove with a broken door glass. Do not abuse the front door by striking or slamming.

When necessary, clean the glass. We recommend using a damp paper towel dipped in gray ash. Rub the inside of the glass with a circular motion. When all the deposits are removed, clean up with window cleaner or with commercial stove glass cleaners, which are available from your local dealer. Never attempt to clean the glass while the fire is burning or while the glass is hot. Remove deposits by following the instructions provided with the cleaner. Wipe the cleaner off with a soft cloth, or black & white newsprint.

**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 a cleaner specifically manufactured for woodstoves only.

The front door glass is a ceramic, thermal shock-resistant glass, made specifically for use in woodstoves. Do not use any replacement glass other than the ceramic glass manufactured and supplied for use in this woodstove. Replacement glass is available through your local dealer.

Replace the door glass immediately if broken or chipped. Contact your local dealer for replacement glass. The glass kit includes instructions and everything needed for the repair. If you replace the glass yourself, wear work gloves and safety glasses.

Required Glass Kit: PN: 90-58300.

# **Troubleshooting**

#### **COMMON ISSUES**

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 no more than 12 inches (30 cm) above the flue collar. A 400° F (200° 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 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 dependent 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 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 that the chimney is too cold. Again, hot chimneys promote stronger drafts. Opening a window briefly in the room while lighting the stove may help.

Other draft guidelines are as follows:

An "AIRTIGHT" HOUSE: The air supply (infiltration) to the interior of the house may be inadequate if your home is super-insulated or especially well sealed. This phenomenon of air starvation within the

building is exacerbated if exhaust fans, such as clothes dryers, bathroom fans or cook stove exhaust fans, are in operation within the home. Outfitting your stove with the optional outside air adaptor connected to an air duct, which leads to the outside of the building, can correct this problem.

**Tall Trees or Buildings:** These obstructions, when located close to the top of the chimney can cause chronic or occasional downdrafts. When selecting a site for a new chimney, 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 can cause erratic downdrafts. For consistent problems, consider a high wind cap, such as the Vacu-Stack.

**Barometric Pressure:** Chimney drafts are typically sluggish on balmy, wet or muggy days (low barometric pressure). 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 all can 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 temperature, the stronger the draft.

#### **OPERATING THE STOVE**

As outlined above, there are days when a good draft is just not easy to establish. The causes are usually seasonal factors or a cold chimney. 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. Sometimes, partially opening a first floor window briefly will help quickly get draft established.

### TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
STOVE SMOKES	Operating Technique	Fully open the primary air control one minute before opening doors.
	Cold Chimney or reverse draft	Preheat the chimney when first starting a fire. Briefly open a window in the room containing the stove.
	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	Seal chimney connections and openings. Check clean-out
	Chimney	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 the ash pan more frequently. Increase efficiency of burns, and avoid using poor quality or green wood.
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. Draft in excess of 0.1 wc should be corrected with a stovepipe damper(s)
	Extra Long Chimney	Shorten the chimney. Install stovepipe damper(s).
	Oversized Chimney	Reline the chimney to the proper diameter.
	High Winds or Hilltop Location:	Install a chimney cap.
INSUFFICIENT HEAT	Poor Quality, low Btu content, or Green Wood	Use only air-dried wood, preferably dried at least one year. Use a wood with a high Btu content if available.
	Low Burn Rate	Operate the stove at a higher burn rate.
	Cold Exterior Chimney	Reline or insulate the chimney.
	Leaky Stovepipe or Chimney	Check the installation. Replace with a pre-fabricated insulated chimney system or a properly sized masonry chimney.
	Too Much Heat Loss From House	Add insulation, use energy efficient windows, or caulk windows, and seal openings in home.
	Excessive Ash Build-up	Empty the ash pan more frequently. Increase efficiency of burns, and avoid using poor quality or green wood.
BLISTERING OF FINISH	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					
	Replacement Parts					
5030-045	Hinge Bushing					
5030-050	Hinge Pin Support					
5030-055	Hinge Plate					
5030-070	Secondary Combustion Tube #1					
5030-072	Secondary Combustion Tube #2					
5030-073	Secondary Combustion Tube #3					
5210-2340	Tie Rod					
	REPLACEMENT KITS AND ACCESSORIES					
90-57300	BLOWER KIT					
90-53300	OUTSIDE AIR KIT					
90-68300	REAR HEAT SHIELD KIT					
90-69300	SPARK SCREEN KIT					
90-58300	GASKET KIT					
90-58305	GLASS KIT					
90-71100	DOOR HANDLE KIT					
90-73212	DOOR LATCH KIT					
90-76300	BAFFLE KIT					

Refer to the Illustrated Parts list for further detail about stove components, available online at www.hearthstonestoves.com.

# **Safety Label**

# HEARTHSTONE FREESTANDING STOVE MODEL NAME: CASTLETON 8030 AU SERIAL NUMBER: TESTED BY: AUSTRALIAN SOLID FUEL TESTING 3 GARDEN ST, MORWELL, VIC 3840 AUSTRALIA

WHEN TESTED IN ACCORDANCE WITH AS/NZS 4012:2014 & AS/NZS 4013:2014

MAXIMUM AVERAGE HEAT OUTPUT BURNING HARDWOOD - 11.5 KW

**OVERALL AVERAGE EFFICIENCY BURNING HARDWOOD - 60%** 

PARTICULATE EMISSIONS FACTOR - 1.4 G/KG

IMPORTED BY: CASTWORKS, 57 INDUSTRIAL DRIVE BRAESIDE, VIC 3195 **MANUFACTURED BY:** 

hearthstone

317 STAFFORD AVENUE MORRISVILLE, VT 05661, USA

DATE OF MANUFACTURE

MADE IN USA

2018 2019 2019 JAN FEB MAY JUN JUN SEP OCT

DO NOT REMOVE OR COVER THIS LABEL

3300-725

#### **Limited Warranty**

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 retail purchaser only (the "Original Purchaser") the new appliance manufactured by Hearthstone, purchased by the Original Purchaser and installed by an authorized Hearthstone dealer or their designated representative against any of the occurrences listed in this document that result from defects in material or workmanship. This warranty is not transferrable. All obligations of Hearthstone under this document commence on the date of the Original Invoice (the "Purchase Date"). The term "Limited Lifetime" is defined as 10 years from the beginning of warranty coverage.

Hearthstone appliances are designed to be operated only with the fuels listed in your owner's manual.

Warranty Period	Wood	Gas	Pellet	Covered Components
Limited	Χ	Χ	Х	Stone
Lifetime	Χ	Χ	X	Cast iron not listed elsewhere
	Х			Clean burning air supply system*
5 Year	Х	Х	Х	Door handles and latches
	Χ	X	X	Steel Components and Firebox
		Х		Burner and logs
3 Year			Х	Burn Pot and Baffles
2 Year	Х	Х	Х	Appliance Electrical and Gas Components
	Х	Х		Refractory, Vermiculite Panels, Baffles
1 Year	Х	Х	Х	Enamel finish against peeling or fading
	Χ	Χ	X	Accessories
	Х	Χ	X	Glass
	Х			Ash Grate
	Χ	Χ	Χ	All components not listed elsewhere

<sup>\*</sup>The clean burning air supply system on the Euro Collection warranty period is limited to 5 years.

Any parts repaired or replaced during the limited warranty period will be warranted under the terms of the limited warranty for a period not to exceed the remaining term of the original limited warranty or one year, whichever is longer.

**Parts:** Hearthstone will replace through an authorized dealer, defective parts covered by the foregoing warranty at no charge.

**Labor:** Within the first  $(1_{st})$  year after the Purchase Date, Hearthstone will pay for warranty labor performed by an authorized Dealer at Hearthstone's published labor rates in effect at the time the labor is performed only if the appliance is installed by an authorized dealer or their designated representative. Otherwise or 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 appliance parts covered by any of the foregoing warranties to and from Hearthstone or an authorized Dealer, as the case may be. Thereafter, the Original Purchaser is responsible for all shipping costs related to shipping appliance parts to and from Hearthstone or an authorized Dealer, as the case may be.

Shipping cost for the appliance: Within the first (1st) year after the Purchase Date, if the Original Purchaser is instructed to return the appliance to Hearthstone or an authorized 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 appliance to and from Hearthstone or an authorized 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 appliance to and from Hearthstone or an authorized 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 appliance returned for repair; the Original Purchaser shall be responsible for any such fees.

#### **EXCLUSIONS & CONDITIONS**

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

- 1. Damages resulting from:
  - a. Failure to install, operate, or maintain the appliance in accordance with the owner's manual, operating instructions, installation instructions, or safety rating label provided with the appliance.
  - b. Over-firing the appliance. Over-firing can be identified by, but not limited to, warped cast iron or steel, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
  - c. Failure to install the appliance in accordance with all national or local building codes.
  - d. Shipping or improper handling.
  - e. Improper operation, abuse, misuse, continued operation with damaged, corroded, or failed components, accident, or improper/incorrect service or repairs.
  - f. Environmental conditions, inadequate ventilation, negative pressure, or improper drafting caused by tightly sealed constructions, insufficient make-up air supply, or air handling devices such as exhaust fans, forced air furnaces, or other such causes.
  - g. Damage caused by direct exposure to water.
  - h. Use of fuels other than those specified in the owner's manual.
  - i. Installation or use of components not supplied with the appliance, or any other components not expressly authorized and approved by Hearthstone.
  - j. Modifications of the appliance not expressly authorized and approved by Hearthstone in writing
  - k. Interruptions or fluctuations of electrical power supplied to the appliance.
- 2. All stones are warranted 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 appliance.
- 3. Repair or replacement of wear parts. Such parts that are subject to normal wear and tear during the warranty period such as paint, gaskets, baffles, refractory materials, ash grates, and glass.
- 4. Damage resulting from installation, modification, alteration, repair or service of the appliance by any party other than an authorized Hearthstone dealer (a "Dealer") or their designated representative, or Hearthstone.
- 5. Damage due to water or condensation due to installation of the appliance in a high moisture area.
- 6. Damage due to installation of the appliance in an atmosphere contaminated by damaging chemicals, including but not limited to chlorine, fluorine or salts.
- 7. Scratches on glass, enameled surfaces or stones due to mechanical abrasion.
- 8. Noise caused by expansion or contraction caused by the heating and cooling of the appliance.
- 9. Odors caused by the heating of the appliance, or surrounding materials
- 10. Consequential damage caused by leaking of condensate during startup
- 11. A defect in any part of the appliance if the Original Purchaser fails to comply with Hearthstone's or a Dealer's request to ship the part or the appliance to Hearthstone or a Dealer, as the case may be.
- 12. Replacement stones and enameled parts are taken from current stock, and may not match originals in color, grain, or pattern. Hearthstone will supply replacement parts for discontinued parts in finishes or colors as available, or at their discretion.
- 13. Hearthstone's obligation under this warranty does not extend to the appliance's ability to heat the desired space. Information is provided to assist the customer and the dealer in selecting the appropriate appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

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 APPLIANCE. 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 APPLIANCE WARRANTED HEREUNDER. THEY ARE NOT TRANSFERRABLE AND 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 LOSS OF USE, 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 their original Hearthstone dealer, or the current responsible local Hearthstone dealer, for instructions regarding the return of defective parts for repair, the return of the appliance for repair, or to schedule a Dealer service call. The Original Purchaser should refer to the Dealer Network search engine contained on Hearthstone's Web site (www.hearthstonestoves.com) if the original dealer is not available, to find a Hearthstone dealer nearest to 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 appliance. When the Original Purchaser contacts a Hearthstone Dealer, the Dealer on behalf of Hearthstone, as the case may be, will instruct the Original Purchaser to either return the defective part, or the entire appliance (if requested), to the Dealer or Hearthstone or allow a Dealer to make a service call at the place where the appliance is located. Hearthstone may require that a digital picture be provided to support the claim. Notwithstanding any other provision of this document, the Original Purchaser shall pay for any fees and service charges related to a Dealer's service call or the shipping charges associated with the return.

#### WARRANTY REGISTRATION

The Original Purchaser should complete their warranty registration on our website at <a href="http://www.hearthstonestoves.com/customer-resources/warranty-registration">http://www.hearthstonestoves.com/customer-resources/warranty-registration</a>

• NOTE: FILLING OUT THE WARRANTY REGISTRATION FORM IS NOT REQUIRED AS A CONDITION OF WARRANTY COVERAGE OR HEARTHSTONE'S PERFORMANCE.