**NOTICE: DO NOT discard this manual!**

**WARNING:** If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury, or death.

- **DO NOT** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **DO NOT** overfire. Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

**WARNING**

**HOT SURFACES!**
Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.
- **DO NOT** touch glass until it is cooled
- **NEVER** allow children to touch glass
- Keep children away

- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

**WARNING**

Fire Risk.

For use with solid wood fuel only.
Other fuels may overfire and generate poisonous gases (i.e. carbon monoxide).

**WARNING**

For use with solid wood fuel only. Other fuels may overfire and generate poisonous gases (i.e. carbon monoxide).

Owner’s Manual
Operation and Care

INSTALLER: Leave this manual with party responsible for use and operation.
OWNER: Retain this manual for future reference.

Contact your dealer with questions on installation, operation, or service.
Safety Alert Key:

- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- **WARNING!** Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- **CAUTION!** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- **NOTICE:** Indicates practices which may cause damage to the fireplace or to property.

## Table of Contents

1. **Welcome**  
   - A. Congratulations 3  
   - B. LIMITED WARRANTY 4  

2. **Product Specific and General Information**  
   - A. Appliance Certification 8  
   - B. Vented Gas Log Sets and Gas Log Lighters 8  

3. **Important Safety and Operating Information**  
   - A. Fireplace Safety 9  
     1. Clear Space 9  
     2. Grate 10  
     3. Refractory 10  
     4. Firescreen 10  
     5. Flue Damper 10  
     6. Glass Doors 10  
     7. Glass Specifications 10  
     8. Over-Firing Your Fireplace 10  
     9. Chimney Fire 10  
   - B. General Operating Parts 11  
     1. Flue Damper 11  
     2. Outside Air (Required) 11  
     3. Glass Doors 11  
     4. Screen Door 11  
   - C. Fuel 12  
     1. Hardwood vs. Softwood 12  
     2. Moisture content 12  
     3. Seasoning 12  
     4. Storing Wood 13  
     5. Burning Process 13  
     6. Creosote Formation 13  
     7. Processed Solid Fuel Firelogs 13  
   - D. First Fire 13  
   - E. Lighting Instructions 13  
   - F. Normal Operation 14  

4. **Maintenance and Service**  
   - A. Ash Removal 15  
   - B. Grate Inspection 15  
   - C. Refractory 15  
   - D. Glass Cleaning 15  
   - E. Chimney Inspection 16  
   - F. Creosote (Chimney) Cleaning 16  

5. **Replacement Maintenance**  
   - A. Glass Door Removal 17  
   - B. Glass Replacement 17  
   - C. Grate/Bracket Replacement 17  
   - D. Refractory 17  
   - E. Damper Adjustment 17  

6. **Troubleshooting**  
   - A. Troubleshooting Table 18  
   - B. Performance Considerations 19  

7. **Reference Materials**  
   - A. Service Parts 21  
   - B. Accessories 25  
   - C. Contact Information 28  

► = Contains updated information.
Welcome

Read this manual before installing or operating this fireplace.
Please retain this owner’s manual for future references.

A. Congratulations

Congratulations on selecting an Outdoor Lifestyles wood burning fireplace. The Outdoor Lifestyles fireplace you have selected is designed to provide the utmost in safety and reliability.

As the owner of a new fireplace, you'll want to read and carefully follow all of the instructions contained in this Owner's Manual. Pay special attention to all Cautions and Warnings.

This Owner's Manual should be retained for future reference. We suggest that you keep it with your other important documents and product manuals.

Your new Outdoor Lifestyles wood burning fireplace will give you years of durable use and trouble-free enjoyment. Welcome to the Outdoor Lifestyles family of fireplace products!

Outdoor Lifestyles is a registered trademark of Hearth & Home Technologies.

Local Dealer Information

DEALER: Fill in your name, address, phone and e-mail information here and fireplace information below.

Dealer Name: ____________________________________________________________
Address: _________________________________________________________________
Phone: _____________________________ E-mail: ________________________________

Fireplace Information:

Brand: _____________________________ Model Name: __________________________
Serial Number: ______________________ Date Installed: _______________________

Rating Plate Information/Location

The model information regarding your specific fireplace can be found on the rating plate located in the left column of the fireplace.
Hearth & Home Technologies, on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet, coal and electric hearth appliances that are purchased from an HHT authorized dealer.

**WARRANTY COVERAGE:**  
HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

**WARRANTY PERIOD:**  
Warranty coverage begins on the date of original purchase. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/ distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term “Limited Lifetime” in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood, pellet, and coal appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

### Warranty Period HHT Manufactured Appliances and Venting

<table>
<thead>
<tr>
<th>Warranty Period</th>
<th>HHT Manufactured Appliances and Venting</th>
<th>Components Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parts</td>
<td>Labor</td>
</tr>
<tr>
<td>1 Year</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years 1 year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 years 3 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 years 1 year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Lifetime</td>
<td>3 years</td>
<td></td>
</tr>
<tr>
<td>Limited Lifetime</td>
<td>90 Days</td>
<td></td>
</tr>
</tbody>
</table>

See conditions, exclusions, and limitations on next page.
WARRANTY CONDITIONS:

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- This warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the appliance resides.
- Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

WARRANTY EXCLUSIONS:

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, wood, pellet and coal gaskets, firebricks, grates, flame guides, batteries and the discoloration of glass.
- Expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth components or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT’s obligation under this warranty does not extend to the appliance’s capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF LIABILITY:

- The owner’s exclusive remedy and HHT’s sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.
Hearth & Home Technologies (“HHT”) extends the following warranty for all Outdoor Lifestyles by HHT™ brand products (“Products”) that are purchased from an HHT authorized dealer.

**WARRANTY COVERAGE:**
HHT warrants to the original owner of the Product at the site of installation, and to any transferee taking ownership of the Product at the site of installation within one year following the date of original purchase, that the Product will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. This warranty is subject to conditions, exclusions and limitations as described below.

**WARRANTY PERIOD:**
The warranty period runs for one year, beginning on the earlier of: (i) the date of invoice for the Product; (ii) in the case of new home construction, the date of first occupancy of the residence or six months after the date of sale of the Product by an HHT authorized dealer, whichever occurs first; or (iii) the date 24 months following the date of Product shipment from HHT, regardless of the invoice or occupancy date.

**WARRANTY CONDITIONS:**
- This warranty only covers Products that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the Product remains at the site of original installation.
- Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the Product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

**WARRANTY EXCLUSIONS:**
This warranty does not cover the following:
- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur; this is not a flaw and not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, firebricks, grates, flame guides and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
• Damages resulting from: (1) failure to install, operate, or maintain the Product in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the Product; (2) failure to install the Product in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or incorrectly performed repairs; (5) inadequate ventilation, negative pressure or environmental conditions, including, without limitation: hail, snow, ice, fallen branches, flooding, water damage and fading of color; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the Product or any other components not expressly authorized and approved by HHT; (8) modification of the Product not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the Product.

• Non-HHT venting components, hearth components or other accessories used in conjunction with the Product.
• Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
• The Product’s capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to the Product’s location and configuration and environmental conditions.

This warranty is void if:
• The Product has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes and cracking or spalling of refractory or cementitious materials.
• The Product is subjected to prolonged periods of dampness, condensation, ice or snow.
• There is any damage to the Product or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF LIABILITY:
Repair or replacement in accordance with the provisions of this warranty will be the owner’s exclusive remedy for and will constitute HHT’s sole obligation under this warranty, under any other warranty (express or implied), or in contract, tort or otherwise; provided, however, that if HHT is unable to provide repair or replacement in an expedient and cost effective manner, HHT may discharge all such obligations by refunding the purchase price of the Product. No employee, agent, dealer, or other person is authorized to give any warranty on behalf of HHT. TO THE EXTENT ALLOWED BY LAW, HHT MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. HHT WILL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING OUT OF DEFECTS IN OR USE OF THE PRODUCTS. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you also may have other rights, which vary from state to state. The duration of any implied warranty is limited to the duration of the warranty period specified herein.
Product Specific and General Information

A. Appliance Certification
This fireplace system has been tested and listed in accordance with UL 127 and ULC-S610 standards by Underwriters Laboratories Inc. for installation and operation in the United States and Canada.

This fireplace may be installed in manufactured homes, except in sleeping rooms. If installed with a gas log set, provisions for the National Fuel Gas Code must be met.

This fireplace has been tested and listed for use with the optional components specified in this manual.

Outdoor Lifestyles is a registered trademark of Hearth & Home Technologies.

B. Vented Gas Log Sets and Gas Log Lighters
• Optional
• Vented gas log sets, or gas log-lighters can be installed in this fireplace. Follow the instructions provided with the accessory for operation.
• Gas logs shall be certified for the application. When installed, the chimney damper shall be permanently secured in an open position to effectively vent the appliance.

WARNING! Risk of Fire or Asphyxiatioin!
• DO NOT install unvented gas logs.
• Damper must be set in fully open position.
• Gas flame may generate fumes.
### A. Fireplace Safety

**WARNING! Risk of Fire!** Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.

Most problems are caused by improper installation and operation of the fireplace. To provide reasonable fire safety, the following should be given serious consideration:

- The fire should be supervised whenever the fireplace is in use.
- An annual inspection should be performed on the fireplace system.
- Install at least one smoke detector on each floor of your home to ensure your safety.
- Install a conveniently located Class A fire extinguisher near the fireplace.
- Devise and practice an evacuation plan in the event of a fire.

**DO NOT:**

- operate damaged fireplace
- modify fireplace
- overfire
- install any unvented gas log set
- install any component not approved by Hearth & Home Technologies
- install parts or components not Listed or approved
- operate the fireplace without fully assembling all components

Hearth & Home Technologies disclaims any responsibility for, and the warranty and agency listing will be voided by the above actions.

**WARNING: This product and the fuels used to operate this product (wood and wood pellets), and the products of combustion of such fuels, can expose you to chemicals including carbon black, which is known to the State of California to cause cancer and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov.**

### 1. Clear Space

**WARNING! Risk of Fire!** Keep combustible materials, gasoline and other flammable vapors and liquids clear of the fireplace.

**DO NOT:**

- store flammable materials close to the fireplace
- use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen up” a fire in this fireplace.

Combustible materials must not be stored on the hearth extension. Room furnishings such as drapes, curtains, chairs or other combustibles must be at least 4 ft (1219 mm) from the front of the fireplace and 12 in. (305 mm) from side of fireplace opening. See Figure 3.1.

Combustible materials are materials made of or surfaced with any of the following materials:

- Wood
- Compressed paper
- Plant fibers
- Plastic
- Plywood/OSB
- Drywall
- Any material that can ignite and burn, flame proofed or not, plastered or un-plastered.

Non-combustible materials are materials which will not ignite and burn, composed of any combination of the following:

- Steel
- Iron
- Brick
- Tile
- Concrete
- Slate
- Glass
- Plasters
2. Grate

**WARNING! Risk of Fire!** Use only the factory-supplied integral grate.
- Keeps logs and fire in place.
- Allows proper air circulation around the fire.

This fireplace is designed to be used with the supplied grate or one approved by HHT.

3. Refractory

**WARNING! Risk of Fire!** **DO NOT** burn fireplace without refractory. Use only refractory supplied by Hearth & Home Technologies.

The refractory is supplied to contain heat and provide an attractive interior.

It will break down over time and will need occasional replacement. Small hairline cracks and discoloration are normal and do not affect its safety. Hairline cracks are not covered under warranty.

4. Firescreen

**Warning! Risk of Fire or Burns!**
- Screen will not prevent burning materials from falling out.
- Screen may be hot.

The firescreen is provided to control sparks. Keep it closed when the fireplace is in use and glass door is open.

5. Flue Damper

**WARNING! Risk of Fire and Asphyxiation!** Open damper prior to operating fireplace. A closed damper overfires the fireplace and spills smoke and flames into the room.

The flue damper must be in the fully opened position during operation of the fireplace.

6. Glass Doors

*Fireplace is equipped with a door that moves up and down. The unit can be burned with the door in any position.
*State of Washington requires the door to be closed when burning.

7. Glass Specifications

This appliance is equipped with 5mm ceramic glass. Please contact your dealer for replacement glass.

8. Over-Firing Your Fireplace

**WARNING! Risk of Fire!** Do not over-fire.

Over-firing may ignite creosote or will damage the fireplace and chimney.

To prevent over-firing your fireplace. **DO NOT:**
- use flammable liquids
- overload with wood larger than the grate
- burn trash or large amounts of scrap lumber
- permit too much air to the fire

Symptoms of over-firing may include one or more of the following:
- chimney connector or fireplace glowing
- roaring, rumbling noises
- loud cracking or banging sounds
- metal warping
- chimney fire
- rapid deterioration of refractory

9. Chimney Fire

**WARNING! Risk of Fire!** A chimney fire can permanently damage your chimney system. Failure to replace damaged components and make proper repairs can cause a structure fire.

In the event of a chimney fire:
- In the event of a chimney fire, Hearth & Home Technologies recommends replacement of the chimney unless a CSIA Certified Chimney Sweep verifies the chimney is suitable for continued service using the necessary level of inspection as defined by NFPA 211.
- Replace components of the chimney and fireplace as specified by the professionals before operating.
B. General Operating Parts

**WARNING! DO NOT** operate fireplace before reading and understanding operating instructions. Failure to operate fireplace according to operating instructions could cause fire or injury.

1. Flue Damper
   The flue damper must be in the fully open position (handle all the way to the top and locked in the notch) during operation of the fireplace. See Figure 3.2.

   Before lighting the fireplace, verify the fully open position by looking up from the inside of the fireplace.

2. Outside Air
   The outside air supplies cooling air and combustion air for the fireplace. The OA damper is also controlled by the damper control handle. When the handle is in the upward position, the OA damper is open. See Figure 3.2.

   When the control handle is down and in the locked position, the OA damper and damper are in the closed position.

   Close the damper to prevent cold drafts when the fireplace is not being used.

3. Glass Doors
   The door moves up to open and down to close. The removable door handle fits in the slot in the lower right corner of the door to open and close the door. See Figure 3.3.

4. Screen Door
   The door moves up to open and down to close. The removable door handle fits in the slot in the lower right corner of the door to open and close the door.

---

**WARNING**

HOT SURFACES!

Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.
- DO NOT touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.

---

**CAUTION!** If you expect that children may come into contact with this fireplace, we recommend a barrier such as a decorative screen. See your dealer for suggestions.
C. Fuel

Warning! For use with solid wood fuel only. Other fuels may overfire and generate poisonous gases (i.e. carbon monoxide).

DO NOT BURN:
- Garbage
- Lawn clippings or yard waste
- Materials containing rubber, including tires
- Materials containing plastic
- Waste petroleum products, paints, paint thinners, or asphalt products
- Materials containing asbestos
- Construction or demolition debris
- Railroad ties or pressure-treated wood
- Manure or animal remains
- Salt water driftwood or other previously salt water saturated materials
- unseasoned wood
- Paper products, cardboard, plywood, or particleboard. The prohibition against burning these materials does not prohibit the use of fire starters made from paper, cardboard, saw dust, wax or similar substances for the purpose of starting a fire in an affected wood heater. Burning these materials may result in release of toxic fumes or render the heater ineffective and cause smoke.

1. Hardwood vs. Softwood

Your fireplace's performance depends on the quality of the firewood you use. One species of wood varies very little to the other in terms of energy content. All seasoned wood contains about 8,000 BTU's per pound. Hardwoods have a greater density than softwoods; a piece of hardwood will contain about 60% more BTU's than an equal size piece of softwood. A cord of seasoned oak (hardwood) would contain about 60% more potential energy than a cord of seasoned pine (softwood).

Most softwoods are coniferous. These are trees with needle-like leaves that stay green all year and carry their seeds exposed in a cone. Examples of coniferous trees are Douglas fir, pine, spruce and cedar. Softwoods, being more porous, require less time to dry, burn faster and are easier to ignite than hardwoods. Hardwoods are deciduous trees, broadleaf trees that lose their leaves in the fall. Their seeds are usually found within a protective pod or enclosure. Some examples of deciduous trees are oak, maple, apple, and birch. However, it should be noted that there are some deciduous trees that are definitely not considered hardwoods such as poplar, aspen and alder. Hardwoods require more time to season, burn slower and are usually harder to ignite than softwoods. Obviously, you will use the type of wood that is most readily available in your area. However, if at all possible the best arrangement is to have a mix of softwood and hardwood. This way you can use the softwood for starting the fire, giving off quick heat to bring the fireplace up to operating temperature. Add the hardwood for slow, even heat and longer burn time.

<table>
<thead>
<tr>
<th>Soft woods</th>
<th>Hard woods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas Fir</td>
<td>Oak</td>
</tr>
<tr>
<td>Pine</td>
<td>Maple</td>
</tr>
<tr>
<td>Spruce</td>
<td>Apple</td>
</tr>
<tr>
<td>Cedar</td>
<td>Birch</td>
</tr>
</tbody>
</table>

WARNING! Risk of Fire!
- **DO NOT** burn wet or green wood.
- Wet, unseasoned wood can cause accumulation of creosote that can lead to chimney fires.

2. Moisture content

The majority of the problems fireplace owners experience are caused by trying to burn wet, unseasoned wood. Freshly cut wood can be as much water as it is wood, having a moisture content of around 50%. Imagine a wooden bucket that weighs about 8 pounds. Fill it with a gallon of water, put it in the firebox and try to burn it. This sounds ridiculous but that is exactly what you are doing if you burn unseasoned wood. Dead wood lying on the forest floor should be considered wet, and requires full seasoning time. Standing dead wood can be considered to be about two-thirds seasoned, if cut at the dry time of the year.

Burning wet, unseasoned wood will produce less heat output because it requires energy in the form of heat to evaporate the water trapped inside. This is wasted energy that should be used for heating your home. This moisture evaporates in the form of steam which has a cooling effect in your firebox and chimney system. When combined with tar and other organic vapors from burning wood it will form creosote which condenses in the relatively cool firebox and chimney.

Even dry wood contains at least 15% moisture by weight, and should be burned hot enough to keep the chimney hot for as long as it takes to dry the wood out - about one hour. To tell if wood is dry enough to burn, check the ends of the logs. If there are cracks radiating in all directions from the center, it is dry. If your wood sizzles in the fire, even though the surface is dry, it may not be fully cured.

3. seasoning

**NOTICE:** Seasoning time may vary depending on drying conditions.

Seasoned firewood is nothing more than wood that is cut to size, split and air dried to a moisture content of around 20%. The time it takes to season wood varies from around nine months for soft woods to as long as eighteen months for hardwoods.
The key to seasoning wood is to be sure it has been split, exposing the wet interior and increasing the surface area of each piece. A tree that was cut down a year ago and not split is likely to have almost as high a moisture content now as it did when it was cut.

To season wood:
- Cut logs to size
- Split to 6 in. (152 mm) or less
- Air dry to a moisture content of around 20%
  - Soft wood - about nine months
  - Hard wood - about eighteen months

4. Storing Wood
Splitting wood before it is stored reduces drying time. Use the following guideline to properly season wood:
- Stack the wood to allow air to circulate freely around and through the woodpile.
- Elevate the woodpile off the ground to allow air circulation underneath.
- The smaller the pieces, the faster the drying process. Any piece over 6 in. (152 mm) in diameter should be split.
- Wood should be stacked so that both ends of each piece are exposed to air, since more drying occurs through the cut ends than the sides. This is true even with wood that has been split.
- Store wood under cover, such as in a shed, or covered with a tarp, plastic, tar paper, sheets of scrap plywood, etc., as uncovered wood can absorb water from rain or snow, delaying the seasoning process. Avoid covering the sides and ends completely. Doing so may trap moisture from the ground and impede air circulation.

5. Burning Process
Fire requires fuel, air and heat. If heat is robbed from the fireplace during the drying stage, the new load of wood has reduced the chances for a good clean burn. Always burn dry, seasoned firewood.

6. Creosote Formation
When wood is burned slowly, it produces tar and other organic vapors which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a newly-started or a slow-burning fire. As a result, creosote residue accumulates on the flue lining.

When ignited, creosote creates an extremely hot fire which may damage the chimney or even destroy the house.

The chimney shall be inspected at least annually before lighting, or once every two months during heating season.

When creosote has accumulated it shall be removed to reduce the risk of a chimney fire.

7. Processed Solid Fuel Firelogs
Manufactured firelogs may be used with this fireplace. Hearth & Home Technologies recommends the use of UL Classified processed fuel firelogs. Follow the manufacturer’s lighting and safety instructions.

Using firelogs may require more frequent chimney inspections and cleaning.

Do not poke or stir the logs while they are burning. Use only firelogs that have been evaluated for the application in manufactured fireplaces and refer to firelog warnings and caution markings on packaging prior to use.

D. First Fire
Before lighting your first fire in the fireplace, make certain that:
- refractory is in place
- all labels have been removed.
- grate is in place.
- manuals and packaging are removed.

E. Lighting Instructions
WARNING! Risk of Fire! Keep combustible materials, gasoline and other flammable vapors and liquids clear of the fireplace.

DO NOT:
- store flammable materials close to the fireplace
- use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen up” a fire in this fireplace.

NOTICE: You must establish a good draft to prevent smoke spillage into the room.

The first three or four fires should be of moderate size to allow the oils and binders to be burned from the fireplace and the refractory and paint to cure. You may notice an industrial odor the first few fires. This is considered normal.

Use well-seasoned wood.
- Open the flue damper to fully open position.
- Place crumpled or twisted paper under the fireplace grate.
- Loosely arrange kindling or small pieces of wood to form a ‘tent’ on the fireplace grate.
- Pre-warm the flue to establish a draft to help reduce smoke spillage during start-up. Hold a rolled up piece of burning newspaper under the flue damper for a few moments.
- Light the crumpled paper to ignite the kindling.
- Add small pieces of wood until a hot bed of embers has been established.
- Add a minimum of three average size pieces of split firewood, placed to allow combustion air and flames between them.
F. Normal Operation

1. When refueling, open the glass door slowly to prevent spillage.
2. Place logs on the grate so that air can flow between them.

The unit can be operated with the glass door fully open, fully closed, or any position in between.

When the glass door is in any position other than fully closed, the screen door must be in the closed position to control sparks.

**Note:** This fireplace has been tested and approved for use in the state of Washington with doors closed and wood fuel only.

**NOTICE:** Hearth & Home Technologies is not responsible for discoloration, cracking or other material failures of finishing materials due to heat exposure or smoke. Stainless steel will discolor with temperature.
**4 Maintenance and Service**

**WARNING! Hot Surfaces!**
Glass and other surfaces are hot during operation AND cool down. **DO NOT** clean fireplace until it is cooled.

**A. Ash Removal**
- **Frequency:** As necessary
- **By:** Homeowner
- **Tools Needed:** Covered metal container, metal shovel, fireplace broom

**WARNING! Risk of Fire! DO NOT** remove ashes until the fire is out and the fireplace is cold.

- The grate assembly is intended to be hinged out of the way to allow easy removal of ashes.
- Ashes should be placed in metal container with tight fitting lid.
- The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal.
- If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

**B. Grate Inspection**
- **Frequency:** After each ash removal
- **By:** Homeowner

Inspect grate for:
- Warping or sagging 1-1/2 in. (38 mm) or more
- Broken welds
- Burn-through of grate bars
- Proper location of grate
For safe operation, replace only with the approved grate from Hearth & Homes Technologies.

**C. Refractory**
- **Frequency:** After each ash removal
- **By:** Homeowner

- Inspect condition of refractory. Replace if crumbly or otherwise deteriorated, or if cracks exceed 1/4 in. (6 mm) in width. Small hairline cracks and discoloration are normal and do not affect its safety.

**D. Glass Cleaning**
- **Frequency:** As necessary
- **By:** Homeowner

**Tools Needed:** Vinegar or glass cleaner, soft towel, (2) 1/2 in. spacers

- Raise screen up as high as it will go.
- To help prevent scratching of the fireplace ledge or breaking of the glass, it is required that a 1/2 in. spacer (not included) be placed under the door frame on each end.
- Using the allen wrench from the removable handle, remove screws on right side of the frame.
- Insert removable handle into glass door. Use to help swing door open to access back side.
- Clean glass with a non-abrasive glass cleaner. Use a damp cloth dipped in wood ashes or a commercially available oven cleaner. Remove any oven cleaner residue with a glass cleaner or soap and water.
- Close and replace screws.
**E. Chimney Inspection**

**Frequency:** As necessary; at least annually before lighting fireplace, or once every two months during heating season.

**By:** Homeowner/Chimney Sweep

- Confirm that termination cap remains clear and unobstructed.
- Inspect for blockages such as bird nests, leaves, etc.
- Inspect for corrosion or separation.
- Inspect for creosote and remove as needed, at least every two months during the heating season.
- Inspect the system at the fireplace connection and at the chimney top.

In the event of a chimney fire, Hearth & Home Technologies recommends replacement of the chimney unless a CSIA Certified Chimney Sweep verifies the chimney is suitable for continued service using the necessary level of inspection as defined by NFPA 211.

**F. Creosote (Chimney) Cleaning**

**Frequency:** As needed; at least annually before lighting, or once every two months during heating season. When creosote has accumulated it shall be removed to reduce the risk of a chimney fire.

**By:** Chimney Sweep

**Tools Needed:** Brush, allen wrench, Phillips screwdriver

- When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire.
- Remove all ash from the firebox and extinguish all hot embers before disposal. Allow the fireplace to cool completely.
- Close the door tightly.
- Remove the top of the termination cap as shown in Figure 4.1 to clean the cap and chimney.
- The creosote or soot should be removed from the chimney with a brush specifically designed for the size of chimney in use.
- Reinstall termination cap top.
- Clean out fallen debris from the firebox.
A. Glass Door Removal

Note: HHT recommends the following maintenance be performed by a qualified service technician. You may need to refer to the Longmire Service Manual for detailed instructions.

To remove door only (2 people)
1. Place 2-1/2” spacers (required but not included) at each end of the door opening and close the door so that it rest on them.
2. Using the Allen wrench from the door handle, remove the (2) screws on the right side.
3. Open the door so you can see the screws on the left side hinge.
4. Using a vice grip, clamp it to the inner door frame so that the smoke shield will stop the vice grips from letting the inner door frame go up.
5. Have another person hold and support the door as you remove the screws that hold the hinge to the inner door frame.
6. To reinstall the door, reverse steps 1-5.

**NOTICE:** Remove all labels from glass before lighting the fire.

B. Glass Replacement

1. Lay the door face down on a solid surface.
2. Remove (2) counter sunk screws. One on each bottom leg of the door, (4) screws to remove the hinge and (5) screws across the top.
3. Pull the back of the door off to expose the gasketed glass.
4. Remove the glass, making sure the area where the glass was laying is free of foreign objects.
5. Lay the new glass panel into the frame, making sure the logo is facing down/out.
6. Put the door back together as it was using the new screws provided.
7. Go back to step #6 to install door.

C. Grate/Bracket Replacement

1. Remove the refractory front ash lip by lifting it up and out from the fireplace.
2. Turn the front retainer up 90° (front brackets can be removed from grate.)
3. Slide grate toward front of fireplace and remove it from the rear brackets.
4. Remove the hearth refractory.
5. Remove the rear brackets by pulling them forward.
6. Replace grate and brackets by reversing the previous steps.

D. Refractory

1. Remove the refractory front ash lip by lifting it up and out from the fireplace.
2. Turn the front retainer up 90° (front brackets can be removed from grate.)
3. Slide grate toward front of fireplace and remove it from the rear brackets.
4. Remove the hearth refractory.
5. Remove the rear brackets by pulling them forward.
6. Loosen screws and remove the splitter/retainer at the top of the side refractory.
7. Remove the side refractory.
8. Repeat for the other side.
9. Remove the back refractory retainers at the top of the back refractory panels.
10. Remove the back refractory.
11. Replace the refractory, grate and brackets by reversing the previous steps.
12. Replace grate and brackets by reversing the previous steps.

E. Damper Adjustment

If the damper does not close completely, the cable length can be adjusted.

1. Remove 2 screws at the top and bottom of the right side column cover.
2. Remove the cover and access the turnbuckle.
3. Using (2) 3/8 in. wrenches, loosen the nut on the top of the turnbuckle.
4. Tighten the turn buckle as necessary to shorten the length until the damper is closing completely.
5. Re-tighten the nut on the turnbuckle.
6. Replace the column cover.
## A. Troubleshooting Table

<table>
<thead>
<tr>
<th>Start Fire Problems</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
</table>
| Can’t get fire started  
Excessive smoke or spillage  
Burns too slowly  
Smolders, sizzles | Not enough kindling/paper or no kindling/paper | Use dry kindling, more paper. Arrange kindling & wood for air movement. |
| Damper closed/not fully open | Open damper. |
| Not enough air for fire to ignite | Check for restricted cap/shroud. |
| | Open air kit (if installed). |
| | Check for flue blockage. |
| | Pre-warm flue before starting fire (refer to starting fire section). |
| | Check for adequate vent height (refer to chimney assembly section). |
| | Open window below the fireplace towards the wind. |
| Wood condition is too wet, too large | Use dry, seasoned wood (refer to wood fuel section). |
| Bed of coals not established before adding wood | Start with paper & kindling to establish bed of coals (refer to starting fire section). |
| Flue blockage such as birds’ nests or leaves in termination cap | Have chimney inspected for creosote and cleaned by a certified chimney sweep. |
| Down draft or negative pressure  
Competition with exhaust devices | Do not use exhaust fans during start-up (refer to negative pressure section). |
| | Open window below the fireplace towards the wind. |
| Fire burns too fast | Extremely dry or soft wood | Mix in hardwood. |
| | Mix in less seasoned wood after fire is established (refer to wood fuel section). |
| Overdrafting | Check for correct vent height; too much vertical height creates overdrafting. |
| | Check location of vent termination (refer to chimney assembly section). |
B. Performance Considerations

Hearth & Home Technologies assumes no responsibility for the improper performance of the fireplace system caused by inadequate draft due to environmental conditions, down drafts, tight sealing construction of the structure, or mechanical exhausting devices which will create a negative air pressure within the structure where the fireplace is located.

If smoke spillage occurs from a fireplace opening when the door is open, there is either a leakage in the flue, a blockage in the flue, or some condition is affecting draft. Understanding and differentiating the conditions which can cause each of these kinds of spillage problems is essential to their solution.

- **Flue Leakage**
  Check for improperly connected flue joints or a damaged flue joint in the chimney system. Such leakage would reduce draft (air would be drawn in through the leaks rather than through the fireplace). The result might be difficult start-up and smoky fires that might spill if other adverse draft conditions accompany this problem.

- **Flue/Termination Cap Blockage**
  The damper should be open.
  Check for objects that may have fallen down the chimney.

Flue draft is measured as negative pressure in the chimney. The amount of negative pressure determines how strong the draft is. The draft is important because it draws the combustion air into the fireplace and pulls the smoke out of the chimney.

There are three basic criteria essential in establishing and maintaining flue draft:

- availability of combustion air
- heat generated from the fire
- diameter and height of the flue system

These three factors work together as a system to create the flue draft. Increasing or decreasing any one of them will affect the other two and thus change the amount of draft in the entire system.

If the fire is hard to start and smoke spills out of the fireplace, or you find it difficult to establish and maintain a moderately high burn rate, then the flue draft is too low and corrective measures must be taken.

Be sure you have air available for combustion and that your firewood is dry and well seasoned. Build your fires properly and according to the instructions given in operating instructions, “Starting a Fire”. Be sure your flue system is installed correctly and that it is the proper diameter and height. Check for the following:

- All chimney sections are properly installed.
- The chimney is clean and free of creosote or soot buildup.
- Make sure overhanging trees and branches are cut back within ten feet of the top of the chimney and the chimney is free of debris from animals.
- Ensure the chimney cap is clean and free of any buildup of soot or creosote if cap is equipped with a spark arrestor screen.
- The wood being used is dry and well seasoned.

If you still suspect you have a low draft problem it may be necessary to increase the volume of air in your flue system. Since the diameter of your flue system is matched with the size of the flue collar and should not be changed, then the height of the system must be increased. Add chimney sections one at a time until the draft improves.

In some cases, regardless of what you do, it can still be difficult to establish the proper flue draft. This is especially evident when using an exterior factory-built chimney or exterior masonry chimney. Try holding a burning rolled up newspaper as close to the flue outlet as possible for a few minutes, then light the paper under the kindling. The heat generated from the burning rolled up newspaper should help get the draft established.

Still other negative house pressure factors can affect how well your flue system performs. Neighboring structures, high winds, tall trees, even hillsides can affect air currents around the chimney. See Figure 5.1. Well-designed chimney caps are available that can help. Your fireplace dealer is the local expert in your area. He can usually make suggestions or discover problems that can be easily corrected allowing your fireplace to operate correctly as it has been designed, providing safe and economical heat for your home.

Contact your dealer for additional information regarding operation and troubleshooting. Visit www.hearthnhome.com to find a dealer.
Another appliance in home also exhausting air (furnace, fan, dryer, etc.)?

Air register from furnace near fireplace?

Doors opening and closing? Window closed for start-up?

Overhead fan operating?

Unsealed can lights?

Overhanging tree?

Bird's nest or leaves in termination cap?

Structural changes in chimney area?

Creosote buildup in flue?

Damper opened

Strong winds around chimney termination?
B. Accessories

Doors
C. Contact Information

Hearth & Home Technologies
7571 215th Street West
Lakeville, MN 55044
www.hearthnhome.com

Please contact your Outdoor Lifestyles dealer with any questions or concerns.
For the number of your nearest Outdoor Lifestyles dealer, please visit www.hearthnhome.com.

– NOTES –

This product may be covered by one or more of the following patents: (United States) 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5413089, 5429495, 5452708, 5542407, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, 7047962, 7216645, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.

Printed in U.S.A. - Copyright 2012