CAUTION

DO NOT DISCARD THIS MANUAL

• Important operating and maintenance instructions included.
• Read, understand and follow these instructions for safe installation and operation.
• Leave this manual with party responsible for use and operation.

WARNING

Fire Risk
• For use with solid wood fuel or decorative gas appliance only.
• Do not install unvented gas logs.

WARNING

If the information in these instructions is not followed exactly, a fire 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: For Outdoor Use Only.

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or NFI certified professionals.

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 appliance.
• Alert children and adults to hazards of high temperatures.
High temperatures may ignite clothing or other flammable materials.
• Keep clothing, furniture, draperies and other combustibles away.
Read this manual before installing or operating this fireplace.
Please retain this owner’s manual for future reference.

Congratulations!

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

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 you keep it with your other important documents and product manuals.

The information contained in this owner’s manual unless noted otherwise, applies to all models and gas control systems.

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!

Homeowner Reference Information

Model Name: ____________________________ Date purchased/installed: __________________

Serial Number: __________________________ Location on fireplace: ______________________

Dealership purchased from: __________________ Dealer phone: _________________________

Notes: ____________________________________________________________

Listing Label Information/Location

The model information regarding your specific fireplace can be found on the rating plate located on the smoke shield of the fireplace.

Congratulations!

Testing Information

The fireplace has not been tested with an unvented gas log set. To reduce the risk of fire or injury, do not install an unvented gas log set into fireplace.

WARNING! TO AVOID THE RISK OF DAMAGING FIREPLACE MATERIALS AND INCREASING THE RISK OF SPREADING A FIRE DO NOT USE THE FIREPLACE TO COOK OR WARM FOOD.

If installation or operating instructions are missing contact Hearth & Home Technologies, Inc., 1915 W. Saunders St., Mt. Pleasant, IA 52641.
# Table of Contents

1 **Listing and Code Approvals**  
   A. Appliance Certification. .................................. 4  

2 **Getting Started**  
   A. Design and Installation Considerations .................. 5  
   B. Typical Fireplace System. .............................. 5  
   C. Tools and Supplies Needed .............................. 6  
   D. Inspect Fireplace and Components ...................... 6  

3 **Framing and Clearances**  
   A. Selecting Fireplace Location ............................ 7  
   B. Clearances ............................................. 9  
   C. Sidewalls/Surrounds .................................... 10  
   D. Frame the Fireplace .................................. 10  
   E. Chimney Requirements ................................ 11  

4 **Installation of Fireplace**  
   A. Install the Dual Cooling Air Kit ....................... 12  
   B. Secure the Fireplace .................................. 13  

5 **Chimney Assembly**  
   A. Chimney Requirements ................................ 14  
   B. Using Offsets/Returns ................................ 15  
   C. Assemble the Chimney Sections ....................... 16  
   D. Install the Ceiling Firestops ......................... 16  
   E. Install the Attic Insulation Shield ................... 17  
   F. Double-check the Chimney Assembly .................. 17  
   G. Secure the Chimney ................................... 17  

6 **Complete the Enclosure**  
   A. Chimney Termination ................................... 18  
   B. Chase Top ............................................. 19  
   C. Install the Termination Cap ............................ 20  

7 **Accessories**  
   A. Gas Log/Lighter Provisions ............................. 22  

8 **Finishing**  
   A. Hearth Extension ........................................ 23  
   B. Finishing Material ...................................... 24  
   C. Mantel .................................................... 24  
   D. Sidewalls/Surrounds .................................... 24  
   E. Glass Doors ............................................. 24  

9 **Operating Instructions**  
   A. General Information ..................................... 25  
   B. Clear Space Near the Fireplace ....................... 26  
   C. Flue Damper ............................................. 26  
   D. Firescreen .............................................. 26  
   E. Glass Doors ............................................. 26  
   F. Grate ..................................................... 26  
   G. Wood Fuel .............................................. 27  
   H. Starting a Fire .......................................... 28  

10 **Troubleshooting**  
   Diagnostics and Problem Solving ......................... 29  

11 **Maintenance and Servicing the Fireplace**  
   A. Disposal of Ashes ....................................... 30  
   B. Chimney Inspection/Cleaning ......................... 30  
   C. Firebox Refractory Replacement ....................... 30  
   D. Maintenance Task List ................................ 31  
   E. Chimney Fire ........................................... 31  

12 **Reference Materials**  
   A. Fireplace Dimensions .................................. 32  
   B. Fireplace Components ................................ 33  
   C. Chimney Components .................................. 34  
   D. Service Parts .......................................... 38  
   E. Limited Warranty ...................................... 42  
   F. Contact Information .................................... 44  

---

**Note:** An arrow (►) found in the text signifies change in content.
A. Appliance Certification

This fireplace system has been tested and listed in accordance with UL 127 and CAN/ULC-S610-M87 standards by Underwriters Laboratories Inc. for installation and operation in the United States and Canada.

This fireplace has been tested and listed for use with the optional components specified in this manual. These optional components may be purchased separately and installed at a later date.

Installation of a dual cooling air kit is required and must be installed at the time of the initial fireplace installation. Failure to do so may result in a fire causing property damage and/or personal injury.

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

---

**WARNING**

Fire Risk

- Do not install or operate damaged fireplace.
- Do not modify fireplace.
- Installation other than as instructed by Hearth & Home Technologies is strictly prohibited.
- Do not operate the fireplace without fully assembling all components.
- Do not overfire.
- Do not install an unvented gas log set. This fireplace has not been tested for use with unvented gas log sets.

Installation and/or use of any component part not approved by Hearth & Home Technologies.

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

---

**WARNING**

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner’s information manual provided with this fireplace. For assistance or additional information consult a qualified installer, service agency or your dealer.

---

Not intended for use as a primary heat source.

This fireplace is tested and approved as a decorative fireplace. It should not be factored as a primary heat source in residential heating calculations.

---

**WARNING**

Fire Risk

TO AVOID THE RISK OF DAMAGING FIREPLACE MATERIALS AND INCREASING THE RISK OF SPREADING A FIRE, **DO NOT USE THE FIREPLACE TO COOK OR WARM FOOD.**
2 Getting Started

A. Design and Installation Considerations

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check building codes prior to installation.</td>
</tr>
<tr>
<td><strong>Installation MUST comply with local, regional, state and national codes and regulations.</strong></td>
</tr>
<tr>
<td>Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.</td>
</tr>
</tbody>
</table>

When planning a fireplace installation, it is necessary to determine the following information before installing:

- **Where the fireplace is to be installed.** See Sections 3 and 4.
- **The vent system configuration to be used.** See Sections 5 and 6.
- **Framing and finishing details.** See Sections 3, 6 and 8.
- **Whether optional accessories are desired.** See Section 12.

Draft is the pressure difference needed to vent fireplaces successfully. Considerations for successful draft include:

- Location of fireplace and chimney

**Moisture Resistance:**

This outdoor fireplace will shed moderate amounts of water, but is not waterproof. Water and condensing water vapor may enter the chase under certain conditions.

The fireplace will not perform as an exterior wall. Moisture penetration must be considered for construction that places the fireplace in structure walls or on moisture sensitive surfaces.

**When installed on exterior walls:** Hearth & Home Technologies recommends that the fireplace chase be constructed outside the structure’s weather envelope. Where the platform meets the wall, use a flashing detail similar to that required for attached decks. Chase platforms, including hearths should slope away from the structure at 1/8 in. to 1/4 in. per foot. The fireplace can be shimmed level.

**When installed on surfaces where water may collect or cause damage:** Hearth & Home Technologies recommends that a drainage pan be placed under the unit. This can be constructed of metal, adhesive polymer membrane (such as ice and water shield) or other suitable materials. A means of drainage out of the pan such as tubes or weep holes should be provided. A slope of 1/8 in. to 1/4 in. per foot towards the drain port is suggested. The fireplace can be shimmed level.

Hearths should slope away from the front of the fireplace and chase at 1/8 in. to 1/4 in. per foot. Spark strips must be on top of any combustible hearth materials used for moisture management.

B. Typical Fireplace System

The Outdoor Lifestyle fireplace system consists of the following:

- **Fireplace/integral grate/dual cooling air system**
- **Refractory**
- **Chimney termination cap**
- **Chimney system (SL1100 series pipe is NOT approved for Canada)**
- **Hearth extension**

Optional components include:

- **Glass doors**
- **Weather cover**
- **SLA10 11-10 in./279-254 mm Adapter (required in Canada)**

![Figure 2.1 Typical Fireplace System](image-url)
C. Tools and Supplies Needed

Before beginning the installation be sure the following tools and building supplies are available:

- Reciprocating saw
- Framing material
- Pliers
- High temp caulking material
- Hammer
- Gloves
- Phillips screwdriver
- Framing square
- Flat blade screwdriver
- Electric drill and bits
- Plumb line
- Safety glasses
- Level
- Tape measure
- 1/2-3/4 in. length, #6 or #8 self-drilling screws
- Misc. screws and nails

---

D. Inspect Fireplace and Components

**CAUTION**

- Keep fireplace dry.
- Mold or rust may cause odors.

**WARNING**

- Fire Risk
- Explosion Risk
- Inspect fireplace and components for damage. Damaged parts may impair safe operation.
  - Do NOT install damaged components.
  - Do NOT install incomplete components.
  - Do NOT install substitute components
  - Report damaged parts to dealer.

- Carefully remove the fireplace and components from the packaging.
- The vent system components and doors are shipped in separate packages.
- Report to your dealer any parts damaged in shipment.
- **Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**
### 3 Framing and Clearances

#### A. Selecting Fireplace Location

This outdoor fireplace will shed moderate amounts of water, but is not waterproof. Water and condensing water vapor may enter the chase under certain conditions.

The fireplace will not perform as an exterior wall. Moisture penetration must be considered for construction that places the fireplace against structure walls or on moisture sensitive surfaces.

- **Exterior Walls (see Figure 3.1)**
  Hearth & Home Technologies recommends that the fireplace chase be constructed outside the structure’s weather envelope. Where the platform meets the wall, use a flashing detail similar to that required for attached decks. Chase platforms, including hearths, should slope away from the structure at 1/8 in to 1/4 in. per foot. The fireplace can be shimmed level. Build the outside enclosure out of standard building materials, being careful to maintain the minimum air clearances specified in these installation instructions.

#### Freestanding Installations (see Figure 3.2)

When installing this fireplace as a freestanding fireplace on your porch, patio or in your yard, it must be enclosed to prevent impact damage to the fireplace. The exterior of the enclosure may be finished in a textured plywood, a wood clapboard siding, brick, or a cultured stone. Vinyl siding is not recommended for use on the front of the fireplace due to the heat the fireplace produces. This can cause the vinyl siding to deteriorate.

- **When Installed on Surfaces Where Water May Collect or Cause Damage:**
  Hearth & Home Technologies recommends that a drainage pan be placed under the unit. This can be constructed of metal, adhesive polymer membrane (such as ice and water shield) or other suitable materials. A means of drainage out of the pan such as tubes or weep holes should be provided. A slope of 1/8 in. to 1/4 in. per foot towards the drain port is suggested. The fireplace can be shimmed level.

  Hearths should slope away from the front of the fireplace and chase at 1/8 in. to 1/4 in. per foot. Spark strips must be used on top of any combustible hearth materials used for moisture management.

#### Note:
- Illustrations and photos reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation/appearance may vary due to individual design preference.
- Hearth & Home Technologies reserves the right to alter its products.

---

**WARNING**

Fire Risk

Provide adequate clearances.
- Around air openings
- To combustibles
- For service access.

Locate fireplace away from traffic areas.

---

**Note:**
- Illustrations and photos reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation/appearance may vary due to individual design preference.
- Hearth & Home Technologies reserves the right to alter its products.

---
Note: If this surface is inside the building’s warm air envelope... ...then this surface must be an exterior wall system.

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montana-36</td>
<td>in</td>
<td>24-1/2</td>
<td>24</td>
<td>42</td>
<td>43</td>
<td>46</td>
<td>1/2</td>
<td>1-1/2</td>
<td>1-1/2</td>
<td>74-1/2</td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>622</td>
<td>610</td>
<td>1067</td>
<td>1092</td>
<td>1168</td>
<td>13</td>
<td>38</td>
<td>38</td>
<td>1892</td>
</tr>
<tr>
<td>Montana-42</td>
<td>in</td>
<td>24-1/2</td>
<td>24</td>
<td>48</td>
<td>49</td>
<td>52</td>
<td>1/2</td>
<td>1-1/2</td>
<td>1-1/2</td>
<td>80-1/2</td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>622</td>
<td>610</td>
<td>1219</td>
<td>1245</td>
<td>1321</td>
<td>13</td>
<td>38</td>
<td>38</td>
<td>2045</td>
</tr>
</tbody>
</table>

Figure 3.1 Fireplace Locations

Figure 3.2 Freestanding Fireplace Locations
B. Clearances

**WARNING**

**Fire Risk**
- Comply with all minimum clearances to combustibles as specified.
- Framing or finishing material used on the front of, or in front of, the appliance closer than the minimums listed, must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.).

Failure to comply may cause fire.

---

**Figure 3.3 Clearances to Combustible Materials**

- 36 in. (914 mm)
- 0 in. to level of standoffs
- 1-1/2 in. (38 mm)
- 1/2 in. (13 mm)
- Drywall
- 0 in.
C. Sidewalls/Surrounds

Adjacent combustible side walls must be located a minimum of 12 in. (305 mm) from the fireplace opening. See Figure 3.4. If you are using a decorative surround constructed of combustible material, it must be located within the shaded area defined in Figure 3.3. Short stub walls are also acceptable if they are contained within the shaded area.

D. Frame the Fireplace

Figure 3.5 shows a typical framing (using 2 x 4 lumber) of the fireplace, assuming combustible materials are used. All required clearances to combustibles around the fireplace must be adhered to. See Figure 3.2. Any framing across the top of the fireplace must be above the level of the top standoffs.
E. Chimney Requirements

When planning your fireplace location, the chimney construction and necessary clearances must be considered. The fireplace system and chimney components have been tested to provide flexibility in construction. The following figures are the minimum distances from the base of the fireplace.

- Minimum overall straight height is **6 ft 4 in. if the fireplace is freestanding** and a minimum of 10 ft from a combustible structure. See Figure 3.2.
- Chimney must extend 2 ft (.6 m) above any portion of the roof within 10 ft (3 m) of the chimney. Refer to Figure 6.1.

<table>
<thead>
<tr>
<th></th>
<th>ft</th>
<th>m</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Minimum height with offset/return</td>
<td>14.5</td>
<td>4.42</td>
</tr>
<tr>
<td>* Maximum height</td>
<td>90</td>
<td>27.43</td>
</tr>
<tr>
<td>* Maximum chimney length between an offset and return</td>
<td>20</td>
<td>6.1</td>
</tr>
<tr>
<td>* Maximum distance between chimney stabilizers</td>
<td>35</td>
<td>10.67</td>
</tr>
<tr>
<td>* Double offset/return minimum height</td>
<td>24</td>
<td>7.32</td>
</tr>
<tr>
<td>* Maximum unsupported chimney length between the offset and return</td>
<td>6</td>
<td>1.83</td>
</tr>
<tr>
<td>* Maximum unsupported chimney height above the fireplace</td>
<td>35</td>
<td>10.67</td>
</tr>
<tr>
<td>* Minimum overall straight height if fireplace is freestanding</td>
<td>6.4</td>
<td>1.95</td>
</tr>
<tr>
<td>* Minimum Straight Height</td>
<td>14.5</td>
<td>4.42</td>
</tr>
</tbody>
</table>

**Note:** A maximum of two pairs of offsets and returns may be used.
A. Install the Dual Cooling Air Kit

The cooling air kit is supplied as a standard feature with this fireplace and is required for safe operation. Installation must be done at the time of initial construction. Locate air inlet hoods to prevent blockage from leaves, snow/ice, or other debris.

To install the air kit collar, slide one of the tabs down into the seam. See Figure 4.1. Secure the collar tabs to the fireplace with screws placed into the holes provided. See Figure 4.2. Repeat for other side.

Note: Locate cooling air inlet hoods to prevent blockage from leaves, snow/ice, or other debris.

B. Secure the Fireplace

• Position the Fireplace

This fireplace may be placed on either a combustible or noncombustible continuous flat surface. Follow the instructions for framing in Section 3.D. Slide the fireplace into position. Be sure to provide the minimum air clearance at the sides and back of the fireplace assembly. See Section 3.B.

WARNING

Fire Risk
Asphyxiation Risk
Do not draw outside combustion air from:
• Wall, floor or ceiling cavity.
• Enclosed space such as an attic or garage.
• Close proximity to exhaust vents or chimneys.
Fumes or odor may result.

CAUTION

Sharp Edges
• Wear protective gloves and safety glasses during installation.

WARNING

Fire Risk!
• Prevent contact with sagging, loose insulation.
• Do NOT install against vapor barriers or exposed insulation.
• **Place the Protective Metal Hearth Strips**
  Included with your fireplace you will find two metal hearth strips measuring approximately 26 in. x 4 in. (660 mm x 102 mm). These strips are used to provide added protection where the fireplace and the hearth extension meet.

  Slide each metal strip 2 in. (51 mm) under the front edge of the fireplace. The individual pieces must overlap each other by 1 in. (25 mm) minimum in the middle of the fireplace to provide continuous coverage of the floor. See Figure 4.3. These metal strips should extend from the front and sides of the fireplace opening by 2 in. (51 mm).

  ![Diagram of Protective Metal Hearth Strips](image)

  **WARNING**
  
  **Fire Risk!**
  - Metal hearth strips MUST be installed.
  
  Sparks or embers may ignite flooring.

  ![Diagram of Protective Metal Hearth Strips](image)

• **Level the Fireplace**
  Level the fireplace side-to-side and front-to-back. Shim with noncombustible material, such as sheet metal, as necessary. Secure the fireplace (using the nailing flanges located on either side of the fireplace) to the vertical framing.

  ![Diagram of Protective Metal Hearth Strips](image)

  **Note:** When elevating the fireplace above the hearth extension the front of the elevated platform must be protected with a protective metal hearth strip as shown in Figure 4.4.

  ![Diagram of Protective Metal Hearth Strips](image)

  **Important:** To ensure proper fit of the glass doors, check the fireplace opening for square. Measure diagonal distances of the opening to make sure they are equal. If they are not, continue to shim the fireplace until those diagonals are equal.

  ![Diagram of Protective Metal Hearth Strips](image)
A. Chimney Requirements
Vertical distances are measured from the base of the fireplace.

- Minimum overall straight height is **6 ft 4 in. if the fireplace is freestanding** and a minimum of 10 ft from a combustible structure. See Figure 3.2.
- Chimney must extend 2 ft (.6 m) above any portion of the roof within 10 ft (3 m) of the chimney. Refer to Figure 6.1.

<table>
<thead>
<tr>
<th></th>
<th>ft</th>
<th>m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum height with offset/return</td>
<td>14.5</td>
<td>4.42</td>
</tr>
<tr>
<td>Maximum height</td>
<td>90</td>
<td>27.43</td>
</tr>
<tr>
<td>Maximum chimney length between an offset and return</td>
<td>20</td>
<td>6.1</td>
</tr>
<tr>
<td>Maximum distance between chimney stabilizers</td>
<td>35</td>
<td>10.67</td>
</tr>
<tr>
<td>Double offset/return minimum height</td>
<td>24</td>
<td>7.32</td>
</tr>
<tr>
<td>Maximum unsupported chimney length between the offset and return</td>
<td>6</td>
<td>1.83</td>
</tr>
<tr>
<td>Maximum unsupported chimney height above the fireplace</td>
<td>35</td>
<td>10.67</td>
</tr>
<tr>
<td>Minimum overall straight height if fireplace is freestanding</td>
<td>6.4</td>
<td>1.95</td>
</tr>
<tr>
<td>Minimum Straight Height</td>
<td>14.5</td>
<td>4.42</td>
</tr>
</tbody>
</table>

**Note:** A maximum of two pairs of offsets and returns may be used.

**WARNING**

**Fire Risk**
- Must maintain 2 in. (51 mm) air clearance to insulation and other combustible materials.

**CAUTION**
- Do NOT connect this fireplace to a chimney flue servicing another appliance.
- Do NOT connect to any air distribution duct or system.

<table>
<thead>
<tr>
<th><strong>Table 5.1</strong></th>
<th>in.</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HEIGHT OF CHIMNEY COMPONENTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chimney Stabilizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SL11</td>
<td>SL4</td>
<td>4-3/4</td>
</tr>
<tr>
<td>Ceiling Firestops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS538</td>
<td>FS538</td>
<td>0</td>
</tr>
<tr>
<td>FS540</td>
<td>FS540</td>
<td>0</td>
</tr>
<tr>
<td>Offsets/Returns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SL1130</td>
<td>SL430</td>
<td>14-1/2</td>
</tr>
<tr>
<td>Chimney Sections*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SL1106</td>
<td>SL406</td>
<td>4-3/4</td>
</tr>
<tr>
<td>SL1112</td>
<td>SL412</td>
<td>10-3/4</td>
</tr>
<tr>
<td>SL1118</td>
<td>SL418</td>
<td>16-3/4</td>
</tr>
<tr>
<td>SL1136</td>
<td>SL436</td>
<td>34-3/4</td>
</tr>
<tr>
<td>SL1148</td>
<td>SL448</td>
<td>46-3/4</td>
</tr>
<tr>
<td>n/a</td>
<td>SLA10</td>
<td>16-3/4</td>
</tr>
</tbody>
</table>

* Dimensions reflect effective height.
B. Using Offsets/Returns

To bypass any overhead obstructions, the chimney may be offset using an offset/return.

An offset and return may be attached together or a chimney section(s) may be used between an offset and return.

Perform the following steps to determine the correct chimney component combination for your particular installation:

- Measure how far the chimney needs to be shifted to enable it to avoid the overhead obstacle. See Figure 5.1. Use dimension “A” to determine chimney section required to achieve the needed shift.
- After determining the offset dimension, refer to Table 5.2 and find the “A” dimension closest to but not less than the distance of shift needed for your installation.
- The “B” dimension that coincides with the “A” dimension represents the required vertical clearance that is needed to complete the offset and return.
- Read across the chart and find the number of chimney sections required and the model number of those particular chimney parts.
- Whenever the chimney penetrates a floor/ceiling, a ceiling firestop must be installed.
- The effective height of the fireplace assembly is measured from the base of the fireplace to the top of the starter collar. See Dimensions in Section 12.

### Table 5.2

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>SL1106</th>
<th>SL1112</th>
<th>SL1118</th>
<th>SL1136</th>
<th>SL1148</th>
</tr>
</thead>
<tbody>
<tr>
<td>in.</td>
<td>mm</td>
<td>SL406</td>
<td>SL412</td>
<td>SL418</td>
<td>SL436</td>
<td>SL448</td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>4 7/8</td>
<td>124</td>
<td>17 7/8</td>
<td>454</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7 1/4</td>
<td>184</td>
<td>2 2</td>
<td>559</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9 3/4</td>
<td>248</td>
<td>26 1/8</td>
<td>664</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10 1/4</td>
<td>260</td>
<td>27 1/4</td>
<td>692</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>12 3/4</td>
<td>324</td>
<td>31 3/8</td>
<td>797</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>13 1/4</td>
<td>337</td>
<td>32 3/8</td>
<td>822</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>15 3/4</td>
<td>400</td>
<td>36 5/8</td>
<td>930</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>18 1/8</td>
<td>460</td>
<td>40 3/4</td>
<td>1035</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>18 3/4</td>
<td>476</td>
<td>41 3/4</td>
<td>1060</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>21 3/4</td>
<td>552</td>
<td>47</td>
<td>1194</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>22 1/4</td>
<td>565</td>
<td>48</td>
<td>1219</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>24 3/4</td>
<td>629</td>
<td>52 1/8</td>
<td>1324</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>27 3/4</td>
<td>705</td>
<td>57 3/8</td>
<td>1457</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>28 1/4</td>
<td>718</td>
<td>58 3/8</td>
<td>1483</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>30 3/4</td>
<td>781</td>
<td>62 1/2</td>
<td>1588</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>33 3/4</td>
<td>857</td>
<td>67 3/4</td>
<td>1721</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>36 3/4</td>
<td>933</td>
<td>73</td>
<td>1854</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>39 3/4</td>
<td>1010</td>
<td>78 1/8</td>
<td>1984</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>41 1/8</td>
<td>1045</td>
<td>82 3/8</td>
<td>2092</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>45 3/4</td>
<td>1162</td>
<td>88 1/2</td>
<td>2248</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>48 1/8</td>
<td>1222</td>
<td>92 3/4</td>
<td>2356</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>51 3/4</td>
<td>1314</td>
<td>98 7/8</td>
<td>2511</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

Proper assembly of air cooled chimney parts results in an overlap of chimney joints of 1-1/4 in. (32 mm). Effective length is built into this table.

### Figure 5.1 Chimney Offset/Return

**Example:** Your “A” dimension from Figure 5.3 is 14 1/2 in. (368 mm). Using Table 5.2 the dimension closest to, but not less than 14 1/2 in. (368 mm) is 15 3/4 in. (400 mm) using a 30° offset/return. It is then determined from the table that you would need 36 5/8 in. (930 mm) (Dimension “B”) between the offset and return. The chimney components that best fit your application are two SL1112s or SL412s.
C. Assemble the Chimney Sections

Attach either a straight chimney section or an offset to the top of the fireplace (depending on your installation requirement). Chimney sections are locked together by pushing downward until the top section meets the stop bead on the lower section.

The inner flue is placed to the inside of the flue section below it. The outer casing is placed outside the outer casing of the chimney section below it. See Figure 5.2.

Note: Inner flue and outer liner sections cannot be disassembled once locked together. Plan ahead to ensure the proper installation height is achieved with the selected chimney components.

![Figure 5.2 Assembling Chimney Sections](image)

D. Install the Ceiling Firestops

Where the chimney system is installed in a chase on the exterior side of the building envelope or as a free standing installation, firestops are not required. Check building codes prior to installation.

Where the chimney system is on the interior side of the building envelope, follow the ceiling firestop instructions below:
- Mark and cut an opening in the ceiling for the ceiling firestop being used. See Figure 5.3.
- Frame the opening with the same size lumber used in the ceiling joists.
- Install the ceiling firestop.

Note: The ceiling firestop MUST be nailed to the bottom of the ceiling joists EXCEPT when the space above is uninsulated and the attic insulation shield is not being used (see Figure 5.5). When the attic insulation shield is used the ceiling firestop may be above or below the joist of an insulated ceiling.

Note: Inner flue and outer liner sections cannot be disassembled once locked together. Plan ahead to ensure the proper installation height is achieved with the selected chimney components.

Note: Inner flue and outer liner sections cannot be disassembled once locked together. Plan ahead to ensure the proper installation height is achieved with the selected chimney components.

Note: You must provide support for the pipe during construction and check to be sure inadvertent loading has not dislodged the chimney section from the fireplace or at any chimney joint.

![Figure 5.3 Installing the Ceiling Firestop](image)

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS538</td>
<td>17</td>
<td>432</td>
</tr>
<tr>
<td>FS540</td>
<td>17</td>
<td>660</td>
</tr>
</tbody>
</table>

Note: Use same dimensional lumber for framing ceiling firestop and joists.

CAUTION

- Ceiling firestops must be used where chimney pipe penetrates ceiling/floor.

Ceiling firestop slows spread of fire and reduces cold air infiltration.
E. Install Attic Insulation Shield

**WARNING! Risk of Fire!** You MUST install an attic insulation shield when there is any possibility of insulation or other combustible material coming into contact with the chimney.

- **DO NOT** pack insulation between the chimney and the attic insulation shield.
- Failure to keep insulation and other materials away from chimney pipe could cause fire.
- **DO NOT** offset chimney inside insulation shield.

Installation of a ceiling firestop is required:

- Refer to Figures 5.3, 5.5, 5.6.
- Roll the shield (around the chimney if already installed). The three holes on each side will match up (large holes on top).
- Insert three screws into the matching holes to form a tube.
- Bend the tabs on the bottom of the tube inward to 90° to maintain chimney air space.
- Rest the insulation shield on the ceiling firestop below.
- Bend the tabs at the top of the shield inward to 90° to maintain the 2 in. (51 mm) air space from the chimney.

F. Double-check the Chimney Assembly

Continue assembling the chimney sections up through the ceiling firestops as needed. While doing so, be aware of the height and unsupported chimney length limitations given under Section 5.A. Chimney Requirements.

Check each section by pulling up slightly from the top to ensure proper engagement before installing the succeeding sections. If they have been connected correctly, they will not disengage when tested.

---

**WARNING**

Fire Risk

- Secure offsets with screws (not to exceed 3/4 in./19 mm in length).
- Secure returns with strapping.
- Straight chimney sections may be secured with screws (not to exceed 3/4 in./19 mm in length) at the joints.

Keep chimney sections from separating or twisting.
G. Secure the Chimney

When offsets and returns are joined to straight pipe sections, they must be locked into position with the screws (outer only). To prevent gravity from pulling the chimney sections apart, the returns and the chimney stabilizers have hanger straps for securing these parts to joists or rafters. See Figure 5.7.

* or equivalent #6 or #8 sheet metal screw no longer than 3/4 in. (19 mm).
A. Chimney Termination

Chimney Termination Requirements (See Figure 6.1)

- Must have a cap approved and listed for this fireplace system
- Must not be located where it will become plugged by snow or other material
- Must terminate at least 3 ft (914 mm) above the roof and at least 2 ft (610 mm) above any portion of the roof within 10 ft (3.05 m)
- Must be located away from trees or other structures

![Diagram of chimney termination requirements for slanted and flat roofs.](image)

<table>
<thead>
<tr>
<th>Location Type</th>
<th>Minimum Extension Above Roof</th>
<th>Minimum Extension Above Adjacent Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slanted Roofs</td>
<td>3 ft (0.9 m)</td>
<td>2 ft (0.6 m)</td>
</tr>
<tr>
<td>Flat Roofs</td>
<td>3 ft (0.9 m)</td>
<td>2 ft (0.6 m)</td>
</tr>
</tbody>
</table>

Multiple Chimney Locations

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 in. (minimum) up to 20 in.</td>
<td>18 in. minimum 152 mm/508 mm</td>
</tr>
<tr>
<td>20 in. and over</td>
<td>0 in. minimum 457 mm</td>
</tr>
</tbody>
</table>

If using decorative cap cover(s), this distance may need to be increased. Refer to the installation instructions supplied with the decorative cap cover.

In a staggered installation with both gas and wood terminations, the wood termination cap must be higher than the gas termination cap.
Mark the Exit Point of the Roof
Locate the point where the chimney will exit the roof by plumbing down to the center of the chimney. Drive a nail up through the roof to mark the center. See Figure 6.2.

Cut Out the Hole in the Roof
Measure to either side of the nail and mark the 14-1/2 in. x 14-1/2 in. (368 mm x 368 mm) opening required. This is measured on the horizontal; actual length may be larger depending on the pitch of the roof. Cut out and frame the opening.

![WARNING]
Fire Risk
- Must maintain 2 in. (51 mm) air clearance to insulation and other combustible materials.

Assemble the Chimney Sections Through the Roof
Continue to add chimney sections through the roof opening, maintaining at least a 2 in. (51 mm) air space to combustible materials.

Install the Roof Flashing
If a roof flashing is to be used, install the roof flashing appropriate to the roof pitch and install a round termination cap and storm collar following the instructions shipped with the cap.

B. Chase Top
A metal chase top is required to seal the top of the chase around the chimney pipe. The top should include a turn-down and drip edge to prevent water from seeping into the chase. Provide a 1/8 in. (3 mm) gap around the flue pipe and slope the top downward away from the penetration. See Figure 6.3.
- All seams must be caulked to prevent leaks.
- A chase installation must use a chase top. Chase tops may be field constructed.
- Attach the chase top to the top of the chase.
C. Install the Termination Cap

**Note:** To protect against the effect of corrosion on those parts exposed to the weather, the termination cap can be painted with a rust-resistant paint.

![WARNING](image)

**Fire Risk**
- The minimum overlap of cap to pipe MUST be met or chimney may separate from cap.
  Separation allows sparks, heat and embers to escape.

Install the chimney sections up through the chase enclosure and refer to termination cap instructions.

- **TR11/TR444 Round Termination Cap**

![Figure 6.4 Installing a TR11/TR444 Round Termination Cap](image)

- **ST1175/ST475 Square Termination Cap**

![Figure 6.6 Installing an ST1175/ST475 Square Termination Cap](image)

- **TR11T/TR442 Round Telescoping Termination Cap**

![Figure 6.5 Installing a TR11T/TR442 Round Telescoping Termination Cap](image)
**TCT1175 Terra Cotta Cap**

Remove 2 screws from front & back to lift the top off.

Place waterproof sealer under each flange of the termination cap and on top of each screw to help prevent leaks.

The last section of pipe must stop between 2 in. (51 mm) above top of chase and 7 in. (178 mm) below top of chase.

Termination cap pipe and chimney section must overlap 1-1/2 in. (38 mm)

**Figure 6.7 Installing a TCT1175 Terra Cotta Cap**
A. Gas Log/Lighter Provisions

A certified gas log lighter or decorative gas log set can be installed in this fireplace.

This fireplace was not tested and listed for use with an unvented gas log heater. Do not install an unvented gas log heater in this fireplace and operate it with the flue damper in the closed position unless the unvented gas log heater has been specifically tested and listed for use in this fireplace by Underwriters Laboratories Inc.

Use of an unvented gas log heater in this factory built fireplace may create a fire hazard that can result in a structure fire.

- Maximum input is 100,000 BTU/hr.
- Decorative gas appliance must be certified to ANSI Z21.60 “Standard for Decorative Gas Appliances for Installation in Vented Fireplaces”.
- Must be installed in accordance with the National Fuel Gas Code, ANSI Z223.1.
- A log set must incorporate a gas shutoff.
- Log set requires the damper to be locked fully open. Knockouts are provided on both sides of the fireplace and in refractories for 1/2 in. (13 mm) iron pipe.
- We recommend you seal refractory around pipe with fireplace mortar or high temperature, noncombustible sealant.
- Repack insulation from the knockout around the pipe.
- Maintain 1-1/2 in. (38 mm) air space around the pipe for 4 in. (102 mm) beyond the fireplace.
- See Figure 7.1.

![Figure 7.1 Gas Line Installation](image)

### WARNING

**Asphyxiation Risk**

- Damper must be locked open when gas logs installed.

Gas fire generates fumes.

### WARNING

**Fire Risk**

- For use with solid wood fuel or decorative gas appliance only.
- DO NOT install unvented gas logs.

### WARNING

**Fire Risk**

**Explosion Risk**

Inspect appliance and components for damage. Damaged parts may impair safe operation.

- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components

Report damaged parts to dealer.
A. Hearth Extension

A hearth extension must be installed with all fireplaces to protect the combustible floor in front of the fireplace from both radiant heat and sparks. See Figures 8.1-8.3.

The hearth extension should slope away from the front of the fireplace and chase at 1/8 in. to 1/4 in. per foot. Spark strips must be used on top of any combustible hearth materials used for moisture management.

This fireplace has been tested and approved for use with a hearth extension insulated to a minimum R value of 1.03.

To substitute materials for the factory-available hearth extensions, see Figure 8.3 and calculate insulation alternatives as per Table 8.1 and the following formulas:

- Thermal conductivity per inch thickness = \( k \)
- \( k = (\text{BTU})(\text{inch}) / (\text{foot}^2)(\text{hour})(^\circ\text{F}) \)
- Required thickness = \( Rk \)

- Thermal resistance per inch thickness = \( r \)
- \( r = (\text{foot}^2)(\text{hour})(^\circ\text{F}) / (\text{BTU})(\text{inch}) \)
- Required thickness = \( R / rB \).

### Table 8.1

<table>
<thead>
<tr>
<th>Material</th>
<th>( k ) per inch thick</th>
<th>( r ) per inch thick</th>
<th>Minimum thickness required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearth &amp; Home HX3, HX4 (Micore 300™)</td>
<td>0.49</td>
<td>2.06</td>
<td>1/2 in.</td>
</tr>
<tr>
<td>USG Micore 160™</td>
<td>0.39</td>
<td>2.54</td>
<td>1/2 in.</td>
</tr>
<tr>
<td>USG Durock™ Cement Board</td>
<td>1.92</td>
<td>0.52</td>
<td>2 in.</td>
</tr>
<tr>
<td>Cement Mortor</td>
<td>5.0</td>
<td>0.20</td>
<td>5-1/8 in.</td>
</tr>
<tr>
<td>Common Brick</td>
<td>5.0</td>
<td>0.20</td>
<td>5-1/8 in.</td>
</tr>
<tr>
<td>Ceramic Tile</td>
<td>12.50</td>
<td>0.08</td>
<td>12-1/4 in.</td>
</tr>
<tr>
<td>Armstrong™ Privacy Guard Plus</td>
<td>0.46</td>
<td>2.18</td>
<td>1/2 in.</td>
</tr>
<tr>
<td>Marble</td>
<td>14.3-20.0</td>
<td>0.07-0.05</td>
<td>14-5/8 in. - 20-3/8 in.</td>
</tr>
</tbody>
</table>

**WARNING**

Fire Risk
- Metal hearth strips **MUST** be installed.
  Sparks or embers may ignite flooring.

**WARNING**

Fire Risk
- Hearth extensions must be installed exactly as specified.
  High temperatures or hot embers may ignite concealed combustibles.
B. Finishing Material

- **Combustible Material**
  Material which is made of or surfaced with wood, compressed paper, plant fibers, plastics, or any material capable of igniting and burning, whether flame proofed or not, plastered or not plastered.

- **Non-Combustible Material**
  Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

- **Non-Combustible Sealant Material**
  Sealants which will not ignite and burn: Rutland, Inc. Fireplace Mortar #63, Rutland 76R, Nuflex 304, GE RTV106 or GE RTV116 (or equivalent).

After completing the framing and applying the facing material (drywall) over the framing, a bead of non-combustible sealant must be used to close off any gaps at the top and sides between the fireplace and facing to prevent cold air leaks. Large gaps can be bridged with fiberglass rope gasket.

Only non-combustible materials may be used to cover the black metal fireplace front.

---

**WARNING**

**Fire Risk**

- Maintain clearances.
- Use only non-combustible material below standoffs, material such as cement board is acceptable.

- Framing or finishing material used on the front of, or in front of, the appliance closer than the minimums listed, must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.).

---

C. Mantel

A combustible mantel may be positioned no lower than 12 in. (305 mm) above the top of the fireplace opening. The combustible mantel may have a maximum depth of 12 in. (305 mm). Combustible trim pieces that project no more than 1-1/2 in. (38 mm) from the face of the fireplace can be placed no closer than 6 in. (152 mm) from the top of the fireplace opening. See Figure 8.4. Combustible trim must not cover the metal surfaces of the fireplace. This mantel clearance is in accordance with Section 7-3.3.3 of ANSI/NFPA211.

---

D. Sidewalls/Surrounds

Adjacent combustible side walls must be located a minimum of 12 in. (305 mm) from the fireplace opening. If you are using a decorative surround constructed of combustible material, it must be located within the shaded area defined in Figure 8.5. Short stub walls are also acceptable if they are contained within the shaded area.

---

E. Glass Doors

This fireplace has been tested and listed for use with doors as specified in Section 12.B. Fireplace Components. Please refer to the manual packed with each set of doors for installation instructions.
9 Operating Instructions

A. General Information

Fireplaces, as well as other woodburning appliances, have been used safely for many years. It has been our experience that most problems are caused by improper installation and operation of the fireplace. Make certain that installation and operation of the fireplace system is in accordance with these instructions.

It is extremely important that the fire be supervised whenever the fireplace is in use. It is also recommended that an annual inspection be performed on the fireplace system to determine if the flue system needs to be cleaned, or as in the case of any appliance, if minor repairs are required to maintain the system in top operating condition.

**WARNING**

Fire Risk

- Do not operate fireplace before reading and understanding operating instructions.
- Failure to operate fireplace properly may cause 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 appliance.
- Alert children and adults to hazards of high temperatures.
- High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other combustibles away.

**WARNING**

Fire Risk

- For use with solid wood fuel or decorative gas appliance only.
- Do not install unvented gas logs.

![Figure 9.1 General Operating Parts](image)
B. Clear Space Near the 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 (1.22 m) from the open front of the fireplace.

C. Flue Damper

The flue damper must be in full open position, and is operated by moving the handle up toward the top of the fireplace. Before lighting the fire, verify this by looking up from the inside of the fireplace. Always operate this fireplace with the damper fully open. Please note: Down drafts, obstructions, damaged or poor (wet) fuels can cause smoke spillage.

See Figure 9.1 for location and operation.

D. Firescreen

A firescreen is always provided to control sparks. It must be closed whenever the fireplace is in use. Glass doors or firescreens must not be used to hold burning material inside the fireplace. Only those glass doors specifically tested and listed for use with the specific fireplace model should be used. Screens should be closed when the glass doors are closed.

E. Glass Doors

Most efficient fireplace operation using glass doors is with the doors open. When the doors are open the screen must be closed. Only Hearth & Home Technologies glass doors may be used. See Figure 9.2 for proper glass door operation.

F. Grate

The factory installed integral grate must be used to hold the logs from falling out of an open fireplace and to allow air to pass between the burning logs. It is important to keep the fire off the hearth and to allow the ashes to collect beneath the fire, thereby forming a layer of additional heat protection.
G. Wood Fuel

Firewood

Your fireplace performance depends on the quality of the firewood you use. All seasoned wood, regardless of species, contains about 8,000 BTU’s per pound, and hardwoods have a greater density than soft woods. A piece of hardwood will contain about 60% more BTU’s than an equal size piece of soft wood. Firewood is commonly sold by the cord (128 cu. ft.). A cord of seasoned oak (hardwood) would contain about 60% more potential energy than a cord of seasoned pine (soft wood).

Examples of soft wood trees are Douglas fir, pine, spruce, and cedar, poplar, aspen and alder. Soft woods require less time to dry, burn faster and are easier to ignite than hardwoods.

Examples of hardwood trees are oak, maple, apple, and birch. Hardwoods require more time to season, burn slower and are usually harder to ignite than soft woods.

The best wood fuel is a combination of soft wood and hardwood. Start the fire with soft wood; the fire will give off quick heat to bring the fireplace up to operating temperature, and then the hardwood can be added for slow, even heat and longer burn time.

Moisture

Regardless of which species of wood you burn, the single most important factor that effects the way your fireplace operates is the amount of moisture in the wood. 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 eight pounds. Fill it with a gallon of water, put it in the fireplace and try to burn it. This sounds ridiculous but that is exactly what you are doing if you burn unseasoned wood.

Seasoning

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.

The following guideline will ensure properly seasoned 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.
- Cover the top of the woodpile for protection from rain and snow. Avoid covering the sides and ends completely. Doing so may trap moisture from the ground and impede air circulation.

The problems with burning wet, unseasoned wood are twofold: First, you will receive less heat output from wet wood 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. Secondly, this moisture evaporates in the form of steam which has a cooling effect in your fireplace and chimney system. When combined with tar and other organic vapors from burning wood it will form creosote which condenses in the relatively cool fireplace and chimney.

![WARNING]

**Fire Risk**

- Do NOT burn wet or green wood.
- Store wood in dry location.
- Stack wood so both ends are exposed to air.

Wet, unseasoned wood can cause accumulation of creosote.

---

**WARNING**

**Fire Risk**

Do NOT store wood:

- Closer than required clearances to combustibles to fireplace.
- Within space required for loading or ash removal.
H. Starting a Fire

Check the flue damper to be certain it is in the full open position. Place crumpled or twisted paper under the fireplace grate. Loosely arrange kindling or small pieces of wood to form a layer above the paper.

The fires must be built on the fireplace grate, without danger of the burning fuel falling out of the fireplace opening.

Light the paper and add small pieces of wood until a hot bed of embers has been established.

After establishing the fire bed, and the small firewood is burning briskly, add a minimum of three average sized pieces of split firewood, place the wood in such a manner to allow combustion air and flames between them.

**Note:** When first lighting your fireplace, it may be necessary to pre-warm the flue to establish a draft. This is done by holding a rolled up piece of burning newspaper under the flue damper for a few moments. This will help reduce smoke spillage during start-up.

**Note:** 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.

**CAUTION**

With outdoor applications, wind may affect the flame pattern and performance of the fireplace. Smoke spillage and sporadic flame extending beyond the front of the fireplace may be possible when doors are open.

**WARNING**

Fire Risk
Keep combustible materials, gasoline and other flammable vapors and liquids clear of fireplace.
- Do NOT store flammable materials close to the fireplace.
- Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen up” a fire in this fireplace.
- Keep all such liquids well away from the fireplace while it is in use.

Combustible materials may ignite.

**CAUTION**

Odors and vapors released during initial operation.
- Curing of high temperature paint.
- Open windows for air circulation.
Odors may be irritating to sensitive individuals.
10 Troubleshooting

Diagnostics and Problem Solving

I can't get a good fire going. What am I doing wrong?

<table>
<thead>
<tr>
<th>Diagnostic Questions</th>
<th>Possible Causes of Condition</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the damper open?</td>
<td>• No draft</td>
<td>Open damper.</td>
</tr>
<tr>
<td>Is there enough paper/starter?</td>
<td>• Insufficient heat to ignite kindling</td>
<td>Use more paper/starter.</td>
</tr>
<tr>
<td>Is there enough kindling?</td>
<td>• Insufficient heat to ignite fuel</td>
<td>Use more dry kindling.</td>
</tr>
<tr>
<td>Is the kindling dry?</td>
<td>• Insufficient heat to establish draft</td>
<td>Use small split wood that is well seasoned (split, covered on top at least 6 months, preferably a year).</td>
</tr>
<tr>
<td>Is there enough or too much wood?</td>
<td>• Insufficient air passage</td>
<td></td>
</tr>
<tr>
<td>Is it too large? Is it dry enough?</td>
<td>• Insufficient surface area</td>
<td></td>
</tr>
<tr>
<td>Are there adequate air spaces between fuel pieces?</td>
<td>• Insufficient combustion air and exposed surface area</td>
<td>Arrange kindling and wood for air movement.</td>
</tr>
<tr>
<td>Is the chimney pre-warmed?</td>
<td>• Exposed, cold chimney down drafting</td>
<td>Use lighted rolled newspaper at throat or flue opening to start upward movement.</td>
</tr>
<tr>
<td>Does the kindling, wood not ignite?</td>
<td>• Condition, amount, arrangement of kindling and fuel</td>
<td>Use more, drier, well-spaced kindling and fuel.</td>
</tr>
<tr>
<td>Does the kindling ignite, but the fuel doesn't?</td>
<td>• Amount of kindling</td>
<td>Use more kindling; use smaller, dry wood.</td>
</tr>
<tr>
<td>Does the fuel ignite, but not burn well?</td>
<td>• Condition of fuel</td>
<td>Use well-seasoned wood and sufficient amount; turn exhaust fans off; open window slightly. Perform Simplified House Pressure Test.</td>
</tr>
</tbody>
</table>

I don’t get enough/any heat from the fireplace. What can I do about it?

<table>
<thead>
<tr>
<th>Diagnostic Questions</th>
<th>Possible Causes of Condition</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much wood is used for fire?</td>
<td>• Insufficient fuel</td>
<td>Make larger fires.</td>
</tr>
<tr>
<td>How well seasoned is the wood?</td>
<td>• Condition of fuel</td>
<td>Burn seasoned wood: covered on top, split and stacked for 9 months to 2 years.</td>
</tr>
<tr>
<td>How much heat output do you expect?</td>
<td>• Unrealistic expectations</td>
<td>Explanation of decorative nature of fireplace; suggestion of approved fireplace insert.</td>
</tr>
</tbody>
</table>

The fireplace burns the wood too fast. What can I do?

<table>
<thead>
<tr>
<th>Diagnostic Questions</th>
<th>Possible Causes of Condition</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have glass doors?</td>
<td>• Need to slow air intake</td>
<td>Add glass doors.</td>
</tr>
<tr>
<td>What is the condition of the wood?</td>
<td>• Extremely dry wood</td>
<td>Mix in less seasoned wood after fire established.</td>
</tr>
</tbody>
</table>
A. Disposal of Ashes
Ashes should be placed in a metal container with a 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 embers have thoroughly cooled.

**WARNING**

**Fire Risk**
Disposal of ashes

- Ashes should be placed in metal container with tight fitting lid.
- Do not place metal container on combustible surface.
- Ashes should be retained in closed container until all embers have thoroughly cooled.

B. Chimney Inspection/Cleaning
Inspect the chimney internally for obstructions and construction damage. Flue pipe joints and seams must be continuous and mechanically tight.

The chimney should be inspected once every two months during the heating season.

If creosote has accumulated, it should be removed to reduce the risk of chimney fire.

Refer to Figure 11.1 to remove/reinstall termination caps.

**WARNING**

**Fire Risk**
Prevent creosote buildup

- Inspect chimney once every two months during heating season.
- Remove creosote to reduce risk of chimney fire.
- Ignited creosote is extremely HOT.

C. Firebox Refractory Replacement
Check firebox refractory for excessive cracks or gaps. If cracks exceed 1/4 in. (6 mm) in width the refractory should be replaced. See Section 12 for replacement information.

1. Remove Smoke Shield, by unscrewing 8 screws.
2. Remove Hearth Retainer by unscrewing 2 screws on the left and the right side.
3. Remove Grate Lift up and out
4. Remove side refractory, by unscrewing the 1 screw holding the refractory bracket in place. Can start on left or right side. Slide refractory forward and lift up and out. Repeat on other side.
5. Remove Back Refractory, by unscrewing the one screw holding refractory bracket in place. Lift up and out.
6. Install new refractory Reverse steps 5-1

**WARNING**

**Fire Risk**
- Inspect fireplace refractory annually. Crumbling, deteriorated refractory can allow overheating of surrounding materials.

**Note:** As you use the fireplace, expansion and contraction will cause minor cracking of the refractory. This is normal, unavoidable, and will not affect the performance of the fireplace. If the cracks become large enough that the metal behind the refractory is exposed or large pieces fall out, the panels should be replaced.
**CAUTION**

Handle glass assembly with care.

*When cleaning glass door:*
- Avoid striking, scratching or slamming glass.
- Do NOT use abrasive cleaners.
- Use a hard water deposit glass cleaner on white film.
- Do NOT clean glass when it is hot.

**WARNING**

**Fire Risk**
- Do not use chimney cleaners or flame colorants in your fireplace.
  Will corrode chimney.

---

**D. Maintenance Task List**

<table>
<thead>
<tr>
<th>Inspect</th>
<th>Maintenance Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screens</td>
<td>1 Assess condition of screen and replace as necessary. Screens are required.</td>
</tr>
<tr>
<td></td>
<td>2 Verify maintenance of proper clearance to combustible household objects.</td>
</tr>
<tr>
<td>Glass Doors</td>
<td>1 Inspect glass panels for cracks. Replace if this condition is present.</td>
</tr>
<tr>
<td></td>
<td>2 Confirm there is no damage to glass or glass frame. Replace as necessary.</td>
</tr>
<tr>
<td></td>
<td>3 Clean glass using a non-abrasive cleaner such as Brasso®.</td>
</tr>
<tr>
<td>Circulation Compartment</td>
<td>1 Remove any foreign objects.</td>
</tr>
<tr>
<td></td>
<td>2 Verify unobstructed air circulation.</td>
</tr>
<tr>
<td>Firebox</td>
<td>1 Inspect condition of refractory. Replace if crumbly, deteriorated, or if cracks exceed 1/4 in. (6 mm).</td>
</tr>
<tr>
<td>Chimney</td>
<td>1 Inspect for blockage or obstruction such as bird nests, leaves, etc.</td>
</tr>
<tr>
<td></td>
<td>2 Confirm that termination cap remains clear and unobstructed by plants, etc.</td>
</tr>
<tr>
<td></td>
<td>3 Verify that termination cap clearance to subsequent construction (building additions) has been maintained.</td>
</tr>
<tr>
<td></td>
<td>4 Inspect for corrosion or separation.</td>
</tr>
<tr>
<td></td>
<td>5 Verify weather stripping, sealing and flashing remain intact.</td>
</tr>
<tr>
<td></td>
<td>6 Inspect for creosote and remove as needed. (See Sections 10 and 11)</td>
</tr>
<tr>
<td>Grate</td>
<td>1 If grate burns out, it should be replaced only with the grate specified on the rating plate and in the replacement parts list for this fireplace.</td>
</tr>
</tbody>
</table>

---

**E. Chimney Fire**

In the event of a chimney fire:

- Have the chimney and adjacent structure inspected by qualified professionals. Hearth & Home Technologies recommends that NFI or CSIA certified professionals, or technicians under the direction of certified professionals, conduct a minimum of an **NFPA 211 Level 2** inspection of the chimney.
- Replace components of the chimney and fireplace as specified by the professionals.
- Ensure all joints are properly engaged and the chimney is properly secured.

A chimney fire can permanently damage your chimney system. Failure to replace damaged components and make proper repairs creates risk of fire.
A. Fireplace Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONTANA-36</td>
<td>36 in.</td>
<td>42 in.</td>
<td>25 in.</td>
<td>13-7/8 in.</td>
<td>13-1/4 in.</td>
</tr>
<tr>
<td></td>
<td>915 mm</td>
<td>1067 mm</td>
<td>635 mm</td>
<td>353 mm</td>
<td>337 mm</td>
</tr>
<tr>
<td>MONTANA-42</td>
<td>42 in.</td>
<td>48 in.</td>
<td>31 in.</td>
<td>14 in.</td>
<td>14 in.</td>
</tr>
<tr>
<td></td>
<td>1067 mm</td>
<td>1219 mm</td>
<td>787 mm</td>
<td>356 mm</td>
<td>356 mm</td>
</tr>
</tbody>
</table>
### B. Fireplace Components

<table>
<thead>
<tr>
<th>Component Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONTANA-36</td>
<td>MONTANA-42</td>
</tr>
<tr>
<td>MONTANA-36H</td>
<td>MONTANA-42H</td>
</tr>
<tr>
<td>DM1836S</td>
<td>DM1842S</td>
</tr>
<tr>
<td>HX3</td>
<td>HX4</td>
</tr>
<tr>
<td>HX3</td>
<td>WC42S</td>
</tr>
<tr>
<td>GR33</td>
<td>GR21</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>OGL-42</td>
<td></td>
</tr>
</tbody>
</table>

**GR21 & GR33**

Integral Grate

**Bi-fold Glass Doors**

- 52 in. (1321 mm)
- 16 in. (406 mm)
- 1/2 in. (13 mm)

**HX3 Hearth Extension**

- 66 in. (1676 mm)
- 20 in. (508 mm)
- 1/2 in. (13 mm)

**Traditional Brick Pattern Refractory**

**Herringbone Pattern Refractory**
C. Chimney Components

The following pictures show only those chimney components which may be safely used with this fireplace.

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAK5A</td>
<td>CAK5A Chimney Air Kit</td>
</tr>
<tr>
<td>n/a</td>
<td>SLA10 Adapter 11 in. (457 mm) long</td>
</tr>
<tr>
<td>ID4</td>
<td>UD4 Insulated Duct/Outside Air</td>
</tr>
<tr>
<td>SL1106</td>
<td>SL406 Chimney Section - 6 in. (152 mm) long</td>
</tr>
<tr>
<td>SL1112</td>
<td>SL412 Chimney Section - 12 in. (305 mm) long</td>
</tr>
<tr>
<td>SL1118</td>
<td>SL418 Chimney Section - 18 in. (457 mm) long</td>
</tr>
<tr>
<td>SL1136</td>
<td>SL436 Chimney Section - 36 in. (914 mm) long</td>
</tr>
<tr>
<td>SL1148</td>
<td>SL448 Chimney Section - 48 in. (1219 mm) long</td>
</tr>
<tr>
<td>SL11</td>
<td>SL4 Chimney Stabilizer</td>
</tr>
<tr>
<td>SL1130</td>
<td>SL430 Chimney Offset/Return - 30 deg</td>
</tr>
<tr>
<td>FS538</td>
<td>FS538 Ceiling Firestop - Straight</td>
</tr>
<tr>
<td>FS540</td>
<td>FS540 Ceiling Firestop - 30 deg</td>
</tr>
<tr>
<td>AS10</td>
<td>AS10 Straight Attic Insulation Shield, 24 in. (610 mm)</td>
</tr>
<tr>
<td>JB577</td>
<td>JB577 Chimney Joint Band</td>
</tr>
<tr>
<td>CB576</td>
<td>CB576 Chimney Bracket</td>
</tr>
<tr>
<td>RF570</td>
<td>RF570 Roof Flashing - Flat to 6/12 Pitch</td>
</tr>
<tr>
<td>RF571</td>
<td>RF571 Roof Flashing - 6/12 to 12/12 Pitch</td>
</tr>
<tr>
<td>TR11</td>
<td>TR444 Round Termination Cap</td>
</tr>
<tr>
<td>TR11T</td>
<td>TR442 Round Telescoping Termination Cap</td>
</tr>
<tr>
<td>TCT1175</td>
<td>Terra Cotta Termination Cap</td>
</tr>
<tr>
<td>ST1175</td>
<td>ST475 Square Termination Cap</td>
</tr>
<tr>
<td>DTO134</td>
<td>DTO134 Short Octagon Decorative Cap</td>
</tr>
<tr>
<td>DTO146</td>
<td>DTO146 Tall Octagon Decorative Cap</td>
</tr>
<tr>
<td>DTS134</td>
<td>DTS146 Short Square Decorative Cap</td>
</tr>
<tr>
<td>DTS146</td>
<td>DTS146 Tall Square Decorative Cap</td>
</tr>
<tr>
<td>LDS33</td>
<td>LDS33 Decorative Shroud - 3 ft x 3 ft (.91 m x .91 m)</td>
</tr>
<tr>
<td>LDS46</td>
<td>LDS46 Decorative Shroud - 4 ft x 6 ft (1.22 m x 1.83 m)</td>
</tr>
<tr>
<td>LDS-BV</td>
<td>LDS-BV Decorative Shroud - 26 in. x 26 in. (660 mm x 660 mm)</td>
</tr>
<tr>
<td>CT-11A</td>
<td>n/a Adapter-May be used with the following Copper Caps</td>
</tr>
<tr>
<td>n/a</td>
<td>n/a CT-Series</td>
</tr>
<tr>
<td>na</td>
<td>na DT-Series</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>US</th>
<th>CAN</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>CAN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SL1106</td>
<td>SL406</td>
<td>6</td>
<td>152</td>
<td>4-3/4</td>
</tr>
<tr>
<td>SL1112</td>
<td>SL412</td>
<td>12</td>
<td>305</td>
<td>10-3/4</td>
</tr>
<tr>
<td>SL1118</td>
<td>SL418</td>
<td>18</td>
<td>457</td>
<td>16-3/4</td>
</tr>
<tr>
<td>SL1136</td>
<td>SL436</td>
<td>36</td>
<td>914</td>
<td>34-3/4</td>
</tr>
<tr>
<td>SL1148</td>
<td>SL448</td>
<td>48</td>
<td>1219</td>
<td>46-3/4</td>
</tr>
</tbody>
</table>

A = Actual Length  
B = Effective Length (length of chimney part after it has been snapped to another)
Ceiling Firestop

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS538</td>
<td>0-deg.</td>
<td>17 in.</td>
</tr>
<tr>
<td>FS540</td>
<td>30-deg.</td>
<td>26 in.</td>
</tr>
</tbody>
</table>

AS10 Straight Attic Insulation Shield

SL1130/SL430 Offset/Return

Assembled
Diameter: 17 in./432 mm
Height: 24 in./610 mm

JB577 Chimney Joint Band

CB576 Chimney Joint Band

RF571 Roof Flashing
**TR11/TR444 Round Termination Cap**
- 15-3/4 in. (400 mm)

**TR11/TR442 Round Telescoping Termination Cap**
- 32-3/8 in. (822 mm)
- 34-3/8 in. (873 mm)

**ST1175/ST475 Square Termination Cap**
- 19 in. (483 mm)
- 15-5/8 in. (397 mm)

**LDS33/LDS46 Decorative Shroud**
- 15-3/4 in. (400 mm)

**TCT1175 Terra Cotta Cap**
- (available US only)
- 20 in. (508 mm)
- 17 in. (432 mm)
- 9-3/8 in. (238 mm)
- 10-1/4 in. (260 mm)

**Catalog # | A | B | C | D**
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LDS33</td>
<td>36</td>
<td>914</td>
<td>36</td>
<td>914</td>
</tr>
<tr>
<td>LDS46</td>
<td>48</td>
<td>1219</td>
<td>72</td>
<td>1829</td>
</tr>
</tbody>
</table>

**LDS-BV Decorative Shroud**
- 23 in. (584 mm)
- 22 in. (533 mm)
- 15-1/2 in. (394 mm)
- 12-1/2 in. (318 mm)
- 26 in. (660 mm)
**Woodburning Termination Cap**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPEN TOP</strong></td>
<td><strong>with solid sides and 3 in. (76 mm) opening at the bottom</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Base Dimensions</td>
<td>23 in. x 23 in. (584 x 584 mm)</td>
<td>28 x 28 in. (711 x 711 mm) with Radiation Shield</td>
<td>26 x 26 in. (660 x 660 mm) with Radiation Shield</td>
<td>32 x 32 in. (813 x 813 mm) with Radiation Shield</td>
</tr>
<tr>
<td>Minimum Top Dimensions</td>
<td>20 x 20 in. (508 x 508 mm)</td>
<td>25 x 25 in. (635 x 635 mm)</td>
<td>23 x 23 in. (584 x 584 mm)</td>
<td>29 x 29 in. (737 x 737 mm)</td>
</tr>
<tr>
<td>Minimum Top Dimensions</td>
<td>20 x 20 in. (508 x 508 mm)</td>
<td>25 x 25 in. (635 x 635 mm)</td>
<td>23 x 23 in. (584 x 584 mm)</td>
<td>29 x 29 in. (737 x 737 mm)</td>
</tr>
</tbody>
</table>

**MAILBOX STYLE** with open ends and 3 in. (76 mm) opening at the bottom of the sides.

| Minimum Base Dimensions  | N/A | 26.5 x 28 in. (673 x 711 mm) with Radiation Shield | 28 x 30 in. (711 x 762 mm) with Radiation Shield | 34 x 34 in. (864 x 864 mm) with Radiation Shield |
| Minimum Height  | N/A | 28 1/4 in. (718 mm) | 27 1/2 in. (699 mm) | 28 1/4 in. (718 mm) |

**ROOFED STYLE** with 12 x 22 in. (264 sq. in.) (305 x 559 mm) opening on each side and 3 in. (76 mm) space between the radiation shield and chase top.

| Minimum Base Dimensions  | N/A | 27 x 27 in. (686 x 686 mm) with Radiation Shield | 27 x 27 in. (686 x 686 mm) with Radiation Shield | 34 x 34 in. (864 x 864 mm) with Radiation Shield |
| Minimum Height  | N/A | 23 in. (584 mm) | 23 in. (584 mm) | 23 in. (584 mm) |

Minimum Height is measured from the bottom of the termination cap:
Minimum height is established with the bottom of the termination cap 7 in. (178 mm) above the chase top. Minimum height must increase accordingly for any height above 7 in. (176 mm).

All dimensions are INSIDE dimensions.
D. Service Parts

Service Parts  MONTANA-36, MONTANA-36H
36” Outdoor Woodburning Fireplace  Beginning Manufacturing Date: Sept 2003
Ending Manufacturing Date: Active

Part number list on following page.
## Service Parts
### MONTANA-36, MONTANA-36H

**Beginning Manufacturing Date:** Sept 2003  
**Ending Manufacturing Date:** Active

**Important:** This is dated information. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>COMMENTS</th>
<th>HHT PART NUMBER</th>
<th>VCG PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Starter Collar</td>
<td></td>
<td>30399</td>
<td>SRV30399</td>
</tr>
<tr>
<td>2</td>
<td>Damper Assembly</td>
<td></td>
<td>34454</td>
<td>SRV34454</td>
</tr>
<tr>
<td>3</td>
<td>Top Stand Off</td>
<td>Qty 4 Req</td>
<td>4044-111</td>
<td>SRV4044-111</td>
</tr>
<tr>
<td>4</td>
<td>Upper Front Face</td>
<td></td>
<td>4039-114L</td>
<td>SRV4039-114</td>
</tr>
<tr>
<td>5</td>
<td>Side Column Left</td>
<td></td>
<td>30375L</td>
<td>SRV30375</td>
</tr>
<tr>
<td>6</td>
<td>Top Door Track</td>
<td>Qty 2 Req</td>
<td>4039-118</td>
<td>SRV4039-118</td>
</tr>
<tr>
<td>7</td>
<td>Door Clips</td>
<td>Qty 2 Req</td>
<td>30407</td>
<td>SRV30407</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stocked in Depot</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>HHT PART NUMBER</th>
<th>VCG PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Right Side Refractory</td>
<td>28393</td>
<td>SRV28393</td>
</tr>
<tr>
<td>9</td>
<td>Back Refractory</td>
<td>29992</td>
<td>SRV29992</td>
</tr>
<tr>
<td>10</td>
<td>Left Side Refractory</td>
<td>28393</td>
<td>SRV28393</td>
</tr>
<tr>
<td></td>
<td>Hearth Refractory</td>
<td>29993</td>
<td>SRV29993</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Traditional Refractory</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>HHT PART NUMBER</th>
<th>VCG PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Right Side Refractory</td>
<td>4010-013</td>
<td>SRV4010-013</td>
</tr>
<tr>
<td>9</td>
<td>Back Refractory</td>
<td>4010-016</td>
<td>SRV4010-016</td>
</tr>
<tr>
<td>10</td>
<td>Left Side Refractory</td>
<td>4010-014</td>
<td>SRV4010-014</td>
</tr>
<tr>
<td></td>
<td>Hearth Refractory</td>
<td>4010-019</td>
<td>SRV4010-019</td>
</tr>
<tr>
<td>11</td>
<td>Grate</td>
<td>Pre AK560843</td>
<td>4039-102</td>
</tr>
<tr>
<td>12</td>
<td>Hearth Pan</td>
<td>4039-108</td>
<td>SRV4039-108</td>
</tr>
<tr>
<td></td>
<td>Hearth Stone Retainer</td>
<td>4039-120</td>
<td>SRV4039-120</td>
</tr>
<tr>
<td>14</td>
<td>Screen Assembly</td>
<td>4039-119</td>
<td>SRV4039-119</td>
</tr>
<tr>
<td>15</td>
<td>Door Pivot Clip</td>
<td>Qty 2 Req</td>
<td>31527</td>
</tr>
<tr>
<td>16</td>
<td>Bottom Front Face</td>
<td>4039-113L</td>
<td>SRV4039-113</td>
</tr>
<tr>
<td>17</td>
<td>Side column Right</td>
<td>30376L</td>
<td>SRV30376</td>
</tr>
<tr>
<td></td>
<td>Gas Tube</td>
<td>4039-116</td>
<td>SRV4039-116</td>
</tr>
<tr>
<td></td>
<td>Smoke Shield</td>
<td>4039-106</td>
<td>SRV4039-106</td>
</tr>
<tr>
<td></td>
<td>Air Kit w/box</td>
<td>30416</td>
<td>SRV30416</td>
</tr>
<tr>
<td></td>
<td>Outside Air Hood</td>
<td>Qty 2 req</td>
<td>33271</td>
</tr>
</tbody>
</table>
Part number list on following page.
Service Parts

MONTANA-42, MONTANA-42H

Beginning Manufacturing Date: Sept 2003
Ending Manufacturing Date: Active

IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>COMMENTS</th>
<th>HHT PART NUMBER</th>
<th>VCG PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Starter Collar</td>
<td></td>
<td>30399</td>
<td>SRV30399</td>
</tr>
<tr>
<td>2</td>
<td>Damper Assembly</td>
<td></td>
<td>34454</td>
<td>SRV34454</td>
</tr>
<tr>
<td>3</td>
<td>Top Stand Off</td>
<td>Qty 4 Req</td>
<td>4044-111</td>
<td>SRV4044-111</td>
</tr>
<tr>
<td>4</td>
<td>Upper Front Face</td>
<td></td>
<td>30395L</td>
<td>SRV30395</td>
</tr>
<tr>
<td>5</td>
<td>Side Column Left</td>
<td></td>
<td>30375L</td>
<td>SRV30375</td>
</tr>
<tr>
<td>6</td>
<td>Top Door Track</td>
<td></td>
<td>30400</td>
<td>SRV30400</td>
</tr>
<tr>
<td>7</td>
<td>Door Clips</td>
<td>Qty 2 Req</td>
<td>30407</td>
<td>SRV30407</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>COMMENTS</th>
<th>HHT PART NUMBER</th>
<th>VCG PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Right Side Refractory</td>
<td></td>
<td>28393</td>
<td>SRV28393</td>
</tr>
<tr>
<td>9</td>
<td>Back Refractory</td>
<td></td>
<td>28394</td>
<td>SRV28394</td>
</tr>
<tr>
<td>10</td>
<td>Left Side Refractory</td>
<td></td>
<td>28393</td>
<td>SRV28393</td>
</tr>
<tr>
<td></td>
<td>Hearth Refractory</td>
<td></td>
<td>28391</td>
<td>SRV28391</td>
</tr>
</tbody>
</table>

Traditional Refractory

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>COMMENTS</th>
<th>HHT PART NUMBER</th>
<th>VCG PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Right Side Refractory</td>
<td></td>
<td>4010-013</td>
<td>SRV4010-013</td>
</tr>
<tr>
<td>9</td>
<td>Back Refractory</td>
<td></td>
<td>4010-015</td>
<td>SRV4010-015</td>
</tr>
<tr>
<td>10</td>
<td>Left Side Refractory</td>
<td></td>
<td>4010-014</td>
<td>SRV4010-014</td>
</tr>
<tr>
<td></td>
<td>Hearth Refractory</td>
<td></td>
<td>4010-020</td>
<td>SRV4010-020</td>
</tr>
<tr>
<td>11</td>
<td>Grate</td>
<td></td>
<td>GR21</td>
<td>SRVGR21</td>
</tr>
<tr>
<td>12</td>
<td>Hearth Pan</td>
<td>Pre AK560843</td>
<td>30405</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hearth Stone Retainer</td>
<td>Post AK560843</td>
<td>30403</td>
<td>SRV30403</td>
</tr>
<tr>
<td>13</td>
<td>Firescreen Rod</td>
<td>Qty 2 Req</td>
<td>31375</td>
<td>SRV31375</td>
</tr>
<tr>
<td>14</td>
<td>Screen Assembly</td>
<td>Qty 2 Req</td>
<td>30371</td>
<td>SRV30371</td>
</tr>
<tr>
<td>15</td>
<td>Door Pivot Clip</td>
<td>Qty 2 Req</td>
<td>31527</td>
<td>SRV31527</td>
</tr>
<tr>
<td>16</td>
<td>Bottom Front Face</td>
<td></td>
<td>30393L</td>
<td>SRV30393</td>
</tr>
<tr>
<td>17</td>
<td>Side column Right</td>
<td></td>
<td>30376L</td>
<td>SRV30376</td>
</tr>
<tr>
<td></td>
<td>Gas Tube</td>
<td></td>
<td>30412</td>
<td>SRV30412</td>
</tr>
<tr>
<td></td>
<td>Smoke Shield</td>
<td></td>
<td>30402</td>
<td>SRV30402</td>
</tr>
<tr>
<td></td>
<td>Air Kit w/box</td>
<td></td>
<td>30416</td>
<td>SRV30416</td>
</tr>
<tr>
<td></td>
<td>Outside Air Hood</td>
<td>Qty 2 req</td>
<td>33271</td>
<td>SRV33271</td>
</tr>
</tbody>
</table>
E. Warranty

Outdoor Lifestyles by Hearth & Home Technologies™
Warranty

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.
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.