THIS BOOKLET IS NOT TO BE USED AS THE INSTALLATION MANUAL IT IS MERELY A GUIDE TO ASSIST WITH THE DESIGN PROCESS

Dear Customer,

This Booklet is designed to assist with planning for the installation of a Renaissance Rumford Fireplace. It is NOT a replacement for the installation manual itself. Product installation manuals can be downloaded at: [http://www.renaissancefireplaces.com/en/installation-manuals](http://www.renaissancefireplaces.com/en/installation-manuals)

The LINEAR 50 is unique in its design. The 50" wide opening provides an enormous linear space to watch the fire. It combines technology with elegance, allowing you to enjoy an open fire in a modern fashion.

We at Renaissance Fireplaces™ want to thank you for considering our fireplaces for your project.

Sincerely,

The Renaissance Fireplaces® Team

November, 2015
UNIT DIMENSIONS

The fireplace bottom standoff and bottom casing are mandatory for all installations. They MUST be installed regardless of whether the fireplace is installed on combustible or non-combustible flooring or platforms.

Figure 1 Fireplace Dimensions
CLEARANCES

Figure 2 Fireplace Clearances

HRS Air Intake

Figure 3 HRS (Heat Redistribution System)
## Table 1 Unit Clearances and Specifications (Figure 2)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Distance to combustible material from side and back standoffs</td>
<td>0&quot; (0.0 mm)</td>
</tr>
<tr>
<td></td>
<td>Top standoff requirement</td>
<td>Framing header on top standoffs or above, if used, must be steel.</td>
</tr>
<tr>
<td>B</td>
<td>Minimum distance from side wall to the side of the fireplace opening.</td>
<td>24&quot; (610 mm)</td>
</tr>
<tr>
<td>C</td>
<td>Minimum ceiling clearance: Always take measurement from the lowest point on the fireplace (i.e. bottom of the bottom standoff).</td>
<td>9' (2.44 m)</td>
</tr>
<tr>
<td>D</td>
<td>Minimum depth of non-combustible hearth extension: from the front of the fireplace</td>
<td>20&quot; (610 mm)</td>
</tr>
<tr>
<td>E</td>
<td>Minimum width of non-combustible hearth extension: total width, must be centered on the firebox opening</td>
<td>74.5&quot; (1.70 m)</td>
</tr>
<tr>
<td>F</td>
<td>Minimum width of the spark guard</td>
<td>74.5&quot; (1.70 m)</td>
</tr>
<tr>
<td>G</td>
<td>Diameter of outside air less than 20’ long</td>
<td></td>
</tr>
<tr>
<td></td>
<td>More than 20’ long</td>
<td>4” (101 mm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5” (127 mm)</td>
</tr>
<tr>
<td>H</td>
<td>Maximum vertical rise of aluminum flexible duct rated over 200°F (93°C) (not provided) from the base of the bottom standoff.</td>
<td>12’ (3.66 m)</td>
</tr>
<tr>
<td>I</td>
<td>Minimum chimney height: minimum total chimney height from fireplace top to below the chimney rain cap</td>
<td>12’ (3.66 m)</td>
</tr>
<tr>
<td>J</td>
<td>Maximum chimney height: maximum total chimney height from fireplace top to below the chimney rain cap</td>
<td>38’ (18.3 m)</td>
</tr>
<tr>
<td>K</td>
<td>Maximum chimney height supported by the fireplace</td>
<td>12’ (4.57 m)</td>
</tr>
<tr>
<td>L</td>
<td>Minimum distance from the top of the fireplace opening to the bottom of a combustible mantel.</td>
<td>12” (305 mm)</td>
</tr>
<tr>
<td>M</td>
<td>Maximum mantel shelf depth</td>
<td>12&quot; (305 mm)</td>
</tr>
</tbody>
</table>
### Table 2 HRS (Heat Redistribution System) Clearances and Specifications (Figure 3)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Minimum clearance between the outer surface of the HRS intake duct and any combustible structure</td>
<td>0” (0 mm)</td>
</tr>
<tr>
<td>B</td>
<td>Minimum height of the HRS air intake decorative grill from the floor</td>
<td>0” (0 mm)</td>
</tr>
<tr>
<td>C</td>
<td>Maximum length of the HRS air intake duct (EO-CID)</td>
<td>5’ (1.52 m)</td>
</tr>
<tr>
<td>D</td>
<td>Framing/facing material for HRS air intake</td>
<td>1. Non-combustible&lt;br&gt;2. wood</td>
</tr>
<tr>
<td>E</td>
<td>Framing material for HRS heat outlet</td>
<td>Steel studs</td>
</tr>
<tr>
<td>F</td>
<td>Minimum clearance between the outside of the ducting for the HRS heat outlet and any combustible materials</td>
<td>6” (152 mm)</td>
</tr>
<tr>
<td>G</td>
<td>Minimum clearance between the decorative grill of the HRS heat outlet and the ceiling; from the top the decorative grill to the ceiling</td>
<td>11” (280 mm)</td>
</tr>
<tr>
<td>H</td>
<td>Minimum height of the HRS heat outlet on a second floor, measured from the floor to the bottom of the decorative grill</td>
<td>59” (1.5 m)</td>
</tr>
<tr>
<td>I</td>
<td>Maximum length of the HRS heat outlet ducting, measured from top of fireplace to the decorative grill</td>
<td>15’ (4.57 m)</td>
</tr>
</tbody>
</table>

## PLANNING INSTALLATION

Check with your local authority having jurisdiction (such as municipal building department, fire department, fire prevention bureau, etc.) regarding restrictions and installation requirements, and the need to obtain a permit.

### Location

There are a number of factors that may prevent installation in a particular room, but there are also locations where the installation of this fireplace is prohibited:

- The LINEAR 50 must be installed within the vapor barrier of the home.
- It cannot be installed outdoors, or on a three season porch.

### Floor Requirements

Before installing the LINEAR 50, make sure the floor surface and floor structure are level and can sustain the weight of the complete fireplace and whatever finishing material you will use to cover the facing of your fireplace.
**HRS (Heat Redistribution System) Planning**

The HRS is mandatory for all Linear 50 installations. The HRS is composed of ducts that circulate air from the home through the fireplace in order to redistribute heat and to maintain a safe temperature around the fireplace.

The system consists of two Air Intake ducts and two Heat Outlet ducts for a total of four vents. Any or all ducts can be located on the front, sides or back of the fireplace to suit your aesthetic choice.

Framing of the Heat Outlet ducts must be composed of steel studs.

The framing dimensions are larger than required for ease of installation.

The horizontal header going across the top of the fireplace (at 67 3/8" above the base of the bottom standoff) MUST be steel framing.

When HRS heat outlets are installed above the front of the fireplace, the studs above the steel header must also be steel.

Framing around the outlets of the HRS heat outlets MUST be steel framing whether they are installed above the front of fireplace or elsewhere.

*Figure 4 Framing Example*
**FINISHING**

**FRAMING**

The LINEAR 50 MUST be covered with cement board at least ½" thick. Cement board will allow you to finish the facing of the fireplace with any non-combustible material you like.

**FIREPLACE FACING**

Facing materials must be NON-COMBUSTIBLE such as cement board, metal, brick, slate or ceramic tile. Gypsum board is NOT an acceptable facing material. The only combustible material accepted on the facing of the fireplace is for a mantel (shelf and posts).

**MANTLE**

Masonry and other non-combustible mantels (shelf and posts) can be placed anywhere around the fireplace opening.

For combustible mantel shelves (combustible mantel posts are not permitted), the maximum depth is 12” and the minimum clearance to the door opening is 12”. See Figure 2 for an example, and Table 1 (L-M) for details.

The only combustible material accepted on the facing of the fireplace is for a mantel shelf.

**HEARTH EXTENSION**

The area immediately in front of the fireplace must be protected if the surface is combustible. Refer to (D-E) for the depth and width that the hearth extension protection should extend beyond the front and both sides of the fireplace opening (see Figure 2).

Non-combustible flooring material such as brick, tile, stone, or slate must be used as finishing material over the hearth extension area.

The non-combustible flooring material must have the same minimum dimensions as the hearth extension (see (D-E)).

If the LINEAR 50 is installed on a non-combustible floor, none of the protection above is needed.

**RAISED HEARTH EXTENSION**

A raised hearth extension is permitted if the materials used to make the structure and to cover it are all non-combustible such as steel studs, cement blocks, etc. No combustible materials are allowed above the floor level on which the bottom standoff resides below the fireplace.

A non-combustible raised hearth extension can be constructed as high as the hearth threshold, making it a flush hearth extension. The HRS air inlets will either have to be located on the sides or back of the fireplace, or framed on the raised hearth extension and connected by the duct to the front knockouts.
Regular Hearth Extension

Raised Hearth Extension

Raised Fireplace Hearth Extension

Table 1 (G)

Standard Wood Floor Structure

Spark Guard

No Combustible Material Allowed Above this Point

Non-Combustible Flooring

Fireplace

Table 1 (G)

Standard Wood Floor Structure

Spark Guard

No Combustible Material Allowed Above this Point

Non-Combustible Flooring

Fireplace

Non-Combustible Structure

Table 1 (G)

Standard Wood Floor Structure

Spark Guard

No Combustible Material Allowed Above this Point

Non-Combustible Flooring

Spark Guard Required if Raised Platform is Combustible

1/2" Cement Board

Fireplace

Non-Combustible Flooring

Table 1 (G)

Standard Wood Floor Structure

Raised Platform

Spark Guard

Figure 5 Hearth Extension Examples