1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2012, 2009 and 2006 International Residential Code® (IRC)
- 2012, 2009 and 2006 International Mechanical Code® (IMC)

Properties evaluated:

- Fire resistance
- Seismic resistance

2.0 USES

The Isokern fireplaces are wood-burning or gas-burning fireplaces that are constructed in the field using prefabricated cementitious blocks.

3.0 DESCRIPTION

3.1 Solid-fuel-burning Fireplaces: Isokern Standard Models 36-Inch, 42-Inch, and 46-Inch with DM Chimney; and Magnum Fireplace Series Models 28, 36, 42, 48, 60 and 72 with DM54 Chimney:

Isokern fireplaces and DM54 chimney systems are modular refractory units designed for field assembly. The units consist of interlocking precast parts that are fitted together in the field using a premixed mortar called Earthcore mortar, supplied with the units, to form a solid-fuel-burning fireplace and chimney system. The refractory parts are manufactured using a proprietary mixture of volcanic pumice aggregate and aluminate cement. The firebox, smoke dome and chimney outer casing are manufactured with medium-density material, and the flue liner with high-density material. High-temperature refractory firebricks, a minimum of 1 1/8 inches (28.6 mm) thick, are provided to line the interior of the firebox. The firebox is available in sizes noted in Table 2. See Figures through 5 for further details.

3.2 Fire-Lite Systems:

3.2.1 General: The Fire-Lite systems consist of Standard Models 36-inch, 42-inch, and 46-inch fireplaces and Magnum Series Models 28-inch, 36-inch, 42-inch, 48-inch, 60-inch and 72-inch fireplaces, described in Section 3.1, and a factory-built chimney. All conditions of fireplace manufacture and installation noted in Section 3.1 apply, except as noted in Section 3.2.2.

3.2.2 Factory-built Chimney: A listed and labeled factory-built chimney is used with the fireplaces, subject to the following requirements:

1. The factory-built chimney is listed by an approved agency for compliance with the requirements of UL 103 for continuous use at 1000°F (537°C) and intermittent use at 1700°F (927°C).
2. The factory-built chimney is for use only with an open combustion chamber and must be marked “Residential Type and Building Heating Appliance Chimney.”
3. The chimney is either solid-pack insulated, a combination of insulation and air space, or noninsulated, completely thermal siphoning, double-wall air-cooled.
4. Listed chimney liners conforming to the 1700°F (927°C) requirements of UL 1777, ULC S635, or ULC S640 may be used.
5. Chimneys and chimney liners must be installed and terminated in accordance with the manufacturer’s installation instructions and under the terms of the manufacturer’s listing for use with open-faced, masonry fireplaces.
6. A minimum 2-inch (51 mm) clearance to combustible construction and 3-inch (76 mm) clearance to insulation is maintained.

As an alternative, a listed and labeled Security Chimneys International (Lennox) FTF-13 factory-built chimney may be used with the fireplaces, subject to the following requirements:

1. The factory-built chimney must be installed and terminated in accordance with the report holder’s
installation instructions and under the terms of the report holder’s listing for the fireplaces.

2. A minimum 2-inch (51 mm) clearance to combustible construction and insulation is maintained.

3.3 Models VF-36, VF-42, and VF-46 Unvented Gas Appliance Firebox Enclosures:

The enclosures consist of materials similar to those used for the Isokern solid-fuel-burning fireplaces. The enclosures are recognized as complying with ANSI Z21.91 and are for use with unvented decorative gas logs listed and labeled as complying with ANSI Z21.11.2, and having a minimum heat input of 40,000 Btu/h (11 700 W). The gas logs must be factory-equipped with a listed oxygen-depletion safety shutoff system (ODS) and must comply with 2012 and 2009 IFGC Section 621.6 and 2006 IFGC Section 620.6 (2012, 2009 and 2006 IRC Section G2445.6). The enclosure must only be installed within a room that has a primary source of heat, and use of the units is prohibited in locations defined in IRC Section G2406.2 and IFGC Sections 303.3 and 621.4. Combustion air must be provided in accordance with IRC Section M1702 and IFGC Section 621.5. The room in which the units are installed must have a free-air volume equal to or greater than 50 cubic feet per 1000 Btu/h (4.8 m³/kW) of the aggregate input rating of all appliances within the room.

The base, sides, rear and top of the firebox consist of preformed refractory components that interlock together to form the enclosure. Assembly of the firebox is as described in Section 4.3 of this report, except that a 1/2-inch-wide (12.7 mm) mortar joint is used; and 1 1/8-inch-thick (28.6 mm) (minimum) refractory firebrick, conforming to ASTM C1261, is used to line the hearth, side walls and back wall. The unit must be anchored in accordance with IRC Section R301.1.3. Under the IRC, an engineered design must be provided in accordance with IRC Section R301.1.3. A copy of the manufacturer’s published instructions and the applicable report holder’s listing for the fireplaces.

3.4 Models IBV-36, and IBV-46 Vented Gas Fireplaces:

3.4.1 General: Vented gas-fired fireplace models IBV-36 and IBV-46, with dimensions and weights as described in Figure 5, comply with ANSI Z21.50 and are for connection to listed Type B gas vents as described in Section 3.4.2.

3.4.2 Gas Vent: The gas vent system consists of a nominally 10-inch-diameter (254 mm), Type B gas vent complying with Chapter 8 of the IMC and Chapter 5 of the IFGC and Chapter 24 of the IRC.

3.5 Factory-built Chimney:

The firebox units, described in this report, may be used in conjunction with factory-built chimneys listed and labeled as complying with UL103, and must be used with one in Seismic Design Categories C, D, E, and F. The factory-built chimney must comply with Type HT requirements of UL 103 and be marked “Type HT” and “Residential Type and Building Heating Appliances.” As an alternative, a listed and labeled Security Chimneys International (Lennox) FTF-13 factory-built chimney may be used with the fireplaces. The chimneys are limited to a maximum height of 80 feet (24380 mm) and a minimum height of 14 feet (4270 mm); except that where offsets are used, the minimum height is 17 feet (5180 mm). The maximum number of offsets is two.

3.6 Grout and Mortar:

Grout used in construction of the fireplace unit is Quickcrete Concrete Mix #1001, 4000 psi concrete mix or equivalent. Mortar used with the fireplace unit is Earthcore mortar.

4.0 DESIGN AND INSTALLATION

4.1 General:

The fireplaces must be installed in accordance with this report, the manufacturer’s instructions and the applicable code. A copy of the manufacturer’s published instructions must be available at the jobsite at all times during installation. The fireboxes are not recognized for use with doors.

4.2 Design:

Installation is limited to Seismic Design Categories A and B, except that when installation is in accordance with Section 4.3 of this report, the fireplaces may be installed in Seismic Design Categories C, D, E and F, provided the seismic design factors are limited to the values noted in Table 1. The seismic design must be in accordance with Sections 15.3.2 (1) and 13.3, 13.4, 13.5 and 13.6 of ASCE 7. Fireplace systems used in Seismic Design Categories C, D, E, and F are limited to those incorporating listed and labeled factory-built chimneys.

Structural design calculations and construction plans prepared by a licensed design professional are required to determine the requirements for the fireplace foundation and anchorage of the fireplace to the foundation.

When installation is on wood floor construction, the licensed design professional must determine the requirements for support and anchorage for the combined gravity and seismic loading. The applicability of the seismic design parameters in Table 1, for Seismic Design Categories C, D, E and F, must be verified with due consideration of the flexibility of anchorage and supports. In addition, the calculated long-term deflection of the wood members supporting the fireplace must not exceed the values shown in IBC Table 1604.3 for floor members. Under the IRC, an engineered design must be provided in accordance with IRC Section R301.1.3.

4.3 Installation:

4.3.1 General: A noncombustible foundation, adequate to support all required loads, is necessary and must be approved by the building inspector. Fire-Lite Series and Models IBV-36 and IBV-46 Vented Gas fireplaces and Models VF-36, VF-42 and VF-46 may be installed on combustible systems. For combustible supporting systems, installation of a 3-inch-thick (76 mm) Earthcore base plate is required before placement of the firebox hearth components. The Fire-Lite system firebox is assembled following the manufacturer’s published instructions. For Seismic Design Categories C, D, E and F, anchorage of the fireplace unit to the foundation or supporting floor must be designed as described in Section 4.2. Units are assembled on the foundation by installing the base plate, firebox wall sections, damper assembly and smoke dome. Earthcore Mortar is mixed with water until smooth and without dry spots, and is then poured into the supplied Earthcore application bag and applied to one adjoining component face of each joint. A 1/2-inch-wide (12.7 mm) line of mortar is applied 1/2 inch (12.7 mm) from all edges of the face with two longitudinal lines between. Mortar must be exposed at the joints when components are joined, and the excess must be smoothed out. The firebox hearth, side walls and back wall are then lined with approved refractory materials.
bricks a minimum of 1\(\frac{1}{8}\) inches (28.6 mm) thick, except for the Magnum Models 60 and 72, which require minimum 4-inch-thick (101.6 mm) approved refractory bricks, complying with ASTM C27 or ASTM C1261, at the side walls using a refractory mortar, complying with ASTM C199, recommended by Earthcore Industries, LLC.

4.3.2 Clearances: Minimum clearance from the fireplace opening to side walls is 26 inches (660 mm). Sheathing and trim must be kept at least 8 inches (203 mm) from the opening. Combustible mantles must be at least 14 inches (356 mm) above the opening. A noncombustible hearth extension is necessary and must extend a minimum of 20 inches (508 mm) in front and 12 inches (305 mm) beyond each side of the fireplace opening.

For the Magnum Series Models 60 and 72, minimum clearance from the fireplace opening to side walls is 48 inches (305 mm). Sheathing and trim must be kept at least 9 inches (228 mm) from the opening. Combustible mantles must be at least 38 inches (965 mm) above the opening. A noncombustible hearth extension is necessary and must extend a minimum of 33 inches (838 mm) in front of and 12 inches (305 mm) beyond each side of the fireplace opening.

4.3.3 DM54 Chimney Systems: The DM54 chimney system must be supported from the top plate of the smoke dome. The chimney is assembled starting with a 6-inch-high (152 mm) liner that offsets the joints in the octagonal inner Earthcore liner from those in the square outer chimney casing. The mortar mix is applied in all joints as previously described. The outer chimney blocks have provisions for installation of reinforcing bars. Chimneys may include offsets with a maximum horizontal distance of 6 feet (1829 mm) which is 24 offset blocks in sequence. The offset blocks are supplied by Earthcore Industries, LLC. The fourth and sixth offset blocks and every third block thereafter must be supported by a concrete block support wall. Where required by the code official, details of the support wall construction must be provided.

The portion of the chimney exposed to the exterior must be covered with weather protection material such as exterior plaster or brick veneer, in accordance with the applicable code. Terminations must comply with IBC Section 2113.9 and IRC Section R1003.9. Where required by the code official, an approved spark arrester complying with 2012 IBC Section 2113.9.2 or 2009 and 2006 IBC Section 2113.9.1 must be used. Under the 2012 IBC and IRC, a chimney cap must be installed in accordance with IBC Section 2113.9.1 and IRC Section R1003.9.1.

For installations with vertical chimneys, the fireplace and chimney may be installed with zero clearance to combustibles, except that the Magnum series units require a minimum 1\(\frac{1}{2}\)-inch (38 mm) clearance on the sides and back of the firebox and smoke chamber. When offset blocks are used, the system must be installed with a minimum 1\(\frac{1}{2}\)-inch (38 mm) clearance on the sides and back of the firebox and smoke chamber, and with zero clearance on the top; the chimney is installed at zero clearance to combustibles. Except as noted in this section for clearances to combustibles, chimney fireblocking must be in accordance with IBC Section 2113.20 and IRC Section R1003.19.

4.3.4 Gas Vent Installation: Gas vents are installed through a 10-inch-diameter (254 mm) hole cut into the top plate of the fireplace enclosure, centered from each edge. The Isokern Anchor Plate/Downdraft Diverter component is placed over the hole using either a bed of Earthcore mortar, or an approved ceramic blanket gasket. The Anchor Plate/Downdraft Diverter hood component is then secured to the top plate using masonry screws. The Type B gas vent must be connected to the Anchor.

4.3.5 Plate/Downdraft Diverter component and installed in accordance with the vent manufacturer’s instructions.

4.3.6 Unvented Gas Appliance Firebox Enclosures: Models VF-36, VF-42 and VF-46 unvented gas appliance firebox enclosures must be installed in accordance with IFGC Section 621, IRC Section G2445 and the manufacturer’s published installation instructions.

4.3.7 Vented Gas Fireplaces: Models IBV-36 and IBV-46 vented gas fireplaces must be installed in accordance with IFGC Section 604, IRC Section G2434 and the manufacturer’s published installation instructions.

5.0 CONDITION OF USE

The Isokern fireplaces and chimney systems described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The fireplaces must be installed in accordance with this report, the manufacturer’s published installation instructions and the applicable code. In the event of a conflict between this report and the manufacturer’s instructions, this report governs.

5.2 Structural design and calculations from a registered design professional must be provided to the code official to justify the supporting structure for all applicable loads, including gravity, wind and earthquake loading, and applicable load combinations per IBC Section 1605.

5.3 An analysis shall be provided to the code official establishing that the seismic conditions for the installation site do not exceed the specified seismic limitations.

5.4 The fireplaces must not be installed with doors.

5.5 Compliance with the fireplace air leakage provisions found in 2012 International Energy Conservation Code® (IECC) Section R402.4.2 and Table R402.4.1.1; 2012 IRC Section N1102.4.2 and Table N1102.4.1.1; 2009 IECC Section 402.4.3; and 2009 IRC Section N1102.4.3, are outside the scope of this report.

5.6 The wood-fired fireplaces and unvented gas-fired units are manufactured in Chesapeake, Virginia, under a quality control program with inspections by ICC-ES. The IBV vented gas-fired fireplaces are manufactured in Chesapeake, Virginia, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Field-constructed Fireplace Systems Using Prefabricated Blocks (AC375), dated February 2012.

7.0 IDENTIFICATION

7.1 The components of the fireplace and chimney are supplied to the jobsite on shrink-wrapped pallets bearing a label with the Earthcore Industries, LLC, name and address; the product name; the address of the manufacturing plant and the evaluation report number (ESR-2316). A permanent label must be attached to the fireplace and to the vented or unvented enclosure, bearing the Earthcore Industries, LLC, name; the product name; the manufacturing location; the date of manufacture and the serial
number; the clearances to combustibles; other information required by UL 127; (for wood-fired fireplaces and unvented gas appliance firebox enclosure models VF-36, VF-42 and VF-46; or PFS Corporation for vented gas fireplace models IBV-36 and IBV-46); and the evaluation report number (ESR-2316).

7.2 The report holder’s contact information is the following:

EARTHCORE INDUSTRIES, LLC
6899 PHILLIPS INDUSTRIAL BOULEVARD
JACKSONVILLE, FLORIDA 32256
(904) 363-3417
www.isokern.net

### TABLE 1—SEISMIC DESIGN FACTORS FOR SEISMIC DESIGN CATEGORIES C, D, E AND F

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplification Factor, ( \alpha_p )</td>
<td>1.0</td>
</tr>
<tr>
<td>Component response modification factor, ( R_p )</td>
<td>3.0</td>
</tr>
<tr>
<td>( Z/h ) factor, where ( Z ) is the height in structure of point of attachment with respect to the base; and ( h ) is the average roof height of structure with respect to the base</td>
<td>0.65</td>
</tr>
<tr>
<td>Spectral response acceleration parameter, ( S_{oa} )</td>
<td>2.0</td>
</tr>
<tr>
<td>Weight, ( W_p ) (lbs)</td>
<td>See Figure 1</td>
</tr>
<tr>
<td>Fundamental period of fireplace unit, ( T_s )</td>
<td>0.35</td>
</tr>
</tbody>
</table>

For SI: 1 foot = 305 mm; 1lb = 4.45 N.

### TABLE 2—ISOKERN FIREPLACE DIMENSIONS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OVERALL SIZE (inches)</th>
<th>FIREBOX OPENING SIZE (inches), Width x Height</th>
<th>HEARTH EXTENSION SIZE (inches), Width x Depth</th>
<th>CHIMNEY MINIMUM SIZE (inches), I.D.</th>
<th>INSTALLED HEIGHT, FIREPLACE AND CHIMNEY DM SYSTEM (feet)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>36-Inch</td>
<td>Width: 43 Depth: 25( \frac{3}{4} ) Height: 63( \frac{3}{4} )</td>
<td>37 x 32</td>
<td>58 x 20</td>
<td>12( \frac{3}{4} )</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>42-Inch</td>
<td>Width: 49 Depth: 25( \frac{3}{4} ) Height: 63( \frac{3}{4} )</td>
<td>42 x 32</td>
<td>64 x 20</td>
<td>12( \frac{3}{4} )</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>46-Inch</td>
<td>Width: 53 Depth: 25( \frac{3}{4} ) Height: 63( \frac{3}{4} )</td>
<td>47 x 32</td>
<td>68 x 20</td>
<td>12( \frac{3}{4} )</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>IBV36</td>
<td>Width: 43 Depth: 25( \frac{3}{4} ) Height: 71</td>
<td>37 x 32</td>
<td>58 x 20</td>
<td>10</td>
<td>15</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>IBV42</td>
<td>Width: 49 Depth: 25( \frac{3}{4} ) Height: 79</td>
<td>42 x 32</td>
<td>64 x 20</td>
<td>10</td>
<td>15</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>IBV46</td>
<td>Width: 53 Depth: 25( \frac{3}{4} ) Height: 71</td>
<td>47 x 32</td>
<td>68 x 20</td>
<td>10</td>
<td>15</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>VF - 36</td>
<td>Width: 43 Depth: 25( \frac{3}{4} ) Height: 38</td>
<td>36 x 31( \frac{3}{4} )</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>VF - 42</td>
<td>Width: 49 Depth: 25( \frac{3}{4} ) Height: 38</td>
<td>43 x 31( \frac{3}{4} )</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>VF - 46</td>
<td>Width: 53 Depth: 25( \frac{3}{4} ) Height: 38</td>
<td>47 x 31( \frac{3}{4} )</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Mag - 28</td>
<td>Width: 35( \frac{3}{4} ) Depth: 28 Height: 60( \frac{3}{4} )</td>
<td>31 x 28( \frac{3}{4} )</td>
<td>57( \frac{1}{2} ) x 20</td>
<td>12</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Mag - 36</td>
<td>Width: 43 Depth: 28 Height: 69( \frac{3}{4} )</td>
<td>38( \frac{1}{2} ) x 38</td>
<td>60( \frac{1}{2} ) x 20</td>
<td>12( \frac{3}{4} )</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Mag - 42</td>
<td>Width: 48( \frac{1}{2} ) Depth: 28 Height: 69( \frac{3}{4} )</td>
<td>44( \frac{1}{2} ) x 38</td>
<td>6( \frac{1}{2} ) x 20</td>
<td>12( \frac{3}{4} )</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Mag - 48</td>
<td>Width: 53 Depth: 28 Height: 69( \frac{3}{4} )</td>
<td>48( \frac{1}{2} ) x 38</td>
<td>70( \frac{1}{2} ) x 20</td>
<td>12( \frac{3}{4} )</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Mag - 60</td>
<td>Width: 73( \frac{3}{4} ) Depth: 28 Height: 85( \frac{3}{4} )</td>
<td>69( \frac{1}{2} ) x 38</td>
<td>91 x 33</td>
<td>12( \frac{3}{4} )</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Mag - 72</td>
<td>Width: 85( \frac{1}{2} ) Depth: 28 Height: 85( \frac{3}{4} )</td>
<td>81( \frac{1}{4} ) x 38</td>
<td>101( \frac{1}{4} ) x 33</td>
<td>12( \frac{3}{4} )</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

For SI: 1 foot = 305 mm; 1lb = 4.45 N.
FIGURE 1—STANDARD SERIES DIMENSIONS

For Fire-Lite Units – Add 4 inches to C and to minimum framing height H.
FIGURE 2—UNVENTED GAS-FIRED SERIES DIMENSIONS
FIGURE 3—MAGNUM 28, 36, 42 AND 48 SERIES DIMENSIONS

For Fire-Lite Units – Add 4 inches to C and to minimum framing height H.
FIGURE 4—MAGNUM 60 AND 72 SERIES DIMENSIONS
FIGURE 5—VENTED IBV SERIES DIMENSIONS

<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>Minimum Framing</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>36&quot;</td>
<td>43&quot;</td>
<td>25%</td>
<td>71 1/4&quot;</td>
<td>31 1/2&quot;</td>
<td>36 1/8&quot;</td>
<td>27 1/4&quot;</td>
<td>21%</td>
<td>20%</td>
<td>5&quot;</td>
<td>43&quot; W x 71 1/4&quot; H x 26 3/4&quot; D</td>
<td>1500 lbs.</td>
</tr>
<tr>
<td>46&quot;</td>
<td>53&quot;</td>
<td>25%</td>
<td>71 1/4&quot;</td>
<td>31 1/2&quot;</td>
<td>47 1/8&quot;</td>
<td>37 1/4&quot;</td>
<td>32&quot;</td>
<td>20%</td>
<td>5&quot;</td>
<td>53&quot; W x 71 1/4&quot; H x 26 31/4&quot; D</td>
<td>1700 lbs.</td>
</tr>
</tbody>
</table>

*To achieve height dimension "D" in table above, a 100" (8.3') minimum flue height with 10" I.D. B-Vent is required

<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>Minimum Framing</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>36&quot;</td>
<td>43&quot;</td>
<td>25%</td>
<td>81 3/4&quot;</td>
<td>&quot;42&quot;</td>
<td>36 1/8&quot;</td>
<td>27 1/4&quot;</td>
<td>21%</td>
<td>20%</td>
<td>5&quot;</td>
<td>43&quot; W x 81 3/4&quot; H x 26 3/4&quot; D</td>
<td>1650 lbs.</td>
</tr>
<tr>
<td>46&quot;</td>
<td>53&quot;</td>
<td>25%</td>
<td>81 3/4&quot;</td>
<td>&quot;42&quot;</td>
<td>47 1/8&quot;</td>
<td>37 1/4&quot;</td>
<td>32&quot;</td>
<td>20%</td>
<td>5&quot;</td>
<td>53&quot; W x 81 3/4&quot; H x 26 3/4&quot; D</td>
<td>1850 lbs.</td>
</tr>
</tbody>
</table>

*To achieve height dimension "D" in table above, a 9' minimum flue height with 10" I.D. B-Vent is required

<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>Minimum Framing</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>36&quot;</td>
<td>43&quot;</td>
<td>25%</td>
<td>92 1/4&quot;</td>
<td>52 1/2&quot;</td>
<td>36 1/8&quot;</td>
<td>27 1/4&quot;</td>
<td>21%</td>
<td>20%</td>
<td>5&quot;</td>
<td>43&quot; W x 92 1/4&quot; H x 26 3/4&quot; D</td>
<td>1800 lbs.</td>
</tr>
<tr>
<td>46&quot;</td>
<td>53&quot;</td>
<td>25%</td>
<td>92 1/4&quot;</td>
<td>52 1/2&quot;</td>
<td>47 1/8&quot;</td>
<td>37 1/4&quot;</td>
<td>32&quot;</td>
<td>20%</td>
<td>5&quot;</td>
<td>53&quot; W x 92 1/4&quot; H x 26 3/4&quot; D</td>
<td>2000 lbs.</td>
</tr>
</tbody>
</table>

*To achieve height dimension "D" in table above, a 12' minimum flue height with 10" I.D. B-Vent is required