High Form Damper
Installation Instructions

Dimensions

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>P</th>
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<tr>
<td>1224</td>
<td>24-26</td>
<td>48+</td>
<td>27+</td>
<td>17</td>
<td>24-27</td>
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<td>14½</td>
<td>24</td>
<td>8½</td>
<td>6</td>
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<tr>
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<td>54+</td>
<td>27+</td>
<td>23</td>
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<td>6</td>
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<td>31+</td>
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<td>6</td>
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<td>35</td>
<td>20½</td>
<td>6</td>
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<tr>
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<td>14½</td>
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<td>26½</td>
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<td>72</td>
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<td>18</td>
<td>12</td>
<td>11</td>
</tr>
</tbody>
</table>

All dimensions are in inches.

Conforms with IBC® & IRC®

Poker or Rotary Control

Made from Heavy Gauge Steel

Insulation provided to prevent masonry cracking

Construction Details

Always install according to local building codes.

Foundation:
The foundation should be poured concrete — not mortar or other softer material. It should extend a minimum 6" beyond the masonry on all sides and be from 8" to 12" or more thickness, depending on the size of the fireplace. It is recommended that it be reinforced with steel or mesh. Check your local building code.

Masonry Layout:
The outside dimensions of the fireplace are found in the dimension chart. The width of fireplace opening (dimension “A”) determines damper size and masonry layout. Dimension “C” shows minimum depth, and “B”, minimum width. Lay an 8" wide masonry wall according to the above measurements and build the outside 4" of masonry to approximately 48" above the hearth. The inside 4" and front 8" of masonry should stop approximately 6" below the finished floor level. A clean-out door should be used in the outside wall at foundation level.

Ash Pit:
The inside area of the masonry walls is used as an ash pit. The concrete hearth slab will form the top of the pit. An opening must be left in the hearth slab for the ash dump.

Concrete Hearth Slab:
The hearth should extend a minimum 18" in front of the fireplace and a minimum 12" on each side. The floor joist must be cut and “headed” to allow for the hearth. Lay 1/2" reinforcing rods across the narrow width of the ash pit and across the 8" front masonry wall to the floor joist header. They should be on 8" centers and covered with expanded metal. The concrete hearth slab should now be poured. Reinforcing rods should be placed in the slab approximately 4" on center. Leave open area for ash dump.

Continued on back

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Construction Details (continued)

Firebox Floor (inner hearth):
Lay fire brick over concrete slab underneath firebox area. Do not extend beyond face masonry.

Firebox Construction:
Build firebox of fire brick 6” to 9” higher than fireplace front opening height (dimension “F”). Use thin mortar joints. Top opening should fit the bottom side of the damper (dimensions “K” and “P”). Fill in area between sides of firebox and exterior fireplace wall with masonry. Fill area behind and to top of firebox with rubble or masonry. Slope to the rear.

Setting Damper:
Set damper on top of firebox opening. Completely cover damper with insulation provided with the damper. Use double thickness insulation at both ends. Lay masonry around damper. Do not wedge masonry against damper.

Smoke Chamber:
The smoke chamber is the area behind the form damper. It should start at the lowest level of the damper and extend to the bottom of the flue liner. (See section view drawing.) The width of the area (right to left) narrows as it extends upward to the flue liner. The sides of the chamber should follow the angle of the form damper with the slope extending up to the flue liner. All sides of the area should be parged (trowelled) smooth. Ledges and offsets will restrict the flow of the rising smoke.

Flue Size:
All fireplaces require the proper flue size in order to create the proper draft and avoid smoking. The size of the flue is calculated to match the fireplace opening. In general, the flue’s inner cross section should be 1/10 of the total fireplace opening. For example, a fireplace opening 27” high by 32” wide equals 864 square inches of opening, and needs a flue with a inner cross section of 86.4 square inches or larger.

Masonry Chimney:
Set a section of flue liner on top of the smoke chamber opening. Lay a minimum 4” of masonry around the liner. Leave an air space (1” on exterior; 2” on interior) between the masonry and any wood or combustible material or framing. Make sure each joint is sealed when the next section of liner is added. The chimney should extend 4’ above a flat roof, or 2’ above the ridge of a pitched roof. The top of the chimney above the roof must be 2’ above any point on the roof within 10’ of the chimney.

Masonry Cap:
The top of the chimney should be capped with concrete and slope up to the liner. The liner should extend 2” or more above the cap. Multiple liners in a single chimney should be separated by 4” of masonry, and the top of the liners should be staggered 4” in height.

Masonry Face:
The masonry face may be laid after setting the damper or after the chimney is completed. The measurements of the fireplace opening are important. See the dimension chart and drawings for width and height measurements.

A combustable mantel should be placed 12” or more above the fireplace opening. If the mantel is placed less than 12” above the fireplace opening, it may only project 1/8 inch for each inch above the opening. For example, a mantel ten inches above the fireplace opening may project 1/8” x 10” or 1 1/4”.

WARNING: Contains fiberglass wool. Possible cancer hazard. To avoid this possibility, use a properly fitted NIOSH or MSHA approved disposable dust respirator such as the 3M Model 8710 or 9900 (in high humidity environments) or equivalent when installing or removing this product in confined or poorly ventilated spaces such as attics or crawl spaces. As an extra precaution, you may choose to wear a disposable dust respirator at all times.

May cause irritation to skin, eyes and respiratory tract. Avoid contact with eyes and skin. Wear long sleeved, loose fitting clothing, gloves and eye protection when handling and applying material. Wash with soap and warm water after handling. Wash work clothes separately and wipe out washer.

For more health information, consult the Material Safety Data Sheet (MSDS) and the pamphlet “The facts about fiberglass and health” available free from Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659, or call 1-419-248-8234.