FIRE DOOR FRAME LISTING PROGRAM

Customer: BASF SE
Class: Fire Door Frames
Location: Frankenthal, Germany
Website: www.basf.com

Listing No. F411-2
Project No. F411-2 Edition 7
Effective Date: October 12, 2012
Last Revised Date: May 28, 2018

Standards:
- UL 10B Fire Tests of Doors Assemblies.
- UL 10C Fire Tests of Doors Assemblies.

Product: 90 min Rated Positive Pressure Fire Door Frames

Markings: See FD001 - Fire Door Labeling requirements

Models: 90-MINUTE FIRE DOOR FRAMES:

Maximum Frame Sizes

<table>
<thead>
<tr>
<th>Swing Type</th>
<th>Maximum Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width: 3'6&quot; (1067 mm)</td>
</tr>
<tr>
<td></td>
<td>Height: 9'0&quot; (2743 mm)</td>
</tr>
<tr>
<td>Single Swing</td>
<td></td>
</tr>
<tr>
<td>Pairs</td>
<td>Width: 7'0&quot; (2134 mm)</td>
</tr>
<tr>
<td></td>
<td>Height: 9'0&quot; (2743 mm)</td>
</tr>
<tr>
<td>Double Egress</td>
<td>Not Permitted</td>
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</tbody>
</table>

LIMITATIONS:

- Minimum Frame Leg Width: 4-3/4"
- Maximum Frame Leg Width: Equivalent to wall thickness
- Minimum Frame Leg Thickness: 5/8" (-1/16")
- Minimum Rabbet for Door: 1-3/4" (-1/16")
- Minimum Stop Height: 1/2"
- Minimum Stop Width: 1-1/4" (-1/16")

Hardwood Facings: Maximum ¼" x 1" Hardwood Facing inlaid into the face of the frame leg

Electric Raceway: Max. ¼" diameter hole through the frame leg at 40" from the floor and below.

Mortised Door Closer: Concealed closer allowed in the frame header. Maximum 2-1/6" x 3-5/8" x 12" pocket dimensions lined with Interdens Type 15 on 4 sides as outlined in drawings. Minimum 3/8" frame header thickness above the concealed closer pocket. Header is constructed with layers of Palusol SW cores.
Installation: Fastened through the frame legs with finishing nails. Fasten through the frame at 2 fastener locations on the hinges with fastener long enough to penetrate at least ¾” into wall framing.

Notes: Refer to QAI evaluation report F411-2 and the applicable test reports for test assembly configurations used for fire endurance testing.

Refer to the QAI FD002 - Fire Door Guidelines for general guidelines of fire door assemblies

Final acceptance of the product in the intended application is to be determined by the authority having jurisdiction (AHJ).

Product is to be installed in accordance with the manufacturer’s published installation instructions by qualified installing personnel.

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