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 8

Effective Date: October 12, 2012
Last Revised Date: November 12, 2020

UL 10B Fire Tests of Doors Assemblies.
UL 10C Fire Tests of Doors Assemblies.
NFPA 252 Standard Methods of Fire Tests of Door Assemblies.

Product: 90 min Rated Positive Pressure Fire Door Frames

Markings: See FD001 - Fire Door Labeling requirements

Models: 90-MINUTE CATEGORY C FIRE DOOR FRAMES:

Maximum Frame Sizes

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

Limitations:

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

Hinges and Hardware:

All hinges and applicable hardware must be fire rated for use in openings at or above the fire rating of the frame system being installed.

Preparation of all hinges and hardware shall be made in accordance with NFPA 80, the hinge or hardware manufacturer's installation instructions and templates.
Electric Raceways:

A ¼” diameter hole is permitted anywhere below 40” above the floor on the hinge or latch frame leg. Wire can then be routed through the hole for electronically controlled hardware. The hole may be left open or sealed with silicone caulking.

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.

Header is constructed with layers of Palusol SW cores. Minimum 3/8” frame header thickness above the concealed closer pocket.

Mortised Electric Strike:

Frame thickness shall be built up to fully enclosed the closer body. Maximum mortise depth 1 1/2” and maximum mortise height 3 ½”.

Installation:

Shims need to be installed. Silicone caulking applied between the jamb and rough opening on both sides of the assembly. Each hinge needs to be fastened through the shim into the frame with at least #12 x 2-1/2” screws. The frame can then be fastened at all non-hinge shim locations with 2” finishing nails. Follow NFPA 80 Installation guidelines. Installation instructions shall be supplied with frames.

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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