FIRE DOOR FRAME LISTING PROGRAM

Customer: BASF SE
Class: Fire Door Frames
Location: Frankenthal, Germany
Website: [www.basf.com](http://www.basf.com)

Listing No. F411-2
Project No. F411-2 Edition 8

Effective Date: October 12, 2012
Last Revised Date: November 1, 2020

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

Product: 20 min Rated Positive Pressure Fire Door and Sidelite / Transom Frames

Markings: See [FD001 - Fire Door Labeling requirements](#)

Models: CATEGORY C 20-MINUTE FIRE DOOR FRAMES

Maximum Sizes Fire Door Frames:

<table>
<thead>
<tr>
<th>Swing Type</th>
<th>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>
</tr>
<tr>
<td>Pairs</td>
<td>7'0&quot; (2134 mm)</td>
<td>9'0&quot; (2743 mm)</td>
</tr>
<tr>
<td></td>
<td>8'0&quot; (2438 mm)</td>
<td>8'0&quot; (2438 mm)</td>
</tr>
<tr>
<td>Double Egress</td>
<td>Not Permitted</td>
<td></td>
</tr>
</tbody>
</table>

Limitations:

Frame - Single or Double Rabbet Option:
- Minimum frame width: 4-1/2"
- 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"

Frame - Option with a Kerf:
- Minimum frame width: 4-1/2"
- Maximum frame width: Equivalent to wall thickness
Minimum frame thickness: 3/4"
Minimum rabbet for door: 1-3/4"
Minimum stop height: 1/2"
Minimum stop width: 1-1/2"
Maximum door to stop gap: 7/16" (allowance for weatherstrip)
Maximum frame kerf thickness: 1/8"

Note: Kerfed frame is limited to use with Category A doors only (intumescent in door edges).

Maximum Sizes Fire Rated Sidelites and Transoms:

<table>
<thead>
<tr>
<th>Window Type</th>
<th>Maximum Dimensions Width:</th>
<th>Height:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Glazed</td>
<td>2'0&quot; (610 mm)</td>
<td>4'0&quot; (1219 mm)</td>
</tr>
<tr>
<td>Combination</td>
<td>Not Permitted</td>
<td></td>
</tr>
</tbody>
</table>

Limitations:
- Minimum Frame Width: 4-1/2"
- Maximum Frame Width: Equivalent to wall thickness
- Minimum Frame Thickness: 5/8" [BASF SW 45-1 Material]
- Maximum Frame Thickness: 1½" [BASF SW 45-1 Material + MDF]
- Stop Height: 1/2"
- Stop Width: 3/4"

Glass Lights (Listed and labeled for rated opening):
- Glazing material shall be listed and labeled for rated opening and light kit type.
- Glazing installed in accordance with the installation instructions for BASF frames.
- Glazing details:
  - Maximum window opening 24" x 48" (Width x Height) with BASF SE vision kit using Listed 3/16" ceramic glazing.
  - BASF Glazing Clips used at 8" maximum spacing, fastened using 3/4" staples or flat head nails.
  - Silicone sealant must be used around perimeter of glass (between the glass and frame).

Arched Top Frames:
- Not permitted.

Mulled Assemblies:
- Not permitted.

Hinge and Strike Plates:
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 for hinges and hardware shall be made in accordance with NFPA 80, the hinge 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 all 5 sides.

Minimum 3/8” frame header thickness above the concealed closer pocket [See Figure 8].

Mortised Electric Strike:

Mortise electric strike allowed, Maximum mortise depth 1 ½”, maximum mortise height 3 ½”

Concealed Hinges

Concealed SOSS and TECTUS hinges are permitted. Frame section shall be built up to encase hinge body.

Installation Instructions

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. Installation instructions shall be shipped with frame or fire window shipment.

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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