FIRE DOORS LISTING PROGRAM

Customer: Visser Manufacturing Ltd.
Class: Fire Doors
Location: Ottawa, ON
Website: vissermfg.ca

Listing No. F449-1
Project No. F449-1 Edition 1

Effective Date: January 1, 2018
Last Revised Date: January 1, 2018

UL 10(b) Fire Tests of Doors Assemblies.
NFPA 252 Standard Methods of Fire Tests of Door Assemblies.

Product: 90 min Rated Neutral Pressure Fire Doors

Labels: See FD001 - Fire Door Labeling requirements

Models: 90-MINUTE LAMINATED CORE FLUSH DOORS:

Minimum 1-3/4" Thickness

<table>
<thead>
<tr>
<th>Swing Type:</th>
<th>Maximum Dimensions</th>
<th>Panel Type:</th>
<th>Latching:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width:</td>
<td>Length:</td>
<td></td>
</tr>
<tr>
<td>Single Swing (5-ply core)</td>
<td>4'0&quot; (1219 mm)</td>
<td>10'0&quot; (3048 mm)</td>
<td>Flush</td>
</tr>
<tr>
<td>Single Swing (7-ply core)</td>
<td>4'0&quot; (1219 mm)</td>
<td>9'0&quot; (2743 mm)</td>
<td>Flush</td>
</tr>
<tr>
<td>Single Swing w/ Transom</td>
<td>4'0&quot; (1219 mm)</td>
<td>10'0&quot; (3048 mm)</td>
<td>Flush</td>
</tr>
<tr>
<td>Pairs</td>
<td>8'0&quot; (2438 mm)</td>
<td>8'0&quot; (2438 mm)</td>
<td>Flush</td>
</tr>
</tbody>
</table>

Notes:
Maximum 4'0" x 4'0" transom panel in single swing doors.
Limitations: (Review Machining Report for further detail)

- Cylindrical Latches (Listed and labeled)
- Mortise Lockset (Listed and labeled)
- Deadlock (Listed and labeled)
- Fire Exit Devices (Listed and labeled)
  - Surface mounted vertical rod, RIM surface mounted exit devices.
- Surface mounted door closer (Listed and labeled)
- Light Kit (Listed and labeled)
  - Listed Steel Lite Kit – max. 100 sq. in. listed fire rated glazing (max dimension of 33" for doors 8’ high or less; max dimension of 25” for doors over 8’ high).
- Electrical Raceway
- Manual or automatic flush bolts (Listed and labelled)
- Viewers (Listed and labeled)
- Protection Plates
  - Brass, bronze, steel, aluminum or decorative laminate up to 16” high.

Notes:  Refer to QAI evaluation report F449-1 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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