FIRE DOOR LISTING PROGRAM

Customer: Eggers Industries
Class: Fire Doors
Location: Two Rivers, Wisconsin
Website: www.eggersindustries.com

Listing No. F443-1-1-90
Project No. F443-1 Edition 3

Effective Date: June 9, 2017
Last Revised Date: August 15, 2018

Standards:
- UL 10B Fire Tests of Door Assemblies
- UL 10C Positive Pressure Fire Tests of Door Assemblies
- NFPA 252 Standard Methods of Fire Tests of Door Assemblies
- CAN/ULC S104 Standard Method for Fire Tests of Door Assemblies

Product: 90 minute Neutral and Positive Pressure rated Fire Doors

Markings: See FD001 - Fire Door Labeling requirements

Models: 90 MINUTE COMPOSITE CORE FIRE DOORS CATEGORY A & B (POSITIVE & NEUTRAL PRESSURE):

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>Height:</td>
<td></td>
</tr>
<tr>
<td>Single Swing</td>
<td>4'0&quot; (1219 mm)</td>
<td>8'0&quot; (2438 mm)</td>
<td>Flush only</td>
</tr>
<tr>
<td>Single Swing with Transom¹</td>
<td>3'6&quot; (1067 mm)</td>
<td>8'0&quot; (2438 mm)</td>
<td>Flush only</td>
</tr>
<tr>
<td>Transom in separate frame</td>
<td>4'0&quot; (1219 mm)</td>
<td>4'0&quot; (1219 mm)</td>
<td>Flush only</td>
</tr>
<tr>
<td>Pair</td>
<td>8'0&quot; (2438 mm)</td>
<td>8'0&quot; (2438 mm)</td>
<td>Flush only</td>
</tr>
<tr>
<td>Double Egress</td>
<td>8'0&quot; (2438 mm)</td>
<td>8'0&quot; (2438 mm)</td>
<td>Flush only</td>
</tr>
</tbody>
</table>

¹ Maximum 3'6" x 3'0" transom panel, maximum 3'6" x 10"0’ single door frame opening.
Minimum 2-1/4” Thickness

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<tr>
<td>Single Swing</td>
<td>4’0” (1219 mm)</td>
<td>9’0” (2743 mm)</td>
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¹ Maximum 3’6” x 3’0” transom panel, maximum 3’6” x 10’0’ single door frame opening.

- The above Category A Positive Pressure Fire Doors are manufactured with edge sealing gasketing. Doors do not require additional gasketing for positive pressure applications.
- The above Category B Neutral Pressure Fire Doors are required to be installed with Category G gasket when used in positive pressure applications. Category G gasket is to be approved and listed for use with wood door types.

Additions / Limitations:
(Review Machining Specifications Report for details)

Latch Sets (Listed and labeled for rated opening and door type)
- Cylindrical Latches:
  - Assa Abloy Hospitality AS – Vingcard Hardware
    - "VingCard 810" with 1/2 in. latch bolts.
- Mortised Latches:
  - Unit locks allowed in doors up to 8’0” high. The stile must be 1” wider than the depth of the lock machining.
  - Assa Abloy Hospitality AS – Vingcard Mortise Hardware
    - 1000 Series; Models 1001, -02, -04, -07, -12, -14, -15, -57, -85 with 19.05 mm (3/4 in.) latch bolts; may include suffix letters -K, -KVC, -L or -LVC bearing on the face of each lock or latch the letter "F"
    - "Signature Series, Euro, ANSI and US ANSI” battery operated units with (3/4 in.) latch bolts.
    - "Essence Series” battery operated units with (3/4 in.) latch bolts.
Deadbolts (Listed and labeled for rated opening and door type)
- Cylindrical Deadbolts:
  - Maximum 2-1/8" bore located a minimum of 6" center-line to center-line from the latch cutout.
- Mortised Deadbolts:
  - Unit locks allowed in doors up to 8'0" high. The stile must be 1" wider than the depth of the lock machining.

Hinges (Listed and labeled for rated opening and door type)
- Hinges per NFPA 80, Table 6.4.3.1
- Offset pivot only per NFPA 80, must include in intermediate pivot.
- Continuous hinges: UL listed and approved for use with wood doors (label on top of door).

Fire Exit Devices (Listed and labeled for rated opening and door type)
- Surface Mounted Vertical Rod Fire Touch Bar Exit Device, may be less bottom rod with use of auxiliary fire latches.
- Concealed Vertical Rod (CVR) Fire Touch Bar Exit Device, may be less bottom rod with use of auxiliary fire latches. CVR without metal edge.
- Rim Type Fire Exit Devices.

Door Closers (Listed and labeled for rated opening and door type)
- Surface Mounted Door Closers.
- Concealed Door Closers with closer arm maximum cutout dimension 23-3/4" long x 1-3/8" wide x 1-1/2" deep.

Surface Mounted Protection Plates
- Steel, brass, bronze, aluminum, PVC, or plastic laminate max 48” high.

Flush Pull
- Not permitted.

Louvers (Listed and labeled for rated opening and door type)
- Fusible link louver without temperature rise rating.
- Maximum size 24” x 24” FLDL, minimum 10” bottom rail.
- Not allowed in doors with lite openings or Fire Exit Hardware.

Metal Edges
- Flush or raised on stile. May be mortised into the door face.
- Double egress without metal edge:
  - Requires intumescent edge strip and may require auxiliary fire latches.

Astragals (Listed and labeled for rated opening and door type)
- Optional if ‘Category A’ intumescent edge is used.
- Minimum 20 gauge steel. May be veneer wrapped.
- May use flat overlapping wood or metal astragals such as Pemko 357.
- Pairs without astragal:
  - Requires intumescent edge strip and may require auxiliary fire latches.
Viewers (Listed and labeled for rated opening and door type)
- Maximum size of 1” diameter.
- Viewers located a minimum 12” away from edges of doors and other hardware.
- Must be located in a rail, Mullion, raised or flat panel or anywhere on a flush slab.

Glass Lites (Listed and labeled for rated opening and door type)
- Glazing material shall be listed and labeled for rated opening, lite kit and door type
- Glazing installed in accordance with NFPA 80, and the listed lite kit frame installation instructions.
- Grill work - Maximum 5/8” X 5/8” wood muntin bars installed with double-sided tape.
- Lite minimum margins:
  - 4-7/8 between lite and stile / top rail.
  - 2-15/16 between lock and lite cutout.
  - 3” between multiple lites.
- Lite in raised panels:
  - Rim-banded only, Minimum 5” between edge of panel face and edge of lite cutout.
- Lites with temperature rise:
  - Maximum visible glass 100 sq. in. Maximum 10” x 10” with veneer wrapped Firestop/Marinite bead or metal vision panel.
- Lites without temperature rise:
  - Lite in raised panel:
    - Maximum visible glass area 1296 sq. in. (combined).
    - Maximum 30” x 54” with 9/16” x 9/16” veneer wrapped Firestop/Marinite bead or metal vision panel listed for use in composite core doors.
  - Full lite:
    - Maximum visible glass area 1296 sq. in. (combined).
    - Maximum 30” x 54” with 15/16” x 5/8” veneer wrapped Firestop bead or metal vision panel listed for use in composite core doors.

Door Bottoms Seals (Listed and labeled for rated opening and door type)
- Surface mounted and mortised automatic door bottom.

Electric Raceway
- Maximum 3/8” diameter. Raceway may be machined along edge of rail, around lite or panel opening or drilled through cross rail.

Electric Strikes / Locks, Magnetic Switches and Electrical Power Transfers (EPT) (Listed and Labeled for rated opening and door type)
- UL listed and approved for use in wood doors.
- Surface mounted and mortised:
  - Electric latch sets.
  - Power transfers.
  - Magnetic switches.
  - Electric strike (single doors only, not allowed in pairs).
  - Shear locks (surface mounted only).

Surface Mounted and Flush Bolts (Listed and labeled for rated opening and door type)
- Surface mounted and mortised manual bolts.
- Surface mounted and mortised automatic bolts.
- May be top bolt only with use of auxiliary fire latches.
Applied Molding / Grooves
- Maximum 6” wide x 1-1/2” thick, applied to stiles, rails, Mullions or panel.
- Grooves in flat panel face: Minimum 1-1/8” panel thickness after grooving.

Rabbeted Door / Transom
- Same construction as doors, installed with spring bolts.
- Requires installation of HSS2000 intumescent (2 strips) at the top of door.

Notes:
- Refer to QAI evaluation report F443-1 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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