FIRE DOOR FRAME LISTING PROGRAM

<u>Class:</u> <u>Fire Door Frames</u>

Customer: BASF SE

Location: Frankenthal, Germany

Listing No. F411-2 Effective Date: June 5, 2014 Last Revised: June 5, 2014

Expires: N/A

Product: 90 min Rated Fire Door Frames

Standard(s): CAN/ULC-S104 (2010) Standard Method for Fire Tests of Door Assemblies

UL10 (b) (2008) Fire Tests of Doors Assemblies
UL10 (c) (2009) Fire Tests of Doors Assemblies

NFPA-252 (2012) Standard Methods of Fire Tests of Door Assemblies

UBC-7-2 (1994) Uniform Building Code UBC-7-2 (1997) Uniform Building Code

ASTM E2074 (2000) Standard Test Method for Fire Tests of Door

Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies

Label: MARKINGS:

Once the frame machining has been completed a permanent QAI label shall be applied within the top 1/3 of the frame on the hinge side.

Wood Frame: The marking label shall be applied with fasteners

(minimum 5/8" (16mm) screw type nails or minimum 18 gauge staples with 1/4"(6.4 mm) crown and 5/8"(16mm) in length). Two fasteners

are required, one at each end of the label.

Steel Frame: The marking label shall be applied with 1/8"

(3.2mm) diameter rivets, tack welds or adhesive.

Exceptions:

1. If a continuous hinges is used, the QAI label shall be attached to the header

Each product is marked on door frame and packaging:

The certification label shall contain at a minimum:

- QAI logo with "c" and " us" indicatorⁱ
- LISTED FIRE FRAME
- Manufacturer/Machiners Information
 - o Name
 - Manufacturing Addressⁱⁱ
- Product Designation including Name/Modelⁱⁱⁱ

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- Fire Protection Rating
- Serial Number^{iv}
- The words "DO NOT REMOVE OR COVER THIS LABEL"
- The words "SEE INSTALLATION INSTRUCTIONS"

Other requirements:^v

Positive Pressure

- If the door slab meets the positive pressure requirement, the following is required:
 - The words:
 - "MEETS UL 10C"
 - "POSITIVE PRESSURE"^{vi} [Optional]

Smoke and Draft Control

- Frame must meet the positive pressure requirements
 - A Listed gasket to UL 1784 must be installed as per the listing
- Installation of smoke doors shall be in accordance with NFPA 105
- o Labels shall have the following:
 - S Mark
 - The words
 - "SMOKE AND DRAFT CONTROL RATING REQUIRE A LISTED GASKET"
 - "SMOKE LEAKAGE < 3 cfm/ft² per UL 1784" [Optional]

Models: **SWING-TYPE FIRE DOOR FRAMES:**

General Information:

These door frames are categorized as Category "C" door frames. These door frames have been evaluated with a sealing system (concealed or visible) into the edge of the slab by the licensed manufacturer or machining distributor. Category "C" - Proprietary Frame - Wood door frame for installation in 20 minute locations in steel/wood stud, drywall or masonry openings. Category "G" Edge Sealing System is required for Category 'B' door slabs in a positive pressure application.

All door frames listed below have been evaluated and tested to comply with the following standards CAN/ULC S104, UL 10(c), UBC 7-2 (1997) Part 1, NFPA 252 and ASTM E2074, "Standard Method of Fire Tests of Door Assemblies" (Positive Pressure) and CAN/ULC S104, UL 10(b), UBC 7-2 (1994), and NFPA 252, "Standard Method of Fire Tests of Door Assemblies" (Neutral Pressure), including hose stream.

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Frames labeled for positive pressure applications must include installation instructions to be furnished by the door labeler. Unless otherwise noted in the door's installation instructions, all intumescent materials and smoke/draft control gasketing used in the assembly are to be installed per their respective manufacturers' instructions.

90-Minute Fire Door Frames:

• Category "C" Frame

Materials:

Medium Density Fiberboard (MDF)

• Meeting ANSI A208.2

Proprietary BASF Laminated Core: (QAI Listing # F411-3)

Palusol SW 60-1 Core (0.6250" Thickness)

- Composite continuous core type
- Integrated edge seal

Maximum Sizes:

Single Swing 3'6" wide by 9'0" high Pairs 7'0" wide by 9'0" high

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")

Note: Refer to QAI evaluation report F411-2 and the applicable test reports for

test assembly configurations used for fire endurance testing.

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.

The materials, products or systems listed herein have been qualified to bear the QAI Listing Mark under the conditions stated with each Listing. Only those products bearing the QAI Listing Mark are considered to be listed by QAI.

No warrantee is expressed or implied, and no guarantee is provided that any jurisdictional authority will accept the Listing found herein. The appropriate authorities should be contacted regarding the acceptability of any given Listing.

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Questions regarding this listing may be directed to info@qai.org. Please include the listing number in the request.

FORM History

History Date	Version	Change Description	Reviewed By	Approved By
04/17/2014	3.0	Added disclaimer to	J. Johnson	K. Adamson
		form.		

[&]quot;c" indicator for Canada and "us" indicator for United States.

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ii If multiple plants, then location or location code shall be noted on the label

The product designation must be sufficient to identify the product's manufacturing listing report

For open stock labels, the serial number is unique and therefore also satisfies the requirements for a control number or listee's name

Depending on local code requirements or test results, some additional labeling information will be required.

vi IBC permits UL 10C or NFPA 252. If NFPA 252 only is referenced, then the statement "Positive Pressure" is required.