

FIRE DOORS LISTING PROGRAM

Customer: Karona Doors Inc.
 Class: Fire Door Frames
 Location: Caledonia, Michigan
 Website: www.karonadoor.com

Listing No. F441-2
 Project No. F441-2 Edition 1

Effective Date: March 13, 2017
 Last Revised Date: March 13, 2017

Standards: CAN/ULC-S104 UL 10(b) UL 10(c) NFPA 252	<i>Standard Method for Fire Tests of Door Assemblies. Fire Tests of Doors Assemblies. Fire Tests of Doors Assemblies. Standard Methods of Fire Tests of Door Assemblies.</i>
---	--

Product: 90 min Rated Fire Door Frames

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

Models: **90-MINUTE FIRE DOOR FRAMES:**

MAXIMUM FRAME SIZES:

Swing Type:	Maximum Dimensions	
	Width:	Height:
Single Swing	3'6" (1067 mm)	9'0" (2743 mm)
Pairs	7'0" (2134 mm)	9'0" (2743 mm)
Double Egress	Not Permitted	

LIMITATIONS:

Minimum Frame Leg Width:	4-3/4"
Maximum Frame Leg Width:	Equivalent to wall thickness
Minimum Frame Leg Thickness:	5/8" (-1/16")
Maximum Frame Leg Thickness:	1" (-1/16") [with MDF frame backing] 1-1/2" (-1/16") [with BASF SW20-1 frame backing]
Minimum Rabbet for Door:	1-3/4" (-1/16")
Minimum Stop Height:	1/2"
Minimum Stop Width:	1-1/4" (-1/16")

Hardwood Facings: Maximum 1/4" x 1" Hardwood Facing inlaid into the face of the frame leg

Electric Raceway: Max. 1/4" diameter hole through the frame leg at 40" from the floor and below.

Mortised Door Closer: Not Allowed

Installation: Fastened through the frame legs with finishing nails. Fasten through the frame at 2 fastener locations on the hinges with fastener long enough to penetrate at least ¾" into wall framing.

Notes: *Refer to QAI evaluation report F441-2 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.

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. Visit the QAI Online Listing Directory located at www.qai.org for the most up to date version of this Listing and to validate that this QAI Listing is active. Questions regarding this listing may be directed to info@qai.org. Please include the listing number in the request.
