



FIRE DOOR LISTING PROGRAM

Customer: Karona Door, Inc.
 Class: Fire Doors
 Location: Caledonia, Michigan
 Website: <http://www.karonadoor.com/>

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

Effective Date: May 9, 2017
 Last Revised Date: May 9, 2017
 Expires: N/A

Standards: UL 10(c) *Fire Tests of Doors Assemblies.*
 NFPA 252 *Standard Methods of Fire Tests of Door Assemblies.*

Product: 20 min Rated Fire Doors

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

Models: **20-MINUTE POSITIVE PRESSURE FIRE DOORS:**

Minimum 1-3/4" Thickness

Swing Type:	Maximum Dimensions		Panel Type:	Latching:
	Width:	Length:		
Single Swing	3'6" (1067 mm)	8'0" (2438 mm)	Flush or Raised	Single Point (Mortised or Cylindrical)
Pairs	7'0" (2134 mm)	8'0" (2438 mm)	Flush or Raised	3 or 4 point (Active: Mortised or Cylindrical) (Inactive: Mortised or Surface Mounted Fire Exit Devices)

All 20 minute Positive Pressure assemblies evaluated without hose stream.

Limitations: (Review Machining Report for further detail)

- Cylindrical Latches (Listed and Labelled)
 - Maximum 2-3/4" backset
 - Maximum 2-1/8" bore size
- Mortise Lockset (Listed and Labelled)
 - Max. mortise pocket 4-3/8" deep x 6-3/8" high x 1-1/8" thick
- Deadbolt (Listed and Labelled)
 - Maximum 2-3/4" backset
 - Maximum 2-1/8" bore size
 - Located a minimum of 6" centerline of latchset to centerline of deadlock
- Hinges (Listed and Labelled)
 - Spring hinges, minimum of two per door leaf is required
 - Continuous hinges
- Viewers (Listed and Labelled)
 - Maximum 3/4" diameter opening
- Fire Exit Devices (Listed and Labelled)
 - Surface Mounted Vertical Rod, Rim Exit Device, Mortise Exit Device
 - Devices installed with throughbolts
- Flushbolts (Listed and Labelled)
 - Surface Mounted Manual and Mortised Automatic
- Door Closer (Listed and Labelled)
 - Required on all fire doors
 - Surface Mounted Closers installed with throughbolts, OR
 - Spring hinges, minimum of two per door leaf is required
- Light Kit (Listed and Labelled)
 - Any listed glazing including wired glass, Firelite, and Firelite Plus
 - Listed Steel Lite Kit – max. 987 sq. in. (max dimension of 39")
- Protection Plates (Listed and Labelled)
 - Plates of brass, bronze, steel, aluminum, polycarbonate, or decorative laminate
 - Top of the plate shall be a maximum of 16" above the bottom of the door on one or both sides of the door
- Automatic Door Bottom (Listed and Labelled)
 - Surface mounted only

Notes: *Refer to QAI evaluation report F441-1 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.



LABORATORIES

CERTIFICATION TESTING INSPECTION

VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
WASHINGTON, DC: 540.636.9445 ph. | 540.636.9414 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON: 416.550.9280
SEATTLE, WA: 425.512.8419
WEBSITE: WWW.QAI.ORG

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