



Fusion 20 Minutes

Fire-Rated Fusion Door 20 Minute (Positive Pressure) Category A & B Machining Specifications As of November 2006

Hardware Preparation:	All hardware to be prepared for must be labeled and listed
Hinges:	Per NFPA 80, Table 2-8.1.1, continuous hinges, spring hinges
Latch Sets:	Positive latching is required on all fire doors. Roller latches are not allowed.
Cylindrical:	Maximum 2 1/8 diameter hole with maximum 5" backset, minimum 2 3/4" backset
Mortise:	Maximum 1 1/16" wide x 4 1/2" deep x 6 1/2" high
Fire Exit Devices:	Rim, surface vertical rod, concealed vertical rod (CVR), CVR top only
Closing Devices:	Floor closers, surface mounted closers (must be mounted with through bolts). An exception to this would be when the doors have been ordered with interior blocking that would permit the closures to be attached with screws. Spring hinges (2 per leaf)
Overhead Stops:	N/A
Concealed Closer Arms:	N/A
Louvers:	N/A
Dust Boxes for Strike:	Allowed (must be steel)
Dead Bolts:	Mortised minimum 5" from latch cutout, cylindrical minimum 5" CL to CL
Interconnected Dead Bolts:	Allowed
Flush Bolts:	Mortised automatic, mortised semi-automatic, surface mounted, extension to 24"
Viewers:	Maximum 1" diameter
Metal Edges & Astragals:	N/A *Metal edges not allowed with intumescent.* Supplied with all CVR construction: when metal edge is used, category A is satisfied.
Protection Plates:	Allowed up to 48" from bottom of door
Automatic Door Bottoms:	Surface, semi-mortised and fully mortised allowed: maximum cutout is 1" x 1 3/4"
Von Duprin EPT Devise:	N/A
Raceways:	Maximum 3/8" x 3/8" channel, minimum 1 1/8" from molding cutout, one or both
Plant-Ons:	Faces, maximum width = 2 3/8"; maximum thickness 3/4", not closer than 3 1/2" from edge or hardware cutout, not more than 20% of door 1296 sq. in. glass
Vision Panels:	Maximum width 36", maximum length 54"; minimum of 5 3/8" from edge of molding, door or hardware cutout
Dutch Doors:	N/A
Door & Transom:	Must be same construction as door. Transom may not be rabbeted. Install with a metal edge and astragal or with a transom bar between the door and transom. Spring bolts must be applied as follows: 2" from each corner up to 18" tall require 2 per side; 18"-36" tall require 3 per side; 36"-40" require 4 per side.
Installation Instructions:	Installation instructions must be supplied with all orders that are machined. The instruction sheet must be <u>securely attached to each pallet of doors.</u>
Labeling:	Warnock Hersey "ONLY" may be used. The labels must be applied 60" from the bottom of the door on the hinge side. The only exception is when a "continuous hinge" is used; then a label shall be applied to the top rail.
Secondary Labels:	These are to be overlapped with the main label to indicate the following: fire exit hardware, surface mounted hardware, fire retardant edges, listed side panel, "S" label for positive pressure. (Continual improvements for fire testing)

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Maximum Sizes:	All doors shall have a minimum thickness of 1 3/4" +/- 1/16"
Single Swing:	4/0 x 9/0
Standard Pair:	8/0 x 9/0; 2, 3 and 4 point latch
Double Egress Pair:	8/0 x 9/0 (composition stiles required)
Standard CVR Pair:	8/0 x 9/0 (5" composition stile with 5" metal channel)
Double Egress CVR Pair:	8/0 x 9/0 (5" composition stile with 5" metal channel)
Door & Transom Single Swing:	4/0 x 9/0 maximum transom size of 4/0 x 3/4 transom bar between door and transom
Door & Transom Pair:	N/A
Dutch Door Single & Pair:	N/A

Note: Hardware machining must be done by the factory or authorized dealer/distributor in order for the door to receive an attached metal label. See Prefit and Machining section.