

Stile and Rail Specifications

Neutral Pressure Specifications

	20 Minute	45 Minute	60 Minute	90 Minute
Maximum width (single opening)	4'0"	3'6"	3'6"	3'6"
Maximum width (paired opening)	8'0"	7'0"	7'0"	7'0"
Maximum height	9'0"	9'0"	9'0"	9'0"
Stile and rail thickness	1-3/4"	1-3/4"	1-3/4"	1-3/4" or 2-1/4"
Minimum raised panel thickness	1-1/8"	1-1/8"	1-1/8"	1-5/8" @ 2-1/4" or 1-1/8" @ 1-3/4" thick door
Minimum flat panel thickness	5/8"	1-1/8"	1-1/8"	1-1/8" @ 2-1/4" or 5/8" @ 1-3/4" thick door
Maximum lite opening (glazed)	2695 sq. in. Maximum tested by Glass Mfg.			
Temperature rise in 30 minutes	250° F	250° F	250° F	250° F
Minimum latch throw (single opening)	1/2"	1/2"	1/2"	1/2"
Minimum latch throw (paired opening)	3/4"	3/4"	3/4"	3/4"

All Ratings	
Minimum stile and top rails	5" face (before prefit)
Minimum cross rails and mullions	3" face
Minimum bottom rails	10" face (before prefit) non rated 5" face (before prefit) 20 minute 9" face (before prefit) 45/60/90 minute
Minimum distance between panels, lites, louvers	3"
Maximum louver area (auto release)	24" x 24" (not allowed on 20 minute)
Maximum transom size	36" x 36" non rated 48" x 36" 20 minute 42" x 36" 45/60/90/minute
Fixed sidelites or panels	Same as swinging doors
Concealed vertical rods (6" stiles)	Yes
Raceways	Yes
Species available	Any
General: Glazing for lites, in all ratings, as permitted by NFPA 80. All units tested per ANSI/UL 10B (NFPA 252, ASTM E-152, CAN4-104)	

Positive Pressure Specifications

	20 Minute	45 Minute	60 Minute	90 Minute
	Cat, A & B	Cat, A & B	Cat, A & B	Cat, A & B
Maximum width (single opening)	4'0"	3'6"	3'6"	3'6"
Maximum width (paired opening)	8'0"	7'0"	7'0"	7'0"
Maximum height	9'0"	8'0"	8'0"	8'0"
Stile and rail thickness	1-3/4"	1-3/4"	1-3/4"	1-3/4" or 2-1/4"
Minimum raised panel thickness	1-1/8"	1-1/8"	1-1/8"	1-5/8" @ 2-1/4" or 1-1/8" @ 1-3/4" Thick Door
Minimum flat panel thickness	5/8"	1-1/8"	1-1/8"	1-1/8" @ 2-1/4" or 5/8" @ 1-3/4" Thick Door
Maximum lite opening (glazed)	2695 sq. in. Maximum Tested by Glass Mfg.			
Temperature rise in 30 minutes	250° F	250° F	250° F	250° F
Minimum latch throw (single opening)	1/2"	1/2"	1/2"	1/2"
Minimum latch throw (paired opening)	3/4"	3/4"	3/4"	3/4"

Positive Pressure Specifications

	All Ratings
Minimum stile and top rails	6" face (before prefit) non rated 5" face (before prefit) 20 minute 5-1/2" face (before prefit) 45/60/90 minute
Minimum cross rails and mullions	3" face
Minimum bottom rails	10" face (before prefit) non rated 5" face (before prefit) 20 minute 9" face (before prefit) 45/60/90 minute
Minimum distance between panels, lites, louvers	3"
Maximum louver area (auto release)	24" x 24" (not allowed on 20 minute)
Maximum transom size	36" x 36"
Fixed sidelites or panels	Same as swinging doors
Raceways	Yes
Species available	Any
Panic load tested per UL 305, permitting the use of fire exit hardware	

Typical Elevations

Below is a sampling of stile and rail door elevations. An infinite number of custom designs are available.

