

# Minimum Fire Protection Ratings for Opening Protectives in Fire Resistance–Rated Assemblies and Fire Rated Glazing Markings

(As Approved by the Technical Committee for the 2012 Edition of the Life Safety Code, NFPA 101, Table 8.3.4.2)



Component	Walls and partitions (hr)	Fire Door Assemblies (hr)	Door Vision Panel Maximum Size	Fire Rated Glazing Marking Door Vision Panel	Minimum Side Light/Transom Assembly Rating (hr)		Fire Rated Glazing Marking Side Light/Transom Panel		Fire Window Assemblies <sup>c,e</sup>	
					Fire protection	Fire resistance	Fire protection	Fire resistance	(hr)	Fire Rated Glazing Marking Window
Elevator hoistways	2	1-1/2	155 sq. in. <sup>f</sup>	D-H-90 or D-H-W-90	NP	2	NP	D-H-W-120	NP	W-120
	1	1	155 sq. in. <sup>f</sup>	D-H-60 or D-H-W-60	NP	1	NP	D-H-W-60	NP	W-60
	1/2	1/3	85 sq. in.	D-20 or D-W-20	1/3	1/3	D-H-20	D-W-20	NP	W-30
Elevator Lobby (per 7.2.13.4)	1	1	100 sq. in. <sup>c</sup>	≤100 sq.in., D-H-T-60 or D-H-W-60	NP	1	NP	D-H-W-60	NP	W-60
				>100 sq.in., D-H-W-60						
Vertical shafts (including stairways, exits and refuse chutes)	2	1-1/2	Maximum size tested	D-H-90 or D-H-W-90	NP	2	NP	D-H-W-120	NP	W-120
	1	1	Maximum size tested	D-H-60 or D-H-W-60	NP	1	NP	D-H-W-60	NP	W-60
Replacement Panels in Existing Vertical Shafts	1/2	1/3	Maximum size tested	D-20 or D-W-20	1/3	1/3	D-H-20	D-W-20	NP	W-30
Fire barriers	3	3	100 sq. in. <sup>c</sup>	≤100 sq.in., D-H-180 or D-H-W-180	NP	3	NP	D-H-W-180	NP	W-180
				>100 sq.in., D-H-W-180						
	2	1-1/2	Maximum size tested	D-H-90 or D-H-W-90	NP	2	NP	D-H-W-120	NP	W-120
	1	3/4	Maximum size tested	D-H-45 or D-H-W-45	3/4 <sup>d</sup>	3/4 <sup>d</sup>	D-H-45	D-H-W-45	3/4	
	1/2	1/3	Maximum size tested	D-H-45 or D-H-W-45	1/3	1/3	D-H-20	D-W-20	1/3	

Component	Walls and partitions (hr)	Fire Door Assemblies (hr)	Door Vision Panel Maximum Size	Fire Rated Glazing Marking Door Vision Panel	Minimum Side Light/Transom Assembly Rating (hr)		Fire Rated Glazing Marking Side Light/Transom Panel		Fire Window Assemblies <sup>e</sup>	
					Fire protection	Fire resistance	Fire protection	Fire resistance	(hr)	Fire Rated Glazing Marking Window
Horizontal exits	2	1-1/2	Maximum size tested	D-20 or D-W-20	NP	2	NP	D-H-W-120	NP	W-120
Horizontal exits served by bridges between buildings	2	3/4	Maximum size tested	D-H-45 or D-H-W-45	3/4 <sup>d</sup>	3/4 <sup>d</sup>	D-H-45	D-H-W-45	3/4	OH-45 or W-120
Exit access corridors <sup>a</sup>	1	1/3	Maximum size tested	D-20 or D-W-20	3/4	3/4	D- H-45	D-H-W-20	3/4	OH-45 or W-60
	1/2	1/3	Maximum size tested	D-20 or D-W-20	1/3	1/3	D- H-20	D-H-W-20	1/3	OH-20 or W-30
Smoke barriers <sup>a</sup>	1	1/3	Maximum size tested	D-20 or D-W-20	3/4	3/4	D- H-45	D-H-W-20	3/4	OH-45 or W-60
Smoke partitions <sup>a,b</sup>	1/2	1/3	Maximum size tested	D-20 or D-W-20	1/3	1/3	D- H-20	D-H-W-20	1/3	OH-20 or W-30

NP: Not permitted.

- a. Fire doors are not required to have a hose stream test per NFPA 252, Standard Methods of Fire Tests of Door Assemblies; ASTM E 2074, Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies; ANSI/UL 10B, Standard for Fire Tests of Door Assemblies; or ANSI/UL 10C, Standard for Positive Pressure Fire Tests of Door Assemblies.
- b. For residential board and care, see 32.2.3.1 and 33.2.3.1.
- c. Fire resistance rated glazing tested to NFPA 251 shall be permitted in the maximum size tested, (See 8.3.3.7).
- d. Maximum area of individual exposed lights shall be 1296 in<sup>2</sup> (0.84 m<sup>2</sup>) with no dimension exceeding 54 in. (1.37 m) unless otherwise tested. [80:Table 4.4.5 Note b and 80:4.4.5.1].
- e. Fire-rated glazing in exterior windows shall be marked in accordance with Table 8.3.3.12
- f. See ASME A17.1, Safety Code for Elevators and Escalators, for additional information.
- g. Note: 1 inch = .00064516 meter

To find out more, please contact Technical Glass Products (TGP) at 800-426-0279 or visit [www.fireglass.com](http://www.fireglass.com).



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