

OPENING FIRE PROTECTION ASSEMBLIES, RATINGS AND MARKINGS

Type of Assembly	Required Wall Assembly Rating (hours)	Minimum Fire Door & Fire Shutter Assembly Rating (hours)	Door Vision Panel Size	Fire-Rated Glazing Marking Door Vision Panel ^e	Minimum Sidelight / Transom Assembly Rating (hours)		Fire-Rated Glazing Marking Sidelight / Transom Panel	
					Fire Protection	Fire Resistance	Fire Protection	Fire Resistance
Fire walls and fire barriers having a required fire-resistance rating greater than 1 hour	4	3	See note b	D-H-W-240	Not Permitted	4	Not Permitted	W-240
	3	3 ^a	See note b	D-H-W-180	Not Permitted	CONTRAFLAM 180 VDS 180	Not Permitted	W-180
	2	1½	KERALITE F or L 90 VDS HM 90 Doors (TR) KERALITE-Ultra 90 CONTRAFLAM 90 VDS 90 Doors (TR)	≤100 sq. in. = D-H-90 >100 sq. in. = D-H-W-90	Not Permitted	CONTRFLAM 120 VDS 120 VDS 120 CW	Not Permitted	W-120
	1½	1½	KERALITE F or L 90 VDS HM 90 Doors (TR) KERALITE-Ultra 90 CONTRAFLAM 90 VDS 90 Doors (TR)	≤100 sq. in. = D-H-90 >100 sq. in. = D-H-W-90	Not Permitted	CONTRFLAM 90 VDS 90/120 VDS 90/120 CW	Not Permitted	W-90
Enclosures for shafts, interior exit stairways and interior exit ramps	2	1½	KERALITE F or L 90 VDS HM 90 Doors (TR) KERALITE-Ultra CONTRAFLAM 90 VDS 90 Doors (TR)	≤100 sq. in. = D-H-90 >100 sq. in. = D-H-T-W-90	Not Permitted	CONTRFLAM 120 VDS 120 VDS 120 CW	Not Permitted	W-120
Horizontal exits in fire walls ^e	4	3	100 sq. in.	≤100 sq. in. = D-H-180 >100 sq. in. = D-H-W-240	Not Permitted	4	Not Permitted	W-240
	3	3 ^a	100 sq. in.	≤100 sq. in. = D-H-180 >100 sq. in. = D-H-W-180	Not Permitted	3	Not Permitted	W-180
Fire barriers having a required fire-resistance rating of 1 hour: Enclosures for shafts, exit access stairways, exit access ramps, interior exit stairways and interior exit ramps; and exit passageway walls	1	1	KERALITE F or L 60 (See note c) VDS LITE 60 Doors VDS HM 60 Doors (TR) KERALITE-Ultra CONTRAFLAM 60 VDS 60 Doors (TR)	≤100 sq. in. = D-H-60 >100 sq. in. = D-H-T-W-60	Not Permitted	CONTRFLAM 60 VDS 60 VDS 60 CW	Not Permitted	W-60
					Fire protection			
Other fire barriers	1	¾	KERALITE F OR L 45 (to maximum size tested) CONTRAFLAM 45 (See note b) VDS HM 45 Doors VDS LITE 45 Doors	D-H-45 D-H-OH-45	KERALITE R, F or L 45 CONTRAFLAM 45 VDS HM 45 / VDS LITE 45	D-H-45 OH-45		
Fire partitions: corridor walls	1	⅓ ^b	KERALITE F OR L PYROSWISS 20 (to maximum size tested) VDS HM 20 Doors VDS LITE 20 Doors	D-20	KERALITE R, F or L 45 CONTRAFLAM 45 VDS HM 45 / VDS LITE 45	D-H-OH-45		
	0.5	⅓ ^b			KERALITE R, F or L 20 VDS HM 20 / VDS LITE 20	D-H-OH-20		
Other fire partitions	1	¾	KERALITE F OR L 45 (to maximum size tested) CONTRAFLAM 45 VDS HM 45 Doors VDS LITE 45 Doors	D-H-45 D-H-OH-45	KERALITE R, F or L 45 CONTRAFLAM 45 VDS HM 45 / VDS LITE 45	D-H-45 OH-45		
	0.5	⅓				D-H-20		
			PYROSWISS 20 (to maximum size tested) VDS HM 20 Doors VDS LITE 20 Doors	D-H-20	KERALITE R, F or L 20 VDS HM 20 / VDS LITE 20	D-H-20		
					Fire Protection	Fire Resistance	Fire Protection	Fire Resistance
Exterior walls	3	1½	KERALITE F or L 90 VDS HM 90 Doors (TR) KERALITE-Ultra 90	≤100 sq. in. = D-H-90 See note b	Not Permitted	CONTRAFLAM 180 VDS 180	Not Permitted	W-180
			CONTRAFLAM 90 VDS 90 Doors	>100 sq. in. = D-H-W-90 See note b				
	2	1½	KERALITE F or L 90 VDS HM 90 Doors (TR) KERALITE-Ultra 90	≤100 sq. in. = D-H-90	Not Permitted	CONTRAFLAM 120 VDS 120 VDS 120 CW	Not Permitted	W-120
			CONTRAFLAM 90 VDS 90 Doors	>100 sq. in. = D-H-W-90				
					Fire protection			
	1	¾	KERALITE F or L 45 (to maximum size tested) CONTRAFLAM 45 (See note b) VDS HM 45 Doors VDS LITE 45 Doors	D-H-45 D-H-W-45	KERALITE R, F or L 45 CONTRAFLAM 45 VDS HM 45 / VDS LITE 45	D-H-45 OH-45		
Smoke barriers	1	⅓	PYROSWISS 20 (to maximum size tested) VDS HM 20 Doors VDS LITE 20 Doors	D-20	KERALITE R, F or L 45 CONTRAFLAM 45 VDS HM 45 / VDS LITE 45	D-H-OH-45 OH-45		

For SI: 1 square inch = 645.2 mm.

a. Two doors, each with a fire protection rating of 1½ hours, installed on opposite sides of the same opening in a fire wall, shall be deemed equivalent in fire protection rating to one 3-hour fire door.

b. Fire-resistance-rated glazing tested to ASTM E 119 in accordance with Section 716.2 shall be permitted, in the maximum size tested.

c. Except where the building is equipped throughout with an automatic sprinkler and the fire-rated glazing meets the criteria established in Section 716.5.5.

d. Under the column heading "Fire-rated glazing marking door vision panel," W refers to the fire-resistance rating of the glazing, not the frame. See Section 716.5.8.1.2.1.

e. (TR) = Temperature rise

www.vetrotechusa.com

888-803-9533
253-333-0660

Auburn, WA 98001
2108 B Street NW, #110
Vetrotech Saint-Gobain USA



vetrotech
SAINT-GOBAIN



Photo: VDS and Contraflam
shown here at Chicago Intrinsic
Schools, Chicago, Illinois.

VETROTECH FIRE-RATED GLAZING SYSTEMS REFERENCE

IBC 2015 Table 716.5 Opening Fire Protection Assemblies, Ratings and Markings