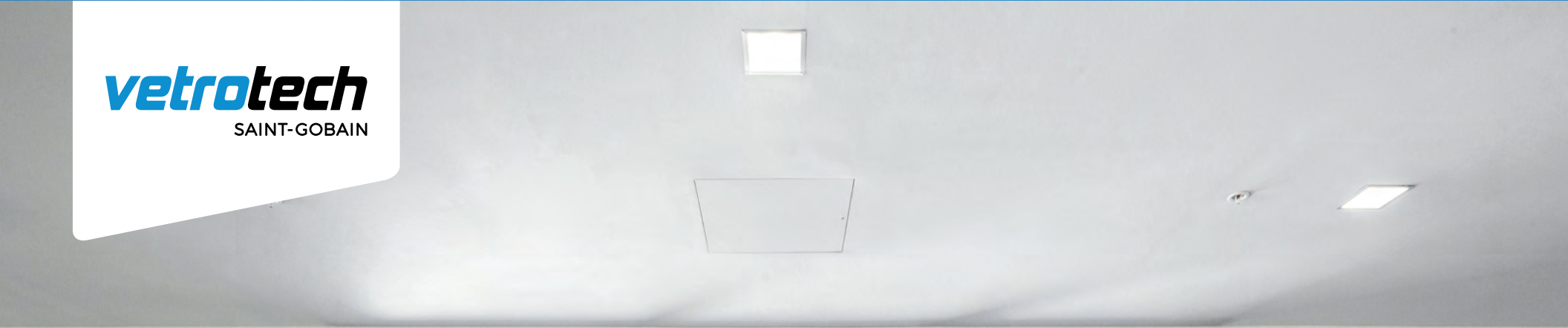
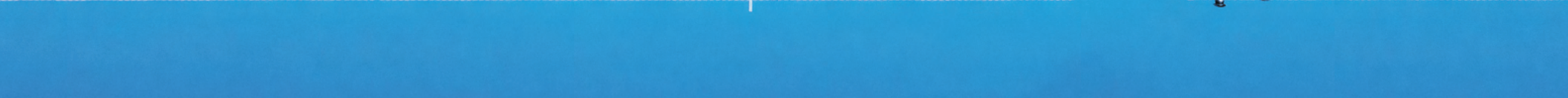




Vetrotech North America
2108 B Street NW, #110
Auburn, WA 98001
253-333-0660
888-803-9533
www.vetrotech.com

vetrotech
SAINT-GOBAIN



VETROTECH FIRE-RATED GLAZING SYSTEMS REFERENCE

Opening Fire Protection Assemblies, Ratings and Markings



Type of Assembly	IBC WALL		DOORS		WINDOWS, SIDELITES & TRANSOMS				
	Required Wall Assembly Rating (hours)	Minimum Fire Door & Fire Shutter Assembly Rating (hours)	Recommended Product for Door Vision Panel	Fire-Rated Glazing Marking for Door Vision Panel ^{c,e}	Recommended Product for Sidelight / Transom Panels		Fire-Rated Glazing Marking for Sidelight / Transom Panel		
					Fire Protection	Fire Resistance	Fire Protection	Fire Resistance	
			Frame Type		Frame Type				
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 Hours (240 min)	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	1 ½	KERALITE Filmed or Laminated 90 KERALITE Ultra 90	≤100 sq. in. = D-H-90	Not Permitted	CONTRFLAM 120 CONTRAFLAM STRUCTURE 120	Not Permitted	W-120	
			VDS HM 90 Doors	Maximum size tested >100 sq. in. = D-H-W-90		VDS 120 VDS 120 CW			
			CONTRAFLAM 90 VDS 90 Doors VDS LITE 90 Doors						
	1 ½	1 ½	KERALITE Filmed or Laminated 90 KERALITE Ultra 90	≤100 sq. in. = D-H-90	Not Permitted	CONTRFLAM 90	Not Permitted	W-90	
			VDS HM 90 Doors	Maximum size tested >100 sq. in. = D-H-W-90		VDS 120 VDS 120 CW			
			CONTRAFLAM 90 VDS 90 DOORS VDS LITE 90 DOORS						
	Enclosures for shafts, interior exit stairways and interior exit ramps	2	1 ½	KERALITE Filmed or Laminated 90 KERALITE Ultra 90	≤100 sq. in. = D-H-90	Not Permitted	CONTRFLAM 120 CONTRAFLAM STRUCTURE 120	Not Permitted	W-120
				VDS HM 90 Doors	Maximum size tested >100 sq. in. ^c = D-H-T-W-90		VDS 120 VDS 120 CW		
CONTRAFLAM 90 VDS 90 Doors VDS LITE 90 Doors									
Horizontal exits in fire walls ^d	4	3	See note b	≤100 sq. in. = D-H-180 >100 sq. in. = D-H-W-240	Not Permitted	4 Hours (240 min)	Not Permitted	W-240	
	3	3 ^a	See note b	≤100 sq. in. = D-H-180 >100 sq. in. = D-H-W-180	Not Permitted	3 Hours (180 min)	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 Filmed or Laminated 60 KERALITE Ultra 60	≤100 sq. in. = D-H-60	Not Permitted	CONTRFLAM 60 CONTRAFLAM STRUCTURE 60	Not Permitted	W-60	
			VDS HM 60 Doors	Maximum size tested >100 sq. in. ^c = D-H-T-W-60		VDS 60 VDS 60 CW			
			CONTRAFLAM 60 VDS 60 Doors VDS LITE 60 Doors						
Other fire barriers	1	¾	KERALITE Filmed or Laminated 45 CONTRAFLAM 45 PYROSWISS 45	Maximum size tested D-H-45	KERALITE Filmed or Laminated 45 CONTRAFLAM 45 PYROSWISS 45	N/A	D-H-OH-45	N/A	
			VDS HM 45 Doors VDS LITE 45 Doors		VDS HM 45 / VDS LITE 45				
Fire partitions: corridor walls	1	⅓ ^b	KERALITE Filmed or Laminated 20 PYROSWISS 20	Maximum size tested D-20	KERALITE Filmed or Laminated 45 PYROSWISS 45 CONTRAFLAM 45	N/A	D-H-OH-45 (see note b)	N/A	
			VDS HM 20 Doors VDS LITE 20 Doors		VDS HM 45 / VDS LITE 45				
	0.5	⅓ ^b	KERALITE Filmed or Laminated 20 PYROSWISS 20		KERALITE Filmed or Laminated 20	N/A	D-H-OH-20	N/A	
			VDS HM 20 Doors VDS LITE 20 Doors		VDS HM 20 / VDS LITE 20				
Other fire partitions	1	¾	KERALITE Filmed or Laminated 45 CONTRAFLAM 45 PYROSWISS 45	Maximum size tested D-H-45	KERALITE Filmed or Laminated 45 PYROSWISS 45 CONTRAFLAM 45	N/A	D-H-OH-45	N/A	
			VDS HM 45 Doors VDS LITE 45 Doors		VDS HM 45 / VDS LITE 45				
	0.5	⅓	KERALITE Filmed or Laminated 20 PYROSWISS 20	Maximum size tested D-H-20	KERALITE Filmed or Laminated 20	N/A	D-H-OH-20	N/A	
			VDS HM 20 Doors VDS LITE 20 Doors		VDS HM 20 / VDS LITE 20				
Exterior walls	3	1 ½	KERALITE Filmed or Laminated 90 KERALITE Ultra 90	≤100 sq. in. = D-H-90	Not Permitted	CONTRAFLAM 180	Not Permitted	W-180	
			VDS HM 90 Doors VDS LITE 90 Doors	Maximum size tested >100 sq. in. ^b = D-H-W-90		VDS 180			
			CONTRAFLAM 90 VDS 90 Doors VDS LITE 90 Doors						
	2	1 ½	KERALITE Filmed or Laminated 90 KERALITE Ultra 90	Maximum size tested D-H-90	CONTRAFLAM 90	CONTRAFLAM 120	D-H-OH-90	W-120	
			VDS HM 90 Doors VDS LITE 90 Doors	Maximum size tested D-H-W-90	VDS 120 CW	VDS 120 CW			
			CONTRAFLAM 90 VDS 90 Doors VDS LITE 90 Doors						
	1	¾	KERALITE Filmed or Laminated 45 CONTRAFLAM 45 PYROSWISS 45	Maximum size tested D-H-45	KERALITE Filmed or Laminated 45 CONTRAFLAM 45 PYROSWISS 45	N/A	D-H-45	N/A	
			VDS HM 45 Doors VDS LITE 45 Doors		VDS HM 45 / VDS LITE 45				
	Smoke barriers	1	⅓	PYROSWISS 20	Maximum size tested D-20	KERALITE Filmed or Laminated 45 PYROSWISS 45 CONTRAFLAM 45	N/A	D-H-OH-45	N/A
				VDS HM 20 Doors VDS LITE 20 Doors		VDS HM 45 / VDS LITE 45			

The table above references the IBC 2018 Table 716.1 for Opening Fire Protection Assemblies, Ratings and Markings and indicates where Vetrotech products are the best solution for your fire-rated project.
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 E119 in accordance with Section 716.1.2.3 shall be permitted, in the maximum size tested.

c. Under the column heading “Fire-rated glazing marking door vision panel,” W refers to the fire-resistance rating of the glazing, not the frame.

d. See Section 716.2.5.1.2.1.
e. See Section 716.1.2.2.1 and Table 716.1(1) for additional permitted markings.