

Fire Rated Door Summary of Listings

Note: These doors are tested for neutral pressure.

- * This table pertains to fire approvals. It is the users responsibility to evaluate the affect of various options on special requirements such as Radiation Shielded shielding and acoustic performance.
- * All hardware and accessories used on fire rated doors must be appropriately listed
- * Columns indicate association approval for each option. Combinations of options can affect approval status or available sizes.

UNDERWRITERS LABORATORIES (UL)		NEUTRAL PRESSURE		UNDERWRITERS LABORATORIES (UL)		NEUTRAL PRESSURE (CONT.)						
Door	Code	Maximum Size	Maximum Visible Glass Size (10, 11)	Side Edge Covering	Hinges & Pivots	Latching Devices (7)	Closers/Overhead Stops	Viewers	Fusible Link Louvers (2, 11)	Kickplates (12)	Drop Seals	Transoms (8, 14)
Single Doors	90-min (B) Mineral core	DFM-90 EFM-90	4/0 x 10/0 (1219mm x 3048mm)	Veneer banding or decorative laminate; full or partial length metal edge protectors (3)	Per NFPA 80: 4-1/2" x 0.134" (114mm x 3.4mm) butt or listed continuous hinges; doors 3/0 x 7/0 (914mm x 2134mm) or less may use 4" x 0.105" (102mm x 2.7mm) butt or spring hinges Doors 1-3/8" x 3/0 x 7/0 (914mm x 2134mm) or less may use 3-1/2" x 0.123" (89mm x 3mm) butt hinges; some pivots allowed on 20 and 45 minute doors	Cylindrical, mortised, unit & card locks, mortised exits, full surface vertical rods, rim exits, concealed vertical rods (1)	Surface mounted	One 1" (25mm), or up to two 1/2" (13mm) diameter viewers from door perimeter and each other.	Area limit is 576 sq. in. (3716 sq. cm.) max continuous length or width; 24" (609mm) 1 or 2 individual louvers	Metal, HPL, PVC or acrovyn; up to 48" (1219mm) from the bottom of the door	Any listed full or semi-mortised drop seal requiring a maximum cutout size of 1-15/16" deep and 15/16" wide or less (13)	For approved frame with a transom bar: max opening is 4/0 x 10/0 (1219mm x 3048mm), area not to exceed 40 sq. ft. (3.7 sq. m.) Without transom bar: rabbeted joint, max opening 3/6 x 9/11 1/2 (1067mm x 3048mm) (4)
	60-min (B) Mineral core	DFM-60 EFM-60										Veneer banding or decorative laminate; full or partial length metal or plastic edge protectors (3); or PVC
	45-min (C) Mineral core	DFM-45 EFM-45		See Lite Approvals		Cylindrical, mortised, unit & card locks, mortised exits, full surface vertical rods, rim exits, concealed vertical rods (1), flushbolts and extension flushbolts	Surface mounted					
	20-min Particleboard core or Staved core	DFP-20 DFS-20 ESC-20 EPC-20										Veneer banding or decorative laminate; flush or rabbeted fire retardant stiles, metal edge/astragal, or two metal edges (5)
20-min Structural Composite Lumber	DCL-20	8/0 x 8/0 (2438mm x 2438mm)	Veneer banding or decorative laminate; metal edge/astragal, two metal edges (5, 6)	Veneer banding or decorative laminate; flush or rabbeted fire retardant stiles, metal edge/astragal, or two metal edges (5)	Surface mounted	Not approved						
90-min (B) Mineral core	DFM-90 EFM-90						8/0 x 10/0 (2438mm x 3048mm)	Veneer banding or decorative laminate; metal edge/astragal, two metal edges (5, 6)	Surface mounted	Not approved		
60-min (B) Mineral core	DFM-60 EFM-60	Available as Positive Pressure only	Veneer banding or decorative laminate; metal edge/astragal (5)	Surface mounted	Not approved							
45-min (C) Mineral core	DFM-45 EFM-45					8/0 x 8/0 (2438mm x 2438mm)	See Lite Approvals	Full surface vertical rods or concealed vertical rods (1)	Surface mounted	Not approved		
20-min Particleboard core or Staved core	DFP-20 DFS-20 ESC-20 EPC-20	Veneer banding or decorative laminate; flush fire retardant stiles, metal edge/astragal, or two metal edges (5)	Full or top rod only surface vertical rods or concealed vertical rods (1)	Surface mounted or concealed overhead	Not approved							
20-min Structural Composite Lumber	DCL-20					3/0 x 7/0 (914mm x 2134mm)	Veneer banding or decorative laminate	Surface mounted	Not approved			
Other Doors	20-min, 1-3/8" (35 mm) Particleboard core	DFP-20	Single or multiple lites not to exceed 100 sq. in. (645 sq. cm.) of visible glass; max high 33" (838mm); max width 12" (305mm)	Veneer banding, decorative aminate; partial length metal edge protectors (3) or PVC	Per NFPA 80: 4-1/2" x 0.134" (114mm x 3.4mm) butt or listed continuous hinges; doors 3/0 x 7/0 (914mm x 2134mm) or less may use 4" x 0.105" (102mm x 2.7mm) butt or spring hinges Doors 1-3/8" x 3/0 x 7/0 (914mm x 2134mm) or less may use 3-1/2" x 0.123" (89mm x 3mm) butt hinges; some pivots allowed on 20 and 45 minute doors					Cylindrical locks	Surface mounted	One 1" (25mm), or up to two 1/2" (13mm) diameter viewers 5 1/2" (140mm) from door perimeter and each other.
	20-min Dutch door	DFP-20 EPC-20				Veneer banding; full or partial length metal edge protectors (3), or PVC	Top and Bottom leaf: cylindrical, mortised or card locks	Surface mounted, concealed overhead, or spring hinges				
	20-min Acoustic	DSR-41		Cylindrical, mortised or card locks					Surface mounted			
	20-min, Radiation Shielded w/ 1/8" (3.2mm) lead	Not listed with Underwriters Laboratories at this time				Not listed with Underwriters Laboratories at this time						
20-min Stile & Rail	Not listed with Underwriters Laboratories at this time			Not listed with Underwriters Laboratories at this time								

- For detailed information on concealed vertical rods see TechUpdate 162.
- Louvers not allowed in doors with lites or fire exit hardware.
- Protection channels may be mortised into the stile edge, but cannot be mortised into the face.
- Special rail construction required.
- Metal edges and astragals may be veneer wrapped.

- Metal edges only require special construction.
- If a mullion is used metal edges are not required.
- Transoms must be supplied with factory installed springbolts.
- Requires 90 minute triple ply construction.
- Metal vision panels may be wood veneer wrapped.

- Openings must be cut by factory or licensed machiner, minimum distance from cutout to any edge or adjacent openings is 5-1/2" (140mm).
- Acrovyn Kickplates and PVC by Inpro can be the full height of the door for all ratings 20 thru 90-minute.
- 3-3/4" AT bottom rail required for mineral core and 3-7/8" LSL bottom rail required for 20-minute doors.
- Transoms may not be available on all door types.

HPL = High Pressure Laminate
Fire doors to be installed per NFPA 80. Maximum allowable undercut is 3/4"