

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
1202 Mail Service Center, Raleigh, NC 27699-1202
919-661-5880**

Horizontal Sliding Doors

Code: 2012 North Carolina Building Code
Sections: 1008.1.4.3, and 715.4.2

Date: September 1, 2011

Question:

Are horizontal sliding doors installed per Section 1008.1.4.3:

- (1) permitted for exit enclosures?
- (2) acceptable in the required means of egress?
- (3) usable by the visually impaired?

Answer:

(1) Yes. Section 1022.3 limits openings in exit enclosures to those necessary for means of egress. The opening size, therefore, is limited to what is required for egress only. Horizontal sliding doors are, typically, significantly larger than the required exit width. If the egress opening is required to be 3' wide then the opening cannot be made wider for other purposes such as but not limited to aesthetics or convenience.

(2) Yes. Horizontal sliding doors are recognized in Section 1008.1.4 as one of the "special" means of egress doors. Custom features are available for alternate approval and should be considered on a case-by-case basis dependant upon conditions such as egress pattern, egress width, fire protection systems, furnishings, occupancy, and occupant load.

(3) Yes. Custom features are available for alternate approval and should be considered on a case-by-case basis to accommodate the visually impaired. Additional fire exit hardware is recommended (8-to 10-foot intervals) for large openings. Voice notification (multi-language) is available to direct the occupant to the fire exit hardware.

Question:

Are horizontal sliding doors acceptable for use in fire protective openings per Section 715?

Answer:

Yes. ICC Evaluation Services Report 1394, dated August 1, 2006 confirms fire-resistance-rating for openings 12 feet wide by 10 feet high. An evaluation report by Enterprise Engineering Laboratory, Inc. dated July 8, 1993 that used UL 10B testing requirements indicates that a rating can be accomplished for an opening 25'-6" wide by 7'-10" high. Because these openings are often not recognized by the building users as fire doors, a method for ensuring the path of the door is kept clear of obstructions is required.

Keywords:

Fire door, fire-resistance-rated, fire, rated, exit, exiting, handicapped, handicap, accessible, curtain, accordion door, accordion partition, Won-Door