

Model Door Numbering System

Purpose of Numbering School Doors

When emergencies occur, the rapid response of emergency workers to the incident can be critical. Many schools have dozens of doors providing entrance and egress to their buildings. During an emergency it may be necessary for responders to gain access through the door closest to the emergency scene. Numbering external doors can be extremely valuable to emergency responders and will also assist your students and staff in acclimating themselves to door locations in case of an emergency.

Numbering Sequence

All exterior doors that allow access to the interior of the school should be numbered in a sequential order starting with the main entrance (office door/public entrance).

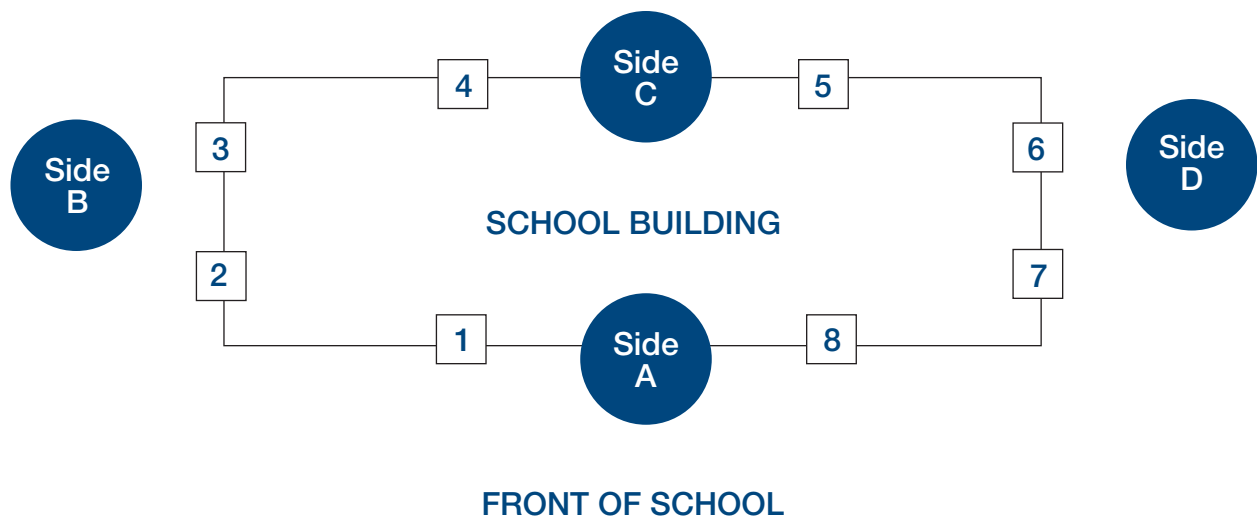
The main entrance should always be #1
Subsequent doors will be numbered in sequential order in a clockwise manner

Exterior Numbers

According to Section 505 of the International Fire Code requirements (§ 505), all numbers should be:

- Arabic numbers
- Visible from the street or closest traffic way/driveway
- Contrasting with their background
- Retro-reflective for low light or smoky conditions

NOTE: In most cases, white numbers work well on clear glass. While a bulk purchase of one color may be economical, it may be less useful on some surfaces or require a back panel.



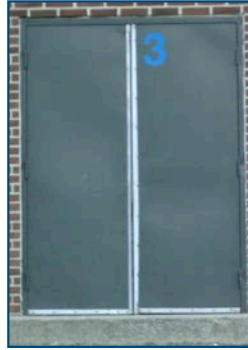
Responders typically identify the front of the school as “Side A”

Model Door Numbering System (continued)

Exterior Number Position

All numbers should be:

- Placed at the top right of the door
- Where a multiple bank of doors (3 or more) is present, it is good practice to center the number or put the same number at both ends of the bank.
- Each door may be numbered separately, as follows: 3-1, 3-2, etc.
- Some schools have chosen to mark each door with an individual number when they face different directions (north and east).



Exterior door with number on door



Exterior door with number on building

Exterior Number Sizing

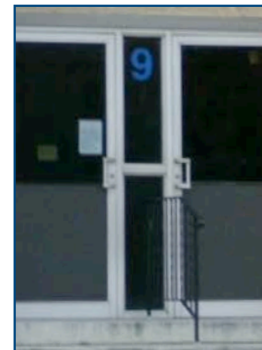
According to the International Fire Code § 505 requirements, all numbers should be the correct size in correlation with how far from the street or fire department access (Ord. 2010-17 § 1 (part), 2010; Ord. 2007-15 § 1, 2007):

- Structures up to thirty-six (36) feet away: numbers are a minimum of four (4) inches high and a minimum of one-half (0.5) inch stroke width
- If the structure is thirty-six (36) to fifty (50) feet away: numbers are a minimum of six (6) inches high and a minimum of one-half (0.5) inch stroke width
- When the structure is more than fifty (50) feet away: numbers are a minimum of nine (9) inches high and a minimum of one (1) inch stroke width

Some schools have chosen to use twelve (12) inch numbers for increased visibility. Obviously the larger the number, the greater the distance it will be visible by responders.



4-inch numbers



12-inch numbers

Interior Numbers

The numbers should:

- Match the number on the outside of the door
- Always be placed on the hinge side of the door near the bottom so they can be viewed in smoky conditions
- Contrast with their background
- Be retro-reflective for low light or smoky conditions

Model Door Numbering System (continued)

Non-Access Doors

Doors which do not allow access to the building should not be numbered. Examples of these may be storage rooms or trash rooms. They may be labeled “Storage Only”, “No Access”, etc.

Courtyard Doors

- Completely enclosed courtyards are numbered C-1, C-2, etc., and are numbered on both the inside and outside, in the same manner as other exterior doors.
- Generally the courtyard door closest to the main entrance is numbered C-1.

Multiple courtyards can be numbered:

- 1st courtyard: C1-1, C1-2, etc.
- 2nd courtyard: C2-1, C2-2, etc.

Letters/numbers should be:

- Contrasting with their background
- Retro-reflective for low light or smoky conditions

Roof Hatches and Roof Access Doors

Roof hatches and roof access doors should be:

- Numbered R-1, R-2, etc.
- The following size:
 - Exterior: six (6) inch minimum
 - Interior: four (4) inch on the interior as with regular doors
- Contrasting with their background
- Retro-reflective for low light or smoky conditions

Roll-Up (garage style) Doors

Numbers on roll-up doors that provide access to the interior of the school should be:

- Numbered consistent with other exterior doors
- Marked by placing the number between $\frac{1}{2}$ and $\frac{3}{4}$ (of the height of the door) off the ground
 - Example: eight (8) foot high door, number would be placed between four- (4) to six (6) feet off the ground
 - When left open during the majority of the day and access to the school is otherwise restricted by locked interior doors, marked by placing the number along the door frame near the top
- Contrasting with their background
- Retro-reflective for low light or smoky conditions

NOTE: The practice of leaving roll up doors open should be strongly discouraged through local procedures and guidelines, as it presents a potential security breach.

Mobile Classrooms

- Mobile classrooms present unique issues and should be numbered using an “M” to signify modular or mobile (M-1, M-2, etc.).
- Each mobile classroom should be numbered near each door and on the “street” side so the numbers are visible to emergency responders.

Letters/numbers should be:

- Contrasting with their background
- Retro-reflective for low light or smoky conditions

Some schools choose to use numbering as though the mobile units are another floor or wing. Example: modular units are numbered 301, 302 and 303 located next to a small two-story elementary school. However, please note that best practice would be to use an “M” in front of the number to avoid confusion by emergency responders.

Special Markings for School Safety and Emergencies

Areas of Rescue Assistance

- If local responders have designated areas of rescue assistance, they should be marked with a minimum of twenty-four (24) inch “R” on the exterior of the window closest to the fire lane or as otherwise designated by the fire official for the municipality.
- Interior areas of rescue assistance should be marked conspicuously within the building so persons needing assistance can readily identify those areas or rooms during an emergency situation.

NOTE: NFPA (National Fire Protection Association) standards require two-way communications at these areas of rescue.

Stairwells

Stairwells should be identified pursuant to local code or NFPA-Life Safety Code § 7.2.2.5.4. It is recommended that stairwells in schools are lettered A, B, C, etc. and should be:

- Contrasting with their background
- Retro-reflective for low light or smoky conditions
- When possible, color-coded to aid in law enforcement response for active criminal events

Street Address Markings

Identification of premises in the form of address numbers, building numbers or approved building identification shall be placed in a position that is plainly legible and visible from the street or road fronting the property according to § 505.



The identification should be:

- Contrasting with their background
- Arabic numerals or alphabet letters
- A minimum of four (4) inches (102mm) high and a minimum of one-half (0.5) inch (12.7mm) stroke width

Unique Situations

As with other situations school design and configurations present unique challenges to a uniform door numbering system. Deviations from this guideline may be made upon the mutual agreement of the school or school district and the primary fire department and/or municipality having jurisdiction.

Nothing in this document is intended to require schools to re-number doors which utilize a pre-existing numbering system already agreed upon by responders and school officials.

For more information:

Center for Safe Schools
(717) 763-1661 ext. 164
SafeSchools@csc.csiu.org