

COMMUNITY FIRE PROTECTION DISTRICT

Fire Marshal Office

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RESIDENTIAL STAIR, GUARD, AND HANDRAIL REQUIREMENTS

STAIRS

The minimum width of stairs shall be 36 inches. Handrails may extend not more than 4 ½ inches into the required width.

The minimum headroom at all parts of the stairway shall not be less than 6 feet 8 inches measured vertically from the tread nosing and landing.

The maximum riser height shall be 7 ¾ inches. Risers may be solid or open. If open, the opening between treads shall not allow the passage of a 4 inch diameter sphere. The opening between treads is not restricted if the total rise of the stair is 30 inches or less.

The minimum tread depth shall be 10 inches. A ¾ to 1 ¼ inch nosing shall be provided if the tread depth is less than 11 inches.

The tolerance between the largest and smallest riser, between the largest and smallest tread, or between the largest and smallest nosing shall not exceed 3/8 inch in any flight of stairs.

There shall be a floor or landing at the top and bottom of each stairway. A floor or landing is not required at the top of an interior flight of stairs, provided a door does not swing over the stairs. A flight of stairs shall not have a vertical rise greater than 12 feet between floor levels or landings. The width of each landing shall not be less than the stairway served. Every landing shall have a minimum dimension of 36 inches measured in the direction of travel.

GUARDS

Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads for the entire stairs.

Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches or more in diameter. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 6 inches cannot pass through. Openings for required guards on the sides of stair treads shall not allow a sphere 4 3/8 inches to pass through.

HANDRAILS

Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.

Handrail height, measured vertically from the tread nosing, or finish shall be not less than 34 inches and not more than 38 inches.

Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1 ½ inch between the wall and the handrails.

Handrails with a circular cross section shall have an outside diameter of at least 1 ¼ inches and not greater than 2 inches. If the handrail is not circular it shall have a perimeter dimension of at least 4 inches and not greater than 6 ¼ inches with a maximum cross section of dimension of 2 ¼ inches. Handrails that provide an equivalent graspability shall be permitted.



