Handout R.07

Residential Stairway Construction

Typical Stairway Details for Conventional Frame Construction

**Width.** Stairways shall not be less than 36 inches. Handrails shall not project more than 4.5 inches on either side of the stairway.

Exception: See spiral stairways.

**Treads and Risers.** The maximum riser height shall be 7 ¼ inches. The minimum tread depth shall be 10 inches. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch. Open risers are permitted provided that the opening between trends does not permit the passage of a 4 inch diameter sphere. The Building Official may accept alternatives to these measurements, on a case by case basis. An Alternate Means and Methods form is available for this purpose.

**Headroom.** The minimum headroom in all parts of the stairway shall not be less than 6 feet, 8 inches measured vertically from the sloped plane adjoining the tread nosing or from the floor surface of the landing or platform.

Exception: See spiral stairs.

**Winders.** Winder tread width at a point not more than 12 inches from the side where the treads are narrower shall not be less than 10 inches and minimum width of any tread shall not be less than 6 inches.

**Spiral Stairs.** Spiral stairways are permitted, provided the minimum width shall be 26 inches with each tread having a 7 ½ inch minimum tread width at 12 inches from the narrow edge. All treads shall be identical, and the rise shall be no more than 9 ½ inches. A minimum headroom of 6 feet, 6 inches shall be provided.

**Circular Stairways.** Circular stairways shall have a tread depth at a point not more than 12 inches from the side where the treads are narrower of not less than 10 inches and minimum depth of any tread shall not be less than 6 inches. Tread depth at walk line shall measured a consistent 12 inch distance from the side of the stairway, shall be uniform.

**Under Stair Protection.** Enclosed accessible space under stairs shall have walls, under stair surface and any soffits protected on the enclosed side with ½ inch type x gypsum board.

**Vertical Rise.** A flight of stairs shall not have a vertical rise larger than 12 feet between floor levels or landings.

Sharen A. Walsh, Building Official
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