Knox County Fire Prevention Bureau

Egress Stairs-Constructed in Accordance with the Life Safety Code Section 7.2.2

Stair Dimensional Criteria

11 inches minimum
(Excluding nosing)

4 inches min.
7 inches max.

Dimensional Uniformity
There shall be no variation more than 3/16" in depth of adjacent treads or in height of adjacent risers, and the tolerance between the largest and smallest riser or between the largest and smallest tread shall not be more than 3/8" in any flight.

Headroom
Headroom on stairs shall be a minimum of 6’8”, and shall be measured vertically above a plane parallel to and tangent with the most forward projection of the stair tread.

Handrail

2.25 inches.

7.2.2.4.1 New stairs and ramps require handrails on both sides and within 30” of all portions of the required egress width of stairs. (See Exceptions)

Handrails on stairs shall be at least 34 inches and not more than 38 inches above the surface of the tread, measured vertically to the top of the rail from the leading edge of the tread. (See Exceptions)

New handrails shall provide a clearance of at least 2.25 inches between the handrail and the wall to which they are attached.

Handrails shall have a circular cross section with an outside diameter of at least 1.25 inches and not more than 2 inches. New handrails shall be continuously graspable along the entire length. (See Exceptions)
7.1.10.1 Means of egress shall be continuously maintained free of all obstructions or impediments to full instant use in the case of an emergency. This would include the impediment due to the accumulation of snow, ice, and water.

7.2.2.4.5 Means of egress that are more than 30 inches above the floor or grade below shall be provided with guards to prevent falls over the open side.

The height of guards shall be measured vertically to the top of the guard from the surface adjacent thereto.

Guards shall be at least 42” height. (See Exceptions)

Open guards shall have intermediate rails or an ornamental pattern such that a sphere 4” in diameter shall not pass through any opening up to a height of 34 “. (See Exceptions)

Intermediate rails or ornamental pattern so that 4” round sphere cannot pass through.

Guard Dimensional Criteria

This handout is intended as a guide. It is by no means all-inclusive or has all code related section listed. If you have questions regarding this information please contact the Knox Co. Fire Prevention Bureau at 215-4660.