

# Stairs and Ramps - Residential

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Stairways can be dangerous if improperly constructed. It is very important to have uniformity in the construction of stairways.

For Residential (single family and two-family) facilities:

- Minimum width of stairways = 36"
- Minimum Headroom Height = 6'8" as measured at the nosing, or landing to the ceiling above
- Minimum tread length is 10" and a nosing is required the nosing is not required if the tread is 11")
- Maximum riser is 7 <sup>3</sup>/<sub>4</sub>", the maximum variation in riser heights is 3/8"
- Maximum vertical rise is 12' (higher stairs require an intermediate landing)
- Landings (of a length equaling the width of the stairway) is required at the top and bottom (and possibly at intermediate landings) of stairways. The minimum Landing length size is 36".
- Handrails are required on one side of the stairway (See Handrails below for more information)
- Open sides of stairways having a total height of 30" above grade below require a guard (see "Railing Heights, baluster spacing and Handrails" above)
- Open risers are allowed with the limitation that a space shall be sized such that a 4" sphere cannot pass
- Doorway may not swing over the top of a tread. Note: there is an exception for bulkhead stairs that do not serve as a part of the means of egress.
- Stairs must be served with a means of illumination (including the electrical switches at top and bottom)
- Enclosures under stairs must be protected with a minimum of 1/2" sheetrock
- Spiral and winders stairs are allowed but have many dimensional requirements (contact the Building Official)

Ramps differ for residential than commercial facilities. Ramps for residential occupancies may or may not be regulated by ADA. Where ramps are constructed at residences we suggest that the guidelines of ADA be followed.

Residential:

- Minimum width of ramp for residential = 36”.
- Minimum Headroom Height = 6’8” as measured at the slope of the ramp to the ceiling above
- Maximum slope is one (1) unit vertical in twelve (12) units horizontal (8.33%). There is an exception that may allow a slope of one (1) unit vertical in eight (8) units horizontal (12.5%) if the 8.33% is technically infeasible.
- Maximum vertical rise is 30” (higher ramps require an intermediate landing if building to ADA)
- Landings (of a length equaling the width of the ramp) is required at the top and bottom (and possibly at intermediate landings) of ramps, at ramp changes in direction and at each doorway that leads to a ramp.
- Handrails are required on one sides of the stairway (See Handrails below for more information)
- Open sides of ramps having a total height of 30” above grade below require a guard (see “Railing Heights, baluster spacing and Handrails” above)
- Doorway never swings over the ramp (see Landings above).

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