



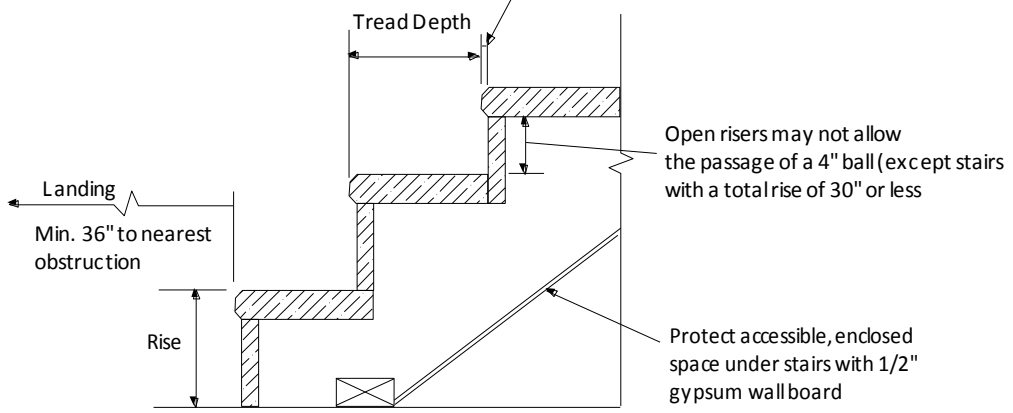
## Basic Stairs

This Job Aid reflects the code requirements of the 2016 California Building and Residential Codes.

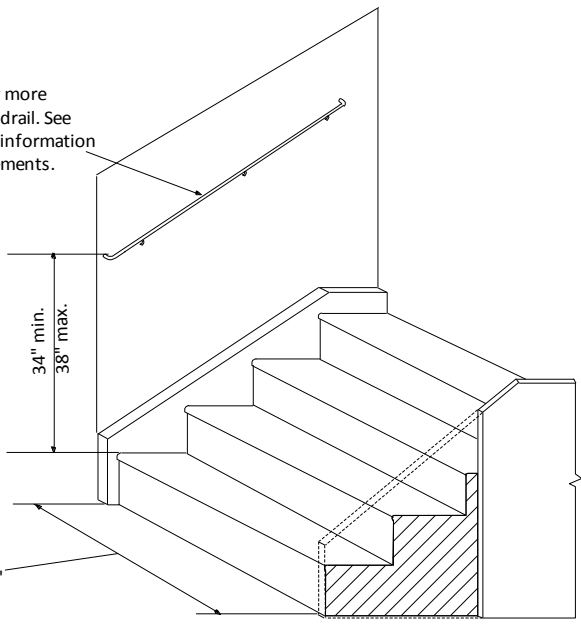
- Stair Treads and risers: The largest tread depth or riser height within any flight of stairs may not exceed the smallest by more than 3/8"
- Risers shall have an essentially smooth face with no protrusions extending more than 3/8" out of plane, and no protrusions exceeding the nosing projection.
- Illumination:
  - Interior stairways shall be provided with an artificial light source to illuminate landings and treads. In residential construction, a switch is required at each floor level to control the light source where the stairway has 6 or more risers. Exception: A switch is not required where remote, central or automatic lighting control is provided.
  - Exterior stairways shall be provided with an artificial light source located at the top landing of the stairway. Exterior stairways providing access to a basement from the outdoor grade level must have a light source at the bottom landing of the stairway.
- Handrails: Handrails are required on each side of stairways. Exceptions:
  - Stairways within dwelling units and spiral stairways are permitted to have handrails on at least one side.
  - Decks, patios and walkways having a single change in elevation where the landing depth on each side of the change in elevation is greater than what is required for a landing do not require handrails.
  - In Group R3 occupancies (1/2 family dwellings) a continuous run of treads or flight of stairs with less than four risers does not require handrails.
  - Changes in room elevations of three or fewer risers within dwelling units and sleeping units in Group R2 (apartments) and R3 (1/2 family dwellings) do not require handrails.
- Landings required: Landings are required at the top and bottom of stairways. In residential construction, a landing is not required at the top of an interior flight of stairs, provided a door does not swing over the stairs.
- Landing dimensions: The width and depth of landings may not be less than the width of the stairway served. Exceptions:
  - Where a stairway has a straight run the depth need not exceed 48" (36" in residential construction under the California Residential Code).

Stairway Design Requirements (CBC Sec. 1011/CRC Sec. R311)									
	Width	Head-room	Rise	Tread Depth	Nosing Projection	Nosing Radius	Contrasting Stripe Required	Solid Risers Required	Dimensional Uniformity
Commercial	Sized per CBC Sec. 1005.1 44" min.	80" min.	4" min 7" max.	11" min.	Max. 1 1/4"	Min. 1/16" Max. 9/16"	Yes	Yes (with exceptions)	3/8" tolerance
Residential	36" min.	80" Min.	7 3/4" max.	10" min.	3/4" – 1 1/4" (Not required where tread)	9/16" max.	No	No (open risers may not allow)	3/8" tolerance

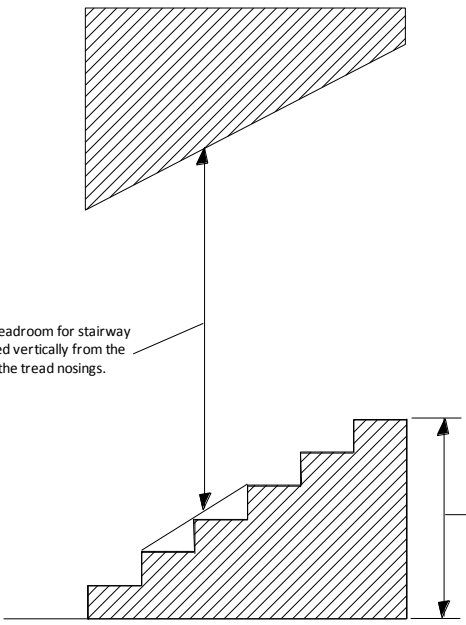
				Nosing Projection	depth is 11" min.)			passage of 4" ball	
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Stair runs with 4 or more risers require a handrail. See Job Aid 4 for more information on handrail requirements.



The minimum headroom for stairway is 6'-8" measured vertically from the sloped plane of the tread nosings.



A flight of stairs may not have a vertical rise of more than 144" between floor levels or landings (147" for residential).

