Inspections Division
One and Two Family Dwellings

Stairs & Railings

Page 1 of 4

Applies to One & Two Family Dwellings

6' - 8" Minimum Headroom

Ends of handrail returned to wall or terminated in newel post

34" - 38" to top of handrail

Handrails continuous to a point directly above the top and bottom riser

TREADS and RISERS:
- Maximum riser is 7-3/4" and the minimum tread depth is 10". Risers and treads shall be uniform throughout flight.
- The greatest riser height shall not exceed the smallest by more than 3/8".
- The greatest tread shall not exceed the smallest by more than 3/8".
- The minimum headroom in all parts of the stairway shall not be less than 6' - 8" measured from a sloped plane adjoining the tread nosings.

HANDRAILS:
- Shall be continuous the full length of the stairs from a point directly above the top riser of a flight to a point directly above the lowest riser of the flight.
- A handrail is required on at least one side of stairs with four or more risers.
- The top of the handrail shall be placed not less than 34 inches and not more than 38 inches above the nosing of the treads.
- Ends of handrails shall be returned to the wall or shall terminate in a newel post.
Treads & Risers shall be uniform throughout flight

Minimum 10” Tread Depth

Maximum Radius = 9/16”

Maximum 7-3/4” Riser Height

Nosing Required
Min. 3/4”
Max 1-1/4”

Solid Riser

STAIR PROFILE:

NOSING REQUIRED:
- A nosing not less than 3/4” and not more than 1-1/4” shall be provided on stairs with solid risers.
- The greatest nosing projection shall not exceed the smallest by more than 3/8 inch.
- A nosing is not required where the tread depth is a minimum of 11 inches.

RISERS:
- Risers shall be solid or
- May be open risers if the opening between treads does not permit the passage of a 4” diameter sphere.
**Inspections Division**

One and Two Family Dwellings

Handrails

Page 3 of 4

**Continuity:** Continuous handrail required the full flight of the stairs

- **Approved:** Handrail is not continuous
- **Not Approved:**

**Handrail Detail:** Handrails allowed to be interrupted at landing

- Min 36" x 36" Landing
- Ends returned to wall
- Top of handrail 34" - 36" above nose of tread
- End terminated in newel post

**Winder Details:**

- Min. 36"
- Newel post may interrupt handrails at turns

**Clearance:** 1-1/2" minimum between the handrail & wall

- 4-1/2" Max Projection
- 1-1/2" Min Clearance

**Approved Handrail Shapes:** Other shapes may be acceptable if they provide equivalent graspability

- 2-3/4" Max
- 1-1/4" Min

- 3/4" Max
- 1-3/4" Min

- 3/8" Max
- 2-1/4" Min

- 1-9/16" Max
- 1-9/16" Min

- 2-3/4" Max
- 1-3/4" Min

- 7/8" Max
- 5/16" Min

- 2" Max
- 1-1/4" Min

- 2-1/4" Max
- 3/8" Min

**Not Approved Shapes:**

- Flat 2 x 4
Guards Required:
- Porches, decks, balconies, ramps 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.

Guard Opening Limitations:
- Required guards shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches in diameter.

Exceptions:
- 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 in diameter 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.