Width

Stairways shall not be less than 36 inches wide. The handrail may enter a maximum of 4-1/2 inches in to this dimension. If placing two handrails on a stairway, maintain a minimum of 27 inches.

Dimensional Tolerances

The largest tread depth or riser height within any stairway shall not exceed the smallest by more than 3/8 inch.

Risers

Open risers are permitted, provided that the opening between treads does not exceed 4 inches. This does not apply if less than 30 inches above floor or grade.

Headroom

Every stairway shall have a headroom clearance of not less than 6 feet 8 inches. The minimum headroom in all parts of the stairway may not be less than 6 feet 8 inches. This is measured vertically from the sloped plane adjoining the tread nosings or from the floor surface of the landings.

Handrails

Required at four or more risers.

The top shall be placed not less than 34 inches, nor more than 38 inches, above the nosing of the treads. Ends shall be returned or terminated in newel posts or safety terminals.

Required handrails shall be continuous for the full length of the stairs from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight.

Exceptions:
Handrails may be interrupted by a newel post at a turn.
A volute, turnout or newel post is allowed over the lowest tread.
The outside diameter of a circular handrail may be no less than 1-1/4 inches and not greater than 2 inches. A non-circular must have a perimeter dimension of at least 4 inches and no greater than 6-1/4 inches. The maximum cross section is 2-1/4 inches. See page 2.

Illumination

All interior and exterior stairways must be illuminated.

Guard opening limitations

INTERMEDIATE RAIL SPACING OR PATTERN
4" sphere cannot pass through

4-3/8" at stair rail only

OPEN STAIRWAYS
34" Minimum for guardrail/handrail

GUARD HEIGHT
36" minimum

TRIANGULAR AREA FORMED BY TREAD, RISER AND GUARDRAIL
6" sphere cannot pass through

This handout is written as a guide to common questions and problems. It is not intended nor shall it be considered a complete set of requirements.
NOTE: REQUIRED HANDRAILS ARE NOT SHOWN

Winding stairway

WIDTH OF RUN
10" Minimum

STAIRWAY WIDTH
Minimum 36'

NOTE: Handrail must be placed on the narrow side of stair.

Circular stairway

WIDTH OF RUN
10" Minimum

STAIRWAY WIDTH
Min. 36'

MINIMUM RADIUS IS TWICE STAIRWAY WIDTH

MIN. 6" Min.

Handrail

Perimeter greater than (≥) 6-1/4"

1-1/4" to 2-3/4"

≤ 3/4"

≤ 7/8"

≥ 3/8"

≥ 5/16"

Graspable

FINGER RECESS AREA required on both sides

Alternative use of winders

WIDTH OF RUN
10" Minimum

STAIRWAY WIDTH
Minimum 36'

Spiral stairway

BETWEEN TREADS
Maximum 9.5" rise

HEADROOM Minimum 6'-6"

Handrail details

Other shapes may be acceptable if they provide equivalent gripping service. Contact Building and Inspection.

CIRCULAR

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

NON-CIRCULAR

PERIMETER
Min. 4", max. 6-1/4"

METAL
Max. 2-1/4"

Handrail samples

PERIMETER greater than
6-1/4"

FINGER RECESS AREA both sides

Achieve 5/16" depth
Continued for at least 3/8"

Within 3/4" FINGER
RECESS begins

Within 7/8" of widest portion, achieve 5/16" depth