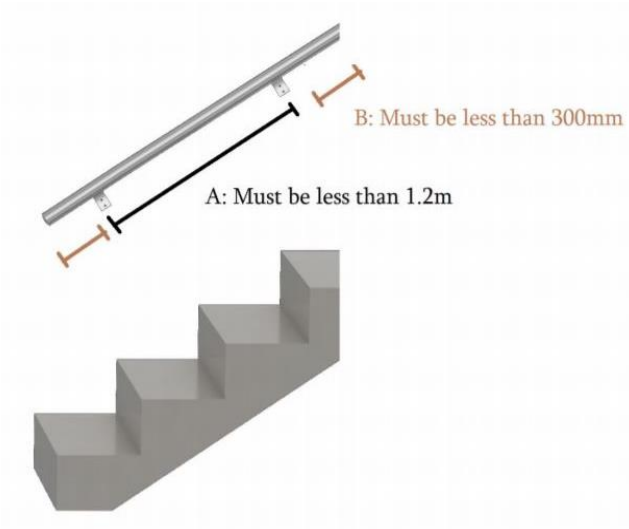
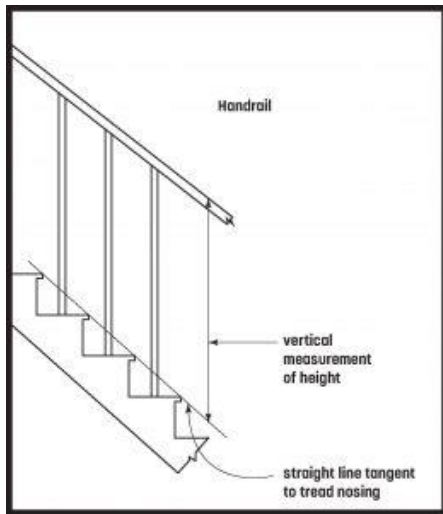


Hand Rails



9.8.7. Handrails

9.8.7.1. Required Handrails

1) Except as provided in Sentences (2) to (4), handrails shall be installed on stairs and ramps in accordance with Table 9.8.7.1.

Table 9.8.7.1.
Number of Sides of Stair or Ramp Required to Have a Handrail
 Forming Part of Sentence 9.8.7.1.(1)

Location of Stair or Ramp	Handrails Serving Stairs			Handrails Serving Ramps	
	Stairs < 1 100 mm Wide		Stairs ≥ 1 100 mm Wide	Ramps < 1 100 mm Wide	Ramps ≥ 1 100 mm Wide
	Straight	Curved	All	Straight or Curved	All
	Number of Sides Required to Have a Handrail				
Within a <i>dwelling unit</i>	1	1	1	1	2
All other locations ⁽¹⁾	1	2	2	2	2

Notes to Table 9.8.7.1.:

(1) See Sentences 9.8.7.1.(2), (3) and (4) for exceptions.

2) Except where a stair or ramp serves not more than two *dwelling units*, at least one handrail shall be located not more than 750 mm from the natural path of travel on the stair or ramp. (See Note A-9.8.7.1.(2).)

3) Handrails are not required for stairs and ramps serving a single *dwelling unit*, where

- interior stairs have not more than 2 risers,
- exterior stairs have not more than 3 risers, or
- ramps rise not more than 400 mm.

4) Only one handrail is required on exterior stairs having more than 3 risers provided such stairs serve not more than one *dwelling unit*.

5) Except for stairs with winders, where a *flight* of stairs within a *dwelling unit* consists of *tapered treads*, one handrail shall be installed along the narrow end of the treads.

9.8.7.2. Continuity of Handrails

(See Note A-9.8.7.2.)

1) Except as provided in Sentence (3), required handrails shall be continuously graspable throughout the length of

- a) ramps, and
- b) *flights* of stairs, from the bottom riser to the top riser.

2) Except for stairs or ramps serving a single *dwelling unit*, at least one required handrail shall be continuous throughout the length of the stair or ramp, including at the landing except where interrupted by doorways.

(See Note A-3.4.6.5.(10).)

3) For stairs or ramps serving a single *dwelling unit* or a house with a *secondary suite* including their common spaces, a handrail is permitted to start from a newel post or volute installed on the bottom tread.

9.8.7.3. Termination of Handrails

1) Handrails shall be terminated in a manner that will not obstruct pedestrian travel or create a hazard.

(See Note A-9.8.7.3.(1).)

2) Except for stairs and ramps serving only one *dwelling unit*, at least one handrail at the sides of a stair or ramp shall extend horizontally not less than 300 mm beyond the top and bottom of each *flight* or ramp.

(See Note A-9.8.7.3.(2).)

9.8.7.4. Height of Handrails

(See Note A-9.8.7.4.)

1) The height of handrails on stairs and ramps shall be measured vertically from the top of the handrail to

- a) a straight line drawn tangent to the tread nosings of the stair served by the handrail, or
- b) the surface of the ramp, floor or landing served by the handrail.

2) Except as provided in Sentence (3) and Clause 3.8.3.5.(1)(e), required handrails shall be 865 mm to 1070 mm high.

3) Handrails installed in addition to required handrails need not comply with Sentence (2).

9.8.7.5. Ergonomic Design

1) The clearance between a handrail and the surface behind it shall be not less than

- a) 50 mm, or
- b) where said surface is rough or abrasive, 60 mm.

2) All handrails shall be constructed so as to be continually graspable along their entire length with no obstruction on or above them to break a handhold. (See Note A-9.8.7.5.(2).)

9.8.7.6. Projections into Stairs and Ramps

1) Handrails and constructions below handrails, including handrail supports and stair stringers, shall not project more than 100 mm into the required width of a stair or ramp. (See also Articles 9.8.2.1. and 9.8.5.2.)

9.8.7.7. Design and Attachment of Handrails

(See Note A-9.8.7.7.)

1) Handrails and their supports shall be designed and constructed to withstand the following loads, which need not be considered to act simultaneously:

- a) a concentrated load of not less than 0.9 kN applied at any point and in any direction for all handrails, and
- b) for handrails other than those serving a single *dwelling unit*, a uniform load of not less than 0.7 kN/m.

2) Where exterior or interior handrails serving a single *dwelling unit* are attached to wood studs or blocking, the attachment shall be deemed to comply with Sentence (1), where

- a) the attachment points are spaced not more than 1.2 m apart measured on the horizontal plane,
- b) the first attachment point at either end is located no more than 300 mm from the end of the handrail, and
- c) the fasteners consist of not less than 2 No. 8 wood screws at each point, penetrating not less than 32 mm into solid wood.