



DEPARTMENT OF COMMUNITY DEVELOPMENT

City of Cedar Falls
220 Clay Street
Cedar Falls, Iowa 50613
Phone: 319-268-5161
Fax: 319-268-5197
www.cedarfalls.com

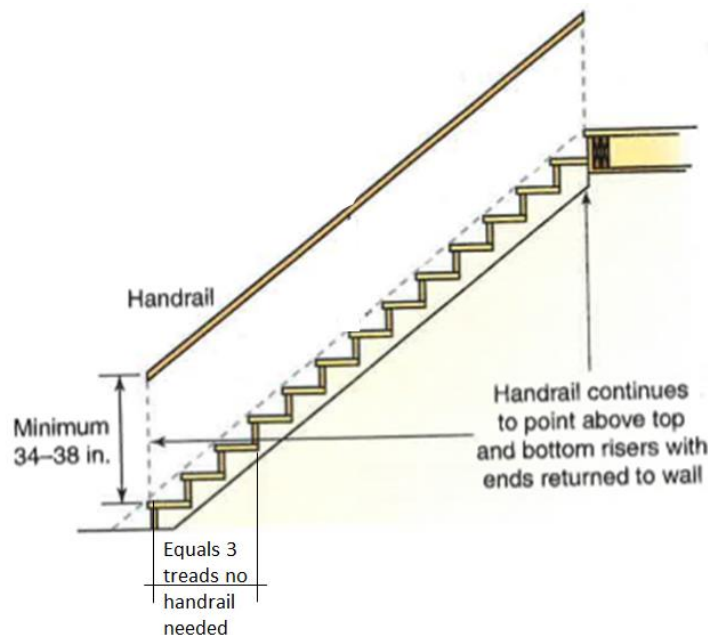
Inspection Services Division Residential Handrail Requirements

2021 International Residential Code

Section R311.7.8 - Handrails shall be provided on not less than one side of each continuous run of treads or flight with four or more risers.

Section R311.7.8.1 Height – Handrail height measured vertically from the sloped plane adjoining the tread nosing shall not be less than 34 inches and not more than 38 inches

Section R311.7.8.2 Continuity. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flights. Handrail ends shall be returned or terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1 ½” between the wall and handrails.

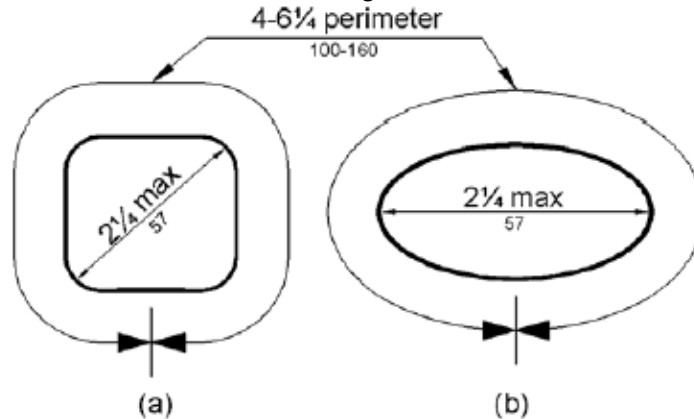


1 - Image from Residential Code Essentials 2015 - Van Note

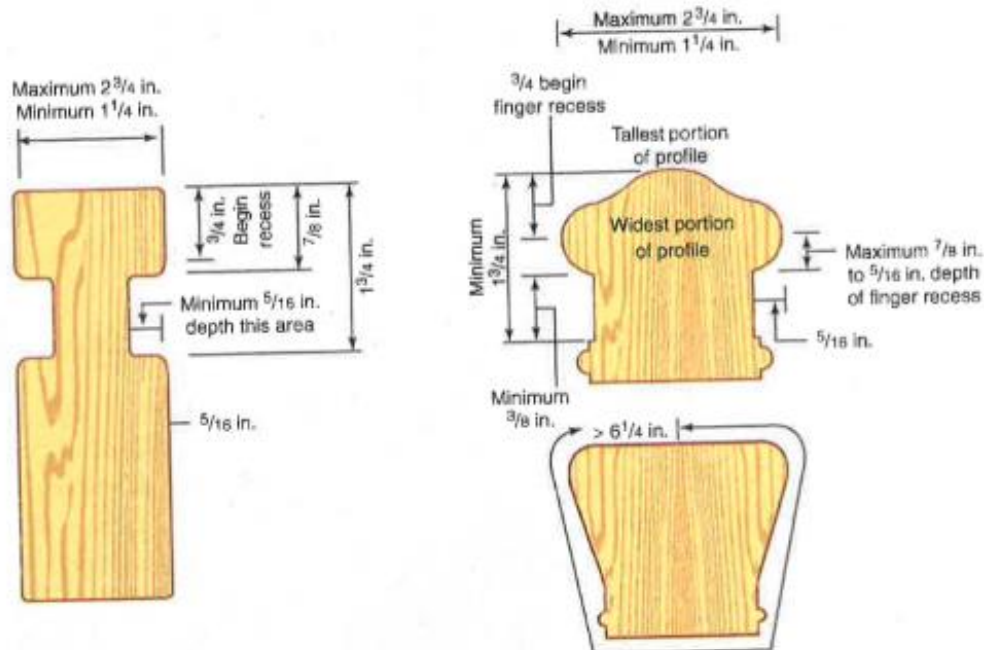
R311.7.1 Width. Stairways shall be not less than 36” in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not project more than 4 ½” on either side of the stairway and the clear width of the stairway at and below the handrail height including treads and landings, shall not be less than 31” where a hand rail is installed on one side and 27” where handrails are provided on both sides.

R311.7.8.3 Grip-size. Required handrails shall be of one of the following types or provide equivalent graspability.

1. Type I. Handrails with a circular cross section shall have an outside diameter of not less than 1 1/4" and not greater than 2". If a handrail is not circular, it shall have a dimension of not less than 4" and not greater than 6 1/4" with a cross section of dimension of not more than 2 1/4". Edges shall have a radius of not less than .01"



2. Type II. Handrails with a perimeter greater than 6 1/4" shall have a graspable finger recess area on both sides of the profile. The finger recess area shall begin within a distance of 3/4" measured vertically from the tallest portion of the profile and achieve a depth of not less than 5/16" within 7/8" below the widest portion of the profile. This required depth shall continue for not less than 3/8" to a level that is not less than 1 3/4" below the tallest portion of the profile. The width of the handrail above the recess shall not be less than 1 1/4" and not more than 2 3/4". Edges shall have a radius of not less than .01"



Type II handrails
perimeter > 6 1/4 in.