

# Development Services Department

## Residential stairs, guards and handrails

Maximum variation of 3/16" for risers and 3/8" for treads.

Minimum width of stairs within a dwelling is 34".

### HANDRAILS

Handrail to be graspable. Top of handrail to be between 34" and 38" above line drawn through front edge of stair treads.

Handrails required at one side of all interior stairs with more than 2 risers and exterior stairs with more than 3 risers.

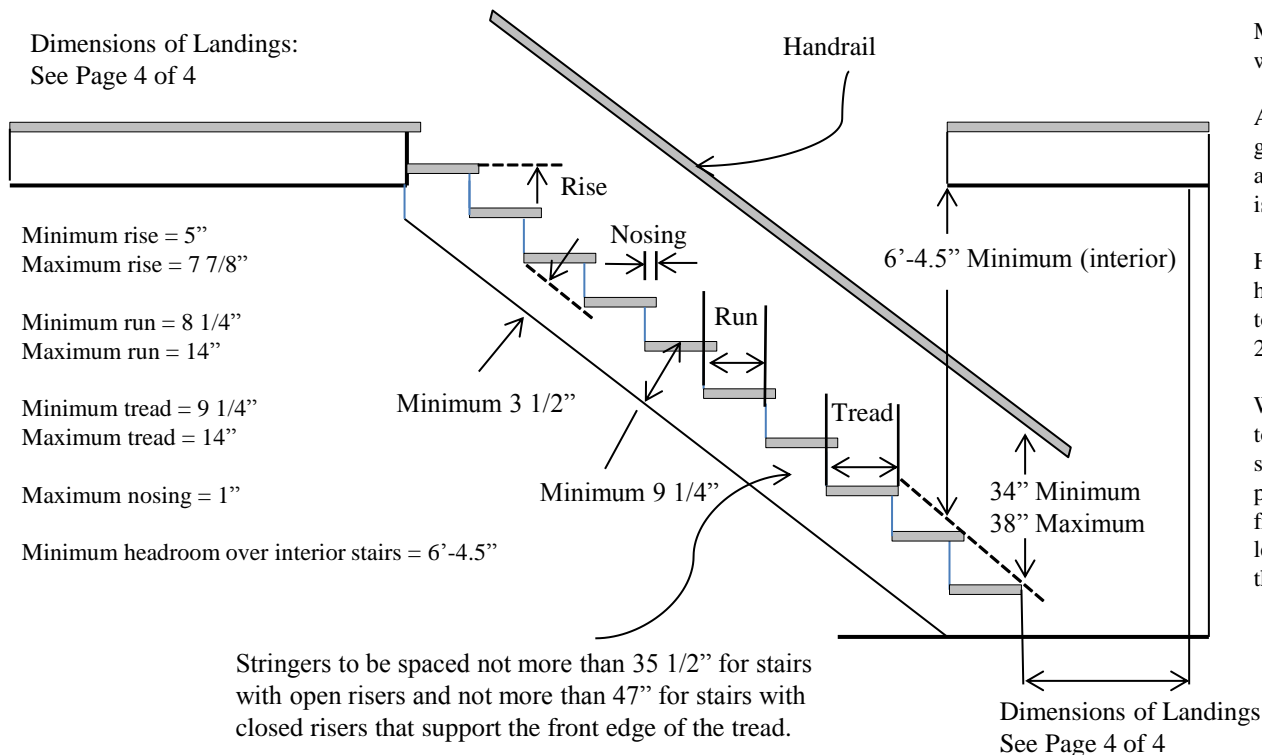
Handrail to project a maximum of 4" into the required width of the stairway.

Minimum clear space of 2" required between handrail and wall.

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, except where the handrail is interrupted by newels and changes in direction.

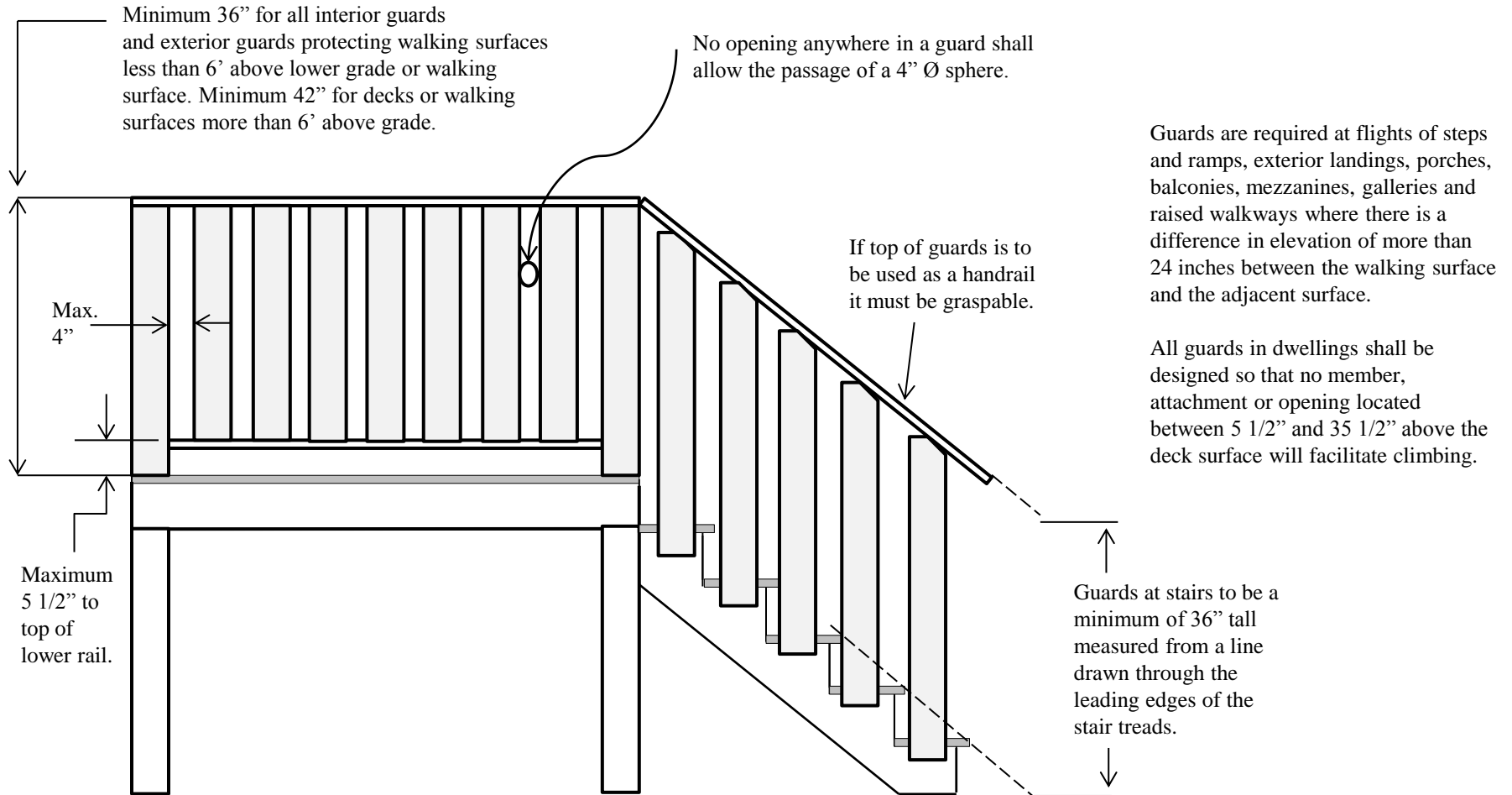
Handrails and any building element that could be used as a handrail shall be designed and attached in such a manner as to resist a concentrated load at any point of not less than 200 pounds.

Where a handrail serving a single dwelling unit is attached to wood studs or blocking the attachment points are to be spaced not more than 4 feet apart. The first attachment point at either end is to be located no more than 12 inches from the end of the handrail and the fasteners consist of not less than 2 wood screws at each point, penetrating not less than 1 1/4 inches into solid wood.



# Development Services Department

## Residential stairs, guards and handrails



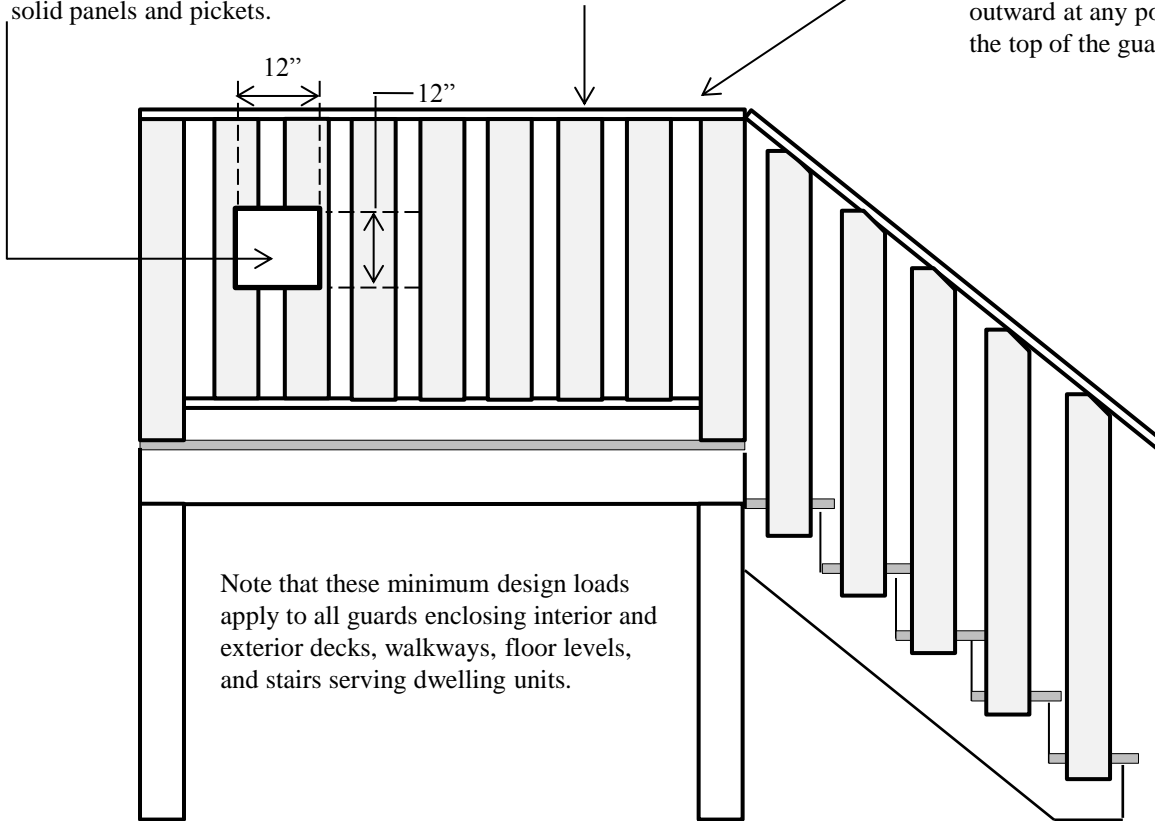
# Development Services Department

## Residential stairs, guards and handrails

Minimum design load of 112 pounds per 12" by 12" section applied horizontally to any elements within the guard including solid panels and pickets.

Minimum design load of 103 pounds per foot applied vertically on the guard.

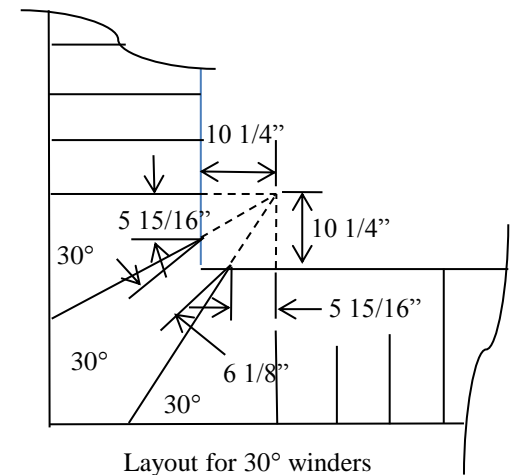
Minimum design load of 225 pounds applied horizontally inward or outward at any point along the top of the guard.



Note that these minimum design loads apply to all guards enclosing interior and exterior decks, walkways, floor levels, and stairs serving dwelling units.

### WINDERS

Winders must be 30° or 45°. Stairs incorporating winders may turn maximum 90° total. Winders to have a minimum width of 5 5/16" at narrow Ends.



## Dimensions of Landings

	Landing Configuration	Minimum Width, mm	Length, mm
Stairs and ramps serving a single dwelling unit	In straight-run stair or ramp, or landing turning through less than 30°, within a dwelling unit	Width of stair or ramp	Not less than 860
	In straight-run exterior stair or ramp, or exterior landing turning through less than 30°	Width of stair or ramp	Not less than 900
	Landing turning through an angle of 30° or more, but less than 90°	Width of stair or ramp measured at right angle to path of travel	a) Not less than 230 measured at the inside edge of the landing, and b) Not less than 370 measured 230 mm from inside edge of landing or handrail
	Landing turning through not less than 90°	Width of stair or ramp measured at right angle to path of travel	Not less than width of stair or ramp landing