

# 2010 FLORIDA BUILDING CODE, RESIDENTIAL

## 2010 FLORIDA BUILDING CODE (FBCR) RESIDENTIAL RAMP CONSTRUCTION

**FBCR 311.8.1 Maximum Slope:**

Ramps shall have a maximum slope of 1 unit vertical in 12 units horizontal. (8.3% slope)

**Exception:** Where it is technically infeasible to comply because of site constraints, ramps may have a maximum slope of 1 unit vertical in 8 units horizontal. (12.5% slope)

**FBCR 311.8.2 Landings Required:**

A minimum 3-foot-by-3-foot landing shall be provided:

1. At top of and bottom of ramps.
2. Where doors open onto ramps.
3. Where ramps change direction.

**FBCR 311.8.3 Handrails Required:**

Handrails shall be provided on at least one side of all ramps exceeding a slope of one unit vertical in 12 units horizontal. (8.3% slope)

**FBCR 311.8.3.1 Handrail Height:**

Handrails height, measured above the finished surface of the ramps slope, shall be not less than 34" and not more than 38".

**FBCR 311.8.3.3 Continuity:**

Handrails where required on ramps shall be continuous for the full length of the ramps. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1 1/2" between wall and handrails.

**FBCR 311.7.7.3 Grip Size:**

All required handrails shall be of one of the following types or provide equivalent graspability.

**Type I.** Handrails with a circular cross section shall have an outside diameter of at least 1 1/4 inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular, it shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6 1/4 inches (160 mm) with a maximum cross section of dimension of 2 1/4 inches (57 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

**Type II.** Handrails with a perimeter greater than 6 1/4 inches (160 mm) shall have a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least 3/8 inch (10 mm) to a level that is not less than 1 3/4 inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 1/4 inches (32 mm) to a maximum of 2 3/4 inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

**FBCR 312.1 Guards Where Required:**

*Guards* shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or *grade* below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a *guard*.

**FBCR 312.2 Guard Height:**

Required *guards* at open-sided walking surfaces, including ramps, porches, balconies or landings, shall be not less than 36 inches (914 mm) high measured vertically above the adjacent walking surface, adjacent fixed seating or the line connecting the leading edges of the treads.

**Exceptions:**

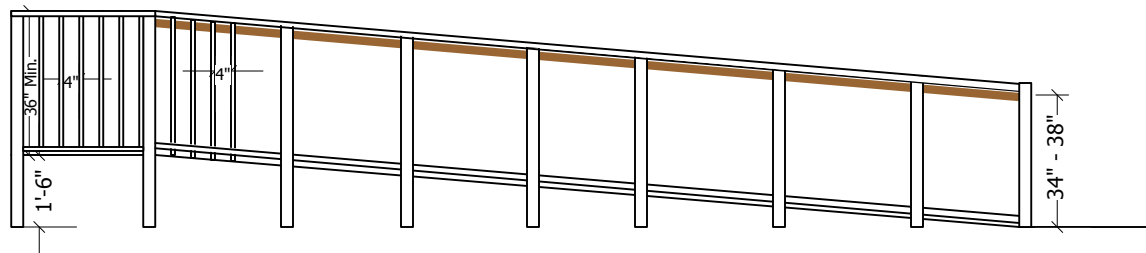
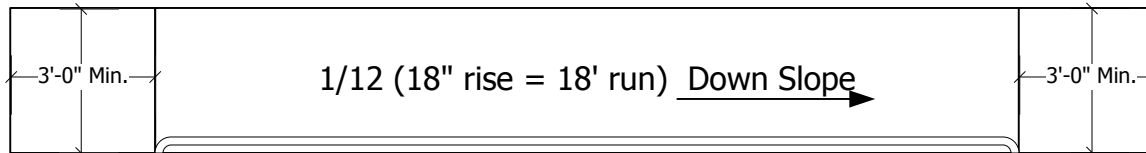
1. *Guards* on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.
2. Where the top of the *guard* also serves as a handrail on the open sides of ramps, the top of the *guard* shall not be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.

**FBCR 312.3 Opening limitations (Greater than 30")**

Required *guards* shall not have openings from the walking surface to the required *guard* height which allow passage of a sphere 4 inches (102 mm) in diameter.

**Exceptions:** (for stairs)

1. The triangular openings at the open side of a stair, formed by the riser, tread and bottom rail of a *guard*, shall not allow passage of a sphere 6 inches (153 mm) in diameter.
2. *Guards* on the open sides of stairs shall not have openings which allow passage of a sphere 4 3/8 inches (111 mm) in diameter



**FBCR 317.4 Wood/Plastic Composites:**

Wood/plastic composites used in exterior deck boards, stair treads, handrails and guardrail systems shall bear a *label* indicating the required performance levels and demonstrating compliance with the provisions of [ASTM D 7032](http://www.astm.org/Standards/D7032.htm)

SCALE

1/4" = 1'