

South Carolina Department of Health and Human Services General Ramp Specifications

These specifications are to be used as a guide to our providers. They will not be used to diminish in any way local, state and national codes. These specifications are a summary of information gathered using the International Building Code (2003 Edition), ICC, ANSI A117.1 1998 and ADA Standards for Accessible Design.

General Notes:

Permits are the responsibility of the provider.

Ramps are to be firm, stable, slip resistant and safe.

Ramps and landings with drop offs will have a minimum 4" curb and railings.

Ramps will be built using pressure (weather) treated lumber.

General Materials:

4x4 posts

2x6 (min.) joists

2x6 or 5/4x6 decking

2x4 (min.) **curbing**, side, top, and top support rail

Pressure treated handrails (2x2 are acceptable)

2x4x4" handrail spacers

Pressure treated decking nails

2500 PSI cement

Foundations:

Posts must be a minimum 4x4 CCA lumber

Posts must be sunk a minimum 8" into the ground and set in concrete (min. 25lbs)

Exception – if post is set on cement walkway or driveway, post may be anchored with a post base attached to the cement, or cross- braced for stability.

Foundation posts are to be set no more than 8' apart.

Floor Framing:

Outside joists shall consist of 2x6 (min) lumber connected to the foundation posts.

Inside joists shall be 2 x 6 (min) and shall be connected to the foundation posts using a header board and proper joist hangers.

There shall be no more than 24" between joists.

Slopes:

All landings must be level (slope no greater than 1:50)

All cross slopes must not exceed 1:50

Ramps will have a maximum slope of 1:12 with few exceptions.

In the RARE case a steeper slope is needed, the following will apply:

A 1:10 slope is permitted for no more than a 6" rise.

A 1:8 slope is permitted for no more than a 3" rise.

Ramps:

Shall not rise more than 30" between landings.

Shall lead to a firm stable landing, **provider is responsible for the area at the end of a ramp.**

Shall be level with a cross slope of no more than 1:50

Shall have a clear width of 36".

With a drop off of more than 2" shall have a minimum 4" curb.

(Ramps continued)

Shall allow for water to run off and not collect.

Must be slip resistant (floor areas painted with a non-slip paint).

Must use 2'x6" or 5/4"x6" as decking.

Ramps are not to be built attached to the house unless necessary (2' spacing).

Ramps for clients using stretchers should avoid turns and be angled if possible.

The end of the ramp will be finished with a metal plate or concrete.

Landings (general):

Must be level – slope less than 1:50, must be stable and slip resistant.

Landings must have top rail, side rail, and curbing.

Must be at least 60" x 60" clear space if the ramp changes direction.

“Straight through” landings must be the width of the ramp and 5' long.

“Switchback landings” will be at least 60"x 96" clear space.

Landings at doorways:

Shall have no more than a 1/2" beveled threshold between landing and interior floor.

Must have a minimum 18" of clear space past the latch side of the door (24" preferred).

Will minimum have 60" x 60" clear space.

Railings are required for drop offs of more than 2".

Must not be positioned in such a way as to expose people to the danger of falling.

Handrails:

Shall run parallel to the floor of the landing or ramp.

Shall be continuous on both sides.

Shall extend 12" past the end of the ramp.

Shall have a 1 1/2" clearance between handrail and top rail and any wall.

Shall be between 34" and 38" high.

Shall not rotate within its fittings.

Must be grip-able with a width of no more than 1 1/4" – 1 1/2" (a 2x4 cap does not comply).

Must be able to withstand 250 Lbs. of pressure.

Top rails, side rails, and curbing:

Top rail must have a side support rail on the inside of the ramp.

Side rails will consist of a minimum 2x4 running parallel to the floor at a mid point between the curbing and the handrail.

Side rails shall be attached on the inside of the ramp to the 4x4 posts (no toe-nailing between posts).

Must have a 2x4 vertical support rail between the top rail and joist at a mid-point between foundation posts.

Curbing shall be attached on the inside of the ramp to the 4x4 posts (no toe-nailing between posts) **and be 1" off the ramp.**

Top rail will extend 12" past the end of the ramp with a return.

Heavy Duty Ramps and Landings:

Ramps and landings for clients above 250 lbs. shall be built to accommodate the extra weight.

These ramps shall use: 2 x 6 decking boards; 2 x 8 joists every 16"; and be a minimum of 44" wide clear space.