



CITY OF ANN ARBOR, MICHIGAN

Planning & Development Services

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RAMPS

If you are planning adding an exterior ramp to your house, this information will help you understand some of the residential building codes for this work.

Minimum Slope

Ramps shall have a maximum slope of one unit vertical in eight units horizontal (12.5-percent slope).

Landings Required

A minimum 3-foot-by-3-foot (914 mm by 914 mm) landing shall be provided:

- At the top and bottom of ramps.
- Where doors open onto ramps.
- Where ramps change direction.

Handrails

Handrails shall be provided on at least one side of all ramps exceeding a slope of one unit vertical in 12 units horizontal (8.33-percent slope).

Handrail height, measured above the finished surface of the ramp slope, should not be less than 34 inches and not more than 38 inches.

The handgrip portion of handrails shall have a circular cross section of 1 1/4" inches minimum to 2 inches maximum. Other handrail shapes that provide an equivalent grasping surface are permissible.

Handrails must be continuous for the full length of the ramp. Handrail ends shall be returned to a wall or post 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 the wall and the handrail.

Additional Requirements

Foundations must be a minimum of 8-inch piers or 4 inch by 4-inch posts. Post size depends on spacing, load and unbraced length. Foundations / posts must not rest on disturbed soils. Footings must be 42 below finished grade.

All wood materials must be preservative treated or naturally durable lumber. "Preservative treated lumber" must bear the quality mark of an improved inspection agency. "Naturally durable lumber" refers to the hardwood of the following species:

Only double dipped galvanized nails, fasteners and hardware should be used.

Approved corrosion-resistant flashing is required at the intersection of exterior walls and landings. Flashing shall be inserted to the extent under the existing siding and over the ledger board to prevent water from collecting at this point. Flashing must be continuous.

Drawings Required for Building Permit

Site Plan – This should show the location of the ramp on the lot and the distance from all property lines.

Ramp Plan – A plan drawn preferably at ¼ scale (1/4" equals a foot). This plan should show all framing sizes and spacing, location and depth of footings and other structural supports.

Elevation – Include an elevation if the ramp is 30 inches or more above finish grade.

Inspection Requirements

Footing – Before postholes.

Framing – Before installing the decking (walking surface).

Final – After completion of all work.