

CITY OF ALTOONA  
**RESIDENTIAL HANDICAP RAMPS – 1 & 2 FAMILY DWELLINGS**

**MAXIMUM SLOPE.** Ramps shall have a maximum slope of one unit vertical in twelve units horizontal (8.3 percent slope)

The building inspector would need to pre-approve this exception: Where it is technically infeasible to comply because of site constraints, ramps may have a maximum slope of one unit vertical in eight horizontal (12.5 percent slope).

**SURFACE.** An approved non-slip surface shall be used.

**WIDTH.** A minimum ramp width of 36 inches is required.

**LANDINGS REQUIRED.** A minimum 3-foot by 3-foot landing with a maximum slope of 1:48 shall be provided:

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

**Use Deck Handout for sizing items such as footings, beams, posts, joists, etc.**

**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 (8.33 percent slope).

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

**HANDRAIL GRIP SIZE.** Handrails on ramps shall be one of the following types or provide equivalent graspability.

1. Type 1. Handrails with a circular cross section shall have an outside diameter of at least 1 ¼ inches and not greater than 2 inches. If the handrail is not circular it shall have a perimeter dimension of at least 4 inches and not greater than 6 ¼ inches with a maximum cross section of dimension 2 ¼ inches.
2. Type II. Handrails with a perimeter greater than 6 ¼ inches shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of ¾ inch measured vertically from the tallest portion of the profile and achieve a depth of a least 5/16 inch within 7/8 inch below the widest portion of the profile. This required depth shall continue for at least 3/8 inch to a level that is not less than 1 ¾ inches below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 ¼ inches to a maximum of 2 ¾ inches. Edges shall have a maximum radius of 0.01 inch.

**HANDRAIL CONTINUITY.** Handrails where required on ramps shall be continuous for the full length of the ramp. 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 1.5 inches between the wall and the handrails. **See Deck Handout for more information on Handrails.**

**GUARDS.** Raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height.

**GUARD OPENINGS.** Required guards shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches or more in diameter.

**WINDOWS (GLAZING).**

Glazing adjacent to landings and ramps that are within 36" horizontally of a walking/traveling surface when the exposed surface of the glass is less than 60" above the plane of the adjacent walking/traveling surface shall have safety glass such as "tempered glass". The glazing shall be permanently identified and shall be type II. Exception: If an approved guardrail is in place and the glazing is at least 18 inches away from the guardrail, safety glass would not be required. See Deck Handout for other areas that require safety glass.