Design considerations should reflect user needs and site conditions

Intermediate landings may be necessary if ramp is of considerable length or if direction of ramp changes

The surface of the rampway should provide a non-slip surface. Treated lumber or wood of natural resistance to decay, such as cedar or redwood, is recommended for exterior use. 2 x 6 boards with gaps (1/4 inch) are recommended. Plywood is not recommended, as it does not provide drainage. Non-slip strips of adhesive are not recommended, as they trap moisture in the spring and fall, becoming ice strips under freezing conditions.
Required maximum slope is 1:8 (IRC R313) - generally too steep for a wheelchair. Recommended maximum slope is 1:12

When the ramp or landing floor surface is more than 30" above grade, a 36" high guard with intermediate rails (or an ornamental pattern) such that a 4" sphere cannot pass through is required (IRC R316).

Handrails: Handrail on one side required if slope is steeper than 1:12 (IRC R313). Handrails on both sides recommended if slope is steeper than 1:15. Design should be easy to grasp - a rounded design minimum 1 ¼" - 2 5/8" maximum in diameter (IRC R315)

A bumper guard is recommended, 2" above the surface and at fixed height of wheelchair footrests.

A separate piece is recommended at bottom to provide smooth transition to grade.

Frost footings not required if temporary ramp (less than one year)