

University of North Dakota

STAIRS, STAIRWELLS

Maximum Fall Distance: Stairwells shall be designed such that it is not possible for a person to jump or fall more than one level.

High Ceilings: In stairwells with high ceilings, light fixtures and other devices requiring periodic maintenance shall be installed at lower elevations (e.g. by wall mounting or on the underside of a landing) to be easily maintainable. Light fixtures shall never be installed in such a way as to require scaffold or a scissors lift for relamping. High ceilings and walls shall be as maintenance free and as accessible for maintenance as possible. Consideration shall be given to limiting the height of the space to avoid more stringent requirements for fire and smoke protection systems.

Accessibility for Cleaning: Stairwells shall be designed so as to be as accessible for cleaning as possible. Consideration shall be given to the need to periodically clean all surfaces, including windows, ledges, piping, etc. This need has often been overlooked in stairwell design on campus.

Enclosed Risers: Stairs shall incorporate an "enclosed" riser design.

Stair Dimensions/Proportions: Stairs shall meet the applicable geometry requirements of the most current adopted edition of the International Building Code and Life Safety Code.

Stair Treads: Treads shall be of highly durable construction.

Handrails/Banisters: Handrail and guardrail installations shall comply with the requirements of the most current adopted editions of the NFPA Life Safety Code and the International Building Code. Vertical baluster spacing is preferred to reduce climb ability of guardrails.

Glass: Use of glass in lieu of balusters shall be avoided due to costly cleaning requirements.

Exterior Stairs: Exterior stair treads shall be pitched ½ in./ft. for drainage.

Areas of Rescue Assistance: Areas of Rescue Assistance (ARA) shall be provided in all newly constructed buildings in accordance with the ADA and the North Dakota Accessibility Guidelines. When technically feasible, ARA shall be provided in buildings undergoing remodeling. See the document entitled Remodeling, Special Considerations within these Standards.