

Building Safety
439 West Utah Avenue
Payson, UT 84651

Revised December 11, 2007

STAIRWAYS, HANDRAILS, AND LANDINGS

DEFINITIONS:

- STAIRWAY--one or more flights of stairs with connecting landings
- FLIGHT-- a series of stairs from one landing to another
- LANDINGS-- a level part of a staircase
- STAIRCASE-- a flight of stairs with their supporting frame-work, casing, and balusters
- PRIVATE STAIRWAY-- a stairway serving one tenant only
- TENANT-- resident, occupant, renter
- HANDRAIL-- a narrow rail for grasping with the hand as a support
- GUARDRAIL-- a barrier which serves to protect persons from dangerous situations
- RISE-- the vertical distance between treads
- RUN-- the horizontal distance between riser (stepping surface) measured from the toe of one tread to the toe of the next

STAIRWAYS: Every stairway having two or more risers serving any building or portion thereof shall conform to these requirements:

Rise and Run:

MAXIMUM RISE	MINIMUM RUN	APPLICATION SERVED
8"	9"	-- Private stairways with occupant loads less than 10. -- To unoccupied roofs.
7"	11"	-- All others

** A stair riser of less than 4" is not permitted.

STAIRS:

- The variance in the rise in height and the run in length of the stair treads in a flight of stairs can not exceed 3/8" for the entire flight of stairs.
- The minimum required clear width (from finished wall to finished wall) of any stairway with an occupant load of 49 or less is 36". For stairways with an occupant load of 50 or more, the minimum clear width is 44".
- A minimum headroom clearance of 6'8" is required in connection with every stairway. Such required clearance shall be measured vertically from the leading edge of the treads to the lowest projection of any construction, piping, fixture or other object above the stair.

HANDRAILS:

- Stairs are required to have at least one handrail unless there are fewer than 4 risers.
- All stairways required to be 44" or more in width are required to have handrails on each side.

- Stairs within and serving individual dwelling units are only required to have a handrail on one side.
- Stairs within an individual unit of an apartment building or a congregate residence or within a private garage or carport are only required to have a handrail on one side.
- The height of the handrail shall be at least 34" and not more than 38" vertically, measured from the nosing of the stair treads to the top of the rail.
- Handrails must be continuous for the full length of the flight of stairs, and at least one handrail must extend not less than 12" beyond the top and the bottom riser.
- The handgrip portion of the handrail must not be less than 1 1/2" or more than 2" in cross-sectional dimension or the configuration of the handrail must be such that it provides an equivalent, gripable shape.
- The handrail must have a clear space of at least 1 1/2" between the handrail and the abutting construction.
- Ramps with a slope greater than 1 unit vertical to 15 units horizontal shall have handrails as required above.

LANDINGS:

General:

1. All landings shall have widths not less than the width of the stairway, ramp, or door which they serve, whichever is greater.
2. The minimum length of landings in the direction of travel shall be not less than 36" when serving individual dwellings and occupant loads of less than 50.
3. The minimum landings for occupant loads of 50 or more shall be 44"
4. Landings shall be level except exterior landings which may be sloped not more than 1/4" per foot.
5. Landings that are less than the requirements above are considered to be a part of the stairway and need to meet the requirements for stairs.

At Doors:

1. Landings, other than ones serving individual dwellings, shall be not more than 1" lower than the doorway threshold (1/2" when access for the physically handicapped is required).
2. Landings of individual dwellings may be up to 8" lower than the floor level, provided the door does not swing over the landing.
3. A door may open at the top step of an interior flight of steps, provided the door does not swing over the steps.
4. A door from a house to a garage or carport (considered interior) need not be served by a landing. A landing is required for a door from a house to a carport (considered exterior). See Landings: General: #4 above.

At Stairs:

1. The length of landings in the direction of travel shall be not less than the width of the stairway, but need not exceed 44".
2. There shall not be more than 12' vertically between landings.

For the requirements on guardrails, see Building Safety Information Sheet # 9

If you have any questions, please feel free to call any of our staff at 465-5204.