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Landings, Platforms, Porches, & Winders

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Landings, Platforms, and Porches

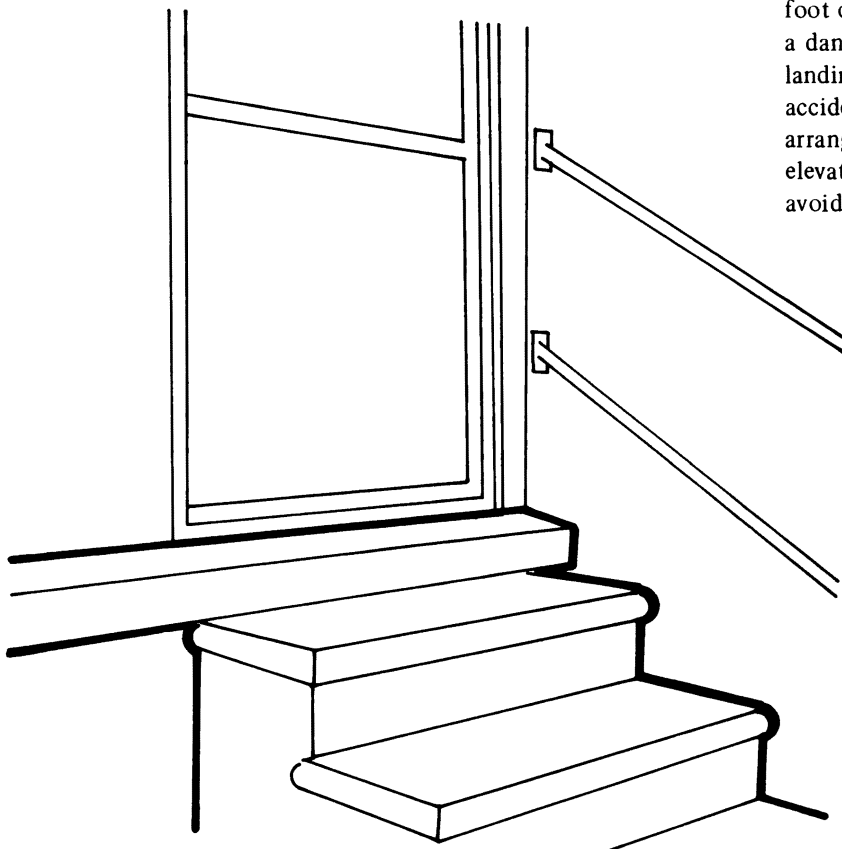
It is important, from the safety standpoint, to give adequate consideration to the need and use of landings and platforms in planning safe stairs.

It has long been thought that lengthy, unbroken flights of stairs contributed to more falls than those with intermediate landings. Recent studies on stairway accidents have contradicted this opinion. This is possibly because there are outside entrances at many landings. This arrangement suggests more usage, plus the possibility of a loose rug, or wet feet and the accumulation of water, as contributory causes for stair accidents. In any event, precautions should be exerted to provide slip-resistant surfaces on interior stair landings, especially where entrances are a factor.

It is understood that the climbing of long, unbroken flights of stairs can be tiring, especially for the elderly. Landings provide a break in the climbing process and should be planned for any flight of stairs having more than 16 risers.

From a safety standpoint, it is necessary to provide landings where the swing of a door is required to be onto a flight of stairs. A landing, platform, or porch should also be provided at the main entrance, except when the entrance is from a paved garage or carport floor. The dimensions of these landings, platforms, and terraces should accommodate the door swing plus sufficient standing area for an individual.

The absence of an entrance platform or landing at a door opening onto a flight of stairs creates a very hazardous condition. The turn-around area of a single stair tread is not sufficient to operate a door safely. Individuals ascending the stair must necessarily step back to allow room for the door swing. A misjudgement regarding the placement of the foot on the lower riser as a person steps backward can cause a dangerous fall. Approaching stairs or platforms without a landing from behind a closed door, may precipitate an accident for the person who is unfamiliar with the arrangement. Suddenly faced with an abrupt change in elevation, the individual may not react quickly enough to avoid a fall.



This entrance is hazardous because there is no landing platform at the doorway, and there is dimensional variation in the riser distance between the top step and the interior floor level.

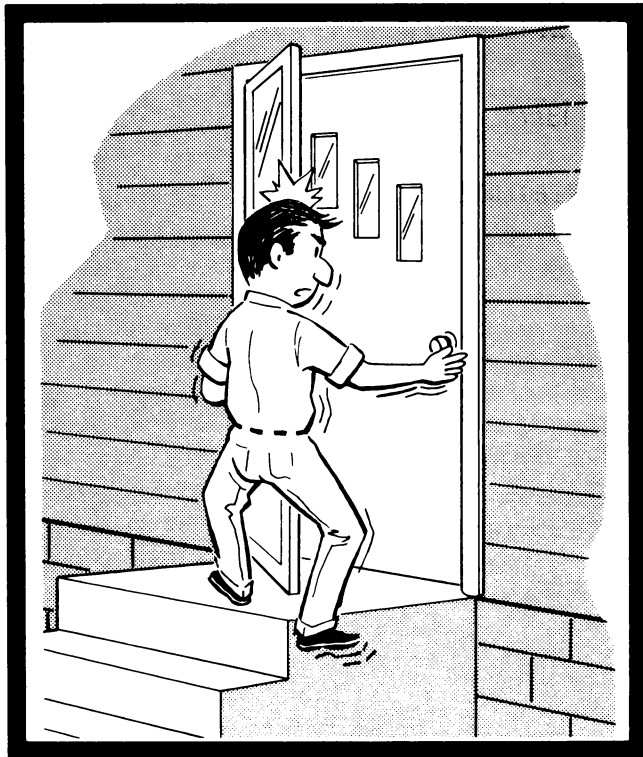
Before building, consult the BOCA code.

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Prepared by Helen L. Wells, Housing Specialist

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Exterior landings should provide sufficient space to allow safe standing room while opening a door which swings over the landing.

RECOMMENDATIONS:

To provide safety and utility in the use of landings, platforms, and porches, the following criteria are recommended:

- Provide an intermediate landing in a stairway which exceeds 16 risers.
- Provide a landing, platform, or porch at the main entrance, principal service entrance, or where a door opens into a stairway.

Winders

Although it has been generally considered that winders are more dangerous than standard stair designs because of the non-uniform tread width or the wedge shape of the winder tread, recent studies concerning stair accidents reveal that this is not true. The frequency of accidents occurring on winders is no greater than on any other type of stairs. In explanation, it is determined that more care is exercised by individuals using winders than the conventional stairs. The variable tread width of winders should present no greater hazard if the walking portion is

the same width as that of conventional stair treads.

RECOMMENDATION:

To provide for safe winder installation, the following is recommended:

- The minimum dimension of an interior landing at the head of a stairway shall be 2 feet, 6 inches and the elevation shall be the same as dwelling floor.
- Exterior landings, platforms, or porches shall have a minimum depth of 3 feet, 6 inches. If the entrance door is of the sliding type, the width shall be at least the width of the door in the fully open position. For hinged doors, the width shall be a minimum of 4 feet, 9 inches, with a minimum of 15 inches extending beyond the latch side of the door. The elevation shall be a minimum of 4 inches and a maximum of 6 inches below the floor of the dwelling at the entrance.
- Entrance platforms may be omitted if floor of garage, carport, or patio is paved and if height of finished floor of dwelling at the entrance above garage, carport, or patio floor does not exceed 18 inches. However, a minimum of 4 inches shall be maintained between the floor of the dwelling at the entrance and the floor of the garage, carport, or patio.
- Where there is an outside entrance at a stairway landing, provisions shall be made to reduce slippery conditions on the interior landing. (See section on stairs for methods.)
- Exterior landings, platforms, and porches shall be constructed of slip-resistant surface. (See section on stairs for methods.)
- Where landings, platforms, and porches exceed 4 risers or 24 inches above finished grade or floors, continuous handrails and protective railings shall be provided.
- Minimum tread width at a point 18 inches from the converging end shall be the same as conventional stair treads.