Interior Service Stairs

It is common practice to design and construct stairs serving basements and attic spaces with a much greater slope than customarily employed in the main or more formal stairs. One must assume that this practice is justified on the basis that the use of these stairs is comparatively infrequent, and, therefore, less floor space should be allocated for their installation, even at the expense of more desirable slope characteristics.

In many cases today and certainly for future planning, basement areas are used as recreation areas, family rooms, garage and utility areas, which invite constant use by the residents. Attic spaces may be planned, or even finished during original construction, for use as bedrooms, recreation areas, or study areas. Utilization of basements and attics for normal daily family function can hardly be termed infrequent. The criteria for planning and construction of access stairs serving these areas should be no less than the minimums established for other residential stairs. The safe use of service stairs leading to basement and attic areas that are not planned for living or recreational purposes can be enhanced with the use of contrasting colors applied to the top and bottom stair treads. This contrasting color will tend to induce an awareness of the most hazardous part of the stairs.

RECOMMENDATIONS:

For increased safety in the use of interior service stairs, the following recommendations are suggested:

- All interior service stairs that provide access to basements and attic areas shall meet the design and construction standards required of other interior stairs.
- Apply contrasting colors to the top and bottom treads of all interior service stairs leading to basement or attic areas which are not planned for living or recreational purposes.

Vertical Clearance

The vertical clearance above residential stairs should be adequate for the easy passage of people and the movement of furniture and household equipment. Any abrupt, uneven, or very low overhead obstruction, real or illusionary, causes an individual to instinctively “duck” or lower his head to avoid a possible collision. This reaction, especially if the individual should be burdened with a heavy or awkward load, could very easily precipitate an accidental fall. When moving furniture or equipment, a person should be able to maintain his normal erect posture while negotiating stairs. If there is insufficient clearance, the person may have to assume a stooped or unnatural position to allow passage of the furniture or equipment, thereby increasing the possibility of an accident resulting from tripping or slipping.

The problem of adequate headroom will arise when two or more flights of stairs are arranged one above the other in the same stair well, such as a basement stair under, or an attic stair above, the main stairs. This problem should be considered very carefully in the planning and design of the home.

Vertical clearance, or headroom, above stairs and stair landings must provide sufficient unobstructed clearance for the safe, comfortable use of personnel, with or without burdens, negotiating the stairs and landings.

RECOMMENDATION:

Dimensional values recommended to accomplish these minimum safety measures are as follows:

- The vertical distance above a flight of stairs, measured from the front edge of the tread nosing to a line parallel to the slope of the stairs, shall be a minimum of 7 feet, 4 inches.