



**THE FOLLOWING IS A RE-PRINT FROM THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES WEB-SITE. IF YOU WISH TO REFER TO INFORMATION ON THE SITE FOLLOW THE INSTRUCTIONS BELOW:**

**Step1.** [www.access-board.gov](http://www.access-board.gov) or call toll free 1-800-872-2253

**Step2.** Select Accessibility Guidelines & Standards

**Step3.** Select Facilities, the ADA Accessibility Guidelines

**Step4.** Select APPENDIX, then find A 4.5.1

### **A4.5 Ground and Floor Surfaces.**

**A4.5.1 General.** People who have difficulty walking or maintaining balance or who use crutches, canes, or walkers, and those with restricted gaits are particularly sensitive to slipping and tripping hazards. For such people, a stable and regular surface is necessary for safe walking, particularly on stairs. Wheelchairs can be propelled most easily on surfaces that are hard, stable, and regular. Soft loose surfaces such as shag carpet, loose sand or gravel, wet clay, and irregular surfaces such as cobblestones can significantly impede wheelchair movement.

Slip resistance is based on the frictional force necessary to keep a shoe heel or crutch tip from slipping on a walking surface under conditions likely to be found on the surface. While the *dynamic* coefficient of friction during walking varies in a complex and non-uniform way, the *static* coefficient of friction, which can be measured in several ways, provides a close approximation of the slip resistance of a surface. Contrary to popular belief, some slippage is *necessary* to walking, especially for persons with restricted gaits; a truly "non-slip" surface could not be negotiated.

The Occupational Safety and Health Administration recommends that walking surfaces have a static coefficient of friction of 0.5. A research project sponsored by the Architectural and Transportation Barriers Compliance Board (Access Board) conducted tests with persons with disabilities and concluded that a higher coefficient of friction was needed by such persons. A static coefficient of friction of 0.6 is recommended for accessible routes and 0.8 for ramps.

It is recognized that the coefficient of friction varies considerably due to the presence of contaminants, water, floor finishes, and other factors not under the control of the designer or builder and not subject to design and construction guidelines and that compliance would be difficult to measure on the building site. Nevertheless, many common building materials suitable for flooring are now labeled with information on the static coefficient of friction. While it may not be possible to compare one product directly with another, or to guarantee a constant measure, builders and designers are encouraged to specify materials with appropriate values. As more products include information on slip resistance, improved uniformity in measurement and specification is likely. The Access Board's advisory guidelines on Slip Resistant Surfaces provides additional information on this subject.