

Extracts from a report by:

The Chair, Standards Australia Committee on Slip Resistance

It should be noted that the preface to AS/NZS 4663 includes the statements that "The testing does not take into account the performance of different footwear sole materials or profiles. The slip resistance of these materials can vary widely, even within generic groups of polymers such as PVC or polyurethane. The slip resistance of footwear is also a function of the soling material, the tread, and the effects of ageing, degradation and wear, as well as design and construction parameters. While it may be possible to form sliders using other soling materials, it is outside the scope of this Standard".

However, it should be recognised that the slip resistance of most products will change (increase or decrease) with wear; that slip resistance will generally decrease if surfaces are soiled or poorly cleaned; and that the available traction will also be a function of the viscosity of any liquid contaminant. **Under no circumstances can any pendulum result or classification be converted into a ramp rating.**

AS/NZS 4586 has a procedure for downgrading the classification of samples if an individual result is less than 20% of the mean result. AS/NZS 4663 has no such mechanism. An individual low reading may indicate a potentially dangerous situation. For pendulum testing, a minimum of five locations shall be used for each site condition, where this condition must be described, with particular reference to any contamination, coatings, wear or slopes. It may be difficult to identify whether a low reading is due to variation within the production batch, wear or maintenance.

SLIP RESISTANCE DESIGN ISSUES

Table 3 in HB 197 gives some recommendations for pedestrian surface materials in some specific locations. HB 197 states that some of the pendulum recommendations may be lenient, while others may be onerous. The recommendations were intended to include an adequate factor of safety, such that if a slightly lesser result is obtained the surface will not be unduly dangerous under the anticipated operating conditions, given acceptable standards of routine maintenance and management of accidental spillages.

It should be noted that many typical locations such as bathrooms and balconies were purposely excluded from Table 3 of HB 197. In particular, residential situations were excluded because people have the right to determine what they want. While catering for the needs of an ageing population is a sound design principle, it is not a mandatory requirement. As far as domestic or hotel bathrooms are concerned, people might want to extrapolate from the recommendations made for ensembles in hospital and aged care facilities, or for communal shower rooms. This does not prevent an architect from complying with a client's specification of a highly polished floor that will provide less slip resistance. Such a decision might be influenced by the provision of grab bars to assist in transits to and from the bath, combined with the knowledge that bath mats will be provided.