A Guide to Slip Resistance

The methods used to measure slip resistance vary from country to country. The UK HSE has always recommended the Pendulum test whereas the most of Europe has favoured the Ramp test. The current HSE recommendation is to combine the Pendulum test with a measurement taken by a surface microroughness meter. A ramp test specific to the UK has also been developed by the UK Slip Resistance Group (UKSRG).

Pendulum Test

Dry areas - A value of 36 or over is specified as having low slip potential for public areas. The Pendulum test is not usually a good measurement for wet areas as there is no differentiation between shoe and barefoot traffic, whereas there is with the ramp Test.

Surface Microroughness Meter

This is used to simply measure the roughness of the surface to give an idea of how slippery it would be in water-contaminated areas. The acceptable roughness varies according to what contaminant is likely to be encountered, but it is not generally recognised for tiles.

Wet Ramp Test

This is as it says for wet barefoot areas only and is measured in values of A to C according to DIN51097. A is suitable for mainly water splash areas for example changing rooms, B is for pool surrounds, shower areas etc and C is for walk through pools, ramps into pools etc.

Ramp Test

This is for wet shoe trafficked areas only. Tiles are measured in two ways, an R value and a V value. The R measures the rmp incline suitability and the V measures the volume of water / matter etc that can pass under the shoe without causing a slip (like stud face tiles etc).

For more detailed information see the HSE publication on "Assessing the slip resistance of flooring" at http://www.hse.gov.uk/pubns/web/slips01.pdf