How to satisfy the EU demand for a slip resistance test that enables long term safety

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European Directive 89/106/EEC required construction products remain safe during their entire life cycle. EU Regulation 305/2011 requires floors remain slip resistant throughout economically reasonable life cycles. The CEN/TC 339 slip resistance standards committee was obliged to establish a single slip resistance test method. The European Commission has funded the SlipSTD, Ultragrip and Slipsafe slip resistance research projects.

The SlipSTD project found the German ramp tests were generally applicable except on smooth surfaces (at the slippery end of the spectrum). The BOT 3000 and GMG 200 tribometers overestimated the wet slip resistance of very smooth floors due to slip-stick effects, while measurements on structured and textured surfaces were impaired by loss of contact. The pendulum was well suited to smooth, structured and textured surfaces. Measurements on profiled surfaces were considered to be impaired by impact variations, but specimen orientation can overcome this issue. The pendulum has the widest operating range. It also only requires a small test area.

The Ultragrip project used an industrial tile polishing machine to provide a sufficiently large worn area for slip resistance testing: there was good correlation between the slip resistance of accelerated conditioned tiles and those that wore in service. The Slipsafe project used a washability tester for accelerated conditioning and the pendulum for slip resistance testing of resilient flooring.

In Australia, accelerated conditioning is routinely used to assure long-term slip resistance. Satisfying the EU sustainable slip resistance mandate requires testing products after appropriate accelerated conditioning. When will CEN/TC 339 take the lead?

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