



Engineering Sciences Section – 2007

C30 Slip-Resistance Measurement of Walkway Surfaces – What Next?

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After attending this presentation, attendees will benefit by training on the application of current and prior ASTM consensus standard test methods for tribometers, slip-resistance measurement of walkway surfaces and, importantly, the current state of the various tribometric standards, which are presently in flux.

This presentation will impact the forensic community and/or humanity by demonstrating how walkway-safety friction measurement is an important consideration in evaluating certain slip, fall, or loss-of-balance related accidents. The monetary impact to the United States is substantial and premises-liability litigation commonly questions the walkway surface attributes.

Consensus standard test methods produced at ASTM commonly become updated, revised, or substituted to reflect new technology, research, practices, industry trends, or progress. The standardization of slip-resistance equipment and test techniques is migrating to a new approach to reflect these trends. The former slip-resistance test methods, ASTM designations F1677, F1678 and F1679, which were written proprietary based - these standards were designated for specific Tribometers. ASTM decreed that standards designated for the Mark I, Mark II and English XL were planned to be withdrawn by the end of September 2006, because these standards were proprietary rather than performance based and valid precision and bias statements were prevented from passing ASTM balloting process. New performance based standards are under development in ASTM Committee F13 with an open framework for industry to independently validate tribometers, considering monotonic performance against a predetermined suite of test surfaces, ruggedness, and precision and bias. ASTM designations F1677, F1678 and F1679 are still valid and acceptable industry tools at least until the new standards are developed, comply with ASTM consensus requirements, pass the ASTM balloting process and tribometer validation is completed.

Forensic Engineering, Walkway-Safety Standards, ASTM Standards Development Process