

**TorTest<sup>SM</sup> Floor Friction Testing Service**  
**SOTTER ENGINEERING CORPORATION**  
Consultants

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*Licensed by the State of California  
Board of Professional Engineers  
And Land Surveyors*

*Approved by the City of Los Angeles  
for testing slip resistance of flooring*

### Flooring Slip Resistance Test Results

**Client: Liquiguard Technologies, Inc.**

Report date: 8/15/16

**Flooring: Silcote AS+**

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Test no.: 1608-1521

Date tested: 5/2/16

#### ANSI B101.3 Dynamic Coefficient of Friction Test

The American National Standards Institute (ANSI) published the B101.3 American National Standard test for measuring dynamic coefficient of friction (DCOF) of common hard-surface floor materials in 2012.

#### Average Dynamic Coefficient of Friction, as found, with SBR rubber slider: Wet: 0.86

Reference tile test value: 0.52 (expected range 0.49-0.57)

Individual test values wet: 0.86, 0.85, 0.82, 0.88, 0.88, 0.84

High dynamic coefficient of friction values indicate potentially good traction. The ANSI B101.3 standard recommends a **minimum** average DCOF of **0.43** for level floors (and **0.46 for ramps** up to 4.76 degrees) for high slip resistance and a “lower probability of slipping”. Average DCOF between 0.30-0.42 is defined as “Acceptable” and an “Increased probability of slipping”. Flooring with values in this range should “Monitor DCOF regularly and maintain cleanliness. Consider traction enhancing products and practices where applicable for intended use”. Values of less than 0.30 have “low slip resistance” and a “higher probability of slipping.” Slip resistance can be affected by factors such as floor coatings, abrasives, detergents, contamination, chemical treatments, and wear. Copies of the BOT-3000E test data printouts can be sent to the client upon request.

Respectfully submitted,  
SOTTER ENGINEERING CORPORATION



J. George Sotter, P.E., Ph.D.  
President



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