



LABORATORY REPORT

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FOR: Kevin Sigourney, PROSOCO, Inc.

SUBJECT: Slip Resistance of PROSOCO, Inc. Treatments
Lawrence, KS

DATE: REVISED November 29, 2017
PROJECT: 1704-05 SLR

SAMPLES TESTED:

<u>Sample Area Tested</u>
Areas of steel-troweled concrete and concrete polished to 1500 grit at PROSOCO, Inc.'s headquarters in Lawrence, KS

Submitted By: Kevin Sigourney

PURPOSE OF TEST:

- To determine the slip resistance characteristics of specific PROSOCO, Inc. treatments on polished and steel-troweled concrete when tested in accordance with ANSI/NFSI B101.3.
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PRODUCTS EVALUATED:

Treatments
Consolideck® LS/CS®
Consolideck® LS®
Consolideck® Blended Densifier
Consolideck® LSGuard®
Consolideck® PolishGuard
Consolideck® Concrete Protector WB
Consolideck® Concrete Protector SB
Consolideck® SLX100® Water & Oil Repellent
Consolideck® 244 Salt Screen Additive used in Consolideck® LS/CS®
Consolideck® GuardEXT
PROSOCO DuraSheen

TEST AREA PREPARATION:

The PROSOCO, Inc. products were applied in accordance with the Product Data Sheet instructions. The treatments were allowed to cure for at least 7 days prior to the slip resistance testing.

PHOTOGRAPHS:

Tested Area



TEST METHODS: ANSI/NFSI B101.3-2012 Test Method for Measuring Wet DCOF of Common Hard-Surface Floor Materials

This test procedure is conducted using an approved tribometer designed to measure the wet dynamic coefficient of friction (DCOF) of a floor or walkway surface under anticipated use.

Measuring the Wet DCOF of Installed Flooring Material (In-Situ Procedure)

The floor/walkway surface area to be tested must be spacious enough to fully accommodate the normal operation of the testing device without restriction. Effort should be made to test each sample area using a minimum of two directions, 90 degrees apart; often referred to as an “X-Y” pattern. One of the tests should be performed in the direction of normal pedestrian traffic if possible.

Prepare the Contact Material - The test surface of the SBR (Styrene Butadiene Rubber) material shall be maintained as to prevent buildup of contaminants which may affect the DCOF test results. Follow the tribometer manufacturer’s instructions for conditioning the SBR material.

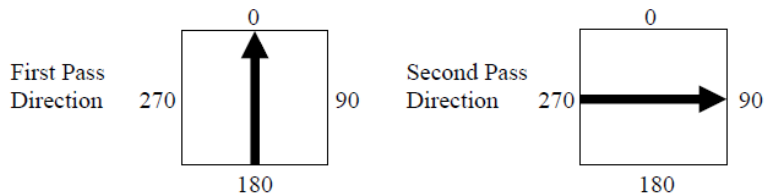
Create a wet test path using a surfactant solution of 0.1 ± 0.005 percent sodium lauryl sulfate in distilled water of sufficient length and width in accordance with the test device instructions for wet DCOF testing.

First Directional Test

Place the measuring device on the surface and conduct three (3) tests in one direction. Record the resulting DCOF values. Dry the test surface by blotting with an untreated paper towel. Use care to not contaminate the surface condition. Check the SBR testing material for contamination or deformation after each test and recondition per the device manufacturer directions if required.

Second Directional Test

Repeat the above procedure at a 90-degree angle rotated clockwise from the original test path.



Calculate the average for the six (6) readings collected from the test area.

DATA INTERPRETATION TABLE

Wet DCOF (μ_D)	Slip Resistance Potential
>0.42	High (lower probability of slipping)
0.30 – 0.42	Acceptable (increased probability of slipping)
<0.30	Low (Higher probability of slipping)



TEST RESULTS: Slip Resistance Evaluation

Concrete Polished to 1500 Grit

Area Tested	AVERAGE DCOF	*Slip Resistance Potential
Consolideck® LS/CS®	0.422	High (Lower probability of slipping)
Consolideck® LS®	0.425	High (Lower probability of slipping)
Consolideck® Blended Densifier	0.425	High (Lower probability of slipping)
Consolideck® LSGuard®	0.422	High (Lower probability of slipping)
Consolideck® PolishGuard	0.483	High (Lower probability of slipping)
Consolideck® Concrete Protector WB	0.453	High (Lower probability of slipping)
Consolideck® Concrete Protector SB	0.530	High (Lower probability of slipping)
Consolideck® SLX100® Water & Oil Repellent	0.483	High (Lower probability of slipping)
Consolideck® 244 Salt Screen Additive used in Consolideck® LS/CS®	0.438	High (Lower probability of slipping)
Consolideck® GuardEXT	0.468	High (Lower probability of slipping)
PROSOCO DuraSheen	0.483	High (Lower probability of slipping)

*NOTE: It is important to note that this category is not indicative of all possible conditions. There are numerous variables that may add to, or take from the available slip resistance potential of any given floor surface (i.e. type or style of footwear, types and frequency of contaminants, pedestrian preoccupation, etc.).

Per the B101.3 test method, the desired value for wet DCOF is >0.42. It should be noted that the larger the DCOF the more resistant the surface is to slipping.

TEST RESULTS: Slip Resistance Evaluation (cont.)

Steel Troweled Concrete

Area Tested	AVERAGE Wet DCOF	*Slip Resistance Potential
Consolideck® LS/CS®	0.458	High (Lower probability of slipping)
Consolideck® LS®	0.482	High (Lower probability of slipping)
Consolideck® Blended Densifier	0.457	High (Lower probability of slipping)
Consolideck® LSGuard®	0.515	High (Lower probability of slipping)
Consolideck® PolishGuard	0.535	High (Lower probability of slipping)
Consolideck® Concrete Protector WB	0.458	High (Lower probability of slipping)
Consolideck® Concrete Protector SB	0.478	High (Lower probability of slipping)
Consolideck® SLX100® Water & Oil Repellent	0.485	High (Lower probability of slipping)
Consolideck® 244 Salt Screen Additive used in Consolideck® LS/CS®	0.518	High (Lower probability of slipping)
Consolideck® GuardEXT	0.502	High (Lower probability of slipping)
PROSOCO DuraSheen	0.475	High (Lower probability of slipping)

*NOTE: It is important to note that this category is not indicative of all possible conditions. There are numerous variables that may add to, or take from the available slip resistance potential of any given floor surface (i.e. type or style of footwear, types and frequency of contaminants, pedestrian preoccupation, etc.).

Per the B101.3 test method, the desired value for wet DCOF is >0.42. It should be noted that the larger the DCOF the more resistant the surface is to slipping.



Courtney A. Murdock, CDT
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