



PROSOCO®

Consolideck LS® test results



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Abrasion Resistance - Taber Abraser

LS[®] & competition vs. Untreated Control

TEST

Taber Abrasion Testing
H22 Wheel, 1000 gram load using ASTM C1353
 modified for concrete.

RESULT

% Improvement vs. Control

Concrete Treated with Consolideck [®] LS [™]	59
Concrete Treated with Competitive Product A	29
Concrete Treated with Competitive Product B	29
Concrete Treated with Competitive Product C	37
Concrete Treated with Competitive Product D	42
Concrete Treated with Competitive Product E	46

Notes

This test establishes abrasion resistance of concrete to simulated foot traffic using grinding wheels under specified loads for a specified time. The results show LS[®]-treated concrete reduced abrasion loss by 59% compared to untreated concrete. Other concrete hardeners had less reduction of abrasion.

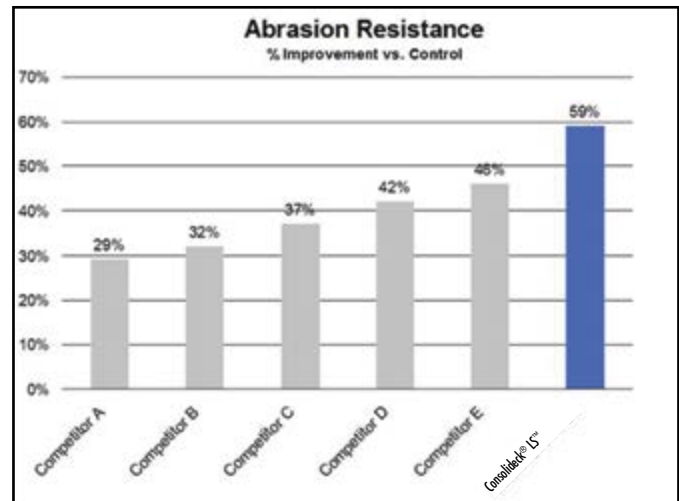


Fig. 1 - LS[®] and competitors vs. control

Hardened & Polished vs. Untreated Control

TEST

Taber Abrasion Testing **H22 Wheel, 1000 gram load**

RESULT

% Improvement vs. Control

Control	100%
Hardened & Polished	521%

Notes

Tiles received one coat of LS[®], then were polished to 3,000 grit.
 Graph shows more than 500 percent improvement in abrasion resistance over untreated, unpolished control.

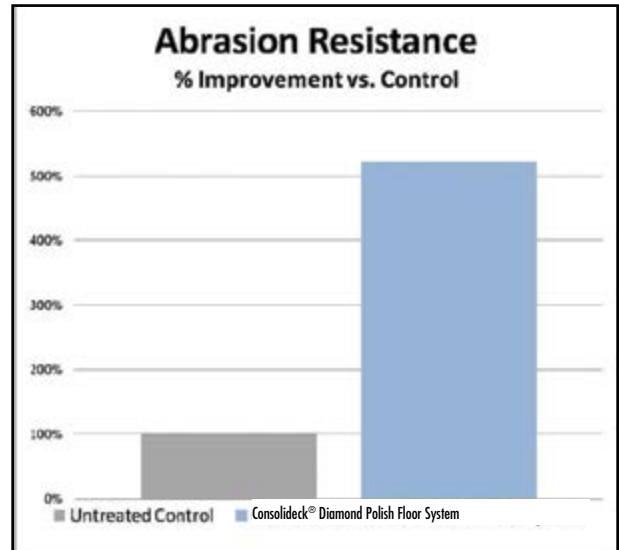


Fig. 2 - Improvement in abrasion resistance

Abrasion Resistance - Micro Abraser

LS® vs. Untreated Control

TEST	RESULT	
Micro Abrasion Resistance Testing ASTM C418 Abrasion Resistance of Concrete	Average Weight Loss Grams	% Improvement
Standard Finish Concrete		
Treated with LS®	0.296	27
Untreated Control	0.407	
Green-colored (shake-on) Concrete		
Treated with LS®	0.164	40
Untreated Control	0.275	

Notes
This test evaluates the relative resistance of a treated concrete surface to air-driven sand compared to untreated concrete. Results show that the LS®-treated standard concrete had 27% less abrasion loss and the LS®-treated shake-on concrete had 40% less abrasion loss than untreated concrete.

Water Vapor Transmission (breathability)

LS® vs. Untreated Control

TEST	RESULT
ASTM E96 Water Vapor Transmission of Materials	WVT retained
Concrete Treated with LS®	100 percent

Notes
This test determines the rate of water vapor passage through a material or applied film on a substrate under controlled temperature and humidity. The results show the LS®-treated concrete allows the same rate of water vapor transmission as the untreated concrete.

Stain Resistance

LS® & LSGuard® vs. Untreated Control

TEST	RESULT
Based on ASTM D1308-87 (1998) Standard Test Method for Effect of Household Chemicals	% Reduction in staining

Notes
This test determines the ability of treated concrete to resist staining from common household agents like coffee, red wine, and vegetable oil. The results show that LS®-treated concrete resisted an average 23% of the staining on troweled, honed and polished concrete, while LSGuard® resisted an average 69% of the staining compared to untreated concrete.

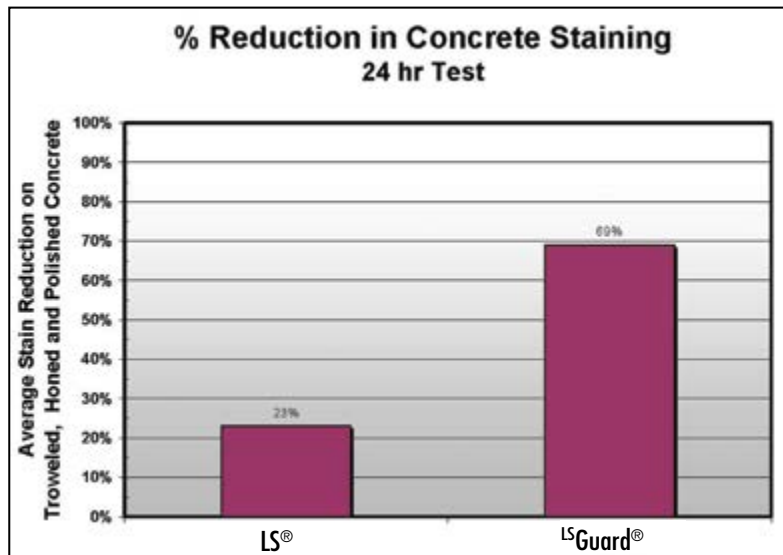


Fig. 3 - % Average reduction in staining by finish

Slip Resistance

ASTM C1028 - Determining the Static Coefficient of Friction

LS® Treated

Finish	Dry	Wet
Steel Troweled	0.720	0.664
Honed (up to 100 grit)	0.759	0.654
Polished (up to 800 grit)	0.865	0.645
Highly polished (up to 3,000 grit)	0.919	0.766

LS® & LSGuard® Treated

Dry	Wet
0.841	0.600
0.836	0.601
0.822	0.606
0.841	0.695

Notes

This test determines the static coefficient of friction of flooring surfaces under wet and dry conditions. The results show that the tested surfaces exceed OSHA and ADA recommendations for slip-resistance.

Adhesion

LS® vs. Untreated Control

TEST

ASTM D4541 Pull-Off of Coatings Using Type II Tester

Steel-troweled concrete

Treated with LS®

Untreated control

RESULT

pounds per square inch

Steel-troweled concrete

483

400

Notes

This test evaluates pull-off strength (adhesion) of a coating applied to a hard surface like concrete. The test results show that concrete treated with LS® exhibited greater coatings-adhesion than untreated.



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