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STONE LABORATORY TEST REPORT

Report No.: 23-0055.04-R0

Test Date: 04/26/23 Report Date: 05/11/23 Retention Date: 04/26/27

Prepared for: Linda Abbott

StoneHardscapes 5841 Powerline Road Fort Lauderdale, FL 33309

Product: One Natural Marble Product (Aspen White – Tumbled)

Scope: The Natural Institute (NSI) was contracted by StoneHardscapes. to perform DCOF testing per ANSI A326.3 in wet condition one natural marble product (Aspen White) with a tumbled finish. Testing was performed at the NSI laboratory located in Oberlin, Ohio.

Methods: The products were evaluated in accordance with the following test method:

ANSI A326.3-2021 – American National Standard Test Method for Measuring Dynamic Coefficient of Friction of Hard Surface Flooring Materials

Test Materials: Three marble paver specimens, designated as Aspen White (Tumbled), were provided by AKDO Intertrade, Inc. The specimens were received at the Natural Stone Institute's Materials Testing Laboratory on 04/24/23 in good condition for testing. Specimen photos are located on page 4 of this report. Specimens were tested as received except for preconditioning to standard lab conditions prior to testing. Representative test materials shall be retained by the NSI for a period of four years.

Test Witness Record

Name	Company
R. Lawson	NSI
Scott D. Scallorn	NSI

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Test Procedure(s): Unless otherwise stated, all specimen conditioning and testing was conducted in standard laboratory conditions. Test photos are located on page 4 of this report. Equipment calibration certificates are available upon request.

ANSI A326.3 Dynamic Coefficient of Friction (DCOF) Evaluation

The DCOF evaluation was conducted in accordance with the procedures detailed in ANSI A326.3, sections 8 & 9. Specimens were evaluated with a BOT 3000E tribometer (ICN NSI00002) in wet condition (employing a 0.05% SLS solution). Four 90° offset passes were conducted, and test values averaged for each specimen. Individual specimen results were averaged for the test series and evaluated against the ANSI A326.3, Section 3.1 recommended wet condition performance criteria of 0.42.

Specimen Details

Product	Test Method	Quantity	Nominal Dimensions	Description
Aspen White – Tumbled	ANSI A326.3	3	12 in. x 12 in. x 1 in. thickness	Light grey and white, natural marble pavers with a tumbled finish on one 12 in. square facing.

Test Results

ANSI A326.3 - Dynamic Coefficient of Friction – Aspen White – Tumbled

Specimen	Test Orientation				Wet Condition
No.	0°	90°	180°	270°	DCOF
W - 1	0.44	0.42	0.43	0.43	0.43
W - 2	0.49	0.48	0.45	0.43	0.46
W - 3	0.48	0.49	0.45	0.45	0.47
Series Average					0.45
Standard Deviation					0.03
Coefficient of Variation (%)				5.6	

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Conclusion: The Aspen White – Tumbled tile product (0.45 DCOF) satisfied the ANSI A326.3 recommended minimum wet condition performance criteria of 0.42 DCOF.

It has been our pleasure to provide this product testing service for your project. Please do not hesitate to contact us if you have any questions or require additional information. Contact information is listed below.

Respectfully submitted,

Scott D. Scallorn, Testing Lab Manager

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Revision Log

No.	Date	Page(s)	Description
0	05/11/23	N/A	Initial report release

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Photographs



Photo No. 1
BOT 3000E Test Apparatus



Photo No. 2
Aspen White – Tumbled
Surface Detail



Photo No. 3

DCOF Test Set Up



<u>Photo No. 4</u> DCOF Test in Progress