



**PRODUCT PERFORMANCE TESTING LABORATORY**

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February 8, 2023

MS International, Inc.  
Attn: Luis Silva  
2095 N Batavia Street  
Orange, CA 92865  
USA

Dear Luis Silva,

Tile Council of North America has tested the samples you submitted. Test report TCNA-0075-23 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

TILE COUNCIL OF NORTH AMERICA, INC.

Damon McDowell  
Laboratory Supervisor  
Enclosures

TCNA TEST REPORT NUMBER: TCNA-0075-23

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TEST REQUESTED BY: MS International, Inc.

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

Informal Test Method Description: This standard describes the test method for measuring dynamic coefficient of friction (DCOF) of hard surface flooring materials under the wet condition using the BOT 3000E device.

This summary is provided for the reader's convenience and is not a complete description of the method. See ANSI A326.3 for all method details and information.

TEST SUBJECT MATERIAL: Identified by client as: "Dimension Collection/Vietnam"  
Approximate Size as Received: 12"x24"  
Product Color: Concrete

TEST DATE: 2/2/2023

TEST PROCEDURE NOTES:

- Sample Prep: Samples cut to 12"x12" for testing.
- The specimens were cleaned with Bona Stone, Tile and Laminate Floor Cleaner prior to testing.
- Three (3) specimens were tested in all four directions with 8"long measurements.
- The SBR sensor was verified using a standard tile prior to testing.
- Testing was performed under wet conditions using 0.05% SLS water
- Testing was conducted under laboratory conditions at approximately 70°F and 50% relative humidity using a calibrated BOT 3000E device (calibration due: 3/29/2023).
- After testing, the SBR sensor was verified again according to the procedure.

TEST RESULTS:

The individual and average DCOF data for each specimen were as follows:

| Direction   | Specimen 1 | Specimen 2 | Specimen 3 |
|-------------|------------|------------|------------|
| Direction 1 | 0.61       | 0.58       | 0.66       |
| Direction 2 | 0.69       | 0.64       | 0.71       |
| Direction 3 | 0.69       | 0.70       | 0.73       |
| Direction 4 | 0.71       | 0.72       | 0.74       |
| Average     | 0.68       | 0.66       | 0.71       |

COMMENTS: None

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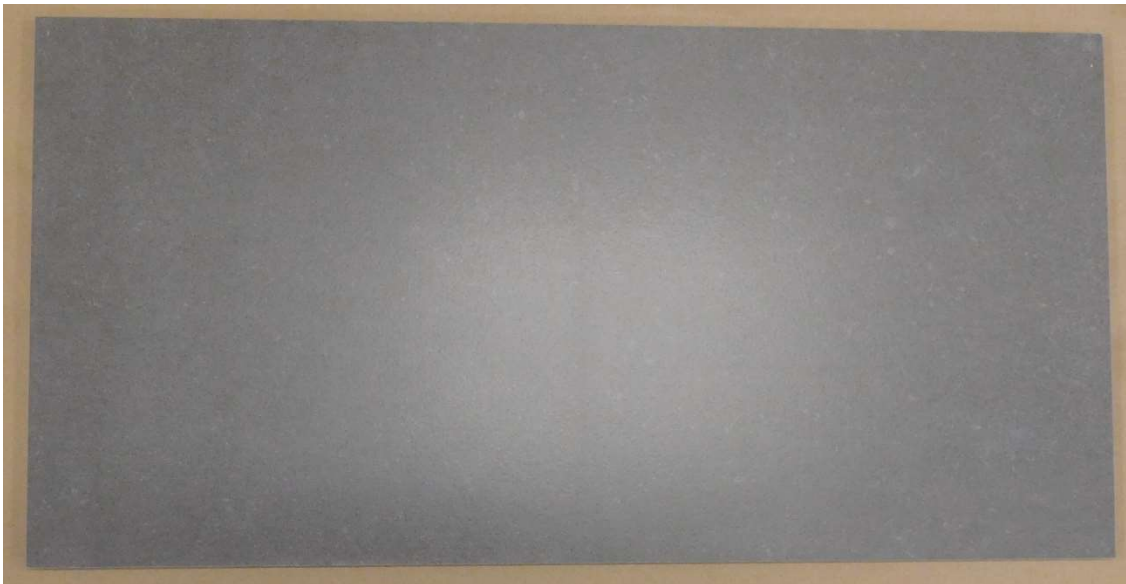
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**IMAGE OF PRODUCT TESTED:**





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**ANSI SPECIFICATIONS:**

According to ANSI A326.3 section 3.1, "Unless otherwise declared by the manufacturer, hard surface flooring materials suitable for level interior spaces expected to be walked on when wet with water shall have a measured wet DCOF value of 0.42\* or greater when tested using SBR testfoot material and SLS solution as per this standard. However, hard surface flooring materials with a measured wet DCOF value of 0.42\* or greater are not necessarily suitable for all projects. The specifier shall determine materials appropriate for specific project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers' guidelines and recommendations."

According to ANSI A326.3 section 3.2, "When tested using SBR testfoot material and SLS solution as per the procedure in this standard, hard surface flooring materials with a measured wet DCOF value of less than 0.42\* (including by way of example, but not in limitation, polished surfaces), unless otherwise declared by the manufacturer, shall only be installed when the surface will be kept dry when walked upon and proper safety procedures will be followed when cleaning the hard surface flooring materials. Hard surface flooring not intended to be walked upon when wet shall have a dry DCOF value of 0.42\* or greater when tested per Section 10.0 of this standard."

\* Each instance of the 0.42 threshold limit value provided on this page applies to the BOT 3000E device; devices being used as equivalent may have different threshold limit values, which shall be independently correlated to those values determined with the BOT 3000E, and independently-derived precision statements which shall be provided by the device manufacturer.

For the complete section, including necessary information for specifiers, this section can be viewed [https://www.tcnatile.com/images/pdfs/ANSI\\_A326.3\\_2021\\_February\\_2022\\_Locked.pdf](https://www.tcnatile.com/images/pdfs/ANSI_A326.3_2021_February_2022_Locked.pdf)





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Damon McDowell  
Laboratory Supervisor

2/8/2023

