



PRODUCT PERFORMANCE TESTING LABORATORY

100 Clemson Research Blvd., Anderson, SC 29625

Phone 864.646.8453 Fax 864.646.2821

Email testing@tcnatile.com Web www.TCNAtile.com

February 28, 2022

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-0099-22 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-0099-22 **PAGE:** 1 OF 4

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: “Savoy Crema”
Approximate Size as Received: 12"x24"
Product Color: Not Provided

TEST DATE: 2/24/2022

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: 9/28/2022).
- 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	0.68	0.68	0.72
Direction 2	0.78	0.80	0.83
Direction 3	0.79	0.84	0.83
Direction 4	0.83	0.86	0.86
Average	0.77	0.80	0.81

COMMENTS: None



TCNA TEST REPORT NUMBER: TCNA-0099-22 **PAGE:** 2 OF 4

TEST REQUESTED BY: MS International, Inc.

TEST SUBJECT MATERIAL: Identified by client as: "Savoy Crema"

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

IMAGE OF PRODUCT TESTED:





TCNA TEST REPORT NUMBER: TCNA-0099-22 **PAGE:** 3 OF 4

TEST REQUESTED BY: MS International, Inc.

TEST SUBJECT MATERIAL: Identified by client as: “Savoy Crema”

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

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,³ 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





TCNA TEST REPORT NUMBER:

TCNA-0099-22

PAGE: 4 OF 4

DISCLAIMER AND LIMITATION OF LIABILITY

This report is provided for the sole use of the client and no one else. It is intended for professional use by a knowledgeable professional. If published by the client, it must be published in full, including this disclaimer and limitation of liability.

This report is not an endorsement, recommendation, approval, certification, or criticism by TCNA of any particular product or its application. TCNA recommends that anyone considering the use or installation of a particular product consult with the manufacturer or an industry professional for advice specific to the person's needs and consider any applicable laws, statutes, codes, or regulations relevant to the particular product. TCNA does not know all the different manners and applications in which a client's particular product might be used, and, therefore, it disclaims any and all duty to provide warnings or to further investigate the suitability of the use of a particular product in a particular situation.

Unless otherwise expressly stated, TCNA tested the specific test subject material provided by the client and identified in the lab report, as indicated by the client. TCNA does not independently verify the information provided by the client, and it makes no representation that similar results would be achieved with other, untested materials, even if such other materials purportedly have the same product name, are purportedly of the same or similar type of tile or product made by the client, or are purportedly from the same batch of tile or product. Nor does TCNA state that the date in this report is representative of production occurring at the same time or at any other time. Only the manufacturer may make that claim, based on sampling and quality control parameters beyond the knowledge and control of TCNA. TCNA does not provide any supervision, review, management, or quality control of any manufacturer's production.

TCNA makes no representation that the client's products are uniform or identical to the test subject material, that the test subject material is suitable for any particular use, application, or installation, or that it will exhibit the same properties when installed or used in a particular manner. The data provided in this report results from standardized laboratory testing performed under laboratory conditions. As such it does not represent all conditions under which the products may be used or subjected. For testing on actual materials being used or considered for a job site, contact TCNA for sampling provisions and possible testing.

This report is intended solely to provide the results of the test procedure stated above as performed on the test subject material provided by the client, and may not be relied on for any other purpose. TCNA MAKES NO OTHER REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY DISCLAIMED. IN THE EVENT OF A DISPUTE CONCERNING THIS REPORT, THE EXCLUSIVE REMEDY FOR CLIENT SHALL BE FOR TCNA TO REPEAT THE TEST REQUESTED, BUT IN NO EVENT SHALL TCNA BE LIABLE FOR AN AMOUNT GREATER THAN THE AMOUNT IT RECEIVED FROM CLIENT FOR THE TEST. UNDER NO CIRCUMSTANCES WILL TCNA BE LIABLE TO CLIENT FOR ANY OTHER DAMAGES (NOR SHALL IT BE LIABLE TO ANY OTHER PERSON OR BUSINESS ENTITY FOR ANY DAMAGES), INCLUDING WITHOUT LIMITATION ANY AND ALL DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, RESULTING, IN WHOLE OR IN PART, FROM ANY USE OF, REFERENCE TO, OR RELIANCE UPON THE REPORT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. TCNA DISCLAIMS ALL LIABILITY TO ANY THIRD PARTY CONCERNING THIS REPORT. THE FOREGOING LIMITATION OF LIABILITY IS A FUNDAMENTAL ELEMENT OF TCNA'S AGREEMENT TO CONDUCT AND PROVIDE THE REPORT.

2/28/2022

Damon McDowell
Laboratory Supervisor

