



# PRODUCT TESTING SERVICE

100 Clemson Research Blvd. □ Anderson, SC 29625 □ Tel (864) 646-TILE □ Fax (864) 646-2821

May 30, 2013

MS International, Inc.  
Attn: Morgan Huang  
2095 N. Batavia St.  
Orange, CA 92865

Dear Mr. Huang,

Tile Council of North America has tested the samples you submitted. Test report TCNA-256-13 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

TILE COUNCIL OF NORTH AMERICA, INC.

Dr. Jyothi Rangineni  
Research Scientist  
Enclosures



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TCNA TEST REPORT NUMBER:

TCNA-256-13

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TEST REQUESTED BY:

MS International, Inc.  
Attn: Morgan Huang  
2095 N. Batavia St.  
Ornage, CA 92865

TEST SUBJECT MATERIAL:

Identified by client as: "Sonoma Line"

TEST DATE:

5/28/2013

TEST PROCEDURE:

**ASTM C1028: "Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method"**

-A Chatillon DFIS 100 digital force gauge was used to measure each pull in pounds-force.

-A 3 x 3 x 1/8-inch piece of Neolite was used as the sensor.

TEST RESULTS:

The average static coefficient of friction of four (4) pulls on each tile was as follows:

	<u>As Received</u>	<u>After Cleaning</u>
<u>Tile 1</u>		
Dry	<b>0.82</b>	<b>0.83</b>
Wet	<b>0.64</b>	<b>0.65</b>
<u>Tile 2</u>		
Dry	<b>0.83</b>	<b>0.82</b>
Wet	<b>0.66</b>	<b>0.66</b>
<u>Tile 3</u>		
Dry	<b>0.83</b>	<b>0.82</b>
Wet	<b>0.65</b>	<b>0.65</b>

The average static coefficient of friction of twelve (12) pulls was as follows:

	<u>As Received</u>	<u>After Cleaning</u>
Dry	<b>0.83</b>	<b>0.82</b>
Wet	<b>0.65</b>	<b>0.65</b>

5/30/2013

Dr. Jyothi Rangineni  
Research Scientist

Testing Services: [testing@tileusa.com](mailto:testing@tileusa.com) □ Literature Orders: [literature@tileusa.com](mailto:literature@tileusa.com) □ Web Site: [www.tileusa.com](http://www.tileusa.com)

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