TILE COUNCIL OF NORTH AMERICA, INC.

PRODUCT TESTING SERVICE

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

TCNA TEST REPORT NUMBER: TCNA-548-15

TEST REQUESTED BY: Alfagres

TEST METHOD: **ANSI A137.1-2012 Section 9.6.1: "Wet Dynamic Coefficient of Friction (DCOF)"**

Informal Test Method Description: This test method covers the measurement of dynamic coefficient of friction of ceramic tile or other surfaces under the wet condition using the BOT 3000 device.

This summary is provided for the reader's convenience and is not a complete description of the method. See ANSI A137.1 Section 9.6.1 for all method details and information.

TEST SUBJECT MATERIAL: Identified by client as: **"6x6 Colonial Red Smooth"**
Approximate Size as Received: 6″x6″
Product color: Red

TEST DATE: 8/26/2015

TEST PROCEDURE:

- Sample Prep: None
- The tiles were cleaned with Renovator #120 prior to testing.
- Three (3) pieces of tile were tested in all four directions with 6″ 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.

TEST RESULTS:

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

Direction	Tile 1	Tile 2	Tile 3
Direction 1	0.69	0.72	0.72
Direction 2	0.69	0.72	0.70
Direction 3	0.69	0.70	0.72
Direction 4	0.70	0.69	0.69
Average	0.69	0.71	0.71

COMMENTS: None

Katelyn Simpson
Laboratory Manager

9/2/2015

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ANSI SPECIFICATIONS*:

According to the ANSI A137.1 standard for ceramic tile, "Unless otherwise specified, tiles suitable for level interior spaces expected to be walked upon when wet shall have a wet DCOF of 0.42 or greater when tested using SLS solution as per the procedure in section 9.6.1. However, tiles with a DCOF of 0.42 or greater are not necessarily suitable for all projects. The specifier shall determine tiles 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."

This paragraph is excerpted from Section 6.2.2.1.10 of the standard. For the complete section, including necessary information for specifiers, this section can be viewed and downloaded at no cost at http://www.tcnatile.com/images/pdfs/COF_excerpt_from_ANSI_A137.1-2012_release_date_November_2012.pdf

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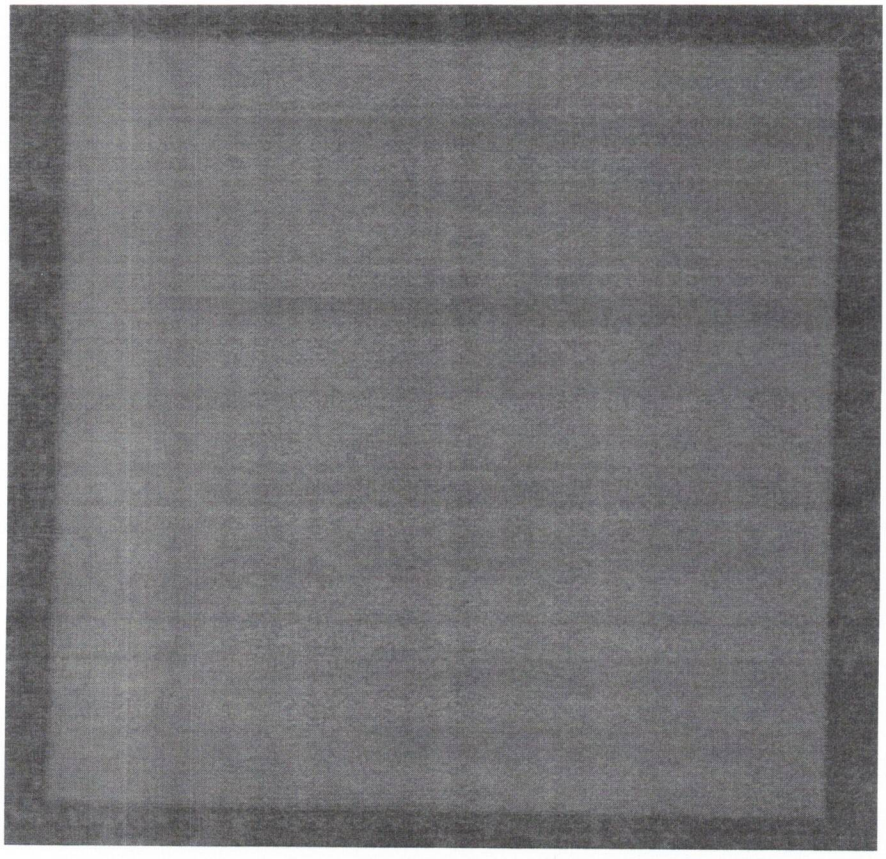
APPENDIX: Image of product tested



Katelyn Simpson
Laboratory Manager

9/2/2015