

## TILE INSTITUTE of AMERICA

1262 Bouquet Circle, Thousand Oaks, California 91362 Telephone: (805) 371-TILE (8453) Facsimile: (805) 371-8455

TIA's Client: 20160415

**AquaBella/Main Street Art, Inc.**  
**Mr. Brian L. Streadbeck**  
**450 South Alpine Highway**  
**Alpine, Utah 84004**

Telephone: (714) 264-8269 Facsimile: (714) 685-0465  
[brian@msgallery.com](mailto:brian@msgallery.com)

Tile: **Aqua Series**, multi-colored "AQ-1203 Obsidian Blend" glass body, mesh back mounted.  
Nominal size: 1" x 2" x 1/4". Tile made in China.

Conditions: New tiles sent to TILE INSTITUTE of AMERICA in sealed manufacturer's boxes from client above and selected at random.

### Thermal Shock Resistance of Ceramic Tile (ASTM C484)

**Procedure:** This test method is a procedure for determining whether ceramic tiles are affected by prolonged exposure to high temperature and rapidly cooled to typical room temperature. The procedure is to place tiles into an oven maintained at a temperature of  $293 \pm 9^\circ \text{F}$  ( $145 \pm 5^\circ \text{C}$ ) and supported face up in a manner that the glazed surface of each tile is freely exposed to the oven atmosphere. After 30 minutes, the tiles are removed and put face up quickly onto a sheet of aluminum maintained at a room temperature of  $75 \pm 5^\circ \text{F}$  ( $24 \pm 3^\circ \text{C}$ ). After 15 minutes, the tiles are inspected for shivering or any other type of disintegration. The process was repeated five times.

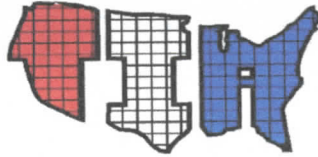
<u>Specimens</u>	<u>Results</u>
1.	Not affected
2.	Not affected
3.	Not affected
4.	Not affected
5.	Not affected

Test Results: Pass

Sincerely,

Gerald M. Halweg, CTC, CSI, TTA.  
President/CEO

Date: June 9, 2016



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**Alpine, Utah 84004**

Client/Test Number: **20160415**

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[brian@msagallery.com](mailto:brian@msagallery.com)

Tile: **Aqua Series**, multi-colored "**AQ-1203 Obsidian Blend**" glass body, mesh back mounted.

Nominal size: 1" x 2" x 1/4". **Smooth surface.** Tile made in China.

Conditions: New tiles sent to TILE INSTITUTE of AMERICA in sealed manufacturer's boxes from client above and selected at random.

## COEFFICIENT OF FRICTION TEST STANDARD: ASTM C 1028

Standard Test Method for Evaluating the static Coefficient of Friction of Ceramic

Tile or Tile and other like surfaces by the Horizontal Dynamometer Pull Meter Method.

Neolite assemblies. Neolite is a registered trademark of the Goodyear Tire and Rubber Co., Shoe Product Division, Windsor, VT.

Color: Natural 11, RMA Spec. #HS-3, 6 irons, Specific Gravity 1.27 ± 0.02, Hardness Shore "A" 93-96.

Neolite sole/heel material is a good representative for most types of heel/sole material commonly worn on shoes today.

Test	Test Assembly	Tile #	North	East	South	West	Average	COF/Fc
1	Dry Neolite	1	26	26	26	25	25.75	<b>0.52</b>
2	Dry Neolite	2	26	25	26	26	25.75	
3	Dry Neolite	3	27	25	26	26	26.00	
4	Wet Neolite	1	16	16	16	15	15.75	<b>0.31</b>
5	Wet Neolite	2	15	15	15	15	15.00	
6	Wet Neolite	3	15	16	15	15	15.25	

### Requirements:

The **TILE INSTITUTE of AMERICA** recognizes 0.50 or greater as providing non-hazardous walkway for zero to 2 percent sloped surfaces.

Underwriters Laboratories had listed COF of 0.50 or higher when dry as slip-resistant.

ASTM F 2047 test method (Laboratory use only) had been reporting 0.50 or greater as slip-resistant surface.

The US National Bureau of Standards had accepted a static COF of 0.50 or higher as adequate for pedestrian safety.

Verify slip-resistant requirements from your local Jurisdiction and/or Municipalities for minimum COF.

US Army adopted 0.50 as the minimum value for wet walking surfaces.

ANSI A1264.2 published 0.50 as a threshold of safety for walking surfaces.

Verify slip-resistant requirements from your local Jurisdiction and/or Municipalities for minimum COF requirements.

Date:

June 11, 2016

Tests Conducted By:

Gerald M. Halweg  
Gerald M. Halweg, CTC, CSI, President