

TILE INSTITUTE of AMERICA

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TIA's Client: 20140815

AquaBella/Main Street Art, Inc.
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Tile: **Valley Series**, color blue/beige "**VA-633**" **Blue China** porcelain body glazed.
Nominal size: 6" x 6" 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.

The tiles were bonded between concrete units and bonding mortar with latex-modified thin set mortar.
Specification: ASTM C 482

Report of Test

ADHESION BOND SHEAR STRENGTH (*ASTM C 482)


Standard Test Method for Bond Strength of Ceramic Tile. This method provides the means for establishing whether or not this tile can be bonded with adequate strength to Portland cement, which may appear in tile specifications. Tile bond adhesion strength is the force in pounds-force (or Newton's), as read from the pressure gauge, necessary to cause the tile's bond to shear. The load was applied at the rate of 1000 lbf/min. The tile samples were placed on a test fixture as per specifications. * Modified by using a bond coat as identified versus pure cement.

Sample #	Days Cured	Bonding Material	Sq. Inches	Load Pound	PSI	Failure %
1	28 Dry	Latex-modified thin set mortar	36	8712	242	T-30%, BC-70%
2	28 Dry	Latex-modified thin set mortar	36	8532	237	T-50%, BC-50%
3	28 Dry	Latex-modified thin set mortar	36	8640	240	T-45%, BC-55%
4	28 Dry	Latex-modified thin set mortar	36	8496	236	T-35%, BC-65%
5	28 Dry	Latex-modified thin set mortar	36	7956	221	T-40%, BC-60%
Average				8467.2	235.2	PASS

Requirements: ANSI A 137.1 (General) Bond Strength. When tested as described in ASTM C 482, the average bond strength shall be 50 pounds per square inch or greater. The UBC requires a shearing stress of 50 psi. The DSA/SS & OSHPD 1 requires 50 psi and bond strength of 100 psi.

Test Results: **Pass**

Sincerely,


Gerald M. Halweg, CTC, CSI, TTA.
President/CEO of TILE INSTITUTE of AMERICA

Date: 11-5-2014