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CLIENT: Tile Tech Inc.
4730 East 26th Street
Vernon, California 90058

Test Report No: RJ3897-2

Date: April 1, 2015

SAMPLE ID: The test samples are identified as: **Tile Tech Porcelain Paver with Hex Tray on Hybrid Pedestal System.**

SAMPLING DETAIL: The test materials were delivered to QAI Laboratories by the manufacturer. The test decks were constructed by QAI personnel. No special sampling conditions or sample preparation were observed by QAI.

DATE OF RECEIPT: Samples were received at QAI on March 27, 2015

TESTING PERIOD: March 31, 2015

AUTHORIZATION: Proposal #DM-2015-031802-R2 Dated March 18, 2015 Signed by Ronnie Tabibnia on March 18, 2015.

TEST PROCEDURE: Conduct a single **Spread of Flame** test on the submitted samples in accordance with the methods and procedures outlined in **ASTM Test Method E108-11, "Standard Test Methods for Fire Tests of Roof Coverings"(E108).**

TEST RESULTS: The sample **Meets the Class A Spread of Flame** requirements when tested in accordance with ASTM Test Method E108-11, **"Standard Method of Fire Tests of Roof Coverings".**

Detailed test results are presented in the subsequent pages of this report.

Prepared By:



David Royer
Test Technician

**Signed for and on behalf of
QAI Laboratories, Inc.**



Brian Ortega
Senior Technician

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SPREAD OF FLAME TEST PER ASTM E108-11

Test Sample Construction Details

Testing was conducted in accordance with ASTM E108-11. All test deck assemblies were stored indoors at temperatures not lower than 60°F (16°C) nor higher than 90°F (32°C) for the period of time necessary to cure the assembly components prior to testing. Test decks were stored such that each was surrounded by free circulating air. The test decks were assembled by QAI Staff.

A 1⁵/₃₂" ACX Plywood sheet was used to support the porcelain pavers, hex tray and hybrid pedestal leveling system. The top surface consisted of 24" x 24" porcelain paver tiles. Each paver tile was placed inside a plastic hex tray and supported by a Tile Tech Hybrid Pedestal at each corner. The nominal dimensions of the completed deck were 4 feet x 8 feet. A picture of the completed deck assembly is provided in the appendix of this report.

Test Details

Spread of Flame – Class A (One Test Deck)

Wind Velocity:	1056 ft/min ± 44 ft/min
Flame Temperature:	1400 ± 50° F
Test Deck Slope:	1/4" per Horizontal Foot
Flame Application:	10 Minutes

Test Results

Ignition Time:	No Ignition
Maximum Spread of Flame:	0 ft.
Time to Maximum Spread:	n/a
Lateral Spread of Flame:	None
Flame Front Recession:	None.

Observations

The sample did not ignite during the 10 minute test. The test was terminated with 0 feet maximum spread of flame. After the test the Hybrid Pedestals were examined for damage. The pedestals showed no signs of melting or burning after the flame exposure to the porcelain pavers during the Spread of Flame test.

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Conclusion

The sample **Meets** the **Class A Spread of Flame** requirements when tested in accordance with ASTM Test Method E108-11, "Standard Method of Fire Tests of Roof Coverings".

CONDITIONS OF ACCEPTANCE FOR CLASSIFICATION BY ASTM E108:

At no time during or after the intermittent flame, spread of flame* or burning brand tests shall:

1. Any portion of the roof covering material be blown or fall off the test deck in the form of flaming or glowing brands that continue to glow after reaching the floor, or
2. The roof deck be exposed, or
3. Portions of the roof deck fall away in the form of particles that continue to glow after reaching the floor.
4. At no time during the Class A intermittent flame or Class A burning brand tests shall there be sustained flaming of the underside of the deck.
- 5.* At the conclusion of the spread of flame tests, the flaming shall not have spread beyond 6 feet for Class A, and there shall have been no significant lateral spread of flame from the path directly exposed to the test flame.

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Appendix



Photograph 1: Tile Tech Porcelain Paver Deck on Hex Tray Prior to Testing

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Appendix



Photograph 3: Tile Tech Porcelain Paver Deck at Maximum Flame Spread (0 Feet)

End of Report

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International Accreditation Service
CERTIFICATE OF ACCREDITATION

This is to signify that

QAI LABORATORIES
8385 WHITE OAK AVENUE
RANCHO CUCAMONGA, CALIFORNIA 91730

Testing Laboratory TL-220
(Revised June 24, 2014)

has met the requirements of the IAS Accreditation Criteria for Testing Laboratories (AC89), has demonstrated compliance with ISO/IEC Standard 17025:2005, *General requirements for the competence of testing and calibration laboratories*, and has been accredited, commencing April 17, 2014, for the test methods listed in the approved scope of accreditation.


Patrick V. McCullen
Vice President


C.P. Ramani, P.E.
President

(see attached scope of accreditation for fields of testing and accredited test methods)



Print Date: 06/24/2014

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