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TCNA TEST REPORT NUMBER: TCNA-141-12

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TEST REQUESTED BY:

Arto Brick/California Pavers

Att: Armen Alajian 15209 So Broadway St Gardena, CA 90248

TEST SUBJECT MATERIAL:

Identified by client as: Western Quarry Monrovia Un-Glazed

TEST DATE:

3/27/12

TEST PROCEDURE:

ASTM C648: "Standard Test Method for Breaking Strength of

Ceramic Tile"

-Ten whole glazed tiles were tested.

-The tiles were loaded at a rate of 1000 pounds per minute. -A one and a half inch triangular support was used to hold the

tiles during loading.

-Testing was performed on an Instron Universal Tester, model

#3385-H

TEST RESULTS:

The average breaking strength of ten (10) tiles was: 1011 lbf.

The individual results of breaking strength are as follows:

Specimen 1: 1010 lbf

Specimen 2: 1011 lbf

Specimen 3: 1012 lbf

Specimen 4: 1013 lbf

Specimen 5: 1007 lbf Specimen 6:

1012 lbf Specimen 7: 1012 lbf

Specimen 8: 1009 lbf

Specimen 9: 1007 lbf

Specimen 10: 1015 lbf

[The ANSI A137.1 Specification for Quarry Tile states: "the average breaking strength shall be 250 lbf or greater with no individual specimen below 225 lbf."]

Katelyn Simpson

Laboratory Manager