



Precision Geosynthetic Laboratories



CLIENT: TILE TECH PAVERS

Research Name: Flexural Strength of Tile Tech Pavers Mounted on Pedestal Paver Systems for City of Los Angeles Certification Application
 (PGL Job No. G080789)

PRODUCT DESCRIPTION

Tile specimen dimension is 18" x 18" x 1.75" complete with Pedestal system consisting of several components which includes: Top Cap, 4" diameter-12" height PVC pipe, Bottom Cap, and Buffer Pad.

SAMPLE IDENTIFICATIONS:

SAMPLE ID	Research CONTROL NUMBER	DATE RECEIVED	ORIGIN OF MATERIAL
18"x 18"x 1.75" Tile Pavers	48543	7/15/08	Tile Tech Pavers
4" diameter PVC pipes	48545	7/15/08	Tile Tech Pavers
Buffer Pad	48548	7/15/08	Tile Tech Pavers
Top and Bottom Cover	48547	7/15/08	Tile Tech Pavers

TESTS REQUIRED:

TEST METHOD

ASTM C293 - Modified

DESCRIPTION

Flexural Strength of Concrete
 (Modified for Tile Tech Pavers)

TEST CONDITIONS:

The samples were conditioned for a minimum of one hour in the laboratory at $22 \pm 2^{\circ}\text{C}$ ($71.6 \pm 3.6^{\circ}\text{F}$) and at $60 \pm 10\%$ relative humidity prior to test.

Preparation and Conduct of the Test:

- Four (4) sets of Pedestal Paver Support Systems were arranged.
- The support assemblies were properly positioned on top of the Compression Testing Equipment's base plate which acted as its foundation.
- The 18"X18" Tile Paver specimen was placed on top of the equally spaced (square position) support assemblies sustaining each corner of the tile specimen.
- The compression test was carried out by applying a normal concentrated load by way of lowering a one (1) inch diameter compression shaft/probe on the middle of the complete assembly at the rate of 0.04 inch/minute.
- The apparatus read out at peak stress indicated that the specimen failed; readings were recorded to complete the test.
- Steps 1 to 5 were performed on the remaining two (2) Tile Pavers. A total three (3) specimens were tested.

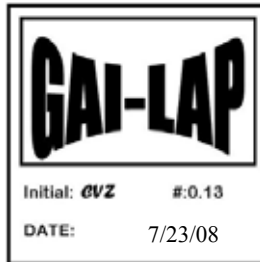
1160 North Gilbert Street, Anaheim, CA. 92801, Tel# 714-520-9631, Fax#714-520-9637

**Precision Geosynthetic Laboratories**Other Attachments

1. Photos showing the performance of the test.

TEST RESULTS:

The test results are summarized in Table 1 indicated with the appropriate unit notations.

PRECISION GEOSYNTHETIC LABORATORIES

Carmelo V. Zantua
Technical/Laboratory Director

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TABLE 1.
 OBJECTIVE: Determination of Flexural Strength of Tile Pavers
 CLIENT: TILE TECH PAVERS
 PROJECT NAME: Flexural Strength of Tile Pavers

Date Started : 7/15/2008
 Date Reported: 7/23/2008
 Client Sample ID : Tile Pavers and Pedestal Paver System
 Material Description: 18" x 18" x 1.75" Tile Pavers and Pedestal Paver System

Reported by: 
 PGL Job No. : G080789

METHOD	SPECIMENS								
	1	2	3	Avg.	Std. Dev.	Min	Max	% RSD	
ASTM C293 (Modified for Tile Tech Pavers)	DESCRIPTION								
	An 18" x 18" x 1.75" Tile Paver specimen was placed perpendicular to the load-supplying and pedestal system. The specimens were placed on top of 4 sets of Pedestal Paver System.								
	One set of the Pedestal Paver System consist of a top cap, 4" diameter-12" height PVC pipe, bottom cap, and buffer pad. The compression apparatus is equipped with a 1" probe and tests were performed at a loading rate of 0.04"/min.								
	Flexural Strength of Concrete	Sample 1	Sample 2	Sample 3					
	Average Width at the fracture, inches	17.94	17.93	17.93	17.93	0.01	17.93	17.94	0.04
	Average Depth at the fracture, inches	1.82	1.78	1.77	1.79	0.03	1.77	1.82	1.51
	Span length, inches	14.00	13.97	14.00	13.99	0.02	13.97	14.00	0.12
	Modulus of Rapture, psi	775	874	778	809	57	775	874	7.0
	Modulus of Rapture, psf	111545	125918	112045	116503	8158	111545	125918	7.0
	Load (lbs)	2189	2380	2071	2213	156	2071	2380	7
Extension (in)	0.10	0.13	0.13	0.12	0.02	0.10	0.13	16.22	



CLIENT: TILE TECH PAVERS
P.O. Box 5982
Los Angeles, CA 90055
Ronnie Tabibnia

Test Report No: 914:015212

Date: September 4, 2008

SAMPLE ID: The following test material identified as Tile Tech Pedestal Bottom cap, nominal 3 mm thick.

DATE OF RECEIPT: Entered into SGS USTC sample tracking system on September 2, 2008.

TESTING PERIOD: September 4, 2008.

AUTHORIZATION: Testing authorized by Ronnie Tabibnia.

TEST REQUESTED: ASTM Designation D635-06 "Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position".

TEST RESULTS: See page 2.

CLASSIFICATION: The submitted sample is designated HB in accordance with para. X1.2.2.
The submitted sample is classified CC1 in accordance with UBC Standard 26-7, SEC. 26.706.5
See classification requirements on page 2.

Tested by



Brian Ortega
Test Technician

Signed for and on behalf of
SGS U.S. Testing Company Inc.



Greg Banasky
Supervisor Fire Technology

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CLIENT: TILE TECH PAVERS

Report No.: 914:015212
Date: September 4, 2008
Page: 2 of 2

TEST RESULTS: Number of Specimens Tested: 10
 Average Specimen Thickness: 3 mm nominal

OBSERVATIONS: None specimens burned to the 25 mm mark. The specimens continued to burn after removal of the test flame for an average of 2 seconds.

EVALUATION OF TEST FROM APPENDIX X1.

X1.2: Category Designation- The behavior of the specimens can be classified HB (HB = Horizontal Burning) if,

X1.2.1 There is no visible signs of combustion after the ignition source is removed, or

X1.2.2 The flame front does not pass the 25 mm reference mark, or

X1.2.3 The flame front passes the 25 mm reference mark but does not reach the 100 mm reference mark, or

X1.2.4 The flame front reaches the 100 mm reference mark and the linear burning rate does not exceed 40 mm/min. for specimens having a thickness between 3 and 13 mm or 75 mm/min. for specimens having a thickness less than 3 mm.

CLASSIFICATION REQUIREMENTS PER UBC STANDARD 26-7, SEC. 26.706.5

CC1: Plastic materials which have a burning extent of 1 inch (25mm) or less when tested in nominal .060-inch (1.5mm) thickness (or in the thickness intended for use) by this test.

CC2: Plastic materials which have a burning rate of 2.5 inches per minute (64mm/min) or less when tested in nominal 0.060-inch (1.5mm) thickness (or in the thickness intended for use) by this test.

End of Report

NORTHWEST LABORATORIES of Seattle, Incorporated

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Report To: Appian Construction
Attention:

Date: July 20, 2006

Report On: Paver Pedestals

Lab No.: E80262

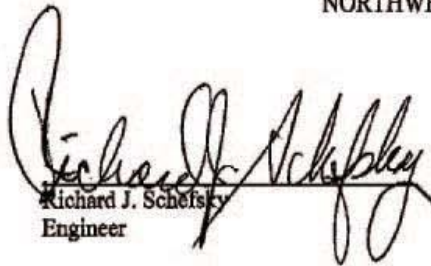
IDENTIFICATION: 4" AWS Pedestal System

TEST METHOD: Per Customer's Instructions Vertical Compression Test

<u>TEST RESULTS:</u>	<u>Sample Height (in.)</u>	<u>Ultimate Load (lbs.)</u>	<u>Failure Mode</u>
	2	10,500	AWS Pipe
	4	12,250	AWS Pipe
	6	11,600	AWS Pipe
	8	11,750	AWS Pipe
	10	12,250	AWS Pipe

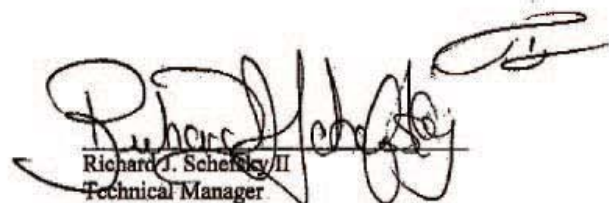
This report applies only to the actual samples tested. Northwest Laboratories does not certify, warrant, or guarantee any products manufactured by others. Samples will be discarded within **thirty (30) days** unless otherwise requested in writing by you.

NORTHWEST LABORATORIES, INC.



Richard J. Scheffsky
 Engineer

wbm



Richard J. Scheffsky II
 Technical Manager