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COMPRESSION TESTING OF TRUEGRID PERMEABLE PAVERS

Stiles Manufacturing LLC		Date:	February 2, 2017
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Houston, TX 77007		Report Number:	ESP024732P
Attn: Barry Stiles		Client Reference:	1326

Respectfully submitted,

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INTRODUCTION

Four (4) various TRUEGRID permeable pavers were received from Stiles Manufacturing LLC of Houston Texas. The pavers were either TRUEGRID ECO or TRUEGRID PRO PLUS. Test specimens before testing can be seen in Figure 1 and Figure 2. The specimens were received for compression testing. The testing and data analysis were completed on February 1st, 2017. The following report documents this testing.

SUMMARY OF RESULTS

Test Number	Sample	Platen Size	Maximum Load (lbf)	Maximum Stress[1] (psi)	Deflection at Maximum Stress[2] (in)
1	TRUEGRID ECO	4.75" x 4.75"	400,000	17,729	0.6685
2	TRUEGRID ECO	4.75" x 8.25"	400,000	10,207	0.5165
3	TRUEGRID PRO PLUS	4.75" x 4.75"	400,000	17,729	1.2600
4	TRUEGRID PRO PLUS	4.75" x 8.25"	400,000	10,207	1.1060

Notes: 1) Maximum stress calculated based on total area of the platen.
2) Maximum deflection is the total deflection measured from the starting point of the top platen to the ending point.

TEST METHOD

Each paver was placed on a flat loading platen on the test machine. A cardboard ring was set around the specimen which was then filled with Quikrete mason sand, an all purpose sand that meets ASTM C144. A 4.75 inch square or 4.75 inch by 8.25 inch rectangular steel loading platen was placed on the specimen. A spherical compression loading joint was attached to the test machine, to make up for any slight misalignment in the test specimens or test machine. Load was applied at approximately 0.2 inches per minute, until 400,000 pounds of force (the limit of the test machine) was achieved. Load and deflection were recorded for each specimen. Stress was then calculated based on the area of the platen. A photograph of the test setup can be seen in Figure 3.

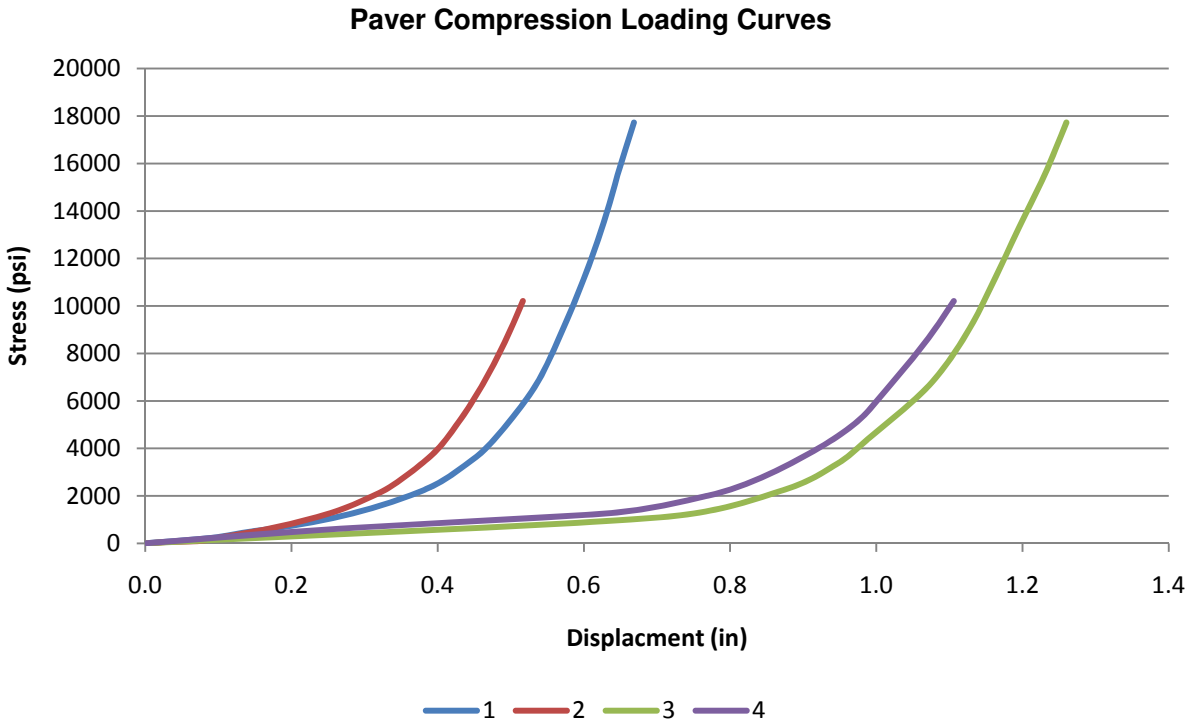
TEST EQUIPMENT

1. Forney Compression Machine, CME-CON-069, Calibrated 09/21/2016, Calibration Due 09/21/2017
2. 0-2" Dial Indicator, CME-SPC-144, Calibrated 08/18/2016, Calibration Due 08/18/2017

REMARKS

All samples will be retained for 30 days and then discarded unless directed otherwise by the customer.

TEST RESULTS



DIGITAL PHOTOS

Figure 1 – A photograph of the TRUEGRID ECO used in tests 1 and 2

Figure 2 – A photograph of the TRUEGRID PRO PLUS used in tests 3 and 4

Figure 3 – An overall photograph of the test setup

NOTE from TRUEGRID Pavers:

TRUEGRID formally announces effective 1 September 2019, the product know as TRUEGRID® ECO™ (ECO) has changed its name to TRUEGRID® PRO LITE™ (PRO LITE). PRO LITE™ product dimensions, add-ons, properties, material source, and components remain the same as ECO™.