



Suitability Test Report

Issued To:
perkEpave LLC
418 Wilson St
Pottstown, PA 19464
USA

Standard:
ASTM C1701(2023): Standard Test Method for Infiltration Rate of In Place Pervious Concrete

System Name:
Multiple perkEpave Systems
Date of Suitability Testing Jan 04, 2024
Report Number 1701-010324-01
Pages 7

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ASTM C1701 Results

Product Name→	1:1 Mix – Walk, Run, Tree Pit	3:1 Mix - Ride, Drive Park	0:1 Mix Play Safe
Infiltration Rate (in/hr)	1159	1164	1766

Notes:

1 – This document contains enhanced digital and duplication security features. More information can be found on our website: www.asetservices.com/blog.

2 – This report contains 7 pages, and may not be used for commercial purposes unless it is reproduced in its entirety.

To: perkEpave LLC
418 Wilson St
Pottstown, PA 19464
USA

Subject: Suitability test carried out on pervious surface system according to ASTM C1701 (issue 2023)

ASET Services, Inc was commissioned by PerkePave LLC, USA to conduct suitability testing of the Multiple perkEpave Systems surfaces.


A single 14 inch diameter x 2 inch thick sample of each system was provided for testing.

The date of the testing was Jan 04, 2024.


1) System Construction Summary

The sample was constructed using the following materials and construction methods.

System1:

<p>Name: 1:1 Mix – Walk, Run, Tree Pit</p>	<p>1 part stone to 1 part rubber blend in an MDI binder</p> <p>Rubber- 5/9 mesh granulated wire free recycled tires</p> <p>Stone: 1/8” – 1/4” kiln dried stone</p> <p>Binder MDI Moisture Cured Binder</p>
<p>Photo:</p>	

System2:

Name: 3:1 Mix – Ride, Drive, Park	3 part stone to 1 part rubber blend in an MDI binder Rubber- 5/9 mesh granulated wire free recycled tires Stone: 1/8" – 1/4" kiln dried stone Binder MDI Moisture Cured Binder
Photo:	

System3:

Name: 0:1 Mix – Play Safe

Rubber blend in an MDI binder

Rubber- 5/9 mesh granulated wire free recycled tires

Binder MDI Moisture Cured Binder

Photo:



2) Testing Procedures

Testing was conducted using a modified version of ASTM C1701 (2023) designed to determine the infiltration rate of a single component in a laboratory setting. The testing climate was 70 F, 42% relative humidity.

Modification Summary:

- A support frame consisting of 1.5 in x 1.5 in pressure treated boards spaced nominally 6 in on-center was used to support the sample over a large catch basin used to catch water after passing through the sample.
- The results provide an indication of how well water can be expected to move through this individual layer of a final system.

While test samples used for these tests were only 14 in diameter, however very little water was transmitted through the horizontal edges of any sample.

Individual samples were initially wetted using the specified 8 lbs of water. The infiltration time of the wetting stage determined the weight of water to be used to determine the actual infiltration rate. Samples were tested a second time, within 2 minutes to prevent the need for rewetting.

3) Test Results

The following table contains the average performance values obtained on the evaluated sport surface system, as well as the requirements of ASTM C1701 (2023).

	1:1 Mix Walk, Run Tree Pit	3:1 Mix Ride, Park, Drive	0:1 Mix Play Safe
Wetting Weight (lbs)	8.0	8.0	8.0
Wetting Time (sec)	17	11	15
Test 1			
Test Weight (lbs)	40.0	40.0	40.0
Test Time (sec)	32.1	30.8	20.2
Infiltration Rate (in/hr)	1195	1246	1900
Test 2			
Test Weight (lbs)	40.0	40.0	40.0
Test Time (sec)	34.2	35.5	23.4
Infiltration Rate (in/hr)	1122	1081	1632
Avg Infiltration Rate (in/hr)	1159	1164	1766

4) Conclusions

The Multiple perkEpave Systems surface system described in previous sections was found to produce the stated infiltration rates using a modified version of ASTM C1701 (2023).

Testing and report generation was performed by Paul W. Elliott, Ph.D., P.E. of ASET Services, Inc.

I hereby certify that the results presented in this report were obtained on the sample as described, on said date and are believed to be accurate representations of the performance of these surface systems.

Paul W Elliott

Date: Jan 9, 2024

Paul W Elliott, PhD, PE

