| TEST METHOD CONDUCTED |
| :--- | :--- |

ASTM F1292 Standard Specification for Impact Attenuation of
Surfacing Materials Within the Use Zone of Playground
Equipment

## DESCRIPTION OF TEST SAMPLE

|  |
| :--- |
| DESCRIPTION OF PRODUCT |
| TESTED |

$18 " x 18 " \times 6$ " $1.5^{\prime \prime}$ poured in place over 4.5 " of loose mulch
The tested assembly meets the criterion of performance at 17.0 feet fall height according to ASTM F1292-22.


## GENERAL PRINCIPLE

Each panel for testing is acclimated for a minimum of 24 hours in each respective condition. NIST Traceable temperature sensors are inserted into the sample to ensure the correct temperature is achieved through the matrix. Testing is commenced within one minute of removal from the acclimation chambers. The specimen is impacted at a specified velocity with a missile of given mass of 10.1 lbs . and geometry. A transducer mounted in the missile monitors the acceleration time history of the impact, which is recorded with the aid of an oscilloscope or other recording device. The head-form was dropped at the requested height. The GMAX values, HIC (head impact criteria) are recorded for three drops. The second and third drops are averaged. Testing was conducted at three temperatures as listed on the results. The maximum criterion for passing a specified drop height is 200 gmax or 1,000 HIC.

| Equipment | Accelerometer Calibration | Accelerometer Manufacturer and Type | Laboratory Conditions |
| :---: | :---: | :---: | :---: |
| GC Fall-tech | $3-28-24$ | PCB Model 356 B 20 | $70^{\circ} \mathrm{F}$ and $50 \% \mathrm{RH}$ |
| Date Tested | Specimen Size Tested | Requested By: | Technician |
| $6 / 25 / 24$ | 2.25 Square Feet | Tom Carroll | Matthew Asbury |



Accreditation \#93341

TEST REPORT
DATE: 06-25-2024
Page 2 of 2
TEST NUMBER: 0308782
CLIENT $\quad$ perkEpave, LLC.

TEST RESULTS

| $\begin{array}{c}\text { Tested Dry, Frozen } \\ \text { at } 25^{\circ} \mathrm{F}\end{array}$ | DROP 1 |  |  | DROP 3 |
| :--- | :---: | :---: | :---: | :---: |$]$| AVERAGE OF |
| :---: |
| DROPS 2 AND 3 |$|$

* Specimen subjected to a theoretical drop height of 17.0 feet. (actual drop height: 205.0 inches at 33.07 ft/sec)

| Tested Dry at 72 |  |  |  | AVERAGE OF |
| :--- | :---: | :---: | :---: | :---: |
| MAX | DROP 1 | DROP 2 | DROP 3 | DROPS 2 AND 3 |
| HIC | 97 | 94 | 94 | 94 |



* Specimen subjected to a theoretical drop height of 17.0 feet. (actual drop height: 205.0 inches at $33.07 \mathrm{ft} / \mathrm{sec}$ )



## COMMENTS

"The results reported herein reflect the performance of the described samples at the time of testing and at the temperature (s) reported. The results are specific to the described samples. Samples of surfacing materials that do not closely match the described samples will perform differently".

Material was damaged catastrophically by the impact when exceeding 17 feet, further tests could not be performed.

APPROVED BY:


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