| To: | FloormarX, LLC |
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|  | 105 W. Circular Street |
|  | Saratoga Springs, NY 12866 |

Attention: Jason Lynch
From: Charles Willis
Project No.: 8869
Subject: Coefficient of Friction Determinations

## INTRODUCTION

We were authorized to determine the coefficient of friction on samples of FloormarX Markers applied to a gym finish and after cleaning with Foot Wipes, submitted by FloormarX, LLC. The marker was applied as two lines perpendicular to each other (see Figure 1.) The evaluations were conducted using a James Machine with a leather sole material under dry surface conditions.

RESULTS
Sample:
MFMA Approved Gym Finish (Control Panels)
Environmental Conditions: $\quad 22^{\circ} \mathrm{C} \& 24 \%$ Humidity, Dry Surface Conditions

| Coefficient of Friction (Average Over 4 Cycles) |  |  | Coefficient of <br> Friction |
| :---: | :---: | :---: | :---: |
| Sample 1 | Sample 2 | Sample 3 | Average |
| 0.61 | 0.62 | 0.60 | 0.61 |

FloormarX Markers were then applied to the test area and allowed to dry.

| Sample: | FloormarX Markers, drawn on MFMA Approved Gym Finish |
| :--- | :--- |
| Environmental Conditions: | $22^{\circ} \mathrm{C}$ \& $26 \%$ Humidity, Dry Surface Conditions |


| Coefficient of Friction (Average Over 4 Cycles) |  |  | Coefficient of <br> Friction |
| :---: | :---: | :---: | :---: |
| Sample 1 | Sample 2 | Sample 3 | Average |
| 0.62 | 0.58 | 0.58 | 0.59 |

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## RESULTS

The ink from the FloormarX Markers was then removed using FloormarX Foot Wipes.
Sample:
FloormarX Foot Wipes, used to remove FloormarX Markers, drawn on MFMA Approved Gym Finish
Environmental Conditions: $\quad 22^{\circ} \mathrm{C} \& 26 \%$ Humidity, Dry Surface Conditions

| Coefficient of Friction (Average Over 4 Cycles) |  |  | Coefficient of <br> Friction |
| :---: | :---: | :---: | :---: |
| Sample 1 | Sample 2 | Sample 3 | Average |
| 0.56 | 0.51 | 0.54 | 0.54 |

Under dry conditions a coefficient of friction value of 0.5 or greater is generally accepted for classifying a walking surface as slip resistant.

Respectfully submitted,


Charles V. Willis
CASE LABORATORIES, INC.
President

Figure 1. FloormarX Markers Applied to Test Panel, in James Machine


