# E-Krete- PCMO Installation in Madison, MS Friction Report



## The ICC SFT 5041 Pavement Friction Tester

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**International Cybernetics Corporation** 

The following report outlines the friction data that International Cybernetics Corporation (ICC) collected on an E-Krete PCMO installation in Madison, MS. The site was approximately 300 feet in length on Industrial Drive South. ICC collected data with its calibrated ASTM E274 locked wheel friction tester. The entire system was calibrated at our facilities prior to the collection of all friction data. The data collection sites were asphalt with E-Krete. All data was collected in accordance with ASTM requirements at a speed of 40 mph with a ribbed tire.

### The ICC SFT 5041 Pavement Friction Tester

The ICC SFT 5041 pavement friction tester measures average locked wheel (skid) and peak incipient (slip) friction characteristics on paved surfaces. The friction tester consists of a fully instrumented tow vehicle and test trailer that uses a two-axis force transducer to provide dynamic vertical load and horizontal tractive force measurements.

#### **Test Procedure**

The Skid Number of the pavement surface is measured using ASTM E 274 "Standard Test Method for Skid Resistance of Paved Surfaces Using a Full-Scale Tire". The summary of the test method as given in the ASTM E 274 is as follows.

- 1. The measurements are conducted with a standard pavement test tire (ASTM E 501 or ASTM E 524) mounted on a test trailer towed by a vehicle. The trailer contains a transducer, instrumentation, a water supply and proper dispensing system, and actuation controls for the braking of the test wheel.
- 2. The test is conducted at a test speed of 40 mph. Water is delivered ahead of the friction force acting between the test tire and the pavement surface and vehicle speed recorded using the suitable instrumentation.
- 3. The skid resistance of the paved surface is determined from the resulting force or torque record and reported as skid number (SN), which is determined from the force required to slide the locked test tire at a stated speed, divided by the effective wheel load and multiplied by 100.



#### **Summary:**

The testing was conducted on 09/15/2018 between 11:00 AM and 21:00 PM using ICC's ASTM E274 Friction Test System. ICC performed friction data collection services for Polycon on an installation at 350 Industrial Drive South in Madison, MS. ICC tested the E-Krete PCMO installation in Madison, MS. The site was approximately 300 feet in length on Industrial Drive. ICC performed multiple tests at 40mph. The site reported an average FN number of 57.1, a high FN of 58.8 and a low FN of 55.4. Several tests on this test section focused on the middle of the application to ensure consistent coverage

It is our professional opinion that the E-Krete product that we tested has safe and desirable friction values for use on highways.

Picture of test site



Respectfully submitted, Chase Fleeman



