**TILTEX PERFORMANCE DATA MISLEADING, TILTEX US DISTRIBUTOR PAYS SUBSTANTIAL DAMAGES IN FALSE ADVERTISING CASE BUT OTHER DISTRIBUTORS CONTINUE PUBLISHING MISLEADING DATA**

**December 12th 2023**  
  
Tiltex is manufactured by Eurobent Sp. z.o.o. (“Eurobent”) and distributed in the US by Inland Tarp & Liner, LLC (“**ITL**”) under the brand name ITL RCR®.

On 29th December 2022 a consent judgment was ordered by Judge Rosenthal of the United States District Court for the Southern District of Texas, In addition to a payment of a substantial sum by ITL® (a distributor of Tiltex in the US) to Concrete Canvas® and an injunction requiring ITL® to only use technical data obtained using unmodified test standards for the GCCM properties in ASTM D8364 (Standard Specification for Geosynthetic Cementitious Composite Mat (GCCM) Materials). The consent judgment also confirmed that ITL® had published and supplied false and misleading performance data to its customers. Eurobent had supplied ITL® with the false data and instructed a test house to modify standards in a way which substantially increase the compressive strength and bending strength of the Tiltex (branded ITL RCR®) samples tested.

Despite the above consent judgment confirming that ITL®’s advertising of Compressive Strength and Bending Strength, of ITL RCR® (**Tiltex**) were false and misleading (all of which were based on Tiltex performance data supplied by Eurobent to ITL® or testing commissioned by ITL® that was modified on the instruction of Eurobent), distributors of Tiltex® outside the US continue to publish the same or similarly misleading data (as of 22 November 2023) including the following properties from data sheets issued by other Tiltex distributors (Soprema and Curtis Barrier):

* 1. Advertise Compressive Strengths using a standard designed for mortars (ASTM C109-1), which does not describe how to measure the compressive strength of a GCCM. Specifically, this standard does not measure the water to cementitious powder ratio as controlled by the GCCM, allowing testing at very low water to powder ratios that will yield higher compressive strength values. In the consent judgment it is confirmed that in 2020, when ITL retained a US laboratory to test ITL RCR®, Eurobent instructed the lab to modify preparation of the GCCM test material. Eurobent instructed the lab to prepare samples of cementitious material using an artificially low water to cementitious material ratio of 0.18 (rather than using ASTM D8329), as this would give much higher strengths. The lab followed these instructions (i.e., it did not determine the ratio using ASTM D8329 and instead prepared samples using a ratio of 0.18) and reported that samples cured for 28 days at this artificially low water to powder ratio had an average compressive strength of 49.8 MPa (7,222 psi). Eurobent had advised ITL® that ASTM D8329 would determine a water to cementitious material ratio of 0.53 for ITL RCR® and that it would have resulted in much lower compressive strength values. Eurobent’s distributors continue to publish data purporting to show a compressive strength of 40MPa and in one example 80MPA (the test standard is not specified). A 28-day Compressive Strength of only 27.2MPa was obtained when, as part of the US litigation, Concrete Canvas commissioned TRI to conduct compressive testing to ASTM D8329 on samples of RCR® (Tiltex) supplied by ITL®.
  2. Advertise bending strengths and durability data using PN EN12467 whose scope is limited to pre-set cement flat sheets used for “wall and ceiling finishes”. This standard is not for testing materials used in erosion control. In particular, EN12467 is for testing factory hardened flat sheet material therefore it does not specify how GCCM samples must be set. Consequently, manufacturers submit pre-hardened samples for the tests. These samples can be prepared with a very low water to powder ratio in order to achieve unrepresentatively high-performance results. In the consent judgment it is confirmed that in 2020, when ITL® retained a US laboratory to test ITL RCR®, Eurobent instructed the lab to modify the preparation of GCCM samples from the method required by ASTM D8030 (Standard Practice for Sample Preparation for GCCM). Instead of hydrating the samples by immersion for the specified 24 hours, Eurobent instructed the lab to be “careful that there is not too much water,” and provided specific (lower) amounts of water for hydrating the samples. This results in samples that have significantly better performance in bending and durability tests. The labs’ test report stated that it used D8030, “modified per manufacturer’s directions” to prepare samples for its testing of ITL RCR® (Tiltex).
  3. This data is supplied to customers directly in documents called Soprema Technical Datasheet TILTEX/TILTEX PLUS and on the Tiltex North America Website.

The only internationally recognised GCCM specification standard is ASTM D8364 Standard Specification for Geosynthetic Cementitious Composite Mat (GCCM) Materials. This standard specifies for all testing of cured GCCMs how the samples must be prepared including crucially how they should be hydrated. This is because using a lower water to powder ratio than is typically obtainable in field use will result in unrealistically high-performance data.

The consent judgment confirmed that ITL®’s advertising of Compressive Strength and Bending Strength, of ITL RCR® (**Tiltex**) were false and misleading (all of which were based on Tiltex performance data supplied by Eurobent to ITL® or testing commissioned by ITL® that was modified on the instruction of Eurobent).

The results of testing samples of ITL RCR® (Tiltex) to unmodified GCCM specific ASTM’s, as specified in ASTM D8364 and conducted by TRI Environmental showed that **the performance of the ITL RCR® (Tiltex) samples tested did not reach the minimum performance values required for a Type I, II or III application of a GCCM when tested in accordance with the standards and criteria in the ASTM GCCM Specification standard D8364**. Type I applications have the lowest requirements and include but are not limited to: erosion control, weed suppression, slope protection, berm protection, and remediation of concrete hydraulic structures. Type II GCCM applications would include all Type I applications, and applications that would have abrasion and wear requirements greater than Type I. Type II GCCM applications include but are not limited to: channel lining, berm protection, armouring, slope protection (any angle and run length), culvert invert lining and concrete overlay, and remediation of concrete hydraulic structures and Type III GCCM applications include all Type I and Type II applications that require additional flexural strength of the GCCM material due to unsuitable (that is, loose) subgrades.

It is the opinion of Concrete Canvas that specifiers and engineers rely on published engineering performance values when designing hydraulic structures and therefore expect GCCM’s to achieve the published performance values in actual use.

Concrete Canvas invented GCCM’s and has been developing GCCM’s for nearly 20 years. Concrete Canvas’s patented GCCM’s are engineered to control the water to powder ratio when sprayed or submerged. This control is achieved by using Concrete Canvas’s proprietary production technology. Concrete Canvas’ GCCM’s are tested using the GCCM specific standards prescribed by ASTM D8364 (Standard Specification for Geosynthetic Cementitious Composite Mat (GCCM) Materials). This ensures that the properties obtained are from samples that have been prepared as specified in ASTM D8030 (GCCM Sample Preparation) and ASTM D8329 (GCCM Compressive Strength) and that Concrete Canvas’s GCCM’s can be safely specified for Type 1, 2 or 3 GCCM applications based on properties obtained from reputable third-party testing to unmodified GCCM standards.

**ASTM D8364 (Standard Specification for Geosynthetic Cementitious Composite Mat (GCCM) Materials)** prescribes appropriate GCCM test standards. This standard ensures that the key properties of GCCM’s can be compared fairly and that specifiers can select GCCM’s with the appropriate performance for given hydraulic and erosion control applications. For example, ASTM D8364 (GCCM Specification) prescribes that ASTM D8329 (GCCM Compressive Strength) must be used for the measurement of compressive strength in GCCM’s. The ASTM D8329 standard first measures the actual water to powder ratio of the GCCM after hydration, then requires the compressive testing to be undertaken at this ratio. In order for a GCCM to perform consistently in the field it must consistently control the water to powder ratio at a sufficiently low level in order to reliably achieve the high cementitious properties, in installed use, that are required for erosion control and hydraulic civil engineering applications.