



PRESS RELEASE

EUROBENT (TILTEX) MANIPULATED COMPRESSIVE STRENGTH TESTING OF ASTM STANDARD

16TH JUNE 2023

In 2020, ITL® engaged the independent laboratory TRI Environmental to test ITL RCR® (which is also sold under the alternative brand, Tiltex) to [ASTM D8329](#), “Determination of Water/Cementitious Materials Ratio for Geosynthetic Cementitious Composite Mats (**GCCMs**) and Measurement of the Compression Strength of the Cementitious Material Contained Within.”

However, Eurobent advised ITL® not to test the compressive strength of the ITL RCR® cementitious material using [ASTM D8329](#). Eurobent advised ITL® that [ASTM D8329](#) would determine a water to cementitious material ratio of 0.53 for ITL RCR® and require preparation of samples for testing compressive strength at this ratio. A ratio of 0.53 water to cementitious powder ratio would result in very low compressive strengths.

Eurobent instead instructed a US test laboratory to prepare samples of cementitious material using an artificially low water to cementitious material ratio of 0.18, which would result in significantly higher strengths (rather than using [ASTM D8329](#)). The US laboratory followed these instructions 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). This was 35MPa below the Tiltex compressive strength data Eurobent had provided to ITL previously.

Based on the modified test results, in 2021, ITL® advertised that after curing for 28 days ITL RCR® had a compressive strength of 49.8 MPa and 7,222 psi using the standard ASTM C109. These advertisements were false because: (a) The US laboratory prepared the samples for testing (as instructed by Eurobent) using a water to cementitious material ratio of 0.18, which resulted in significantly overstating the compressive strength when compared to hydrating ITL RCR® (Tiltex) on an installation site in accordance with ITL®’s hydration instructions; and (b) the testing was not in accordance with ASTM C109, a test designed for mixed cement mortars, not GCCMs, which calls for a specific material of sand and cement not present in the cementitious material of ITL RCR® (Tiltex).

In August and September 2022, ITL® Again Advertised False ITL RCR® Compressive Strength Data. ITL® advertised two updated versions of Technical Data for ITL RCR®, each advertising that ITL RCR® has a compressive strength of 50 MPa and 7,222 psi. These advertisements were based on the US laboratory testing described above in which Eurobent had instructed lab to ignore the instructions for [ASTM D8329](#) and instead to use an artificially low water to cementitious powder ratio of 0.18.

With respect to compressive strength, ITL’s advertisements stated, “Specimen Prepared per [ASTM D8329](#) and modified per manufacturer’s directions.” A footnote in one version of Technical Data stated, “Procedure asks per 100g of cement, add 52.98g of water / Manufacturer recommends per 100 g of cement, add 32.23g of water.” A footnote in the other version of Technical Data stated, “Procedure asks per 100 g of cementitious material, add 52.98g of water / Manufacturer recommends per 100 g of cementitious material, add 32.23g of water.”

ITL’s advertisements were false because: (a) The US laboratory prepared the samples for testing using a water to cementitious material ratio of .18, which resulted in significantly overstating the compressive strength obtained when hydrating Tiltex/ITL RCR at an installation site in accordance with ITL’s hydration instructions; (b) the

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advertisements indicated that a water to cement or cementitious material ratio of .32 was used for testing when in fact the US laboratory prepared samples for testing using a water to cementitious material ratio of .18, which would result in a higher compressive strength; and (c) [ASTM D8329's](#) requirements for determining a water to cementitious material ratio were not followed.

50MPa was nearly double the 28-day Compressive Strength (27.2MPa) obtained when, as part of the litigation, Concrete Canvas® commissioned TRI Environmental to conduct compressive testing to [ASTM D8329](#) on samples of ITL RCR® (Tiltex).

The results of testing conducted by TRI Environmental on samples of ITL RCR® (Tiltex) during the litigation process, 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 D8364 Standard Specification for Geosynthetic Cementitious Composite Mat \(GCCM\) Materials](#).** 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.

Further information and previous related press releases can be found [here](#).

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