

Zycosil Test Results from Singapore Testing Laboratory December 15, 2007

We are continuing to test Zycosil by independent testing laboratory, SETSCO Services PTE Ltd. Three test results just received. Test results report is attached. Following is the summary of these results:

(1) Determination of Abrasion Resistance of the Zycosil Treated Concrete samples. ASTM D4060:01 (Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser). This test was carried out for 1000 hours of abrasion.

Under humidity condition water is absorbed in concrete. Water absorption helps to abrade the surface. Waterproofing may help to reduced abrasion rate.

Test results showed that Zycosil treated surface had 42 % less abrasion. According to the testing laboratory these results are similar to epoxy coated surface. The results suggested that the concrete attains abrasion resistance.

(2) Determination of Stain Resistance of the Zycosil Treated Concrete sample
ISO 10545:14:1995 (European Standard Method) Ceramic tiles -- Part 14: Determination of resistance to stains

This test is useful for determination stain resistance of treated surface. Important part of testing is the how easy stains can be cleaned. The rating is done 0 to 5. Rating 0 is for most difficult cleaning required (impossible) to remove stains. Rating of 5 is for easy to remove stains. The stain resistance was determined for (a) dirty oil (b) Olive oil (c) Coffee and (d) rubber mark (tire).

Test results showed that Zycosil treated surface stain resistance rating is 4 for dirty oil, olive oil and coffee stains and for rubber marks is 5.

(3) Determination of Depth of Penetration of Water for the Zycosil Treated samples
DIN 1048:Part 5:1995 (Germany Standard Method)

This test is useful to determine rain water penetration for the high performance concrete for highways and bridges. These tests showed Zycosil treated sample had zero penetration.

(4) Weathering of Zycosil treated samples (ASTM G154)

This test is useful to determine durability of the treated samples. It is subjected to UV lights, rain showers and drying. Every 100 hours testing will show 1 year equivalent of durability.

This test is on going. After 500 hours testing, results of five samples showed no change in performance. This test will continue up to 2000 hours of testing (20 years). The test report will be available only after completion of the full test.