**Admixture Information (AI 7 MBS):**

**MasterLife® 300 Series Admixtures: CRD C48 Test Method**

The Army Corps of Engineers CRD C48 Standard Test Method for Water Permeability of Concrete is a hydrostatic pressure test method found in some project specifications for evaluating the performance of permeability-reducing admixtures.

A summary of this test method is shown below.

**CRD C48 (Hydrostatic Pressure)**

Sample - 6 x 12 in. [150 x 305 mm] concrete cylinder

**Procedure**

1. Cast and moist cure the concrete sample for 28 days.
	* Evaluate multiple samples given some variability in the test method
2. Cut a 6 in. [150 mm] thick slice from the hardened cylinder.
3. Place the sample into the apparatus and apply water pressure.
	* 200 psi [1.4 MPa] until flow reaches a steady-state [constant]
4. Calculate the permeability.
5. Report mixture proportions, treatments and dosages and permeability values [m/s].

**What the CRD C48 Test Measures**

Coefficient of permeability.

**Interpretation of Results**

1. Exposure to water during testing may change the concrete microstructure (further hydration) during the test.
2. Water permeability can be calculated which can be input into service life prediction models.
3. This test method can be used to compare the water permeability of concrete consisting of different proportions and/or treatments.