Test Procedure for Water Permeability Test (Water Penetration Depth)

Basic procedure of such a test is to apply water under pressure to one surface of the specimen for a specific time and then split the specimen perpendicular to the injected face and determine visually the depth of penetration.

The test is carried out according to German Standard DIN 1048 on concrete specimens of size 150x150x150 mm, at an age of 28 days. The test cell assembly being used had the provision for testing six cubes at a time.

Once the specimens were assembled in the test cells, a water pressure of 500 KPa (5 bar) was applied for 72 hours. Water pressure is applied by means of an arrangement consisting of a water tank connected to an air compressor through a valve, to adjust the pressure.

