

Equipment Checklist

ASTM C 1712 Rapid Assessment of Static Segregation Resistance of Self-Consolidating Concrete Using Penetration Test

		P	F	N/A
Item				
1.	Mold – Conforming to the requirements of ASTM C-143.			
2.	Penetration Apparatus – The penetration apparatus, consists of a support frame, a metal sleeve, a set screw, a penetration head and a reading scale.			
3.	Penetration head consisting of a non-corrosive hollow cylinder and a metal rod, has a mass of 45 ± 1 grams. The rod is bolted vertically into the center of the top of the hollow cylinder and acts as a unit with the cylinder.			
4.	Hollow cylinder inner diameter is 75 ± 1 mm, wall thickness is 1.5 ± 0.1 mm, and height is 50 ± 1 mm.			
5.	Holes are symmetrically drilled on the top surface of the hollow cylinder to allow air to escape during the penetration test. At least two holes with a minimum diameter of 6 mm must be provided.			
6.	Reading scale shall be 55 mm long and marked in 1 mm increments. The scale is mounted on the support frame and adjacent to the metal rod.			
7.	With both the support frame and the hollow cylinder resting on a flat surface, the top of the metal rod shall be 5 mm below the top of the reading scale.			
8.	Metal rod diameter shall be 4.5 ± 0.5 mm. Inner diameter of the metal sleeve shall be 0.7 ± 0.1 mm larger than the diameter of the metal rod.			
9.	Base Plate – A nonabsorbent, smooth, rigid plate having a minimum diameter of 36 inches (915 mm).			
10.	Strike-off Bar – Conforming to the requirements of ASTM C-173.			
11.	Sample Receptacle – A pan or wheelbarrow that is water-tight, has a nonabsorbent surface, and is large enough to allow both remixing of the entire sample and retain a volume of SCC sufficient to fill the mold.			
12.	Other Tools – Items such as shovels and scoops capable of remixing the SCC in the sample receptacle, filling the pouring vessel, or both.			

Remarks:

Date: _____ Technician: _____ IA Observer: _____

Technician's E-mail Address: _____

Employer's/Supervisor's E-mail Address: _____