# Procedure Checklist
# ASTM C 1712 Rapid Assessment of Static Segregation Resistance of Self-Consolidating Concrete (SCC) Using Penetration Test

| Item | | P | F | N/A |
|---|---|---|---|---|
| 1. | Perform test on a flat, level, nonabsorbent work surface. Do not subject the work surface or column mold to vibration or disturbance. | | | |
| 2. | Dampen the hollow cylinder. | | | |
| 3. | Hold apparatus in the horizontal position and release the set screw. | | | |
| 4. | Spin the penetration head to ensure no obstructions are between rod and inner sleeve. | | | |
| 5. | Tighten the set screw to hold rod in the sleeve. | | | |
| 6. | Remix the sample obtained in accordance with ASTM C-172. | | | |
| 7. | Dampen the interior of the mold and place it centered on the work surface in the inverted mold position. | | | |
| 8. | Fill the mold with SCC in accordance with ASTM C-1758. | | | |
| 9. | Strike off the surface of the concrete with the strike-off bar. | | | |
| 10. | Allow the SCC to stabilize for 80 ± 5 seconds. Perform steps 11 through 14 during stabilization period. | | | |
| 11. | Place the penetration apparatus on the top of the inverted slump mold with the hollow cylinder in the center of the mold. | | | |
| 12. | Hold metal rod and release the set screw. | | | |
| 13. | Lower hollow cylinder carefully to just touch the surface of the concrete. | | | |
| 14. | Tighten screw and take initial reading ($d_1$) on the reading scale at the mark that is in line with the top of the metal rod. | | | |
| 15. | After stabilization period, release the set screw to allow the hollow cylinder to penetrate the SCC. | | | |
| 16. | Take final reading ($d_2$) after wait time of 30 ± 2 seconds on the reading scale at the mark that is in line with the top of the metal rod. | | | |
| 17. | Calculate penetration depth to the nearest 1 mm. | | | |
| 18. | Report penetration depth to the nearest 1 mm. | | | |

**Remarks:** **Comparison Criteria:** **2 mm**

Date: _____ Technician: _____ IA Observer:_____

Technician's E-mail Address: _____

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