



Performance Examination - Concrete

Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete (ASTM C1064 / C1064M-17)

Candidate Name: _____ **NICET ID:** _____

Apparatus	Trial 1	Trial 2
Container Shall be large enough to provide at least 3 in. (75 mm) of concrete in all directions around the sensor of the temperature measuring device; concrete cover must also be at least 3 times the nominal maximum size of the coarse aggregate.		
Temperature Measuring Device Shall be capable of accurately measuring the temperature of freshly mixed concrete to $\pm 1^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$) throughout a range of 30-120 $^\circ\text{F}$ (0-50 $^\circ\text{C}$). The design of the temperature measuring device shall be such that it allows 3 in. (75 mm) or more immersion during operation.		
Partial Immersion Liquid-In-Glass Thermometers Shall have a permanent mark to which the device must be immersed without applying a correction factor.		
Reference Temperature Measuring Device Shall be readable and accurate to $\pm 0.5^\circ\text{F}$ (0.2°C) at the verification points at two temperatures at least 30 $^\circ\text{F}$ (15 $^\circ\text{C}$) apart. A certificate or report that verifies the accuracy shall be available in the laboratory for review.		

Procedures	Trial 1	Trial 2
1. Place the Temperature Measuring Device (TMD) in the concrete so that the sensing portion is submerged a minimum of 3 in. (75 mm)		
2. Gently press concrete around the TMD so that ambient (outside) air temperature does not influence the measured temperature.		
3. Leave the TMD in the concrete for at least 2 minutes but not more than 5 minutes.		
4. Read and record the fresh concrete temperature to the nearest 1 $^\circ\text{F}$ (0.5 $^\circ\text{C}$). Do not remove the TMD from the concrete when reading the temperature.		
5. Report the measured temperature of the freshly mixed concrete to the nearest 1 $^\circ\text{F}$ (0.5 $^\circ\text{C}$)		

First Attempt: Pass: _____ Fail: _____ **Second Attempt:** Pass: _____ Fail: _____

Exam Administration: Remote _____ In-Person _____

Comments:

Examiner Name: _____ **Examiner Signature:** _____ **Date:** _____