Procedure Checklist
ASTM C 31 Making and Curing Concrete Test Specimens in the Field

Test procedures for 4 x 8 inch or 6 x12 inch cylinders using concrete with a slump ≥ 1 inch

		P	F	N/A
Item				
1.	Use a scoop to place concrete in the mold. Use care to distribute the material evenly around the perimeter of the mold.			
2.	For the first layer:			
3.	Fill the mold with the appropriate quantity of concrete: approximately ½ the volume for a 4 x 8 inch mold or ⅓ the volume for a 6 x 12 inch mold.			
4.	Rod the layer 25 times throughout its depth, using care not to damage the bottom of the mold. Distribute the roddings uniformly over the cross section of the mold.			
5.	Tap the outsides of the mold lightly 10 to 15 times with the mallet (or open hand if susceptible to denting or other permanent distortion if tapped with a mallet) to close any holes left by rodding and to release any large air bubbles that may have been trapped.			
6.	For the second layer:			
7.	Fill the mold with the appropriate quantity of concrete to fill a 4 x 8 inch mold or to approximately ⅔ the volume for a 6 x 12 inch mold.			
8.	Rod the layer 25 times, penetrating into the layer below approximately 1 inch. Distribute the roddings uniformly over the cross section of the mold.			
9.	Tap the outsides of the mold lightly 10 to 15 times with the mallet (or open hand if susceptible to denting or other permanent distortion if tapped with a mallet) to close any holes left by rodding and to release any large air bubbles that may have been trapped.			
When 4 x 8 inch cylinders are used, skip Step 10 and proceed with Step 14. When 6 x 12 inch cylinders are used, proceed with Step 10.				
10.	For the third layer:			
11.	Add an amount of concrete that will fill the mold after consolidation.			
12.	Rod the layer 25 times, penetrating the layer below approximately 1 inch. Distribute the roddings uniformly over the cross section of the mold.			
13.	Tap the outsides of the mold lightly 10 to 15 times with the mallet (or open hand if susceptible to denting or other permanent distortion if tapped with a mallet) to close any holes left by rodding and to release any large air bubbles that may have been trapped.			
14.	Adjust the concrete level of under-filled and overfilled molds if necessary.			
15. .	Strike off any excess concrete with the tamping rod, or with a handheld float or trowel if appropriate, to produce a flat even surface.			
16.	Verify that the specimen mold has been marked to identify the concrete it represents.			
17.	Immediately after finishing, provide protection to prevent sample moisture loss and move the specimens to an initial curing place for storage.			

Remarks: **Comparison Criteria: N/A**

Date: _____ Technician: _____ IA Observer:_____

Technician's E-mail Address: _____

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