

IA Checklist

R 100 Making and Curing Concrete Test Specimens in the Field

Procedure		P	F	NA
1	Place molds on a level, rigid, horizontal surface free of vibration.			
2	Select a representative sample in accordance with R 60.			
3	Place concrete in the mold, moving the small placement tool around top edge of the mold as the concrete is discharged.			
4a	For 6 x 12" [150 x 300 mm] cylinders: Fill mold in three layers of equal volume.			
4b	For 4 x 8" [100 x 200 mm] cylinders: Fill mold in two layers of equal volume.			
5a	For 6 x 12" [150 x 300 mm] cylinders: Rod each layer 25 times with rounded end of rod, uniformly distributing strokes.			
5b	For 4 x 8" [100 x 200 mm] cylinders: Rod each layer 25 times with rounded end of 3/8 x 12" [10 x 300 mm] rod, uniformly distributing strokes.			
6	Rod bottom layer throughout its depth.			
7a	For 6 x 12" [150 x 300 mm] cylinders: Rod the middle and top layers to a depth of 1" [25 mm] into the underlying layers.			
7b	For 4 x 8" [100 x 200 mm] cylinders: Rod the top layer to a depth of 1" [25 mm] into the underlying layers.			
8	Tap the sides of the mold lightly 10-15 times with a mallet, or open hand (light-gauge, single-use molds only), after rodding each layer.			
9	On the final layer, add an amount that will fill the mold after consolidation. Adjust underfilled or overfilled molds with representative concrete and complete the required strokes.			
10	Strike off excess concrete from the surface with a tamping rod, float or trowel as required. Use the minimum amount of manipulation necessary to produce a flat, even surface.			
11	Mark specimens with positive identification, not on removable caps, using a method that does not alter the top surface of the concrete.			
12	Employ appropriate method of maintaining specified moisture and temperature conditions.			
Equipment		P	F	NA
Single-Use Molds				
1	Molds are constructed in the form of right circular cylinders which stand with the cylindrical axes vertical and the tops open to receive the concrete.			
2	Molds are made of materials that do not react with concrete containing Portland or other hydraulic cements.			
3	Molds are watertight and sufficiently strong and tough to permit their use without tearing, crushing or deforming.			
Tamping Rod				
4	Tamping rod is a round, straight steel rod.			
5a	For cylinders with diameters less than 6" [150 mm]: rod length is 12 ± 4" [300 ± 100 mm] and has a diameter of 3/8 ± 1/16" [10 ± 2 mm]			
5b	For cylinders with diameters of 6" [150 mm] and larger: rod length is 20 ± 4" [500 ± 100 mm] and has a diameter of 5/8 ± 1/16" [16 ± 2 mm]			
6	Tamping rod has the tamping end or both ends rounded to a hemispherical tip of the same diameter as the rod.			
Mallet				
7	A mallet with a rubber or rawhide head weighing 1.25 ± 0.50 lb shall be used.			

Remarks: