

Procedure Checklist ASTM C266-18/AASHTO T154 Gillmore Time of Setting

SiteManager ID:	Date:
Technician:	QA Observer:

TEST PROCEDURE		RESULTS
1.	Procedure: Prepare a batch of paste by mixing 650g of cement with the percentage of mixing water required for normal consistency as described in ASTM C187 OR At the option of the tester, use the paste remaining from the batch used for autoclave expansion or normal consistency.	
2.	From the cement paste, make a pat with a flat top and the sides tapering to a thin edge on a plane non-absorptive plate	
3.	In molding the pat, flatten the paste first on the plate and then form the pat by drawing the trowel from the outer edge toward the center then flattening the top.	
4.	<i>Dimensions of the pat?</i> Base diameter 76±13 mm (3±0.5 in) , top diameter 50±13mm (2±0.5 in) , and center thickness 13±3mm .	
5.	Immediately after molding, place the test specimen and plate in the moisture cabinet or moisture room. Allow it to remain there except when penetration measurements are being made.	
6.	Determine the time of setting by holding the needle in a vertical position and lightly applying it to the surface of the pat.	
7.	Using the Initial Gillmore needle, determine the Gillmore Initial Time of setting end point to be the first penetration measurement that does not mark the specimen surface with a complete circular impression.	
8.	Verify the Initial set by performing two additional penetration measurements on different areas of the specimen surface within 90 sec of the first measurement. The elapsed time between the initial contact of cement and water and the end point is the Gillmore Initial time of setting.	
9.	Using the Final Gillmore needle, determine the Gillmore Final Time of setting end point to be the first penetration measurement that does not mark the specimen surface with a complete circular impression.	
10.	Verify the Final set by performing two additional penetration measurements on different areas of the specimen surface within 90 sec of the first measurement. The elapsed time between the initial contact of cement and water and the end point is the Gillmore Final time of setting.	

***Note according to QA's Evaluation procedure the Branch Manager or Lab Supervisor will be responsible to review this evaluation report with the technician and correct any findings(s) noted, to verify that correct procedures are being followed in future testing.**

Remarks: