PCC Paving Verification Responsibilities

Duty	Task	Performed By/ Required Cert	Minimum Frequency
Sample and test aggregate gradations (Fine, Coarse, and Intermediate)	•Obtain independent sample per Materials IM 301. •Test per Materials IM 302 and 306.	Construction Sampling AGG I Testing - AGG II	Sample 1/day Test 1st day and 1/week (QM-C Test 1st day and 2/week)
2. Verify aggregate quality.	Obtain independent sample and submit to Central Materials (Coarse and Intermediate).	Sampling - District Materials AGG II Testing - Office of Materials	1/100,000 square yards (1/100,000 square meters)
3. Verify cementitious.	Obtain independent sample and submit to Central Materials (Portland Cement, Fly Ash, and Ground Granulated Blast Furnace Slag).	Sampling - District Materials PCC II Testing - Office of Materials	1/100,000 square yards (1/100,000 square meters)
4. Verify admixtures.	Obtain independent samples and submit to Central Materials.	Sampling - District Materials PCC II Testing - Office of Materials	1/producers lot
5. Verify air, Plastic	Sample per Materials IM 327. Test per Materials IM 318.	Construction PCC I	1/700 cubic yards (1/500 cubic meters) - Central Batch 1/100 cubic yards (1/75 cubic meters) - Ready Mix
6. Slump, Hand Finish or Std. Fixed Form Only	Sample per Materials IM 327. Test per Materials IM 317.	Construction PCC I	1/700 cubic yards (1/500 cubic meters) - Min. 1/pour

PCC Paving Verification Responsibilities

Duty	Task	Performed By/ Required Cert	Minimum Frequency
7. Verify reinforcement.	Obtain independent samples and submit to Central Materials.	Sampling - District Materials PCC II Testing - Central Materials	Varies - Check IM 204
8. Verify thickness	Obtain core locations from District Materials Witness core drilling Secure and measure cores per Article 2301.34 and Materials IM 347	Construction PCC I	1/2000 square yards (1/2000 square meters)
9. Verify smoothness.	Randomly select segments and measure smoothness per Materials IM 341. Report results and compare to contractor's results. Check tolerance per IM 216.	District Materials PROF	10% of project

PCC Paving Independent Assurance Responsibilities

			Minimum Frequency	
Duty	Task	Performed By/ Required Cert	L Antral Batch	Ready Mix
Sample and test aggregate gradations (Fine and Coarse)	•Sample and test per Materials IM 204. •Check tolerance per IM 216.	District Materials AGG II	*1/100,000 square yards (1/100,000 square meters)	*1/100,000 square yards (1/100,000 square meters)
2. Entrained Air, Plastic	•Sample and test per Materials IM 204. •Check tolerance per IM 216.	District Materials PCC I	*1/100,000 square yards (1/100,000 square meters)	*1/100,000 square yards (1/100,000 square meters)
3. Test thickness cores	•Sample and test per Materials IM 204. •Check tolerance per IM 216.	District Materials PCC I	10% of project cores	10% of project cores
Calibrate smoothness testing equipment	•Per Materials IM 341.	Office of Materials	Yearly	Yearly

^{*} Systems Approach Applicable

Other Required PCC Paving Acceptance Process Responsibilities

Duty	Task	Performed By/ Required Cert.	Minimum Frequency
1. Inspect stockpiles	Observe stockpiling procedures. Check for segregation. Check for contamination. Check for degradation. Check for proper storage and handling of aggregates per Article 2301.13 and Materials IM 527.	Construction AGG II	Observe during startup and weekly thereafter
2. Concrete Grade Yield	Compare quantity required to quantity batched and placed.	Construction PCC II	Weekly
Flexural Strength (beams) Curing and Testing	Cast and cure per Materials IM 328. Test per Materials IM 316.	Construction PCC I	Observe each occurrence
4. Maturity Curve Development and Validation	Observe maturity curve development per Materials IM 383. Observe casting and curing of beams. Observe testing of beams. Observe maturity meter readings at time of beam breaks.	Construction PCC I	Observe each occurrence
5. Field Maturity Testing	Observe placement of maturity probes per Materials IM 383. Observe contractor maturity meter readings	Construction PCC I	If using thermal meter, observe a temperature reading after first day and weekly thereafter
6. Test Equipment	•Inspect test equipment when test results do not correlate.	Construction PCC I & AGG II	When problems arise
7. Audit Checks and Test results in Plant Book	Check for proper completion of Daily Plant Checklist and Plant Site Inspection List. Observe beam break results (when used for pavement opening strength). Observe record of test results for moistures and specific gravities.	Construction PCC II	Weekly
8. Material certifications	Check certifications for: •Cement •Fly Ash •GGBFS (Slag) •Aggregates •Admixtures	Construction PCC II	Weekly

Other Required PCC Paving Acceptance Process Responsibilities

Duty	Task	Performed By/ Required Cert.	Minimum Frequency
Observe aggregate moisture and specific gravitity testing	•Observe CPI perform test in accordance with Materials IM 307 and IM 308.	Construction PCC II	Once during first week of production
10. Plant proportion control	Observe delivery tolerance. Observe scale sensitivity. Observe admixture dispenser operation. Check for proper batch proportions on computer generated or hand written batch tickets	Construction PCC II	Once during first week of production
11. Observe mix times and number of revolutions	•Per Article 2001.21.	Construction PCC II	Once Daily
12. Audit Daily Diary	•Review for proper recording of events.	Construction PCC II	Weekly
13. Plant Reports	Check for proper project and mix identification. Check for dates and report number. Review batch weights and aggregate gradations. Check materials brands and sources. Check for correct concrete and cement totals (daily, weekly, and to date). Check for appropriate Plant Inspector signature or initials. Sign report after review. Check for hard copy or electronic backup of files	Construction PCC II	Daily
14. Inspect Transit Mixers	Inspect for buildup in drum per Article 2001.21 B. Inspect for fin wear or broken fins per Article 2001.21 B. Check for current truck certification per Article 2001.21 B.	Construction PCC II	1/Month
15. Monitor agitors & dump trucks for properly cleaned dump box		Construction PCC I	Daily
16. Inspect plant facility	Observe plant calibration to assure compliance with Materials IM 527. Check lab qualifications. Inspect test equipment.	District Materials PCC II	Central Batch - Beginning of project Ready Mix - Yearly