

CHAPTER 9 PORTLAND CEMENT CONCRETE (PCC) PAVEMENT

9.00 GENERAL

9.01 PRE-CONCRETING CONFERENCE

9.02 "PCC PLANT PAGE" (FORMS 800240E and 800240M)

9.03 USE OF COMMERCIAL READY MIX CONCRETE ON PAVING PROJECTS

9.04 CONCRETE DELIVERY TIMES

9.10 EQUIPMENT

9.11 TEMPLATE FOR CHECKING GRADES ON DRIVES ON URBAN PAVING PROJECTS

9.12 RESERVED FOR FUTURE USE

9.13 ACCUMULATION OF MATERIALS IN TRANSPORTING VEHICLES

9.14 PCC FINISHING MACHINES

9.15 OPERATING FINISHING EQUIPMENT ON PREVIOUSLY PLACED CONCRETE IN MULTIPLE-LANE CONSTRUCTION WORK

- Protection of Pavement
- Surface Cleaning
- Other Equipment

9.16 EQUIPMENT WEIGHT LIMITATIONS ON NEW PAVEMENTS & PCC OVERLAYS

- Joint Cleaning & Sealing Equipment Used on New Pavement & Unbonded PCC Overlays
- Sawing Equipment Used on Bonded PCC Overlays
- Joint Cleaning and Sealing Equipment Used on Bonded PCC Overlays

9.20 PAVEMENT JOINTS

9.21 JOINT SAWING

9.22 CLEANING JOINTS

9.23 SEALING SAWED JOINTS

- Joint Filling
- Sealing Equipment
- Backer Rod

9.24 RESERVED FOR FUTURE USE

9.25 CD, ED, EE & EF JOINTS, AND OTHER DOWELED SUPPORT ASSEMBLIES

- Expansion Joints
- Bond Breakers
- Dowel Tolerances
- Dowel Assembly Placement
- Marking Joint Locations
- Blanking Bands

9.26 LONGITUDINAL JOINTS DESIGN

Tie Bar Placement

9.27 LONGITUDINAL JOINT (L JOINT) TIE-STEEL INSPECTION

- Procedure
- Frequency
- Documentation
- Tolerance
- Out-of-Tolerance

Retrofit

Price Adjustments

9.28 SAW CUTS IN FULL DEPTH PCC PATCHES

9.30 INTAKES AND UTILITY ACCESSES

9.31 INTAKE CONSTRUCTION ON PAVING JOBS

9.32 BOX-OUTS FOR UTILITY ACCESSES

9.33 BOX-OUTS ON SLIPFORM PAVING

9.40 SURFACE FINISHING

9.41 USE OF WATER IN FINISHING CONCRETE

9.42 MICROTEXTURE AND MACROTEXTURE

9.43 GROOVE DEPTH DETERMINATION

9.44 PAVEMENT CROWN

9.45 STRAIGHTEDGEING PAVEMENT SURFACE

9.46 PAVEMENT DATE STAMPING

9.50 PROTECTION, CURING, AND REPAIR

9.51 PREVENTION OF RAIN DAMAGE TO PLASTIC CONCRETE

9.52 CURING OF KEYED AND DOWELED JOINTS

9.53 REPAIR OF DEFICIENT PAVEMENT

Recommended Repair Method

9.54 MUD BALL REPAIR

9.55 COLD WEATHER PAVING AND PLANT OPERATIONS

Cold Weather Pavement Protection
Cold Weather Plant Operation

9.56 CURING APPLICATION

9.60 CONCRETE MATERIALS ISSUES

9.61 CONCRETE SAMPLING LOCATIONS

9.62 TESTING PROCEDURES

9.63 AIR ENTRAINMENT IN PLASTIC CONCRETE

Control of Air Content
Verification
Air Content Outside Tolerance
Air Content More Than 0.5% Below Target Content
Aggregate Correction Factor

9.64 CONCRETE VIBRATION AND CONSOLIDATION

9.65 PAVEMENT THICKNESS CORES

9.66 PAVEMENT SMOOTHNESS

9.67 QUALITY MANAGEMENT CONCRETE (QM-C)

Measurement and Payment

9.70 PCC PATCHING

9.71 FULL DEPTH PCC PATCHES

Materials
PCC Placement

Curing
Patch Thickness
Saw Cuts

9.72 PARTIAL-DEPTH PCC PATCHES

Materials