

CDOT-ACPA Concrete Pavement Inspector Certification Course Outline

Section 1 – Introduction & Resources

- a. Schedule for the day
- b. Available publications & other resources

Section 2 – Concrete Materials

- a. Ingredients in concrete
- b. Material characteristics

Section 3 – Concrete Batch Plant

- a. Types of plants & how they work
- b. Specifications and inspection of scales

Section 4 – Concrete Batch Tickets

- a. What is required on a batch ticket?
- b. How do you include the % moisture in the sand and aggregate?
- c. How do you check the w/cm ratio & yield?
- d. Sample calculations

Section 5 – Field Testing

- a. Evaluating field tests results
- b. Requirements of field lab
- c. Strength
- d. Coring & thickness measurement

Section 6 – Concrete Mix Designs

- a. Tests & their importance
- b. Certifications
- c. Forms 1188 & 1373

Section 7 – Concrete Pavement Overview

- a. Types of concrete pavements & typical thickness
- b. Concrete pavement joint types

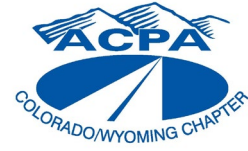
Section 8 – Pavement Subgrade

- | | |
|----------------------------------|----------------------------|
| a. New alignment | d. Testing of base |
| b. Trimming, grading, compaction | e. Asphalt base |
| c. Soft spots and proof rolling | f. String line and off set |



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Section 9 – Paving Equipment

- a. Slipform pavers
- b. Screeds
- c. Hand tools
- d. Consolidation

Section 10 – Steel Placement

- a. Test section
- b. Random testing

Section 11 – Pavement Finish

- a. Surface
- b. Hand finishing
- c. Texturing
- d. Stationing
- e. Curing
- f. Smoothness

Section 12 – Pavement Joints

- a. Sawing
- b. Sealing

Section 13 – Construction Defects, Repairs & Replacement

- a. Cracks
- b. Surface defects
- c. Missing steel
- d. Low strength

Section 14 – Measurement & Payment

- a. Review of specification
- b. Documentation required (Form 266)
- c. Worksheet with calculations
- d. Incentive/Disincentive

Section 15 – Review and Test

- a. Q&A
- b. Administer Test – Must have 80% to pass