



TCCC Incompatibility in Concrete Pavement Systems

Web-based Training

This training was developed by the Transportation Curriculum Coordination Council (TCCC) in partnership with NHI to review integrated materials and construction practices for concrete pavement. It is the first training of its kind offered by NHI, and we would like to give special recognition to the TCCC for their efforts. This course is recommended for the Transportation Curriculum Coordination Council levels II - IV.

The materials used in portland cement concrete play an extremely valuable role in the performance of the concrete. This training covers the incompatibilities of materials used in portland cement concrete. Although certain materials may be perfectly acceptable on their own, when they are combined they are not compatible with each other. This can cause early stiffening, retardation, cracking, and the lack of a quality of air void system. This module is part of a curriculum from the "Integrated Materials and Construction Practices for Concrete Pavement" manual developed through the National Concrete Pavement Technology Center at Iowa State University. Other modules will be available as they are converted to web based training.

OUTCOMES: Upon completion of the training, participants will be able to:

- Understand the causes of incompatible conditions leading to early stiffening or setting and occasional early age cracking
- Understand the importance to use the correct air void system
- Understand test methods used to identify incompatibilities

TARGET AUDIENCE: This training is designed for FHWA, State, and local agencies and their industry counterparts involved in the process to assure that the materials used in portland cement concrete meet specification requirements and are compatible to provide good, durable concrete. It is applicable to anyone desiring a better understanding of the materials used in portland cement concrete.

TRAINING LEVEL: Intermediate

LENGTH: 1 hour

CEU: 0 Units

FEE: FREE

REGISTRATION: Register online at www.nhi.fhwa.dot.gov. If you are a new NHI Web site user, complete the user profile to create a User ID and password. Once you login, add the course to your shopping cart and proceed to checkout. When the checkout process is completed, you will receive an e-mail with instructions for accessing this Web-based Training.

NHI Training Team: (703) 235-0534 • E-mail nhitraining@fhwa.dot.gov

Subject Matter Contact: Chris Newman • (202) 366-2023 • E-mail chris.newman@fhwa.dot.gov

NHI Training Program Manager: Danielle Mathis-Lee • (703) 235-0528 • E-mail danielle.mathis-lee@fhwa.dot.gov

Check out the following WBT trainings that were developed in partnership with the Transportation Curriculum Coordination Council (TCCC):

FHWA-NHI-134081 TCCC Plan Reading

FHWA-NHI-134084 TCCC Fundamentals of Materials Used for Concrete Pavments

FHWA-NHI-134087 TCCC Mix Design Principles



NATIONAL HIGHWAY INSTITUTE