



COURSE NUMBER

FHWA-NHI-130105C



COURSE TITLE

Quality Control of Repair and Retrofit of Concrete Structures Using FRP Composites

Quality Assurance and Construction Process Control of Bonded Repair and Retrofit of Concrete Structures Using FRP Composites is designed to assist State Department of Transportation (DOT) construction and maintenance operation staff develop knowledge of the requirements of quality assurance and quality control during construction, and equip them with the necessary means to control the application of the repair system and the adequacy of the construction process.

This course covers the following topics:

Responsibilities and qualifications of personnel implementing Quality Control and Quality Assurance (QC/QA) program for FRP application

Requirements of Quality control and Quality Assurance (QC/QA) for FRP applications

Application of Quality Control and Quality Assurance (QC/QA) for FRP application

Inspection methods and acceptance criteria for FRP application

Threshold values of concrete surface preparations and construction tolerances

Key elements of Process Control Manual and checklists for inspection of FRP systems

Examples of defective work, repair for defects, and acceptance criteria for repairs

The success of repairs of concrete structures using FRP Composite is dependent on quality control of materials and workmanship, secured by quality assurances processes.

OUTCOMES

Upon completion of the course, participants will be able to:

- Explain the quality assurance methods of FRP repair and retrofit of concrete structures.
- Explain the inspection methods for FRP repair and retrofit of concrete structures.
- Describe the procedures for repairs of defective FRP work.

TARGET AUDIENCE

This training is appropriate for persons with minimal or no experience in bonded repair and retrofit of concrete structures using FRP Composites, as well as those experienced with using FRP Composite. The course focuses on construction areas, however, bridge designers as well as field personnel will benefit from the content.

TRAINING LEVEL: Basic

FEE: 2020: \$0 Per Person; 2021: N/A

LENGTH: 5 HOURS (CEU: .5 UNITS)

CLASS SIZE: MINIMUM: 0; MAXIMUM: 0

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