Proper Joint Sealing Techniques for Pavement Preservation

In this course you will find detailed, “how-to” instruction that covers the scope of tasks and considerations involved in performing joint sealing or resealing pavement joints and cracks. Short, focused lessons are task-based in nature and contain detailed visual aids and videos that reinforce content so you can apply new knowledge directly to your work in the field.

Sawed joints are sealed to prevent the intrusion of water, deicing chemicals, and incompressible materials into the pavement structure which can reduce the pavement’s acceptable performance life. Joint sealing is shown to prevent several types of distresses, including joint associated distress, weakening of the base and subgrade supporting structure, blow ups, and voids beneath the joints and subsequent pavement faulting or pumping. It has also been shown recently that when wide joints are used, sealing joints can reduce the overall tire-pavement interaction noise.

Take this course to learn how to employ successful practices and techniques. Specifically, you will learn the answers to these questions:

1. Why is the technique an important part of concrete pavement preservation?
2. What options are available and which options provide the best opportunities for success?
3. What materials are involved in the techniques?
4. What are the specific, sequential tasks required to properly perform joint sealing?

OUTCOMES

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

- Describe what joint sealing is
- Explain why joints are sealed
- List considerations for preparing for and keeping safe on a joint sealing project
- Describe the materials used in a joint or crack sealing project and their differences
- Describe the standard details used for joint or crack sealing installations
- Identify equipment used for sawing and sealing or resealing joints and cracks
- Describe the purpose of each piece of equipment and how it works
- Explain how a joint or crack is prepared for sealing
- Describe the process for installing the backer rod (if it is used)
- Explain how the sealant or seal is installed
- Describe procedures for applying a penetrating concrete sealer
- Describe procedures for repairing hairline, minor random, and wide cracks
- List important quality considerations for joint sealing projects
- Describe quality control methods you can use to make sure a sealant reservoir is ready for sealant installation and the sealant is installed properly
- Describe how sealant installations are inspected for quality assurance and acceptance
- Identify the distresses or problems that occur with joint sealants and seals
- Explain the steps to take during formed-in-place sealant or compression seal installation

TARGET AUDIENCE

This course provides support and instruction for individuals involved in construction projects using concrete pavement preservation techniques. Participants may have some awareness and past involvement with paving processes, but the training is appropriate for learners regardless of experience level with the techniques. The primary audience is contractors. This course will appeal to individuals in the following roles: construction supervisors, workers, and
technicians; agency inspectors and construction managers; and engineers.

**TRAINING LEVEL:** Basic

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

**LENGTH:** 4 HOURS (CEU: 0 UNITS)

**CLASS SIZE:** MINIMUM: 0; MAXIMUM: 0

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