



structure IMPROVEMENTS

Scope

Polymer overlays are a technology that are used in the preservation of bridge decks. Resurfacing concrete bridge decks with non-skid polymer wearing surface consists of the repair of deck concrete, and application of a thin, flexible, multi-layered, polymer-aggregate wearing surface.



Q: What are polymer overlays?

A: A polymer overlay is an application that consists of two coats of a polymer with aggregate broadcast on top of each layer. Its total thickness is about 3/8 inches. This overlay quickly develops a high tensile strength to seal, protect, and extend the life of bridge decks.

Q: How long does it take to apply the polymer overlay to a structure?

A: The total application time required for a structure is dependent on several variables including weather, the length of a structure, how many lanes are on the bridge and if the overlay can be applied under a full bridge closure if staged construction is required to minimize impacts to traffic. Under ideal conditions, the polymer overlay can be placed on a 12-foot lane at a rate of 10 to 15 feet per minute. Approximately 1 mile of 12 foot bridge deck can be overlaid in 8 hours.



Photo Descriptions

1. Shot blast surface to remove dirt and repair deck if needed
2. scarify 1/4" of the surface to allow polymer overlay to be level with adjacent roadway surface
3. spreading wet polymer and broadcasting the small stone for skid resistance