



PROJECT PROFILE



FAST-TRACK BRIDGE PAVEMENT REPAIRS FOR ONE OF THE NATION'S BUSIEST AIRPORTS

Project Type:

Airport

Application:

Bridge deck overlay

Location:

Boston, MA

Project Dates:

November 4-5, 2017

Project Owner:

Massachusetts Port Authority

Contractor:

indus

Project Size:

16,500 sq. ft.

Product:

Rapid Set® Low-P™ FA1

Boston Logan International Airport is the primary airport serving New England, and one of the nation's busiest airports. All rental car companies serving Boston Logan operate out of the consolidated Rental Car Center (RCC), with shuttle buses arriving at the facility every five to six minutes.

The bridge deck at the RCC entrance took a beating under the constant stop-and-go traffic of the large shuttle buses, which resulted in shoving (abrupt waves) on the asphalt pavement. In November 2017, the Massachusetts Port Authority (Massport) contracted pavement and bridge preservations company indus (formerly Sealcoating Inc.) of Braintree, Mass., to remove 16,500 square feet of damaged pavement and install an overlay.

To prevent future shoving issues, the contractor used CTS Cement's Low-P™ FA1 Cement for the overlay. Low-P FA1 is a polymer-modified cement that when used in conjunction with aggregates will provide a durable concrete overlay that sets fast and provides high early strengths—typically reaching 3,200 psi in three hours. It also has low permeability and is resistant to corrosion caused by chlorides and deicing salts, making it an ideal material for bridge deck overlays and pavement repairs. It is a high-value alternative to latex-modified, polyester, low-slump and microsilica/silica fume concrete repair products.

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For this project, the contractor used 300 cubic yards of material. The material was mixed with water and aggregates and batched by volumetric mobile mixer. A conveyer was used to place the material, and afterward the crew consolidated it to remove air voids and finished the surface with an air screed. After final finishing, they covered the overlay with wet burlap for curing. It was ready for traffic in three hours.

The work took place over one weekend, Nov. 4-5. The result is a smooth riding surface that protects the underlying deck, providing long-lasting durability in Boston's harsh freeze-thaw cycles.

CTS Cement Manufacturing Corporation manufactures Rapid Set professional-grade cement products for concrete repairs and new construction projects. Contractors, owners, engineers and architects choose Rapid Set to eliminate problems they have with other concrete repair materials, to save time and money, when superior durability is required and results need to be aesthetically pleasing. For more information about CTS Cement and Rapid Set, please visit www.CTScement.com.

ABOUT CTS CEMENT