



REAGAN NATIONAL AIRPORT

Project Type:

Airport

Application:

Runway Centerline Lighting

Location:

Reagan National Airport, Arlington, VA

Project Dates:

Nov 1, 2011 – Oct 1, 2012

Project Owner:

Metropolitan Washington Airports Authority

Contractor:

DACO Construction

Concrete Producer:

Heartland Concrete

Project Size:

2,277 cu yds

Product:

Rapid Set® Cement

When replacing lighting that's embedded within a runway, work must adhere to a strict schedule so that it does not disrupt flight schedules. The construction is typically performed at night.

Centerline lighting at Reagan National Airport was replaced in 2011-12. The scope of work included coring and cutting out each light can, with holes measuring approximately 2 feet in diameter by 3 feet deep. Lights are spaced approximately 50 feet apart and trenches for new conduit between the lights measured approximately 6–8 inches wide by 2 feet deep.

Each night, crews were tasked with completing a predetermined number of linear feet, with work that included removal of the existing lighting and placing new conduit and light cans. On average, 200–300 feet of production was accomplished per night. Once the new conduit and light cans were installed, Rapid Set Cement was used to produce a pre-approved concrete mix design to fill trenches and cores. It exceeded the contract's required strength of 3500 psi in four hours.

Rapid Set Cement was ideal for the project, because it can achieve a strength of 3500 psi in two hours—half the specified requirement. This resulted in a longer production window for the contractor each night—a valuable benefit, since contract penalties for construction delays on runways can be extremely punitive.

PROJECT PROFILE

The Rapid Set concrete was produced by a volumetric mixer finished with hand trowels and wet cured. Rapid Set Cement offered reliable set times and strength gain—characteristics that were sampled and tested each night before the runway was approved for aircraft landing.

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