



RAPID SET MEETS OVERNIGHT PAVEMENT DEADLINES AT JOHN WAYNE AIRPORT

Project Type:

Airport

Application:

Can Lighting Trenching

Location:

Santa Ana, CA

Project Dates:

October 19 – December 21, 2020

Project Owner:

Orange County

Contractor:

Royal Electric Co.

Project Size:

13.3 cu. yds.

Product:

Rapid Set® Cement

John Wayne Airport, Santa Ana, Calif., is owned and operated by Orange County and is known as the major commercial and general aviation airport for the county and the Greater Los Angeles area. In addition to commercial flights and air cargo, it provides crucial services for the local law enforcement, air operations and medical flights.

In 2020, contractor Royal Electric Co. was tasked with adding can lighting to the pavement in the taxiways to improve visibility. This involved working overnight to complete the lighting and concrete work. Project specifications required reaching compressive strength of 3500 psi in two hours. Each morning the work had to be finished and the taxiway open for traffic by 5:30 a.m. or heavy penalties would be imposed. The work took place from October 19 until December 21.

To meet the fast turnaround, the contractor used Rapid Set® Cement by CTS Cement Manufacturing Corp. Rapid Set Cement is a fast setting, high performance hydraulic cement that provides faster return to service, high strength and increased durability. The belitic calcium sulfoaluminate (BCSA) cement qualifies as very rapid hardening per ASTM C1600. It achieves structural strength in one hour, has low shrinkage and superior resistance to chemical attack.

To avoid the risk of alkali-silica reaction (ASR) for this job, orca rock was used for ASR mitigation. A volumetric mixer was used for

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mixing, and screed and hand float were employed for finishing. During the project, the weather conditions were from 57° to 60° F with a light wind. Using Rapid Set Cement allowed the taxiway to be open to traffic on time each morning.

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

