



Rapid Set® Cement, I-5 freeway (Los Angeles, CA)

AMBITION AND INNOVATION ON INTERSTATE 5

Volumetric Mixer Produces 398 Cubic Yards of Rapid Strength Concrete in Just 5 Hours

Project Type:

Highway

Location:

Los Angeles, CA

Project Dates:

August 2004, March 2006 (estimated completion)

Size:

17,000 Cubic Yards

Engineer:

Caltrans

Contractor:

All American Asphalt

Concrete Supplier:

Shortload Concrete

Product:

Rapid Set® Cement

Caltrans District 7 contract number 07- 226204 on state route 5 in Los Angeles County continues to amaze the pavement industry.

12,530 cubic meters (16,379 cubic yards) of panel replacement work on one of California's busiest freeways (over 80,000 vehicles per day) was an ambitious undertaking for general contractor All American Asphalt of Corona. All possibilities of production and placement of rapid strength concrete were evaluated for this project. The final conclusion was to use Rapid Set® Cement and have Shortload Concrete of Anaheim produce the concrete.

The project began in August 2004, but record-breaking winter rainfall and temperatures required a 3-month hiatus.

With lane closures averaging only 7-hours, efficiency, performance and production were critical in keeping this contract on schedule. The locations of the deteriorated panels requiring removal posed another hurdle for the contractor. Shortload Concrete formulated a 7-sack Rapid Set Cement concrete mix design to optimize both performance and production. With the original panel replacement estimates of 150 cubic meters per shift (196 cubic yards), removal, placement, and finishing of the concrete had to be well orchestrated.

As progress and experience grew on the job, so did the efficiency and concrete production.