



PROJECT BRIEF



I-85 PANEL REPLACEMENT

Project Type:

Pavement

Application:

Panel replacement

Location:

Spartanburg, SC

Project Dates:

May 1 – Aug 1, 2016

Project Owner:

SCDOT

Contractor:

Southern Concrete & Construction

Concrete Producer:

Heartland Concrete

Project Size:

1,650 cu. yds.

Product:

Rapid Set® Cement

The solution for replacing broken pavement panels along a section of I-85 in Spartanburg, SC came in the form of Rapid Set Cement. Because the roadway had to be returned to traffic by a specified time with a minimum compressive strength of 1,600 psi, Rapid Set's fast curing time provided the ideal solution.

The existing pavement, which was broken and settled, was completely removed. The sub-grade was repaired, and dowels were drilled into the panels on either end of the replacement panels. More than 500 tons of Rapid Set Cement were used to produce 1,650 cubic yards of concrete through six volumetric mixers. The Rapid Set concrete mix design contained 611 pounds of Rapid Set Cement per cubic yard.

The concrete was placed and finished with a roller screed and cured with a curing compound in 85-degree-Fahrenheit temperatures. Rapid Set Cement allowed the contractor to more efficiently use the closure times to replace more panels each weekend.