



PROJECT PROFILE



Rapid Set® Cement All® I-93 Bridge (Concord, NH)

QUICK BRIDGE COMPLETION

with Rapid Set® Cement All®

The New Hampshire Department of Transportation was constructing a new bridge on I-93 in Concord and wanted a grout that would provide fast-setting strength and be easy to use. Rapid Set® Cement All® was chosen for use in the shear keys, stud pockets, and approach slabs. The sequence for the build was to set the

precast panels in place and then fill the areas between the panels – the shear keys – with Rapid Set Cement All.

After the gaps were filled, Cement All set for around 3 hours until it reached structural strength. The precast panels were then tensioned, pulling the sections together. Studs were then welded onto the steel beams and the stud pockets were filled with Cement All to grout the studs in place. Then, approach slabs were poured using extended Cement All.

The extended Cement All contained a coarse aggregate, which turned it into concrete, rather than grout. The extended Cement All was mixed in a ready-mix truck, unlike the Cement All for the shear key and stud pockets, which was mixed by hand. The entire process was completed in just one weekend and the bridge opened that Monday.