Central 70 Expansion

US SPEC Product: NA-100
Location: Denver, CO
Date of Completion: 2022

Central 70, in Denver, is one of Colorado’s economic backbones. It is home to 1,200 businesses, providing the regional connection to Denver International Airport and carrying upwards of 200,000 vehicles per day. The Central 70 Project will reconstruct a 10 mile stretch of highway, add one new express lane in each direction, remove an aging 55-year-old viaduct, lower part of the interstate and place a 4-acre park over a portion of the lowered interstate.

This project, more than 14 years in the making, will be Colorado’s largest ever transportation project. It is designed to reduce travel time through the corridor by one-third to one-half by 2035, accommodate the needs of a growing population, improve safety standards and unite neighborhoods split on the two sides of the corridor.

The Engineer on the project, VSL, is a long time user of US SPEC products. NA-100, a high flow, non-aggregate post tension grout, has been used on several projects throughout Colorado and is on the Colorado Department of Transportation’s approved products list.

For this project, NA-100 was used on pier caps in construction of new bridges. They required a pumpable grout that would fill annular voids between the ducts and the post-tensioned cables.

The material was mixed in a colloidal grout mixer and pumped into the structure through fittings attached to the ducts. The cap was approximately 25-feet above ground; the grout was pumped up to the structure from below. Now that the ducts containing the post-tensioned cables are filled with NA-100, the grout will add protection from corrosive elements.

The contractor liked the long open time of the material. The fluidity of NA-100 allowed it to be easily pumped over long distances.

NA-100

Purpose:

NA-100 is designed to provide maximum flow, shrinkage compensation and extended working times in an aggregate free formulation where clearances are minimal, such as the grouting of tendon cables. NA-100 is non-metallic and non-corrosive.

USES:

NA-100 is ideal for a variety of applications:

- Vertical and horizontal post-tension grouting of stressed steel to provide complete encapsulation and protection from corrosion.
- Grouting of tight clearances between precast segments, beams and columns in contact with stressed steel tendons or cables.