



PROJECT BRIEF



PERFECTING CURE TIME FOR SPEEDY INSTALLATION OF PANELS

Project Type:

Highway

Application:

Panel grouting

Location:

Upper Preston, WA

Project Dates:

September 19 – November 11, 2019

Project Owner:

Washington Department of Transportation

Contractor:

Road Construction Northwest, Inc.

Project Size:

82 panels

Product:

Rapid Set® UltraFlow® 4000/8

Temporary modifications were made to SR 18/Snoqualmie Parkway and nearby local intersections to provide short-term congestion relief and improve traffic flow for a construction work-around. Crews from Road Construction Northwest, Inc., worked to complete these modifications by December so that work can begin on a new I-90/SR 18 interchange project to be completed in 2023.

The contractor chose UltraFlow® 4000/8 for panel grouting. UltraFlow 4000/8 is a high-performance, non-shrink precision grout with long flow life and rapid strength gain—perfect for these conditions.

Road Construction Northwest began by using a mortar mixer to mix a total of 64 bags. Potable water was used to mix the grout for a minimum of 3–5 minutes. After testing to ensure the right consistency has been achieved, the grout was pumped to the needed locations and finished by hand. The biggest challenge was to pump a fluid grout under the precast panels and still achieve a minimum 500 psi to quickly open to traffic.

To do this, the contractor was able to remove some of the retarder to allow UltraFlow 4000/8 to achieve the required strength in a timely manner. CTS was able to produce 1000 lb supersacks, which allowed the customer to save on breaking individual bags.