Carbon Fiber Reinforced Polymer Strands (CFRP)

CFRP offers corrosion-free performance and the promise of lower life cycle cost, without significant increase to a bridge project budget.



Why Carbon Fiber Reinforced Polymer Strands? Why now?

CFRP is a corrosion-free option for pre-tensioning and posttensioning applications on concrete elements. It performs comparably to steel in the finished product in terms of material handling, structural erection, constructability, and other factors. CFRP's benefits compound with its promise of lower life cycle costs, including reduced maintenance and rehabilitation work. This translates to increased worker and motorist safety. It also means that cost savings stay in the roadway user's pocket in the form of less delay (and fuel consumption) plus reduced vehicle wear and tear.

Agencies from Maine to California are recognizing a host of practical advantages of CFRP, which include eliminating the need for grouting in post-tensioning applications, more tendon replacement options, and more options for repairs from high load hits. Plus, the cost of CFRP, which, like steel, is only a fraction of the cost of an overall bridge project, is falling as applications, supply, and technology advance.

CFRP works because it was developed, tested and successfully adopted by your peers. The AASHTO Innovation Initiative assembled those innovators on a team that is standing by now to help you deliver Carbon Fiber Reinforced Polymer Strands to your customers.

Find out more today! Visit aii.transportation.org and click on Carbon Fiber Reinforced Polymer Strands



Matthew Chynoweth, Chair, MDOT chynoweth@michigan.gov

Stephen Sharp, VDOT stephen.sharp@vdot.virginia.gov

Omar Abu-Hajar, ODOT omar.abu-hajar@dot.ohio.gov Jim Gutierrez, Caltrans jim.gutierrez@dot.ca.gov

Wayne Frankhauser, Jr., MaineDOT wayne.frankhauser.jr@maine.gov

Dr. Nabil Grace, Lawrence Technological University ngrace@ltu.edu