Premium Precast Performance

FORTA-FERRO® Strong As Steel!

FORTA Corporation has been supplying a variety of synthetic fiber reinforcements to the precast concrete industry for over 30 years. Now FORTA® has introduced a new macro synthetic fiber - FORTA-FERRO® - that allows for a much higher replacement level of conventional steel reinforcement for all types of precast applications. This next generation fiber was developed by maximizing each of the critical 4-C's fiber characteristic areas, allowing for premium precast performance.

4-C's Fiber Characteristics:

Configuration: A blend of twisted-bundle heavy-duty monofilament fibers and fibrillated-net fibers, to maximize anchorage on post-crack benefits.

Chemistry: Made of virgin polypropylene and high-strength co-polymer materials; non-corrosive, non-magnetic, and 100% alkali proof.

Contents: unique form allows high dosages to be used without causing mixing or handling problems; dosage ranges from 3.0 lbs. to 10.0 lbs. per cubic yard, depending on the precast application.

Correct Length: long 2 ¼ in. (54mm) lengths maximize fiber anchoring and minimize pullout; mixes quickly and distributes uniformly, even in thin-wall precast forms.



Performance Proof

In scores of research programs, FORTA-FERRO® has proven to provide improvements to concrete toughness, impact resistance, and long-term durability. The 3-dimensional fiber coverage also adds a dramatic improvement to concrete's ductility, which is an important advantage in precast applications.

Vacuum Testing

In addition to laboratory specimen testing, advances to standardized vacuum test procedures have given code bodies and precast producers alike the ability to test the composite product and to compare alternate forms of reinforcement. FORTA Corporation offers local technicians and vacuum test equipment as a service to validate compliance with area standards and codes.



FORTA® technicians performed a vacuum test on a steel-reinforced 1,000 gallon single piece tank produced in Clarion, PA. The steel reinforced tank passed both ASTM and NPCA minimum standards, and showed catastrophic long wall collapse at 9-10 in. of mercury.

Performance with a Pay-Back!

As a viable alternative to a higher level of conventional steel reinforcement, FORTA-FERRO® offers a substantial savings in labor and production costs for the producer. Dramatic savings have been reported as a result of reduced time and effort associated with the normal steel cage fabrication and placement within the precast forms. Injury-related costs are also reduced – all without losing reinforcement performance.

With FORTA-FERRO®, we add it directly to the mix, which eliminates having to cut, bend and place wire mesh. Replacing the mesh has saved us on time and labor with our precast products."

 Wayne Richmond Portage Septic Tank Warren, OH

"The FORTA-FERRO® fiber works great. It saves us time and labor, and does everything our steel reinforcing did."

-Lanny Hakes Hakes Concrete Septic Tanks Dover, PA





We have seen an increase in toughness and durability since we began using FORTA-FERRO® in our septic tanks."

- Roger Glenn Glenn Redi-Mix Clarion, PA

Using FORTA-FERRO® has dramatically decreased the cracking in our burial vaults, as well as save us valuable production time."

