

Joint-Free Topping Slab

King County Shoreline Recycling and Transfer Station, Seattle, WA
January 2007

Project Description:

Based on comparative ARS (Average Residual Strength) test data, project engineers opted to use the FORTA-FERRO® macrosynthetic fiber in lieu of steel fibers in this thin 2-1/2" topping over a 12" thick suspended structural slab. The topping, which serves as a wearing surface for this drive-through garbage and recycling transfer station, required 118 cubic yards of fiber-reinforced concrete. The coarse-broom finish provided a non-skid surface, and the synthetic FORTA-FERRO® fiber eliminated any concern of injury and corrosion that might have occurred with steel fibers in this public-access facility. The topping included no contraction joints over the 70' x 220' deck, and has performed extremely well under 3 years of light-traffic use.



Details:

Owner: King County, Washington

Location: Seattle, WA

Project Dates: January 2007 - February 2008

Application: Refuse collection topping slab

Architect: KPG Architects, Seattle, WA

Engineer: KPFF, Shoreline, WA

General Contractor: Lydig Construction, Bellevue, WA

Concrete Supplier: Rinker Materials, Everett, WA

Slab Dimensions: 70' x 220' x 2.5" thick

Original Reinforcement: 55 lbs. steel fibers per cubic yard

FORTA® Alternative: FORTA-FERRO® 2-1/4" long, 5.5 lbs./cu. yd.



FORTA®