

Smooth sidewalks with REGEN Fiber

The job

King's Material Inc., founded in 1882, specializes in concrete, masonry and landscaping products and projects. Ryan Companies is a large-scale general contractor with offices in a dozen locations across the United States. Travero contracted the two companies to supply and pour a new stretch of sidewalk at its headquarters in Fairfax, Iowa.



Finishers added REGEN Fiber concrete fibers – 100% recycled reinforcing fibers made from end-of-life wind turbine blades.

Previously a job like this would have likely utilized polypropylene-based products, which are notoriously difficult to mix, can cause fibers to ball and are harmful to the environment. This leads to toxic emissions, dispersion issues, voids and finishing problems with excess fibers at the surface.

“REGEN Fiber [concrete] fibers shorten project times when replacing steel, as they don’t require extra manpower to provide structural reinforcement.”

– Mike Swartzendruber, manager of King’s Material’s ready-mix division

“The REGEN Fiber [concrete] fibers were uniform in size and dispersed throughout the mix without any clumping or balling of the material. Feedback from the finishers on the site was that the fibers dispersed very well and the concrete finished well.”

– Mike Swartzendruber, manager of King’s Material’s ready-mix division



The REGEN Fiber results

It's all in the mix

REGEN Fiber's concrete fibers **took less time to mix** than polypropylene, requiring **less water** and subsequently **less product**.

The fibers were uniform in size and dispersed evenly throughout the mix, eliminating voids and material clumping. This produced a strong, smooth stretch of sidewalk with a clean surface.

REGEN Fiber's concrete fibers also **shortened the project time, cut costs** and **reduced the amount of manpower**, thanks to the ease of application, less product usage and waste mitigation.

High-quality fiber-reinforced polymer materials increase tensile strength, freeze-thaw resistance and longevity. REGEN Fiber's concrete fibers enhance concrete durability up to 40%.

You can use REGEN Fiber's products for a variety of applications.

- ▮ Slabs-on-grade
- ▮ Concrete decks
- ▮ Overlays
- ▮ Bridge decks
- ▮ Shotcrete
- ▮ Precast products
- ▮ Concrete and mortar
- ▮ Composites
- ▮ Soil stabilization



"I would definitely use REGEN Fiber's [concrete] fibers again, as they provide an environmentally friendly substitution for polypropylene fibers. Any time we can use recycled products it is an advantage and a benefit, as it reduces waste and is environmentally responsible."

– Mike Swartzendruber, manager of King's Material's ready-mix division

An eco-friendly alternative

Recycling wind turbine blades for a structural application, REGEN Fiber's products serve as a sustainable and environmentally conscious replacement for polypropylene fibers, a byproduct of petroleum oil.

Since REGEN Fiber's products are 100% fully recycled strength enhancers, they reduce emissions and can help achieve LEED certification and other sustainable building goals. REGEN Fiber's concrete fibers also meet industry and project specifications. Laboratory and field-sample testing have shown an increase in strength, durability and longevity.

