

James Hardie is a leading high-technology manufacturer of numerous types of fiber-cement products. These are used for a range of applications such as external siding, trim and panels as well as interior floor and tile underlay. Its manufacturing plant in Prattville, Alabama produces fiber-cement building products for the Southern and Eastern U.S. markets. Bekaert played an integral role in the design and execution of the inside and outside floors of the plant.

The challenge

Both the James Hardie construction team and the general contractor were keen to implement a standard flooring solution across both interior and exterior areas that was high performance, easier to install – compared to conventional methods – and cost-effective.

The solution

After a number of discussions, Bekaert worked through the engineering parameters and convinced the engineer of record to specify a steel fiber concrete reinforcement solution that would meet the high quality and load-bearing demands of both the interior manufacturing area as well as the exterior yard. The solution was based on Dramix® 3D 80/60 at a dosage rate of 18 lbs/yard³. Quality processes were put in place to ensure optimal quality both of the steel and the readymix delivered. By eliminating rebar, the contractor was able to accelerate construction and meet a very tight deadline. Moreover, by reducing slab thickness, less concrete was needed. This reduced the project's environmental footprint and helped James Hardie enhance their sustainability credentials

JAMES HARDIE

PRATTVILLE, ALABAMA, USA

PROJECT SPECIFICATIONS

Project type: Manufacturing hall

Application: Saw-cut floor

PARTNERS

- General contractor: Casey Industrial, Colorado
- Readymix: Corliss Resources, Inc.
- Designer: Bibb Engineering



Location: Prattville, Alabama, USA