

At its nearly 2,500-acre petrochemical complex in Point Comfort, Formosa Plastics Corporation, U.S.A. produces an extensive range of polyvinyl chloride, polyethylene and polypropylene resins, caustic soda and other petrochemicals. For a new exterior storage facility, Katoen Natie USA, acting as general contractor (design build) for Formosa Plastics, specifically requested a concrete slab design using steel fiber reinforcement. This was for two reasons. Firstly, an existing rebar-based solution was causing numerous crack-related problems. Secondly, the parent company had successfully used steel fiber concrete reinforcement at other sites around the world.

The challenge

The Bekaert team worked closely with Katoen Natie's technical experts to understand the demand on the flooring as well as the local constraints. The project faced multiple challenges. A single reinforcement solution was needed for both interior and exterior floors. The proposed solution had to be less expensive than rebar. Furthermore, the existing production schedule needed to be optimized in order to accelerate the construction process.

The solution

The Bekaert team proposed a solution based on Dramix[®] 3D 65/60 steel fiber that was high performance, extremely durable, and cost-effective. It was used to create a seven-inch concrete slab suitable for both the interior industrial floor as well as the exterior pavement.

FORMOSA PLASTICS

POINT COMFORT, TEXAS, USA

PROJECT SPECIFICATIONS

Project type: Manufacturing hall

Application: Saw-cut floor

PARTNERS

- General contractor: Katoen
 Natie USA
- Concrete contractor: Keystone Concrete Placement
- Readymix: Alamo Concrete
 Products



Location: Point Comfort, Texas, USA