

Linder Industrial Machinery is a premier heavy equipment dealer in the USA, providing new, used and rental equipment across sixteen branch locations. Its product range includes excavators, bulldozers, front loaders, cranes, agricultural machines, trucks and other heavy-duty vehicles. For their new facility in Concord, North Carolina, Bekaert's Dramix[®] steel fiber concrete reinforcement solution proved ideal to meet the demand for high impact resistance at an affordable price.

The challenge

The new Linder branch in Concord includes a parts warehouse, showroom, parts kiosks, sales offices, three conference rooms, two training rooms and a 2,000 m² shop. Considering the extremely heavy equipment on display, load-bearing capacity was obviously top of the list of requirements. The project also had to be executed within a tight budget.

The solution

The Bekaert team looked at the original design, analyzed the loads, and recommended that the proposed double layer of rebar be eliminated and replaced with Dramix[®] 3D 65/60 steel fiber reinforced concrete. This reduced the concrete thickness by one inch. Compared to rebar, Dramix[®] 3D improves the load bearing capacity of concrete, protecting it against cracking and fatigue. As a result, the floors of the Linder facility reinforced with Dramix[®] 3D are highly resistant to impact and abrasion. By eliminating rebar, accelerating the speed of construction, and using less concrete, project costs were reduced by around 30%. Moreover, by reducing the amount of concrete used, the project met Linder's sustainability objectives with the project.

LINDER

CONCORD, NORTH CAROLINA, USA

PROJECT SPECIFICATIONS

Project type: Warehouse/distribution center

Application: Saw-cut floor

PARTNERS

- General contractor: David E. Looper & Company, Inc.
- Readymix: Macleod
 Construction Inc.
- Designer: Taylor & Viola Engineers



Location: Concord, North Carolina, USA