

Built by Beedie, one of Canada's largest industrial developers,

Morningside Business Centre offers high-quality construction, best-

in-class specifications, and cost-saving building design efficiencies.

Bekaert played a key role in providing a cost-effective, high-

performance steel fiber reinforced concrete floor.

The challenge

Initially the 430,000 square foot floor of the Morningside Business Centre was to be constructed with rebar. However, following discussions between Bekaert, the general contractor, and the flooring contractor, it was realized that a steel fiber reinforcement solution would be much more cost-effective. It was therefore agreed to replace rebar with 25 kg/m³ of Dramix[®] 3D 55/60 steel fiber. However, by the time the floor came to be constructed, nine months later, the volatility of the steel market had led to a significant increase in the price of steel. This meant that the project would be over-budget. Bekaert was invited to offer an alternative proposal.

The solution

The Bekaert solution was to construct the floor with Dramix[®] 4D steel fiber instead of Dramix[®] 3D. The higher performance of Dramix[®] 4D meant that instead of using 25 kg/m³ of Dramix[®] 3D 55/60, only 15 kg/m³ of Dramix[®] 4D 65/60 BG was needed to meet this project's specifications. The slab thickness was unchanged. This product change, which meant that less steel was used, allowed both the production schedule and budget to be met, while maintaining the high performance level of the resulting floor.

BEEDIE MORNINGSIDE

TORONTO, ONTARIO, CANADA

PROJECT SPECIFICATIONS

Project type: Warehouse/distribution center

Application: Saw-cut floor

PARTNERS

- General contractor: Graham
 Construction
- Flooring contractor: Belmont Concrete Finishing Ltd/ Northfleet Concrete Floors Inc.
- Designer: Dorlan Engineering
- Concrete contractor: Belmont Concrete Finishing



Location: Toronto, Ontario, Canada