

Canuck Express is a transportation company based in Toronto and operating throughout Ontario and Quebec. The company operates a range of cargo vehicles from 3-ton trucks to tri-axle truck-and-trailers equipped with refrigerating units. These are available 24/7 for emergency and scheduled deliveries to grocery chains, manufacturers and distributors. The floor of their 40,000 square foot warehouse/distribution center in Markham, on the outskirts of Toronto, was constructed with Dramix® steel fiber reinforced concrete.

## The challenge

The challenge associated with this project was that the entire facility, except the floor, had been constructed without knowing who the tenant was going to be. When it became apparent that the tenant was Canuck Express and that the floor had to meet load requirements higher than expected, the steel fiber specification had to be changed.

### The solution

The owner and general contractor were initially looking for a way to eliminate rebar during floor construction to reduce costs. The Bekaert team worked with the engineer of record to come up with a standard design specification based on Dramix® 3D steel fiber. This was considered an optimal floor for the assumed loading requirements. When it became apparent that the tenant was to be Canuck Express, and that the floor was going to be used by heavy trucks and forklifts, the specification had to be revisited. To ensure the floor could meet its intensive use requirements, Dramix® 3D was replaced by 25 kg/m³ of Dramix® 4D 65/60 BG steel fiber. The resulting seven-inch concrete floor perfectly meets the high load-bearing requirements of Canuck Express.

# CANUCK EXPRESS

MARKHAM, ONTARIO, CANADA

#### PROJECT SPECIFICATIONS

Project type:
Warehouse/distribution center

Application: Saw-cut floor

### **PARTNERS**

- General contractor: Maple Reinders
- Flooring contractor: Belmont
   Concrete Finishing
- Designer: Dorlan Tacoma
   Engineering & Dorlan
   Engineering Consultants Inc.



Location: Markham, Ontario Canada