



CUSTOMER CASE STUDY

Bombardier Inc. is a Canadian manufacturer of aircraft, rail transportation equipment & systems, and motorized consumer products. For its manufacturing site in Bolton, Ontario, Bekaert designed a steel fiber reinforced concrete solution for a floor on piles, which is traditionally constructed with rebar.

The challenge

“ The client was looking for ways to accelerate construction of this 70,000 square foot manufacturing facility, while also seeking a sustainable solution. A traditionally reinforced slab on piles with a double mat of rebar is time- and labor-intensive to construct. The client was eager to get into their facility quickly, but given the poor soils and soil improvement plan, the slab had to have sufficient strength to span between piles while meeting all other loading criteria

The solution

“ The Bekaert team proposed replacing rebar with Dramix® 3D 65/60 BG steel fiber reinforcement. This resulted in time savings and cost reductions, and enabled Bombardier to achieve its sustainability objectives. This is because the use of Dramix® instead of rebar reduced the amount of concrete necessary. This translated into a 30% cost reduction and a lower environmental footprint for the project. Moreover, by using Dramix® steel fibers, less equipment was used during construction, which not only reduced man-hours but also contributed to the plant being constructed ahead of the original schedule.

BOMBARDIER

BOLTON, ONTARIO, CANADA

PROJECT SPECIFICATIONS

Project type:
Manufacturing hall

Application:
Floor on piles

PARTNERS

- Designer: Ghafari (USA) and Teknika HBA (Quebec)
- Readymix contractor: Unibéton (Laval)



Location: Bolton, Ontario, Canada