Customer case study

Bekaert

This Amazon warehouse was reinforced with steel fibers Here's why

Amazon, the global e-retail giant, announced to build their first fulfilment centre ever in India (Hyderabad) in 2015. For a warehouse floor the size of about 6 football pitches, Amazon needed a highly durable, cost-efficient floor that could handle the daily traffic.

The challenge

Firstly, the mezzanine pedestals had to be constructed directly on the floor. To meet this requirement, Aswathnarayana & Eashwara, GMR Aerocity's consultant, designed the floors with Dramix® steel fibers. Secondly, there were very tight construction schedules.

The solution

KMV Infra projects, the contractor, used Dramix® 4D fibers to successfully execute this portion of the floor. Replacing mesh with fibers was a huge time save, because there was no need to tie, cut and bend the metal. The solution consisted of both Dramix® 3D 80/60BG and 4D65/60 BG fibers, with concrete thicknesses of 150 mm, 200mm and 350mm (foundation portion) and concrete quality of M 25 & M35. Concrete was supplied from their own batching plant and Dramix® steel fibers were mixed at the batching plant as per Bekaert's recommendations.

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Project Specifications

Project Type: Warehouse
Application: Saw-cut floor
Product: Dramix® 4D 65/60BG

Partners

General contractor: GMR Aerocity
Engineering office: A&E
Flooring contractors: Avcon Technics Pvt.Ltd & KMV Infra projects