

Reliable passive fire protection and increased project efficiency with Hempafire Pro 315

At the new 6,000-seater Jordal Amfi ice hockey stadium in Oslo, Norway, player and spectator safety is a top priority. The stadium owner wanted a coating system which included passive fire protection, so, when Danishbased Give Steel was contracted to produce the steel structures, they had to not only meet the customer specification for fire protection but also consider the logistics of the project.

The steel pieces were produced in Denmark, and Give Steel needed a coating system that was robust enough to protect the steel during transportation and erection onsite.

"By using Hempafire Pro 315 we secure the high quality fire protection required whilst also benefitting from an efficient application process and low levels of repair on-site."

Torben Larsen, CEO, Give Steel A/S

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Robust passive fire protection for major ice hockey stadium

Challenge

When complete in late 2020, the 6,000-seater Jordal Amfi ice hockey stadium in Oslo, Norway will be home to the Vålerenga ice hockey team and host national and international events. NCC is the main contractor on the project, and it asked Danish-based Give Steel to produce the steel structures.

With spectator and player safety high on the agenda, it was important that the chosen coating system included passive fire protection. In addition, Give Steel would produce and coat the steel sections in Denmark before transporting them to Norway. Therefore, it needed a coating system that is robust enough to handle the abrasion and impact associated with transportation and erection onsite.

The solution

We specified a coating system based on Hempafire Pro 315 FD, a fast-drying intumescent coating that offers 60 minutes passive fire protection for the project. Applied in a thin coat on structural steel, Hempafire Pro 315 FD expands to form an insulting layer of char when exposed to extreme heat. This enables the steel to maintain its load-bearing capacity for longer during a fire and gives valuable extra time for evacuation and emergency response.

As well as enhancing building safety, Hempafire Pro 315 gave Give Steel additional benefits. The coating has exceptionally low loadings and requires lower dry film thicknesses compared to similar products. This translates directly into reduced paint consumption and shorter drying times, which meant Give Steel's applicators could apply more coatings in less time – with less waste, fewer resources and lower costs.

Also, thanks to the low dry film thicknesses, Hempafire Pro 315 achieves its optimum mechanical characteristics faster, reducing the risk of damage during handling and transportation. As a result, less touch-up and repair was needed after erection onsite, significantly reducing Give Steel's project costs.



At a glance	
About the customer	Give Steel is one of Denmark's leading manufacturers of steel structures for the building sector. It produces all kinds of supporting columns and beams, as well as complex customised structures.
Solution	Hempadur Speed-dry ZP 500 Hempafire Pro 315 FD Hempathane Fast Dry 55750

The Hempel Group Head Office