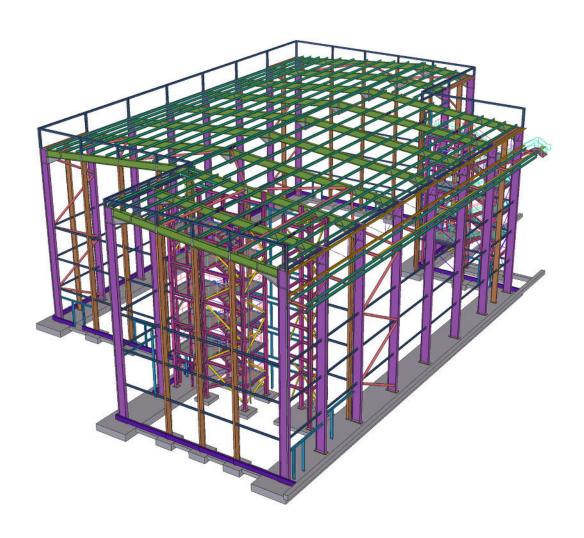


Shortlisted Finalist | Voting ID: #6567

Finished Projects
Constructional Steelwork

Dundalk Fabrication & Coatings -

Records Management Facility, Damastown, Dublin



Voting ID: #6567 | Constructional Steelwork

Records Management Facility

Damastown, Dublin

Project Story:

What makes this project stand out is not just its scale, but its highly specialised and technical requirements.

The structure heights to a remarkable 18 metres at the eaves, an uncommon height for a building of its kind—especially given its tight footprint and close proximity to the existing structure.

But height was only part of the challenge. The building's primary function is to safely house millions of critical records.

To achieve this, the facility uses oxygen reduction technology—a system that removes moisture from the air by lowering oxygen levels, dramatically reducing the risk of fire.

For this to work efficiently, the building envelope had to be exceptionally airtight—far beyond standard construction tolerances. Any leakage would compromise the safety and

sustainability of the storage environment, while significantly increasing operational costs.

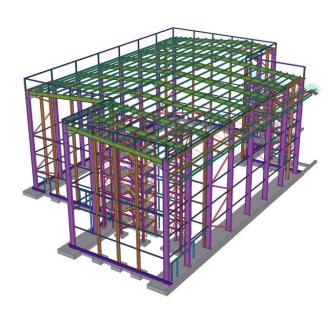
Delivering on these technical requirements required precision planning and flawless execution. Dundalk Fabrications

worked closely with the client and the design team from Van Dijk Architects and POGA Engineers to rigorously assess every design detail.

From cladding selection to the smallest seal, nothing was left to chance.

- Doors were fitted with double seals—and notably, installed without key locks—to eliminate any possible breaches in airtightness.





- Cladding systems were carefully chosen, with Euroclad 150mm–1200mm panels externally, and Euroclad 100mm–1200mm panels for the internal firewall, ensuring both durability and airtight performance.
- The structural frame consisted of over 190 tonnes of precision-engineered steel, supporting a six-storey racking system, with internal and external stairwells connecting every level.

The completed building spans 32m wide by 50m long, incorporating ten steel portals and a total floor area of 1,450m2, with storage capacity extending across five raised floors.

Project Team:

The Design was carried out by Van Dijk Architects and POGA Engineers.



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The Nominee thinks this deserves to win an award because:

The Structure itself was particularly interesting due to the height of the building being 18m to the eaves, its close proximity to the existing adjacent structure and the requirement to achieve a final envelope with the lowest possible airtightness, due to the final use of the building being a Document Storage Facility, where oxygen reduction equipment is installed to reduce the moisture in the air. The key factor here is that if the building does not achieve the air tightness required, the costs of running the plant to reduce the oxygen would be excessive.

This project showcases what is possible when innovation, engineering excellence, and attention to detail come together. Dundalk Fabrications and Coatings are proud to have delivered one of Ireland's most advanced document storage facilities—designed not just to store information, but to protect it, at height and with airtight precision.

We have prepared a Rendering video showcasing the Structural Steel & Cladding works for this project, you may view this at the following <u>link</u>:

To participate in the voting process for all of your favourite projects, click vote now

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