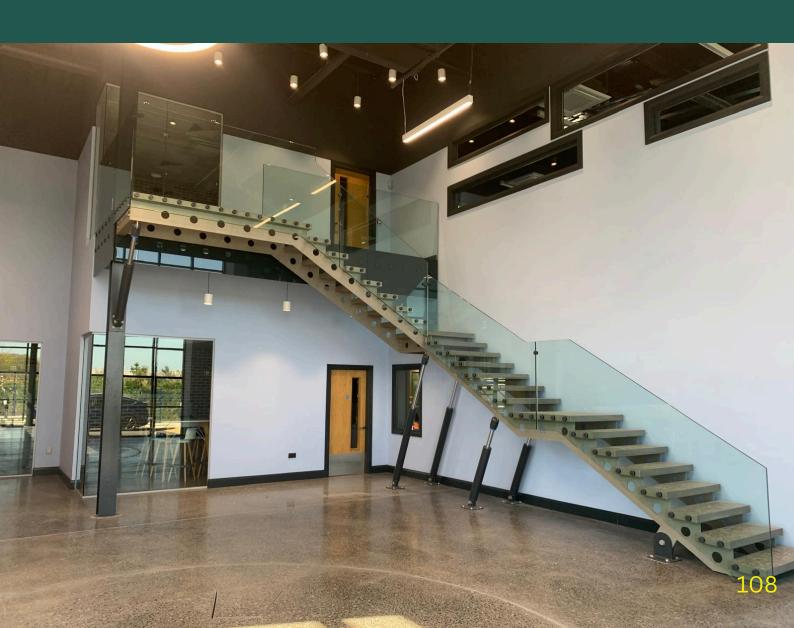


Shortlisted Finalist | Voting ID: #6581Finished Projects
Architectural Metalwork - Staircases

Marcus P Graham Ironworks

"Trucked in" Effect Staircase, Tay Lane, Dublin



Voting ID: #6581 | Architectural Metalwork - Staircases

Marcus P. Graham Ironworks Ltd

"Trucked in" Effect Staircase

Tay Lane, Dublin

Project Story:

The client sought a signature architectural feature for their premises that would be more than just a means of vertical circulation. The brief was for a bold, industrial statement piece, which led to the ambitious concept of a staircase that visually emulates the powerful mechanics of a tipping truck. This concept informed every aspect of the design and engineering, with the goal of creating a functional sculpture.

Our design philosophy was to celebrate the raw beauty and versatility of stainless steel. The solution is centred around two monumental stringers fabricated from 12 mm stainless steel plate.

These were not hidden but exposed as the primary design feature. Large circular cut-outs were profiled into the stringers to reduce the visual weight, enhance the industrial aesthetic, and allow light to permeate the space, creating an interplay of light and shadow.

The primary structural challenge was supporting the considerable weight of the steel structure and the heavy polished concrete infill treads while achieving the unique "tipping" visual. Conventional support was rejected in favour of a more innovative solution. The key to the design is the series of angled floor supports, fabricated to replicate the appearance of hydraulic rams. These assemblies, made from steel rods and intricate bracketry, provide structural stability while being the centrepiece of the "truck tipping" narrative.

All components were modelled in Tekla 3D software by Ken McLoughlin, allowing for seamless integration of various materials.



A key fabrication detail involved 3 mm folded stainless steel trays for the concrete treads, with tabs protruding from the main stringers into corresponding slots, allowing for "secret welding" to conceal the fixings.

The erection sequence began with the main stringers, followed by ram supports, tread trays, and finally the poured concrete and frameless glass balustrades.

Project Team:

The project was delivered through a seamless, integrated process with Marcus P. Graham Ironworks leading the design, fabrication, and installation.

Lead Structural Engineer/Engineering
Consultancy: Ken McGloughlin Design Engineer
Steelwork Contractor/Fabricator: Marcus P.
Graham

Ironworks

Steel Erector: Marcus P. Graham Ironworks LT



Voting ID: #6581 | Architectural Metalwork - Staircases

Marcus P. Graham Ironworks Ltd

"Trucked in" Effect Staircase

Tay Lane, Dublin

The Nominee thinks this deserves to win an award because:

This project deserves to win an Irish Steel Award because it is an example of how structural steel can be elevated from a purely functional material to the realm of industrial art. It moves beyond a simple staircase to become the defining feature of a modern workspace—a sculptural installation that is both a conversation starter and a showcase of cutting-edge design.

The excellence of the project lies in the ambitious translation of a highly creative concept—a "tipping truck"—into a precisely engineered and beautifully finished reality. The innovative use of stainless steel is paramount. The perforated plate stringers are not just structural; they are aesthetic elements that play with scale, weight, and light. The custom-fabricated hydraulic ram replicas are a masterclass in bespoke steel fabrication, transforming a structural necessity into the project's most memorable feature.

The level of craftsmanship and attention to detail sets this project apart. The decision to use concealed welds for the tread supports demonstrates a commitment to achieving a superior finish, where the seamless integration of steel, polished concrete, and glass appears effortless. This technical sophistication, managed through advanced modelling, showcases the pinnacle of modern steel fabrication capabilities in Ireland.

This staircase is more than a structure; it is an experience. It demonstrates that with vision, collaborative design, and expert fabrication, stainless steel can be used to create truly iconic and inspiring architectural moments. For its bold design, innovative engineering, and flawless execution, this feature staircase is a worthy contender for an Irish Steel Award.

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

Vote Now

