The Zurich Blue Building

Lindapter Girder Clamps provided a solution for connecting the framework for the stainless steel and glass façade.

Project Background

Location: Madrid, Spain **Product:** Type AF Girder Clamp Quantity: 3,000 **Client:** Zurich Insurance Group Engineer & Contractor: Bellapart, s.a.u.

The Zurich Blue Building is the Spanish headquarters for Zurich Insurance Group located close to Paseo de la Castellana in Madrid, Spain and designed by Rafael de La-Hoz architects. The new building was designed to be an energy efficient and sustainable modern office block, with a complex stainless steel and glass double skin façade.

Client Requirement

Spanish construction company, Bellapart, were awarded the design and build contract for the Blue Building. One of the most important phases of the design was the custom, geometric, double skin ventilated façade with light reflecting glass to contribute to the overall building energy efficiency through a motorized solar control and glare reduction system.

The design consisted of an internal skin of solar protection glass and aluminium frame, and an external facade using solar protection curved glass and stainless steel micro perforated curved sheets with mirrored finish. During the design Bellapart identified that they required an alternative solution to drilling and bolting or welding the façade to the main building structure.

Type AF girder clamps connect the C-shaped brackets to the steel sections of the main building structure

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Design Solution

Lindapter's technical support team were approached by Bellapart to offer a suitable solution and they were pleased to recommend a simple connection detail using Lindapter girder clamps.

The solution comprised a C-shaped bracket with slotted holes connected to the steel beams of the main building using Type AF size 1/2" girder clamps in a four-bolt configuration. The glass and stainless steel cladding panels could then be connected to the external face of the brackets. This solution provided the necessary tensile and slip resistance to support the double skin façade.



Installation

The contractor used over 3000 Type AF girder clamps to secure the brackets to the steel frame. Installation was quick and easy due to the lateral adjustability, which allowed the contractor to simply slide the bracket into the correct position on each steel beam before tightening with standard hand tools.

Click here to watch the installation video >>>



Result

The Lindapter solution provided a fast installation and avoided costly and inconvenient field drilling or welding that would have been difficult when working at height. The adjustability of the girder clamps also gave the contractor flexibility to overcome any alignment issues when installing the glass and stainless steel facade panels to the brackets as contractors could temporarily loosen the girder clamps, adjust the position and then once in their final position tighten them to the recommended tightening torque.



The Blue Building is considered a benchmark building for sustainability and energy efficiency in the capital, and received the "3 Diamond Award", which recognized it as the most efficient building in Spain. It also achieved energy certification A and the LEED Platinum Certificate.

Key Benefits

High load capacities for a safe connection

- ✓ Quick and easy alignment of each bracket
- ✓ No field drilling or welding required
- ✓ High corrosion protection finish

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