COMMENDATION

The Bakery Building, Dublin

PROJECT TEAM

Architect: AHMM

Structural Engineer: CORA

Steelwork Contractor: Steel & Roofing Systems

Main Contractor: PJ Hegarty & Sons

Client: Google Ireland Ltd

JUDGES' COMMENT

"With two additional floors and a new façade, this latest transformation of a 1940s bakery now provides a hi-tech facility for Google. An impressive 85t of steel was disassembled, tested and reused in creating this most imposing building."

The Bakery Building transforms a former industrial structure in central Dublin into an expanded, high-technology workplace. Originally constructed as a bakery in 1946 with a riveted steel frame, the building was converted into offices during the 1980s before undergoing its latest comprehensive refurbishment and extension.

Structural steelwork enabled the existing building to be retained while accommodating significant vertical and internal expansion. Four new steel cores extend from ground-floor level to the roof across nine levels. Two additional storeys were constructed above the retained frame, together with a further level of rooftop plant steelwork and two new mezzanine floors.

Steel was combined with composite metal-deck slabs to provide a lightweight construction solution. Minimising additional load was essential, as the two-storey vertical extension had to be supported on the existing piled foundations. This avoided the need for new foundations while allowing the building to expand.

At the front of the building, the existing glazed atrium was removed and the structure extended using new steelwork. Circular hollow section columns from the original atrium were retained and repositioned at a higher level within the new eight-storey elevation, demonstrating the adaptability of the existing components.

Steel reuse was central to the project's sustainability strategy. More than 85t of structural steelwork was carefully dismantled from the existing building, transported to the fabrication workshop and reworked for installation in new locations. Delivering this process required detailed design, testing, tracking and coordination so that individual sections could be identified, assessed, modified and returned to the construction programme.

SCI Publication P427 informed the testing, design and fabrication of the reclaimed members, enabling the completed steelwork to achieve the necessary compliance and CE marking. Reuse also provided a cost benefit because the recovered sections were supplied to the fabricator as project-owned material.

The reclaimed sections were supplemented with low-embodied-carbon steel, further reducing the impact of the new structure. Embodied carbon for the shell-and-core works was calculated at 207kgCO_2e/m² for modules A1-A5 and 461kgCO_2e/m² across modules A-C.

The Bakery Building demonstrates how structural steel can facilitate extensive adaptation while retaining valuable existing resources. Its lightweight construction enabled two additional floors without replacing the piled foundations, while the recovery and reuse of 85t of steel established a significant precedent for circular construction in Ireland. The result combines engineering, fabrication and close coordination to give a 1940s structure a new purpose on a constrained urban site.