

Grand canal project

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Summary

Over 5000 square metres of Kingspan Fabrik Panels have been specified for the construction of the Grand Canal Hotel in Dublin, a 142-bedroom hotel, which is located on the city's canal-side. Two types of panel were specified. The Kingspan Fabrik Complete Through Wall system was selected for the Grand Canal Hotel as it offers fast and efficient installation, as well as time and cost savings in terms of the foundation depth and substructure steel required. In addition, the Fabrik Ribbed GRC Panel system was used to accommodate the architecturally complex design and shape of the hotel's mezzanine and roof areas.

Specification

Two types of Kingspan Fabrik Panels were specified:

1. The Fabrik Complete Through-Wall system – Specified on floors 1 to 5. This is a complete through-wall system which incorporates an external GRC panel with a polished White Dolomite aggregate finish which is factory attached to the Kingspan Kingframe and incorporates Kingspan TW55 foil-faced insulation. This system is installed by crane and once installed it is immediately ready for internal lining. An EPDM layer was also used to achieve a further weather seal between the panels and adjoining glazing. The panels can achieve U values as low as 0.2.
2. Fabrik Ribbed GRC Panels. These are external cladding panels similar to architectural precast and are connected back to a secondary steel structure and were used around the ground, mezzanine and roof areas.

The key reasons behind using the system were as follows:

- It is lightweight compared to precast concrete thus allowing for savings in foundations and substructure steel.
- It is fast and easy to install.
- Aesthetics – the panels provide a natural polished finish and use natural materials.
- GRC is a flexible material and could be moulded to achieve the complex shapes required for the mezzanine and roof areas.
- The Fabrik Through-Wall system is a unitised wall panel which achieves performance requirements and is BRE certified for 60 years.

Fabrik commenced delivering panels to site in September 2007 and the project is due to be complete in summer 2008.

In total 5000 m² of Kingspan Fabrik panels will be used on the project.

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