



Project Fact Sheet

ST. FINIANS NATIONAL SCHOOL, DUBLIN 11





Project: St. Finian's National School, Newcastle, Co. Dublin
Value: €5.5m
Client: Department of Education
Completion: May 2015

FACTFILE

System Build Schools - St. Finian's National School, Newcastle, Co. Dublin. This project was one of a number of primary schools identified in rapidly developing areas of the country that were prioritised for funding by the Department of Education and Skills.

The fast-track schedule was as follows:

- Tenders awarded the end of June 2014.
- Planning permission granted for project May 2014
- Detail design period prior to commencement on-site was 10 weeks with a target start date of Sept 1st 2014.
- Planned start delayed due to ownership and access rights to be resolved further delay due to archaeological input.
- Construction on-site commenced on the 29th September 2014
- The school was substantially complete on the 4th May 2015.
- Total on-site build time 32 weeks.
- The project was completed on time and to a high standard of finish.

ABM took on the role of project management, design and build as well as the main contractor. This particular school consisted of a 24-classroom primary school. To achieve the fast-track programme the structural frame was built off-site using a light-weight steel frame system. This meant that after week 7 of the project the structure was erected and ready for windows and a roof.

The external finish was a combination of pre-coloured acrylic render on acement board combined with eternity wall cladding panels. Stairwell walls, stair flights, landings, plant room walls and lift shaft walls were manufactured off-site from pre-cast concrete.



The roofing consisted of insulated Kingspan Kingzip roof panels. Wherever possible, off-site fabrication of the internal components were used such as pre-hung door sets, internal wall partitions, kitchens, cubicles, and heating pipe work runs. The project also involved extensive on and off-site civils works and ancillary external site works.

Advantages of ABM's Off-Site Manufacturing Sustainability

The issue of sustainability continues to increase in importance throughout each project. Off-site manufacturing works in hand with sustainability for the following reasons:

- Up to 67 per cent less energy is required to produce a system build compared to an equivalent traditionally-built project.
- Off-site manufacturing can generate up to 90 per cent fewer vehicle movements to site - reducing carbon emissions, congestion and disruption.
- Off-site construction can reduce on-site waste by up to 90 per cent.

The building was constructed with a high emphasis on build quality & durability using an IBA certified Fusion steel framed building system. This system build solution consists of a unique pre-insulated light gauge steel external wall system, which is combined with internal load bearing walls to provide a low carbon structure. The Fusion system is craned into position on-site with extreme efficiency with regard to installation and programme. Fusion have recently been approved by the Royal Institute of Architects of Ireland as a Continuing Professional Development (CPD) provider in The Use of Light Gauge Steel in Construction

A key advantage of building off-site is the higher degree of predictability it can offer - reducing the risk of time and cost overruns.



St. Finians National School



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