



Clinical efficiencies take priority for design of Children's Hospital

Noah's Ark Children's Hospital of Wales



Client: Interserve Construction Ltd
Location: Cardiff, Wales, United Kingdom
Completion Date: 2015

Opus' geotechnical, civil and structural engineers, working as part of the Interserve team, helped 30,000 young patients through the doors of an award-winning, state-of-the-art children's hospital since it opened in May 2015. Wales was the only country in the UK without a children's hospital and the purpose designed hospital includes:

- Full height atrium with roof light and curtain walling façade maximises light to the internal areas of the hospital making it bright and airy;
- Improved patient journey through the hospital, they move from one child-friendly environment to another;
- Environments that promote healing;
- Full accessibility.

Design to ensure very low floor vibration levels for the theatres located on the upper floors demonstrates how clinical efficiencies took priority over traditional design. Complex 'sky links' were constructed through live plant rooms to enable seamless connections between new and existing buildings.

The safety of all those involved was absolute and best practice focused on close attention to the control of infection, which included a reduction of hidden surfaces, ease of cleaning, air quality control and Legionella control.

"Everyone was proactive in responding to clinical design requests and alterations. Regularly collaborating with the team has resulted in the unique demands of over 20 clinical specialities being successfully tailored to meet the needs of children and their families." Alison Oliver, Clinical Lead

Over £1.5m was saved through an effective site waste management process which was established to divert waste from landfill. Environmental measures included comprehensive ways to control dust emissions and the minimisation of noise/vibration due to the proximity of a 'live' hospital.

Meeting the substitutability assessment method, BREEAM, the hospital was opened eight weeks ahead of time, was under budget and exceeded the required quality standard. Budget savings enabled reinvestment into state of the art medical equipment.

Opus supported Interserve's ambitions to support the Noah's Ark Charity, raising in excess of £85,000.

Named Project of the Year 2016 by Constructing Excellence in Wales.

Services Provided: Civil, Structural and Geotechnical Engineering