

Teknoglass installs hermetically sealed glazing in paediatric intensive care unit at University Hospital Southampton

Teknoglass advanced glazing systems was an intrinsic part of the design and installation for the refurbishment of a 20 bed open planned intensive care unit complete with five hermetically sealed high dependency bays and two private rooms for the south's most critically ill children. As with any project in such a sensitive environment the refurbishment of the children's intensive care unit at University Hospital Southampton had to put, patient care, hygiene and usability at the forefront of the specification.

From the early stages of design, the Teknoglass team worked with the main contractors, LST, and the NHS teams to ensure that the solution integrated our bespoke ground-breaking technology to facilitate the challenging requirements.

The project started in early 2022 and was handed over to University Hospital Southampton NHS Foundation Trust on the 19th December 2022 and became fully operational over the busy festive period.

The new PICU unit was a follow-on development from the rebuild of the main general intensive care ward constructed through the two Covid lockdowns.

The delivery included state of the art Teknoglass medical glazing systems, specifically designed for infection control, enabling the paediatric ICU rooms to provide the best protection for the children both in terms of privacy and protection.



Infection control 'Lift and Slide' door system with motorised blinds



The sliding door system has been tried and tested in other high end intensive care units and comprises of two bi-parting doors and fixed side panels all fitted with double glazed panels

for acoustic control and motorised blinds that provide up/down and tilt control for general patient dignity or emergency intervention. Unlike all other systems the doors when closed hermetically seal to prevent the passage of contagious pathogen from one area to the other.

For maximum usability and flexibility, the blinds are operable from inside and outside the main doors and at the two nurse stations located between adjacent rooms. This enables the staff to monitor two rooms from a central location. Each of the rooms are separated by wall of ceiling to floor glass panels with the same internal motorised blind system operated by switches in either room.

The floor tracks on which the doors run were designed by Teknoglass to be flush with the final floor finish. This ensures that there is a smooth transition with no disturbance to patients when moving them into and out of rooms.



Nurse station viewing panels with manual blinds

Visible access to the five infection-controlled rooms is further facilitated by the installation of two nursing stations with fixed panels, one to each of the rooms. These panels incorporate internal manual blinds providing up/down and tilt control enabling one nurse to monitor two rooms from a single vantage point

Double swing doors with manual blinds

Further to the 5 infection-controlled rooms there are another two patient rooms where the layout did not allow for the lift and slide system to be installed. In these rooms Teknoglass has delivered a double swing door system from the same product range thus ensuring aesthetic consistency. These doors have been fitted with integral manual blinds with up/down and tilt control.

Acoustic specification

All the glazing installed by Teknoglass in the Paediatric Intensive Care Unit provides acoustic isolation up to 35dB(A) delivering further patient privacy.

For further information please contact enquiries@teknoglass.co.uk or call +44 (0)7867 977 379