



Plashet Unity Bridge

Client: London Borough of Newham Year of Completion: 2000

Architect/Designer: Birds Portchmouth Russum Main Contractor/Customer: C Spencer Limited

A dramatic and unusual installation for an urban school, the undulating Unity bridge is in every way a masterpiece and symbol of uniting of two of Londons girls schools. The bridge, which was primarily designed to provide a safe and quick way for the pupils to cross the busy main road between the two sites, received the Structural Steel Design Award 2001, the RIBA Award 2001 and was a finalist for Building of the Year in 2001.

Plashet School has a history dating back to the 1930s when the East Ham Grammar School for Girls first opened on the south site. Two decades later, the north site was built and Plashet County Secondary Modern School for Girls was opened. These two schools were amalgamated into Plashet School in 1972 and the two sites were physically linked by the Unity Bridge in November 2000.

The Unity Bridge was designed to provide a safer and quicker way for staff and pupils to cross the very busy street separating the buildings. Yet it has become far more than merely a walkway. Symbolising the fusion of two girls' schools, it was appropriate that it became a feature in its own right.

This lyrical bridge squeezes the maximum architectural impact from its budget by using tensile fabric to create soft varying organic shapes within a framework of identical steel ribs on a main beam of fixed radius. The fabric is able to adapt to changing geometry very cost effectively due to the efficiency of fabric patterning.

Its complex shape, which is both angular and smooth, was by no means a simple design to engineer - a bespoke tensioning system had to be developed to enable the Teflon to be pulled in to the complex shapes required, and extensive fabric patterning had to be employed to ensure success.

This unique PTFE wrapped structure was the runner up to the Tate Modern in the 2001 construction industry awards in the Prime Ministers Better Public Building Category.

Location:

East Ham, London, UK

Category:

Exterior

Market Sector:

Education

Scope Of Works:

Design
Engineering
Manufacture
Project Management
Install

Fabric Type:

PTFE - Solid

Design Style:

Cladding

Function:

Sculptural/Decorative
Bridge Canopy