

Mardyke Gardens Pavilion



Details

Location	Cork, Republic of Ireland
Description	Mardyke Gardens Pavilion Canopy
Client	Deasy Walley Partnership
Date of project	2013
Where FRP composites are used and why	The canopy was manufactured in FRP to achieve a seamless organic shape and high quality surface finish. The use of FRP in the construction reduced the total weight of the structure to enabling the cantilevered structure to have a minimum connection to the ground slab. This gave the impression of a lightweight wing gently resting on the ground to co-inside with the architect's original remit.
Specific design details	<p>The Canopy stands 17.5 metres long with a maximum height of 4.5 metres and effective roof covering of 5.5 metres deep and weighed 4 tons.</p> <p>Due to the size the canopy a 1.8 metres removable section was manufactured separately to enable transportation to site where it was seamlessly bonded on over the three day installation period.</p>
Type of composite used	The main body of the Canopy was built using Ampreg 21 fire retardant Epoxy resin system and layers multiaxial glass reinforcement with structural Corecell M foam supplied by Gurit UK.
Performance in service	Design life 50 years.
Project partners	Manufacture: AM Structures Design: Darmody Architects Engineer: Gurit

Contact