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**Winner Prize of the Public
& Nominee**

Owner *Serpentine Gallery Trust*
 Architect *Smiljan Radic*
 General Contractor *Stage One*
 Engineering Office *AECOM, London*
 Construction Period *05/2014 - 06/2014*

Serpentine Gallery Pavilion 2014 has been designed by Chilean architect Smiljan Radic with AECOM providing structural design from concept through to construction. This Pavilion exemplifies the history of small romantic constructions seen in parks or large gardens, the so-called follies of the 16th to 19th century. The design is based on two sculptures created by the architect. The goal of the project was to replicate the brittle fragility of papier-mâché whilst achieving the juxtaposition of dark and light through the skin of the build.

Key to the design was to incorporate a thin (13 mm) semi-transparent glass reinforced plastic shell (GRP) with a visible steel frame which would merge the architectural intent of the ruined follies with the functionality of the frame. The aesthetic of sitting the shell directly on sandstone rocks was realized by designing fixed frames within SCIA Engineer and controlling deflections to allow steel columns to be hidden within the sandstone.

Design challenges were faced when evaluating the behaviour of the fibre glass shell and its impact upon the frame. The Pavilion series has a history of utilising unusual structural materials. The GRP was imported as a shell structure to SCIA Engineer using a bespoke panelisation script and analyzed. This was then taken by specialist GRP contractor Optima to produce final construction information.

AECOM

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