The ground floor of The Berkeley hotel in Knightsbridge, London, was refurbished in the first half of 2016. The Works included the construction of a new entrance canopy and glass pavilion designed by Rogers Stirk Harbour and Partners in collaboration with Expedition and Arup.

The pavilion consists in a 30 x 10 metres glazed roof covering both the entrance area and the extensions of the Blue Bar and Collins Room, both clad with glass walls.

The structure of the pavilion consists in sixteen free-form carbon fibre reinforced polymer (CFRP) beams, measuring 10 metres in length, that are connected to the building at one end and to a stainless steel column at their mid point, thus creating a 4.5 metres cantilever over the car stop. In the entrance area, the SS columns are replaced by a 9.5 metres long truss formed by two stainless steel chords and a set of V-shaped CFRP brackets acting as diagonal members.

Bracing is provided by the glazed roof and walls, which are composed of a set of glass-honeycomb sandwich panels with a size up to 4.8x2.3 metres. These panels consist in two sheets of glass structurally bonded to an aluminium honeycomb core by means of a continuous layer of UV-curing transparent acrylic adhesive, thus creating a true structural composite panel with a peculiar translucent look.

**THE BERKELEY HOTEL**

Owner
The Berkeley

Architect
Rogers Stirk Harbour + Partners

Engineer
Arup + Expedition

Project & Construction manager
Rainey & Best

Engineering & Construction
Bellapart, s.a.u.