



# BP SOLAR PAVILION

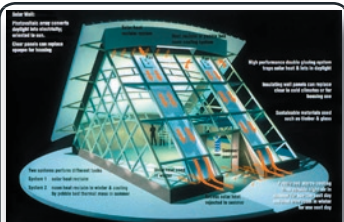
## MOVABLE BUILDING

### BAGLAN BAY, WALES

**Client:** British Petroleum  
**Architect:** Arup Associates  
**Consulting Engineers:** Ove Arup & Partners

Designed and built in six weeks. Building frame is strip-laminated plywood. Three bowstring trusses support the plywood roof sheathing which is underlayment for 176 panels of photovoltaic cells. The prefabricated, re-locatable building was originally built for the G8 Conference in Birmingham (UK) and has been moved to the Baglan Bay BP facility in Wales.

**Project Scope:** Temporary pavilion featuring wall of 176 photovoltaic cells.  
**Start Date:** Mar 1998  
**Finish Date:** May 1998  
**Arup Scope:** Acoustics  
Architecture  
Structural, mechanical, electrical, and façade engineering  
Communications



*3D computer model*

solar wall

Apr 1998  
Job39108\_0.jpg



*Solar wall construction*

Jul 1999  
Job39108\_1.jpg



*Exhibition space construction*

Jul 1999  
Job39108\_2.jpg



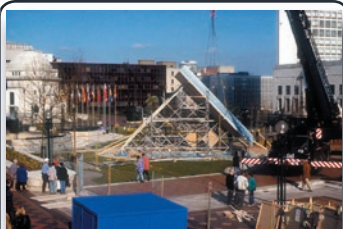
*Exhibition space reconstruction*

Jan 2000  
Job39108\_3.jpg



*Reconstruction detail*

Jan 2000  
Job39108\_4.jpg



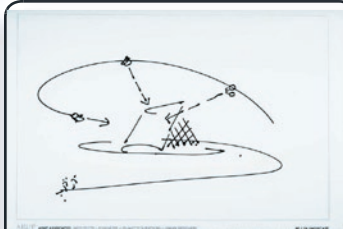
*Reconstruction overview*

Jan 2000  
Job39108\_5.jpg



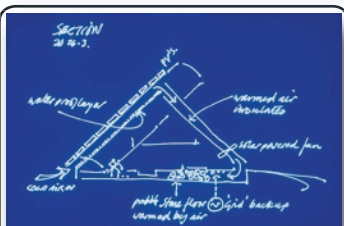
*Crane lift of solar wall*

Nov 1999  
Job39108\_6.jpg



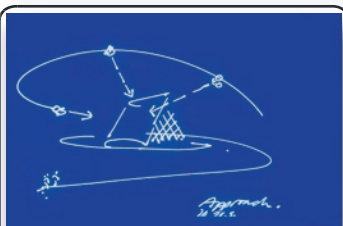
*Early architectural concept*

May 1998  
Job39108\_7.jpg  
James Burland



*James Burland concept sketches*

Apr 1998  
Job39108\_8.jpg  
James Burland



*Early architectural concept (blue)*

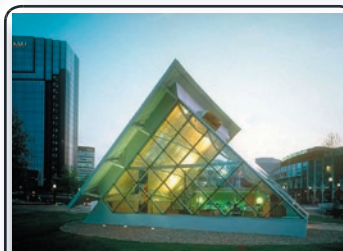
Apr 1998  
Job39108\_9.jpg  
James Burland



*Exhibit space*

night

May 1998  
Job39108\_10.jpg  
Grant Smith/VIEW



*Exhibit space*

daytime

May 1998  
Job39108\_11.jpg  
Grant Smith/VIEW



*Solar wall publicity shot*

May 1998  
Job39108\_12.jpg  
Grant Smith/VIEW



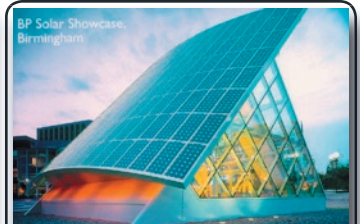
*Kids tour exhibit space*

Jun 1998  
Job39108\_13.jpg



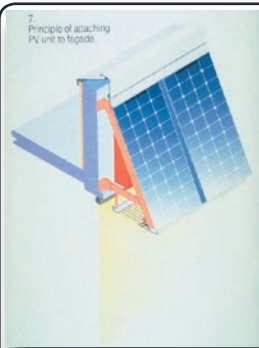
*Kids outside pavilion*

Jun 1998  
Job39108\_14.jpg



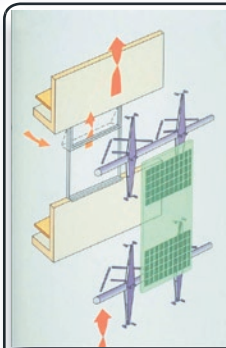
*Solar wall poster shot*

Feb 2000  
Job39108\_15.jpg



*Principle of attaching PV unit to façade*

May 1998  
Job50159\_16.jpg  
Jennifer Gunn



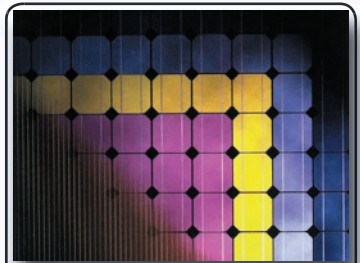
*Prototype PV ventilated façade*

May 1998  
Job50159\_17.jpg  
Jennifer Gunn



*Mublenstrasse BP station, Berlin*

Mar 1998  
Job50159\_18.jpg



*Colour range on a PV unit*

May 1998  
Job50159\_19.jpg  
Jennifer Gunn

**Selected Reference:** Noble, Ray. "From Space Technology to Building Skin." *Arup Journal* (1998): 10–14.