

# BREEAM INDUSTRIAL

## WESTERN POWER DISTRIBUTION, LLANDRINDOD WELLS



### About the building

The Western Power Distribution unit incorporates a production area and associated office accommodation. It is a steel frame building located on the Dole Industrial Estate, north of Llandrindod Wells in Powys.

### Key facts

BREEAM rating:	Excellent
Score:	76.06%
Size:	210m <sup>2</sup>
Stage:	Post Construction Review
BREEAM version:	Industrial 2006

### Overview of environmental features

The Western Power Distribution unit maximises the use of renewable energy and energy efficient technologies in its design. It achieves an 82% improvement over the requirements of Part L2A (Conservation of fuel and power) of the building regulations.

The building:

- is naturally ventilated
- avoids the use of refrigerants in its operation
- is fitted with a biomass boiler to deliver space heating
- has high frequency ballasts installed on all fluorescent and compact fluorescent lamps
- uses a leak detection system that is capable of identifying major leaks, both within the building and between the building and the site boundary
- has resulted in an increase in the number of flora species on the site.

### BREEAM assessment

The building performed well in all BREEAM categories, scoring particularly highly in:

- Energy – 100%
- Management – 88.89%
- Health and wellbeing – 85.71%

### Green strategy

The development gained the maximum of 15 credits under BREEAM E1 (Energy), by achieving an 82% reduction in CO<sub>2</sub> emissions.

The full quota of four credits were awarded under the issue of 'Construction Site Impacts', for monitoring, reporting and setting targets for energy use and water consumption arising from site activities. Site construction waste was also monitored and sorted and recycled into different waste streams. All temporary timber used on site was reused or obtained from an FSC certified source.

Best practice policies were adopted in respect of air (dust) pollution and water (ground and surface) pollution – in line with PPG1, PPG 5 and PPG 6.

Lighting levels were designed in accordance with the appropriate CIBSE guidelines.

In addition:

- the site was registered with the Considerate Constructors Scheme (scoring 32.5 points)
- the Design Team was committed to seasonal commissioning
- a Building User Guide was produced for the building.

### Project team details

Client – Western Power Distribution  
Contractor – Britannia Construction  
Architect – HLN Architects  
Building Services – Triangle Consulting Engineers Ltd  
Structural Engineer – RVW Consulting  
BREEAM Assessor – WYG

"Achieving a BREEAM 'Excellent' rating for the Western Power Distribution unit was greatly assisted by strong communication through the Design Team and the early involvement of the Assessor."

Matthew John, WYG