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Subject The Law & Management Building, Heslington East		Job No/Ref	208187/SH
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# The Law & Management Building

## **Building Description**

The Law and Management Building occupies a central location at the heart of Cluster 1 of the Heslington East site. The building accommodation consists of 2 wings of 3 storeys separated by a central Atrium milling space. Lecture theatres are plugged into the North and South of the Atrium volume.

The building has been designed in such a way as to facilitate passive measures for ventilating, cooling and lighting the accommodation wherever possible.

## **Innovative Design and Low Impact Design Features**

#### Cooling System

The building is generally naturally ventilated through manually operated and automated windows. Where cooling is provided it is controlled by the building management system and interlinked with the manually operated windows.

Where mechanical comfort cooling is provided, this utilises high efficiency heat rejection units and chillers which incorporate free cooling facilities.

#### Lighting

The light output is controlled based on the amount of daylight available and will dim automatically according to daylight in the space.

#### Sanitary Fittings

Dual flush toilets, sensor taps and low pressure showers have been installed to reduce the water use of the building.

## **Steps Taken During the Construction Process to Reduce Environmental Impact**

- The contractor nominated a biodiversity champion to minimise the impact on biodiversity during the construction works.
- Site waste management plan produced by Contractor over 75% construction waste diverted from landfill.
- Construction impacts including CO2 production, water and dust pollution were minimised by setting targets and monitoring results.
- Contractor's workforce trained in how to protect the sites ecology

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#### **Key Statistics**

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BREEAM rating	Very Good		
BREEAM score	58.10%		
Basic building cost (£/m²)1	2408		
Services Costs (£/m <sup>2</sup> )	557		
External Works (£/m²)	85		
Gross Floor Area (m <sup>2</sup> )	6,306		
Total Area of the Site - hectares	2.7		
Function areas and size (m2)	Reception	74.2	
	Offices/PhD	1281.5	
	Meeting Rooms	49.2	
	Breakout/Milling/Common	594.5	
	Seminar Rooms	562.2	
	Lecture Theatre	472.0	
	Kitchen	66.5	
	Teaching Laboratories	91.8	
	Teaching (PBL)	918.1	
	WCs and showers	214.1	
Area of circulation (m <sup>2</sup> )	1258		
Area of storage (m <sup>2</sup> )	161.15		
% area of grounds to be used by the community	100%		
% area of buildings to be used by the community	25%		
Predicted fossil fuel consumption (kWh/m <sup>2</sup> )	55.5		
Predicted electrical consumption (kWh/m <sup>2</sup> )	220		
Predicted renewable energy generation(kWh/m²)	49 <sup>2</sup>		
Predicted water use – m <sup>3</sup> / person	3.75		
Predicted water use to be provided by rainwater or grey water	None		

### Socially/Economically Sustainable measures implemented

The health and well being of building users has been considered in all aspects of the building design and external landscape spaces. Provision of designed-in recycling and extensive cycle-parking is included to promote responsible and social work lifestyles. Secure by design principles have also been adhered to throughout the design process.

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<sup>&</sup>lt;sup>1</sup> Build cost/m<sup>2</sup> are net and include contractors prelims, design and fee but excludes external works/ancillary buildings where applicable.

<sup>&</sup>lt;sup>2</sup> Based on electrical output of 12,500,000kwh/annum from CHP serving the University private networks -Arup 1F0.131Ju<sup>4</sup>/2010