



Wing A is on the right

## Object description

**North Wing, Centre for Disability Studies: Jean Strutt House**

Simmonds.Mills Architects were commissioned by Disability Essex, a charity based in Essex, UK. The brief called for a sustainable building that would provide office and meeting room spaces for the Charity's staff, clients and visitors, as well as providing lettable space for the charity to rent out to similar organisations. The Centre for Disability Studies has been designed as two linked buildings – a North Wing: Jean Strutt House & a South Wing: The Peter Broughton Wing.

The brief required a combination of high levels of thermal comfort, low running costs and low CO2 emissions. In addition the Charity also decided to generate electricity on site in order to provide an income stream, this together with the low running costs is hoped will help the financial sustainability of the Charity. One funding body required formal Passivhaus certification, another required BREEAM 'Excellent'.

**Rochford, Essex, UK**

Treated Floor Area	294.7 m <sup>2</sup>
Number of apartments	NA
Completion date	March 2010

**Energy standard [PHPP]**

Heat requirement / year	15 kWh/m <sup>2</sup> a
Heat load	NA
Primary energy requ.	90 kWh/m <sup>2</sup> a
Air-tightness (n <sub>50</sub> -value)	0.3 1/h
Building type	Non domestic

**U-value**

Exterior wall	0.12 W/m <sup>2</sup> K
Roof(s)	0.08/0.09 W/m <sup>2</sup> K
Basement floor /	NA
Floor slab	0.16 W/m <sup>2</sup> K
Windows / average	0.89 W/m <sup>2</sup> K

**Specification ventilation system**

Two Passivhaus Certified Paul MVHR units, combined with precooling/preheating via pumped ground loop. Summer bypass option and natural ventilation via openable windows.

**Heating installation**

Low temperature radiators running off small domestic gas boiler. Hot water off large domestic hot water cylinder with solar thermal input from roof mounted evacuated tubes.

**Construction costs:**

(inc. all landscaping, fencing, mains services + PV support structures: **£1.3m**)

**Building owner**

Disability Essex

**Architect/Planner**

Simmonds.Mills Architects

**Photo credits**

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