

Site 5 – Eden Court 1



Eden Court is a fourteen story block of flats in Leamington Spa. The turbine is mounted on a non penetrating flat roof mount that is held onto the roof by ballast. This roof mount is approved by the local authorities' structural engineers. All of the mounting system came up through the building.

The base is mounted on special polystyrene sheets to protect the roof materials. These sheets should also help to reduce structural vibration transmitted into the building.

The turbine has been mounted on top of a five meter pole close to the edge of the building in an attempt to get the turbine turning in as smooth as possible air flow. It would be difficult to mount the turbine higher than this due to the point load restriction that the structural engineers recommend.

NOABL wind speed estimate	6.4 ms ⁻¹ at 45m
Planning permission	7 th March 2007
Turbine installation	5 th October 2007
Full data available from	28 th November 2007
Mounting type	Freestanding, non-penetrating on flat roof
Turbine	Ampair 600 230
Inverter	Windy Boy WB700
Anemometer	NRG #40 calibrated
Data logger	Pace Scientific XR5
Watt meter	Iskraemeco ME162

Warwick Wind Trials

Time Interval	Measured Average Wind Speed (ms⁻¹)	Total Energy Exported (kWh)	Average Energy Exported per Day (Wh)
28 th November 2007 to 13 th October 2008	6.22	0	0
December 2007	6.50	0	0
January 2008	7.75	0	0
February 2008	n/a	n/a	n/a
March 2008	7.44	0	0
April 2008	5.76	0	0
May 2008	5.90	0	0
June 2008	6.67	0	0
July 2008	5.37	0	0
August 2008	5.79	0	0
September 2008	4.66	0	0

This turbine is switched off due to concerns about the level of noise produced in high winds. Data is missing from 1st February to 7th March 2008 due to a data logger failure.