

## Site 7 – Southern Court 2



Southern Court is a seven story block of flats. The wind turbines have been mounted on the south side of the roof. The turbine has been mounted at about 30meters above ground level but at 5meters above the roof. Eden court sits south of Southern court and may affect the wind turbine performance of the turbines mounted on Southern court.

The turbine is installed on a flat roof using a non penetrating roof mount that has been approved by the local authority's structural engineers.

The turbine is held down by ballasting the base of the mount. The roof is protected from the base by polystyrene sheets.

<b>NOABL wind speed estimate</b>	5.8ms <sup>-1</sup> at 25m
<b>Planning permission</b>	7 <sup>th</sup> March 2007
<b>Turbine installation</b>	5 <sup>th</sup> October 2007
<b>Full data available from</b>	30 <sup>th</sup> October 2007
<b>Mounting type</b>	Freestanding, non-penetrating on flat roof
<b>Turbine</b>	Ampair 600 230
<b>Inverter</b>	Windy Boy WB700
<b>Anemometer</b>	Schiltknecht Meteo, Type: f.555.1.18
<b>Data logger</b>	Novus LogBox DA
<b>Watt meter</b>	Iskraemeco ME162

Warwick Wind Trials

<b>Time Interval</b>	<b>Measured Average Wind Speed (ms<sup>-1</sup>)</b>	<b>Total Energy Exported (kWh)</b>	<b>Average Energy Exported per Day (Wh)</b>
30 <sup>th</sup> October 2007 to 13 <sup>th</sup> October 2008	5.02	50.27	157
November 2007	4.33	5.28	176
December 2007	5.51	1.46	47
January 2008	6.61	0	0
February 2008	4.99	0	0
March 2008	6.11	0	0
April 2008	5.17	0	0
May 2008	5.30	0	0
June 2008	4.26	0	0
July 2008	4.14	20.46	660
August 2008	4.54	25.80	832
September 2008	3.87	17.25	576

This turbine was switched off until 2<sup>nd</sup> July 2008 due to concerns about noise levels in high winds. The turbine was switched on occasionally during November and December 2007 but only on days of predicted low wind speed.

A new nose cone, blades and interconnect box were fitted on 2<sup>nd</sup> July 2008. On this date the turbine was also switched on – but only during the daytime (it was routinely switched off at night by an automatic timer switch).

The turbine was switched off permanently on 1<sup>st</sup> October 2008 due to a noise complaint.