



# Schlierberg Sun Ship Freiburg (D)

## Building Details

### CONTACTS

	Name	Website (or e-mail)
<b>Owner</b>	Solarsiedlung GmbH Freiburg	<a href="http://www.solarsiedlung.de">www.solarsiedlung.de</a>
<b>Architect</b>	Rolf Disch	<a href="http://www.rolfdisch.de">www.rolfdisch.de</a>
<b>Energy Consultant</b>	Phoenix Solar AG	<a href="http://www.phoenixsolar.de">www.phoenixsolar.de</a>
<b>PV Installer</b>	Phoenix Solar AG	<a href="http://www.phoenixsolar.de">www.phoenixsolar.de</a>

### BUILDING

<b>Completion year</b>	2003 Building	2006 PV Plant	
<b>Category</b>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Renovation	<input type="checkbox"/> Enlargement
<b>Typology</b>	<input checked="" type="checkbox"/> Residential	<input type="checkbox"/> Administration	<input type="checkbox"/> Industrial
	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Urban	<input checked="" type="checkbox"/> Other

### Description

The Sun Ship is the service center for the Solar Settlement in Freiburg and the first commercial PlusEnergy building. It functions as a sound barrier for the housing community thanks to its five stories. Embedded in roof garden landscaping, nine exclusive three level penthouses were constructed with their PV roofs. In addition to the large scale PV plants, the building efficiency is essential for the maximum energy saving. Significant costs are saved because of an annual primary energy savings of about 1 million kWh. The Sun Ship offers infrastructure for a city area of about 25,000 people.



## BiPV Details

### LOCATION OF PLANT

<b>Roof</b>	Flat roof	<b>Sloped</b>	Curved
<b>Façade</b>	Cladding	Balcony	Greenhouse
<b>Glass</b>	Façade	Roof	Solar shading Canopy
<b>Orientation</b>	<b>South</b>	West	East North

### ARCHITECTURAL EVALUATION

<b>Color</b>	crystal blue
<b>Transparency</b>	semitransparent
<b>Frame</b>	Frameless glazed module
<b>Aknowledgements</b>	Eurosolar 2002 (citation) photovoltaic architectural award of the country Baden-Württemberg 2001 (2 <sup>nd</sup> prize)

### SPECIFICATION

<b>Photovoltaic</b>	Monocrystalline	<b>Multicrystalline</b>	Thin Film
<b>PV Module</b>	<b>Cells</b>	Crystalline silicon	
	<b>Module</b>	10 mm Safety glass (various)	
<b>Power</b>	<b>kWp</b>	445	
<b>Size</b>	<b>m<sup>2</sup></b>	-	
<b>Energy production</b>	<b>kWh/year</b>	420 000	