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# Solares Direktgewinnhaus Zweisimmen (CH)

## Building Details

CONTACTS	Name	Website (or e-mail)
<b>Owner</b>	Regula Trachsel, Sascha Schär	
<b>Architect</b>	N11 Architekten	<a href="http://www.n11.ch">www.n11.ch</a>
<b>Energy Consultant</b>	Energiebüro Hanimann Pfleger Stöckli Architekten	<a href="http://www.hanimann.ch">www.hanimann.ch</a> ; <a href="http://www.pflegerstoeckli.ch">www.pflegerstoeckli.ch</a>
<b>PV Installer</b>	Sunstyle	<a href="http://www.sunstyle.com">www.sunstyle.com</a>
BUILDING		
<b>Completion year</b>	2014 Building	2014 PV Plant
<b>Category</b>	New	Renovation    Enlargement    Other
<b>Typology</b>	Residential	Administration    Industrial    Sport
	Agricultural	Urban    Historical    Other

## Description

The Solares Direktgewinnhaus (solar direct energy generating house) is a pentagonal timber turret characterized by a contemporary style. The structure is made of solid wood that supports and insulates the building without the need of additional insulation. The energy demand of the building is very low and no controlled/artificial ventilation is needed, as well as no heating is required. Indeed, the architects plan to use solar passive gains through transparent surfaces and to install a BIPV roof for generating electrical energy. Even though the roof has an unusual shape, the use of solar shingles with different geometries allows to realize an homogeneous surface.

**Acknowledgments**    Recognition in the "Constructive Alps 2015" Award



## BiPV Details

### LOCATION OF PLANT

Roof	Flat roof	Sloped	Curved
Façade	Cladding	Balcony	Greenhouse
Glass	Façade	Roof	Solar shading Canopy
Orientation	South	West	East North
BIPV System	In Roof Solar Tiles (PV modules)		

### ARCHITECTURAL EVALUATION

Color	Blue
Transparency	Opaque
Frame	Frameless

### COSTUMIZATION LANGUAGE AT COMPONENT SCALE

PV CELL	MODULE LAYERING	MODULE FEATURES	DUMMIES
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**DESCRIPTION** The The shape of the module is inspired by the traditional slate and shingle roofs in the Alpine region.

### SPECIFICATION

Photovoltaic	Monocrystalline	Multicrystalline	Thin Film
PV Module	Cells	Monocrystalline silicon	
	Module	Sunstyle SolarDach	
Power	kWp	14	
Size	m <sup>2</sup>	130	
Energy production	kWh/year	12'000	
Cost	€/m <sup>2</sup>	2070	

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