



# WERKHOF MELS

Mels, Kanton St. Gallen (CH)

## Building Details

### CONTACTS

	Name	Website (or e-mail)
<b>Owner</b>	Kanton St. Gallen	
<b>Architect</b>	Brunhart Brunner Kranz Architekten	
<b>Energy Consultant</b>	Sundesign GmbH	<a href="http://www.sundesign.ch">www.sundesign.ch</a>
<b>PV Installer</b>	Suntechnics Fabrisolar AG	<a href="http://www.suntechnics.ch">www.suntechnics.ch</a>

### BUILDING

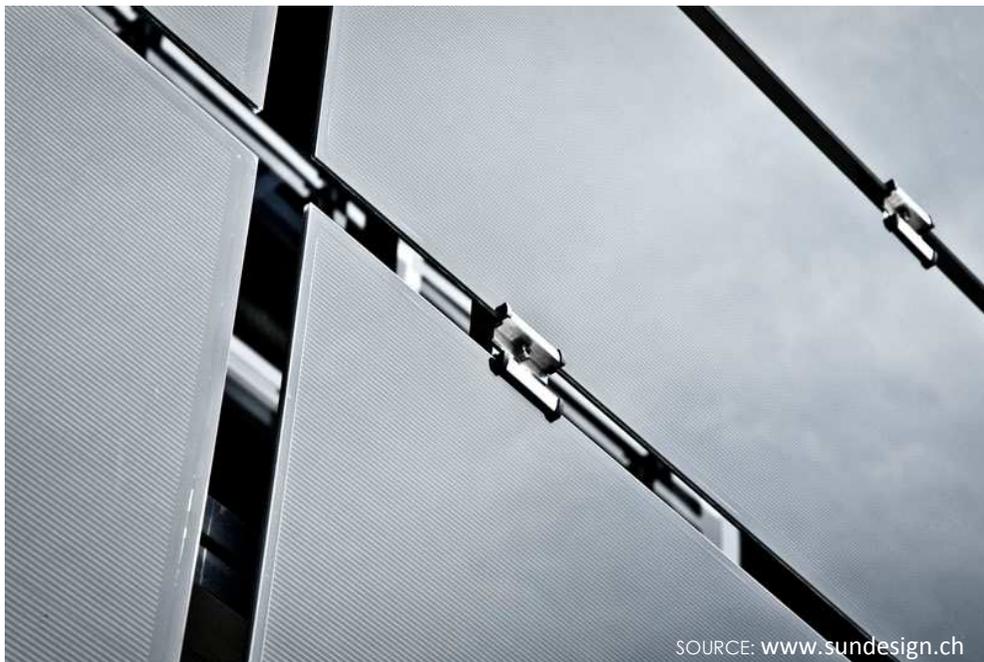
<b>Completion year</b>	2000 Building	2011 PV Plant		
<b>Category</b>	New	Renovation	Enlargement	Other
<b>Typology</b>	Residential	Administration	Industrial	Sport
	Agricultural	Urban	Historical	Other
<b>Building Energy Performance</b>	kWh/m <sup>2</sup> y		-	

### Description

This building is an interesting demonstration of the PV versatility, since this simple PV plant installed on the facade has an important role for the architecture language. Beyond to the energy and aesthetic function the glazed modules, made by thin-film CIGS technology, operate as a shading system for the transparent façade behind ensuring an adequate microclimate for the work area of personal. PV modules are installed at a certain distance from the principal facade with a frameless system and spaced one to another to create a grid. The panels, covering on an area of 135 smq, provide an annual energy production of 10000 kWh/y with a peak power of 13.5 kWp.

### Acknowledgments

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SOURCE: [www.sundesign.ch](http://www.sundesign.ch)

## BiPV Details

### LOCATION OF PLANT

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

### ARCHITECTURAL EVALUATION

<b>Color</b>	Black
<b>Transparency</b>	5%
<b>Frame</b>	Frameless

### COSTUMIZATION LANGUAGE AT COMPONENT SCALE

PV CELL	MODULE LAYERING	MODULE FEATURES	DUMMIES
DESCRIPTION			

### SPECIFICATION

<b>Photovoltaic</b>	Monocrystalline	Multicrystalline	Thin Film
<b>PV Module</b>	<b>Cells</b>	CIGS	
	<b>Module</b>	Q-Smart UF 75	
<b>Power</b>	<b>kWp</b>	13.5	
<b>Size</b>	<b>m<sup>2</sup></b>	135	
<b>Energy production</b>	<b>kWh/year</b>	10000	
<b>Cost</b>	<b>€/m<sup>2</sup></b>	750	