

Solar PV Panels



- Green Building Summary Sheet -

Author

EnviroSpec Verification Services

Document Type

Green Building Rating Compatibility Analysis

Document Code

ES-GSNZ-16-87

Validity						
*greenstar	Office 2009 + V3 / Interiors 2009 + V3 / Education 2009 + V3 + V3.1 / Industrial 2009 + V3	\checkmark				
🛟 homestar	Homestar V2 + V3+V4	\checkmark				
Circular Economy Model Office	V 1.1	Not applicable				
LIVING BUILDING CHALLENGE	V3.0	\checkmark				
NABER S M2	NABERSNZ	\checkmark				
Pressivhaus Institut	Passivhaus	Not yet assessed				
NETZERO Mercia and Artaciante	Net Zero NZ	\checkmark				

Client Solarcraft

Product Name

Solar PV Panels

Product Description

Solarcraft install a wide range of system sizes from 1.59kW for smaller homes to 10.00kW or larger. These systems are designed specifically for each building's power consumption and budget. Solarcraft uses Mitsubishi Electric panels and can offer either grid-tied systems or off-grid systems.



Manner in which the product may contribute towards points	Legend of Symbols in EnviroSpec	
Products must meet specific criteria (e.g. Paint VOC emissions, carpets, etc)	~	
Products may help achieve points by their very nature, if they are specified and installed (e.g. bicycle racks)	•	
Products may help achieve an outcome but they must be used in a specific manner (e.g. lighting control and zoning systems) OR This product can contribute towards the outcome but many other products or factor influence that same outcome (E.g. Potable Water Calculator)	0	

Disclaimer - Please read this carefully

Each Building Environmental Rating Tool and Scheme nominated herein is owned and operated by its respective operative organisation, independently of EnviroSpec Ltd., and EnviroSpec Ltd. equally operates independently of any nominated rating scheme. The information represented on EnviroSpec is not endorsed by any of these organisations in a direct manner and any decision regarding final approval or refusal of points and certifications where the nominated product is used is at the final discretion of the respective owners and operators of the nominated Building Environmental Rating Schemes, and any network of assessors or auditors that are accredited to operate under their assessment structure, in accordance with all associated technical manuals, rules and guidelines. For detailed technical information about each Building Environmental Rating Schemes and product related criteria please refer to the appropriate technical manuals. EnviroSpec does not accept liability for any loss or damages resulting from the use of this document and emphasizes that this document is provided as guidance only. Use of, or reliance upon, any information contained in this report is at the user's own risk. The information presented in this report is valid for the Building Environmental Rating Schemes and Tools nominated herein only. As and when the respective owners publish updates or new tools, the information may require updating. EnviroSpec Ltd. will only update information in this report upon receiving written consent from the Manufacturer, Supplier or upon request from an operative organisation of one of the Building Environmental Rating Tools nominated herein of the reader to check for regular updates.



Solar PV Panels



- Green Building Summary Sheet -

Tool	Credit category	Points available	Requirements	Contribution symbol	Contribution Potential	Details of compliance
Green Star NZ Office (2009 + V3)	ENE-2	20	This credit rewards buildings with lower CO2 emissions, as calculated by the Green Star NZ GHG Emissions Calculator.	o	Up to 20 points (Contributio n towards CO2 reduction)	The performance of this product is project dependent. Details must be discussed with the engineer and GSAP to ensure correct calculations.
Education (2009, V3 + V3.1) + Industrial (2009 + V3)	ENE-2	10	This credit rewards buildings with lower CO2 emissions, as calculated by the Green Star NZ GHG Emissions Calculator.	o	Up to 10 points (Contributio n towards CO2 reduction)	The performance of this product is project dependent. Details must be discussed with the engineer and GSAP to ensure correct calculations.
Homestar (V2 + V3)	EHC-5	8	This credit rewards the installation and operation of local renewable electricity generation system to reduce carbon dioxide emission.	0	Up to 8 points (Contributio n factor)	If appropriately sized, with correct orientation, then the use of the solar panels can assist towards gaining up to full points in this category
Homestar V4	EHC-8	7	This credit rewards the installation and operation of local renewable electricity generation system to reduce carbon dioxide emission.	ο	Up to 7 points (Contributio n factor)	If appropriately sized, with correct orientation, then the use of the solar panels can assist towards gaining up to full points in this category
NABERS NZ	Section 6.3	-	Where energy is generated for use in the rated premises to be rated and is either: • connected on the user side of the consumption meter which records the relevant external energy supply to the premises, or • used on site independently of utility-supplied systems, then it will reduce the amount of utility-supplied energy required and will therefore help improve the NABERSNZ potential rating.	o	Contributio n factor	The value contribution is a factor of system sizing relative to overall building energy demand. No adjustment is required. In effect this means that energy utility billing data must be used without modification.
Living Building Challenge 3.0	Imperativ e I.06	Pass/Fail	One hundred and five percent of the project's energy needs must be supplied by on-site renewable energy on a net annual basis, without the use of on-site combustion. Projects must demonstrate that sufficient back-up battery power be installed for emergency lighting (at least 10 percent of lighting load) and refrigeration use for up to one week for greater resiliency.	~	Pass (if appropriate ly sized)	If the system is demonstrated as providing more than 105% of the total project Energy Use Intensity + >10% backup energy storage, when calculated in accordance with the I.06-4 Energy Table (based on 12 months of energy bills), then the project can qualify for this Imperative.
Net Zero Energy Building Certification	Imperativ e I.06	Pass/Fail	One hundred percent of the project's energy needs must be supplied by on-site renewable energy on a net annual basis, without the use of on-site combustion.	*	Pass (if appropriate ly sized)	If the system is demonstrated as providing 100% of the Total Energy Demand, when calculated in accordance with the Energy Production and Demand Table (based on 12 months of energy bills), then the project can qualify for the Energy Petal.