



SOLAFLEX 290W

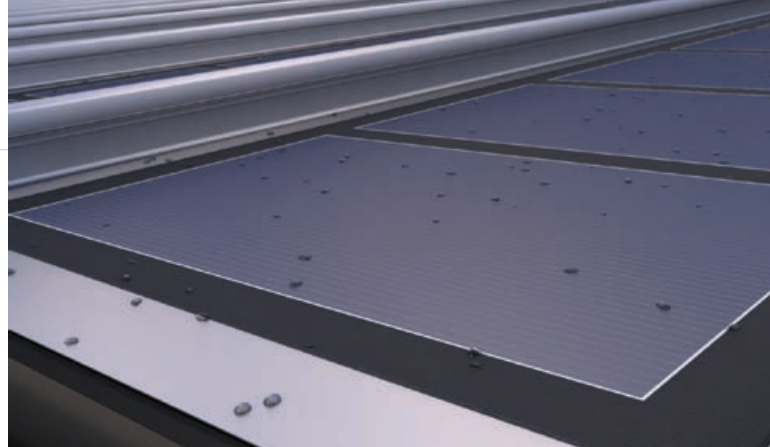
DATA SHEET

SOLAFLEX 290W

Flexible CIGS Laminate strips are a innovative Solar solution unique to Metalcraft Solar. The Solaflex modules adhere directly to the pan of 'espan470' roof profile; once installed they present the significant aesthetic advantages of an integrated CIGS solution, with high efficiency output properties.

Key features

- Record efficiency levels in a CIGS flexible form factor
- Low installed weight at less than 2.1 kg/m² (<0.43 lb/ft²)
- No penetrations, ballast or racking required
- Applicable for high wind load and high seismic hazard areas
- Bypass diodes reduce CIGS system shading losses
- Directly bonds to many approved surfaces



Reliability and safety

IEC 61646 & IEC 61730
UL 1703

Warranty

5 year workmanship
10/25 year warranty against power loss

Electrical performance at stc¹

Nominal Power	P_{MPP}	[W]	290
Nominal Efficiency	η	[%]	16.1%
Power Output Tolerance		[W]	+10/-0
Maximum Power Voltage	V_{MPP}	[V]	70.3
Maximum Power Current	I_{MPP}	[A]	4.13
Open Circuit Voltage	V_{OC}	[V]	87.9
Short Circuit Current	I_{SC}	[A]	4.70
Maximum Series Fuse Rating		[A]	10
Maximum System Voltage	IEC/UL	[V]	1000/1000

¹Standard Test Conditions (STC): 1000 W/m², 25°C cell temperature, AM 1.5 spectrum

Thermal characteristics

NOCT	[°C]	48
Temperature Coefficient of P_{MPP}	[%/°C]	-0.38
Temperature Coefficient of V_{OC}	[%/°C]	-0.28
Temperature Coefficient of I_{SC}	[%/°C]	0.008

Physical and mechanical specifications

Length	5910 mm (232.7 in)
Width	348 mm (13.7 in)
Thickness, Maximum at J-Box*, Module	17 mm (0.7 in)
Weight (Module without adhesive)	3.6 kg (7.9 lb)
Weight (Module with adhesive)	4.3 kg (9.5 lb)
Weight/Area (Module without adhesive)	1.7 kg/m ² (<0.4 lb/ft ²)
Weight/Area (Module with adhesive)	2.1 kg/m ² (0.4 lb/ft ²)
Junction Box Type	IP68
Cable Connections	MC4 Compatible
Cell Type	Copper Indium Gallium Diselenide (CIGS)
Warranty**	5 year workmanship; 10/25 year power output
Certifications	UL 1703, IEC 61646, IEC 61730
Packaging Info	5 modules per crate, 40 modules per pallet, 800 modules per 20' ISO container, 1760 modules per 40' ISO container

*2.5 mm (0.1 in) for the rest of the module with adhesive

**1.6 mm (0.06 in) for the rest of module without adhesive

**Please see full warranty for details

