

Our Ref: 23088
 15 January 2013
 Clenergy Australia
 18/20 Duerdin Street
 Clayton North VIC 3168

Array Frame Engineering Certificate

RE: Solar Terrace II Installation

Gamcorp (Melbourne) Pty Ltd, being Structural Engineers within the meaning of Australian Building Regulations, have carried out a structural design check of the Solar Terrace II installation within Australia. The design check has been based on the information in the *PV-ezRack SolarTerrace II Planning and Installation Guide* and schematic drawings of the system components by Xiamen Clenergy co.,Ltd, provide by Clenergy Australia.

Components	Part No
PV-ezRack SolarTerrace II	
C -post	ER-CP
T -Rail 105mm	ER-R-T105
SolarTerrace II Pre-assembled support 30°	ER-S-STII/30
Post Brace for C-post	ER-PB-CP

We find the Solar Terrace II to be structurally sufficient for Australian use based on the following conditions:

- Wind Loads to AS/NZ1170.2:2011
- Wind Terrain Categories 2, 3 & 4
- Wind average recurrence interval of 100 years
- Wind region A, B, C & D
- Max. Solar Panel length 1.65 m
- Maximum Frame Spacing

Wind Zone	Region A	Region B	Region C	Region D
Wind speed(m/s)	41	48	56	66
Maximum spacing (m)	3.3	2.85	2.05	1.45
Driven post minimum embedment length(m)				
Wind Zone	A	B	C	D
Soil Type				
Gravel soil	1.35	N/A	N/A	N/A
Firm clay	1.18	N/A	N/A	N/A

Note 1 : For Solar Terrace II Driven post installation, maximum post height above the ground is 1.3 m.

	300mm Diameter concrete piers minimum embedment length(m)			
Wind Zone	A	B	C	D
Soil Type				
Gravel soil	0.65	0.85	0.86	0.86
Sandy soil	1.05	1.37	1.38	1.39
Soft clay	0.82	1.06	1.07	1.08
Firm clay	0.47	0.61	0.61	0.61

Note 2 : For Solar Terrace II concrete pier installation, maximum post height above the ground is 1.5 m.

Note 3 : For concrete piers foundation, use 25 MPa strength concrete.

Construction is to be carried out strictly on accordance with the instruction manual. This work was designed in accordance with the provisions of Australian Building Regulations and in accordance with sound, widely accepted engineering principles.

Yours faithfully,
Gamcorp (Melbourne) Pty Ltd



Martin Gamble
Director
Gamcorp (Melbourne) Pty Ltd



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