

**ROOF TOP SOLAR POWER ELECTRICAL INSTALLATION CERTIFICATE for  
DESIGN&CONSTRUCTION (ANNEX 5)  
(LESS THAN OR EQUAL 1.0 MW SUPPLY - LV Metered Customers)  
(REQUIREMENTS FOR ELECTRICAL INSTALLATIONS - BS 7671 [IET WIRING REGULATIONS])**

<b>DETAILS OF THE CUSTOMER</b>			
Name of the Customer		Customer Electricity Account No. and Electric Utility	
Address of the Customer		Contact No./ Email/ Fax	
<b>DETAILS OF THE CONTRACTOR</b>			
Name of the Contractor		SEA Registration No.	
Address of the Contractor		Contact No./ Email/ Fax	
<b>Description of the installation:</b>			
Extent of installation covered by this Certificate:			
.....kW roof top grid connected solar power installation at the above address.			
(Use continuation sheet if necessary)		see continuation sheet No: .....	

<b>DESIGN AND CONSTRUCTION</b>			
<b>DETAILS OF THE INVERTER</b>			
1.	Brand(s) of the Inverter(s)	a.	
2.	Country of Origin		
3.	Number of Inverters		
4.	Model No. & Serial No		
5.	Reputed Independent Agency of Submitting Test Reports	b.	
6.	Rated Output Voltage (AC) and Rated Input Voltage (DC)	Output (AC) Input (DC)	
7.	Rated Power Output (W)		
8.	Max. input voltage (DC)		
9.	Max. input current (DC)		
10.	Max. output voltage(AC)		
11.	Max. output current (AC)		
12.	Rated Power Frequency		
13.	Max. Efficiency		
14.	Operating temperature range		
15.	Degree of Protection		
16.	Supported Standards		
<b>DETAILS OF THE SOLAR PANELS</b>			
1.	Brand of the Panel		
2.	Country of Origin		
3.	Reputed Independent Agency of Submitting Test Reports	b.	
4.	Model No. & Serial No.		
5.	Peak Power (W) /Panel		
6.	No. Of Panels		
7.	Panel Efficiency		
8.	PV Cell Type		
9.	Panel Open Circuit Voltage (DC)		
10.	Panel Rated Voltage (V <sub>MPP</sub> )		
11.	Panel Short Circuit Current (DC)		
12.	Panel Rated Current (I <sub>MPP</sub> )		
13.	Supported Standards		

**Main Protective Conductors**

Earthing conductor	Material ..... csa ..... mm <sup>2</sup>	Connection / continuity verified <input type="checkbox"/>
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**SCHEDULES**

The attached Schedules are part of this document and this Certificate is valid only when they are attached to it.  
 ..... Schedules of Inspections are attached.

(Enter quantities of schedules attached)

**FOR DESIGN and CONSTRUCTION**

I/We being the person(s) responsible for the design and construction of the electrical installation (as indicated by my/our signatures below), particulars of which are described above, having exercised reasonable skill and care when carrying out the design and construction hereby CERTIFY that the work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with BS 7671:2008, amended to ..... (date) except for the departures, if any, detailed as follows:

Details of departures from BS 7671 (Regulations 120.3 and 120.4):

Details of permitted exceptions (Regulation 411.3.3). Where applicable, a suitable risk assessment(s) must be attached to this Certificate.

The extent of liability of the signatory or signatories is limited to the work described above as the subject of this Certificate.

For the DESIGN and CONSTRUCTION of the installation:

Signature: ..... Date: ..... Name (IN BLOCK LETTERS): .....

The extent of liability of the signatory or signatories is limited to the work described above as the subject of this Certificate.

For the DESIGN and CONSTRUCTION of the installation:

Signature: ..... Date: ..... Name (IN BLOCK LETTERS): .....

**PARTICULARS OF SIGNATORY TO THE ELECTRICAL INSTALLATION CERTIFICATE**

**Designer / Contractor**

Name: .....	Company: .....
Address: .....	
.....	Postcode: ..... Tel No: .....

a. If there are more than one inverter in the installation, provide the particulars of each inverter in the same format in additional sheets.

b. The test certificates/ compliance certificates from independent agencies or accredited agency or one of the following institutions in Sri Lanka, should be submitted to prove the mentioned values

- i. Department of Electrical Engineering , University of Moratuwa
- ii. National Engineering Research and Development Centre(NERD)
- iii. Industrial Technology Institute(ITI)

**SCHEDULE OF INSPECTIONS (for new installation work only) for  
ROOF TOP SOLAR POWER INSTALLATION LESS THAN OR EQUAL TO 1 MW SUPPLY**

**NOTE1:** This form is suitable for many types of smaller installation, not exclusively domestic.

All items inspected in order to confirm, as appropriate, compliance with the relevant clauses in BS 7671. The list of items and associated examples where given are not exhaustive.

**NOTE2:** Insert ✓ to indicate an inspection has been carried out and the result is satisfactory, or N/A to indicate that the inspection is not applicable to a particular item.

ITEM NO	DESCRIPTION	Outcome See Note 2
1.0	<b>OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS (SECTION 712)</b>	
1.1	Any connections with Earth on the D.C. side is electrically connected so as to avoid corrosion	
1.2	The protective measures of non-conducting location and earth-free local equipotential bonding are not on the D.C. side. (712.410.3.6)	
1.3	PV A.C. supply is connected to supply side of protective device (712.411.3.2.1.1)	
1.4	RCD is in place and it is type B to IEC 60775 (712.411.3.2.1.2) or	
1.5	Protection by the use of Class II or equivalent insulation has been adopted on D.C. side of cell (712.412)	
1.6	Overloaded protection is omitted from the PV array string if the cable current-carrying capacity is rated to at least 1.25 of the short circuit current. Short circuit current protection is provided at connection to the mains (712.433.1), (712.434.1)	
1.7	To minimize voltage induced by lighting, the area of all wiring loops are as small as possible (712.444.4.4)	
1.8	PV modules comply with the requirements of the relevant equipment standards. (712.511.1)	
1.9	PV modules have been installed in such a way that there is enough heat dissipation under conditions of maximum solar radiation for the site. (712.511.2.1)	
1.10	The selection and erection of equipment shall facilitate safe maintenance (712.513.1)	
1.11	PV string cables, PV array cables and PV main D.C. cables have been selected and erected so as to minimize the risk of Earth faults and short circuits. (712.522.8.1)	
1.12	Wiring systems withstand the expected external influences such as wind, temperature and solar radiation. (712.522.8.3)	
1.13	Isolation for maintenance on D.C. and A.C. sides is provided (712.537.2.1.1)	
1.14	A switch-disconnector is provided on the D.C. side of the the PV convertor. (712.537.2.2.5)	
1.15	All junction boxes carry label warning about energization after loss of mains. (712.537.2.2.5.1)	
1.16	Protective bonding conductors run in close contact with D.C. and A.C. PV system cables (712.54)	
1.17	Electrical Single line diagram of the installation is attached with the certificate.	

Inspected by Designer / Contractor:

Name (Capitals) .....

Signature .....

Date .....

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Inspected by Inspector:

Name (Capitals) .....

Signature .....

Date .....