

**ROOF TOP SOLAR POWER ELECTRICAL INSTALLATION CERTIFICATE FOR
INSPECTION & TESTING (ANNEX 6)
(LESS THAN OR EQUAL TO 1 MW SUPPLY - LV metered Customers)
(REQUIREMENTS FOR ELECTRICAL INSTALLATIONS - BS 7671 [IET WIRING REGULATIONS])**

DETAILS OF THE CUSTOMER			
Name of the Customer		Customer Electricity Account No. and Electric Utility	
Address of the Customer		Contact No./ Email/ Fax	
DETAILS OF THE CONTRACTOR			
Name of the Contractor		SEA Registration No.	
Address of the Contractor		Contact No./ Email/ Fax	
Description of the installation: 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:			

INSPECTION AND TESTING						
Description		CEB Requirement			Inverter	
		Unit	Reference	Value	Reference Document	Value
1.	Synchronization w.r.t prevailing voltage level	%	IEEE 1547.4.1.3	+/-5% of the prevailing Voltage	c.	
2.	Capability to withstand voltage and current surges		IEEE 1547.4.1.8.2	---	c.	Yes/No
3.	Capability to withstand voltage w.r.t to the interconnection voltage	%	IEEE 1547.4.1.8.3	220% of the facility rated voltage	c.	
4.	Output voltage waveform		CEB Manual 7.6	50Hz sinusoidal	c.	Yes/No
5.	Reconnection time of the inverter after stable service voltage and frequency	Min.	CEB Manual 7.2.3	at least 3 minutes	c.	
6.	Islanding Protection	s	CEB Manual 7.2.6	Within 0.5s of loss of utility power	c.	
7.	Limitation of dc injection current w.r.t full rated output current at the point DR connection	%	IEEE 1547.4.3.1	<0.5%	c.	
8.	Total Demand Distortion (TDD)	%	IEEE 1547.4.3.3	<5% (95th percentile)	c.	
Individual harmonic current distort limits as a percentage of maximum demand load current at the point of common coupling -ion limits as a percentage of maximum demand load current at PCC						
9.	h<11 (Odd harmonic current)	%	IEEE 1547.4.3.3	<4 % (95 th percentile)	c.	

10.	11=< h <17 (Odd harmonic current)	%	IEEE1547.4.3.3	<2% (95 th percentile)	c.	
11.	17=< h <23 (Odd harmonic current)	%	IEEE1547.4.3.3	<1.5% (95 th percentile)	c.	
12.	23 =< h < 35 (Odd harmonic current)	%	IEEE1547.4.3.3	<0.6% (95 th percentile)	c.	
13.	h>=35 (Odd harmonic current)	%	IEEE1547.4.3.3	<0.3% (95 th percentile)	c.	
14.	h<11 (Even harmonic current)	%	IEEE1547.4.3.3	<1% (95 th percentile)	c.	
15.	11=< h <17 (Even harmonic current)	%	IEEE1547.4.3.3	<0.5% (95 th percentile)	c.	
16.	17=< h <23 (Even harmonic current)	%	IEEE1547.4.3.3	<0.375% (95 th percentile)	c.	
17.	23 =< h < 35 (Even harmonic current)	%	IEEE1547.4.3.3	<0.15% (95 th percentile)	c.	
18.	h>=35 (Even harmonic current)	%	IEEE1547.4.3.3	<0.075% (95 th percentile)	c.	

The details furnished in **DESIGN AND CONSTRUCTION CERTIFICATE** are correct without any deviations / with following deviations.

Deviations of furnished details:

Details of the inverter

Details of the Solar panel

Others

COMMENTS ON EXISTING INSTALLATION :

SCHEDULES

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

..... Schedules of Inspections and Schedules of Test Results are attached.

(Enter quantities of schedules attached).

FOR INSPECTION & TESTING

I being the person(s) responsible for the inspection & testing of the electrical installation (as indicated by my/our signature below), particulars of which are described above, having exercised reasonable skill and care when carrying out the inspection & testing hereby CERTIFY that the work for which I 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):

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

For INSPECTION AND TESTING of the installation:

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

NEXT INSPECTION

I/We the designer(s), recommend that this installation is further inspected and tested after an interval of not more than years/months.

PARTICULARS OF SIGNATORY TO THE ELECTRICAL INSTALLATION CERTIFICATE		
Inspector	Name:	Company:
	Address:
	Postcode: Tel No:

c. Page numbers of the reference documents

**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
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1.0	OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS (SECTION 712)	
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 lightning, 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 Inspector:

Name (Capitals)

Signature

Date