

## Stephenson House Solar Panels

<b>MAINTENANCE SCHEDULE FOR SOLAR PANELS</b>			
<b>SUB-SYSTEM OR COMPONENT</b>	<b>MAINTENANCE ACTION</b>	<b>FREQUENCY</b>	<b>REMARKS</b>
<b>SITE</b>	Verify Cleanliness (accumulation of debris around and/or under array).	3m	Clean site as required. Remove obstructions if required.
<b>ACCESS</b>	Ensure safe access in reference to roof access procedures in place	3m	Check site procedures for safe roof access.
<b>PV MODULES</b>	Verify Cleanliness (accumulation of dust on array).	3m	Clean if necessary
	Check for visual defects including: 1. Fractures 2. Browning 3. Moisture penetration 4. Frame corrosion 5. Tube damage (water)	1 Year	Modules with visual defects should be further inspected for performance and safety to determine the need for replacement
	Verify Bypass Diodes	1 Year	Any defective seals, clamps and bypass diodes are to be replaced.
<b>WIRING/PIPEWORK INSTALLATION</b>	Verify Mechanical Integrity of Conduits	5 Years	Any damaged conduit is to be replaced. Any damaged pipework to be replaced.
	Verify insulation integrity of Cables installed with Conduit	5 Years	Any damaged cable is to be replaced
	Check Junction Boxes for: 1. Tightness of connections 2. Water accumulation/build up 3. Integrity of Lid Seals 4. Integrity of Cable Entrance and/or Conduit sealing 5. Integrity of clamping devices 6. Thermal insulation of pipework condition	1 Year	Any defective seals, clamps blocking diodes and surge arresters are to be replaced.
	Check earthing connections for: 1. Tightness of connections 2. Corrosion	1 Year	
<b>ELECTRICAL CHARACTERISTICS</b>	Measure Open Circuit Voltages	1 Year	
	Measure Short Circuit Currents	1 Year	
<b>PROTECTIVE DEVICES</b>	Verify: 1. Integrity of Fuses 2. Operation of CB's and RCD's 3. Operation of Solar Array isolation device 4. Operation of earth fault protection system	1 Year	
<b>MOUNTING STRUCTURES</b>	Verify tightness and integrity of bolts and other fastening devices	1 Year	
	Inspection for corrosion	5 Years	