

SolShare Commissioning and Inspection Tests

For Australia only

v.A2

After a SolShare has been installed according to the project design and commissioned using the SolShare [commissioning app](#), the commissioning and inspection check explained in this document is required to ensure the installation is compliant with the **AS/NZS 4777.1:2024** requirement to test islanding detection and safety requirements.

Below is an example of what a typical SolShare installation looks like.

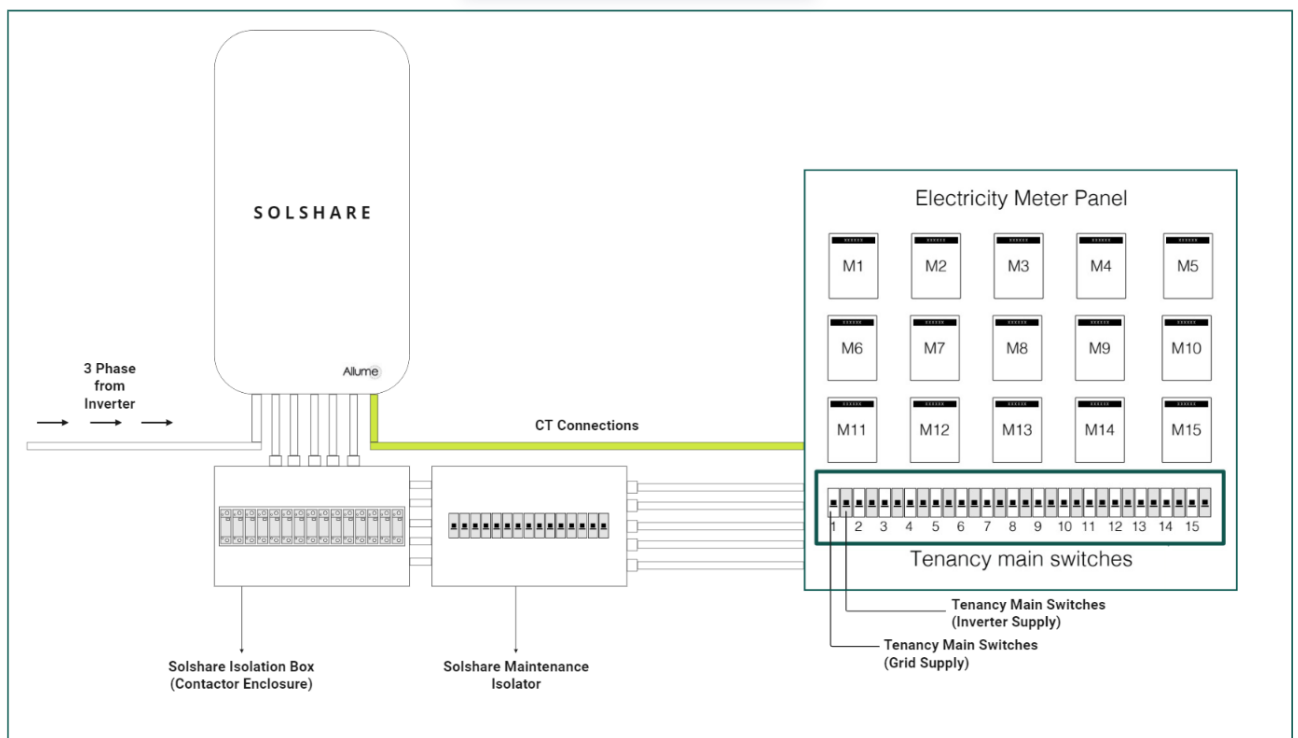


Fig 1. SolShare Installation Setup



WARNING: Before carrying out any test or inspection, be careful around nearby live cables, as this test will be carried out while the SolShare is powered and in operation.

To complete the **AS/NZS 4777.1:2024** SolShare compliance test, follow the steps below.

1. Before commencing the test, the SolShare should be in its operational state, with Inverter DC and AC isolators in the **ON** position, the Solar inverter generating Power, and the SolShare sharing power to output connections.
2. Using a 4mm hex key, remove the four (4) screws at the bottom of the enclosure, as shown in *Fig 2*.



Fig 2. Opening SolShare installation Area

3. Lift the SolShare front cover halfway to reveal SolShare's installation area, as shown in *Fig 3*.



Fig 3. SolShare Installation Area

4. Interrupt the signal from SolShare's Current Transformer by pulling out the CT block for a phase, as shown in *Fig. 4 & Fig. 5*; verify that the loss of signal results in the isolation of all IPSD ports.

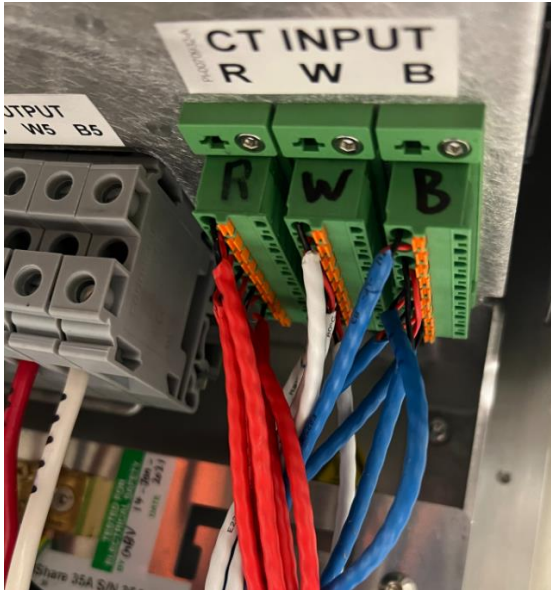


Fig 4. SolShare CT Block



Fig 5. CT Block on red phase removed.

This test can be verified by observing the inverter. Once the CT block has been removed from the SolShare, as shown in *Fig 5*, the inverter's islanding response will be triggered, disconnecting the solar system from the grid.

If the inverter is not co-located with the SolShare, the test can be verified using a clamp meter to measure the current flow on the conductor, supplying solar power to those units from SolShare, as shown in *Fig 6*.



Fig 6. Test confirmation using a Clamp meter

- Complete this step once for each phase of the electrical installation and document your result in the **Commissioning and Inspection Report Sheet**.
- Once the tests in step 4 are completed, reconnect the CT block to its normal operational state, as shown in *Fig. 4*, before moving to the next step.

5. Isolate the **Tenancy Main Switch (Grid Supply)** or **Main Isolator (Grid Supply)** for an apartment/ flat connected to SolShare (this will be located in the MSB or meter panel) and verify that the disconnection time for solar to the apartment is less than 2 seconds. An example of isolation point in this instance is shown in **Fig 8**.



Fig 7. Meter Panel

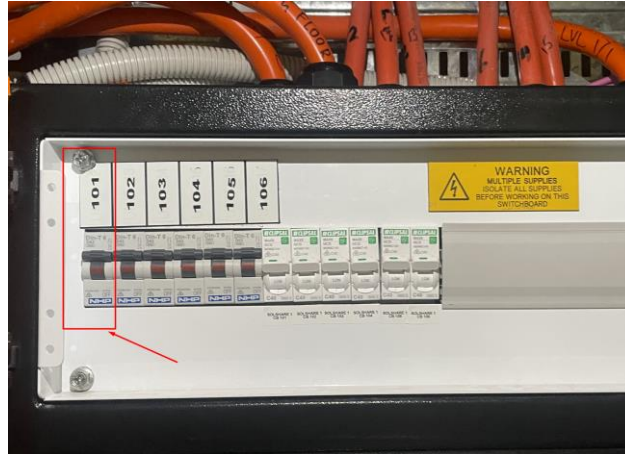


Fig 8. Isolation Point

This test can be verified by using a clamp meter to measure the current flow on the conductor, supplying solar power to that unit from SolShare, as shown in **Fig 9**. Refer to the project SLD to locate the switch/ isolator to operate.



Fig 9. Test confirmation using a Clamp meter

- Complete this step once for each phase of the electrical installation and document your result in the **Commissioning and Inspection Report Sheet**.

6. Operate the **Tenancy Main Switch (Grid Supply)** and verify that the connection time is greater than 60 seconds (Note: The SolShare may not send solar to the tested connection if there is no load on that connection at the time of testing). Refer to the project SLD to locate the switch/ isolator to operate. This test can be verified by using a clamp meter to measure the current flow on the conductor supplying solar power to that unit from Solshare, as shown in **Fig 9**. Refer to the project SLD to locate the switch/ isolator to operate.
 - Complete this step once for each phase of the electrical installation and document your result on the **Commissioning and Inspection Report Sheet**.

After Completing Steps 4, 5 & 6, record all your results in the **Commissioning and Inspection Report Sheet** and include this as part of the project documentation for the installation site.

7. Once you have completed the test, slide Solshare cover down to the closed position and re-insert the four (4) screws at the bottom of the enclosure, as shown in **Fig. 10**.
 - Remember to switch on any **Tenancy Main Switches (Grid Supply)** that may have been disconnected/ isolated as part of this test before leaving the electrical installation.



Fig 10. Closing SolShare cover

Commissioning and Inspection Report Sheet

This sheet is produced per the requirements from AS/NZS 4777.1:2024, Clause 8.4.2.

Project name: _____ Location: _____

System DC size: _____ System AC size: _____

SolShare Serial number: _____ Date of Commissioning: _____

Test ID	Test Description	Phase	Pass/ Fail	Response Time
1.	Interrupt the signal from SolShare's Current Transformer by pulling out the CT block for a phase and verify that the loss of signal results in the isolation of all IPSD ports.	Red	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
		White	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
		Blue	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
2	Isolate the Tenancy Main Switch (Grid Supply) or Main Isolator (Grid Supply) for an apartment/ flat connected to SolShare (this will be located in the MSB or meter panel) and verify that the disconnection time for Solar to the apartment is less than 2 seconds.	Red	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
		White	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
		Blue	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
3	Operate the Tenancy Main Switch (Grid Supply) and verify that the connection time is greater than 60 seconds (Note: The SolShare may not send solar to the tested connection if there is no load on that connection).	Red	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
		White	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
		Blue	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	

Electrical Safety Check Certification			
Electrical Safety Check completed by:		Licence/ registration number:	
		Inspection date:	
<p><i>I, the above-named licenced electrician, have carried out an electrical safety check of this residential tenancies per the requirements set out in the Australian/New Zealand Standard AS/NZS 4777.1:2024, "Grid connection of energy systems via inverters, Part 1: Installation requirements", and have recorded my observations.</i></p>			
Sign: _____		Date: _____	