

Labelling Checklist for Grid-connected Systems

This checklist details requirements across solar PV, battery, and PV and battery systems. The checklist should be used in conjunction with *SAA Labelling Support - Grid-connected Systems* and in conjunction with the relevant standards.

You may wish to print this document and have it available on-site during installation and commissioning to use as your record of labelling at the installation site.

Date:	
Address:	
Accredited installer:	Accreditation number:

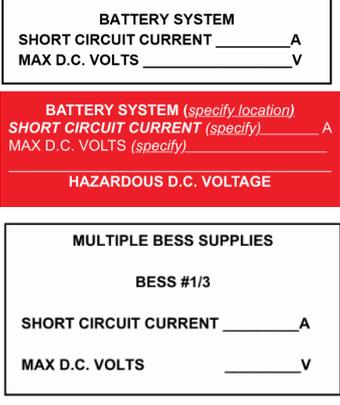
Requirement	Checked
Metering Panel and Main Switchboard	
AS/NZS 5033:2021 Clause 5.4 Fire and emergency information	  
AS/NZS 5139:2019 Clause 7.3 Battery type general labelling	
AS/NZS 4777.1:2024 Clause 6.11.2 Energy source labelling for electric vehicles and electric vehicle supply equipment <i>(Only required for equipment capable of reverse power transfer.)</i>	

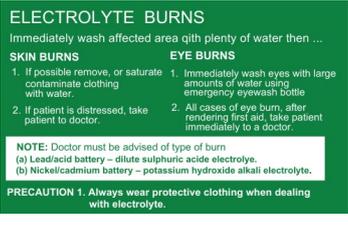
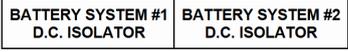
Requirement	Checked
<p>AS/NZS 5033:2021 Clause 5.6 Recording of solar system layout</p>	
<p>AS/NZS 5033:2021 Clause 5.6.1 Recording of solar system layout</p>	
<p>AS/NZS 5033:2021 Clause 5.6.1.1 Additional information for PV d.c. systems</p>	<p><i>As above in AS/NZS 5033:2021 Clause 5.6.1</i></p>
<p>AS/NZS 4777.1:2024 Clause 6.5 Signs for inverter locations</p>	<p><i>May be included in Solar System Layout</i></p>
<p>AS/NZS 5139:2019 Clause 7.4 Signs for battery system location</p>	<p><i>May be included in Solar System Layout</i></p>
<p>AS/NZS 5139:2019 Clause 7.7 Safety data sheet (SDS)</p>	
<p>Switchboard and Distribution Boards</p>	
<p>AS/NZS 4777.1:2024 Clause 6.3 Signs for the switchboard to which the IES is directly connected</p>	<p>(a)</p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 5px;">MAIN SWITCH (INVERTER)</div> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 5px;">MAIN SWITCH (SOLAR INVERTER)</div> <p>(b)</p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 5px;">MAIN SWITCH (GRID)</div> <p>(c)</p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 5px;">MAIN ISOLATOR (GRID)</div> <p>(d)</p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 5px;">MAIN SWITCH (ALTERNATIVE)</div> <p>(e)</p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 5px;">MAIN SWITCH (INDEPENDENT)</div>

Requirement	Checked
<p>(f)</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> ISOLATOR (GRID INPUT) </div> <p>(g)</p> <div style="background-color: yellow; border: 1px solid black; padding: 5px;"> WARNING <small>MULTIPLE SUPPLIES ISOLATE ALL SUPPLIES BEFORE WORKING ON THIS SWITCHBOARD</small> </div>	
<p>AS/NS 4777.1:2024 Clause 6.4 Signs for other switchboards</p>	<div style="background-color: yellow; border: 1px solid black; padding: 5px;"> WARNING <small>MULTIPLE SUPPLIES ISOLATE INVERTER SUPPLY AT DISTRIBUTION BOARD IN</small> </div>
<p>AS/NZS 4777.1:2024 Clause 6.8 Signs for multiple mode inverters</p>	<div style="background-color: yellow; border: 1px solid black; padding: 5px;"> WARNING <small>MULTIPLE MODE INVERTER CONNECTED NEUTRAL AND EARTH CIRCUITS MAY BE LIVE UNDER NORMAL AND FAULT CONDITIONS FOLLOW SHUTDOWN PROCEDURE</small> </div>
<p>AS/NZS 3000:2018 Clause 2.10.5.2 Relationship of electrical equipment</p>	<div style="background-color: yellow; border: 1px solid black; padding: 5px; text-align: center;"> <small>ALTERNATIVE SUPPLY CIRCUITS</small> </div> <div style="background-color: yellow; border: 1px solid black; padding: 5px; text-align: center; margin-top: 5px;"> <small>ALTERNATIVE SUPPLY CIRCUIT</small> </div>
<p>AS/NZS 4777.1:2024 Clause 6.11.1 Energy sources with applicable installation standards</p>	<div style="background-color: yellow; border: 1px solid black; padding: 5px;"> WARNING <small>ALL ENERGY SOURCES MUST BE TURNED OFF TO ACHIEVE COMPLETE ISOLATION</small> </div>
Inverter	
<p>AS/NZS 4777.1:2024 Clause 6.2 Signs for emergency shutdown procedure</p> <p><i>(Wording needs to be specific to the installed system. An example could be as shown on the far right.)</i></p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;">SHUTDOWN PROCEDURE</p> <p style="text-align: center;"><small>INSERT APPROPRIATE STEPS FOR SAFE SHUTDOWN.</small></p> <div style="background-color: yellow; border: 1px solid black; padding: 2px; text-align: center;"> <small>WARNING PV ARRAY D.C. ISOLATORS DO NOT DE-ENERGISE THE PV ARRAY AND ARRAY CABLING</small> </div> </div>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;">SHUTDOWN PROCEDURE</p> <p>1. Turn off the MAIN SWITCH (INVERTER) OR INVERTER A.C. ISOLATOR 2. Turn off the PV ARRAY D.C. ISOLATOR located at the Inverter</p> <div style="background-color: yellow; border: 1px solid black; padding: 5px; text-align: center;"> WARNING <small>PV ARRAY D.C. ISOLATORS DO NOT DE-ENERGISE THE PV ARRAY AND ARRAY CABLING</small> </div> </div>
<p>AS/NZS 5033:2021 Clause 5.7 Shutdown procedure</p> <p><i>(Wording needs to be specific to the installed system. An example could be as shown on the far right.)</i></p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;">SHUTDOWN PROCEDURE</p> <p style="text-align: center;"><small>INSERT APPROPRIATE STEPS FOR SAFE SHUTDOWN.</small></p> <div style="background-color: yellow; border: 1px solid black; padding: 2px; text-align: center;"> <small>WARNING PV ARRAY D.C. ISOLATORS DO NOT DE-ENERGISE THE PV ARRAY AND ARRAY CABLING</small> </div> </div>	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;">SHUTDOWN PROCEDURE</p> <p>1. Turn off the MAIN SWITCH (INVERTER) OR INVERTER A.C. ISOLATOR 2. Turn off the PV ARRAY D.C. ISOLATOR located at the Inverter</p> <div style="background-color: yellow; border: 1px solid black; padding: 5px; text-align: center;"> WARNING <small>PV ARRAY D.C. ISOLATORS DO NOT DE-ENERGISE THE PV ARRAY AND ARRAY CABLING</small> </div> </div>

Requirement	Checked		
<p>AS/NZS 5139:2019 Clause 7.16 Shutdown procedure</p> <p><i>(Wording needs to be specific to the installed system. As an example, the shutdown procedure for a PV & Battery system could be as shown on the far right.)</i></p> <div data-bbox="691 353 887 555" style="border: 1px solid black; padding: 5px; margin: 10px;"> <p style="text-align: center;">SHUTDOWN PROCEDURE</p> <p style="text-align: center;">INSERT APPROPRIATE STEPS FOR SAFE SHUTDOWN</p> <div style="background-color: yellow; border: 1px solid black; padding: 2px; margin-top: 5px;"> <p style="text-align: center;">WARNING</p> <p style="font-size: 8px;">BATTERY SYSTEM D.C. ISOLATORS DO NOT DE-ENERGISE THE BATTERY SYSTEM AND BATTERY SYSTEM CABLING</p> </div> </div> <div data-bbox="911 282 1227 745" style="border: 1px solid black; padding: 5px; margin: 10px;"> <p style="text-align: center;">SHUTDOWN PROCEDURE</p> <ol style="list-style-type: none"> 1. Turn off the MAIN SWITCH (INVERTER) or INVERTER A.C. ISOLATOR 2. Turn off the MAIN SWITCH (ALTERNATIVE) or ALTERNATIVE SUPPLY A.C. ISOLATOR 3. Turn off the PV ARRAY D.C. ISOLATOR located at the Inverter 4. Turn off BATTERY SYSTEM D.C. ISOLATORS located at the Inverter or Battery <p style="font-size: 8px; margin-top: 5px;">ZYX System installed by ZYX Electrical Phone 0412 345 678</p> <div style="background-color: yellow; border: 1px solid black; padding: 2px; margin-top: 5px;"> <p style="text-align: center;">WARNING</p> <p style="font-size: 8px;">PV ARRAY D.C. ISOLATORS DO NOT DE-ENERGISE THE PV ARRAY AND ARRAY CABLING</p> </div> <div style="background-color: yellow; border: 1px solid black; padding: 2px; margin-top: 5px;"> <p style="text-align: center;">WARNING</p> <p style="font-size: 8px;">BATTERY SYSTEM D.C. ISOLATORS DO NOT DE-ENERGISE THE BATTERY SYSTEM AND BATTERY SYSTEM CABLING</p> </div> </div>			
<p>AS/NZS 4777.1 Clause 6.6 Signs located adjacent to inverter(s)</p>	<div data-bbox="911 763 1227 875" style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="text-align: center;">INVERTER A.C. ISOLATOR</p> </div>		
<p>AS/NZS 4777.1:2024 Clause 6.7 Signs for multiple systems</p>	<div data-bbox="911 898 1227 954" style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px; font-size: 8px;">INVERTER #1 A.C. ISOLATOR</td> <td style="padding: 2px; font-size: 8px;">INVERTER #2 A.C. ISOLATOR</td> </tr> </table> </div>	INVERTER #1 A.C. ISOLATOR	INVERTER #2 A.C. ISOLATOR
INVERTER #1 A.C. ISOLATOR	INVERTER #2 A.C. ISOLATOR		
<p>AS/NZS 4777.1:2024 Clause 6.9 Signs for inverters with substitute supply function</p>	<div data-bbox="911 976 1227 1084" style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <div style="background-color: yellow; border: 1px solid black; padding: 2px;"> <p style="text-align: center;">WARNING</p> <p style="font-size: 8px;">LIMITED POWER OUTPUT ONLY AVAILABLE WHEN GRID POWER IS INTERRUPTED</p> </div> </div>		
<p>AS/NZS 4777.1:2024 Clause 6.10 Signs for portable IES inlet plug</p>	<div data-bbox="911 1106 1227 1214" style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="text-align: center; font-size: 8px;">ISOLATED OUTPUT INVERTER ONLY RCD PROTECTED AND EQUIPOTENTIALLY BONDED INVERTERS SHALL NOT BE CONNECTED</p> </div>		
<p>AS/NZS 5033:2021 Clause 5.5.1 General</p> <p><i>(Sub clause to 5.5 Labelling/Signs for disconnection device)</i></p> <p><i>(This requirement is generally met by the equipment manufacturer.)</i></p>	<div data-bbox="911 1240 1227 1621" style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">  </div>		
<p>AS/NZS 5033:2021 Clause 5.5.2.1 Load break disconnection device</p> <p><i>(PV Array D.C. Isolators: This requirement is generally met by the equipment manufacturer when using external isolators as shown in the image above.)</i></p> <p><i>(WARNING MULTIPLE DC SOURCES: This label is only required where multiple separate load break disconnection devices are installed.)</i></p>	<div data-bbox="935 1749 1238 1854" style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="text-align: center;">PV ARRAY D.C. ISOLATOR</p> </div> <div data-bbox="935 1877 1254 1982" style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto; margin-top: 10px;"> <div style="background-color: yellow; border: 1px solid black; padding: 2px;"> <p style="text-align: center;">WARNING</p> <p style="font-size: 8px;">MULTIPLE D.C. SOURCES TURN OFF ALL D.C. ISOLATORS TO ISOLATE EQUIPMENT</p> </div> </div>		

Requirement	Checked
Wiring System between Inverter and PV Array	
<p>AS/NZS 5033:2021 Clause 5.3.2 Signs for junction boxes containing PV d.c. cable terminations</p>	
<p>AS/NZS 5033:2021 Clause 5.3.1.1 General (Sub clause to 5.3 Labelling/Signs for PV cables and enclosures)</p>	
<p>AS/NZS 5033:2021 Clause 5.3.1.2 In a ceiling space or accessible floor space</p>	
PV Array	
<p>AS/NZS 5033:2021 Clause 5.5.1 General (Sub clause to 5.5 Labelling/Signs for disconnection device) (This requirement is generally met by the equipment manufacturer)</p>	
<p>AS/NZS 5033:2021 Clause 5.5.2.1 Load break disconnection device</p>	
<p>AS/NZS 5033:2021 Clause 5.3.2 Signs for junction boxes containing PV d.c. cable terminations</p>	
<p>AS/NZS 5033:2021 Clause 5.5.2.2 Disconnection point</p>	
Wiring system between Inverter and Battery	
<p>AS/NZS 5139:2019 Clause 7.14 Battery system cables</p>	

Requirement	Checked
Battery System	
<p>AS/NZS 5139:2019 Clause 7.5 Restricted access</p>	
<p>AS/NZS 5139:2019 Clause 7.6 Voltage and current</p>	
<p>AS/NZS 5139:2019 Clause 7.8 Explosive gas hazard</p>	
<p>AS/NZS 5139:2019 Clause 7.9 Toxic fume hazard</p>	

Requirement	Checked
<p>AS/NZS 5139:2019 Clause 7.10 Chemical hazard</p>	
<p>AS/NZS 5139:2019 Clause 7.11 Arc flash</p>	
<p>AS/NZS 5139:2019 Clause 7.12 Disconnection devices</p>	
<p>AS/NZS 5139:2019 Clause 7.12.1 General <i>(Sub clause to 7.12 Disconnection devices)</i> <i>(This requirement is generally met by the equipment manufacturer.)</i></p>	
<p>AS/NZS 5139:2019 Clause 7.12.2 Battery system isolation device</p>	
<p>AS/NZS 5139:2019 Clause 7.12.3 Multiple isolation device</p>	
<p>AS/NZS 5139:2019 Clause 7.12.4 Disconnectors for DVC-B and DVC-C systems <i>(This only applies to Section 6 battery systems)</i></p>	
<p>AS/NZS 5139:2019 Clause 7.13 Overcurrent devices</p>	
<p>AS/NZS 5139:2019 Clause 7.13.1 General <i>(Sub clause to 7.13 Overcurrent devices)</i></p>	
<p>AS/NZS 5139:2019 Clause 7.13.2 Multiple overcurrent devices</p>	
<p>AS/NZS 5139:2019 Clause 7.13.3 Fuse holders</p>	

Requirement	Checked
<p>AS/NZS 5139:2019 Clause 7.19</p> <p>Spill containment</p> <p><i>(This generally only applies to Section 6 Battery systems.)</i></p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>IN THE EVENT OF LIQUID DETECTED IN THE BUND, USE LABELLED SPILL KIT AND PPE TO REMOVE LIQUID. REPORT FAILURE IMMEDIATELY TO SUPPLIER UN: _____</p> </div>