

ASNZS5139:2019 Installation

TN00001

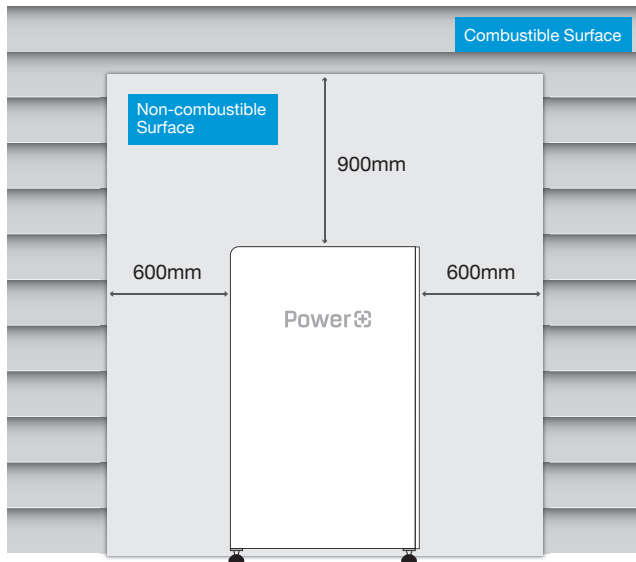


FIGURE ONE: Installation Section 5 and 6

1. The wall needs to be fire rated to AS1530.1 behind the PPE battery cabinet, or to be of brick or masonry block, concrete, cement sheet, ceramic or terracotta tile.
2. Non-combustible material must protrude 600mm past each side and 900mm above the PPE battery cabinet.
3. If PPE battery cabinet is within 900mm of ceiling or structure, then fire rated material 600mm past extremities of PPE battery cabinet must also be fitted above.
4. There must be 600mm unobstructed access each side of PPE battery cabinet and 900mm above.
5. There must be 600mm clearance unobstructed access on the working Side of the PPE battery cabinet when voltage is DVC-A $+>4\text{Cal/cm}^3$.
6. There must be 900mm clearance unobstructed access on the working Side of the PPE battery cabinet when voltage is greater than DVC-A $+>4\text{Cal/cm}^3$.
7. There must be 1metre clearance in front of the PPE battery cabinet in a walkway, corridor or hallway.
8. **Restricted areas:** ceiling space, wall cavities, under stairs, under walkways, in evacuation escape routes, in habitable rooms.
9. **Extra restrictions Section 6 only:** not to be installed under floors of habitable rooms, Fire Hazard Level 1 – not to be installed inside or under building with habitable rooms.

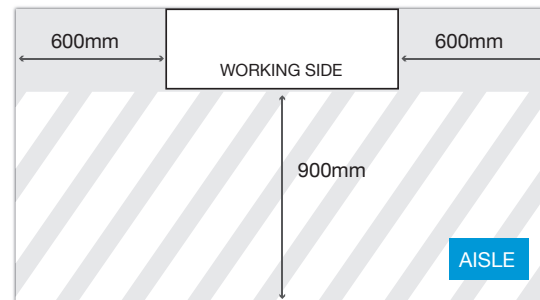


Figure two: Aerial View of Battery Room

FIGURE TWO: Installation Battery Rooms

1. The room must be a clean, dry, ventilated room that minimises the likelihood of build up of other materials around the battery system.
2. The room must minimise or prevent the infestation of insects or vermin.
3. There must be 600mm unobstructed access each side of PPE battery cabinet.
4. There must be 600mm clearance unobstructed access on working side of the PPE battery cabinet when voltage is DVC-A $+>4\text{Cal/cm}^3$.
5. There must be 900mm clearance unobstructed access in front (working Side) of the PPE battery cabinet when voltage is greater than DVC-A $+>4\text{Cal/cm}^3$.
6. There must be minimum 900mm aisle clearance.

Other Notes:

- Associated battery storage equipment (PCE's, wiring etc) can be installed in clearance zone.
- DC isolator is required for each parallel PPE battery cabinet.
- DC isolator must be within 2m of battery terminals and PCE.
- DC isolator at PCE if battery terminals and PCE $>3\text{m}$ apart.
- Switch disconnecter (DC isolator / HRC with DC switch) compliant to AS60947.3.
- Batteries $> \text{VDC-A}$ to be earthed or have earth fault alarm.

Always read AS5139:2019, manufacturer's installation guides/manuals and other applicable standards before designing or installing any equipment.

This technical note is a guide only.