

Generac PWRcell: Installation Compliance Summary

This is a quick reference guide and checklist for installing the Generac ESS. Please consult the Installation manual and abide by all local codes and requirements.

PWRcell Battery, Li-ion (optional)

Product Requirements:

- Installation site is indoors
- Ambient temp remains between 41-113F
- Wall bracket fastened to studs or structure

NFPA 855 Requirements:

- Site is not in living or sleeping space
- 1-2 PWRcell batteries per inverter only
- If installing two PWRcell batteries, site allows for 36" separation between units
- Min. Working space of: 6'6"H x 46"D 30"W per battery
- Interior of space is faced with fire resistant material: Ex. 5/8" type X gypsum board
- Networked fire and heat detection in installation space
- If in garage, impact barrier required
- Impact barrier is outside of working area

PWRcell Inverter

Factory Requirements:

- Located with access for hardwire internet connection
- Wall bracket fastened to studs or structure

NEC Requirements

- If load-side connection: Use 40A back-feed capable breaker for grid connection

Generac PV Links / PV panels

Product Requirements:

- Solar substring $\leq 420V_{oc}$, cold corrected
- Solar substring $\leq 18A I_{sc}$
- Solar substring $\leq 360V_{mp}$
- PV Link's connect to each other in parallel
- Equipment Ground PV links to Inverter
- If using SnapRS, install one per PV module, installed to negative lead of module
- Max. 3 PV links per REbus input on inverter

NEC Requirements

- Max 3 PV links per home run to Inverter on 10ga conductor
- If NEC 2017 or 2020, must use SnapRS

Codes

The following codes apply to the Generac ESS. Generac does not certify this list to be comprehensive or complete. Other requirements may apply to your installation including local requirements.

PWRcell LI-ion battery

- 110.26: Proper Clear Working Space required
- 15.6.2 ESS shall not be installed in living areas of dwelling units or in sleeping units.
- 2018 ICC International Residential Code (IRC) R327.3: ESS not installed in habitable space of a dwelling unit.
- ETL listed to UL 9540: Safety of ESS
- ICC IRC Section R314 smoke alarms NFPA72 shall be UL 217 and 2034
- ICC IRC- R314: Interconnection of alarms required, combination alarms and power source.
- NEC 480 Emergency disconnect
- NEC 705: Disconnecting means from source
- NEC Article 480: Storage Batteries
- NEC Article 706: Energy Storage Systems
- NFPA 855 15.10: Protection from Impact
- NFPA 855- 15.7: Energy Ratings.
Individual ESS units shall have a maximum stored energy of 20 kWh.
- NFPA 855-15.7.1: The aggregate rating (kWh) amount within a dwelling unit, garage, or accessory structure
- NFPA 855-15.9.1 Networked smoke alarms
- NFPA 855-15.9.2: ESS smoke and heat alarms interconnectivity.
- NFPA 855, Chapter 15: New Standard (2020) Covers the installation and use of Energy Storage Systems, residential

PV Links and Array

- NEC 2017 and 2020: 690.12: Rapid Shutdown of PV Systems on Buildings. 690.12(A) -(D)
- NEC 690.11 Arc-Fault Circuit Protection requirements for DC

PWRcell Inverter/AC circuits

- NEC Article 705, Interconnected Electric Power Production Sources
- NFPA 855 3.3.21 Utility Interactive.
- NEC 2017- 705.12: Supply and load side connections, breaker fastening, Sum rule, Center fed panels, 120% and 125% rule.
- NEC 2020- 705.11: Source side connections
- NEC 2017-705.20: Disconnect means, sources
- NEC 705.22: Disconnect device for AC breaker
- NFPA 855-15.4: Commissioning the system
- California Rule 21- Beacon PWRview TOU Enabling Grid compliance settings

Other considerations

- NEC - Article 100: "Qualified Person"
- State licensing requirements for solar contractors -<https://irecusa.org/workforce-education/training-resources/solar-licensing-database/>
- Registering PWRcell ESS: register.generac.com