

Building and Safety Permit Service Center

All plans must be submitted in electronic format as an unsecured, flattened PDF with embedded fonts. Minimum 11"x17" sheet size.

This checklist is intended to provide information and improve consistency in local application and enforcement of the California Building Code requirements as they may apply to this project.

Numbers in parenthesis refer to code sections of the 2022 edition of the California Residential Code (CRC), California Electrical Code (CEC), California Mechanical Code (CMC), California Plumbing Code (CPC), California Energy Code (CEnC) and California Green Building Standards Code (CGBSC).

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Code Compliance Checklist ENERGY STORAGE SYSTEMS

Project Information

Permit #:

Project Address:

Permit Submittal Requirements

Schematic Site Plan showing building footprint(s) with distances to property lines, parking area(s), location of the electrical service/subpanels, and any existing and proposed solar photovoltaic system and energy storage system(s). The site plan shall also contain project information (i.e. project address, owner's information, scope of work statement), applicable codes (and editions), and signature by the document author.

Floor Plan (Existing and Proposed) showing location of energy storage system. Energy storage system shall not be installed within the habitable space. Installations in a location subject to vehicle damage shall be protected by approved barriers.

Electrical Plan showing the complete single line diagram of the energy storage system (ESS), any PV and utility interconnection, existing service size and number of meters, size/type/insulation ratings (voltage, temperature, etc.) of all conductors and associated wiring components, markings & labeling.

Permanent plaque or directory denoting all electric power sources on or in the premises at the service equipment location.

Manufacturer's Specification Sheets with make, model, listing, size, and weight for all components and structural connection details. Grounding method used must comply with installation manual requirements.

Residential Code Requirements

Equipment listings: Energy storage systems shall be listed and labeled with accordance with UL 9540. [CRC R328.3]

Individual units shall be separated from each other by not less than 3 feet except where smaller separation distances are documented to be adequate based on large-scale fire testing complying with UL 9540A. [CRC R328.3.1 and CFC 1207.1.5]

Installation: Stationary storage battery systems shall be installed in accordance with the manufacturer's instructions and their listing. [CRC R328.3]

Location: ESS shall be installed only in the following locations: [CRC R328.4]

- (1) Detached garages and detached accessory structures.
- (2) Attached garages separated from the dwelling unit living space in accordance with CRC R302.6.
- (3) Outdoors or on the exterior side of exterior walls located not less than 3 feet from doors and windows directly entering the dwelling unit.
- (4) Enclosed utility closets, basements, storage or utility spaces within dwelling units with finished or noncombustible walls and ceilings. Walls and ceilings of unfinished wood-framed construction shall be provided with not less than 5/8-inch Type 'X' gypsum wallboard.

ESS shall not be installed in sleeping rooms, or closets or spaces opening directly into sleeping rooms or in habitable spaces of dwelling units.

Energy Rating: Individual ESS units shall have a maximum rating of 20 kWh. [CRC R328.5]

Protection From Impact: Energy storage systems installed in a location subject to vehicle damage shall be protected by approved barriers. [CRC R328.8]

ELECTRICAL CODE REQUIREMENTS:

Qualifications of Installer: The installation and maintenance of ESS equipment and all associated wiring and interconnections shall be performed only by qualified persons. [CEC 706.3]

Dwelling Units: An ESS for dwelling units shall not exceed 100 volts between conductors or to ground. [CEC 706.20(B)]

Disconnecting means: A disconnecting means shall be provided for all ungrounded conductors derived from an ESS and shall be permitted to be integral to listed ESS equipment. The disconnecting means shall comply with all of the following: [CEC 706.15(A)]

- (1) The disconnecting means shall be readily accessible.
- (2) The disconnecting means shall be located within sight of the ESS.
- (3) The disconnecting means shall be lockable open in accordance with CEC 110.25.

Notification and Marking: The disconnecting means shall be plainly indicating whether it is in the open (off) or closed (on) position and be permanently marked "ENERGY STORAGE SYSTEM DISCONNECT." The disconnecting means shall be legibly marked in the field to indicate the following: [CEC 706.15(C)]

- (1) Nominal ESS AC voltage and maximum ESS DC voltage.
- (2) Available fault current derived from the ESS.
- (3) An arc-flash label applied in accordance with acceptable industry practice.
- (4) Date the calculation was performed.

Partitions Between Components: Where circuits from the input or output terminals of energy storage components in an ESS pass through a wall, floor, or ceiling, a readily accessible disconnecting means shall be provided within sight of the energy storage component. Fused disconnecting means or circuit breakers shall be permitted to be used. [CEC 706.15(D)]

Space About ESS Components: Working spaces for ESS shall comply with CEC 110.26 and 110.34. [CEC 706.20(C)(1)]

Directory: A permanent plaque or directory denoting all electric power sources on or in the premises shall be installed at each service equipment location and at locations of all electric power production sources capable of being interconnected. [CEC 110.21(B), 706.21, 705.10 and 712.10]

Overcurrent Protection: Overcurrent protective devices, where required, shall be rated in accordance with CEC 240 and the rating provided on systems serving the ESS and shall be not less than 125 percent of the maximum currents calculated in CEC 706.31(B).

Additional:

I certify that I have read and acknowledged all of the Code Requirements noted above. I accept full responsibility for complying with all of the above requirements, as applicable to my project. I further agree that if I fail to comply with the code requirements, due to error or omission, I will correct all deficiencies prior to final inspection.

Name		Signature	Date	
Chec	ck One:	Contractor	Owner	Owner's Agent