



New ESS Guidelines **Effective December 9, 2022**

1. These rules and regulations apply to ESS installed in one- and two-family dwellings or townhouse units.
2. All ESS installations over 1kWh require permits from the local building department and local fire department.
3. ESS shall only be installed in the following locations:
 - In attached garages separated from the dwelling unit living area and sleeping units in accordance with the local building code.
 - In detached garages and detached accessory structures.
 - In enclosed utility closets and storage or utility spaces.
4. ESS installed in enclosed utility closets, storage, or utility spaces is permitted only where the enclosed utility closet, storage, or utility space does not open into a sleeping area. *Exception: Buildings provided throughout with an automatic fire sprinkler system complying with NFPA 13D, 13R, or 13.*
5. ESS shall only be installed in garages and in basement spaces that are not used for living or sleeping purposes. ESS shall not be installed in closets or spaces opening directly into sleeping rooms.
6. If the room or space where the ESS is to be installed is not finished, the walls and ceilings of the room or space shall be protected with not less than 5/8" Type X gypsum board. *Exception: If the walls are constructed of concrete or concrete block, the requirement for Type X gypsum board is waived.*
7. All sheetrock seams shall be fire-taped and all penetrations to the space shall be fire-caulked.
8. The door to the ESS space shall be a minimum 1-3/8" thick solid wood or an equivalent one hour rated door.
9. The plans and specifications associated with an ESS and its intended installation, replacement or renewal, commissioning, and use shall be submitted to the AHJ for approval and include the following:
 - Location and layout diagram of the room or area in which the ESS is to be installed.
 - Details on wall construction for rooms or areas where ESS are installed.
 - The quantities and types of ESS units.
 - Manufacturer's specifications, ratings, and listings of ESS.
 - Description of energy storage management system and their operation.

- Location and content of required signage.
 - Details on fire suppression, smoke or fire detection, gas detection, thermal management, ventilation, exhaust, and deflagration venting systems, if provided.
 - Support arrangement associated with the installation, including any required seismic support.
 - Description of scope of work for retrofit or repairs of ESS.
10. Individual ESS units shall be separated from each other by a minimum of 3 ft. unless smaller separation distances are documented to be adequate as approved by the AHJ, based on large-scale fire testing complying with 4.1.5.
11. The immediate location where the ESS is to be installed shall have a hard-wired smoke detector which is interconnected with other smoke detectors in the dwelling.
12. If the ESS is installed in an unheated garage, a hard-wired heat detector shall be installed and interconnected with the dwelling's existing smoke detector system.
13. An ESS installed in a garage shall be protected by protective barriers such as bollards.
14. The area where the ESS is installed shall have a permanent light fixture operated by either a wall switch or integral pull chain switch.
15. ESS should not be located under any water, drain, or sewage pipe, regardless of PVC or metal pipe, to protect the electrical equipment from water damage.
16. ESS installed in one- and two-family dwellings and townhouses shall be commissioned as follows:
- Verify that the system is installed in accordance with the approved plans and manufacturer's instructions and is operating properly.
 - Provide a copy of the manufacturer's installation, operation, and maintenance instructions with the listed system.
 - Provide training on the proper operation and maintenance of the system to the system owner.
 - Provide a label on the installed system containing the contact information for the qualified maintenance and service providers.
17. Individual ESS units shall have a maximum stored energy of 20 kWh.
18. The aggregate rating amount within a dwelling, garage or accessory structure shall not exceed the following:
- 40 kWh within utility closets and storage or utility spaces
 - 80 kWh in attached or detached garages and detached accessory structures
 - 80 kWh on exterior walls
 - 80 kWh in outdoor installations