

Seattle Fire Prevention Division

220 3rd Avenue South
Seattle, WA 98104-2608
SFD_FMO_PlanReview@seattle.gov



Energy Storage Systems – Code and Permit Requirements in Seattle

Due to the dangers inherent in many energy storage system (ESS) technologies, the Seattle Fire Code (SFC) and the Seattle Electrical Code (SEC) regulate installation of ESS. Power walls or solar photovoltaic installations in a one- or two-family residential setting do not require an SFD permit. Most other energy storage systems need an SFD permit. These systems also require an electrical permit from the Seattle Department of Constructions and Inspections (SDCI).

What are the current installation requirements for the Seattle Fire Department permit?

The Seattle Fire Code provides tables that differentiate requirements between technology types reflecting specific hazards present in each technology. Most ESS will require fire detection and suppression, venting, fire rated walls, and placarding, depending on the capacity and technology of the ESS.

If you are preparing project submittal documents, please be aware that the Seattle Fire Department has already adopted provisions from the 2021 and 2024 International Fire Code (IFC) for permitting energy storage systems. These changes took effect with [SFD Administrative Rule 12.01.2022](#) on October 1, 2022, and apply to all projects with an electrical or construction permit application date that is on or after this date.

Because provisions from the 2021 IFC are in effect in Seattle, explosion protection is now required for several types of energy storage systems, depending on the type of battery technology and the capacity. Separations between lithium-ion batteries are also required in many instances. [Administrative Rule 12.01.22](#) also brought forward 2021 and 2024 IFC provisions for annual testing, mitigation and monitoring by the owner in situations of reignition, and a few additional modifications to the 2018 IFC tables and requirements, for example for sprinkler density and fire-rated walls. If you wish to install an ESS that exceeds maximum allowable quantities in the code, a third-party hazard mitigation plan and live fire testing are also required.

Seattle has pre-adopted these requirements from the 2021 IFC and 2024 IFC to provide the most up to date code protections to our residents and our firefighters with respect to these quickly evolving technologies.

Additional Resources To Prepare for Project Submittal

Seattle Fire Department [permit applications](#) and [permit conditions](#) are both available once you search on the relevant permit code. Permit Code 6401-Install “*Installation of Battery Systems*”, 1206-Install “*Installation of Capacitor Energy Storage Systems*”, or 1207-Install “*Installation of Stationary Fuel Cell Systems*”. The permits are inspected by SFD’s Special Hazards Unit.

Current Seattle Fire Code requirements available in [SFD Administrative Rule 12.01.2022](#).

Electrical permits: [Seattle Services Portal](#). The permit review includes plan review by the Seattle Fire Department and inspection from an electrical inspector.