

WHAT CONTRACTORS NEED TO KNOW BEFORE INSTALLATION

BFFR FIRE-SIDE REVIEW

Black Forest Fire Rescue reviews the fire-service and life-safety portions of Solar PV and Energy Storage System projects routed through the permit process. PPRBD remains responsible for the building/electrical permit functions within its authority. BFFR review is based on the adopted 2021 IFC, applicable residential provisions, approved plans, equipment listings, manufacturer instructions, and BFFR project conditions.

SOLAR PV - COMMON FIRE REVIEW ITEMS

Roof access and pathways

Keep required firefighter roof pathways and access areas open. Do not move modules into a required pathway or ridge setback shown on the approved plans.

Emergency escape openings

Do not block required bedroom emergency escape/rescue openings or the access area needed to reach them.

Rapid shutdown and disconnects

Install the required rapid-shutdown and PV disconnecting means in the approved locations. Keep them accessible and permanently identified.

Labels and directory

Required PV, service, disconnect, inverter and rapid-shutdown labels must be installed, durable, legible and visible after construction is complete.

Array layout

The installed module layout, inverters, combiners and related equipment must match the approved plan. Field relocations can create fire-service access problems.

Ground-mounted systems

Do not obstruct apparatus access, hydrants, gates, fire lanes, service equipment, emergency controls or other approved emergency access.

BEFORE YOU MOVE EQUIPMENT OR CHANGE THE ARRAY

Confirm the revised layout with the reviewing agencies before installation. A code-compliant product can still create a noncompliant installation if it blocks required firefighter access or is placed differently from the approved plan.

ENERGY STORAGE SYSTEM (ESS) - COMMON FIRE REVIEW ITEMS

Listing and approved equipment

Use the ESS manufacturer/model shown on the approved permit documents. Equipment must be listed and installed in accordance with its listing and manufacturer instructions.

Location

Install the ESS only in an approved location. Residential and commercial systems may have different allowed locations and room/enclosure requirements.

Separation and clearances

Maintain required spacing from other ESS units, doors, windows, openings, combustible construction and other equipment unless an approved design or test basis allows otherwise.

Vehicle impact protection

Where ESS equipment is exposed to vehicle impact, provide the approved bollard, barrier, curb, protected location or other approved protection.

Detection and ventilation

Provide smoke/heat detection, fire-alarm connection, ventilation or other safeguards when required by the approved plans, code, listing, or battery chemistry.

Shutdown, signage and emergency information

Required disconnects, shutdown controls, hazard labels, battery signage and emergency instructions must be accessible, permanent and visible.

Large or commercial ESS

Large-capacity, unusual-chemistry, or commercial systems can require commissioning, hazard-mitigation analysis, UL 9540A or other test information, detection/suppression, ventilation, emergency planning or other project-specific review.

BFFR SUBMISSION / PAYMENT PROCESS

- Submit the PPRBD permit number, approved plans, applicable equipment information, and the completed BFFR contractor inspection pages.
- Current BFFR review / inspection fees used for this process: Solar PV \$275; ESS \$275; Solar + ESS \$550; reinspection \$200 when applicable.
- BFFR final approval is not posted until the applicable payment, documents, corrections, and inspection requirements are complete.
- Current forms and information: www.bffire.org/fire-prevention-compliance/ | Questions: 719-495-4300.