

SOLAR PV & ESS CONTRACTOR INFORMATION

Read Before Ordering Equipment or Beginning Installation

BFFR REVIEW REQUIRED

Solar photovoltaic (PV) and Energy Storage System (ESS) permits routed through Pikes Peak Regional Building Department may require BFFR fire-code review, the applicable BFFR fee, and a BFFR final inspection before the fire-district permit hold can be released.

CURRENT BFFR FEE	SOLAR PV	ESS	REINSPECTION
Fire-code review / inspection	\$275	\$275	\$200 when applicable

HOW THE BFFR PROCESS WORKS

1	Permit referral PPRBD routes the Solar PV and/or ESS permit to BFFR or the contractor contacts BFFR when directed.
2	BFFR review BFFR reviews the submitted permit plans for firefighter access, emergency controls, equipment location, required markings, and other applicable fire-code provisions.
3	Fee / invoice The applicable BFFR Solar PV or ESS fee is invoiced and must be paid as directed.
4	Install to approved plans Do not relocate equipment, reduce required access, or change the approved system layout without approval from the appropriate reviewing authority.
5	Final inspection / release When the installation is complete, contact BFFR if a final fire inspection is required. The BFFR hold remains until applicable review, payment, and inspection requirements are complete.

SOLAR PV - WHAT CONTRACTORS SHOULD CHECK

Key fire-safety items

- Roof access and pathways: Rooftop arrays must preserve required firefighter access, pathways, and spacing. Keep pathways over roof areas capable of supporting firefighter operations and avoid obstructions such as vents, conduit, and mechanical equipment.
- Residential roof layout: Where the residential code applies, array layout must maintain the required roof access, ridge clearances, and access to emergency escape and rescue openings.
- Rapid shutdown and disconnects: Required PV shutdown and disconnecting means must be installed, accessible, and clearly identifiable for emergency responders.
- Labels and markings: Required PV system, disconnect, rapid-shutdown, service, and warning labels must be permanently installed and legible.
- Equipment placement: Inverters, combiner equipment, disconnects, conduit, and other components must not obstruct required firefighter access or emergency openings.
- Approved plans: The installed array and emergency-control locations should match the approved permit documents.

Code basis includes the locally adopted 2021 IFC Chapter 12 and applicable 2021 IRC Section R324 provisions, along with NFPA 70 and approved manufacturer instructions.

ENERGY STORAGE SYSTEMS (ESS)

Key fire-safety items

- Listing and installation: Residential ESS is generally required to be UL 9540 listed and installed to its listing, manufacturer instructions, approved plans, and applicable electrical requirements.
- Location: Install ESS only in code-permitted locations. Residential ESS is not permitted in sleeping rooms or spaces opening directly into sleeping rooms.
- Separation and capacity: Maintain required unit separation unless an approved listing or large-scale fire-test basis allows less. Systems exceeding residential energy limits are reviewed under the IFC ESS provisions.
- Detection / protection: Smoke detection, impact protection, ventilation, enclosure protection, or other safeguards may be required based on the location and system design.
- Emergency controls: Disconnects, shutdown controls, warning labels, and emergency operating information must be accessible and clearly identified.
- Large or commercial ESS: Additional IFC 1207 requirements may include fire testing, hazard mitigation, emergency planning, separation, suppression, detection, ventilation, or other project-specific provisions.

Code basis includes the locally adopted 2021 IFC ESS provisions and applicable 2021 IRC Section R328 provisions, along with NFPA 70, the equipment listing, and manufacturer instructions.

BE READY BEFORE REQUESTING BFFR FINAL INSPECTION

Inspection readiness

- Installation is complete and matches the approved permit plans.
- Required labels, placards, shutdown markings, disconnect identification, and PV roof access/pathways are complete.
- ESS location, separation, protection, and emergency controls are complete.
- Any prior BFFR corrections have been completed.
- The applicable BFFR fee has been paid and the permit number is available.

COMMON REASONS A BFFR HOLD IS NOT RELEASED

- Required BFFR fee or permit information is incomplete.
- Solar PV roof access/pathways or emergency-control markings are incomplete.
- ESS location, separation, protection, or shutdown requirements are incomplete.
- Required BFFR inspection has not passed or corrections remain outstanding.

BFFR CONTRACTOR INFORMATION

Black Forest Fire Rescue Protection District | Fire Prevention & Compliance
Phone: 719-495-4300 | Email: admin@bffire.org
Website: www.bffire.org/fire-prevention-compliance/

Before making changes: Contact BFFR if the approved plans, equipment location, system size, or fire-safety features change. Project-specific requirements are determined by the adopted codes, approved plans, BFFR review, and the applicable electrical/building authorities.

Reference summary: 2021 IFC Chapter 12; 2021 IRC Sections R324 and R328; NFPA 70; approved construction documents; equipment listings; and manufacturer instructions. This handout does not replace the adopted code or project-specific BFFR determinations.