# Jurisdictional Residential Solar Codes & Standards

In an effort to bring consistency and maximize effective firefighting operations, Bennett-Watkins Fire Rescue (BWFR) has jurisdictional specifications for residential solar installation. These specifications are based on national standards which are adopted locally and best practices as outlined in the International Fire Code. These specifications are applied within all areas on BWFR’s jurisdiction, referred to as the “District”, and shall apply to all new construction, replacement, and maintenance of residential solar arrays.

## Solar Panel Installation Information 2018 IFC Code Adoption

Adams County, the Town of Bennett, and Bennett-Watkins Fire/Rescue have all adopted the 2018 International Fire Code. There are some changes and requirements related to solar panel installations that come along with the code adoption. We have summarized what the code requires below:

- No fewer than two – 3-foot pathways up the rakes with at least one being on the front, or driveway side of the structure.
- 18” across the ridge on both sides if the solar panels occupy less than 33% of the plan view of the total roof area. If it is more than 33% then the ridge dimension is 3’ of clear space on each side of the ridge.
- No solar panels can be installed below an emergency escape or rescue access (i.e. a bedroom widow).
- The 2018 code does not address hips and valleys. For fire operations and consistency – we will be using the 18” of clearance on each side of the hip or valley.
- Also new is the section of IFC code below pertaining to labeling:

1204.5.1 Rapid shutdown type. The type of solar photovoltaic system rapid shutdown shall be labeled with one of the following:

1. For solar photovoltaic systems that shut down the array and the conductors leaving the array, a label shall be provided. The first two lines of the label shall be uppercase characters with a minimum height of 3/8 inch (10 mm) in black on a yellow background. The remaining characters shall be uppercase with a minimum height of 3/16 inch (5 mm) in black on a white background. The label shall be in accordance with Figure 1204.5.1(1) and state the following:

**SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN. TURN RAPID SHUTDOWN SWITCH TO THE “OFF” POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN ARRAY.**
2. For photovoltaic systems that only shut down conductors leaving the array, a label shall be provided. The first two lines of the label shall be uppercase characters with a minimum height of 3/8 inch (10 mm) in white on a red background and the remaining characters shall be capitalized with a minimum height of 3/16 inch (5 mm) in black on a white background. The label shall be in accordance with Figure 1204.5.1(2) and state the following:

**THIS SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN. TURN RAPID SHUTDOWN SWITCH TO THE “OFF” POSITION TO SHUT DOWN CONDUCTORS OUTSIDE THE ARRAY. CONDUCTORS WITHIN ARRAY REMAIN ENERGIZED IN SUNLIGHT.**

As always – if you have something that does not quite “fit”, please contact us directly and we can discuss appropriate solutions.

Please contact our office if you have additional questions. Thank you,
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**About the International Fire Code (IFC)**

Bennett-Watkins Fire Rescue, Adams County, or the Town of Bennett adopts fire code by resolution or ordinance. The current adopted code can be found in the District’s website. A free online version of the IFC can be found on the International Code Council website. For questions about any of these code requirements visit our website at www.BennettFireRescue.org or contact the Department’s Life Safety Division at LifeSafety@BennettFireRescue.org or (303) 644-3572.