

SUBMITTAL GUIDELINES FOR COMPLIANCE WITH THE ADOPTED  
2018 INTERNATIONAL FIRE CODE (IFC) AND 2018 INTERNATIONAL  
RESIDENTIAL CODE (IRC) PROVISIONS PERTAINING  
TO RESIDENTIAL SOLAR SYSTEM INSTALLATION  
CITY OF GOLDEN FIRE DEPARTMENT • BUILDING DIVISION

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Changes to the International Fire Code (IFC) and International Residential Code (IRC) pertaining to residential solar installations were designed to provide general electrical hazard a safety and relative safe roof access for fire fighters should it become necessary to perform manual ventilation by cutting one or more holes, generally at the highest point of the roof area, during a fire event.

The City of Golden recognizes the paramount importance of fire fighter and homeowner safety, while also seeking a balance with various factors of importance in our community, including but not limited to:

- Efforts to meet Renewable Energy goals under the City of Golden sustainability initiative
- Homeowner demand for photovoltaic (PV) solar power systems
- Economic imperatives of local businesses engaged in the sale and installation of PV solar systems

Homeowners and contractors seeking a City of Golden permit for solar installation have two options regarding the site plan required with a permit application packet for a rooftop installation on a surface with greater than 2:12 pitch:

1. **Prescriptive Compliance.** Submit a scaled or dimensioned site plan and roof plan reflecting compliance with the prescriptive requirements of section 1204 of the adopted 2018 IFC and section 324 of the IRC, specifically noting the following characteristics:
  - For homes with hip roof layout, single 3' wide clear access pathway, located at a structurally strong location capable of supporting the live load of fire fighters, from the eave to the ridge on each roof slope where modules are located.
  - For homes with hip and valley layout, modules located no closer than 18" to any hip or valley when modules are placed on both sides of the hip or valley.
  - For homes with single-ridge layout, two 3' wide clear access pathways, located at structurally strong locations capable of supporting the live load of fire fighters, from the eave to the ridge on roof slope where modules are located.
  - Markings for all solar PV systems as required.
2. **Alternate Methods & Materials Compliance.** Submit a scaled or dimensioned site and roof plan **along with a request for an approval of *Approved Materials And Equipment*** in accordance with section 104.9 of the adopted 2018 IFC, to be considered on a case-by-case basis. The site plan must illustrate the following:
  - Label the location of surrounding streets, alleys and overhead power lines.

- Identify the safe and practicable primary and secondary access points for ground and/or truck ladders.
- Identify potential egress options.
- Indicate surrounding topography, especially with impact to truck and ground ladder placement.
- Label the location of fire truck access.
- Specify the highest point of roof ridge lines for likely ventilation locations supported by structural roof members.
- Show locations of rooftop hips, valleys and ridge lines with identified roof access pathways from these areas to where modules are located.
- Identify the existence of contiguous or multiple attic spaces.
- Show markings for all solar PV systems as required.

The main goal of the site plan is to illustrate an alternate plan for fire fighters to conduct safe approach to the structure and provide the best possible outcome for fire fighters, as well as homeowners and local businesses. Incomplete site plans will be returned for revision. Seeking the Alternate Methods and Materials dispensation may create delays in the review of permit application.