

City of Grand Prairie Fire Department Code Regulations

Residential Solar Panels

Many residents are installing solar panels on their rooftops to generate electricity, known by the Code as "photovoltaic (PV) panels". "Building-integrated photovoltaic (BIPV)" systems incorporate technology into the construction of buildings.

The City of Grand Prairie has adopted the 2021 *International Residential Code* (IRC), which contains the following requirement:

R324.6 Roof access and pathways. Roof access, pathways, and setback requirements shall be provided in accordance with Sections R324.6.1 through R324.6.2.1. Access and minimum spacing shall be required to provide emergency access to the roof, to provide pathways to specific areas of the roof, provide for smoke ventilation opportunity areas, and to provide emergency egress from the roof.

Exceptions:

- 1. Detached, nonhabitable structures, including but not limited to detached garages, parking shade structures, carports, solar trellises and similar structures, shall not be required to provide roof access.
- 2. Roof access, pathways, and setbacks need not be provided where the code official has determined that rooftop operations will not be employed.
- 3. These requirements shall not apply to roofs with slopes of 2 units vertical in 12 units horizontal (17-percent slope) or less.
- 4. BIPV systems *listed* in accordance with Section 690(B)(2) of NFPA 70, where the removal or cutting away of portions of the BIPV system during fire-fighting operations has been determined to not expose a firefighter to electrical shock hazards.

The Fire Marshal, who is the code official for this requirement, has determined that rooftop operations will not be employed on residential buildings with PV panels installed, and therefore this requirement can be excepted.

The 2021 IRC can be viewed in its entirety at: https://codes.iccsafe.org/content/IRC2021P2

All other requirements must be met, but this is the only one that deals specifically with fire prevention and mitigation.

Homes protected by automatic fire sprinkler systems are allowed smaller setbacks as well as a host of other cost-saving exceptions and conveniences.