

COMMERCIAL LIABILITY

ROOFTOP SOLAR PANELS CAN COMPLICATE BUILDING FIRES

WHILE SOLAR technology can provide significant long-term benefits for commercial property owners, they should also understand how these systems can affect fire safety.

Solar panels do not frequently cause fires on their own. However, when a fire occurs, the presence of a rooftop solar array can complicate firefighting efforts and increase the severity of the loss.

As insurers encounter more claims involving solar-equipped buildings, many are paying closer attention to how these systems are installed and maintained.

How they interfere with firefighting

Fires often require firefighters to quickly access rooftops, ventilate buildings and locate hidden fire conditions. Solar arrays can interfere with these efforts in several ways:

- Panels continue producing electricity when exposed to light, even after power is shut off.
- Large arrays can limit roof access and reduce available work areas for firefighters.
- Panels may block ventilation openings used to release smoke and heat.
- The area beneath panels can allow fire to spread across a roof.
- Solar equipment can interfere with thermal imaging and efforts to locate hot spots.
- The added weight of panels can affect structural stability during a fire.
- Burning components and battery systems may produce toxic smoke and hazardous gases.

Installation and maintenance

Most solar systems are safe when installed correctly. However, poor workmanship, incompatible electrical components, damaged connectors and inadequate maintenance can create additional hazards.

Steps to reduce the risk

- Hire qualified, certified solar installers.
- Ensure systems has rapid-shutdown capabilities.
- Maintain adequate roof access and firefighter pathways.
- Clearly label disconnect switches and electrical equipment.
- Remove debris that accumulates beneath panels.

One of the most effective steps commercial property owners can take is to work with the local fire department before installation begins.

Large building owners should consider inviting the fire department to review installation plans and develop a firefighting strategy before the project is completed. Sharing information about roof layouts, equipment locations, shutoff procedures and access points can help emergency responders prepare for a possible future incident.

Written emergency procedures should also clearly identify who is responsible for shutting down solar equipment and communicating with first responders.

The takeaway

If you are considering solar panels for your commercial property, please call us to discuss your plans. If you can show your insurer that you've taken steps to mitigate damage should a fire occur, you may positively affect your insurance rates.

