



SOUTHERN COLORADO  
**BUILDING**  
DEPARTMENT

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# ACCESS PATHWAYS AND SETBACKS



# Access Pathways and Setbacks

The following information is based on **2021 International Residential Code (IRC)**

**First version, December 2020**

**Section R324 Solar Energy Systems**

**Subsection 6 Roof Access and Pathways**

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Visit the International Code Council for the most current version of the IRC: <https://codes.iccsafe.org/>

## Roof access and pathways (R324.6)

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. *See code text for four exceptions.*

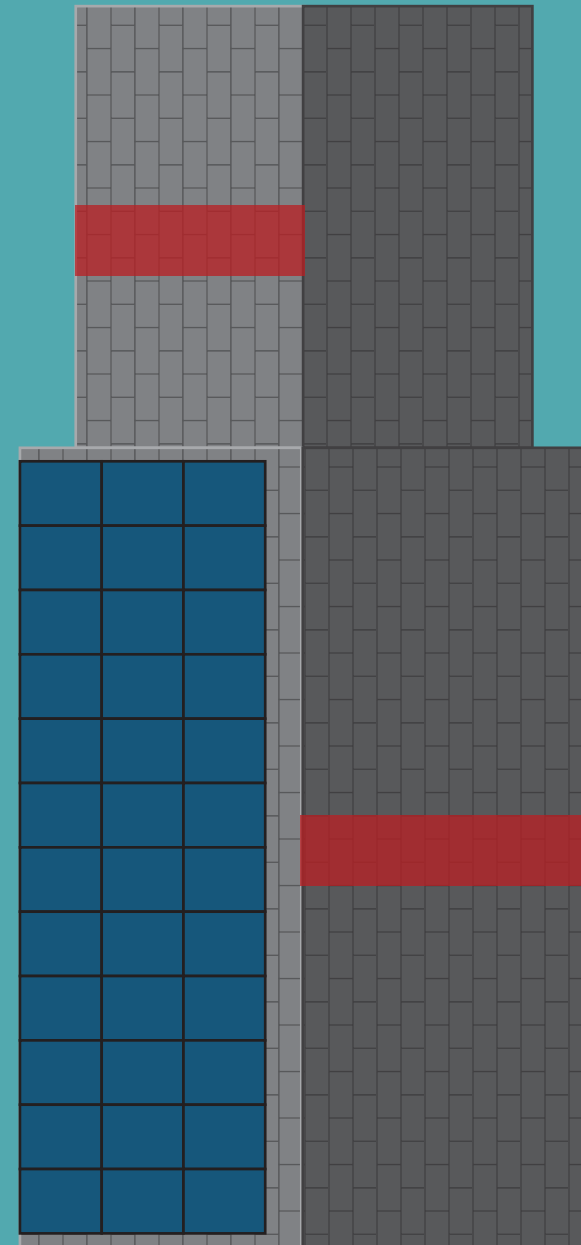
### Pathways

Regardless of the size of the array, there must be pathways from the lowest roof edge to the ridge on each roof plane.

### Pathways to Ridge and Street Access (R324.6.1)

All buildings must be provided with at least two pathways on each roof plane, from the lowest roof edge to the ridge. The pathways must be:

- at least 36 inches (914 mm) wide
- be over areas capable of supporting firefighters accessing the roof
- located in areas with minimal obstructions, such as vent pipes, conduit, or mechanical equipment.



# Setbacks at Ridge

## Setbacks for a dwelling with no sprinklers (R324.6.2)

For PV arrays occupying **less than 33%** of the total roof area:

- A minimum 18-inch clear setback is required on both sides of a horizontal ridge

For PV arrays occupying **more than 33%** of the total roof area:

- A minimum 36-inch clear setback is required on both sides of a horizontal ridge

## Alternative setback at ridge for a dwelling with an automated sprinkler system (R324.6.2.1)

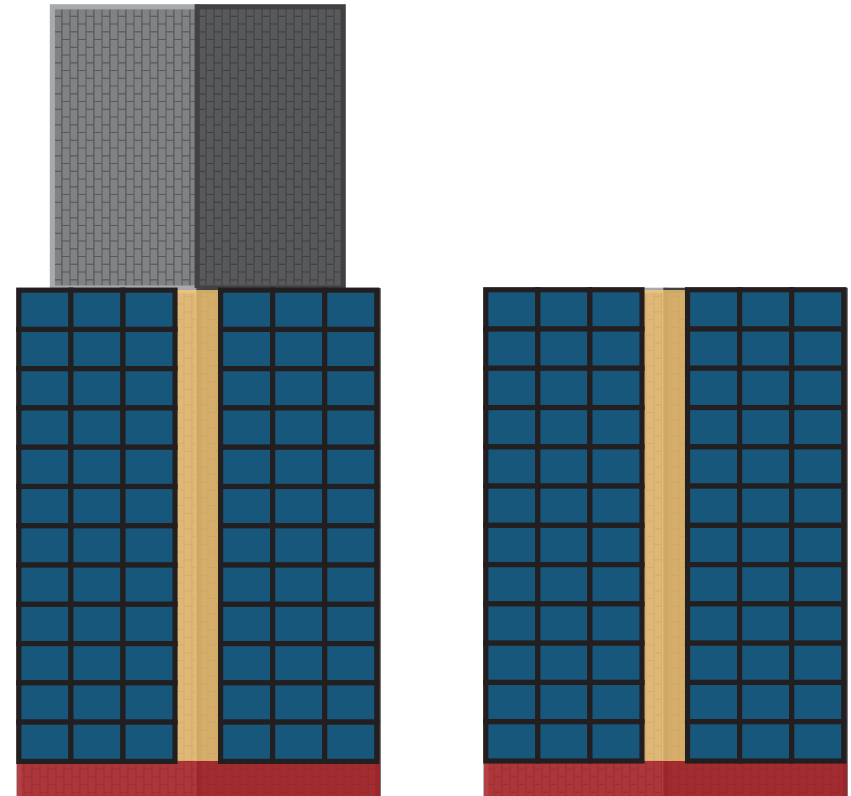
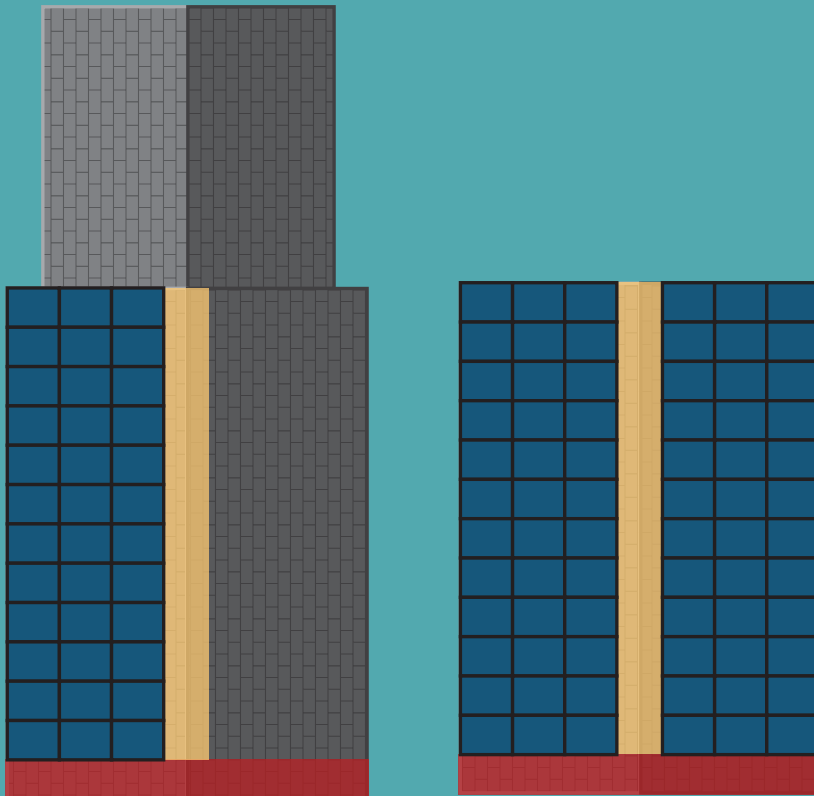
For PV arrays occupying **not more than 66%** of the total roof area:

- A minimum 18-inch clear setback is required on both sides of a horizontal ridge

For PV arrays **greater than 66%** of the total roof area:

- A minimum 36-inch clear setback is required on both sides of a horizontal ridge

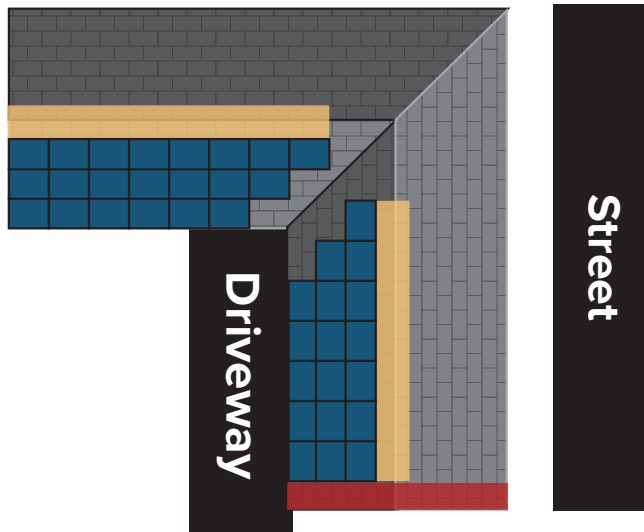
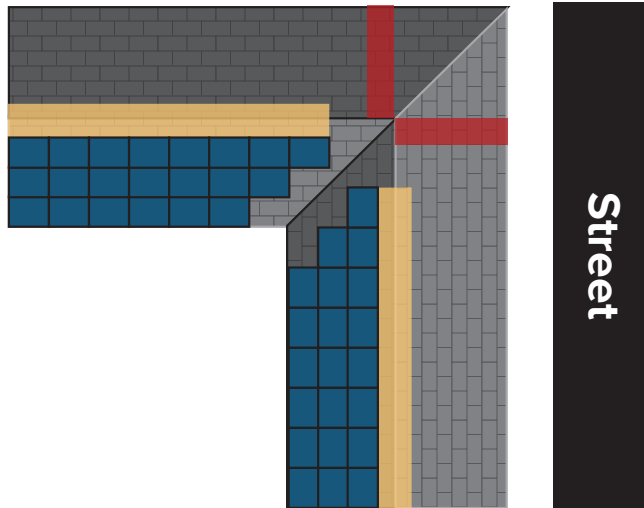
The distance the array must be setback from the ridge depends upon 1) if the dwelling has an automated sprinkler system and 2) the size of the array with respect to the area of the roof.



# Hips and Valleys

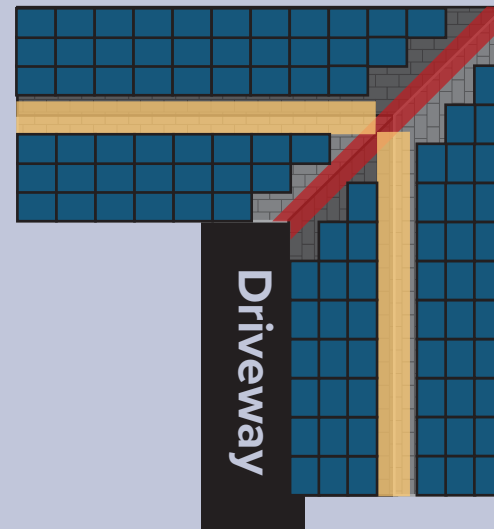
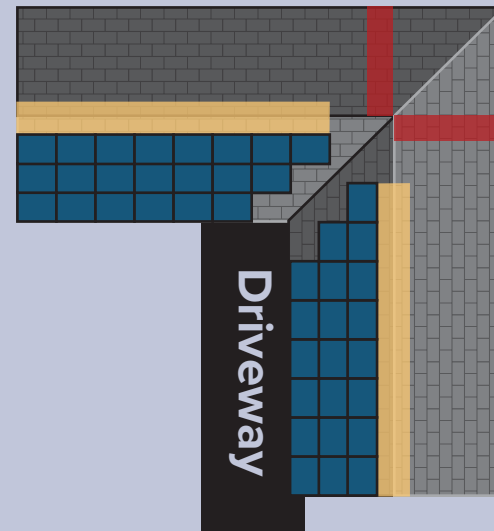
Dwellings with a hip and valley roof are subject to the same code requirements. Below are some ways to visualize compliance.

Not fewer than one pathway shall be provided on the street **or** driveway side of the roof.



Each roof plane with a PV array must have:

- a pathway from the lowest roof edge to the ridge **or**
- the pathway must be on an adjacent roof plane **or**
- straddling the same and adjacent roof planes.



## Emergency Escape and Rescue Opening (R324.6.2.2)

Modules installed on dwellings must NOT be placed on the portion of a roof that is below an emergency escape and rescue opening. There must be a pathway not less than 36 inches (914 mm) wide to the emergency escape and rescue opening.

**Exception:** BIPV systems listed in accordance with Section 690.12(B)(2) of NFPA 70, where the removal or cutting away of portions of the BIPV system during firefighting operations has been determined to not expose a firefighter to electrical shock hazards.

