



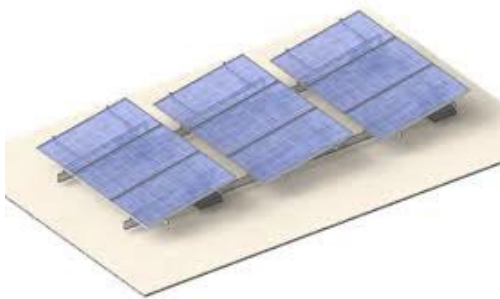
Residential Solar-Ready Requirements

2021 IRC Appendix AT (IECC Appendix RB)

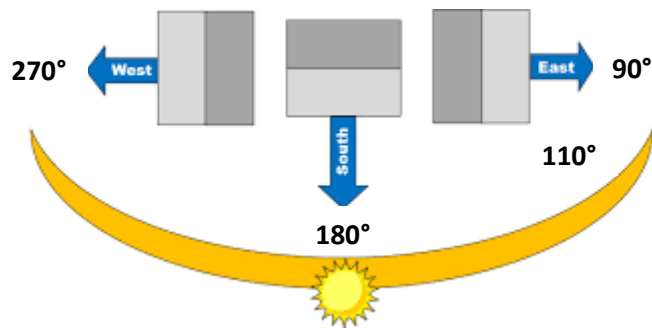
rev. 2/7/23

Appendix AT of the 2021 IRC provides solar-ready requirements for detached one- and two-family dwellings and multiple single-family dwellings (townhouses). With continued citizen demand for on-site solar energy generation, the appendix removes future obstacles by making accommodations for solar panel placement and electrical or plumbing connections. This will help expedite the city permit process and save time, effort and resources for homeowners and contractors. A little pre-planning will result in a win-win situation with respect to roof clearances, connection pathways and visual impacts.

The provisions apply to low-slope roofs 600 sq. ft. or greater (regardless of building orientation) and pitched roofs 600 sq. ft. or greater oriented between 110 degrees and 270 degrees of true north (see illustration below). Pitched roof standard plans without a determined site orientation at time of plan review shall be exempt from the solar-ready requirements.



Low-slope Roof

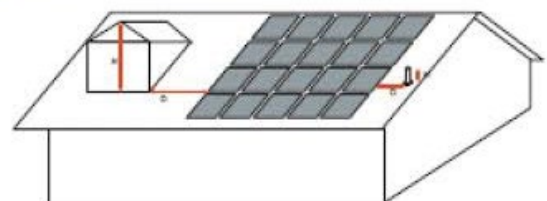


Pitched Roof

The following items must be identified on the construction documents:

- Solar-ready zone area of not less than 10% of the total roof area over conditioned space but not less than 300 sq. ft. (150 sq. ft. for building with a total floor area of 2,000 sq. ft. or less per dwelling unit) exclusive of areas covered by skylights, occupied roof decks, and mandatory access or setback areas as required by the fire code. The area shall be free from obstructions including vents, chimneys and roof-mounted equipment.
- Pathway for routing future conduit or plumbing from the solar-ready zone to the electrical service panel or service hot water system. Acceptable pathways include attics, vertical chases and open framing cavities.
- On low-slope roofs (1 in 12 pitch or less), provide a capped roof penetration sleeve adjacent to solar-ready zone. The capped sleeve shall have an inside diameter of not less than 1-1/4 inches.
- Reserved electrical service dual pole circuit breaker space positioned at the opposite (load) end from the input feeder location or main circuit location.

It's the responsibility of the building designer to identify an unobstructed roof area by considering plumbing vents, mechanical vents and roof-mounted equipment. This will save the homeowner time and effort when installing future solar systems.



Solar Ready Zone Area – Free from Obstructions