

DOE Zero Energy Ready Home PV-Ready Checklist



DOE Zero Energy Ready Home National Program Requirements Mandatory Requirement 7 (Renewable Ready) shall be met by any home certified under the DOE Zero Energy Ready Home program, only where **all three conditions** of the following conditions are met. If any of these three conditions is not met, the home is exempt from requirements contained in the PV-Ready checklist.

1. Location, based on zip code has at least 5 kWh/m²/day average daily solar radiation based on annual solar insolation using PVWatts online tool:
http://gisatnrel.nrel.gov/PVWatts_Viewer/index.html **AND**;
2. Location does not have significant natural shading (e.g., trees, tall buildings on the south-facing roof, **AND**;
3. Home as designed has adequate free roof area within +/-45° of true south as noted in the table below.

<u>Conditioned Floor Area of the House (sq. ft.)</u>	Minimum Roof Area within +/- 45° of True South for PV-Ready Checklist to Apply (ft ²)
≤ 2000	110
≤ 4000	220
≤ 6000	330
> 6000	440

Note:

- If a solar photovoltaic system is included with the home, then compliance with the Consolidated RERH checklist is not required.

These requirements were adapted from the EPA's Renewable Energy Ready Home Solar Photovoltaic Specification Guide (RERHPV Guide). For further guidance on any of the above items, this checklist notes the section of the guide. This guide can be accessed on the DOE Zero Energy Ready Home program website at http://www1.eere.energy.gov/buildings/residential/pdfs/rerh_pv_guide.pdf

Designate a proposed array location and square footage on architectural diagram: PV _____ sq.ft. (<i>RERHPV Guide 1.1</i>)	<input type="checkbox"/>
Identify orientation (Azimuth) of proposed array location: PV _____ degrees. (<i>RERHPV Guide 1.2</i>)	<input type="checkbox"/>
Identify Inclination of proposed array location: PV _____ degrees. (<i>RERHPV Guide 1.3</i>)	<input type="checkbox"/>
Provide code-compliant documentation of the maximum allowable dead load and live load ratings of the existing roof; recommended: allowable dead load rating can support an additional 6 lbs/sq. ft. for future solar system. (<i>RERHPV Guide 2.1</i>)	<input type="checkbox"/>
Provide architectural drawing of solar PV system components. (<i>RERHPV Guide 3.5</i>) Alternative: Provide home buyer with the following information: <ul style="list-style-type: none"> ➤ List of renewable-ready features ➤ Available free roof area within +/- 45° of true south ➤ Location of panel or blocking for future mounting of PV system components ➤ Location of Breaker or slot for future breaker in electrical service panel ➤ Copy of the PV-Ready Checklist ➤ A copy of the RERH Solar PV Specification Guide 	<input type="checkbox"/>
Install a 1" metal conduit for the DC wire run from the designated array location to the designated inverter location (cap and label both ends). (<i>RERHPV Guide 3.2</i>)	<input type="checkbox"/>
Install a 1" metal conduit from designated inverter location to electrical service panel (cap and label both ends). (<i>RERHPV Guide 3.3</i>)	<input type="checkbox"/>
Install and label a 4' x 4' plywood panel area for mounting an inverter and balance of system components. (<i>RERHPV Guide 3.1</i>) Alternative: Blocking is permitted to be used as an alternative to the 4' x 4' panel. The area designated for the future panel to mount PV components shall be clearly noted in the system documentation.	<input type="checkbox"/>
Install a 70-amp dual pole circuit breaker in the electrical service panel for use by the PV system (label the service panel) (<i>RERHPV Guide 3.4</i>) Alternative: Provide a labeled slot for a double-pole breaker in the electrical service.	<input type="checkbox"/>

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