



## Henrico County Office of Building Construction & Inspections

SUBJECT: **Residential Solar Panel Permit Application & Inspections**

DATE: July 8, 2022 (revised)

The installation of solar panels on ***single family dwellings*** in Henrico County requires application for an electrical permit only. A separate building permit is not required. For rooftop installations, the online application for the electrical permit requires submission of a diagram of the ***solar system access pathway*** as required by VRC R324.6 but not electrical plans or equipment specifications. At the time of inspection, the applicant shall provide to the inspector an accurate single-line schematic diagram along with color photographs, printed on 8-1/2" x 11" paper depicting the system as installed\*. The diagram and photos shall clearly show the following:

- Roof top junction boxes, including any connections and conductors in the roof top junction boxes. At least one photo shall be zoomed out sufficiently to show the roofing type and color, and roof top junction boxes,
- All conductors run on the roof for bonding or grounding of the panels and system,
- All conduits and cables run on the roof and their required supports,
- Any penetrations of the roof by conduits and cables that are run through attics or spaces that are not readily accessible for inspection. Photos of conduits and cables shall include the supports installed for the conduits and cables.

(\*Alternately, the applicant may upload the diagram and photos to the permit via the Build Henrico customer portal.)

A representative of the Solar contractor is not required to be on site for the inspection. A responsible adult is required to be on site if the inspection of the panelboards requires access to the interior of the structure.

Please be reminded that the information provided to the inspector has not been reviewed prior to installation and is subject to the approval of the inspector. Failure to provide diagrams and photographs that accurately depict the installation may result in failed inspections.

**Commercial solar installations** will continue to require **both** building and electrical permit applications with of submission of detailed plans, specifications, and structural evaluations.

Please contact Senior Plan Review Engineer Bob Allen, or Electrical Inspection Supervisor Larry Redford at 804/501-4360 if there are any questions regarding the above requirements.

Bob Allen  
Senior Plan Review Engineer

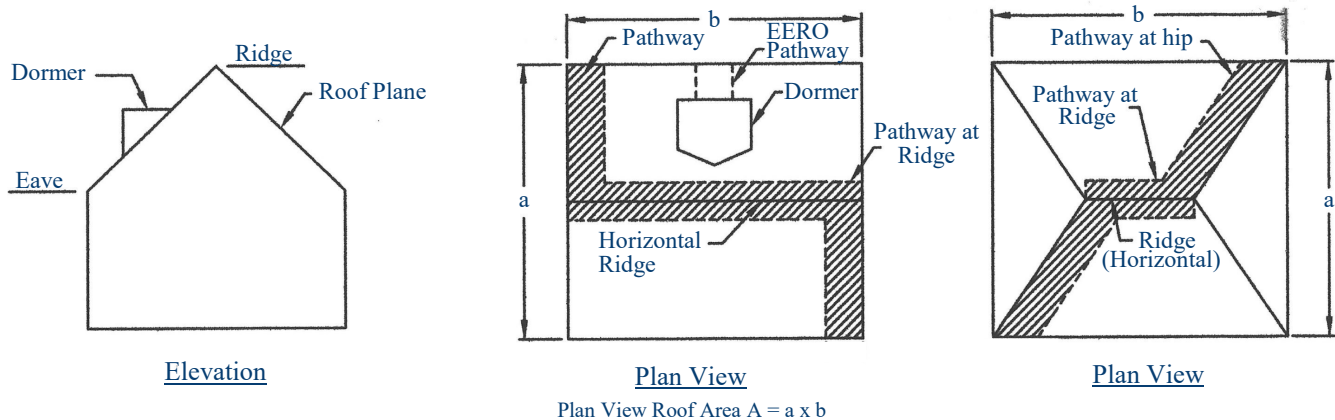
Larry Redford  
Electrical Inspection Supervisor



## Office of Building Construction & Inspections

### SOLAR ENERGY SYSTEM ROOF ACCESS AND PATHWAY REQUIREMENTS FOR HABITABLE STRUCTURES WITH ROOF SLOPES > 2:12 PER THE 2018 VRC SECTION R324.6

**A DETAILED ROOF PATHWAY LAYOUT PLAN MUST BE SUBMITTED FOR APPROVAL PER THE REQUIREMENTS NOTED BELOW**



#### Pathways to the Ridge:

- ◆ Two 36-inch-wide pathways from the eave to the ridge on separate roof planes
  - One of the two required 36-inch wide pathways above must be provided from the street or driveway side of the roof

#### Pathways to the Solar Array:

- ◆ One 36-inch-wide pathway either on the roof with the solar array, on an adjacent roof plane, or straddling the same and adjacent roof planes (see requirements below when straddling a horizontal ridge)

#### Pathway from an Emergency Escape and Rescue Opening (EERO):

- ◆ One 36-inch-wide pathway from an Emergency Escape and Rescue Opening (EERO), if applicable
- ◆ Solar Arrays shall not be installed directly below an EERO

#### Setback requirements when straddling a horizontal ridge:

- ◆ One 18-inch-wide clear pathway on each side of the ridge (for a total of 36-inches) for solar arrays  $\leq 1/3$  of the plan view roof area (not sprinklered) or  $\leq 2/3$  of the plan view roof area (with automatic sprinkler)
- ◆ One 36-inch-wide clear pathway on each side of the ridge (for a total of 72-inches) for solar arrays  $> 1/3$  of the plan view roof area (not sprinklered) or  $> 2/3$  of the plan view roof area (with automatic sprinkler)

#### Other General Requirements:

- ◆ Manufacturer's Installation instructions must be submitted for review
- ◆ Solar systems installed on or above the roof covering must be designed to structurally support the system and withstand applicable gravity loads
- ◆ Pathways shall be over areas capable of supporting fire fighters accessing the roof
- ◆ Pathways shall be in areas with minimal obstructions such as vent pipes, conduit, or mechanical equipment