



SOLAR SYSTEMS PERMIT DOCUMENT GUIDELINE

Building / Equipment / Roof Plan Information

Required for Photovoltaic & Solar Thermal Systems

1. Provide a roof plan diagram showing all dimensions and the total area of the roof.
 2. Show roof edges, walls, parapet walls, change of elevations, expansion joints, roof top equipment, etc. on the roof plan diagram
 3. Show the location on the roof where the solar system is to be installed. Include the size of the solar system and total area of the proposed system installed on the roof.
 4. Provide the wind uplift zone (per ASCE-7) of the roof, the solar system is to be installed & the wind uplift pressure for that zone.
 5. Provide the Perimeter Width (per ASCE-7) of the roof and for roof section, the solar system is to be installed
 6. Provide the type of structural roof deck type on the building, the solar system is to be installed
 7. Specify condition of the roof assembly:
 - New roof (tied to a new construction master permit) *Separate roof permit required.*
 - Re-roof (replacing existing roof assembly) *Separate roof permit required.*
 - Existing roof (no change to roof assembly) *Fire Rating of the existing roof assembly shall be maintained.*
 8. Specify the type of roof on the structure and the roofing material used for the roof assembly.
 9. Submit roof clearance requirements for the proposed solar system.
 10. Submit a detail of required roof penetration flashings
 11. Provide a Florida Solar Energy Center (FSEC) photovoltaic system certification approval form for the proposed solar system
- NOTE: Photovoltaic Laminate Modules require a separate roofing permit for the installation of this product.*
12. Provide completed copy of owner's solar system disclosure form.



Structural Design Requirements for Solar Systems

Provide signed & sealed drawings & design calculations for the applicable requirements listed below:

- 1. Provide documentation and/or verification that the exposed solar panel equipment meets wind load
- 2. Provide documentation and/or verification the support framing meets both uplift and lateral forces
- 3. Provide documentation and/ or verification the structure will accommodate additional dead loads
- 4. Provide design of connections for the wind loads

Electrical Design Requirements for Solar Systems

- 1. Submit a complete Electrical Diagram:
Designed in accordance to the NEC Article 690 Solar Photovoltaic Systems, in its entirety.
- 2. Submit a floor plan showing location of all electrical equipment
- 3. Submit load calculations
NEC 110.3(B) Installation and Use Listed or Labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling

Electrical Engineer must sign and seal plans if:

- 1. The system has a value of more than \$50,000
- 2. The system has an aggregate service of capacity of 600 amps (240 volts) or more for a residential electrical system
- 3. The system has an aggregate service of capacity of 800 amps (240 volts) or more for a commercial or industrial electrical system



Solar Water Heaters

System Components

- 1. Solar water heater: Submit FSEC approval/listing and system reference drawing
- 2. Solar water heater using a PV powered pump: Provide electrical listing for PV panel and pump
- 3. Solar swimming pool water heater: Provide manufacturer's selected system installation manual /detail and system specifications
- 4. Solar swimming pool water heater: Provide FSEC approval/listing and system reference drawing
- 5. Show water heater storage tank location on the floor plan
- 6. Show water heater storage tank relief line termination point
- 7. Show piping layout from solar collector to storage tank