Effective: May 15, 2009 Amendment Effective: October 24, 2022

Broward County Board of Rules and Appeals Policy #09-02

Subject: Administrative Guidelines for Processing Solar Thermal/Electric Permits

- A. Adopt the Solar Thermal and Solar Electric Matrix as a "BCBRA" Approved Guideline" establishing minimum code requirements regarding permit application submittals, thereby creating, and instituting countywide uniformity.
- B. Building Departments shall establish an individual master permit for both Solar Thermal and Solar Electric installations to which applicable subsidiary categories are to be tied. Adding additional categories to the master permit may not require an additional permit obtained by a separate contractor but will require a separate trade review in every instance.
- C. It is established that Certified Solar Contractors may obtain the master permit in either the Solar Thermal or Solar Electric categories. Certified or Registered Plumbing Contractors may obtain the master permit in the Solar Thermal category. Certified or Registered Electrical Contractors may obtain the master permit in the Solar Electric category. Registered Solar Contractors may obtain the master permit in the Solar Thermal category, restricted to residential installation only. Each of these contractors may perform all work identified in their individual scopes of work including the installation of appurtenances, apparatus, or equipment. However, such contractor shall subcontract all other work, which is specified as being the work in the trade of another contractor.
- D. Building Departments shall provide inspections of solar thermal and solar electric systems. More than one inspection may be performed during any inspection **visit**.

Solar Thermal

Building/Structure/Roofing – Time of installation and Final

Plumbing – Final

Solar Electric

Building/Structure/Roofing – Time of Installation and Final

Electrical – Rough and Final

Hybrid Systems (Complete PV Panel System combined with integral solar water panels)

Building/Structure/Roofing – Time of Installation and Final

Electrical – Rough and Final

Plumbing – Final

- E. The Board recommends Building Departments establish an inspection procedure to ensure all required inspections are completed within a specified two-hour timeframe.
- F. Recommend that Building Departments include an Owner notification on all solar thermal or solar electric permit applications, for existing structures, using substantially the language provided below:
 - "Installation of roof mounted photovoltaic or solar support systems typically require roof system penetrations to allow attachment to the structure, which may create additional long-term roof system maintenance requirements and/or jeopardize roof system manufacturer's warranties. Roof mounted solar systems generally require removal and reinstallation of solar panels/arrays in order to perform routine roof system maintenance, repair, or replacement."
- G. The Board recommends Building Departments maintain accurate records regarding the type, number, and the location of solar energy installations.
- H. Recommend and encourage Building Departments to expand access of renewable energy technology to the community, by not imposing needless or excessive oversight measures and through a program streamlined permitting and inspections.
- I. Recommend and encourage manufacturers to pursue optional product approval as a means of accelerating the permit approval process by ensuring a less complicated and less expensive process for consumers.
- J. BCCO to continue the ongoing awareness program designed to ensure all certified personnel understand the process of permitting and inspecting Solar Thermal and Solar Electric installations.
- K. BCCO will provide guidelines and assistance to the Solar Energy Industry, provide mediation, and assist with the BORA appeal process, as necessary.

UNIFORM PERMIT SUBMITTAL MATRIX for SOLAR THERMAL AND SOLAR ELECTRIC INSTALLATIONS

in

THE HIGH VELOCITY HURRICANE ZONE FBC 7th Edition (2020)

| General Requirement | Submittal Requirements | F.S./Code Section |
|--|--|--|
| 1. Permit Application | | |
| | | BCAP 105.3 |
| 2. Building/Equipment Layout Plan | | |
| | | BCAP 107 |
| 3. Structural Design | | |
| Photovoltaic Roof Mounted Panel & Solar Thermal Equipment. | Submit signed and sealed drawings & design calculations by licensed Professional Engineer or Registered Architect showing: • Documentation/verification exposed solar panel equipment meet wind loads. • Documentation/verification support framing meets both uplift and lateral forces. • Design of connections for the wind loads. • Documentation/verification structural supports will accommodate additional dead loads. | FBCB 1522.2 FBCEB 603 FBCB 1616.1.2 FBCEB 706 FBCB 1605 FBCB 1620.1 FBCB 1620.2 FBCB 1620.3 FBCB 1621 Note: Dead load compliance with the Exception contained in the FBCEB Section 706.2 may be demonstrated by Providing the Dead Load criteria from the original plans. |
| 4. Roof Design | | |
| Building Integrated Photovoltaic (BIPV). | Submit a Uniform HVHZ Permit Application. | FBCB 1512.3 FBCB 1512.2.1 FBCB 1516.2 |
| Photovoltaic Roof Mounted Panel. | Submit a detail of the roof penetration flashing. | FBCB 1514 |
| Solar Thermal. | Submit a detail of the roof penetration flashing. | FBCB 1514 |

| 5. System Components | | |
|---|---|--|
| Solar Water Heater. | Submit FSEC Approval/Listing and System Reference Drawing. | FBCB 107 FBCEC R403.4.3 BCAP 101 |
| Solar Water Heater using a PV powered pump. | Submit listing for PV panel and pump. | NEC Article 690 |
| Solar Swimming Pool Water Heater. | Manufacturers selected system installation manual/detail and system specifications. | FBCB 107 BCAP 106 |
| Solar Swimming Pool Water Heater. | Submit FSEC Approval/Listing and System Reference Drawing. | FBCB 107 F.S. 377.705 BCAP 101 |
| Photovoltaic System. | Plans must be signed and sealed by a Florida Professional Engineer or Certified by FSEC. | F.S. 471.025 F.S. 377.705(4)(d) |
| Statutory Requirement. | FSEC will generate a System Certification Approval Form or signed and sealed by a Florida Professional Engineer. | F.S. 377.705(4)(d) |
| Electrical Diagram | Submit electrical diagram including components interconnects, conductor types and sizes, conduit types and sizes, disconnects, and point of interconnection. | National Electrical Code NEC Article 690 NEC Article 705 |
| Component Documentation | FSEC Certification or signed and sealed by a Florida Professional Engineer. | F.S. 377.705(4)(d) |
| Abbreviations | BCAP - Broward County Administrative Provisions FBCB - Florida Building Code, Building Volume FBCEB - Florida Building Code, Existing Building Volume FBCEC - Florida Building Code, Energy Conservation Volume F.S - Florida Statute FSEC - Florida Solar Energy Center NEC - National Electric Code | |