

MIAMI-DADE COUNTY, FLORIDA DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES PRODUCT CONTROL SECTION

CHECKLIST #0443 FOR THE APPROVAL OF: PHOTOVOLTAIC (PV) MODULES (Solar Panels)

- Basic Requirements Checklist.
- One set of the manufacturer's 'approval drawing' including:
 - a) PV modules installation diagram,
 - b) Method of installation which should match the testing installation,
 - c) Specifications and size of materials used, and
 - d) Anchorage method to the structure, according to test and calculations.
- Manufacturer's installation instruction manual.
- Design calculations for the structural frame supporting the photovoltaic modules and the anchorage of the frame to the roof system.
- One set of manufacturer's design drawings marked and verified by the testing laboratory.

The following current laboratory tests and test reports in compliance with protocol TAS 301.

- Testing data per Standard for Flat-Plate Photovoltaic Modules and Panels, UL 1703 / UL 61730.
- At least 3 PV Modules of each model must be tested for Uplift Load Test per FBC, TAS202 with a safety factor of 2 (FBC 1523.4).
- □ At least 3 PV Modules of each model must be tested for Cyclic Load Test per FBC, TAS 203 (671 cycles positive and negative, FBC 1625.4).
- PV Module Fire testing per ASTM E108 or UL 790.
- □ Wind Driven Rain Resistance testing per **FBC**, **TAS 100(A)**. Each test mockup must include no less than two solar panels of the largest size being qualified, and each type of roof mount and penetration must be tested.
- Compliance with at least one of the following:
 - -TAS114 Appendix F Susceptibility to Hail Damage for Roof System Assemblies, or
 - -The requirements in the Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings, **ANSI Z97.1-14**; or
 - -The requirements in the Code of Federal Regulations, **Title 16 CPSC Part 1201** Safety Standard for Architectural Glazing Materials.

Revised: July 2022

PhotoVoltaic (PV) Modudels Checklist # 0443 (Solar Panels) Checklist # 0443

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□ Corrosion resistance per TAS114 Appendix E Section 2 (ASTM G85) Salt Spray for 1000 hrs. required on ferrous components only.

Notes:

- 1. Photovoltaic (PV) Modules must be registered by the Florida Solar Energy Center (FSEC).
- 2. PV Modules shall be tested, approved and installed with the same number, location and type of anchors & fasteners.
- 3. Photovoltaic (PV) Modules shall be installed using an UL 2703 Certified rooftop mounting system to maintain or exceed the roof's required fire listing.
- 4. Approval by this office is for structural performance only. Electrical circuitry, wiring and energy efficiency ratings are outside the scope of this approval.
- 5. If PV Module or fixture has plastic as a component, add the plastics checklist to these requirements.

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