
**CHECKLIST #0475 FOR THE APPROVAL OF:
SOLAR COLLECTORS (PHOTOVOLTAIC DEVICES)**

- Basic Requirements Checklist.
- One set of the manufacturer's 'approval document' including:
 - a) PV 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 device 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.

- Copy of Listing per UL-1703, or comparable standard in order to compare/correlate to units tested for structural performance.
- Uplift load test per TAS202 on the collector (attach collector as it will be used). See note 1.
- Fire testing per ASTM E108 or UL 790.
- TAS100 Wind Driven Rain Resistance for sloped roof applications of 2:12 and greater. The BIPV roof system test assembly shall be installed in accordance with the manufacturer's published installation instructions on a 10-foot-by-10-foot (3.05 by 3.05 m) flat deck at the prescribed minimum slope. The test area is defined as an 8-foot-wide (2.44 m) section of this deck centered on the centerline of the wind generator nozzle. The BIPV roof system shall consist of at least four adjacent courses of BIPV panels, and roof system components as required by the installation instructions. One test shall be conducted for each approved roof covering type (asphalt shingles, and clay and concrete tiles) for which recognition is sought. The selected roof covering shall cover the remainder of the test deck. There must be at least one course of roofing material or 12 inches (305 mm), whichever is greater, below the BIPV roofing panels. One test must include vertical joints between the BIPV panels in the test area on at least three courses, and one test must include vertical joints between the BIPV roof panels and other roof covering in the test area of at least three courses. The same specimens may be used for both tests. Any openings on the perimeter of the test assembly may be sealed. Roof covering materials not immediately adjacent to the BIPV roof panels may be secured with additional fasteners or adhesives if required to prevent tear-off and impingement on the BIPV roofing system.





MIAMI-DADE COUNTY, FLORIDA
BUILDING AND NEIGHBORHOOD COMPLIANCE DEPARTMENT
PRODUCT CONTROL SECTION

- 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 Z97.1-1984; or
 - The requirements in the Code of Federal Regulations, Title 16 CPSC Part 1201– Safety Standard for Architectural Glazing Materials.
- Corrosion resistance per TAS114 Appendix E Section 2 (ASTM G85) Salt Spray for 1000 hrs. required on ferrous components only.

Notes:

1. One specimen of each model, a minimum of three specimens shall be tested and they shall be rated for the lowest pressure. Minimum design pressure for approval is 41 psf.
2. Collector shall be tested, approved and installed with the same number, location and type of anchors & fasteners.
3. The design pressure shall be determined dividing the test pressure by 2.
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 collector has plastic as a component, add the plastics checklist to these requirements.
6. Collector must be installed with a minimum clearance of 8" above the finished roof system.

Revised: 12-22-10

PhotoVoltaicDevices

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