

# BCAB

Building Code Advisory Board of Palm Beach County

## TECHNICAL ADVISORY

Issued on March 15, 2017  
by Building Code Advisory Board

### Subject: Roof Moisture Surveys

This Technical Advisory is established as a recommended strategy to ensure roof coverings are not installed over existing low-slope roof membranes that may contain detrimental levels of moisture.

The "Reroofing" sections of the Florida Building Code (Code) specify that "new roof coverings shall not be installed where the existing roof or roof covering is water soaked or deteriorated to the point that it is not an adequate base for additional roofing." More specifically, the High Velocity Hurricane Zone (HVHZ) section states: "the moisture content of the existing roofing assembly to be covered by a new roofing system shall not exceed 5% by weight in the roofing membrane and 8% by weight in commercially manufactured rigid board insulation as verified by moisture survey performed in accordance with TAS 126. Test results shall be submitted with the...permit application." The Board reviewed the professional documents used in the development of the HVHZ parameters and also finds the values to be acceptable.

Palm Beach County is not located in the HVHZ as defined by the Florida Building Code (*Broward and Dade Counties*), however, provisions of the HVHZ roofing requirements may be implemented where the jurisdiction having authority has adopted their use along with the associated roofing application standards (RAS) and testing application standards (TAS).

The Board finds the more clearly defined parameters of allowable moisture, as required in the HVHZ section of the Code, to be far more advantageous to both contractors and code officials by offering a quantifiable benchmark for determining the suitability of the existing roof membrane when considering a recover installation. Further, TAS 126 "Standard Procedures for Roof Moisture Surveys" establishes an accepted testing protocol for determining the moisture content of a roof assembly in accordance with each Testing Method's guiding Standard as follows:

- Nuclear Thermography - *ANSI/SPRI/RCI NT-1 Detection and Location of Latent Moisture in Building Roofing Systems by Nuclear Radioisotopic Thermalization.*
- Infrared Thermography - *ASTM C1153 Standard Practice for Location of Wet Insulation in Roofing Systems Using Infrared Imaging.*
- Impedance Testing - *ASTM D7954 Standard Practice for Moisture Surveying of Roofing and Waterproofing Systems Using Non-Destructive Electrical Impedance Scanners.*

Based on the importance of verifying an existing roof membrane is in adequate condition to receive additional roofing layers, the Building Code Advisory Board recommends a Roof Moisture Survey, performed in accordance with TAS 126, be included with all roof 'recovering' or 'partial reroofing' permit applications for low slope non-SFD structures. The Board believes this recommended action meets the Code's intent to establish minimum requirements to safeguard the public's health, safety and general welfare through structural strength and safety to life and property.

For Building Code Advisory Board

  
Roger Held, Chair

The Building Code Advisory Board of Palm Beach County was created by a Special Act of the Florida Legislature, at the request of the building code enforcement and construction industries. The purpose of the Board is to advise the Board of County Commissioners and local governments concerning the adoption of building codes and their enforcement throughout the County. The Act also granted Palm Beach County special powers concerning building codes, in the interest of the public's health, safety and general welfare.

2300 North Jog Road · West Palm Beach, Florida 33411-2741 · 561-233-5101 · FAX 561-233-5020

Revised: 3/17

U:\Building Administration\badmin1\BCAB\Technical Advisories\BCAB -Roof Moisture Survey TA final.doc