

BCAB

Building Code Advisory Board of
Palm Beach County

TO: Palm Beach County Building Officials

DATE: November 19, 2003 (A revision to May 19, 1999 Technical Advisory)

RE: Florida Building Code 2001 Building
Section 103.7 - Alternate Materials & Methods
Section 2309.7.1 – Ventilation of Attic Space

At a regularly scheduled meeting of the Building Code Advisory Board of Palm Beach County on March 17, 1999, a special technical presentation on the suitability and use of unvented or “sealed” attic assemblies was given by a local professional design and consulting team presently specifying such systems in the south Florida area.

The presentation included supporting correspondence from staff of the Southern Building Code Congress International, Inc., recognizing use of unvented attic systems under appropriate conditions, and also included other technical papers and commentaries from current ASHRAE Standards citing viability of unvented attics in hot, humid climates.

Issues and concerns with the appropriateness of conventionally-vented attics in large coastally-located homes has surfaced in recent years based on actual mitigation projects undertaken to prevent the continued effects of moisture-related damage, corrosion, and/or deterioration of building elements in these coastal homes. Problems stem principally from extensive moisture intrusion into the attic cavity, driven by prevailing year-round off-shore winds carrying high moisture-laden air. Retro-fitting effected attics with closed, unvented assemblies has proved successful in mitigating moisture damage.

In review of this subject, the Board has rendered the following opinion:

- Designed unvented attic systems are viable in hot, humid climates where year-round cooling, and humidity and climate control is predominant.
- Generally, these systems may be best used where the roof is cement tile, or other low-heat absorptive roof covering, and radiant barriers can be employed.
- Approved insulation products are used, as specified, in a continuous envelope or array from the wall cavities into the upper roof assembly’s sheathing or decking.

Therefore, the Code Advisory Board recognizes the applicability and use of unvented attic systems in hot, humid climates such as occur in Palm Beach County, under the following minimum recommended conditions:

1. Unvented attic systems/assemblies are designed by a Florida Registered Design Professional.
2. Insulation must be installed continuously in the upper plane of the roof assembly’s deck/sheathing with specified, approved insulation products, and the ceiling plane (space) is not separated from the conditioned habitable space below, with insulation.
3. When unvented attics systems are specified in conjunction with asphalt based roofing products, the roofing material/system manufacturer shall provide an affidavit certifying use of their product over an unvented attic system.

Revised: 5/99; 11/03

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.

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