

BCAB

Building Code Advisory Board of Palm Beach County

TECHNICAL ADVISORY

Issued on 11-17-04 (Revised 01/19/05)
by Building Code Advisory Board

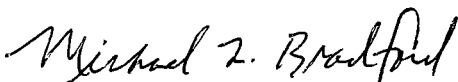
Subject: Mortar Bedding Course 3/4" Maximum Thickness Under 2-3/8" Pavers
(By unanimous vote in BCAB 11/17/04 Meeting)

As recommended by local members of the Aluminum Association of Florida, this Advisory to Palm Beach County Building Officials suggests Administration Code Section 103.6 "Requirement Not Covered by Codes" be utilized to minimize reoccurrence of aluminum structure failure due to inadequate connection to concrete foundations. These failures were widely observed in Hurricane Frances and Hurricane Jeanne. Specifically, observations were that 6" Tap-Con fasteners through paver brick at column locations pulled out due to inadequate embedment in poured concrete footers. Adequate embedment must exist.

Assured structural attachment of aluminum framed enclosures require embedment into concrete footers that cannot be obtained with 6" Tap-Cons installed through a 1" height base extrusion if thickness of the pavers and bedding above concrete footings are too thick. Therefore, unless Alternate Methods acceptable to the Building Official are proposed, this Technical Advisory suggests limiting the mortar bedding course under pavers to 3/4" maximum thickness atop footings. Sand shall not be used for paver bedding atop footers since sand does not provide lateral support to fasteners through the layer of sand. If a mortar bed is found to exceed the maximum 3/4" recommended in this Technical Advisory, site specific analysis and design by the designer of record could be accepted by the local Building Official under 103.7 "Alternate Materials and Methods".

BCAB noted that even greater assurance of anchor embedment in concrete would be obtained by placement of the aluminum structure directly atop the concrete perimeter footing, not atop pavers. Assuring the anchor embedment specified on permit drawings, under paver decks, requires careful investigation by both contractors and inspectors.

For Building Code Advisory Board



Michael Bradford, Chair

Revised: 11/04

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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