

PALM BEACH COUNTY PLANNING, ZONING AND BUILDING DEPARTMENT BUILDING DIVISION POLICY AND PROCEDURE

Rebecca D. Caldwell, Director

 PPM#:
 PBO-114

 Issued:
 04/26/12

 Effective:
 04/26/12

## SUBJECT: MEMBRANE COVERED STRUCTURES

- AUTHORITY: Sections 104.11 & 104.12 Palm Beach County Amendments to the Florida Building Code; Sections 1609 & 3102 Florida Building Code, Building
- **REFERENCE:** Technical Advisory issued by the Building Code Advisory Board on 5-16-07 for Membrane Covered Structures (posted online off Building Division website).
- **PURPOSE:** To provide guidance for permitting and legal placement of membrane covered structures. (a-k-a "Canvas Canopies", " Fabric Roofed Structures" and other "Shade Roofs").
- **POLICY:** Membrane Covered Structures shall meet all requirements for permanent traditional structure. They may be erected only in approved locations, must be anchored to meet wind load requirements, and <u>do</u> require a permit. Applications shall be submitted, reviewed and processed under standard procedures.
- **PROCEDURE:** A. Submittal Requirements:
  - A survey (or copy of a survey) showing all property lines, all buildings and easements on the property, all streets and bodies of water abutting the property, and the location of the proposed membrane covered structure, drawn to scale with distances to property lines and structures on the site dimensioned.
  - Details regarding the type, size, and materials of the proposed membrane structure, especially frame and covering details.
  - Details regarding the installation and anchoring proposed for the frame.
  - Details regarding the attachment of the membrane to the frame, including a rapid removal method.

PPM# PBO-114/Page 1 of 3

- B. Construction Requirements:
- Membrane covered structures must be erected within setbacks established for the buildable area in the particular zoning districts.
- If the membrane cover is designed to be removable it must contain a statement, "This covering must be removed in the event of a hurricane or high winds that exceed speeds of 40 mph." This is to be stamped, printed, or sewn on the membrane.
- Cover shall be flame resistant, if within 5' of the property line and/or within 5' of a building eave. Membrane covers shall be tested in accordance with the provisions of NFPA 701, which is A Standard for Testing Flame Resistance of Textiles. CPAI-84: A Specification for Flame Resistant Materials used in Camping Tentage, 1995 Revision shall be accepted as an equivalent standard for flame resistant textiles to NFPA 701.
- The frame support sections shall be fastened together at each joint. If telescoping or "slip-together" joints hold frame piping together, then a minimum 1/4" thru bolt or 2 #10 self-tapping sheet metal screws shall secure each joint.
- The structure shall be anchored to the ground by any method listed below:
  - $\checkmark$  Install auger type earth anchors 3" diameter, 24" long; attached by strap, cable or chain with a minimum strength of 250 lbs.
  - ✓ Install 6" x 6" cast-in-place concrete footings, continuous between posts, reinforced with one #4 bar; attached by strap with two #12 hex-head self-drilling sheet metal screws.
  - √ Requires the legs to be bolted to a concrete slab on grade equal in area to canopy, minimum 4" thick, reinforced with WWF 6X6, 1.4X1.4; attached by strap with two 3/16 x 1-1/4" concrete screws and two self-drilling sheet metal screws.
  - $\sqrt{}$  Install one precast concrete wheel stop, nominally 5" x 7" x 71", centered under each post, buried a minimum of 3" below grade; attached by strap, cable or chain with a minimum working strength of 250 lbs.

PPM# PBO-114/Page 2 of 3

- C. Inspections:
- Inspectors shall verify the anchoring method used.
- If new concrete footings are to be installed, they shall be inspected when formed and prior to pouring of concrete.
- In all cases a final inspection shall be requested by the applicant and Inspection final approval is required.

## **Supersession History:**

- 1. PPM# PBO-114 issued 02/02/03
- 2. PPM# PBO-114 issued 02/10/03
- 3. PPM# PBO-114 issued 02/11/03
- 4. PPM# PBO-114 issued 04/16/03
- 5. PPM# PBO-114 issued 05/15/03
- 6. PPM# PBO-114 issued 04/26/12

PPM# PBO-114/Page 3 of 3