

BUILDING CODE SERVICES CODE INTERPRETATION

Subject Title: Fabric Covered Shade Structures
Revision Date: 7/29/25

Applicable Codes: FBC, 8th Ed., 2023, NFPA 101, 2021
Approved By: Mark Lodge, Director

Contact Name: Marisa-Ann Gedeon, Manager

Contact Email: marisa-ann.gedeon@palmbeachschools.org

Question:

What factor determines when a permit is required to install any type fabric covered shade structure on a public education school site?

Answer:

The size in area (square feet) of the shade structure determines when a permit is required. Shade structures up to 120 square feet in area, no permit is required. Shade structures exceeding 120 square feet in area, a permit is required. *Exception: All cantilevered umbrella structures of any size, a permit is required.*

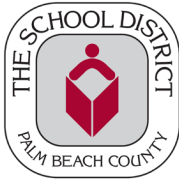
Conditions:

- Types of structure sides; open, enclosed, and partially enclosed.
- The structure shall be a minimum of 10-feet from any building, including overhangs.
- The structure shall be placed on a level surface with positive drainage.
- The structure shall be linked to an accessible route.
- No combustible ground cover shall be placed under a structure.
- Provide protection from tie-downs.
- Locate structure in a fenced area.
- Structures exceeding 120 square feet in area shall be protected by a lightning protection system when existing buildings are protected.
- The maximum area for any (individual) type structure shall be 2,450 square feet.
- Multiple shade structures may be placed next to each other if the total area for the group is less than 2,450 square feet, separation of 60' (minimum) shall be provided from the next shade structure that would cause the group to exceed the limit of 2,450 square feet.
- Open structures are allowed to have side panels (valences) that extend downward to a maximum of 18" from the eave (transition from roof to side) and still be considered open.
- Fabric to be removed at the end of school year and upon official issuance of a hurricane warning.
- Cantilevered umbrellas shall be put in closed position before wind speeds reach 20 mph and shall be entirely removed when wind speeds are expected to reach 45 mph.

Documentation Required for permitting:

- Provide a site plan or aerial map showing the location and dimensions of the structure(s) in relationship to buildings, sidewalks, and other improvements.
- For structures that are enclosed or partially enclosed, for any use or occupancy classification, a Life Safety Code analysis shall be provided.
- Structural plans and calculations for the shade structure signed and sealed by Florida Professional Engineer. (Wind loads, 75 mph with fabric cover, wind design loads in figure 1609A Risk Category II, of FBC, Chapter 16, with/without the fabric cover)

- Signed letter from the School Principal advising of condition under which the fabric cover must be removed (sample letter included). *Exception: Cantilevered umbrellas less than 120 square feet do not require structural plans. However, a product data sheet must be submitted as part of the permitting package.*
- Certificate certifying the fabric cover meets the requirements of NFPA 701, Standard Methods of Fire Tests for Flame-Resistant Textiles and Film. Also, provide instruction on caring of the fabric and any requirements for re-treating the fabric to maintain its fire-retardant classification.



**THE SCHOOL DISTRICT OF
PALM BEACH COUNTY, FL**

**MARK LODGE, PE, CBO
DIRECTOR**

**JOSEPH M. SANCHES, MBA
CHIEF OPERATING OFFICER**

BUILDING CODE SERVICES
3661 INTERSTATE PARK ROAD N., SUITE 200
RIVIERA BEACH, FL 33406
PHONE: 561-383-2093
WWW.PALMBEACHSCHOOLS.ORG

**DAVID G. DOLAN, MBA
CHIEF OF FACILITIES MANAGEMENT**

(Insert Date)

Principal **(Insert
Principal's name)** **(Insert
school address)**

Reference: **(Insert project name and number)**

Dear Principal **(Insert principal's name)**,

Pursuant to the attached Florida Building Code and NFPA Interpretation for Fabric Canopy Shade Structures, by the SDPBC Building Code Services, this letter is to advise you of the stipulated requirements of **(Insert School Name)**, for removal of the shade fabric of the canopy. Removal and storage are to occur at the end of every school year, or notice of high wind event. Canopy re-installation may occur at the beginning of the following school year or end of high wind conditions.

Due to high wind conditions, the engineered plans for this shade structure canopy require that the canopy fabric be removed when wind speeds are predicted to be greater than 75 MPH. Cantilevered umbrellas shall be put in closed position before wind speeds reach 20 mph and shall be entirely removed when wind speeds are expected to reach 45 mph.

This notification is a requirement of the SDPBC Building Codes for permitting and the Maintenance Plant & Operations Department for protection, life cycle, and maintenance of the removable canopy. Also, forthcoming under separate transmittal will be the related structural, care, and maintenance from the manufacturer data for the shade canopy.

Upon completion of the installation of the shade canopy, a post installation training and turn-over meeting will be scheduled for you and your staff to familiarize you with and provide record file documents on the following requirements:

- Care and maintenance of the canopy for its expected life cycle.
- Removal, storage and re-installation of the canopy.
- Manufacturer product, structural and maintenance data.
- Contact information of manufacturer I vendor and Facility Manager for your use as required.

Should you have any questions, please do not hesitate to contact your **(Insert FMC's name)**, Facility Management Coordinator at (561) **(Insert phone)** or **(Insert name)**, Facility Management Coordinator, Maintenance & Plant Operations at (561) **(Insert phone)**.

Sincerely,

(Insert Name)

Facility Management Coordinator, Maintenance & Plant Operations

Principal _____ Date: _____

copy: **(Inset Name)**, FMC, SDPBC M&PO Dept.
Mark Lodge, Director, SDPBC Building Code Services (w/ permit application)