

## Informal Interpretation Report Number 7427



Date December 04, 2014

Edition 2010

**Section** 412.5.5

### **Question:**

Is it the intent of section 412.5.5 Residential aircraft hangars shall not exceed 2,000 square feet in area and 20 feet in building height, that aircraft hangers accessory to residential dwellings exceeding 2,000 sq. ft. in area and/or 20 ft. in building height, comply with all commercial hanger requirements listed in the Florida Building Code (Building) including the requirement for a fixed fire suppression system?

#### **Answer**

Yes, a hangar that exceeds 2000 square feet and 20 feet in building height cannot be considered a residential aircraft hangar subject to Section 412.5. Instead the hangar would be subject to Section 412.4.

There are generally three separate conditions that could dictate when or if an aircraft hangar building is required to be sprinkled. They include:

- a. Aircraft hangar building "Group" designation classified in accordance with NFPA 409, per FBC Section 412.4.
- b. FBC Section 903.2.9 for Group S-1 hangar buildings over 12,000 square feet in area, c. Aircraft hangar buildings without proper exterior wall openings per FBC Section 903.2.11.1.

Each of these conditions must be verified separately to determine if the hangar building is required to be sprinkled or not.

The Requester has not supplied the type of construction or the actual square footage of the proposed hangar. Additionally, information relating to the exterior wall openings in the hangar has also not been provided.

Let's assume the square footage is 5000 square feet or less; regardless of the type of construction, the hangar would be classified as a Group III hangar (read across the bottom line of Table 412.4.6).

For Group III hangars, fixed fire protection systems are not normally required unless, according to Section 412.4.6.1, there are hazardous operations such as fuel transfer, welding, torch cutting, spray painting, etc. performed in a Group III hangar. In this case the hangar would need to meet the fire protection requirements of a Group II aircraft hangar.

Additionally, if the hangar door is greater than 28 feet in height, the hangar would be classified as a Group I hangar regardless of area, see footnote a. of Table 412.4.6.

Chapter 9 must also be considered. This aircraft hangar is an S-1 occupancy. All Group S-1 occupancy aircraft hangar buildings are required to be sprinkled when their building fire area exceeds 12,000 square feet in area (per FBC Section 903.2.9.1), or when they do not have proper opening around their perimeter (per FBC Section 903.2.11.1). Both requirements must be checked to be sure of sprinkler requirements for S-1 aircraft hangars.

According to the commentary, a hangar that exceeds the limitations of Section 412.5 must then meet other applicable code provisions, including; compliance with fire separation, adequate means of egress, smoke detection and alarms, independent mechanical and plumbing systems and height and area limitations.

# **Commentary:**

None

#### **Notice:**

The Building Officials Association of Florida, in cooperation with the Florida Building Commission, the Florida Department of Business & Professional Regulation, ICC, and industry and professional experts offer this interpretation of the Florida Building Code in the interest of consistency in their application statewide. This interpretation is informal, non-binding and subject to acceptance and approval by the local building official.