



**SCHOOL DISTRICT PALM BEACH COUNTY
BUILDING DEPARTMENT
CODE INTERPRETATION**

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Subject Title: Wind Load Design for Shelters
Applicable Code: FBC 423.25.4 Structural Standard for Wind Loads (2004 edition)
Date: March 31, 2005
Revised: April 16, 2007

Question: Does the code require shelters be designed to wind speed per the Basic Wind Speed Map, Figure 1606 FBC plus 40 MPH?

Answer: No, 423.25.4 only recommends adding 40 MPH to base wind speed and use an importance factor of 1.0.

- The DDC already requires using a wind speed of 140 MPH Countywide with an Importance Factor of 1.15 and Exposure Category 'C' for all schools.
- We also require all schools be designed as enclosed structures with passive wind-borne debris protection on all openings.

Comment:

The language in FBC 423.25.4 is unusual code language, in that it has a recommendation to do something other that is required by another chapter. In code language, "shall," means this you have to do this "may" means you can do this but do not have to. With this logic a recommendation is just that, you can do this, but you do not have to do this. Therefore using the base wind speed of 140 MPH for Palm Beach County along with an Importance Factor of 1.15 and Exposure Category 'C' meets or exceeds the code requirements.

ASCE 7 and Chapter 16 FBC clearly define the requirements for structural design of all structures and neither one requires adding 40 MPH to the Basic Wind Speed Map.