

Building Design Wind Limits vs. Hurricane Wind Categories

“Apples vs. Oranges”

| Minimum Wind Velocity for Structural Design Criteria/HVHZ Miami-Dade Co. | | |
|-----------------------------------------------------------------------------|----------------|----------------------------------------|
| APPLICABLE BUILDING CODE | TIME IN EFFECT | WIND VELOCITY 3- SECOND GUST (MPH)* |
| No Codes, Local Ordinance** | 1957-1974 | N/A |
| South Florida Building Code** | 1977-1994 | N/A |
| Southern Standard Building Code | 1945-1994 | 110 |
| Standard Building Code | 1945-2001 | 110 |
| FBC 2001 Edition | 2001-2004 | 146 |
| FBC 2004 Edition | 2004-2007 | 146 |
| FBC 2007 Edition | 2007-2010 | 146 |
| FBC 2010 Edition | 2010-2014 | 186 |
| FBC 2014 Edition | 2014-PRESENT | 186 |

| FIU MMC Selected Facilities | | | | |
|--------------------------------------------------------------------------------------|-------------------------------|---------------------------------------------|-----------------------------------------------|------------------------------|
| COMPARABLE MATRIX: WIND VELOCITY FOR STRUCTURAL DESIGN vs HURRICANE WIND SPEED SCALE | | | | |
| FACILITY/BLDG | "PUBLIC" SHELTER | BLDG CODE | WIND VELOCITY 3- SECOND GUST (MPH)* | BUILDING RISK CATEGORY*** |
| Parkview Housing | North Portion, East Wing only | FBC, 2010 Edition (REF ASCE 7-10) (HVHZ) | 226 | III |
| Parkview Housing (excluding "Public" Shelter) | N/A | FBC, 2010 Edition (REF ASCE 7-10) (HVHZ) | 186 | III |
| PG-5 Mixed-Use Occupancy | N/A | FBC, 2007 Edition (REF ASCE 7-98) (HVHZ) | 186 (increased for bldg. risk category) | IV |
| PG-6 Mixed-Use Occupancy | N/A | FBC, 2010 edition (REF ASCE 7-10) (HVHZ) | 186 | III |
| PC University Bldg. | N/A | SS Bldg Code, 1970 Edition | 110 | N/A |
| Rec. Center | N/A | FBC, 2001 Edition REF ASCE 7-98 (HVHZ) | 146 | III |
| Mango University Bldg | N/A | FBC, 2010 Edition (REF ASCE 7-10) (HVHZ) | 186 | III |

* In the HVHZ, buildings are designed using wind velocity (3-second gust) in MPH, as applied to the building's risk category. Hurricanes are classified by actual sustained wind speeds per Saffir-Simpson Scale:

Cat 1 = 74-85 mph Cat 2 = 96-100 mph Cat 3 = 111-129 mph Cat 4 = 130-156 mph Cat 5 = >156 mph

** Not applicable to FIU.

***Risk category based on nature of building occupancy; not related to Saffir-Simpson hurricane categories.

I. - Agricultural & minor storage

III.-Most University Buildings

II.-Other structures than those listed on III & IV.
center.

IV.-Essential facilities, e.g. emergency management operations