

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