



Memorandum

Effective: January 1, 2018

To: Contractors, Building Inspectors, Design Professionals & Industry Stakeholders

From: John Cosmo, Chief Building Official

Subject: Wind Loads Interpretation – 6th Edition Florida Building Code

Authority: Florida Statute 553.775 – Florida Building Code, Building – Chapter 16; Florida Building Code, Residential – Chapter 3; Boca Raton Building Regulations Section 19-57.

Purpose: To establish minimum acceptable criteria and ensure uniformity throughout the entire City of Boca Raton with respect to structural design of buildings, structures and portions thereof regulated by this building code.

Re: Wind Velocity & Exposure Category

The City of Boca Raton is located in southern Palm Beach County with direct exposure to the ocean from the east and Broward County directly to the south. Its close proximity to Broward County which is designated in the Florida Building Code as part of the (HVHZ) High Velocity Hurricane Zone in effect means the City of Boca Raton buildings are subjected to virtually the same wind velocity and positive/negative pressures as the buildings located within the HVHZ.

Example: Broward County has set the wind loads for a Risk Category II building at 170 mph. Using an interpolation method Boca Raton's wind loads would range from 167 mph – 170 mph depending on where inside the city a building is located. Interpolating the ultimate design wind speed from figures 1609.3(1), 1609.3(2), 1609.3(3) in the Florida Building Code would be subjective and would not ensure uniformity of design or construction and would not provide consistency for industry.

Therefore, the following wind loads shall apply to the entire City of Boca Raton with respect to the wind load designs for new buildings and structures or existing buildings and structures being repaired, renovated, altered or reconstructed.

1. Wind Velocity (3-second gust) used in structural calculations shall be as follows:
 - a. Risk Category I Buildings and Structures: 157 mph
 - b. Risk Category II Buildings and Structures: 170 mph
 - c. Risk Category III and IV Buildings and Structures: 182 mph
2. All Buildings and structures shall be considered to be in Exposure Category C, unless Exposure Category D applies, as defined in Florida Building Code 1609.4.3

Florida Building Code 6th Edition (2017)

ULTIMATE DESIGN WIND SPEEDS

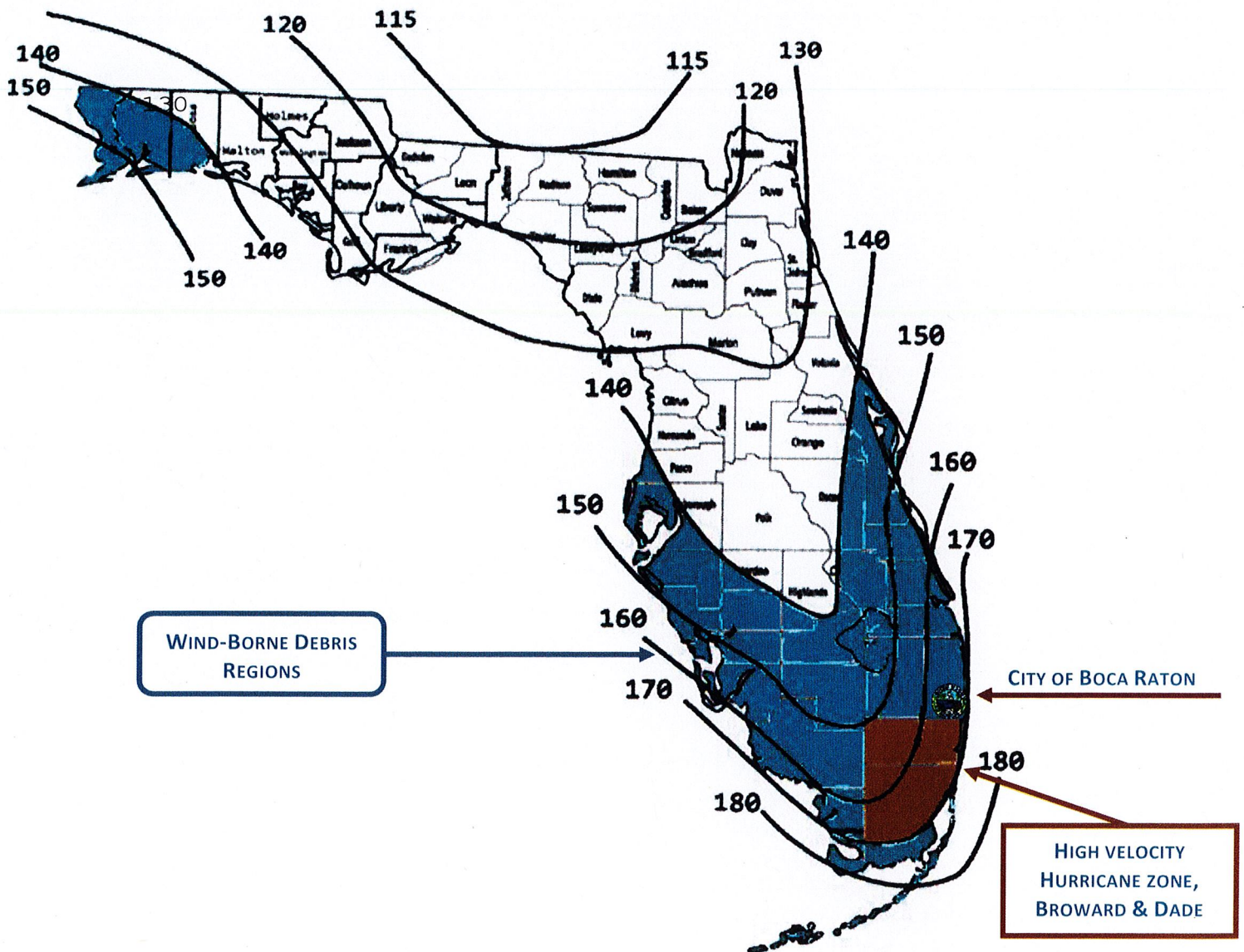


FIGURE 1609.3(1)
ULTIMATE DESIGN WIND SPEEDS, V_{ult} , FOR RISK CATEGORY II BUILDINGS AND OTHER STRUCTURES