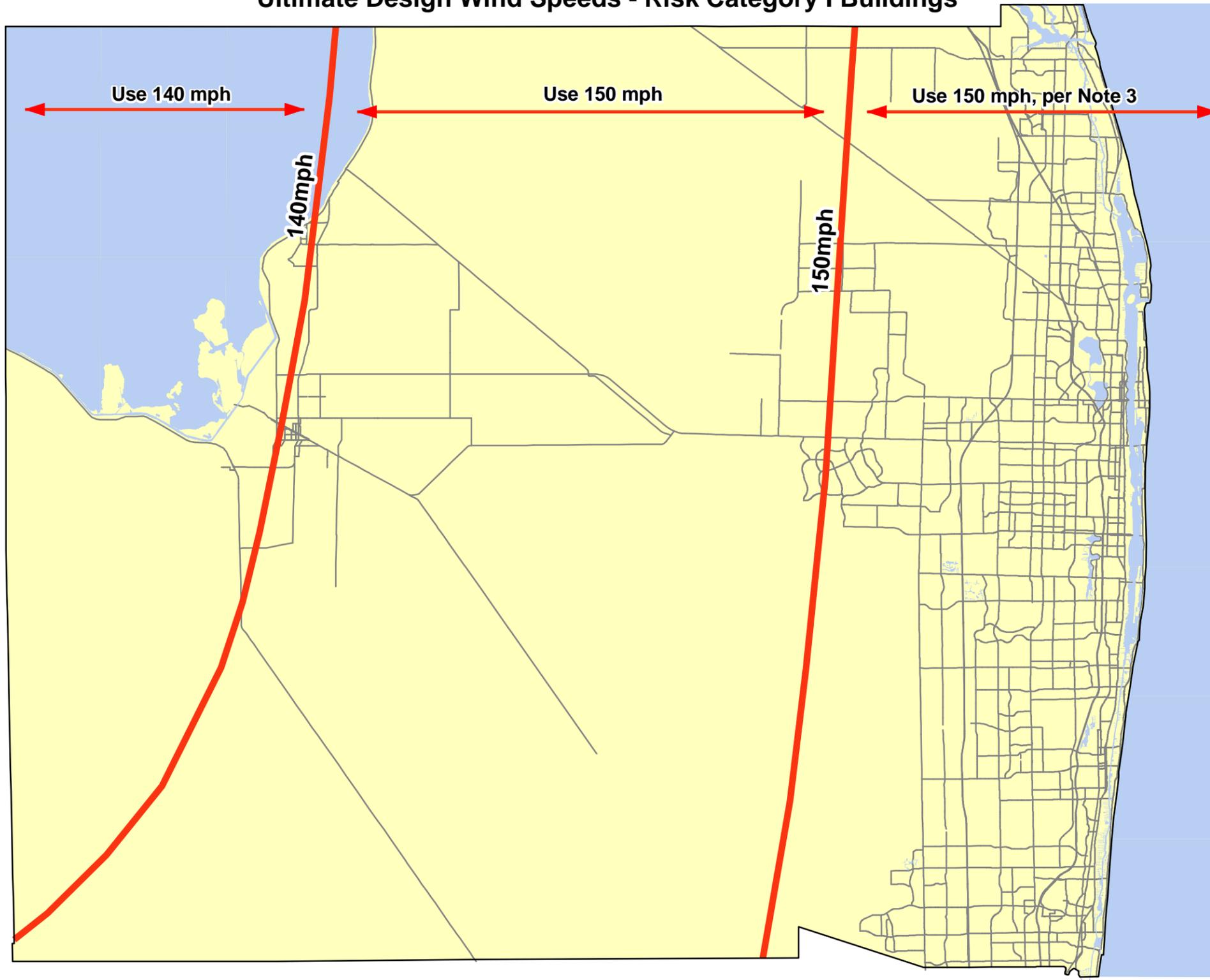


Palm Beach County - Figure 1609.3(4) Ultimate Design Wind Speeds - Risk Category I Buildings



Sources: Florida Department of Community Affairs, Codes and Standards Division; Applied Research Associates, Inc; Florida Geographic Library

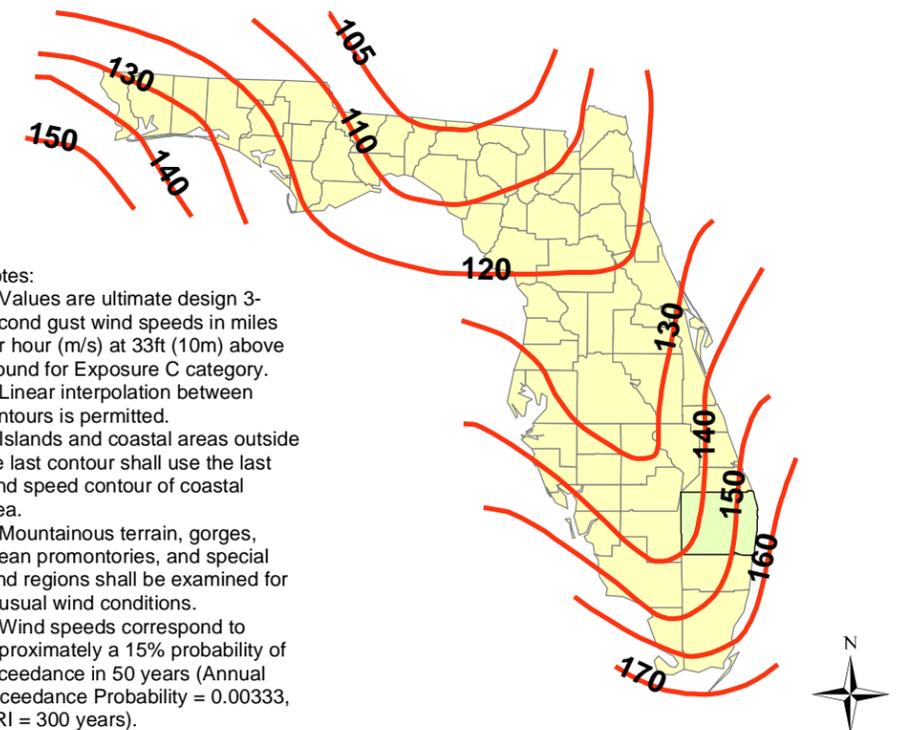
The ultimate design wind speed, V_{ult} , in mph, for the determination of the wind loads shall be determined by Figures 1609.3(1), 1609.3(2), 1609.3(3), and 1609.3(4). The ultimate design wind speed, V_{ult} , for use in the design of Risk Category II buildings and structures shall be obtained from Figure 1609.3(1). The ultimate design wind speed, V_{ult} , for use in the design of Risk Category III buildings and structures shall be obtained from Figure 1609.3(2). The ultimate design wind speed, V_{ult} , for use in the design of Risk Category IV buildings and structures shall be obtained from Figure 1609.3(3). The ultimate design wind speed, V_{ult} , for use in the design of Risk Category I buildings and structures shall be obtained from Figure 1609.3(4). The ultimate design wind speed, V_{ult} , for the special wind regions indicated near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements. The ultimate design wind speeds, V_{ult} , determined by the local jurisdiction shall be in accordance with Chapter 26 of ASCE 7. The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores wherever possible. To determine the applicable wind speed of a particular parcel, Palm Beach County has developed separate Geographic Information Systems (GIS) tools for each of the Risk Categories, available on the Building Division website at <http://discover.pbcgov.org/pzb/Maps/Wind-Speeds.aspx>

WIND-BORNE DEBRIS REGION. Areas within hurricane-prone regions located:

1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed, V_{ult} , is 130 mph (58 m/s) or greater; or
2. In areas where the ultimate design wind speed is 140 mph (63.6 m/s) or greater. Linear interpolation between contours may not be utilized in the determination of the Wind-Borne Debris Region. All of Unincorporated Palm Beach County is within the Wind-Borne Debris Region.

For Risk Category II buildings and other structures and Risk Category III buildings and other structures, except health care facilities, the wind-borne debris region shall be based on Figure 1609.3(1). For Risk Category III health care facilities, the wind-borne debris region shall be based on Figure 1609.3(2). For Risk Category IV buildings and other structures, the wind-borne debris region shall be based upon Figure 1609.3(3).

**Figure 1609.3(4) Ultimate Design Wind Speeds,
for Risk Category I Buildings and Other Structures**



- Notes:
1. Values are ultimate design 3-second gust wind speeds in miles per hour (m/s) at 33ft (10m) above ground for Exposure C category.
 2. Linear interpolation between contours is permitted.
 3. Islands and coastal areas outside the last contour shall use the last wind speed contour of coastal area.
 4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
 5. Wind speeds correspond to approximately a 15% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00333, MRI = 300 years).

PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE - BUILDING, 7th EDITION (2020)

Exposure categories to be utilized for design shall be in accordance with Section 1609.4 of the Florida Building Code, Building.



Date: 10/6/2020 S:\Work\skubber\Projects\Building Department\Wind_Data\WindSpeeds_2020\UltimateDesignWindSpeedMaps_1609.3(4).mxd/sek



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