COLUMBIA

Figure 1609C
Ultimate Design Wind Speeds
Risk Category I Buildings

BASIC WIND SPEED. The basic wind speed in miles per hour, for the development of wind loads, shall be determined from Figure 1609. 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 whenever possible.

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 Vult is 130 mph (45 m/s) or greater; or
2. In areas where the ultimate design wind speed Vult is 140 mph (63 m/s) or greater

For Risk Category II buildings and structures and occupancy category III buildings and structures, except health care facilities, the windborne debris region shall be based on Figure 1609A. For occupancy category IV buildings and structures and occupancy category III health care facilities, the windborne debris region shall be based on Figure 1609B.

Risk Category I Buildings: 105 miles per hour north of centerline of C.R 240 (parts of aka Myrtis & Family) & 110 miles per hour south of centerline of C.R. 240.

Figure 1609C Ultimate Design Wind Speeds, for Risk Category I Buildings and Other Structures

Notes:
1. Values are nominal design 3-second gust wind speeds in miles per hour (m/s) at 33 ft (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 the 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).

September 5, 2011

Source: Florida Department of Community Affairs, Codes and Standards Division; Applied Research Associates, Inc.; Florida Geographics Data Library /Florida Building Code 2016; Troy Creek, Columbia County Building Office, 09/10/2011
Figure 1609A
Ultimate Design Wind Speeds
Risk Category II Buildings

BASIC WIND SPEED. The basic wind speed in miles per hour, for the development of wind loads, shall be determined from Figure 1609. 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 whenever possible.

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 (48 m/s) or greater; or
2. In areas where the ultimate design wind speed $V_{ult}$ is 140 mph (53 m/s) or greater

For Risk Category II buildings and structures and occupancy category III buildings and structures, except health care facilities, the windborne debris region shall be based on Figure 1609A. For occupancy category IV buildings and structures and occupancy category III health care facilities, the windborne debris region shall be based on Figure 1609B.

Risk Category II Buildings:
115 miles per hour north of centerline of C.R 240 (parts of aka Myrtis & Family) &
120 miles per hour south of centerline of C.R. 240.
COLUMBIA

Figure 1609B
Ultimate Design Wind Speeds
Risk Category III and IV Buildings

BASIC WIND SPEED. The basic wind speed in miles per hour, for the
development of wind loads, shall be determined from Figure 1609. 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 whenever possible.

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 Vult is 130 mph (48 m/s) or greater; or
2. In areas where the ultimate design wind speed Vult is 140 mph (53 m/s) or
greater

For Risk Category II buildings and structures and occupancy category III
buildings and structures, except health care facilities, the windborne debris
region shall be based on Figure 1609A. For occupancy category IV buildings
and structures and occupancy category III health care facilities, the windborne
debris region shall be based on Figure 1609B.

Figure 1609B Ultimate Design Wind Speeds,
for Risk Category III and IV Buildings and Other Structures

Notes:
1. Values are nominal design 3-second gust wind speeds in miles per
hour (m/s) at 33 ft (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 the 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 3% probability of
exceedance in 50 years (Annual
Exceedance Probability = 0.000588,
MRI = 1700 years).

Sources: Florida Department of Community Affairs, Codes and Standards Division; Applied Research Associates,
Inc.; Florida Geographics Data Library; Florida Building Code 2010; Troy Creek, Columbia County Building
Office, 08/10/2011
<table>
<thead>
<tr>
<th>RISK CATEGORY</th>
<th>NATURE OF OCCUPANCY</th>
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| I             | Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to:  
• Agricultural facilities.  
• Certain temporary facilities.  
• Minor storage facilities.  
• Screen enclosures. |
| II            | Buildings and other structures except those listed in Risk Categories I, III and IV |
| III           | Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to:  
• Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300.  
• Buildings and other structures containing elementary school, secondary school or day care facilities with an occupant load greater than 250.  
• Buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500.  
• Group I-2 occupancies with an occupant load of 50 or more resident patients but not having surgery or emergency treatment facilities.  
• Group I-3 occupancies.  
• Any other occupancy with an occupant load greater than 5,000.  
• Power-generating stations, water treatment facilities for potable water, waste water treatment facilities and other public utility facilities not included in Risk Category IV.  
• Buildings and other structures not included in Risk Category IV containing sufficient quantities of toxic or explosive substances to be dangerous to the public if released. |
| IV            | Buildings and other structures designated as essential facilities, including but not limited to:  
• Group I-2 occupancies having surgery or emergency treatment facilities.  
• Fire, rescue, ambulance and police stations and emergency vehicle garages.  
• Designated earthquake, hurricane or other emergency shelters.  
• Designated emergency preparedness, communications and operations centers and other facilities required for emergency response.  
• Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures.  
• Structures containing highly toxic materials as defined by Section 307 where the quantity of the material exceeds the maximum allowable quantities of Table 307.1(2).  
• Aviation control towers, air traffic control centers and emergency aircraft hangars.  
• Buildings and other structures having critical national defense functions.  
• Water storage facilities and pump structures required to maintain water pressure for fire suppression. |