Figure 1609A
Ultimate Design Wind Speeds
Risk Category II Buildings

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 7% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00143, MRI = 700 years).

Sources: Florida Department of Community Affairs, Codes and Standards Division; Applied Research Associates, Inc.; Florida Geographic Data Library
Figure 1609B
Ultimate Design Wind Speeds
Risk Category III and IV Buildings

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 Geographic Data Library
Figure 1609C
Ultimate Design Wind Speeds
Risk Category I Buildings

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).

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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.

Sources: Florida Department of Community Affairs, Codes and Standards Division; Applied Research Associates, Inc.; Florida Geographic Data Library
1604.5 Occupancy category. Buildings shall be assigned an occupancy category in accordance with Table 1604.5.

### TABLE 1604.5 OCCUPANCY CATEGORY OF BUILDINGS AND OTHER STRUCTURES

<table>
<thead>
<tr>
<th>OCCUPANCY 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 Occupancy 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:  
• Covered structures whose primary occupancy is public assembly with an occupant load greater than 300.  
• Buildings and other structures with elementary school, secondary school or day care facilities with an occupant load greater than 250.  
• Buildings and other structures with an occupant load greater than 500 for colleges or adult education facilities.  
• Health care facilities with an occupant load of 50 or more resident patients, but not having surgery or emergency treatment facilities.  
• Jails and detention facilities.  
• Any other occupancy with an occupant load greater than 5,000.  
• Power-generating stations, water treatment for potable water, waste water treatment facilities and other public utility facilities not included in Occupancy Category IV.  
• Buildings and other structures not included in Occupancy 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:  
• Hospitals and other health care facilities having surgery or emergency treatment facilities.  
• Fire, rescue and police stations and emergency vehicle garages.  
• Designated hurricane or other emergency shelters.  
• Designated emergency preparedness, communication, and operation centers and other facilities required for emergency response.  
• Power-generating stations and other public utility facilities required as emergency backup facilities for Occupancy 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 treatment facilities required to maintain water pressure for fire suppression. |