

### **1609.1 Applications.**

Buildings, structures and parts thereof shall be designed to withstand the minimum wind loads prescribed herein. Decreases in wind loads shall not be made for the effect of shielding by other structures.

All exterior wall coverings and soffits shall be capable of resisting the design pressures specified for walls for components and cladding loads in accordance with Section 1609.1.1. Manufactured soffits shall be labeled in accordance with Section 1715.9 of this code.

#### **1609.1.1 Determination of wind loads.**

Wind loads on every building or structure shall be determined in accordance with Chapters 26 through 30 of ASCE 7 or the provisions of the alternate all heights method in Section 1609.6. Wind shall be assumed to come from any horizontal direction and wind pressures shall be assumed to act normal to the surface considered.

#### **Exceptions:**

1. Subject to the limitations of Section 1609.1.1.1, the provisions of ICC 600 shall be permitted for applicable Group R-2 and R-3 buildings.
2. Subject to the limitations of Section 1609.1.1.1, 1609.1.4, and 1609.3, provisions of ANSI/AF&PA WFCM, Wood Frame Construction Manual for One- and Two-Family Dwellings shall be permitted for applicable wood frame buildings of Group R-3 occupancy where  $V_{asd}$ , determined in accordance with Section 1609.3.1 is 150 mph or less.
3. Subject to the limitations of Section 1609.1.1.1, residential structures using the provisions of AISI S230.
4. Designs using NAAMM FP 1001. Specification for Design Loads of Metal Flagpoles.
5. Designs using TIA-222 for antenna-supporting structures and antennas shall be permitted for communication tower and steel antenna support structures.
6. Wind tunnel tests in accordance with Chapter 31 of ASCE 7.
7. Designs using AASHTO LTS-4 Structural Specifications for Highway Signs, Luminaries, and Traffic Signals.
8. Wind loads for screened enclosures shall be determined in accordance with Section 2002.4.

The wind speeds in Figure 1609A, 1609B and 1609C shall be converted to nominal wind speeds,  $V_{asd}$  in

accordance with Section 1609.3.1 when the provisions of the standards referenced in Exceptions 1 through 5 and 7 are used unless the wind provisions in the standards are based on Ultimate Wind Speeds as specified in Figures 1609A, 1609B or 1609C or Chapter 26 of ASCE 7.

**1609.1.1.1 Applicability.**

The provisions of ICC 600 are applicable only to buildings located within Exposure B or C as defined in Section 1609.4. The provisions of ICC 600, AF&PA WFCM, and AISI S230 shall not apply to buildings sited on the upper half of an isolated hill, ridge or escarpment meeting the following conditions:

1. The hill, ridge or escarpment is 60 feet (18 288 mm) or higher if located in Exposure B or 30 feet (9144 mm) or higher if located in Exposure C;
2. The maximum average slope of the hill exceeds 10 percent; and
3. The hill, ridge or escarpment is unobstructed upwind by other such topographic features for a distance from the high point of 50 times the height of the hill or 1 mile (1.61 km), whichever is greater.