## Wind Resistance

The aesthetic appearance and the natural durability of cedar add property value to your home. These are just a couple of the reasons cedar is so often used as a roof covering. Cedar shakes and shingles also prove to be highly wind resistant roof coverings.

In Miami-Dade County, Florida, where hurricanes and tropical storms are a common occurrence, roofing systems using Certi-label™ shakes and shingles comply with the International Residential Code.

Certi-label™ shakes and shingles have been subjected to the UL 1897 fourth edition "Uplift tests for roof covering systems" with exemplary results. The classification for uplift resistance is expressed in pounds per square foot. The test method subjects a minimum 10 by 10 ft. test sample to various short term (1 minute interval) static pressures which represent the uplift forces imposed on roofing systems securement to a specified roof deck when exposed to high velocity winds. In other words it tests how well shakes and shingles hold up when subjected to high winds. It measures the degree to which the roofing material is uplifted from the roof deck.

- Certigrade® shingles 90 PSF (pounds per square foot)
- Certi-Split® shakes 180 PSF

A subsequent report by a Florida Registered Professional Engineer converted the PSF numbers into miles per hour figures using the analytical method for wind design of roof cladding set forth in Section 6 of ASCE 7-98 (American Society of Engineers). Results, using no safety factors, are as follows:

- Certigrade® shingles withstood wind speeds of 173 MPH
- Certi-Split® shakes withstood wind speeds of 245 MPH

It should be noted that these calculations were conducted for a specific house in the Dade County area of Florida. When converting from PSF to MPH using ASCE 7-98 results will vary depending on many factors including building height, location, roof slope, environment etc. Be advised that all design parameters, assumptions and limitations of use set forth in the Florida engineer's report are necessary components of further interpretation.