Shakespeare Composite Structures

1/1–1998

Wind Velocity Exposure Test Results **Shakespeare Composite Structures simulated the effects of wind loading on its poles in accordance with the American Association of State Highway and Transportation Officials (AASHTO) LTS-1 and LTS-2.**

The wind velocities illustrated by Chart A are isotach values, not gust values. Shakespeare's design velocities include a gust factor of 1.3, which results in a pole designed for winds considerably greater than the isotach value.

Wind loading for Shakespeare Composite Structures fiberglass-reinforced composite poles is calculated in accordance with AASHTO Standard Specification for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

Lateral Load Deflection Test Results **Shakespeare tested the lateral load deflection of its 30-foot Round Anchor Base and 23- and 17-foot Round Direct Burial poles in accordance with the American Society for Testing and Materials (ASTM) D-4923. The poles were subjected to loads ranging from 0-300 lbs. Chart B illustrates inches of total deflection at load point.**

Applications **Shakespeare composite poles are currently resisting the effects of strong winds in Florida, Hawaii, Colorado, Wyoming, Alaska and near the Arctic Circle, among other locations.**

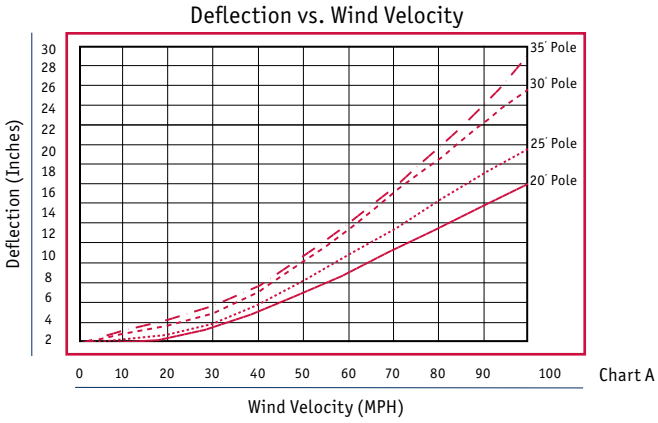


Chart A

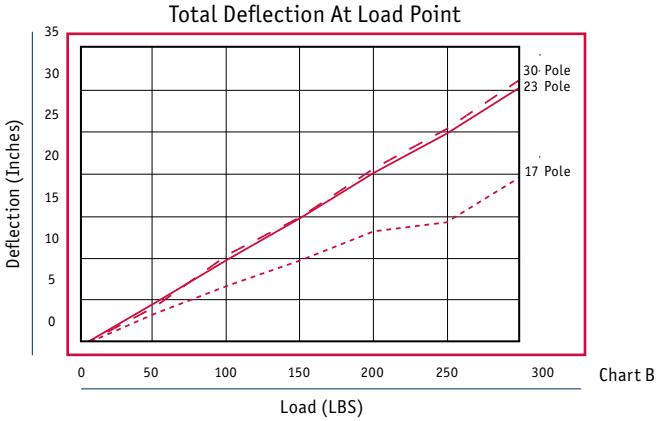
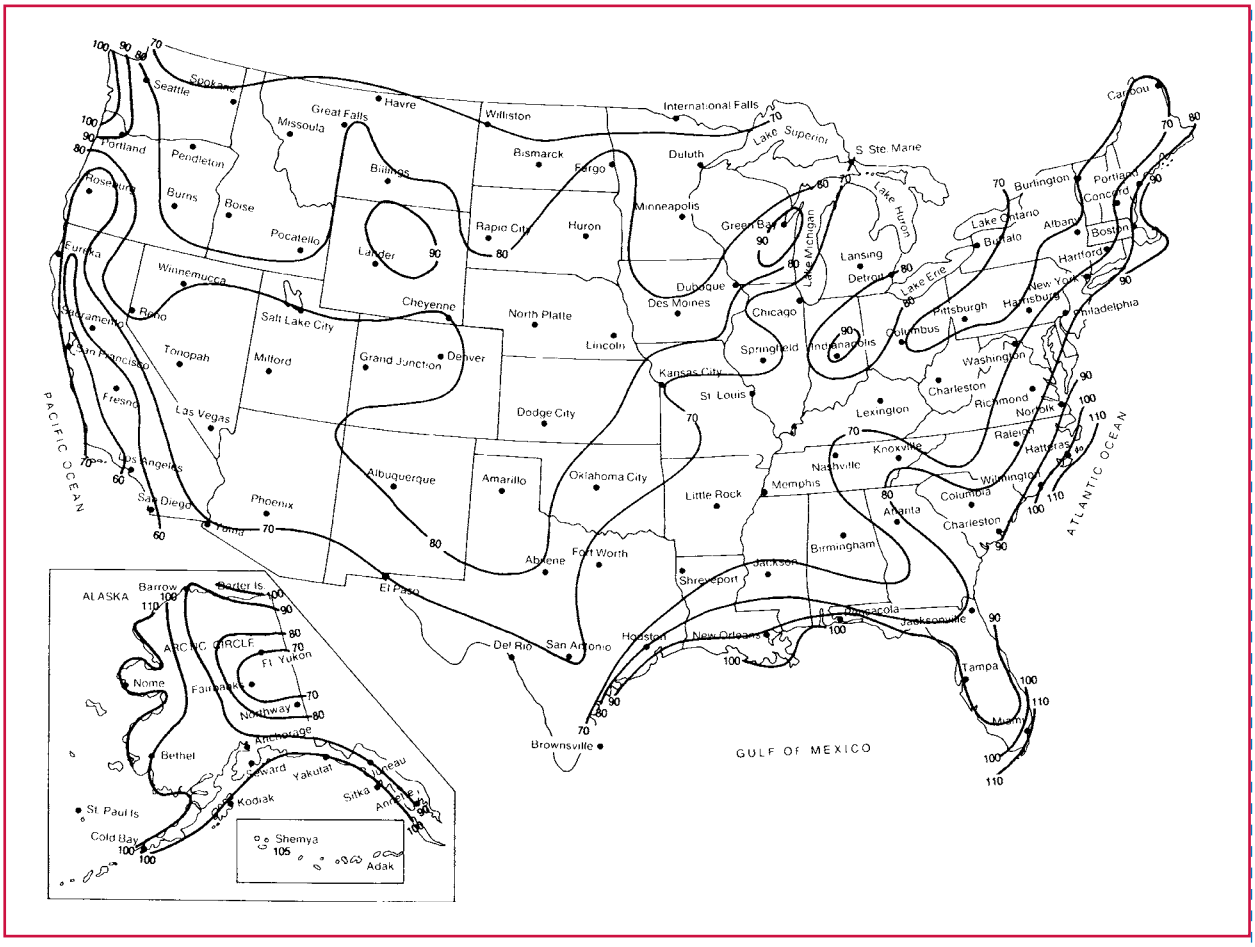


Chart B

Maximum Expected Wind Velocities in the U.S.



Isotachs of Extreme Mile
at 30 Feet Above Ground

Isotach Value	Gust Velocities
60	78
67	87
75	98
80	104
85	111
90	117
95	124
100	130
110	143
120	156

Interval for Hawaii is 80 mph.
Interval for Puerto Rico is 95 mph.

Isotach 0.02 Quartiles,
in Miles Per Hour:
Annual Extreme-Mile 30 feet
above ground, 50-year Mean
Recurrence Interval.

50-year Mean Recurrence (miles per hour)