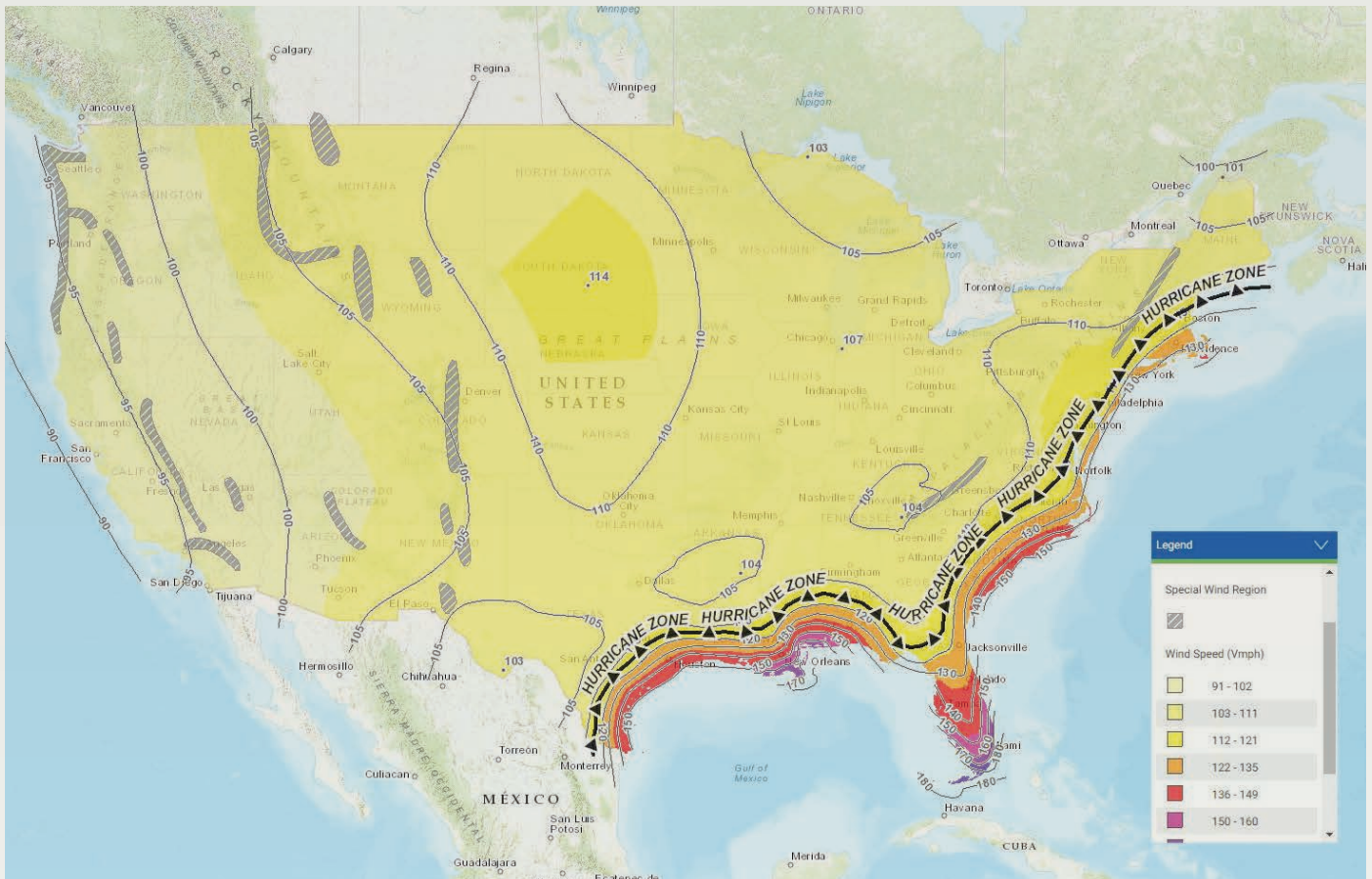


2016 AASHTO Wind Map



Notes

- Values are 3-second gust speeds in m/s (mph) at 10 m (32.8 ft) above ground for Exposure C category and are associated with an annual probability of 0.02 (50-year mean recurrence interval)
- The wind map is intended as a general guide. Always consult local authorities to determine maximum wind velocities, gusts, and special conditions for your installation.
- Hawaii has a 105 mph wind velocity.
- Puerto Rico has a 125 mph wind velocity.
- Caution must be taken when selecting wind velocity in special wind regions as indicated in the map above. These areas include:
 - Open land, oceans, or large bodies of water
 - Mountainous regions and gorges
 - Areas where extreme wind conditions such as hurricanes and tornadoes are common.
- The effective projected area (EPA) of the sum of all fixtures and arms must not exceed the maximum allowable pole EPA for the selected design wind speed.
- It is the responsibility of the specifier to correctly select a pole for a given wind load per the AASHTO standards.
- Pole foundations should be designed per the soil conditions and local codes. Structura does not offer foundation design recommendations.
- Consult the factory for luminaire arms greater than 24" in length and luminaires greater than 50 lbs.

Beam

6" Size

| Overall Pole Height (ft) | Pole Size | Anchor Bolt Qty. | Weight | Allowable Pole EPA | | | | | | |
|--------------------------|-----------|------------------|--------|--------------------|--------|--------|--------|--------|--------|--------|
| | | | | 90mph | 100mph | 110mph | 120mph | 130mph | 140mph | 150mph |
| 12' | 6" | 4 | 333 | 25.8 | 20.6 | 16.8 | 13.8 | 11.6 | 9.8 | 8.3 |
| 12' | 6" | 6 | 333 | 38.7 | 30.9 | 25.2 | 20.8 | 17.4 | 14.7 | 12.5 |
| 14' | 6" | 4 | 379 | 18.1 | 14.4 | 11.6 | 9.4 | 7.8 | 6.5 | 5.4 |
| 14' | 6" | 6 | 379 | 27.2 | 21.6 | 17.4 | 14.2 | 11.7 | 9.7 | 8.1 |
| 16' | 6" | 4 | 425 | 13.1 | 10.2 | 8.1 | 6.5 | 5.2 | 4.2 | 3.4 |
| 16' | 6" | 6 | 425 | 19.7 | 15.4 | 12.2 | 9.7 | 7.9 | 6.4 | 5.1 |
| 18' | 6" | 4 | 471 | 9.6 | 7.3 | 5.7 | 4.4 | 3.4 | 2.6 | 2.0 |
| 18' | 6" | 6 | 471 | 14.4 | 11.0 | 8.5 | 6.6 | 5.1 | 4.0 | 3.0 |
| 20' | 6" | 4 | 517 | 7.0 | 5.2 | 3.9 | 2.8 | 2.0 | 1.4 | 0.9 |
| 20' | 6" | 6 | 517 | 10.6 | 7.8 | 5.8 | 4.3 | 3.1 | 2.1 | 1.4 |
| 22' | 6" | 4 | 563 | 5.1 | 3.6 | 2.5 | 1.6 | 1.0 | - | - |
| 22' | 6" | 6 | 563 | 7.6 | 5.5 | 3.7 | 2.4 | 1.5 | - | - |
| 24' | 6" | 4 | 609 | 3.5 | 2.3 | 1.3 | - | - | - | - |
| 24' | 6" | 6 | 609 | 5.3 | 3.4 | 2.0 | 1.0 | - | - | - |

Beam

8" Size

| Overall Pole Height (ft) | Pole Size | Anchor Bolt Qty. | Weight | Allowable Pole EPA | | | | | | |
|--------------------------|-----------|------------------|--------|--------------------|--------|--------|--------|--------|--------|--------|
| | | | | 90mph | 100mph | 110mph | 120mph | 130mph | 140mph | 150mph |
| 12' | 8" | 4 | 540 | 66.5 | 55.0 | 44.9 | 37.3 | 31.4 | 26.7 | 22.9 |
| 12' | 8" | 6 | 540 | 102.8 | 82.5 | 67.4 | 56.0 | 47.1 | 40.1 | 34.4 |
| 14' | 8" | 4 | 618 | 57.9 | 46.3 | 37.7 | 31.2 | 26.1 | 22.0 | 18.8 |
| 14' | 8" | 6 | 618 | 86.8 | 69.4 | 56.5 | 46.8 | 39.1 | 33.1 | 28.2 |
| 16' | 8" | 4 | 696 | 47.8 | 38.2 | 31.1 | 25.7 | 21.5 | 18.1 | 15.5 |
| 16' | 8" | 6 | 696 | 71.7 | 57.3 | 46.6 | 38.5 | 32.2 | 27.2 | 23.2 |
| 18' | 8" | 4 | 774 | 36.7 | 29.2 | 23.6 | 19.3 | 16.0 | 13.4 | 11.3 |
| 18' | 8" | 6 | 774 | 55.1 | 43.8 | 35.4 | 29.0 | 24.1 | 20.1 | 16.9 |
| 20' | 8" | 4 | 852 | 28.8 | 22.7 | 18.2 | 14.7 | 12.0 | 9.9 | 8.2 |
| 20' | 8" | 6 | 852 | 43.2 | 34.0 | 27.2 | 22.1 | 18.1 | 14.9 | 12.3 |
| 22' | 8" | 4 | 930 | 22.8 | 17.8 | 14.0 | 11.2 | 9.0 | 7.2 | 5.8 |
| 22' | 8" | 6 | 930 | 34.2 | 26.7 | 21.1 | 16.8 | 13.5 | 10.9 | 8.8 |
| 24' | 8" | 4 | 1008 | 18.2 | 14.0 | 10.8 | 8.5 | 6.6 | 5.1 | 4.0 |
| 24' | 8" | 6 | 1008 | 27.3 | 21.0 | 16.3 | 12.7 | 9.9 | 7.7 | 4.8 |
| 26' | 8" | 4 | 1086 | 14.5 | 10.9 | 8.3 | 6.3 | 4.7 | 3.4 | 2.4 |
| 26' | 8" | 6 | 1086 | 21.8 | 16.4 | 12.4 | 9.4 | 7.0 | 5.2 | 3.7 |
| 28' | 8" | 4 | 1164 | 11.6 | 8.5 | 6.2 | 4.4 | 3.1 | 2.0 | 1.1 |
| 28' | 8" | 6 | 1164 | 17.3 | 12.7 | 9.3 | 6.7 | 4.6 | 3.0 | 1.7 |
| 30' | 8" | 4 | 1242 | 9.1 | 6.4 | 4.4 | 2.9 | 1.7 | - | - |
| 30' | 8" | 6 | 1242 | 13.7 | 9.6 | 6.6 | 4.4 | 2.6 | 1.2 | - |

Beam

10" Size

| Overall Pole Height (ft) | Pole Size | Anchor Bolt Qty. | Weight | Allowable Pole EPA | | | | | | |
|--------------------------|-----------|------------------|--------|--------------------|--------|--------|--------|--------|--------|--------|
| | | | | 90mph | 100mph | 110mph | 120mph | 130mph | 140mph | 150mph |
| 12' | 10" | 4 | 786 | 122.3 | 98.4 | 80.7 | 67.3 | 56.8 | 48.6 | 41.9 |
| 12' | 10" | 6 | 786 | 183.4 | 147.6 | 121.1 | 101.0 | 85.3 | 72.8 | 62.8 |
| 14' | 10" | 4 | 894 | 103.8 | 83.3 | 68.2 | 56.6 | 47.7 | 40.6 | 34.8 |
| 14' | 10" | 6 | 894 | 155.7 | 125.0 | 102.3 | 85.0 | 71.5 | 60.9 | 52.3 |
| 16' | 10" | 4 | 1002 | 89.78 | 71.8 | 58.6 | 48.5 | 40.7 | 34.5 | 29.4 |
| 16' | 10" | 6 | 1002 | 134.6 | 107.8 | 87.9 | 72.8 | 61.0 | 51.7 | 44.2 |
| 18' | 10" | 4 | 1110 | 78.7 | 62.8 | 51.0 | 42.1 | 35.1 | 29.6 | 25.1 |
| 18' | 10" | 6 | 1110 | 118.1 | 94.2 | 76.6 | 63.1 | 52.7 | 44.4 | 37.7 |
| 20' | 10" | 4 | 1218 | 67.1 | 53.6 | 43.5 | 35.9 | 30.0 | 25.3 | 21.5 |
| 20' | 10" | 6 | 1218 | 100.7 | 80.4 | 65.3 | 53.9 | 45.0 | 37.9 | 32.2 |
| 22' | 10" | 4 | 1326 | 54.3 | 43.1 | 34.8 | 28.5 | 23.6 | 19.7 | 16.6 |
| 22' | 10" | 6 | 1326 | 81.47 | 64.6 | 52.2 | 42.8 | 35.4 | 29.6 | 24.9 |
| 24' | 10" | 4 | 1434 | 44.4 | 35.0 | 28.1 | 22.8 | 18.7 | 15.4 | 12.8 |
| 24' | 10" | 6 | 1434 | 66.6 | 52.6 | 42.1 | 34.2 | 28.0 | 23.1 | 19.2 |
| 26' | 10" | 4 | 1542 | 36.6 | 28.6 | 22.7 | 18.2 | 14.7 | 11.9 | 9.7 |
| 26' | 10" | 6 | 1542 | 55.0 | 43.0 | 34.1 | 27.4 | 22.1 | 17.9 | 14.6 |
| 28' | 10" | 4 | 1650 | 30.4 | 23.5 | 18.4 | 14.5 | 11.5 | 9.1 | 7.2 |
| 28' | 10" | 6 | 1650 | 45.6 | 35.5 | 27.6 | 21.8 | 17.3 | 13.7 | 10.8 |
| 30' | 10" | 4 | 1758 | 25.3 | 19.3 | 14.8 | 11.5 | 8.8 | 6.8 | 5.1 |
| 30' | 10" | 6 | 1758 | 37.9 | 28.9 | 22.3 | 17.2 | 13.3 | 10.1 | 7.6 |