

WIND TURBINE SITE SURVEY GUIDE

Site Survey Guide

**WARNING****Personal Injury and Property Damage Hazard**

Improper installation, alteration, service or maintenance may result in death, serious bodily injury or property damage. Installation or repairs made by unqualified persons could result in hazards to you and others. Installation must conform with all safety and other codes of all governmental authorities having jurisdiction.

The information contained in this Site Survey Guide is intended for use by Authorized Installers or other licensed contractors who are experienced in installing and servicing the WindTronics™ Wind Turbine, are familiar with all precautions and safety procedures required in such work, and are equipped with the proper tools and machinery.

## Factors to Consider

When selecting the best location for the wind turbine, consider the following:

1. Wind – Is the area windy enough to support the installation of a wind turbine?
2. Height – Install as high as possible. Ideally, it should be greater than 33' from ground to turbine center for best performance and safety of personnel.
3. Obstructions – Place the turbine in the location furthest away from all obstacles (buildings, trees, parapets, HVAC units, rooftops, etc.).
4. Prevailing Wind – As a general guide, place the turbine in a location that can best take advantage of prevailing winds (if you do not know, you can find historical “wind rose” information on the internet).

## Site Information

Complete the table below to provide the necessary site information.

<b>Site Owner</b>	<b>Site Address</b>
<b>Assessed By</b>	<b>Date Assessed</b>
<b>Latitude and Longitude Coordinates</b>	

## Wind Data and Maps

Collect information about the wind available at the site and attach the findings here. Here are some online resources for you to utilize:







<http://www.nrel.gov/gis/wind.htm>

[www.windmapper.com](http://www.windmapper.com)

## Site Description

Include pictures and a description of the site here. Clearly indicate the intended location of the following: turbine, Smart Box/Aurora/DC Charge Controller, obstacles, etc.

**LEGEND**

	Turbine
	Tree
	Battery Box
	Energy Management System
	Prevailing Wind
	Compass

## Important Site Details

Record the following:

Distance from turbine to Energy Management System (max 200 ft (60m)) \_\_\_\_\_

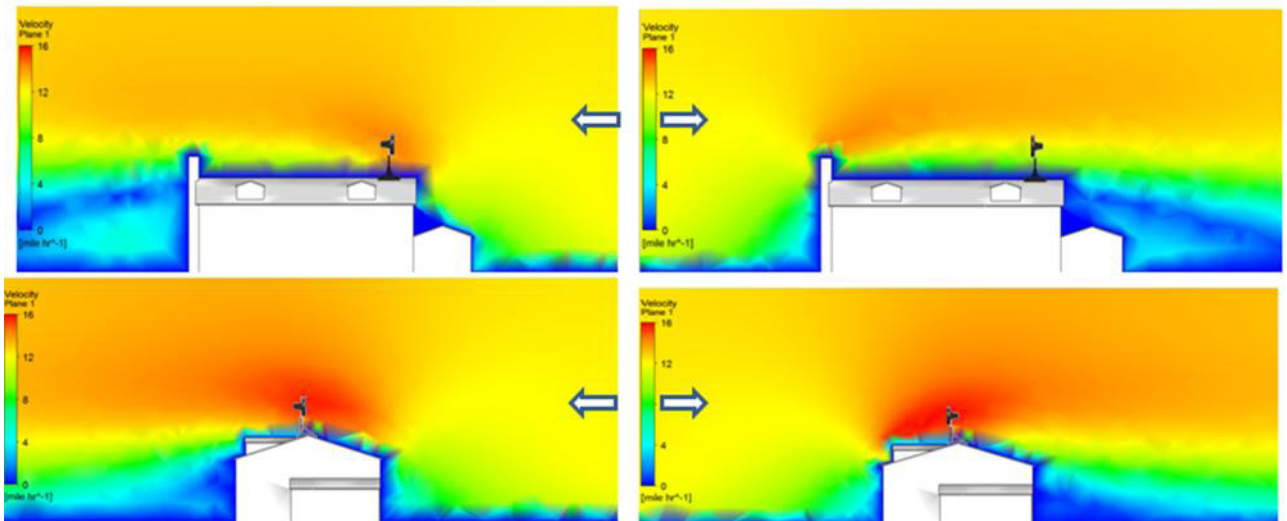
Type of mount: Pole Mount or QuadPod Roof Mount \_\_\_\_\_

Height from ground to turbine \_\_\_\_\_

## WindTronics™ Site Assessment Services

WindTronics™ has developed specific site assessment services based on Computational Fluid Dynamics (CFD) analysis to determine the optimal turbine location. If you are interested in this service for your specific site please call WindTronics™ and ask to speak to Tech Support at: (877) 946-3898.

### WindTronics Turbine with QuadPod On the Roof of a Typical Home



## Site Wind Speed Data Collection

You are now ready to install an anemometer and data logger at the intended location of the turbine and collect data for a reasonable period of time, two weeks, one month, or longer (the more data collected the better). It is recommended to use the anemometer and data logger from APRS World, LLC, shown below.

Setup the anemometer and data logger following these steps:

1. Plug in the unit to AC
2. Mount the anemometer
3. Open the case and flip the power switch on
4. Press Down Arrow ONCE
5. Press Select ONCE
6. Press Up Arrow FOUR TIMES slowly
7. Press Select ONCE
8. Press Select FIVE TIMES slowly
9. Press Down Arrow FIVE TIMES slowly
10. You should see "Logging..." blinking every second.  
If you do not, power cycle the unit and start at step 1 to repeat.



<http://www.aprsworld.com/selfcontained/>

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## Permits Required

If it is determined the site is indeed windy enough to support a wind turbine, please proceed forward and work with the local permit agency to acquire the necessary permits needed to install a wind turbine. Please list the permits below.

Permit #		Date	
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Permit #		Date	
Permit #		Date	

### OBTAINING THE REQUIRED PERMITS

It is recommended to bring the following items to the permitting agency:

- Wind Turbine Owner's Manual
- Energy Management System Owner's Manual
- Energy Management System Quick Start
- Site survey data collected:
  - Site address and/or coordinates
  - Wind assessment at site
  - For roof mount: drawings of home/business and assessment of roof loadings
  - For pole mount: soils information and foundation drawings
  - Electrical configuration of home/business

