

AEROTURBINES

Aeroturbines are new vertical axis wind turbines. They can be installed on existing flat rooftops or designed into new buildings to provide clean, renewable energy on site. Aeroturbines are uniquely suited to urban environments because they are:

Noise and vibration-free

Safe for birds

Grid inter-tied

Able to utilize multi-directional and gusting winds

Self-regulating (no overspeed protection required)

Low maintenance

Light weight

Materials are green, low-cost and easily available

For optimal efficiency, Aeroturbines should be mounted above or away from trees or other obstructions where wind speeds are at least 10 miles per hour on average. Aeroturbines in the vertical format can use winds from any direction.

610V model

The 610V is rated at 1,000 Watts in a 32 mph wind. The 610V is intended for vertical mounting and can be either bolted or ballasted down. The 610V is modular and may be stacked when more power is needed. The standard overall height of the 610V Aeroturbine is 20 feet. The base and caged rotor structures are each 10 ft. tall. The 610V Aeroturbine consists of a helical rotor and airfoils housed within a 6 ft. x 10 ft. steel cage. Exact costs depend on the project location, number purchased, and the required mounting method. Final costs are determined by the entire scope of the project and can be discussed with your dealer.



Sankofa House
Chicago, IL

712V model

The 712V is a slightly larger scale version of the 610V Aeroturbine. The 712V is rated at 2,500 Watts in a 32 mph wind. The standard overall height of the 712V Aeroturbine is 22 ft. tall. The 712V Aeroturbine consists of a helical rotor and airfoils housed within a 7 ft. x 12 ft. steel cage. Exact costs depend on the project location, number purchased, and the required mounting method. Costs are determined by the scope of the project which your dealer will help you with.



Sloan Valve
Franklin Park, IL

CUSTOM FABRICATION AND DESIGN JOBS UPON REQUEST



Maucen Green Roof
Chicago, IL



Hornblower Hybrid Ferry
San Francisco, CA

HYBRIDS

Combining the wind and the sun is the perfect fit. This will allow you 24hrs. of renewable energy. The hybrids and the SunStruts can shade your roof to lower summer energy bills, which can add to the roof's life. Hybrids work together. The wind/solar hybrid models instantly capitalize on changes in conditions and seasons; at night when no solar is generated, wind is often available. The hybrid can create electricity when either or both wind and sun are available.

712V hybrid model

The 712V Hybrid Aeroturbine consists of a helical rotor and airfoils housed within 7 ft. x 12 ft. steel cage combined with a shelf of 12 photovoltaic solar panels. The full system weighs approximately 1400 lbs. (without ballast). The standard 712V Hybrid Aeroturbine is 22 ft. tall and the solar shelf spans 17 ft. The power rating for each of the 12 solar panels is 175 Watts for a total of 2100 Watts. The 712V Hybrid is intended for vertical mounting and can be either bolted or ballasted down. Vertical Aeroturbines work well in winds from any direction, and therefore the presence of a dominant wind direction is not critical. Exact costs depend on the project location, number purchased and attachment method. These costs can be finalized with you by your dealer.



SSA Building, Chicago, IL

CUSTOM FABRICATION AND DESIGN JOBS UPON REQUEST

610V hybrid models

The 610V Hybrid Aeroturbine consists of a helical rotor and airfoils housed within a 6 ft. x 10 ft. steel cage combined with a shelf of 6 photovoltaic solar panels. The weight is approximately 900 lbs. (not including ballast). The standard 610V Hybrid Aeroturbine is 20 ft. tall and the 6 panel solar shelf spans 17 ft. The power rating for each of the 6 solar panels is 175 Watts for a total of 1050 Watts. The 610V Hybrid is intended for vertical mounting and can be either bolted or ballasted down. Vertical Aeroturbines work well in winds from any direction, and therefore the presence of a dominant wind direction is not critical. The 610V Hybrid is modular and may be horizontally extended indefinitely to create very large wind and solar electric arrays covering entire flat rooftops. Exact costs depend on the project location, number purchased and attachment method. Final costs are determined by the entire scope of the project and can be worked out between you and your dealer.



Pepsico/Quaker Oats, Chicago, IL

SUNSTRUT

SunStrut is the name of Aerotecture's 12 panel PV support structure. Each SunStrut holds 12 – 175 Watt solar electric individual panels and is ballasted (held down by weight) to flat roofs. Prices are determined on number purchased and project location. The SunStruts have 8' X 10' steel support stands and twin 'ladders' each with 5-6 PV panels reaching to 17 feet horizontally and approximately 3 feet above roof level. The typically 2100 Watt, ballasted, SunStrut structures:

Can hold up to 12 - 175 watt solar panels

Can cast, at minimum, over 3500 SF of shade on the roof daily

Reduce cooling electric loads in the summer

No expansion or adjustment problems

Safe, quiet and vibration free

Minimal maintenance

Adjustable and strong enough for snow loads

Will act as a "wind ramp" when added to the Aeroturbines



Sloan Valve, Franklin Park, IL

SunStrut Performance:

Extensive field testing in winds up to 70 mph has shown excellent performance from the SunStrut support structure combination.

SunStruts have proven to be safe, completely quiet, vibration-free and maintenance minimal. They are designed to be adjustable to sit above midwest snow levels and do not have expansion problems. Each SunStrut system includes a variable height structural option, modular and changeable ladders capable of holding a wide range of standard frame photovoltaic panels and a frame-mounted DC shutoff that meets or exceeds NEC solar disconnect provisions. When installed with Aeroturbines they force the wind directly into the turbines rotor -making them a perfect pair. It is estimated the SunStrut systems can produce more than 2,500 kWhs of solar power per year in the Great Lake states of the USA.

