

RILEY TOWNSHIP - ST. CLAIR COUNTY

ARTICLE IX
GENERAL PROVISIONS

SECTION 923. WIND ENERGY CONVERSION SYSTEMS (WECS)

INTENT: The purpose of this Ordinance is to establish guidelines for construction and usage of Wind Energy Turbines (WETs).

A. PRIVATE WECS:

1. Accessory use: A small wind energy system is allowed as an accessory use in all zones in which structures are permitted.
2. General standards:
 - a. The minimum distance between the ground and any part of a rotor blade must be at least **ten (10)** feet.
 - b. Small wind energy systems may not be illuminated, nor may they bear any signs or advertising.
 - c. Small wind energy systems must have automatic braking, governing, or feathering system to prevent uncontrolled rotation, over speeding, and excessive pressure on the support structure, rotor blades, and turbine components.
 - d. All wiring serving small wind energy systems must be underground. All electrical compartments, storage facilities, wire conduit and interconnections with utility companies must conform to national and local electrical codes.
 - e. Noise produced by small wind energy systems may not exceed **fifty-five (55)** dBA measured at the property line.
 - f. Small wind energy systems must not cause any interference with normal radio and television reception in the surrounding area, with any public safety agency or organization (including but not limited to police, fire, ambulance) radio transmissions, or with any microwave communications link. The owner shall bear the costs of immediately eliminating any such interference should any occur, or must immediately shut down the system or parts of the system causing the interference.
 - g. A finish (paint/surface) must be provided for the small wind energy system that reduces the visibility of the facility, including the rotors. In most circumstances this condition may be satisfied by painting the support structure and rotors with flat light

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haze gray paint. If the support structure is unpainted, it must be of a single color throughout its height. The owner must maintain the finish, painted or unpainted, so that no discoloration is allowed to occur.

- h. The diameter of the area swept by the rotors may not exceed **twenty-five (25)** feet.
- i. Small wind energy systems must be located in the rear yard of the property.

3. Free-standing systems, additional standards

Small wind energy systems may be mounted on a tower detached from other structures on the lot.

- a. **Setback:** The minimum setback from any property line, overhead utility line, or public right-of-way shall be a distance equal to the vertical distance from the ground to the tip of a wind generator blade when the tip is at its highest point plus **fifty (50%)** of the distance. In addition to the system's structures, guy wires, if needed, associated with towers shall meet applicable setbacks for the zone district.
- b. **Height:** Support structures for free standing systems may not exceed **eighty (80)** feet in height.
- c. **Security:** Support structures for free standing systems must not be climbable from the ground to a height of at least **fifteen (15)** feet.
- d. **Number:** A maximum of one free standing small wind generator system may be allowed on a minimum parcel of **two (2)** acres. On additional free-standing system is allowed for each additional acre.

4. Roof-mounted systems, additional standards

Small wind energy systems may be mounted on the roof of a structure as an appurtenance.

- a. **Height:** Roof-mounted systems may not be more than **five (5)** feet over the maximum allowed height for the structure.
- b. **Number:** There is no maximum number of roof-mounted systems permitted.

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B. Agriculture WECS

1. Small wind energy systems may be mounted on a tower detached from other structures on the lot. They must meet General Standards A(2).
 - a. Setback: The minimum setback from any property line, overhead utility line, or public right-of-way shall be a distance equal to the vertical distance from the ground to the tip of a wind generator blade when the tip is at its highest point plus **fifty (50%)** of the distance. In addition to the system's structures, guide wires, if needed, associated with towers shall meet applicable setbacks for the zoning district.
 - b. Height: Support structures for free standing systems may not exceed **eighty (80)** feet in height.
 - c. Security: Support structures for free standing systems must not be climbable from the ground to a height of at least **fifteen (15)** feet.

C. Commercial WECS

1. Based on wind map surveys for Michigan, Riley Township does not anticipate Commercial WECS.