

24.2.8 TOWER HEIGHT: The height above average grade of the fixed portion (hub) of the tower.

24.2.9 TOTAL EXTENDED HEIGHT

For a Horizontal Axis Wind Turbine it is the distance from the average grade to highest point of the rotor blade.

For a Vertical Axis Wind Turbine it is the distance from the average grade to the highest point of the wind turbine.

24.3 REQUIREMENTS FOR ALL WIND TURBINES

1. **All** wind turbines require a special land use permit.
2. **All** foundations need to be inspected by the Clark Township Building Inspector.
3. Electrical permits are required and all work needs to be inspected by the Electrical Inspector
4. **All** wind turbines are required to carry a UL Listing. (underwriter's label)
5. Every application shall be accompanied by the following informational requirements:
 - A. A completed permit from Clark Township and a site plan.
 - B. Evidence of compliance with a setback of 150% of the total extended height of all turbines from any public road right-of-way, any overhead utility line and all property lines. Guy wire anchors, if required, shall be placed at least fifteen (15) feet from any property line and shall be clearly visible to a height of six (6) feet above grade.
 - C. All turbine specifications – including manufacturer and model specs; rotor diameter; tower height, type and drawings; tower foundation drawings.
 - D. The method of restricting access to ground mounted electric/control equipment and tower access to a height of ten (10) feet above grade.
 - E. Description of lightning protection and location of underground wiring.
 - F. Confirmation that there will be no artificial lighting unless required by the Federal Aviation Administration. Lighting shall be a strobe light during daylight hours and red lights at night to reduce the negative effects of the flashing strobe light.
 - G. Furnish copies of written utility notification and permission to interconnect with the electric grid, unless the system is to be installed off-grid.
 - H. Provide evidence that turbine blade shadow flicker will not fall on public roadways or off-site habitable structures.
 - I. Description of the automatic braking, governing or feathering system to prevent uncontrolled blade rotation or over speeding.
 - J. Submission of a sound level analysis prepared by the turbine manufacturer or a qualified engineer indicating that noise emissions from any turbine will not exceed forty (40) dB(A) measured at the property lines. This sound pressure level may be exceeded during short-term events such as utility outages and/or severe wind storms. In the event the ambient sound pressure level exceeds forty (40) dB(A), the standard shall be ambient plus 5 dB(A).