

**Sec. 23-43. Accessory uses, buildings and structures.**

**(g) *Solar Energy System Regulations.***

- (1) *Purpose.* The purpose of this ordinance is to oversee the permitting of solar energy systems and preserve and protect public health and safety without significantly increasing the cost or decreasing the efficiency of a solar energy system (per Wis. Stat. §66.0401).
- (2) *Definitions.* The definitions identified in this section shall apply to this section and shall prevail in the event any inconsistency exists between these definitions and the definitions set forth in Article II of this chapter.
  - a. Building-integrated Solar Energy Systems means a solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include but are not limited to photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.
  - b. Ground-mount means a solar energy system mounted on a rack or pole that rests or is attached to the ground.
  - c. Photovoltaic System means a solar energy system that converts solar energy directly into electricity.
  - d. Roof-mount means a solar energy system mounted on a rack that is fastened to or ballasted on a structure roof. Roof-mount systems are accessory to the principal use.
  - e. Solar Collector means a device, structure or a part of a device or structure for which the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical, or electrical energy. The collector does not include frames, supports, or mounting hardware.
  - f. Solar Energy means radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.
  - g. Solar Energy System means a device, array of devices, or structural design feature, the purpose of which is to provide for generation or storage of electricity from sunlight, or the collection, storage and distribution of solar energy for space heating or cooling, daylight for interior lighting, or water heating.
  - h. Solar Hot Water System means a system that includes a solar collector and a heat exchanger that heats or preheats water for building heating systems or other hot water needs, including residential domestic hot water and hot water for commercial processes.
- (3) *Permitted solar energy systems.* Solar energy systems are permitted as an accessory use in all zoning districts subject to requirements as set forth below.
  - a. Development standards
    1. Setbacks. Solar energy systems must meet the following setback requirements:
      - (a) Building-integrated or roof-mount solar energy systems attached to a principal building shall comply with the setbacks required for a principal building in the underlying zoning district.
      - (b) Building-integrated or roof-mount solar energy systems attached to an accessory building or structure shall comply with the setbacks required for an accessory building or structure in the underlying zoning district.

- (c) Ground-mount solar energy systems shall comply with the setbacks required for an accessory structure in the underlying zoning district when oriented at minimum design tilt.
- 2. Height. Solar energy systems must meet the following height requirements:
  - (a) Building-integrated or roof-mount solar energy systems attached to a principal building shall not exceed the maximum allowed height for a principal building in the underlying zoning district.
  - (b) Building-integrated or roof-mount solar energy systems attached to an accessory building or structure shall not exceed the maximum allowed height for an accessory building or structure in the underlying zoning district.
  - (c) Ground-mount solar energy systems shall not exceed the maximum allowed height for an accessory structure in the underlying zoning district when oriented at maximum tilt.
- 3. Lot Coverage. Ground-mount solar energy systems must meet the following standards.
  - (a) Ground-mount solar energy systems shall be included in the calculation of lot coverage and shall not exceed the maximum lot coverage percentage as established for the applicable zoning district if the area under the collector is an impervious surface. Ground-mount solar energy systems shall be exempt from impervious surface standards if the soil under the collector is maintained in vegetation and not compacted.
  - (b) The total solar collector area of ground-mount solar energy systems shall not exceed the total gross floor area of the principal building(s).
- (4) *Building Plan Approval Required.* All solar energy systems requiring a building permit or other permit from the City of Appleton shall provide a building plan for review.
  - a. Plan Applications: Plan applications for solar energy systems shall be accompanied by to-scale horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the building or on the property for a ground-mount system, including the property lines.
  - b. Plan Approvals: Applications that meet the design requirements of this ordinance shall be granted administrative approval by the Inspections Supervisor.
- (5) *Compliance with applicable regulations.* Solar energy systems shall comply with all applicable Municipal Code regulations, including but not limited to, Zoning, Local Building, Fire, State Electric Code, State Plumbing Code, and all applicable State and Federal Laws, unless otherwise stated in this section.
- (6) *Utility Notification.* All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility.
- (7) Other solar energy systems. Solar energy systems are not permitted as a standalone principal use in any zoning district unless reviewed and regulated by the Public Service Commission (PSC) of Wisconsin. Solar energy systems subject to review and regulation by the Public Service Commission (PSC) of Wisconsin are exempt from the requirements of this article.
  - (h) ***Setback, height and lot coverage restrictions.*** Accessory buildings and/or structures, shall meet the following setback, height and lot coverage requirements: