

SOLAR IS A PRINCIPLE USE IN ALL RESIDENTIAL & COMMERCIAL ZONES

REGULATION OF SOLAR ENERGY COLLECTORS

§ 280-19.1-1. Purpose and intent.

A. The purpose of this legislation is to balance the potential impact on neighbors when solar collectors may be installed near their property while preserving the rights of property owners to install solar collection systems without excess regulation. The intent is to allow building-integrated photovoltaic (BIPV) systems, flush-mounted solar systems, roof-mounted and building-mounted and pole-mounted solar installations that have a minimum footprint (height) to be approved using the building permit process while requiring freestanding, ground-mounted or pole-mounted solar energy system installations over a certain height and based upon certain placement, to go through the site plan review process before the Planning Board. This legislation is not intended to override agricultural exemptions that are currently in place for farmers.

B. Solar energy is a renewable and nonpolluting energy resource that can prevent fossil fuel emissions and reduce a municipality's energy load. Energy generated from solar energy systems can be used to offset energy demand on the grid when excess solar power is generated.

C. The use of solar energy equipment for the purpose of providing electricity and for heating and/or cooling is a national priority and is a necessary component of the Town of Kingsbury's current and long-term sustainability agenda.

§ 280-19.1-2. Definitions. As used in this article, the following terms shall have the meanings indicated:

ALTERNATIVE ENERGY SYSTEM: Structure, equipment devices or construction techniques for the production of heat, light, cooling, electricity or other forms of energy on site and may be attached to or separate from the principal structure.

BUILDING-INTEGRATED PHOTOVOLTAIC (BIPV) SYSTEM: A solar energy system that consists of integrating photovoltaic modules into the building structure such as the roof or the facade and which does not alter relief of the roof.

COLLECTIVE SOLAR: Solar installation owned collectively through subdivision homeowner association, college student groups, "adopt-a-solar-panel," or other similar arrangements.

FLUSH-MOUNTED SOLAR PANEL: Photovoltaic panels and tiles that are installed flush to the surface of a roof or wall and which cannot be angled or raised.

FREESTANDING OR GROUND-MOUNTED SOLAR ENERGY SYSTEM: A solar energy system that is directly installed on the ground and is not attached or affixed to an existing structure.

NET METERING: A billing arrangement that allows solar customers to get credit for excess electricity that they generate and deliver back to the grid so that they only pay for their net electricity usage.

PERMIT GRANTING AUTHORITY: The Town of Kingsbury authority charged with granting permits for the installation of alternative energy systems.

PHOTOVOLTAIC (PV) SYSTEM: A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells, that generate electricity when light strikes them.

QUALIFIED SOLAR INSTALLER: A person who has skills and knowledge related to the construction and operation of solar electrical equipment and installations and has received safety training on the hazards involved. Persons who are on the list of eligible photovoltaic installers maintained by the New York State Energy Research and Development Authority (NYSERDA), or who are certified as a solar installer by the North American Board of Certified Energy Practitioners (NABCEP), shall be deemed to be qualified solar installers for the purposes of this definition. Persons who are not on NYSEDA's or NABCEP's list of certified installers may still be deemed to be qualified solar installers if the Town of Kingsbury determines such persons to have had adequate training to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the installation safely. Such training shall include the proper use of special precautionary techniques and personal protective equipment, as well as the skills and techniques necessary to distinguish exposed energized parts from other parts of electrical equipment and to determine the nominal voltage of the exposed parts.

ROOFTOP OR BUILDING-MOUNTED SOLAR SYSTEM: A solar system in which solar panels are mounted on top of the structure of a roof either as a flush-mounted system or as modules fixed to frames which can be tilted toward the south at an optimal angle.

SOLAR ACCESS: Space open to the sun and clear of overhangs or shade including the orientation of the streets and lots to the sun so as to permit the use of active and/or passive solar energy systems on individual properties.

SOLAR COLLECTOR: A solar photovoltaic cell, panel or array, or any solar hot air or solar energy collector which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored energy to heat, air or water.

SOLAR EASEMENT: An easement recorded pursuant to the NY Real Property Law § 335-b, the purpose of which is to secure the right to receive sunlight across real property of another for continued access to sunlight necessary to operate a solar collector.

SOLAR ENERGY EQUIPMENT/SYSTEM: Solar collectors, controls, energy storage devices, heat pumps, heat exchangers, and other materials, hardware or equipment necessary to the process by which solar radiation is collected and converted into another form of energy and is stored, protected from unnecessary dissipation and distributed. Solar systems include solar thermal, photovoltaic and concentrated solar.

SOLAR PANEL: A device for the direct conversion of solar energy into electricity.

SOLAR STORAGE BATTERY: A device that stores energy from the sun and makes it available in an electrical form.

SOLAR THERMAL SYSTEM: Solar thermal systems directly heat water or other liquid using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water, and heating pool water.

§ 280-19.1-3. Applicability.

- A. The requirements of this article shall apply to all solar collector system installations modified or installed after the effective date of this article.
- B. Solar collector system installations for which a valid building permit has been properly issued, or for which installation has commenced before the effective date of this article, shall not be required to meet the requirements of this article, except in accordance with § 280-19.1-5D, E and F.
- C. All applications for the installation of solar collector systems shall be designed by a licensed engineer and contain site specific building plans which bear the seal and signature of a licensed engineer and satisfy the permitting requirements contained in this Chapter.
- D. All solar collector systems shall be designed, erected and installed in accordance with all applicable codes, regulations and industry standards as referenced in the State Building Code and Town of Kingsbury Building Code.

§ 280-19.1-4. Permitting.

- A. To the extent practicable, and in accordance with the Code of the Town of Kingsbury, the accommodation of solar access to sunlight for such equipment and the protection of access to sunlight for such equipment shall be encouraged in the application of the various review and approval provisions of the Town of Kingsbury.
- B. Rooftop and building-mounted solar collectors. Rooftop and building-mounted solar collectors are permitted in all zoning districts in the Town of Kingsbury subject to the following conditions:
 - (1) Building permits shall be required for installation of all rooftop and building-mounted solar collectors.
 - (2) Height limitations contained in this Chapter shall apply.
 - (3) Rooftop units must have a one foot setback on all four sides.
 - (4) Roof structures must be properly engineered to support collectors.
 - (5) Rooftop units must be installed according manufacturer's specifications.
- C. Building-integrated photovoltaic (BIPV) systems. BIPV systems are permitted outright in all zoning districts.

D. Ground-mounted racks and freestanding solar collectors. Ground-mounted and freestanding solar collectors mounted on a pole are permitted as accessory structures in all zoning districts of the Town of Kingsbury, subject to the following conditions:

- (1) Building permits are required for all ground-mounted and freestanding solar collectors.
- (2) The location of the solar collectors must meet all applicable minimum yard size requirements for principal structures in the applicable zoning district.
- (3) The unit should be installed in a side or rear yard; where installed in the front yard, a one hundred (100) foot setback shall apply for all zoning districts.
- (4) Units shall not exceed 20 feet in total height from the existing grade.
- (5) The Town encourages installations that would employ landscape screening and other methods of enhancing the appeal of the ground-mounted and freestanding solar collector such as the use of architectural features, earth berms, or other screening which will harmonize with the character of the property and surrounding area.
- (6) Small experimental solar panels for charging batteries (less than one kilowatt) would not require any permits.
- (7) Solar collectors shall be located in a manner that reasonably minimizes shading of property to the north while still providing adequate solar access for collectors.
- (8) There is a permitted primary structure and use located on the premises.
- (9) The solar collectors shall not exceed forty percent (40%) of the total lot coverage.

E. Ground-mounted racks and freestanding solar collectors. Ground-mounted and freestanding solar collectors mounted on a pole are permitted as a primary structure in all zoning districts of the Town of Kingsbury, subject to the following conditions:

- (1) Building permits are required for all ground-mounted and freestanding solar collectors.
- (2) The location of the solar collectors must meet all applicable minimum yard size requirements for principal structures in the applicable zoning district.
- (3) In commercial zones, the unit shall be setback at least one hundred seventy feet (170) from the front property line.
- (4) In all other zones, the unit shall be setback at least one hundred (100) feet from the front property line.
- (5) Units shall not exceed 20 feet in total height from the existing grade.
- (6) The Town encourages installations that would employ landscape screening and other methods of enhancing the appeal of the ground-mounted and freestanding solar collector such as the use of architectural features, earth berms, or other screening which will harmonize with the character of the property and surrounding area.
- (7) Small experimental solar panels for charging batteries (less than one kilowatt) would not require any permits.
- (8) Solar collectors shall be located in a manner that reasonably minimizes shading of property to the north while still providing adequate solar access for collectors.
- (9) The solar collectors shall not exceed forty percent (40%) of the total lot coverage.
- (10) All units within this subpart shall be subject to site plan review as described in Article VIII of this Chapter 280.

F. Solar-thermal systems. Solar-thermal systems are permitted in all zoning districts subject to the following condition:

- (1) Building permits are required for installation of all solar-thermal systems.

G. Solar energy systems and equipment shall be issued building permits only if the Town of Kingsbury Code Enforcement Officer determines that the proposed solar energy system does not present any unreasonable safety risks, including, but not limited to, the following:

- (1) Weight load.
- (2) Wind resistance.
- (3) Ingress or egress in the event of fire or other emergency.

§ 280-19.1-5. Safety.

A. All solar collector installations must be performed by a qualified solar installer.

B. Prior to operation, electrical connections must be inspected by the Code Enforcement Officer/Building Inspector and by an electrical inspection person or agency in conformance with State Building Code.

C. Any connection to the public utility grid must be inspected by the appropriate public utility.

D. Solar energy systems shall be maintained in good working order and shall be removed if not in use for more than 12 months by removal of such system and mounting hardware within 90 days after the 12th month.

E. Rooftop and building-mounted solar collectors shall be designed to be and installed to be in conformance with the New York Uniform Fire Prevention and Building Code Standards that are applicable when the building permit is issued.

F. If solar storage batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure meeting the requirements of the New York State Building Code when in use. When they are no longer in use, they shall be disposed of in accordance with the laws of New York and Code and local laws of the Town of Kingsbury and any other applicable laws or regulations.

§ 280-19.1-6. Appeals.

A. Any person aggrieved over any order, requirement, decision or determination by an administrative agency pursuant to the provisions of this article may present an appeal for redress to the Board of Appeals in accordance with the provisions of § 267, Subdivision 2, of the Town Law and this Chapter 280.