

LOCAL LAW NO. 2 FOR THE YEAR 2016
A LOCAL LAW FOR SOLAR ENERGY SYSTEMS

Section 1. Purpose

- A. Solar Energy is a renewable and non-polluting energy resource that can prevent fossil fuel emissions and reduce the energy load.
- B. The ordinance aims to promote the accommodation of solar energy systems and equipment and the provision for adequate sunlight and the convenience of access necessary thereof.

1. Definitions

Alternative Energy Systems – Structures, equipment, devices or construction techniques used for the production of heat, light, cooling, electricity or other forms of energy on site and may be attached to an existing structure or a stand-alone system.

Building-Integrated Photovoltaic Systems – A solar energy system that consists of integrating photovoltaic modules or solar collectors into a building structure, such as the roof or the façade and which does not alter the ridge or edge of the roof.

Flush Mounted Solar Energy Panel – Photovoltaic or solar collector panels and tiles that are installed flush to the surface of the roof and which cannot be angled or raised.

Freestanding or Ground-Mounted Solar Energy System – a solar energy system that is directly installed in the ground and is not attached or affixed to an existing structure.

Net-Metering – A billing arrangement that allows energy generating customers to receive a credit for excess electricity that they generate and deliver to the power grid so that they only pay for their net electricity usage at the end of a given month.

Permit Granting Authority – The Town authority charged with granting permits for the operation of solar energy systems.

Photovoltaic Systems - A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells that generate electricity whenever 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 qualified photovoltaic installers maintained by the New York State Energy Research and Development Authority (NYSERDA), or who are certified as solar installers 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 not on either of these lists may be deemed to be qualified solar installers if the Town of Hopkinton's Code Enforcement Officer determines that such

persons have had adequate training to determine the degree and extent of the hazards and personal protective equipment and job planning necessary to perform the installation safely. Such training shall include the 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 exposed live parts.

Rooftop or Building Mounted Solar Energy System – A solar energy system in which solar collector panels are mounted on top of the structure of a roof either as a flush mounted system or as modules fixed to a frame 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 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 solar hot air or water collector device which relies upon solar radiation as an energy source for the generation of electricity or the transfer of stored heat.

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, converted into a another form of energy, 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.

Storage Battery – A device that stores energy and makes it available in an electrical form.

Solar-Thermal Systems – 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.

Utility-Scale Photovoltaic System – a commercial solar collection system that produces a minimum of one (1) megawatt (MW) of energy for the purpose of sale on the power grid.

2. Applicability

- A. The requirements of this ordinance shall apply to solar energy systems modified or installed after the effective date of this ordinance.
- B. Solar energy systems for which a valid permit has been properly issued or for which installation has commenced prior to the effective date of this article shall not be required to meet the requirements of the ordinance.
- C. All solar energy systems shall be designed, erected and installed in accordance with all applicable federal, state, local and industry code regulations and standards.

- D. Solar energy collectors shall be permitted to provide power for use by owners, lessees, tenants, residents or other occupants of the premises which they erected, but nothing in this provision shall be construed to prohibit the sale of excess power through a “net billing” or “net-metering” arrangement in accordance with New York State Public Service Law §66-j or similar federal or state statute.
- E. Utility-scale solar energy collectors, properly permitted by the Town of Hopkinton, may be erected for the express purpose of generating electricity for sale as a commercial enterprise.

3. Permitting

- A. No solar energy system or device shall be installed or operated in the Town of Hopkinton except in compliance with this article.
- B. To the extent practicable, the accommodation of solar energy systems and equipment and the protection of access to sunlight or such equipment shall be encouraged in the Town of Hopkinton.
- C. Rooftop and Building Mounted Solar Collectors: Rooftop and building mounted solar collectors are permitted in all areas in the Town of Hopkinton subject to the following conditions:
 - 1. Building permits shall be required for the installation of all rooftop and building mounted solar collectors.
 - 2. The installation of rooftop and building mounted solar collectors shall be a standard use in the areas subject to building height restriction for the district.
 - 3. Solar energy systems and equipment shall be permitted only if they are deemed by the Town of Hopkinton not to present any unreasonable risks to the public’s health, safety and welfare, including but not limited to the following:
 - a. Weight load.
 - b. Wind resistance.
 - c. Ingress or egress in the event of fire or other emergency; for example, solar panels or collectors may not be installed in front of a window or door.
 - d. Roof-mounted solar collectors shall not be installed with twenty-four (24) inches of the edge of any roof surface or within sixteen (16) inches of any protrusion through a roof such as electrical mast, chimney or vent shack.
 - 4. Utility-scale solar collectors shall be permitted subject to a special use permit.

5. Ground-mounted and free standing solar collectors are permitted with a special use permit subject to the following conditions:
 - a. Building permits shall be required for the installation of all ground-mounted solar collectors.
 - b. The location of the solar collector meets all applicable set-back requirements as set forth.
 - c. The height of ground mounted and free standing solar collectors and any mounts shall not exceed 20 feet from finished grade when oriented at maximum tilt.
 - d. Solar energy collectors and equipment shall be located in a manner to reasonably minimize view blockage for surrounding properties and shading of properties to the north, while still providing adequate solar access for the collectors.
 - e. Free standing solar energy collectors shall be screened when possible and practicable through the use of architectural features, earth berms, landscaping, vegetation other screening that will harmonize with the character of the property and surrounding area.

6. An applicant for utility-scale solar collectors must provide one (1) parking space for each motor vehicle used in connection with the business and not less than five (5) additional spaces.

4. **Safety**

- A. Prior to operation, electrical connections must be inspected and approved by a qualified third party electrical inspector as determined by the Town of Hopkinton.
- B. Any connection to the public utility grid must be inspected and approved by the appropriate public utility.
- C. Rooftop and building mounted solar collectors shall meet the requirements of the New York Uniform Fire Prevention and Building Code.
- D. If 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 Uniform Fire Prevention and Building Code when in use and when no longer used shall be disposed of in accordance with the laws and regulations of the Town of Hopkinton and any applicable federal, state, county or regional laws or regulations.
- E. If a solar collector ceases to perform its originally intended function for more than twelve (12) consecutive months, the property owner shall remove the collector, mounts and associated equipment and return the site or building to its original condition no later than ninety (90) days after the end of the twelve (12) month period.

5. Appeals

- A. If a building permit or land-use permit for a solar energy collector is denied because of a conflict, the request will be forwarded to the Town Board.

6. Zoning for Future Solar Access

- A. New residential and non-residential structures will be sited to take full advantage of solar access insofar as practical, including the orientation of proposed buildings with respect to sun angles, the shading and windscreen potential of existing and proposed vegetation on and off-site, and the impact of solar access to adjacent uses and properties.
- B. The impact of street trees on the solar access of the surrounding property will be minimized to the greatest extent possible in selecting and locating shade trees. Every effort shall be made to avoid shading solar collectors. The use of compact trees, particularly under overhead utility lines is strongly encouraged.
- C. In the event that it is necessary to remove an existing tree(s) on public property to accommodate a solar collector, the property owner shall mitigate the loss of shade by planting a tree(s) in the public domain (parklands, schools, public streets).

Section 3. Enactment.

This local law shall become effective immediately upon the notification of the filing of same with the Secretary of State.