

§ 148-5-8 Solar Energy Systems

- A. Intent. The purpose of the following regulations is to promote and accommodate the provision of solar energy systems as an environmentally friendly alternative source of energy for town residents and businesses. The Town shares the general goal of encouraging solar energy generation with Federal and State programs. However, Federal and State programs focus on total energy production, the interface with public utilities, and operational characteristics of solar energy systems, while the Town is more concerned with the physical characteristics and impacts of solar energy systems. These regulations reflect the Town's concerns.
- B. Authority. All solar energy systems shall be established and maintained in conformance with this Section. The Town recognizes that solar technology for consumer use is a new and evolving technology and that some town standards may not apply to all solar energy systems. Therefore, this section authorizes limited modifications as deemed appropriate (see 148-5-8.D.4.d)).
- C. Solar Energy System Review & Dimensional Standards. The following table sets forth the review procedures and standards for solar energy systems. See also §148-12-2 Definitions (for terms with “*”).

1. Table of standards

Solar Energy System Type*	ON - site/Individual*			OFF- site/Community*			Utility*
	BIPV	Building Mount	Ground Mount	BIPV	Building Mount	Ground Mount	Ground Mount
Zone Districts, permitted in:	All	All	All	All	All except HM		IRO
Town Review Procedure	Building-Zoning Permit	Building-Zoning Permit	Site Plan Review	Building-Zoning Permit	Building-Zoning Permit	Special Permit	Special Permit
Land use/structure type:	Equipment/accessory structure			Sole principal or 2 nd principal use			
Kilowatt, max.	Subject to NYSERDA limits			Subject to NYSERDA /NYS PSC limits			
Lot area, Min.	-	-	2 acres	-	-	10 acres	20 acres
Solar Energy Materials & Equipment*							
Solar Panel*							
Maximum height/projection							
Wall/pitched roof	-	1 ft.	-	-	1 ft.	-	-
Flat/low pitch roof	-	6 ft.	-	-	6 ft.	-	-
Ground mount	-	-	15 ft.	-	-	15 ft.	15 ft.
Solar Array*							
% lot area, max.	-	-	5%	-	-	25%	50%
Impermeable surface coverage	-	-	exempt	-	-	exempt	exempt
Permeable Surface Coverage	-	-	exempt	-	-	exempt	exempt
Yard setbacks							
Front	-	-	Per Zone District Standards applicable to principal use/structure	-	-	100 ft.	100 ft.
Side	-	-		-	-		
Rear	-	-		-	-		

2. Off-site/Community solar system may be the sole principal use of a lot or may be co-located as second principal use with another principal use on a portion of a lot and shall be subject to town review and applicable standards. The solar collectors may be building-mounted or ground-mounted. The off-site/community system shall apportion solar collectors or electric output to individual end-users through a legally binding agreement and management system. This management system shall be documented, subject to town review and may show either collective ownership and management by the end-users OR ownership and operation by a third party with long-term leases to the individual end-users. Examples of the managing entity include subdivision homeowner association and other similar organization or a profit or nonprofit third-party.
3. Utility Facility system may be the sole principal use of lot or may be co-located as second principal use with another principal use on a portion of a lot and shall be subject to town review and applicable standards.

D. General regulations

1. Safety and Security compliance

- a. *Electrical Connections. All solar energy systems shall be subject to electrical permit, inspection and certification for safe installation and operation. Prior to the time of the issuance of a building permit, the applicant/owner shall demonstrate to the Code Enforcement Officer a reliable and safe method for de-energizing the solar energy system in the event of an emergency.*
- b. *Utility Connection. All power lines from the solar energy system for on-site consumption shall be located underground; interconnections to the public utility grid shall be subject to the requirements of the public utility. All lines and connections shall be installed by certified professionals and must meet all applicable federal, state and local electrical codes.*
- c. *Security. ground mounted solar systems shall be enclosed by fencing to prevent unauthorized access. Warning signs with the owner's contact information shall be placed on the entrance and perimeter of the fencing.*
- d. *Maintenance and Inspection.*
 - i. The land, structures and equipment associated with all solar energy systems shall be maintained in good condition and in accordance with all requirements of this section.

- ii. Upon notice to the owner or his/her agent, the Codes Enforcement Officer and/or Town Engineer shall have the right at any reasonable time to enter the premises on which a solar energy system is constructed to inspect all parts of the installation and require that repairs or alterations be made if in his/her judgment there may be a deficiency in the operation or the structural stability of the system. If necessary, the Codes Enforcement Officer or Town Engineer may order the system to be secured or to cease operation. If the Codes Enforcement Officer or Town Engineer has reason to believe that an emergency situation involving danger to life, limb or property exists, the Codes Enforcement Officer or Town Engineer may enter the premises for purposes of inspecting the system without notifying the owner or agent in advance and order immediate correction. (See also Discontinuance).

2. Visual Protection.

- a. Screening. All ground mounted solar energy systems shall be screened to the maximum extent feasible to minimize visual impacts to nearby residential properties, any public road ROW and Skaneateles Lake, taking into consideration site-specific conditions including topography, adjacent structures and roadways. Such screening may be accomplished using context-appropriate fencing, by preserving natural vegetation, the construction of berms, and providing additional landscape screening, as determined by the reviewing board. Existing vegetation must be preserved and used for screening whenever practical.
- b. Glare. All ground mounted solar energy systems shall be designed and located to minimize reflective glare.
- c. Significant view-sheds. No ground mounted systems shall be installed in any location that would substantially detract from or block the view(s) of all or a portion of a view-shed listed or referred to in the adopted Town of Skaneateles Open Space Plan or Comprehensive Plan or in any future officially adopted Town planning document. Off-site ground mounted systems placed within a recognized view-shed and that are directly observable within 1 mile from points of public access such as Skaneateles Lake or public ROW shall be positioned and screened to minimize alteration of the existing view. Any Off-site/Community or Utility Facility solar system shall be presumed to result in significant visual impacts. However, the applicant shall have the opportunity to rebut that presumption through the submission of detailed visual simulations. The Planning Board may exercise its discretion to grant a special permit for an Off-site/Community or Utility Facility solar system only if it is satisfied that there will be minimal negative visual impacts due to existing screening, topography or the installation of additional vegetative screening.

- d. Spacing. To prevent the oversaturation of Off-site/Community and Utility Facility solar systems in one area of the Town, no Off-site/Community or Utility Facility solar system shall be approved if it is within one mile of an already approved Off-site/Community or Utility Facility solar systems unless the reviewing board makes specific findings that it will not have a significant impact on the character of the area.
 - e. Visual Impacts in the Skaneateles Lake Watershed. No Off-site/Community or Utility Facility solar system shall be approved if any portion of the project is located within 1,500 feet of the shoreline of Skaneateles Lake.
 - f. The Planning Board may require equipment associated with solar arrays to be painted a neutral color in order to minimize visual impacts on neighboring properties.
3. Other structures/improvements. Any structures or improvements, such as driveways, parking, maintenance-storage buildings or offices incidental to off-site systems shall be subject to all zone district dimensional requirements normally applicable to the site.
4. Exemptions and waivers
- a. Agricultural exemption. When an on-site solar energy system is part of a farm operation located within an agricultural district as defined in Article 25AA of the NYS Agriculture and Markets Law, it shall be considered to be part of the farm operation and shall be exempt from the requirement to obtain a special permit or site plan review as set forth in §148-5-8.C above. An Off-site Community or Utility system co-located on farm land as an unrelated and separate principal use shall NOT be considered an exempted agricultural activity and shall be subject to the provisions of this section.
 - b. Setback/Height limited exemption building mounted systems. Building mounted systems that otherwise comply with dimensional requirements in §148-5-8.C above may encroach into minimum required setbacks or exceed maximum height limits by up to [one (1) foot].
 - c. Conflict with Federal or State Solar Programs. In the event that there is conflict between the requirements of Federal and State solar energy programs and Town Zoning requirements the Board or Codes Enforcement Officer may adjust these Zoning requirements for a specific proposal to make reasonable accommodations among conflicting requirements.
 - d. Modification for technological changes. §148-5-8 assumes that building mounted solar energy systems are designed as flat rectangular panels

mounted flush or parallel to a building and that ground mounted systems are installed on two support posts with minimal disturbance of the ground surface. During Site Plan or Special Permit review the dimensional limits (height, setback) for solar energy systems may be modified by the reviewing board upon a finding that changes in solar technology require reasonable and minor adjustments to dimensional limits to enable installation of a solar energy system. The reviewing board may increase the setback encroachment by not more than one (1) foot and/or increase the height limit by an additional 10%.

- e. Permeable and Impermeable Surface Coverage- limited exemption. All ground mounted systems are exempt from Required Maximum Permeable or Impermeable Surface Coverage based on the observation and finding that existing mounting materials and installation methods result in negligible disturbance to the ground and any drainage systems, provided however, that the supporting posts and associated footings are no more than one (1) sq. ft. in area for each support post. Any posts, footings or structural bases for solar energy systems exceeding one (1) sq. ft. shall be subject to Permeable and Impermeable Surface Coverages.

5. Nonconformities

- a. Pre-existing solar systems. Any solar energy system installed prior to June 5, 2023, may continue to operate and be maintained and repaired. Any expansion of an existing solar energy system shall be in conformance with this Section.
- b. Nonconforming uses. A solar energy system may be installed on a lot occupied by a nonconforming use in compliance with this Section.
- c. Nonconforming structures. A solar energy system may be installed on a lot occupied by a nonconforming structure in compliance with this Section, provided that it does not increase the nonconformity of any structure. The solar energy system setback and height exemptions shall apply.
- d. Nonconforming lots. A solar energy system may be installed on a nonconforming lot provided the following conditions are met. Building mounted systems may be installed on conforming structures in compliance with this section. Ground mounted systems may be installed on nonconforming lots that have insufficient lot area or lot width provided that the solar energy system can meet the minimum applicable setback requirements applicable to principal buildings specified in §148-8-9.A.1 and that the lot has a minimum lot area of 20,000 sq. ft.

6. Discontinuance

- a. Decommissioning. If a solar energy system ceases to perform its originally intended function for more than 12 consecutive months as determined by the property owner, the property owner shall remove the system and associated equipment no later than 90 days after the end of the twelve month period.
 - b. Mandatory Removal. If the Codes Enforcement Officer, on the basis of investigation or information received determines that a solar energy system is inoperative or its use has been discontinued, the Codes Enforcement Officer shall provide written notification to the property owner. The owner shall either substantiate to the satisfaction of the Codes Enforcement Officer that the solar energy system is still operating or obtain a demolition permit from the Codes Enforcement Officer to decommission the system as provided in paragraph (§148-5-8.D.6.a) above within one year of said notification. Failure to obtain a demolition permit to remove the discontinued solar energy system in accordance with these regulations shall be a violation of this section, and at the option of the Town Board, the Town Board may cause the solar energy system to be removed. All expenses incurred by the Town to remove the solar energy system shall be assessed against the land on which the solar energy system is located and such expenses shall be levied and collected in the same manner as provided in the Town Law for the collection of a special ad valorem levy (See also Inspection).
7. Change of Ownership. The owner of an off-site/community or industrial solar system must notify the Town Code Enforcement Officer in writing no later than thirty (30) days prior to a change in ownership of the system that it will be sold or the lease assigned to another entity or person. Failure to comply with this requirement shall result in the special permit being terminated.

- E. Supplemental Submissions for Solar Energy Systems. The following are additional and specialized submissions for solar energy systems that shall accompany, applications for building permit, Site Plan Review, Special Permit or Variance.
1. Statement of Compliance. All applications for solar energy systems shall provide documentation of compliance or the status of pending compliance with applicable requirements of NYSERDA, NYS PSC or any other regulatory agency with jurisdiction over the application.
 2. Utility notification. Applications for solar energy systems that will have a utility connection shall include a signed interconnection agreement or letter of intent with the interconnecting utility company.
 3. Manufacturer/installation Specifications. Documentation from the manufacturer w/graphics shall be supplied to the town for all solar energy systems.
 4. View-shed analysis. All off-site/community and utility ground mounted systems shall include a site location map showing the site of the proposed placement of the solar energy system and its relationship to potential views from public access points within 1 mile of the site for each view shed recognized in Town Comprehensive Plan. Photo simulation of the impact of the proposed energy system may be required by the reviewing board.
 5. Landscaping plan. All ground-based systems shall include as part of its Site Plan documentation information of existing and proposed site drainage, vegetation and strategies for screening. The Planning Board may specify the species, minimum height and configuration of vegetation that must be planted in order to minimize visual impacts. The Landscaping Plan shall be prepared by a professional arborist or landscape architect and include a Landscaping Maintenance Plan to ensure that vegetative screening and plantings shall be maintained, and if necessary, replaced as needed. The Planning Board shall require an escrow or bond to ensure that that the requirements of the Landscaping Maintenance Plan are enforced.
 6. The Planning Board may require a sound study or analysis to determine whether the Project could result in sound impacts above ambient at the nearest property line. In the event that the Planning Board determines that the Project may result in a significant adverse noise impact on a neighboring property owner, the Planning Board may either require the applicant to mitigate those impacts or deny the application.

F. Supplemental Review Standards for Solar Energy Systems. The following are additional and specialized standards for solar energy systems that shall be considered by the reviewing board and shall be in addition to the general review standards applicable to Site Plan Review, Special Permit or Variance.

1. Site Plan Review – Special Permit. Solar energy systems required by this Section to obtain a Site Plan Review or a Special Permit shall comply with the procedures and standards of the applicable sections of §148-10-5 through §148-10-9.
2. Building mounted arrays may be arranged with minimal horizontal or vertical separation of panels. Building mounted the panels may be parallel to the wall/roof surface or when placed upon a flat or low slope roof angled to maximize exposure to solar radiation. The projection beyond the wall/roof plane is measured along a perpendicular line extending out from the wall/roof plane to the surface plane of the panel. (see also Table of Standards and Exemptions for setback – height)
3. Ground based arrays are typically arranged in rows with minimal side-to-side separation of panels and with an intermediate access path between rows of sufficient width for a person to walk for maintenance and to facilitate surface water run-off. Ground based arrays are regulated as a percentage of lot area per §148-5-8C. The exterior limits of the entire solar array with intermediate access paths are to be included within an array perimeter drawn upon a site plan. The basis of solar array coverage is the area contained within the array perimeter and shall be measured in square feet and as a percentage of the total lot area. Ground mounted panels are placed on vertical posts above the ground and angled to maximize exposure to solar radiation. The height of panels above the ground is measured along a perpendicular line extending up from the ground plane to the highest point of the solar panel.
4. Coverage for Ground mounted Array. A ground mounted solar array shall be evaluated by the Planning Board for the cumulative effect upon ground coverage of the grouping of solar panels. The Planning Board shall find (1) the area contained within the solar array is within the required zone district required setbacks established for a principal structure; (2) the proposed array is within the maximum allowable percentage of lot area (set forth in table above); (3) the intermediate paths between panel rows included in the array are reasonable and adequate for equipment and ground maintenance;(4) the ground within the array is covered with vegetation or appropriate permeable materials; and (5) that all surface water run-off is able to be directly absorbed into the ground and will be compatible with existing or planned drainage patterns for the site.
5. Preservation of Agricultural Resources. The Planning Board must consider the impact of the construction of a Solar Energy System on existing agricultural resources, including but not limited to, impacts on existing farm

operations, the availability of suitable land available for farmers to lease and the irreversible destruction of productive soils.