

TOWNSHIP OF WYCKOFF

ORDINANCE # 1985

AMENDING CHAPTER 186 (ZONING), SECTION 186-36.1 (SOLAR PANEL INSTALLATION” TO AMEND THE INSTALLATION REQUIREMENTS

WHEREAS, the Township of Wyckoff has a strong interest in ensuring firefighters and first responders have unobstructed access to the roof of a structure from the closest roadways to allow for effective vertical ventilation during structure fires; and

WHEREAS, solar panel technology has advanced to allow for the installation of building-integrated photovoltaic panels that cantilever or hinge away from the roof of a structure, allowing firefighters to achieve vertical ventilation during structure fires with minimal risk of electrocution or other injuries; and

WHEREAS, the Township Committee of the Township of Wyckoff seeks to modernize the Town Code to provide for these newly-developed solar systems; and

WHEREAS, the hinged building-integrated photovoltaic panels that cantilever or hinge away from a roof structure allow for easier removal and displacement of panels and provide for a lower live voltage which allows a safer method for firefighters to achieve vertical ventilation;

BE IT ORDAINED, by the Township Committee of the Township of Wyckoff, in the County of Bergen, State of New Jersey, as follows:

SECTION 1. Section 186-36.1 (Solar Panel Installation) is amended to read as follows:

§ 186-36.1. Solar panel installation.

A. Definitions. As used by this section, the following terms shall have the meanings indicated:

BUILDING-INTEGRATED PHOTOVOLTAIC PANELS

Solar panels that are mounted directly to the underlayment of a roof with individual receptive cells that act as the roof shingles and have the appearance of roof shingles and generate low voltage direct electrical currents.

SOLAR ENERGY SYSTEM

A solar energy system and all associated equipment which converts solar energy into usable electric energy, heats water or produces hot air or other similar function through the use of solar panels.

SOLAR PANELS

A structure containing one or more receptive cells, the purpose of which is to convert solar energy into usable electrical energy by way of a solar energy system, including but not limited to tempered glass aluminum frame panels, building-integrated photovoltaic panels, and flexible laminate solar modules.

SOLAR PRODUCTION RATION OR SPR

The ratio between how much power a solar power system is estimated to produce in relation to the size of the system. Production ratio = year one production estimate/system size (watts).

B. Purpose. The purpose of this section is to establish requirements for the installation of solar panels within the Township of Wyckoff and to protect the safety of firefighters and first responders that will interact with solar panels and solar energy systems.

C. Permit Requirements.

- (1) Before any solar panel may be installed, plans for such installation shall be submitted to the Wyckoff Building Department and Wyckoff Fire Department officials. No solar panel shall be installed without a permit issued by the Township.
- (2) The design of the solar panel system shall conform to all applicable industry standards, including the New Jersey Uniform Construction Code, the National Electric Code, and the Wyckoff Building Code and Zoning Regulations. The applicant shall submit certificates of design compliance obtained by the equipment manufacturer from a certified organization, and any such design shall be certified by an engineer registered in the State of New Jersey. The manufacturer specifications shall be submitted as part of the application.

D. Installation Requirements.

- (1) Solar panels shall be permitted as a rooftop installation in any zoning district. A roof-mounted system may be mounted on a principal building or accessory building.
- (2) Roof-mounted solar panels on slopped roofs shall be flush mounted parallel to the roof angle and shall not exceed a height of 12 inches above the rooftop and, in no event, shall exceed the maximum permitted height in the zone for the structure or building.
- (3) A roof-mounted solar panel that is mounted on a flat roof may be angled to achieve maximum sun exposure but shall not exceed five feet above the roof. No such mounted solar panel shall exceed the maximum permitted height of the structure.
- (4) All roof-mounted solar panels shall be installed at least three feet from roof edges and roof ridgeline.
- (5) Roof-mounted solar panels shall not be permitted on the front roof of a structure that faces a street except as permitted below. This requirement shall also apply to the side street of a corner lot. Solar panels shall be located on a rear-or-side-facing roof, as viewed from any adjacent street, ~~unless such installation is proven to be ineffective or impossible. The removal of potential obstructions such~~

~~as interceding vegetation shall not be sufficient cause for permitting a front-facing installation. Front-facing installation may be permitted in accordance with the following provisions:~~ Notwithstanding the above, installation of solar panels on a street-facing roof may be permitted if the following is complied with:

- (a) ~~The applicant must present valid reasons to the building official as to why a front roof is the only effective or possible means for utilizing solar energy on the property. Such information shall be certified by a professional deemed qualified by the Building Department and reviewed by the Township Engineer and any other professional that the Township deems necessary~~ a certification of a professional engineer or other individual deemed qualified by the Zoning Officer that no other solar energy system array on the property other than a front-facing solar array will generate an SPR of at least one. The professional engineer's certification must include the SPR calculation for each roof plane on which a solar energy system array could be erected; and
- (b) Solar panels must be flush mounted to the roof; and
- (c) No wiring, cables, conduits or related equipment may travel from the roof to any front façade of the structure; and
- (d) No solar panels may be located on street facing roof planes or street-facing facades on any principal or accessory structure that has been designated as a historic structure pursuant to Wyckoff's Historic Preservation Ordinance.
- (e) An applicant may appeal a denial of the Building Department to allow solar panels on a front roof to the Zoning Board of Adjustment.
- (6) Notwithstanding any other provision of this Chapter, building-integrated photovoltaic panels that act as roof shingles and have mountings that allow for the panels to cantilever or hinge away from the underlayment of a roof are permitted on the front roof of a structure that faces a street.
- (7) ~~(6)~~ Solar panels shall be placed such that concentrated solar radiation or glare shall not be directed onto nearby properties, businesses, residential homes or roadways.
- (8) ~~(7)~~ All exterior electrical lines must be painted a color scheme that matches as closely as reasonably possible the color of the structure and adjacent materials.
- (9) ~~(8)~~ An external disconnect switch, which is clearly identified and unobstructed, shall be provided.
- (10) ~~(9)~~ Signage identifying the use of solar panels shall be posted at an easily visible location. The signage shall clearly state the name,

address and telephone number of the vendor authorized to deactivate the solar panel system in the case of an emergency.

- (11) ~~(40)~~ In addition to the required signage, property owners shall provide the Township Fire Official with a map illustrating the location of the disconnect switch, as well as any information regarding the vendor authorized to deactivate the solar panel.
- (12) ~~(44)~~ Marking is required on all interior and exterior direct conduit, raceway, enclosures, cable assemblies and junction boxes to alert the Fire Service to avoid cutting them.
- (13) ~~(42)~~ Ground-mounted solar energy systems shall not be located in the front or side yards and shall have side and rear yard setbacks of no less than 20 feet. No part of the ground-mounted solar energy system shall exceed seven feet in height.
- (14) All energy storage systems or backup battery systems shall be specified and clearly located on plans for review and approval by appropriate Township officials.

SECTION 2. Except as hereby amended, all other Sections of Chapter 186 shall remain in full force and effect.

SECTION 3. If any section, sub-section, paragraph, sentence, or any other part of this ordinance is adjudged unconstitutional or invalid, such judgment shall not affect, impair or invalidate the remainder of this ordinance.

SECTION 4. This Ordinance shall take effect upon final passage and publication as required by law.