

19.23 Alternative energy systems.

B. Solar panels. Solar panels shall be allowed in all zoning districts either attached to permitted principal or accessory buildings or as accessory structures subject to the following regulations:

- (1) Attached to building. Where attached to a building, the solar panels shall be subject to the same regulations as the building in terms of height and setbacks. Solar panels may be attached to the roof or the building wall, but not both.
 - (a) Roof-mounted panels shall include solar panels integrated as the surface layer of the roof structure with no additional apparent change in relief or projection (the preferred installation), or separate flush-mounted solar panels attached to the roof surface.
 - [1] Solar panels integrated as the surface layer of the roof structure, as well as separate flush-mounted solar panels may be located on any part of the roof.
 - [2] Separate flush-mounted solar panels ~~may only be located on a rear or side facing roof.~~ shall be parallel with the roofline, and shall not project more than 12 inches above the roof.
 - [3] Separate flush-mounted solar panels installed on a building or structure with a sloped roof surface shall not project vertically above the peak of the roof to which it is attached.
 - [4] Solar panels mounted on a flat roof shall not be subject to the standards of paragraph 2 above. However, they shall not project vertically higher than the height of the parapet wall surrounding the roof or shall be screened by architectural features in accordance with § 285-19.6C(4).
 - (b) Flush-mounted solar panels on the building wall may only be attached to one side or rear building facade and shall not face a street.
 - (c) Roof-mounted panels shall be permitted on the roof of a covered boat well, subject to the provisions of paragraph (a) above, but freestanding solar panels shall not be permitted over the water.
- (2) Freestanding. Solar panels that are not attached to a building shall be permitted as accessory structures subject to the following regulations:
 - (a) Freestanding solar panels shall be permitted in the rear yard only.
 - (b) Freestanding solar panels shall be setback no less than six feet from the side and rear lot lines.
 - (c) Freestanding solar panels shall not exceed a height of four feet.
 - (d) The surface area covered by a freestanding system shall not exceed 2% of the lot or 360 square feet, whichever is less, except as provided for in Subsection B(5) below. Area covered shall be included in the lot coverage calculations for the lot.
 - (e) All power transmission lines shall be underground.

- (f) Freestanding solar panels shall not be visible from adjacent property and shall be screened by landscaping where necessary.
- (3) Glare. Solar panels shall be placed and arranged such that reflected solar radiation or glare shall not be directed onto adjacent buildings, properties or roadways.
- (4) Building permit. Solar energy systems shall conform to applicable industry standards. A building permit shall be obtained for a solar energy system in accordance with the Building and Electrical Codes.
- (5) Commercial solar array. In the A-1 Airport and Light Industrial District, the Planning Commission may approve a site plan under Article 21 for solar photovoltaic plants or arrays of photovoltaic modules, mounted on buildings or ground mounted, developed for commercial purposes.
 - (a) The solar array may be developed as a principal use on a lot and shall not be subject to surface area limits of Subsection B(2)(d) above.
 - (b) The solar array shall meet all dimensional and site design requirements of the A-1 Airport and Light Industrial District.
 - (c) The solar array shall be designed to not create glare that would be a hazard to aviation.