

Sec. 117-430. - Alternative energy systems.

- (c) *Solar energy systems* . In all districts, solar energy systems shall be permitted as an accessory use in accordance with the standards in this section.
- (1) *Exemptions* . Passive or building-integrated solar energy systems are exempt from the requirements of this section and shall be regulated as any other building element.
- (2) *Standards*.
- a. *Location*. Ground-mounted solar energy systems may be permitted in any yard.
1. *In residential districts, the location of ground-mounted solar energy systems shall be in accordance with the accessory building location standards in City Code section 117-349(d)(12).*
- b. *Setbacks*.
1. Ground-mounted solar energy systems shall be located on a property such that the distance to the closest property boundary is at least equal to the height of the solar energy system at its maximum designed tilt.
2. Building-mounted solar energy systems shall comply with all building setbacks in the applicable zoning district and shall not extend beyond the perimeter of the building on which the system is mounted unless the mounting system has been explicitly engineered to safely extend beyond the edge.
3. In residential districts, front, side and rear yard setbacks for ground-mounted solar energy systems shall be in accordance with accessory building setbacks outlined in City Code section 117-111(d).
- c. *Height*.
1. The height of ground-mounted solar energy systems at maximum designed tilt shall not exceed the distance from the nearest property boundary or the maximum allowable building height for the applicable zoning district, whichever is more restrictive.
2. Building-mounted solar energy systems shall comply with the maximum allowable building height for the applicable zoning district.
3. In residential districts, the height of ground-mounted solar energy systems shall be in accordance with accessory building height limitations outlined in City Code section 117-349(d)(6).
- d. *Easements*. Solar energy systems shall not encroach on public drainage, utility, roadway or trail easements.
- e. *Feeder lines*. The electrical collection system shall be placed underground within the interior of each property. The collection system may be placed overhead near substations or points of interconnection to the electric grid.
- f. *Aesthetics*. All solar energy systems shall be designed to blend into the architecture of the building and to minimize glare toward vehicular traffic and adjacent properties to the extent possible without impacting the performance of the system.
- g. *Abandonment*. If a solar energy system remains non-functional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The owner shall remove the abandoned system at their expense after obtaining a demolition permit.
- h. *Permits*. A permit(s) shall be obtained for any solar energy system in accordance with Minnesota State Building Code prior to installation.

- i. *Glare.* The panels of ground mounted solar energy systems shall be placed and arranged such that reflected solar radiation or glare shall not be directed onto adjacent buildings, properties or roadways.
 - 1. Prior to the issuance of a permit for a ground mounted solar energy system in a residential district or on a property abutting a residential district, the permit applicant must provide an analysis demonstrating that the ground mounted system will not impact aesthetics of adjacent residential properties due to glare.