

158.153 SOLAR ENERGY CONVERSION FACILITIES

Carroll County Code of Public Local Laws & Ordinances

As of December 1, 2015

§ 158.153 SOLAR ENERGY CONVERSION FACILITIES.

(A) **Purpose.** The intent of this section to provide for the safe, effective and efficient utilization of solar energy systems while protecting the rights, health, safety and welfare of adjoining land uses and landowners through appropriate zoning and land use controls.

(B) **Solar energy conversion facilities, as an accessory use.**

(1) This use shall be permitted in all districts.

(2) **Size limits:**

(a) In ~~residential~~ the R (Residential) and C (Conservation) zoning districts, the physical size of the system shall be limited to the size of the roof, or roofs of structures, situated on the subject property, when roof mounted. ~~Ground-mounted systems shall be, or~~ no larger than 120 the square feet ~~footage of solar panel surface area allowed based on the size of the lot as shown below when ground-mounted. In the event that a combination of roof-mounted and ground-mounted systems is utilized, the total solar panel surface area cannot exceed the aggregate square footage of the roof areas on the property on which the system is installed on lots that are 3 acres or less in size. On lots more than 3 acres, the total solar panel surface area cannot exceed 1½ times the aggregate square footage of the roof areas on the property on which the system is installed.~~ No variance or waiver to the size or setback requirements of the ground-mounted system is allowed in the Residential districts. A variance may be requested for lots more than 3 acres in the Conservation district; documentation from a North American Board of Certified Energy Practitioners (NABCEP) certified professional solar panel installer must be included to demonstrate that the total size allowable limit is inadequate to power 100 percent of the home and accessory structures based on the previous 12 months of usage and identify the additional size and number of panels needed to meet 100 percent of the expected energy use the homeowner's specific needs. Wall-mounted systems are not permitted.

<u>Lot Size</u>	<u>Solar Panel Surface Area Maximum Square Footage for Ground-Mounted Systems</u>
<u>Less than or equal to ½ acre</u>	<u>120 square feet</u>
<u>More than ½ acre to 1 acre</u>	<u>240 square feet</u>
<u>More than 1 acre to 3 acres</u>	<u>480 square feet</u>
<u>More than 3 acres</u>	<u>½ the size aggregate square footage of the roof, or roofs of structures, situated on the subject property</u>

(b) In the A (Agricultural) zoning ~~D~~ district, the physical size of the system shall be limited to the size of the roof, or roofs of structures, situated on the subject property, when roof mounted, or no larger

As of October 25, 2016

than the aggregation of the roof area of all permitted structures on site, when ground mounted. In the event that a combination of roof-mounted and ground-mounted systems is utilized, the total area cannot exceed the aggregate square footage of the roof areas on the property on which the system is installed.

(c) In the commercial and industrial districts, the physical size of the system shall be limited to the size of the roof, or roofs, of structures situated on the subject property, when roof mounted, or in the B-G District, no larger than the aggregate of the roof area of all permitted structures on site, when ground mounted. Ground-mounted systems up to 120 square feet may be authorized in the B-NR District. No variance or waiver to the size of ground mounted systems are-is allowed.

(3) **Setbacks.** Ground-mounted facilities shall satisfy the minimum side and rear yard setback requirements for the district in which the use is situated. No portion of such facility shall be located within a front yard in any district.

(4) **Height limits.** No portion of the system shall extend more than ten feet from the highest portion of the principal structure to which it is attached. The total height of the building, including all portions of the solar facility, shall comply with the height regulations as set forth in the bulk requirements for the individual district in which the use is proposed. Ground-mounted systems may not exceed a total height of ten feet above existing grade.

(5) **Miscellaneous provisions.**

(a) Electrical connections:

1. If interconnected to the local utility grid, a copy of the conditional approval from the local utility must be provided prior to, or at the time of, permit application.
2. All systems must meet all applicable construction and electrical codes.
3. Systems that connect to the electric utility power grid shall comply with all utility notification requirements.
4. A copy of the signed certificate of completion from the utility company shall be provided prior to occupancy permit issuance.
5. When batteries are included, they must be placed in a secure container or enclosure per manufacturer's specifications; screened from view.

(b) Appearance:

1. Color must remain as it was originally provided by the manufacturer, or match the exterior of the principal structure.
2. No signs other than the manufacturer's, or installer's identification, appropriate warning signs; and not more than two manufacturers' signs may be on the system.

3. Glare must be mitigated away from an adjoining property or adjacent road, which shall be certified by the solar installer prior to installation. ~~when it creates a nuisance or hazard.~~

4. The system cannot unreasonably interfere with the view of, or from, a site of significant public interest (scenic road, historic resources, etc.).

5. Ground-mounted systems may not be affixed to a block wall or a fence.

6. Roof mounted systems shall be installed in such a manner that there is no change in relief or projection.

7. A property owner who has installed or intends to install a solar energy conversion facility shall be responsible for negotiating with adjacent property owners for any necessary solar access easement and shall record the easement with the Clerk of the Court. Property owners who fail to secure an easement for the receipt of solar energy act at their own peril.

(C) Solar energy conversion facilities, in commercial zones.

(1) Solar energy conversion facilities shall be permitted in the B-NR District when roof mounted. No ground mounted systems are allowed in the B-NR District.

(2) Solar energy conversion facilities shall be permitted in the B-G District whether roof mounted or ground mounted.

(3) Size limits:

(a) In the B-NR District, the physical size of the system shall be limited to the size of the roof.

(b) There shall be no size limit for systems in the B-G District.

(4) Setbacks:

(a) Setbacks shall be 400 feet from the boundaries of all adjoining residentially zoned properties, and 200 feet from the boundary lines of adjoining nonresidential zoned properties.

(b) The Planning Commission may reduce required setback for any yard setback by up to 50% provided that supplemental landscaping, as may be determined by the Planning Commission, is provided.

(5) Height limits: No portion of the system shall extend more than ten feet from the highest portion of the principal structure to which it is attached. The total height of the building, including all portions of the solar facility, shall comply with the height regulations as set forth in the bulk requirements for the individual district in which the use is proposed. Ground mounted system may not exceed a total height of 25 feet above existing grade.

(6) Miscellaneous provisions:

(a) Electrical connections:

1. Prior to interconnection with the local utility grid, a copy of the conditional approval from the local utility must be provided prior to or at the time of permit application,
2. All systems must meet all applicable construction and electrical codes.
3. All systems shall comply with all utility notification requirements.
4. A copy of the signed certificate of completion from the utility company shall be provided prior to occupancy permit issuance.
5. When batteries are included, they must be placed in a secure container or enclosure per manufacturer's specifications; screened from view.

(b) Appearance:

1. Color must remain as it was originally provided by the manufacturer, or match the exterior of the principal structure.
2. No signs other than the manufacturer's, or installer's identification, appropriate warning signs; and not more than two manufacturers' signs may be on the system.
3. Glare must be mitigated away from an adjoining property or adjacent road when it creates a nuisance or hazard.
4. The system cannot unreasonably interfere with the view of, or from, a site of significant public interest (scenic road, historic resources, etc.).
5. Ground mounted systems may not be affixed to a block wall or a fence.
6. Roof mounted systems shall be installed in such a manner that there is no change in relief or projection.

(D) Solar energy conversion facilities, in industrial zones.

(1) Solar energy conversion facilities shall be permitted in the I-G and I-R Districts whether roof mounted or ground mounted.

(2) Size limits:

- (a) When roof mounted, the physical size of the system shall be limited to the size of the roof.
- (b) There shall be no size limit for ground mounted systems.

(3) Setbacks:

(a) Setbacks shall be 200 feet from the boundaries of all adjoining residentially zoned properties, and 100 feet from the boundary lines of adjoining nonresidentially zoned properties.

(b) The Planning Commission may reduce required setback for any yard setback by up to 50% provided that supplemental landscaping, as may be determined by the Planning Commission, is provided.

(4) Height limits: No portion of the system shall extend more than 25 feet from the highest portion of the principal structure to which it is attached. The total height of the building, including all portions of the solar facility, shall comply with the height regulations as set forth in the bulk requirements for the individual district in which the use is proposed. Ground mounted system may not exceed a total height of 25 feet above existing grade.

(5) Miscellaneous provisions:

(a) Electrical connections:

1. Prior to interconnection with the local utility grid, a copy of the conditional approval from the local utility must be provided prior to or at the time of permit application.

2. All systems must meet all applicable construction and electrical codes.

3. All systems shall comply with all utility notification requirements.

4. A copy of the signed certificate of completion from the utility company shall be provided prior to occupancy permit issuance.

5. When batteries are included, they must be placed in a secure container or enclosure per manufacturer's specifications; screened from view.

(b) Appearance:

1. Color must remain as it was originally provided by the manufacturer, or match the exterior of the principal structure.

2. No signs other than the manufacturer's, or installer's identification, appropriate warning signs; and not more than two manufacturers' signs may be on the system.

3. Ground mounted systems may not be affixed to a block wall or a fence.

4. Roof mounted systems shall be installed in such a manner that there is no change in relief or projection.

(Ord. 2014-07, passed 8-26-2014)

ADMINISTRATION AND ENFORCEMENT

§ 158.130 EXCEPTIONS AND MODIFICATIONS.

(F) Application; limits.

(1) A person shall apply to the Zoning Administrator for a variance or administrative adjustment from the height, setback, parking, loading, dimensional, area, width, sign, and distance requirements as specified in this chapter or as specified in [Chapter 155](#) unless a simultaneous application for a conditional use has been filed with the BZA pursuant to § [158.133\(D\)](#). The application shall be made on a form and in a manner prescribed by the Zoning Administrator.

(2) The maximum variation from a requirement as listed in division A shall be as follows:

(a) Height: 75%;

(b) Setback: 75%;

(c) Parking: 75%;

(d) Loading: 75%;

(e) Distance: 80%;

~~(e)~~(f) Area of solar energy conversion facilities as accessory uses in the C district: 80%;

~~(f)~~(g) Other dimensional requirements: 80%; and

~~(g)~~(h) Area: 75%.

(3) For the following variances or administrative adjustments, a person shall apply to the BZA:

(a) Setback or distance requirements for communications towers; and

(b) Variances or administrative adjustments exceeding the maximum variation in division B, or which would be necessary to abate a permit or zoning violation. (2004 Code, § 223-181)