

## 33.299 Wind Turbines

# 299

### Sections:

- 33.299.010 Purpose
- 33.299.100 Where These Regulations Apply
- 33.299.110 Rotor Swept Area
- 33.299.120 Setbacks and Height
- 33.299.130 Noise

### **33.299.010 Purpose**

These regulations allow small, urban-scale wind turbines while limiting potential negative impacts. In concert with a variety of City, State, and Federal programs, allowing the turbines in more locations may encourage further development of wind turbines that are appropriate for urban settings.

### **33.299.100 Where These Regulations Apply**

The regulations of this chapter apply to small wind turbines.

Large wind turbines and utility-scale wind turbines are regulated by the base zones, and are not subject to the regulations of this chapter.

### **33.299.110 Rotor Swept Area**

The rotor swept area is the projected area as defined by the American Wind Energy Association (AWEA). In Residential zones, the maximum rotor swept area is 50 square feet. In commercial/mixed use, and campus institutional zones, the maximum rotor swept area is 150 square feet. There is no maximum in the E and I zones.

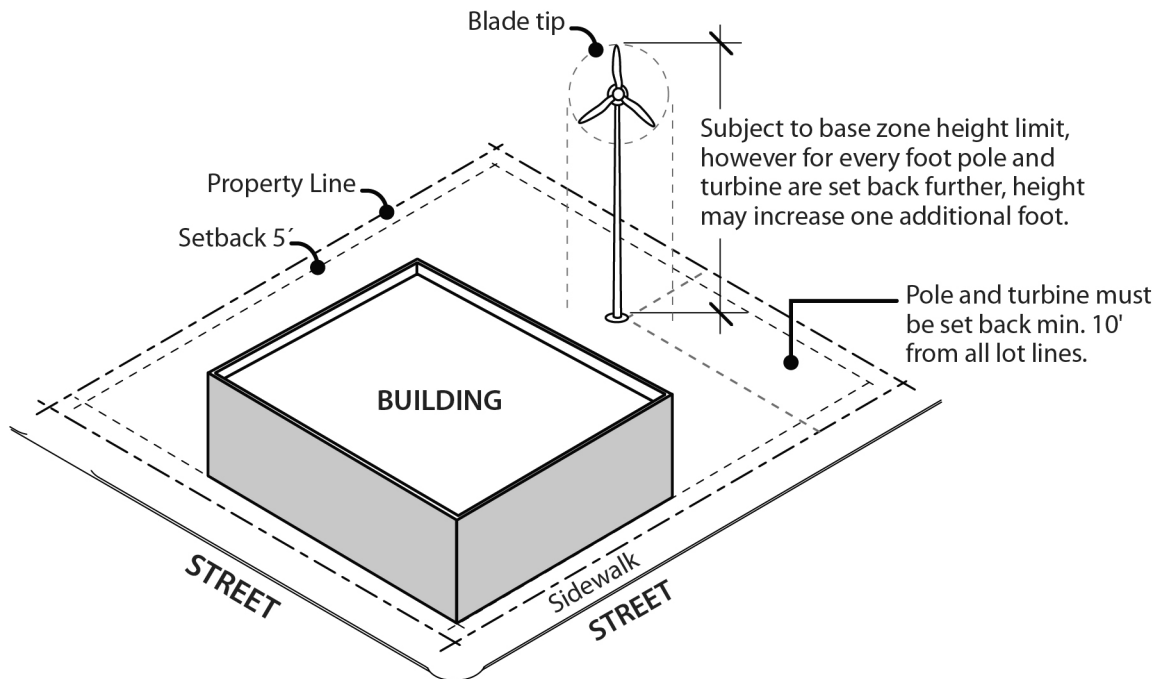
### **33.299.120 Setbacks and Height**

The height of a turbine is measured to the tip of the rotor blade at its highest point. For pole mounted turbines, height is measured from grade at the base of the pole. For building mounted turbines, height is measured from the base point of the building.

- A. View Corridors.** Although the regulations of this section allow wind turbines to exceed the height limits of the base zones, they are not allowed to extend into a view corridor designated by the *Scenic Resources Protection Plan (1991)* or the *Central City Scenic Resources Protection Plan (2018)*.
- B. Pole Mounted.** Pole mounted turbines must meet the following. Distances between lot lines and the pole and turbine are measured at the closest points:
  - 1. Front and street setback. The pole and turbine are not allowed in a required front or street setback;
  - 2. Setback from all lot lines. The pole and turbine must be set back at least 10 feet from all lot lines;

3. Height. The pole and turbine are subject to the base zone height limit. However, for every foot that the pole and turbine are set back farther than specified in B.1 and 2, the height of the turbine may increase one additional foot above the base zone height limit. Each additional foot of height is earned when the pole and turbine are set back from all property lines by an additional foot. The height may not increase more than 50 percent above the base zone height limit. See Figure 299-1.

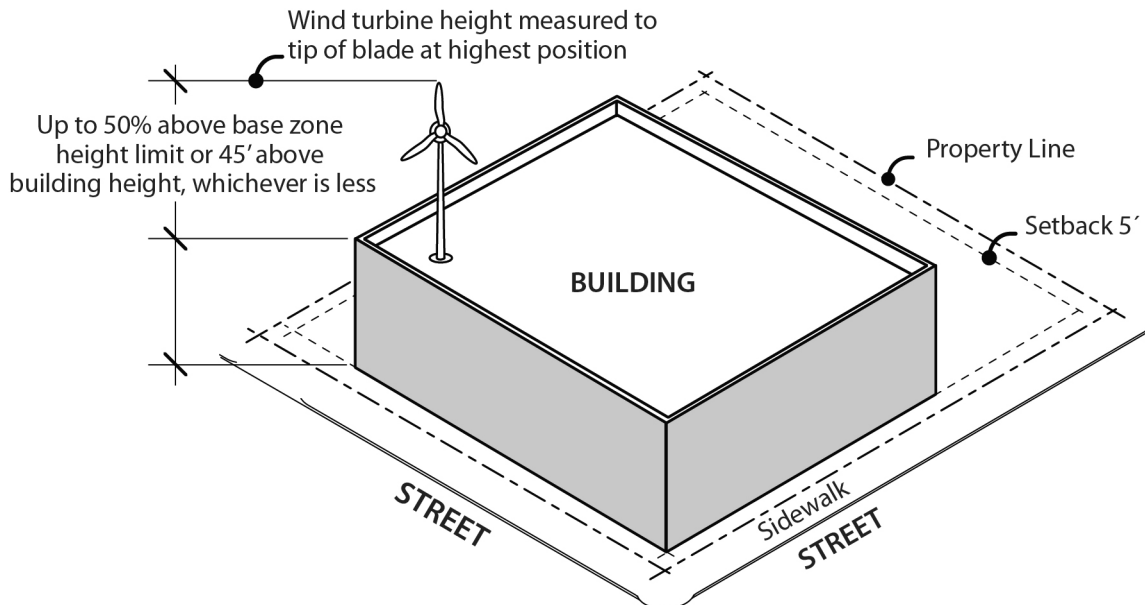
**Figure 299-1**  
**Pole-Mounted Wind Turbine**



**C. Building mounted.**

1. Setbacks. Building mounted turbines are subject to the minimum building setbacks of the building they are mounted on.
2. Height. A turbine may be up to 50 percent above the base zone height limit, or 45 feet above the height of the building it is mounted on, whichever is less. See Figure 299-2.

**Figure 299-2**  
**Building-Mounted Wind Turbine**



**D. Exceptions.**

1. RF zone. Turbines in the RF zone are subject to Subsections A and B. However, there is no height limit if the turbine is set back from all lot lines a distance equal to its height.
2. EG2, IG, and IH zones. In the EG2, IG, and IH zones, there is no setback or height limit except where lot lines abut R-zoned sites. Where the lot lines abut R-zoned sites:

a. Pole-mounted turbines are subject to the following:

- (1) Setback. They must be set back at least 10 feet from lot lines that abut R-zoned sites.
- (2) Height. They are subject to the height regulations for pole-mounted turbines that apply to the adjacent R-zone. If the site abuts more than one R-zone, the most restrictive height regulation applies.

For every foot that the pole and turbine are set back farther than 10 feet from the adjacent R zone, the height of the turbine may increase one additional foot above the adjacent R-zone base zone height limit. Using this provision, the height may not increase more than 50 percent above the adjacent R-zone base zone height limit.

However, there is no height limit if the turbine is set back from all lot lines a distance equal to its height.

b. Building-mounted turbines. Building-mounted turbines must meet the setbacks and height regulations that apply to building-mounted turbines in the adjacent R-

zone. If the site abuts more than one R-zone, the most restrictive regulations apply.

**33.299.130 Noise.**

In residential zones, turbines must have an AWEA-rated sound level of 45dBA or less. The City noise standards of Title 18 also apply in all zones.

---

*(Added by Ord. No. 183598, effective 4/24/10; Amended by: Ord. No. 188177, effective 5/24/18; Ord. No. 188958, effective 5/24/18; Ord. No. 189000, effective 7/9/18; Ord. No. 190023, effective 8/10/20.)*