

Summary of the Ecoroof Standard (33.510.243)

All new buildings in the CX, EX, RX or IG1 base zone that are 20,000 square feet or larger must include an ecoroof that covers 100 percent of the rooftop area, excluding rooftop parking areas. Up to 40 percent of the rooftop may be covered in mechanical equipment, fire evacuation routes, stairwell/elevator enclosures, skylights, solar panels, wind turbines or uncovered common outdoor areas.

Frequently Asked Questions

1. How can a building meet the city's ecoroof requirement and the state's solar requirement?

Solar panels and ecoroofs are compatible with each other. Solar panels provide shade for the plants and protect them in inclement weather. The ecoroof helps cool the solar panels. Solar should be installed with breaks between panels to allow rainwater and light to reach the plants.



2. Can a white roof be used instead?

No. A white roof does not meet the purpose of ecoroof standard because it does not manage stormwater, improve air quality, provide urban green space or provide habitat.

3. Can an ecoroof be irrigated?

Yes. Ecoroofs benefit from irrigation while the plants are getting established. The City's Stormwater Management Manual allows drip-irrigation on ecoroofs.



4. Is wind shear or uplift a problem for ecoroofs?

The engineering of rooftops and structures attached to roof top like mechanical equipment, solar panels and ecoroofs, must meet the building code for wind shear and uplift. There are examples in Portland and in other U.S. cities of ecoroofs on tall (>250 ft) buildings.

5. Is there flexibility in the kinds of plants installed?

Yes. A variety of plants can be used to address microclimate conditions such as shade, wind and temperature. The plant species must be drought tolerant and appropriate for ecoroof growing mediums. Plants can be non-native but must not be invasive or nuisance species.

6. What is the maintenance cost of an ecoroof compared to a conventional roof?

On average, ecoroofs cost roughly 4 percent more to maintain than a conventional roof (San Francisco, Living Roof Cost-Benefit Study, 2016). Maintenance includes irrigation during plant establishment and replacement of plants that die. However, because a conventional roof needs to be replaced after 20 years and an ecoroof typically doesn't need to be replaced until 40 years, the replacement savings far outweigh the additional maintenance costs.



CENTRAL CITY 2035 – ECOROOF STANDARD

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Below is an example of an approved building design that meets the Central City Ecoroof Standard. It is a ¾-block development with more than 60-percent ecoroof coverage. Solar panels will be installed over the ecoroof.

