

working green for clean rivers

Ecoroof Floor Area Ratio Bonus Option

2009

working for
clean rivers,
healthy
watersheds,
and a livable,
sustainable
community

What is the ecoroof FAR?

The Ecoroof Floor Area Ratio (FAR) Bonus option can earn a developer or builder a larger development footprint or additional floor area than otherwise allowed by zoning codes if their building proposal includes an ecoroof



that meets specific requirements. The Ecoroof FAR Bonus typically applies to larger scale development projects such as industrial, commercial, and multi-family residential housing (e.g. condominiums, apartments). Currently, the ecoroof FAR is available only in Portland's Central City Plan District. For a boundary map see www.portlandonline.com/bes/FARmap.

Why consider an ecoroof?

Ecoroofs replace conventional roofing with a lightweight, vegetated roof system consisting of soil and plants on top of a waterproof membrane. An ecoroof reduces stormwater runoff, helps the building conserve energy, reduces the urban heat island effect, increases wildlife habitat, and provides additional greenspace for urban dwellers. Ecoroofs last twice as long as conventional roofs that are exposed to sunlight. Ecoroofs can help meet the city's stormwater management requirements for new and redevelopment projects, and can save money on stormwater charges under the Clean River Rewards incentive program.



ENVIRONMENTAL SERVICES
CITY OF PORTLAND

working for clean rivers

Dan Saltzman, Commissioner
Dean Marriott, Director

How does the Ecoroof FAR apply?

The amount of FAR bonus allowed to a developer or builder depends on the percentage of ecoroof coverage in relation to the building footprint. Building proposals in the Central City Plan District with an ecoroof may receive bonus floor area as follows:

- 10-30% ecoroof coverage earns one (1) square foot of additional floor area per square foot of ecoroof;
- 30-60% ecoroof coverage earns two (2) square feet additional floor area per square foot of ecoroof; and
- 60% or greater ecoroof coverage earns three (3) square feet of additional floor area per square foot of ecoroof.

Submittal Requirements for Ecoroof FAR Approval

Ecoroof Plan

- Show total building roof area of all vegetated ecoroof coverage, mechanical units, patios, gravel and path areas, etc.
- Show calculations for FAR bonus
- Plans must be to scale

Cross sections of typical details and related specifications

- Provide cross section and details for ecoroof areas, gravel and path areas, locations where ecoroof meets parapet or mechanical unit, etc.

Planting Plan

- Provide both botanical and common names
- Specify planting layout

Method of vegetation application

- This application must ensure 90% coverage of soil within one year and prevent soil loss and vegetation damage due to wind erosion

Planned water use and/or irrigation system

- No irrigation is required after the 2-year establishment period. Naturescaping and water reuse is highly encouraged

Drainage Plan

- Show materials, layout, and ultimate disposal point

Soil specification

- Provide soil depth
- Provide weight per square foot

Ecoroof elements

- Show typical ecoroof cross section and describe components

Operations and Maintenance Plan

- The Stormwater Management Manual standard plan may be used but must be modified to meet specific circumstances

The applicant must submit the above materials to Environmental Services and meet specific criteria before receiving an Ecoroof FAR letter of approval. The applicant must submit all of the materials above at the time of the Land Use application.

For ecoroof design requirements, see the City of Portland Stormwater Management Manual, pg 2-37. or visit www.portlandonline.com/bes/ecoroof

For more information on the Ecoroof FAR Bonus see City code Title 33.510.210, or visit www.portlandonline.com/bes/FARcode