



ZONING ADMINISTRATOR BULLETIN NO. 11

Better Roofs Ordinance

Section 307 of the Planning Code mandates the Zoning Administrator to issue and adopt such rules, regulations and interpretations as are in the Zoning Administrator's opinion, necessary to administer and enforce the provisions of the Planning Code.

Date: December 2016	Relevant Ordinance: Better Roofs Ordinance
	Relevant Code Section: Section 149 Better Roofs; Living Roof Alternative

PURPOSE:

Pursuant to the Planning Code, Green Building Code and the Better Roof Project Guide issued by the Planning Department in coordination with the Department of the Environment, there are requirements for new building construction to facilitate the development of renewable energy facilities and living roofs. These standards will require between 15% and 30% of roof space on most new construction to incorporate solar, living (green) roofs, or a combination of both. The living roof option will allow a project sponsor to replace the required solar with living roof at a rate of 2 square feet of living roof for every 1 square foot of solar.

APPLICABILITY:

The Better Roofs requirements apply to all buildings that meeting each of the following below:

- (1) has a gross floor area of 2,000 square feet or more;
- (2) has 10 or fewer occupied floors; and
- (3) applies for a site permit or building permit on or after January 1, 2017.

A project sponsor may use a Living Roof as an alternative means of meeting some or all of the Better Roof requirements for any building that includes the above criteria is also constitutes a Large Development Project or Small Development Project under the Stormwater Management Ordinance (Public Works Code secs. 147 147.6). If the Living Roof alternative is chosen the square footage of the living roof shall be used in compliance with the Public Utilities Commission Stormwater Management Ordinance.

ALLOWED BETTER ROOF USES:

The better roof area must be filled, at the time of construction, with any combination of the following technologies, such that the performance requirements for each installed technology are met:

- PV, with a minimum 10 W DC per sq. ft. or roof area allocated to PV
- SWH, with minimum 100 kBtu/sq ft of roof area allocated to SWH
- For buildings over 5,000 sq ft and subject to the SF SMO, Living roof, such that 2 sq. ft. of living roof is installed to satisfy 1 sq. ft. of minimum solar zone area

The Department of Building Inspection reviews the technical details of the solar hot water or photovoltaics. *For more information on the power requirements please contact the Department of Building Inspection, Green Building Division.*

Firefighter pathways and other access requirements must be maintained in the design of all systems installed in the solar zone. The Better Roof Project Guide contains information on Fire Code requirements, but for more detailed information please contact the Fire Department.

STORMWATER MANAGEMENT ORDINANCE:

The required stormwater management controls depend on the project size, location, and type, but generally the Stormwater Management Ordinance requires development and maintenance of the stormwater management controls for work that disturbs 5,000 square feet or more of the ground surface. Living roofs are one of the Best Management Practices (BMPs) that is reviewed for compliance with the ordinance and can be found in the Stormwater Design Guidelines Handbook. *See the San Francisco Stormwater Design Guidelines for more information.*

NON-POTABLE WATER ORDINANCE:

Living roofs may be used in conjunction with rainwater harvesting systems. It is generally best to harvest rainwater from portions of the roof that are impervious and not connected to the same drainage system as the living roof portion. This rainwater may then be stored, filter, and used for non-potable applications, including irrigation of the living roof.

See the SF PUC's On-site Non-potable Water Use guide and Non-potable water use program website for more information.

DEFINITIONS:

Rooftop Area

Pursuant to Planning Code section 149, a roof is considered all outside coverings of a building or structure, including the structural supports, decking, and top layer exposed to the outside, at all levels of building, excluding roof area designated for skylights, vehicle traffic, or heliport.

Height

The total height of the building is measured to the top of all structures. Where there may be a podium less than 10 floors, but a tower greater than 10 floors, the Better Roofs requirements does not apply to the overall building.

Living Roof

The media for growing plants, as well as the set of related components installed exterior to a facility's roofing membrane. "Living Roof" includes both "roof gardens" and "landscaped roofs" as referenced in the California Building Code.

Please reference the Living Roof Manual on the Planning Department's webpage for more information on living roof designs.

PROCESS:

A Project Sponsor must select and exhibit clearly in the submitted drawings the method of compliance with the Better Roof requirements before Planning Department approval. Planning staff will calculate the required Better Roof area and record related information in the permit tracking system.

The Public Utilities Commission will continue reviewing projects which are required to meet the Stormwater Management Ordinance. The Department of Building Inspection will review the technical solar requirements of solar hot water and photovoltaics.

QUESTIONS:

Planning Department and Department of the Environment are committed to helping Project Sponsors better utilize rooftop space. Staff will work with the Project Sponsor to ensure that the Better Roof requirements are complied with to the furthest extent possible in each case. The Better Roof Project Guide contains more detailed information on the policy context, related codes, and possible designs for a Better Roof. For questions regarding the process, please contact the Planning counter at 628.652.7300 or pic@sfgov.org.



**San Francisco
Planning**

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