Green Roof Policies Are a Growing Trend

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In 2009, the Canadian city of Toronto, Ontario passed the first law in North America requiring green roofs on newly constructed buildings over a certain size. Now, 10 years after the passage of Toronto's <u>Green Roof Bylaw</u>, Toronto has gained 640 new green roofs under the law. And the rest of the continent seems to be <u>catching on</u>. The number of green roofs in North American is estimated to have grown by 15 percent since 2013.

Green Roofs

It's common to call anything that's more sustainable than standard practices "green." But a green roof, sometimes called a living roof, is not just any <u>sustainable roofing</u> material. A green roof is a specific type of roofing system that supports living plants. Green roofs have been around in the form of sod roofs since at least the middle ages.

But a <u>modern green roof</u> involves more than just plants. It needs high quality waterproofing and protection against root damage, a drainage system, filter cloth, and a lightweight growing medium. The plants may be small, drought-tolerant ones like sedums, or larger grasses. The system can be modular or site-built, and depending on the planting medium depth, may even resemble a natural <u>meadow</u> or a garden with shrubs and trees.

Residential and Commercial

Green roofs have been used on private residences very successfully. Although the high cost of design and installation has slowed their adoption as a standard roofing option, they can provide <u>lifetime savings</u>.

Single-family homes made up <u>less than 2 percent</u> of the green roofs in the U.S. in 2015. Multifamily homes, on the other hand, have the efficiencies of scale to justify the expense (and sometimes, have the square footage to trigger green roof requirements) and made up 22 percent of green roof projects. That still leaves the vast majority of green roofs to industrial and commercial buildings.

But private homeowners need not despair. Many of the incentives available for green roof construction are available for single-family residences, too.

Carrots and Sticks

Toronto became the first city to require green roofs in 2009; in 2019, <u>New York City</u> became the latest. In between, <u>at least 20 U.S. cities</u> have passed some sort of green roof policy. The list includes cities you might expect – like Portland, Denver, and San Francisco. But it also includes some you might not expect – Baltimore and Nashville.



Modern living roof on a private residence. Photo: Adobe Stock

Cities have also added financial incentive programs to the <u>inherent benefits</u> of reducing air conditioning by up to 75 percent; reducing air pollution and greenhouse gas production; reducing or eliminating stormwater runoff; and providing amenities for human health and recreation. The government incentives include low-cost financing to defray the upfront cost premium of green roof construction; tax credits; and rebates.

<u>This list</u> compiles city, state, regional, and federal incentives for green roofs as well as regulations requiring green roofs around the U.S. and Canada. Whether you find your city on this list or not, it's still a good idea to check with your local government about the latest bylaws. New green roof policies are appearing all the time.

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