



ECOROofs: AN AESTHETIC CHOICE MAKES EARTH SENSE

+ Story by Meg Daly

When architect Roger Strout was building his Jackson home, he wanted the roof to double as an activity space. An ecoroof was the perfect solution. Also known as green roofs or sod roofs, vegetated roof systems are popping up all over Jackson, from private residences to commercial spaces.

“It’s a great place to entertain,” Strout says. He designed his roof to include photovoltaic panels, a deck, and numerous containers with plants and trees. We often think of green roofs as grassy expanses, like the roof of the iconic Jackson Hole and Greater Yellowstone Visitor Center. However, just like gardens, ecoroofs come in many shapes and sizes, from wild and woolly native grasses to manicured lawns to carefully chosen container plants like Strout’s.

According to several area architects, clients in Jackson choose green roofs primarily for the aesthetics. They want their houses to blend in with surrounding landscapes and mirror the natural beauty of the land.

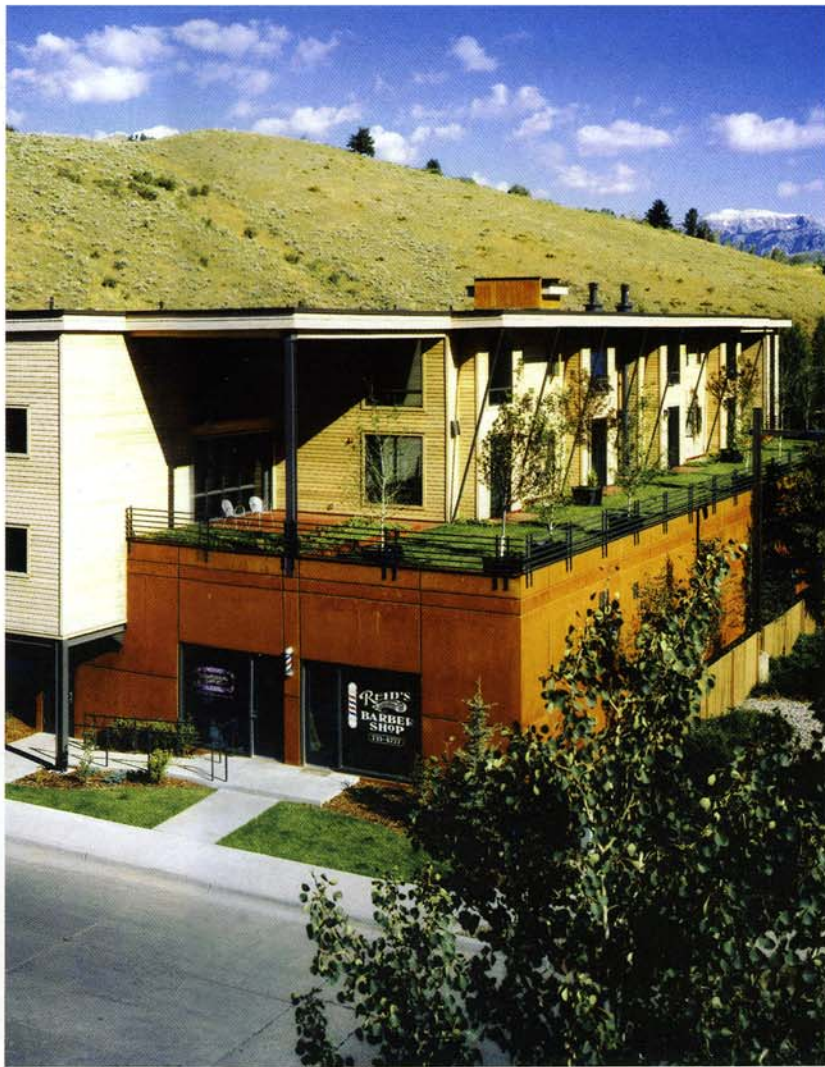
Not that the ecoroof doesn’t have real benefits for the surrounding ecosystem. Vegetation and soil on an ecoroof help filter and slow storm water runoff. This not only cuts down on erosion around a building, it reduces the water load in creeks, rivers and municipal storm drains. Plus, the water that does reach streams is cleaner.

In Seattle, a metropolis with heavy rainfall, the cumulative effect of slower, cleaner runoff can be dramatic. Cities like Chicago, that have championed green roofs since 1998, have seen dramatic decreases in what’s known as “heat island effect,” where an urban area is hotter than surrounding rural areas. According to ExploreChicago.com, the green roof on Chicago’s City Hall is nearly 100 degrees cooler than an adjacent building with a traditional roof. ▶



Top: The green roof of this home designed by Ward + Blake Architects mirrors surrounding flora, adding an integrated feel between structure and landscape. Photograph by Doug Kahn.

Left: For a new home in Indian Trails, Hawtin Jorgensen Architects incorporated a section of ecoroof as a design statement. Photograph by Premier Property Photography, landscape design by Hershberger Design.



Blake incorporated individual lawns when designing the condo apartments at the Sherwin Mixed-Use Building on Maple Way. Photograph by Lark Smothermon.

But in Jackson, while every little bit counts, green building practices cannot entirely mitigate the impact of new construction, says Jorgensen. It's a challenge for any new building in the Tetons to fully neutralize its carbon footprint through green or eco-friendly design. "All those decisions are additive," Arne Jorgensen said. "A house built anywhere in this particular climate will have difficulty mitigating its impact one hundred percent by green choices alone. Our total heating requirements have the greater impact."

Beyond aesthetic value, an ecoroof does provide direct benefit in extending the life of a roof. According to architect Mitch Blake, a green roof can have triple the life of a conventional roof. Ecoroofs also provide great insulation for the building.

Strout emphasizes that waterproofing the roof is the biggest challenge. "Roots find their way through anything," he said. He installed heavy-duty waterproof membranes on the roof and chose plants with shallow root systems.

Blake mentions irrigation as the primary maintenance issue. "If you plant grass, you have to mow and utilize a sprinkler system," he said. Even for low-maintenance vegetation, initial irrigation will be necessary. "You need some irrigation to get a green roof started," he said. "Then you let the plants act as they do elsewhere around the building."

Ecoroofs weigh more and cost more than traditional roofs, but they can save you money in the long run in terms of insulation and the life of your roof. Perhaps more importantly, ecoroofs honor a local ethic of building structures that blend in with natural settings. And if the water and air around our homes is a little bit cleaner because of ecoroofs, so much the better for humans and our wildlife neighbors. 