

Herzberg Garage

Eco Roof

From Lawn to Eco Roof

Our 1923 garage was a green roof before anyone ever heard of “eco-roof”. A lawn surrounded by boxwood hedges covered our detached garage and was a favorite spot for our kids. It was a beautiful oasis of green, but it leaked. The garage was not usable for storage for our cars or other objects. We decided to solve the problem.

We first removed the compacted earth from the roof 3 feet x 20 x 25 feet. This was done manually over the course of a week and filled several truckloads. After cleaning off the roof surface, we realized that there was no waterproof barrier between the cement roof of the garage and the soil. Moreover, the clay drainage pipes were completely clogged with soil and the pitch of the roof was such that water did not effectively drain. The next step was to build a "cricket", a wood support structure that inclined the pitch of the roof to drain water to the existing drainpipe in the southwest corner. This consisted of 2x4 pieces, which were angled to create an adequate slope for drainage and was topped off by plywood sheets. An impermeable rubberized membrane was affixed to the cricket, "torched on" and up the inner aspect of the enclosing parapet.

Not wanting to mess with dirt on our roof ever again, we decided to put on a deck. We looked at decks in the neighborhood, paged through magazines, and realized that we were much more excited by green roofs than by decks. We missed the square of green grass on our garage, but not the mess it created in the garage. We started researching and visiting ecoroofs in Portland, trying to see if it was possible to bring some green back to the roof and still be assured that it would be waterproof.

We met with a contractor experienced installing ecoroofs. We spoke with many of his clients, and came to see that done properly, a planted roof was a safe and beautiful option. And much cheaper than a deck!

Before planting, we added an additional membrane to prevent puncture by sharp rock. Being extra cautious about adding weight to our garage, we chose sedums that could be planted in 4 inches of vermiculite. Our design is inspired by fields, planted in a variegated style, with different patches of different sedum varieties. River rocks creates a river-like path that go from the top end of the garage to the drainage corner. A gravel area comes off the river, creating a small patio area surrounded by our sedum meadow. Our garage is 500 sq. feet. Planting space is 380 sq. feet.

The plants are just beginning to get established. I can't wait until next spring and summer when the sedum fill in and we get to see the blooms.

