



LEED Gold Certified Welcoming Center

Living Roof Overview

The Living Roof on top of our new Welcoming Center covers 3,400 square feet with 9 different types of plants, including sedums and native grasses. Other names for a living roof include green roof and nature roof.

Extensive vs Intensive:

Our roof is considered an extensive green roof (also known as an ecoroof), because there is a very thin layer of dirt (4 inches in our case) that holds drought-tolerant, easy-care plants — plants which don't require a lot of fertilizer or maintenance. The other type of roof, an intensive living roof, has a much deeper layer of dirt: anywhere from 6 inches to 15 feet, allowing a much more elaborate roof garden with larger plants and even trees.

Benefits of a living roof:

- Keeps the building cooler
- Alleviates stormwater runoff
- Provides natural habitat to replace lost footprint
- Insulates the building and provides thermal mass

Cooling the roof:

Living roofs can reduce heating and cooling needs by 25—50%, by reducing the rooftop temperature by as much as 50—75 degrees. When the outdoor temperature is 95°, a regular black tar roof surface can reach 175° F — while a green roof will be only 100° F.

By the way, a “cool roof” is distinct from a green roof — a cool roof is one that has been painted a light, reflective color — usually white. Just painting it can reduce the roof temperature significantly.

Living Roof Background:

Historically, living roofs have been around for centuries in the form of sod roofs in Iceland and Scandinavia. Later they were also popular in the American West. The modern green roof movement started about 30 years ago in Germany and is spreading in Europe.

An early supporter of green roofs in the U.S. is Chicago Mayor Richard Daley, who discovered living roofs while visiting Germany in the late 1990's. Daley was immediately impressed with green roofs and brought the idea back to Chicago, where there is now over 2 million square feet of green roof.

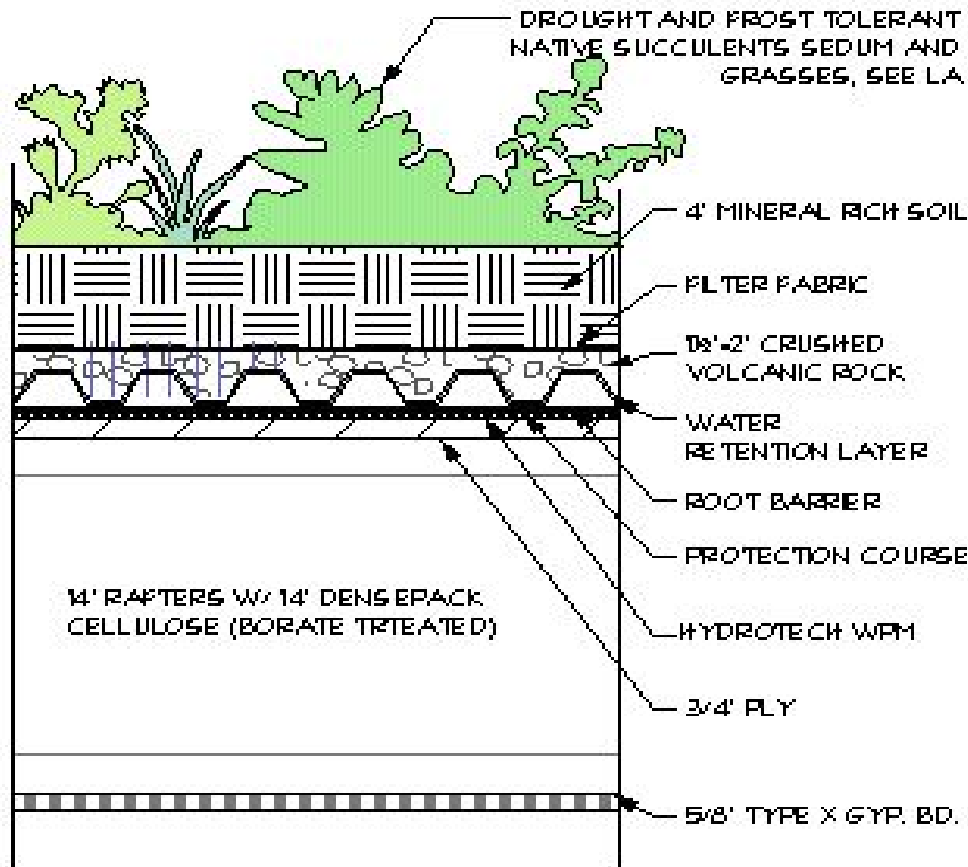
In the San Francisco Bay Area, you can also find living roofs at the Gap Headquarters in San Bruno, Foothill College in Los Altos, Santa Clara University in Santa Clara and, in 2008, at the California Academy of Sciences in San Francisco.

Presentation Center Roof Plant List

Botanical Name	Common Name	California Native
<i>Festuca idahoensis</i>	Idaho fescue	✓
<i>Nassella polera</i>	Purple needlegrass	✓
<i>Nassella lepida</i>	Foothill needlegrass	✓
<i>Sisyrinchium bellum</i>	Blue-eyed grass	✓
<i>Achillea millefolium</i>	White Yarrow	
<i>Sedum album</i>	White Stonecrop	
<i>Sedum anopelatum</i>	Stonecrop	
<i>Sempervivum calcareum</i>	Houseleek	
<i>Sempervivum "Purple Fuzzy"</i>	Purple Fuzzy Houseleek	

Plant List by Landscape Architect, Sarah Sutton, ASLA of Design Community & Environment, Berkeley

Living Roof Cross-Sectional View:



Living Roof Cross-Sectional View by Dan Smith & Associates, Architects, Berkeley