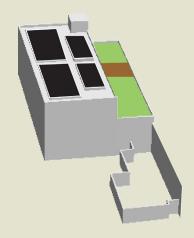
# Whole Building Design

### Maximizing Amenities for Sustainable Buildings



### **CASE STUDY FACTS**

Year: 2010 Type: Extensive Size: approx. 650 sq. ft. Access: Private via roof deck Greenroof System: Modular trays Cost: Low Cost Designed by: Matarozzi Pelsinger and Jeff Miller Landscape Arch.



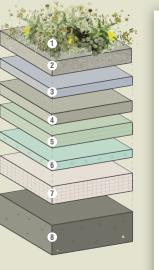
# **PROJECT BACKGROUND**

Matarozzi Pelsinger Builders have a history and reputation in the Bay Area for their commitment to sustainable building design. When they developed a new headquarters, they naturally wanted their own building to reflect their practice, and demonstrate their firm's familiarity with common sustainable building products and technologies. Their building was certified LEED-NC Gold, and also received recognition from the American Institute of Architect's Committee on the Environment as a Top 10 Green Project of 2010. The living roof was always conceived as integral to the project's scope, helped earn a number of LEED credits, and helps to manage 57% of stormwater on site, along with other permeable landscape features.

The living roof is a tray-based system, which helped to keep costs and structural loads low. Even so, the roof's supporting joists needed to be doubled to support the additional roof weight. The first plants selected for the roof did not perform well given the harsh conditions, but a second round of planting utilized only native, drought-tolerant species, and included the installation of a wind barrier to protect the plants from desiccation. These plants were irrigated for a 1 year establishment period, but today the roof is unirrigated and the plants are thriving.

In addition to helping the building achieve its sustainability goals, the living roof is located at the roof deck, which is used frequently by employees. This vegetation helps to contribute to a healthier and more productive workplace by providing an aesthetic amenity and a direct connection to nature.

## **ROOF SECTION**



# ROOF SECTION LAYERS CALIFORNIA SEDUM MIX G GROWING MEDIA FILTER FABRIC WATER RETENTION/DRAINAGE MODULAR TRAY CONTAINER WATERPROOF MEMBRANE NSULATION

CONCRETE ROOF DECK