



CALIFORNIA ACADEMY OF SCIENCES

Photo: Kay Cheng

CASE STUDY FACTS

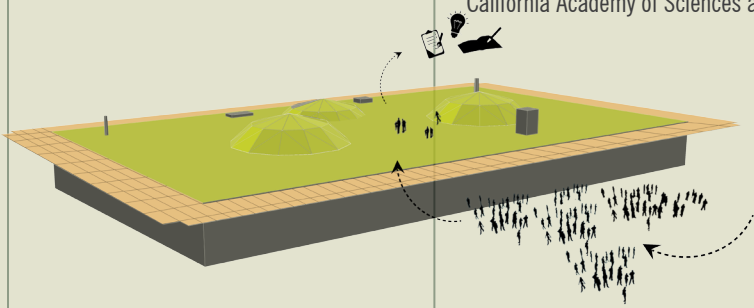
Year: 2007
 Type: Intensive
 Size: 197,000 sq. ft. (2.5 acres)
 Access: Public access from museum to observation deck
 Greenroof System: Bio-Trays
 Designed by: Rana Creek

PROJECT BACKGROUND

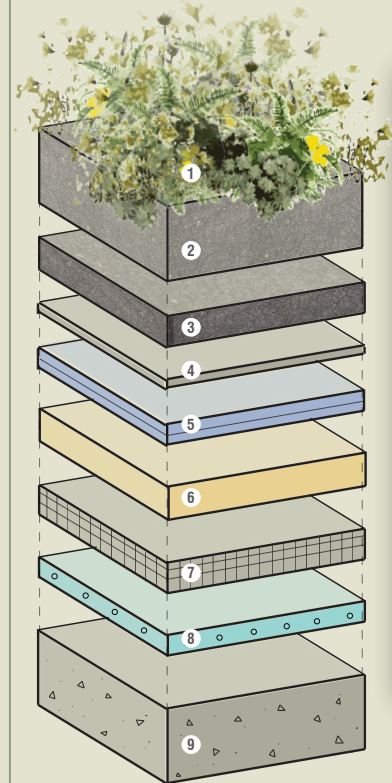
The California Academy of Sciences is a perfect opportunity to support, educate, and engage the public in local native plants because it is a popular museum in San Francisco and offers many opportunities to learn from and do research on its living roof.

The roof was primarily built for research and educational purposes. Some examples of the subjects of research projects include plant identification and studying which thrive on the roof, ground beetle diversity, bird habitat identification, cavity nesting native bees, ornithology, and carbon offsets. The roof structure itself also provides for unique research opportunities because different plants and their root systems have varying reactions to the slopes of the domes.

The museum is very open to new research projects that follow a scientific methodology and are open to valid peer review. The ability to do research on such a large scale is incredibly important for the success of green roofs in the future. Seeing the results of these studies will bring more answers for new green roof technology. San Francisco's green roofs will be able to use the California Academy of Sciences as a test subject to improve the green roofs of the future.



ROOF SECTION



- ### ROOF SECTION LAYERS
- 1 80 DIFFERENT PLANT SPECIES
 - 2 BIODEGRADABLE TRAYS
 - 3 ADDITIONAL SOIL
 - 4 POLYPROPYLENE FILTER SHEET
 - 5 PLASTIC DRAINAGE LAYER
 - 6 VINYL PROTECTION LAYER
 - 7 POLYSTYRENE INSULATION
 - 8 THERMAL PLASTIC WATER-PROOFING
 - 9 BUILDING CONCRETE