



NASA AMES, SUSTAINABILITY BASE

NET-ZERO ENERGY

SUSTAINABILITY BASE, NASA AMES RESEARCH CENTER*

Moffet Field, CA

Role: Design Manager

Project Size: 50,000SF Architecture, 50,000SF Landscape

Project Cost: \$26M (excluding FFE)

Construction: 2011

LEED: Platinum Certified

Awards: 2010 GSA Green Innovation and other awards

Sustainability Base is a Net-Zero, High-Performance building reflecting NASA's commitment to exploration, innovation and the environment. The first new office building to be built in twenty years on the NASA Ames Research Center campus at Moffett Field campus, the agency was guided by strong principles of reflecting history and technology to its greatest advantage.

The new two-story facility includes administrative office areas, conference spaces, as well as research facilities.

Through a series of extensive computer simulation modeling, the team developed a comprehensive climate-responsive building that includes:

- Efficient modular building structure
- Open column-free workspace
- Overhangs and exposed structural elements provide shade and harken to NASA satellite vehicles which establishes an iconographic image while still complying with the NASA
- Natural Ventilation
- Large expanses of curtain-wall for maximum daylight and views
- Roof-top photovoltaics
- Geothermal well-field to reduce thermal energy impact
- Radiant Wall Heating and Ceiling Cooling Panels
- Raised-Access Floor system
- Reclaimed treated municipal water for landscape irrigation and building grey water usage.
- 88% reduction in potable water consumption as a result of on-site water treatment and reclaimed municipal supplied treated water for irrigation and building use.

The facility's windows, interior shades, light fixtures and climate control system is run by an Integrated Building Management Control System, which monitors and adjusts are aspects of the buildings environment.

The result - N232 re-asserts NASA's culture as one that embraces current technologies and environmental concerns while addressing individual comfort in the workplace.

*June Grant, Design Manager while with AECOM
WMD-Partners, Design Architects





