



# Innovation @ WSTF 2011

## Facility Innovations

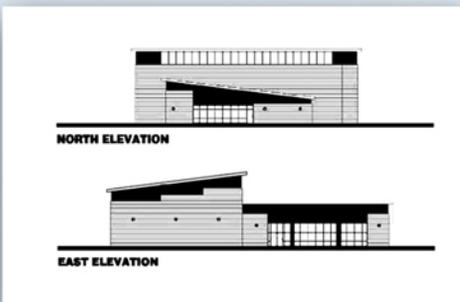
### NASA REQUIREMENT

NASA has adopted the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) as its performance measure for sustainable development.

For CoF projects, all new construction and major building renovation projects planned for award after October 1, 2005, shall meet the minimum LEED Silver rating.

(Source: NPR 8820.2F)

### COLUMBIA FITNESS CENTER DESIGN ELEVATIONS

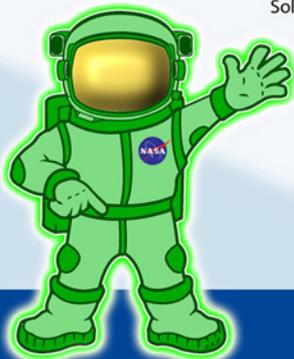


### CERTIFIED LEED SILVER



#### LEED PROJECT DETAILS

- Site Selection
  - Reuse of Parking Lot
- Renewable Energy
  - 54kW Solar System
- Water Conservation
  - Dry Urinals
- Low-Emitting Materials
  - Adhesives, Sealants, Paints
- Waste Management
  - >50% of Construction Waste Recycled
- Energy Efficiency
  - Limited West Facing Windows
- Daylight Views
  - Windows Providing Natural Light & Views
- Reduced Heat Island
  - Solar Shade Structures



### WHAT IS LEED?

#### Leadership in Energy and Environmental Design

LEED is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO<sub>2</sub> emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

Developed by the U.S. Green Building Council (USGBC), LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. LEED is flexible enough to apply to all building types—commercial as well as residential. It works throughout the building lifecycle—design and construction, operations and maintenance, tenant fitout, and significant retrofit. And LEED for Neighborhood Development extends the benefits of LEED beyond the building footprint into the neighborhood it serves.

(Source: <http://www.usgbc.org>)

### BUILDING 20 - JSC CERTIFIED LEED PLATINUM



NATURAL LIGHT AND VIEWS



WATER EFFICIENT LANDSCAPING



SOLAR WATER HEATING

#### LEED PROJECT DETAILS

- Energy Efficiency
  - Lighting Adjusts Based on Natural Light
- Waste Management
  - 95% of Construction Waste Recycled
- Daylight Views
  - Windows Providing Natural Light & Views
- Reduced Heat Island
  - Reflective Roof Coating
- Renewable Energy
  - Solar Water Heating
- Water Conservation
  - Dry Urinals, Water Efficient Landscaping
- Low-Emitting Materials
  - Adhesives, Sealants, Paints
- Forest Preservation
  - Bamboo Millwork

