

PROJECT PROFILE

Building 2N – Johnson Space Center Public Affairs Office

Upgrading NASA's Gateway to the Public







PROJECT DESCRIPTION

NASA JSC Building 2 North otherwise known as the Public Affairs building has a total of 17,424 square feet and was originally built in 1961. It includes open offices, enclosed offices, conference rooms, and a main briefing room. The building structure was left the same, but new walls, windows, an Energy Star roof, and roof insulation were added.

SUSTAINABLE SITES (2/7)

Asbestos contamination has been remediated in compliance with the National Emission Standards for Hazardous Air Pollutants and the Texas Asbestos Health Protection Act as enforced by the Texas Department of State Health Services. The project has provided bicycle storage and shower facilities for at least 5% of the building occupants. 100% of the total roof area consists of an Energy Star rated roofing material with emissivity of at least 0.9.

WATER EFFICIENCY (3/5)

The project has reduced potable water use by 56.77% from a calculated baseline design through the installation of low flow water closets, low flow urinals, a waterless urinal, low flow lavatories, low flow showers, and a low flow kitchen sink. The project has reduced potable water use for sewage conveyance by 52.38% from a calculated baseline design.

ENERGY & ATMOSPHERE (7/17)

The project has achieved an energy cost savings of 13.0% using the ASHRAE 90.1-1999 Chapter 11 methodology. The base building HVAC and R systems use no HCFC-based refrigerants or Halons. The project demonstrates exemplary performance for this credit by purchasing Green-e accredited Tradable Renewable Certificates (RECs) equal to 100% of the predicated annual electrical consumption over a two-year period.

MATERIALS & RESOURCES (9/13)

The project is a renovation of an existing building and that 100% of the existing wall support, floor, and roof elements have been maintained. The project has diverted 1,018.56 tons (89.18%) of on-site generated construction waste from landfill. 10.26% of the total building materials content, by value, have been manufactured using recycled materials. 78.49% of the total building materials value (21.61% of the locally manufactured materials) have been manufactured using raw materials that were harvested, extracted, or recovered within 500 miles of the project site. 70.86% of the total wood based building materials are harvested from FSC certified forests.

INDOOR ENVIRONMENTAL QUALITY (14/15)

Designated smoking areas have been located at least 25 feet from building openings and air intakes. The project has installed a CO2 monitoring system that provides feedback on space ventilation performance in a form that affords operational adjustments and carbon dioxide differentials that conform to ASHRAE 62-2001, Appendix C. All adhesive and sealant products, indoor paints, carpet systems, and composite wood and agrifiber products are Low-Emitting Materials. The project has achieved a minimum 2% daylight factor in 75% of all space occupied for critical visual tasks, and has enabled direct line of sight views from a minimum of 90% of all space occupied for critical visual tasks.

INNOVATION IN DESIGN (5/5)

Exemplary performance was achieved in building 2N for its innovations in water reduction, building enclosure commissioning, maximizing open space, use of Tradable Renewable Certificates, and open space accommodation.





Owner: NASA Johnson Space Center

Architect: PDG Architects

Structural Engineer: Paul Wottwring & Associates

MEP Engineer: WSP Flaack & Kurtz Commissioning Authority: Page

Sutherland Page

Contractor: McDonald Electric Project Size: 17,424 SF Project Cost: \$5,461,198 Completion: April 2009 Photography: NASA

The LEED Green Building Rating System is the national benchmark for the design, construction, and operations of highperformance green buildings. Visit the U.S. Green Building Council's Web

site at www.usgbc.org and the TX Gulf

Coast Chapter of USGBC at

www.usgbctexasgulfcoast.org to learn more about how you can make LEED work for you.