

GREEN BUILDING TOURS GREATER

January 28, 2011

FC Gulf Freeway LTD Houston, Texas LEED for Core and Shell 34.9% less electrical use **100%** less irrigation water use 100% green roof 100% daylight and views 90% construction waste diverted



LEED[®] Facts Jacob White Development Jacob White Construction Co.

Houston TX 77034

LEED-CS Certification Awarded Nov 11, 2010

| Platinum | 51* |
|------------------------------|-------|
| Sustainable Sites | 12/15 |
| Water Efficiency | 5/5 |
| Energy & Atmosphere | 12/14 |
| Materials & Resources | 6/11 |
| Indoor Environmental Quality | 10/11 |
| Innovation & Design | 5/5 |

ut of a possible 61 points

PROJECT PROFILE

FC Gulf Freeway LTD's Platinum Core & Shell 12941 Gulf Freeway Houston Texas 77034

PROJECT DESCRIPTION

The project is a two-story, core and shell, office building of 22,700 square feet situated on approximately 1.6 acres. ■ Large porches surround three sides of the building. ■ Green (permeable) site area totaling 53% of total site area. ■ Shading: within 5 years approximately 50% of concrete paving/parking will be shaded, which is a key strategy to mitigating heat island effects.

SUSTAINABLE SITES (12/15)

The project is located within a ¼ mile of two bus lines. ■ With help from the 15,741 sf extensive green roof, 53% of to total site has been restored with vegetation. 100% of site parking has been paved with non-colored concrete. Three out of four Alternative Transportation credits, both Site Development credits, both Stormwater design credits, both Heat Island Effect credits, Light Pollution reduction, and Tenant Design & Construction Guidelines to round out the Sites credits.

WATER EFFICIENCY (5/5)

Irrigation systems use only captured rainwater, and recycled gray water. ■ The irrigation of the green roof and the site was accomplished through the underground construction of a network of culverts under the on-site parking, used for both storm water detention and retention for irrigation. The 62,200 cubic feet hold approximately 465,428 gallons that contains required detention (not including storage capacity) within the parking lots proper. The capacity is sized to provide water for irrigation during the driest two months of the year. ■ Toilets are flushed using water from the cistern.

ENERGY & ATMOSPHERE (12/14)

A commissioning agent was engaged during design through construction to complete enhanced commissioning. The project follows ASHRAE 90.1 requirements, however, the roof assembly has a calculated R-value of 61, and the walls total 24, greatly exceeding the average local buildings. The HVAC system installed was optimized for high performance (attaining 7 of the 8 Optimize Energy Performance credits) and utilizes MERV 13 filtration, CO2 monitoring, and UV-C light air stream purification. The entire building is projected to use only 30,000 kW hours per month of electrical power, 55% less than a baseline building of this size. 100% green power. Highly efficient exterior LED lighting was installed. The interior lighting is controlled with motion sensors and a building management system. A tenant submetering system was installed.

MATERIALS & RESOURCES (6/11)

A recycling area is provided on site. ■ 90% of construction waste was diverted from the landfill. ■ A multitude of finish materials count toward the recycled content credit, 21% of the total value of materials in the project is manufactured using recycled materials. ■ 32% of building materials and products are manufactured regionally within a 500-mile radius.

INDOOR ENVIRONMENTAL QUALITY (10/11)

The HVAC system is designed to comply with the latest ASHRAE 62 Standards. ■ Smoking is prohibited in the building. ■ A construction air quality management plan was developed and used throughout construction. ■ Low-emitting carpets, wood & agrifiber products, adhesives, and sealants were installed to meet requirements. ■ Interior latex paints with zero VOC emissions were installed. ■ Indoor pollutant source control measures with entry mat, and MERV 13 air filters. ■ Increased ventilation to all occupied areas 30% above ASHRAE 62.1-2004. ■ The project space complies with ASHRAE 55 requirements, and a permanent monitoring system is in place. ■ 100% of the occupants have a direct line of sight to the perimeter glazing.

INNOVATION IN DESIGN (5/5)

All five of the Innovation points are exemplary levels of base points. ■ 100% non-roof impervious surfaces reducing Heat Island Effect. ■ LEED-EBOM IEQc3.9 Indoor integrated pest management plan. ■ 100% in lieu of 35% using Green Power. ■ Green housekeeping program. ■ Alan Scott, LEED AP, the Project Administrator, chaired the documentation efforts.

"We created a healthy aesthetically pleasing building that can increase productivity. The costs to go green have a short payback period and will guarantee that future operating costs will be low."

Jeff Mickler President/CEO Jacob White Development Jacob White Construction Co.





Developer: Jacob White Development **Owner: FC Gulf Freeway LTD** Tenant: FCT Capital Partners, State Farm Agent Norwood Richardson, Texas American Title, Executive Suites Contractor: Jacob White Construction Co. Architect: Webb Architects Structural Engineer: BGA MEP Engineer: John Suttles Commissioning : Code Consultants, Inc. Plumbing : Belknap Plumbing Electrician: McDonald Electric LEED Consulting: Green Building Services Energy Consulting: Momentum Bay Assoc. HVAC: J&S Mechanical Completion: June 2010 Project Size: 22,700

ABOUT LEED

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 Texas Gulf Coast Chapter of USGBC at www.usgbchouston.org to learn more about how you can make LEED work for you.