

Bissell Companies, Inc  
Nominates

## **The Irby Building**

For

Green Building Management  
Project of the Year

February 10, 2009



The Bissell Companies is proud to nominate The Irby Building for the *Charlotte Business Journal 2009 Green Awards* under the category of *Green Building Management Project of the Year*.



The Irby Building located at 11325 North Community House Road, Charlotte, NC 28277, in the Ballantyne Corporate Park, a 535-acre master planned office community with over three million square feet of Class A office space, was designed, engineered and constructed according to LEED® Core and Shell certification standards and is currently registered for LEED Gold certification. To date, two tenant spaces totaling 35,869 square feet are also registered for LEED CI certification.

Upon completion of the project by Bissell Development in early 2008, the Property Services Division of the Bissell Companies was given the assignment to continue the green efforts that were designed and built into the initial shell construction of the building. Partnering with employees, vendors, tenants and guests, The Bissell Companies has set the bar for green building management by establishing standards using LEED operations and maintenance guidelines that transform The Irby Building into a financially viable green environment for the building ownership and the current and future occupants of the project.

### **Sustainable Site**

- Storm Water
  - A comprehensive storm water management plan was developed to protect receiving stream channels and natural hydrology from erosion and runoff.
  - Storm water runoff is captured and treated to remove 85 percent of total suspended solids and pollutants that could otherwise be returned to local drinking supplies or natural ecosystems.

- Heat Island Effect
  - High performance roofing materials are used to reduce heat absorption and thermal gradient.
  - The Irby Building features a white top roof with a solar reflectance index greater than 78.
  - Construction of parking deck minimized the amount of asphalt on site.
  - Both strategies help to reduce cooling demand and reduce heat islands, which raise the temperature of areas around and below the surface.
  
- Light Pollution Reduction
  - Outdoor lighting has been designed to illuminate exterior connections such as sidewalks, roadways and parking areas, while minimizing negative impact on surrounding environments.
  - Interior lighting is automatically controlled to turn off after regular business hours.
  - T-5 lamps are used in the parking deck for controllability and energy savings.
  - These efforts preserve a clear view of the night sky in the developed area.

## **Water Efficiency**

- Landscaping
  - The site is designed with water efficient landscaping using no municipal water.
  - Significant water use savings are achieved with drip irrigation, high uniformity nozzles, planting materials and water use zones.
  - Trees, shrubs and other planted materials selected are native to the area and require low water volume to maintain.
  
- Water Use Reduction
  - Low flow automatic faucets, urinals and toilets are installed to reduce demand for potable water.
  - Based on current occupancy, a 40 percent reduction in water use has been measured compared to average building consumption.

## Energy & Atmosphere

- Commissioning of Building Energy Systems
  - McCracken & Lopez, P.A. has been hired as Commissioning Agent to review building systems and to verify the installation and performance of systems.
  - Commissioning Agent ensures that all of the energy efficient and conservation strategies integrated into the building are operating as intended.
- Energy Performance
  - HVAC system and lighting is designed and managed to maximize energy performance. Examples of this are:
    - CO<sub>2</sub> Sensors.
    - Energy Management System with optimal start/stop.
    - Motion sensors in all equipment rooms and some tenant spaces.
    - Static resets on air handling units.
    - No CFC refrigerants used in base building HVAC system.
- Measurement and Verification – Base Building
  - Ability to track data through SMART breakers and supplemental meters to measure energy usage.
- Measurement and Verification – Tenant Sub-Metering
  - System designed to create infrastructure for tenant to earn Energy & Atmosphere Credit 3 in LEED for Commercial Interiors.
  - Auxiliary HVAC system sub-metered in all tenant spaces to account for electricity consumption and encourage energy savings.

## Materials & Resources

- Storage and Collection Recyclables
  - Since occupancy, over 101 tons of waste has been recycled from this project. Contractor guarantees at least 65 percent of waste to be eliminated from landfill.
  - Recycled materials include: paper, cardboard, glass, plastic and metals.

- All bulbs, ballasts and batteries are recycled from the location.

### **Indoor Environmental Quality**

- Indoor Air Quality Performance
  - All supply air is filtered through Merv 13 air filters
- Environmental Tobacco Smoke Control
  - Building and public spaces are designated non-smoking.
  - Designated smoking area provided more than 25 feet from building entrance, windows and outside air intake vents.
- Outdoor Air Delivery Monitoring
  - Air flow monitoring verifies that HVAC equipment is operating correctly.
- Low Emitting Materials
  - Low VOC adhesives, sealants, paints, coatings, carpets and composite wood products are used throughout base building and tenant spaces. CRI Green Label Plus carpet and adhesives are building standard.
- Indoor Chemical and Pollutant Source Control
  - Green chemicals with low VOC used throughout to maintain building surfaces.
  - Janitorial staff uses products, procedures and equipment that meet LEED Green cleaning standards.
    - Micro-fiber wiping cloths and mopping system.
    - Vacuums have HEPA filters, are quieter and automatically turn off when full.
    - 100% recyclable paper products used throughout.
  - Building entrance walk-off mats meet LEED requirements for length of area covered.

### **Outdoor Environmental Quality**

- Golf carts provided as an eco-friendly alternative to gas powered vehicles for building engineers.
- Hybrid landscaping equipment used to maintain grounds, such as propane mower, low emissions edger, blower and trimmer.
- Hybrid parking spaces offered in prime locations to encourage the use of hybrid vehicles to keep emissions low.

### **For the Tenants & Local Economy**

- Located within walking distance of retail shopping, over 50 restaurants, four hotels, the YMCA, walking trails, parks, ponds and a golf course.
- Tenants have access to car pooling and bus routes through [www.go-ballantyne.com](http://www.go-ballantyne.com).
- 80 percent of the total vendors used at The Irby Building are local.
- Tenants of The Irby Building automatically have the benefits associated with a LEED CS certified building.
- Tenants who choose to upfit to LEED CI standards automatically qualify for certain points.
- Tenant guidelines are written to encourage sustainability and utilization of green building materials.
- The Irby Building provides tenants superior indoor air quality, lighting and thermal quality, potentially resulting in increased productivity and reduced absenteeism.

### **Training**

- Vendors are required to submit their LEED training processes for employees to ensure that proper use of chemicals and correct procedures are being applied.
- Operations engineers are trained through videos and on site application when learning building systems to ensure proper maintenance is carried out in order to meet LEED standards for the building.