



CITY OF HOUSTON  
**LEED® TOUR**  
 commercial interiors



## HHS Holcombe Lab

2250/2252 Holcombe  
 Houston, TX 77030  
 July 10th  
 10am—12pm

### [Project Background information]

The LEED® green building certification program is the nationally accepted benchmark for the design, construction, and operation of green buildings.

### [Start tour from lobby / Introduction]

When the City of Houston began looking for new space, the Health and Human Services Department had some very specific criteria. The base building should aim to be LEED certified, and the space had to accommodate 90% lab workspace and 10% office space that subscribe to energy-efficient and sustainable design.

The Texas Medical Center is an ideal location— and the Holcombe facilities serve as the best candidates for a regional laboratory. The design strategy incorporated funding from the City of Houston Energy Performance Contract program (ESCO) as part of the Clinton Climate Initiative to contribute to energy savings. Energy retrofits included the replacement of chillers and controls system throughout the facilities.

The project achieved Sustainable Sites credit for community connectivity since it is sited in a dense urban area. Sustainability played a strong roll throughout the Holcombe Lab project, during both design and construction. As the project progressed, 86% of construction waste was diverted from landfill!

The original degraded floor in this lobby has been replaced entirely with low-emitting VCT flooring system. Dust control mats at the entrance-way prevent majority of debris from travelling into the building.

### [Ascend group up elevator to 2nd floor]

To optimize energy efficiency in the LEED system, this building was evaluated for ventilation, air-conditioning systems, and lighting.

The FY2012-2016 CIP for the Department of Health and Human Services (HDHHS) have used funds for the renovation of an existing laboratory building to replace the severely deteriorated Central Health Lab facility. The plan provided for facility improvements and the redesign of interior workspace toward increasing operational efficiencies in the HDHHS Laboratories.

The project is registered with the certification goal of LEED® Certified under the U.S. Green Building Council's (USGBC) LEED® certification for Commercial Interiors™ rating system. LEED for Commercial Interiors enables tenants and designers to work within the building's interior—encouraging spaces that are healthy for both its occupants and the environment. The rating system covers all interior elements such as floors and walls, finishes, lighting, furniture, mechanical systems and individual comfort.

### Holcombe Lab Facilities:

2252 Holcombe Blvd- Bldg A: 1flr/ total gross: 24,030sf



**Owner:** City of Houston  
**Dept:** HDHHS

**Architect:** HOK  
**Contractor:** Gilbane  
**MEP:** Infrastructure Assoc, Inc.

**Occupied:** Jan. 2012



### [Proceed into lab corridor]

The interior remodel received only low or zero-VOC finishes throughout. All materials on the floor are formaldehyde-free, and all sealants, insulation, floor adhesive, and paint are low-VOC. All ducts were covered during construction to prevent particulates and moisture from collecting in airways. This practice promotes high indoor air quality, which contributes to a healthful and comfortable workspace. Continuous CO2 monitoring ensure that the optimal amount of ventilation is delivered to each space. A commissioning agent verified building controls and installation of HVAC equipment.

Reuse of the building, doors, and its cabinetry is an essential strategy to earn LEED credits. Most of the total equipment were salvaged from the original laboratory facility on Braeswood.

### [Enter lab space]

To create a more effective laboratory, the project team took time to study and learn from the design of the existing space. Temperature and internal pressure conditions has to support clinical activities. Some LEED-CI credits were incompatible with this project because spaces are assumed to have re-circulated air while the laboratory has once-through air.

The lighting settings in the main lab spaces are tied together with occupancy sensors. Daylight entering through the windows contributes to a pleasant indoor environment and has been shown to increase productivity.

### [Lead towards office]

Only 10-12% of the facilities comprise of office type space. High-performance green interiors provide productive places to work, and are less costly to operate and maintain. There are designated recycling areas with each office containing a recycling bin. Recyclables are collected throughout the building through the City's internal recycling program.

### TOUR FOCUS:

- Sustainability Initiatives
- Facility Improvements
- Occupant Testimonials
- Lessons Learned

### [Gather towards meeting room for final Q&A]

Energy conscious efforts promote the importance of sustainable lab practice. 100% Energy Star rated equipment was purchased in minimizing the facility's energy use—earning LEED exemplary performance. In addition, two years of renewable energy credits (RECs) was allocated for this project to earn LEED credits for energy efficiency and Green Power.

The facilities were occupied by the Health & Human Services Department in January 2012. By next year, a thermal comfort survey will be coordinated by Lab Safety Officer, Cyndie Boule. The thermal questionnaire enables a collection of feedback from staff employees to determine thermal satisfaction. The survey will be shared among the facility operations/maintenance engineering group to implement corrective action based on comfort and laboratory thermal requirements to ensure optimal performance.

Environmental education is promoted as a principle strategy to address awareness. Environmental posters regarding pollution, contaminants, toxins and hazards are posted in various locations of the facility as an informative approach to recognizing irresponsible human activity.

If you have any questions, please contact:  
HHS Safety Officer: Cyndie Boule

