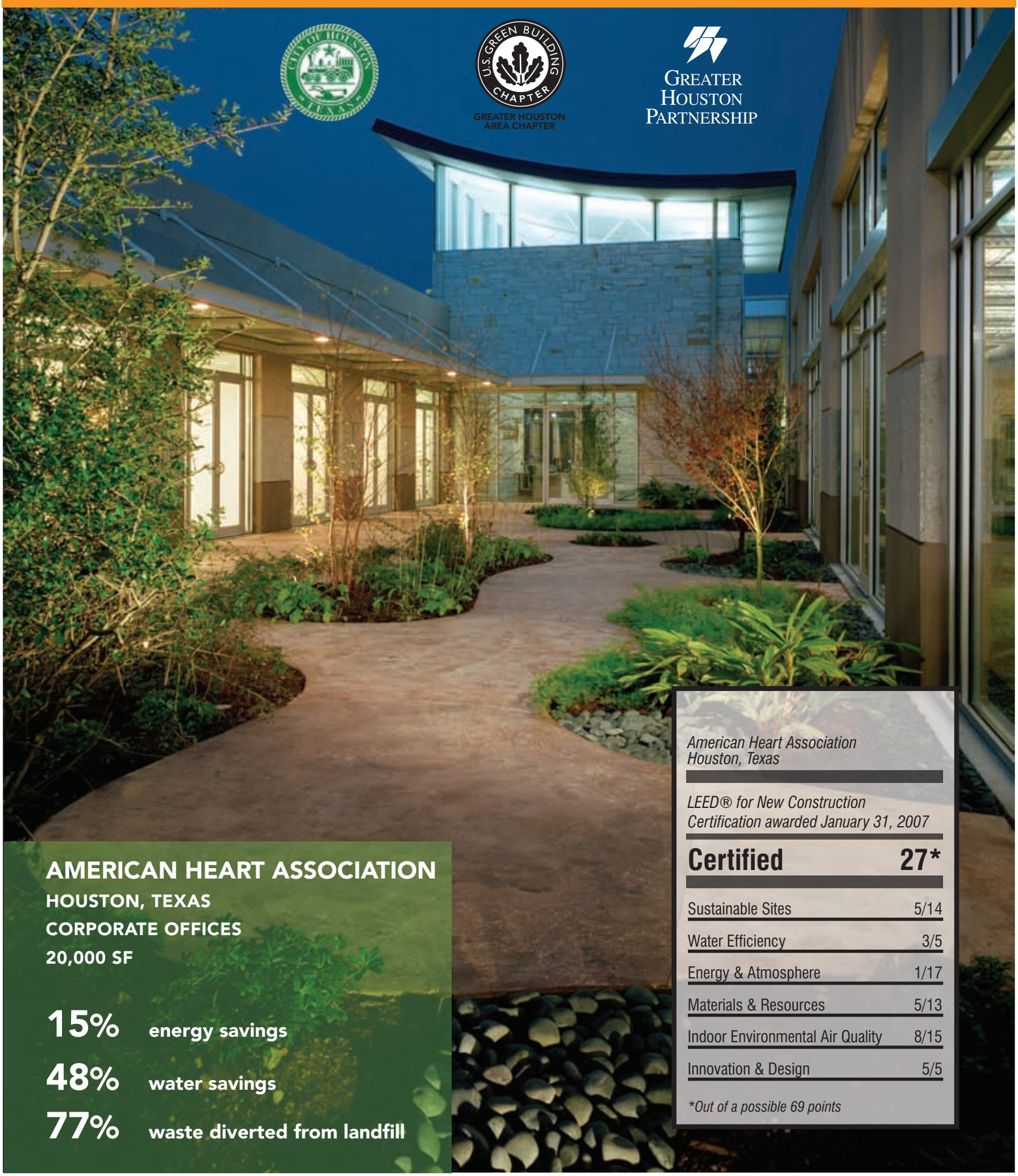
THE MAYOR'S GREEN BUILDING ADVISORY COUNCIL PRESENTS

# GREEN BUILDING TOURS

AUGUST 18, 2008



## AMERICAN HEART ASSOCIATION

**HOUSTON, TEXAS**
**CORPORATE OFFICES**
**20,000 SF**

**15%** energy savings

**48%** water savings

**77%** waste diverted from landfill

*American Heart Association*
*Houston, Texas*

*LEED® for New Construction*
*Certification awarded January 31, 2007*

| **Certified** | **27*** |
|---|---|
| Sustainable Sites | 5/14 |
| Water Efficiency | 3/5 |
| Energy & Atmosphere | 1/17 |
| Materials & Resources | 5/13 |
| Indoor Environmental Air Quality | 8/15 |
| Innovation & Design | 5/5 |

**Out of a possible 69 points*

PROJECT PROFILE

## AMERICAN HEART ASSOCIATION CORPORATE HEADQUARTERS

# Clean Living is Good for the 'Heart'

Green headquarters helps the American Heart Association promote healthy lifestyle

### PROJECT BACKGROUND

The American Heart Association's mission "to reduce disability and death from cardiovascular diseases and stroke" promotes healthy living. This office space serves as an example of their mission by creating a healthy workplace.

### SUSTAINABLE SITES (5/14)

The open space surrounding the building footprint is preserved and forms a swale that retains and absorbs stormwater in the event of a heavy rain or flooding. ▪ Using high reflectance concrete in the parking lot lowers the building's contribution to the heat island effect. ▪ Native landscaping allows American Heart to avoid using toxic fertilizers or pesticides to maintain a healthy site and requires less irrigation. ▪ American Heart encourages bicycle commuters and provides a bike rack, lockers and a shower for employees and visitors.

### WATER EFFICIENCY (3/5)

Waterless urinals, dual flush toilets and autosensored faucets reduce the building's water use by 49% over a conventional building. ▪ An irrigation management system and attached rain sensor control how often the plants are watered based on the time of year, amount and frequency of rain and help reduce the potable water used in irrigation by 50%.

### ENERGY & ATMOSPHERE (1/17)

The east-west orientation of the site reduces exposure to the sun, resulting in a more energy efficient building. ▪ The interior courtyard increases the amount of diffused natural light penetrating the building, while occupancy sensors operate lighting only when employees are present. ▪ Low-e insulated glazing protects the building's exterior facades from much of the potential heat gain caused by the sun. ▪ Shading devices are extended to the interior of the building to become light shelves, throwing daylight far into the interior. ▪ According to an Energy Model that considers all of the energy-saving design strategies at the American Heart Association, the building requires 15% less energy to operate than is required by the City of Houston Energy code.

### MATERIALS & RESOURCES (5/13)

78% of the building materials were manufactured locally or regionally and 77% of the construction waste was diverted from the landfill and recycled. ▪ Recycled materials were used throughout such as carpet, ceiling tile and grid, gypsum board, concrete steel, furniture and bio-composite millwork.

### INDOOR ENVIRONMENTAL QUALITY (8/15)

An Indoor Air Quality Management plan was followed during construction to protect against airborn contaminates. ▪ CO2 monitors are installed to regulate proper levels of CO2 inside the building. ▪ Windows are located throughout the building to provide 96% of the regularly occupied spaces with daylighting and 100% of the regularly occupied spaces with direct access to outdoor views. ▪ Low VOC paint, carpeting and composite wood are used throughout the building, resulting in an environment with less airborne pollutants that could cause illness or discomfort.

### INNOVATION & DESIGN (5/5)

Requirements for the local and regional meterials credit were exceeded by 78%. ▪ A green housekeeping program was implemented, with the use of green seal-approved cleaning fluids, recycled content disposable paper products and trash liners.

**Owner:** American Heart Association
**Architect & Interior Designer:** Kirksey
**Contractor:** Metzger Construction Company
**MEP Engineer:** Day Brown Rice
**Developer:** Senterra Real Estate Group

Photography by Aker/Zvonkovic Photography

### ABOUT LEED

*The LEED® Green Building Rating System™ is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council's Web site at www.usgbc.org to learn more about how you can make LEED work for you.*



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U.S. GREEN BUILDING CHAPTER
GREATER HOUSTON AREA CHAPTER