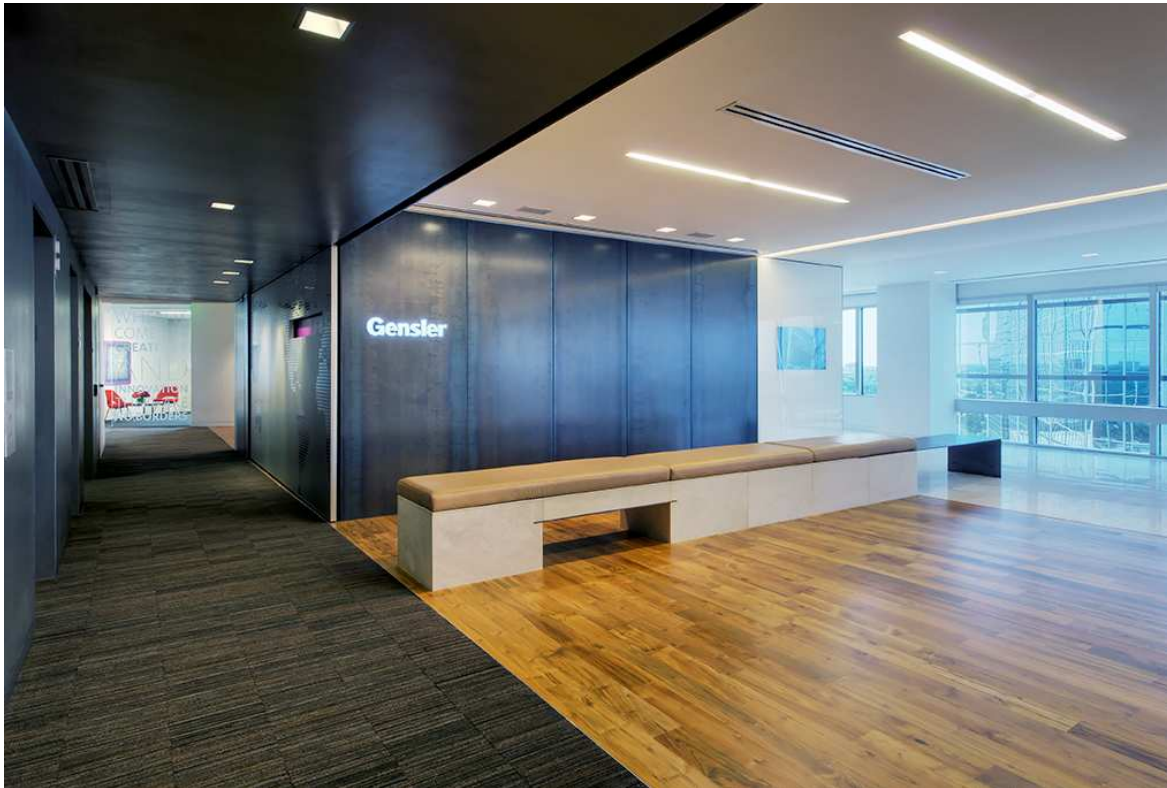


# "Sustainable Interiors"

"Gensler Dallas, LEED CI"

ONE



By: R. Kirk Johnson, AIA, LEED AP

The Gensler Dallas office headquarters recently earned U.S. Green Building Council LEED for Commercial Interiors (CI) Silver level certification aligning the regional office with a longstanding corporate sustainable design philosophy. Situated within an existing high rise tower complex positioned at the confluence of Interstate 635 and the Dallas Tollway, the one level 33,000 square foot sustainable interior connects to a larger community neighborhood consisting of office, retail, housing, restaurants, hotels, and other local amenities. The project is

served by multiple public transportation lines aiding in reducing the carbon footprint of the interior office area. Covered parking spaces are provided under the footprint of the office tower.

#### Organization

The V-shaped existing building interior envelope consists of two distinct wings of combined open space workstation areas, enclosed offices, conference rooms, storage areas, print rooms, resource library, break areas, amenities, informal gathering spaces, and public reception areas. Upon entering the sleek modern interior office space, a warm naturally lit reception area

constructed with reclaimed teak flooring, reclaimed wood furniture, and low VOC paints frames a view to the exterior. Additional open and glass enclosed public spaces, such as waiting, conference, presentation, work session, and various community spaces flank the inviting centrally located reception area forming a unifying "client corridor". Two primary circulation paths radiate from this central node to the wings of the building containing the staff spaces. Openness and light permeate the interior environment.

Organized around straightforward planning criteria, the sustainable

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interior is designed to provide maximum flexibility and clarity. A continuous axial layout, threading through the interior environment,

provides strong defined circulation paths terminating at natural light filled intersecting nodes. Various smaller residual design epicenters are located in

each wing providing additional accessibility and opportunities for office collaboration.

#### **Daylight + Views**

In order to maximize daylight opportunities into the core, enclosed spaces are located in the interior of the floor plate and the open office workspaces are located toward the perimeter. As a result, the large majority of interior spaces have direct views to the exterior environment. Interior furniture workstations are organized to maximize communication between internal working teams. Daylight responsive lighting controls with associated zoning are installed in all regularly occupied areas within fifteen feet of exterior windows. The use of this integral daylight harvesting system provides additional energy savings and comfortable light levels for computer work. Continuous standing height work islands encourage impromptu gatherings while addressing storage needs and views to the outside.

#### **Energy**

Sophisticated energy management controls were incorporated into the design of the interior to compliment a robust energy management system. Reduced lighting power density levels minimize energy consumption within the office. Energy Star appliances were utilized throughout the interior. Additional reporting mechanisms and meters were added to allow for on-going energy optimization opportunities. Enhanced commissioning services were engaged

*“Ecological sensitive recycled, reclaimed, and renewable materials are highlighted throughout the interior.”*



to fine tune the facility after occupancy usage. All occupants are able to adjust individual lighting task needs through the use of workstation task lighting, enclosed office areas, and shared multi-occupant spaces.

#### **Materials**

Ecological sensitive recycled, reclaimed, and renewable materials are highlighted throughout the interior. Cork flooring, a rapidly renewable natural resource, is used in the library area along with solid surfacing countertops constructed of repairable, renewable, and low volatile organic

compound materials. Carpet and Rug Institute Green Label Plus recycled carpet is used extensively in the interior sound absorptive areas. One area utilizes carpet tile manufactured from 95% recycled truck and bus tires. Teak wood flooring, recycled from a local Dallas demolition project, is used in the primary reception lobby. Various specialty areas display millwork constructed of reclaimed Hawaiian Koa trees, wooden table assembled from reclaimed domestic trees, and display surfaces built from Red gum, a regional Texas tree.

Typical workstation furniture is constructed of high recycled content. Exposed structural elements are intermittently used to allow for minimal material use. Large full height glass doors are used in the conference areas allowing daylight to penetrate into the interior and to enable views to the outside. Water conserving low flow faucets and urinals were implemented in the design providing approximately 35% consumption savings in water usage.

#### **Air Quality**

Equally important as the finishes and materials utilized in the facility are the elements within the space focused at improving the quality of the air within the space. During the construction and prior to occupancy, considerable attention was given to minimize the emergence of air quality issues through the use of extensive and rigorous filtering system and increased ventilation methodologies. In order to optimize air quality within the facility, low volatile organic compound materials were used throughout in the paints, sealants, adhesives, flooring, and casework. A permanent thermal comfort monitoring system was employed throughout the interior to ensure continued comfort criteria performance.

#### **Innovation + Operation**

A comprehensive green educational program, complete with various graphics and teaching narratives was infused throughout the interior to reinforce sustainable concepts

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incorporated in the design to occupants and visitors to the facility. An additional ergonomic program was also utilized for the staff furniture and interior construction. A comprehensive recycling program, featuring storage and collection areas, was established with the design providing continual waste management opportunities within the space.

**By the Numbers**

A brief overview of the pursued LEED CI credits utilized in the building is listed in the following table:

▪ Sustainable Sites	2
▪ Water Efficiency	2
▪ Energy + Atmosphere	7
▪ Materials + Resources	3
▪ Indoor Environmental Quality	11
▪ Innovation in Design	3
▪ <b>Total</b>	<b>28</b>

**By the Details**

A detailed breakdown of the individual credits achieved with the LEED Silver Certification of the building is listed below:

**Sustainable Sites**

- *SSc2 Development Density & Community Connectivity*
- *SS3.1 Public Transportation Access*

**Water Efficiency**

- *WE c1.1 Water Use Reduction*
- *WE c1.2 Water Use Reduction*

**Energy + Atmosphere**

- *EAp1 Fundamental Commissioning*
- *EAp2 Minimum Energy Performance*
- *EAp3 CFC Reduction in HVAC&R Equipment*

- *EAc1.1 Optimize Energy Performance- Lighting Power*
- *EAc1.2 Optimize Energy Performance- Lighting Controls*
- *EAc1.4 Optimize Energy Performance- Equipment and Appliances*
- *EAc2 Enhance Commissioning*
- *EAc3 Energy Use, Measurement & Payment Accountability*

**Materials + Resources**

- *MR p1 Storage and Collection of Recyclables*
- *MRC1.1 Tenant Space, Long Term Commitment*
- *MRC4.1 Recycled Content*
- *MRC4.2 Recycled Content*

**Indoor Environmental Quality**

- *EQp1 Minimum IAQ Performance*
- *EQc1 Outside Air Delivery Monitoring*
- *EQc3.1 Construction IAQ Management, During Construction*
- *EQc3.2 Construction IAQ Management, Before Occupancy*
- *EQc4.1 Low-Emitting Materials – Adhesives and Sealants*
- *EQc4.2 Low-Emitting Materials – Paints and Coatings*
- *EQc4.3 Low-Emitting Materials – Carpet Systems*
- *EQc4.4 Low-Emitting Materials – Composite Wood & Laminate Adhesives*
- *EQc4.5 Low-Emitting Materials – Systems Furniture & Seating*
- *EQc6.1 Controllability of Systems, Lighting*
- *EQc7.1 Thermal Comfort- Compliance*
- *EQc7.2 Thermal Comfort- Monitoring*
- *EQc8.3 Daylight & Views- Views for 90% of Spaces*

**Innovation In Design**

- *IDc1.1 Innovation in Design. Educational Program*
- *IDc1.2 Innovation in Design. Comprehensive Ergonomic Program*
- *IDc2 LEED Accredited Professional*

**Project Team**

- Owner- **Gensler**
- Interior Designer- **Gensler**
- Architect- **Gensler**
- Structural- **Bauldauf, Herrin + Assoc.**
- MEP- **Purdy-McGuire**
- Lighting- **Steven Bliss**
- Commissioning- **Air Performance**
- Contractor- **James R. Thompson, Inc.**
- AV- **Admiral Communications**