


40 Broad Street
Boston, MA
Project Profile

**LEED
PURSUED SILVER
2023**

PROJECT INFORMATION

| | |
|------------------------------|------------------------|
| BUILDING OWNER | LINCOLN PROPERTIES |
| PROJECT MANAGER | STRUCTURE TONE |
| CONTRACTOR | STRUCTURE TONE |
| ARCHITECT | GENSLER |
| MEP ENGINEER | VANDERWEIL |
| COMMISSIONING FOOTAGE | WSP COMMISSIONING |
| PROJECT SIZE | 11,172 ft ² |



| LEED® Facts 40 Broad Street | |  |
|--|----------------|---|
| Location..... | Boston, MA | |
| Rating Systems..... | LEED ID+C v4.1 | |
| Certification Achieved (Pursued) | Silver | |
| Total Points Achieved..... | 55/110 | |
| Integrative Process..... | 0/2 | |
| Location and Transportation..... | 19/18 | |
| Water Efficiency..... | 0/12 | |
| Energy and Atmosphere..... | 14/38 | |
| Materials and Resources..... | 12/14 | |
| Indoor Environment Quality..... | 5/17 | |
| Innovation..... | 4/5 | |

PROJECT HIGHLIGHTS

| | |
|-------------|--|
| 100% | Parking reduction below baseline (no parking onsite for employees, public transportation and bicycle commuting encouraged) |
| 31% | Indoor water use reduction |
| 53% | EnergySTAR equipment and appliances installed or reused from previous office |
| 54% | Lighting power reduction |
| 3.52 | lbs/ ft. ² of waste generated in construction activities |
| 47% | Products meeting sourcing of raw materials requirements |
| 44% | Reused interior structural elements by cost |



PROJECT DESCRIPTION



Structure Tone has had a long, storied history in the Boston construction market. When it was time to find a new office in Boston, Structure Tone took on the task of being both construction manager and owner for their new space. After a robust search, Structure Tone found a 11,172 ft² space on the second floor of 40 Broad St to build out and showcase their expertise in the indoors market.

The location of the new office provides unmatched access to the city of Boston, with unfettered access to public transit and a quick walk from iconic landmarks such as long wharf, Aquarium, post office square and the greenway. The design of the space itself incorporates views of the surrounding area while also balancing incoming sunlight and occupant comfort.

Since the project team acted as their own client, many of the project goals were deliberate and included priorities established by all employees. Ideas such as active workstations, sustainable material choices, established areas for privacy, improved energy efficiency, and low VOC products were all made a priority from the project start. On top of all the design priorities, the construction schedule reflected a quick project duration of less than 6 months.

LOCATION AND TRANSPORTATION



During the process of selecting a new office location, Structure Tone evaluated several sites based on the following criteria:

- Access to public transportation
- Proximity to typical Boston project locations
- Occupant comfort
- Site walkability
- Neighborhood amenities

The chosen location, 40 Broad St., fulfills all the search criteria and more. Within a half-mile of the project location, there are several public transportation options, including light rail, heavy rail, bus stops and even ferry services. In addition, the site has a Walk Score of 98, a Transit Score of 100, and a Bike Score of 87. Within walking distance is farmer's markets, greenspaces, historic monuments, and a litany of amazing hole in the wall eateries. The area also has excellent bike access, and the project has incentivized employees to use public transit by reducing the parking footprint of the space by 100%.



INDOOR ENVIRONMENT QUALITY

The project team for the 40 Broad St. spaced endeavored to create a space which promoted human health and wellness, building a space that complied with stringent VOC emissions standards. 100% of paints, adhesives, coatings, flooring and furniture meet LEED v4.1 indoor air quality standards by cost, exceeding typical material content ranges.

All interior flooring materials met or exceeded applicable criteria for the Carpet and Rug Institute and FloorScore. All carpet adhesives used a VOC level of less than 50g/L, with all flooring finishes and tile grouts meeting applicable SCAQMD Rule standards.

To best understand the indoor environmental conditions after occupancy, Structure Tone has partnered with Awair to continuously monitor the indoor air quality. Using three small sensors throughout the project boundary, air quality parameters such as humidity, PM2.5, TVOC, temperature and sound levels can all be monitored in real time. By running these sensors constantly, Structure Tone can gain a more comprehensive understanding of indoor air quality, identifying unknown potential sources of contamination and collecting baseline data during construction and beyond occupancy.

MECHANICAL & ELECTRICAL SYSTEMS



The engineering team, along with the decision to reuse several large appliances from the old space, helped the space save on energy use by utilizing 53% of energy star rated appliances. The team reused the main printers in the old space to be used in the centralized printing area in the new office.

Considering electricity use in lighting, occupancy sensors and daylighting controls were installed on all applicable light fixtures. Throughout the space, controllable dimmer switches were utilized that can have their power reduced or turned off during off-hours or when not in use. All in, this project was able to reduce lighting power by over 54%. Mechanical equipment and processed water is controlled by the base building operations.

MATERIAL AND WASTE

Material and product selection for the office relocation was a top priority to the project team, who had the difficult job of juggling sustainability, cost, COVID delays, wellness, and design considerations. Through sustained efforts and wide-ranging efforts to maintain top quality, this project was able to achieve all materials credits in the LEED rating system, as well as score extra points for innovation and exemplary performance.

- | | |
|--|---|
| 1. USG Ecosmart Gypsum Wallboard | 7. Teknion upStage Tables |
| 2. Sargent 8200 Mortise Locks | 8. Armstrong Lyra and Ultima Acoustic Ceiling Tiles |
| 3. Carnegie Xorel Fabrics | 9. Knauf EcoBatt Insulation |
| 4. Benjamin Moore Ultra Spec 500 Zero VOC Interior Paint | 10. Interface GlasBac Carpet Tile |
| 5. Eggers Wood Doors | 11. K-13 Thermal and Acoustic Insulation |
| 6. Humanscale Monitor Arms | |

To save on costs and carbon emissions, the decision was made early in the project timeline to salvage and reuse as much of the existing furniture from the old office as possible. This decision meant that nearly a hundred chairs, dozens of stools and benches, several tables and as many electronics as possible were reused in the new space. Comprising a value of over \$215,000, these reused elements help to contribute to the 44% of interior nonstructural elements by cost. While the project space was handed over to Structure Tone as core and shell, a conscious effort was made to reduce construction waste and maintain best waste practices. Utilizing both a waste hauler as well as internal labor resources, this project was able to reduce its total waste to 3.52 lbs/ft² of project space.



SUSTAINABILITY STRATEGY

Structure Tone understands that environmental sustainability is of utmost importance to combat the climate crisis and reduce the massive carbon and waste impacts of the construction industry. To this end, Structure Tone intends to integrate sustainable frameworks and foster innovation into all business practices and projects to meet the growing need for green construction practices. Our commitment is to:

- Abide by all applicable environmental laws, regulations, and standards
- Begin tracking embodied carbon emissions on jobsites, regardless of project requirements
- Advance circularity and C&D waste reduction through site separation, material reuse and landfill diversion programs
- Promote biodiversity and support introduction of biophilia in corporate offices
- Reduce resource impacts through energy efficiency audits and water reduction innovation
- Champion human health and wellness in construction through IAQ inspections, material health reviews, and onsite safety practices such as stretch-n-flex

