

Teknion Case Study

client
The Bullitt Center

designer
Point32

dealer
OfficeMax Workplace
Interiors, Seattle

products featured
Expansion Desking
District Credenzas
Livello Tables
Audience Tables
Fitz Seating
Visio Seating

The Project

Designed to be the “greenest commercial building in the world,” Seattle’s new Bullitt Center is a pioneering project led by the Bullitt Foundation, an organization devoted to protecting and restoring the natural environment of the Pacific Northwest. The Bullitt Foundation’s environmental mission is made evident in the performance-based, self-sustaining design of a six-story, 50,000-square-foot building located at the edge of Seattle’s Capitol Hill neighborhood. Developed by Point32 real estate group and designed by the Miller Hull Partnership, the Bullitt Center is meant to demonstrate that a net-zero energy building can be a commercially viable and architecturally stunning office space where people work in a healthy setting. It is hoped that others will follow suit in attempting a quantum leap forward in sustainable design.

Design Intent/Challenge

The Bullitt Center aims to be a model of urban sustainability, acting as a catalyst to change the way buildings are designed, built and operated. The energy-neutral Bullitt Center building draws all of its power from sunlight falling on a rooftop array of photovoltaic (PV) panels. All grey water is treated and infiltrated into the soil on site. A ground-source heat-pump system, which includes 26 geothermal wells, drilled 400-feet deep, taps the temperature of the earth to provide both heating and cooling. The Bullitt Center is also designed and equipped to harvest the water it requires from rainwater collected in a 56,000-gallon cistern. However, Washington State Department of Health has yet to permit the potable use of treated rainwater, so drinking water is presently drawn from city resources. (The Bullitt Center was named Sustainable Building of the Year 2013 in the World Architecture News Awards international competition.)

In addition to an energy-efficient building envelope, the Bullitt Center is built to last. Its timber structure is designed for a 250-year life. And while the extensive use of wood may seem to contradict the “deep green” intent of the project, the Center uses native FSC-certified Douglas Fir and is the first commercial structure in the U.S. to achieve “project certification” from the Forest Stewardship Council—100 percent of the wood in the core and the shell is FSC-certified.

While many of the Bullitt Center’s eco-friendly features represent significant “firsts,” the backers of the project have also chosen to attempt to be the first commercial structure to meet the goals of the Living Building Challenge (LBC)—a truly ambitious goal. To be certified as a living building, a structure is required to be net-zero for energy and water for at least 12 continuous months and to meet strict standards for green materials and indoor air quality, as well as for building equity and beauty. Heretofore, the “imperatives” of LBC certification have been deemed out of the realm of possibility for a multi-story office building in a dense urban environment, but the Bullitt Center fully intends to be the first.

To achieve that goal, the design of the Bullitt Center, in addition to the strategies named above:

- encourages workers to walk, bicycle or take public transit to work—no parking for automobiles is provided on site;
- promotes occupant health by providing access to views, operable windows and inviting stairways that encourage walking;
- foregoes any materials that contain any Red-List chemicals, and limits volatile organic compounds (VOCs) or other potentially toxic components; and
- creates an inspiring work setting with attractive architecture and landscape design. There is also a neighborhood pocket park adjacent to the grounds.



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As architects, the Miller Hull Partnership has designed the Bullitt Center with floor-to-ceiling windows on each floor that bring fresh air, daylight and views to all who work in the building. Handsome timber structural components are left exposed and an “irresistible stairway” with wood treads and glass balustrade offers panoramic views of the Seattle skyline. Furniture projects a clean, contemporary aesthetic and, perhaps more importantly, meets LBC criteria, which include limits on the distances that components can be shipped and proscribes the presence of 14 potentially toxic substances—the Red List—that are commonplace in building materials and furniture.

Teknion Response

Choosing furniture for the Bullitt Center was a challenging and lengthy process as the project team carefully considered aesthetics, costs and functionality—along with Red List exclusions, life cycle and other criteria of the LBC. One of three manufacturers to be vetted, Teknion ultimately provided six products: Expansion Desking, Audience meeting tables and Fitz task seating were selected to furnish Point32’s open-plan workspace on the fourth floor; Livello adjustable tables, Visio task seating and District credenzas furnished the offices of the International Living Future Institute (ILFI) on the first floor. Note: ILFI is the progenitor of the LBC and the entity that will measure the building’s performance.

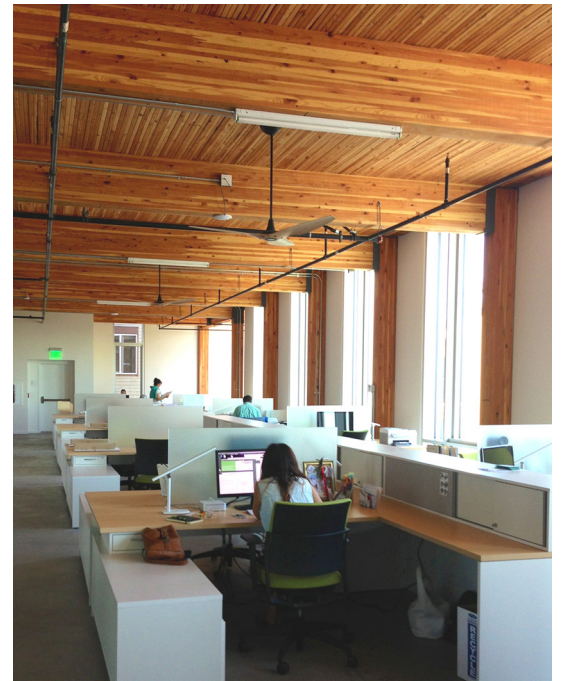
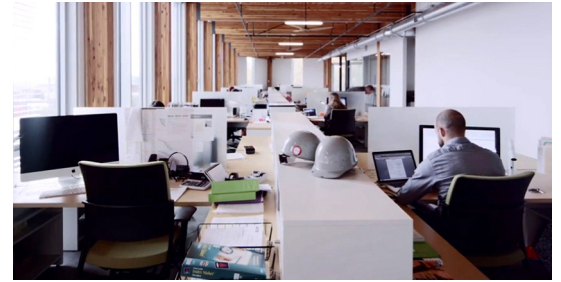
Although the LBC’s mandatory performance areas or “petals” (site, water, energy, health, material, equity and beauty) do not address furniture specifically, Bullitt Foundation President and CEO Denis Hayes, and the project team, felt that furniture was key to indoor air quality and the health and well-being of people who occupy the Bullitt Center. Thus, manufacturers were required to provide full disclosure with regard to the material content of furniture, as well as paints, finishes, trims, etc. Teknion’s ability to provide 100 percent transparency was an important factor in the selection of its products.

On the fourth floor of the Bullitt Center building, home to Point32, Expansion Desking was used to create workstation clusters. Each was placed within 30 feet of one of the Center’s expansive windows to provide all workers with a view—the city of Seattle or distant Cascade Mountains to the east. The windows admit sufficient daylight to reduce the electricity required for ambient and task lighting, and Expansion Desking low-height workstations make the most of the natural light flowing into and through the workspace. White and light-colored faux wood surfaces maintain a clean, contemporary look that harmonizes with the architectural aesthetic.

Workstations on the fourth floor were supplied with Fitz task seating and the conference room and meeting rooms with Audience tables. Like Expansion Desking, Audience tables do not have a NAUF core (no added urea formaldehyde) and are edged with ABS, rather than PVC, bands.

ILFI takes up a portion of the first floor, which it shares with the Cascadia Green Building Council. The ILFI workspace is furnished in part with Livello tables and District credenzas, a low landscape that permits visual contact among workers and with the out-of-doors. Visio task chairs provide a fresh, modern look and comfortable seat. The height-adjustable Livello worktables are fitted with linoleum tops (rather than laminate), edged with ABS bands and equipped with a hand-crank adjustment mechanism. Although a switch mechanism is available on Livello tables, even the minimal electrical draw of such a device is a consideration as electricity use is continually measured for each tenant, and each plug.

The Teknion products specified for the Bullitt Center provide an affordable, flexible furniture solution that supports client goals and will remain relevant over the long term, thereby helping to ensure a long life cycle, with less waste and less resource depletion. The combined efforts of the client, architect, dealer and Teknion ensure a safe, humane and beautiful setting for work, a



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place that will support employee engagement, performance and well-being, and a community asset that will provide an incentive for market transformation.

Conclusion

Expansion Desking

Expansion® Desking is a comprehensive line of freestanding furniture that creates highly functional, space-efficient workstations. Expansion Desking achieves a wide range of applications, from open-plan collaborative settings to private offices with a casegoods look, thus allowing a consistent aesthetic across the office landscape and reducing overall inventory.

District Credenzas

Combining the attributes of classic furniture with the functionality of systems, the District® collection of desks, cabinets, credenzas and bookcases echoes the architectural aesthetic of mid-century office furniture with low, horizontal lines. District is also influenced by the light, floating presence and compact dimensions of modern European residential pieces. Refined details and finishes bring the appeal of classic modern furniture to the open plan.

Livello Tables

Livello™ height-adjustable workstation tables integrate seamlessly with freestanding or panel-based environments and enable users to adjust tables to fit the task at hand. Height adjustment permits seated or standing work and allows for a healthy variety of postures throughout the day. The Livello collection also comprises flip-top meeting tables.

Audience Tables

Designed to furnish boardrooms and meeting rooms, the Audience® offering is a complete line of tables and boardroom storage. A selection of sizes, shapes, leg options and finishes allows Audience tables to be dressed up or down for elegant boardrooms or casual meeting rooms, addressing a range of aesthetics and price points.

Fitz Seating

Fitz™ is a high-performance task chair based on the principle of fit. Designed to address global anthropometrics – defined as the measurement of the size, weight and proportions of the human body – Fitz has translated the most demanding requirements of ergonomic guidelines into a broader range of adjustability.

Visio Seating

A complement to Teknion's Fitz chair, Visio® is also designed to address the seating needs of an internationally diverse workforce. Visio's Flexweave chair back, comprised of 100 percent polyester/elastomeric yarns, is soft and flexible enough to allow the chair back to comfortably conform to and support the user's specific back contour and shape. Visio provides ergonomically correct fit, while allowing airflow and user comfort.

