

#### ASID Award-Winning Submission:

For more than 20 years, the American Society of Interior Designers (ASID) has promoted sustainable design at the national level and through our 46 chapters across the United States. By providing practical solutions, applying innovative thinking and establishing creative partnerships, ASID continues to play a front-line role in the effort to create a sustainable world that stays green for all people, at all socioeconomic levels, in all places. Our responsibility to economically disadvantaged populations is especially acute, because these populations are least able to bear the rising cost of energy and are most vulnerable to health issues caused by sick environments. The following are just a few of our initiatives we've undertaken to promote green and sustainable design.

ASID regularly publishes papers to help our designers understand and implement concepts in sustainable design. The topics covered in these papers are indicated by their titles: "Indoor Air Quality," "Selling Green," "Beyond Interior Design," "Materials and Products" and "Reference Guide." ASID staff and member committees are also working with International Code Council (ICC) staff to create new materials and resources for interior designers to better understand and apply the tenets and requirements found in the IBC, IRC, IEBC, IECC, and IgCC.

In these guides, ASID strives to give interior designers a framework for how to think about sustainable design and then provide practical advice. For example, in "Materials and Products," the practical information includes everything from advice to working with Life-Cycle Assessments (popularly known as LCAs), to assessing and selecting materials, to finding reliable information and keeping a green library.

In 2011, ASID, in conjunction with our national Sustainable Design Council, created and published "The Guide to Ecolabels" to help designers understand and make use of ecolabels and certifications for building materials, interior finishes, furniture, fixtures and equipment. It offers detailed information, including links, regarding certification and evaluation programs from the American Tree Farm System<sup>®</sup> (which aims to hold family-owned forests to "rigorous standards") to WaterSense<sup>®</sup> (which covers bathroom faucets and accessories, showerheads, toilets and flushing urinals).

ASID realizes that when it comes to producing green buildings and sustainable products, the breakthrough bet is a trifecta: buildings and products that are well-designed, sustainable and affordable.

We can often get two out of three: a building that's sustainable through energy efficiency and is well designed—but then affordability becomes an issue. When we sacrifice affordability to achieve the other two, we are abandoning the lower socioeconomic communities that are the most vulnerable to unhealthy living and work spaces. When healthy, sustainable buildings are available only to those who can afford them, that's just plain wrong.

But there's an alternative to sacrificing affordability. A variety of organizations, such as Make It Right, are applying that kind of innovation to building homes for communities in need—homes that are energy



efficient, beautifully designed and sustainable, from the materials used in the foundations to the solar panels on their roofs.

ASID is proud to be pushing for that same kind of innovation in the materials, training and philosophy we offer interior designers including information on ICC codes including the IECC, IEBC, and IgCC. When properly equipped, our designers can help educate consumers to create the demand that will drive manufacturers to produce green and sustainable products. And that gets us closer to our ultimate goal of designing healthy, affordable spaces for everyone.

Leading by example, in 2017, ASID completed an historic, full spectrum of pre- and post-occupancy research on its new Washington, D.C. headquarters (research report attached). The research shows how workplace design positively influences health, wellness, employee satisfaction, and work performance.

In partnership with Cornell University, Delos, and the Innovative Workplace Institute, ASID researched the impact of innovative workplace design on behavior and performance, how spatial design supports organizational goals, and the impact of design on human, organizational, and environmental sustainability. Research was conducted through a series of in-depth interviews and employee surveys, sociometric data culled from badges worn voluntarily by employees, and environmental metrics from the building and measured within the office.

Research highlights include:

Improvements to environmental quality, environmental satisfaction, employee health and wellness, employee retention, employee performance, and resource efficiency.

Office design shaping the social environment to boost employee performance and productivity.

Demonstrating office design – the office culture supports the messages communicated through the design – results in cost savings.

The research projects each examined the role of workplace design and its impact on the employees and their work. Taking all the key findings from each research project into account, here are the highlights on how the ASID office demonstrates the impact of design.

Design Improves Environmental Quality: As the world's first space to achieve both LEED Platinum (v.3) and WELL Platinum (v.1) certifications, the office is not only validated by third-party institutions as a healthy and sustainable office, but supporting data from pre- and post-occupancy research projects further confirms improved environmental quality and enhanced employee satisfaction on environmental conditions.

Indoor Air Quality: ASID implemented design strategies such as a VOC reduction design that requires product finishes, interior paints and coatings, and interior adhesives and sealants to meet multiple standards, an air filtration design that purifies outdoor air and recirculated air, and a ventilation effectiveness design that regulates the ventilation rate of outdoor air to keep carbon dioxide (CO2)



levels in the space below 800ppm. The average CO2 level in the overall office in July 2017 was 570ppm during the time of typical occupancy (Monday to Friday, 5:30 a.m. to 7:00 p.m.)—this is 2.5 times less than the CO2 level measured in the Society's previous office.

Lighting: Survey results indicate all ASID employees have knowledge on circadian lighting and its effects on their health and well-being, and 25 percent of employees attribute circadian lighting at the new office space on 15th St. NW for their enhanced sleep quality.

Acoustics: The average sound pressure levels (dB) measured in the 15th St. open office during typical work conditions reduced significantly—measurements were half the loudness in the open office as compared to the co-working office.

Spatial Quality: ASID assessed their office using the CAPTIW© worksheet1, which analyzes the performance of physical workspaces in relation to organizational innovation strategies and innovation performance according to key performance indicators. The office scored an 83.9 percent of the total 100 points possible, with top indicators being space size and access (100 percent), healthfulness (98.8 percent), and space type (91.7 percent).

Design Impacts Experience: Design impacts the experience people have in the space. ASID employees' experiences in the office are influenced by multiple factors including the individual design components (e.g., lighting, acoustics, color, texture, etc.), the space in its collective form, and the social environment generated by the occupants. Referring to human-centered design, ASID first examined their corporate identity, team roles, individual responsibilities, work processes, and work behaviors to ensure that their office was an extension of their organizational culture.

Stimulates Collaboration: The office enables employees to choose their workstation for the day. The unassigned seating arrangement sparks spontaneous interactions in the open office while offering opportunities to cross-pollinate among teams and to get to know each other on a social level. With this office layout, ASID became more collaborative than concentrative. The office also plays a role in facilitating communication among employees (42 percent increase), and in supporting the sharing and exchanging of ideas (44 percent increase).

Creates Attachment: Humans spend about a third of our day, or half of our waking hours, in the office. ASID employees' satisfaction in several environmental conditions such as lighting quality, noise reduction, speech privacy, available space, visual privacy, and ease of interaction contribute to place attachment. Particularly, the significant effects between ease of interaction and place attachment suggest that workplace design plays a role in shaping a social environment that engages employees in the office.

Establishes Support: The workplace is comprised of both the physical and social environment, and these two should naturally go hand in hand for the organization to thrive. When ASID employees perceive social support in the office, they tend to have higher job satisfaction, be more creative, and be more productive.



Design Achieves Results: Thoughtful design can support organizational priorities such as employee health, productivity, and financial return. By incorporating multiple innovative features, design has positively affected the health and well-being of employees while boosting resource efficiency.

Health: The health and wellness features in the office encourage healthy behaviors in various ways including access to a fitness center, sit/stand workstations, healthy snacks, filtered water and air, and a wellness room. The common areas are centralized in the office, forcing employees to take a few extra steps to access them. These examples and many others have resulted in a two percent improvement in physical health scores within a year of occupying the office.

Productivity: ASID has seen increases in several productivity measures in the Delos survey alluding to the impact of design on productivity. Absenteeism scores (ranging from -1 to 1), measured by how much employees are working more than expected by their employer, improved by 19 percent. Presenteeism (ranging from 0 to 100) has also improved, indicating that on average, employees feel they are working at 90 percent of their possible job performance, which is a 16 percent increase than what was reported in the co-working office.

ROI: The impact of design resonates beyond the individual and to the organizational bottom line. Using a calculation determined by ASID, the financial impact to the organization's bottom line accounts for employee productivity, employee retention, and energy savings. Taking the average employee cost in Washington, D.C., including salary, benefits, overhead and other costs, and applying the 16 percent productivity increase reported over the first year at the 15th St. office, calculations made by ASID indicate it will recoup its investment in the first half of its 10 year lease agreement.

Employee Retention: Office design, especially when job demands or the office culture supports the messages communicated through the design, results in cost savings. Findings from the Cornell study confirm that perceived environmental quality has a significant effect on turnover intention.

Energy Savings: The research findings show the office has saved over 76 MWh in lighting energy over the first fifteen months of occupancy, equal to \$7,636 in cost savings, 38.2 ton of coal not burned and 72.9 ton of CO2 not emitted into the atmosphere.

In May 2016, ASID moved into its new corporate headquarters, designed by Perkins+Will, a living laboratory for the design community. The new 8,500 square foot office is the first space in the world to achieve both Platinum Level Certification for the WELL Building Standard<sup>™</sup> (WELL<sup>™</sup>) under WELL v1 and Leadership in Energy and Environmental Design (LEED), under the LEED ID+C rating system – the highest recognition awarded by the U.S. Green Building Council (USGBC) and the International WELL Building Institute<sup>™</sup> (IWBI<sup>™</sup>). The office space incorporates the most innovative health and wellness design features, and has sustainability as a central philosophy.

In addition to research and cultivating/sharing interior design sustainable best practices, in 2018, ASID reestablished its Construction Codes & Standards Committee comprised of 12 interior design professionals from across the country chaired by Tracey Fillmore, a former Florida fire inspector. The



Committee is in the process of reasserting the interior design profession in national and international code and standard development processes and policy conversations and will be attending the 2019 ICC Annual Business Meeting and code hearings.

ASID is excited to continue its work promoting sustainable design and best practices, which, in turn promote the codes developed and supported by the International Code Council. ASID appreciates the work of the ICC Sustainability Membership Council and looks forward to working more closely with the SMC in the near future.