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OFFICE DESIGN IN A POST- COVID WORLD

A roundtable discussion with members of the design and manufacturing communities provides insight into how the pandemic may reshape the modern office

The more things change, the more they stay the same...and yet, most of us have yet to see life return to the world we knew in 2019. In a recent IES/LD+A survey, 46% of respondents stated their belief that the lighting industry would return to its pre-COVID status in the second half of 2021, while 40% of respondents

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said not until 2022. Regardless of when industries begin to bounce back, many jobs will be forever altered, a fact perhaps most easily seen in the uncertainty surrounding the future of the office. While many workers crave the face-to-face interaction 2020 deprived us of, others would be happy to make their Zoom calls from a hotel in Tulum for the rest of their days...and others fall somewhere in between.

Unfortunately, the uncertainty of what a post-COVID workplace looks like affects more than just the workers who fill that space—amongst others, it also affects those who create the space. For insight into what office design and lighting in a post-pandemic world might look like, we talked to six industry leaders including Rachel Fitzgerald, senior associate and lighting discipline lead at Stantec; Matthew Hartley, principal at Matt Hartley Lighting LLC; Maria del Pilar Toro-Ortiz, technical director at Ideas en Luz; Alessa Aguayo, director of international and national accounts at Coronet LED; Michael Thornton, chief marketing officer at Focal Point LLC; and Kraig Kasler, president of Cooper Lighting Solutions. Here's what they had to say:

How will the explosion in remote work impact the market for office lighting projects?



Fitzgerald: Many of our client organizations are anticipating smaller overall footprints, more seat sharing and a higher proportion of space dedicated to collaboration, supporting organizational culture and alternative spaces for individual work

beyond the desk. Office lighting will adapt, accommodating a more flexible workforce with spaces focused on collaboration and requiring adjustable layers of illumination with variable controls to suit a variety of users and their collaborative needs.



Toro-Ortiz: There will be a transition period where hybrid models will be used, and eventually, our new normal will settle. We have two areas of opportunity: multifunctional spaces and vertical lighting for videoconferencing. Multi-

functional spaces pose new challenges: Will every surface be considered a work surface and need to comply with local codes and regulations? Are hybrid spaces that may or may not also function as an office subject to the same stringent regulations?

We also need to consider that many of these spaces are improvised, which leaves a huge window of opportunity for vertical lighting for videoconferencing. If in the traditional office the lighting recommendations are mainly horizontal, our current situation poses a new challenge—vertical lighting to appropriately model people’s faces for videoconferencing.



Thornton: From what I have been reading and hearing, the trend for a more condensed office space is being reconsidered. Common areas and conference rooms are being modified or redesigned to allow more space per

individual. It is unclear as to exactly how this will impact office lighting. Most probably, comfortable ambient lighting will remain necessary for open seating areas and more specialized lighting will

be required for areas such as videoconference rooms or communal spaces. A sense of comfort emanating from home will be sought-after in office spaces, which may translate into more “hospitality-inspired” luminaires being used in these areas. This could include technologies such as warm dimming, which are not as prevalent in commercial offices as in other verticals.

How important will controls be in office lighting design, as spaces become more flexible due to remote work teams?

Fitzgerald: Lighting controls are constantly evolving and becoming more important as part of a holistic lighting design solution. This is in part due to the advancement of energy codes, but also to address the changes in our workplace. With the increased focus on collaboration, spaces are becoming adaptable with layers of lighting that can be easily adjusted to meet varying user needs. Additionally, with the increased reliance on video calls, work spaces need to be provided with not only adequate horizontal illumination for the work plane, but also quality vertical illumination that is comfortable and adjustable for users to be well illuminated for video.



Hartley: Controls have been a growing market in the lighting industry for years now, but the need for controls will increase more and more moving forward. They will be used for videoconferencing, daylighting, adaptive lighting and other

emerging concepts like biophillicia.

Toro-Ortiz: In the past, lighting controls have enhanced the user’s appropriation of space. Now, lighting controls will have to enable quick adaptability of these new spaces to enhance the flexible and collaborative nature of the new post-COVID workplace.



Aguayo: With more offices sitting empty and reductions in maintenance staff, there is a big possibility that lights are left on unnecessarily. Lighting controls are important now more than ever. With so many great wireless solutions on the

market, I believe they should be specified on all office lighting projects. In addition to occupancy and vacancy sensors, remote monitoring and controllability will help reduce electrical consumption when no one is in the office.



Kasler: Office spaces will continue to become more flexible, but controls and connected lighting solutions will still be required to solve higher complexity problems beyond light and energy management including deeper insights as

to the usage, the location of people and resources, and the optimization of the design and layout.

Do you think open-office plans will continue to trend in the coming years, or will a new layout define the office of the future? What might this change mean for lighting?

Fitzgerald: The debate between open or private offices will be unique to each organizational culture with neither going away entirely. Moving forward, work spaces will be designed for efficiency and effectiveness and not a one-size-fits-all approach. As companies shift to looking at how space can support individual users, we are seeing hybrid models of people working from home and in the office. Lighting systems will be more flexible with easy-to-use controls for a variety of user groups. What was once a single layer of office ambient lighting, now needs to be a layered solution incorporating indirect, direct and vertical perimeter lighting that is all separately controlled.

Hartley: Open offices are still a popular concept in design, but employers may become more cautious about open-office designs with low partitions in case of a future outbreak. With private offices or even higher partitions, this will change the overall lighting design and control system for these spaces. The focus of lighting design will shift from visible glare and spacing criteria to layers of light and overhead glare, as well as a need for more diverse light distributions.

Aguayo: While divided and private offices may be prioritized for health, they would diminish the interpersonal communication that we are all missing

while we work from home. I have faith in the design community that an open office layout can be achieved without risking the health of the building occupants. I believe one design strategy is Germicidal Ultraviolet lighting, specifically the upper-air disinfection method, which allows for occupants to freely move about the space while the air near the ceiling is being disinfected.

Kasler: We think the future is trending towards more communal work spaces and fewer offices and cubicles. Smaller offices will help companies reduce their carbon footprint as well as help corporations meet their sustainability goals. With this said, lighting design will also have to adjust to these new office space trends and we could see a growth in suspended lighting. Additionally, fewer commuters mean less parking, which means there could be an impact on outdoor lighting needs.

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-Thornton

With the proliferation of remote work, is there potential for the home office lighting market to expand?

Fitzgerald: Most residential lighting is not adequate for working from home—something I learned firsthand during the pandemic! Personally, I had to add some indirect light to my home office, increasing levels of ambient illumination in my work area. As people adapt their home office creating more “permanent” spaces to work from home, lighting upgrades will be a key element to any renovation.

Toro-Ortiz: In short? Yes. In a matter of weeks, we went from crowded offices and diverse spaces

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-Hartley

to improvised home offices that brought challenges in and of themselves. We need to rethink better home office solutions that satisfy our current remote/hybrid office and the in-between. The transition between both spaces should be softer—a mix of both home and office lighting in both spaces.

Aguayo: While I would like to say yes, I am not convinced there will be big growth in the home office lighting market. On one hand, people may be looking to set up a great home office but, unfortunately, I do not think light fixtures are high on the priority list. On the other hand, home improvement projects have been extremely popular so there could be an opportunity.

Thornton: The home office is a very personalized and varied application where everyone gets to act as the designer for his or her preferences. I’m sure new lighting products targeting the home will flood the market from a diverse global supply chain, but it’s unlikely that something will be created that adds a new value beyond what exists today. For example, my home office is almost 100% lit with daylight during the day and I use very little ambient and task lighting at night as most of my work is computer-based.

Outside of COVID, do you see other opportunities for promoting the benefits of light and health in office design?

Hartley: Over the past six or more years adaptive lighting has been developed, and this technology is ready to be implemented for dimming and visible spectrum control. This can allow users to follow daylighting patterns, or simply change the mood

of a space. Biophilia is also a growing field where integrating natural elements and forms has been shown to increase well-being in the workplace.

Toro-Ortiz: Lighting has been shown to impact mental health, which has become one of the biggest challenges for employees and employers to manage in this continuously evolving work dynamic. We need the right light for wellness, for shifting activities and to bring people together. We need to recover contrast strategies in the face of excessive uniformity, understand the use of space in a humanized and flexible way, and above all, reassess lighting standards—from quantitative to qualitative.

Aguayo: Absolutely, humans spend 90% of their time indoors and a good portion of that is spent in offices. Access to natural light, proper light levels and the ability to control color temperature and brightness can make us all healthier, happier and more productive employees.

Thornton: The connection between health, well-being and light is going to increase as science and technology continue to evolve. It is interesting to watch as the science of light is getting quantified into defined best practices or recommendations. Many influencers, with differing interests and opinions, are making their voices heard and, as a result, a broad spectrum of solutions and recommendations are promoted with various levels of scientific backing. Allowing the IES to lead these best practices is the best way to ensure that light is properly and practically administered for the well-being of the occupants.

Kasler: Absolutely. We are spending more time indoors than ever before and bringing the outdoors inside through lighting is a growth opportunity as we enhance well-being with higher CRI, color that matches the outside based on time of day and reducing glare to eliminate eye strain. ©



For more on the industry’s response to the pandemic, see [#LetsTalkLight](#) on the IES LinkedIn page.