

The Post-Pandemic Office: Fake Sharkskin Door Handles and No Restroom Doors

Architects Rethink Long-Term Workplace Design in a Post-Coronavirus World



The corporate headquarters for Yeti in Austin, Texas, has an inter-floor staircase, which is expected to be a popular alternative to the elevator in the post-COVID-19 office. (Gensler)

By [Candace Carlisle](#)

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Post-pandemic offices may feature sharkskin door handles, fewer huddle rooms and a lot more elbow room.

Workplace designers and architecture firms, once focused on open-floor plans that encouraged collaboration, are looking at long-term ways to incorporate antiviral materials used in hospitals and no-touch designs found at busy airports into the office space of the future. While the immediate focus for [reopening offices is on quick fixes](#), from plastic barriers to better air filters, the pandemic is already altering big-picture thinking for workspaces.

"There's been a lot of discussion about this in a short time," said Randy Cooper, an executive managing director for Stream Realty Partners, in an interview. "For a long time, there's been a push for higher density, but the need for social distance could impact space design moving forward."

The amount of real estate allocated per employee in an office has been declining in the United States since the Great Recession, as companies reined in spending. Now, facing a coronavirus-induced recession, that trend might do an about-face with average square feet per employee climbing because of social-distancing expectations.

"It will be a consideration during the design process for companies now," said Cooper. "Employees and employers will demand a safe work environment."

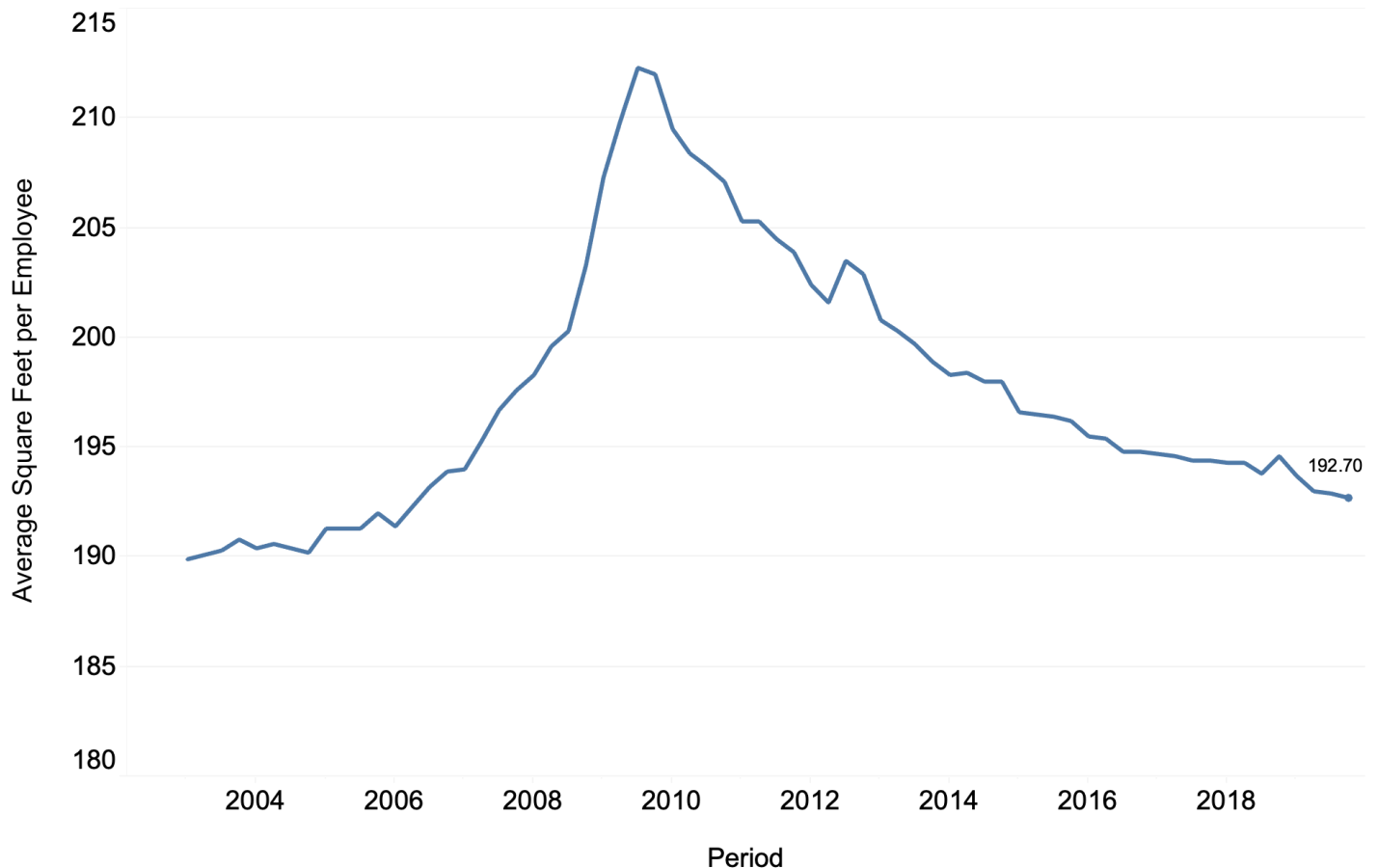
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As federal and state government [leaders look to ease](#) stay-home restrictions tied to the pandemic, companies will need to implement precautions, said Kate Davis, principal and director of commercial interiors at HKS architecture firm.

"We are working with a group of experts on ways we can help control infection and mitigate health risks," said Davis, who leads the workplace design team for HKS from its [Chicago office](#).

Some spaces and leases don't allow for a 6-foot separation from other employees, which is recommended under social distancing guidelines, so some companies will probably adopt flexible work arrangements with employees staggered throughout the day so fewer employees are in the office at the same time, said Davis. For the long term, that can mean changing the way buildings are designed to provide more areas around individuals.

Office Space per Employee from 2003-2019



Source: Cushman & Wakefield Research; Bureau of Labor Statistics; Moody's, January 2020



Average U.S. office space per employee rose in the early 2000s before shrinking steadily since the Great Recession. The pandemic and social distancing could reverse this trend, analysts say, and the average square footage per employee may climb again.

"We, as designers, are looking to design a more frictionless way for tenants to be in commercial office buildings," said Davis.

Rethinking Entries

Touchless options can replace card readers or door handles to avoid hundreds of people touching the same spot.

Most airports don't have entry doors for bathrooms, instead opting for long hallways, and offices may follow suit. Davis said, "They are designed so people don't have to touch a lot of

surfaces." Possibilities designers have discussed range from forgoing the doors the way airports do, with turns in hallways, or simply adding touchless opening and closing technology.

Expect high-density workspaces to be replaced with assigned seating. That may mean scrapping the use of hoteling, when many different visiting workers could share a desk in a week, said Nena Martin, director of workplace for Gensler in [the firm's Austin, Texas, office](#).



Large conference and training rooms and small huddle areas meant for brainstorming are likely a thing of the past since it would be difficult to maintain six feet from another person in such areas. (HKS)

"People are going to have to embrace a whole new working aspect and be more mindful of what they are touching and how they are feeling," Martin said in an interview. "Someone's health and environment will affect a whole community, and everything will change drastically. You can't go back to the same ways."

Martin expects more virtual meetings. Designing large conference and training rooms and small huddle areas meant for brainstorming are likely a thing of the past since it would be difficult to maintain 6 feet from another person in such areas.

Video conferencing may be used for all training purposes because "a huge training room" makes it hard to social distance with 50 people in one place, Davis said: "We need to leverage technology differently."

Employees who have been working from home during the coronavirus outbreak probably will want the option to stay home and not commute into an office on public transit.

"I could see companies having satellite or secondary offices and use more teleworking and video conferencing," said Amanda Shailendra, a site selection expert who secured Mercedes-Benz USA's corporate headquarters for Atlanta when she worked for the Georgia Economic Development Department.

Modifying Materials

Designers are [rethinking materials](#) when it comes to post-pandemic office space. Some materials may need antimicrobial coating on high-trafficked areas, such as a stainless steel door handle, to deter microorganisms. Designers will need to know how both natural and artificial materials interact with the virus.

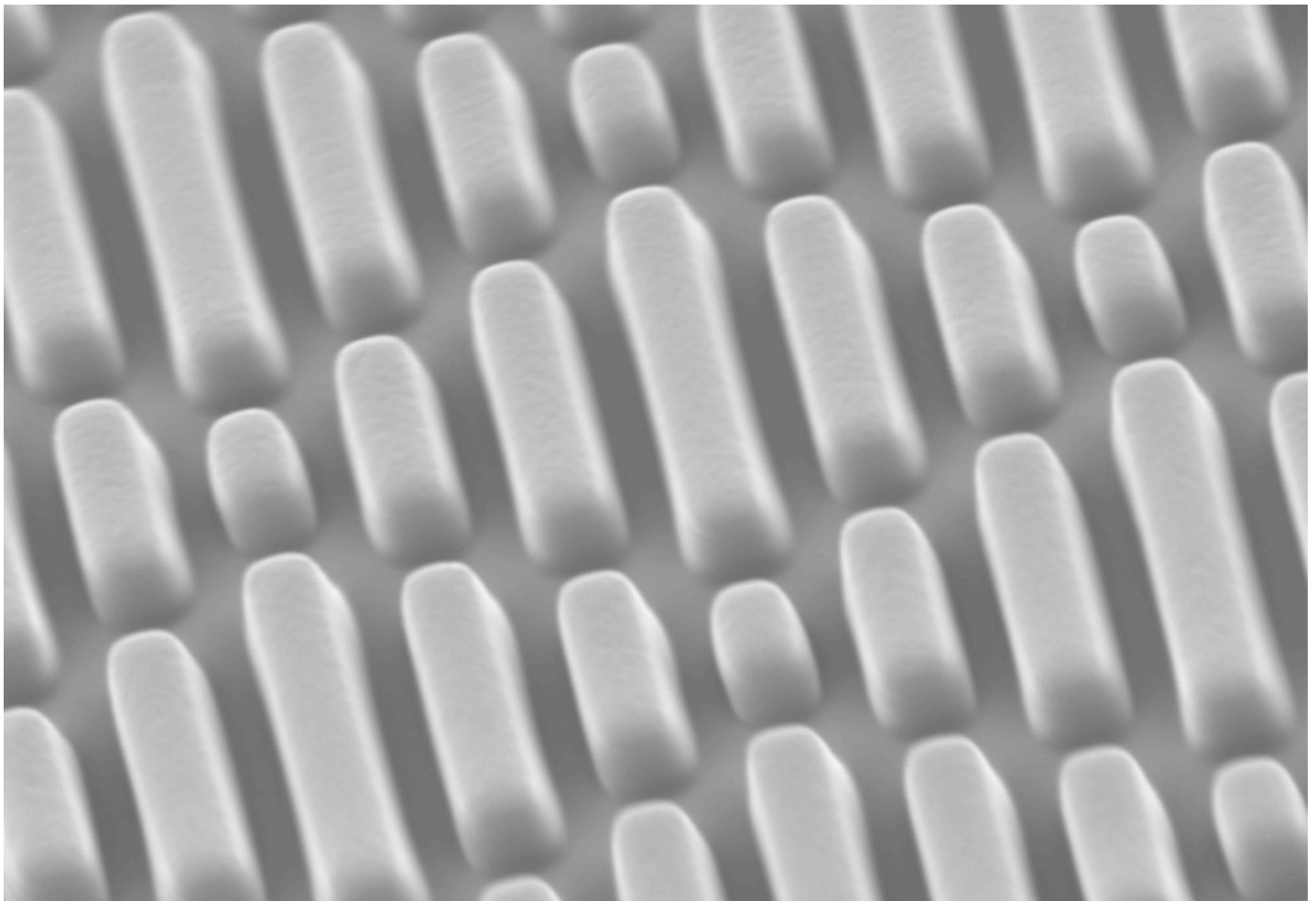
"It's not just going to be the fabrics of furniture, but carpeting and hard surfaces and what to use in key areas," said Gensler's Martin.

Davis, who leads HKS' workplace design initiatives, said some surfaces could use a material that helps limit the spread of bacteria.

Biotech firm Sharklet Technologies Inc. makes a plastic sheet that mimics sharkskin. The coronavirus has caused a spike of interest in the technology, said Ethan Mann, a vice president of the decade-old company based in the Denver area.

From baby products to operating rooms to healthcare spaces, Sharklet helps prevent contamination without the use of chemicals, he said. A peel-and-stick film with adhesive backing to retrofit handrails and high-touch surfaces retails for about \$1.20 per square foot.

"At one point there was an educational burden to convince consumers that surfaces could



Denver-based Sharklet Technologies makes a product that helps prevent a virus from spreading called Sharklet, which mimics sharkskin. (Sharklet) become contaminated, but the coronavirus has changed that," Mann said. "There's more interest now to find a solution."

For an office tenant to tool a material with the specific sharkskin patterns, Mann tells customers to expect about a 20% increase in material costs. But, he said, costs vary depending on volume and scale.

"This shark-like film could be added after the fact to door handles, so you wouldn't have to change out a handle or push bar," said Davis with HKS. "We are looking for these additive products so they wouldn't need to be completely redesigned."

Back to the Basics

A crowded elevator, which averages about 22 square feet of space, could spread the contagion to employees at a single company or to multiple companies if it serves a multitenant office



Kate Davis is principal and director of commercial interiors with HKS. (HKS) building.

This could inspire some companies to tell employees to use staircases between floors to help limit the risk of catching the coronavirus in an elevator.

"Elevators are going to be scary for a while," Davis said. "There's no way to socially distance in an elevator cab. Companies will need to make inter-floor travel more accessible. We still need to unpack and solve how we move between floors if there's no interconnected stairs."

For Martin with Gensler, she said she could see more elevator upgrades as a result of the pandemic to speed up vertical mobility on a skyscraper to get people moving quickly out of danger. She said she could also see passenger limits on elevators with cleaning staff on hand to decontaminate the cab between passengers.

The circulating air in the cab would also need to be refreshed at a higher frequency, Martin said. The virus could lead to buildings with much more elaborate air filtration systems to



Nena Martin is Gensler's director of workplace and sits in the firm's Austin office. (Gensler)

boost the quality of the indoor air. And those designs could call for devices that show in real time the performance of those systems of air filtration throughout the day, she added.

CoStar News reporter Tony Wilbert contributed to this article.
