

Bloomberg takes a city-specific approach. Clockwise: London, Amsterdam, Bangkok, and Geneva.

For Bloomberg, responsible design includes everything from local input to material selection to how you move around in a building. A focal point of the London office is its continuous ramp, which flows throughout the building and encourages conversation while acting as a chimney, where natural air flows up to the building's atrium and out onto the roof.

Conversation starters like the ramp are nothing new for Bloomberg, though. The company's building at 731 Lexington Avenue in Manhattan—which received the highest Fitwel rating—also encourages movement and conversation, but using stairs. Elevators don't stop on every floor, and employees are encouraged to take the stairs unless unable to. "It's a big part of that active design we've always done naturally," says **Michael Barry**, head of sustainable business operations at Bloomberg. "We do that in all of our workspaces. We

don't want people to have to go on an elevator to go two or three floors. A, it's healthier for them, and B, we want people to bump into each other and talk and have a spontaneous conversation that might lead to a new idea."

Where and how people work affects employees' lives in a big way, Hiemstra says, and even things like where to find the coffee can impact an employee's happiness and productivity. "From a corporate perspective, the people are the most important part of our business. And you're designing their environment."

The experience of a building is crucial to its design, especially ensuring everyone has access to views and daylight. Bloomberg thinks about every element of experience, from security to waiting for an elevator to where doors are located. The design principles continue to evolve as Bloomberg considers how people work and collaborate, with a focus as well on comfortable lighting and acoustics. Now, every desk is height adjustable so employees have the option to stand, for instance. And collaborative spaces are plentiful, from meeting rooms without walls to pantry areas you can also get work done in. "We give them spaces that work for them," Hiemstra says. When it comes to saving energy, Bloomberg uses daylight sensors and even plumbing features that detect when no one is in a room, so not only do the lights shut off, the master plumbing shuts off as well. This also helps prevent leaks and drips.

IT'S ALL IN THE APPROACH Literally dozens of Bloomberg's 176 offices are certified—more than 70% of their employees work in a LEED or BREEAM space. The leadership isn't working just to amass accreditations, though. They're thinking about how people are affected and letting that drive their design choices. "We spend a lot of time building the rules to which our architects design," Hiemstra says, adding that they don't define what materials an architect should use or how things should look, though.

Instead, they enter partnerships that make sense. By now, anyone who works with Bloomberg understands the company's ethos and is on board to meet their human-centric objective. "We think about everything—from the details of functionality to the aesthetics to the subconscious wellbeing aspect of the space and people who work there." Considering most employees spend a third of their lives in the office, it's no small commitment, Hiemstra says.

Bloomberg starts local—hiring the people who know a place best, whether the building is in Prague or Hong Kong. "You're

"NO OFFICE IS GOOD ENOUGH IN MY OPINION. EVERYTHING CAN ALWAYS BE IMPROVED."

gaining a massive amount of benefits from doing that," Hiemstra says. He looks to Prague as a stellar example of local teams in action. "Everything about that design was done in the right way. Everything from the relationship with the local team who was absolutely incredible to the way we selected materials." Furniture came from the Czech Republic and even the graphic design team was local. "We really learned about the history of the country," Hiemstra says. "Just through designing graphics, we learned about what was important to people there." Typically, Bloomberg briefs the local team about the company's mission while the design team on the ground teaches Bloomberg about the local culture. "If you're building an office in Prague, you're not building a New York headquarters. You're building a piece of local tradition."

Hiemstra says tailoring that design is vital. "The other way of doing it is basically having globally centric design solutions, which a lot of companies do, where they have materials that are pre-set because that's the aesthetic that's been selected on a global scale," he says. "It's just not the right thing to do. Understanding that you're a guest and you are a visitor there is a crucial part. And understanding how you can attain the knowledge, the expertise, the intellect, and the knowledge of the local culture and location is very important."

Choosing the right building, that's centrally located with access to transportation, is also key. Healthy design for Bloomberg in general includes a series of "musts," things like LED lighting and pushing building owners to manage waste responsibly. Then there are the beautiful, sustainable features—even things like fish tanks or rounded, collaborative desks. Of course, the company also focuses on materials. "In addition to having a green workspace, we want to have a healthy workspace so we're naturally using materials with low VOCs and really focusing on the material resource points," Barry says.

Bloomberg also continues to push the

industry with initiatives like separating liquids from waste and stacking cups. It's as simple as pouring the liquid out before you throw your cup in the trash, and yet so many people don't do it. "No office is good enough in my opinion. Everything can always be improved," Hiemstra says.

GOALS THAT INSPIRE "Our buildings and our offices have always been an important part of our culture," Barry says. When sustainability officially started in Bloomberg in 2007, one of the first things the company looked at as a group was its emissions. "In our offices, energy is 55% of our annual emission. It's the biggest part of our emissions, so we really focused in on what we could do in the built environment." Bloomberg aims to have a 20% absolute reduction in emissions by 2020.

A little more than a decade ago, Bloomberg looked to LEED—the first standard of its kind. Bloomberg did its first LEED project in 2008 in San Francisco. The Pier 3 building on the Embarcadero in an old warehouse is still one of Barry's favorite projects. "We realized building with LEED isn't that much more difficult than doing our regular fit-out. Also, it provides a lot of transparency as to all the contractors and the people involved in the project doing what you've asked them to do. And then at the end, because of the rigorous standard and having this documentation, you get validation that you've achieved what you set out to."

Collaboration is also key. Continuing to share knowledge and work with others for the greater good is core to Bloomberg's mission. While Barry is part of the **Renewable Energy Buyers Alliance** and the **Sustainable Purchasing Leadership Council**, Bloomberg itself is a major player in the New York City carbon challenge. "Companies pledge to reduce their New York City emissions by a certain percentage by a certain time. We have a 50% goal by 2023." Bloomberg is also working toward 90% waste diversion overall by 2020.

Barry says net zero should be the goal of offices in the future. "We're a member of RE100, so we've pledged to get 100% of our energy from renewable sources by 2025, which is a great goal, but a lot of these are offsite wind farms. We've done a few onsite projects where we can, but ideally we'd figure out ways for offices to have a net zero impact; that's really where things need to go. The built environment, especially in urban areas like New York City, is the majority of carbon emissions, and it's important for new projects that come online to continue to push the bar." **gb&d**

DESIGNING FOR PEOPLE

Bloomberg leads by example with some of the most beautiful—and sustainable—offices in the world.

BY LAURA ROTE

No more fighting for corner offices or window views. What was once a struggle under fluorescent lights in drab cubicles is now a collaborative environment with flexible, light-filled spaces.

It's no secret—at least not in the green building industry—that healthier buildings lead to happier employees. A recent **USGBC** survey (see pg. 81) found employees who work in LEED-certified green buildings are happier, healthier, and more productive than employees in non-LEED or conventional office buildings.

HUMAN-CENTRIC DESIGN In Bloomberg buildings, office design is increasingly human-centric, from the moment an employee walks in the door. "Responsible design is the rule rather than an exception for us," says **Christiaan Hiemstra**, Bloomberg's global head of design. The company has long been a leader in sustainable design but also recently earned the moniker of "world's most sustainable office space" for the new European headquarters in London (as per BREEAM standards). The 10-story facility earned a 98.5% BREEAM rating, the highest score for an office building to date.

PHOTOS, CLOCKWISE: JAMES NEWTON; MACHTELD SCHOEPE; WISON TUNGTHUNYA; NICHOLAS WORLEY

BETTER WITH BIOPHILIA

Designs from
Ambius
encourage
happy, healthy
workplaces.

BY LAURA ROTE



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TEN YEARS AGO, when **Kenneth Freeman** started working with **Ambius**, the term “biophilic design” didn’t exist. Today biophilia is a thriving segment of design that continues to evolve, and its implementation far exceeds installing plants that please the eye (though it does that, too).

The term “biophilia” was coined by American biologist **Edward O. Wilson** in his 1984 book *Biophilia*, which describes humans’ innate attraction to nature. But it wasn’t until much later that it caught on.

Freeman, Ambius’ head of innovation, remembers first seeing the term more prominently in 2008. With his background as a biologist, he says thinking about how interior

landscaping may affect people just as animals made perfect sense. He uses zoo animals as an example—they get stressed when removed from their natural environment. “We put people in offices for 8,000 hours a year,” he says. “You may as well be a lab rat.”

Consider how we’ve seen a radical shift in our everyday environment in a relatively short amount of time—we now spend on average 90% of our time indoors. As a result, we’ve learned a few other new terms, like sick building syndrome (a condition affecting office workers that’s often marked by headaches and respiratory problems), and seen an increase in diabetes, heart disease, and depression, among other issues.

While researchers have been talking about plants’ benefits and even their ability to reduce pollution for years, it wasn’t until recently that research showed how benefits go beyond the physical to psychological, as people appeared more relaxed around greenery. “We did other research, a lot of people did, that found whenever you put plants in buildings, well-being seemed to improve, but the improvements could not be adequately explained by the mere physical properties of the plant,” Freeman says. He says a plant’s metabolism is much slower indoors, so they can’t really do much to the indoor environment in terms of their biology, but what they seemed to do for the mind was great. “It seems as though they throw a switch in the brain: ‘I’m back in my normal environment, my wild environment.’ It induces this sense of well-being.”

DESIGN IN ACTION Ambius, the world’s largest interior landscaping organization, was one of the first companies to begin talking about how offices could look different (more plants) and be worth it (employee well-being). Not long ago, office design was dominated by sterile interiors and a commitment to minimalism. Many architects looked at the experts at Ambius like their suggestions were crazy at first.

“Putting plants inside buildings not only attracts new customers; they also help employees with health, wellness, and a lot of other things, including attendance,” says **Matt Hills**, staff architect and an expert in green wall development at Ambius. “They’re happy in their work environment.” And green walls are in demand. Hills has seen living wall projects increase from 10 to 15 a year to more than 100 in the last eight years.

Envestnet is a recent repeat client that’s worked with Ambius over the last few years. The architect **Baumann Studios** approached Ambius to collaborate on the Envestnet projects, as Ambius offers

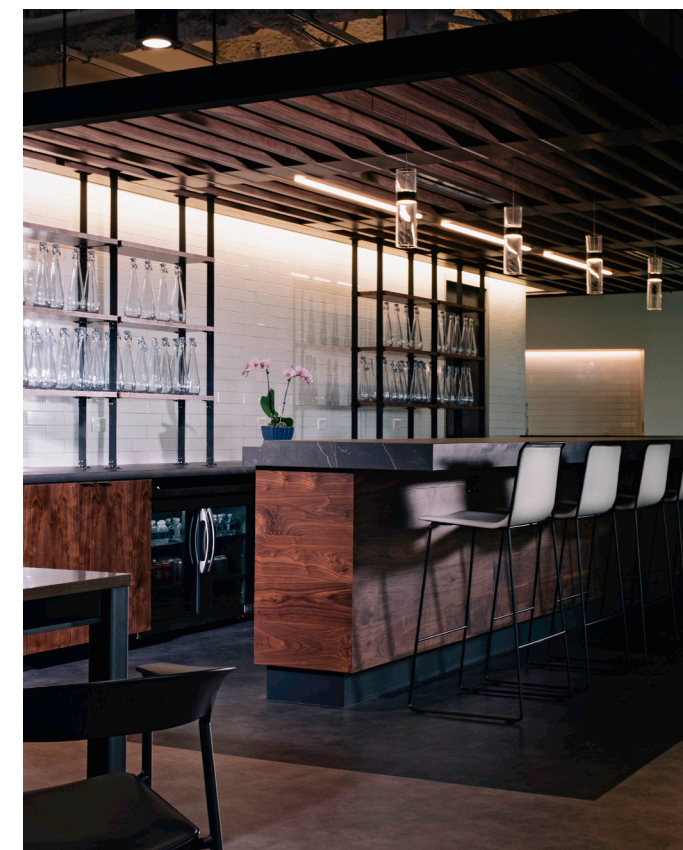
custom interior landscaping solutions, living green walls, and even scenting solutions. “We started with one green wall in our Philadelphia office a few years ago and loved the addition to our environment so much that we now have five large walls—including one in our main lobby—and several smaller green walls,” says **Alana Gavrilis**, facilities manager for Envestnet. “They really liven up the space and add to the atmosphere for both our team and visitors to our office.” Ambius specifies, designs, builds, installs, and maintains each project it does.

Ambius joined Baumann to help produce the designs and implement the installation for Envestnet, from reviewing drawings and ensuring they had the necessary plumbing and lighting design to working with the contractor throughout construction to make sure the green wall system functioned properly. No matter the project, Ambius works closely with the architect and owner to design systems that work despite any challenge you could dream of, even if that means a project needs a tank system behind the wall.

Ambius doesn’t disappear after the install, though. “We maintain all these walls. We have a team that’s dedicated to that building. I think that’s part of why clients like us,” Hills says. While many companies don’t have the capability to provide the maintenance, Ambius guarantees it and can do so easily, including on a national scale for companies with multiple locations.

Ambius has completed three of four living wall projects for Envestnet so far. The third project, completed in August, includes four green

With more than 50 years of experience, Ambius’ experts work in 15 countries to improve spaces with interior landscaping, living green walls, and even scenting solutions. To date, Ambius has installed more than 700 square feet of living walls for Envestnet.



PHOTO, THIS SPREAD AND PREVIOUS: COURTESY OF ENVESTNET

walls covering more than 500 square feet. The Ambius Philadelphia team provides the warranty and maintenance services for all the green walls at this property.

Having that maintenance guarantee is crucial, especially as the first weeks after installation are used to monitor irrigation and make sure plants aren't under- or over-watered. Service then tapers to biweekly, where an Ambius expert comes in to check the walls, make plant replacements if necessary, and dust the plants or pull dead leaves as needed. "We want to make sure the wall is looking its best at all times," Hills says.

EASY TO INCORPORATE Freeman was recently struck by a conversation he had with a facilities manager who didn't realize green walls in buildings were professionally designed and maintained. She assumed plants were brought in, installed, and that was it, thinking an office manager or someone internal had to be responsible for keeping the plants alive, for example. "I started talking about a professional services company doing it and that it might only cost as much as a premium cup of coffee from Starbucks each week," Freeman says. "You wouldn't trust the photocopier to be looked after by just anyone. You'd get a professional engineer. The same applies to indoor plants. They work best if maintained properly."

You can create a strong biophilic environment without having to do much to the fabric of a building, Freeman says. "We don't have to rewire or replumb things or knock down walls. We just have to think differently about the way we design with the plants and the containers and the accessories." And the whole service—from design and installation to maintenance—is relatively inexpensive.

GROUNDBREAKING RESEARCH While green walls certainly draw attention, their benefits far outweigh being beautiful, and researchers are currently in the midst of a comprehensive study to prove just that.

Ambius is working with **BRE**, the world's leading building science center, on a 30-month study that looks at biophilic design in a

7,000-square-foot office building on the BRE campus near London. The building is being refurbished based on biophilic design principles, and Ambius is working with BRE, **Oliver Heath Design**, and other partners to collect data on the design's impact on the health, well-being, and productivity of office occupants. "They're taking over refurbishing a floor in a 1980s concrete framed office, and we're going to redesign that space along biophilic lines with different degrees of interventions," Freeman says.

Ambius and core partners will evaluate impacts on the office environment, including daylight, lighting, indoor air quality, and acoustic, thermal, and humidity comfort. Office occupants will wear technology that allows researchers to track key health metrics and gain insight into the impact of biophilic design. They will undergo confidential health evaluations and participate in a series of online surveys. The products used will also undergo laboratory evaluation to establish whether a health and well-being potential can be quantified at product level. Results are expected to be available in early 2020.



Ambius also installed an 8-by-20-foot green wall and plants throughout the Segment San Francisco headquarters. It won a Gold International Plantscape Award from AmericanHort. Ambius is set to design their Vancouver and New York City spaces next.

PHOTOS: COURTESY OF ENVESTNET, SEGMENT IO



PHOTO: COURTESY OF ENVESTNET

"There are a range of organizations who are interested in working on this project with us," Freeman says. "All with a different take on what biophilic design and well-being means. We're all working together with BRE to actually create a genuinely biophilic space—and to properly manage it scientifically."

It's this first comprehensive study of its kind, and Freeman looks forward to being able to publish independently validated and peer reviewed academic research to show the effects in a real workplace. "The results of this project will tell us a huge amount. And I'm confident they'll be good results."

ENDLESS POSSIBILITIES Hills expects future workplaces to be increasingly green as more office workers tire of the old cubicle mindset. "Companies like Envestnet and Apple are stepping back and starting to do the research and really change the way their workplace looks," he says. "Now you have office spaces

with no walls and open offices with lots of glass to the outside. Even just having a view of plants or a picture of plants motivates people. These companies are trying to find innovative ways to keep their employees around."

Freeman hopes people see the opportunity before them to do more, too, without getting caught up in things like uniformity and brand standards. He wants people to have fun with it. "One thing that really depresses me in office buildings is when you see the same plants—every other filing cabinet has the same trough of plants because they are supposed to look minimalist. That to me is not biophilic."

He suggests varying plants' texture, color, and height in different arrangements and giving employees a choice. People like choices. "It's not just about the stuff that goes into the building; it's about making the people who work in the buildings as comfortable as possible," he says. **gb&d**

SURVEY SAYS

A recent USGBC survey indicates a majority of office workers want to work for companies that are value-oriented, take stances on important issues like sustainability, and do their part to make a positive difference in the world. In fact, 84% of the more than 1,000 U.S. workers surveyed said they prefer to work for a company with a strong mission and positive values.

When it comes to choosing a new job, findings show people's decisions were influenced by whether or not the workplace was in a LEED-certified building. More than 90% of respondents in LEED-certified green buildings say they are satisfied on the job and 79% say they would choose a job in a LEED-certified building over a non-LEED building.

In addition, 85% of employees in LEED-certified buildings also say their access to quality outdoor views and natural sunlight boosts their overall productivity and happiness, and 80% say the enhanced air quality improves their physical health and comfort.

WHY BETTER DESIGN MAKES A BETTER TEAM

National Business Furniture's new study and recent work reveal office furniture's impact on workers' well-being. **BY CHRISTINE BIRKNER**



Executives and employees alike can appreciate beautifully designed workspaces, but a recent study from **National Business Furniture** (NBF) shows just how valuable they can be. According to the study by Kelton Global on behalf of NBF, a whopping 92% of American workers say that when their physical workspace is not up to par, their mental well-being and productivity can suffer. Because office design affects stress levels and mood, more thoughtfully designed workspaces can mean happier, more productive employees.

The shift in the nature of work is a major driver of this trend. Because working from home is on the rise and technology like laptops and smartphones allows for increased flexibility, the days where workers sit at their desk for eight hours a day are dwindling. "Employees have greater flexibility than ever before to work outside the office," says **Dean Stier**, chief marketing officer at NBF. "It's more of a centralized hub, where people can meet, share ideas, and check in on projects. We don't see this trend slowing down, so spaces need to change along with this."

FLEXIBILITY IS KEY NBF's study shows workspace preferences differ somewhat by generation. While nearly one in five working millennials attribute open floor plans to their happiness at work, they still desire some privacy in the workplace; 40% of millenni-

PHOTOS: COURTESY OF NBF

als, compared to 30% of boomers, say having privacy screens or walls around their workspaces are essential. In general, flexibility is key, as 43% of NBF's study respondents said not having a private space would affect their mental wellness, and 25% value flexible areas to work away from their usual workspaces.

In many offices, static cubicles, offices, and corner offices are giving way to a variety of new creative spaces: meeting nooks, phone rooms for privacy, and conference rooms that allow for greater flexibility. When digital advertising company **Sizmek** outgrew its space, it turned to NBF, which it had worked with to redesign its offices in the past. They sought the furniture company to build out a new space from the ground up, making it a colorful, vibrant workplace in keeping with the company's branding. The space is a blend of collaborative and private areas: open desks and breakout meeting areas as well as small conference rooms and phone booths to take personal calls.

"NBF is great about matching our furniture requirements with a cool, fun look and feel," says **Tim Quillin**, associate vice president of real estate and facilities at Sizmek. "The result is high-quality, stylish pieces that are still cost-effective, which is a win for us. There's plenty of breakout and private space for our teams and a variety of furniture. People were ecstatic when they first saw it. It really helps with employee retention."

PHOTOS: COURTESY OF NBF

gb&d



National Business Furniture transformed Sizmek with colorful, comfortable spaces.

THE IMPACT

A recent study by Kelton Global on behalf of NBF pinpointed four primary factors that can derail workplace satisfaction.

1
CLUTTERED
WORK AREA

2
OUTDATED
TECHNOLOGY

3
POOR
WORKSPACE
ERGONOMICS

4
LACK OF
PRIVACY AND
FLEXIBILITY

CREATING ENVIRONMENTS "Sizmek is excited and enthusiastic about their space," says **Rusty Jenkins**, NBF's regional sales manager. "It energizes the employees and makes them want to go to work. We're not just selling furniture—we're creating environments and creating furniture that works for customers based on their needs."

Companies can accomplish a lot by making small changes to their workspaces, like updating their breakroom or redesigning a conference room, according to Stier. "When it comes to employee retention and recruitment, a lot of attention has been given to things like adding ping-pong tables and creating Silicon Valley-type environments, but that's really not what's driving great office spaces," he says. "It's about making people comfortable, with different spaces for different needs—having open space but being careful not to ostracize your introverts. Acknowledging that the nature of work is changing and doing small things to your office can make a really big difference."

"The walls of the cubicle are coming down, and people are using their spaces for different purposes," Jenkins says. "Having a cool, fun work environment shows employees you care and affects their morale and productivity." **gb&d**