

# Sustainable & Health-Conscious Work Environment

## HEALTHY BUILDING = HEALTHY EMPLOYEES

Ashforth cares about your employees as much as our own. We have a long-standing commitment to providing health-conscious work environments and understand that a sustainable and healthy building will improve your employees' health and productivity, ultimately helping reduce healthcare cost and illness-related absences. Ashforth's overall sustainable and healthy building program includes efforts to provide superior air quality, create opportunities for employees to stay active and eat healthy, and operate sustainable buildings.

#### SUSTAINABLE WORKPLACE

- Ownership/management committed to environmental stewardship and social responsibility; results in lower operating costs.
- Ashforth is an ENERGY STAR Partner and all of its owned buildings have above-average ratings. 707 Summer Street is above the 75 threshold to be ENERGY STAR-rated.
- Through Renewable Energy Certificates (RECs), Ashforth purchased its electricity generated from renewable resources: 50% for three owned properties in CT – 3001 Stamford Square, 707 Summer Street, and Greenwich Plaza; and 100% for Liberty Centre in OR.
- Ashforth utilizes an ESG data management platform - Measurabl - to measure, analyze, and report on our ESG efforts and to see
  - and understand trends, outliers, and patterns to help make improvements. Ashforth also uses Measurabl's Asset Optimization tool that provides real-time utility readings, building-level insights, and operational efficiency recommendations.
- State-of-the-art BMS that continuously monitors building systems.
- All building systems throughout Ashforth-owned properties have been re-commissioned to optimize efficiency, reducing energy consumption approximately 5%.
- Building common areas and parking garage retrofitted with ENERGY STAR-rated LED lighting.
- Superior energy reducing building systems including highefficiency heat pumps with eco-friendly 410A refrigerant.
- Low-flow restroom fixtures; eco-friendly cleaning supplies used.
- Low water-use landscaping and rain-sensing irrigation systems
- Eco-encouraged priority parking for hybrid vehicles & bicycles.
- Free shuttle to and from the Stamford Transportation Center.
- Long-standing Ashforth Green Council develops and implements environmentally-responsible initiatives for the company and owned properties.
- Sustainability-based events including Ashforth's annual Environmental Awareness Week, e-cycling, and used book and clothing recycling drives benefit local nonprofits.

## SUPERIOR AIR QUALITY

- 707 Summer Street's needlepoint bipolar ionization (NPBI) system improves indoor air quality (IAQ) and significantly reduces energy consumption.
- In addition to significantly reducing disease-causing viruses such as COVID-19, NPBI dramatically reduces airborne particles, odors and contaminants that typically cause asthma, allergies, headaches and irritation. Studies have shown use of



- this technology leads to a reduction of illness-related absences and improvement in employee health and productivity.
- By modulating outdoor air intake, the system also helps decrease energy consumption and costs. In addition, the system enables building staff to monitor, in real time, indoor air quality throughout the buildings.
- Ashforth has also upgraded all air filters from MERV 13 to 16, the highest level for office buildings. These filters, in combination with the ionization system, work to remove over 90% of airborne pollutants.
- Smoke-free policy indoors and outdoors signage installed.

#### **HEALTHY ENVIRONMENT**

- Landscaped courtyard with park bench seating
- Healthy food options within five minute walking distance or through online food ordering with on-site delivery.
- AED and trained personnel on-site
- On-site health events featuring flu shots, blood drives, health screenings, chair massage, fitness classes and games.
- Tenant events and activities provide opportunities for social engagement.
- Bicycle racks
- 16-foot by 17-foot living wall in main lobby







# Cleaner, Safer Air

#### WHAT WE DID

• The Ashforth Company conducted an independent indoor air quality (IAQ) study and based on our extensive research and testing, we made significant upgrades to optimize IAQ in our buildings. In addition, our study focused on improving IAQ in conference rooms and other small, enclosed spaces which are often densely occupied or used for an extended period of time. (see report on reverse side)

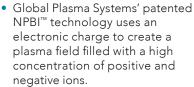


- Ashforth installed GPS's (Global Plasma Solutions) state-of-theart needlepoint bipolar ionization (NPBI) systems in all three of its owned buildings in Connecticut to help protect their tenants, employees, and visitors from COVID-19 and other viruses and pollutants.
- New NPBI systems were installed in 707 Summer Street and 3001 Stamford Square. Greenwich Plaza upgraded its bipolar ionization system that was originally installed in 2015.
- In addition to installing these systems, all air filters were upgraded from MERV 13 to MERV 16, the highest level possible for office buildings.
- To better address the additional issue of COVID-19 droplets or aerosols being spread by individuals and immediately transmitted to others in densely occupied small spaces such as conference rooms, Ashforth installed a supplemental NPBI ionizer at the point in the building filtration duct immediately prior to the diffuser distributing the air into our corporate headquarters' conference room at 707 Summer Street.

### WHY WE DID IT

- Our goal was to improve the air quality in our buildings and protect our tenants, employees, and visitors to the highest extent possible from COVID-19 and other viruses and pollutants.
- NPBI in combination with MERV 16 filters significantly reduces diseasecausing pathogens such as COVID-19 and other viruses.
- In addition to significantly reducing disease-causing viruses such as COVID-19, NPBI dramatically reduces airborne particles, odors and other illness-causing contaminants that typically cause asthma, allergies, headaches and irritation.
- Studies have shown use of this technology leads to a reduction of illness-related absences and improvement in employee health and productivity.
- NPBI is one of the safest, most energy-efficient and effective ways to reduce or eliminate pollutants in the air.







- As these ions travel with the air stream, they attach to particles, pathogens, and gasses. The ions help to agglomerate fine submicron particles, making them drop to the floor or filterable. The ions kill pathogens by immediately robbing them of lifesustaining hydrogen.
- The ions break down harmful VOCs with an Electron Volt
  Potential under twelve into harmless compounds like O<sub>2</sub>, CO<sub>2</sub>,
  N<sub>2</sub> and H<sub>2</sub>O. The ions produced travel within the air stream
  into the occupied spaces, cleaning the air everywhere the ions
  travel, even in spaces unseen.
- Through this naturally occurring chemistry the air is purified to the level seen in most natural environments.
- The NPBI™ system by GPS (Global Plasma Solutions) consistently ranks as a leading technology for pathogen mitigation.

#### THE BENEFITS

- On many days, the air quality in Fairfield County is unacceptable and, on those days, it is clear that the air quality is dramatically better in buildings with superior filters and air cleaning devices.
- The NPBI systems now installed in our Ashforth owned office buildings are circulating air that is equivalent to or better than the air circulated in hospitals (excluding



 NPBI systems produce more ions comparable to pristine outdoor air such as that near waterfalls, which produce extremely high level of ions. This is all very promising for the future of cleaner, safer, indoor air in all buildings.

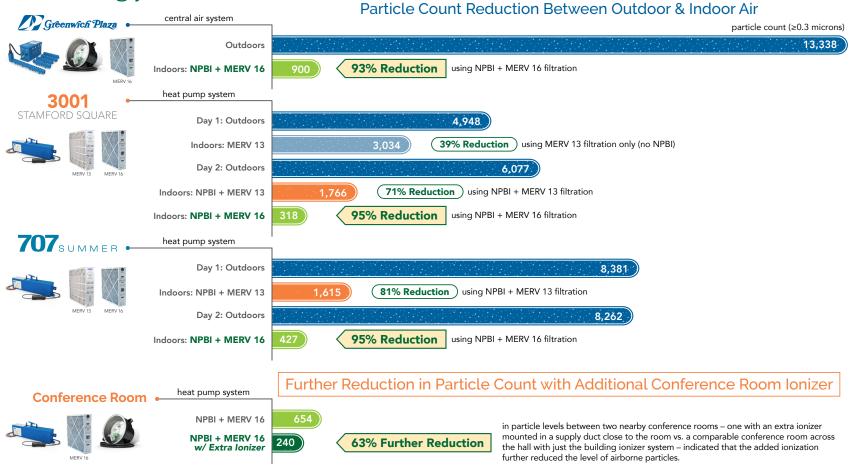




# Ashforth's Indoor Air Quality Study

The effect of our upgraded needlepoint bipolar ionizers on the removal of airborne particles in air moving through MERV 13 filters showed dramatic results in all three buildings. Our ability to upgrade to MERV 16 filters by adding our ionization system resulted in an even more significant improvement in particle removal.

# Methodology & Results



## NPBI combined with higher levels of filtration provides the cleanest air

The ENCON and Ashforth teams started collecting data in the fall of 2020 using an Extech VPC300 particle counter (shown at right). Measurements of particle levels (0.3 microns per cubic centimeter or greater) were taken in various locations within the office buildings under varying conditions (e.g., with NPBI™ products switched on or off and with different levels of filtration). Outside measurements were also collected for comparison purposes, making the relative particle counts on each day most important since the starting particle levels of the outside air varied each day of testing. ENCON collected initial measurements, but the Ashforth team handled the majority of data collection, which has also been reviewed by GPS, the manufacturer of the ionizers.





