



A HEALTHIER FUTURE **STARTS** **INDOORS: HOSPITALITY**

The hospitality industry has undoubtedly been one of the hardest hit by the COVID-19 pandemic. Now, as the industry looks to reopen and rebound from historically low occupancy rates, the future depends on effective implementation of evidence-based protocols – including those that address airborne transmission.

By focusing on healthy building strategies and creating healthy indoor environments in hotels, this beleaguered industry can unlock enormous potential – to not only ensure the health and safety of guests and staff in the short term, but also to enhance the guest experience, wellness as a differentiator and brand loyalty for years to come.

HOTEL PRIORITIES



THE SCIENCE OF HEALTHY HOTELS

Creating a healthy building through engineering controls in spaces is a key component of combating COVID-19 and reopening the industry. But research has shown the benefits go beyond infection control. Factors including CO₂ levels, lighting and noise were shown to significantly impact guest sleep and next-day concentration and cognitive performance. Moving forward, guests will expect more from their stay in terms of comfort and overall wellness.



HEALTHY HOTELS IN ACTION

Healthy buildings focus on addressing foundational aspects of the indoor environment to positively impact the people inside. Dr. Joseph Allen and a multidisciplinary team of experts from the Healthy Buildings Program at the Harvard T.H. Chan School of Public Health have identified these key areas as “The 9 Foundations of a Healthy Building.” Based on the 9 Foundations, we’ve outlined specific strategies hotel owners and operators can take to make their building a healthy building.

 <p>VENTILATION</p> <p>Maximize outdoor air ventilation Monitor and control target ventilation</p>	 <p>AIR QUALITY</p> <p>Implement multipoint IAQ monitoring Incorporate advanced IAQ controls</p>	 <p>THERMAL HEALTH</p> <p>Design to appropriate comfort standard Advanced localized controls</p>	 <p>FILTRATION</p> <p>Filter air at MERV 13 or higher Implement advanced purification solutions</p>
 <p>MOISTURE</p> <p>Control to 40%-60% relative humidity</p>	 <p>SAFETY AND SECURITY</p> <p>Implement touchless access Execute advanced access solutions</p>	 <p>NOISE</p> <p>Design for minimum equipment background noise</p>	

CARRIER HEALTHY BUILDINGS PROGRAM

As the inventors of modern air conditioning and a world leader in HVAC, refrigeration, and fire & security solutions, Carrier has a legacy of creating safe and comfortable buildings. Now we’re building on that legacy through the launch of our Healthy Buildings Program. Our experts have in-depth knowledge and experience in hospitality and a holistic suite of healthy building technologies and services to address the immediate pandemic concerns and long into the future.

HEALTHY BUILDINGS ASSESSMENTS FOR HOSPITALITY

At Carrier, we understand that many of our hospitality customers are facing uncertainty with how to move forward in developing a healthy building strategy. Our experts are here to help – starting with assessments across various aspects of a hotel or property.

 <p>SAFE START SERVICES</p> <p>Ensure building is ready for occupancy Rigorous recommissioning of HVAC equipment Implement best practices (possibly remotely)</p>	 <p>EMERGENCY ASSETS</p> <p>HVAC equipment on demand to reopen quickly and safely Detailed site evaluations Ensure system is able to meet your new ventilation and IAQ requirements</p>	 <p>IAQ ASSESSMENT</p> <p>Test air quality Develop and implement upgrades for optimal filtration, ventilation, airflow, controls, etc. Develop corporate-wide IAQ engineering standards</p>	 <p>VENTILATION UPGRADE</p> <p>Increases ventilation rate to reduce indoor pollutants Increases effective dilution ventilation per person Improves IAQ and occupant comfort</p>	 <p>SECURITY ASSESSMENT</p> <p>Provide security solutions and upgrades Contactless access management, body temp screening and video analytics Remote monitoring and diagnostics</p>
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HEALTHY BUILDINGS SOLUTIONS FOR HOSPITALITY

Carrier offers a full suite of products and services designed to help create safe and healthy environments for hotel guests and staff. The following are just a few highlights of our offering.



CARRIER HEALTHY BUILDINGS TECHNOLOGIES

Carrier's Healthy Buildings Program offers customers comprehensive, building-wide technology solutions for today's reimagined environments. In addition to Carrier's comprehensive HVAC, fire, security and controls product offering, the Healthy Buildings offering includes:



OptiClean™ Air Scrubber and Negative Air Machine helps clean contaminated air and prevent it from spreading to different sections of a building, which is critical for infection control.



BlueDiamond™ Touchless Access eliminates a significant number of access touch points through industry-leading mobile credentialing technology.



Advanced Airside Equipment offers air-handling units and fan coil units equipped with advanced filtration designs and germicidal UVC light that provide excellent microbial control and enhanced IAQ features, presenting the perfect balance between a safe and healthy environment, performance and eco-efficiency.



MyWay™ Building Services Mobile Platform integrates HVAC, lighting, elevator and other system controls, touchless access, indoor location and other services for a safer and personalized occupant experience.



Air Purifiers are filtration technologies including various HEPA filters for particulate matter, activated carbon filters for removal of bad odors and volatile organic compounds, photocatalyst filters and UV lamps (with an elimination rate of $\geq 99.999\%$ for pathogens such as E. coli and influenza, tested in Kitasato Institute, Medical Environment Research Center, Japan) to target viruses and bacteria and improve IAQ for an area of up to 4,500 square feet.



DirectKey™ Mobile Access Solution has empowered millions of hotel guests to safely access their hotel rooms without contact by bypassing the front desk check-in and eliminating many traditional touch points in the process.

HEALTHY BUILDING SERVICES FOR HOSPITALITY

Healthy buildings are about more than building design and solutions. Ongoing management and operation are essential to optimizing indoor environments for guest comfort and efficiency. Here are a few examples of how Carrier remote services can help.



REMOTE AIRSIDE MANAGEMENT

Manage IAQ and ventilation in line with best practices

Make changes and fix issues remotely

Optimize maintenance and operational costs

24x7 command center



REMOTE ENERGY MANAGEMENT

Provide advanced cloud-based analytics

Optimize energy efficiency, equipment uptime, occupant comfort and operational productivity

Actionable insights by CORTIX™ building IoT platform

Optimize autonomously or through a mobile application



REMOTE HVAC SERVICES

Maximize performance and efficiency

Increase uptime

Improve budgeting and scheduling

Fault detection and diagnostics



GET STARTED WITH AN EXPERT

From safe hotel stays to ongoing enhancements to the guest experience, a healthier future starts indoors. Let's work together to safely unlock the full potential of healthy hotels. Visit us at carrier.com/healthybuildings to learn more about our Healthy Buildings Program and connect with one of our experts.



HEALTHYBUILDINGS

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