

Johnson Controls is powering the safe recovery of the hospitality industry

Solutions and capabilities to safeguard hotels and reimagine lodging for travelers

Reopening solutions

- Life safety inspections and maintenance
- Mechanical equipment inspections and maintenance
- Safety, compliance and risk inspections
- Disinfectant lighting solutions
- Air quality assessments and strategy
- Water testing, cleaning and treatment

Resilient/flexible infrastructure support

- Infrastructure readiness for "pandemic mode" or other emergencies
- Alternative space planning strategies
- Technology resources and expertise
- Energy and operational saving strategies

Safe and healthy environment solutions

- Elevated skin temperature screening
- Space planning and occupancy strategies
- Social distancing strategy and enablement
- Preventative cleaning strategies and enablement
- Occupant hygiene strategies and enablement
- Frictionless, touchless environments
- Workspace, meeting and collaboration space management
- Ventilation, filtration and air purification strategies

Guest and staff screening solutions

- Elevated skin temperature screening
- Visitor screening and management
- Credentials management

Remote services

- Remote monitoring and maintenance of building systems
- Preventative and predictive maintenance programs

As states begin to emerge from shelter-in-place restrictions, economies slowly reopen, and people cautiously resume traveling for leisure and work, hotels must respond by adjusting to the new normal of the hospitality industry.

Just as in the aftermath of 9/11, travel and hospitality will never be the same after COVID-19. The pandemic has effected every guest touchpoint – food and beverages, lodging, and recreational activities. Each area must be considered as an opportunity to rebuild confidence in your brand, and that requires ensuring the infrastructure is in place to support a safe, secure and healthy stay at the hotel.

Hotel operators concerned with retrofitting their properties to welcome the safe return of travelers are confronted with the following challenges:

- What do I need to do to retrofit my hotel infrastructure to build traveler confidence?
- How can I keep the buildings and people inside them safe, comfortable, healthy and satisfied with their experience?
- What opportunities do I have to reduce my operating costs, improve efficiency and tap into new revenue streams?
- How can I ensure flexibility and resiliency of my hotel to support a spectrum of future states, the reduction of travelers, and changes in how spaces will be used?

The power behind your mission



Johnson Controls is powering the safe recovery of the hospitality industry

Johnson Controls is committed to helping the hospitality industry reimagine lodging amidst the challenges of COVID-19. Our goal is to deliver solutions that help enhance guest and staff safety, wellness and productivity, and facility efficiency

Essential Workforce in Your Community

- 120 branch locations in North America supported by 25,000 employees
- 13,600 field technicians and mechanics in North America
- World-class vendor partners with expertise in air cleaning technologies
- Recognized by federal, state and local governments as a provider of essential products, services, and personnel
- Johnson Controls is at the front lines of COVID-19. Across the globe, our teams are actively supporting customers and communities. For over 130 years we have been helping customers prepare for and recover from natural disasters and other unexpected high-impact events

Guidance on relief funding and financing options

Johnson Controls can help provide guidance on stimulus funding and financing options. Hotels can streamline renovations through financing options available through Johnson Controls designed to help you preserve valuable cash while improving the operational efficiency of your hotel. You can bundle needed upgrades and leverage a variety of funding mechanisms to put the improvements within financial reach. Our experienced, dedicated Structured Finance Team is available to ensure your necessary hotel improvements happen as planned.

In addition, you can utilize an “as-a-service” leasing model to reduce your upfront IT spend and still access the latest technologies.



Smart, connected technology helps deliver a safe traveler and staff experience

Johnson Controls solutions and capabilities help to support hotels during recovery, reopening and the new normal. The checklist follows many of the suggestions made by the ASHRAE Epidemic Task Force, Centers for Disease Control and Prevention and World Health Organization for mitigating potential health risks during reopening and retrofitting of hotels.

Retrofit your buildings

As you prepare your hotel to welcome guests and support your staff, steps should be taken to ensure environments have the agility to transform to meet a variety of needs while remaining safe, secure and healthy for occupants. Consider the following guidelines for operational readiness:

- Verify HVAC system performance to provide proper airflow, temperature and humidity
- Ensure preventive maintenance inspections are up-to-date on all building systems
- Ensure fire/life safety inspections are up-to-date per NFPA and other regulatory bodies, and equipment is performing properly
- Flush out air and water systems and replace filters
- Review new occupancy levels, schedules and update:
 - Fire/life safety systems/services based on new fire risk profiles
 - Security systems/services based on new security risk/loss profiles
 - Sequences/schedules in security, building automation and lighting control systems

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Keep hotel occupants safe, secure, comfortable and well

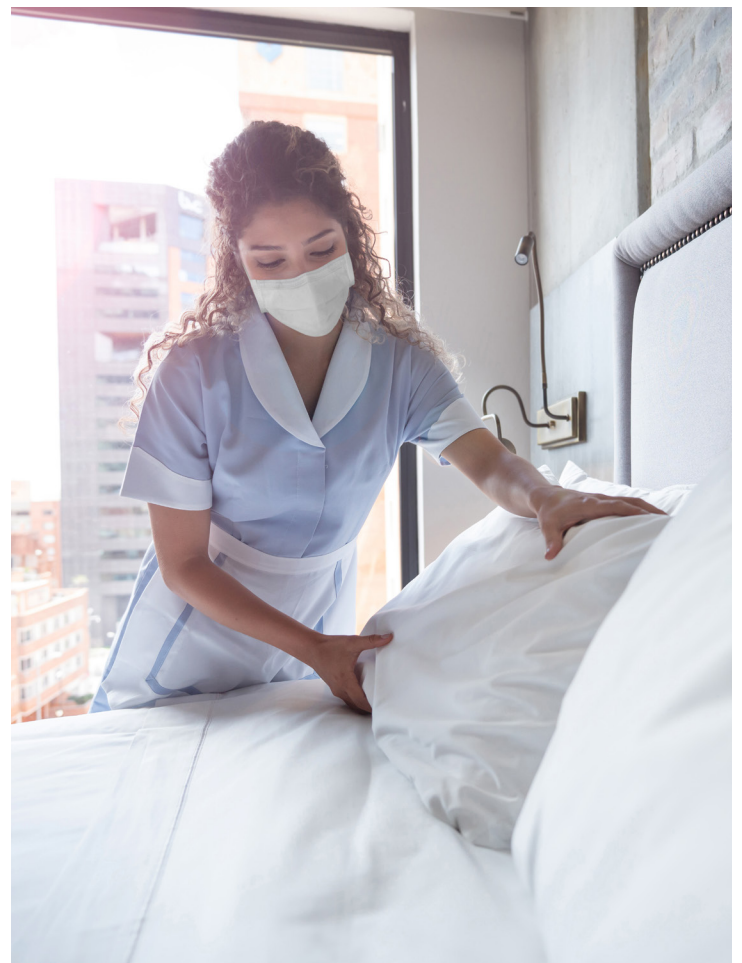
Consider the different ways travelers will be required to interact with the hotel, other travelers and staff. These suggestions can help maintain the safety, security and wellness of people, buildings and spaces:

- Initiate ventilation, filtration, humidification and air cleaning strategies to control the risk of airborne infectious contaminants to building occupants
- Utilize zoning to allow treatment of individual spaces to avoid re-circulated air and airborne pathogens from being transmitted
- Update software (BAS, Security & Fire) to ensure the facility is minimizing risks around cyber-security
- Validate access control settings and reinforce new policies for entering the building with:
 - Additional visitor management processes/technologies
 - Elevated skin temperature screening
- Use security, video surveillance, lighting and building automation systems to:
 - Enforce social distancing policies, monitor occupant activity and intrusion detection
 - Reduce density or enforce maximum occupancy policies
 - Optimize cleaning practices
- Add disinfectant lighting systems
- Enable location based services for social distance monitoring and contact tracing
- Create touchless environments:
 - Cover and lock thermostats
 - Replace light switches with occupancy sensors
 - Create mobile/web-based interfaces to allow occupants to control lighting and temperature
 - Use access control, sensors and interlocks with doors and elevators to provide "frictionless" movement throughout the building
 - Install hands-free fixtures in bathrooms and kitchens
- Enhance communications systems:
 - Expand temporary network (wired/wireless)
 - Expand building, business and clinical system installation for hospital infrastructure
 - Install mass notification systems to support both routine and emergency communications
 - Install wireless duress buttons
 - Use unified communications to support a hotel campus-wide emergency response

Ensure open spaces operate safely

Large open spaces like courtyards, restaurants, bars, check-in areas, and parking structures present unique challenges for safely hosting travelers and staff. Consider these steps:

- Use video surveillance and access control to define and support separation
- Leverage occupancy/access control data to evaluate new usage patterns
- Enable location based services for social distance monitoring and contact tracing
- Parking garage upgrades to include additional HVAC, video surveillance for occupant tracking, thermal detection and public safety



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Ensure cost-effective operations

The need to reduce costs and improve operational efficiency is more important than ever. We help you do both with these suggestions:

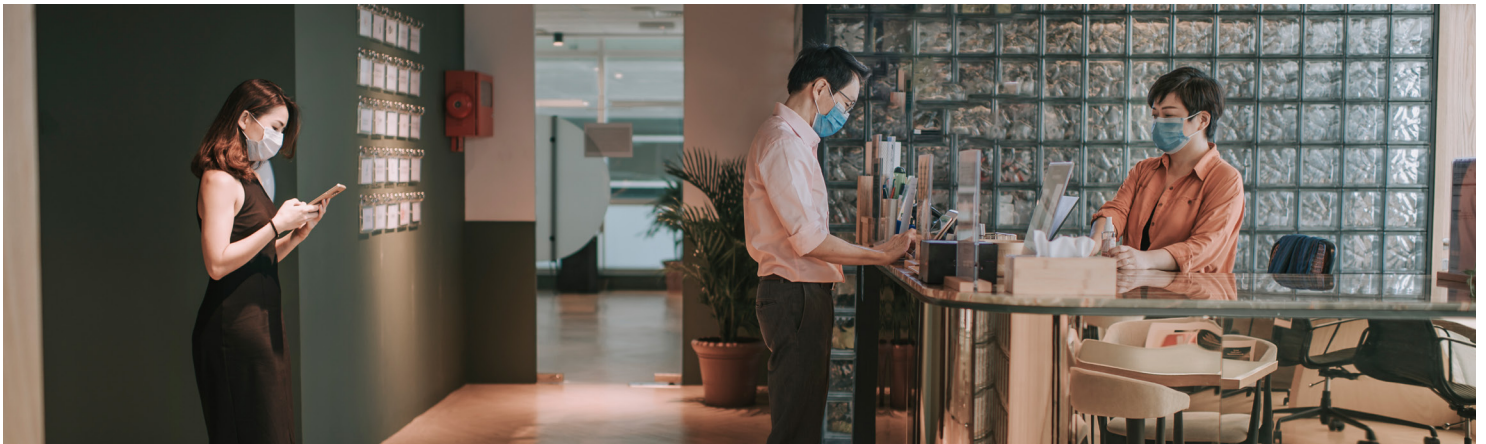
- Seek guidance on funding sources and financing options to preserve valuable cash and improve the safety of your facilities in these difficult times
- Add remote monitoring of HVAC and security systems to diagnose and resolve many systems issues quickly over the phone, minimizing staff requirements
- Enable preventative and predictive maintenance programs to ensure equipment uptime and reliability
- Employ self-testing of fire alarm equipment using addressable notification to ensure compliance
- Explore energy cost control measures through optimized equipment and lighting strategies

Prepare for resilient, flexible spaces and operations

Finally, no one knows what the future holds, but we can take what we've learned to prepare hotels for future states, including pandemics and surges, and optimize the building infrastructure to support travelers as required in the new normal.

Consider these modifications:

- Enable dynamic and flexible control of building systems to handle a spectrum of future states:
 - Add additional modes of operation to the building automation system, lighting control, and security systems for pandemics, energy efficiency, air quality, minimal occupancy, demand response or other specialized conditions
- Add additional capability to monitor, operate and service the building and building systems remotely



Your partner for the re-entry to a “new normal”

Johnson Controls can rapidly mobilize technical resources – including planning and design engineers, project managers, installers, service technicians and more – to create safe, secure and healthy work environments and buildings. When you partner with Johnson Controls, we treat your mission as our own. We put our deep expertise, leading technology and world-class products to work for you, never resting until you achieve your goals.

Learn more when you visit us: www.johnsoncontrols.com

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