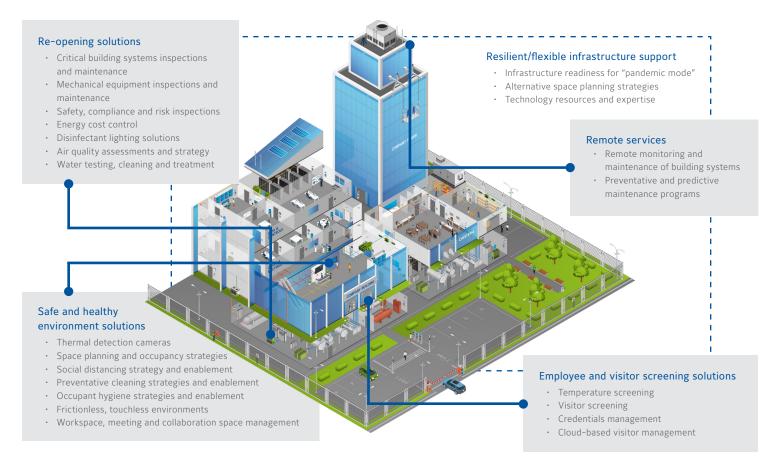
Solutions and strategies for re-entering your building

A checklist to ensure your buildings are healthier and safer for occupants and flexible for the future



At Johnson Controls we support clients with the re-opening of their buildings to help provide a healthier and safer return-to-work environment. The following information is a guide towards helping you to achieve this outcome in conjunction with building owners, facility managers and site teams.

Re-opening your building

As you prepare to re-open buildings for employees and visitors, steps should be taken to help you to ensure the environment is safer and better able to maintain healthy business operations. Consider the following guidelines for operational readiness:

- □ Ensure preventive maintenance inspections are up to date on all building systems
- □ Ensure life safety inspections are up to date per manufacturer recommendations and other regulatory bodies
- Perform start-up procedures for mechanical equipment such as chillers
- $\hfill\square$ Flush out air and water systems and replace filters
- $\hfill\square$ Clean, test and treat cooling towers and other water sources

- □ 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
- □ Update HVAC system operations, maintenance and equipment to minimize spread of airborne infectants



Keep building occupants safer, more secure and healthier

Consider the different ways you'll be working, changes to occupancy, how employees interact with each other, visitors and the building. These suggestions can help improve the safety, security and wellness of your people, buildings and spaces:

- □ Update HVAC system operations, maintenance and equipment to minimize spread of airborne infectants
- □ Reinforce new policies for entering the building with:
 - Additional visitor management processes/technologies
 - Thermal screening technologies
 - Negative pressure rooms for screening and isolating potentially infected occupants
- □ Use security, video, lighting and building automation systems to:
 - Enforce social distancing policies
 - · Reduce density or enforce maximum occupancy policies
 - · Optimize cleaning practices
 - Reinforce hand hygiene
 - Enable fever screening
 - Monitor and trace the movements of building occupants
- □ Add disinfectant lighting equipment and Indoor Air Quality (IAQ) systems such as bi-polar ionization and high-efficiency filtering
- □ 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 through the building
 - Install hands-free fixtures in bathrooms and kitchens

Cost-effective operations

Controlling operating expenses and enhancing building efficiency are easier than you may think. Our suggestions include:

- □ Seek guidance on stimulus funding and financing options to preserve valuable cash and improve the safety of your facility 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 and update 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
- □ Review critical equipment, operations and strategic plans
- □ Create measures which will make occupants feel safer in returning to a work place

Resilient, flexible operations

Finally, no one knows what the future holds, but we can take what we've learned to prepare buildings for future states, including pandemics and sudden health crises, whilst optimizing the building infrastructure to support flexible, resilient spaces. Consider these modifications:

- Add additional modes of operation to the BAS, 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 is the power behind your mission through the uncertainty of this time. We can help you plan for the reopening of buildings and successfully implement strategies to help you to ensure the work environment provided is safer, healthier and better maintained than before.

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

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