



# STARTING UP RETAIL STORES POST COVID-19 SHUTDOWNS

Deploying industry best practices helps ensure reliable operations

In the wake of the COVID-19 crisis, retail stores are facing unique challenges. These challenges include interrupted operations, air quality issues, and limited usage and/or missed preventative maintenance of HVAC equipment due to unoccupied facilities. As the summer approaches, retail facilities will want to ensure reliable operations. As such, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Eurovent European Industry Association, and Indian Society of Heating, Refrigerating & Air Conditioning Engineers (ISHRAE) have suggested best practices, recommendations, and guidelines for operating HVAC systems in the time of the COVID-19 pandemic and beyond.

The recommendations include, but are not limited to, the following:



Increasing outdoor air ventilation



Operating HVAC equipment longer



Improving central air filtration

# **EcoEnergy Insights Safe Start Program**

The EcoEnergy Insights Safe Start program translates these best practice recommendations into specific actions and then deploys them, helping to ensure smooth store operations as well as employee and customer safety, when you are ready to reopen your retail stores.



# **Ventilation Control**

We manage outdoor air ventilation to increase the effective dilution ventilation per building occupant.



### **Equipment Maintenance**

We help ensure your HVAC equipment is operating properly.



## **System Monitoring**

We review control strategies to ensure systems are operating optimally.



## Easy launch

We launch the program in three easy steps, with almost all actions carried out remotely.



# **EcoEnergy Insights Safe Start Program**

We deploy many of the best practices remotely, even when stores are not in operation. Actions are coordinated directly with store personnel/technicians.

#### **Ventilation Control**

With our deep understanding of rooftop units and controls, we retro-commission to ensure the following

- Ventilation rates are configured to ensure high levels of outside air are circulated in the facility.
- Fans are configured to run continuously during occupied hours.
- Standardized control strategies are reviewed and implemented based on industry best practices. This helps ensure that HVAC control systems provide proper ventilation rates based on outdoor air conditions and equipment type. Control strategies for economizers, lockouts, and demand control ventilation are considered, to name a few.
- Ventilation rates are increased prior to cleaning and maintenance staff entering the facility (if the retail stores are not open for business).

### **Equipment Maintenance**

Your HVAC equipment is managed using our CORTIX™ platform, which uses predictive insights to help drive proactive maintenance decisions. This is especially helpful in the event of a series of shutdowns extending over the next two quarters.

- Remote checks of equipment health will occur
  3-5 days before start of store operations
- Validation of proper system operations will occur after filter changes
- Any critical maintenance, if needed, is added to the deferred list and tracked.

#### **System Monitoring**

We optimize the operation of HVAC systems by combining our own retail expertise with ASHRAE and other industry standard guidelines.

- Building Automation System readiness
  - Ensure systems and policies are standardized
  - Batch programs for schedule changes, on compatible systems, are designed and tested
  - Quality assurance and check mechanisms are put in place
- Everything is tested at least a day before operations resume. Continuous ventilation is ensured on the day prior to the start of operations.
- Our 24/7 Command Center is available for support as you resume store operations.

# Launch the program in 3 easy steps

### 1) Connect

We establish secure connectivity to access your building automation and work order management systems. We will share a form for setting up connectivity and work with your IT team to establish a secure Virtual Private Network (VPN).

### 2) Analyze

We carry out online workshops with your teams to:

- Discuss standard policies, work order and maintenance processes
- · Discuss building management systems

## 3) Deploy

- We design the 'Safe Start' strategies
- A pilot is run in sample stores of your choosing
- We deploy across the enterprise with quality checks

A 'Safe Start readiness report' is then prepared for you to reopen the stores.

# We're here to help

As the COVID-19 situation continues to evolve, we're ready to support your store reopening and are committed to helping maintain the health and safety of your buildings, your equipment, your staff, and your customers.

Reach out to us at info.ecoenergy@carrier.com

lhttps://www.ashrae.org/news/ashraejournal/guidance-for-building-operations-during-the-covid-19-pandemic; https://eurovent.eu/?q=articles/covid-19-regular-and-correct-maintenance-ventilation-systems-gen-110500; and https://ishrae.in/mailer/ISHRAE\_COVID-19\_Guidelines.pdf



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