

Supporting stores during COVID-19

Due to the COVID-19 pandemic many of our customer associates are now wearing Personal Protective Equipment as a safety measure against the virus. Wearing PPE's has resulted in the associates becoming overheated and uncomfortable while working. Several of our customers requested the assistance of Phoenix to review and assess the store conditions and propose a temporary solution to improve the comfort in the locations that apply

Leveraging the data

Phoenix used Building View to isolate the building data we felt relevant to improving the store conditions

- 7-day zone temperatures averages with a focus on Minimum and Maximum temperatures
- Hours of active cooling, heating and economizing
- 7 day outdoor air temps using NOAA weather feeds

Interpreting the data

Reviewing the data pulled, Phoenix is focused on a few main areas of potential impacts

- The average zone temperature is below the active cool set point, essentially satisfied and with no air movement as fans operate in auto mode
- Of the sites requiring cooling were they using free cooling through optimized economizer setups
- Identify sites were still actively heating during the 7-day period observed
- Average daytime outdoor temperature high was 65 while the overnight low was 55

Proposed solution

In an attempt to make the stores more comfortable, Phoenix proposed the following adjustments to the operating modes

- Lower the Occupied Cool setpoint by -2°F to engage free cooling or mechanical cooling during the day
- Lower the Occupied Heat setpoint by -2°F to reduce added heating and maintain the dead band
- Lower the Unoccupied Cool set point to occupied temperature to maintain a cooler store overnight and encourage free cool economizing which brings in 100% outside air and improves indoor air quality
- Set HVAC fans to continuous mode to maintain positive air movement throughout the day
- The store is comfortable when associates arrive for work in the morning

Results

Store conditions should be improved to help the associates faced with wearing various forms of PPE's.