

# Key Features of an Ideal IAQ System for Remediating Wildfire Smoke

## Powerful Localized Air Purification:

Units that work alongside existing HVAC systems, introducing additional air changes per hour even when the HVAC system is turned off to reduce the intake of outdoor air.

## Advanced Filtration Technology:

H13 True HEPA filtration, which removes 99.95% of airborne particles as small as 0.1 microns, including the most dangerous contaminants found in wildfire smoke (PM2.5, PAHs, and VOCs).

## Adaptive and Proactive Air Quality Management:

The system should adapt to changes in occupancy density and environmental conditions, ensuring efficient and effective air purification.

## Easy-to-Use Dashboard:

Provide facilities managers with the ability to respond to real-time data, notifications, trends, and precise air quality status.

Display the current IAQ of any space to reassure occupants and promote the organization's commitment to ensuring a safe and healthy indoor environment.

## Real-Time Monitoring:

Employ real-time monitoring and inter-unit communication to provide comprehensive insights into air quality changes throughout a building.

Include advanced sensors to continuously monitor for contaminants in any space so building operators can act.

## Target conditions based on RESET standards:

- PM2.5 should be kept as low as possible, at a minimum below 11  $\mu\text{g}/\text{m}^3$ . Indoor levels should be lower than outdoor levels.
- Carbon dioxide (CO<sub>2</sub>) should be kept below 963 ppm.
- Temperature should be kept below 78°F/26 °C.
- Relative humidity should be kept between 35 and 50%.
- Total volatile organic compounds (TVOCs), should also be kept as low as possible, at least below 240 ppb.