

PARTICULATE AND GASEOUS CONTAMINANTS

Mitigating Risk

The smoke produced by a wildfire contains microscopic particles less than 2.5 microns in size, known as PM2.5. In fact, 90% of the total mass of wildfire smoke is comprised of these particles. Smoke can be carried on air currents to populated areas miles away from the actual fire and PM2.5 particles can penetrate deep into the lungs and bloodstream of local residents. Wildfires also release gaseous hydrocarbons and nitrogen oxides that form ground level ozone. PM2.5, gaseous contaminants and ozone all cause a range of health problems from temporary burning eyes to lifelong heart and lung damage.

Wild fire smoke drawn into a building through an HVAC ventilation system lacking proper filtration can spread these risks throughout the facility. In hospitals, outpatient or residential care facilities, patients and visitors are especially vulnerable to these contaminants. Odor from smoke can linger and cause a drop-off in learning and productivity in schools and commercial buildings. Sensitive equipment and products being manufactured such as microelectronic parts or food and beverages can be damaged or destroyed.

One strategy to mitigate the risks of wildfire smoke is to utilize a combination of carbon filtration to control odor and gaseous contaminants and high efficiency air filters on PM2.5 particles.





CityPleat Carbon MERV 11 CityCarb I High Capacity Carbon MERV 15/14A CitySorb High Capacity Carbon MERV 8



Durafil® ES MERV 13/13A MERV 14/14A MERV 16/16A Hi-Flo® ES MERV 11/11A MERV 13/13A MERV 14/14A MERV 15/15A CC500 Air Purifier/ Isolation Unit Includes a 99.99% true HEPA filter and a 30/30® Dual 9 Prefilter MERV 9/9A