

Novel Coronavirus (COVID-19)

Los Angeles County Department of Public Health Guidance for Ventilation at Workplace Settings

An important approach to lowering the concentrations of indoor air pollutants or contaminants including any viruses that may be in the air is to increase ventilation. This document provides information on how to improve ventilation through improving air circulation and air filtration.

Definitions:

- **Ventilation** – supplying air to or removing air from a space, either naturally or mechanically, for the purpose of controlling air contaminant levels, humidity, or temperature within the space.
- **Air Handling Unit (AHU)** – the part of a heating, ventilating, and air-conditioning (HVAC) system that takes in outside air, filters it, heats or cools it, and then pushes it out into the room(s).
- **Minimum Efficiency Reporting Values (MERV)** – a rating (1-20) used to measure the effectiveness of air filters at catching small particles. The higher the MERV rating, the more effective the filter.
- **Ultraviolet Germicidal Irradiation (UVGI)** – a disinfection method that uses ultraviolet light to kill or inactivate microorganisms.

Before resuming business operations, verify the building is ready for re-occupancy and the ventilation system is operating properly. If the Heating/Ventilation/Air Conditioning system (HVAC) has been turned off, refer to the manufacturer restart procedures. If you plan to make any changes or modifications, always speak to a person knowledgeable of the ventilation system (for example, the building engineer or building manager).

INCREASE AIR CIRCULATION

- Increase outdoor air by opening windows (if available and safe to do so) to help dilute indoor air. If windows are not available, open the outdoor air intake on the AHU to allow more outdoor air inside and reduce the amount of air that is recirculated.
- Turn on the AHU for two hours prior to spaces being occupied and turn off two hours afterwards.
- Ensure restroom exhaust fans are operating at full capacity when the building is occupied.
- Avoid duct cleaning during the pandemic to prevent releasing virus particles into the air.

IMPROVE AIR FILTRATION

- Use higher MERV-rated air filters (MERV 13). This may require frequent replacements as the filter can become loaded with dust and particles more quickly.
- Ensure the filters fit properly in the filter housing and check for ways to minimize filter bypass.
- Consider adding UVGI to the ventilation system to inactivate the virus.
- Portable air cleaners with high-efficiency particulate air (HEPA) filters can be used to enhance air cleaning in higher risk areas.

Applied Companies Notes:

The Plug-In Filtration Unit's HEPA/ULPA Filter equates to Top Tier Merv Levels **17-20 (Exceeds Merv 13 recommended above)**. A Merv 8 is used as a pre-filter to eliminate the need for frequent replacement mentioned above. Those filters combo-ed with Carbon Filtration, and UV Light guarantees cleanroom standard for the classroom. Safely capturing & killing contagions, VOCs, virus particles, droplet nuclei and more. (Ref: Air Cleaner Particulates Data ASHRAE)

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- <https://www.cdc.gov/coronavirus/2019-ncov/community/office-buildings.html>

