Auburn University Facilities Management (AUFM) has taken multiple actions to ready buildings across campus. This fact sheet describes actions taken for Woltosz Engineering Research Lab. AUFM has used recommendations from the Centers for Disease Control and Prevention (CDC) and American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), along with input from the AUFM COVID-19 Task Force and public health experts to help reduce the potential for virus transmission within campus buildings.

**AIR QUALITY AND VENTILATION**

Auburn University buildings are generally conditioned by one or a combination of three types of heating, ventilating and air conditioning systems: fan coil units, central air handling systems, and localized refrigerant-based systems. Click here for information of how each of these systems work. Woltosz Engineering Research Lab’s mechanical system is comprised of:

- 5 central air handlers that introduce outside air into the building and provide distribution of filtered and conditioned air to the building.

The 3 main principles of the recommendations from the CDC, ASHRAE and other government and industry associations related to air quality and ventilation include:

1. **Ensure ventilation systems are operating properly** – At Woltosz Engineering Research Lab, AUFM has completed a comprehensive evaluation of the building’s air ventilation systems to include a verification of operation and ventilation amounts. Any deficiencies found are being or have been corrected. The building systems are running at a frequency that meets or exceeds ASHRAE recommendations. In addition, we have increased the frequency and extent of preventative maintenance measures.

2. **Upgrade air filters where possible to a level efficient at capturing airborne viruses to reduce potential concentration of particles in the air** – Prior to the COVID-19 pandemic, the AU standard air filter was MERV 8 rated. Based on ASHRAE’s recommendations, we have upgraded to MERV 13 filters where possible. At Woltosz Engineering Research Lab, 4 air handling units were upgraded to MERV 13 filters. Learn more about Minimum Efficiency Reporting Value (MERV).

3. **Increase circulation of outdoor air as much as possible** – At Woltosz Engineering Research Lab, the percentage of outside air has been increased as much as possible, taking into account equipment limitations and the thermal comfort of the building occupants. Increased ventilation can be through natural or mechanical ventilation systems and helps to remove contaminants from a room.

**AIR CHANGES**

ASHRAE defines air changes per hour (ACH) as the volume of ventilation air that is supplied and removed from a room every hour and will vary and is dependent on room size, occupant load and heat load for each room throughout campus.

In general, laboratories are supplied with 6-12 ACHs, and office areas and classrooms are supplied with 3-8 ACHs. ASHRAE states that 3 air changes will reduce contaminants in a space by 95%.

- 95% of campus buildings with central mechanical systems achieve 3 air changes in one hour.
- Woltosz Engineering Research Lab meets or exceeds ASHRAE recommended air exchange rate.
PLUMBING SYSTEMS

In anticipation of building re-occupancy prior to fall semester, AUFM completed a comprehensive flush and check of the building’s plumbing system to ensure proper operations and to guard against microbial hazards that had the potential to surface due to the reduced activity at the building. Since that time, Woltosz Engineering Research Lab’s plumbing systems have been operated continuously during the COVID-19 pandemic. In addition, within Woltosz Engineering Research Lab, AUFM is converting restroom fixtures to operate automatically. New touchless faucets have been installed where possible to improve restroom hygiene and so that all restrooms have at least one touchless faucet available.

CLEANING AND DISINFECTING

The AUFM COVID-19 cleaning services modifications plan focuses on enhanced cleaning, sanitation, and disinfecting using disinfectants on the “EPA List N: Disinfectants for Coronavirus (COVID-19)” to kill the coronavirus SARS-CoV-2 (COVID-19). Actions taken in Woltosz Engineering Research Lab include:

- Nightly disinfection cleaning of classrooms, study rooms, instructional labs, and computer labs between the hours of 4 p.m. and 6 a.m. including wiping all horizontal surfaces, including desks, chairs, lecterns, etc.
- Increased frequency cleaning of all high touch surfaces to include entrance doors, elevator lobby hardware, elevator interiors, stair rails, lobby seating and restroom fixtures.
- Weekly e-misting with an electrostatic sprayer that applies disinfectant solution to surfaces with precision, which allows one person to disinfect an entire room in seconds and up to 54,000 sf/hour.
- Installing hand sanitizer stations. Sanitizing dispensers are located in the main entrance lobby and other highly visible areas.
- Augmented cleaning supplies and began using supplies rated to kill SARS-COV-2 (COVID-19) virus.

SIGNAGE AND COMPLIANCE AND OCCUPANCY STUDIES

Advisory, directional, and safety signage has been installed in Woltosz Engineering Research Lab. The comprehensive signage is intended to assist physical distancing and best health practices among building occupants, particularly in high-traffic area, and remind occupants and encourage behaviors to reduce the spread of COVID-19.

Signage installed covered several areas, including:

- Health guidance and behavioral best practices
- Circulation and egress
- Max recommended capacities (elevators and restrooms,)
- Entrances, exits, stairways, etc.
- Queuing areas

At Woltosz Engineering Research Lab, a Compliance and Occupancy Study was done to include client-driven review of specific areas of concern and question. The areas reviewed included public areas, meeting rooms and classrooms, and recommendations were provided to improve the physical distancing to meet the university's guidance as well as provide additional desired signage.

The expectation is that all of AUFM measures described above are taken in tandem with the behaviors articulated in the University’s Guidance to reduce the spread of COVID-19, including wearing a face covering, maintaining at least a six-foot distance from others, and washing hands frequently.