

## **ASSET MANAGEMENT & OPERATIONS**

Supplemental ventilation information

The following is supplemental information that can be used for communications regarding the ventilation systems on campus.

# System types

We classify the air systems we have on campus into three general categories. Regardless of the category of system, it will generally have the ability to heat, cool and filter the air prior to it being distributed to each room.

## Blended air system

These systems make up the majority of the air systems on campus. They supply air that is distributed to the rooms made up of a blend of return air from the building spaces and outside air. These air systems are dynamic based on several factors and the blend of outside air to return will be changing throughout the day and year.

## Outside air system

All the air that is supplied from these systems is drawn from outside the building. Additionally, a matched system(s) exhausts the same volume of air from the building that is being supplied to the building. Generally these systems are found in our laboratory buildings that have fume hoods in the labs.

### Recirculated air system

These air systems draw air from a space and circulate it through an air system where it may heat, cool or filter the air. Examples include spot cooling units used to cool computer server rooms.

# System maintenance

#### Filter maintenance

Air filters are evaluated every 6 weeks and replaced if needed or if they will not meet the next cycle in 6 weeks' time. Filters require changing based on the air pressure drop going through the filters.

### Air system maintenance

Each of our air handlers is reviewed and maintained to ensure that all of the components are operating properly. A detailed review of the system documents each component and any required maintenance on the system and calibrates sensors and alarms. Most of the systems

are also monitored by our control systems and report back to our Unified Communications Centre if they are not operating in the normal range. When alarms reach the centre, technicians are dispatched to review and rectify the situation to return the unit to normal operating conditions.

## Filtration

Our air systems have different levels of air filtration, through the unit typically with the highest level of filtration on the air leaving the unit being MERV-13 or higher. Please see information on building filtration levels and air circulation for more details on each building.

# Air system operations

Any air system that operated 24 hours a day continued to operate that way. Any air system that may have had an economized schedule to reduce the operating hours has been changed to operate according to the building hours. The additional runtime hours will provide recommended ventilation building flush.

Please see information on our <u>building filtration levels and air circulation systems</u>. In the coming weeks, we will share additional information on the nominal air change rate in the buildings and work down to information at a classroom level.