Implementation & Considerations

What are the next steps?

• If MERV 13 filters are installed in the existing equipment then order additional filters for future filter changes.
• Filter Rack Maintenance and Replacement:
  − If filter rack is damaged then repair rack,
  − Ensure filter rack is sealed to prevent bypass of unfiltered air,
  − Review seal installation procedures with maintenance and operations staff,
  − Replace and Upgrade Rack if possible, to accept a filter with a higher MERV rating.
• Consider changing out motor to increase static pressure available, but this may require significant electrical modifications.
• Adjust the Variable Frequency Drives to address increase in static pressure for filters.
Implementation & Considerations
Continued

If MERV 13 Filters cannot be installed, consider the following:

• Increase the filtration in the unit to the maximum available
• Provide a recirculation fan filtration unit and duct into the return of units
• Provide a HEPA filtration unit which re-circulates air within the space
• Consider additional treatment technology to kill/disable airborne infectious aerosols (refer to Building Readiness Document for additional guidance)
• Refer to ASHRAE Filtration and Disinfection system section for additional information
• Consider alternate filter locations in return duct or grille but consider static pressure drop implications and relationship with outside air dampers

Additional Considerations:

• Install a pressure gauge on units to assist in determining filter change frequency
• Document motor amperages before and after filter changes, alarm points in BAS may need to be updated
• Filter change frequency may increase due to seasonal and atmospheric considerations at different sites (such as Pollen Season)
• There will be an increase in fan energy used to overcome additional pressure drop from filters
• With an increase pressure drop for filtration there will be less airflow to heat and cool the spaces during peak design days
• Additional supplementary heaters or cooling devices may be required
HVAC System Maintenance and Filter Replacement during the COVID-19 Pandemic:

• For HVAC systems suspected to be contaminated with SARS-CoV-2, it is not necessary to suspend HVAC system maintenance, including filter changes but additional safety precautions are warranted.
• The risks associated with handling filters contaminated with coronaviruses in ventilation systems under field-use conditions have not been evaluated.
• Workers performing maintenance and/or replacing filters on any ventilation system with the potential for viral contamination should wear appropriate personal protective equipment (PPE).
• When feasible, filters can be disinfected with a 10% bleach solution or another appropriate disinfectant, approved for use against SARS-CoV-2, before removal. Filters (disinfected or not) can be bagged and disposed of in regular trash, or applicable local health and safety standards.
• When maintenance tasks are completed, maintenance personnel should immediately wash their hands with soap and water or use an alcohol-based hand sanitizer.