Public Policy Memo

Enhancing HVAC System Filtration and Control Measures for Improved Indoor Air Quality

The COVID-19 pandemic has emphasized the critical role of indoor air quality in preserving public health. Now that we are post-pandemic, it is vitally important that we prioritize the enhancement of HVAC system filtration and control measures to reduce the risk of airborne transmission within enclosed spaces. This memorandum outlines key considerations, filtration facts, and HVAC system control adjustments for a comprehensive approach to improving indoor air quality.

Filtration Facts:

The only filter proven to block COVID-19 is HEPA filters used in hospitals, biomedical and medical device facilities. Retrofitting HEPA filters for most buildings would require major modifications and is not recommended.

Many commercial buildings are upgrading to MERV 13 filters for enhanced efficiency. While not a guarantee against COVID-19, influenza strains, or other viruses, MERV 13 filters offer increased effectiveness.

HVAC System Control Adjustments:

Focus on the return air/re-circ system flow to address the recirculation of potentially contaminated air.

Attention to "blow by" (issues leading to loss of compression and engine inefficiency) and pressure drop considerations are crucial during MERV 13 filter installation to ensure a 100% sealed system. Monitor pressure drop as higher efficiency filters may affect air distribution. Clients who have upgraded to MERV 13's have reported no issues, but it's essential to be aware of the possibility. Consider the lead times for MERV 13 filters (1 to 2 months) and the frequency of filter changes due to increased particulate capture.

HVAC System Control Adjustments:

Increase air changes and avoid re-circulation to dilute contaminated air with fresh, uncontaminated air.

Acknowledge potential negative effects such as higher energy consumption and longer compressor run times. Address comfort complaints and impacts on sensitive areas like server rooms.

Aim to reduce or eliminate recirculation, bringing in 100% fresh outside air whenever possible.

Utilize Building Management Systems (BMS) with Direct Digital Control (DDC) systems to monitor and adjust fresh air percentages.

For buildings without DDC systems, consider manual adjustments based on equipment capabilities.

Conclusion:

This memorandum emphasizes the urgent need to address indoor air quality concerns in our post-COVID environment. By incorporating upgraded filtration systems and implementing control adjustments, we can create healthier indoor environments for all occupants. Your attention to these recommendations is crucial in ensuring the well-being of our community.

Thank you for your consideration.

Kindest Regards,

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