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**Keeping your buildings
infection-free post
lockdown**

Keeping your buildings infection-free post lockdown - a simple guide from Facilities Management Solutions

As communal spaces begin to open up and people gradually return to the workplace, protecting staff from Covid-19 is a key priority for facilities and buildings managers across the world – so how can you protect your employees, mitigate the risks and what are your responsibilities?

We now know that the virus that causes COVID-19 is more easily spread indoors than outdoors and therefore effective ventilation practices and measures provides a key part of minimising risk.

Improving the ventilation systems in your buildings

Whether you have existing ventilation systems in your building or not, you should always consult with qualified heating, ventilation and air conditioning (HVAC) professionals before making any upgrades or improvements – this will ensure the work is carried out to a professional standard and that the overall effectiveness of ventilation interventions are delivered.

There are a wide range of ventilation techniques that can reduce the viral particle concentrations in the air to mitigate risk and improve the effectiveness of any ventilation interventions you decide to use. Any upgrades and improvements to your existing ventilation systems can boost the flow of clean air whilst also diluting any contaminants.

Ventilation measures that can reduce the risk of viral particle concentration within your building:

The use of fans to increase the effectiveness of external air circulation

- Fan location is extremely important and will vary from room to room depending on their configuration. Fans must be positioned in a way that stops contaminated air travelling directly from person to person and this can be achieved by using a securely mounted window fan. This will bring fresh air from outside the room without creating strong room currents.
- Larger buildings and office spaces might also benefit from other fan systems such as gable fans and roof ventilators which can achieve similar outcomes.

At FMS we would advise you to check your ventilation systems to ensure they operate efficiently and that they provide acceptable indoor air quality for the current occupancy level for any given space.

Rebalance HVAC systems to increase overall airflow to occupied spaces

- When your premises are occupied, we would advise turning off any demand-controlled ventilation (DCV) controls that restrict air supply based on occupancy or temperature.

Improve air filtration

Increasing air flow when external air distribution options are limited is extremely beneficial and FMS can look at the current level of filtration and make recommendations based on existing and potential parameters. Over the years many buildings have reduced the size or grade of filters which can have an impact on the airflow being sent to the serviced rooms but this is something that is easy to correct.

- Check your air filters to make sure they are the right size and have a long service life
- Inspect the filter housing and frames to ensure an air-tight fit and reduce the amount of air that bypasses them
- Ensure toilet exhaust fans are functional and operating at full capacity
- Inspect and maintain exhaust ventilation systems in kitchens, cooking areas, and other spaces and operate these systems even when not occupied as this will improve overall ventilation within the building
- Use portable high-efficiency particulate air (HEPA) fan/filtration systems to enhance air cleaning (especially in higher risk areas such as Hospital clinical offices or areas frequently inhabited by staff with a higher likelihood of transmitting COVID-19 and/or an increased risk of getting COVID-19)
- Evaluate and reposition the supply louvres, exhaust air grilles, and/or damper settings as needed to provide clean-to-less-clean air flow
- When other options for enhancing room ventilation and filtration are limited, use ultraviolet germicidal irradiation (UVGI). In-duct UVGI systems can aid and improve air cleaning inside central ventilation systems and can be utilised to provide air cleaning within inhabited spaces.
- Run the HVAC system at maximum outside airflow for 2 hours before and after the building is occupied in non-residential situations

Increase the introduction of outdoor air

- Open windows and doors where possible to increase outdoor air flow (unless health and safety risks prevent this)
- To limit or remove HVAC air recirculation, open external air dampers beyond the minimal levels.

This has little effect on thermal comfort or humidity in mild weather, however in cold, hot, or humid conditions, this may be difficult to accomplish and so FMS would recommend using an expert HVAC technician.

It's important to note that while the above measures can help reduce risk, they can't completely eliminate it. The types of measures used will also change depending on the building type and the season – which is why it's important to use a professional as they can identify which tools are appropriate for each facility throughout the year.

Get in touch

FMS can help with all of your heating, ventilation and air conditioning needs, from system design and installation to maintenance and repair - our highly-skilled engineers are available 24/7.

Whether designing and installing a brand-new HVAC system or maintaining an existing one, we'll spend time with each individual client to ensure that their system is working as efficiently as possible.

To discuss any of the measures mentioned above or to arrange a free site visit where we can provide a bespoke proposal for your needs, simply contact us on **01908 034040** or email **info@fmsolutions.co.uk**