Managing COVID-19 concerns in air conditioning and ventilation systems

GHD is helping a range of businesses with their plans to return to work at their facilities.

We leverage the broad, technical experience of our international network of specialists to provide localised, evidence based advice.

With the majority of businesses looking to return to work over the coming months, we understand that a key concern is viral transmission inside buildings and through the Heating, Ventilation and Air Conditioning (HVAC) systems.

Our approach to mitigating such concerns is focused on supporting the health and well-being of the individual by maintaining high quality indoor air environments that are comfortable, productive and reduce the risk of infection exposure as far as practicable.

Approaches that can be considered to achieve this include:

- Increasing outdoor air ventilation flow rates to dilute air borne contaminates and pathogens
- Introduction of purge cycles
- Use of high efficiency filtration systems in air streams
- UV disinfection of air streams
- Active humidity control – Current literature indicates that room humidity can have an impact on the survival and transmission of COVID-19
- Diligent and robust maintenance of the systems, controls and filtration
- The use of appropriate PPE during maintenance
- Automatic, smart monitoring and control of HVAC systems
- Laminar flow ventilation by means such as displacement ventilation

Through our global network of HVAC professionals, we can assist you to understand how your buildings’ HVAC systems are configured and operating. We can advise on how existing systems can be modified to reduce the risks of airborne infection exposure.
GHD’s Offer

GHD can review the configuration, operation and performance of a building’s HVAC system with an emphasis on reducing the risk of airborne pathogen exposure including:

- Assessing the condition, configuration and performance of HVAC systems
- Advising on suitability of implementing additional control and monitoring strategies into an existing HVAC system
- Assessing and advising on energy efficiency to changes in system operation
- Providing advice on optimisation of existing HVAC system performance
- HVAC system upgrades and refurbishment
- HVAC system maintenance

We can also provide specialist advice for health and aged care facilities.

Our HVAC teams are well placed to meet the challenges facing industry and the return to work. We are up to date on published research and industry advice on transmission methods and mitigation strategies for COVID-19 and other contaminants. Utilising our extensive experience, we can advise on appropriate measures that can be implemented in your existing facility whilst considering operational performance and energy efficiency.

Contact

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