



During the COVID-19 period A.G. Coombs has taken a leading role in the Australian HVAC industry in providing technical services to support the development and operation of facilities to help meet the challenges posed by the pandemic and aerosol transmission of the SARS-CoV-2 virus.

The organisation has extensive expertise and longstanding experience in the design and construction of high-risk containment facilities and critical infrastructure, and in supporting their effective and low risk operation.

A.G. Coombs expertise includes engineering, modelling, design, consulting and advice, testing and balancing, HVAC design, installation and maintenance, Facility Management and operation.

## **Targeted Outcomes**

HVAC system COVID-19 assessment and recommendations.

System performance verification and recommissioning.

Air purification technology assessments

System upgrades and project management.

Air quality control, monitoring and reporting including  $\ensuremath{\text{CO}}_2.$ 

Assessment of energy, asset operational and maintenance Impacts.

Servicing and Maintenance including filter changes and coil cleaning.

## **Market Sectors**

Commercial & Retail

Healthcare

Pharmaceutical & Controlled Environments

Arts, Recreation & Sport

Industrial

Education

Telecommunications & Data Centres

Residential

Transport & Infrastructure

Government & Defence

Finance

## **Services**

- HVAC system risk and improvement assessments; including desktop documentation reviews, site inspections and measurement of system performance, and quantitative risk calculations (Wells-Riley method) to determine current levels of system effectiveness, and the options and potential for improvement to further mitigate COVID-19 aerosol transmission
- Assessment of building design and operation against best practice industry and government guidelines mitigate COVID-19 aerosol transmission.
- Development and detailed design of HVAC related COVID-19 mitigation upgrades, including improvement of ventilation rates, airflows, outside air rates, filtration, humidity control and application of air purification and disinfection technologies.
- Assessment of air purification and disinfection technologies, installation options and estimation of relative improvements to risk and cost benefit analysis.
- HVAC System testing, adjusting, balancing and re-commissioning of plant and equipment to improve performance and mitigation of COVID-19 aerosol transmission
- + Review and enhancement of Building Management and Controls Systems (BMCS) with a focus on monitoring and ongoing reporting and communication of air quality and improvements in control of systems associated with mitigating COVID-19 aerosol transmission.

- Security and access control system design and consulting incorporating touchless technologies, and occupancy management and control including people counting, biometrics and CCTV analytics.
- Assessment of energy usage, asset operational and maintenance impacts associated with implementing COVID-19 mitigation strategies.
- Project Management and the supply and installation of HVAC systems and modification of existing systems to mitigate the transmission risk of COVID-19 within buildings.
- Development and implementation of HVAC servicing and maintenance measures to support the effective operation and performance of HVAC systems in mitigating COVID-19 aerosol transmission.
- Development of operational guides and ongoing monitoring, reporting and communication regimes.
- + Provision of communications materials for building occupants to assist with providing an appropriate understanding of COVID-19 aerosol transmission and confidence in the technical measures undertaken to mitigate its transmission.





