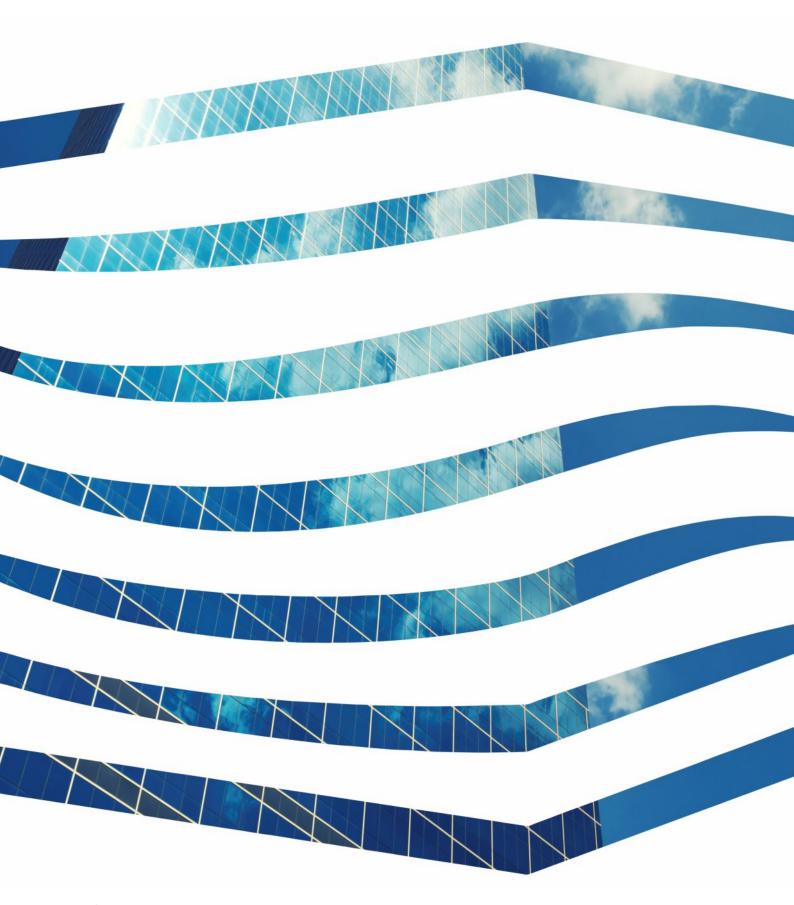
## CAPABILITY STATEMENT







Proudly designing, constructing, integrating and maintaining HVAC systems across Australia since 2001.

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## WELCOME TO AIRCONSTRUCT IEQ

#### Profile

Airconstruct IEQ has successfully designed and delivered in excess of \$60M in HVAC projects with measurable results for over 20 years. We carry out equipment installations, which are often in complex environments and create targeted maintenance strategies across the commercial, infrastructure, mining and government sectors. Our portfolio of projects is primarily with long term clients, which speaks volumes about our focus on excellence and ability to meet client needs. Our expertise in Indoor Air Quality has continually matured as part of core business since 2008, giving you confidence that IAQ has been at the forefront of our minds long before the challenges of COVID arrived on our shores.

#### Vision

Our vision is to be recognised as your HVAC contractor of choice. We want you, the decision maker, to have absolute comfort in knowing we can apply our knowledge, skills and processes to your specific needs, and to develop the solution that is right for your situation.

To achieve this we know we must genuinely listen and then act in accordance with our vision and core values.

### Core Values

Airconstruct IEQ is built on 5 core values that you will find on display each time we engage with our clients, staff and suppliers.



#### SAFETY

It's everyone's responsibility to make safety the No.1 priority



#### PROFESSIONALISM

We execute with confidence, skill and proudly hold ourselves to the highest standards



#### SUSTAINABILITY

We harness innovation and challenge assumptions to deliver sustainable results for our clients and ourselves



#### **ACCOUNTABILITY**

When we commit, we deliver with integrity, respect and with transparent communication



#### **TEAMWORK**

Team unity leads to incredible achievements for staff and job satisfaction for everyone





## WHAT MAKES US DIFFERENT

We feel fortunate to be a company that people want to work for, who are proud to wear the shirt and share common goals. This allows us to get the best people for the job with the right technical skills, right attitude and right approach to service delivery. We are dedicated to building a team from diverse backgrounds that complement each other, creating opportunities for career growth and allowing individuals strengths to shine through. Whether that is through mentoring, formal or informal training or new additions to the team, we stay focused on building the expertise as a team.

Our director David Jones has drawn on over 36 years of industry experience and a plethora of qualifications to build a company with a solid reputation of excellence in service delivery and safety.

He has surrounded himself with talented long-term staff who hold complementary skills and qualifications, which in turn, has created a business that has become renowned for technical accuracy and a deep understanding of how to integrate technologies to provide high quality results. Our staff are encouraged to foster innovation and are empowered to make decisions and think on their feet, in order to maintain or accelerate momentum and resolve challenges for our clients.



David Dowes
Founder & Director





#### TARGETED MAINTENANCE

Reliability-centered maintenance, targeted to safeguard indoor air quality and equipment longevity.



#### **HVAC HYGIENE**

Sanitising and protecting your systems from mould and mycotoxins that pollute the air you breathe.



#### IAQ AUDITS

Full analysis, lab testing and reporting on contamination risks within your HVAC systems to drive exposure reductions.



#### **DESIGN**

Our QBCC Unlimited Design Airconditioning License allows us to provide perceptive systems designs that are RPEQ engineered to stand the test of time.



#### INSTALLATION

Experienced and qualified to install new or upgraded systems with minimal interruption to operations and your occupants.



#### **ASSET PROTECTION**

Coil corrosion defense from environmental factors, ensuring efficient operation and asset longevity.



### 24/7 MONITORING

Minimising running costs, detecting and managing C02 levels, and increasing ventilation rates through system automation.



#### RETROFITS

Blending new technology with older buildings or infrastructure through expert planning, to provide solutions that are seamless and operationally compatible.



#### **FLEXIBILITY**

Deployment from our Brisbane and Mackay facilities allows us to deliver projects in any Queensland location.

## **OUR CAPABILITIES**

Airconstruct IEQ specialise in the design, construction, integration and targeted maintenance of air conditioning and ventilation systems in the commercial, government, mining and infrastructure sectors across Queensland. Our team has delivered over \$60M in projects across the past 20 years in retail precincts, airports, hotels & resorts, health and community services, schools and executive residences.

We can give you peace of mind when you engage Airconstruct IEQ for any of the following:

- Targeted strategies for compliance, maintenance and energy optimisation of all leading manufactured equipment including Temperzone, Actron Air, Sigma, Samsung, Fujitsu, Mitsubishi Electric and Toshiba.
- ✓ Installation and care of chilled water systems, including process cooling equipment and computer room air conditioning.
- ✓ Service and maintenance on leading brand plant air dryers such as Champion, Boreas, Frigomatic and Donaldson.
- Service and maintenance to amenity refrigeration equipment including Manitowoc and Hoshizaki ice makers, Orford, Williams and Skope upright fridges, custom built cool rooms, Zip and Billi under bench heat/cool units.
- ✓ Electrical automation and fault detection systems backed-up with remote monitoring and desktop support via BACnet or 5G network.
- ✓ Analysis of equipment to measure filtration effectiveness and determine if upgrades can be achieved without performance degradation to provide a better working environment.
- ✓ And much, much more ...

We know we are at our best when we are working for clients who need our out-of-the-box thinking to create simple solutions to what some of our competitors may see as complex requests. With facilities in Brisbane and Mackay, we can deploy teams to deliver projects seamlessly in any Queensland location.





## INTEGRATED MANAGEMENT SYSTEM

In line with our core values, there is no room for complacency when it comes to how we interact with our clients and the environment. Integral to our success is our Integrated Management System that was first accredited in 2013. Our IMS has matured through the process of continuous improvement into a tried-and-true, robust system that is supported by ongoing training and professional development around these vital business elements.

## Health & Safety ISO 45001

Our safety systems have been tested against some of the largest and most stringent safety requirements for clients in all market sectors. We can proudly say that we have never been issued a non-compliance or improvement notice, had a critical incident or had our reputation questioned when providing evidence of our safety protocols, including any scrutiny by the various industry bodies or regulators. As we are often engaged to work in public or sensitive places our staff hold Queensland Police Security and Working with Children clearances. A blend of online tools, paper-based processes and ongoing rigorous face to face safety training are embedded in everything we do. No ifs, no buts; we will never sacrifice safety for commercial gain.

## **Environment ISO 14001**

As we commence any project, environmental impacts are considered, focusing on not only air quality, pollutants and chemical impacts on people, the land and wildlife, but also the sustainability of what we are delivering for you.

As part of our IMS system, government approvals are obtained by our team when there is any potential impact on protections under The Environment Protection and Biodiversity Conservation Act (1999) that cannot be avoided. This includes national heritage properties.

## Quality ISO 9001

Quality products and services are fundamental to the success of our company, holding true to our culture, and more importantly, being accountable for the outcomes we deliver to our clients. We are resolute in also holding our suppliers' products up to these high standards. This includes the use of consumables designed to improve indoor air quality that may inadvertently affect equipment longevity.





## INNOVATION & THE FUTURE

## Educating the HVAC industry

The knowledge gaps in the HVAC industry are something that has been of concern to industry bodies and key stakeholders for some time. The Airconstruct IEQ team have been helping clients with indoor air quality audits for over ten years, which has highlighted the need to help educate and strengthen the industry through the development of a ASQA recognised Cert II in Air Hygiene. This new qualification will provide career pathways to the new generation of HVAC technicians and growth for associated businesses to ensure the air we breathe when indoors is safe.

## Technology advances

We have been working with the CSIRO Energy Centre in Newcastle NSW since 2016, developing a fault detection and diagnostics algorithm which can detect faults in HVAC systems. This research has primarily been focused on filter degradation so we can determine when the air conditioning unit actually needs servicing, rather than the current schedule-based approach, or worse, when equipment breaks down. The aim of this technology is to substantially reduce maintenance costs, energy and water use.

Our fault detection technology was accepted into the METS RISE program in 2019 where our Director David Jones collected the Best Emerging Technology Award for the work undertaken with CSIRO. This was a huge step in the right direction for the industry as we find more advanced solutions for air hygiene management.

## Social Responsibility

Further testament to our commitment to the future, is our support for community groups and grassroots charitable causes where there is a focus on sustainable outcomes. Airconstruct IEQ has been making contributions to a range of NFP's for over 20 years where the concept of the future is central to what they do.



We are committed to complete every project in full, on time and within budget while maintaining work practices that will deliver our goal of "zero harm".

PROJECT TYPE

Installation and HVAC Hygiene

CLIENT

**Aurizon Holdings** 

PROBLEM

During the planning process prior to commencing the project, the client requested we assess the ductwork although it had not been included in the awarded tender.

SOLUTION

We replaced the existing chiller with a Hitachi 150KW air-cooled chiller prior to undertaking the air hygiene work. We found the duct work was contaminated with microbial growth and consequently had to re-line the air handling unit.

**CHALLENGES** 

Additional Airhygienists had to be put on the project within a very tight timeframe to get this unplanned work completed. The initial projects delivery timeline was still achieved.

**VALUE** 

\$200K

PROJECT TYPE

Design and Construct

**CLIENT** 

**Hamilton Island Enterprises** 

**PROBLEM** 

Ducted aircon systems were required in the new executive bungalow residences and resort apartments being built.

SOLUTION

Airconstruct supplied and installed 42 Daikin ducted systems to 6 Star bungalows and 108 Daikin ducted systems to 18 x 3 bedroom apartments.

**CHALLENGES** 

Remote logistics meant that planning had to be precise and thorough. We were often working on difficult terrain that at times required some 'out-of-the-box' problem solving to avoid delays to the construction plan.

**VALUE** 

\$480K

PROJECT TYPE

Service & Maintenance

CLIENT

BMA since 2004

CONTRACT

Ongoing monthly maintenance of air-conditioning, computer and data centre cooling assets and HVAC Hygiene across various BMA sites including Caval Ridge, Goonyella Riverside, Peak Downs and Saraji Mines.

**SERVICES** 

Our record of service excellence has been integral in building long-standing relationships with decision makers across the BMA group. This has in turn led to increased opportunities to assist BMA with a range of HVAC services. We currently have technicians permanently engaged at some sites providing planned and unplanned maintenance. In addition to this we have teams on-call and available for the client when required. Work often involves rapid response/stand by arrangements due the commercial risks around system failures.

**CHALLENGES** 

By nature, mining operations are remote which presents logistical challenges as well as complex layers of safety systems to adhere to.

VALUE \$35M and ongoing 14

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PROJECT TYPE

**HVAC** Hygiene

CLIENT

Queensland Dept of Justice & Attorney General (DJAG)

PROBLEM

Six courthouses (Southport, Beenleigh, Caloundra, Gympie, Sandgate and Cleveland) had significant contamination issues but also had budgetary restraints to consider.

SOLUTION

DJAG engaged less skilled contract labour supported by Airconstruct's expertise for supervision, sampling and audits. DJAG were able to save substantial money yet still had the right expertise leading the project. We supervised the duct cleaning contractors and then audited the results. We undertook thorough pre/post remediation swab analysis as part of the audit inspections for third party verification.

**CHALLENGES** 

The project not only required labour supervision, but also mentoring the workers who were unfamiliar with this scale of work and needed close guidance. This project led to future work with DJAG at other facilities.

**VALUE** 

\$80K

PROJECT TYPE

Chiller Replacement & BMS Upgrade

CLIENT

**Gympie Magistrates and District Courthouses** 

PROBLEM

Needed to upgrade BMS without disrupting court proceedings or causing risks to the public or those detained awaiting trial.

SOLUTION

Replaced 185KW Chiller and Fan Coil Units, upgraded existing mechanical electrical systems, chiller mains supply, and installed new Innotech BMS across both buildings.

**CHALLENGES** 

This project involved close coordination with the court registrar to minimise the shutdown activities hindering court proceedings, or cause any confidentiality breaches or security risks. Legislated environmental protection considerations due to Heritage Building requirements also increased project complexity.

**VALUE** 

\$300K

PROJECT TYPE

Computer Room Installations

CLIENT PROBLEM **DJAG - Brisbane Magistrates Court** 

Commercial stakes were high as the entire project had to be conducted in a live data centre environment that Queensland's 92 courthouses rely on for all IT operations.

SOLUTION

Our history with DJAG made us stand out from our competitors. We undertook a well-orchestrated staged removal of 5 old Vertiv Emerson CRAC units while using cryogenic pipe freezing processes along with constant temperature monitoring.

**CHALLENGES** 

To resolve the clients concerns about safeguarding their sensitive live data, we worked closely with their IT Principal to ensure courthouse IT, Voice and CCTV systems remained operational and uninterrupted at every stage of equipment removal and replacement. Part of the process also required carrying out vital repairs to flooring under the units to take them up to an acceptable standard.



VALUE \$225K

15

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PROJECT TYPE

**HVAC** Hygiene

CLIENT

Queensland Health, Mt Isa Hospital

PROBLEM

Required HVAC hygiene services inside sensitive palliative care and infectious diseases wards.

SOLUTION

Designed and implemented a HVAC hygiene program that maintained patient and medical staff safety during the project.

CHALLENGES

It was imperative that we had a thorough understanding of compartment pressurization and outside air purge strategies to ensure the hospital could remain operational while duct cleaning work was undertaken.

**VALUE** 

\$68K

PROJECT TYPE

Installation & HVAC Hygiene

CLIENT

Whitsundays Community Health Centre

PROBLEM

Equipment was at end of life and required replacement. While undertaking the replacement project, indoor air quality issues were evident and consequently reported to the client.

SOLUTION

Installation work was awarded through an open tender process for the replacement of existing HVAC equipment. As a result of the air quality issues we found, we were asked to also complete HVAC hygiene works to ensure the viability of the new equipment would not be compromised and that their staff and visitors would be safe.

**CHALLENGES** 

Works needed to be conducted inside an operational community health facility without any disruption to patients and staff or any equipment being offline. Privacy and confidentiality were also a high priority for this client due to the sensitive nature of the work they do. This had to be taken into consideration when coordinating manpower for the project.

**VALUE** 

\$90K

PROJECT TYPE

Design and Construct

CLIENT

North Queensland Airports (Mackay)

PROBLEM

Equipment was at end of life and required replacement. Duct work longevity was decreased due to environment factors.

SOLUTION

Designed and installed 13 Temperzone high efficiency package units and a new BMS, replaced mechanical switchboards and all external duct work. Once installed, we completed corrosion treatment for the package units and air balancing in the terminal and office areas. To solve their duct issues, we replaced it with stainless steel duct which is more resilient to an airport environment. Project was completed on time with only minor extensions required due to unexpected latent building defects.

**CHALLENGES** 

Project was very complex due to extremely rigid security and documentation requirements, in addition to that there were limited opportunities for crane lifts as we had to work around flight schedules.

**VALUE** 

\$1.2M



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PROJECT TYPE

State Government Design and Construct

**CLIENT** 

**Longreach School of Distance Education** 

**PROBLEM** 

Required to demolish systems at end of life.

SOLUTION

Replacement of HVAC systems with more efficient equipment totalling 300KW.

**CHALLENGES** 

To avoid interruption to the School of the Air, we had an extremely tight two week time frame to complete the project during school holidays.

**VALUE** 

\$315K



Local Government Design and Construct

**CLIENT** 

**Mackay Entertainment & Convention Centre** 

**PROBLEM** 

Upgrade all HVAC plant and equipment in Mackay's leading entertainment venue.

SOLUTION

Full design responsibility to replace 11 x air handling units (16 to 150KW), new condenser water and chilled water pumps and cooling tower (incl. 800KW Smardt Powerpax Chiller). Upgraded all mechanical services inside of seven weeks, achieving practical completion eight weeks ahead of schedule.



Original system was installed during initial building construction, creating project challenges from a building and HVAC perspective as substantial penetrations were required in the building envelope as well as intricate logistics. HVAC Hygiene issues became evident during the project and resulted in remediation work being carried out during the project.

**VALUE** 

\$1.1M

PROJECT TYPE

Rectification of Defective Works

**CLIENT** 

**Anytime Fitness** 

PROBLEM

Replacement of ducted air conditioning system which was not fit for purpose.

SOLUTION

Rectification of poor design by an unlicensed contractor resulting in the removal of the entire ceiling to undertake the work.

**CHALLENGES** 

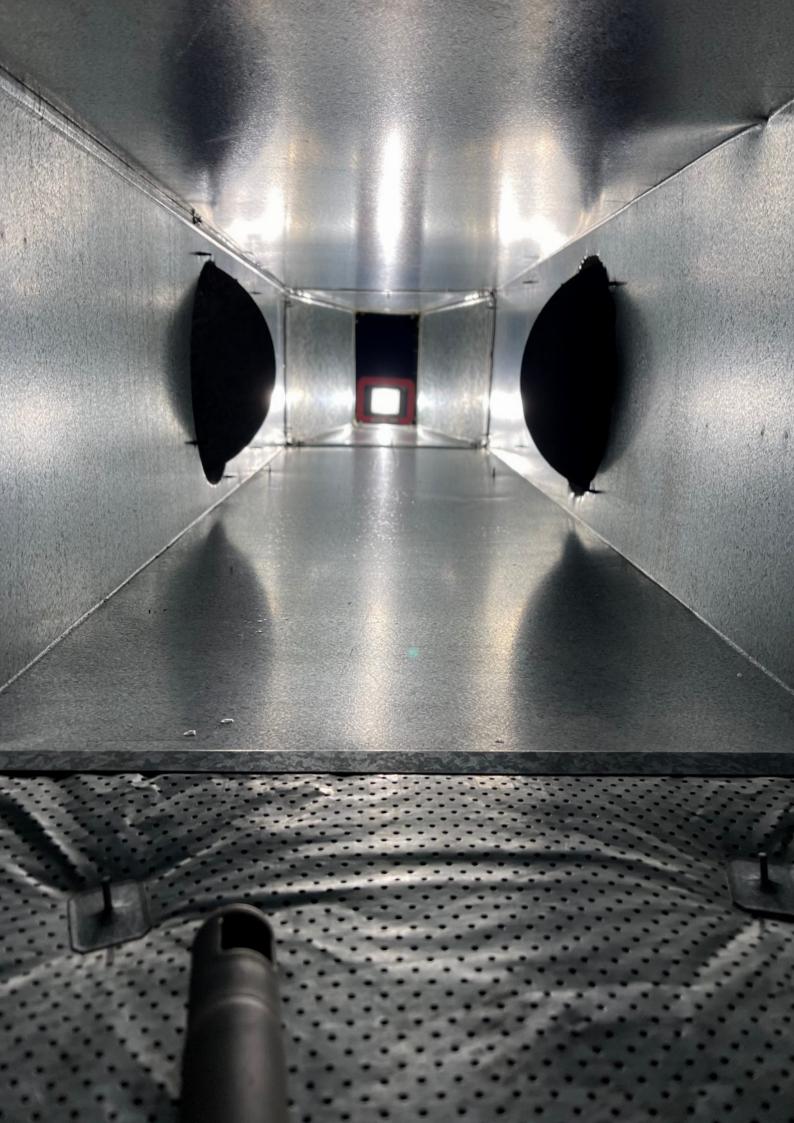
Due to their members using the facility 24/7, the safety risks associated with conducting the work while people were using the facility were too high and unfortunately required the gym to close for the works to be completed. We did this over their quietest two days to reduce the commercial impact on the business and the least disruption to their members. The project was finished before schedule so their members could get back in sooner than expected.







VALUE \$56K 17



# AHVAC LICENCES, CERTIFICATION, & ASSOCIATIONS

## Licences



QBCC Airconditioning Unlimited Design Contractor Licence #1034787



Arctick Refrigeration Handling Licence #AU04509



Qld Electrical Contractor Licence #82764



Q Build Registration #874677



ABN #36 097 396 417



Qld Govt PQC Registration Rating Level 2 #2129

## Licences & Clearances held by our team

- ✓ Cert III Airconditioning / Refrigeration Mechanic
- ✓ Cert III Electrical Fitter / Mechanic
- ✓ Cert IV Workplace Health & Safety
- ✓ Cert II Air Hygienist
- ✓ Drivers licence up to HR
- ✓ Qld Police Clearances

- ✓ Cert III Electrotechnology
- ✓ Cert III Telecommunications
- ✓ QBCC Mechanical Services Occupational & Supervisory Licences
- ✓ NADCA Air Systems
  Cleaning Specialist
- ✓ Elevated Work Platform High Risk Work licence

- ✓ GSES Design & Installation Accreditation
- Clean Energy Council Accredited Installer
- ✓ Construction White Card
- ✓ Working at Heights
- ✓ Confined Spaces
- ✓ Working with 
  Children Clearances

AS/NZS ISO 9001: 2015 Quality Management Systems

AS/NZS ISO 45001: 2018 Occupational Health And Safety Management Systems

AS/NZS ISO 14001: 2015 Environmental Management Systems

## Associations & Memberships



Facilities Management Association (FMA)



Velg Training Pty Ltd



Institute of Managers and Leaders (IML) (Previously AIM)



Restoration Industry Association (RIA)



Australian Institute of Refrigeration, Air Conditioning & Heating (AIRAH)



Australian Institute of Company Directors (AICD)



International Sanitary Supply Association (ISSA)



Indoor Air Quality Association (IAQA)



Clean Energy Council



#### Brisbane + Mackay + Clermont

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