FANQUIP

Summer Solutions Catalogue

Industrial ventilation and cooling fans.



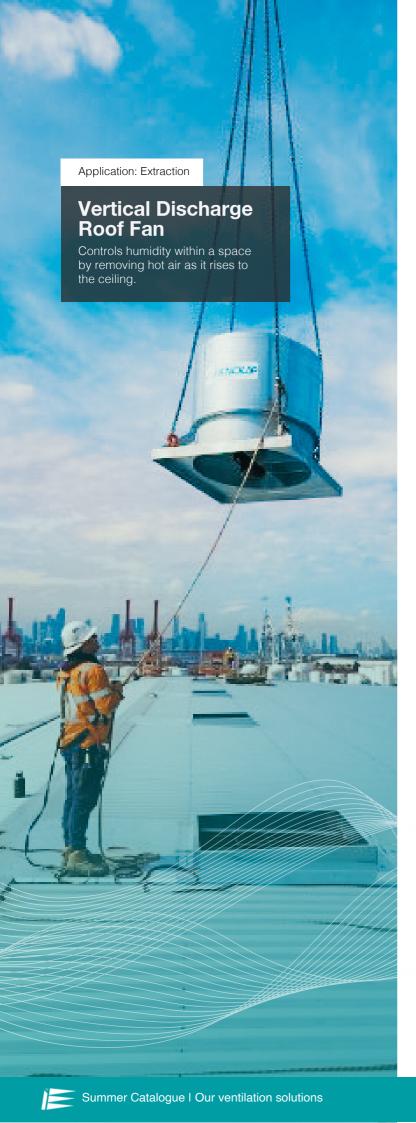


Table of **Contents**

02

About us.

Since the 1980s, Fanquip have provided solutions to ventilation and airflow problems within industrial and commercial workplaces.

03

Summer ventilation in industrial workspace.

Discover SafeWork recommendations for industrial workplace airflow and temperature supported by key measures that mechanical ventilation can provide.

05

Summer ventilation solutions.

Mancoolers, Giant Fans, Roof Fans, Air Circulators, Wall Exhaust fans, Transformer Cooling Fans.

16

Selecting mechanical ventilation solution for summer.

A guide to help you understand your requirements and choices suited to your budget.

17

Installation and maintenance.

Indications that your fan requires assessment and post-installation services Fanquip provide.

About us.

For 40 years, Fanquip have been at the forefront of innovative solutions for industrial commercial applications. With our extensive expertise in designing, manufacturing, and supplying ventilation systems, we are dedicated to meeting the needs of air quality-conscious industries. Our diverse range of fan systems, which includes supply and extraction fans, cooling and heat control fans, and filtration fans, are specifically designed to effectively eliminate hazardous fumes, dusts, and gases that are commonly generated in various industrial operations and to ensure safe and comfortable working environment for the employees.

At Fanguip, we improve the safety and well-being of our customers by ensuring regulatory compliance and minimising operational downtime. Our ventilation systems are designed to meet and exceed industry standards, providing reliable and efficient solutions for air quality control.

For 40 years, we have successfully helped customers Australia-wide in these industries, providing tailored solutions to meet their specific needs:

- Agriculture
- · Building and construction
- · Food processing and production
- · Commercial laundry
- Manufacturing
- · Mining and metals
- · Oil & gas
- Retail
- · Smelters and refineries
- Warehouse

We possess the knowledge and proficiency needed to address any ventilation-related issues across various industries, particularly during summer months:

- · High temperatures and temperature regulation
- Poor air quality
- · Smoke, odours and gas control
- Stagnant air
- Humidity control
- · Compliance with regulations
- · Equipment maintenance and product preservation
- Worker productivity
- Noise control





Understanding the need for summer ventilation in Industrial workspaces.

Industrial workspaces can become excessively hot in the summer, affecting people's productivity and performance. To mitigate risks, ensure good ventilation and maintain optimal temperature, airflow, and humidity.

What are the recommendations?

SafeWork (safework.nsw.gov.au) recommends:

- · An optimal temperature range of 20-26 degrees for sedentary work, and lower temperatures for physical activity.
- · Air velocity (air flow) should be 0.1-0.2m/s to prevent stagnant air and fatigue.
- Humidity levels should be between 40% & 70%.

By maintaining these thresholds, safety, health, productivity, and human performance can be optimised.

Why is summer ventilation important?

Poor ventilation, particularly in the warmer summer months, can play a huge role in the health of both your workplace and workers. Overheating and excess humidity can hinder performance of machinery and employees, resulting in higher burnout, turnover, and reduced profits.

Heat Management

Industrial operations, machinery, and equipment produce a substantial amount of heat, which can become overwhelming during the summer months, resulting in dangerously high temperatures that pose a threat to the well-being of workers. Prolonged exposure to elevated temperatures can lead to heat stress among employees, as their bodies struggle to release excess heat, resulting in an increase in core temperature and heart rate. Employers are responsible for providing adequate cooling and hydration measures to prevent heat stress in their workers.

Key Facts

- ✓ Workplaces in summer can reach as high as 30 degrees Celcius.
- It takes someone 1 or 2 hours to overheat.
- It's estimated that hot workplaces cost Australian workplaces \$7.92bn each year.

Air quality control and regulation compliance

Industrial processes can release harmful substances, including fumes, dust particles, and hazardous chemicals. Employees within industries such as manufacturing, vehicle repair shops, bakeries, warehouses, or workshops are particularly vulnerable to the potentially harmful effects of these contaminants. Industrial sectors are bound by stringent regulations and standards pertaining to indoor air quality, temperature control, and worker safety. Therefore, ensuring proper ventilation becomes paramount to comply with these regulations and guarantee a secure workplace.

(i) Key Facts

Safe Work Australia sets workplace exposure standards for particulate matter and airborne contaminants applicable to all workplaces and are not limited to any specific industry or operation.

Preventing stagnant air and humidity

Stagnant air pockets can form in expansive industrial areas, leading to uneven airflow and compromised ventilation. Breathing in stagnant or stale air can cause skin irritations, headaches, and fatigue, which is particularly concerning for employees with underlying health conditions like asthma, allergies, or respiratory problems.

To combat this issue, a ventilation system should be installed to extract hot air, keeping the space cool, clean, and comfortable. Besides, the air exchange and circulation can help to dilute indoor humidity levels.

(i) Key Facts

- Breathing in stale air can cause skin irritation, headaches, and fatigue.
- According to the Environmental Protection Agencies recommendations, healthy indoor humidity levels are between 30-50%.

Equipment installation and performance

Various types of industrial equipment, electronics, and machinery are particularly sensitive to elevated temperatures. Operating or installing equipment in extreme heat can result in overheating, diminished performance, malfunctions, breakdowns, and costly repairs. Therefore, it is imperative to guarantee that equipment can operate safely and efficiently within specified temperature ranges.

(i) Key Facts

Extreme heat can push materials and equipment beyond their temperature thresholds.





Summer ventilation solutions.

Keep productivity up and worker stress down with Fanquip's range of cooling solutions. Misting mancoolers, fans and more.





The Fanquip Mancooler Fan is a high-performance axial fan specially designed to offer efficient cooling in industrial environments. Whether it's maintaining the comfort of employees during their work or effectively dissipating heat from equipment, this fan is the perfect solution. Its unique airflow control allows for targeted cooling in even the most confined spaces, while also effectively extracting contaminants like dust, steam, or explosive gases. Australian-made, the Mancooler Fan is available in both wall-mounted and ceiling-mounted models for convenient and permanent installation.

Mancoolers range

Our selection of Mancoolers is uniquely designed to offer extra heavy-duty longevity and durability, while the Mini Mancoolers are intended to provide a powerful rate of fresh air close to the heat source, Mobile Mancoolers are for those needing a more portable solution.

Accessories

Optional extras, such as hazardous location rating, ceiling, or mount application, and hydromisting kits for fast targeted cooling, further enhance their versatility and effectiveness.



Mobile Mancooler features

- · Premium powder-coated steel casing
- Inlet and outlet finger guards
- IP55 Motor
- · GRP adjustable pitch blades Isolating switch
- 5m lead & 3 pin plug (415V models exclude plug)
- · Adjustable discharge direction
- · Top mount lifting hook
- · Heavy-duty wheels for ease of handling



Mini Mancooler features

- · Premium powder-coated steel casing
- · Inlet and outlet finger guards
- · IP55 Motor
- · GRP adjustable pitch blades Isolating switch
- 5m lead & 3 pin 10ft plug (415V models exclude plug)
- · IP55 Motor
- · Adjustable discharge direction
- · Side mount carry handles



Fanquip's high-volume, low-speed Giant Fans are the ultimate solution for effective and ultra-low noise ventilation. They not only keep your facility cool during warmer months but also combat moisture, condensation, and unpleasant odors. By enhancing your existing HVAC system, these powerful fans help reduce energy consumption. Perfect for industries dealing with strong-scented materials or operating in large open spaces, Giant Fans are also ideal for large production workplaces, dispatch areas, processing sheds, and agricultural applications.

Features

- Can be used for summer cooling or winter heat destratification
- · High air volume for large area coverage
- Wall mount control box with variable speed control
- · Whisper quiet extremely low noise levels

Industries

- Agriculture
- Food Processing
- Laundry Services
- Manufacturing
- Warehouse





Roof Fans help to expel stifling hot air as it rises, allowing cool air to circulate, reducing humidity levels, and helping to maintain lower indoor temperatures. Fanquip offer completely weatherproof, easy-to-install roof exhaust or supply air fans to remove heat, steam, or dust in commercial and industrial applications. Cooling solutions such as industrial Giant Fans, Air Circulators, or HVAC systems can be used in conjunction with exhaust or roof fans to improve their overall effectiveness.

Roof fans range

Fanquip manufacture and supply three main types of industrial roof fans: Vertical Discharge, Curb Base Hooded and Profile Base Hooded, Filtered Roof Supply Fans.

Industries

- · Agriculture
- · Warehouse
- Building & Construction Factories
- Food Processing
- Hospitals
- Laundry Services
- · Office Buildings
- Manufacturing
- · Processing plants



Vertical discharge roof fans

Fanguip's Vertical Discharge Roof Fans are designed to effectively control humidity levels in any space. These fans are made in Australia, using hot-dipped galvanized steel construction for superior durability. With weatherproof butterfly dampers, these fans can withstand any environmental conditions when installed on a building's roof. By efficiently removing heat, dust, steam, smoke, and even harmful gases as they rise to the ceiling, these roof fans ensure a clean and comfortable environment for all.



- Vertical discharge of airflow
- Hot dip galvanised casing
- Butterfly damper to prevent rain ingress
- IP55 motor
- GRP adjustable pitch blades
- External junction box
- 700mm lead, no plug



Profile base hooded roof fans

Profile Based Hooded Roof Fans are an effective way to improve air quality, as they help to remove humidity, heat, and harmful pollutants from the air. Besides, this fan can cut installation time and costs by as much as 60%, as no flashings are required. Follow the simple installation process from Fanguip's installation guide; the fibreglass profile base is overlapped and underlapped from all sides, ensuring a seamless weatherproof finish, and removing the feed for upstands and flashings.

Features

- · Exhaust or Supply air versions available
- Fibreglass hood and base / Hot dip galvanised casing
- Profile base to match a wide range of roof profile
- · Simple installation no upstand or overflashings required
- · Birdmesh protection
- · Weatherproof design
- · IP55 motor
- · GRP adjustable pitch blades
- External junction box
- · 700mm lead, no plug



Curb base hooded roof fans

Fanquip's Curb Base Hooded Roof Fans discharge air out through the roof with a heavy-duty hood in place to stop rain ingress. Place strategically from the major openings of a warehouse, workshop, storage depot, processing plant or other large complex to create airflow over a large area before it is extracted. Made from fibrealass or hot dip galvanised steel, Fanquip's Hooded Roof Fans are heavy-duty and lightweight and can withstand the force of extreme weather conditions including erosion.

Features

- · Exhaust or supply air versions available
- Fibreglass hood/Hot dip galvanised casing
- Birdmesh protection
- IP55 motor
- GRP adjustable pitch blades
- · Weatherproof design
- External junction box
- · 700mm lead no plug

Filtered roof supply fan

The Fanquip Filtered Roof Supply Fans are heavy duty, weatherproof roof mounted axial fans designed for the supply of clean filtered air into commercial and industrial buildings. Well suited for buildings with tight or congested ceiling cavities where there is limited installation space for traditional filter boxes.

- · Weatherproof design
- · Hot dip galvanised casing
- · Powder coated hinged louvre doors
- · G4 grade replaceable filters
- · IP55 motor
- · GRP adjustable pitch blades
- · External junction box
- 700mm lead, no plug
- · Bottom spigot for duct connection





Fanquip's Air Circulation Fans provide critical air movement to create a workspace that is both comfortable and productive. These circulating fans are essential to many commercial working environments improving air quality, employee productivity and reducing perceived temperatures by evenly distributing cool air during summer and hot air during winter.

Air ciruclator range

Available in pedestal and wall mount units, and powder coated or stainless-steel construction, these hose-proof fans allow your personnel to carry out their daily activities in a comfortable and healthy working environment.

Industries

- · Agriculture
- Building & Construction
- Food Processing
- · Laundry Services
- Manufacturing
- Warehouse
- · Oil & Gas
- · Smelters & Refineries

Pedestal air circulators

Pedestal Air Circulators are among popular due to their portability, versatility, and durability. They play a crucial role in enhancing air circulation, creating a more comfortable and safer working environment for employees. With the ability to be utilized in multiple locations within a facility, these efficient devices save valuable time, energy, and money.

- · Australian made
- · GRP adjustable pitch blades
- Stainless steel or powder-coated steel construction
- · Washdown duty/hose proof
- · IP56 rating
- Fixed head design tilt & height adjustable
- IP56 motor (240V), IP55 motor (415V), IP69 (415V stainless steel)
- · GRP adjustable pitch blades
- 5m lead & 3 pin 10A plug (240V models) 5m lead, no plug (415V models)







Wall mount air circulators

Compared to pedestal fans, Wall Mount Air Circulators offer the same cooling and airflow benefits while taking up minimal floor space. They are a cost-effective and energy-efficient solution for improving air quality and cooling in industrial environments. With their ease of installation, adjustable settings and wide area coverage, Wall Mount Air Circulators are an effective and practical option for many types of businesses.

Features

- · Australian made
- · Stainless steel or powder-coated steel construction
- Washdown duty/hose proof
- IP56 rating Fixed head design tilt & height adjustable
- IP56 motor (240V), IP55 motor (415V), IP69 motor (415V stainless steel)
- · GRP adjustable pitch blades
- 5m lead & 3 pin 10A plug (240V models)
- 5m lead, no plug (415V models)

Utility air circulators

Fanquip's Utility Air Circulators provide maximum air movement, comfortable conditions and a cooler, fresher environment. Power consumption and associated installation costs are kept to a minimum, due to the turnkey design, which incorporates handles to enable the air circulator to be suspended using chains or cables.

- · Galvanised steel casing
- · GRP adjustable pitch blades Inlet and outlet finger guards
- IP55 Motor
- · Lead and 3 pin plug (plug supplied on 240V model only)
- · Lightweight for fast and easy installation
- · Side mount hanging handles





The Fanquip Air Curtains are a heavy duty direct-drive fans designed to provide a high-speed curtain of air in front of doorways and entrances, to block out dust, odours and insect entry. Additionally, air curtains act as a reliable thermal barrier, preventing the escape of cold air from buildings and reducing energy costs associated with HVAC or refrigeration cooling systems. These units meet critical AQIS standards ensuring compliance with the strictest requirements in industries such as food and meat processing. Guaranteed to produce the required 8 metres per second air velocity at 900mm above floor level.

Features

- · Australian made
- · High air velocity
- Meets AQIS requirements of 8 metres/seconds at 900mm above floor level
- · Stainless steel construction
- · Washdown duty/hose proof
- · IP56 rated
- 2m lead & 3 pin 10A plug (240V models)
- · 3m lead, no plug (415V models

Industries

- Agriculture
- · Cold Storage
- · Food & Meat Processing
- Manufacturing
- · Mining & Metals
- Pharmaceutical





Exhaust fans play a crucial role in maintaining clean air, allowing for the extraction of contaminants and pollutants that may otherwise affect one's health. Exhaust fans can efficiently capture these hazardous particles from the air, preventing them from entering our spaces, allowing workers to work comfortably indoors without the fear of inhaling toxins and perform better in their roles. Moreover, exhaust fans are particularly invaluable in industries such as food processing as they efficiently reduce excess moisture in enclosed spaces. By expelling stagnant air and replacing it with fresh outdoor air, these fans significantly reduce the risk of fungal growth and other moisture-related hazards, enhancing the overall air quality within the building.

Industries

- Agriculture
- Building & Construction
- Food Processing
- · Laundry Services
- Manufacturing
- Mining and Metals
- · Smelters & Refineries
- · Warehouse & Factories

Wall plate exhaust fans

The Fanquip Wall Plate Exhaust Fans are very versatile in their numerous and varied applications as exhaust or supply air fans. Designed to operate in wide-ranging climatic conditions, they can remove heat, steam, and dust from any environment.

- · Premium powder-coated steel casing
- · Inlet and outlet finger guards
- · IP55 Motor
- · GRP adjustable pitch blades
- 2m lead with 3 pin IOA plug (240 models only)
- 3m lead with no plug (415V models only)







Side wall exhaust fans

With their robust weatherproof design and durable galvanized construction, Fanquip's Side Wall Exhaust Fans excel at removing significant amounts of heat, steam, or dust from industrial or agricultural facilities.

Features

- · Hot dip galvanised casing / galvanised housing
- · Aluminium gravity closing damper
- · Inlet finger guard
- · IP55 motor
- · GRP adjustable pitch blades
- 2m lead & 3 pin 10A plug (240V models)
- 3m lead, no plug (415V models)

End wall exhaust fans

Fanquip's End Wall Exhaust Fans are specifically designed to provide efficient ventilation for large buildings or warehouses. These fans are not only low noise and belt driven, but also feature a unique gravity closing louvre for added external weather protection.

- · Galvanised casing
- · Galvanised gravity closing damper
- · Inlet finger guard
- · IP55 motor
- · Stainless steel fixed blades





Transformer Cooling Fans are an efficient and reliable cooling solution that is critical for the safe and efficient operation of transformers in industrial and commercial settings. With their minimal maintenance requirements and numerous safety benefits, investing in transformer cooling fans is necessary for any electrical system. Particularly for oil-cooled transformers, these fans work to eliminate excess heat by maximizing airflow over the cooling fins. By regulating the temperature, Transformer Cooling Fans effectively prevent overheating and significantly extend the lifespan of your valuable equipment.

Features

- · Australian made to suit
- · Australian conditions
- · Continuously rated
- · Hot dip galvanised casing
- IP56 motor
- · GRP adjustable pitch blades

Industries

- · Building & Construction
- OEM Manufacturing
- · Mining & Metals
- · Smelters & Refineries
- Power Stations





Selecting the right mechanical ventilation solution for summer.

At Fanquip, we begin our process by arranging a discovery meeting to fully understand your specific system requirements, the layout of your facilities, any existing solutions, and their capabilities, as well as any additional concerns you may have.

Once we have thoroughly discussed your needs, our team of skilled design engineers will create a personalised solution tailored to your short-term and long-term objectives. We carefully select products for your system based on your budget and goals, ensuring a seamless integration that delivers optimal performance levels.

Your custom design will include detailed drawings, a comprehensive list of recommended products, and a clear plan for how they will be interconnected. We firmly believe that the most effective solutions are those that are custom-designed to meet your individual requirements.

Once your system design is finalised, we will conduct a thorough review of pricing, capabilities, return on investment (ROI), and make any necessary adjustments. We are more than happy to accommodate any requested modifications, providing you with a final design that awaits your approval.



Installation and Maintenance

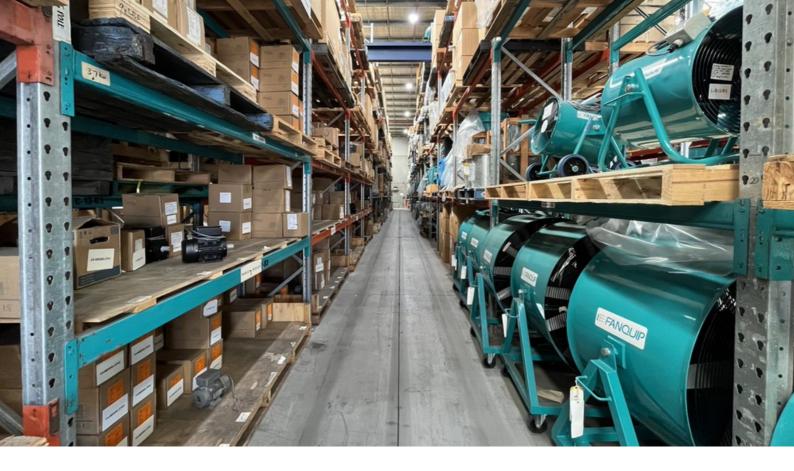
Regular maintenance and assessments are crucial to ensure they operate efficiently and safely. Here are some indications that your industrial fan may require assessment and repair:

- Unusual sounds or vibrations If you detect peculiar noises or vibrations emanating from your fan during operation, it could be a sign that the fan belt or components need to be replaced.
- Reduced performance If you observe a significant decrease in your fan's efficiency, it may need repairs to restore its optimal functioning.
- Overheating Inadequate cooling or motor malfunctions can lead to further damage and potentially cause your fan to overheat. It is crucial to have your fan checked by a professional promptly if it is experiencing overheating issues.

At Fanquip, we offer a comprehensive repair and overhaul service for fans, impellers, motors, and related products. Our goal is to minimise downtime and ensure long-lasting performance for your equipment. Our range of services includes:

- Repairs for fan casings
- Repairs or replacements for impellers
- Repairs or replacements for motors
- Blasting, painting, and powder coating services
- Crack testing
- Impeller static and dynamic balancing
- Airflow testing





Resources

- https://www.theguardian.com/business/2015/may/05/heatwaves-impact-on-workplaces-costing-australia-792bn-a-year
- https://www.seattlechildrens.org/conditions/a-z/heat-exposure-and-reactions/
- https://www.safeworkers.co.uk/equipment-environment/safe-working-temperatures/
- · https://www.fanquip.com.au/news/summer-solution/signs-of-heat-stress-in-warehouse-workers/
- · https://www.fanquip.com.au/news/product-highlight/industrial-cooling-ventilation-fans/
- https://www.fanquip.com.au/news/summer-solution/industrial-cooling-solutions/
- https://www.dcceew.gov.au/environment/protection/npi/substances/fact-sheets/particulate-matter-pm10-and-pm25
- https://www.safeworkaustralia.gov.au/safety-topic/hazards/working-heat/managing-risks-air-pollution-advice-pcbus\
- · https://www.airthings.com/business/resources/humidity-office

Contact Us

- sales@fanquip.com.au
- 1300 224 308
- **Head Office** 1 Civic Avenue, Singleton NSW 2330 Australia
- Warehouse 23 Ash Road, Prestons NSW 2170



