

Air conditioning never felt so good

Artus[®]





Welcome to the future of air conditioning

Positive change
through innovation



Roger Olsen
Chief Technical Officer
Artus Air Ltd.

“My motivation for inventing Artus was to solve one of society’s greatest challenges: to reduce the amount of energy we all consume.”

Contents

Overview

Introduction	4
Our products	6
Key benefits of Artus	9

Features and benefits

Cut carbon and energy	10
Space saving	11
Design flexibility	13
Easy installation and maintenance	14
Packaged unit	15
Ultimate comfort	16

Applications

Artus for commercial settings	19
Artus at home and away	20
Artus for laboratories	22
Finishing options	23

Choosing Artus

The team	26
Trust us to deliver	27
The installation process	29
Maintaining your unit	30
Technical specifications	31
Visit us	34

Precision engineering with real impact

Artus revolutionises the way buildings are cooled and heated, reducing energy consumption and carbon emissions. Its compact size and simple installation saves space, time and cost. The ideal solution for many applications, including commercial, hotel and residential, and laboratory environments.

Created for the climate

Artus' founding purpose is to enable businesses to reduce their carbon impact and energy usage. We're proud to be part of the climate change solution.



Pictured: Artus in situ at One Canada Square, London E14

Choose the solution that's right for your space

AR60

The smaller unit in the range is ideal for maximising ceiling heights in busy services zones or cellular spaces. It's typically suitable for conditioning spaces of around 20m².

Nominal dimensions: 600 x 600 x 200mm

AR75

Ideal for larger zones in open plan spaces and able to serve typical zones sizes of 40m².

The larger (but still compact) unit offers the option to rationalise the number of units required in a design, thereby providing the most cost-effective solution.

Nominal dimensions: 750 x 750 x 300mm

See p31 for detailed technical specifications for each unit.





AR75

AR60



Pictured: **Artus in situ** at WeWork's 10 Devonshire Square offices

Engineering innovation, for people and the planet

Maximised energy efficiency and reduced carbon

Lower energy use and reduced carbon emissions help you meet Net Zero goals.

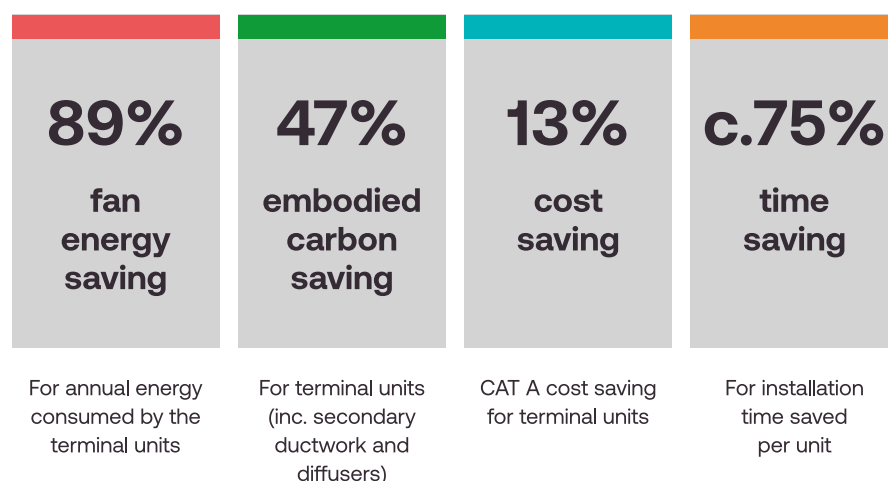
Reduce risk

Everything you need is contained in a single box, for convenience and certainty.

Better for your bottom line

Streamlined installation, reduced energy costs and easier maintenance all add up to a more cost-effective solution for cooling and heating your space.

Switching from ducted FCUs to Artus saves:



Above savings based on a highly performing new build comparing ducted FCUs versus Artus. Artus layout based on a mixture of AR60 and AR75 units.

Cut carbon and energy

- **Support Net Zero targets and achieve valuable environmental certifications**
- **Reduce your building's energy consumption, and futureproof your operations**

Designed to maximise energy efficiency while using less material resource, Artus shrinks your building's carbon footprint without sacrificing performance or comfort.

Compared to a traditional Fan Coil Unit (FCU) system, Artus consumes 89% less energy.

And because the unit uses less metal to achieve the same thermal output as an equivalent FCU, Artus offers a 47% reduction in embodied carbon.

Patented design for an efficient air flow

Traditional air conditioning solutions are bulky and inefficient. With Artus, the patented design and resulting air flow path means air moves through the device in a completely new way.

With very low pressure drop across the heat exchanger (or coil) minimal fan power is required to achieve enough air flow to condition the space below. At the same time, the fan speed and valve open position reacts to the demand within the space, and always runs at the slowest possible speed to achieve the temperature needed – another energy efficient feature.



Above savings based on a highly performing new build comparing ducted FCUs versus Artus. Artus layout based on a mixture of AR60 and AR75 units.

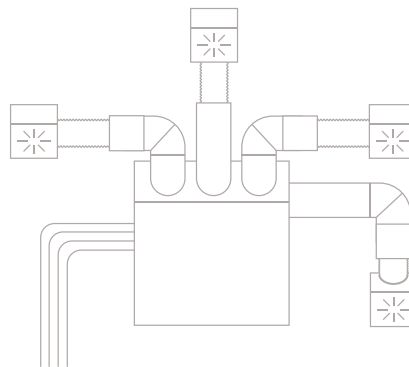
Unique space-saving design

- The low-profile design enables higher floor to ceilings, saving up to 300mm in services void
- Fan coils and ductwork no longer need to dominate the ceiling; Artus is compact and unobtrusive
- Service coordination becomes a breeze, leaving designers free to focus on other important aspects of the fit out

With no secondary ductwork, grilles or attenuators to contend with, Artus is streamlined, compact and elegant.

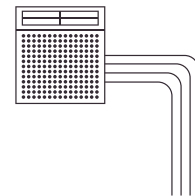
Its low profile means you can maximise floor to ceiling height. This is ideal for retrofits, freeing up extra vertical space in the existing structure without the need for major reconstruction.

Conventional solution



Complex system layout

Artus[®]



Simple layout

Artus is a complete, contained solution, simply requiring connection to the building's water, data and power. It just integrates discreetly and seamlessly with the fabric of each space, whether the ceiling is exposed, enclosed in a false ceiling, or anything in between.

Artus ensures the architectural intent of the building can be fully expressed with a wide range of options for integration with ceiling finishes.



Pictured: Artus in situ at One Canada Square, London E14

Putting aesthetics first

Artus is a flexible solution that can easily be adapted to fit your architectural requirements. How it looks and feels in each space is completely up to you – architectural freedom is built-in.

We have a range of beautiful, high-quality standard finishes and pre-designed solutions, which can also incorporate acoustic absorption and lighting.

Each space can evolve over time, with Artus remaining discreetly in position. Architectural finishes can be switched out as needed giving you the confidence that change is quick and easy.

- **A huge range of finishes and fitting options ensure an elegant result**
- **Flexibility in where and how you install each unit**
- **Go pre-designed or bespoke, depending on your needs**

See p23 to explore our range of beautiful off-the-shelf and custom architectural finishes.

Easy installation and maintenance

When it comes to installation, an Artus unit can be up and running in about an hour. Compared to up to four hours for installing a traditional FCU, that's impressively fast – saving you significant time and reducing construction risk.

The unit is lightweight and compact, so it's easy to lift into position, with only four drop rods needed to install the unit. That means a safer construction environment due to the reduced time and complexity of working at height.

All maintenance work happens via the drop down fascia of the unit, which can be easily opened for access to any of the components.

For simpler maintenance, Artus has been designed to allow easy access to components inside the unit, a feature which reduces costs, disruption and downtime to the end user.

See p29 to learn more about the simple installation process.



- **The unit is conveniently maintained from below**
- **Everything you need is contained in a single box, for convenience and certainty**

All in one perfect package

Each Artus unit is pre-packaged in one compact box, and functionality tested before it leaves the factory. Components are pre-wired, with no air balancing needed, and the software comes pre-installed in the controller too.

Everything works right out of the box, with only the building-specific water balancing and local control or BMS set-up to complete once on site – giving you design and construction peace of mind.



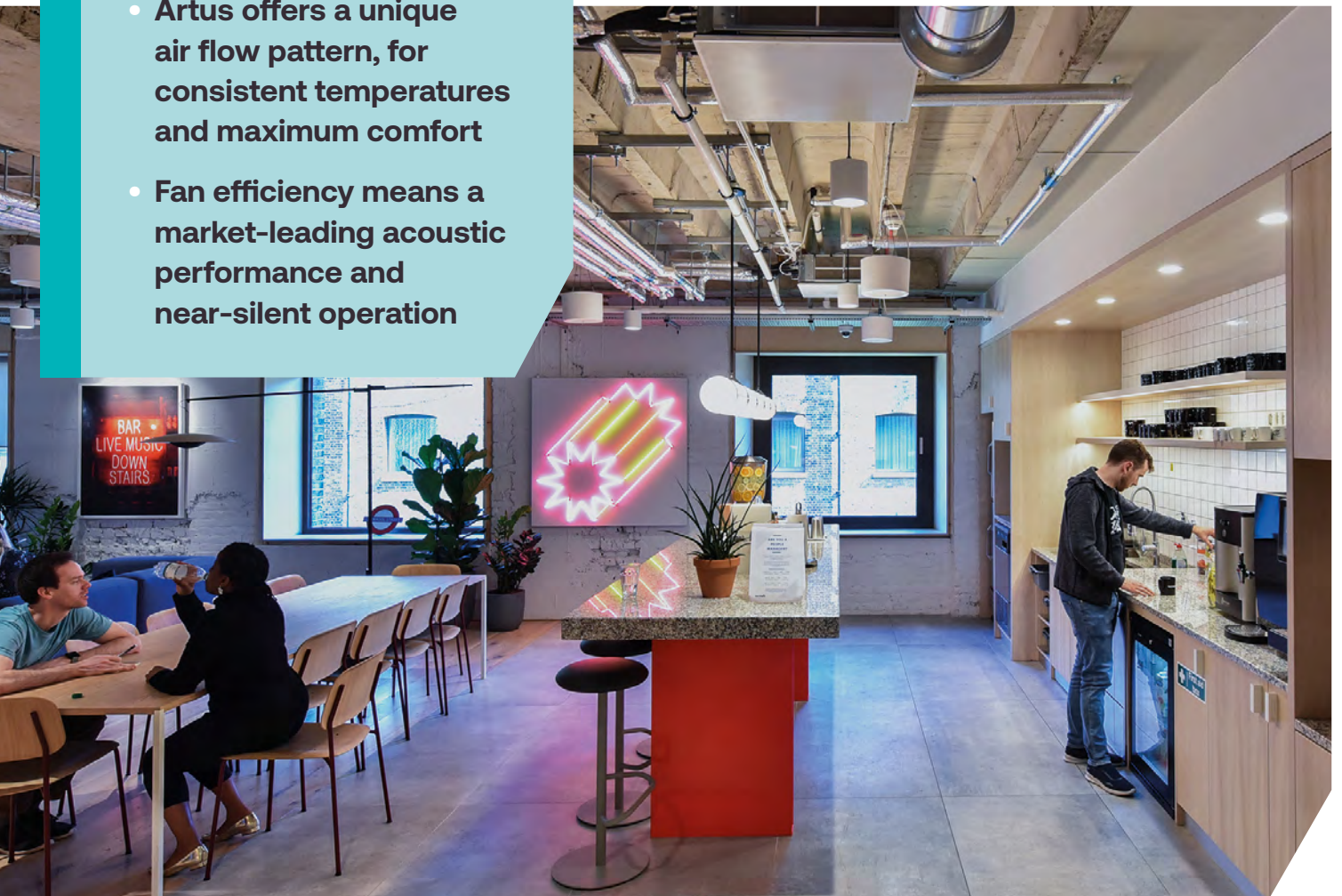
The most comfortable air conditioning you will experience

Artus' patented air flow design enables a unique 360° horizontal distribution pattern, eliminating uncomfortable down-draughts. No more cold spots, just a perfect, consistent temperature throughout the room.

Heat or cool your environment with meticulous precision, with air temperature variations limited to just plus or minus 0.5°C.

And enjoy the peace and quiet; low fan speeds mean Artus is nearly silent, offering a noise rating of NR 25 and below.

- **Artus offers a unique air flow pattern, for consistent temperatures and maximum comfort**
- **Fan efficiency means a market-leading acoustic performance and near-silent operation**



Pictured: Artus in situ at WeWork's 10 Devonshire Square offices

“The installation of the Artus units at WeWork’s 10 Devonshire Square offices has really enhanced the building. The reduced visual impact celebrates our industrial aesthetic, while the granularity and localised zone control improves our members’ comfort and gives us flexibility for the future.”

Ross Milner, Head of Engineering for UK & Ireland, WeWork



Learn more about our 10 Devonshire Square project



Pictured: Artus in situ at 80 Charlotte Street, London

Artus for commercial settings

When it comes to fitting out new build or refurbished commercial office projects, Artus is an ideal solution.

It allows the ceiling scape to be less cluttered, giving more design freedom to architects, interior designers and MEP consultants.

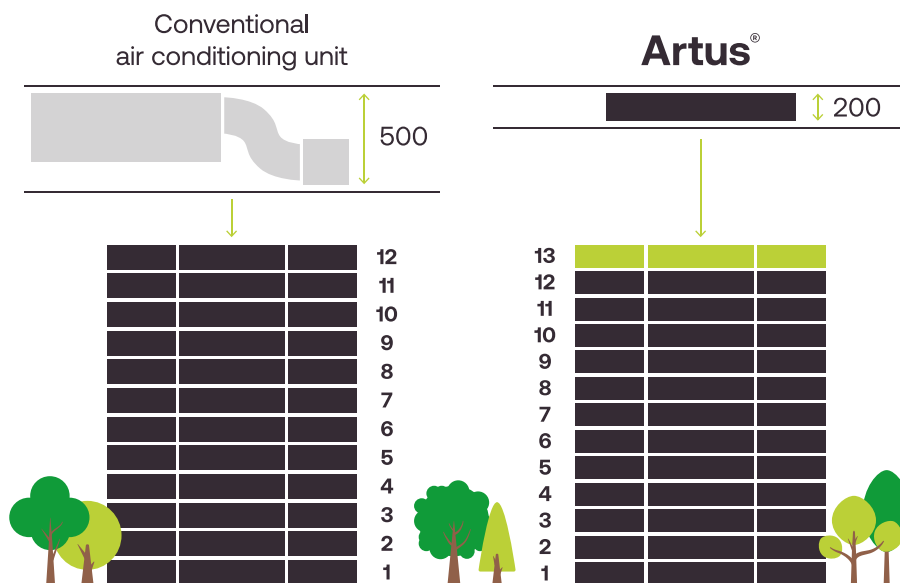
The compact size enables increased floor to ceiling heights to be achieved and lack of secondary ductwork a more aesthetic result, while eliminating service coordination challenges during design.

For occupants, Artus offers draught-free comfort and less noise, and supports the achievement of WELL certification. Today's workers are placing increasing importance on their employers' green credentials; having Artus in the workplace can only enhance employee attraction and retention.

Artus' energy efficiency reduces bills and enables impressive BREEAM, LEED, NABERS and EPC ratings, making buildings more attractive to tenants.

Fit out (Cat A and Cat B) is fast, flexible and cost-efficient, whether that's for a retrofitting project or a new construction.

For new builds using Artus from the start, the reduced requirement for ceiling space makes possible the inclusion of an additional storey for every 12 floors built, without increasing the overall vertical height of the building.



Artus at home – and away

Hotels and residential projects both see major benefits from Artus installations. The unit's low height is excellent for the shallow ceiling voids these buildings traditionally have, allowing designers to reduce the extent of bulkheads and optimise the space without compromise.

The unit can be designed into the ceiling of the bedrooms and living rooms, with no bulky ductwork or acoustic attenuation passing between rooms. Maintenance is fast and convenient for minimal disruption, with no access panels required – simply open the unit from below.

Residents and hotel guests benefit from low noise and a draught-free environment, allowing them to live and sleep in greater comfort.



“The Artus units were a key component of our data-driven intelligent control system, and we are looking to include them in our next development too.”

John Wilson, Owner, Ridgeline Ltd



Learn more about the Ridgeline project



Artus for laboratories

Highly serviced projects like labs typically have space at a premium, with limited room to fit in pipework and other services; the space-saving design of Artus means we are a perfect fit in these environments.

Low noise and lack of draughts make it an ideal choice for sensitive laboratory settings. Temperatures can be precisely controlled and will remain consistent throughout the space.

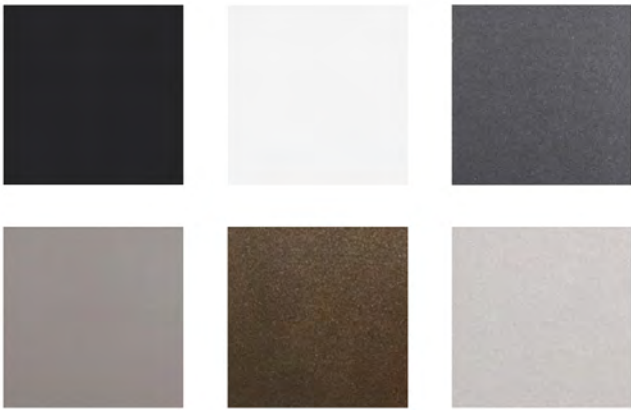
Maintenance is easy and mess-free; access to pumps and filters is from below, avoiding the need to open up dirty and dusty false ceiling zones.

Pictured: **Artus in situ at Sainsbury Wellcome Centre, London**

Beautiful in every interior

Artus has been designed with a range of finishing options to integrate seamlessly with any environment.

These include ready-designed exposed and in-ceiling options ensuring installation, performance and maintenance is uncompromised.



// Fascias



// Metal rafts



// Custom colours available



// Acoustic rafts



// Multi-service units



// Ceiling system agnostic access panel

**“Artus’ low-energy credentials,
combined with its design
simplicity and adaptability,
made it an obvious choice for
the 80 Charlotte Street fit-out.”**

Iain Moore, Fit-out Services Design Lead, Arup



Learn more about the 80 Charlotte Street project

Meet the team

As an innovation-driven business, we are determined to lead positive change in our industry as we all strive for a more sustainable future. Our team has an impressive track record, and with significant investment from our partners, we're here for the long-term.

The Artus team was originally established working together at Arup. Our founders have a high pedigree in engineering and solutions-focused design and are prominent in the industry.

CEO Rebecca Stewart has over 20 years' experience bringing product solutions to market with brands like Kinnarps, Reynaers, Lindner and Forum Seating.

Artus is the brainchild of CTO Roger Olsen, one of the foremost MEP consultants at Arup for over 40 years.

The commercial stability is proven in CFO Duncan Macrae, who has driven the investment and capital growth of three previous technology businesses, and has extensive private equity investment experience.

Sales Director Ed Sayce is an engineer by training, with previous experience in consultancy and design in the built environment, now working closely with our clients to identify optimum solutions for their needs.

Paul Freeman is our Technical Director, with over 25 years in the HVAC industry, and is the driving force behind our continuous product development and innovation.

At Board level, Chair Catriona Schmolke CBE offers an excellent strategic vision through her significant executive and non-executive experience in construction and sustainability organisations. Peter Rogers, co-founder of Stanhope and Lipton Rogers, brings his considerable sector experience to help guide the company's fortunes.



Rebecca Stewart
CEO



Roger Olsen
CTO



Duncan Macrae
CFO



Ed Sayce
Sales Director



Paul Freeman
Technical Director

Trust us to deliver

Investing in innovation

The Artus business originated as part of the Arup Ventures Programme, a long-running incubator investing in innovative concepts and products. Artus was developed over a six-year period and received significant investment from Arup to launch to the market.

In 2021 the Artus Air Ltd spin-out was formed, with subsequent investment from Par Equity and the Business Growth Fund. Both investors have impressive track records of scaling up businesses and have provided substantial equity investment into the company to support our growth aspirations.

Our products have now been installed in many buildings in the UK and Europe, and we expect strong and sustainable growth in years to come.

Rock-solid manufacturing and supply partnerships

We work with well-known manufacturer Stulz SpA, who have a 30-year heritage of excellence in the cooling industry. Stulz offers a market-leading committed manufacturing capacity, delivered across several semi-automated assembly lines, which gives us the flexibility to increase capacity as we grow.

Our components come from global suppliers such as Siemens, EBM-Papst, Charles Austen and Johnson Controls, ensuring quality and well-established supply chains.



Success stories

Artus works alongside a range of customers throughout the construction and development industry, with proven success on a wide variety of projects.

We are a trusted partner to contractors, developers, mechanical, acoustic and cost consultants, and architects. Working closely together, we identify the most efficient and sustainable solutions for each project. Our three-year warranty leads the industry, a testament to the reliability of the product.



Pictured: **Artus in situ** at offices in Centenary Square, Birmingham

Installation in a fraction of the time

Artus has been designed to ensure a fast, smooth installation on site, that can be up and running in less than an hour.

Each unit is individually boxed and several can be stacked on a pallet, for easy transportation around your construction site.

Installation and commissioning at a glance:

Installation

1. Install X,Y,Z Unistrut frame (by others) on soffit.
2. Mount Artus onto Unistrut frame via 4 drop rods.
3. Use Artus provided colour-coded plugs to connect power and data to unit on external connection plate.
4. Connect flow and return pipework to pipe unions at the rear of Artus, ideally with flexible connectors.

Setting to work

5. Open water system to unit via external isolation valves.
6. Water flush through unit and bleed air via bleed valve on unit coil header.
7. Set water control valves to maximum flow required on pre-installed PICV using Artus schedule staging settings.

No airside commissioning activities are required.

Operation

- The unit comes with an in-built, pre-programmed controller, with software designed to optimise energy efficiency and save you running costs. Easily addressed and incorporated into the BMS.



Maintaining your unit

Artus is 'self-access', with a hinged fascia underneath giving easy access to all maintainable components.

Maintenance of the unit is non-disruptive and straightforward; all accessible from underneath the unit.

Artus filters are washable – no need to replace them.

Three-year warranty

All Artus units are provided with an industry-leading three-year parts-only warranty when installed and maintained by a certified professional who has completed our recommended training.



Technical specifications

Nominal data	AR60	AR75
Base variants	2 pipe 1 coil cooling (+ Elec heating option) OR heating 4 pipe 1 coil (heating and cooling) 4 pipe 2 coil (heating and cooling)	2 pipe 1 circuit cooling (+ Elec heating option) OR heating 4 pipe 1 circuit (heating and cooling) 4 pipe 2 circuit (heating and cooling)
Overall sound power (dB(A))¹	50	50
Guide NR²	38	38
Dimension (mm)	572 x 572 x 206	730 x 730 x 300
Air flow at presented noise level (l/s)	140 (21 & 41) / 132 (42)	260
Specific fan power season average (W/l/s)³	0.055	0.055
Typical floor area served, m2⁴	20	40
Heating capacity (kW)⁵	2.6 kW (21 & 41) / 0.43 kW (42)	5.9 kW (21 & 41) / 2.1 kW (42)
Heating capacity electric (kW)	0.6 kW	2.0 kW
Sensible cooling capacity (kW)⁶	2.15 kW (21 & 41) / 2.06 kW (42)	4.7 kW (21 & 41) / 4.1 kW (42)
Total cooling capacity (kW)⁶	2.7 kW (21 & 41) / 2.62 kW (42)	6 kW (21 & 41) / 5.1 kW (42)
Dry/wet weight (kg)	20.6/21.4 (21 & 41) / 22/23.5 (42)	42/46 (21 & 41) / 43/47 (42)
Options		
Fascias and architectural products	All variants	All variants
Internal flushing/bypass valve set	2 pipe 1 coil	All variants
External flushing/bypass valve set	Option for all	Option for all
BMS options	Bacnet IP or MSTP	Bacnet IP or MSTP
Control functionality	Basic	Basic or Plus



See full technical specifications

1 Summation of return and supply sound power measured to BS EN 3741:2010 and EN 16583:2015

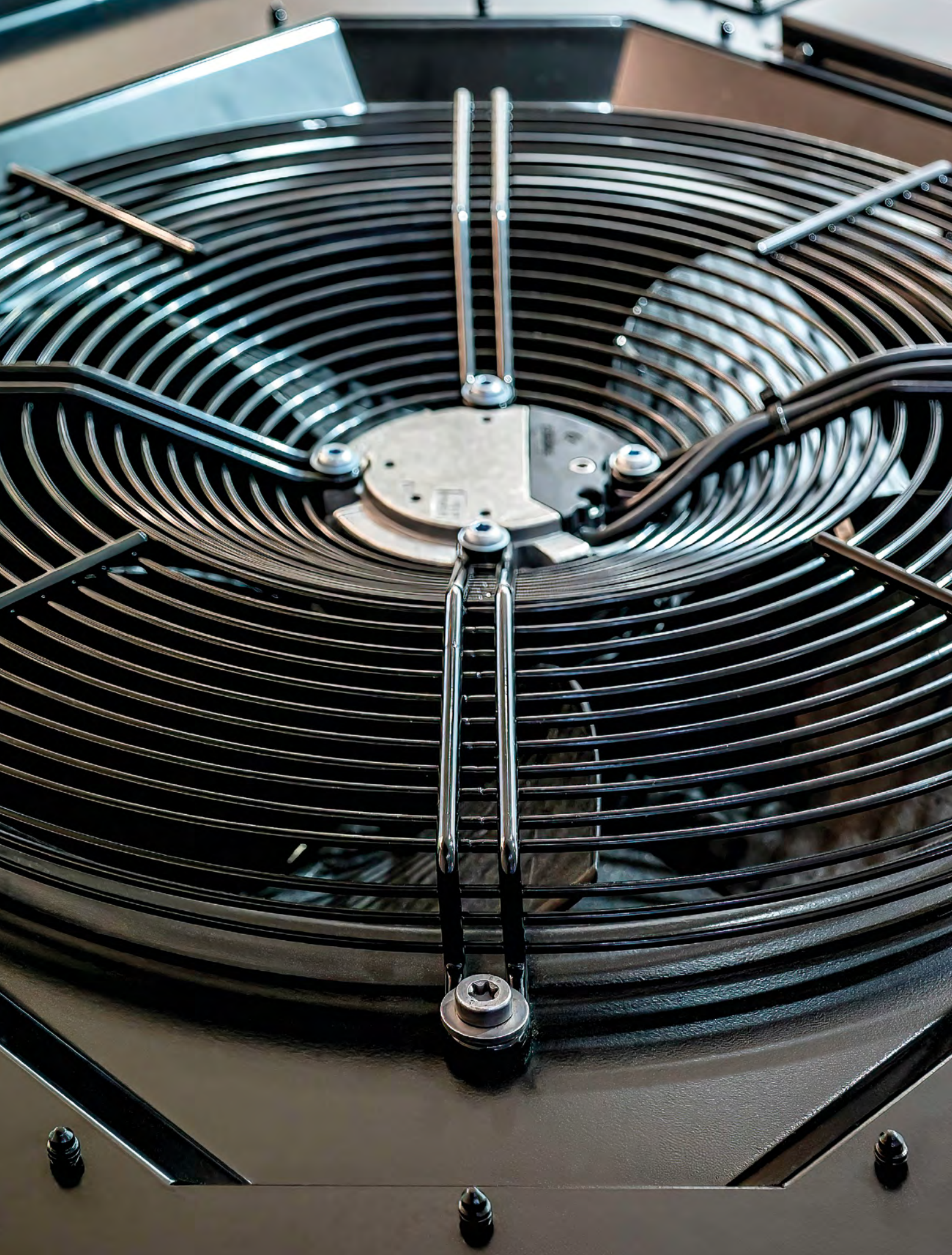
2 Guide NR based on typical office with ceiling. 1 Artus per 40m² and RT 0.4s, cooling load may dictate smaller area

3 Based on almost all of year having part load cooling or heating demand. Peak SFP around 0.09W/l/s

4 Based on satisfying sensible cooling load of 100 W/m²

5 Heating capacity based on 45/40°C, return air 21°C as per EN ISO 1397:2015/AC:2016

6 Cooling capacity based on 6/12°C, return air 26°C, 46% RH as per EN ISO 1397:2015/AC:2016





Get in touch here

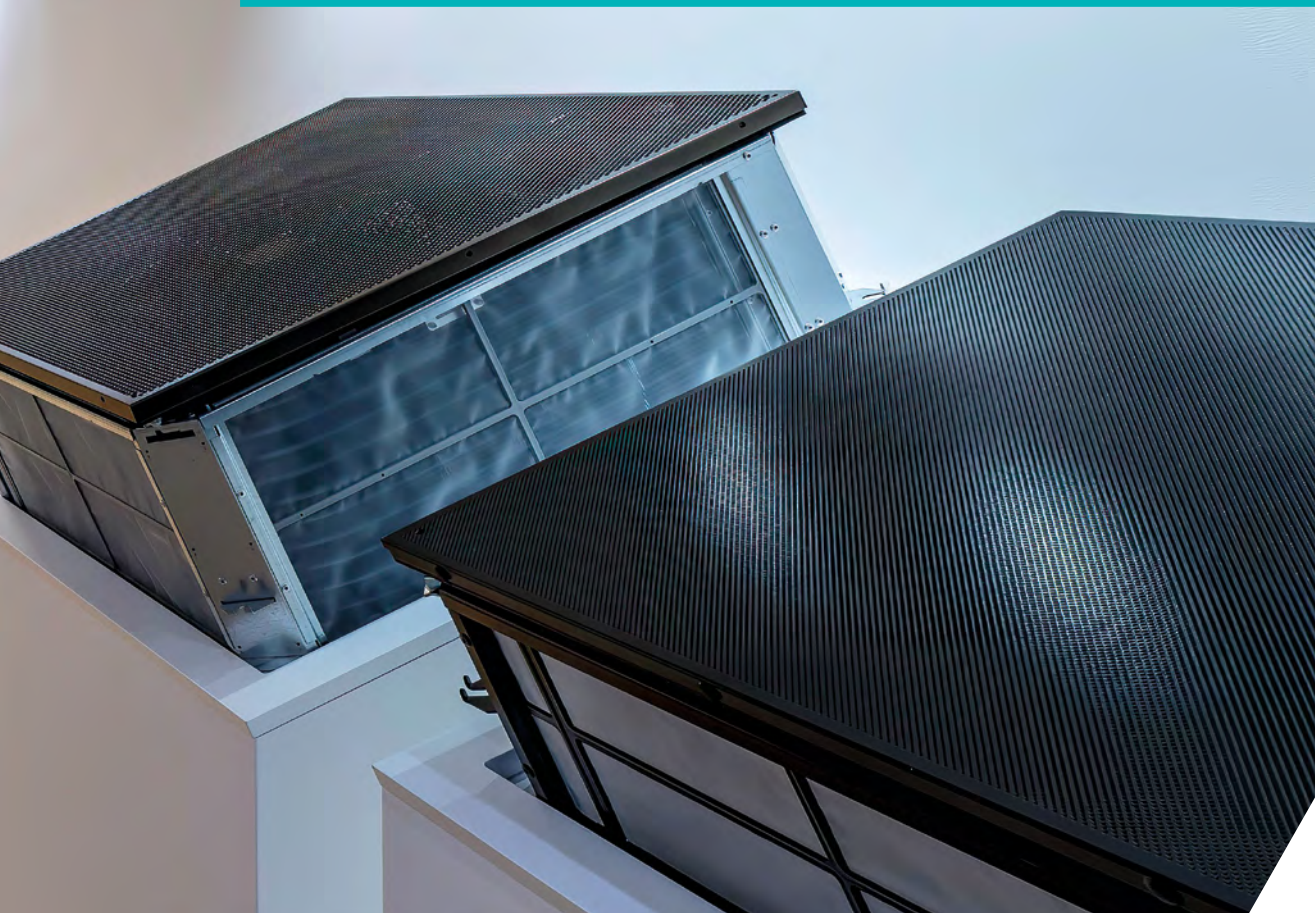


Visit our London showroom

Join us at Soho Lighthouse, 21 Great Chapel Street, London, W1F 8FP to experience the comfort and precision of Artus for yourself.

Meet our team and discover how Artus could transform your next project.

Call us on **0204 566 8377** or email **connect@artusair.com** to book your visit.





**“We didn’t just improve
air conditioning,
we reinvented it.”**

Roger Olsen, Chief Technical Officer, Artus Air Ltd.

Our awards

RAC Cooling Awards:

2017 Winner 'Air Conditioning Product of the Year: System' category

CIBSE Yorkshire Awards:

2017 Winner 'CIBSE Yorkshire Region Manufacturers Award'

IET Innovations Awards:

2017 Highly Commended 'Emerging Technology Design' category

2017 Highly Commended 'Energy' category

Ecobuild, Big Innovation pitch M&S Awards:

2017 Joint Winner 'Innovation' category

CIBSE Building Performance Awards:

2018 Shortlisted 'Energy Efficient Product or Innovation of the Year' category

2021 Shortlisted 'Product or Innovation – Thermal Comfort' category

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Artus Air Ltd
Soho Lighthouse
21 Great Chapel St
London W1F 8FP

+44 (0)204 566 8377
artusair.com