



zehnder

always the
best climate

Integrated Ventilation and Heating Systems

for Social Housing



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Poor ventilation - an age old problem

Condensation and mould in houses are an age old problem, and the need to safeguard against these issues hasn't gone away. In fact, the increased focus on reducing air leakage around our homes means ventilation is needed more than ever.

Our homes need air to breathe and of course, that air needs to be of good quality.

Some homes are warm and comfortable because of modern heating systems, sufficient insulation, and double glazing that prevents heat loss - but without adequate ventilation, it may lead to causing discomfort or even health problems.

This issue is exacerbated due to a greater number of people spending more time indoors, therefore contributing to factors that fuel mould and condensation.

Impacts on indoor air quality

Many things contribute to the quality of air within a house.

Although they aren't visible, common pollutants such as dust, dust mites, pollen, bacteria, and viruses affect the air we breathe.

Air quality, and ultimately our health and well-being, is impacted too by volatile organic compounds (VOCs). These are produced by a wide range of everyday items such as cleaning products, air fresheners, solvents, cigarettes, polishes, hairspray and textiles.

Also, without effective ventilation, cooking, bathing and showering can contribute towards mould and condensation. Natural ventilation can't counter these problems effectively.

Today's building regulations state acceptable levels for indoor air pollutants, which inform ventilation rates for houses, including:



Nitrogen dioxide



Carbon monoxide



Total volatile organic compound

We endeavour to provide expert climate solutions that deliver on cost, practicality and energy efficiency.



01 Ventilation

Our ventilation systems work to create a fresh and healthy indoor environment - ensuring effective circulation, to deliver purity to the air you breathe.



02 Radiators

Our radiators are designed to bring warmth, design and functionality to your home in equal measure - all whilst conserving as much energy as possible.



03 Heating and cooling systems

Whilst the weather may constantly be changing, our heating and cooling systems deliver complete climate control - providing energy efficient solutions that you can count on.



Solutions

Why Zehnder?

With a history stretching back 125 years and strong family ties, Zehnder Group is the international specialist in heating, cooling, and fresh and clean air systems.

Our Zehnder Greenwood brand is at the forefront of designing and supplying domestic ventilation products. Tailored to provide outstanding performance in line with building regulations, our products are specifically focused on reducing energy and improving comfort, as well as indoor air quality.

Always the best climate

“We strive to improve the quality of life by providing the finest indoor climate solutions.”



Excellent team

Every day we combine passion, expert knowledge and commitment to give you the best results.

Great solutions, products and services

Great products and unique services for an energy-efficient, healthy and comfortable indoor climate.

First choice for customers

Always close to the needs of our customers, to grow with you and overcome all challenges together.

We are specialists of providing healthy, comfortable and energy-efficient indoor climate.

The broad and clearly structured portfolio from the Zehnder Group is split into four product lines. Consequently, we can provide our customers with the right product, perfect system and matching service for all types of projects – from new build to renovations, single or multi-occupancy homes, as well as commercial projects. This variety ensures that our wealth of experience is continuously expanding, providing tangible added value to our customers on a daily basis.

Decorative radiators

Our individual decorative radiators for living and bathrooms make a home not only warmer, but also more attractive. Created by renowned designers, they impress with excellent functionality.



Comfortable indoor ventilation

Our comfortable indoor ventilation is energy-efficient and provides a healthy indoor climate. It promotes the wellbeing of the occupants and increases the value of the property.



Heating and cooling ceiling systems

Zehnder ceiling systems are convenient and energy-efficient for heating and cooling. They are perfectly attuned to the relevant environment.



Clean air solutions

Clean air systems from Zehnder reduce the level of dust in the air, to create a healthier working environment and reduce the amount of cleaning required.



Our brands embrace innovation, quality and design



The Zehnder brand offers excellent indoor climate solutions within the product lines of decorative radiators, comfortable indoor ventilation, heating and cooling ceiling systems and clean air solutions.



The Greenwood Airvac brand offers a range of low energy and smart residential ventilation solutions from intermittent extract fans to whole house ventilation with heat recovery.

Key Product Developments

GiP (Guaranteed Installed Performance)

Achieving installed performance is essential to ensure that a comfortable and energy efficient indoor environment is delivered – every time for every installation, to meet building regulation requirements. At Zehnder Greenwood, we pioneered this approach with easy to adjust products, systems and solutions - ensuring peace of mind for specifiers, installers and homeowners.



MVHR (Mechanical Ventilation with Heat Recovery)



Our first introduction into MVHR manufacture was focused on delivering a high performing, small and compact unit. The hugely popular HRV1 was launched in 2006.

As technologies improved and customer acceptance of MVHR increased, an advanced product – HRV2 was delivered in 2009 and led the industry in heat recovery performance.

Customer requirements identified ease of installation being of prime importance in selecting MVHR units - and our innovative commissioning wizard, integrated within our Vireo units in 2013, set the benchmark.

Delivering the highest performing MVHR units, our ComfoAir Q range achieves up to 96% heat recovery efficiency. Passive House accredited, these units have raised the bar for MVHR!

Most recently, our Vireo MVHR units have been enhanced and re-branded as ComfoAir models.



dMEV (Decentralised Mechanical Extract Ventilation)



We have been first to market, manufacturing the first dMEV classified product in the UK. Our approach to deliver a low energy performance product, with a 'one fan fits all approach' to facilitate easier installation procedures for domestic properties, resulted in the Unity CV100/SV being launched to the market in 2007.

Delivering products tailored to our customers requirements is integral to our market approach. We worked closely with landlords and tenants to identify key product attributes, including low energy consumption and running costs, as well as low running noise, which contributed to developing our Unity CV2 GiP product – a firm favourite for nearly a decade!

The requirement to deliver an advanced extract fan that offers easy compliance to building regulations and contributes to well-being, whilst still being cost-effective to run and quiet in operation, resulted in the Unity CV3 being launched in the market in 2017. The product also offered smartphone app functionality for enhanced customisation.

An increased focus on the need for fire prevention measures facilitated the integration of an easy fit ceiling mounted fire damper within our portfolio, to ensure the integrity of ceilings when extract fans are installed.

Ventilation

As you would expect from a leading domestic ventilation manufacturer, we provide a wide range of whole house mechanical systems for both new builds and refurbishment projects. Our range includes products that provide replacement air into new and existing homes.



Our products



dMEV (Decentralised Mechanical Extract Ventilation)

- A dMEV system incorporates continuously running mechanical extract ventilation fans, designed to remove waste and moist air out of single wet rooms (bathrooms and utility). It also ensures that the desired set commission rate is maintained at all times.



Unity CV3 Extract Fan

- SMART Guaranteed Installed Performance (GiP) set-up features, including commissioning.
- Quiet in operation (lowest in its comparable dMEV category).
- Low energy use (lowest in its comparable dMEV category).



Omniquest Multifunctional Fan and Window Kit

- Designed in conjunction with social landlords to deliver an intruder proof window fan.
- The only extract fan with the Secured by Design approval to PAS24:2010 criteria.
- Multi-functional and adaptable for various applications.



cMEV (Centralised Mechanical Extract Ventilation)

- MEV units provide continuous extract ventilation for houses and apartments, in line with building regulations' current airflow requirements.



Centair CMEV.4eHT cMEV

- Low SFP for use in up to seven wet rooms.
- Incorporates SMART™ technology to ensure efficient operation.
- High performing MEV unit.

Our products

MVHR (Mechanical Ventilation with Heat Recovery)



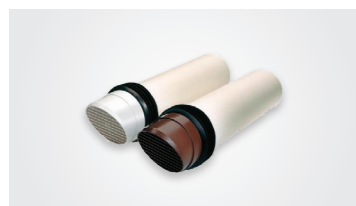
ComfoAir

- Both ceiling and wall mounted variants.
- Ease of installation.
- Incorporates innovative and high-performance features.



ComfoAir Q

- Industry leading MVHR heat recovery performance.
- PassiveHaus accredited units.
- Commissioning wizard and intuitive device display make set-up easy.



Ducting - Fast Fix Duct System

- Comprises 100mm PVC duct with external wall duct seal and external grille.
- Suitable for most 100mm bathroom fans and some kitchen fans.
- Facilitates completion of installations, internally. No need for scaffolding or ladders.



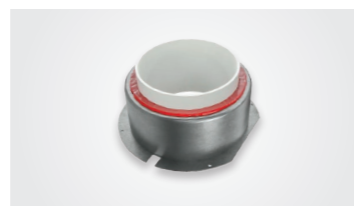
Semi-Rigid Ducting - ComfoTube

- High-performance range to suit residential applications.
- Easy and quick to install.
- Clinside™ smooth internal lining helps to reduce build-up of dust and makes cleaning easier.



Supply and Extract Air Valves - Luna Valves

- Slim and discreet design ensures effective integration in all dwelling types.
- Air flow locking mechanism prevents unintentional changes to settings.
- Impressive performance with very quiet air flows.



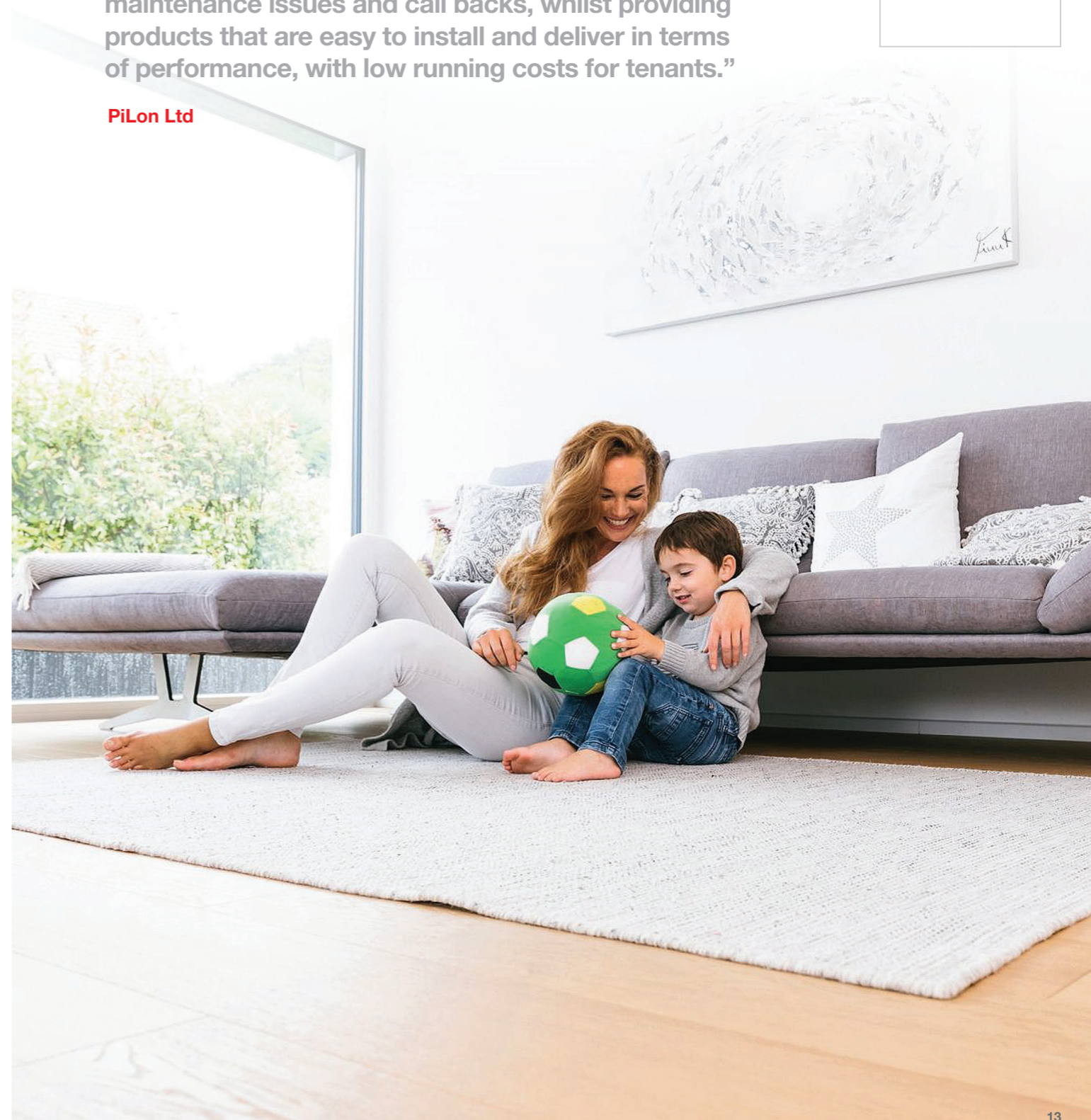
Fire Damper for Ceiling Fan

- A fire protection solution for 100 mm ceiling fans.
- Independently approved for use with Unity CV2GIP and CV3 dMEV fan.
- Fire Tested to BS EN 1365-2.

“ We’ve been installing Zehnder Greenwood products over the last decade. It’s ideal to work with a company that provides us with the quality assurance across their portfolio of ventilation and heating solutions. This helps to reduce maintenance issues and call backs, whilst providing products that are easy to install and deliver in terms of performance, with low running costs for tenants.”



PiLon Ltd



Radiators

Designed to provide exceptional performance and energy efficient operation, our radiators look good - whether in the living room, bedroom or bathroom.



“ Crossfold Electrical Wholesalers are specialists supporting the UK social housing sector, we have been working with Zehnder Greenwood for nearly 30 years. Having access to a comprehensive range of products from one supplier, renowned for their quality, longevity and performance is important for our customers.”



Crossfold Electrical

Our products



Towel Warmers

- Extensive range covering practical and design-led products.
- Manufactured in stainless steel and aluminium, with a multitude of colour and finish choices.
- Horizontal and vertical options.



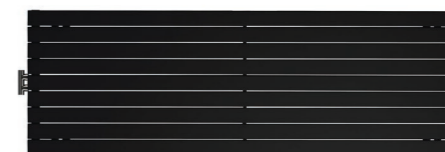
General Purpose Radiators

- Range of radiators available to support individual room requirements.
- Exceptional manufacturing processes and quality standards.
- Off-the-shelf and bespoke options.



Aluminium Radiators

- Fast response to heat demand requirements.
- Highly thermal efficient.
- Lightweight.



Electric Room Radiators

- Compact and energy efficient.
- Comply with Lot 20 of the Energy Efficiency Directive.
- Integrated controls allow for customisation to user requirements.



Dual-Energy Radiators

- Conventional radiators featuring an electric element.
- Deliver all-year warmth and comfort in the bathroom.
- Provide warmth when central heating is not in use.



LST (Low Surface Temperature) Radiators

- Developed for where safety is the primary consideration.
- Functional design, smooth panels and rounded edges.
- Comply with NHS guidelines, ensuring temperature requirements are not exceeded.

Radiant Heating and Cooling

Zehnder is the largest manufacturer of radiant ceiling panels in Europe, with over 50 years' experience gained from supporting the commercial application of radiant panels in numerous sectors, including education and healthcare.

Because of their easy installation and maintenance, as well as their energy efficiency benefits, our products are finding greater prominence in domestic environments.



Our products

All products are available in a comprehensive range of sizes, finishes and RAL colours.



Ceiling Panels

- Energy efficient operation – delivers heating as required.
- High heating and cooling performance.
- Can be used in conjunction with various energy sources such as heat pump.



Lay-In Panels

- Ideal for rooms with low ceilings.
- Ensures an even distribution of heat.
- Easy to clean and maintain.



Integrated Panels

- Can be integrated in either the ceiling or wall.
- Maximises available wall and floor space.
- Innovative and adaptable heating and cooling product.

How We Support You

We do much more than simply sell products. You can rely on us to be aware of industry regulations and their potential impact on you. We'll work with you to ensure you meet compliance, as well as specify the appropriate products for building occupants.

Zehnder Centre of Excellence

You can experience our innovative heating, cooling and ventilation products in operation at our two centres of excellence, based at our Head Office in Camberley, Surrey, and at the Business Design Centre in Islington. Whilst there, we can discuss how our products can add value to your business.

Camberley Experience Centre

Our Camberley Experience Centre is a central, inspirational world of indoor climate systems, taking individual products and creating a vision of how they can be integrated into a building, to give a systemic approach.

Flat 51 is our purpose-built microclimate which combines heating, cooling, ventilation and humidity control through one system with complete simplicity - showcasing our innovative comfort concept for homes.

London Specification Centre

Our London Specification Centre captures the endless possibilities that our heating, cooling and ventilation products can bring to the built environment.

Here, you can experience our products in operation, as well as within a comfortable environment in which we can discuss the potential for integration throughout your projects.

You can be assured that we'll be able to support your HVAC requirements – whatever they might be.

Zehnder Greenwood's Kent Operation - Manufactured in the UK

From our Kent facility, we manufacture and distribute our range of ventilation products to UK and international customers. Supporting UK manufacture has many benefits, from reducing CO2 impact by minimising transportation of goods, to assurances on product manufacturing quality.



Our Expertise

Bespoke Documentation

It is essential that installed ventilation and heating systems operate as intended, to ensure ideal indoor air quality and comfort. We are dedicated to providing clients with educational information and supporting documentation, which include homeowner guides that demystify some of our products and explain how to get the best out of them, and at their lowest running costs.

Knowledge Sharing

Our support is not based pre or post install of our products - we love to share our knowledge and expertise further. Through site visits, toolbox talks or informal lunch and learn sessions, we make sure that you are fully informed on important matters, such as product choices and industry regulations.



NICEIC Competent Persons Scheme

Our specification advisors are NICEIC qualified to the Competent Persons Scheme, which ensures that they comply with building regulations for any work that installation teams carry out, without the need to inform the local authority.

CPD

We have a portfolio of accredited CPD presentations, covering key technologies used to heat, cool and ventilate buildings - including our ventilation methodologies and their application CPD, through to MVHR in passive house.

Our CPD presentations have been independently certified by both CIBSE and RIBA, so you can be assured of neutral content.

The presentations can be hosted at your premises or you can alternatively visit one of our events at our Head Office in Camberley, or our Specification Centre in Islington, London. They are also available digitally.

Overheating Solutions

Zehnder is the only HVAC manufacturer able to offer a complete suite of integrated products, which can satisfy CIBSE TM59 design methodology and mitigate issues concerning overheating.

Our products span from purge ventilation, through to an integrated heating and ventilation system with humidity control.

We have been at the forefront of driving industry regulation and developing forward thinking approaches to mitigate overheating through the use of integrated ventilation solutions.

Accreditations, Certifications and Assurances

SMART™ Technology

Smart™ technology is integrated in a selection of our dMEV fans and MVHR units, to ensure your ventilation systems operate as intended.

To achieve this, they need to be adaptable to the ever-changing environment. Intuitive sensors ensure your ventilation systems operate cost effectively to help reduce household bills. This all adds up to reducing your carbon footprint and positively impacting the planet. Smart™ technologies extend across six innovative settings that deliver effective ventilation for houses every day of the year.



Revolutionary way of using humidity levels to provide effective ventilation in domestic properties all year round.



A logical approach to timer operation used in domestic ventilation fans and whole house systems – putting a stop to nuisance running in the middle of the night!



Innovative design controls and features on Greenwood products that are simply there to make on-site set up and commissioning the easiest it can be – see how wireless and touch-pad technology can make life simple!



This innovative technology ensures a home has filtered air 365 days a year, especially in warmer summer months.



Ensures the ventilation system is protected from extreme temperatures during winter months, whilst also providing a comfortable and balanced indoor environment 365 days a year.



An innovative combination of the most efficient components and design means that these products are among the top performing in their class/ventilation method when compared against standard market alternatives.



Passive House

Passive House is a leading international low energy design standard with which we are closely aligned.

We offer a complete range of Passive House accredited heat recovery systems, suitable for small apartments through to large houses, and offer a full design service for multi-dwelling builds.

Our Passive House accredited heat recovery units extend across the Zehnder Comfosystems range and include our ComfoAir and our industry-leading ComfoAir Q range with up to 96% heat recovery efficiency.



CIBSE TM59 Methodology

CIBSE's TM59 design methodology aims to tackle overheating issues at the design stage of new dwellings. The methodology is a collaboration of TM52 and CIBSE Guide A, and ensures both target temperature (26°C) and the frequency this temperature is experienced does not exceed stipulated criteria.

At Zehnder we have championed CIBSE's methodology, as this supports the approach we have adopted in delivering a full suite of integrated products that form our cooling hierarchy.



Official Police Security Initiative

Secured by Design

Secured by Design is the official UK police flagship initiative, focused on design and security - particularly within homes, commercial premises and car parks. It also acknowledges the quality of security and crime prevention products.

Our Zehnder Greenwood Omnique Window Fan is the only one of its kind to be awarded the prestigious Secured by Design seal of approval. This seal is proven to reduce burglary and crime rates by up to 75% on new build developments and up to 60% on refurbished developments.



SAP Appendix Q

Appendix Q of SAP provides a means whereby validated, individual branded product performance information can be accessed and used as an adjunct to the SAP calculation.

We use rigorous verification procedures to validate our performance data, and our products are featured in the Product Characteristics Database (PCDB). They appear within the following category listings for Mechanical Ventilation under the Zehnder and Greenwood brand names:

- **Balanced whole-house mechanical ventilation with heat recovery**
- **Decentralised MEV**
- **Semi-rigid MVHR duct**



BEAMA

Active engagement with BEAMA enables us to discuss industry regulations and changes that would support the growth of our industry, as well as develop proposals to represent the association members' best interests. With a high degree of industry experience across those representing our organisation, we are well positioned to contribute to the growth of the HVAC sector.



Guaranteed Installed Performance (GiP)

The Domestic Ventilation Compliance Guide, launched in 2010, brought specific requirements for good installation practice and on-site requirements for installers.

Guaranteed Installed Performance is now a fundamental part of building regulation compliance – ensuring ventilation is doing what it is supposed to for the building and its occupants. GiP is important in both new builds and refurbishments, and our Zehnder Greenwood ventilation products are designed to easily facilitate this.

You're in Safe Hands With Zehnder

UKAS Tested

All Zehnder Greenwood products are tested at third party UKAS accredited test houses to all current British and European standards:



BS EN 13141-1

2004 Ventilation for Buildings

BS EN 1026

2000 Air Permeability

BS EN 1027

2000 Watertightness

BS EN ISO 717-1

1997 Airborne Sound Insulation



ISO9001:2015 and ISO4001 certification

For quality, environmental management and carbon foot-printing, we use robust frameworks and processes. This ensures that we are consistent in our business operation. It allows us to measure ourselves and look for genuine areas of improvement. We also use a 360 degree feedback mechanism.

We are proud of our achievements, especially our quality performance.



Warranty

All products manufactured under the Zehnder and Greenwood brands are developed using the very highest standard best in class components, technologies and manufacturing processes.

For specific product warranty details, visit:

www.zehnder.co.uk/zehnder-group-uk-data-privacy-policy.



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