



# Perfect home climate control

Introducing The Unico System: a small-duct, high-velocity renewable solution that works efficiently and discreetly 24/7/365 to maintain perfect, optimum temperatures and exceptional indoor air quality.









#### Perfect home climate control

The Unico System is a 3-in-1 renewable solution that works efficiently and discreetly to maintain perfect, optimum temperatures and exceptional indoor air quality in the home and in light commercial settings.

Unico warms in the winter and cools in the summer, plus all-year-round it removes pollutants and irritants to leave you with clean, healthy, filtered air in your home. It creates living spaces that are perfectly climate-controlled to combat our changing and challenging UK weather conditions.

Unico is the perfect option for any new build property or self-build project where the system can be designed to fit perfectly within the fabrication of the building. It is also an ideal solution for top floor installations in existing properties where loft space is available to locate the air handler.



Select your perfect temperature



Unico will cool or heat your spaces accordingly



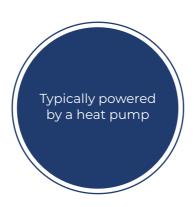
Your rooms will feel comfortable 24/7/365, no matter the weather outside



The system will filter the air to remove pollutants and irritants, delivering beautifully fresh air into your home



Sit back and enjoy optimum living conditions with minimal day-to-day input from you



#### Warm in winter. Cool in summer. Always beautifully fresh, filtered air.



#### Imagine your home with Unico

Unico will give you perfectly temperature-controlled living spaces filled with fresh and filtered air, despite harsh winters, recordbreaking summers and high levels of environmental pollution.

Once you've set your perfect temperature, the 3-in-1 system will work 365 days a year to cool or heat your spaces accordingly with fresh and filtered air, free of pollutants and irritants.

The result is a home that feels beautiful to live in.

#### **Sleep Easy**

Having complete control of the environment in your home means you and your family can 'sleep easy' and 'breathe easy'. No more stuffy, uncomfortable sleeping conditions. Instead, Unico can create your ideal sleeping temperature and remove all nasties from the air you're breathing at night, ideal for anyone that suffers from allergies.









#### **Warm** in winter

During the colder months, Unico will work efficiently to warm your home to your desired, pre-set temperature. Your rooms will receive a steady, warm supply of air via specially-located, discreet outlets, based on our unique aspiration principal. Unico will distribute the air evenly and consistently, meaning no hot or cold spots, just an overall feeling of pleasant warmth and comfort.

#### **Cool** in summer

When temperatures rise, Unico becomes the perfect antidote to overwhelming heat and stuffiness. Not only will the system cool your spaces to your desired level, it will also remove humidity and irritants, such as pollen, which adds to uncomfortable living conditions during UK summers. With Unico, you will achieve a fresh, cool home environment, no matter what the temperature outside.

Unico automatically and seamlessly switches between heating and cooling, doing whatever it needs to maintain your desired home climate.

# A home free of humidity

Thermal comfort is not just about temperature. People give off moisture though breathing and perspiration. Showering, cooking and plant life also add moisture inside the house. Unico removes around 30% more humidity (moisture) than traditional heating, ventilation and cooling (HVAC) systems, because of its cleverly-designed cooling coil which allows significantly more air to flow across its cooling surface. This means your home won't feel stuffy in winter or overwhelmingly uncomfortable in summer, helping with well-being and general comfort.

If not controlled properly, humidity, together with indoor air pollution, negatively affects the health and comfort of a home's occupants. It can also be detrimental to the fabric of the building and its components.

30%

more humidity removed by Unico than traditional HVAC systems

# Always beautifully fresh, filtered air

As well as intelligently warming and cooling your home as required, Unico also filters your air to remove pollen, pet hair, pollution, odours, germs, mould, viruses and bacteria from within your home

#### **Health benefits**

The Unico System dramatically improves a space's indoor air quality (IAQ), which is important for everyone, but especially for those with conditions such as asthma, respiratory illness, compromised immune systems or thermoregulation problems.



www.unicosystem.co.uk | info.uk@unicosystem.co.uk | 01384 422 094 The Unico System





#### Discreet & stylish outlets

Unico's discreet outlets allow home owners to make maximum use of their internal space. Outlets can be positioned in ceilings, walls or floors giving uncompromised interior design potential because there's no unsightly radiators or pipework to work around or accommodate. The freedom of design that Unico enables is loved by architects, self-builders and interior designers.

Unico outlets are either round (approx 50-65mm inner diameter/ 125mm outer diameter) or slotted (approx 25mm by 200mm). They are available in a variety of finishes including black, brass and chrome, or they can be stained or painted to blend into any style of decor. They can even be wall-papered to become virtually invisible in their surroundings.





### Whisper quiet

Air from Unico is delivered quietly and seamlessly with decibel levels down to a whisper (< 30 decibels).

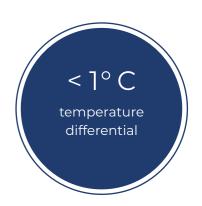
Our supply tubing is designed to be as quiet and efficient as possible, with a nylon inner core and insulation that absorbs sound. Our air handlers are designed to isolate noise and vibration, with closed cell, sound-deadening insulation. Together, they bring decibel levels to the equivalent of a soft whisper. While you'll feel the comfort our system provides, you'll hardly notice it's running.



#### Draft free, even temperatures

Traditional systems distribute air unevenly, dumping air into rooms, creating drafts and uneven temperatures throughout different parts of the room.

Instead, The Unico System uses a principle called aspiration; an air delivery method that uses a lower volume of air moving at a high velocity. Aspiration creates a gentle suction around the delivery outlets, drawing the room's air into its stream of cooled air, providing better comfort to occupants by eliminating drafts and hot/cold spots, and resulting in even temperatures from room to room, floor to floor, and floor to ceiling. The temperature differential is no greater than 1°C throughout the entire space using Unico.



# Energy efficient

Achieve superior energy efficiency performance with 97% of the system energy delivered to the conditioned living space.

Conventional HVAC systems can lose as much as 40% of their conditioned air, especially when ducting is located in an unconditioned area like an attic, but Unico's smaller, tighter ducts lose virtually none of their conditioned air. Plus, Unico blowers are available with programmable, variable speed Electronically Commutated Motors (ECMs) that use less electricity than their conventional counterparts. You can be sure Unico is providing actual delivered efficiency and not losing conditioned air to duct leakage or thermal transference.

97%
of system energy delivered to your living space.







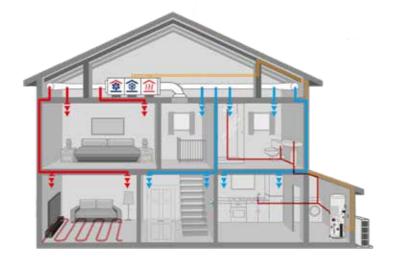
#### **3-in-1** technology

The Unico System is a small-duct, small air handler system for central heating, air conditioning (cooling) and ventilation applications.

The system's modular air handlers can be easily installed in lofts, utility rooms, voids and crawlspaces. Careful consideration is required for the location of the air handler units (AHU) and the central duct system. From the central duct the sound attenuated 89mm flexible supply tubes easily runs through and around the construction of a new building or existing buildings, where voids or more likely the loft space can be utilised.

The Unico System is available in five sizes and selection is made once the calculation for the heating and cooling demand has been established. Each project and house type can be very different and whilst two properties may look similar from the outside the construction, U-value and load requirement can be very different.

The advanced modular air handling units are at



the heart of every system. Unico is the only high velocity manufacturer to utilise a true variable speed EC motor combined with our S.M.A.R.T (Software Managed Air Rate Technology) control board that allows for exact airflow and temperature control.

Quick and easy to install, our five basic models cater for all types of UK properties and has the ability to pair with numerous outside condensers, air source heat pumps and traditional UK boilers.

### FREE project evaluation & advice from Bell Plumbing Supplies

Unico is proud to have selected Bell Plumbing Supplies as our technical sales and distribution partner in the UK.

Bells' System Design Team is the first point of call for anyone interested in discovering more about the suitability of Unico. Simply get in touch with your plans and the team will be delighted to advise you.



Project evaluation



Ventilation requirements



Indicative costs



Indicative materials list



Expert advice



# Unico components









CENTRAL DUCT











& SPARES

#### First-class installation from

# **Unico Specialist**

Following Bell's project evaluation and indicative costs, if you'd like to continue to a full quote and design service, we can then refer you to one of our Unico Specialist Partners (USPs). Based around the UK, our network of USPs are fully trained, accredited Unico installers. Our USPs are able to carry out home visits and work closely with you to create the perfect bespoke solution.

We always recommend a Unico Specialist Partner for your Unico installation to guarantee a thoroughly professional, seamless project.







# Unico Specialist Partner delighted with performance of Unico in his own home

#### Case study: 4-bedroom new build - Devon

Brian Litchfield, owner of Climate Controls and Spares in Devon has demonstrated how effective the Unico system is in his own home.

The Litchfield family has owned the Bloor Homes property since it was built in 2016. It's original design included an air source heat pump which worked faultlessly to heat the home via traditional radiators. However, recent summers, marked by significantly higher temperatures, had created uncomfortable sleeping conditions in the bedrooms of such a well insulated, air tight property.

Brian investigated the options to address the overwhelming build-up of heat and humidity but opening windows, investing in air conditioning or using temporary portable air units had many disadvantages. Selecting to retrofit Unico became a natural decision.

"Having the Unico system adds a whole extra dimension to the air movement in the house and to the benefits of using a heat pump. Whether it's heating, cooling, ventilation or the air filtration that the system provides, it is making a huge difference. This installation has moved us up to a whole new level of comfort," says Brian. "The unobtrusiveness of the system, its very quiet operation and ability to cool a bedroom very quickly are major benefits for the family. We can look forward to more comfortable nights as well as highly efficient indoor climate control for years to come."

www.climatecontrolsandspares.co.uk













#### Ready for a

#### **FREE project evaluation?**

Great! We'd be delighted to assist. Simply email your plans (including elevations if you have them) to info.uk@unicosystem.com and our System Design Team will be in touch.



Ventilation requirements

**Material** Indicative costs

Management of the state of the

**Ø** Expert advice



#### Contact Us









The UK sales & distribution partner of The Unico System