

## Foreword

Welcome to the May 2024 edition of our bi-annual newsletter bringing you information and updates on our recent activities.

Firstly, we are happy to highlight two major upcoming events. Mark your calendars for the upcoming 12<sup>th</sup> TightVent – 44<sup>th</sup> AIVC – 10<sup>th</sup> venticool joint conference in Dublin, Ireland on 9-10 October 2024. Following this, we look forward to the AIVC – ASHRAE IEQ – TightVent – venticool joint conference in Montreal, Canada, scheduled for 24-26 September 2025.

We are also excited to announce the latest publications in the series of Ventilation Information Papers dealing with trends in building and ductwork airtightness in various countries such as Japan, Republic of Korea, New Zealand & USA.

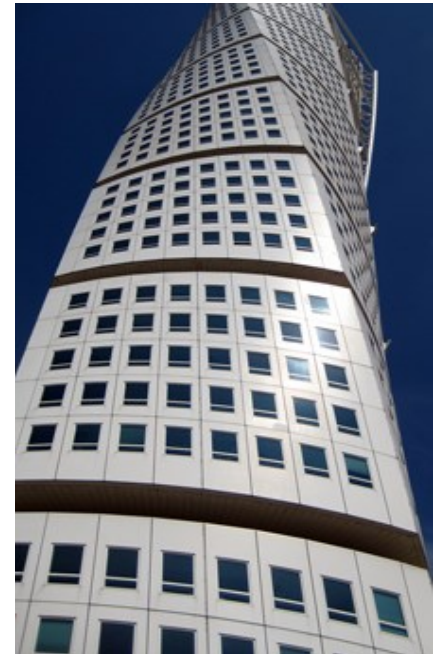
In addition, we present feedback from our recent AIVC-TightVent webinar on airtightness tests for high-rise buildings. In case you missed it, you can always listen to the recorded presentations.

Our TightVent Airtightness Association Committee (TAAC) has been active with various initiatives and updates, which you will find detailed in this edition. We believe that the committee's efforts are crucial in advancing airtightness practices worldwide.

Lastly, we bring you the latest product news from our partners, showcasing innovative solutions and advancements in the industry.

Please visit our [website](#), follow us on [twitter](#) and [LinkedIn](#) and [read](#) to our monthly newspaper "Energy Efficiency and Indoor Climate in Buildings" to find out more about our activities. We wish you a pleasant reading!

The TightVent team



## 24 – 26 September 2025, AIVC – ASHRAE IEQ – TightVent – venticool joint conference, Montreal, Canada

The conference "IEQ 2025: Rising to new challenges: Connecting IEQ to a sustainable future", organised by ASHRAE and AIVC, will be held in Montreal, Canada on 24-26 September 2025. The conference will also be the 13<sup>th</sup> TightVent and 11<sup>th</sup> venticool conference. This conference provides the opportunity to learn, network and engage with IEQ professionals dedicated to advancing the fields of indoor environmental quality. Emphasis is placed on the growing understanding of occupant response to indoor environment elements (thermal, air quality, lighting and acoustics) while enhancing resilience in a changing climate. Seminars are led by experts from around the world representing AIVC, ASHRAE and many other partnering organisations.

**Topics for Papers and Seminars:** Performance Metrics: For all aspects of IEQ; Occupant Behavior: How behavior impacts IEQ and how IEQ impacts behavior – psychological dimensions of IEQ; Smart Sensors, Data and Controls: Sensor properties, data management, cybersecurity, applications, commissioning, equivalence; Resilience and IEQ: Responding to climate change and disasters; Ventilation: Mechanical, passive, natural and hybrid systems; Air Tightness: Trends, methods and impacts; Thermal Comfort: Dynamic approaches, health impacts and trends; Policy and Standards: Trends, impacts, implications; HVAC and IEQ in a post-COVID world; Ventilation and building decarbonisation.

**Important dates:** Abstracts for Conference Papers and Extended Abstracts Due: **November 11, 2024**; Decisions on Abstracts for Conference Papers and Extended Abstracts Sent: **December 16, 2024**; Registration Opens: **March 7, 2025**; Papers and Extended Abstracts Due: **March 10, 2025**; Paper Final Revisions Due: **May 12, 2025**; Speaker Presentations Due for Commercialism Review: **September 8, 2025**;

More information can be found at: <https://www.ashrae.org/conferences/topical-conferences/ieq-2025-conference>

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## 9-10 October 2024 – 12<sup>th</sup> TightVent- 44<sup>th</sup> AIVC - 10<sup>th</sup> venticool conference in Dublin, Ireland

The 12<sup>th</sup> TightVent conference: **"Retrofitting the Building Stock: Challenges and Opportunities for Indoor Environmental Quality"** will be held in Dublin, Ireland together with the 44<sup>th</sup> AIVC and the 10<sup>th</sup> venticool conferences on October 9-10, 2024. The conference will take place at Croke Park, Dublin.

### Conference Scope

In a world striving to achieve carbon neutrality by 2050, it is imperative to strike a balance that sustains both our environment as well as the health and comfort of the individuals inhabiting buildings. Considering that 90% of the current buildings are projected to remain in the year 2050, retrofitting the existing building stock is paramount to reaching decarbonisation goals. From the perspective of climate goals, reducing energy use in the built environment via energy retrofit and climate neutral newly constructed buildings are critical. However, it is crucial to prioritise indoor environmental quality when reducing energy usage to meet climate targets. Well-designed and executed retrofits are needed to reduce carbon emissions while ensuring healthy indoor environments. Building retrofit professionals, energy conservation experts, ventilation system designers & installers, and indoor air quality specialists must collaborate on innovative solutions to achieve these multifaceted objectives. AIVC 2024 will serve as a multidisciplinary platform to address the emerging challenges by exchanging cutting-edge ideas, research findings, policies and industrial experiences.

The conference organisers have invited contributions centred around the pivotal role of ventilation, airtight building and ductwork designs, and ventilative cooling solutions in enhancing Indoor Environmental Quality (IEQ) and overall health in existing buildings.

### Conference concept

- The conference will consist of 3 parallel sessions largely devoted to:
- Smart ventilation, Indoor Air Quality and health
- Building and ductwork airtightness
- Ventilative cooling – Resilient cooling

The conference will consist of a mixture of invited presentations and presentations in response to a call for papers, organised in structured sessions focused on the conference topics. Some sessions will consist of presentations from the call for papers only, while other sessions will be topical sessions with presentations proposed by a session organiser or by the organising committee. The conference is combined with an exhibition by industry partners.

### Conference topics

#### *Smart ventilation, IAQ and health*

- Integration of ventilation in building energy retrofits
- Associated health benefits of energy retrofits
- Strategies to reduce exposure to outdoor and indoor air pollutants (filtration, air cleaning, source control)
- Resilient approaches in IAQ management (infection control, hazardous events, etc.)
- Inspection, monitoring, maintenance, reliability and durability of ventilation systems
- Model based data analytics and control strategies for smart ventilation, including the role of consumer-grade IAQ sensors
- Building Information Modelling (BIM), Life Cycle Assessment (LCA) and ventilation systems
- Standards, policies and legislation

#### *Building and ductwork airtightness*

- Role of airtightness in building energy retrofits
- Energy and IAQ impact of envelope and ductwork leakage

- Innovative measurement and airtightening techniques
- Compliance schemes for airtightness
- Long-term performance: durability of airtightness

#### *Ventilative cooling – Resilient cooling*

- Role of ventilative and resilient cooling in building energy retrofits
- Occupant IEQ perception and satisfaction
- Resilient approaches to extreme heat events and climate change
- Control strategies and personal comfort control
- Standards, legislation and compliance tools

### Conference Organisers

The conference is an initiative from:

- the International Network on Ventilation and Energy Performance (INIVE) on behalf of the Air Infiltration and Ventilation Centre (AIVC), the Building and Ductwork Airtightness Platform (TightVent Europe), and the platform for resilient ventilative cooling (venticool);
- the University of Galway;
- the Maynooth University; and
- the Sustainable Energy Authority of Ireland (SEAI)

For more information, please visit the conference website at:

<https://aivc2024conference.org/>

## Feedback from the AIVC- TightVent webinar “Airtightness tests for high-rise buildings”

The AIVC-TightVent webinar “Airtightness tests for high-rise buildings” was held on January 26<sup>th</sup>, 2024. The event attracted 98 participants who provided positive feedback through the evaluation survey. Recordings and presentation slides from the webinar are now accessible online [here](#).

You can explore this valuable collection, along with past events, by visiting this [link](#).

Don't forget to [subscribe](#) to our YouTube channel for the latest video updates.

## New AIVC publications! Building and ductwork airtightness in the Republic of Korea, Japan, New Zealand and USA

We are happy to announce the release of 4 new AIVC publications developed in collaboration with TightVent & TAAC.

[Ventilation Information Paper #45.12: Trends in building and ductwork airtightness in USA](#)

[Ventilation Information Paper #45.11: Trends in building and ductwork airtightness in New Zealand](#)

[Ventilation Information Paper #45.10: Trends in building and ductwork airtightness in the Republic of Korea](#)

[Ventilation Information Paper #45.9: Trends in building and ductwork airtightness in Japan](#)

These papers are part of the new VIP series being developed and dealing with trends in building and ductwork airtightness in various countries.

Previously released papers include trends in building and ductwork airtightness in [Estonia](#), [Spain](#), [the Czech Republic](#), [Belgium](#), [Latvia](#), [France](#), [Greece](#) & [China](#)



All documents are freely accessible and available for download [here](#).

## TAAC news & latest activities

The TightVent Airtightness Association Committee (TAAC) continues to actively engage with its members, meeting four times a year. As was customary before the pandemic, a physical meeting is held annually, typically the day before the AIVC Conference. Last year's meeting took place in [Copenhagen in October 2023](#), and the next is scheduled for October 8, 2024 right before the [AIVC Conference in Dublin](#). These meetings provide an invaluable opportunity to discuss new regulations and trends from various countries represented by the participants.

The TAAC working group is expanding, with new representatives from Japan, Montenegro, Italy, and Australia recently joining the effort to improve building and ductwork airtightness. The group now has 19 countries involved.

Recent meetings have focused on several key topics, including the revision of ISO 9972, discussing its anticipated developments and the rationale behind them. Other significant discussions have revolved around the impact of airtightness on indoor air quality and innovative experimental methods for testing ductwork airtightness. Additionally, web meetings have provided a platform to present and look deeper into research papers from the AIVC conference with their authors.

Thanks to the dedication of [TAAC participants](#) and [AIVC board members](#), several Ventilation Information Papers (VIP)s on "Trends in Building and Ductwork Airtightness" have been published, covering insights from 12 different countries: Estonia, Spain, the Czech Republic, Belgium, Latvia, France, Greece, China, Japan, the Republic of Korea, New Zealand & USA. Using a standardized template for these papers allows for easy comparison of how building and ductwork airtightness are addressed in each country. Five more VIPs are currently under development and should be released in the coming months. Additionally, an [AIVC Technical Note](#) featuring synthesis papers on the status of airtightness in

various countries will be available soon so stay tuned.

## TightVent welcomes Build Test Solutions as new gold partner

TightVent is very pleased to welcome Build Test Solutions, as new partner!

[Build Test Solutions](#) (BTS) is a UK based technology manufacturing business dedicated to driving innovation in building performance measurement. We are driven to change buildings for the better by providing the means to measure and act on as-built performance. To do this, we develop game-changing equipment and software solutions for a wide range of stakeholders in construction, renovation and home improvement sectors. Specifically in line with the work of TightVent, we have worked with the University of Nottingham in the UK to bring to market a novel low pressure compressed air based method of measuring building air leakage. Unlike conventional steady state techniques, this dynamically measures air leakage rates directly at 4Pa with a short burst of air, a pressure level that closely resembles day-to-day ambient conditions. We also host tools used for measuring the thermal performance of buildings, indoor air quality and ventilation performance. Build Test Solutions strongly supports the work of TightVent and the efforts of the wider membership in advocating the importance of building and ductwork airtightness in achieving healthy, sustainable low energy buildings.





## Product news as provided by our partners

### Introducing the Solo: Retrotec's Single Channel Gauge

Retrotec is excited to announce the Solo Single Channel Manometer. This cutting-edge digital gauge is accurate and versatile, all while maintaining affordability. The Solo utilizes the same digital sensor and filtering technology as Retrotec's DM32X and includes auto-zeroing technology for hassle-free operation.

Features: Auto - zeroing technology for hassle free operation; Adjust Time Averaging directly on the gauge. Eliminates the need to pair with an app; Responsive Display Screen changes directions when maneuvering from Landscape into Portrait mode; 19 hour continuous battery life. 2-hour fast charge via USB-C; Magnetized clip for convenient HVAC placement; Test at multiple units of measurement; Unmatched accuracy in the most demanding environments.

Learn more at [www.retrotec.com](http://www.retrotec.com)

Contact Retrotec EU | +31 (0) 522 282941 | [salesEU@retrotec.com](mailto:salesEU@retrotec.com)



## DIAMOND PARTNERS



## GOLD PARTNERS



### Leakage testing & reporting on ductwork

A training programme by the AIRWORKER Academy - the modern competence centre for air duct systems.

The seminar comprises the theory and practice of airtightness of air duct systems in ventilation systems. It covers legally binding and technical regulations, general and metrological principles, and the performance of leakage tests.

By participating in the seminar you will gain: the knowledge of why tight air duct systems must be guaranteed during installation & operation; the expertise to carry out a leakage test and; the knowledge to create a proper inspection report.

Date: 24 and 25 June or 9 and 10 September 2024

Location: Germany, Bierwiesenstraße 7, 72770 Reutlingen

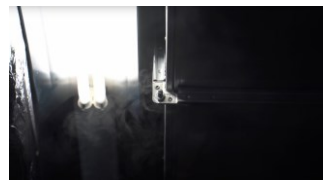
Price: € 995,- net, per person

More details and registration: <https://www.mez-technik.de/en/academy/leakage-testing-and-reporting.html>

The AIRWORKER Academy also offers individual training programmes for five or more participants.



AIRWORKER Academy, photo by MEZ-TECHNIK



Leakage, photo by MEZ-TECHNIK

### ACIN Instrumenten: enhanced global recognition through ISO

#### 17025 Accreditation

An increasing number of European countries require measurement equipment for ventilation and air tightness testing to be calibrated by ISO17025 accredited laboratories. The Council for Accreditation (RvA) has accredited, ACIN instrumenten, to the ISO 17025 standard for the measurement of pressure and ventilation volume. This accreditation confirms that Acin meets international standards and provides reliable, accurate measurement results. As a result, Acin measurements are recognised and accepted worldwide, increasing confidence in our services. A new FlowFinder mk2+ now comes with an accredited certificate and we can calibrate any volume flow meter that falls within our [scope K186](#).

For more information please contact: [nj.bink@acin.nl](mailto:nj.bink@acin.nl)

HCS code	Measurement quantity, Instrument, Measure	Measuring range	CMC <sup>2</sup>	Comments	Location
PV 0 0	Pressure and vacuum				
PV 1 2	Gauge pressure	0 Pa - 5890 Pa	0,25 Pa - 0,6 Pa		RWK
FG 1 0	Flow of gas				
FG 1 1	Gas flow rate	10 m <sup>3</sup> /h - 1400 m <sup>3</sup> /h	0,04 Q m <sup>3</sup> /h, with a minimum of 3 m <sup>3</sup> /h	or volume flow rate offered, properly and tested air	RWK



## SILVER PARTNERS



## ASSOCIATE PARTNERS



## PLATFORM FACILITATOR



### Don't forget to seal cracks!

With Soudal Window System (SWS), Soudal offers a total system solution for the professional sealing of windows and doors. The SWS range includes joint sealants, PU foams, pre-compressed tapes, self-adhesive tapes and liquid membranes which can all be perfectly combined. The products were developed in cooperation with leading window and masonry manufacturers and can be used for all types of joinery: alu, wood and PVC. SWS not only ensures an optimum airtightness, but also insulation and protection of the building materials against weather influences (rain, UV and wind).

For more information please visit: <https://www.soudal.com/>

