

# Newsletter

#### **Foreword**

Welcome to the May 2025 edition of our biannual newsletter, where we bring you the latest updates and insights from our recent activities.

This edition includes announcements of several exciting upcoming events, such as the 45<sup>th</sup> AIVC-13<sup>th</sup> TightVent Conference taking place in September 2025 in Montreal. We also invite you to join our upcoming webinar on the inspection of ventilation systems in non-residential buildings, scheduled for June 2025.

Looking back, we're pleased to share highlights from the 14<sup>th</sup> International Buildair Symposium and our recent webinar, "Building and Ductwork Airtightness Trends and Regulations in Estonia, Germany, and the U.S.", held on May 12, 2025.

We're also excited to announce the expansion of TightVent's scope, along with updates from the TightVent Airtightness Association Committee (TAAC) and information on newly released publications. Last but not least, this issue features the latest product innovations from our partners, showcasing new solutions and advancements in the industry.

Please visit our <u>website</u>, follow us on <u>bluesky</u> and <u>LinkedIn</u> and <u>read</u> 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 joint 45<sup>th</sup> AIVC conference and ASHRAE 2025 IEQ conference "IEQ 2025: "Rising to New Challenges: Connecting IEQ to a Sustainable Future" will be held on September 24-26, 2025, in Montreal, Quebec together with the 13<sup>th</sup> TightVent and the 11<sup>th</sup> venticool conferences. The event will focus on the increasing understanding of how occupants respond to various indoor environmental factors while enhancing resilience in the face of a changing climate.

#### **Keynotes**

- A Performance Based Rating Ecology for Residential IAQ Management from IEA-EBC Annex 86, Jelle Laverge
- Community Engaged Frameworks lead to Healthy and Sustainable Indoor Environments, Sarah Haines
- Healthy and Resilient Indoor Environments Applied Research in Canadian Buildings, Grace Zhou

#### Workshops

- Dimensions of Indoor Environmental Quality for Healthy Aging in Place
- Non-Energy Impacts: Exploring the Nexus of IEQ and Decarbonization in Residential Buildings
- Indigenous Perspectives and Community-Led Approaches to Shaping Indoor Environments
- Real-life examples of applying ASHRAE Standard 241 "Control of Infectious Aerosols" and Guideline 44 "Protecting Building Occupants from Smoke During Wildfire"
- IEA EBC Annex 86: a Rating Ecology for IAQ Management in Residential Buildings
- IEA-EBC Annex 78 Supplementing Ventilation with Gas-phase Air Cleaning, Implementation and Energy Implications
- Bedroom Environmental Quality impacts our Sleep, Health and Well-being
- Unlocking energy efficient ventilative cooling through emerging CEN & ISO standards
- Durability of the building airtightness (TightVent related workshop)

For further information and updates visit: <a href="https://www.ashrae.org/conferences/topical-conferences/ieq-2025-conference">https://www.ashrae.org/conferences/topical-conferences/ieq-2025-conference</a>.

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## Broadening the Scope of TightVent

Since many of the challenges related to building & ductwork airtightness are shared across Europe, the TightVent Europe platform, created in 2011, aims to address the clear need for a strong and concerted initiative to these issues. Indeed, overcome sharing experience on practical issues as specifications, design implementation, control, etc. as well as learning from pioneering efforts, will help improve airtightness quality while maintaining adequate ventilation.

TightVent Europe was initiated by <a href="INIVE">INIVE</a> (International Network for Information on Ventilation and Energy Performance) with financial and technical support from <a href="industry">industry</a> partners.

An important aspect of ductwork airtightness is performance testing and inspection. Over the past few years, we have observed that companies and experts interested in ductwork airtightness often have a broader interest in performance testing and inspection, including air flow rates, acoustics, draught, energy performance, etc.

Additionally, the recast of the Energy Performance of Buildings Directive (EPBD), which introduces new requirements for the inspection of ventilation systems in larger buildings, has a broader scope than ductwork airtightness alone.

We have also received considerable interest in our activities from outside Europe.

As a result, the TightVent Steering Committee has decided to widen the scope of its activities:

- TightVent and TAAC activities will be expanded to include various aspects related to the inspection of ventilation systems
- The scope of TightVent will extend beyond Europe

More information will be available on the TightVent website.

## Innovating Airtightness and Ventilation: Insights from the BUILDAIR Symposium

The 14<sup>th</sup> International Buildair Symposium in Hannover (Germany) on May 16 and 17 was organised by the Energie- und Umweltzentrum am Deister (e.u.[z.], <a href="https://www.e-u-z.de">www.e-u-z.de</a>), in close cooperation with the AIVC, TightVent and INIVE. The event brought together about 120 international experts.

On the morning of May 17, TightVent and AIVC organised a session with four presentations by Valerie Leprince (Cerema/INIVE) and Peter Wouters (AIVC Operating Agent/INIVE).

The first presentation introduced the work of TightVent and AIVC, highlighting various outputs and resources relevant to the BUILDAIR community.

The second presentation analysed trends in building and ductwork airtightness across 16 countries, focusing on regulations, metrics, testing protocols, and their role in energy performance calculations. It highlighted that building airtightness is more commonly regulated than ductwork, with many countries having building quidelines and testing protocols, while mandatory ductwork requirements remain limited. The studv stresses the increasing importance of airtightness for energy efficiency and indoor air quality, recommending more testing, stricter rules, and better guidelines, particularly for ductwork systems. More information can be found in AIVC Technote 73.

The third presentation focused on regulatory developments in Belgium enhancing ventilation and indoor air quality in buildings. It detailed regional federal measures including minimum ventilation requirements, assessment procedures, quality frameworks, and risk analysis. Notably, while Belgium has no requirements for airtightness testing or minimum airtightness levels, over 98% of all new residential buildings undergo airtightness measurements. More information can be found in AIVC VIP 45.4.

The final presentation outlined proposed revisions to ISO 9972 aiming to improve accuracy, relevance, and consistency with other standards. updates Key include revised terminology, measurement improved limits. error testing procedures, and new annexes for specific building types. Drawing on a decade of experience and research, changes aim to promote airtightness testing and support energy-efficient building practices.

#### **New AIVC publication**

We are happy to announce the release of a new addition to the AIVC Ventilation Information Paper (VIP) series dealing with trends in building ventilation requirements and inspection in various countries.

Ventilation Information Paper #48.4: Trends in building ventilation requirements and inspection in Italy is now available to download.

All documents in the VIP series are freely accessible and available for download **here**.

## Webinar Recordings Now Available!

The recordings from the recent AIVC and TightVent co-organised webinar, "Building & Ductwork Airtightness Trends and Regulations in Estonia, Germany and the U.S.", held on May 12, 2025, are now available on our website.

#### Featured Speakers:

- Jaanus Halik (Tallinn University of Technology, Estonia),
- Oliver Solcher (FLiB, Germany)
- Andrew K. Persily (NIST, USA).

Access the recordings <u>here</u>. Don't forget to <u>subscribe to our YouTube channel</u> for the latest webinars, updates, and video releases!



#### Upcoming AIVC-TightVent webinar: "Inspection of ventilation systems in non-residential buildings" – 5 June 2025 (13:30 -15:00 CET)

The inspection of ventilation systems in non-residential buildings is a growing priority across Europe, driven by the need for better energy efficiency and indoor air quality. Inspection protocols can be challenging to develop as, unlike for residential buildings, a wide range of building types and use has to be covered. Moreover, inspection protocols vary significantly between countries due to different national policies and building practices. In Sweden the inspection is mandatory for all buildings whereas in France and in Flanders (Belgium) it is mandatory only for residential buildings.

The new European Performance of Buildings Directive (EPBD) now asks member states to require regular inspection of ventilation systems in large buildings (every 3 or 5 years). Various standards (EN 16798-17, EN 12599 and EN 16211) provide a framework for ventilation system inspections but they could still be improved to better cover demand-control ventilation.

This webinar will present the inspection of ventilation systems in non-residential buildings in France, Belgium, and Sweden, and discuss how international regulations are shaping these practices. The goal is to offer a clear overview of current approaches and foster a better understanding of global trends in ventilation system inspections.

This webinar is organised with the support of the <u>AIVC</u> and TightVent. Both initiatives are facilitated by <u>INIVE</u>.

#### Agenda (CET)

- 13:30 | Inspection of ventilation systems in the new EPBD and in existing EU standards, Valérie Leprince (Cerema, France)
- 13:40 | Questions and answers
- 13:50 | Obligatory Ventilation

Control in Sweden since 1991, Dennis Andersson (FunkiS, Sweden)

- 14:05 | Questions and answers
- 14:15 | Experiences with existing inspection schemes in Belgium, Maarten De Strycker (BCCA, Belgium)
- 14:30 | Questions and answers
- 14:40 | PromevenTertiaire: the new French protocol for the inspection of ventilation systems in non-residential buildings, Ariane Lesage (Cerema, France)
- 14:50 | Questions and answers
- 15:00 | End of webinar

Attendance to the webinar is free of charge, but <u>registration</u> is required. For further information please download the <u>flyer</u>.

#### **TAAC** news

The TightVent Airtightness Association Committee (TAAC) had four meetings over the past year, including one inperson meeting in Dublin, held just before the AIVC-TightVent-venticool joint conference in October 2024, and three virtual sessions. The main topics discussed during these meetings included:

- Building airtightness
  measurements for very airtight
  buildings: Two complementary
  presentations addressed
  appropriate air pressure
  measurements, delivered by
  Michael Wehrli (theCH,
  Switzerland) and pressure buildup duration by Joachim Zeller
  (Ingenieurbüro Zeller, Germany).
- Impact of air Pressure measurement location: Adeline Mélois (Cerema, France) presented model-scale wind tunnel studies, while Kevin Verniers (Renson NV, Belgium) shared case studies on air pressure differences across building envelopes.
- Revisions and proposals for airtightness standards: This included a proposal for a new regression method and uncertainty calculation for ISO 9972 by Valérie Leprince (Cerema, France), as well as a discussion on the revised German

- airtightness standard (DIN 4108-7) presented by Oliver Solcher (FLiB, Germany). Additionally, Federico Pedranzini (Politecnico di Milano, Italy) addressed ductwork airtightness measurements.
- New testing facility for air leakage investigation: Markus Diel (DLR, Germany) introduced the ATLAS (Adaptable Testing Laboratory for Air Sealing) for advanced air leakage studies.
- Performance evaluation of humidity-controlled decentralized ventilation systems: Gilles Flamant (CEDEUS, Chile) presented a case study on social housing in Chile
- National updates: Participants shared updates on airtightness and ventilation regulations from their respective countries (Belgium, Czech Republic, France, Germany, Greece, Netherlands, Spain, Switzerland, and the UK) as well as insights from TightVent partners (Build Test Solution, dooApp, Lindab, Retrotec, Acin).

Looking ahead, TAAC members plan to continue their collaboration on airtightness and ventilation topics, further strengthening this international network of experts spanning more than 20 countries.

#### Save the Date: April 21– 22, 2026 | AIVC International Workshop – Madrid

Join us in Madrid for the AIVC 2026 International Workshop on "Climate Change, Ventilation and Resilience".

Dates: April 21–22, 2026Location: Madrid, Spain

This international event is organised by the <u>AIVC</u> in collaboration with the <u>Eduardo Torroja Institute for Construction Science (CSIC)</u>, and facilitated by INIVE (International Network for Information on Ventilation and Energy Performance).

Stay tuned! Details on the programme, speakers, registration, and more will be announced soon!



## Partners

#### Product news as provided by our partners

#### Introducing the AirTracer: Retrotec's Handheld Smoke Generator

Retrotec is excited to announce the AirTracer, a professional-grade handheld smoke generator built for quick, accurate air leak detection -

With a simple press of a button, the AirTracer releases smoke in a second, allowing for easy leak identification when used alongside a blower door or duct tester.

#### Features:

- Instant smoke generation.
- Easy cartridge replacement system with digital countdown display.
- USB-C fast charging for minimal downtime.
- Compact smoke diffuser attachment for targeted inspections.
- Professional-grade performance at a budget-friendly price.
- Lightweight and easy to use for all building diagnostics.





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#### Launch of "Sustainable joinery" v2.0: Building a Sustainable Future **Together**

On March 27, 2025, the new version of the certification system "Sustainable joinery" **v2.0** was officially launched. The certification "Sustainable joinery" is one of the first product certifications to combine a high level of technical quality with environmental and social aspects. It considers the entire life cycle of the ioinery products.

The system operates with three levels (Bronze, Silver, and Gold) and provides an objective and transparent way to recognize efforts in entrepreneurship.

Certified companies do not merely comply with current standards; they also commit to a continuous improvement process in their sustainability

For more information, watch the video or visit the dedicated website also available in Dutch: video and website.



**MENUISERIE** 

## Infiltrea 5.1: Revolutionizing Multi-Fan measurements

Infiltrea 5.1 marks a major advance in blower door testing. This new version now allows direct multi-fan measurements without the need for third-party software.

features automatic manometer detection, easy channel configuration, and manual or automatic fan control. The new expert view also features real-time data display of pressure curves, automatic verification of pressure drops and advanced analysis tools for optimal control of your measurement even on complex buildings, and ever more accurate results.

To find out more about this new version, please contact us: contact@dooapp.com

Find out more at: www.dooapp.com

