

# Newsletter

## Foreword

Welcome to the November 2019 issue of the TightVent Europe newsletter! In this edition we present the highlights of the 2019 joint AIVC – TightVent – venticool conference "From Energy crisis to sustainable indoor climate – 40 years of AIVC" held on 15 & 16 October 2019 in Ghent, Belgium i.e. a summary of the airtightness track of the event and news from the TAAC meeting held right after the conference. Moreover, you will be informed on our upcoming events and the 41<sup>st</sup> AIVC & 9<sup>th</sup> TightVent -ASHRAE IAQ joint conference to be held on 14 -16 September 2020 in Athens, Greece. The newsletter includes also a special section with product news from our partners.

Please visit our <u>website</u>, follow us on <u>twitter</u> and <u>LinkedIn</u> and <u>subscribe</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 and look forward to seeing you in our future events!

The TightVent team

## Feedback from the 40<sup>th</sup> AIVC & 8<sup>th</sup> TightVent conference-Summary of the airtightness track

The AIVC - TightVent - venticool 2019 joint Conference "From Energy crisis to sustainable indoor climate - 40 years of AIVC", co-organized by Ghent University and 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 international platform for ventilative cooling (venticool), was held on 15-16 October in Ghent, Belgium. The event drew just over 200 participants researchers, engineers & architects, policy makers or regulatory bodies, manufacturers & stakeholders and international organizations from 28 countries.

The programme included 3 parallel tracks of structured sessions with around 160 presentations covering the main conference topics namely: Smart Ventilation, Indoor Air Quality (IAQ) and Health relationships; Airtightness; Ventilative cooling – Resilient cooling. A special session i.e. "90 seconds industry presentations" was also organized and devoted to the sponsors of the event.

The Conference featured the official inauguration of the Indoor Environmental Quality Global Alliance (IEQ-GA) association during a ceremony held on the evening of the first day of the event. At the ceremony, the founding members celebrated with short speeches the establishment of the association and presented its mission and objectives to create a healthier indoor environment in the buildings sector.

The event has also been a major discussion place for on-going or recently launched projects such as, the IEA EBC annex 68 "Design and Operational Strategies for High IAQ in Low Energy Buildings" (http://www.iea-ebcannex68.org/), the IEA EBC annex 78 "Supplementing Ventilation with Gasphase Air Cleaning, Implementation and Energy Implications" (http://annex78.ieaebc.org/), the IEA EBC annex 79 "Occupant-Centric Building Design and Operation" (http://annex79.iea-ebc.org/) and the IEA EBC annex 80 "Resilient Cooling" (http://annex80.iea-ebc.org/).

The article available **here** presents main trends, ideas, considerations and conclusions that emerged from the two days of the conference on the topic of building & ductwork airtightness. The "Airtightness" track of the AIVC 2019 conference consisted of 24 presentations. Selected presentations are grouped into 3 main themes:

- 1. Airtightness measurements, alternative methods & wind impact
- 2. Durability of airtightness &
- 3. Modelling of infiltration



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## 14 -16 September 2020 – 41<sup>st</sup> AIVC & 9<sup>th</sup> TightVent -ASHRAE IAQ joint conference in Athens, Greece

The conference "IAQ 2020: Indoor Environmental Quality Performance Approaches Transitioning from IAQ to IEQ", organized by ASHRAE and AIVC will take place September 14-16, 2020 in Athens, Greece. The conference will also be the 9<sup>th</sup> TightVent and 7<sup>th</sup> venticool conference.

Indoor Air Quality (IAQ) has been the core of ASHRAE'S IAQ series of conferences for the past 30 years. This conference will expand from Indoor Air Quality to Indoor Environmental Quality (IEQ). IEQ includes air quality, thermal comfort, acoustics, and illumination and their interactions. The particular focus of this conference is on performance approaches including the metrics, systems, sensors and norms necessary to implement them.

#### **Conference topics**

- Health and Well-being: Appropriate technical and operational definitions
- Performance Metrics: For all aspects of IEQ
- Interactions: Interactions between IEQ parameters

- Occupant Behavior: How behavior impacts IEQ and how IEQ impacts behavior - psychological dimensions of IEQ
- Smart Sensors and Big Data: Sensor properties, data management, cybersecurity, applications
- Smart Controls: Equipment properties, 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

#### **Call for Abstracts & Papers**

Authors have the option to submit either a conference paper or an extended abstract and to state their preference for either an oral or poster presentation. Authors are invited to submit a 300-word or less abstract on a conference topic by December 9, 2019.

Decisions on abstracts will be made by January 8, 2020. Authors of accepted abstracts will have until February 17, 2020 to submit their conference paper or extended abstract. A template will be provided for the paper and extended abstract. Peer review of the papers will be conducted by the Scientific Committee. Papers requiring revisions should be re-submitted through April 2020.

#### Deadlines

- Submission of abstract, **December 9, 2019**
- Notification of decision on abstract, February 12, 2020
- Submission of complete manuscript, April 17, 2020
- Final acceptance, June 12, 2020

#### **Keynote speakers**

- Philomena Bluyssen, Professor of Indoor Environment, TU Delft
- Richard de Dear, Ph.D., Director, Indoor Environmental Quality Laboratory, University of Sydney
- Mariana Figuiero, Director of the Lighting Research Center, Rensselaer Polytechnic Institute
- Dr. Benjamin Jones, Associate Professor, University of Nottingham
- Cath Noakes, PhD, FIMechE, FIHEEM, Professor of Environmental Engineering for Buildings, University of Leeds
- Stephanie Taylor MD, M Architecture, CIC, FRSPH(UK), MCABE, Taylor Healthcare Consulting, Inc.

#### **Abstract Submission**

To submit an abstract please follow this link:

https://www.conftool.org/IAQ2020/

For more information, please visit: https://www.ashrae.org/conferences/to pical-conferences/indoorenvironmental-quality-performanceapproaches or contact meetings@ashrae.org

## **Tight Vent**

BUILDING AND DUCTWORK AIRTIGHTNESS PLATFORM

## **TAAC news**

On October 17<sup>th</sup>, 2019 the TightVent Airtightness Associations Committee (TAAC) held their 31<sup>st</sup> meeting since the committee's launch in September 2012. 23 TAAC members and guests from 9 countries (Belgium, Czech Republic, France, Germany, Latvia, Sweden, Spain, USA and the UK) attended the meeting.

The meeting started with the participants' updates on their activities and sharing news from their countries. It appears that in Europe, awareness on building airtightness is constantly raising.

Following these introductory presentations from the members, the discussions focused specifically on:

- Conducting airtightness measurements in high-rise buildings
- The future launch of a survey on the inspection of ventilation systems and specifically on ventilation flowrate measurements in order to compare approaches between different countries
- The development of a common building airtightness database

The participants identified also some of the topics of discussion for the next TAAC meeting in December 2019 as follows:

- Airtightness measurements in high-rise buildings -Specifications by the Passive House & British Standards
- Follow up of ventilation flowrate measurements survey
- Follow up of common building airtightness database developments
- Measurements of part of building e.g. windows (interesting and emerging topic for manufacturers, craftsmen and measurers)

The next TAAC meeting will be held on Tuesday December 10<sup>th</sup>, 2019 at 14:00 CET. In case you are interested to obtain further information and/or join us, please visit

http://tightvent.eu/partners/taac or send us an email at info@tightvent.eu.

## 2<sup>nd</sup> EPBD article 19a Stakeholder meeting – 28 November 2019, Brussels

Following the 1<sup>st</sup> EPBD article 19a stakeholder meeting which took place in June 2019 and where stakeholders discussed the state of the art regarding existing schemes in relation to the inspection of stand-alone ventilation systems and optional building renovation passports, the 2<sup>nd</sup> stakeholder meeting aims to present the impact analyses and discuss the relevance, feasibility and possible scope of measures at EU-level.

The objectives of the 2<sup>nd</sup> stakeholder meeting are to:

- Define and discuss possible approaches to the inspection of stand-alone ventilation systems and building renovation passports
- Describe the impact analyses
  methodologies and their boundary
  conditions
- Present preliminary outcomes of these impact analyses
- Examine and discuss possible EU policy options to the inspection of standalone ventilation systems and building renovation passports
- Collect stakeholder input and feedback on the possible scope of potential measures
- Discuss the future of inspection of stand-alone ventilation systems and building renovation passports

The detailed agenda of the meeting is available <u>here</u>.

Registration to the 2nd stakeholder meeting of 28 November 2019 is possible <u>here</u>.

For further information about the study or stakeholder meeting, visit www.epbd19a.eu/

## Frequently asked questions on airtightness by TightVent

TightVent Europe's website includes a page dedicated to providing answers to commonly asked questions regarding building and ductwork airtightness. Please visit https://tightvent.eu/fags and learn:

- What is building airtightness?
- > What is ductwork airtightness?
- What is infiltration/exfiltration?
- What is the energy impact of building and ductwork airtightness?
- Is there experimental data showing the energy savings of good building airtightness?
- Is good building airtightness compatible with good indoor air quality?
- What is an adhesive, a grommet, a vapour barrier, etc.?
- Are there groups of airtightness testers?
- How is the building airtightness quantified?
- How is the ductwork airtightness quantified?
- Are there databases on building and ductwork airtightness?
- Is there on-going research in relation to durability of airtightness?
- What is the relationship between pressure and leakage air flow rate?
- What are the most common air leakage/infiltration paths?
- How do you design for airtightness?
- > What is an air barrier?
- Is building and ductwork airtightness testing mandatory?
- What is a Blower Door?
- What is TAAC? How can I be involved?
- ≻ ...



#### Product news as provided by our partners

## BlowerDoor DG-1000 now with Bluetooth® for easy connection to

#### mobile devices

The firmware of the current pressure gauge DG-1000 for the Minneapolis BlowerDoor measuring system is continuously updated. The biggest news about the latest update is the addition of Bluetooth to the networking options. It allows for easier connections to mobile devices (iOS and Android) in order to use the apps "TEC Gauge" for one-point test and "TEC Auto Test" for multiple point test according to ISO 9972. The update is done by the user over the internet free of charge: By installing this latest update the Bluetooth antenna, which has been built into each and every DG-1000 from the beginning, will be activated.



#### Lindab is raising the standard. Again.

Lindab is constantly striving to raise its standard when it comes to both product development and new energy efficient innovations. Hence it has been highly important to us to have our product ranges Lindab Safe and Lindab Safe Click Eurovent certified. A Eurovent certification is a program for tightness class D regarding strength and leakage in duct systems. It ensures that the products live up to certain standards throughout the whole production process and that their performance and capability are in accordance with the manufacturer's specified data.





#### **MEZ-AEROSEAL**

MEZ-AEROSEAL is a unique technology for the efficient and effective sealing of air duct systems from the inside out. Since 2015, the AEROSEAL process has been used in more than 200 projects throughout Europe (Fig. 1). As an integrative component in the construction of new ventilation systems, it guarantees and meets maximum tightness requirements for ventilation systems. When renovating or retrofitting existing ventilation systems, AEROSEAL seals the air duct system quickly, efficiently and reliably up to the desired air tightness class. MEZ-AEROSEAL has been successfully used at restaurants, public facilities, hospitals, industry and residential buildings (Fig. 2). MEZ-AEROSEAL was able to achieve a project growth of average 33% per year throughout Europe. Finally, it can be said that the AEROSEAL process is an important part on the way to achieve energy efficiency goals throughout Europe. More information at: www.mez-aeroseal.com





#### Retrotec's New DucTester Shells Are In

Retrotec is excited to announce the new and improved "X Series" duct tester shells. For the first time ever, magnetically mount the DM32 digital Wi-Fi gauge directly onto the DucTester for advanced maneuverability. The more robust legs support sturdiness & assist in tipping prevention. A Quick Connect Collar is now automatically included in every DucTester system along with a new, larger carrying case. In addition, Retrotec is excited to announce new Calibration Chambers are up & running at our facility in the Netherlands. Don't use Retrotec? We can still calibrate your equipment! Visit <u>www.retrotec.com</u> or contact SalesEU@retrotec.com for more information.





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### **GOLD PARTNERS**









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## PLATFORM FACILITATOR

