

Air Infiltration and Ventilation Centre

EBC ANNEX 5

The principal goal of the Air Infiltration and Ventilation Centre is to provide reference information on ventilation and air infiltration in the built environment. Since its launch in 1979, the AIVC has been adjusting its scope to reflect emerging concerns, challenges and opportunities. Over that period, this major project's focus has markedly expanded beyond air infiltration energy losses to cover all building ventilation strategies with respect to efficient energy use and acceptable indoor environmental quality (IEQ) in new and existing buildings.

Objectives

The objectives of the AIVC are to:

- identify emerging issues on ventilation and air infiltration in new and renovated buildings;
- help to better design, implement, hand-over and maintain ventilation systems;
- provide discussion platforms, including conferences, workshops and webinars.

Deliverables

- Events: AIVC Annual Conference, one to two workshops per year on specific topics, with one to two webinars per year;
- Publications: conference and workshop proceedings, technical notes, contributed reports (typically one per year), and a biannual newsletter.

Progress

In 2018, the AIVC focused its work on nine projects, the 39th AIVC Annual Conference, two workshops, four webinars, and supporting discussions and dissemination for EBC Annex 62 on Ventilative Cooling and EBC Annex 80 on Resilient Cooling. The nine projects are entitled: 'BIM and ventilation and infiltration', '40 Years of AIVC', 'Smart Ventilation', 'Utilization of Heat Recovery', 'Rationale Behind Ventilation Requirements and Regulations', 'Integrating Uncertainties Due to Wind and Stack Effect in Declared Airtightness Results', 'Indoor Air Quality

Metrics', 'Residential Cooker Hoods', and 'Competent Tester Schemes for Building Airtightness Testing'.

In particular, the 'Smart Ventilation' project published Ventilation Information Paper, 'What is smart ventilation?', presenting and illustrating the definition of 'smart ventilation'. The recently launched project '40 years of AIVC', is anticipated to result in Technical Note 'AIVC after 40 years', highlighting the progress and outcomes



The latest project publication 'Ventilation Information Paper n° 38: What is smart ventilation?', published in 2018.

Source: EBC Annex 5

over these 40 years with contributions from various AIVC Board experts.

The 39th AIVC Annual Conference was held in Juan-Les-Pins, France in September 2018. The theme of the conference was 'Smart Ventilation for Buildings', attended by 207 people from 27 countries. Several topical sessions related to AIVC projects were organized during the event. Also, EBC Annex 78 'Supplementing Ventilation with Gas-phase Air Cleaning, Implementation and Energy Implications' and EBC Annex 80 organized specific sessions to discuss their approaches and future plans.

Two AIVC workshops were held in March 2018:

- 'Towards higher-performing buildings: The role of airtightness and ventilation' was convened in Wellington, New Zealand co-organized with ASHRAE and BRANZ;
- 'Ventilation for Indoor Air Quality and Cooling' workshop in Sydney, Australia, co-organized with the Cooperative Research Centre for Low Carbon Living.

The AIVC also contributed to the organization of four webinars on ductwork airtightness, smart ventilation, ventilative cooling, and on low-cost sensors for ventilation control, the latter in collaboration with EBC Annex 68 'Design and Operational Strategies for High IAQ in Low Energy Buildings'.

In order to have more interaction with related organisations, AIVC is a founding member of the Indoor Environmental Global Alliance (www.ieq-ga.net). There is also close co-operation with the TightVent (www.tightvent.eu) and venticool (www.venticool.eu) platforms.

Meetings

The AIVC Board met twice in 2018:

- Wellington, New Zealand, in March, 2018, and
- Sophia Antipolis, France, in September 2018.

AIVC Newsletter

March 2018

September 2018

Project duration

1979–2021

Operating Agent

Peter Wouters, INIVE eeig, Belgium

Participating countries

Australia, Belgium, P.R. China, Denmark, France, Italy, Japan, the Netherlands, New Zealand, Norway, R. Korea, Spain, Sweden, UK, USA

Further information and reports

www.iea-ebc.org



www.aivc.org
