Air Infiltration and Ventilation Centre AIVC

ANNEX 5

The primary objective of the EBC information centre, 'Air Infiltration and Ventilation Centre' (AIVC), is to be the international centre on research and development in the fields of air infiltration and ventilation. Thus, the specific objective is to provide a high quality international technical and information forum covering the areas of ventilation and air infiltration in the built environment with respect to efficient energy use, good indoor air quality and thermal comfort. The mission of AIVC is to be the reference portal for information on ventilation in buildings to improve the wellbeing of people through development and dissemination of ventilation knowledge.

Since the beginning of 2011, the AIVC has been operating with a new approach, which has been unanimously approved by the EBC Executive Committee in June 2013 for prolongation for the period through to 2016. A key ambition of the new AIVC is to convene integrated and combined activities (called 'projects'), resulting in different information tools, for example webinars, workshops, position papers, technical papers, and so on. These are supported by a review process and result in an increased information dissemination impact. The projects initiated since 2011 are:

- Quality of methods for measuring ventilation and infiltration in buildings
- Competent tester schemes for building airtightness testing
- Ventilation and health
- Improving the quality of residential ventilation systems
- Ventilative cooling use of natural or mechanical ventilation strategies to cool indoor spaces, resulting in the launch of EBC Annex 62
- Testing, reporting and quality schemes for building airtightness
- Philosophy for setting building airtightness requirements
- Development and applications of building air leakage databases

For the current focus, with projects and events in relation to airtightness and ventilative cooling, AIVC is joining forces with the two information platforms TightVent Europe and venticool. TightVent is focusing on airtightness of buildings and ductwork and was launched in January 2011. Venticool is focusing on ventilative cooling and was launched in September 2012. TightVent Europe's and venticool's main goals are to:

- raise awareness of airtightness and ventilative cooling issues, which are relevant concerns for a wide range of buildings and may even be critical in nearly zero energy buildings;
- provide appropriate support tools and knowledge transfer to ease market transformation.

In 2013, the 34th AIVC Annual Conference, held in Athens, Greece, has again provided an opportunity for over 170 researchers and practitioners from around the world to exchange ideas and to present their latest findings. The theme for the conference was 'Energy conservation technologies for mitigation and adaptation in the built environment: the role of ventilation strategies and smart materials'. The very positive evaluation of the event by participants – 96% rated the conference as meeting their expectations well or extremely well – shows the quality of the programme and organization.

Given the converging interests of AIVC, TightVent Europe and venticool, the AIVC Board and the Steering Committees of both platforms have agreed to collaborate among other things on:

- the organization of the 2014 conference, which will be held in Poznan (Poland) on the theme of 'Ventilation and airtightness in transforming the building stock to high performance', and
- the joint management of seven of the projects mentioned above.

NEW PRODUCTS

Website

In October 2013, AIVC has launched its new website which is database driven with 'Web 2.0' functionalities. It includes a powerful search engine for the bibliographic database AIRBASE with over 18000 references and 5000 pdf documents.

Technical Notes

Technical Note 66: 'Building air leakage databases in energy conservation policies: analysis of selected initiatives in 4 European countries and the USA'

Technical Note 67: 'Building airtightness: a critical review of testing, reporting and quality schemes in 10 countries'

AIVC Conference Proceedings

34th Annual Conference, 'Energy conservation technologies for mitigation and adaptation in the built environment: the role of ventilation strategies and smart materials', held 25th – 26th September 2013, Athens, Greece.

Contributed reports

Contributed report 14: 'Methods and techniques for airtight buildings'

Contributed report 15: 'Development and evaluation of a new test method for portable air cleaners'

AIVC Newsletter

February 2013 September 2013

WEBINARS

- Airtightness testing part 1: status and trends in competent tester schemes in United Kingdom and Belgium, held in November 2013.
- Airtightness testing part 2: status and trends in competent tester schemes in Germany, the Czech Republic and France, held in November 2013.
- Recordings of 20 presentations from the AIVC 2013 conference, held in September 2013.

Project duration

1979-present

Operating Agent

Peter Wouters, INIVE eeig, Belgium

Participating countries

Belgium, Czech Republic, Denmark, France, Germany, Greece, Italy, Japan, Republic of Korea, The Netherlands, New Zealand, Norway, Portugal, Sweden, USA

Further information and reports

www.iea-ebc.org www.aivc.org





A ventilation heat exchanger. Source: Rekuperatory.pl, Poland