

AIVC Workshop: 19-20 March 2018 Te Papa, Wellington

Towards higher-performing buildings: The role of airtightness and ventilation

The objective of this workshop is to discuss and identify ways to improve the quality of our homes with respect to airtightness and ventilation, as well as discussing the impact suboptimal performance has on energy consumption and health of the occupants. Also of interest are the impacts of mandatory airtightness targets and how best to implement these, if at all.

Specific topics

- Indoor air quality in schools and residential buildings
- Ventilation and its impact on energy and health outcomes for occupants
- Airtightness of New Zealand buildings trends and requirements

The workshop discussions will be based on detailed presentations from international and national researchers. Interaction between participants will allow exchange of ideas and experiences.

Context

New Zealand homes and apartments have become more and more airtight and have reached a level of airtightness that requires dedicated ventilation. Despite the fact that there is no airtightness requirement in the New Zealand Building Code, new homes regularly reach an airtightness level of 2-3.5 ACH50. This can be a welcome trend as it allows controlled ventilation and therefore control of the energy demand of the building. Many newly built homes, however, experience excess moisture and mould problems in living areas and/or roof cavities, due to a combination of occupant behaviour and a lack of ventilation.

The goals of a healthy home environment and energy efficiency can sometimes pull in opposite directions, requiring us to find a trade-off between health and energy saving.

Do we need dedicated airtightness and ventilation targets in the Building Code to reach an optimal set point for ventilation related energy use and health outcomes? How can this be achieved?

Organisers

The workshop is organised by INIVE EEIG on behalf of AIVC in cooperation with ASHRAE and BRANZ.

Registration and participation

Participation in the workshop requires you to register your interest at <u>branz.arlo.co/courses/22-aivc-workshop</u>.

The workshop is free of charge.

Registration starts at 8am on 19 March 2018. The workshop is 1.5 days long. The most recent agenda, list of speakers and other general updates on the workshop are available at <u>branz.arlo.co/courses/22-aivc-workshop</u>.



Venue

The workshop will be held at: **Museum of New Zealand Te Papa Tongarewa** 55 Cable St, Te Aro, Wellington

About the organisers



AIVC (Air Infiltration and Ventilation Centre) is the IEA (International Energy Agency) information centre on energy-

efficient ventilation.

In recognition of the significant impact of ventilation on energy use, combined with concerns over indoor air quality, the IEA inaugurated the AIVC in 1979. New Zealand is one of the AIVC member countries. The AIVC offers industry and research organisations technical support aimed at optimising ventilation technology. We offer a range of services and facilities, including a comprehensive database on literature standards and ventilation data.

We also produce a series of guides and technical notes. AIVC holds annual conferences and workshops.



ASHRAE, founded in 1894, is a global society advancing human wellbeing through sustainable technology for the built environment. ASHRAE and

its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today.



BRANZ - Inspiring industry to provide better buildings for New Zealanders.

BRANZ is the independent and impartial research, testing and consulting organisation focused on the building industry, funded

through the Building Research Levy.

BRANZ works to identify and solve industry challenges and provide insightful research, practical knowledge and guidance that is accessible to all parts of the building and construction industry.

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