



International Energy Agency
Energy Conservation in
Buildings and Community
Systems Programme



INTERNATIONAL WORKSHOP

Achieving relevant
and durable
airtightness levels:
status, options and
progress needed

BBRI offices
Boulevard Poincaré 79
1060 Brussels

Brussels, Belgium
28-29 March 2012

A joint AIVC-TightVent event

DESCRIPTION OF THE WORKSHOP

Adequate ventilation as well as good envelope and ductwork airtightness represent a specific challenge for new or renovated nearly zero-energy buildings. Alone, they can represent over 50% of a building's total space heating (or cooling) needs, and their share often increases with increasing energy performance.

This is the reason why many issues have arisen in the past few years regarding regulatory and voluntary initiatives to improve envelope and ductwork airtightness, bringing forward apparently simple questions such as:

- Should there be specific airtightness requirements? If so, should they be differentiated with climate, building usage, and ventilation system type?
- Should there be a minimum level of air leakage?
- Are quality management approaches appropriate instruments to push and/or pull market players? What are the pitfalls to avoid? What can be learnt from pioneering experience in this field, including in the inspection of ventilation systems?
- How does airtightness changes with time, and how does that affect the building's performance over its lifetime?

The objective of this workshop is to discuss those questions with key experts. It is divided into three parts:

- Philosophy for setting airtightness requirements: recommendations and pros and cons of various approaches
- Durability of seals and bonds: what we know and where we need to go
- Dealing with airtightness in the construction process: lessons learnt and potential for quality management approaches.

VENUE OF THE WORKSHOP

The workshop will take place in the offices of the Belgian Building Research Institute (CSTC-WTCB) Boulevard Poincaré 79, 1060 Brussels, Belgium. It is within walking distance of Brussels South train station.

LANGUAGE

The workshop will be held in English. No translation is foreseen.

FEE

The workshop fee is 302.5 € (VAT included). This fee includes participation to the workshop, documentation, lunches on 28-29 March and coffee breaks.

REGISTRATION

Participants should enrol by returning the registration form available on AIVC-TightVent websites and pay the registration fee before March 14, 2011.

SECRETARIAT

For any information, please contact Stéphane Degauquier at INIVE EEIG (Belgian Building Research Institute - BBRI):

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ACCOMMODATION

A contingent of rooms in the hotels Floris Ustel Midi and Avenue has been taken. To benefit of the preferential rates, see the attached document.

Wednesday March 28 2012

9.00 Registration

9.30 General introduction: context, challenges and opportunities
With introductions by AIVC, TightVent, INIVE

10.00 Session 1: Philosophy and approaches regarding envelope airtightness requirements: country views

11.15 Coffee break

11.30 Session 2: Philosophy and approaches regarding envelope airtightness requirements: country views

13.00 Lunch break

14.00 Session 3: Structured discussion: Pros and cons of various approaches for airtightness requirements – Recommendations and pitfalls to avoid

15.30 Coffee break

15.45 Session 4: Durable airtightness performance: what we know and where we need to go

17.15 End of the first day

19.00 Walking dinner in Brussels (to be confirmed)

Thursday March 29 2012

9.00 Session 5: Dealing with airtightness in the construction process: potential for quality management approaches

10.30 Coffee break

10.45 Session 6: Dealing with airtightness in the construction process: converging needs and ventilation issues

12:30 Conclusions of the workshop

13:30 End of the workshop

The workshop is organized by the International Network on Ventilation and Energy Performance (INIVE) on behalf of the Air Infiltration and Ventilation Centre (AIVC) and TightVent Europe (the European Building and Ductwork Airtightness Platform).

Created in 1979, the Air Infiltration and Ventilation Centre (www.aivc.org) is one of the projects/annexes running under the Energy Conservation in Buildings and Community Systems implementing agreement, within the context of the International Energy Agency. With the support of 12 member countries as well as key experts and two associations (REHVA and IBPSA), the AIVC offers industry and research organisations technical support aimed at better understanding the ventilation challenges and optimising energy efficient ventilation.

TightVent Europe (www.tightvent.eu) aims at facilitating exchanges and progress on building and ductwork airtightness issues, including the organization of conferences and workshops. It fosters experience sharing as well as knowledge production and dissemination on practical issues such as specifications, design, execution, control, etc., taking advantage of the lessons learnt from pioneering work while keeping in mind the need for adequate ventilation.

TightVent Europe has been initiated by INIVE EEIG (International Network for Information on Ventilation and Energy Performance) with at present the financial and/or technical support of the following partners: Buildings Performance Institute Europe, BlowerDoor GmbH, European Climate Foundation, Eurima, Lindab, Soudal, Tremco illbruck, and Wienerberger.

About INIVE EEIG

INIVE EEIG (International Network for Information on Ventilation and Energy Performance) was created in 2001 as a so-called European Economic Interest Grouping. The main reason for founding INIVE was to set up a worldwide acting network of excellence in knowledge gathering and dissemination. At present, INIVE has 11 member organisations (BBRI, CETIAT, CIMNE, CSTB, ERG, ENTPE, IBP-Fraunhofer, SINTEF, NKUA, TMT US and TNO) (www.inive.org)

INIVE is coordinating and/or facilitating various international projects, e.g. the AIVC, the European portal on Energy Efficiency (www.buildup.eu), the ASIEPI project (www.asiepi.eu), TightVent Europe and Dynastee (www.dynastee.info).

Sponsoring

This workshop is receiving financial support from the Flemish Energy Agency as part of a project dealing with the philosophy on building airtightness requirements. The workshop is supported by REHVA and Buildair.

