

# Third announcement



**Copenhagen, Denmark  
10–11 October 2012**

**Joint Conference  
33<sup>rd</sup> AIVC Conference and 2<sup>nd</sup> TightVent Conference**

**Optimising Ventilative Cooling and Airtightness for [Nearly]  
Zero-Energy Buildings, IAQ and Comfort**

**In cooperation with**



International Energy Agency  
Energy Conservation in  
Buildings and Community  
Systems Programme



International  
**BUILDAIR**  
Symposium

REHVA



Federation of  
European Heating,  
Ventilation and  
Air-conditioning  
Associations

## Conference organizers

The conference 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 Building and Ductwork Airtightness Platform.

Since 1980, the annual AIVC conferences have been the meeting point for presenting and discussing major developments and results regarding infiltration and ventilation in buildings. AIVC contributes to the programme development, selection of speakers and dissemination of the results.

The TightVent « Building and Ductwork Airtightness Platform », which was launched January 1, 2011, aims at facilitating exchanges and progress on building and ductwork airtightness issues, including the organization of conferences, workshops, webinars, forums, etc.

## Conference concept

The conference will consist of 3 parallel tracks devoted to a large extent to the following topics:

- Ventilative cooling;
- Airtightness issues;
- Indoor air quality and health.

The conference will consist of a mixture of:

- Well-prepared structured workshops focused on the conference topics;
- Presentations on invitation;
- Presentations from call for papers.

## Scope

The joint '33<sup>rd</sup> AIVC Conference' and '2<sup>nd</sup> TightVent Conference' aims to focus on **ventilation and infiltration in nearly zero-energy buildings** and more particularly on challenges and perspectives for **ventilative cooling** (the use of ventilation to cool indoor spaces) as well as the rationale and solutions for better **building and ductwork airtightness**.

Ventilative cooling strategies, as part of an overall design strategy including adequate solar protections, thermal mass and active cooling, can help improve thermal comfort. Their potential is more and more considered to reduce the cooling energy demand in summer or mid-season conditions, depending in particular on outdoor climate, building design and internal loads.

At the same time, ventilation as well as envelope and ductwork airtightness remain a specific challenge for new or renovated very low-energy buildings as they can represent over 50% of a building's total space heating (or cooling) needs. Besides, their share often increases with increasing energy performance.

To address these issues, the aim of this conference is to present and foster new research and development, applications and market transformation with a specific focus on ventilative cooling strategies as well as envelope and ductwork airtightness, two aspects that are particularly relevant in the trend towards nearly zero-energy buildings.

## Topics of the conference

Contributions are invited in the areas of research, development, application and market and legislative implementation of ventilation and infiltration. Preference has been given to presentations focusing on one of the following topics:

For **ventilative cooling** aspects:

- Potential for ventilative cooling strategies
- Design approaches for ventilative cooling and case studies
- Ventilative cooling in energy performance regulations
- Summer comfort and ventilation

For **airtightness** related aspects:

- Product and method developments for envelope and ductwork airtightness
- Best practice and case studies
- Quality management approaches for envelope and ductwork airtightness
- Airtightness issues in existing buildings
- Energy and IAQ impact of envelope and ductwork leakage
- Ventilation and infiltration in mild climates

For **other ventilation** aspects:

- Innovative ventilation concepts and combined systems
- Demand-controlled ventilation
- Humidity control and moisture damage
- Ventilation and thermal comfort, and infiltration in nearly zero-energy buildings
- Ventilation, indoor air quality and health
- Quality of ventilation systems

## Venue and language

The conference will be held in downtown Copenhagen in the building AXELBORG Vesterbrogade 4A - 1620 Copenhagen V (Denmark). Address: Vesterbrogade 4A – 1620 Copenhagen V, [Google Map](#).




Hotel accommodations are plentiful nearby.

English will be the official language. No translation is foreseen.

## Technical visits

The conference organizers are pleased to offer you the opportunity to register to technical visits of shining examples of energy conservation in buildings and the Technical University of Denmark (DTU). The visit will take place October 9<sup>th</sup> between 14:50 and 19:00 with bus transfer between the sites.

The tour includes technical visits of the following sites:

<p><b>Green Lighthouse:</b></p> <p>The project is part of "Model Home 2020" which aims at demonstrating that it is possible to reach the 2020 energy targets while devoting a special attention to liveability (indoor comfort, especially thanks to ventilation and daylight) and respecting the environment.</p> <p>Click <a href="#">here</a> for details</p>	
<p><b>Osram Culture Centre:</b></p> <p>A very attractive energy and indoor climate renovation of a former industrial building, now in use as a cultural centre as part of a neighbourhood renewal project.</p> <p>Click <a href="#">here</a> for details</p> <p><a href="http://www.velux.com/sustainable_living/other_cases/osram_culturecentre?akeywords=osram&amp;resNum=1">http://www.velux.com/sustainable_living/other_cases/osram_culturecentre?akeywords=osram&amp;resNum=1</a></p>	
<p><b>Technical University of Denmark International Centre for Indoor Environment and Energy:</b></p> <p>ICIEE is a world leading research and dissemination organisation whose mission is to serve to achieve healthy, comfortable and productive indoor environments with minimal energy consumption.</p> <p>Click <a href="#">here</a> for details</p>	

The visits are free of charge for conference attendees, however, if you are interested to join the tours, you need to register using the conference registration form before September 15.

Note that the maximum size is limited to 3 groups of 25 persons and participation is on a first-registered, first-served basis.

This tour is made possible thanks to the financial and organization support of the VELUX group. The conference organizers wish to thank DTU and Rockwool for their support in the organization of this tour.

## Programme

At present, the programme includes the following **topical sessions**:

Ventilative cooling	Building and ductwork airtightness	Ventilation, health and comfort	Ventilation technologies and site implementation
International initiatives on ventilative cooling	Philosophy and approaches for building airtightness requirements	Health and comfort in highly energy efficient buildings	Demand-controlled ventilation (Clear-Up project)
Ventilative cooling in residences	Quality and building airtightness	Health-Based Ventilation Guidelines for Europe (HealthVent project)	Quality of domestic ventilation systems
Advanced ventilative cooling concepts in Nearly Zero-Energy Buildings	Quality of ductwork systems	Ventilation and cooling strategies for high performance school renovations (School Vent Cool project)	Multi-zone airflow simulations
Ventilative cooling in building regulations		European Policies on Indoor Air Quality	

Wednesday October 10 2012			
Time	Programme		
08:00-18:00	Registration		
09:15-10:45	Opening session		
10:45-11:15	Break		
11:15-12:45	Combined session -		
12:45-13:45	Lunch break		
13:45-15:15	1A	1B	1C
15:15-15:30	Room change		
15:30-16:30	2A	2B	2C
16:30-17:00	Coffee break		
17:00-18:30	3A	3B	3C
18:30-19:30	Poster and industry exhibition		

Thursday October 11 2012			
Time	Programme		
09:00-10:30	4A	4B	4C
10:30-11:00	Coffee Break		
11:00-12:00	5A	5B	5C
12:00-12:15	Room change		
12:15-13:15	6A	6B	6C
13:15-14:00	Lunch break		
14:00-15:30	7A	7B	7C
15:30-15:50	Room change		
15.50-17:30	Closing session		

## About AIVC and TightVent Europe

The **AIVC** activities are supported by several countries. See [www.aivc.org](http://www.aivc.org) for more info.

The **TightVent Europe** activities are supported by European Climate Foundation, BlowerDoor, BPIE, EURIMA, Lindab, Retrotec, Soudal, Tremco illbruck , Wienerberger. See [www.tightvent.eu](http://www.tightvent.eu) for more info.

## Fee (see registration form)

## Sponsoring

This conference is organised with logistic and financial support from the VELUX Group.

## Exhibition

Organisations who would like to sponsor the conference or have a stand should contact Mr. Rémi Carrié, [remi.carrie@inive.org](mailto:remi.carrie@inive.org)

## Conference secretariat

Questions about the programme, sponsorship and exhibition: Mr. Rémi Carrié, [remi.carrie@inive.org](mailto:remi.carrie@inive.org)

Other questions:

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