

Programme

Thursday 18 April 2013

08:00-09:30 Session 1: Opening session

1. Welcome by AIVC (INIVE), Peter Wouters, INIVE EEIG
2. Welcome by NIBS and BETEC, Henry Green, President of NIBS, USA
3. Presentation by the Department of Energy, Eric Werling, Department of Energy, USA
4. ASHRAE's work on Air Tightness in the Built Environment – an update, Tom Phoenix, ASHRAE, USA

10:00-11:30 Session 2: Airtightness requirements and quality issues

1. The changing requirements on airtightness in the US. Wagdy Anis, WJE Associates, USA
2. Efforts for providing quality control regarding airtightness, Laverne Dalgleish, chair of ABAA
3. Interactions of airtightness with ventilation systems and implications on energy use, Willem de Gids, the Netherlands
4. New and retrofitted army buildings. Alexander Zhivov, USACE, USA

12:30-13:45 Session 3: Characterization of products and systems

1. Airtightness of the window-wall interface in masonry brick walls, Nathan Van den Bossche and Arnold Janssens, Belgium
2. Evaluation of an Interior Air Barrier System with Dynamic Water Vapour Control in North American Climates. Stanley D. Gatland II, CertainTeed, USA
3. Airtight Curtain Wall/Window Connection Best Practice. Joerg Birkelbach, Tremco illbruck, USA
4. Service Life Prediction on Sealant Materials. Joannie Chin, NIST, USA

Short Presentation

5. *The Science of Fluid-Applied Flashing Systems, Paul Grahovac, Prosoco, USA*

14:00-15:30 Session 4: Durability of seals – Design and quality control

1. The effect of air tightness on the energy consumption - Analyses of field measurements. Wouter Borsboom, TNO, Netherlands
2. Innovative Sealant Technology Provides Design Flexibility for Air Tight Joints. Andrea Wagner, Dow Corning, USA
3. Building Enclosure Commissioning – BECx -The Plan - Why, What, How, Where, Who? William R. Nash , P.E. USA
4. Performance of Duct Leakage Test Methods – When to Use Which and Why Paul Francisco, University of Illinois, USA
5. Energy Impacts of Envelope Tightening and Mechanical Ventilation for the U.S. Residential Sector, Jennifer Logue, LBNL, USA

Short Presentation

6. *Impact of Sheathing Installation Practices on Air Barriers, Brett T. Fagan, USA*

16:00-17:30 Session 5: Design and quality control of airtightness

1. Consideration of Envelope Airtightness in Modelling Commercial Building Energy Consumption, Lisa Chen Ng, NIST, USA
2. Leakage Reductions for Large Building Air Sealing and HVAC System Pressure Effects David Bohac, Center for Energy and Environment, USA
3. Achieving Tight Buildings through Building Envelope Commissioning, John Runkle, Architectural Testing, USA
4. Commissioning of exterior building envelopes of large buildings for air leakage and thermal anomalies using infrared thermography and other diagnostic tools Mario D. Gonçalves, Patenaude-Trempe Inc, Canada

Short Presentations

5. *Thought Experiments for Evaluating Building Air Leakage Test Procedures. David Saum, Infiltec, USA*
6. *Optimizing Outside Pressure Taps To Reduce Wind Induced Pressure Errors David Saum, Infiltec, USA*

Friday 19 April 2013

08:00-09:30 Session 6: Large and multi-family buildings

1. How Leaky is your Building? Case Studies of Two Whole-Building Air Leakage Tests. Jason S. Der Ananian, Simpson Gumpertz & Heger, USA
2. Measuring the Air Tightness of Mid and High Rise Non-Residential Buildings. Wagdy Anis, WJE, USA.
3. Large Building Air Leakage Measurement – What Has Been Done and What Is Possible Denali Jones, Retrotec, USA
4. Estimates of Uncertainty in multi-zone air leakage measurements, Erin Hult, LBNL, USA
5. Air tightness of buildings in Poland, Michal Szymanski, Poznan University of Technology, Poland

Short Presentation

6. *Large public buildings air tightness in Poland, Radoslaw Gorzenski, Poznan University of Technology, Poland*

10:00-11:30 Session 7: Large and multi-family buildings

1. Repeatability of Whole-Building Airtightness Measurements: Midrise Residential Case Study. Collin Olson, The Energy Conservatory, USA
2. Stack Effect and Mechanical Exhaust System Impacts on Building Pressures and Envelope Air Leakage, Sean M. O'Brien, Simpson Gumpertz & Heger, USA
3. Field Experience with Sealing Large-Building Duct Leakage with an Aerosol-Based Sealing Process, Mark Modera, UC Davis, USA
4. Analysis of the NIST Commercial and Institutional Building Envelope Leakage Database. Steven Emmerich, NIST, USA
5. Practical experience with training and performing airtightness tests in large buildings. Karl Grimnes, Termografi og Maaleteknikk as, Norway

11:45-12:45 (13:00) Session 8: Data collection, perspectives

1. Improving Building envelope and duct airtightness of US dwellings – the current status of energy retrofits, Wanyu R. Chang, LBNL, USA
2. Achieving and Certifying Building Envelope Air Tightness with an Aerosol-Based Automated Sealing Process, Mark Modera, UC Davis, USA
3. Workshop summary, Andy Persily, NIST, USA