Airtightness testing: Status and trends in competent tester schemes in the UK, Belgium, Germany, the Czech Republic and France

Over the past few years, there has been an increasing number of airtightness tests performed in Europe either for specific high performance buildings programmes or for a wide range of buildings in regulatory contexts. This has led to the development of competent tester schemes to contain potential legal and competition issues...

Click on the speakers to view their presentations!

Topics

- **UK**: An overview of competent tester schemes in the UK and ATTMA [the Air Tightness Testing and Measurement Association] by Rob Coxon (ATTMA, UK - 26 minutes).
- **FRANCE**: A presentation of the professional syndicate of testers “Syneole” by Cédric D’Haene (Syneole, France – 9 minutes).
- **BELGIUM**: A presentation of activities related to building airtightness and the launch TightVent Belgium by Clarisse Mees (BBRI, Belgium – 14 minutes).
- **CZECH REPUBLIC**: Status and trends of competent tester schemes in the Czech Republic and the creation of Association Blower Door CZ (A.BD.CZ) by Jiří Novák (A.BD.CZ, Czech Republic - 24 minutes).
- **GERMANY**: A review of the role of the German association on airtightness FlIB (Fachverband Luftdichheit im Bauwesen e.V) from 2000 till today by Oliver Solcher & Stefanie Rolsmeier (FLiB, Germany – 19 minutes).

Building Airtightness Solutions

While building airtightness is a key concern in nearly Zero-Energy Buildings in most European climates, there exists already a wide range of commercially-available products specifically designed to minimize leakage in building envelopes. This series of webinars gives information on the performance and properties of these products based on research including laboratory and field tests...

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Topics

- **Hygrothermal aspects**: An overview of the hygrothermal issues when focussing on wind barriers and neglecting interior air barriers by Staf Roels (KU Leuven, Belgium – 22 minutes)
- **Adhesive tapes**: An evaluation of the long term durability of Knauf Insulation adhesive tapes and its substrates, requirements and testing by Armin Weissmueller & Frédéric Delcuve (Knauf Insulation, Belgium – 37 minutes)
- **Smart vapour retarder**: ISOVER Saint-Gobain solutions for airtightness and moisture control and examples of applications by Guillaume Pandraud (Isover Saint Gobain, France – 30 minutes)
- **Window-wall interfaces**: A study on the airtightness of window-wall interfaces in masonry brick walls and wood-frame construction by Nathan Van den Bossche (Ghent University, Belgium – 20 minutes)
- **Sealants & PU foams**: Soudal airtightness solutions including test performance data by Filip Van Mieghem (Soudal, Belgium – 20 minutes)
- **Impregnated tapes**: Applicable standards and properties of impregnated tapes by Stefan Tenbuss (Tremco illbruck, Germany – 18 minutes)
**Overview of 2012-2013 Webinars on Building and Ductwork Airtightness**

(Available on YouTube)

BUILD UP webinar: Building and Ductwork Airtightness: Legislative Drivers, New Concerns and New Approaches

The implementation of the EPBD recast puts increasing pressure on the market to achieve better building and ductwork airtightness: for most European climates and countries, good airtightness levels are necessary to achieve nearly zero-energy buildings. This webinar was about legislative drivers that have brought to light new concerns and stimulated new initiatives. Recent trends in European regulations as well as studies supporting the development of competent testing schemes were discussed...

**Click on the speakers to view their presentations!**

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**BUILD UP webinar: Building and Ductwork Airtightness: Legislative Drivers, New Concerns and New Approaches**

The implementation of the EPBD recast puts increasing pressure on the market to achieve better building and ductwork airtightness: for most European climates and countries, good airtightness levels are necessary to achieve nearly zero-energy buildings. The objective of this webinar was to give an overview of the needs identified in several countries and reasons behind the development of air leakage databases...

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**The need for structured air leakage databases**

There are several initiatives to collect building airtightness data from field measurements whose number increases rapidly with the trend towards low-energy buildings. The objective of this webinar was to give an overview of the needs identified in several countries and reasons behind the development of air leakage databases...

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**Topics**

- **UK:** An overview of the opportunities and challenges for developing a UK Building Airtightness database by **Chris Knights & Dave Stephens** (BSRIA, UK - 13 minutes)

- **FRANCE:** The development of Web@set, a web based platform on airtightness with air leakage database by **Andrés Litvak & Fabrice Richieri** (CDPEA & CETE, France – 13 minutes)

- **GERMANY:** Experience with the development of an air leakage database in Germany by **Oliver Solcher** (FliB, Germany – 10 minutes)

- **CZECH REPUBLIC:** A presentation on the development of an air leakage database in the Czech Republic and lessons learnt by **Jiří Novák** (Czech Technical University, Czech Republic -12 minutes)

- **CANADA:** A look into the air leakage characteristics of Canadian Housing (low rise, up to 3 storey) by **Anil Parekh** (NRC, Canada – 15 minutes)

- **USA:** Objectives and perspectives with the LBNL Residential Diagnostic Database (ResDB) by **Rengie Chan** (LBNL, USA – 10 minutes)

- **USA:** Experience with a database for commercial buildings by **Steven Emmerich and Andrew Persily** (NIST, USA – 12 minutes)