



Project©BELAIR – architect & photo© Studio Arne Quinze – M. Jaspers - J. Eyers & Partners

Comfort

Buildings are expected to allow people to live, work and entertain themselves under optimum conditions of comfort. These conditions are composed of multiple aspects such as hygrothermal comfort, eye and sight comfort, acoustic comfort and air quality. All are highly subjective and often lead to complaints from tenants. Therefore, it is important to evaluate all aspects of comfort by calculus or measurement in relation to the actual use of the building, be it an office building, a school, a shopping centre or a residential project.

HOW WE CAN HELP YOU

To assess comfort levels in an objective way, we measure and evaluate the following comfort-influencing factors for you:

- Thermal comfort, including air temperature, wall temperature, air speed, cladding temperature, humidity and activity in the building. Measurements are made in summer as well as in winter.
- Eye and sight comfort including minimum lighting and glare.
- Acoustic comfort and sound intensity.
- Indoor air quality.

HOW WE PROCEED

The scope of the comfort audit is defined jointly with you. We always factor in the function of the building and your specific requirements in order to achieve a comfortable environment. This audit is carried out at several levels:

- Evaluation of the projected eye and visual comfort and hygrothermal comfort by means of dynamic simulations.
- Evaluation of the relationship between energy consumption and comfort level.
- Evaluation of the projected acoustic comfort based on examination of the plans and on calculus.
- Analysis of the project in order to assess compliance with acoustic regulations.
- Use of questionnaires to enquire about comfort perception by users
- Objectification of the comfort levels according to the regulations (hygrothermal: ISO 7730, air quality: EN 152521).
- Measurement of hygrothermals.
- Measurement of eye and visual comfort.
- Measurement of acoustic comfort.
- Measurement of air quality.
- Analysis of comfort calculus and measurements.
- Recommendations aimed at improving the individual comfort levels.

The current tendency towards more insulation and larger glass expanses is making optimum thermal comfort a challenging target. This is especially true in summer, when lengthy exposure to sunlight with subsequently rising temperatures can make a room, a zone or even a complete building unsuitable for use during a certain period of time. We pay special attention to this phenomenon in the early design stage of a new build or renovation project.

WHY RELY ON SECO ?

- Seco provides you with a clear objectification of the comfort levels from the design stage onwards.
- Our interdisciplinary expertise guarantees precise assessment of all comfort-influencing factors within an existing building and the correct measures for substantial improvement of the comfort level. This brings added value to both owners and tenants.

REFERENCE PROJECTS



Project©Forum

- Analysis of thermal comfort including air speed and HVAC inspection.



Project©Siège ING - Budapest

- Evaluation of design in order to optimize comfort level
- Validation of the performance at handover



Project©Centre des congrès-Mons

- Analysis of acoustic performance

Head Office | Rue d'Arlon, 53 | B- 1040 Brussels | Belgium
Phone +32 (0)2 - 238 22 11 | **Fax** +32 (0)2 - 238 22 61 | **e-mail** sales@seco.be
Offices Belgium | Luxemburg | The Netherlands | France | Poland

www.groupseco.com

