

# Airtightness testing of large buildings

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## **ABSTRACT**

Large buildings present significant challenges when trying to measure the total air leakage of the building. Examples include: achieving pressure uniformity, moving enough air, interactions with the fans ducts and dampers of HVAC systems, and interactions with occupants. This workshop will discuss the current state of the art for measuring air tightness in large buildings. We will discuss the equipment used and how it is controlled, building preparation, test procedures and interpretation of test results. Improvements in automation and data logging are allowing for more complex testing approaches than have been used in the past and are opening the door to much improved testing techniques. Despite these advances we will also discuss testing limitations that still exist, such as large uncertainties when testing in windy conditions.

## **KEYWORDS**

Airtightness, blower door, large buildings, field testing, test methods.