

# **Airtightness and internal air flows in multifamily buildings**

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## **ABSTRACT**

A key aspect of air flows for multifamily buildings is the internal air flows between dwelling units and other spaces, such as corridors, elevators, stairs and common spaces. In recent years in the US there has been increasing interest in how Indoor Air Quality (IAQ) is changed by these internal air flows and how specification of air tightness limits in standards and other design decisions. Historically these concerns were often based on odours, such as tobacco smoke, but now are expanded to include health-related contaminants. This includes indoor contaminants of concern, such as particles, and, more recently, airborne pathogens, such as the coronavirus responsible for SARS-COV-19. This session will discuss airtightness metrics, measurement techniques, and specifications in codes and standards for multifamily airtightness.

## **KEYWORDS**

Airtightness, multifamily, compartmentalization, building standards, contaminant transport