



| v3 - LEED 2009

Minimum indoor air quality performance

EQp1 | Required

Glossary

Intent

To establish minimum indoor air quality (IAQ) performance to enhance indoor air quality in buildings, thus contributing to the health and well-being of the occupants.

Requirements

Case 1. Projects able to meet the standard

OPTION 1. ASHRAE Standard 62.1-2007 or Non-U.S. Equivalent

Modify or maintain each outside air intake, supply air fan and/or ventilation distribution system to supply at least the outdoor air ventilation rate required by ASHRAE Standard 62.1-2007 ventilation rate procedure (with errata but without addenda) under all normal operating conditions. Projects outside the U.S. may use a local equivalent to ASHRAE Standard 62.1-2007 for breathing zone minimum ventilation rates.

OPTION 2. CEN Standard EN 15251: 2007

Projects outside the U.S. may modify or maintain each outside air intake, supply air fan and/or ventilation distribution system to supply at least the outdoor air ventilation rate required by Annex B of Comité Européen de Normalisation (CEN) Standard EN 15251: 2007, Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics.

Case 2. Projects unable to meet the standard

If meeting the ventilation rates required of the above standards is infeasible because of the physical constraints of the existing ventilation system, modify or maintain the system to supply at least 10 cubic feet per minute (cfm) (5 liters per second) of outdoor air per person under all normal operating conditions. Demonstrate through design documentation, measurements or other evidence that the current system cannot provide the flow rates required by the above standards under any operating condition even when functioning properly.

Each air-handling unit in the building must comply with either Case 1 or Case 2. If some airhandling units can provide the outside air flow required by the above standards and others cannot, those that can must do so. Buildings must provide at least 10 cfm (5 liters per second) per person of outside air at each air-handling unit under all normal operating conditions to earn this prerequisite.

- Show compliance with the applicable requirement above (Case 1 or Case 2) through measurements taken at the system level (i.e., the air-handling unit). For variable air volume systems, the dampers, fan speeds, etc. must be set during the test to the worstcase system conditions (minimum outside air flow) expected during normal ventilation operations. Each air-handler must be measured; sampling or grouping of air-handlers is prohibited.
- Implement and maintain an HVAC system maintenance program to ensure the proper operations and maintenance of HVAC components as they relate to outdoor air introduction and exhaust.
- Test and maintain the operation of all building exhaust systems, including bathroom, shower, kitchen and parking exhaust systems.

Naturally ventilated buildings must comply with ASHRAE Standard 62.1-2007, paragraph 5.1(with errata but without addenda¹).

Credit substitution available

You may use the LEED v4 version of this credit on v2009 projects. For more information [check out this article](#).