LEED O+M: Existing Buildings | v3 - LEED 2008

Outdoor air introduction and exhaust systems

EQp1 | Required

Glossary

Intent

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

Requirements

Choose one of the following options:

Option A

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 62.1–2007 Ventilation Rate Procedure under all normal operating conditions.

Option B

If meeting ASHRAE 62.1–2007 ventilation rates 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) 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 ASHRAE 62.1–2007 under any operating condition even when functioning properly.

Each air-handling unit in the building must comply with either Option A or Option B above. If some air-handling units can provide the outside air flow required by ASHRAE 62.1–2007 and others cannot, those that can must do so. Buildings that cannot provide at least 10 cfm per person of outside air at each air-handling unit under all normal operating conditions cannot earn this prerequisite.

Additionally, meet all the requirements below:

- Show compliance with the applicable requirement above (Option A or Option B) 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 worst-case 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.