LEED & Awair Omni

Using Awair Omni to Streamline Air Quality Documentation and Arc Reporting

Each LEED certification has specific air ventilation and monitoring requirements which can help you earn certification points. These requirements typically vary between new construction and existing building projects.

Additionally, LEED v4 certified projects are required to track and report energy and water usage data for a period of five years following certification. To help streamline this data collection and reporting requirement, LEED projects are given free access to Arc, a data platform launched by GBCI. This platform helps to consolidate data from a variety of sources (e.g. water meters, manual tests, and data sensor) and provides an ongoing performance score.

Air Quality Testing Requirements for New Buildings:
New buildings attempting to earn LEED v4 Building Design and Construction (BD+C) credentials must complete an indoor air quality assessment credit. There are two options to fulfill this credit:

Path 1: (1 point)
Install a new filtration system and "flush out" the air in the building before or during occupancy.

Path 2: (2 points)
Conduct a series of IAQ tests. This path requires air quality testing for particulate matter, ozone, carbon monoxide, total VOCs, formaldehyde, and roughly 34 "target" VOCs.

Awair Omni can help you achieve Path 2 by continuously monitoring particulate matter and total VOCs, thereby reducing the annual costs and time associated with spot testing for these pollutants.

In addition to the pathways mentioned above, the BD+C certification offers another credit opportunity for projects that implement additional enhanced IAQ strategies. To achieve this credit (1 point), teams can choose between the following options based on their building ventilation system:

Mechanically ventilated spaces **(select one option):**	A. Exterior Contamination Prevention B. Increased Ventilation **C. Carbon Dioxide Monitoring** D. Additional Source Control and Monitoring.
Naturally ventilated spaces **(select one option):**	A. Exterior Contamination Prevention; **D. Additional Source Control and Monitoring** E. Natural ventilation Room- by-Room Calculations.
Mixed-mode systems **(select one option):**	A. Exterior Contamination Prevention B. Increased Ventilation **D. Additional Source Control and Monitoring** E. Natural Ventilation Room-by-Room Calculations.

As a RESET certified air quality monitor, Awair Omni can be used to achieve option “C” (carbon dioxide monitoring) and option “D” (additional source control and monitoring) from the list above. You can learn more about these requirements here.

Air Quality Testing Requirements for Existing Buildings:
For existing buildings, or LEED v4 Existing Buildings (O+M), performance based indoor air assessment is required for a total of nine credits. Point allocation is broken down into three tiers:

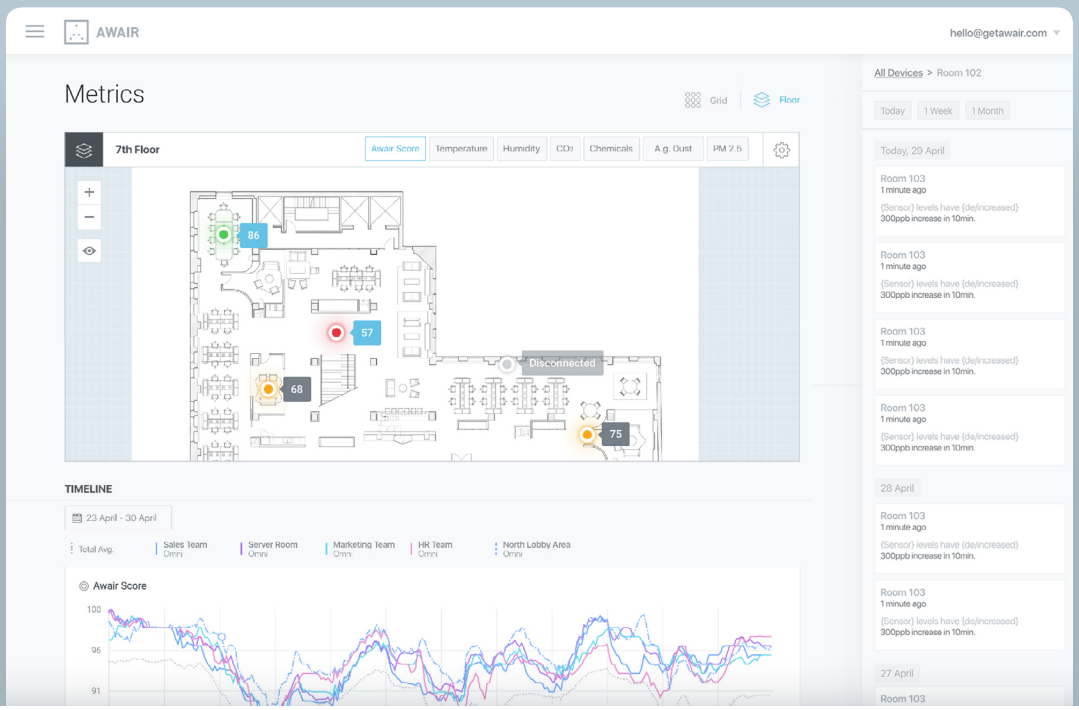
Tier 1: Baseline IAQ Evaluation (2 points)

This mandatory credit involves baseline testing for specific indoor Volatile Organic Compounds (VOCs) and total VOCs, as well as inorganic contaminants such as ozone (O3), carbon monoxide (CO), carbon dioxide (CO2), and fine particulate matter (PM2.5).

For this tier, Awair Omni can be used to provide baseline testing data for indoor total VOCs, CO2, and PM2.5. In addition to providing test results, teams must conduct a satisfaction survey of at least 30 percent of building occupants regarding air quality conditions.

Tier 2: IAQ Optimization (1-4 points)

This optimization tier focuses on using baseline air quality data to identify areas for improvement within your building. For this tier, you can use Awair Omni readings and the Omni Dashboard floorplan feature to locate problem areas and troubleshoot air quality issues at the source. Because Awair Omni provides continuous monitoring, you can use the device to test out different solutions and document improvements over time.



Tier 3: Ongoing IAQ Performance (3 points)
As the name suggests, this tier asks teams to commit to annual or continuous IAQ testing. Awair Omni can be used to provide continuous measurements for indoor PM2.5, CO2, and total VOCs, and to document improvements over time.

Existing buildings also have the option to pursue LEED v4.1 for Existing Buildings by sharing air quality performance data through the Arc portal. To meet this "Human Experience" requirement, teams can conduct an occupant satisfaction survey or complete an indoor air quality evaluation. The latter requires teams to test indoor air quality levels for CO, CO2, O3, PM2.5, or total VOCs during occupied hours at least once per year. Because Awair Omni continuously monitors CO2, PM2.5, and VOCs, data from the Awair Omni Dashboard can be exported to help document compliance.

Getting Started

Interested in learning more about Awair Omni? Visit our website for more information or contact us to discuss how to implement a continuous air quality monitoring solution as part of your next project.

Have specific questions about certification requirements? Get in touch with a LEED representative to learn more about specific program criteria, compliance pathways, and reporting standards.