



LEED 2009 for Core and Shell Development

IEQ CREDIT 1: OUTDOOR AIR DELIVERY MONITORING

All fields and uploads are required unless otherwise noted.

ALL OPTIONS

This static sample form has been modified for offline access. All sections of the form are visible. Sample forms are for reference only.

Compliance with the prerequisite/credit requirements must be documented for the entire Core & Shell project building and associated grounds, including tenant occupied spaces, from which anticipated tenant work may also be documented.

Select one of the following:

- ☐ **In Scope.** The project team does not anticipate any future tenant work that would impact the ability for the Core & Shell project to meet the requirements of this prerequisite and/or credit.
- ☐ **Tenant Sales and/or Lease Agreement.** The Core & Shell project scope is limited such that submittal documentation needs be based (either in whole or in part) on anticipated tenant work beyond the Core & Shell project scope.

IN SCOPE

Complete the following documentation sections using data for the entire project building, including tenant occupied spaces. Data shall be based entirely on design and construction elements that are included in the Core & Shell project scope. No data entered below shall be based on anticipated tenant work.

TENANT SALES AND/OR LEASE AGREEMENT

For all spaces where the scope of anticipated tenant work will include outdoor air delivery monitoring elements addressed in IEQ Credit 1:

- ☐ The tenant sales and/or lease agreement contains binding language specifying the minimum criteria for ventilation monitoring systems and monitoring of mechanically and naturally ventilated spaces; such that spaces within the scope of anticipated tenant work shall comply with the requirements of IEQ Credit1 when completed.

Upload L-6. Provide the legally binding document (lease, sales agreement, tenant construction requirements, etc.) associated with the project, signed by both the developer and the tenant, explicitly stating the performance requirements for the tenant work.

Page/Reference number(s) of language relating to declaration(s) above:

Complete the following documentation section assuming all tenant work has been completed and conforms to the requirements of the sales and/or lease agreements. For required uploads, provide all available documentation pertaining to the Core & Shell project scope and anticipated tenant work.

Select all that apply to the project building:

- ☐ The project building is mechanically ventilated, in part or in whole.
- ☐ The project building is naturally ventilated, in part or in whole.

MECHANICAL VENTILATION

Select all that apply to the project building:

- ☐ Project building contains densely occupied spaces.
- ☐ Project building contains non-densely occupied spaces.

Note: Densely occupied spaces are those with a design occupant density of 25 people or more per 1000 sf.

DENSELY OCCUPIED SPACES

A floor plan or drawing that highlights the location of CO₂ sensors is required to document compliance. The floor plan below is a linked submittal. (If no document is present, you may upload one now.)

Upload L-1. Provide representative floor plan(s) for the project building.

Select one of the following:

- ☐ The floor plan above highlights the location of CO₂ sensors.
- ☐ A different document is better suited to satisfy the requirement.

Upload IEQc1-2. Provide a floor plan that highlights the location of CO₂ sensors.

Table IEQc1-1. Densely Occupied Spaces

Space ID or Description ¹	Space Type	CO ₂ Sensors Installed	Height of CO ₂ Monitor Above the Floor ² (ft)	Design Value (CO ₂ ppm)
		<input type="checkbox"/>		

¹ Must correspond with uploaded floor plans.

² Must be equal to or greater than 3 and equal to or less than 6 feet.

- ☐ The CO₂ sensors are programmed to generate an alarm (either from the building automation system to the building operator, or as a visual or audible alert to the building occupants) when the conditions vary by 10% or more from the design value.

NON-DENSELY OCCUPIED SPACES

Upload IEQc1-1. Provide a controls drawing sample showing the outdoor air flow measurement devices that serve non-densely occupied spaces.

Complete Table IEQc1-1 for all mechanical ventilation systems where 20% or more of the design supply airflow serves non-densely-occupied spaces.

Table IEQc1-2. Outdoor Air Ventilation Rate

AHU	Zone	Outdoor Airflow Measurement Device Present?	Accuracy of Outdoor Airflow Measurement Device (%) ¹	Design Value (CO ₂ ppm)
		<input type="checkbox"/>		

¹ Must be within 15% (plus or minus) of the design minimum outdoor airflow rate

☐ The monitoring equipment is programmed to generate an alarm (either from the building automation system to the building operator, or as a visual or audible alert to the building occupants) when the conditions vary by 10% or more from the design value.

NATURAL VENTILATION

A floor plan or drawing that highlights the location and size of naturally ventilated zones and associated windows, as well as location of CO₂ sensors is required to document compliance. The floor plan below is a linked submittal. (If no document is present, you may upload one now.)

Upload L-1. Provide representative floor plan(s) for the project building.

Select one of the following:

- ☐ The floor plan above highlights the location and size of naturally ventilated zones and associated windows, as well as the location of CO₂ sensors.
- ☐ A different document is better suited to satisfy the requirement.

Upload IEQc1-3. Provide a floor plan that highlights the location and size of naturally ventilated zones and associated windows, as well as the locations of CO₂ sensors.

Table IEQc1-3. Naturally Ventilated Spaces

Space ID or Description ¹	CO ₂ Sensors Installed ²	Height of CO ₂ Monitor Above the Floor (ft) ³	Design Value (CO ₂ ppm)
	<input type="checkbox"/>		

1 Must correspond with uploaded floor plans.

2 One CO₂ sensor may be used to monitor multiple spaces if the natural ventilation design uses passive stacks or other means to induce airflow through those spaces equally and simultaneously without intervention by building occupants.

3 Must be equal to or greater than 3 and equal to or less than 6 feet.

- ☐ The CO₂ sensors are programmed to generate an alarm (either from the building automation system to the building operator, or as a visual or audible alert to the building occupants) when the conditions vary by 10% or more from the design value.

ADDITIONAL DETAILS

- ☐ Special circumstances preclude documentation of credit compliance with the submittal requirements outlined in this form.

SPECIAL CIRCUMSTANCES

Describe the circumstances limiting the project team's ability to provide the submittals required in this form. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits.

Upload IEQc1-SC. Provide any additional documentation that supports the claim to special circumstances. (Optional)

- ☐ The project team is using an alternative compliance approach in lieu of standard submittal paths.

ALTERNATIVE COMPLIANCE PATH

Describe the alternative compliance path used by the project team. Include justification that this path meets the credit intent and requirements. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits.

Upload IEQc1-ACP. Provide any additional documents that support the alternative compliance path approach. (Optional)

SUMMARY

IEQ Credit 1: Outdoor Air Delivery Monitoring Points Documented: