



LEED 2009 for Commercial Interiors

EA CREDIT 3: MEASUREMENT AND VERIFICATION

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.

The ratio of project space to building space in which the project is located determines which compliance path is available to the project. The value below is linked from Project Information Form 2.

Project space gross square footage as a percentage of the building in which the project is located:

 %

CASE 1: PROJECT IS LESS THAN 75% OF TOTAL BUILDING AREA

Select one or both of the following:

- ☐ **Submetering equipment:** The project has installed submetering equipment to measure and record energy uses within the tenant space.
- ☐ **Lease:** The project has negotiated a lease where energy costs are paid by the tenant and not included in the base rent.

SUBMETERING EQUIPMENT

Submetering has been installed in the project for each of the following:

- | | | | |
|------------------------------|-------------------------------------|-------------------------------------|---|
| Lighting systems & controls: | <input type="checkbox"/> Submetered | | |
| Plug loads: | <input type="checkbox"/> Submetered | | |
| Heating (electric): | <input type="radio"/> Submetered | <input type="radio"/> Central Plant | <input type="radio"/> Not applicable to project |
| Heating (fuels): | <input type="radio"/> Submetered | <input type="radio"/> Central Plant | <input type="radio"/> Not applicable to project |
| Heating (steam): | <input type="radio"/> Submetered | <input type="radio"/> Central Plant | <input type="radio"/> Not applicable to project |
| Heating (hot water): | <input type="radio"/> Submetered | <input type="radio"/> Central Plant | <input type="radio"/> Not applicable to project |
| Cooling (electric): | <input type="radio"/> Submetered | <input type="radio"/> Central Plant | <input type="radio"/> Not applicable to project |
| Cooling (fuel): | <input type="radio"/> Submetered | <input type="radio"/> Central Plant | <input type="radio"/> Not applicable to project |
| Cooling (chilled water): | <input type="radio"/> Submetered | <input type="radio"/> Central Plant | <input type="radio"/> Not applicable to project |
| Process uses (water): | <input type="radio"/> Submetered | | <input type="radio"/> Not applicable to project |
| Process uses (electric): | <input type="radio"/> Submetered | | <input type="radio"/> Not applicable to project |
| Process uses (fuels): | <input type="radio"/> Submetered | | <input type="radio"/> Not applicable to project |

Installation records OR a typical floorplan(s) documenting the location of submetering equipment is required to document compliance with EA Credit 3.

The following is a linked submittal (if no document is present, you may upload one now).

Upload L-1. Provide representative floor plans for the project space.

Files:

Select one of the following:

- ☐ The floorplan above shows the location of submetering equipment in the LEED project.
- ☐ A different document is better suited to satisfy this requirement.

Upload EAc3-1. Provide installation records OR a typical floor plan documenting the location of submetering equipment in the LEED project.

Files:

LEASE

A lease documenting the energy cost agreement declared above (with the agreement highlighted) is required to document compliance with EAc3. The following is a linked submittal (if no document is present, you may upload one now):

Upload L-6. Provide signed lease(s) associated with the LEED project.

Files:

Select one of the following:

- ☐ The lease above shows the energy cost agreement for the LEED project.
- ☐ A different document is better suited to satisfy this requirement.

Upload EAc3-2. Provide a lease documenting the energy cost agreement declared above (with the agreement highlighted).

Files:

CASE 2: PROJECT IS 75% OR MORE OF TOTAL BUILDING AREA

Table EAc3-2. Submetered Systems

System	Submetering
Lighting systems and controls:	
Constant and variable motor loads:	
Variable frequency drive (VFD) operation:	
Chiller efficiency at variable loads (kW/ton):	
Cooling load:	
Air and water economizer and heat recovery cycles:	
Air distribution static pressures & ventilation volumes:	
Boiler efficiencies:	
Building-related process energy systems & equipment:	
Indoor water riser and outdoor irrigation systems:	

Upload EAc3-3. Provide the Measurement and Verification Plan consistent with the 2001 International Performance Measurement & Verification Protocol (IPMVP) Volume I: Concepts and Options for Determining Energy and Water Savings option selected.

Files:

Select one of the following:

- ☐ The M&V Plan is consistent with IPMVP Option B.
- ☐ The M&V Plan is consistent with IPMVP Option C.
- ☐ The M&V Plan is consistent with IPMVP Option D.

The uploaded M&V Plan includes the following elements:

- ☐ Table or listing of the project's energy end uses.
- ☐ Indication of which the energy end uses is monitored and if the monitoring is permanent or temporary.
- ☐ Indication of the data source to be used in lieu of specific energy measurements.
- ☐ Indication of the location of all monitoring devices.
- ☐ Specific information regarding the method for determining a baseline case and provides information regarding the baseline conditions established for the project .
- ☐ Specific information regarding the method / frequency for data collection, analysis, and reporting performance against the documented baseline conditions .
- ☐ Specific information regarding the corrective action strategy if measured data deviates from the anticipated performance.

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 EAc3-SC. Provide any additional documentation that supports the claim to special circumstances. (Optional)

Files:

- ☐ 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 EAc3-ACP. Provide any additional documents that support the alternative compliance path approach. (Optional)

Files:

SUMMARY

EA Credit 3: Measurement and Verification Points Documented:

REFERENCE ONLY

REFERENCE ONLY