



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.

Select one of the following:

- ☐ **Option 1. Prescriptive Path.** The project team will document Equipment Efficiency and/or Appropriate Zoning & Controls.
- ☐ **Option 2. Performance Path.** The project team will document reduction of design energy cost by comparing it to the energy cost budget of regulated energy components as described in ASHRAE Standard 90.1-2007.

EQUIPMENT EFFICIENCY AND/OR APPROPRIATE ZONING AND CONTROLS

Choose all that apply:

- ☐ The project team has installed HVAC systems which comply with the efficiency requirements outlined in the Advanced Buildings Core Performance Guide sections 1.4, 2.9, & 3.10.
- ☐ All project spaces meet Appropriate Zoning and Control Requirements.

EQUIPMENT EFFICIENCY

Section 1.4: Mechanical System Design Criteria

Total project space load (heating):	<input type="text"/>	<input type="text"/>
Total project space load (cooling):	<input type="text"/>	<input type="text"/>
Total project space equipment capacity (heating):	<input type="text"/>	<input type="text"/>
Total project space equipment capacity (cooling):	<input type="text"/>	<input type="text"/>
Total tenant space fan & pump sizing:	<input type="text"/>	<input type="text"/>

Upload EAc1.3-1. Provide a summary of mechanical system design calculations. Include the following calculations, as applicable to the project, and maintain consistency with requirements from Criteria 1.4 of the Advanced Buildings Core Performance Guide.

- Load calculations
- Fan-sizing and zone-by-zone load calculations
- Critical path supply duct pressure loss calculations
- Part-load condition calculations.

Signatory EAc1.3-1.

As applicable to the project, each of the following calculations have been documented accurately and are consistent with Advanced Buildings Core Performance requirements.

- Load calculations
- Fan-sizing and zone-by-zone load calculations
- Critical path supply duct pressure loss calculations
- Part-load condition calculations.

Select one of the following:

- ☐ **Signature.** Provide a digital signature affirming the signatory statement in gray directly above.
- Initial here:
- OR ☐ **Upload EAc1.3-S1.** Provide a document with the signatory statement, copied directly from the form, signed and dated on letterhead.

CRITERIA 2.9: MECHANICAL EQUIPMENT EFFICIENCY

Signatory EAc1.3-2.

The mechanical equipment in the project space (package unitary equipment, gas unit heaters, package terminal air conditioners & heat pumps, boilers, electric & absorption chillers, and other equipment) meets the efficiency requirements from section 2.9 of the Advanced Buildings Core Performance Guide.

Select one of the following:

- ☐ **Signature.** Provide a digital signature affirming the signatory statement in gray directly above.
- Initial here:
- OR ☐ **Upload EAc1.3-S2.** Provide a document with the signatory statement, copied directly from the form, signed and dated on letterhead.

Section 3.10: Variable Speed Control Criteria

Complete Table EAp1.3-1 below for all individual pumps serving variable flow systems and VAV fans having a motor horsepower of 5hp or larger.

Table EAc1.3-1. Variable Speed Control

Pump/fan type	Pump/fan location	System served	Design wattage demand of pump/fan motor at 50% of design flow (%) ¹	Design wattage demand of pump/fan motor at 100% of design flow (%)

APPROPRIATE ZONING AND CONTROLS

- ☐ Every solar exposure has a separate control zone.
- ☐ Interior spaces are separately zoned.
- ☐ Private offices and specialty occupancies (conference rooms, kitchens, etc.) have active controls capable of sensing space use and modulating HVAC system in response to space demand.

Plans, specifications and/or an HVAC equipment schedule that shows the equipment within the space and lists the type and function of controls is required to document compliance with Appropriate Zoning and Controls.

Upload L-3. Provide schedule(s) for any mechanical systems within project scope. (Optional)

Select one of the following:

- ☐ **Upload L-4** from PI Form 4 identifies mechanical plans and/or drawings.

OR

- ☐ **Upload EAc1.3-2.** Provide credit specific or plans, specifications and/or an HVAC equipment schedule that shows the equipment within the space and lists the type and function of controls.

HVAC SYSTEM ENERGY MODEL

Upload EAc1.3-3. Provide the [ASHRAE Interactive Energy Cost Budget \(ECB\) Compliance Report](#).

Upload L-4. Provide mechanical plans and/or drawings.

Select one of the following:

- ☐ **Upload L-3** from PI Form 4 is a mechanical schedule showing the equipment within the space and lists the type and function of controls.

OR

- ☐ **Upload EAc1.3-4.** Provide credit specific plans, specifications and/or an HVAC equipment schedule that shows the equipment within the space and lists the type and function of controls.

Table EAc1.3-2. Design Case

HVAC Energy Uses	Energy Type	Units	Energy Use	Design Energy Cost (\$)
Space Heating				
Space Cooling				
Fans and Pumps				

Total (Million Btu)		
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Select one of the following:

- ☐ **Baseline Model:** The project uses the ASHRAE Standard 90.1-2007 mandatory and prescriptive requirements in the project area and the existing conditions in the balance of the modeled building segment.
- ☐ **Alternative Baseline Model:** The project uses the ASHRAE Standard 90.1-2007 mandatory and prescriptive requirements in the project area and in the balance of the modeled building segment.

Table EAc1.3-3. Baseline Case

HVAC Energy Uses	Energy Type	Units	Energy Use	Baseline Energy Cost (\$)
Space Heating				
Space Cooling				
Fans and Pumps				
Total (Million Btu)				
Project area (sf)				
Total segment area (sf)				
Reduction (%)				
Note: 15% reduction is required for 5 points; 30% reduction is required for 10 points.				

Table EAc1.3-4. Alternate Baseline Case

HVAC Energy Uses	Energy Type	Units	Energy Use	Baseline Energy Cost (\$)
Space Heating				
Space Cooling				
Fans and Pumps				
Total (Million Btu)				
Reduction (%)				
Note: 15% reduction is required for 5 points; 30% reduction is required for 10 points.				

Describe the assumptions and calculations made and methodology used in HVAC energy use calculations.

Upload EAc1.3-5. Provide the summary input and output reports from the simulation program used.

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 EAc1.3-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 EAc1.3-ACP. Provide any additional documents that support the alternative compliance path approach. (Optional)

- ☐ The project team is using the above alternative compliance path to document exemplary performance of EA Credit 1.3.

SUMMARY

EA Credit 1.3: Optimize Energy Performance - HVAC Points Documented:

EA Credit 1.3: Optimize Energy Performance - HVAC Exemplary Performance Documented:

- ☐ The project team reserves one point in the Innovation in Design credit category for exemplary performance in EA Credit 1.3.