



OPTION 1: PERFORMANCE RATING METHOD

I confirm that the energy simulation software used for this project has all capabilities described in EITHER section 'G2 Simulation General Requirements' in Appendix G of ASHRAE 90.1-2004 OR the analogous section of the alternative qualifying energy code used.

I confirm that the baseline building and proposed building in this project's energy simulation runs use the assumptions and modeling methodology described in EITHER Appendix G of ASHRAE 90.1-2004 OR the analogous section of the alternative qualifying energy code used.

Complete the following sections to document compliance using Option 1:

- Section 1.1 - General Information
- Section 1.2 - Space Summary
- Section 1.3 - Advisory Messages
- Section 1.4 - Comparison of Proposed Design Versus Baseline Design Energy Model Inputs
- Section 1.5 - Energy Type Summary
- Section 1.6 - On-Site Renewable Energy *(if applicable)*
- Section 1.7 - Exceptional Calculation Measure Summary *(if applicable)*
- Section 1.8 - Performance Rating Method Compliance Report

Section 1.1 - General Information

Provide the following data for your project

Simulation Program:	<input type="text" value="HAP 4.4"/>	Quantity of Stories:	<input type="text" value="2"/>
Principal Heating Source:	<input type="text" value="Electricity"/>	Weather File:	<input type="text" value="San Antonio, TX/AP"/>
Energy Code Used:	<input type="text" value="ASHRAE 90.1-2004 Appendix G"/>	Climate Zone:	<input type="text" value="2B"/>
New Construction Percent:	<input type="text" value="46 %"/>	Existing Renovation Percent:	<input type="text" value="54 %"/>

Enter the Target Finder score for your building from the Energy Star website (http://www.energystar.gov/index.cfm?fuseaction=target_finder.&CFID=154897). The score has no bearing on the number of EAc1 points earned. Use the following process to evaluate the Target Finder score:

1. Enter the facility information
2. Enter the facility characteristics. Select each primary and secondary space type that applies to the project. Then complete the required information for each space type.
4. Enter the total energy use per energy source for your project based on the totals reflected in the Proposed Design energy simulation output report.

Target Finder Score:



Section 1.2 - Space Summary

Provide the space summary for your project
(click "CLEAR" to clear the contents of any row All numeric entries must be entered as whole numbers without commas):

Table 1.2 - Space Summary				
Building Use (Occupancy Type)	Conditioned Area (sf)	Unconditioned Area (sf)	Total Area (sf)	
Building 1-A - Retail and Offices	15,993	0	15,993	<input type="button" value="CLEAR"/>
Building 1-B - Retail and Offices	15,028	2,749	17,777	<input type="button" value="CLEAR"/>
Building 2 - Office	21,162	0	21,162	<input type="button" value="CLEAR"/>
Building 3 - Apartments	8,454	0	8,454	<input type="button" value="CLEAR"/>
Building 4 - Cafe	2,844	0	2,844	<input type="button" value="CLEAR"/>
Areas outside of building envelope		22,228	22,228	<input type="button" value="CLEAR"/>
				<input type="button" value="CLEAR"/>
				<input type="button" value="CLEAR"/>
				<input type="button" value="CLEAR"/>
				<input type="button" value="CLEAR"/>
				<input type="button" value="CLEAR"/>
Total:	63,481	24,977	88,458	

Section 1.3 - Advisory Messages

Complete the following information from the simulation output files (all entries should be entered as whole numbers, without commas)

TABLE 1.3 - Advisory Messages	Proposed Building	Baseline Building (0 deg. rotation)	Difference
Number of hours heating loads not met:	0	0	0
Number of hours cooling loads not met:	10	1	9
Number of warning messages:	0	0	0
Number of error messages:	0	0	0
Number of defaults overridden:	0	0	0



Section 1.4 - Comparison of Proposed Design Versus Baseline Design Energy Model Inputs

Use **Table 1.4** to document the Baseline and Proposed design energy model inputs for your project. Include descriptions for:

1. Exterior wall, underground wall, roof, floor, and slab assemblies including framing type, assembly R-values, assembly U-factors, and roof reflectivity when modeling cool roofs. (Refer to ASHRAE 90.1 Appendix A)
2. Fenestration types, assembly U-factors (including the impact of the frame on the assembly), SHGCs, and visual light transmittances, overall window-to-gross wall ratio, fixed shading devices, and automated movable shading devices.
3. Interior lighting power densities, exterior lighting power, process lighting power, and lighting controls modeled for credit. Any lighting not included in the Core and Shell project must be modeled identically in the design and baseline case.
4. Receptacle equipment, elevators or escalators, refrigeration equipment, and other process loads.
5. HVAC system information including types and efficiencies, fan control, fan supply air volume, fan power, economizer control, demand control ventilation, exhaust heat recovery, pump power and controls, and any other pertinent system information. (Include the ASHRAE 90.1-2004 Table G.3.1.1B Baseline System Number).
6. Domestic hot water system type, efficiency and storage tank volume.
7. General schedule information

Documentation should be sufficient to justify the energy and cost savings numbers reported in the Performance Rating Table.

(Click "CLEAR" to clear the contents of any row.)

Model Input Parameter	Proposed Design Input	Baseline Design Input	
Exterior Wall Construction	Steel Frame Construction Minimum R-13 Spray Foam Insulation Overall U-Factor = 0.069 +	Additions: Steel Frame Construction R-13 Insulation U-Factor = 0.124 +	CLEAR
Roof Construction	Metal Building R-19 Insulation Overall U-Factor = 0.049 +	Original roof: 2 inch insulation, R6, Overall U - Factor 0.147, reference ASHRAE 90.1, Appendix A, Table A2.2 Assembly U-Factor for Roofs with +	CLEAR
Floor/Slab Construction	Mass C - 1.140	Mass C - 1.140	CLEAR
Window-to-gross wall ratio	17%	17%	CLEAR
Fenestration type	1. Dual Pane Metal Frame, tinted low-E glass with thermal break. + 2. Dual Pane Metal Frame, clear low-E glass with +	1. North, South, East, and West Orientations	CLEAR
Fenestration U-factor	Average overall U value 0.56	1. 1.22	CLEAR
Fenestration SHGC - North	1. 0.49 2. 0.71	1. 0.25	CLEAR
Fenestration SHGC - Non-North	1. 0.49 2. 0.71	2. 0.25	CLEAR
Fenestration Visual Light Transmittance	1. 0.40 2. 0.66	1. 0.76 2. 0.76	CLEAR
Shading Devices	1. None 2. None +	1. None 2. None	CLEAR
			CLEAR
Interior Lighting Power Density (W/sf)	Building 1-A: Office = 1.1, Retail = 1.7 Building 1-B: Office = 1.1, Retail = 1.7 Building 2: Office = 1.1 +	Building 1-A: Office = 1.1, Retail = 1.7 Building 1-B: Office = 1.1, Retail = 1.7 Building 2: Office = 1.1 +	CLEAR



TABLE 1.4 - Comparison of Proposed Design Versus Baseline Design

Model Input Parameter	Proposed Design Input	Baseline Design Input	
Daylighting Controls	None	None	CLEAR
Other Lighting Control Credits	None	None	CLEAR
Exterior Lighting Power (kW)	12.1	12.1	CLEAR
Process Lighting (kW)	None	None	CLEAR
Receptacle Equipment Power Density (W/sf)	0.75	0.75	CLEAR
Water Heater	Building 1A: (1)-Water Heater electric type, 220 volt, 4.5 kW, 50 gal, eff=091 Building 3: (8)-Water Heater electric type, 220	Building 1A: (1)-Water Heater electric type, 220 volt, 4.5 kW, 50 gal, eff=091 Building 3: (8)-Water Heater electric type, 220	CLEAR
Primary HVAC System Type	Variable Refrigerant Volume Heat Pump Systems Without Resistance Heat	Table G3.1.1B System # 4 Package Roof Top Heat Pump. Direct Expansion	CLEAR
Other HVAC System Type	None	None	CLEAR
Fan Supply Volume	46,903 CFM	107,304 CFM (Average of 4 rotations)	CLEAR
Fan Power	36.8 kW	80.5 kW	CLEAR
Economizer Control	None	None	CLEAR
Demand Control Ventilation	None	None	CLEAR
Unitary Equipment Cooling Efficiency	Model: RXYQ96MTJU (96k BTU/h) 11.07 EER Model: RXYQ72MTJU (72k BTU/h) 12.63 EER Model: RXYMQ36MVIII (36k BTU/h) 11.08 EER	12 SEER <65,000 BTU/h 10.1 EER greater or equal to 65k BTU/h and less than 135k BTU/h	CLEAR
Unitary Equipment Heating Efficiency	Model: RXYQ96MTJU (109k BTU/h) 3.47 COP Model: RXYQ72MTJU (81k BTU/h) 3.59 COP Model: RXYMQ36MVIII (40k BTU/h) 3.58 COP	7.4 HSPF <65,000 BTU/h 3.2 COP greater or equal to 65k BTU/h and less than 135k BTU/h	CLEAR
Chiller parameters	None	None	CLEAR
Chilled water loop & pump parameters	None	None	CLEAR
Boiler parameters	None	None	CLEAR
Hot water loop & pump parameters	None	None	CLEAR
Cooling tower parameters	None	None	CLEAR
Condenser water loop & pump parameters	None	None	CLEAR
			CLEAR



Section 1.5 - Energy Type Summary

List the energy types used by your project (i.e. electricity, natural gas, purchased chilled water or steam, etc.) for either the Baseline or Proposed design. Also describe the utility rate used for each energy type (i.e. Feswick County Electric LG-S), as well as the units of energy used, and the units of demand used. (Click "CLEAR" to clear the contents of any row):

TABLE 1.5 - Energy Type Summary

Energy Type	Utility Rate Description	Units of Energy	Units of demand	
Electricity	CPS Energy (\$0.096/kWh)	kWh	kW	<input type="button" value="CLEAR"/>
Natural Gas	CPS Energy (\$0.437/therms)	therms	MBH	<input type="button" value="CLEAR"/>
				<input type="button" value="CLEAR"/>
				<input type="button" value="CLEAR"/>

Energy Units:

- 1 kBtu = 1,000 Btu
- 1 kWh = 3.412 kBtu
- 1 therm = 100 kBtu
- 1 MBtu = 1,000 kBtu
- 1 MWh = 3,412 kBtu
- 1 ton hr = 12 kBtu

Demand Units

- 1 MBH = 1,000 Btu/h
- 1 kW = 3.412 MBH
- 1 MMBtuh = 1,000 MBH
- 1 ton = 12 MBH



Section 1.6 - On-Site Renewable Energy

If the project does not include on-site renewable energy, skip to Section 1.7

The project includes On-Site Renewable Energy

How is the on-site renewable energy cost calculated?

This form will automatically calculate the *Renewable Energy Cost* based on the "virtual" energy rate from the proposed design energy model results. This form will subtract the *Renewable Energy Cost* from the proposed design energy model results to calculate the *Proposed Building Performance Rating*. (You do NOT need to fill out the "Renewable Energy Cost" field in Table 1.6 below)

Renewable Energy Cost for each on-site renewable source is analyzed separately from the energy model based on local utility rate structures. The Renewable Energy Cost for each renewable source is reported in Table 1.6 below, This form will subtract the reported Renewable Energy Cost from the proposed design energy model results to calculate the Proposed Building Performance Rating.

On-site renewable energy is modeled directly in the energy model. *Renewable Energy Cost* is already credited in the proposed design energy model results (i.e. the energy model already reflects zero cost for on-site renewable energy, and this form will NOT subtract the *Renewable Energy Cost* a second time).

Indicate the on-site renewable energy source(s) used, the backup energy type for each source (i.e. the fuel that is used when the renewable energy source is unavailable - ASHRAE 90.1-2004, Section G2.4), the rated capacity for the source, and the annual energy generated from each source.

TABLE 1.6 - Renewable Energy Source Summary

Renewable Source	Backup Energy Type	Annual Energy Generated		Rated Capacity	Renewable Energy Cost	
Photovoltaic System	Electricity	271,864	(kWh)	200.6 kW	\$26,099	CLEAR
						CLEAR



Section 1.7 - Exceptional Calculation Measure Summary

(If the energy analysis does not include exceptional calculation methods, skip to Section 1.8)

The energy analysis includes exceptional calculation method(s) (ASHRAE 90.1-2004, G2.5)

How is the exceptional calculation measure cost savings determined?

This form will automatically calculate the exceptional calculation measure cost savings based on the "virtual" energy rate from the proposed design energy model results. This form will subtract this cost savings from the proposed design energy model results to calculate the *Proposed Building Performance Rating*.

Exceptional calculation measure cost for each exceptional calculation measure is analyzed based on local utility rate structures. The *cost savings* for each exceptional calculation is reported below, This form will subtract the reported exceptional calculation cost savings from the proposed design energy model results to calculate the *Proposed Building Performance Rating*.

For each exceptional calculation method employed, document the predicted energy savings by energy type , the energy cost savings (if option 2 above is selected), and a narrative explaining the exceptional calculation method performed, and theoretical or empirical information supporting the accuracy of the method. Reference any applicable Credit Interpretation Rulings. [Note: if an end-use has an energy loss rather than an energy savings, enter it as a negative number]

Exceptional Calculation Measure Short Description:

Energy Type(s)	Annual Energy Savings by Energy Type	Annual Cost Savings	Exceptional Calculation Measure Narrative:
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

Exceptional Calculation Measure Short Description:

Energy Type(s)	Annual Energy Savings by Energy Type	Annual Cost Savings	Exceptional Calculation Measure Narrative:
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	



Section 1.8 - Performance Rating Method Compliance Report (Option 1 Compliance Only)

In **Table 1.8.1**, list each energy end use for your project (including all end uses reflected in the baseline and proposed designs). Then check whether the end-use is a process load, select the energy type, and list the energy consumption and peak demand for each end-use for all four Baseline Design orientations. In **Table 1.8.1(b)** indicate the total baseline energy cost for each energy type for all four Baseline Design orientations. If either the baseline or proposed design uses more than one energy type for a single end use (i.e. electric resistance reheat, and central natural gas heating), enter each energy type as a separate end use (i.e. *Heating - Electric*, and *Heating, NG*).

Fill out the Proposed Design energy consumption and peak demand for each end use in **Table 1.8.2**. In **Table 1.8.2 (b)** indicate the total proposed energy cost for each energy type. [Note: Process loads for the proposed design must equal those listed in the Baseline design. Any process load energy savings for the project must be reported in Section 1.7.]

(Click "CLEAR" to clear the contents of any end use)

End Use	Process?	Baseline Design Energy Type	Units of Annual Energy & Peak Demand	Baseline (0° rotation)	Baseline (90° rotation)	Baseline (180° rotation)	Baseline (270° rotation)	Baseline Design	
Interior Lighting	<input type="checkbox"/>	Electricity	Energy Use (kWh)	230,445	230,445	230,445	230,445	230,445	CLEAR
			Demand (kW)	66	66	66	66	66	
Exterior Lighting	<input type="checkbox"/>	Electricity	Energy Use (kWh)	52,815	52,815	52,815	52,815	52,815	CLEAR
			Demand (kW)	12.1	12.1	12.1	12.1	12.1	
Space Heating	<input type="checkbox"/>	Electricity	Energy Use (kWh)	73,118	74,177	73,704	72,742	73,435.3	CLEAR
			Demand (kW)	296.8	297.7	297.9	298.3	297.7	
Space Cooling	<input type="checkbox"/>	Electricity	Energy Use (kWh)	249,024	246,243	245,123	243,296	245,921.5	CLEAR
			Demand (kW)	175.9	172.8	172.2	169.8	172.7	
Pumps	<input type="checkbox"/>	Electricity	Energy Use (kWh)						CLEAR
			Demand (kW)						
Heat Rejection	<input type="checkbox"/>	Electricity	Energy Use (kWh)						CLEAR
			Demand (kW)						
Fans - Interior	<input type="checkbox"/>	Electricity	Energy Use (kWh)	467,155	469,415	470,213	470,165	469,237	CLEAR
			Demand (kW)	80.3	80.6	80.6	80.6	80.5	
Fans - Parking Garage	<input type="checkbox"/>	Electricity	Energy Use (kWh)	12,025	12,025	12,025	12,025	12,025	CLEAR
			Demand (kW)	2.7	2.7	2.7	2.7	2.7	
Service Water Heating	<input type="checkbox"/>	Electricity	Energy Use (kWh)	53,114	53,114	53,114	53,114	53,114	CLEAR
			Demand (kW)	40	40	40	40	40	
Receptacle Equipment	<input checked="" type="checkbox"/>	Electricity	Energy Use (kWh)	172,278	172,278	172,278	172,278	172,278	CLEAR
			Demand (kW)	51	51	51	51	51	



Table 1.8.1 - Baseline Performance - Performance Rating Method Compliance

End Use	Process?	Baseline Design Energy Type	Units of Annual Energy & Peak Demand	Baseline (0° rotation)	Baseline (90° rotation)	Baseline (180° rotation)	Baseline (270° rotation)	Baseline Design	
Interior Lighting (Process)	<input checked="" type="checkbox"/>	Electricity	Energy Use (kWh)						CLEAR
			Demand (kW)						
Refrigeration	<input checked="" type="checkbox"/>	Electricity	Energy Use (kWh)						CLEAR
			Demand (kW)						
Data Center Equipment	<input checked="" type="checkbox"/>	Electricity	Energy Use (kWh)						CLEAR
			Demand (kW)						
Cooking	<input checked="" type="checkbox"/>	Natural Gas	Energy Use (therms)	1,646	1,646	1,646	1,646	1,646	CLEAR
			Demand (MBH)	164.6	164.6	164.6	164.6	164.6	
Elevators & Escalators	<input checked="" type="checkbox"/>	Electricity	Energy Use (kWh)	48,384	48,384	48,384	48,384	48,384	CLEAR
			Demand (kW)	13.5	13.5	13.5	13.5	13.5	
Miscellaneous	<input checked="" type="checkbox"/>	Electricity	Energy Use (kWh)	6,957	6,957	6,957	6,957	6,957	CLEAR
			Demand (kW)	45.3	45.3	45.3	45.3	45.3	
Baseline Energy Totals:		Total Annual Energy Use (MBtu/year)		4,823	4,825	4,822	4,812	4,821	
		Annual Process Energy (MBtu/year)						941	

Note: Process Cost accounts for 17% of Baseline Performance. Process cost must equal at least 25% of Baseline Performance, or the narrative at the end of this form must document why this building's process costs are less than 25%

Table 1.8.1(b) - Baseline Energy Costs

Energy Type	Baseline Cost (0° rotation)	Baseline Cost (90° rotation)	Baseline Cost (180° rotation)	Baseline Cost (270° rotation)	Baseline Building Performance
Electricity	\$135,700	\$135,756	\$135,672	\$135,390	\$135,629
Natural Gas	\$719	\$719	\$719	\$719	\$719
Total Baseline Costs:	\$136,419	\$136,475	\$136,391	\$136,109	\$136,348

Table 1.8.2 - Performance Rating Table - Performance Rating Method Compliance

End Use	Process?	Proposed Design Energy Type	Proposed Design Units	Proposed Building Results	Baseline Building Units	Baseline Building Results	Percent Savings
Interior Lighting		Electricity	Energy Use (kWh)	229,230	Energy Use (kWh)	230,445	.5 %
			Demand (kW)	65.9	Demand (kW)	66	.4 %



BETA

LEED-CS 2.0 Certification Submittal Template
EA Credit 1: Optimize Energy Performance

Exterior Lighting		Electricity	Energy Use (kWh)	52,815	Energy Use (kWh)	52,815	0	%
			Demand (kW)	12.1	Demand (kW)	12.1	0	%
Space Heating		Electricity	Energy Use (kWh)	13,964	Energy Use (kWh)	73,435.3	81	%
			Demand (kW)	69.5	Demand (kW)	297.7	76.7	%
Space Cooling		Electricity	Energy Use (kWh)	200,620	Energy Use (kWh)	245,921.5	18.4	%
			Demand (kW)	122.2	Demand (kW)	172.7	29.4	%
Pumps		Electricity	Energy Use (kWh)		Energy Use (kWh)		0	%
			Demand (kW)		Demand (kW)		0	%
Heat Rejection		Electricity	Energy Use (kWh)		Energy Use (kWh)		0	%
			Demand (kW)		Demand (kW)		0	%
Fans - Interior		Electricity	Energy Use (kWh)	211,791	Energy Use (kWh)	469,237	54.9	%
			Demand (kW)	36.8	Demand (kW)	80.5	54.4	%
Fans - Parking Garage		Electricity	Energy Use (kWh)	12,025	Energy Use (kWh)	12,025	0	%
			Demand (kW)	2.7	Demand (kW)	2.7	0	%
Service Water Heating		Electricity	Energy Use (kWh)	53,114	Energy Use (kWh)	53,114	0	%
			Demand (kW)	40	Demand (kW)	40	0	%
Receptacle Equipment	X	Electricity	Energy Use (kWh)	172,278	Energy Use (kWh)	172,278	0	%
			Demand (kW)	51	Demand (kW)	51	0	%
Interior Lighting (Process)	X	Electricity	Energy Use (kWh)		Energy Use (kWh)		0	%
			Demand (kW)		Demand (kW)		0	%
Refrigeration	X	Electricity	Energy Use (kWh)		Energy Use (kWh)		0	%
			Demand (kW)		Demand (kW)		0	%
Data Center Equipment	X	Electricity	Energy Use (kWh)		Energy Use (kWh)		0	%
			Demand (kW)		Demand (kW)		0	%
Cooking	X	Natural Gas	Energy Use (therms)	1,646	Energy Use (therms)	1,646	0	%
			Demand (MBH)	164.6	Demand (MBH)	164.6	0	%
Elevators & Escalators	X	Electricity	Energy Use (kWh)	48,384	Energy Use (kWh)	48,384	0	%
			Demand (kW)	13.5	Demand (kW)	13.5	0	%
Miscellaneous	X	Electricity	Energy Use (kWh)	6,957	Energy Use (kWh)	6,957	0	%
			Demand (kW)	45.3	Demand (kW)	45.3	0	%
Energy Totals:			Total Annual Energy Use (MBtu/year)	3,581		4,821	25.7	%
			Annual Process Energy (MBtu/year)	941		941	0	%



BETA

Table 1.8.2(b) - Energy Cost and Consumption by Energy Type - Performance Rating Method Compliance										
Energy Type	Proposed Design			Baseline Design			Percent Savings			
	Energy Use		Cost	Energy Use		Cost	Energy Use	Cost		
Electricity	1,001,178	kWh	\$96,113	1,364,611	kWh	\$135,629	26.6	%	29.1	%
Natural Gas	1,646	therms	\$719	1,646	therms	\$719	0	%	0	%
	0			0			0	%	0	%
	0			0			0	%	0	%
Subtotal (Model Outputs):	3,581	(MBtu/year)	\$96,832	4,821	(MBtu/year)	\$136,348	25.7	%	29	%
On-Site Renewable Energy	Energy Generated		Renewable Energy Cost							
Photovoltaic System	271,864	(kWh)	\$26,098	(subtracted from model results to reflect Proposed Building Performance)						
			0	(subtracted from model results to reflect Proposed Building Performance)						
Exceptional Calculations	Energy Savings		Cost Savings							
Total:	Proposed Design			Baseline Design			Percent Savings			
	Energy Use		Cost	Energy Use		Cost	Energy	Cost		
	2,653	(MBtu/year)	\$70,734	4,821	(MBtu/year)	\$136,348	45	%	48.1	%



DOCUMENTATION DESCRIPTION LOG

Please upload the compliance summaries for ASHRAE 90.1-2004 (or qualifying local energy code) and/or LEED if available from the energy simulation software used. Please also upload the energy rate tariff from the project's energy providers if the project is not using the default rates in the LEED-NC v2.2 Reference Guide.

If the software is incapable of producing the energy code or LEED compliance summaries please provide output summaries and example input summaries for both the baseline and proposed buildings that support the data entered in the template tables above.

- * Output summaries must include simulated energy consumption by end use as well as total building energy consumption and cost by energy type used in the building.
- * Example input summaries must be a sampling of model input assumptions, focusing on the most common systems present in the building. The example input summaries should be taken from the simulation software's standard input reports if available; if the software will not produce input summary reports then screen captures of representative inputs are acceptable. The example input summaries must include samples of the following input information:

1. Occupancy levels, operation schedules, and HVAC setpoints for occupied and unoccupied periods
2. Assumed envelope component sizes and traits (area, R-value, U-value, etc.)
3. Assumed mechanical equipment types and traits (capacity, efficiency, etc.)

Please note that uploaded documents should be SUMMARIES, and not large quantities of detailed data

Documentation Description Log

In the text box below, please reference the file name of each uploaded file (e.g. simulationsummary.pdf)

EA CREDIT 1 DESIGN REVIEW CLARIFICATION RESPONSES.pdf
Daikin Submittal .pdf
Electrical Gas Rates .pdf
Full Goods Mechanical Construction Documents .pdf
Natural Gas Consumption Calculation .pdf

I have provided the appropriate supporting documentation in the document upload section of LEED Online. Please refer to the above sheets.

The key plan on the mechanical drawings indicate the buildings by numbers. The building envelope compliance documents indicate the buildings by letters.
Building 1 is Building A & B.
Building 2 is Building C.
Building 3 is Building D.
Building 4 is Building E.



OPTION 2: ASHRAE ADVANCED ENERGY DESIGN GUIDE FOR SMALL OFFICE BUILDINGS, 2004

The building complies with all the prescriptive measures of the ASHRAE Advanced Energy Design Guide for Small Office Buildings 2004. The following restrictions are applicable:

The project is less than 20,000 square feet.

The project is office occupancy.

The project has fully complied with all applicable Envelope Performance criteria as established in the Advanced Energy Design Guide for the climate zone in which the building is located (1 Point Possible)

The project has fully complied with all applicable Lighting Systems criteria as established in the Advanced Energy Design Guide (1 Additional Point Possible)

The project has fully complied with all applicable HVAC and Service Water Heating criteria as established in the Advanced Energy Design Guide for the climate zone in which the building is located (1 Additional Point Possible)

Climate zone

OPTION 3: ADVANCED BUILDINGS BENCHMARK™ VERSION 1.1

The project fully complies with the Basic Criteria and Prescriptive Measures of the Advanced Buildings Benchmark™ Version 1.1 with the exception of the following sections: 1.7 Monitoring and Trend-logging, 1.11 Indoor Air Quality, and 1.14 Networked Computer Monitor Control.

Climate zone