

١,

(Responsible Individual)

(Company Name)

, from

verify that the information provided below is accurate, to the best of my knowledge.

# CREDIT COMPLIANCE

(Please complete the color coded criteria(s) based on the option path selected)

Please select the appropriate compliance path option

• Option 1 (Pg 2): Performance Rating Method, ASHRAE 90.1-2004 Appendix G or equivalent (up to 10 points possible)

Option 2 (Pg 14): ASHRAE Advanced Energy Design Guide for Small Office Buildings 2004 (4 points)

Option 3 (Pg 14): Advanced Buildings Benchmark<sup>™</sup> Version 1.1, Basic Criteria & Prescriptive Measures (1 point)





# **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:	Trane TRACE 700	Quantity of Stories:	4
Principal Heating Source:	Fossil Fuel	Weather File:	New Orleans, LA
Energy Code Used:	ASHRAE 90.1-2004 Appendix G	Climate Zone:	2A
New Construction Percent:	100 %	Existing Renovation	Percent: 0 %

Enter the Target Finder score for your building from the Energy Star website (<u>http://www.energystar.gov/index.cfm?</u> <u>fuseaction=target\_finder.&CFID=154897</u>). 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)	
Laboratory	14,446	0	14,446	CLEAR
Office	8,023	0	8,023	CLEAR
Conference	3,875	0	3,875	CLEAR
Break Areas	1,291	0	1,291	CLEAR
Lobbies	2,646	0	2,646	CLEAR
Restrooms	1,553	0	1,553	CLEAR
Mechanical/Electrical/Communications	7,743	1,569	9,312	CLEAR
Storage/Janitor/Stair/Elevator	724	2,680	3,404	CLEAR
Lab Shell	7,197	0	7,197	CLEAR
Office Shell	3,484	2,177	5,661	CLEAR
Corridors	4,774	0	4,774	CLEAR
Total	55,756	6,426	62,182	

### 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:	0	0	0
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.
- 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.

TABLE 1.4 - Comparison o	f Proposed Design Versus Baseline Design		
Model Input Parameter	Proposed Design Input	Baseline Design Input	
Exterior Wall Construction	Precast concrete panel with continuous foam insulation, assembly U-value = 0.053	ASHRAE 90.1-2004 Table 5.5-2, steel-framed wall, assembly U-value = 0.124	CLEAR
Roof Construction	Modified bituminous sheets and polyisocyanurate board insulation, assembly U- value = 0.04	ASHRAE 90.1-2004 Table 5.5-2, insulation entirely above deck, assembly U-value = 0.063	CLEAR
Floor/Slab Construction	Unheated concrete slab, F-factor = 0.5	ASHRAE 90.1-2004 Table 5.5-2, unheated slab, F- factor = 0.73	CLEAR
Window-to-gross wall ratio	42.1%	40%	CLEAR
Fenestration type	Insulating double-pane coated Low-E type	ASHRAE 90.1-2004 Table 5.5-2, 30.1-40% of wall area	CLEAR
Fenestration U-factor	Center-of-glass U-value = 0.26; Assembly U-value = 0.47	1.22	CLEAR
Fenestration SHGC - North	0.287	0.25	CLEAR
Fenestration SHGC - Non-North	0.287	0.25	CLEAR
Fenestration Visual Light Transmittance	36%	N/A	CLEAR
Shading Devices	Horizontal and vertical fins and overhangs on curtainwall glazing	None	CLEAR
			CLEAR
Interior Lighting Power Density (W/sf)	Calculated according to Space-by-Space Method. Overall building weighted average: 0.84 W/sf.	Calculated according to Space-by-Space Method. Overall building weighted average: 1.11 W/sf.	CLEAR

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







TABLE 1.4 - Comparison of	of Proposed Design Versus Baseline Desigr	1	
Model Input Parameter	Proposed Design Input	Baseline Design Input	
Daylighting Controls	Provided for southwest-facing Canal St. office with almost 100% glazing	None	CLEAR
Other Lighting Control Credits	10% power adjustment taken for occupancy sensors; see uploaded summary report for details.	None	CLEAR
Exterior Lighting Power (kW)	Tradeable surfaces: 3.3 kW. There are no non- tradeable surfaces in the project.	Tradeable surfaces: 5.1 kW. There are no non- tradeable surfaces in the project.	CLEAR
Process Lighting (kW)	None	None	CLEAR
Receptacle Equipment Power Density (W/sf)	Labs = 5 W/sf; elec/comm rooms = 20 W/sf; all other spaces = 0.75W/sf	Same as proposed	CLEAR
			CLEAR
Primary HVAC System Type	Water-cooled centrifugal chillers with variable frequency drives; variable-volume air handling units: copper-fin tube bot water boilers: termine <b>f</b>	Table G3.1.1B System #5 - Packaged rooftop variable air volume with reheat; direct-expansion cooling: fossil fuel boiler heating	CLEAR
Other HVAC System Type	Direct-expansion split-systems for comm room cooling	Table G3.1.1B System #3 - Packaged constant- volume rooftop air conditioner; direct-expansion cooling: fossil fuel furnace heating	CLEAR
Fan Supply Volume	57,500 CFM, per schedules on the design documents	64,323 CFM, as calculated by system simulation, see uploaded summary report for details	CLEAR
Fan Power	Per schedules on the design documents	Calculated in accordance with Section G3.1.2.9, see uploaded summary report for details	CLEAR
Economizer Control	No economizer is provided	No economizer is required or provided	CLEAR
Demand Control Ventilation	Provided for the air handling system serving the large conference room only	None	CLEAR
Unitary Equipment Cooling Efficiency	14 SEER; 15 tons total capacity	RTU-1A: 17.3 tons; size range: >135,000 Btuh and <240,000 Btuh. RTU-1B: 26 tons; size range: >240,000 Btub and <760,000 Btub. RTU-2: 115	CLEAR
Unitary Equipment Heating Efficiency	8.5 HSPF	80% for all units, per Table 6.8.1E. RTU-2: 668 MBH capacity. RTU-3: 651 MBH capacity. Split Systems: 100 MBH capacity.	CLEAR
Chiller parameters	Full load kW/ton = 0.66; NPLV = 0.459; 56 deg. entering water temperature, 42 deg. leaving water temperature; 500 tons total canacity.	N/A	CLEAR
Chilled water loop & pump parameters	Variable-flow primary with minimum flow bypass	N/A	CLEAR
Boiler parameters	Copper fin-tube type, 81% efficient; 3000 MBH total capacity	80% efficient per ASHRAE 90.1-2004 Table 6.8.1F. Each boiler: 500 MBH capacity. Total heating	CLEAR
Hot water loop & pump parameters	Primary-secondary system with constant flow through boiler loop and variable flow through building distribution loop	Variable flow primary system with pumps riding their curves to vary flow.	CLEAR
Cooling tower parameters	4 deg. approach, 10 deg. range, with variable frequency drives controlling tower fans	N/A	CLEAR
Condenser water loop & pump parameters	Constant speed pumps with cooling tower bypass	N/A	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 Sum	mary			
Energy Type	Utility Rate Description	Units of Energy	Units of demand	
Electricity	Entergy New Orleans	kWh	kW	CLEAR
Natural Gas	Entergy New Orleans	therms	МВН	CLEAR
				CLEAR
				CLEAR

Energy Units:		Demand Units	
1 kBtu = 1,000 Btu	1 MBtu = 1,000 kBtu	1 MBH = 1,000 Btu/h	1 MMBtuh = 1,000 MBH
1 kWh = 3.412 kBtu	1 MWh = 3,412 kBtu	1 kW = 3.412 MBH	1 ton = 12 MBH
1 therm = 100 kBtu	1 ton hr = 12 kBtu		





#### Section 1.6 - On-Site Renewable Energy

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

	] Tł	ne project includes On-Site Renewable Energy
Н	ow is	s the on-site renewable energy cost calculated?
	۲	This form will automatically calculate the <i>Renewable Energy Cost</i> based on the "virtual" energy rate from the proposed design energy model results. This form will subtract the <i>Renewable Energy Cost</i> from the proposed design energy model results to calculate the <i>Proposed Building Performance Rating</i> . (You do NOT need to fill out the "Renewable Energy Cost" field in Table 1.6 below)
	0	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.
	0	On-site renewable energy is modeled directly in the energy model. <i>Renewable Energy Cost</i> 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 <i>Renewable Energy Cost</i> 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.

BLE 1.6 - Renewable Ener	rgy Source Summary				
Renewable Source	Backup Energy Type	Annual Energy Generated	Rated Capacity	Renewable Energy Cost	
					CLEAR
					CLEAR





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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 Calculat	ion Measure Short Descript	tion:	CLEAR
Energy Type(s)	Annual Energy Savings by Energy Type	Annual Cost Savings	Exceptional Calculation Measure Narrative:

Exceptional Calculati	on Measure Short Descript	tion:	CLEAR	
Energy Type(s)	Annual Energy Savings by Energy Type	Annual Cost Savings	Exceptional Calculation Measure Narrative:	

Adobe\* LiveCycle\*



## **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	
nterior Lighting		Electricity	Energy Use (kWh)	218,501.3	218,501.3	218,501.3	218,501.3	218,501.3	CLE
			Demand (kW)	62.9	62.9	62.9	62.9	62.9	
Eutorior Lighting		Electricity	Energy Use (kWh)	24,199.5	24,199.5	24,199.5	24,199.5	24,199.5	
Exterior Lighting		Electricity	Demand (kW)	5.1	5.1	5.1	5.1	5.1	CLI
		Natural Cas	Energy Use (therms)	7,128	7,345	7,425	7,242	7,285	
Space Heating		Natural Gas	Demand (MBH)	527	531	520	529	526.8	5.8
	_		Energy Use (kWh)	676,730.2	675,675.2	678,312.8	679,133.4	677,462.9	
Space Cooling		Electricity	Demand (kW)	330.1	329.8	326	329.8	328.9	CLEAR
_			Energy Use (kWh)	6,066.6	6,037.3	6,037.3	6,037.3	6,044.6	
Pumps		Electricity	Demand (kW)	.6	.6	.6	.6	.6	CLI
			Energy Use (kWh)	240,552.7	239,732.1	237,006.5	239,204.6	239,124	
Heat Rejection		Electricity	Demand (kW)	28.1	28.1	27.8	28.1	28	CLI
			Energy Use (kWh)	188,796.3	185,689.8	190,906.4	194,687.1	190,019.9	
Fans - Interior		Electricity	Demand (kW)	42.8	42.8	42.8	42.8	42.8	CLI
			Energy Use (kWh)	4,396.1	4,396.1	4,396.1	4,396.1	4,396.1	
Space Heating Elec. Accessories	$\Box$	Electricity	Demand (kW)	.6	.6	.6	.6	.6	CLI
			Energy Use (therms)	4,566.2	4,566.2	4,566.2	4,566.2	4,566.2	
Service Water Heating	$\boxtimes$	Natural Gas	Demand (MBH)	125	125	125	125	125	CLE
			Energy Use (kWh)	585,107.9	585,107.9	585,107.9	585,107.9	585,107.9	
Receptacle Equipment	$\boxtimes$	Electricity	Demand (kW)	75.6	75.6	75.6	75.6	75.6	CLE

Adobe\* LiveCycle"



End Use	Process?	Baseline Design Energy Type	Units of An Energy & F Deman	Peak	Baseline (0° rotation)	Baseline (90° rotation)	Baseline (180° rotation)	Baseline (270° rotation)	Baseline Design		
Interior Lighting (Process)	$\square$	Electricity	Energy Use (	kWh)						CLEAR	
			Demand (I	kW)							
Defrigeration		Electricity	Energy Use (	(kWh)						CLEAR	
Refrigeration	$\square$		Demand (I	kW)						CLEAR	
Data Center Equipment		Electricity	Energy Use (	(kWh)						CLEAR	
Data Center Equipment	$\square$		Demand (I	kW)							
			Energy Use							CLEAD	
Cooking			Demand							CLEAR	
Elevators & Escalators		Electricity	Energy Use (	(kWh)	41,610	41,610	41,610	41,610	41,610		
Elevators & Escalators	$\square$		Demand (I	kW)	10	10	10	10	10	CLEAR	
			Energy Use								
			Demand							CLEAR	
		Total Annual Energy	Use (MBtu/y	vear)	7,946	7,950	7,976	7,981	7,963		
Baseline Energy Totals:		Annual Process Energy (MBtu/year)				1	1	1	2,595		

Note: Process Cost equals at least 25% of Baseline Performance, as required for showing credit compliance.

Table 1.8.1(b) - Baseline I	Energy Costs				
Energy Type	Baseline Cost (0° rotation)	Baseline Cost (90° rotation)	Baseline Cost (180° rotation)	Baseline Cost (270° rotation)	Baseline Building Performance
Electricity	\$154,871	\$154,218	\$154,376	\$155,111	\$154,644
Natural Gas	\$10,537	\$10,708	\$10,771	\$10,627	\$10,660
Total Baseline Costs:	\$165,408	\$164,926	\$165,147	\$165,738	\$165,304

Table 1.8.2 - Performan	ice R	ating Table - Perfo	ormance Rating M	ethod Comp	liance		
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)	159,490.4	Energy Use (kWh)	218,501.3	27 %
		Electricity	Demand (kW)	44.7	Demand (kW)	62.9	29 %





End Use	Process?	Proposed Design Energy Type	Proposed Design Units	Proposed Building Results	Baseline Building Units	Baseline Building Results	Perce Savir	
			Energy Use (kWh)	15,658.5	Energy Use (kWh)	24,199.5	35.3	%
Exterior Lighting		Electricity	Demand (kW)	3.3	Demand (kW)	5.1	35.3	%
			Energy Use (therms)	4,897	Energy Use (therms)	7,285	32.8	%
Space Heating		Natural Gas	Demand (MBH)	288	Demand (MBH)	526.8	45.2	%
Crosse Caeling			Energy Use (kWh)	338,321.2	Energy Use (kWh)	677,462.9	50.1	%
Space Cooling		Electricity	Demand (kW)	191.6	Demand (kW)	328.9	41.8	%
Dumps		Floctricity	Energy Use (kWh)	133,024.9	Energy Use (kWh)	6,044.6	-2,100.7	3%
Pumps		Electricity	Demand (kW)	44.5	Demand (kW)	.6	-7,450	%
Heat Rejection		Electricity	Energy Use (kWh)	43,521	Energy Use (kWh)	239,124	81.8	%
neat rejection		Electricity	Demand (kW)	18.2	Demand (kW)	28	34.7	%
Fans - Interior		Electricity	Energy Use (kWh)	191,287.4	Energy Use (kWh)	190,019.9	7	%
		Electricity	Demand (kW)	98.7	Demand (kW)	42.8	-130.1	%
Space Heating Elec. Accessories		Electricity	Energy Use (kWh)	0	Energy Use (kWh)	4,396.1	0	%
			Demand (kW)	0	Demand (kW)	.6	0	%
Service Water Heating	$\times$	Natural Gas	Energy Use (therms)	4,566.2	Energy Use (therms)	4,566.2	0	%
			Demand (MBH)	125	Demand (MBH)	125	0	%
Receptacle Equipment	$\times$	Electricity	Energy Use (kWh)	585,107.9	Energy Use (kWh)	585,107.9	0	%
			Demand (kW)	75.6	Demand (kW)	75.6	.4	%
Interior Lighting (Process)	$\times$	Electricity	Energy Use (kWh)		Energy Use (kWh)		0	%
Interior Lighting (Process)		Electricity	Demand (kW)		Demand (kW)		0	%
Refrigeration	$\times$	Electricity	Energy Use (kWh)		Energy Use (kWh)		0	%
Reingeration		Liectricity	Demand (kW)		Demand (kW)		0	%
Data Center Equipment	$\times$	Electricity	Energy Use (kWh)		Energy Use (kWh)		0	%
Data center Equipment			Demand (kW)		Demand (kW)		0	%
Cooking	$\times$		Energy Use		Energy Use		0	%
cooking			Demand		Demand		0	%
Elevators & Escalators	$\times$	Electricity	Energy Use (kWh)	41,610	Energy Use (kWh)	41,610	0	%
	$\frown$	Licetheity	Demand (kW)	10	Demand (kW)	10	0	%
			Energy Use		Energy Use		0	%
			Demand		Demand		0	%
Energy Totals:		Total Annual Energy	Use (MBtu/year)	6,092		7,963	23.5	%
Lifergy rotals.		Annual Process Ener	gy (MBtu/year)	2595		2,595	0	%







	Proposed Design			Baseline Design			Percent Savings			
Energy Type	Energy Use		Cost	Energy Use		Cost	Energy Use		Cost	
Electricity	1,508,018	kWh	\$120,456	1,986,461	kWh	\$154,644	24.1	%	22.1	%
Natural Gas	9,463	therms	\$8,785	11,851	therms	\$10,660	20.2	%	17.6	%
	0			0			0	%	0	%
	0			0			0	%	0	%
Subtotal (Model Outputs):	6,092	(MBtu/year)	\$129,241	7,963	(MBtu/year)	\$165,304	23.5	%	21.8	%
On-Site Renewable Energy	Energy G	enerated	Renewable Energy Cost							
Exceptional Calculations	Energy	Savings	Cost Savings							
	Proposed E		Design		Baseline D	Design	Perc	Percent		gs
	Energ	ıy Use	Cost	Energ	gy Use	Cost	Energ	ду	Co	st
Total:	6,092	(MBtu/year)	\$129,241	7,963	(MBtu/year)	\$165,304	23.5	%	21.8	%



## 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 and usage patterns
- 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)

NOBIC Energy Analysis Summary.pdf

 $\boxtimes$ 

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





## 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 criteria as established in the Advanced Energy Design Guide for the climate zone in which the building is located
Climate zone

## OPTION 3: ADVANCED BUILDINGS BENCHMARK <sup>™</sup> 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





## NARRATIVE (Optional)

# Please provide any additional comments or notes regarding special circumstances or considerations regarding the project's credit approach.

The target finder score indicated in the template is not an accurate representation of this building's energy performance as compared to average buildings. "Laboratory" is not an option for space type in the Energy Star target finder. The closest alternative is "Medical Office", which implies much less energy consumption than a typical laboratory.

The project is seeking point(s) for this credit using an alternate compliance approach. The compliance approach, including references to any applicable Credit Interpretation Rulings is fully documented in the narrative above. (Indicate the number of points documented in the "Alternative Compliance Points Documented" field below).

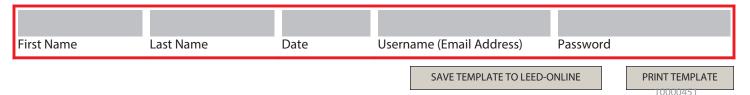
Alternative Compliance Points Documented

Project Name: NOBIC

Credit: EA Credit 1: Optimize Energy Performance

Points Documented:

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Letter Template Version A1.

