

Compliance Forms— Performance Rating Method

The following pages provide a sample performance rating report that conforms to the requirements of the rating method. An electronic version is available for download from ASHRAE's website.

This form is intended for use with the Performance Rating Method of ASHRAE/IES Standard 90.1 (Appendix G) when a rating shell is not used. If a rating shell is used, it should automatically generate a version of the rating report. If this form is used instead, the user should fill in the form using information taken from the output reports of the simulation program.

The performance rating report has several sections designed to make clear to the rating personnel what the building characteristics are and how the rating method has been applied to it.

Project Name and Information

This section begins with a basic statement that the project complies with the mandatory requirements of the Standard and notes the date of the plans upon which the performance rating runs are based. This section also records basic information about the project, the people involved, the heating fuel, and the weather data used for the rating analysis.

Space Summary

This section reports the different building uses included in the building, along with the conditioned, unconditioned and total floor area of each. In addition, the Building Performance Factor (BPF) for each building use for the project climate zone from Table 4.2.1.1 is entered. The total area weighted BPF is calculated here, and will be used later to determine project compliance.

Advisory Messages

This section reports information from the simulation runs that is helpful in identifying modeling problems or special situations.

Energy and Cost Summary by Fuel Type

This table reports the energy consumption and cost for the proposed and baseline buildings by end use. Each end use is grouped under either regulated or unregulated energy. Total regulated and unregulated energy cost is calculated, and summed to find the total building energy cost. Regulated, unregulated and total energy cost for the baseline building will be used in the next section.

Performance Cost Index Target

This section is used to calculate the Performance Cost Index Target (PCI_t) that the proposed building must meet. The total area weighted BPF and the regulated, unregulated and total energy cost for the baseline building are transferred from previous tables and used in the calculation.

Energy Use Summary by End Use

This section summarizes energy use and cost by fuel type for the proposed and baseline building. The Performance Cost Index (PCI) is also calculated. The PCI including solar is then compared to the PCI_t , and the building complies if the PCI does not exceed the PCI_t .

Performance Rating Report

Project Name:		
Project Address:		Date:
Designer of Record:	Email:	Telephone:
Contact Person:	Email:	Telephone:
City:		
Principal heating source: <input type="checkbox"/> Fossil fuel <input type="checkbox"/> Fossil/electric hybrid and purchased heat <input type="checkbox"/> Electricity <input type="checkbox"/> Other		

Space Summary

Building Use	Conditioned Area (ft ² or m ²)	Unconditioned Area (ft ² or m ²)	Total Area (ft ² or m ²)	BPF (Table 4.2.1.1)
Total/Total Area Weighted BPF				

Advisory Messages

	Proposed Building Design	Baseline Building	Difference Proposed – Baseline
Number of hours heating loads not met (system/plant)			
Number of hours cooling loads not met (system/plant)			
Number of warnings			
Number of errors			
Number of defaults overridden			

Simulation General

	Proposed Building Design	Baseline Building	Baseline same as Proposed?
Simulation program			
Weather data			
Utility rates			

Performance Rating Result

The proposed and baseline buildings comply with all applicable mandatory requirements and the requirements of the Performance Rating Method of ANSI/ASHRAE/IES Standard 90.1–2016.

Individual certifying authenticity of the data provided in this analysis:

Signature	Title
-----------	-------

Performance Rating Report

Project Name:		
Contact Person:	Email:	Telephone:

Energy and Cost Summary by Fuel Type*

	Energy Type	Proposed Building		Baseline Building	
		Energy (10 ⁶ Btu/yr or MJ/yr)	Energy Cost (\$/yr)	Energy (10 ⁶ Btu/yr or MJ/yr)	Energy Cost (\$/yr)
Regulated Energy					
Lighting					
Space heating					
Space cooling					
Fans					
Pumps					
Heat rejection					
Service water heating					
Refrigeration					
Elevators and escalators					
Motors					
Transformers					
Other regulated loads					
Total Regulated Electric Energy					
Total Regulated Gas Energy					
Total Regulated Energy					
Unregulated Energy					
Office equipment					
Other computers/servers					
Cooking (commercial)					
Other unregulated loads					
Total Unregulated Electric Energy					
Total Unregulated Gas Energy					
Total Unregulated Energy					
Total Energy					

Performance Cost Index Target

Variable	Description	Value	Source
BBUEC	Baseline Building Unregulated Energy Cost (\$)		Energy and Cost Summary by Fuel Type Table
BBREC	Baseline Building Regulated Energy Cost (\$)		Energy and Cost Summary by Fuel Type Table
BBP	Baseline Building Performance (Energy Cost) (\$)		Energy and Cost Summary by Fuel Type Table
BPF	Total Area Weighted Building Performance Factor		Space Summary Table
PCI _t	Performance Cost Index Target		$[BBUEC + (BBREC \times BPF)]/BBP$

Energy Summary by End Use*

	Proposed Building		Baseline Building		Performance Cost Index (PCI)
	Energy Use (10 ⁶ Btu/yr or MJ/yr)	Energy Cost (\$/yr)	Energy Use (10 ⁶ Btu/yr or MJ/yr)	Energy Cost (\$/yr)	Proposed Energy Cost / Baseline Energy Cost
Electricity					
Natural gas					
Other fossil fuel					
District steam/hot water					
District chilled water					
Total nonsolar					
Solar or site recovered					
Total including solar					
'Total including solar' PCI less than or equal to PCI _t ? (Yes/No)					

* These results use assumptions for showing compliance during a typical year; actual energy costs may be substantially different.