6.2 Project Data

6.2.1 General Information

Project Name	
Applicability	All Projects
Definition	Name used for the project, if one is applicable
Units	Text
Input Restrictions	Input is optional for the proposed design
Baseline Rules	Not applicable
Project Address	
Applicability	All projects
Definition	Street address, city, state, and zip code
Units	Text
Input Restrictions	Input is mandatory for the proposed design
Baseline Rules	Not applicable
Project Owner	
Applicability	All projects
Definition	Owner(s) of the project or individual or organization for whom the building permit is sought. Information should include name, title, organization, email, and phone number
Units	Data structure: Contact
Input Restrictions	Input is optional for the proposed design
Baseline Rules	Not applicable
Architect	
Applicability	All projects
Definition	Architect responsible for the building design. Information should include name, title, organization, email, and phone number
Units	Data structure: Contact
Input Restrictions	Input is mandatory for the proposed design
Baseline Rules	Not applicable
HVAC Engeneer	
Applicability	All projects
Definition	HVAC Engineer responsible for the building design. Information should include name, title, organization, email, and phone number
Units	Data structure: Contact
Input Restrictions	Input is mandatory for the proposed design. Information should include name, title, organization, email, and phone number
Baseline Rules	Not applicable
Lighting Engineer/Designer	
Applicability	All projects
Definition	Lighting Engineer/Designer responsible for the building design. Information should include name, title, organization, email, and phone number
Units	Data structure: Contact
Input Restrictions	Input is mandatory for the proposed design
Baseline Rules	Not applicable
Energy Modeler	
Applicability	All projects
Definition	Individual responsible for performing the rating analysis. Information should include name, title, organization, email, and phone number
Units	Data structure: Contact
Input Restrictions	Input is mandatory for the proposed design
Baseline Rules	Not applicable
Date	

Applicability	All projects
Definition	Date of completion of the rating analysis or the date of its most-recent revision
Units	Date format
Input Restrictions	Input is mandatory for the proposed design
Baseline Rules	Not applicable

6.2.2 Baseline Standard

Purpose	
Applicability	All Projects
Definition	The purpose for which the COMNET software is used:
	The modeling rules and procedures for most of the building descriptors are triggered by this choice.
Units	List of COMNET supported purposes
Input Restrictions	Compulsory input
Baseline Rules	The definition of the baseline building is derived from this input, when applicable.
Building Classification	
Applicability	When the whole building method is used instead of the space-by-space method of classifying activity in the building
Definition	The building type or principle activity. One of two available classification methods for identifying the function of the building or the functions of spaces within the building, which in turn determine energy-related requirements for the baseline building design. Appendix B lists the building classifications that are available under the building area method.
Units	List: Choose a building activity from Appendix B or select "Space-by-Space" if the space-by-space method is used.
Input Restrictions	For multi-use buildings, the building may be divided and a different building classification may be assigned to each part. Either the building classification method or the space-by-space classification method must be used, but the two classification methods may not be mixed within a single rating.
Baseline Rules	The proposed design designations apply to the baseline building.
Baseline Standard	
Applicability	All projects
Definition	The baseline standard that defines the baseline building. ASHRAE Standard 90.1-2001 is the baseline standard for tax deduction calculations. ASHRAE Standard 90.1-2007 is the baseline standard for green building ratings. This is determined from the Purpose (see above) and it may not be necessary to enter it explicitly.
Units	List: Either ASHRAE Standard 90.1-2001, 2007 or 2010, depending on Purpose (see above).
Input Restrictions	None
Baseline Rules	Not applicable
Percent Savings Method	
Applicability	Tax deduction calculations and green building ratings
Definition	
	The method used to calculate percent savings. For tax deductions, only regulated energy is addressed in the numerator and denominator of the percent savings calculation, while with green building ratings, all energy uses in the building are accounted for. Regulated energy includes interior lighting, heating, cooling, fans and hot water. Non-regulated energy is everything else. The same equation is used with both methods (see Equation Figure 6.2.2-1 [1]), however, the Q term only includes regulated energy for tax deductions, but total energy for green building ratings.

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Figure 6.2.2-1: *"Percent Savings Method Equation"*

Units	List
Input Restrictions	This building descriptor is determined from the purpose and is not generally input directly by the software user.
Baseline Rules	Not applicable

6.2.3 Geographic and Climate Data

The following data needs to be specified or derived in some manner. Software developers may use any acceptable method to determine the data. For instance, zip code could be entered and every thing else could be derived from this. Alternatively, state, county and city could be entered and the other variables could be derived from those. If the software allows for the parameters to be individually specified, then data validation should be employed to verify that the inputs are consistent with each other.

Zip Code

Applicability	All projects
Definition	One of approximately 44,000 postal designations in the United States

Definition	One of approximately 44,000 postal designations in the United States
Units	List
Input Restrictions	None
Baseline Rules	Not applicable

Latitude

Applicability	All projects
Definition	The latitude of the project site
Units	Degrees (°)
Input Restrictions	None
Baseline Rules	Not applicable

Longitude

Applicability	All projects
Definition	The longitude of the project site
Units	Degrees (°)
Input Restrictions	None
Baseline Rules	Not applicable

Elevation

Applicability	All projects
Definition	The height of the building site above sea level
Units	Feet (ft)
Input Restrictions	None
Baseline Rules	Not applicable

Thermal Zone

Applicability	All projects
Definition	One of eight thermal zones defined in ASHRAE 90.1-2004 and later
Units	List
Input Restrictions	None
Baseline Rules	Used to determine building envelope and other criteria

Moisture Zone

Applicability	All projects
Definition	One of three moisture zones defined in ASHRAE 90.1-2004 and later
Units	List: Moist (A), Dry (B), or Marine (C)
Input Restrictions	None
Baseline Rules	Used to determine building envelope and other criteria

Time Zone

Applicability	All projects
Definition	The time zone measured from GMT
Units	List
Input Restrictions	Typically derived from other inputs such as zip code or state
Baseline Rules	Same time zone as the proposed design

Daylight Savings Time Observed

Applicability	All projects
Definition	An indication that daylight savings time is observed. The schedules of operation are shifted by an hour twice a year and this affects the time occurance of solar gains, temperature and other factors
Units	Boolean (True/False)
Input Restrictions	Typically derived from other inputs such as zip code or state
Baseline Rules	Same as the proposed design

State

Applicability	All projects
Definition	The state where the project is located
Units	List
Input Restrictions	None
Baseline Rules	Not applicable

County

Applicability	All projects

Applicability	All projects
Definition	The county where the project is located
Units	List
Input Restrictions	None
Baseline Rules	Not applicable

City

Applicability	All projects
Definition	The city where the project is located
Units	List
Input Restrictions	None
Baseline Rules	Not applicable

Weather Data for Simulation

Applicability	All projects
Definition	The hourly (i.e., 8,760 hour per year) weather data to be used in performing the building energy simulations. Weather data must include outside dry-bulb temperature, outside wet-bulb temperature, atmospheric pressure, wind speed, wind direction, cloud amount, cloud type (or total horizontal solar and total direct normal solar), clearness number, ground temperature, humidity ratio, density of air, and specific enthalpy.
Units	Various
Input Restrictions	Weather data should be representative of the long term conditions at the site
Baseline Rules	Weather data shall be the same for both the proposed design and baseline building

Ground Reflectance

Applicability	All projects
Definition	Ground reflectance affects daylighting calculations and solar gain. The reflectance can be specified as a constant for the entire period of the energy simulation or it may be scheduled, which might be appropriate to account for snow cover in the winter.
Units	Data structure: schedule, fraction
Input Restrictions	Default of 0.30
Baseline Rules	Ground reflectance shall be the same for both the proposed design and the baseline building when it is specified to capture snow cover. When specific design features are incorporated to increase or reduce reflectance for the purpose of enhancing daylighting, there can be variation between the proposed design and the standard design, when appropriately documented.

6.2.4 Building Site Characteristics

Shading of Building Site

Applicability	All projects
Definition	Shading of building fenestration, roofs, or walls by other structures, surrounding terrain, vegetation, and the building itself
Units	Data structure
Input Restrictions	The default is for the site to be unshaded. The user may input the necessary information to model shading of the building site by any permanent object or feature likely to significantly reduce incident solar loads on the building site. Permanent here means likely to remain for the life of the building or likely to be replaced by objects that will produce similar shading over the life of the building.
Baseline Rules	The proposed and baseline building designs are modeled with identical assumptions regarding shading of the building site.

6.2.5 Calendar

Year for Analysis

Applicability	All projects
Definition	The calendar year to be used for the annual energy simulations. This input determines the correspondence between days of the week and the days on which weather events on the weather tape occur and has no other impact.
Units	List: choose a year (other than a leap year).
Input Restrictions	Any calendar year that does not include a leap year.
Baseline Rules	Same calendar year as the proposed design

Schedule of Holidays

Applicability	All projects
Definition	A list of dates on which holidays are observed and on which holiday schedules are used in the simulations.

Definition	A list of dates on which holidays are observed and on which holiday schedules are used in the simulations
Units	Data structure
Input Restrictions	The following ten holidays represent the default set. When a holiday falls on a Saturday, the holiday is observed on the Friday proceeding the Saturday. If the holiday falls on a Sunday, the holiday is observed on the following Monday.

New Years Day   January 1
Martin Luther King Day   Third Monday in January
Presidents Day   Third Monday in February
Memorial Day   Last Monday in May
Independence Day   July 4
Labor Day   First Monday in September
Columbus Day   Second Monday in October
Veterans Day   November 11
Thanksgiving Day   Fourth Thursday in November
Christmas Day   December 25

Other holiday sets may be observed when input by the user.

Baseline Rules	The baseline building model shall observe the same holidays specified for the proposed design

6.2.6 Energy Price Data

Not applicable for Design to Earn ENERGY STAR.

The default energy rates for electricity and gas are shown in Chapter 5. Tables are provided for each of the thermal and moisture zones that include time-of-use rates for electricity and seasonal rates for gas, steam and chilled water.

Currency	
Applicability	All projects
Definition	The currency used to compare the proposed design and the baseline building
Units	List: local energy costs, default time-of-use energy costs, EPA source energy, or site energy.
Input Restrictions	The default is time-of-use energy costs specified in Chapter 5.
Baseline Rules	Same as the proposed design
Local Electric Utility Rates	
Applicability	When Currency (see above) is "local energy costs"
Definition	The local utility rate for electricity delivered to the building. The utility rate data entered under this descriptor may include a variety of rate features, such as demand charges, time of day rates, service charges, and taxes.
Units	Data structure
Input Restrictions	None
Baseline Rules	The baseline building shall use the same utility rate as the proposed design.
Local Gas Utility Rates	
Applicability	When Currency (see above) is "local energy costs"
Definition	The utility rates for natural gas delivered to the building. The utility rate data entered under this descriptor may include seasonal variations, service charges, and taxes.
Units	Data structure
Input Restrictions	None
Baseline Rules	The baseline building shall use the same utility rate as the proposed design.
Local Other Utility Rates	
Applicability	When Currency (see above) is "local energy costs"
Definition	The utility rates for chilled water, steam or other energy sources delivered to the building. The utility rate data entered under this descriptor may include seasonal variations, service charges, taxes, and other factors.
Units	Data structure
Input Restrictions	None
Baseline Rules	The baseline building shall use the same utility rate as the proposed design.

Source URL: http://www.comnet.org/mgp/content/62-project-data

Links:
[1] http://www.comnet.org/mgp/content/622-baseline-standard#percent-savings-method-equation