

Building Energy Data Exchange Specification

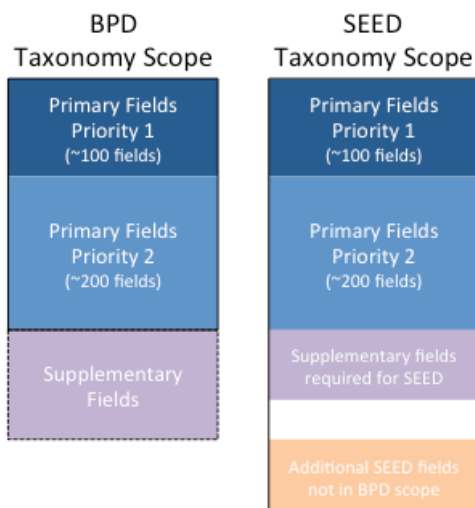
Version 2.3

2/15/13

Overview:

This document describes the DOE Building Energy Data Exchange Specification (BEDES). BEDES is designed to support analysis of the measured energy performance of commercial and residential buildings, with data fields for building characteristics, efficiency measures and energy use. BEDES defines and describes these data fields and their relationships.

BEDES is used for the DOE Building Performance Database (BPD) as well as the Standard Energy Efficiency Disclosure (SEED) platform, as shown below. Note that SEED includes additional fields that are outside BPD scope (e.g. property address and auditor contact information).



This documentation is intended to provide stakeholders an understanding the overall data scheme and data fields. The document is not intended to be a software specification for tool developers.

Contents:

"Intro" is this sheet

"Scheme" shows the overall scheme for BEDES

"Data Fields-Primary" shows the primary data fields, categorized into two priority levels.

"Data Fields-Supplementary" shows supplementary (optional) data fields that may be applicable for special use cases.

"Data Fields-SEED Additional" shows data fields that are specific to SEED only, and are not part of the BPD.

Objectives:

1. BEDES must be general and flexible enough to accommodate a wide set of current and anticipated use cases to analyze the measured energy performance of commercial and residential buildings.
2. BEDES must support a wide range of existing data sources that could be imported into the Building Performance Database while also anticipating future data collection efforts that may provide richer datasets.

Development Approach:

Given the objective to accommodate a wide range of current and future use cases and data sources, a combination of "top-down" and "bottom-up" approaches is being used iteratively to develop BEDES.

A "top-down" approach was used to develop the overall scheme i.e. data entities, their relationships, and scope of data fields for each entity, based on a general logical understanding of building performance information.

A "bottom-up" approach was used to develop the list of data fields based on existing data sources and formats, which were then mapped to the overall scheme developed using the top down approach.

The development process also included review and consideration of over a dozen related efforts such as the Industry Foundation Classes, OmniClass systems, ASTM BEPA checklist, ASHRAE Audit Procedures Checklist. Where appropriate, data fields and enumerated types from these efforts were mapped into BEDES. This version also incorporates numerous edits based on comments received via a Request for Information (RFI) published in the Federal Register.

Future Development:

BEDES will be continually revised as needed:

- To accommodate new data fields in future data sources
- To increase compatibility with other taxonomies
- To accommodate data fields required for new use cases

Scope and Limitations:

This document describes the overall data scheme and data fields. It is not intended to be a detailed technical specification for software implementation.

This document does not include the mapping rules for various data sources.

BEDES is focused on data related the measured energy performance of buildings. It is not intended to be a general data specification for other building data and applications e.g. structural analysis, space planning, etc.

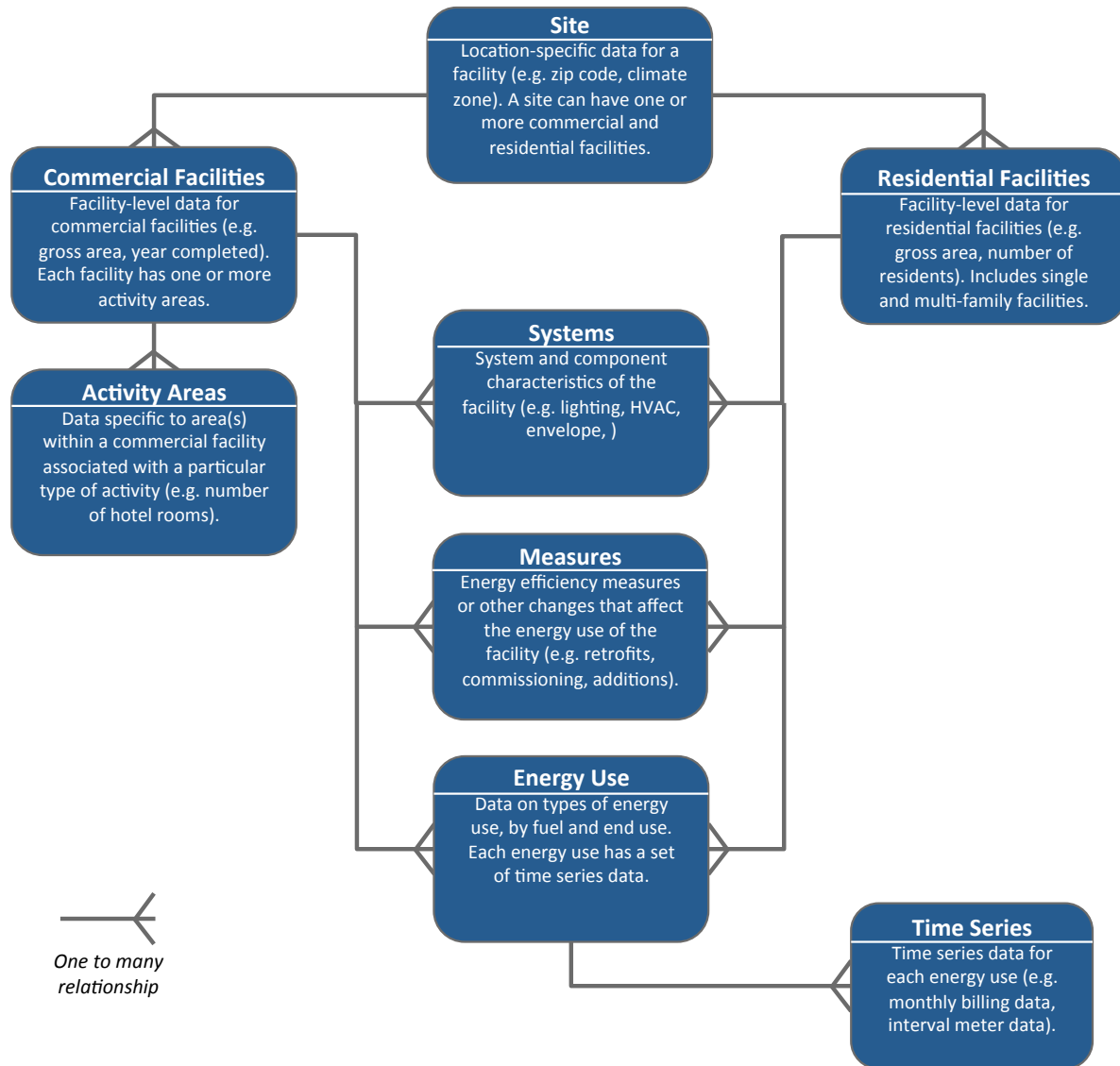


*Developed by Lawrence Berkeley National Laboratory
for the U.S. Department of Energy*

Scheme

Notes:

1. This figure schematically indicates the major entities and their relationships. It is not intended for use as software documentation.
2. See "Data Fields" worksheets for list of data fields in each entity



Primary Data Fields

Notes:

1. Data fields are organized by entity. See "Scheme" worksheet for description of entities and their relationships.
2. Data fields with constrained lists show list items below description.
3. Data Fields have been prioritized into two levels:

Priority 1 fields are in dark blue, bold font

Priority 2 fields are in light blue

4. Most data fields generally apply to all commercial and residential facilities. However, some fields may only apply to certain types of facilities. (e.g. number of guest rooms only applies to lodging facilities)

5. Display tip: Display of data fields and enumerated types can be toggled on/off using buttons on left of row labels.

Priority 2 Fields

Show Hide

Site

City The city in which the site is located.

State The state in which the site is located.

Postal Code The postal code in which the site is located.

County The county in which the site is located. If not known, can be derived from Postal Code.

Country The country in which the site is located.

Climate zone The ASHRAE climate zone in which the site is located, or CBECS climate zones if ASHRAE climate zone is unavailable. If not known, can be derived from Postal Code.

- 1A, Very Hot - Humid (Miami, FL)
- 2A, Hot - Humid (Houston, TX)
- 2B, Hot - Dry (Phoenix, AZ)
- 3A, Warm - Humid (Memphis, TN)
- 3B, Warm - Dry (El Paso, TX)
- 3C, Warm - Marine (San Francisco, CA)
- 4A, Mixed - Humid (Baltimore, MD)
- 4B, Mixed - Dry (Albuquerque, NM)
- 4C, Mixed - Marine (Salem, OR)
- 5A, Cool - Humid (Chicago, IL)
- 5B, Cool - Dry (Boise, ID)
- 6A, Cold - Humid (Burlington, VT)
- 6B, Cold -Dry (Helena, MT)
- 7, Very Cold (Duluth, MN)
- 8, Subarctic (Fairbanks, AK)
- CBECS - Zone 1
- CBECS - Zone 2
- CBECS - Zone 3
- CBECS - Zone 4
- CBECS - Zone 5

Elevation Elevation of the site. [feet]

Site Type Site type.

Rural
Suburban
Urban
Unknown

Number of Facilities Total number of facilities on the site.

Residential Facility

Residential Facility Type **Type of residential facility**

Single Family - Uncategorized
Single Family - Attached
Single Family - Detached
Manufactured Home
2-4 Unit Building
5+ Unit Building
Multifamily - Uncategorized
Multifamily - Town Homes
Multifamily - Condominiums
Apartment Unit
Other
Unknown

Year Completed **Year in which construction was completed.**

Year Occupied Year in which the facility was first occupied.

Operator Type Entity responsible for the operation of the facility.

Owner
Occupant
Property Management Company
Government
Other / Combination
Unknown

Surroundings Structure(s) surrounding the facility.

Stand-alone
Attached to another building on one side
Attached to another building on two sides
Attached to another building on three sides
Within a building
Unknown

Orientation Orientation of the main long axis.

East-West
North-South
North East-South West
North West-South East

Not Applicable

Building Footprint Area Total area of a lot or site that is surrounded by the exterior walls of a building or portion of a building, exclusive of courtyards. [square feet]

Footprint Shape General shape of building footprint.

Rectangular
Square
Circular
L-Shaped
U-Shaped
I-Shaped
V-Shaped
T-Shape
Other
Unknown

Perimeter Length of a line forming the boundary around the facility. [feet]

Gross Floor Area **Total floor area of all floors of a building calculated with the external dimensions of the enclosing fixed walls of the building including structures, partitions, corridors, stairs, and conditioned below-grade spaces. Note: All parking areas (enclosed and non-enclosed) should be excluded; atrium should only include the base floor area that it occupies. [square feet]**

Net Floor Area Gross floor area of a building, excluding the area occupied by walls and partitions, the circulation area (where people walk), and the mechanical area (where there is mechanical equipment) i.e. gross floor area reduced by the area for structural components. [square feet]

Rentable Floor Area Floor area that is being rented or is for rent. [square feet]

Occupied Floor Area Floor area that is currently occupied or assigned. [square feet]

Percentage of Common Space Percent of gross floor area that is common space only

Lighted Floor Area Floor area of all spaces that are lit artificially. [square feet]

Heated Floor Area Floor area of all spaces that are heated. [square feet]

Cooled Floor Area Floor area of all spaces that are cooled. [square feet]

Unconditioned Floor Area Floor area of a building that is neither heated nor cooled. [square feet]

Basement Floor Area **Basement refers to an enclosed space under all or part of the building in which a person can walk upright. [square feet]**

Basement Heated Floor Area Area of heated enclosed space under all or part of the building in which a person can walk upright. [square feet]

Basement Cooled Floor Area Area of cooled floors pace that is enclosed under all or part of the building in which a person can walk upright. [square feet]

Attic Floor Area	Attic refers to floor consisting of open space at the top of a house just below roof; often used for storage. [square feet]
Attic Heated Floor Area	Area of heated floor space consisting of open space at the top of a house just below roof; often used for storage. [square feet]
Attic Cooled Floor Area	Area of cooled floor space consisting of open space at the top of a house just below roof; often used for storage. [square feet]
Garage Floor Area	Garage refers to a space large enough to accommodate a car, with a door opening at least 6 feet wide and 7 feet high. [square feet]
Garage Heated Floor Area	Area of heated space large enough to accommodate a car, with a door opening at least 6 feet wide and 7 feet high. [square feet]
Garage Cooled Floor Area	Area of cooled floor space large enough to accommodate a car, with a door opening at least 6 feet wide and 7 feet high. [square feet]
Volume	Volume of a building measured by its external dimensions. [cubic feet]
Conditioned Building Volume	Heated or cooled air volume of a building. [cubic feet]
Number of Dwelling Units	Number of individual units in a multifamily facility.
Aspect Ratio	The ratio of the facility's width to its length.
Number of Floors	Number of floors in the facility.
Floors Above Ground	Number of floors which are above ground.
Floors Below Ground	Number of floors which are underground.
Number of Residents	Number of residents in the facility.
Number of Bedrooms	Bedroom refers to a room intended for sleeping, even if not presently used for sleeping. The number of bedrooms are those that would be listed as descriptive of the apartment or house if it were on the market for sale or rent. A one-room efficiency or studio apartment has no bedrooms.
Number of Complete Baths	Complete bath refers to a full bathroom that contains a sink with running water, a flush toilet, and a bathtub or shower.
Number of Half Baths	Half bath refers to a bathroom which contains a toilet or bathtub or shower.

Number of Rooms Rooms refers to subdivisions of a housing unit. Whole rooms are rooms such as living rooms, dining rooms, bedrooms, kitchens, lodgers' rooms, finished basements or attic rooms, recreation rooms, and permanently enclosed sun porches that are used year round. Rooms used for offices by a person living in the unit are included.

Not considered to be rooms are bathrooms, halls, foyers or vestibules, balconies, closets, alcoves, pantries, strip or pullman kitchens, laundry or furnace rooms, unfinished attics or basements, open porches, and unfinished space used for storage.

A partially divided room, such as a dinette next to a kitchen or a living room, is considered a separate room only if there is a partition from floor to ceiling--but not if the partition consists solely of shelves or cabinets. If a room is used by occupants of more than one unit, the room is included with the unit from which it is most easily reached.

Building Certification Type **Building energy labeling, rating, or sustainability certification obtained. (Multiple instances of this field)**

- CMP Green Value Score
- EPA ENERGY STAR Rating
- EPA ENERGY STAR Label
- Green Globes Rating
- UCSGBC LEED Certification Neighborhood Development (ND)
- UCSGBC LEED Certification for Homes
- Certified
- Not Certified
- Unknown

Building Certification Value **Value specifying building certification, e.g. score or level. (Multiple instances of this field)**

Certification Year **Year the facility earned certification. (Multiple instances of this field)**

Year of Last Remodel Year of the most recent remodel.

Commercial Facility

Year Completed **Year in which construction was completed.**

Year Occupied **Year in which the facility was first occupied.**

Owner Type **The type of organization, association, business, etc. that owns the facility.**

- Property Management Company
- Corporation/Partnership/LLC
- Religious Organization
- Other Non-Profit organization
- Privately-Owned School
- Individual
- Other Nongovernment
- Government
- Federal Government
- State Government
- Local Government
- Other
- Unknown

Percent Occupied by Owner Percent of facility area occupied by owner.

Operator Type Entity responsible for the operation of the facility.

- Owner
- Occupant
- Property Management Company
- Other corporation/partnership/LLC
- Religious organization
- Other non-profit organization
- Privately-owned school
- Individual owner
- Other nongovernment owner
- Government
- Federal government
- State government
- Local government
- Other / Combination
- Unknown

Surroundings Structure(s) surrounding the facility.

- Stand-alone
- Attached to another building on one side
- Attached to another building on two sides.
- Attached to another building on three sides.
- Within a building
- Unknown

Orientation Orientation of the main long axis.

- East-West
- North-South
- North East-South West
- North West-South East
- Not Applicable

Building Footprint Area Total area of a lot or site that is surrounded by the exterior walls of a building or portion of a building, exclusive of courtyards. [square feet]

Footprint Shape General shape of building footprint.

- Rectangular
- Square
- Circular
- L-Shaped
- U-Shaped
- I-Shaped
- V-Shaped
- T-Shape
- Other
- Unknown

Perimeter Length of a line forming the boundary around the facility. [feet]

Gross Floor Area	Total floor area of all floors of a building calculated with the external dimensions of the enclosing fixed walls of the building including structures, partitions, corridors, stairs, and conditioned below-grade spaces. Note: All parking areas (enclosed and non-enclosed) should be excluded; atrium should only include the base floor area that it occupies. [square feet]
Net Floor Area	Gross floor area of a building, excluding the area occupied by walls and partitions, the circulation area (where people walk), and the mechanical area (where there is mechanical equipment) i.e. gross floor area reduced by the area for structural components. [square feet]
Rentable Floor Area	Floor area that is being rented or is for rent. [square feet]
Occupied Floor Area	Floor area that is currently occupied or assigned. [square feet]
Lighted Floor Area	Floor area of all spaces that are lit artificially. [square feet]
Heated Floor Area	Floor area of all spaces that are heated. [square feet]
Cooled Floor Area	Floor area of all spaces that are cooled. [square feet]
Unconditioned Floor Area	Floor area of a building that is neither heated nor cooled. [square feet]
Volume	Volume of a building measured by its external dimensions. [cubic feet]
Conditioned Building Volume	Heated or cooled air volume of a building. [cubic feet]
Aspect Ratio	The ratio of the facility's width to its length.
Number of Floors	Number of floors in the facility.
Floors Above Ground	Number of floors which are above ground.
Floors Below Ground	Number of floors which are underground.
Number of Occupants	Number of occupants in the facility.
Building Certification Type	Building energy labeling, rating, or sustainability certification obtained. (Multiple instances of this field)
	ASHRAE Building EQ
	CMP Green Value Score
	EPA ENERGY STAR Rating
	EPA ENERGY STAR Label
	Green Globes Rating
	USGBC LEED Certification for New Construction & Major Renovation (NC)
	USGBC LEED Certification for Core & Shell Development (CS)
	USGBC LEED Certification for Commercial Interiors (CI)
	USGBC LEED Certification For Existing Buildings Operations & Management (EBOM)
	USGBC LEED Certification for Retail
	USGBC LEED Certification for Schools
	USGBC LEED Certification fro Healthcare
	USGBC LEED Certification Neighborhood Development (ND)
	Certified
	Not Certified
	Unknown

Building Certification Value Value specifying building certification, e.g. score or level. (Multiple instances of this field)

Certification Year Year the facility earned certification. (Multiple instances of this field)

Year of Last Remodel Year of the most recent remodel.

Number of Activity Areas Number of separate activity areas (one or more) for this facility, as recorded in this dataset.

Activity Area

Activity Type A space or area within a building designated for a particular activity

Vacant
Commercial - Uncategorized
Office - Uncategorized
Office - Administrative/professional
Office - Bank/other financial
Office - Government
Office - Medical non diagnostic
Office - Mixed use
Office - Other
Laboratory
Warehouse - Uncategorized
Warehouse - Refrigerated
Warehouse - Non-refrigerated
Warehouse - Distribution/Shipping center
Warehouse - Self-storage
Food Sales
Convenience store
Convenience store with gas station
Grocery store/food market
Public Safety - Uncategorized
Public Safety - Courthouse
Public Safety - Fire station/police station
Public Safety - Jailhouse
Public Safety - Penitentiary
Health Care - Uncategorized
Health Care - Outpatient Uncategorized
Health Care - Outpatient Diagnostic
Health Care - Outpatient Clinic
Health Care - Inpatient
Religious worship
Public Assembly - Uncategorized
Public Assembly - Entertainment/culture
Public Assembly - Movie Theater
Public Assembly - Drama theater
Public Assembly - Large Hall
Public Assembly - Library
Public Assembly - Recreation
Public Assembly - Arena
Public Assembly - Stadium
Public Assembly - Social/meeting
Public Assembly - Funeral home
Public Assembly - Pool
Public Assembly - Other
Education - Uncategorized
Education - College/university
Education - Elementary/middle school
Education - High school
Education - Preschool/daycare
Education - Other classroom

Food Service - Uncategorized
 Food Service - Fast food
 Food Service - Restaurant/cafeteria
 Food Service - Bakery
 Food Service - Other
 Nursing Home
 Lodging - Uncategorized
 Lodging - Dormitory/fraternity/sorority
 Lodging - Hotel
 Lodging - Motel or inn
 Lodging - Other
 Retail - Uncategorized
 Retail - Strip shopping mall
 Retail - Enclosed mall
 Retail - Other than mall
 Retail - Small Box (< 50,000 sf)
 Retail - Big Box (> 50,000 sf)
 Retail - Vehicle dealership/showroom
 Service - Uncategorized
 Service - Post office/postal center
 Service - Repair shop
 Service - Vehicle service/repair shop
 Service - Vehicle storage/maintenance
 Service - Industrial shop
 Service - Dry-cleaning/Laundry
 Service - Art/Video/Photography Studio
 Service - Other service
 Parking Garage
 Comm Garage
 Transportation Terminal
 Industrial
 Agricultural
 Data Center
 Residential
 Other

Gross Floor Area	Total floor area of all floors of an activity area calculated with the external dimensions of the space including structures, partitions, corridors, stairs. [square feet]
Heated Floor Area	Floor area of all heated spaces in the activity area. [square feet]
Cooled Floor Area	Floor area of all cooled spaces in the activity area. [square feet]
Number of Floors	Number of floors in the activity area.
Floors Above Ground	Number of floors which are above ground pertaining to the activity area.
Floors Below Ground	Number of floors which are underground pertaining to the activity area.
Floor Height	Average height of the floor(s) pertaining to the activity area. [feet]
Number of Units	Number of individual units, such as retail units, in the activity area.
Seating Capacity	The number of people who can be seated in a specific space, either in terms of the physical space available, or in terms of limitations set by law.

Number of Occupants	Number of occupants in the activity area.
Number of Guest Rooms	Number of rooms allocated for guest use in the activity area. (Typically applicable to lodging).
Number of Licensed Beds	The number of beds for which a facility holds a license to operate in the activity area. (Typically applicable to health care).
Average Weekly Operating Hours	Average weekly operating hours.
Average Weeks per Year in Use	Average number of weeks per year that the facility or activity area is occupied.

Systems

Note: Separate records may be entered for each system (e.g. lighting, heating, etc.) if a facility has multiple types of that system.

Lighting

Lighting Type	Type of artificial source of light.
	<ul style="list-style-type: none"> Incandescent Fluorescent - Uncategorized Fluorescent - T5 Fluorescent - T8 Fluorescent - Super T8 Fluorescent - T12 Compact Fluorescent High intensity discharge (HID) Halogen LED Mercury Vapor Sodium Sodium - High Pressure Sodium - Low Pressure Metal Halide Other / Combination Unknown
Ballast Type	<p>Type of ballast: a piece of equipment required to control the starting and operating voltages of electrical gas discharge lights.</p> <ul style="list-style-type: none"> Electronic Magnetic Instant start Rapid Start Programmed Start Other / Combination Unknown
Lighting Control Type	<p>Type of control used to manage lighting.</p> <ul style="list-style-type: none"> Daylight Dimming Occupancy Sensors Vacancy Sensors Manual Dimming Bi-level Control Timers

Advanced Controls
EMCS
Manual
Always On
Other / Combination
Unknown

Installed Power Installed power for this system. [kW]

Percentage of Total Installed Power Percent this system is of total installed power. [%]

Percentage of Total Floor Area Served The percentage of a facility's square footage served by system. [%]

Outside Lighting True if lighting system is primarily for outside lighting, false otherwise.

Air Distribution

Configuration Basic configuration of air-distribution equipment.

Packaged
Built-up
Split
Other
Unknown

Flow Control Type of air flow control.

Variable Volume
Constant Volume
Other
Unknown

Duct Configuration Configuration of ducts.

Single
Dual
Three
Unitary
Other
Unknown

Heating Source Source of heating in air-distribution system.

Hydronic
Steam
Electric Resistance
Furnace
Gas
Other
Unknown

Cooling Source Source of cooling in air-distribution system.

Direct Expansion

	Evaporative Hydronic Other Unknown
Preheat Source	Source of preheating in air-distribution system.
	Hydronic Furnace Electric Resistance Other Unknown
Humidification	Humidification type in air-distribution system.
	Steam Water Spray Other Unknown
Dehumidification	Dehumidification type in air-distribution system.
	Desiccant Wheel Liquid Desiccant Other Unknown
Quantity	Number of systems of this type.
Size	System fan size. [cfm]
Power	Fan power. [kW]
Year of Manufacture	Year system was manufactured.
Primary	True if the system is the primary air-distribution equipment for the building.
Percent of Total Installed Capacity	Percent this system is of total installed capacity. [%]
Percent of Floor Area Served	The percentage of a facility's square footage served by system. [%]
Static Pressure Reset Control	True if there is static pressure reset, false otherwise.
Supply Air Temperature Reset Control	True if there is supply air temperature reset, false otherwise.
Efficiency	Efficiency of system.
Efficiency Unit	Unit used to measure efficiency.
	% W/cfm

Other
Unknown

Fan Motor Efficiency **Efficiency of the fan's motor.**

Economizer **Type of air economizer system in this air-distribution system.**

Uncategorized
Dry-Bulb - Uncategorized
Dry-Bulb - Fixed
Dry-Bulb - Differential
Enthalpy - Uncategorized
Enthalpy - Fixed
Enthalpy - Differential
Demand Controlled Ventilation
Nonintegrated
None
Unknown

Minimum Outside Air Percentage **Minimum outside air percentage allowed. [%]**

Fan Control Type **Type of fan control.**

Outlet Damper
Bypass Damper
Inlet Guide Vanes
VFD
Constant
Riding Fan Curve
Intermittent
None
Other / Combination
Unknown

Heat Recovery Type **Type of heat recovery within the air distribution equipment.**

Run-Around Coil
Thermal Wheel
Heat Pipe
Air-to-Air Heat Exchanger
Earth-to-Air Heat Exchanger
Earth-to-Water Heat Exchanger
Other
Unknown

Heat Recovery Efficiency **Efficiency of heat recovery. [%]**

Duct Insulation **Condition of duct insulation.**

Excellent
Good
Average
Poor
Very Poor
None

Unknown

Duct Sealing Condition of duct sealing.

Excellent
Good
Average
Poor
Very Poor
None
Unknown

Duct Location Location of ducts.

Conditioned Space
Unconditioned Space
Unknown

Duct Insulation R-Value R-value of duct insulation.

Heating

Heating Type Type of heating system. This generally refers to central heating equipment. Zonal heating is recorded in a separate data field.

Furnace
Furnace - Condensing
Boiler - Uncategorized
Boiler - Hot Water
Boiler - Hot Water - Condensing
Boiler - Hot Water - Non-Condensing
Boiler - Steam
Boiler - Steam - Low-Pressure
Boiler - Steam - High-Pressure
Radiator
Central Heating
PTAC
Heat Pump - Uncategorized
Heat Pump - Ground Source
Heat Pump - Air Source
Heat Pump - Water Loop
Geothermal Heat Pump
District Hot Water
District Steam
Solar Thermal
Induction Unit
Resistance Heating
Perimeter Baseboard
Other / Combination
Unknown
No Heating

Burner Type Type of burner on boiler, if applicable.

Atmospheric
Power
Sealed Combustion
Sealed Combustion Condensing
Rotary Cup
Not Applicable

Other / Combination
Unknown

Fuel Main fuel used by the system. Refer to Fuel list in Energy Use.

Quantity Number of systems of this type.

Capacity Capacity of the system.

Capacity Unit Unit used to measure capacity. Refer to Unit list in Energy Use.

Year of Manufacture Year system was manufactured.

Primary True if the system is the primary equipment.

Efficiency Efficiency of system.

Efficiency Unit Unit used to measure efficiency. Refer to Units in Energy Use for list.

COP
AFUE
Other
Unknown

Percent of Total Installed Capacity Percent this system is of total installed capacity. [%]

Percent of Floor Area Served The percentage of a facility's square footage served by system. [%]

Hot Water Reset Control Type of hot water reset control, if any.

Seasonal
None
Other
Unknown

Control Type Type of system operation control.

Programmable Thermostat
Manual Thermostat
Digital Thermostat
Timer
EMCS
Always On
Other / Combination
Unknown

Zonal Heating

Type Type of equipment used for heating at the zone.

PTAC
Radiator
Air Handler
Induction Units

VAV Reheat Boxes
 CAV Reheat Boxes
 Fan Coil Unit
 Fan Coil-2 Pipe
 Fan Coil-3 Pipe
 Fan Coil-4 Pipe
 Perimeter Baseboard
 Radiant Floor or Ceiling
 Low Pressure Under Floor
 Pipeless Furnace
 Portable Heater
 Fireplace
 Cookstove
 Heating Stove
 Built-in Heater
 Individual Space Heater
 Heat Pump - Uncategorized
 Heat Pump - Ground Source
 Heat Pump - Air Source
 Heat Pump - Water Source
 Heat Pump - Packaged Terminal (PTHP)
 Resistance Heating
 Other / Combination
 Unknown

Control Type Type of system operation control.

Programmable Thermostat
 Manual Analog Thermostat
 Manual Digital Thermostat
 On/Off
 EMCS
 Always On
 Other / Combination
 Unknown

Fuel Main fuel used by the system. Refer to Fuel list in Energy Use.

Year of Manufacture Year system was manufactured.

Quantity Number of individual systems of this type.

Percent of Total Installed Capacity Percent this system is of total installed capacity. [%]

Percent of Floor Area Served The percentage of a facility's square footage served by system. [%]

Cooling

Cooling Type Type of cooling equipment. This generally refers to central cooling equipment. Zonal cooling is recorded in a separate data field. Use of fans or blowers by themselves without chilled air or water is not included in this definition of air conditioning.

Central Air Conditioning
 Split AC System
 Heat Pump - Uncategorized
 Heat Pump - Ground Source
 Heat Pump - Air Source
 Heat Pump - Water Loop

Heat Pump - Geothermal
District Chilled Water
Chiller - Uncategorized
Chiller - Absorption
Chiller - High Pressure Absorption
Chiller - Low Pressure Absorption
Chiller - Turbine Driven
Chiller - Engine Driven
Chiller - Modular
Evaporative Cooler
Cooling Tower - Uncategorized
Cooling Tower - Open
Cooling Tower - Closed
Condenser
PTAC
Packaged Direct Expansion
No cooling
Other / Combination
Unknown

Chiller Compressor Type Type of compressor in the chiller.

Reciprocating
Screw
Scroll
Centrifugal
Other
Unknown

Chiller Cooling Type Chiller cooling type.

Air cooled
Water cooled
Other
Unknown

Fuel Main fuel used by the system. Refer to Fuel list in Energy Use.

Quantity Number of individual systems of this type.

Capacity Capacity of the system.

Capacity Unit Unit used to measure capacity. Refer to Unit list in Energy Use.

Efficiency Efficiency of system.

Efficiency Unit Unit used to measure efficiency.

COP
EER
SEER
HSPF
kW/ton
Other
Unknown

Year of Manufacture **Year system was manufactured.**

Primary True if the system is the primary cooling equipment for the building.

Energy Star True if equipment is Energy Star rated.

Percent of Total Installed Capacity Percent this system is of total installed capacity. [%]

Percent of Floor Area Served The percentage of a facility's square footage served by system. [%]

Chilled Water Reset Control Type of control on chilled water reset.

- Seasonal
- None
- Other
- Unknown

Cooling Tower Control Type Type of system operation control.

- Wet Bulb Reset
- Max Cells
- Min Cells
- Other
- Unknown

Control Type Type of system operation control.

- Programmable Thermostat
- Manual Thermostat
- Digital Thermostat
- Timer
- EMCS
- Always On
- Other / Combination
- Unknown

Zonal Cooling

Zonal Cooling Type **Type of equipment used for cooling at the zone.**

- Air Handler
- Dual Duct
- Constant Volume
- Constant Volume Reheat
- Variable Volume Reheat
- Variable Air Volume (VAV)
- Heat Pump - Water Source
- Radiant Ceiling
- Chilled Beam
- Fan Coil-2 Pipe
- Fan Coil-3 Pipe
- Fan Coil-4 Pipe
- PTAC
- Packaged Direct Expansion
- Room Air Conditioner

Room Air Conditioner - Through the wall (Sleeve)
 Room Air Conditioner - Window AC
 Low Pressure Under Floor
 Split AC System
 Split AC System - Mini-split
 Split AC System - Direct Expansion
 Heat Pump
 Other / Combination
 Unknown

Year of Manufacture **Year system was manufactured.**

Control Type Type of system operation control.

Programmable Thermostat
 Manual Analog Thermostat
 Manual Digital Thermostat
 On/Off
 EMCS
 Always On
 Other / Combination
 Unknown

Fuel **Main fuel used by the system. Refer to Fuel list in Energy Use.**

Quantity Number of individual systems of this type.

Percent of Total Installed Capacity Percent this system is of total installed capacity. [%]

Percent of Floor Area Served The percentage of a facility's square footage served by system. [%]

Capacity Capacity of the system.

Capacity Unit Unit used to measure capacity. Refer to Unit list in Energy Use.

Other HVAC

Other HVAC Type **Type of heating, ventilation, and air-conditioning (HVAC) equipment that is not classified as heating, cooling, air-distribution, zonal heating, or zonal cooling.**

Humidifier
 Dehumidifier
 Air Cleaner
 Non-conditioning Fan
 Mechanical Ventilation
 Other / Combination
 Unknown

Fuel **Main fuel used by the system. Refer to Fuel list in Energy Use.**

Quantity Number of individual systems of this type.

Capacity	Capacity of the system.
Capacity Unit	Unit used to measure capacity. Refer to Unit list in Energy Use.
Year of Manufacture	Year system was manufactured.
Percent of Total Installed Capacity	Percent this system is of total installed capacity. [%]
Percent of Floor Area Served	The percentage of a facility's square footage served by system. [%]
Control Type	Type of system operation control. Programmable Thermostat Manual Thermostat Digital Thermostat Timer EMCS Always On Other / Combination Unknown

Service Hot Water

Service Hot Water Type **Type of water heating equipment for hot running water.**

Outdoor
 Storage Tank - Uncategorized
 Storage Tank - Distributed
 Storage Tank - Looped
 Storage Tank - Point-Of Use
 Storage Tank - Direct-fired
 Unspecified
 Instantaneous
 Heat pump
 Tankless
 Heat Exchanger
 Other / Combination
 Unknown

Fuel **Main fuel used by the system. Refer to Fuel list in Energy Use.**

Quantity Number of individual systems of this type.

Size Size of system. [gallons]

Capacity Capacity of the system.

Capacity Unit Unit used to measure capacity. Refer to Unit list in Energy Use.

Year of Manufacture **Year system was manufactured.**

Energy Star **True if equipment is Energy Star rated.**

Control Type Type of system operation control.

Programmable Thermostat
Manual Thermostat
Digital Thermostat
Timer
EMCS
Always On
Other / Combination
Unknown

Efficiency Efficiency of system.

Efficiency Unit Unit used to measure efficiency.

COP
AFUE
Energy Factor
Other
Unknown

Storage Tank Insulation R-Value Insulation R-Value of hot water storage tank.

Storage Tank Insulation Thickness Insulation thickness of hot water storage tank. [inches]

Percent of Total Installed Capacity Percent this system is of total installed capacity. [%]

General Controls & Operations

Regular HVAC Maintenance Level of routine inspection and service for HVAC equipment.

None
Yes - unspecified
As Needed
Daily
Weekly
Bi-Weekly
Monthly
Semi-Quarterly
Quarterly
Semi-Annually
Annually
Unknown

Programmable Thermostats Used True of programmable thermostats are used to control HVAC equipment; false otherwise.

Standard Thermostats True if standard thermostats are used to control HVAC equipment; false otherwise.

Heat Lowered Times programmable thermostat lowers the heat.

During the day
At night
During sleeping and unoccupied hours
Never / Rarely
Other
Unknown

AC Adjusted Times programmable thermostat adjusts air conditioning.

During the day
At night
During sleeping and unoccupied hours
Never / Rarely
Other
Unknown

Occupied Day Setting Temperature set during the day when occupied. [Degrees F]

Unoccupied Day Setting Temperature set during the day when unoccupied. [Degrees F]

Sleeping Hours Setting Temperature set during sleeping hours. (Applies to residential facilities). [Degrees F]

Wall

Exterior Wall Type Type of exterior wall construction.

Brick
Brick Cavity
Stone
Concrete - Uncategorized
Concrete - Panels
Concrete - Block
Concrete Poured
Concrete Non-Load Bearing
Concrete Load Bearing
Concrete - Insulated Forms
Concrete - Aerated
Metal - Uncategorized
Metal Panels
Sheet Metal
Masonry
Frame Wall
Frame Wall and Masonry
Curtain Wall
Window Wall
Slab Edge
Continuous Angle
SIPS
EIFS and Masonry
EIFS
Wood Walls
Siding or Shingles
Other / Combination
Unknown

Exterior Wall Color General color shading of the exterior wall.

White
Light

Medium
Med-Dark
Dark
Other / Combination
Unknown

Wall R-Value The walls' resistance to heat flow.

Percentage of Total Wall Area Percentage of this exterior wall type relative to total wall area. [%]

Wall Insulation Type **Wall insulation type.**

Loose Fill
Batts
Spray-On
Rigid
EPS
Other / Combination
None
Unknown

Wall Insulation Thickness **Thickness of wall insulation. [inches]**

Basement wall insulation thickness Thickness of basement insulation. [inches]

Tightness Air tightness (sealing) of building.

Excellent
Good
Average
Poor
Very Poor
Unknown

Roof / Ceiling

Roof Type **Type of roof construction.**

Built-up
Shingles
Slate or tile shingles
Wood shingles/shakes/other wood
Asphalt/fiberglass/other shingles
Metal surfacing
Plastic/rubber/synthetic sheeting
Concrete
Cool Roof
Green Roof
Other / Combination
Unknown

Roof Color **General color shading of the roof.**

White
Light
Medium
Med-Dark

Dark
Other / Combination
Unknown

Deck Type Roof deck material type.

Concrete
Metal
Wood
Other / Combination
Unknown

Roof R-Value The roof's resistance to heat flow.

Percentage of Total Roof Area Percentage of area covered by this roof type, relative to the total roof area. [%]

Roof Insulation Type Type of roof insulation.

Loose Fill
Batts
Spray-On
Rigid
None
Other / Combination
Unknown

Roof Insulation Thickness Thickness of roof insulation. [inches]

Attic/Ceiling Type Type of insulation in the attic or ceiling.

Unconditioned Attic
Conditioned Attic
Cathedral Ceiling
Other
Unknown

Attic/Ceiling R-value The attic/ceiling's resistance to heat flow.

Attic/Ceiling Insulation thickness Thickness of insulation in attic/ceiling. [inches]

Attic/Ceiling Insulation Type Type of material used to insulate attic/ceiling.

Fiberglass
Rockwool
Insulsafe
Recycled Cotton
ISOCY
Icynene
None
Other / Combination
Unknown

Radiant Barrier True if a radiant barrier is installed, false otherwise.

Fenestration

Window Glass Type Type of glass in windows.

Low-e
Tinted
Reflective
Tinted/Reflective
High Performance
Other / Combination
Unknown

Operable Windows True if windows are operable and can be used as ventilation, false otherwise.

Windows Gas Filled True if windows are gas filled, false otherwise.

Window Glass Layers Number of layers in window type.

Single-pane
Double-pane
Triple-pane
Multi-layered
Single-Paned with Storms
Other / Combination
Unknown

Window R-value The windows' resistance to heat flow.

Solar Heat Gain Coefficient (SHGC) SHGC is the fraction of incident solar radiation admitted through a window, both directly transmitted and absorbed and subsequently released inward.

Window Visible Transmittance Amount of visible light transmitted through the window vs. full transmittance. [%]

Window to Wall Ratio Ratio of total window area to total wall area.

Window Frame Type Type of window frame.

Aluminum - Uncategorized
Aluminum - No thermal break
Aluminum - Thermal break
Composite
Fiberglass
Steel
Vinyl
Wood
Other / Combination
Unknown

Exterior Shading Type Any type of overhang or awning on the outside of the building designed to limit solar penetration.

Exterior Shades - Uncategorized

External Overhangs
Awnings
Solar Screens
Solar Film
None
Other / Combination
Unknown

Exterior Shading Orientation Orientation of window exterior shading.

North
North East
North West
South
South East
South West
East
West
Unknown

Interior Shading Type Type of interior shading.

Blinds
Curtains
Shades
None
Other / Combination
Unknown

Skylights True if skylights are present, false otherwise.

Windows Weather-Stripped True if windows are weather-stripped, false otherwise.

Exterior Door Type Exterior entrance/exit doors type.

Solid Wood
Hollow Wood
Uninsulated Metal
Insulated Metal
Glass
Other / Combination
Unknown

Doors Weather-Stripped True if exterior doors are weather-stripped.

Foundation

Ground Coupling The manner in which the building is connected to the ground.

Basement
Conditioned Basement
Unconditioned Basement
Half Conditioned Basement
Slab
Crawl Space
Unvented Crawlspace
Vented Crawlspace
Continuous Angle

Other / Combination
Unknown

Perimeter Insulated True if floor perimeter is insulated, false otherwise.

Floor Insulation Thickness Thickness of insulation in floor. [inches]

Floor R-Value The floor's resistance to heat flow.

Floor Construction Type Floor construction type.

Concrete
Light Weight Concrete & Steel
Wood
Other / Combination
Unknown

IT System

IT System Type Type of information/technology (IT) system.

Personal Computer
Server
Printing
Cash Register
Audio
Display
Networking
Security
Set Top
Telephoning
Business Equipment
Power
Other / Combination
Unknown

Quantity Number of individual systems of this type.

Electrical Plug Intensity Plug load per square foot. [Watts/sq.ft.]

Energy Star True if equipment is Energy Star rated.

Process Load

Process Load Type Type of general miscellaneous equipment not categorized elsewhere.

Medical Equipment
Laboratory Equipment
Machinery
Motor
Air Compressor
Fume Hood
Appliance
Gaming/Hobby/Leisure
Infrastructure
Electric Vehicle Charging
Other / Combination

Unknown

Fuel Main fuel used by the system. Refer to Fuel list in Energy Use.

Quantity Number of individual systems of this type.

Installed Power Installed power of process load. [Watts]

Efficiency Value Efficiency of system.

Efficiency Unit Efficiency class of the system.

Cooking

Cooking Type Type of cooking as an energy end use (does not include employee lounge areas that are equipped with microwaves, other food preparation equipment, and/or vending machines.)

Residential Kitchen
Commercial - Uncategorized
Commercial - Fast Food / Small Restaurant
Commercial - Large Restaurant
Institutional - Uncategorized
Institutional - Cafeteria
Institutional - Snack Bar / Small Kitchen
Other / Combination
Unknown

Fuel Main fuel used by the system. Refer to Fuel list in Energy Use.

Refrigeration

Refrigeration Type Type of refrigeration equipment.

Refrigeration - Case
Refrigeration - Walk-in
Commercial - Uncategorized
Commercial Freezer - Uncategorized
Commercial Freezer- Walk-in
Commercial Freezer - Case
Commercial Refrigerator - Uncategorized
Commercial Refrigerator - Walk-in
Commercial Refrigerator - Open Case
Commercial Refrigerator - Closed Case
Residential - Uncategorized
Residential - Full-Sized, One Door
Residential - Full-size, Two Doors
Residential - Half or Quarter Size
Residential Freezer - Uncategorized
Residential Freezer - Manual Defrost
Residential Freezer - Frost Free
Refrigerated Vending Machine
Refrigerator - Uncategorized
Freezer - Uncategorized
Other / Combination
Unknown

Quantity Number of individual systems of this type.

Size	Size of system. [cubic feet]
Year of Manufacture	Year system was manufactured.
Energy Star	True if equipment is Energy Star rated.
Doors	Door configuration of the refrigerator/freezer unit.
	Side-by-side Top and bottom Other / Combination Unknown

Dishwasher

Dishwasher Type	A built-in or portable appliance used for automatically cleaning dishware, utensils, and cutlery.
	Residential - Uncategorized Residential - Built-in under counter Residential - Portable Residential - Counter-top Commercial - Uncategorized Commercial - Under Counter Commercial - Single Tank Commercial - Conveyor Other Unknown
Fuel	Main fuel used by the system. Refer to Fuel list in Energy Use.
Year of Manufacture	Year system was manufactured.
Energy Star	True if equipment is Energy Star rated.

Laundry

Laundry Type	Type of laundry system.
	Washer - Uncategorized Washer - Residential Washer - Commercial Dryer - Uncategorized Dryer - Residential Dryer - Commercial All-in-One Combination Washer Dryer Unitized/Stacked Washer/Dryer Pair Onsite Laundry Facility Other Unknown
Fuel	Main fuel used by the system. Refer to Fuel list in Energy Use.
Year of Manufacture	Year system was manufactured.
Energy Star	True if equipment is Energy Star rated.

Conveyance

Conveyance System Type Type of vertical or horizontal transportation equipment that moves people or goods between levels, floors, or sections.

Escalator
Elevator
Moving Walkway
Other / Combination
Unknown

Quantity Number of individual systems of this type.

Control Type Type of system operation control.

Electro-Mechanical
Digital
Always On
Other / Combination
Unknown

On-Site Generation

On-Site Generation Type Type of on-site energy generation system.

PV
Fuel Cell
Microturbine
Turbine
Cogeneration
Plasma Gasification
Generator - General
Solar Thermal
Geothermal
Biomass
Hydrothermal
Wind
Reciprocating Engine
Other / Combination
Unknown

Fuel Generated Fuel type generated by generator system. Refer to Fuel list in Energy Use.

Quantity Number of individual systems of this type.

Capacity Capacity of the system.

Capacity Unit Unit used to measure capacity. Refer to Unit list in Energy Use.

Energy Storage

Energy Storage Type Type of equipment that has the ability to hold energy for later retrieval.

Battery
Ice Storage
Chilled Water Storage
Other / Combination
Unknown

Quantity	Number of individual systems of this type.
Energy Storage Capacity	Maximum energy that can be stored.
Capacity Unit	Unit used to measure capacity. Refer to Unit list in Energy Use.

Pool

Pool Type	Type of pool. Hot Tub/ Spa Pool - Uncategorized Pool -Olympic Pool - Recreational Pool - Short Course Other / Combination Unknown
Quantity	Number of individual systems of this type.
Heated	True if fuel is used to heat the pool. False, otherwise.
Fuel	Main fuel used to heat the pool. Refer to Fuel list in Energy Use.
Pool Volume	Volume of the pool. [gallons]
Number of Pool Pumps	Number of pool pumps used for the pool.
Control Type	Type of control used to manage heating of pool. Programmable Thermostat Manual Thermostat Digital Thermostat EMCS Timer attached to pool pump Always On Other / Combination Unknown

Measures

Measure List	Energy efficiency measures, or other changes that affect the energy use of this facility. Measures may be multi-selected to indicate 'packages' of measures. Commissioning or Retro-commissioning Cleaning and/or Repair - Uncategorized Training and/or Documentation - Uncategorized Operating Protocols, Calibration, and/or Sequencing - Uncategorized Envelope - Uncategorized Envelope - Replace Glazing Envelope - Increase Wall Insulation Envelope - Increase Ceiling Insulation Envelope - Increase Roof Insulation Envelope - Increase Floor Insulation Envelope - Cool/Green Roof Installed Envelope - Add Window Films Envelope - Add Shading Devices
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Envelope - Cleaning and/or Repair
Envelope - Air Sealing (changed from weather-stripping)
Envelope - Insulation or Replacement of Solar Screens
Envelope - Insulate Attic Hatch / Stair Box
Envelope - Add Attic/Knee Wall Insulation
Envelope - Insulate Thermal Bypass
Envelope- Insulate Foundation
HVAC - System - Uncategorized
HVAC - System - Operating Protocols, Calibration, and/or Sequencing
HVAC - System - Cleaning and/or Repair
HVAC - System - Training and/or Documentation
HVAC - Heating - Uncategorized
HVAC - Heating - Replace Boiler or Furnace
HVAC - Heating - Replace Burner
HVAC - Heating - Replace Packaged Terminal Units
HVAC - Heating - Add Heat Recovery
HVAC - Heating - Convert Gas-Fired Unit to Boiler Loop
HVAC - Heating - Boiler Room Insulation
HVAC - Heating - Operating Protocols, Calibration, and/or Sequencing
HVAC - Heating - Cleaning and Repair
HVAC - Ventilation - Uncategorized
HVAC - Ventilation - Duct Sealing
HVAC - Ventilation - Duct Insulation
HVAC - Ventilation - Balancing
HVAC - Ventilation - Operating Protocols, Calibration, and/or Sequencing
HVAC - Ventilation - Upgrade Fans
HVAC - Ventilation - Cleaning and Repair
HVAC - Cooling -Uncategorized
HVAC - Cooling - Replace Chiller
HVAC - Cooling - Replace Package Units
HVAC - Cooling - Operating Protocols, Calibration, and/or Sequencing
HVAC - Cooling - Economizer Cycle
HVAC - Cooling - Heat Recovery
HVAC - Cooling - Add or replace Cooling Tower
HVAC - Cooling - Install VSD on Electric Centrifugal Chillers
HVAC - Distribution - Uncategorized
HVAC - Distribution - Add Pipe Insulation
HVAC - Distribution - Add Duct Insulation
HVAC - Distribution - Balancing
HVAC - Distribution - Operating Protocols, Calibration, and/or Sequencing
HVAC - Distribution - Replace/Modify AHU
HVAC - Distribution - Repair Leaks / Seal Ducts
HVAC - Distribution - Improve Fans or Pumps
HVAC - Distribution - Convert System from Steam to hot Water
HVAC - Distribution - Convert CV System to VAV System
HVAC - Controls - Uncategorized
HVAC - Controls - Add or Upgrade BAS/EMS/EMCS
HVAC - Controls - Add or Upgrade Controls
HVAC - Controls - Pneumatic to DDC Convert
Domestic Hot Water - Uncategorized
Domestic Hot Water - Replace or Upgrade Heater
Domestic Hot Water - Heat Recovery
Domestic Hot Water - Add Pipe Insulation
Domestic Hot Water - Install Low-Flow Fixtures
Domestic Hot Water -Add Recirculating Pumps
Domestic Hot Water - Separate DHW from Heating
Domestic Hot Water - Solar Hot Water
Domestic Hot Water - Operating Protocols, Calibration, and/or Sequencing
Motors - Uncategorized
Motors - Replace with higher efficiency
Motors - Replace with VSD
Motors - Add Drive Controls
Lighting - Uncategorized
Lighting - Retrofit/Replace

Lighting - Cleaning and/or Repair
 Lighting - Operation Protocols, Calibration, and/or Sequencing
 Lighting - Retrofit with T-8
 Lighting - Retrofit with T-5
 Lighting - Retrofit with CFLs
 Lighting - Add occupancy sensors
 Lighting - Add daylight dimming
 Data Center - Uncategorized
 Process/Plug Equipment - Uncategorized
 Process/Plug Equipment - Replace with Energy Star Rated
 Process/Plug Equipment -Operating Protocols, Calibration, and/or Sequencing
 Process/Plug Equipment - Cleaning and/or Repair
 On-Site Generation - Uncategorized
 Fuel Conversion
 Addition or Annex
 Other
 Unknown

Scope Percentage of the building floor space affected. [%]

Description Description of measure.

Start Date Date the implementation began.

End Date Date the implementation was completed.

Life Life expectancy of measure. [years]

First Cost The sum of the initial expenditures to implement the measure; includes items such as equipment, transportation, installation, preparation for service, as well as other related costs. [US \$]

O&M Cost Operation and maintenance cost per year relating to the measure. [US \$ /year]

Funding from Rebates Amount of funding gained from rebates. [US \$]

Funding from Tax Credits Amount of funding gained from tax credits. [US \$]

Energy Use

Fuel Type of fuel.

Electricity
 Electricity (Renewable)
 Natural Gas
 Natural Gas (Renewable)
 Fuel Oil
 Fuel Oil No.1
 Fuel Oil No.2
 Fuel Oil No.4
 Fuel Oil No.5 and No.6
 District Steam
 District hot water
 District chilled water
 Solar hot water
 Bottled gas (LPG or propane)
 Propane

Liquid Propane
Kerosene
Diesel
Coal
Coal (anthracite)
Coal (bituminous)
Coke
Wood
Other / Combination

Complete Fuel True if this Energy Use record covers total consumption of this fuel type in this facility; false otherwise.

End Use Type End use that this Energy Use primarily applies to.

Whole Building
Whole Building Baseload
Lighting - Uncategorized
Lighting - Interior
Lighting - Exterior
Heating
Cooling
Ventilation
Pump
IT
Plug Load
Process Load
Conveyance
Domestic Hot Water
Refrigeration
Cooking
Dishwasher
Laundry
Pool Heating
Other / Combination
Unknown

Complete End Use True if this Energy Use covers total consumption of this end use; false otherwise.

Units Units for energy use.

cmh (cubic meters per hour)
ccf (hundred cubic feet)
kcf (thousand cubic feet)
MCF(million cubic feet)
cfh (cubic feet per hour)
Wh
kWh (thousand Watt-hours)
MWh (million Watt-hours)
Btu
kBtu (thousand Btu)
kBtu/hr (thousand Btu per hour)
MBtu (million Btu)
therms
Lbs. (pounds)
KLbs. (thousand pounds)
MLbs. (million pounds)
Ton
Ton Hours
kg (kilogram)
Other / No Units

Unknown

Interval Type Indicates whether the reading is meant to be representative of a specific time interval.

15-minute
Hourly
Daily
Monthly
Annual
Other
Unknown

Reading Time Zone Code The 3 letter code for the time zone where the reading was taken.

Reading Type Interval meters either average or give point readings for each time step.

Point
Median
Average
Total
Estimate
Other
Unknown

Summer Peak Peak demand in the summer.

Winter Peak Peak demand in the winter.

Time Series

Start Time Stamp The timestamp that marks the beginning of the time step.

End Time Stamp The timestamp that marks the end of the time step.

Reading The numerical value of the reading.

Interval Peak Maximum value in this interval.

Interval Minimum Minimum value in this interval.

Supplementary Data Fields

Notes:

1. These data fields are supplementary to the primary fields; and are implemented as needed to support special use cases
2. Data fields are organized by entity. See "Scheme" worksheet for description of entities and their relationships.
3. Data fields with constrained lists show list items below description.
4. Most data fields generally apply to all commercial and residential facilities. However, some fields may only apply to certain types of facilities. (e.g. school district only applies to schools)
5. Display tip: Display of data fields and enumerated types can be toggled on/off using buttons on left of row labels.

Site

Complex Type	<p>If the site hosts a complex, the main purpose or use of the complex as a whole.</p> <ul style="list-style-type: none"> College/university/junior college Primary or secondary school (K-12) Other type of school Office complex Retail complex Religious campus or complex Hospital or other health care complex Lodging or resort complex Post office complex Other type of government complex Industrial complex Transportation complex Multifamily Other / Combination Unknown
School District	<p>The school district the site pertains to.</p>
eGRID Region	<p>Emissions & Generation Resource Integrated Database (eGRID) region in which this site is located.</p>
Tax Floor Area	<p>The floor area for the site as defined by the tax records.</p>

Residential Facility

Facility Number	<p>Number for the specific facility (out of total for site).</p>
Year Completed Range	<p>If exact year of construction completion is unknown, this is a range.</p>
Number of Floor Plans	<p>Number of floor plans in a multi-family facility.</p>
Floor Plan Type	<p>Floor plan type. There may be as many types as number of different floor plans.</p> <ul style="list-style-type: none"> Studio 1 Bed / 1 Bath 1 Bed / 1+ Bath 2 Bed / 1 Bath 2 Bed / 1+ Bath 3+ Bed / 1+ Bath Other Unknown

Number of Units per Floor Plan	Number of units with floor plan specified in Floor Plan Type.
Facility Tax Floor Area	The floor area for the facility as defined by the tax records. [square feet]
Enclosed Floor Area	Floor area of all spaces enclosed by walls. [square feet]
Conditioned Floor Area	Floor area of all spaces that are either heated or cooled. [square feet]
Semi-conditioned Floor Area	Partially heated or air-conditioned floor area of a building. [sq. ft.]
Heated Only Floor Area	Floor area of all spaces that are only heated. [square feet]
Cooled Only Floor Area	Floor area of all spaces that are only cooled. [square feet]
Heated and Cooled Floor Area	Floor area of all spaces that are both heated and cooled.
Non-Enclosed Floor Area (w/roof)	Floor area of all spaces that are not enclosed by walls but do have a roof. [square feet]
Open Floor Area (w/o roof)	Floor area of all spaces that are not enclosed by walls and do not have roofs. [square feet]
Facility Height	Height of the facility. [feet]
Floor-to-Floor Height	Average height of the floor(s), measured from floor to floor/ceiling. [feet]
Number of Floors in Housing Unit	Number of floors in unit, which is part of a building.
Number of Conditioned Floors	Number of conditioned floors above ground.
Number of Conditioned Floors Above Ground	Number of floors that are conditioned and are above ground.
Numbers of Conditioned Floors Below Ground	Number of floors that are conditioned and are below ground.
Household Type	<p>The type of household consisting of persons who are permanently resident in the same dwelling unit.</p> <ul style="list-style-type: none"> Family household Married couple, no children Male householder, no spouse Female householder, no spouse Nonfamily household Single male Single female Other

Unknown

Ownership Status **The relationship of a housing unit's occupants to the structure itself, not the land on which the structure is located.**

Own/Buying
Renting
Occupying without payment of rent
Other / Combination
Unknown

Government Subsidized Housing **True if multifamily property receives affordable public local, state or federal subsidies, false otherwise.**

Occupant Income Range **Annual income of the household occupants.**

Lowest Fifth
Second Fifth
Middle Fifth
Fourth Fifth
Highest Fifth
Top 5%
Other / Combination
Unknown

Occupant Education **Highest education level of the household occupants.**

No High School
Some High School
High School Graduate
Some College
Vocational/Technical/Associates Degree
Bachelor's Degree
Some Post Graduate
Master's Degree
Professional Degree
Doctoral Degree
Other / Combination
Unknown

Resident Population Type **This is a descriptor used to identify multifamily housing that may be marketed to and/or dedicated for specific resident populations. Applies to the majority (more than 50%) of the residents.**

No specific Resident Population
Student
Military
Senior/Independent Living
Special Accessibility Needs
Other / Combination
Unknown

Number of Adults **Number of persons age 18 or older residing in the residence.**

Number of Children **Number of persons under the age of 18 residing in the residence.**

Number of Non-bedrooms **Non-bedrooms refers to rooms not intended for sleeping.**

Commercial Facility

Facility Number	Number for the specific facility (out of total for site).
NAICS Code	North American Industry Classification System code.
Ownership Status	The relationship of a commercial facility's occupants to the structure itself, not the land on which the structure is located. Own/Buying Renting Occupying without payment of rent Other / Combination Unknown
Facility Tax Floor Area	The floor area for the facility as defined by the tax records. [square feet]
Enclosed Floor Area	Floor area of all spaces enclosed by walls. [square feet]
Conditioned Floor Area	Floor area of all spaces that are either heated or cooled. [square feet]
Semi-conditioned Floor Area	Partially heated or air-conditioned floor area of a building. [sq. ft.]
Heated Only Floor Area	Floor area of all spaces that are only heated. [square feet]
Cooled Only Floor Area	Floor area of all spaces that are only cooled. [square feet]
Heated and Cooled Floor Area	Floor area of all spaces that are both heated and cooled.
Non-Enclosed Floor Area (w/roof)	Floor area of all spaces that are not enclosed by walls but do have a roof. [square feet]
Open Floor Area (w/o roof)	Floor area of all spaces that are not enclosed by walls and do not have roofs. [square feet]
Basement Floor Area	Basement refers to an enclosed space under all or part of the building in which a person can walk upright.
Facility Height	Height of the facility. [feet]
Floor-to-Floor Height	Average height of the floor(s), measured from floor to floor/ceiling. [feet]
Number of Conditioned Floors	Number of conditioned floors above ground.
Number of Conditioned Floors Above Ground	Number of floors that are conditioned and are above ground.
Numbers of Conditioned Floors Below Ground	Number of floors that are conditioned and are below ground.

Activity Area

Activity Area Name	Name or identifying description of activity area.
Metered Space	True if activity area is individually metered, false otherwise.
Exterior Entrance to the Public	True if facility has an exterior entrance for public use, false otherwise.
Enclosed Floor Area	Floor area of all spaces enclosed by walls. [square feet]
Non-Enclosed Floor Area (w/roof)	Floor area of all spaces that are not enclosed by walls but do have a roof. [square feet]
Open Floor Area (w/o roof)	Floor area of all spaces that are not enclosed by walls and do not have roofs. [square feet]
Conditioned Floor Area	Floor area of all spaces that are either heated or cooled. [square feet]
Office Air-Conditioned	True if office space is air-conditioned, false otherwise.
Office Heated	True if office space is heated, false otherwise.
Senior Care Facility Total Resident Capacity	Total resident capacity in senior care facility.
Occupant Density	Number of occupants per 100 square feet.
Hours per Day Guests on Site	Hours per Day Guests on Site
Number of Months in Use	Number of months the building is in full operational mode.
Average Occupancy Percentage	Percentage of occupancy. [%]
Room Density	Number of rooms per 1,000 square feet.
Number of Businesses	Number of distinct businesses operating in the facility.
Weekly Hours of Parking Access	Number of hours parking is accessible in an average week.
K - 12 School - Open Weekends	True if the school facility is open on weekends; false otherwise.
Floor area of full-service spas	Floor area of full-service spas. [square feet]

Floor area of gym/fitness center	Floor area of gym or fitness center. [square feet]
Dorm has Computer Lab	True if dormitory includes a computer lab, false otherwise.
Hospital - Tertiary Care?	True if tertiary care is offered at the hospital, false otherwise.

Systems

Lighting

Lighting Efficacy	Luminous efficacy of lighting. [lm/W]
Specular Reflectors	True if fixtures have specular reflectors, false otherwise.
Percent lit when open	Percentage of square footage that is lit electrically during usual operating hours. [%]
Percent lit when closed	The percentage of square footage that is lit electrically during all hours other than the usual operating hours. [%]
Lighting Daily Hours (Moved from Operations)	Average hours per day lights are on. 1 to 4 hours per day 4 to 12 hours per day More than 12 hours per day All day Unknown

Air Distribution

Static Pressure	The designed static pressure for the system. [Pa]
Zone Count	Number of zones serviced by the conditioning system.
Fan Placement	Placement of fan relative to the air stream. Series Parallel Draw Through Blow Through Other Unknown
Flow Configuration	Configuration of air flow. Stud Furrdown Upflow Downflow Horizontal Other Unknown
Duct Type	Type of duct material. Flex - Uncategorized Grey Flex Mylor Flex Duct Board

Sheet Metal
Galvanized
Flexible
Fiberboard
No Ducting
Other / Combination
Unknown

Bucket Type

Bucket type.

Duct Board
Metal
Other / Combination
Unknown

**Duct Pressure Test Leakage
(cfm)**

Duct leakage found from pressure test. Reported in cubic feet per minute. [cfm]

**Duct Pressure Test Leakage
(Percentage)**

Duct leakage found from pressure test. Reported as a percentage. [%]

Heating

Distribution Type

Type of distribution. (Allow multi-select)

Hot Water Pipes - Primary Distribution
Hot Water Pipes
One Pipe Steam - Primary Distribution
One Pipe Steam
Two Pipe Steam - Primary Distribution
Two Pipe Steam
Air - Primary Distribution
Air
Other - Primary Distribution
Other
Unknown

Vacuum Return System

True if there is a vacuum return system, false otherwise.

Input Capacity

Input capacity of equipment. [kBtu/hour]

Output Capacity

Output capacity of equipment. [horsepower]

Location

Location of heating equipment.

Indoors
Outdoors
Closet
Central Plant - On Site
Central Plant - Off Site
Other
Unknown

Draft Type

Draft mechanism used for drawing air through the boiler.

Natural
Mechanical Forced
Mechanical Induced
Other
Unknown

Zone Count **Number of zones** serviced by the equipment

Exclusive to this Facility **True if the asset is used exclusively for the present facility; false otherwise.**

Cooling

Water-side Economizer **True if there is a waterside economizer in use, false otherwise.**

Location **Location of cooling equipment.**

Indoors
Outdoors
Closet
Central Plant - On Site
Central Plant - Off Site
Other
Unknown

Zone Count **Number of zones** serviced by the equipment

Cooling Equipment Redundancy **True if there is backup cooling equipment. False otherwise.**

Zonal Cooling

Size Range **Size of air distribution equipment, in a range.**

5,000 - 10,000 cfm
10,000 - 20,000 cfm
Greater than 20,000 cfm
Unknown

Downstream Distribution **True if zonal cooling equipment has downstream distribution, false otherwise.**

Average Operating Hours **Hours system is on during an average day in the cooling season.**

Number of Months in Operation **Number of months room air conditioner is on during an average cooling season.**

Other HVAC

Location **Location of system.**

Indoors
Outdoors
Closet
Garage
Attic
Other
Unknown

Zone Count **Number of zones** serviced by the equipment

Service Hot Water

Location **Location of system.**

Indoors
Outdoors

Closet
Garage
Attic
Basement or Crawlspace
Other
Unknown

Setpoint Temp **Temperature setpoint of service hot water. [Degree F]**

Residential Temperature Setting **General temperature setting heat mode.**

Low
Medium-Low
Medium
Medium-High
High
Unknown

General Controls & Operations

Task Lighting In Use **True if task lighting is used.**

Percent Controlled by EMCS **Percent of space controlled by EMCS as far as HVAC.**

Primary HVAC Control Strategy **Primary HVAC equipment control strategy.**

Pneumatic
Electric
Other / Combination
Unknown

HVAC Systems Controlled by EMCS **HVAC systems that are controlled by an energy management and control system (EMCS).
Allow multi-select.**

Heating plant
Cooling Plant
Terminals
Other
Unknown

Individual HVAC Control **Control type of individual HVAC equipment**

Temperature
Airflow Velocity
Airflow Direction
Other
Unknown

Percent of rooms controlled by thermostatic radiator valves **Percent of rooms controlled by thermostatic radiator valves. [%]**

Percent of rooms controlled by electronic zone valves with thermostats **Percent of rooms controlled by electronic zone valves with thermostats. [%]**

Percent of rooms controlled by temperature sensors	Percent of rooms controlled by wireless temperature sensors. [%]
Percent of rooms controlled by demand control ventilation	Percent of rooms controlled by demand control ventilation. [%]
Lighting reduced during off hours	True if lighting load is reduced during off hours. False otherwise.
Percent Area Covered by Occupancy Sensors	Percent of area covered by lighting occupancy sensors. [%]
Percent Area Covered by Vacancy Sensors	Percent of area covered by lighting vacancy sensors. [%]
Percent Area Covered by Photo Sensors	Percent of area covered by lighting photo sensors. [%]
Percent Area Covered by Timers	Percent of area covered by lighting timers. [%]
Percent Area Covered by Advanced Controls	Percent of area covered by advanced lighting controls. [%]
AC Replaced in Last 10 Years	True if air conditioning equipment or components have been replaced in the last ten years; false otherwise.
Number of Coils Replaces	If air conditioning was replaced in the last ten years, then the number of coils that were replaced.
Number of Air Handlers Replaced	If air conditioning was replaced in the last ten years, then the number of air handlers that were replaced.
Number of Guest Meals	Number of guest meals served per year.
Quantity of Laundry	Quantity of laundry processed on-site annually

Wall

Wall Area Total exposed above-grade wall area. [square feet]

Roof/Ceiling

Roof Slope Roof slope type.
Flat
Pitched
> 2:12
< 2:12
Other / Combination

Unknown

Roof Area	Surface area of roof. [square feet]
Percent of Roof Terraces	Percentage of roof made up of terraces. [%]
Terrace R-Value	The terrace's resistance to heat flow.
Attic Access Location	Specifies if access to the attic is through a conditioned or unconditioned space. Conditioned Space Unconditioned Space Unknown

Fenestration

Window Area	Total window area. [square feet]
Ground Floor Only	True if window type applies to only the ground floor, false otherwise.
Percent Vision Glazing	Percent of vision glazing of exposed wall area. Vision glazing is windows that provide a connection to the outdoors. [%]
Year of Last Window Replacement	Year of last window replacement, if known.
Percent of Window Area Shaded	Percent of window area that is shaded at max shading by external shading. [%]
Percent Skylight Area	Percentage of roof area that is skylight(s). [%]
Skylight SHGC	SHGC is the fraction of incident solar radiation admitted through a window, both directly transmitted and absorbed and subsequently released inward.
Skylight Visible Transmittance	Amount of visible light transmitted through the window vs. full transmittance.
Number of Exterior Doors	The number of doors that lead to the exterior.

Foundation

Carpet	True if floors are carpeted, false otherwise.
Plumbing Penetration Sealing	True if plumbing penetration sites are sealed, false otherwise.

IT System

UPS System Redundancy	True if there is a backup uninterruptable power supply (UPS). False otherwise.
Density	Number of assets of this type per 1,000 square feet.

Process Load

Capacity Capacity of all process equipment.

Capacity Unit Unit used to measure capacity. Refer to Unit list in Energy Use.

Cooking

Capacity Capacity of all cooking equipment.

Capacity Unit Unit used to measure capacity. Refer to Unit list in Energy Use.

Quantity Number of individual assets of this type.

Refrigeration

Density Number of assets of this type per 1,000 square feet.

Dishwasher

Quantity Number of individual assets of this type.

Loads Per Week Average number of loads of dishes washed per week.

Laundry

Quantity Number of individual assets of this type.

On-Site Generation

Annual Operation Hours Hours in operation per year. [hours/year]

Pool

Indoor True if the pool asset is indoors. False otherwise.

Pool Area Surface area of pool. [square feet]

Measures

Lot Configuration If there are more than one building on the lot, identify the retro-commissioning efforts.

Entire lot audited and retro-commissioned together as one
Each building audited and retro-commissioned individually
Unknown

Simple Payback The length of time required for an investment to pay for itself. [year]

Cost Effectiveness Screening Method Method for cost effective screening.

Simple Payback
NPV
Other / Combination
Unknown

O&M Cost Annual Savings Operation and maintenance annual cost savings. [US \$ /year]

Total Job Hours Total hours billed to the measure.

Annual Savings Estimate (Cost) Estimate of cost savings per year. [US \$ /year]

Annual Savings Estimate (Energy) Estimate of energy savings per year. [Btu / year]

Annual Savings (Cost) Cost savings per year. [US \$ /year]

Annual Savings (Energy) Energy savings per year. [Btu / year]

Implementation Status Implementation status of measure.

- Completed
- Selected
- Discarded
- Discarded - 5-Year Payback
- Discarded - Requires Permit
- Recommended
- In Progress
- Satisfactory Repair Not Achieved
- Other
- Unknown

Number of Permits Replaced Number of permits replaced as part of measure.

Number of Staff Members Trained Number of staff members trained as part of measure.

Work Performed By Entity who performed the work.

- Retro-Commissioning Team
- Building Staff
- Outside Contractor
- Other / Combination
- Unknown

Energy Use

Rate Structure Rate structure type for utility billing.

Metering Configuration Configuration of metering.

- Direct metering (Tenants directly metered)
- Master meter without sub-metering (Tenants not directly metered or sub-metered)
- Master meter with sub-metering (Tenants sub-metered by building owner)
- Other / Combination
- Unknown

Emissions Factor Emissions factor associated with this fuel according to EPA. [kg Co2e/Mbtu]

Fuel Interruptibility This refers to the practice of supplementing fuel by other means when there are interruptions in supply from the utility.

- Interruptible
- Firm
- Other
- Unknown

Shared Energy System Situation that applies if this energy system is shared with multiple buildings on a site, such as shared chilled water.

SEED Additional Data Fields

Notes:

1. These data fields are specific to SEED and are not within the scope of the Building Performance Database. They include Personally Identifiable Information (PII) and calculated energy and water metrics imported from other tools.
2. Data fields are organized by entity. See "Scheme" worksheet for description of entities and their relationships.
3. Data fields with constrained lists show list items below description.
4. Most data fields generally apply to all commercial and residential facilities. However, some fields may only apply to certain types of facilities. (e.g. property management contact information)
5. Display tip: Display of data fields and enumerated types can be toggled on/off using buttons on left of row labels.

Site

Site ID	Unique number identifying the site.
Address Field 1	Street Address or other address field.
Address Field 2	Street Address or other address field.
City ID Code	Field can be used for any city identification code. There may be multiple City ID Codes, such as 3 for borough, block, and lot.
City ID Code Name	Name of city identification code. There may be multiple City ID Code Names, such as 3 for "Borough," "Block," and "Lot."
Longitude	The angular distance of a place east or west of the meridian.
Latitude	The angular distance of a place north or south of the Earth's equator.

Residential Facility

Facility ID	The unique facility identifier.
Facility Name	Name of the facility.
Address Field 1	Street Address or other address field.
Address Field 2	Street Address or other address field.
Owner Name	Owner of the facility.
Facility Contact	Primary contact for the facility.
Owner Address 1	Street Address or other address field for the facility owner.
Owner Address 2	Street Address or other address field for the facility owner.

Owner City	The city in which the facility owner is located.
Owner State	The state in which the facility owner is located.
Owner Postal Code	The postal code in which the facility owner is located.
Owner Phone Number	Home phone number of residential facility owner, if appropriate.
Facility Phone	Phone number to reach primary property contact.
Facility E-Mail Address	E-mail to reach primary property contact.
Property Management Company	Company name managing the property.
Property Management Address	Address of the property management company.
Property Management Contact	Name of primary contact for the property management company.
Property Management Phone	Phone number of property management company.
Property Management E-Mail Address	E-mail address for property management company.
Agency	Federal agency, required to designate a facility as a federal property in Portfolio Manager.
Department/Region	Federal department/region, required to designate a facility as a federal property in Portfolio Manager.
PM Unique Building Identifier	Portfolio Manager Building identifier
Year PM Benchmarked	Full year prior to Audit that the building was benchmarked in Portfolio Manager. [year]
Federal Real Property ID	Federal real property ID, required to designate a facility as a federal property in Portfolio Manager.
Administrator	Designates this Portfolio Manager account as administrator over other customer accounts.
Shared By	Designates the original Portfolio Manager account who has shared this facility data.
PM Last Modified Date	Last date of Portfolio Manager data entry.

Eligibility for ENERGY STAR Indicator signifying whether or not a facility is eligible for the ENERGY STAR Label.

ENERGY STAR Application Status Status of Statement of Energy Performance (SEP) and ENERGY STAR application.

- Application has not yet been started
- No SEP has been generated
- SEP has been generated
- SEP Expired
- Application Submitted to EPA
- Pending EPA receipt
- Pending EPA decision
- Application on hold
- Application Approved
- Application expired

Space Use Alerts Portfolio Manager alerting that space types within the same facility are incompatible.

Year(s) Labeled The year or years in which the facility was ENERGY STAR Labeled.

Approval Date – Last ENERGY STAR The period ending date associated with last (i.e. most recent) ENERGY STAR Label received.

Baseline Rating A facility's baseline estimated energy use rating, as calculated by Portfolio Manager.

Target Rating ENERGY STAR target rating selected by Portfolio Manager user.

Building Profile Status The status of the building profile submission process for Portfolio Manager.

- Draft
- Received
- Under Review
- On Hold
- Reviewed and Approved
- Reviewed and Not Approved

Federal Sustainability Checklist Completion Percentage Percentage of the Federal High Performance Sustainability Checklist that has been completed for federal building in Portfolio Manager.

Notes Facility level details about the building in Portfolio Manager.

Service and Product Provider The ABS Service and Product Provider associated with this Portfolio Manager Facility.

Commercial Facility

Facility ID The unique facility identifier.

Facility Name Name of the facility.

Address Field 1 Street Address or other address field.

Address Field 2	Street Address or other address field.
Owner Name	Owner of the facility.
Facility Contact	Primary contact for the facility.
Building Operator	Name of building operator, if applicable.
Building Operator Certification	Certification of building operator. BOC BPI Other Unknown
Building Operator Certification Number	Building operator's certification or license number.
Building Operator Certification State	Building operator's certification or license state.
Owner Care-Of Name	Owner care-of contact for the facility.
Owner Address 1	Street Address or other address field for the facility owner.
Owner Address 2	Street Address or other address field for the facility owner.
Owner City	The city in which the facility owner is located.
Owner State	The state in which the facility owner is located.
Owner Postal Code	The postal code in which the facility owner is located.
Property Management Company	Company name managing the property.
Property Management Address	Address of the property management company.
Property Management Contact	Name of primary contact for the property management company.
Property Management Phone	Phone number of property management company.

Property Management E-Mail Address	E-mail address for property management company.
Agency	Federal agency, required to designate a facility as a federal property in Portfolio Manager.
Department/Region	Federal department/region, required to designate a facility as a federal property in Portfolio Manager.
PM Unique Building Identifier	Portfolio Manager Building identifier
Year PM Benchmarked	Full year prior to Audit that the building was benchmarked in Portfolio Manager. [year]
Federal Real Property ID	Federal real property ID, required to designate a facility as a federal property in Portfolio Manager.
Administrator	Designates this Portfolio Manager account as administrator over other customer accounts.
Shared By	Designates the original Portfolio Manager account who has shared this facility data.
PM Last Modified Date	Last date of Portfolio Manager data entry.
Eligibility for ENERGY STAR	Indicator signifying whether or not a facility is eligible for the ENERGY STAR Label.
ENERGY STAR Application Status	Status of Statement of Energy Performance (SEP) and ENERGY STAR application. Application has not yet been started No SEP has been generated SEP has been generated SEP Expired Application Submitted to EPA Pending EPA receipt Pending EPA decision Application on hold Application Approved Application expired
Space Use Alerts	Portfolio Manager alerting that space types within the same facility are incompatible.
Year(s) Labeled	The year or years in which the facility was ENERGY STAR Labeled.
Approval Date – Last ENERGY STAR	The period ending date associated with last (i.e. most recent) ENERGY STAR Label received.
Baseline Rating	A facility's baseline estimated energy use rating, as calculated by Portfolio Manager.
Target Rating	ENERGY STAR target rating selected by Portfolio Manager user.
Building Profile Status	The status of the building profile submission process for Portfolio Manager. Draft

Received
Under Review
On Hold
Reviewed and Approved
Reviewed and Not Approved

Federal Sustainability Checklist Completion Percentage

Percentage of the Federal High Performance Sustainability Checklist that has been completed for federal building in Portfolio Manager.

Notes

Facility level details about the building in Portfolio Manager.

Service and Product Provider

The ABS Service and Product Provider associated with this Portfolio Manager Facility.

Measures

EER Submitted by

Name of the person who submitted the Energy Efficiency Report (EER).

EER Submission Company

Name of company who submitted the Energy Efficiency Report (EER).

EER Submission E-Mail

E-mail associate with who submitted the Energy Efficiency Report (EER).

EER Submission Date

Date the Energy Efficiency Report (EER) was submitted. [Date]

Simple Building Audit Exemptions

If the building is a Simple Building as defined by New York City local Law 87 and has met six or more of the seven items. (Allow multi-select)

Individual heating controls
Common area and exterior lighting
Low flow faucets and shower heads
Pipe insulation
Domestic hot water
Washing machines
Cool roof

LEED Certification Audit Exemption

**True if building has met all three of the following requirements, false otherwise:
--Building has received certification under the Leadership in Energy and Environment Design (LEED) 2009 rating system within two years prior to filing this Energy Efficiency Report (EER);
AND
--Building has earned the LEED point for Existing Building Commissioning investigation and analysis; AND
--Building has earned the LEED point for Existing Commissioning implementation.**

Audit Date

Date Report was conducted or generated.

Auditor Name

Name of auditor responsible for execution of Energy Efficiency Measure.

Auditor Qualification

Qualification of auditor responsible for execution of Energy Efficiency Measure.

PE
CEM
BPI-BA
RESNET-Home Partner
RA
Other

Unknown

Auditor Qualification Number	Certificate number, license number, etc., of Auditor Qualification.
Auditor Qualification State	If Auditor Qualification 1 is state-issued, the state the qualification is from.
Auditor Team Member with Certification	Name of auditor team member with certification specified in "Audit Team Member Certification Type".
Audit Team Member Certification Type	Type of certification held by the team member specified in "Audit Team Member with Certification". NYSERDA FlexTech Certified Energy Manager (CEM) Certified Energy Auditor (CEA) High-Performance Building Design Professional (HPBD) Multifamily Building Analyst (MFBA) Other Unknown
Auditor Company	Company or organization the auditor represents.
Auditor Company Address	Address of auditor.
Auditor Company Phone Number	Phone number of auditor.
Auditor E-Mail Address	E-mail of auditor.
Name of Audit Certification Holder	Name of designated audit certification holder.
Central Plant Included in Audit	True if there is a central plant and it is included in this audit, false otherwise.
Retro-commissioning Date	Date retro-commissioning was conducted.
Implementer Name	Name of implementer responsible for execution of Energy Efficiency Measure.
Implementer Qualification	Qualification of implementer responsible for execution of Energy Efficiency Measure. PE CEM BPI-BA RESNET-Home Partner RA Refrigerating System Operating Engineer High Pressure Boiler Operating Engineer Other Unknown

Implementer Qualification Number	Certificate number, license number, etc., of Implementer Qualification.
Implementer Qualification State	If Implementer Qualification 1 is state-issued, the state the qualification is from.
Implementer Team Member with Certification	Name of the implementing team member with certification specified in "Implementer Team Member Certification Type".
Implementer Team Member Certification Type	Type of certification held by team member specified in "Implementer Team Member with Certification". Certified Commissioning Pro (CMP) Certified Building Commissioning Pro (CBCP) Existing Building Commissioning Pro (EBCP) Commissioning Process Management Pro (CPMP) Accredited Commissioning Process Authority Pro (ACPAP) Other Unknown
Implementer Company	Company or organization the implementer represents.
Implementer Company Address	Address of implementer.
Implementer Company Phone Number	Phone number of implementer.
Name of Retro-commissioning Certification Holder	Name of designated retro-commissioning certification holder.
Audit ID	ID code for this Audit.
Measure ID	ID code for this Measure.
Notes	Additional relevant information regarding the measure.

Energy Use + Metrics

Identifier	Name or identifier of the Energy Use e.g. fuel type or meter number.
Energy Use Metric Type	Type of calculated energy use metric. Portfolio Manager Energy Performance Rating Whole Building Energy Use Intensity (Source) Whole Building Energy Use Intensity (Source, Weather Normalized) Whole Building Energy Use Intensity (Site) Green House Gas Emissions (CO2e) Baseline Data Center Source PUE Baseline PUE-PDU Input Baseline PUE-UPS Output Baseline Site IT Equipment Input Energy (kWh)

Baseline Site PDU Input Energy (kWh)
 Baseline Site PDU Output Energy (kWh)
 Baseline Site UPS Output Energy (kWh)
 Baseline Source IT Energy (kBtu)
 Current Data Center Source PUE
 Current PUE-PDU Input
 Current PUE-UPS Output
 Current Site IT Equipment Input Energy (kWh)
 Current Site PDU Input Energy (kWh)
 Current Site PDU Output Energy (kWh)
 Current Site UPS Output Energy (kWh)
 Current Source IT Energy (kBtu)
 National Average PUE
 Baseline Direct GHG Emissions (MtCO2e)
 Baseline Indirect GHG Emissions (MtCO2e)
 Baseline Total GHG Emissions (MtCO2e)
 Change from Baseline: GHG Emissions (MtCO2e)
 Current Direct GHG Emissions (MtCO2e)
 Current Indirect GHG Emissions (MtCO2e)
 Current Total GHG Emissions (MtCO2e)
 Baseline Energy Period Ending Date
 Current Energy Period Ending Date
 Baseline Water Period Ending Date
 Current Water Period Ending Date
 Baseline Total On-Site Renewable Electric Use (kWh)
 Current Total On-Site Renewable Electric Use (kWh)
 Percent of Electricity from On-Site Renewable (%)
 Total Avoided GHG Emissions from Green Power (MtCO2e)
 Total Green Power Purchased (MWh)
 Total Renewable Energy Sold to Grid (kWh)
 Total Revenue From Energy Sold to the Grid (USD \$)
 Baseline Site Energy Intensity (kBtu/sq.ft)
 Baseline Total Site Energy Use (kBtu)
 Current Total Site Energy Use (kBtu)
 National Median Site EUI (kBtu/sq.ft)
 Target Site Energy Intensity (kBtu/sq.ft)
 Weather Normalized Site EUI (kBtu/sq.ft)
 % Difference from National Median Site Energy per Square Foot (%)
 Baseline Site Electric Use (kWh)
 Baseline Site Natural Gas Use (therms)
 % Difference from National Median Source Energy per Square Foot (%)
 Baseline Source Energy Intensity (kBtu/sq.ft)
 Baseline Weather Normalized Source Energy Intensity (kBtu/sq.ft)
 National Median Source EUI (kBtu/sq.ft)
 Baseline Total Source Energy Use (kBtu)
 Current Total Source Energy Use (kBtu)
 Data Center- IT Energy Configuration
 Data Center- PDU Input Energy (kWh)
 Data Center- UPS Output Energy (kWh)
 Data Center - UPS Capacity (kW)

Water Use Metric Type Type of annual water use metric.

Indoor Water Cost (US \$)
 Indoor Water Use (kGal)
 Indoor Water Use Intensity (Gal/sq.ft.)
 Other Water Cost (US \$)
 Other Water Use (kGal)
 Outdoor Water Cost (US \$)
 Outdoor Water Use (kGal)
 Total Indoor and Outdoor Water Cost (US \$)
 Total Indoor and Outdoor Water Use (kGal)
 Wastewater/Sewer Cost (US \$)

Wastewater/Sewer Use (kGal)

Utility Name of utility company billing this Energy Use.

Power Plant Portfolio Manager field.

Energy Use Alerts Portfolio Manger generated alerts relating to energy use.

Water Use Alerts All alerts for this facility that are related to water use.