



Data Collection Tip Sheet

General Characteristics



Floors above grade: You can enter 0.5 for floors that are partly above grade.

<u>Square Footage of Conditioned Area</u>: Estimated the conditioned (i.e., climate controlled/have heating and cooling) by either multiplying the square footage of each unit type by the number of units of that type OR Subtracting the square footage of *un*conditioned areas from the building's total square footage

<u>Average Ceiling Height</u>: Ceiling height can be measured with a measuring tape. If different floors have different ceiling heights, use an average. Typical ceiling height is 8 to 12 feet.

Benchmarking



For tips on benchmarking, see the document "Determining the Best Approach for Entering Utility Data."

Envelope



<u>Wall Type</u>: Here a few methods to determine your exterior wall type:

- Visually inspect an unfinished part of your building where the exterior wall type is exposed and where the wall does not have sheetrock or another type of wall finish.
- Use a stud finder to determine whether or not the exterior walls contain studs. If a stud is located, the walls are probably hollow as solid walls do not have studs.
- Remove the wall plates of electrical outlets or other types of access panels that are located on exterior walls. You can sometimes see the wall construction type when those covers are removed.

<u>Window Type</u>: The "flame trick" can identify whether a window is single or double paned. Hold the flame from a candle, match, or lighter near the glass. If the window reflects two flames, it's double-paned. If you see just one flame, it's single-paned. For additional information on window types, see http://energy.gov/energysaver/articles/window-types.

Heating & Cooling



<u>System Capacity</u>: The system capacity of heating and cooling systems can be entered in terms of Btu/h, kBtu/h, or tons. The capacity of your system can be found in a system manual or by inspecting the nameplate on the unit itself. Many outdoor units for heat pumps and air conditioners have a nameplate on the exterior of the unit with a model number that indicates the system capacity in tons, for example:

- "12" or "12000" model number = 1 ton system
- "18" or "18000" model number = 1.5 ton system
- "24" or "24000" model number = 2 ton system
- "30" or "30000" model number = 2.5 ton system
- "36" or "36000" model number = 3 ton system

How to enter heating and cooling systems vary depending on whether you use the EZ Path or the Advanced Path. For more information, see the document "EZ Retrofit HVAC Options."

Domestic Hot Water

<u>System Type</u>: Systems are 'Direct' when the heat source and the storage tank are combined in one integrated unit. If water is heated in one unit and stored in a separate tank, the system is 'Indirect'.

Clothes Washers



If you lease laundry equipment and prefer not to assess upgrade options, you may skip this section. If so, be sure to use the average consumption numbers provided on the Energy and Water Data Confirmation screen



Kitchen Appliances



<u>Refrigerator</u>: EZ Retrofit has a present number of refrigerator types. The options in the dropdown menu are listed in the table on the left. To select the right option, you need to know:

- Is the refrigerator auto-defrost or manual/partial auto-defrost?
- Does the refrigerator have through-the-door ice?
- Where is the freezer mounted?

The graphic below shows options for where the freezer is mounted.

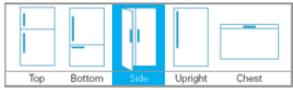


Photo courtesy of http://www.energystar.gov/index.cfm?fuseaction=refrig.calculator&

Manual/partial auto-defrost refrigerator with or
without freezer

Auto-defrost refrigerator with or without topmounted freezer

Side-by-side without through-the-door ice

Side-by-side with through-the-door ice

Bottom-mounted freezer without through- the-door ice

Bottom-mounted freezer with through-the-door ice
Other

\$

Lighting

Since there are typically many lighting systems, it is usually easier to enter lighting data in the Advanced Path.

<u>Ballast Type</u>: Here are a few options to help you determine whether a ballast is magnetic, energy efficient magnetic (EEMag), or electronic:

- Check the ballast label
- Perform an internet search on the ballast number.
- Use your <u>cell phone</u> to take a picture of the bulb and check whether the bulb appears to have bands across the tube (magnetic) or appears uniformly illuminated (electronic).
- If you are unable to determine the ballast type, select electronic.



Magnetic Ballast



Electronic Ballast

Duct Sealing

<u>Conditioned area served by the duct system</u>: For central systems, this is the entire conditioned space. For individual systems, this is the portion of the building's conditioned square footage that is served by the duct system being entered.

"Mastic" is a high-grade construction adhesive commonly used to seal ducts in buildings.

Water Fixtures

Age	Average Flow Rate		
	Bathroom Faucet	Kitchen Faucet	Showerhead
After 2006	2.2	2.2	2.5
1996 – 2005	2.2	2.2	2.5
1986 – 1995	3	3	4
Before 1985	3	3	4

To find a fixture's flow rate, first look for a label on the fixture. Alternatively, use the fixture's approximate age and the chart to the right to make an estimate.

Select Faucet/Public Restroom only for common area restrooms accessible to all tenants.

Water Conservation



To find the gallons per flush rating of a toilet, first look for a label behind the back of the toilet seat or inside the toilet tank. Alternatively, use the toilet's approximate age and the chart to the right to make an estimate.

Toilet Age	Standard GPF (Gallons per Flush)
After 2006	1.6
1996 - 2005	1.6
1986 - 1995	3.5
1977 - 1985	3.5
Before 1977	5