U.S. Department of Energy Commercial Building Energy Asset Score

Quick Start Guide

To create a Commercial Building Energy Asset Score (Asset Score) for your building you need to complete the following six (6) steps using the Commercial Building Energy Asset Scoring Tool (Asset Scoring Tool). Although you are not required to carry out these steps in a specific order, the following sequence will most likely save you time.

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Input Basic Building Information

- Click the New Building button + to begin.
- Enter building name, location, gross floor area, and year of construction.
- Click the Create Building button to continue.

2.

Identify Building Use Type(s)

- Select all applicable use types.
- Choose from a variety of options including office, retail, multi-family, education, and library, among many others.

3.

Create an Inventory of Your Building's Features

• Enter information regarding the building's assembly components (roofs, skylights, windows, walls, floors) and its major energy systems (lighting, HVAC, hot water systems). The Data Collection Form can assist you in gathering your building information.

4.

Create 3-D Block(s) of Your Building

• Create "blocks" to construct a 3-D image that approximates the building's geometry, configuration, and orientation. You can find more information below on how to build blocks.

5.

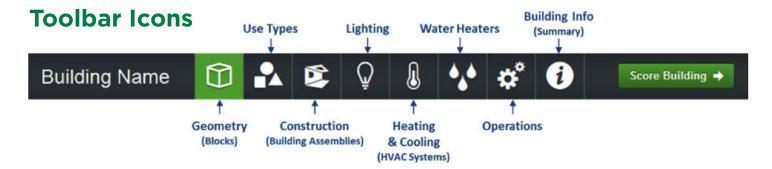
Apply Use Types and Features to Your Building Block(s)

- The Asset Scoring Tool will automatically apply information you entered in Steps 2 and 3 to your building blocks.
- To ensure that each building block is correctly characterized, use the top toolbar (see "Toolbar Icons" on the next page) to review how each building feature is linked to each building block. Move across the toolbar at the top and review each icon one at a time. You can then see how a particular feature (e.g. use type, lighting, heating, etc.) is applied to each of your individual building blocks. This tends to be simpler than trying to fully review one building block and then moving onto the next.
- If you find that a use type or building feature is incorrectly linked to a building block, simply delete the incorrect information from that building block. Then, drag and drop any missing information to the building block from the relevant section of the toolbar.
- A <u>M</u> symbol on the toolbar indicates that a particular section is either missing required information or has a problem with data already entered.

Score your Building and Review your Commercial Building Energy <u>Asset Score</u> <u>Report</u>

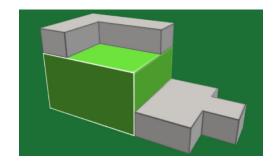
6.

- Click the 10 icon on the toolbar to do a final review of all building data prior to scoring your building. Go back and make changes to your inputs if needed.
- Select Score Building to submit your building. You will receive an email notice when an Asset Score Report for your building is available for review and download.



How to Build Blocks

The Asset Scoring Tool is designed to model simple buildings as well as more complex ones that are made up of sections with distinctly different physical configurations or energy features. In order to score your building, you'll need to use building "blocks" to create a graphical representation of your building's footprint and shape. You can provide dimensions to alter the shape of each block as needed. You can also move the blocks around to best approximate the configuration and orientation of your building.



Most buildings can be modeled as only one block, but you should create additional blocks if any of the following situations apply:

- a. The building has sections with different numbers of floors (e.g., one portion of the building is 3 stories and another portion is 10 stories).
- b. The building is served by different HVAC systems (e.g., one portion of the building uses a local chiller and another portion uses packaged DX units).
- c. The building has multiple use types selected (e.g., multifamily building with retail on first floor).
- d. The building footprint cannot be simplified by the basic footprint shapes provided in the Asset Scoring Tool.
- e. The building has sections with different operating schedules (e.g., one portion of the building is occupied 24-hours, while another portion is used only 8 hours per day).

Helpful Hints:

- Look for the icon on every data entry screen to learn more about what's being asked in each section of the Asset Scoring Tool.
- Additions, deletions, and changes can be made to all blocks and building components at any point in the process.
- Required fields in each of the data entry screens are indicated with a red star (*). If a non-required field is left blank, the Asset Scoring Tool will infer a value based on system type, building vintage, and location where possible.
- To more accurately characterize your building, you can provide data for any of the non-required data fields available in the Asset Scoring Tool. If you go beyond the minimum data requirements needed for the simple score, you will receive an advanced score, regardless of how many additional data fields you fill in. When defining your building's lighting, you can

- either choose to count and provide the number of fixtures OR state what percent of the block is served by that particular type of fixture. The Asset Scoring Tool will apply standard assumptions regarding lighting density and usage patterns.
- Buildings frequently have multiple fixture types. If you
 choose to provide the percent of the block served by
 each fixture type, these percentages are not expected
 to total 100% since multiple types of fixtures may serve
 the same area of a building.
- Entering operational information is optional since
 the Asset Scoring Tool applies standard operational
 assumptions depending on the building's use type.
 If you provide information on your building's actual
 operations, the Asset Scoring Tool will take these into
 account when developing recommendations for energy
 efficiency upgrades; however, this will not affect your
 building's current score.