

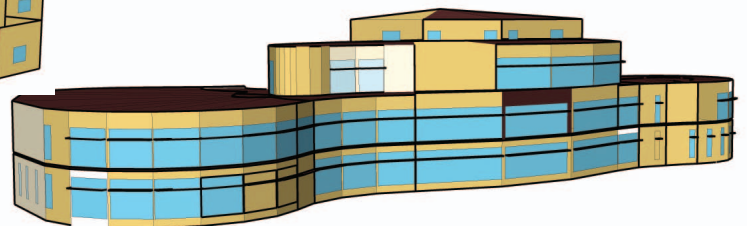
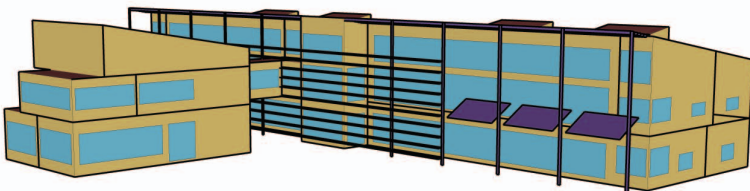
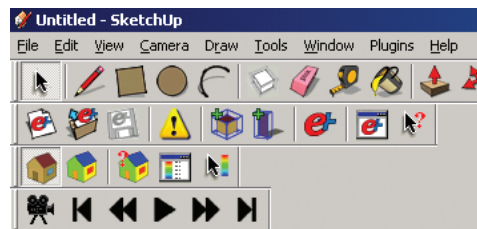
# OpenStudio

## A Building Energy Simulation Plugin for Google SketchUp

OpenStudio™ is a free plugin for the Google SketchUp 3D drawing program. OpenStudio makes it easy to create and edit the building geometry in EnergyPlus input files or launch EnergyPlus simulations and view the results in SketchUp.

### About OpenStudio

OpenStudio is a geometry editor for EnergyPlus, the whole-building energy simulation program sponsored by the U.S. Department of Energy (DOE). OpenStudio adds EnergyPlus functionality to the Google SketchUp 3D environment, allowing users to create building geometry from scratch, open and edit existing EnergyPlus input files, or run EnergyPlus and view the results without leaving SketchUp. OpenStudio is not a full-featured interface for EnergyPlus, so it requires some expertise using EnergyPlus to develop a complete building model.



### Download and Install OpenStudio

OpenStudio is compatible with both the Free and the Pro versions of Google SketchUp 6 and 7, but not with version 5. For full access to all of the plugin functionality of OpenStudio, EnergyPlus must already be installed. EnergyPlus is available for free download from DOE at [www.energyplus.gov/cfm/reg\\_form.cfm](http://www.energyplus.gov/cfm/reg_form.cfm).

The download process requires users to register with a valid email address for receipt of an installer password. Once **EnergyPlus** is installed, users can then download and install OpenStudio from [www.energyplus.gov/openstudio.cfm](http://www.energyplus.gov/openstudio.cfm).

### Getting Started

**OpenStudio** includes help documentation accessible through the menu item **OpenStudio**. The User Guide describes all of the plugin commands and explains how to get Google SketchUp and **OpenStudio** to work together. **OpenStudio** also comes with example input files for **EnergyPlus** that can be opened in SketchUp using the menu item **OpenStudio**. The example files are an effective way to become familiar with **OpenStudio** and **EnergyPlus**.

While **OpenStudio** makes it easier to work with **EnergyPlus**, a solid proficiency using **EnergyPlus** at the text level is highly recommended for performing successful and accurate simulations. **EnergyPlus** also includes documentation and example files, including a “Getting Started” document. A variety of other resources for getting user support are also available. For more details, visit [www.energyplus.gov/support.cfm](http://www.energyplus.gov/support.cfm).

