

Mid-South Engineering Company

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Google Sketch Up: Digital Rendering

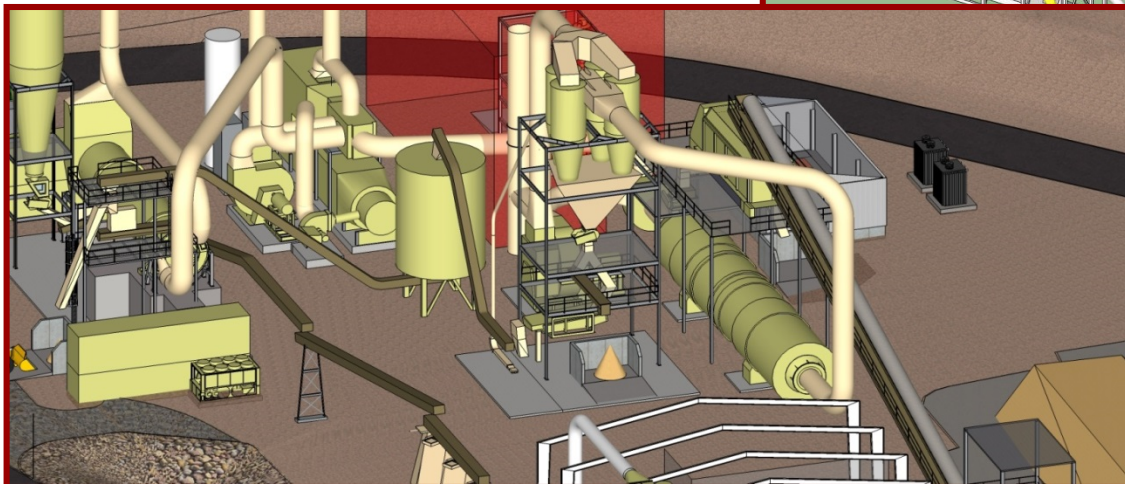
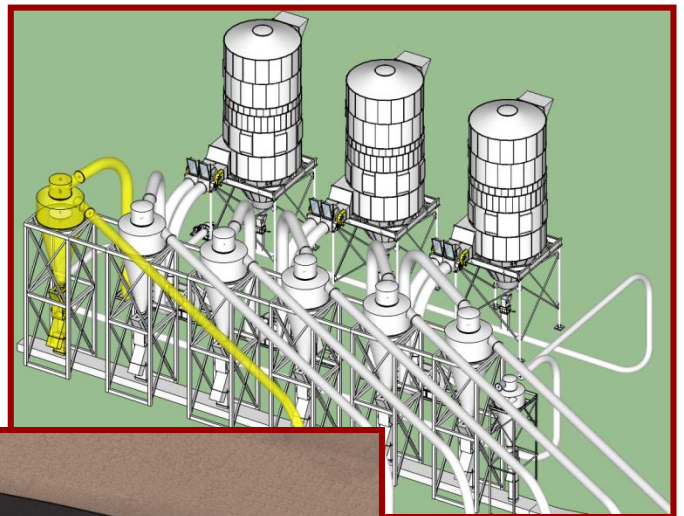
By: Jeanette Egan, LEED A.P.

Google Sketch Up is a 3D modeling program that can be beneficial to anyone that works within a Design Discipline. The program enables the user to create digital renderings, to scale, and can be further customized by incorporating AutoCAD drawings or sites retrieved from Google Earth. The program lends itself to feasibility studies in regards to space planning, project planning and "solar" orientation.

The ability to use this software in this capacity is why design disciplines such as Architects, Civil Engineers, Mechanical Engineers and Structural Engineers utilize it. The software is instinctive, easy to learn, and has found a following by everyday artisans, efficient lay people and training programs are being implemented around the country.

The primary reason this program has become so popular is the fact that there is a free version of the software available online. There is also a Professional version that includes a Layout program that allows Designers to create a version of construction documents with title block, annotation and dimensions. They can use different views and create sections from their Sketch Up Renderings. The online collaboration from BIM and 3D Warehouse allows users to pull from digital libraries any combination of components from landscaping materials to complex mechanical pumps and assemblies.

The ability to render a project that combines all disciplines, allowing planners to check for interferences, conflicts and feasibility, is worth the investment when we consider the amount spent on change orders and re-design fees. Not only is Sketch Up a good design tool, it is an effective marketing tool as well. The ability to create a visual representation of a project provides peace of mind to both designer and client; and provides the client with a very good representation of their ideas to future investors. Although we cannot eliminate contingencies with 3D modeling, we can minimize construction delays and provide customers the most comprehensive visualization of their project without ever moving one shovel full of dirt.



Log Storage & Fire Code Impacts

By: Zane Weaver, P.E.

The International Fire Code is in use or has been adopted in 43 states, and Section 1906 is dedicated to Log Storage Areas. Log decks (runs) (referred to as “cold decks”) are limited to 500 feet in length, 300 feet in width, 20 feet in height, and are required to be separated from adjacent “cold decks” or other exposures by a minimum of 100 feet. There is an Exception that allows the fire code official to determine the size of cold decks where they are protected by special fire protection including, but not limited to, additional fire flow, portable turrets and deluge sets, and hydrant hose houses equipped with approved fire-fighting equipment capable of reaching the entire storage area.



There is no exception for the 100 feet separation requirement so plan to comply on new plant layouts and reconfigurations of existing log yards. Storing logs higher than 20 feet is common but not code compliant without the fire code official's approval. Do not approach the fire code official asking him to determine the size of your “cold decks”. Size your “cold decks” as required to meet your operational needs, address the stipulations associated with the Exception, and then present your protection measures and log storage configuration to the fire code official for approval. Failure to obtain this approval could result in your insurer refusing to cover losses associated with a log yard fire. For more stringent and prescriptive protection standards refer to FM Global Property Loss Prevention Data Sheet 8-28 – Pulpwood and Outdoor Log Storage.



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