

outliner and components



SKETCHUP-UR-SPACE



<u>List of Contents</u>

- 1. A letter to the desk of editor
 - ♣ A letter direct from the editor desk highlighting on January edition
- 2. Interview
 - Interview with Rachmat Nurhadi
- 3. Cover Story
 - SketchUp for Game Design
- 4. Article
 - ♣ The creation of an Innovative Didactic resource with SketchUp
 - My story with SketchUp
 - How to hide and unhide the right way using outliner and components
- 5. Blog
 - CISCO TX9000 Telepresence and 3D Augmented Reality
- 6. Tutorial
 - SketchUp Tutorial A Case Study with SketchUp Pro
 - SketchUp Tutorial 3D Cutlists for Woodworking Projects
- 8. News Room
- 9. Magazine Details The Creative team of SketchUp ur Space



A letter to the Desk of Editor

Hello friends!

The SketchUp ur space is becoming popular all corner of the world and getting warm applauses from SketchUp users. Presently we have incredible numbers of readers and we are getting huge requests from newbie designers and modelers to showcase their work.

Keeping this in mind we are trying to make our magazine more informative by providing lots of articles and tutorials as well as video tutorials.

We are going to publish the next issue (i.e. January 2013) of the magazine. The present theme of the magazine is "SketchUp For Game Design". SketchUp is a very promising tool for modeling, modding, rendering and visualization of game environment. The game developers can produce magically immersive worlds which provide pragmatic backdrops to enlighten their stories. The SketchUp ur space team has presented an interesting cover story focusing various aspects of SketchUp for game developer. In interview section there will be a spectacular interview with Rachmat Nurhadi, the most promising landscape architect and 3D visualizer from Indonesia. In this interview the readers will come to know about how SketchUp can be applied for landscape designing.

In article section there will be some impressive articles presented by some renowned architect and writers. Paul Stefanik, the well-known author & principle of Design Intent Studio LLC has presented an article about how to hide and unhide the right way applying outliner and components of SketchUp.

Belen Fernandez, the renowned technical architect from Spain has provided a case study about an educational project conducted primarily with SketchUp.

Suttipong Robkham, a budding designer and president of PLAN NEXT STEP INTERNATIONAL Co Ltd, has presented his personal experience working with SketchUp.

In tutorial section there will be a case study with SketchUp pro and how SketchUp facilitates wood workers presented by Robert W Lang.

In news section the readers will get some latest happening with SketchUp in 3D world.

Hope our readers will like this month's issue and provide their cordial support for the successful publication of the magazine in near future.

"To be yourself in a world that is constantly trying to make you something else is the greatest accomplishment."

Hope our readers will like this publication of SketchUp ur Space. We will welcome some helpful feedback from our readers. Please send me your suggestions at raijb@SketchUp-ur-space.com.



Best Wishes Rajib Dey Editor

Happy Reading!



Interview with Rachmat Nurhadi - Owner of ardisia design landscape and 3D visual and renowned landscape architect

Hello Rachmat! Welcome to the SketchUp community. Please make your introduction to our readers.

Hello, my name is Rachmat Nurhadi, I am under graduate majoring landscape architecture of Bogor Agricultural Institute, Indonesia, in 2004. I am 32 years old, and work as a landscape architect and 3D visualizer.

When do you first discover SketchUp in your professional career?

Around 2005, while working in landscape consultant. I used SketchUp4 and SketchUp5 as my first experience.

You have lots of experience working as a landscape architect. How do you utilize SketchUp in your profession?

SketchUp is very helpful in my work as a landscape architect; it makes me easy in making landscape design visualization for my clients. It is very useful with simple tools and supported with adequate library especially plants. I use SketchUp for landscape design concepts presentation to the client, with non rendering visualization, very easy to give an explanation of the concept of landscape that we propose. In addition with very good rendering results it is very helpful in making 3D for marketing/brochure, with results that are not necessarily inferior to other 3D software.

You are the owner of Ardisia design landscape & 3D visual. Tell us something about your organization.

Ardisiadesign landscape design & 3D visual is my personal studio working in the field of landscape design services as well as 3D visual modeling for presentations and marketing purposes. It is established in mid 2012, originally named studiodesainku landscape since 2007, we have done several small to large scale projects such as restaurants, cafes, water park, city parks, housing cluster, etc., our clients are from public and private.

The SketchUp contains various version and out of them which can be considered most useful for landscape designing?

When I first knew about SketchUp, I used SketchUp5 and it was quite helpful, although at the time there were not many plugins that I knew of. But now with the existing SketchUp software development, I use SketchUp8 with some additional plugins which are very helpful in making the picture, both in terms of time efficiency and the ability to create complex 3D objects.

How SketchUp can be applied for site designing?

SketchUp has the ability to make good land contours, it is very helpful in my profession which has a lot to do with the contours of the land/site. Besides SketchUp also connected with Google earth so it's very helpful also in providing an analysis overview of site/land we will work on.

What rendering software do you want to recommend for landscape visualization?

I am currently using 3 rendering software, I initially used Podium, then I learned vray and now there is a very good software namely lumion, each has its own strengths and weaknesses. The best from Podium is the speed and settings. I use vray because it has a complete material setting. Whereas Lumion gives the best results, and fast, as well as the ability of the library in lumion especially plants is very helpful to provide landscape design visualization to clients. I recommend these 3 software as I said earlier they have the different strengths and weaknesses.



You have completed several landscape architectural projects with SketchUp and among them which was the most complicated project to finish. How did you apply SketchUp in that project?

So far projects which have the most difficult challenges are projects that have a large area, and also the high level of complexity, such as a city forest or territory scale, due to the size of land and also the level of complexity of the landscape design would require patience and thoroughness in creating it. I use SU to visualize concepts and landscape design results to clients.

What obstacles do you generally face while utilizing SketchUp for landscape designing?

Obstacles in using SketchUp is when the file is very large and complex sometimes it will be very difficult for SketchUp file to be driven in a computer, and sometimes cannot be rendered, I myself do not understand but based on experience, maybe SketchUp does have the shortcoming in handling a lot of polygon so that when the file is complex it will be very heavy to edit.

You had received so many prizes in your professional life like 1st Prize winner at House Garden Design Contest held by PT. Urbanindo Modul Utama and 1st Prize winner team in Cimahi Landscape Planning Competition, held by Pemkab Cimahi. Please tell something about those achievements.

The first is a home garden design competition held when I was a student, when SketchUp hasn't existed yet back then, and I was still using freehand drawings to complete the design with my teammates. While the second is a contest being held when I was joined oemardizain landscape consultant, My team and I in followed the contest. We used SketchUp to create 3D presentations even without rendering software. And at that time we managed to beat other teams from various professions such as architects, urban designers, and other landscape architects.

Who are your biggest inspirations for landscape architecture designing?

In landscapes world I am inspired by Bill Bensley, an American landscape architect, who has a lot of experience in tropical landscape. Also in Indonesia I was inspired by Mr. Zain Rahman, which we call the Father of Indonesian Landscape Architecture.



The SketchUp has been acquired by Trimble. What upgradation should be included in SketchUp for landscape designing in near future? What are your suggestions for budding landscape architects?

So far SketchUp has really been helpful because of the ease in making a 3D object. But there are drawbacks that may still need to be increased as the heavy files when handling objects with many polygons. It would be very easy for us as users of SketchUp in completing the work. Additionally



plugins which is still not integrated directly in the SketchUp may later be integrated directly in the SketchUp so it will be easier for us to use it.

What are your suggestions for budding landscape architects?

Keep learning and practice, both in terms of the use of software and the more important is how to make a good landscape design and in accordance with the character of the user, this would require knowledge and also exercise a lot. Because good design comes from a good concept, and can be applied at the land/site.

What suggestions do you want to provide to the team of SketchUp-ur-space team for improving the quality of the magazine?

So far it's been very nice, and keep up the good work and also expand education as well as tips and tricks in using SketchUp.



SketchUp for Game Design

The SketchUp is a user-friendly entry level modeling program which can be utilized for prototype game design & modding.

With its 3D visualization and physics-based simulation tools SketchUp facilitates game designers and developers to generate a realistic, visually immersive game environment, levels, and props. A game designer can get the ability to make presentations and concepts rapidly, effortlessly and reasonably.

SketchUp consists of drawing layout functionality which is very useful for story boarding. With SketchUp the game developer can boost the game development procedure by inserting realistic details quickly. They can utilize 3D drawing to manage every shot competently.



SketchUp contains an edge regarding modeling and it promotes the application & progression of free and open source 3d models as well as game resources, high quality textures. All the 3D models created with SketchUp can be imported to third party game engines like Meshlab, GIMP and Unity 3D to transfer the models into usable 3D game assets for making games.

The game developers can snap digital photographs and utilize SketchUp to convert them into 3D objects for quick, fun, game formation. They will be able to create realistic 3D models like terrain, buildings, barrels, rusty fencing vehicles and low polygon 3D objects to transform the game alive.





SketchUp facilitates surface rendering in changeable styles, puts up third-party "plug-in" programs with photo pragmatic rendering and allows position of its models inside Google Earth.

The game developer can find models free from an online repository of pre-built objects known as 3D warehouse and download cars, ships, people, trees and anything else they like from there.

SketchUp comes up with various versions and among them SketchUp Pro is very useful for game developer. With SketchUp Pro, they will be capable of exporting the models to utilize in other software. SketchUp Pro can produce 3DS, OBJ, FBX and COLLADA (DAE) files, with others. The game designer can make their ideas with SketchUp quickly and transfer them into their preferred 3D program.





The game developer can create complete game Graphical User Interface (or GUI) with SketchUp and then export it to any third party programme like 3D Studio MAX for rendering and finalization to be programmed into the game in the end.

SketchUp provides the following wide array of benefits to the game designer/developer:-

- Make perfect designing for game level
- Generate superior quality textures for games
- Create dazzling graphics
- Obtain a 3D walk-through of all models
- Add materials and colors as well as texture, lighting, entities toward surfaces
- Create quick animation
- Model low-poly game assets to be sold in game asset stores
- Photo texture models for ultra pragmatism
- Form game ready" textures & models from photographs
- With in-built Sandbox tools sculpt irregular terrain
- Put in lighting and walk around in game visualization
- Make a physical 3D environment and objects with professional game art, levels and props
- Save pre-set views to demonstrate all through presentations
- Find instant aerial imagery and terrain for several location from Google Earth
- Set up your character controller
- Fencing areas of your creation

There are lots of resources through which a game developer/designer can enhance its design skills. Robin de Jongh released a book alias "SketchUp for Game Design". The book provides step-by-step tutorial and screen shots which may be very useful for newbie developer for developing 3D games. The game developers will come to know - How to make a complete game level with realistic 3d models, textures, levels and props.





The book is available from Packt Publishing or on Amazon (along with a version for Kindle).

Stefan Boeykens, the renowned architect-engineer and doctoral Researcher at KU Leuven had personally reviewed the book and provided his valuable opinions regarding the pros and cons of the book. Go through the following link to get the review.

Review: Google SketchUp for Game Design



The renowned art director and concept artist Robh Ruppel utilized SketchUp for designing award-winning video games known as <u>Uncharted 2: Among Thieves</u>. SketchUp was applied to visualize the



environment of the video games. It was the leading video game of 2009 and considered as the most critically acclaimed game of the year.

Coen Naninck also presented a brief case study on How SketchUp is utilized for game modding. Go through the following link to get the details. https://docs.google.com/document



Go through the following video to get the detailed process for creating the video game.

http://www.youtube.com/watch?feature=player_embedded&v=8mkPRmqUIFw

Robh Ruppel has also given an exclusive interview on how he utilize SketchUp in making decisions and designing shapes in this video game. The interview was published in SketchUp artist.

Robh Ruppel – Google SketchUp in Game Design



The creation of an Innovative Didactic resource with SketchUp

Hi, I am Belen Fernandez Franca from Barcelona Spain. I have studied here in my country Technical Architecture and followed that up with a masters degree in Pedagogical Training, I am Trimble SketchUp Authorized Trainer for Spain at the same time as I'm the Community Manager of SketchUp here in my home town of Barcelona. I have worked many years together with the Polytechnic University of Catalonia collaborating on things related to the world of the Education and Architecture. It is for this reason that I have decided to give a little insight into you one of my Pedagogical Projects that was made with SketchUp. This project was made in collaboration with Cristina Venturi and under the supervision of the Polytechnic University of Catalonia. Thank you very much to you both!

The project that is described within this article consists of the creation of an Innovative Didactic Resource for students of Professional Training and students of the first year of Higher Education of Construction and Civil Work. This didactic resource is principally targeted to generate a data base that includes technical information of particular constructive elements, as well as having an attractive and dynamic interface for the student.

This project was baptized with the name "Virtual Catalogue of Constructive Elements".

The idea of this project initially came about from my own personal and practical experience both as a student and as a building industry professional afterwards. Consensual manner with other students and professionals, we believe that you never really reach a solid 100% knowledge base until you start to work within the real world environment and labor market.

In my opinion Construction within Spain is taught in ways that are often impractical in the real world. It is loaded with great theoretical models students soon forget ... I think to achieve real Excellence in Education it should foster Significant Learning. For this reason, we think that it would be very useful for students newly arrived into the world of Construction, a visual catalogue easy to handle on the different architectural elements that can be found in further works.

What is intended with this material is that students set up a cognitive and structural relationship with what you learn in the future. This will create a general idea of the different items that will be studied later, based on Significant Learning experience.

The goals of the project was to improve performance and comprehension of students both in the classes and projects, to provide students with a general idea of the different building elements and construction processes of these items that will be studied further, making the resource as close to the real life promoting at the same time the use of Information and Communication Technologies (ICT).

To achieve these goals we thought that when creating a resource that promotes Significant Learning, we needed to combine traditional elements with new technologies to keep the resource interactive and easy to handle by users.

The result was the "Virtual Catalogue of Constructive Elements" which consists of a series of descriptive files of various building items adapted to new Technical Edification Code of Spain.

Here is an example from the catalogue.





The catalog is displayed in "PDF" format (for Acrobat Reader 8 or above). Each of the files from the catalog contains the following information.

• Technical descriptions of the item. This description contains tags linked to the Terminological Glossary related with the item.

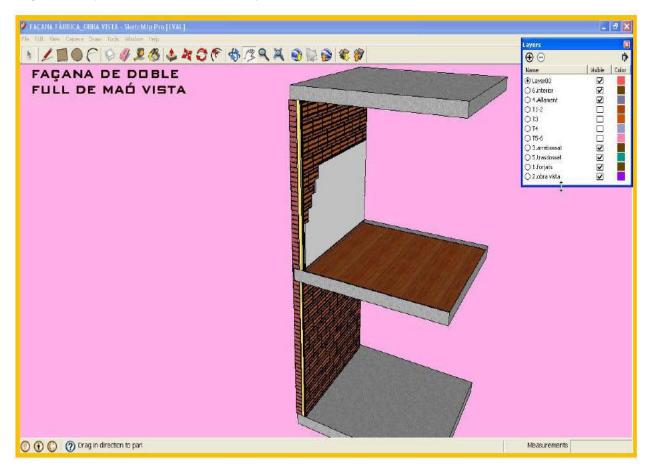


Façana de doble full de maó vista

(Clica aquí per a obtenir l'arxiu en format SketchUp)

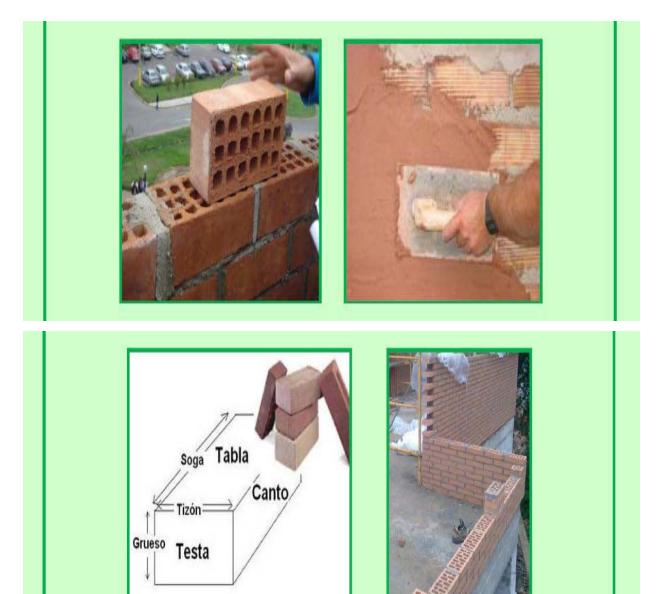
Es tracta d'un tancament exterior vertical format per un full exterior de fàbrica de maó d'obra vista i arrebossat per l'interior que garanteix la impermeabilitat del parament, per una cambra d'aire intermèdia amb aïllament tèrmic que proporciona protecció contra la temperatura, i per un full interior ceràmic (o de cartró guix) que serveix per a tancar la cambra d'aire i com a suport del revestiment interior de l'edifici (lliscat, referit o alicatat); tot recolzat en el forjat de cada planta de l'edifici. En aquest cas, l'espessor total del conjunt és de 28cm (15cm de maó massís arrebossat per l'interior + 6cm de cambra intermèdia + 7cm de maó de gran format lliscat).

• Links to the editable 3D model of the item in Trimble SketchUp. You can control the whole element via a software product that is free of charge. Every .skp model contains the different elements by layers in sequence to the construction process.



Real pictures of the item and its construction process.





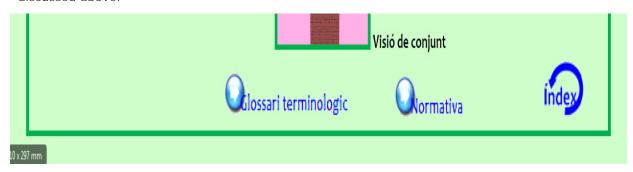
3D graphical item description of phases of execution manageable from the same PDF file. All these
screen views are made with SketchUp and are described both in a written and graphically manner.
If you click on a image you will be able to view the item in a 360° viewer without having to have
SketchUp installed.





The creation of an Innovative Didactic resource with SketchUp

 Link to Terminological Glossary related to the item. Every item contains a link to the different tags discussed above.



Linked to this page



Glossari terminològic de façanes

- Acabat exterior: (veure revestiment exterior)
- Accions: càrregues a les que està sotmesa una estructura.
- Aglomerant: material que serveix per a mantenir units en una massa compacta les partícules d'altres materials per mètodes físics (morter, etc.).
- Aillament tèrmic: capacitat de qualsevol material que actua como aillant del fred o la calor.
- Alicatatt revestiment discontinu interior a base de peces ceràmiques o rajoles (impermeables).
- Aplacat: revestiment discontinu exterior a base de pedres naturals, pedres artificials o peces ceràmiques (impermeables).
- Argila: sorra composta de silicats d'alumini hidratats, utilitzada per a fabricar teules i maons.
- Arrebossat (cast. enfoscado): revestiment continuo de 20 o 30 mm d'espessor executat amb morter de ciment o de ciment i cal (aglomerant) per a allisar la superfície, omplir buits o protegir, normalment com a base d'un altre tipus de revestiment o de pintures.
- Barrera impermeable (o sistema d'estanqueïtat):
 Sistema de protecció que impedeix el pas d'aigua en forma líquida o de vapor en una construcció.
- Cantell del forjat; gruix del forjat; sol ser d'uns gorm també es poden trobar d'altres dimensions.
- Cambra d'aire (o cambra intermèdia): espai deixat entre dos murs o vidres amb la finalitat de controlar la humitat i el soroll i/o d'allotjar materials que realitzin o reforcin aquesta funció.
- Cambra intermèdia: (veure cambra d'aire)
- Cambra intermèdia ventilada: serveix per a millorar les prestacions de la cambra d'aire convencional, tancar el pas d'aigua de l'exterior i evacuar la humitat gracies a la ventilació continuada.
- Conglomerant: material que pot unir els fragments d'una substancia i mitjançant transformacions físicquímiques de la massa, donar coherència i resistència al compost format (cal, ciment, guix, etc.).

- Element constructiu: part de l'edifici amb una funció independent (sols, murs, façanes, cobertes, etc.).
- Encalats (cast. encalados): revestiment continu executat amb morter de cal (aglomerant).
- Estanqueïtat: possibilitat de crear una superfície per on no accedeixi l'aigua a l'interior del material mitjançant un sistema d'estanqueïtat (o barrera impermeable). Es tracta d'una exigència a complir molt important quan es construeix un edifici.
- Estructura auxiliar en retícula: estructura portant formada per muntants (perfils verticals) i travessers (perfils horitzontals), fixada a l'estructura de l'edifici amb la finalitat de subjectar l'aplacat de la façana.
- Estructura de l'edifici: conjunt d'elements estructurals que, a demés de sostenir-se a si mateixos, constitueixen el suport de les accions que s'exerceixen sobre ell i les transmet al terreny on es fonamenta.
- Elements estructurals: és la part d'una estructura distingible físicament. Els elements estructurals bàsics que es troben en una construcció són les bigues, pilars, murs o parets de càrrega i fonamentacions.
- Estructura: és el conjunto d'elements connectats entre ells amb la finalitat de resistir les acciones previsibles i en proporcionar regides.
- Estuci revestiment continu de pasta composta de cal o guix (conglomerants) i pols de marbre, pastada amb aigua barrejada amb cola. S'utilitza com acabat de parets exteriors o interiors amb diferents tècniques, i es pot aplicar imitant el marbre.
- Evacuació d'aigües: canalització de les aigües cap a l'exterior amb la finalitat d'evitar problemes d'humitats.
- Fàbrica: conjunt de peces assentades amb morter.
- Fàbrica de maó: organització estable de maons travats per un procediment d'adició realitzat en forma manual amb una tècnica específica de lligam mitjançant morter. Normalment s'utilitzen maons

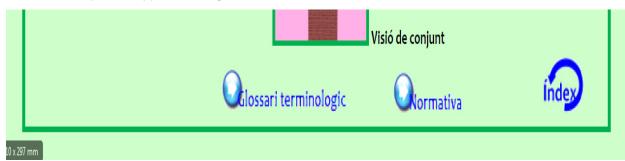








• Link to the Spanish Applicable Regulations related to the item.



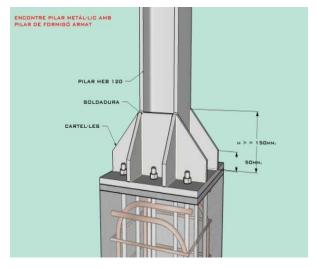
Linked to this page

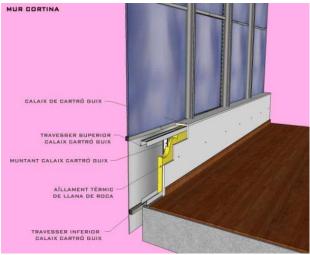
Marc normatiu de façanes Normativa d'obligat compliment: I. LOE - Ley de Ordenación de la Edificación II. CTE - Código Técnico de la Edificación http://www.codigotecnico.org/index.php?id=33 III. Norma de Construcción Sismorresistente: parte general y edificación (NCSR-02) http://www.boe.es/aeboe/consultas/bases_datos/doc.php?id=BOE-A-2002-19687 IV. Clasificación de los productos de construcción y de los elementos constructivos en función de sus propiedades de reacción y de resistencia frente al fuego (RD 312/2005, B.O.E.: 2 de abril de 2005). http://www.boe.es/aeboe/consultas/bases_datos/doc.php?id=BOE-A-2005-5271 V. Disposiciones para la libre circulación de productos de construcción, en aplicación de la Directiva 8g/106/CEE (RD 1630/1992, B.O.E.: 9 de febrero de 1993) http://www.boe.es/aeboe/consultas/bases_datos/doc.php?id=BOE-A-1993-3344 VI. Ampliación de los anexos I, II y III de la Orden de 29 de noviembre de 2001, por la que se publican las referencias a las normas UNE que son transposición de normas armonizadas, así como el período de coexistencia y la entrada en vigor del marcado CE relativo a varias familias de productos de construcción (Resolución de 13 de mayo de 2008,B.O.E.: 2 de junio de 2008) http://www.boe.es/boe/dias/2008/06/02/pdfs/A25457-25480.pdf VII. RL-88 (Pliego General de Condiciones para la Recepción de los Ladrillos Cerámicos en las Obras de Construcción, B.O.E. 3 agosto). http://www.boe.es/aeboe/consultas/bases_datos/doc.php?id=BOE.A. VIII. NBE FL-go Muros resistentes de fábrica de ladrillo (RD 1723/1990, de 20 de Diciembre). IX. NBE-CT-79. Condiciones térmicas en los edificios. (RD 2429/1979, de 6 de Julio). X. NBE-CA-81. Condiciones acústicas de los edificios y modificaciones posteriores. (RD 1909/1981, de 24 de Julio). XI. NBE-CPI-g6. Condiciones de protección contra incendios en los edificios. (RD 2177/1996, de 4 de Octubre). ataleg virtual Olossari terminologic



The catalogue is divided into seven chapters that are: Superficial Foundations, Deep Foundations, Vertical Structural Elements, Horizontal Structural Elements, Partitions, Frontages and Roofs.

The 50 construction details that make up this catalogue I made personally with Google SketchUp Pro 8. The following images is a small example of some of them.

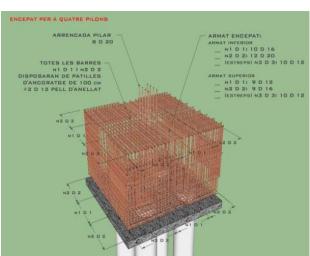




Encounter metal and concrete pillar

SABATA AÎLLADA ENTRE QUATRE BIGUES

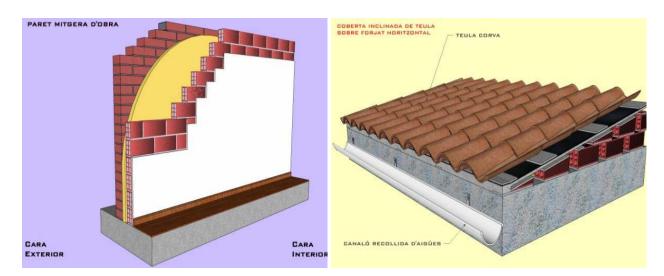
Glass frontagee



Isolated footings

Deep foundations





Partitioned brick wall

Concrete ceramic roof

The selection of this software has been been a key element to the success of this project. Planning was very limited due to a non-existent budget. Thanks to the close relationship SketchUp maintains with the Educational World, its partner in Spain "Iscar Software de Arquitectura S.L" provided me an educational license with which to develop my project.

Needless to say, that the power and speed that SketchUp drawing offers us is truly outstanding. Only using this software I created a database of about 50 items in record time, compatible with other media elements and with good graphic quality. From here I would like to take the opportunity to truly thank the SketchUp team, the Polytechnic University of Catalonia, to Íscar Software de Arquitectura S.L., and to SketchUp-ur-space with the trust they showed me and the support within the Education World.

This catalogue is intended to be a living element that should adapt to new technologies and laws that are will come about during the course of time. Unfortunately at the moment, it may not be possible due to the lack of financing that the crisis the country is suffering. I take this space to make a call to all people who may be interested in collaborating and get involved in this project.

Belén Fernandez Franca - Trimble SketchUp Authorized Trainer

Email - belenferfra@gmail.com

belenfernandezfranca.wordpress.com

www.tcadbcn.com



My story with SketchUp

"I first got hooked on SketchUp about four or five years ago and, once I realized how easy it was to quickly generate an exterior model and interior model, I've been using it for most of my custom design projects. It's common for us to work with customers remotely via email, and then it's great to be able to email them PDF's or JPG's of the preliminary floor plans and a copy of the SketchUp model for their review."

When I start a new project, I usually start with a drawing on paper. Then make a three-dimensional computer to present to the client. It will take a long time and it is very hard to make our customers can see all the. But for SketchUp is not. SketchUp can make model and solve a very simple form. And customers can see and understand the first ideas. After we work with customers. We can develop an initial draft with a plug-in on the SketchUp program and we use it made the final design form presents. Buildings under design conditions. Short period of time required to make an appointment to meet a client. Choose one of the designer's works to help save time and visualize the project is complete. The model with the sketch up to create a rough image. And see the project details in a story height space consumption, which in the current sketch up is a plug-in help in rendered has not lost 3d max ever when combined with technical, personal, and therefore is the way. Choose one of the presentations. Presentation as well and very fast. Savings also for those who want to save your budget, too.And delivered to customers to build.







Suttipong Robkham - c_scape49@hotmail.com



How to hide and unhide the right way using outliner and components

There is a right way and a wrong way to hide objects in your SketchUp. The more common way to hide objects is to select and right-click to hide them. Fig. 1 this way is problematic, because you must really know what you are doing, or at least remember what you were doing, to undo is not to unhide things that you have selected. This it is easy to forget what you have done. Fig. 2 to make the case even worse, how do you find the hidden objects in the scene? The easy answer is, if they are components and labeled, then you can always find them.

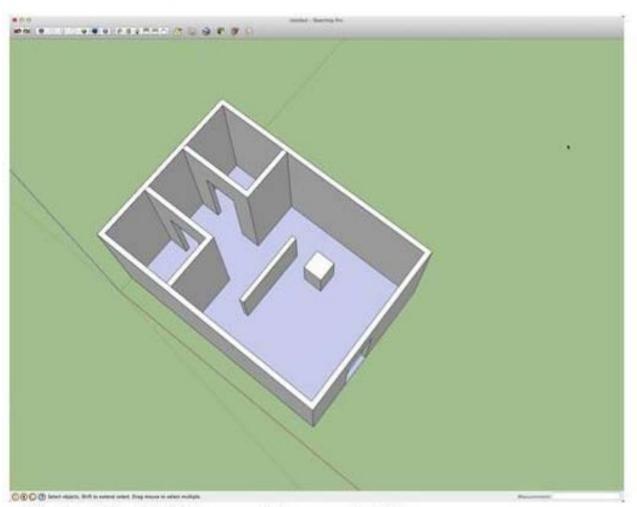


Fig. 1 nothing is hidden, we pick square to hide



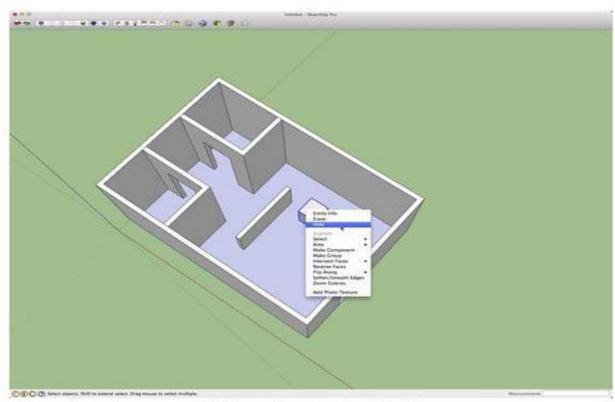


Fig. 2 Once the square is hidden, where can I unhide it?

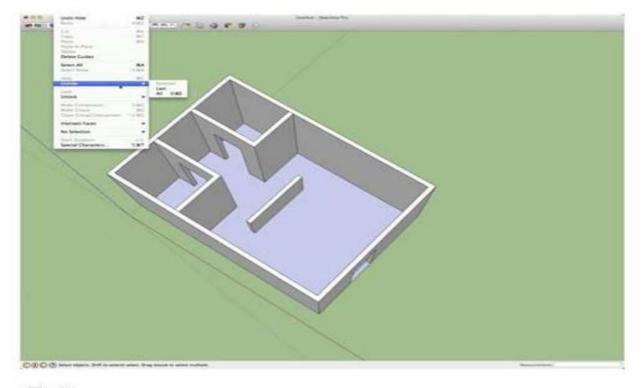


Fig. 3



You can unhide by menu all or last, by this may not be the best option. Let's say you need a few parts to be hidden at one time, because you working on a wall or something that you need work closely with. Fig 3 lets say you need room 2 and wall 2 hidden, cause you need add something to the space. After you are done adding the stuff you want, how do you toggle on just room1? As in Fig. 3. The answer is the outliner.

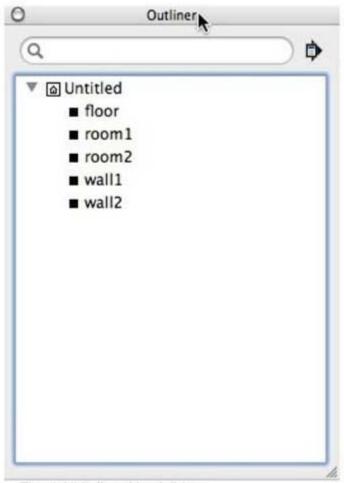


Fig. 4 All is listed is visible.





Fig. 5 What is greyed out is hidden.

The more pragmatic approach to hide and unhide is to use components with outliner. By making everything in your scene a component, you can control what is visible by a click of the mouse. Fig. 4 with a mere glance at outliner you will know what is selected and visible or not. Fig. 5 you can click on the tagged item and determine if it is hidden are not - no hunting, no guesswork and no wasted time finding things. To find outliner, go to on (mac/windows) menu windows and select outliner.

Paul Stefanik - paul@paulstefanik.com



CISCO TX9000 Telepresence and 3D Augmented Reality

Telepresence refers to a set of technologies which allow people to feel as if they were present, to give the appearance of being present, or to have an effect at a place other than their true location. TelePresence also refers to the ability to live virtual experiences without realizing that technology is present. This is called Immersive TelePresence.

When referred to virtual meeting technology, for example, Immersive Telepresence gives the impression that the meeting is conducted with all participants in the same room.

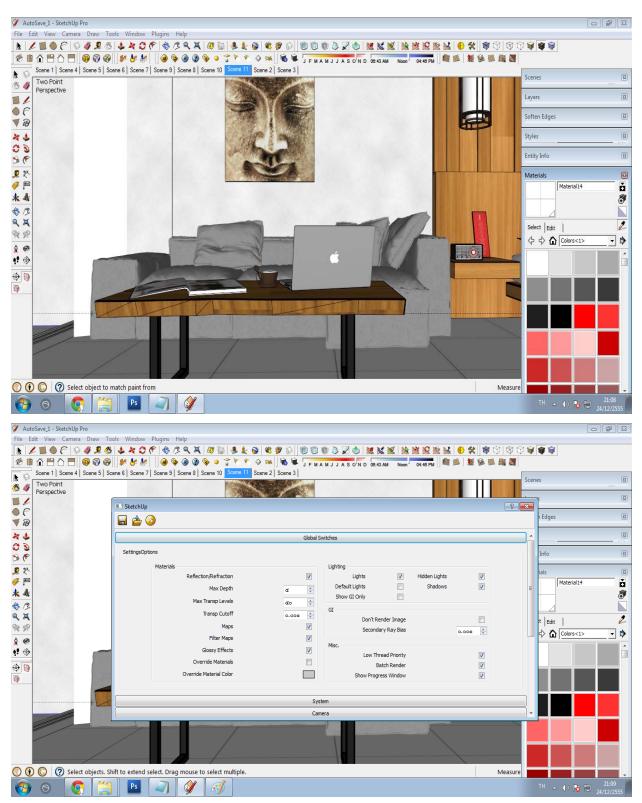
There is strong evidence that telepresence can improve remote collaboration. TelePresence can further improve collaboration between individuals not only directly, but also through collaboration tools, like for example through Augmented Reality technologies. At least this is what CISCO, the leading IT company, believes by adopting ARmedia.

http://www.youtube.com/watch?feature=player_embedded&v=YH3VmvXw6g8

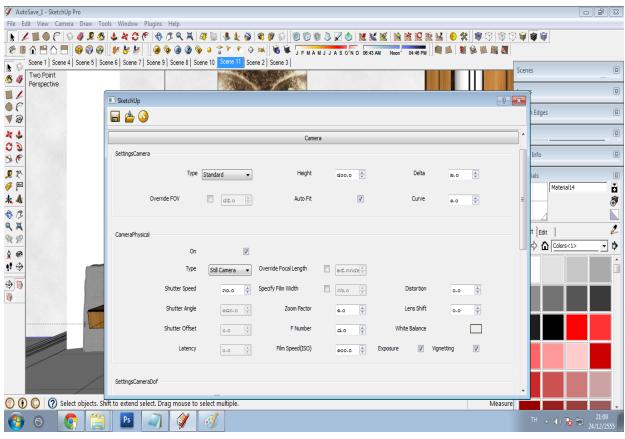
For more information, visit the CISCO collaboration blog: http://collaborationblog.cisco.fr

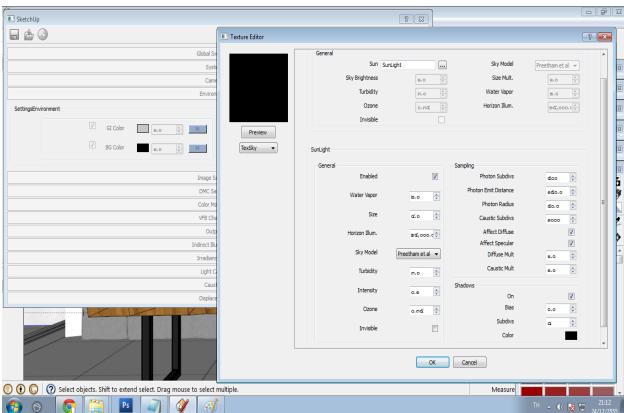


A Case Study with SketchUp Pro

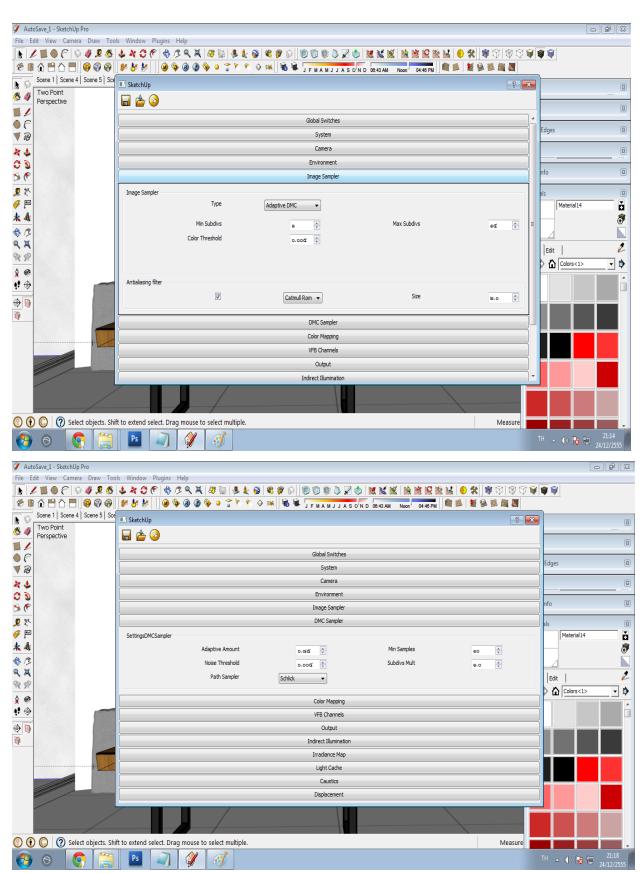




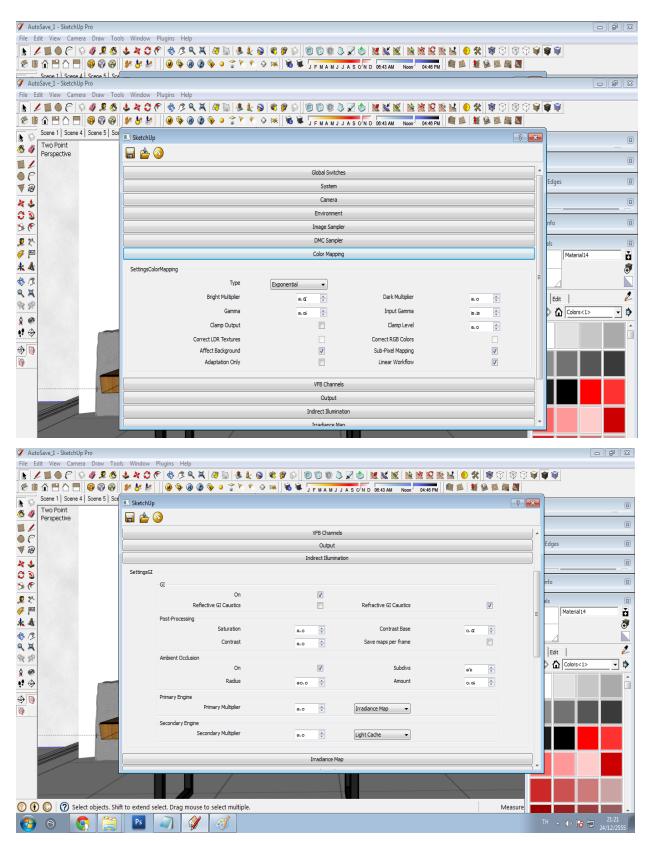




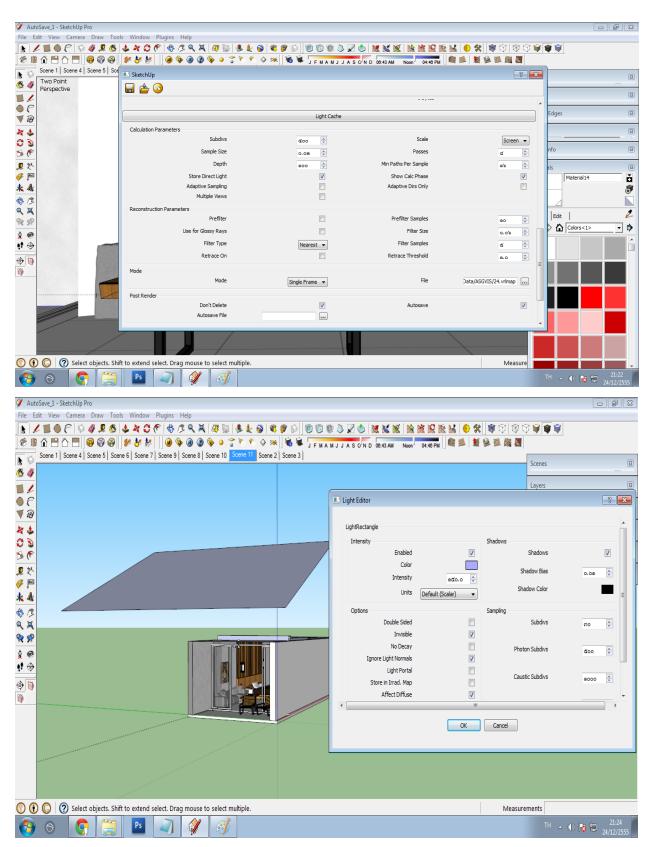




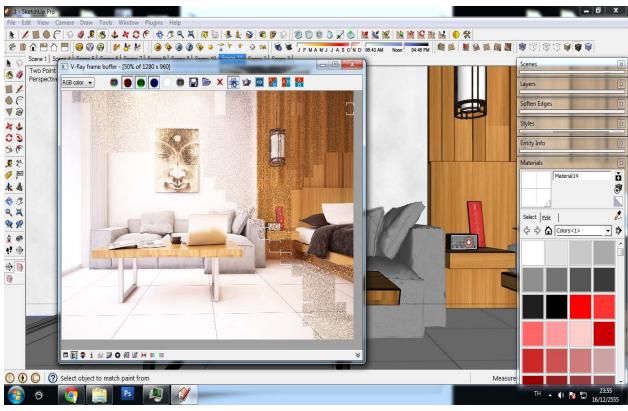














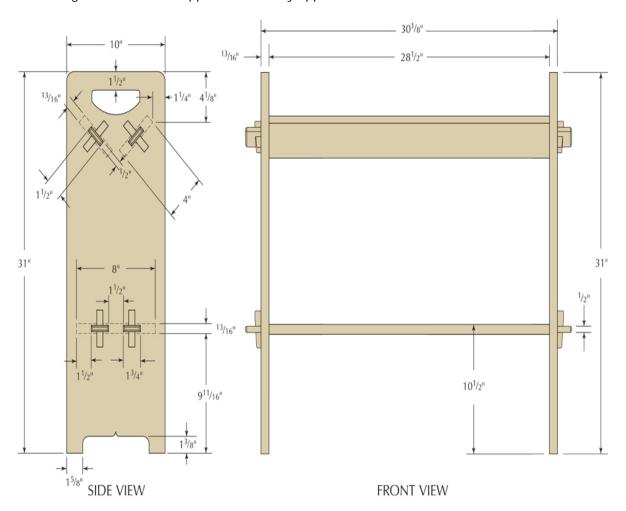






SketchUp for Woodworkers - 3D Cutlists for Woodworking Projects

Traditional approaches in woodworking are generally reliable and efficient. If you know something has worked well for other woodworkers for a few hundreds years, you can likely assume that adopting it will be a good way to accomplish what you want to do. But the traditional approach isn't always the best method forever, and when a new technology comes along, it can make the shortcomings of a traditional approach blatantly apparent.



This is the case with shop drawings, cutlists, and the adoption of SketchUp as a design and planning tool. Here is an example, using the Gustav Stickley No. 74 Book rack I built for the August 2012 issue of Popular Woodworking Magazine. The first image (at right) is the illustration as it appeared in print, and the second image (at left) is the cutlist published in the magazine. As a reader, you expect to see this form and we've never really questioned whether or not this is what we should print. We do it this way because we've always done it this way, as have other publications for the last century or so. But the reasons why these types of drawings were developed isn't because they are the best way to communicate information, this tradition developed because this is a quick and easy way to create a technical drawing by hand and put it on the printed page.



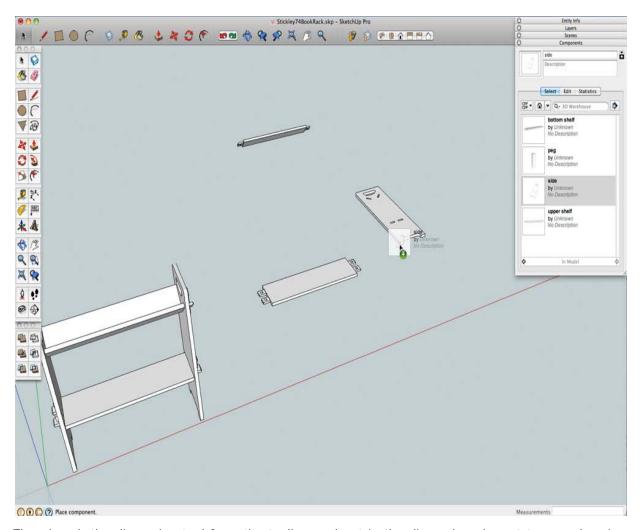
Stickley No. 74 Book Rack

NO.	ITEM	DIMENSIONS (INCHES)			MATERIAL	COMMENTS
		T	W	L		
2 2	Ends	¹³ / ₁₆	10	31	QSWO*	
1	Lower shelf	¹³ / ₁₆	8	33 ⁵ /8	QSWO	1 ³ / _{4"} TBE*
2	Upper shelves	13/16	4	33 ⁵ /8	QSWO	1 ³ / ₄ " TBE
3 8	Keys	5/8	5/8	5	QSWO	Trim after fitting

^{*} QSWO=Quartersawn White Oak, TBE=Tenon Both Ends

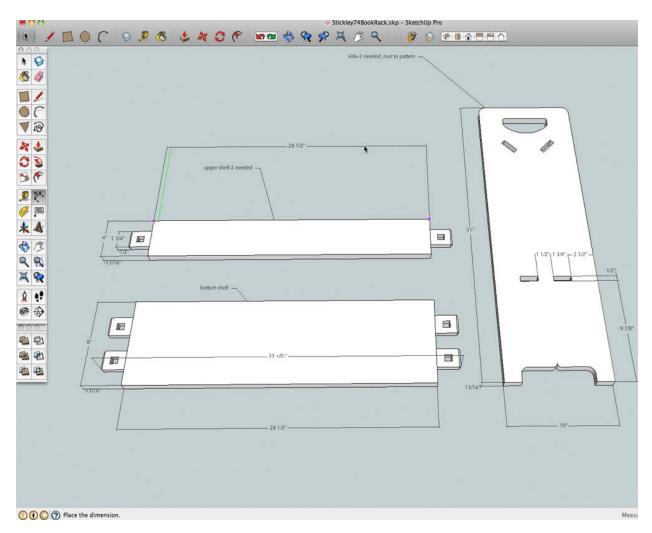
When I built the piece, I worked from a SketchUp model. I did make some prints from the model to use as a reference in the shop, but what I find useful when building doesn't look like a traditional drawing. After completing the model, I navigate to an empty area and drag parts of the model from the components window into the model space. This is a simple piece with few parts, but I use the same approach with more complex projects. When the parts are in the model, I move and rotate them so that they are in the same neighborhood. What I'm after is an arrangement where I can clearly see the size and shape of each part.





Then I grab the dimension tool from the toolbar and put in the dimensions I want to see when I'm selecting material and fabricating the parts. Because of the way SketchUp works, this process is quite fast. The elapsed time between these two screen shots is about two minutes, far less time than it would take me to write a cutlist the traditional way. It is also far more useful because I can include additional information, such as the size and location of joints, and when I refer to it I don't have to find a detail in the drawing then hunt it down in the cutlist. The other benefit is that if I have a carefully constructed model – I don't need to do any calculating to arrive at sizes. All I need to do is click on the right points in the model with the dimension tool, and SketchUp lets me know what the real sizes are.





For me, this is the ultimate reason for using SketchUp, it speeds up the process and gets me out to the shop sooner, armed with reliable information so I don't have to stop building to revisit the planning. In addition to an easy to use cutlist, I also generated full size patterns for the shape of the side pieces. As a bonus, these patterns also gave me the exact location and size of the through mortises.

Contact: Robert W. Lang

Cross posted from Popular Woodworking Magazine



Sefaira Concept + SketchUp for Green Building Design

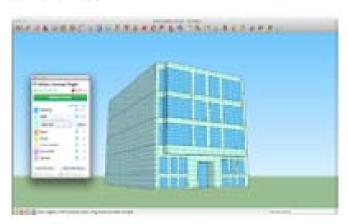
Traditionally, thermal simulation packages or energy models assess compliance at the end of the design process. Booth Hansen selected Sefaira Concept to rapidly analyze and evaluate "what-if" options from the earliest design stages, to provide its clients with relative energy savings of many sustainable design strategies. In addition, by using the Sefaira Concept SketchUp Plug-in with SketchUp Pro, Booth Hansen ensures the accurate representation of their models during early stage sustainability analysis.

The first step in performing early stage sustainability analysis with Sefaira Concept is to upload building geometry from a SketchUp file. Sefaira Concept automatically identifies the physical elements of a model – including floors, walls, glazing, and roofs – so that the software can deliver real-time, iterative analysis and inform the design process.



Deming Place is mid-block in an urban context, and shares party walls with its neighbors on either side. Concept initially identified the party walls as standard walls. However, modeling these as standard walls would incorrectly simulate thermal transfer to outside air.

The Sefaira Concept Plug-in allows designers to visualize Concept's interpretation of the model and either make adjustments to this interpretation or provide additional information as necessary. Booth Hansen used the Concept Plug-in to obtain feedback on Sefaira Concept's interpretation of the various building elements in this model.



Once the building elements were identified, the Concept SketchUp Plug-in gave Booth Hansen the ability to override the initial designations. The side walls of Deming Place were selected and changed to party walls, which more closely represented the actual building conditions.

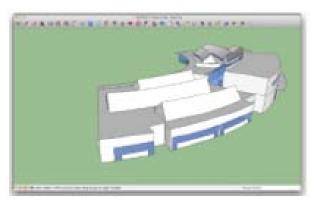




Concept then used the party walls to define the enclosed space earmarked for analysis while identifying that there was no significant thermal transfer through these walls, under the assumption that the interior of the buildings on either side are kept at roughly the same internal temperatures as Deming Place.



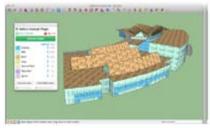
Children's Center at the Chicago Botanic Gardens For the Children's Center at the Chicago Botanic Gardens, Booth Hansen utilized a series of concentric circles to define the building's floor plan. This design resulted in a geometrically complex roof structure at the clerestory windows. To make sure that the analysis was accurate, Booth Hansen's architects needed to know that Concept had correctly identified and categorized the building's different elements. Booth Hansen used the Concept Plug-in to obtain feedback on how Sefaira Concept interpreted the different building elements in the model.





Using the Concept Plug-in, Booth Hansen could see that Sefaira Concept had identified the clerestory roofs as a combination of wall and roof planes. Booth Hansen corrected Concept's initial interpretation using the Concept Plug-in, so that all clerestory roofs would be correctly analyzed as "roof".







Once uploaded into Concept for analysis, Booth Hansen was able to parametrically manipulate the properties of the roof surfaces (such as R-value and construction type).





Public Digital Humanities for Lunch - A free tour of 3D modeling software

This January, Public Digital Humanities for Lunch (PDH4L) gives users a free tour of 3-D modeling software.

Cory Taylor kicks off this year's PDH4L series with "(Re)creating the World: Modeling for Google Earth with Trimble SketchUp." The presentation takes place from 12:30 to 1:30 p.m. Thursday, Jan. 24, in the University of Iowa Main Library, Room 1015A. Computers will be available for interested users to participate.

Rather than giving a presentation, this PDH4L will be a hands-on tutorial. Taylor plans to introduce audiences to the basics of 3-D modeling software and help participants master tools they can use to create their own models of real-world sites for display in Google Earth.

Taylor's presentation will use free software. According to Taylor, Trimble SketchUp is "Far more intuitive (and 100 percent more free!) than other 3-D modeling software. Trimble SketchUp is remarkably easy to use and has a very short learning curve."

Using local buildings, participants will learn SketchUp's basic drafting tools, how to position their models on a map and give them photo textures, and how to submit their models to the Trimble 3-D Warehouse for inclusion in Google Earth.

Taylor is a first-year doctoral student in the Department of Religious Studies in the UI College of Liberal Arts and Sciences. His research interests are Deutero-Isaiah in its cultural and political setting, form criticism of the Hebrew Bible, Persian-period Judaism, early Christianities, evolutionary religious studies, and the use of digital tools within archaeology and epigraphy. He explores all of those topics in depth on his blog Ex Libris.

Taylor's "demo presentation" is the first PDH4L event of the semester. The PDH4L series will move to a new location in the University Capitol Center in Feb. All lectures are free and open to all interested individuals. Lunch is not provided, but participants are welcome to bring their own.

PDH4L talks throughout 2013 will focus on the nature and role of public digital humanities in contemporary culture. Over the course of this series, audiences will interact with prominent public digital humanities researchers to gain understanding and shape the discussion of this rapidly rising field of study.



How to utilize Google SketchUp for 3D Printing

With the fast growing popularity of 3D Prototyping, a lot of 3D modeling tools and software have been developed in recent years. 3D modeling software plays a crucial role in creating 3D prototypes, as it is only with the use of the right 3D modeling tool that someone can design a perfect prototype.

Over the years, one of the many challenges faced by the general technology of 3D prototyping has been the inability of many people to comfortably create 3D models that can be turned into actual objects through 3D printing. However, since 3D modeling tools came into the picture, even people without extensive product design skill can still create intricate three-dimensional prototypes. By eliminating the 'lack of skill' barrier, 3D modeling tools have made it possible for virtually anyone to create 3D models.

Google SketchUp is currently the most popular tool for 3D modeling being used by millions of users across the world. This software allows you to use your artistic intuition to create any 3D model you have in mind. Google SketchUp imposes absolutely no limits on users when it comes to 3D modeling. Common prototypes that can be created with this modeling tool include models of houses, buildings, cars and even furniture. There are a whole lot of other paper crafts that you can fabricate using the Google SketchUp tool.

Google SketchUp was initially owned by the search engine giant, Google, but the application was acquired by Trimble in April, 2012. According to Google, this was necessary so that Trimble could develop the software further and increase its efficiency in fabricating 3D prototypes.

Advantages of Google SketchUp over Other Modeling Software

Regardless of the fact that there are many 3D modeling tools and software on the market, Google SketchUp is second to none. The following are the main reasons that have contributed towards the rising prominence of Google SketchUp:

- **Ease of Use** it is extremely easy to learn and use Google SketchUp. The software is simple and beginner friendly, thus anyone can manage to create 3D models after just a few hours of practicing. The process gets even simpler when you get used to the software.
- Accessibility Google SketchUp is widely available online. Anybody who wants to use it can
 quickly download it over the internet for free, although there is a 'Pro' version for those looking
 for more functionality. This means you don't have to shell out a penny to obtain and get to use
 Google SketchUp.
- **Fast and Efficient** Google SketchUp has very simple tools. As a result you can create the 3D prototype you want in a matter of minutes, depending on its complexity and size. In addition, it has excellent drawing effects that give you an exact image of the model you had visualized.
- Layout Feature most architects, designers and engineers normally use the Pro version of Google SketchUp, such as the recent 'Pro Version 8'; to come up with professional presentations of their respective 3D prototypes. Through the layout feature in Google SketchUp, such people are able to print several layouts of the same model, to give them a more realistic view of the prototype. This way, identifying any flaws in the prototype becomes easy and you can quickly come up with a final prototype that's flawless.
- Software Compatibility the brilliant bit about Google SketchUp is that it supports many other formats, making it compatible with other 3D modeling tools. Because of its compatibility with other software, you can import a model that you had start using other software to Google SketchUp and finish perfecting your prototype using Google SketchUp tools. As if that is not enough, most Computer Aided Design (CAD) programs freely accept files exported from Google SketchUp.



Google SketchUp vs Google SketchUp Pro

Many people who want to use Google SketchUp often are faced with the dilemma of whether or not to use Google SketchUp (free) or Google SketchUp Pro. Just for the record, both of them have incredible abilities in designing 3D prototypes.

The main difference between Google SketchUp and Google SketchUp Pro is the fact that the free version is mainly designed for home use but the Pro version has exceptional functionality for professional use.

For instance, Google SketchUp Pro has the layout feature that is not present in the 'ordinary' Google SketchUp version. Other additional features that you may find in Google SketchUp Pro include the Style Builder, which helps the designer to create his own unique SketchUp styles, and the ability to format reports. With the Pro version you can also print images of any size without being limited by your screen's resolution. It is this feature that enables designers to use Google SketchUp Pro even on their Smartphones without any problems.

How to Obtain Google SketchUp

Most versions of Google SketchUp can be easily downloaded online and you'll be good to go. Nonetheless keep in mind that if you are downloading a free version, you may only be able to use it for a given trial period. There are only a few differences between the free version and Google SketchUp Pro, so if you don't have any professional interests with the software, Google SketchUp (free version) will work just fine for you.

You can also download tutorials online to quickly guide you on how to get started. On the SketchUp Website, you can find Video and Self-Paced Tutorials, as well as the option to sign up for an Online Session. However, the best way to learn any new software package is to immerse yourself into it.

Remember, Google SketchUp can be used by anyone and everyone. Many schools are now even starting to use it for class work and in teaching lessons. Teachers in different schools across the country are finding Google SketchUp to be very helpful to their students in increasing their understanding of subjects like geography, mathematics (in geometry) and industrial technology. So whatever 3D model you want to create, Google SketchUp will do just about everything for you.



Shaderlight version 2.4 has been launched for SketchUp users

Users of Shaderlight can now render faster and more efficiently, thanks to the release of version 2.4 of the leading interactive and intuitive rendering plug-in to SketchUp.

Available to download from today, this latest update to Shaderlight delivers dramatically improved export and rendering performance to users when rendering complex components such as trees from 3D Warehouse or using Replace Me functionality. In tests, Shaderlight 2.4 has reduced memory usage up to 90%.

Shaderlight Cloud Rendering, the first and only SketchUp rendering plug-in to harness the power of cloud computing, also benefits from this latest release with vastly improved export and render times.

Kate Marshall, Marketing Director at ArtVPS said, "We are always looking for ways we can improve the user experience when rendering with Shaderlight. This latest release which has focussed around the way we use instancing has delivered fantastic results particularly when rendering complex SketchUp scenes."

Shaderlight 2.4 is available for free to existing Shaderlight v2 customers. New users can purchase the new release as a full or timed access license from our webstore. This month, users can get 25% off any full price license using the discount code jan25.



Google SketchUp Video Animations Explain Basic Sustainable Landscape Design Concepts

The Urban Forests = Cleaner, Cooler Air <u>video</u>, one of five new animations from ASLA, explains the importance of trees in urban areas to mitigate the heat island effect. All the videos are geared to the general public and give a basic understanding of sustainable practices of landscape architects.

With funding provided by the National Endowment for the Arts, the American Society of Landscape Architects has launched five more educational Google SketchUp animations designed to introduce some basic sustainable landscape design concepts to the public. ASLA now has 10 of these animations in its arsenal. They've been viewed more than 130,000 times and received press attention from The Atlantic, Fast Company, The Huffington Post and Grist, among others.

The animations, created by Daniel Tal, ASLA, explain how landscape architects use sustainable design approaches to help solve social, environmental and economic challenges.

The five new animations:

Designing Neighborhoods for People and Wildlife video www.asla.org/sustainablelandscapes/Vid_Wildlife.html explains how to transform a residential property into a wildlife habitat, spaces where nature can maintain itself without fertilizers or irrigation. Such landscapes are attractive and give urbanites some nature. Also, seeing plants and hearing song birds reduces stress and improves one's mood.

The Edible City dirt.asla.org/2012/04/30/the-edible-city video shows how some conventional communities are using models of some cutting-edge cities to incorporate urban agriculture. Growing food "breaks the law" in many U.S. cities, but some cities are changing regulations to accommodate urban "farmers." Front and backyards, courtyards in multifamily complexes, abandoned lots and building rooftops are some of the unproductive spaces being used to grow vegetables and fruit.

The Urban Forests = Cleaner, Cooler Air video www.asla.org/sustainablelandscapes/Vid_UrbanForests.html presents the latest research on air pollution and the urban heat island effect. Research shows significant short-term improvements in air quality in urban areas with a tree canopy.

The Infrastructure video www.asla.org/land/LandArticle.aspx?id=31980, featured by many leading environmental and design media, argues that we can transform our transportation needs into multiuse infrastructure that serve everyone. The problem is many cities are designed around the transportation systems, a detriment to the inhabitants. Today transportation infrastructure accounts for 20-40 percent of all urban land. With "parklets," underpass parks, rails-to-trails, and revitalized waterways, cities can take back infrastructure and bring new life to underused, derelict, or even contaminated spaces.

The Energy-Efficient Home Landscapes video www.asla.org/sustainablelandscapes/Vid_Energy.html demonstrates how smart landscape architecture reduces the energy consumption of a typical suburban home. Showing models based in real science, the animation shows how basic green technologies like smart tree placement and green roofs and walls can dramatically reduce energy use.

Each animation has a companion guide to sustainability education resources designed for students from kindergarten to 12th grade. The resources include hundreds of curricula, games, activity guides and videos to help classrooms explore these ideas.



Workshop taps into spatial-visual strengths of children with autism

The University of Utah's iSTAR educational program focuses on children with autism; specifically teaching them how to use computers for 3-D modeling.

The university held a demonstration for parents and teachers Thursday to show how SketchUp, a free downloadable design program, could help children at home and in the classroom.

Often times, children with autism face challenges in school, but this program gives them an opportunity to shine and show people what they can do. The program uses Trimble's SketchUp to display the kids' spatial-visual strengths.

Mason designed a character for a video game. The 15-year-old said he likes the program, "because you can do basically anything on it."

"They have an affinity for computers and technology, and so what we're really doing is building on their strengths," explained Cheryl Wright, assistant professor of family and consumer studies at the U. of U.

She, along with Scott Wright, with the U. of U. Gerontology interdisciplinary program, have been working on a curriculum that they hope can become the norm in schools across the country to help teach children with autism valuable life skills.

"That's particularly important for this population because often times there are high rates of unemployment or under-employment," she said.

Steve Gross, a certified SketchUp instructor and designer for Universal Creative, mentored children on how he used SketchUp to design attractions like Transformers and the Wizarding World of Harry Potter at Universal's theme parks.

In the program, students create 3-D models of their own individual design.

"I don't give them a lot of direction on what they create, because I want them to be in charge of that," Gross said, "I just facilitate and show them how to use the tools."

Gross likes the program and uses it all the time because he said it's a fairly easy program to learn and use.

"So most of these kids can draw, to some degree, but when they do draw, it doesn't really look like what they want it to look like," Gross said, "but with SketchUp, they really get good results, quickly so you don't get to the point where they get discouraged."

For the last three years, the instructors have seen encouraging results, with kids actively engaged in their projects, showing increased confidence, and having better interacting skills; a trait not often associated with people with autism.

"Look at what's very unique here is social interaction going on," Scott Wright said. "This isn't just sitting in front of a computer with tunnel vision. They are sharing and learning from each other."

The goal is to work with them to develop computer skills that companies like Universal, Disney, Google and others are always looking for, and that someday, these students might provide.

"All this builds up competency, mastery and a feeling of being able to shine, let talent shine through," Scott Wright said.



PolicyPak Locks Down Settings in Google SketchUp

PolicyPak Software, a leader in desktop management and Group Policy, recently released a management Pak for Google SketchUp.

The new pre-configured SketchUp Pak allows IT admins to fully lock down users' applications so users can't alter their settings. Admins can disable user application updates for Google SketchUp so everything is admin controlled. Additionally, the Pak allows admins to enforce an "Auto-Save" feature so users don't call the help desk with complains about losing work that wasn't saved. More information and video about the features of the Google SketchUp Pak can be found on the PolicyPak website.

IT Admins can try out the PolicyPak software for free by attending a Group Policy Webinar at the PolicyPak Website, or by calling (800) 883-8002.

PolicyPak can deliver settings using Microsoft Active Directory Group Policy, Microsoft SCCM, Dell KACE, or any other management tool.

Jeremy Moskowitz, founder of PolicyPak Software, talks about the need for PolicyPak when using Google SketchUp by saying, "Your organization can't afford to have users waiting on the help desk, which is why you can't afford to put your users in charge of the administration of this or any application."

PolicyPak Professional customers have free access to the Google SketchUp Pak, in addition to over 50 other pre-configured Paks. Some of the most popular applications offer up solutions for Java, Flash, Firefox and Shockwave. Security options are also available for less popular applications and custom homegrown applications with the PolicyPak Design Studio.



Create a Land Subdivision Concept 3D Model In Trimble SketchUp

Landon Blake will be giving a talk entitled "Create a Land Subdivision Concept 3D Model in Trimble SketchUp". The talk will be given at the 52nd CSUF Geomatics Conference, in Clovis California.

In this talk the audience will learn how to use Trimble SketchUp to create and render a 3D model of a small mixed use commerical and residential subdivision.

You can read information, download files, and find links related to that talk on this web page.

Files

- Sketchy Images of Completed Model in a Zip File
- Rendered Images of Completed Model in a Zip File
- Screenshots of Model Construction in a Zip File
- SketchUp Models in a Zip File
- CAD Drawing File for Model Base



SketchUp ur Space - The Creative Team



Rajib Dey rajib@SketchUp-ur-space.com

Rajib, the editor-in-chief of SketchUp ur Space magazine is the main writer. He is responsible to write the cover story, blog and many other columns. Along with it, he is creating a liaison between the writers and the readers.



Ramesh Komanna ramesh@jobs2india.com

Ramesh is the designer-in-chief of this magazine. With the help of his creativity SketchUp ur Space has gotten a classy as well as trendy look. He designed the website of SketchUp ur Space.



Manoj Kumar Singh manoj@jobs2india.com

Manoj is enthusiastic helps to put the content of the SketchUp up Space magazine in the html version. Manoj is the html developer who beautifully creates each and every edition with care along with the PDF version.