# SKETCHUP-UR-SPACE

Issue - January, 2014

www.sketchup-ur-space.com

## TIPS & TUTORIALS

Making of scandinavian interior with Sketchup, Vray and Photoshop
- Javier Wainstein

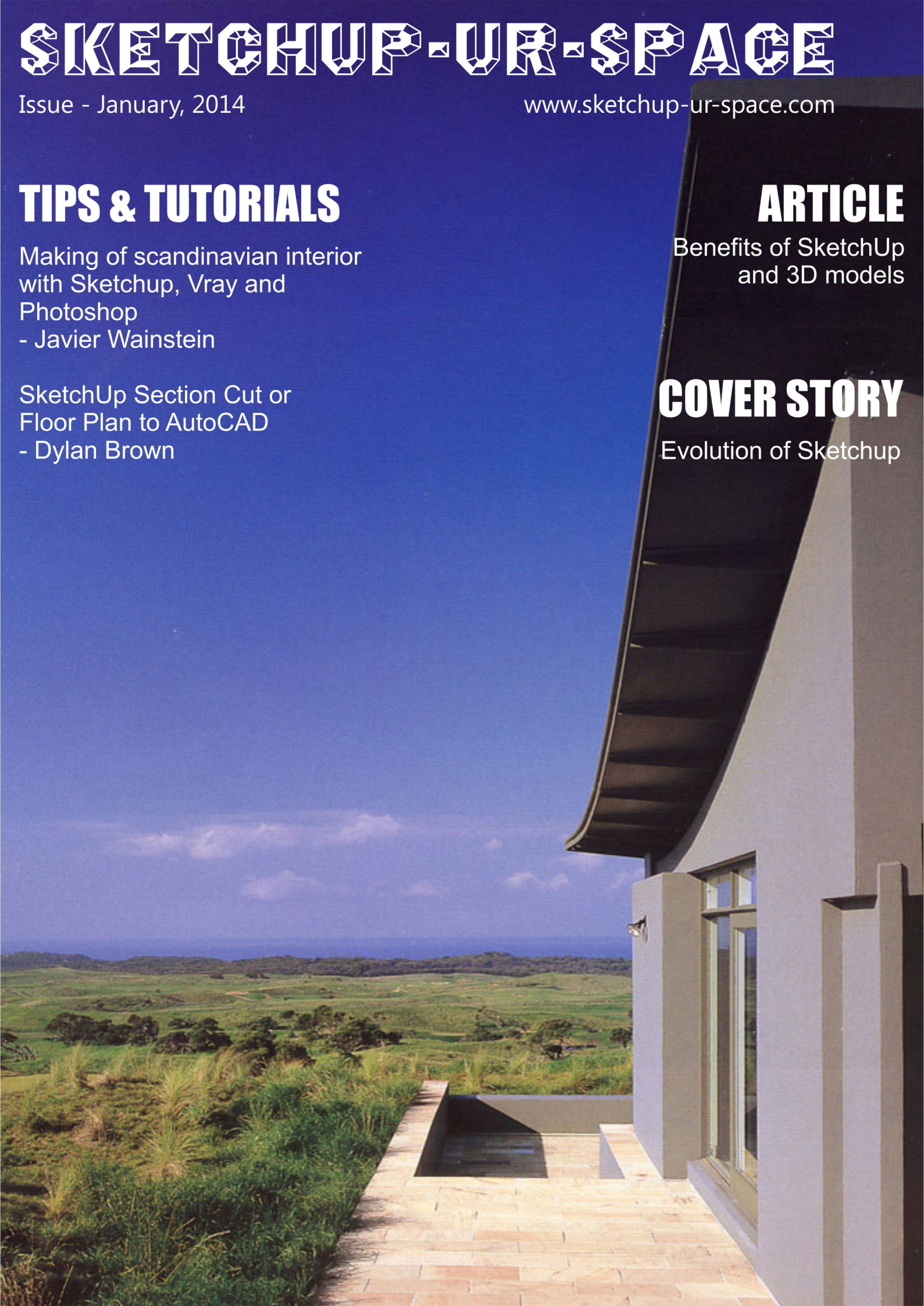
SketchUp Section Cut or Floor Plan to AutoCAD
- Dylan Brown

## ARTICLE

Benefits of SketchUp and 3D models

## COVER STORY

Evolution of Sketchup



SKETCHUP-UR-SPACE
*the first ever SketchUp magazine*

# List of Contents


1. **A Letter to the desk of editor**
   - A letter direct from the editor desk highlighting on January edition
2. **Interview**
   - Interview with Bob Lang
3. **Cover Storey**
   - Evolution of Sketchup
4. **Article**
   - Print Full-size Patterns from SketchUp
   - The benefits of SketchUp and 3D models - software for specifiers
5. **Blog**
   - GKWare Door Maker Plug-in for Sketchup
   - Axis introduces interactive camera visualization tool for sketchup 3D CAD software
   - Autodesk launches Cloud-Supported 3D Character Generator
6. **Tutorial**
   - Make realistic roof in Sketchup?
   - Making of scandinavian interior with Sketchup, Vray and Photoshop
   - Tiles setting in Sketchup
7. **News Room**
8. **Magazine Details – The Creative team of Sketchup-ur-Space**

# A letter direct from the editor desk highlighting on January edition

The year 2014 brings lots of excitements for sketchup users as Trimble has released another crucial version of Sketchup i.e. sketchup 2014.

In SketchUp 2014, there exists significant advancements with 3D warehouse. The sketchup 3D Warehouse is totally revamped with the integration of WebGL viewer, facilitating the sketchup professionals to view and orbit models in complete 3D ahead of downloading them into their own projects. Now the sketchup users don't have to open any 3D models in sketchup initially for uploading the models. They can upload any 3D models straightforwardly from their web browsers. The size of uploadable models is raised from 10 to 50 megabytes.

Sketchup 2014 simplifies BIM workflow to a great extent with the inclusion of new classifier tools to tag geometry with industry standard object types like walls, slabs, roofs and lots more. After classifying the objects in any model, export an IFC (Industry Foundation Classes) file bundling the project to be applied with a new BIM application. The sketchup users will be able to obtain the crucial metadata that is inserted in Sketchup Pro 2014 with their model geometry.

The team of sketchup ur space had published another sensational issue. In this issue the team of sketchup ur space has presented an exclusive cover story focusing on evolution of sketchup till the release of sketchup 2014.

In article section, Mr. Bob Lang, the Executive Editor of popular Woodworking Magazine, has presented an enriched write up highlighting how one can print a full-size pattern from the free version of SketchUp.

In another article, Geraldine Chua, the Content Producer at Cirrus Media Australia, explains how the architects get benefitted with sketchup in comparison with other expensive 3D modeling programs like Autodesk Revit, AutoCAD or ArchiCAD.

In tutorial section, Dadi Supriadi, the most promising Freelancer 3D Render, has presented an exclusive tutorial analyzing how to produce a realistic roof with sketchup.

In another tutorial, Javier Wainstein, the renowned 3D modeler and architect having great expertise in interior space designing, has provided some useful tips & tricks on how to add Scandinavian touch to the interior space of a room through sketchup, photoshop and v-ray.

There is another short but useful tutorial which is presented by Apple Trox, the talented 3D graphic artist focusing on how to make tile setting with sketchup.

In blog and news section the readers will get the latest information with the 3D modeling world.

**Hope our readers will enjoy and cherish with reading this issue.**

**If you have any queries concerning publication, subscription, troubles navigating the site, please mail us at**[rajib@sketchup-ur-space.com](mailto:rajib@sketchup-ur-space.com)

Best wishes
**Rajib Dey**
Editor

# Rendezvous with Bob Lang, Executive Editor, Popular Woodworking Magazine

**Hello! Welcome to the space of sketchup ur space. Please introduce yourself to our readers.**

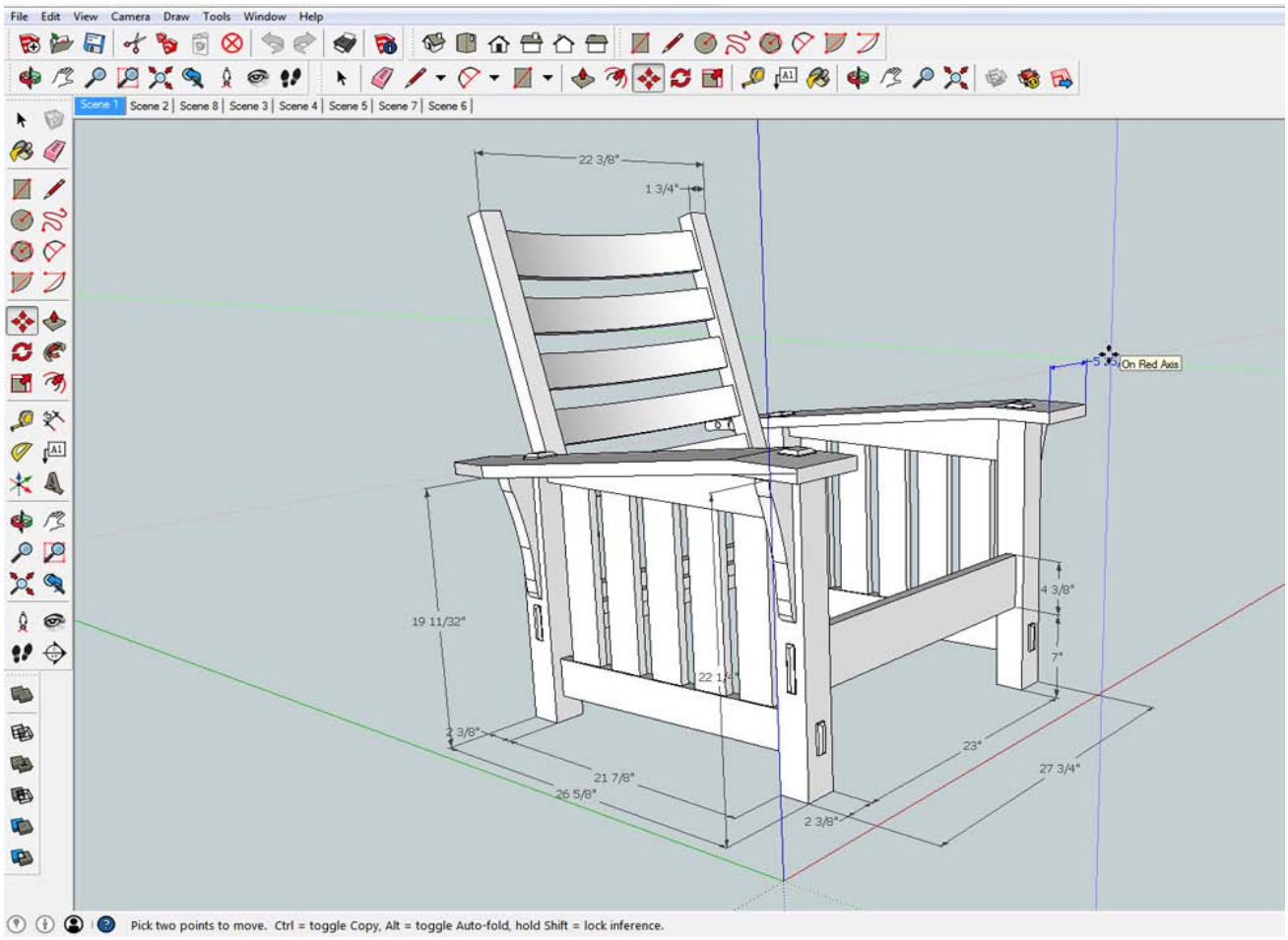
I am the executive editor of Popular Woodworking Magazine and the author of several books of measured drawings of furniture from the American Arts & Crafts period and two books about using SketchUp. The SketchUp books are in enhanced PDF format with video content embedded within the text. While teaching SketchUp I found that there are some common obstacles to learning the basics and my books address those.

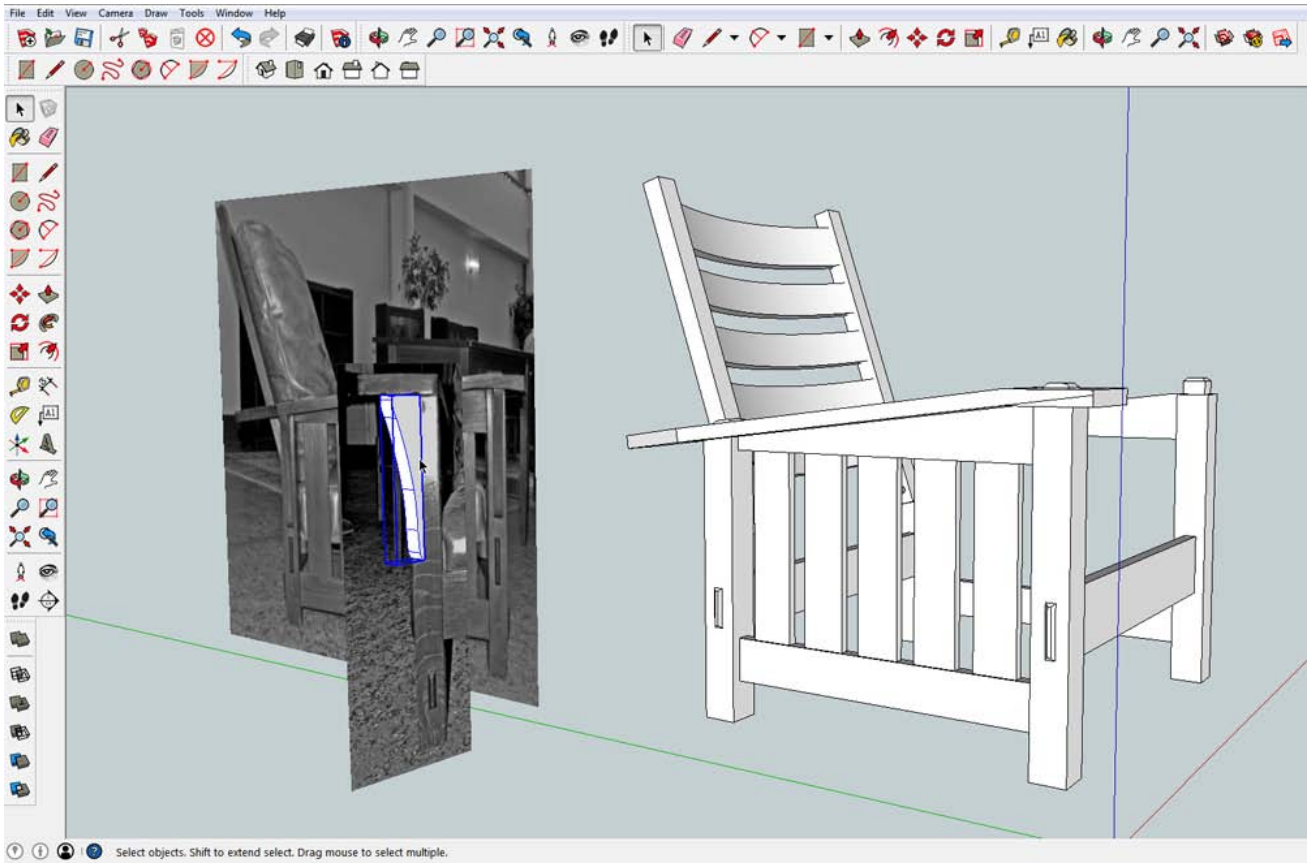
**When did you first get hooked with sketchup?**

When I was in school drafting was still a pencil and paper process. I worked as a cabinetmaker and project manager in the architectural millwork industry and used AutoCAD to prepare shop drawings. I also used AutoCAD to create the 2D drawings in my books. Shortly after joining Popular Woodworking Magazine about 10 years ago I heard about SketchUp and tried it out. It took me a while to unlearn drafting and AutoCAD and learn to speak SketchUp's language. We were looking to streamline the process of creating illustrations and SketchUp proved to be an excellent solution.

**How sketchup provides huge benefits to a woodworker?**

For me personally it is faster, more efficient and more flexible than other design/engineering methods. I can make a quick "sticky" model to explore visual variations and then develop a completely detailed plan. I like to focus on the model itself rather than the 2D drawings that I will eventually develop from the model. The information for any presentation is within a good model, waiting to be extracted.






For woodworkers (or anyone) in general working in 3D is a huge benefit. 3D modelling is essentially a dress rehearsal for building in real life and SketchUp prevents many of the errors that arise when working in two dimensions. In two dimensional drawing it is remarkably easy to create a plan and section that look good but don't agree with each other. That doesn't happen in SketchUp because all of the 2D output is derived from the same model.

**Are there any good plugins for sketchup which can be applied for any woodworking project?**

I personally don't use many plug-ins. I do have a few installed for drawing curves. That doesn't mean I have anything against plug-ins, it means I don't have time available to explore everything that SketchUp can do. Many woodworkers are big fans of the Cut-list plug-in that generates a list of parts and I'm always impressed when I see a good rendering. For my work I export from SketchUp to Adobe Illustrator because I need that format for publishing. I was very happy to see the solid modeling tools introduced with SketchUp 8. That feature alone cut my work load considerably.

**You are the executive Editor at Popular Woodworking magazine. Besides, you are highly recognized as a SketchUp instructor and each year conducts SketchUp classes at different locations around the USA. Tell us something about that.**

Teaching wasn't something I set out to do, but I was asked to teach the other staff members at the magazine to use SketchUp, and then I was asked to teach SketchUp at a woodworking school where I also teach classes in making furniture. In the first few years of teaching I learned a lot about the specific things average people struggle with and have tailored my classes and what I write about SketchUp to those areas.

I believe that when I teach the class shouldn't be about me showing off what I can do in SketchUp, it should be about getting the students to speak the language of SketchUp. I would like to teach more, but don't have much time to pursue teaching. I'm proud of how I have been able to refine my classes to enable beginners to become good modelers.

**You have written several books on sketchup. Which book do you want to recommend for sketchup professionals?**

My first digital book "Woodworker's Guide to SketchUp" had two goals. The first was to provide specific information about SketchUp to people who didn't need to model entire buildings. There are specific skills you need to perform the tasks of making accurate and detailed models of objects that go inside buildings as opposed to the buildings themselves. With most books on SketchUp those skills are either missing or buried under the things you need for large-scale architectural modeling.

I also was keenly interested in combining video content within the text of a book, and the feasibility of small-scale publishing in a digital format. Not everyone can obtain all the information they need from a book or a video alone, each format seems to appeal to a different part of the brain, or to different personalities. With the combined format readers receive the same information in different ways and it is a powerful tool as a reference if you need to refresh your memory. The first book proved successful on both counts and so I decided to create a similar book for a more general audience that included things I learned from my students when I teach.

My long-range plan is to develop similar books on more specific topics that build off the basic skills in "Building Blocks of SketchUp". I'm not really targeting people who intuitively develop their skills in SketchUp, my goal is to get anyone started and to assist people in specific areas of building and interior design get up to speed so they can apply the benefits of 3D modeling to what they do. To get back to the original question, I would recommend that SketchUp professionals consider sharing the skills they have through this new medium. The publishing model I have developed works better than I expected, and I would like to see far more books in this format than I have time to write.

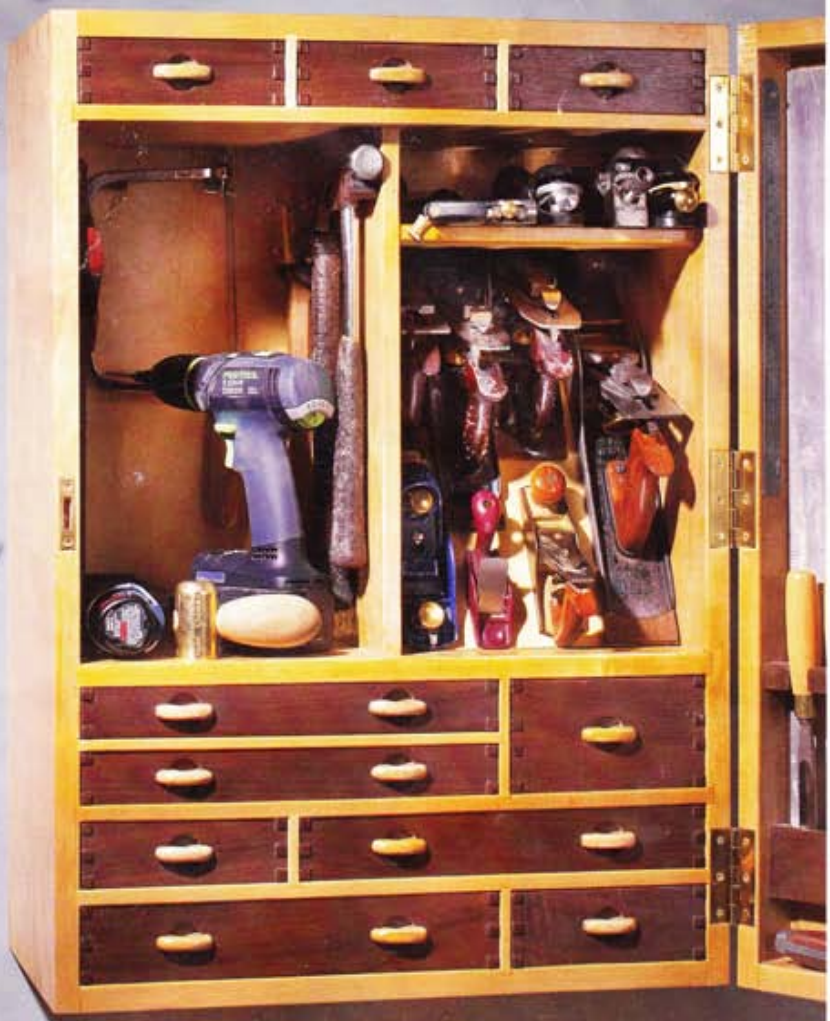
Win this Tool Chest & a $1,000 Gift Card!

31-Day Holiday Giveaway

# POPULAR Woodworking MAGAZINE

December 2013 ■ #208

## Hanging Tool Cabinet
Stylish Storage for the Tools You Need



## Veneer with Hide Glue
Science of the Sticky Stuff

## Curves on Display
Contemporary Kitchen Rack

## Pursuit of Perfection
A Visit to Vesper Tools

fw media
US $5.99
12
0 74470 01355 6
Display until January 6, 2014

## Roy Underhill on Stanley's 45 & 55
Are Multi-Purpose Planes Worth the Fuss?

popularwoodworking.com

**Sketchup 2014 is just released. What are the most crucial features of it?**

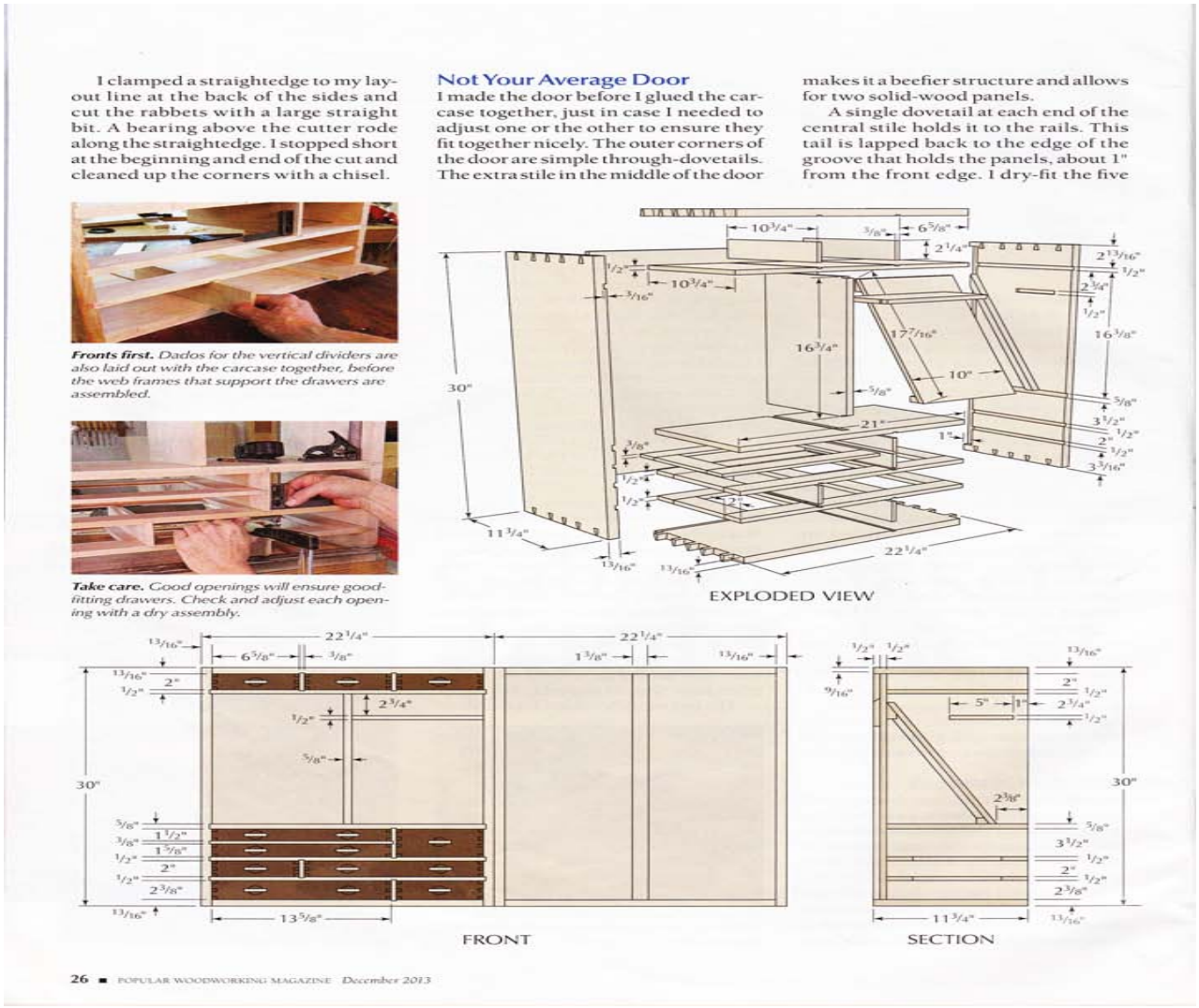
If I were still active in the construction industry I would be very excited about BIM. I have been on too many job sites where everything came to a halt because of missing or conflicting information in the plans, and I think SketchUp and BIM have the capability to eliminate problems that have plagued building since the pyramids.

**You have completed several projects with sketchup. What do you consider your best or most popular work?**

My favorite project is usually the next one. One of the things I am rather proud of is the magazine's collection of models in the 3D Warehouse. When we started using SketchUp models as the basis of our illustrations we wanted to share the benefits of exploring them with our readers and so we uploaded the models we created and invited readers to share models from earlier issues. It amazes me that we now have hundreds of models online. Some of those have been viewed hundreds of thousands of times and downloaded tens of thousands of times.

**Besides sketchup, what software packages and tools do you utilize for your projects?**

In publishing I use Adobe Creative Suite and particularly Adobe Illustrator. The process for preparing technical illustrations starts with exporting DWG of DXF files from SketchUp Pro. In Illustrator I reset line-weights and colors and reformat the text. I also export from SketchUp to AutoCAD on occasion, but that is mostly because I'm more familiar with using that and I haven't had the time to get good at using Layout. Almost all of my SketchUp work is either preparing plans to build furniture personally or preparing technical illustrations for the magazine or books.



I clamped a straightedge to my layout line at the back of the sides and cut the rabbets with a large straight bit. A bearing above the cutter rode along the straightedge. I stopped short at the beginning and end of the cut and cleaned up the corners with a chisel.



***Fronts first.*** *Dados for the vertical dividers are also laid out with the carcase together, before the web frames that support the drawers are assembled.*



***Take care.*** *Good openings will ensure good-fitting drawers. Check and adjust each opening with a dry assembly.*

## Not Your Average Door

I made the door before I glued the carcase together, just in case I needed to adjust one or the other to ensure they fit together nicely. The outer corners of the door are simple through-dovetails. The extra stile in the middle of the door makes it a beefier structure and allows for two solid-wood panels.

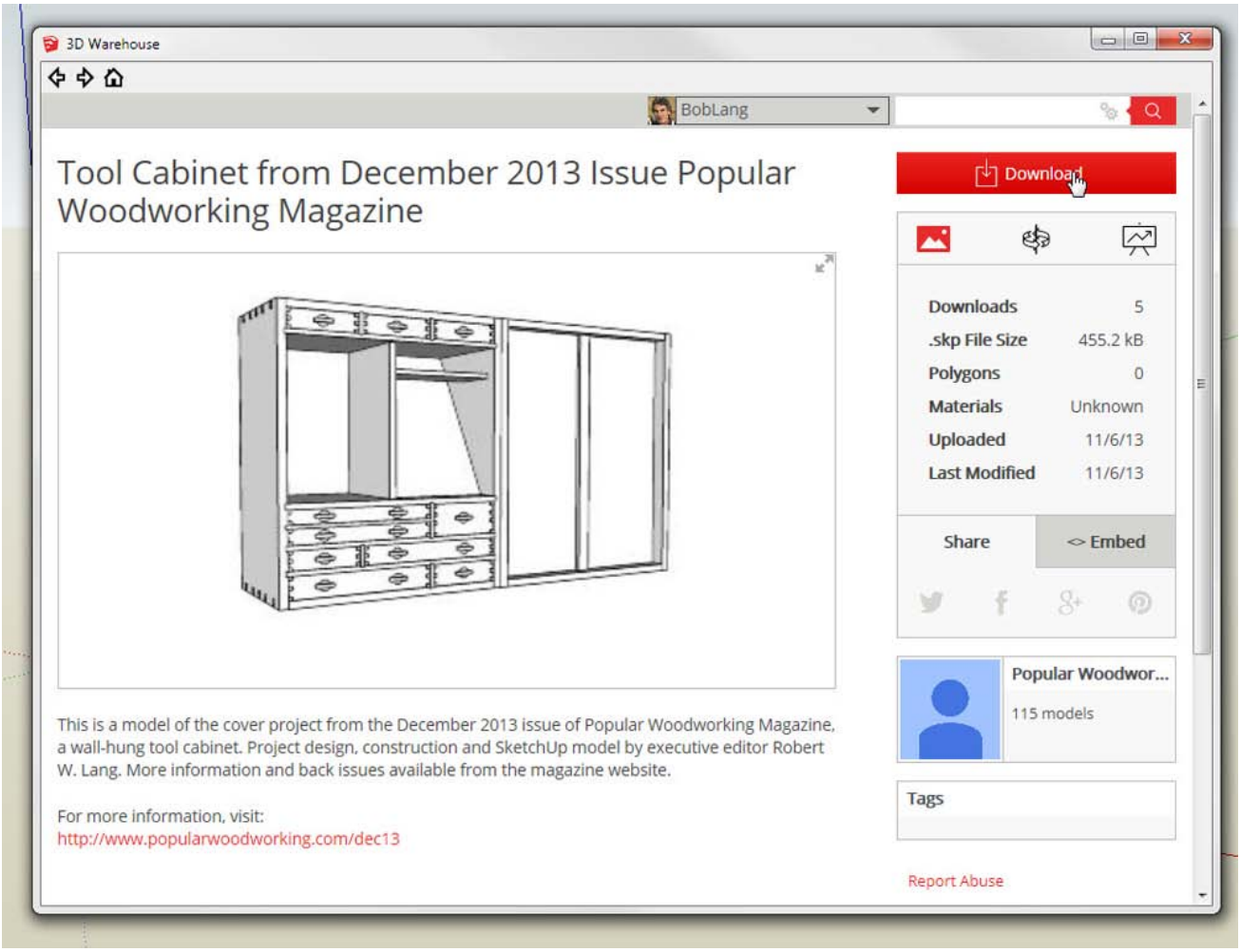
A single dovetail at each end of the central stile holds it to the rails. This tail is lapped back to the edge of the groove that holds the panels, about 1" from the front edge. I dry-fit the five

EXPLODED VIEW

FRONT

SECTION

26 ■ POPULAR WOODWORKING MAGAZINE December 2013




**Who are your mentors or inspiration in your professional life?**

My first publisher, John Kelsey was a huge help to me when I made the change from building furniture and cabinets to publishing. I also admire the folks who created and continue to develop SketchUp. The world needs more people who can be creative enough to come up with new ways of doing things and brave enough to take the risks needed to develop new things.

**What advanced features should be included with sketchup in near future?**

Selfishly, I would like to see more control over text (especially fractions) and Layers in exports. I end up doing some tedious things translating vectors from SketchUp to Illustrator. I expect to see more features for BIM and 3D printing in the next few years.

**What suggestions do you want to provide for newbie sketchup users?**

Learning SketchUp is much like learning a new language. Sometimes you have to set aside what you know (especially if you have experience in CAD or mechanical drawing) to make room in your brain for something new. Master the basics and develop a good understanding of how the things on the computer screen relate to each other. It is similar to the real world, but not quite the same. When new users get the basics with an open mind they can do just about anything.

**How do you evaluate our magazine?**

I think this type of publication, connected people with similar interests from different sides of the world nearly instantaneously is the up and coming model for publishing. I'm grateful that I was asked to participate.

# Evolution of Sketchup

AutoCAD, Autodesk Revit and ArchiCAD are most commonly used programs at architectural firms. These programs have now gained a status that makes them almost synonymous to CAD and BIM. It is well known that CAD or BIM aid in the representing the physical and functional characters of any project digitally. Similarly, Autodesk Revit, AutoCAD and ArchiCAD are considered as one of the fundamental cornerstone of buildings and a shared knowledge resource to obtain information regarding any facility.

Over the years, gradually SketchUp, a 3D modeling software has attained the position where it can claim itself as an antidote to the expensive and complicated CAD software.

When the design professional went through this growing need for some intuitive and accessible 3D modeling program, SketchUp was born. It was in the year 1999 that it was first introduced by a tech company @last Software. It was originally developed as a general- purpose 3D tool for content creation. It was conceptualized as a program that would enable design professionals to work freely and independently without using pen and paper. This gave them a kind of feeling of freedom from the shackles of age old work methodology. SketchUp was envisioned to simplify the workflow for designers, architects, engineers, builders and makers and to ensure that they would not be bothered about the interface and could focus on what could be created with it.

The launch of SketchUp was well appreciated and this made @last to place the models created in SketchUp by people into Google Earth. To meet this end they collaborated with Google for developing a plug-in for Google Earth. This also enabled people to geo-locate their SketchUp developed models in Google Earth.

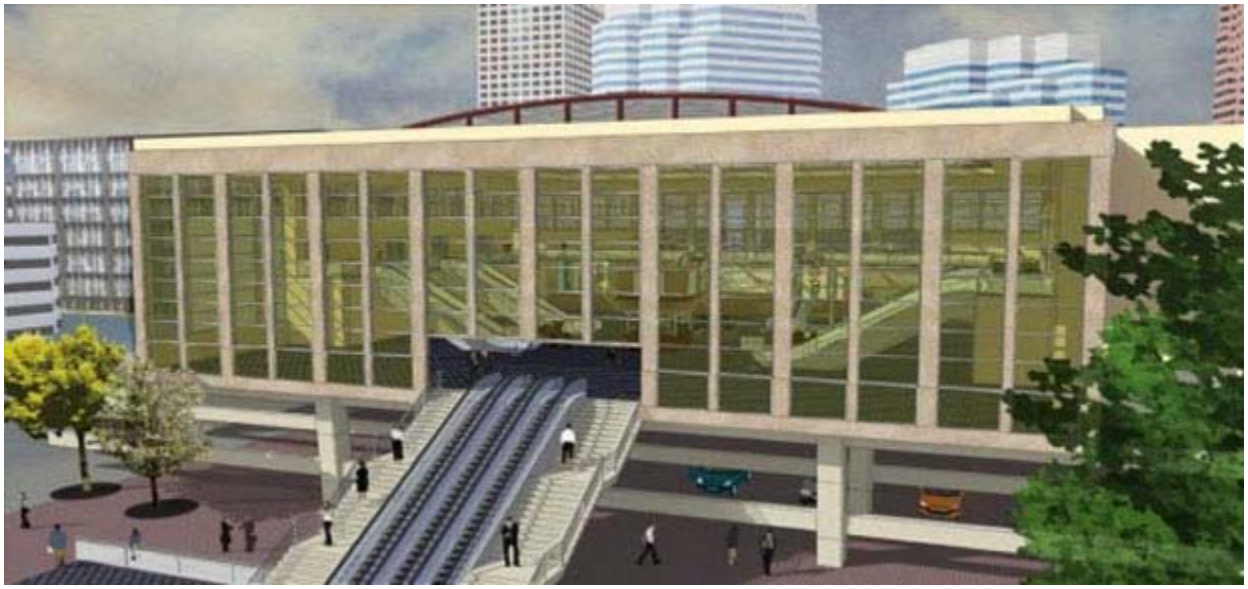
Google bought the program in 2006 as it was highly impressed by its Google Maps plugin. In 2012, SketchUp was acquired by Trimble, a surveying and navigation equipment company and by this time, SketchUp had about two million active users every week.

SketchUp 2013 is the latest version of the 3D modeling platform and features a wide array of tools and capabilities which helps users in exploring, modifying and sharing their design ideas in 3D. Users can also import CAD plans and photos and develop communication and planning deliverables.

Over the passage of time, the program has undergone various changes and improvements, but this has not influenced or hampered the core of the program. SketchUp scored above BIM only because of its simplicity and accessibility that remain the main elements of the program. Tasman Storey, who is the design principal at Sydney-based Tropman & Tropman Architects, noted that SketchUp is not only quick but also highly easy to use. He also added that it is an effective initial design tool that aids in generating an entire series of interiors and exterior, fly through and elevations.

It is simple for users to add ideas on SketchUp in combination with some AutoCAD drawings. The addition can be done quickly and with expertise in applying rendering, the designing can be completed within hours. With

each step of using SketchUp, the user goes on learning more about the program and working with the program becomes easier. It is like a reliable and efficient guide for users who are not good at drawing or are not quite sure of the final look of their building. SketchUp is intuitive and user friendly and is hence ideal for new users as well as professionals.



SketchUp design tools are balanced by the Trimble SketchUp 3D warehouse. It is an online repository that assists users in creating, finding and sharing collections of 3D models. 3D model libraries have various benefits as the user can just click, save and specify thus simplifying their workflow.

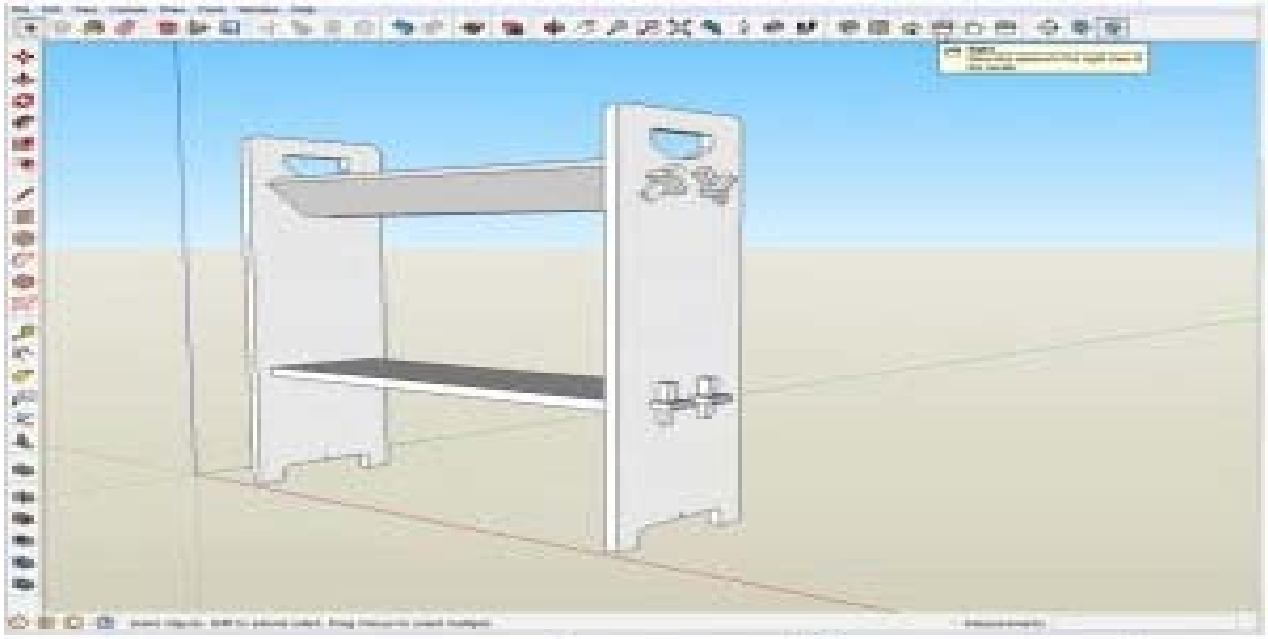
SketchUp 3D warehouse is not the only online library available for building products. RubySketch is expected to be the largest multi-format BIM library in Australia. RubySketch works with Australian product manufacturers to depict and add products to its website and it does not host nonspecific representations. The CEO of RubySketch and AAD Build, Mr. Andrew Dwight said that they research on a company and decide on how the product is related to architect, the context in which the model will be used and how will be the model searched. Later they collaborate with the manufacturer of that product to look for important information and definable features of the product such as visual properties, sustainability, cost, weight etc. Here each of the models that can be downloaded contains certain information about the product.

Free availability of such information to a design or construction community in one single location saves architect time researching and the builder time sourcing. This information includes all products that are built in contact information. This also helps the estimator in quantifying time and the clients who are trying to understand what are they are getting into before the construction begins to have a clear idea about the cost. In the design process this provides the 3D models of products that might be used and when collaborated with SketchUp, builders as well as architects can view the final look of the product.

Previewing the role and performance of a product in relation to a project reduces the chances of redesigning. It also aids the project team to realize if the collaboration of the product and the design harmonize with each other.

The advantages of RubySketch are very similar to that of SketchUp's 3D library. Like any real- life centralized warehouse, RubySketch offers easy access o the entire host of products. While using Ruby Sketch, the user does not require scanning the web for 3D content just because it is all in one specific spot. Specifiers can search through the models in the website by just typing the product name or item code and opt for the suitable model and download it in the most preferred software format. Complete rooms with finished floors, tiles, fixtures and PC items are also available for download. RubySketch and similar types of 3D libraries are highly effective in reducing the gap between manufacturers and designers during the design phase.

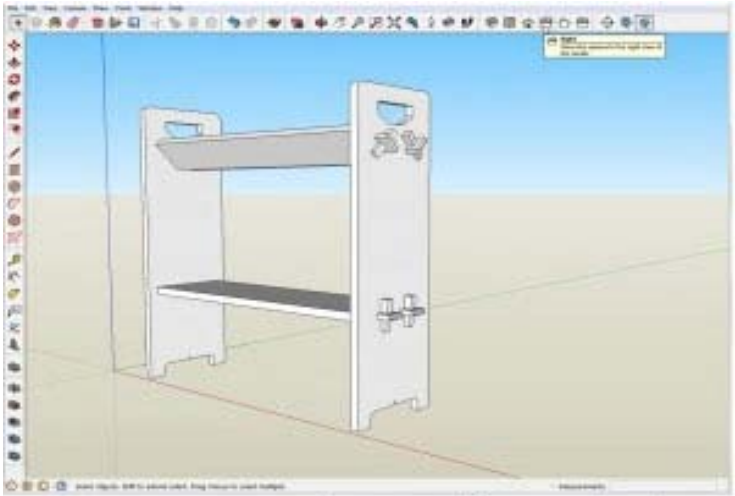
# Print Full-size Patterns from Sketchup



Full-size patterns can be printed from a SketchUp model. You can do this with the free version of SketchUp and your own printer.

In my post on making a template for through mortises, I used a full-sized paper pattern that I printed from a SketchUp model. A reader posed the logical and obvious question “can you print a full-size pattern from the free version of SketchUp, or do you need special software and a special printer?” The short answer is yes, and the detailed answer is here.

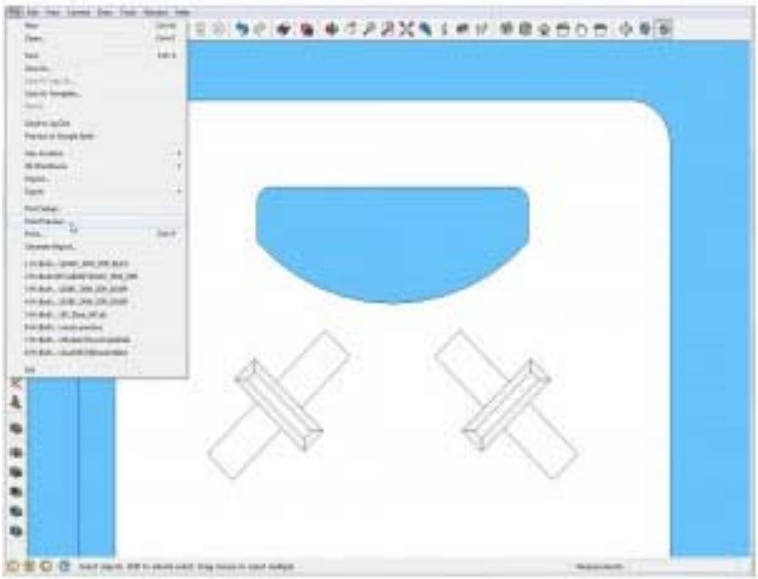
At left is a screen shot of the SketchUp model. The model is available for free on the 3D warehouse. You can search on the term “Stickley Bookrack” or you can click on this link. Printing from SketchUp isn’t the easiest or most intuitive thing, but once you understand the steps of the process, it isn’t that bad. Generating full-size patterns from a SketchUp model is an incredibly valuable and powerful thing. In this example, the curved shapes of the end, and the size and location of the mortises come from the pattern. These things were drawn once in SketchUp, so there isn’t any need to draw them a second time out in the shop.



Full-size patterns can be printed from a SketchUp model. You can do this with the free version of SketchUp and your own printer.

There are rules for printing at full size from SketchUp. The first of these is that you have to be in one of the "Standard" views. I have the "Standard Views" toolbar visible, so I just click on the appropriate little house icon. You can also find "Standard Views" under the "Camera" menu, not the "View" menu as you might suspect.That positions the camera in SketchUp to look at the model directly from the right side.

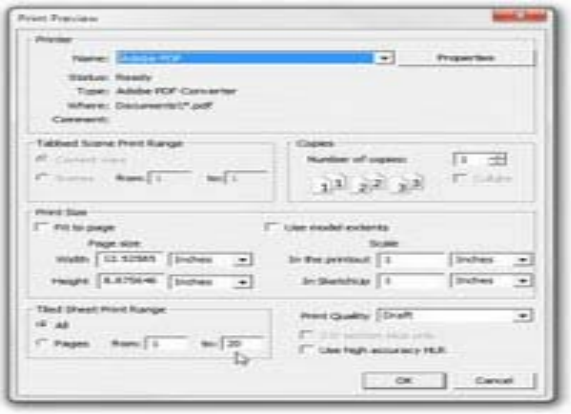
So far, so good. Rule number two is you have to turn off the "Perspective" view of the model and switch to "Parallel Projection". That change is also made from the "Camera" menu. SketchUp can't print to a specific scale from perspective. You can print to any scale you want to print working drawings, and you set the scale from the "Print Preview" window.



*Under the File menu, select Print Preview*

All of this is what things look like on a PC. On a Mac, a similar dialog opens but it isn't quite the same. The same dialog will open if you select Print, but you need to be careful if you go that route. It's easy to select OK and find that your printer is cheerfully spitting out dozens of pages.

SketchUp will automatically tile the print to however many pages it needs to get the job done. I'm after a single page showing the top of the side of the bookrack. The print function in the free version of SketchUp (SketchUp Make) is dependent on what is visible on the screen. If you want to print only a portion of a piece, zoom in so it fills most of the screen, and you also may need to resize the model window to roughly the proportions of the paper you want to print on. The actual piece is 10″ wide and to print on  a letter size piece of paper, so I need to zoom way, way, in and set the printer to Landscape.

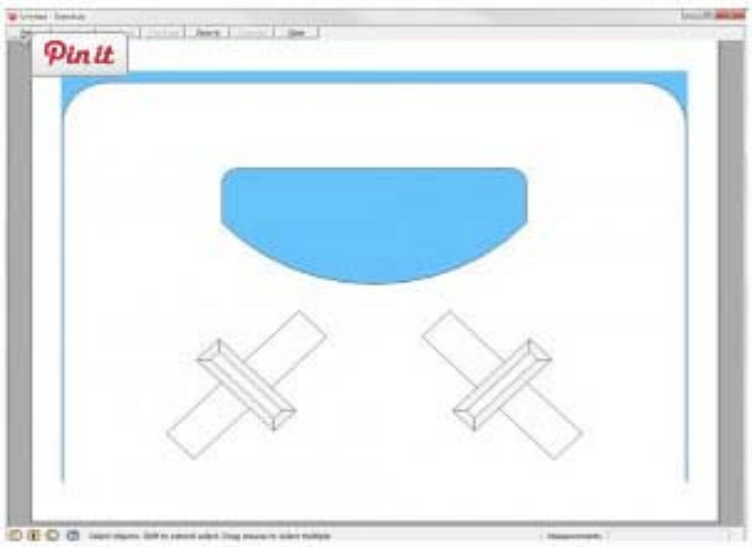


*Click on the image for a larger version. Pay close attention to the lower left corner of the dialogue box and the "Tiled" print range.*

Here is what the dialogue box looks like. Checking or unchecking some of the boxes changes the options that are available. If you're in "Print Preview" it's safe to play around with the different settings to see what happens. When you click "OK" you will see what will go to your printer. To print to full size (or any specific scale) uncheck the box that says "Fit to page". That lets you change the numbers below Scale. The numbers and units should match, as seen here where an inch in the printout equals an inch in SketchUp.

At the top of the box you can select your printer. I have my machine set to "print" an Adobe PDF file so I can show you the results. I can also select my inkjet printer and put these on letter or legal size paper. If you want a real big print on a single sheet, you can find software online that will let you create PDF files as a virtual printer. Set up the page size for a large sheet, 24 x 36 or 36 x 48 are standard sizes. You can then take (or e-mail) the PDF to someone with a great big printer (I use my local Staples store).

If you print on your own machine, PAY ATTENTION TO THE TILED SHEET PRINT RANGE in the lower left corner or the dialogue box. I took this screen shot before zooming way, way in and SketchUp is ready to print all of the model (along with a great deal of the background) on twenty sheets of paper. That's 19 sheets more than I want, so I need to play around with the window size and my view to get it down to a single sheet.




*Don't hit "Print" until the preview shows you what you want to see.*

Here is the preview that I'm looking for — almost. The blue color is the "sky" background in SketchUp. Because I don't want to run out of blue ink in my printer, I'll go to the Styles window in SketchUp and turn off the display of the sky, or select a different style that is just lines. To make this fit, I held a piece of paper up to my screen to resize the window proportions and I zoomed in to fill the screen. I could also have selected legal size paper and wouldn't need to get so close.

To make everything fit for the bottom of the side, I had to sacrifice the outer edges of the pattern and put it on a legal size sheet in Portrait orientation. Click Patterns From SKP to download a PDF file showing the results, directly from SketchUp. They may not be the prettiest things you've ever seen, but the are perfectly usable. When you print from SketchUp, or from a PDF generated from SketchUp make sure that the physical printer is set to print at 100%, not scaled to fit the page or an arbitrary print area. If you need to be sure that the print is at actual size, measure the printed output and compare the number with the SketchUp model dimensions.

# The benefits of SketchUp and 3D models - software for specifiers

Have a quick browse through the computers at any architecture practice today (without getting thrown out) and you'll surely come across the programs Autodesk Revit, AutoCAD or ArchiCAD.

Synonymous with computer-aided design (CAD) and Building Information Modelling (BIM), which is the digital representation of the physical and functional characteristics of a project, these systems are the virtual cornerstone of buildings; a shared knowledge resource for information about a facility.

So where does SketchUp, a 3D modelling software that claims to be the "antidote to complicated, expensive CAD software", fit in?

SketchUp was originally developed by startup company @Last Software in 1999 as a general-purpose 3D content creation tool, envisioned as a program that would allow design professionals to emulate the feel and freedom of working with pen and paper.

The idea was that if architects, designers, builders, makers and engineers were not unnecessarily bogged down by figuring out how to work the interface, they could focus on what they could create with it.

Attracted to its Google Maps plugin, Google bought the program in 2006. Under the hands of the internet search giant, SketchUp grew in size and scope, so that by 2012 – the time of its acquisition by surveying and navigation equipment company Trimble – it had approximately two million active users every week.

**https://www.youtube.com/watch?feature=player_embedded&v=jb23enMOHyc**

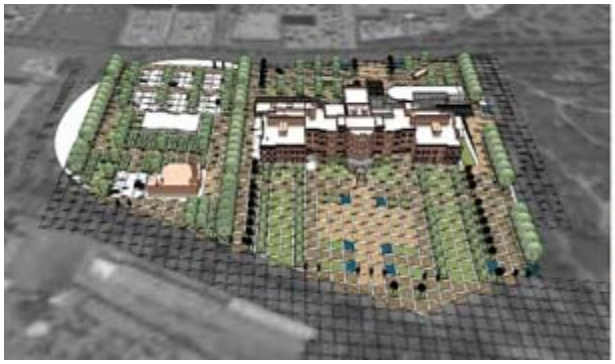
Today the latest version of the 3D modelling platform, SketchUp 2013, features various capabilities and tools that allow users to explore, modify and share design ideas in 3D, import CAD plans and photos, and even develop communication and planning deliverables.

But, despite the improvements and changes, the core of the program is unchanged: simplicity and accessibility remain the elements that set SketchUp apart from other BIM software.

“The beauty is how quick and easy it is to use,” notes Tasman Storey, design principal at Sydney-based Tropman & Tropman Architects, who says the platform is a great initial design tool that can generate a whole series of interiors and exteriors, elevations and fly-throughs.

“You have some ideas and you can put them down on SketchUp in conjunction with some AutoCAD drawings. You can add to it quite quickly, and if you’ve got the skill to apply a render, within hours you can have the design solve.

“It’s one of those programs that you can start off and add to your knowledge as you work on it quite easily. People who can’t draw quite well, or are unsure of what their building is going to look like, can also fall back on something like SketchUp.”



*Al Hamra Palace, or the Red Palace by Tropman & Tropman Architects. The design was created with SketchUp Pro.*

Intuitive and easy to use, SketchUp does not require the skills and learning time needed of most other programs.

**CLICK, SAVE, SPECIFY: BENEFITS OF 3D MODEL LIBRARIES**

Balancing SketchUp’s design tool is the Trimble SketchUp 3D warehouse, an online repository where users can create, find and share collections of 3D models.

Promoting collaboration between users, the website is currently operated by Google and not only includes 3D trees and cars, 3D buildings that are geo-located, and 3D people to inhabit these buildings, but also encompasses collections of ‘real’ products – fromFisher & Paykel fridges to Alucobond wall panel systems.

Ford Center is a multi-purpose arena in downtown Evansville, Indiana. The model is available on the Trimble 3D Warehouse, and has received 5362 downloads.

However, the SketchUp 3D warehouse is not the only online library available, particularly when it comes to building products.

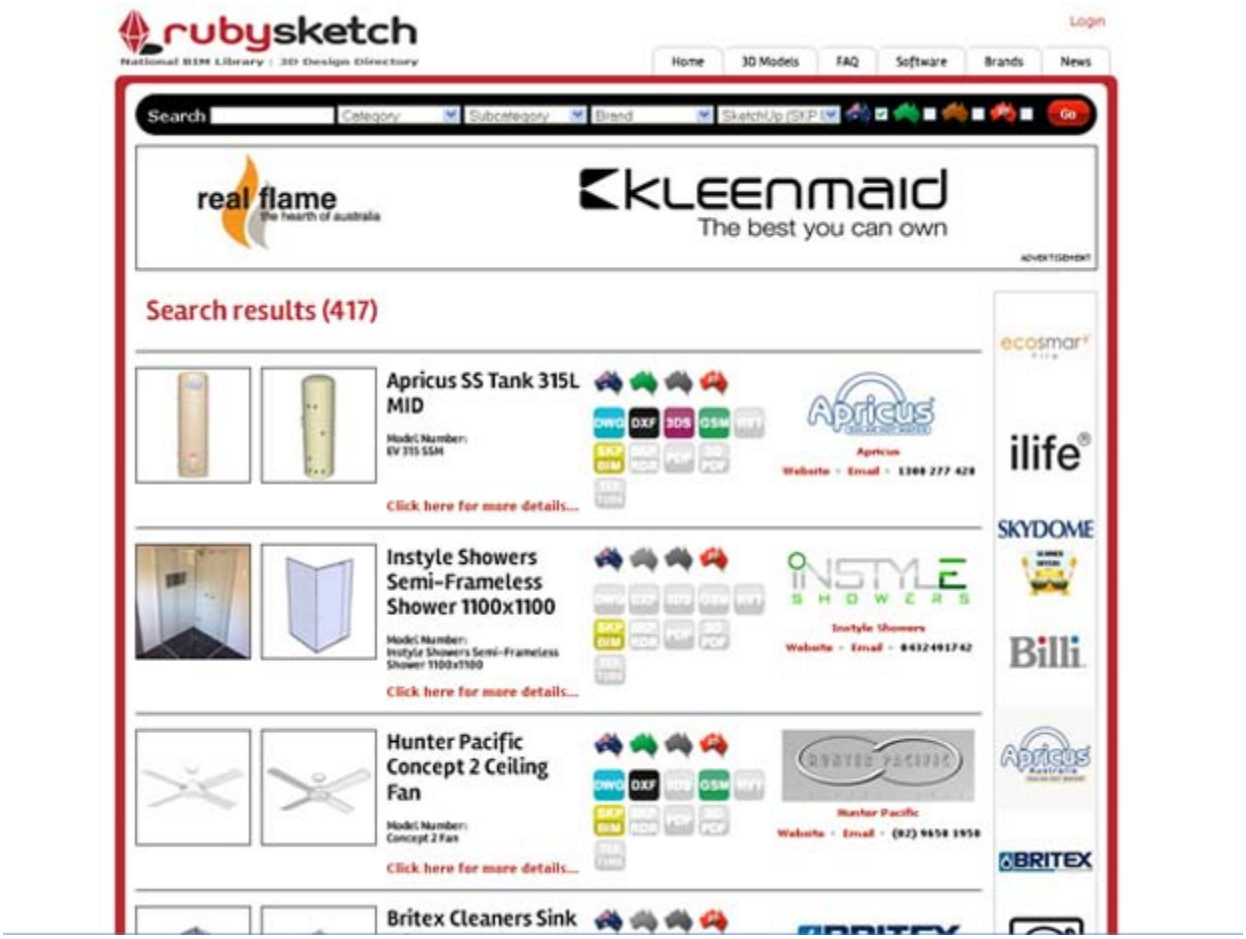
Probably the biggest multi-format BIM 'supermarket' in Australia is RubySketch, which does not host generic representations, but works directly with Australian product manufacturers to draw and add products to www.rubysketch.com.

"We will do research on a company and make an informed decision on how the product is related to the architect, in what context the model will be used, and how it will be searched," says Andrew Dwight, CEO of RubySketch and AAD Build.

"We then collaborate with the product manufacturer to find out definable characteristics of the product, for instance, sustainability, visual properties, costs and weight of the product and other pieces of crucial information."

Each downloadable model on the website contains specific information about the product.

Currently, architectural firms ranging from small 2-3 team operations to larger practices such as Suters and Cottee Parker utilise RubySketch. According to Dwight, the larger companies tend to distribute the downloaded models via their BIM managers and through to their staff. This means that in many cases, one model download from RubySketch can lead to over 150 architects specifying that product when on multiple jobs.




The main benefit that RubySketch offers is therefore similar to the advantages of SketchUp's 3D library or a real-life centralised warehouse: easy access to a whole host of products.

With RubySketch, there is no need to scan the web for 3D content as it is all in one spot. All specifiers need to do is go to the website, search through the models by typing the name of the product or item code, choose a preferred model and download that model in their favourite software format.

Full rooms complete with tiles, floors, PC items and fixtures can also be downloaded.

"Having this type of information freely available to the design and construction community in one location, with all products having built in contact information, basically saves the architect time researching, the builder time sourcing, the estimator time quantifying, and the client trying to figure out what it is they are getting into before they actually on to construction phase, where cost comes into play," explains Dwight.

Within the design process, this translates to having 3D models of potential products that could be used. When inserted on to SketchUp, architects and builders will be able to quickly visualise how a product will look like.

This ability to preview how a product will fit and perform in the context of a project can minimise potential design re-work. It also helps the project team gain a deeper understanding of how the products and design will work together.

3D libraries like RubySketch are therefore essential in bridging the gap between architects and manufacturers during the design phase.

"From our point of view as a manufacturer, we realise that the architecture industry is using these tools, and we want to make sure we have the resources available for them," says Richard Michael of Steel Select, which has now been integrated into Bluescope Steel's new website, steel.com.au.

“We make components and we make products for a range of software, but we leave the choice up to the architect and designer on how they want to create their models and building designs.”

Al Hamra Palace, or the Red Palace by Tropman & Tropman Architects. The design was created with SketchUp Pro. Image: Tropman Architects.

Bluescope is one manufacturer that jumped on the SketchUp 3D products bandwagon early on, providing free downloads of its roofing products on its website, including both renders (flat colour swatches) and textures (roofing and walling profiles).

However, while these online libraries allow architects and designers to ‘test’ and compare their design ideas before moving on to construction, the burning question of whether these products actually get specified in real life remains.

# GKWare Door Maker Plugin for Sketchup

Gary Kernan, having huge experience over 15 years for creating cabinet and curved staircase building, has developed Door Maker plugin for sketchup. The plugin is compatible with SketchUp 7, SketchUp 8, SketchUp 2013 and available in Chinese, English, French, Russian.

Door Maker plugin for sketchup facilitates the sketchup users to produce parametrically dialed cabinet door components for various types of cabinets containing diversified sizes, styles and textures. The supplementary textures can also be added. The users can effortlessly settle these components inside their design.

There exist 7 types of styles that range from plain, shaker, square, arch, cathedral, double arch and double cathedral.

The users can select 15 types of wood grain textures. There prevails an Image folder having textures as well as a texture.txt file. With the help of the proper naming conventions, just include both a horizontal and a vertical texture in jpg format. As for example maple_hor.jpg and maple_ver.jpg and provide a single entry in the textures.txt file. The users will also be able to reschedule the order of the textures in the textures.txt file.

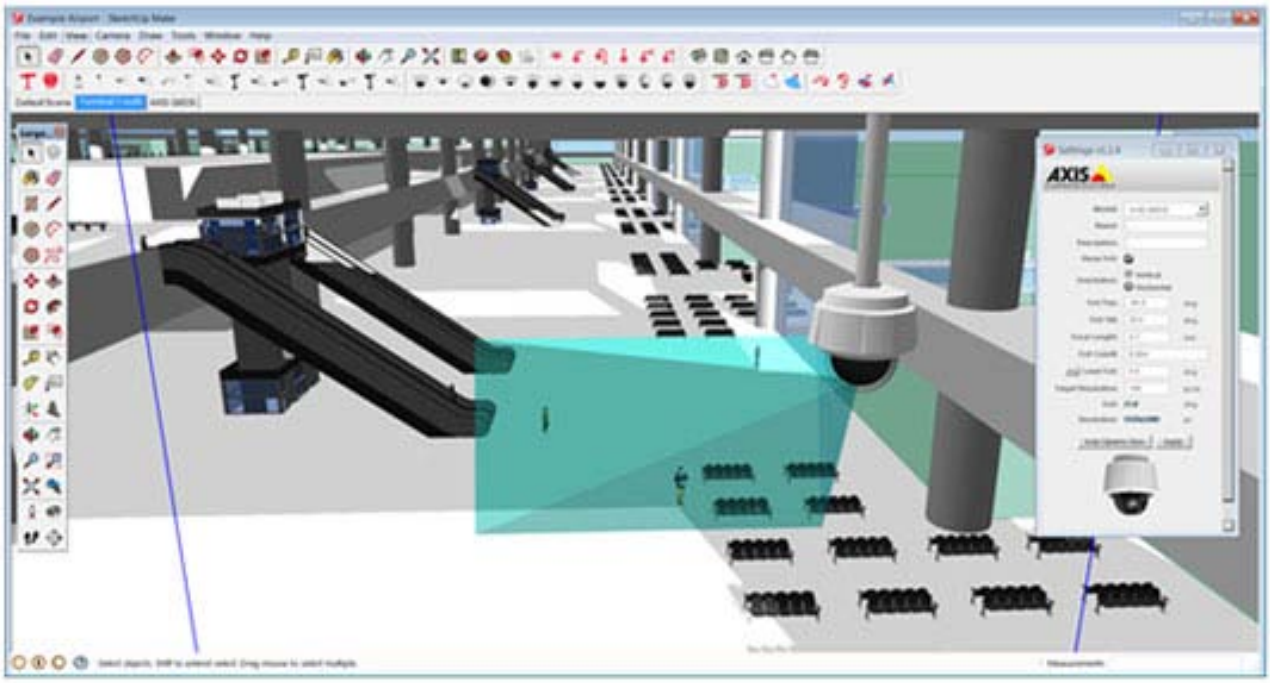
**Follow the below mentioned steps for generating doors:**

- *One is European style cabinets. The users can apply it with a single click. Put up the size concerning the door and door gap as per your requirements. The door is included and placed to the right by the gap amount.*
- *The second step is click and drag or click and type in the width. For this purpose, the lower left hand corner of the door is placed accurately where you click.*

**Downloadable link**

https://www.youtube.com/watch?feature=player_embedded&v=vBeug0CTA7k

# Axis introduces interactive camera visualization tool for sketchup 3D CAD software




*With the new Axis Camera Extension for SketchUp, users can select Axis Network Cameras and insert them into 3D models of buildings, see film.*

With the Axis Camera Extension for the Sketchup 3D CAD software, system designers can conveniently select Axis Network Cameras and insert them into 3D models of buildings. Different mounting positions and view angles can be evaluated through interactive camera views showing the respective camera coverage areas. Users can pan, tilt and zoom the cameras to determine the optimal setup for the best video surveillance coverage.

Axis Communications, the world leader in network video, today introduces the Axis Camera Extension for SketchUp providing interactive 3D models of Axis Network Cameras to aid in the planning and design of video surveillance systems. Users can place cameras directly into CAD building plans and visualize the areas the cameras will cover.

The new SketchUp extension from Axis allows users to see exactly how the cameras fit into the building layout and to easily spot if camera views are obstructed by columns or walls. This effectively reduces the risk of unexpected blind spots when planning and designing video surveillance systems.

Axis Network Cameras can be conveniently selected from the SketchUp toolbar allowing users to compare and evaluate different camera models as well as to determine the optimal camera mounting positions. Users can pan, tilt and zoom the cameras to adjust the field of view and define the optimal camera settings.

“SketchUp is a popular and easy-to-use 3D CAD software for security system design. With the new Axis Camera Extension, system integrators can use SketchUp to place Axis Network Cameras into virtual buildings to precisely plan camera view angles and coverage,” said Peter Friberg, Director of System and Services, Axis Communications. “As SketchUp integrates with Google Maps it makes it easy when working on city surveillance or critical infrastructure projects to get a good overview of the environment where the cameras are placed. The Axis Camera Extension allows system integrators to find the optimal camera model and settings for a given mounting position and significantly streamlines the overall planning and design process for video surveillance systems.”

Axis' broad portfolio of video surveillance system design tools also includes Axis Coverage Shapes for Microsoft Visio and Axis Camera Families for Autodesk Revit.

The Axis Camera Extension for SketchUp is available today and can be downloaded free of charge from axis.com/tools. The Axis Camera Extension for SketchUp is initially available in English, more languages (French, Italian, German, Spanish, Russian, Japanese, Korean, Brazilian Portuguese and Chinese) will be added in Q2, 2014.

Sketchup is a trademark of Trimble Navigation Limited.

# Autodesk launches Cloud-Supported 3D Character Generator

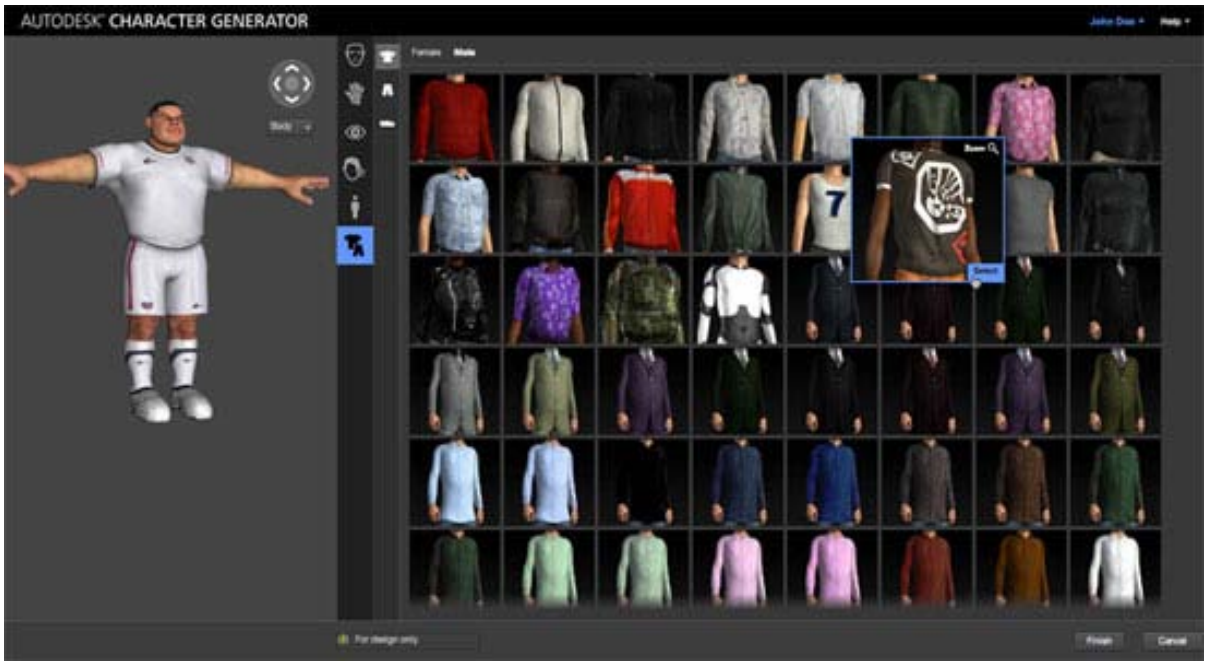
Autodesk adds a new wing to its cloud based application by introducing Character Generator. It is a user-friendly web-based application that facilitates the users to produce customized, improvised and animatable 3D characters virtually.

After completing the design, the users can utilize the characters for a wide array of applications like populating game scenes, mastering animation and modeling, producing models for pre-visualization, design visualization and lots other. Character Generator necessitates five cloud credits per high-resolution character download in favor of clients on Autodesk subscription or rental plans. Students and educators can avail the product at free of cost. Besides, anybody can also avail a lighter version of the application at free of cost for generating low-resolution and crowd characters.

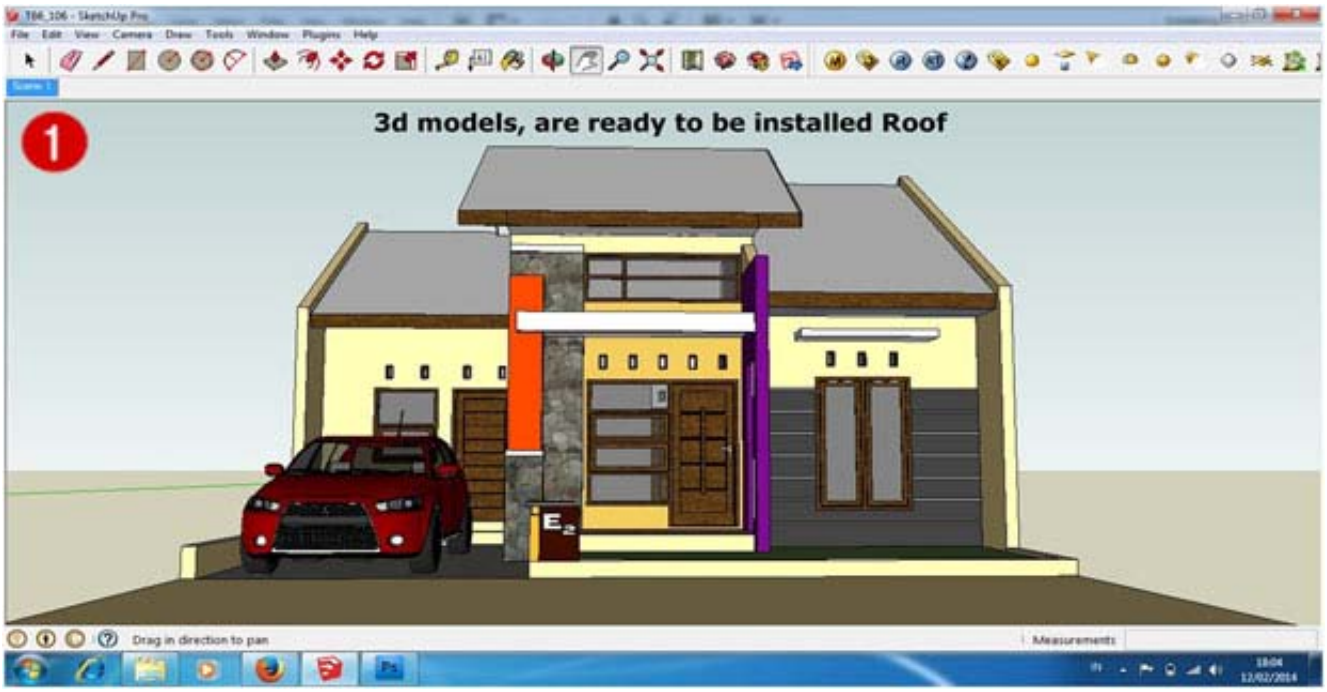
Character Generator was formed following customer's opinion incorporated during the development, and consists of a powerful library of pre-built male, female and creature characters. In order to produce exceptional characters, the users can apply perceptive slider and selection functions by mixing and morphing the physical characteristics of the pre-built models which range from body traits to facial features, skin color, hair styles, clothing and more. Once completed, the users will be able to leverage cloud credits for exporting their 3D works to leading software like Autodesk Maya, Maya LT and 3ds Max for more customization and animation as well as utilizing in game engines like Unity through Autodesk subscription or rental plans.

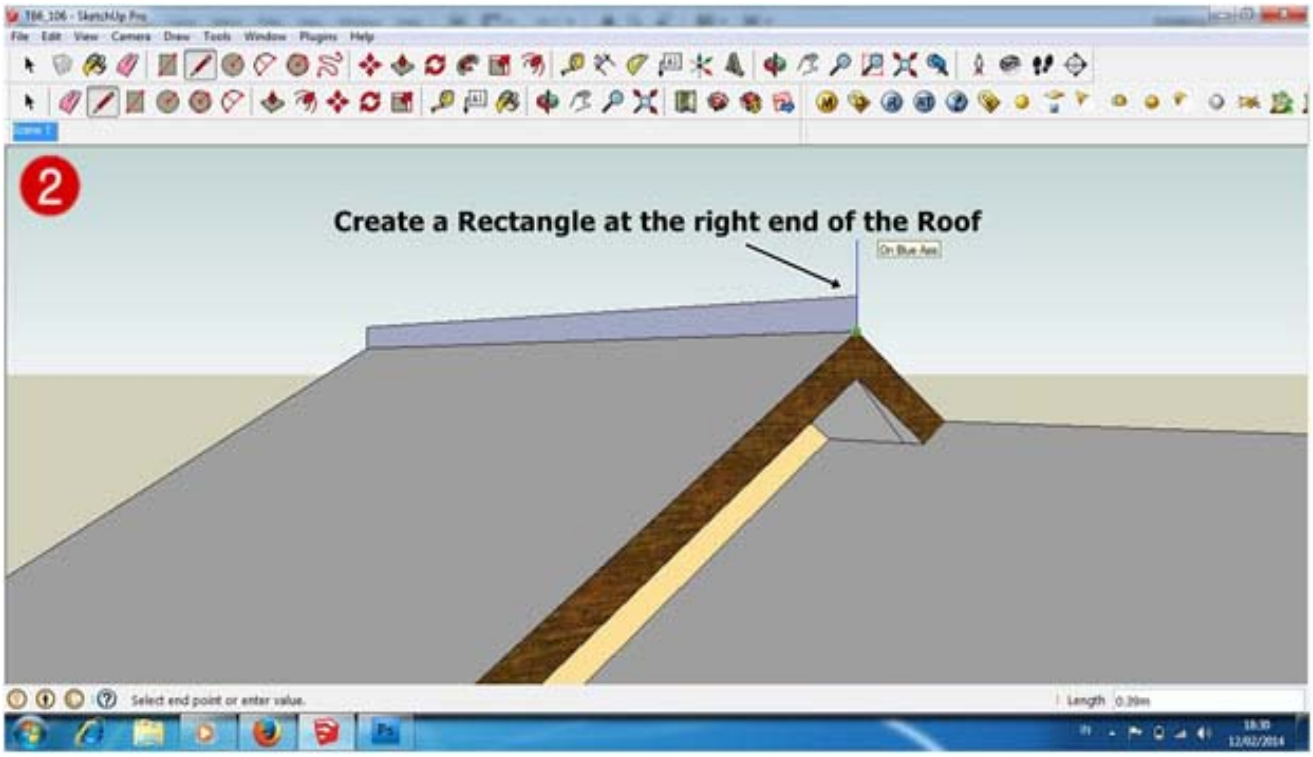
**Character Generator contains the following exclusive features:**

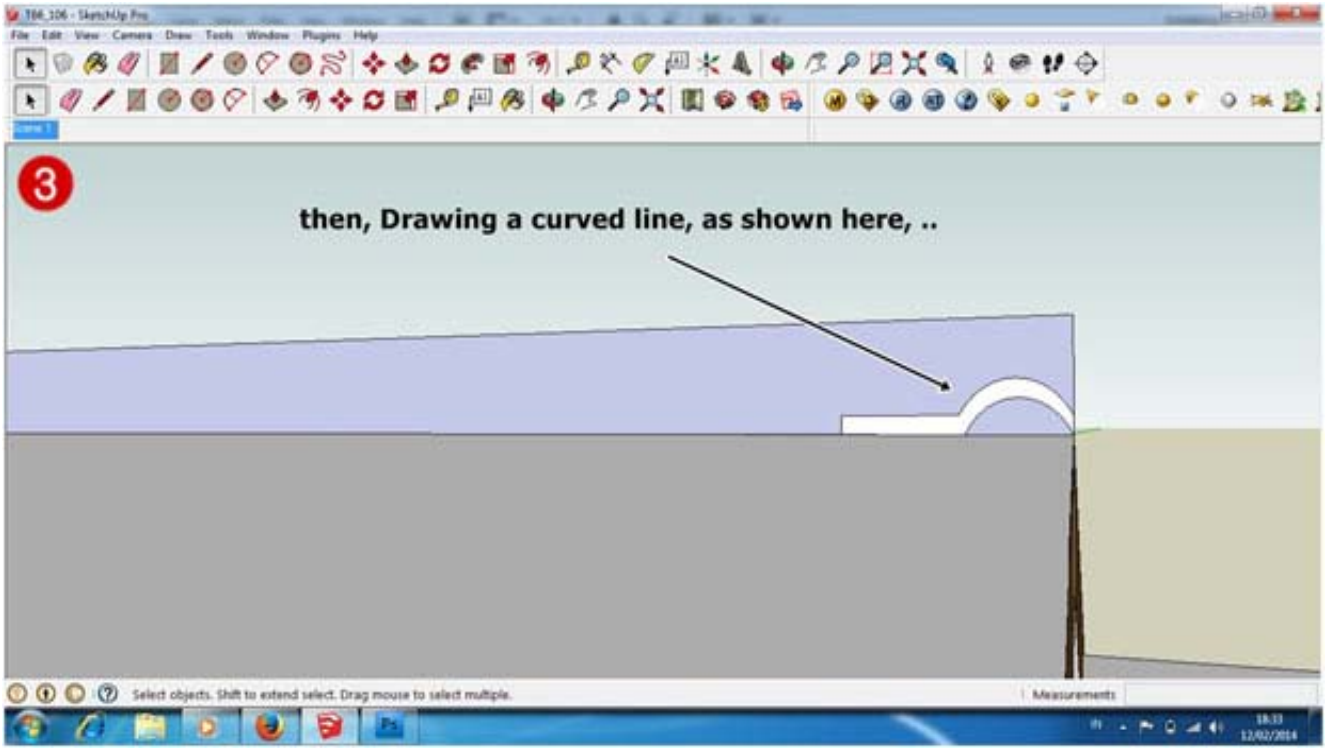
- *A wide-ranging collection of male, female and fantasy characters, by which users will get the ability to merge two dissimilar sources to form an original design.*
- *Select from indefinite virtually collection of skin, eye, hair, clothing and shoes.*
- *Targeted blending options to filter characters for each feature basis.*
- *Any characters can be saved in the cloud and altered in the future as required.*
- *Autodesk subscription and rental customers can get access to a body, bone and blend-shape facial rig collection that is well versed with Autodesk HumanIK middleware to facilitate keyframe, motion-capture or facial animation in Autodesk software.*
- *FBX and Maya publishing options for clients on Autodesk subscription or rental plans.*

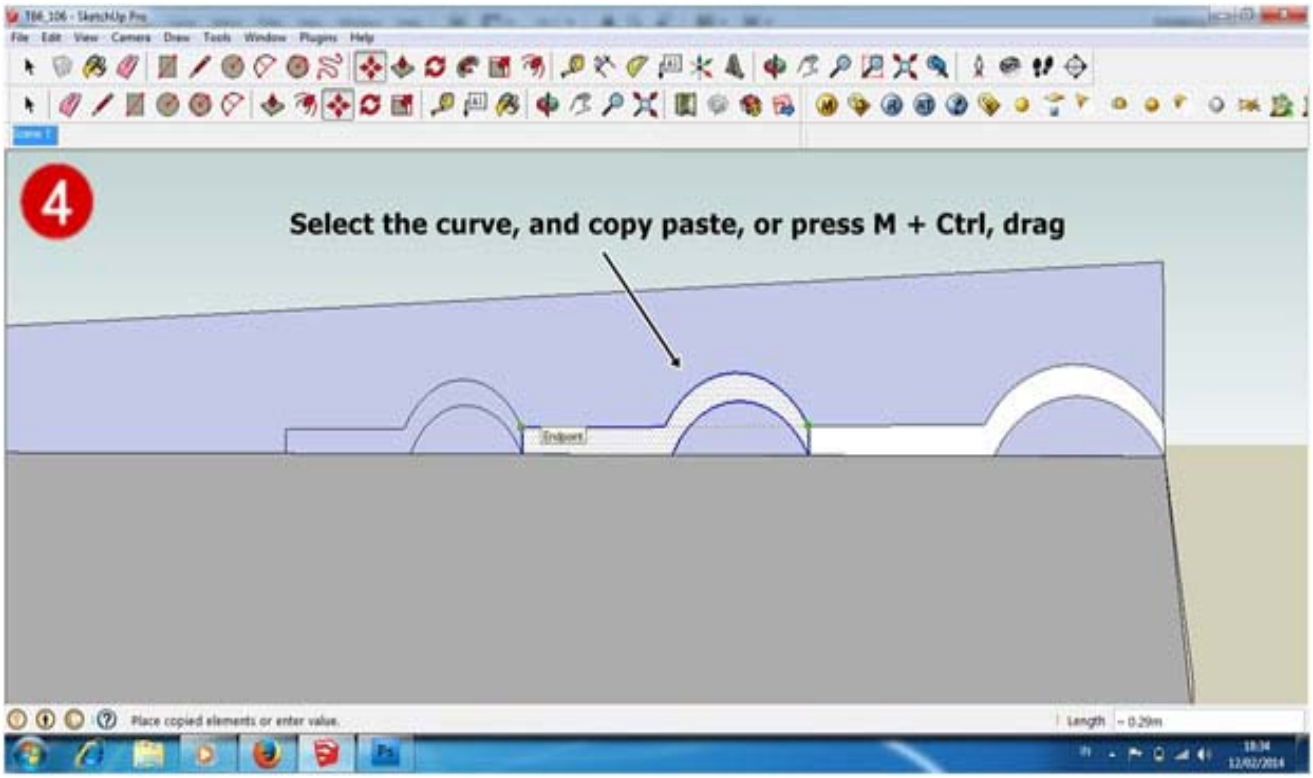


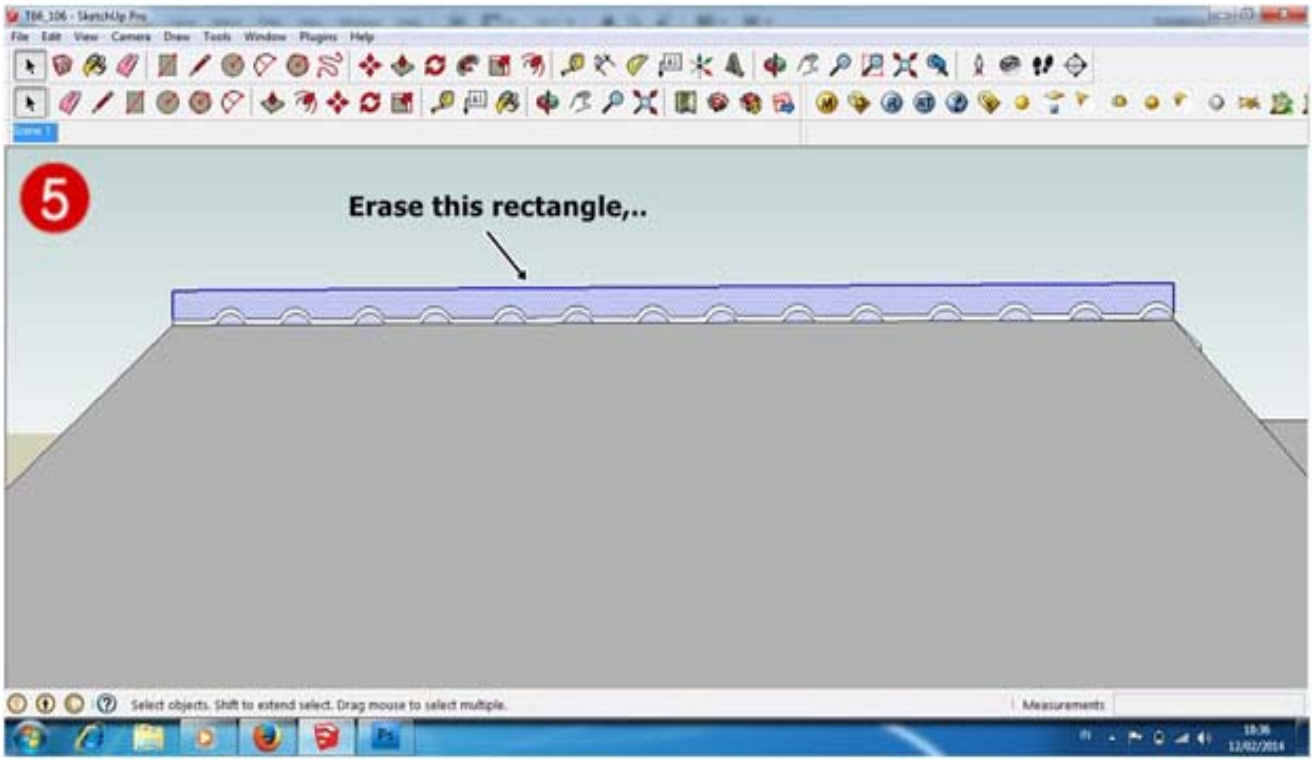
# Make realistic roof in Sketchup

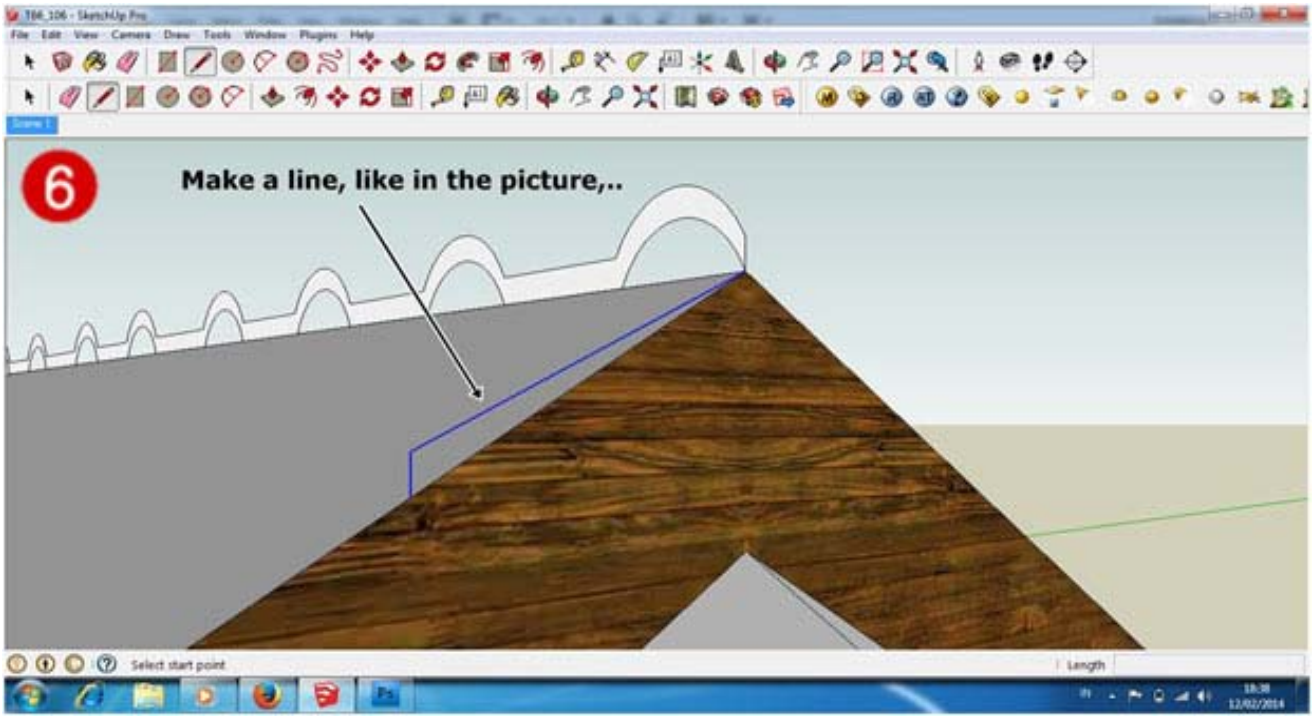


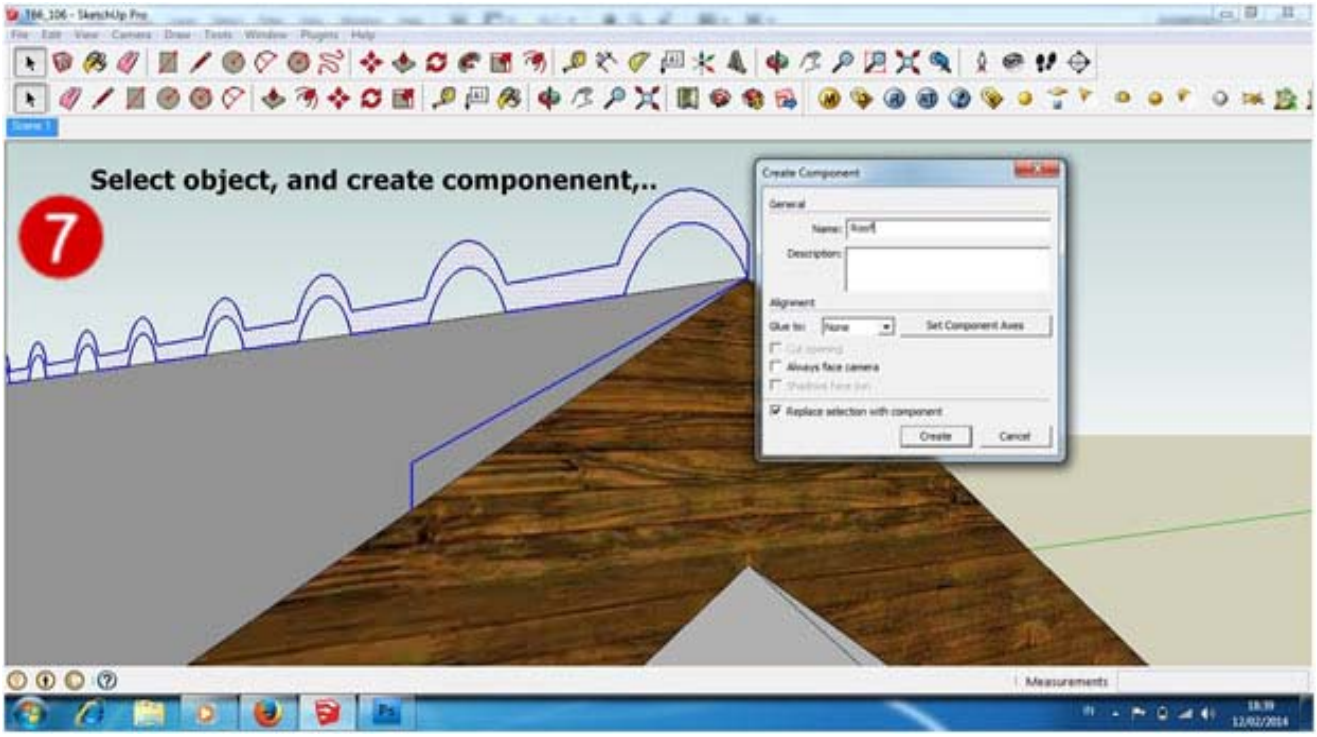

2
Create a Rectangle at the right end of the Roof
On Blue Axis
Select end point or enter value.
Length

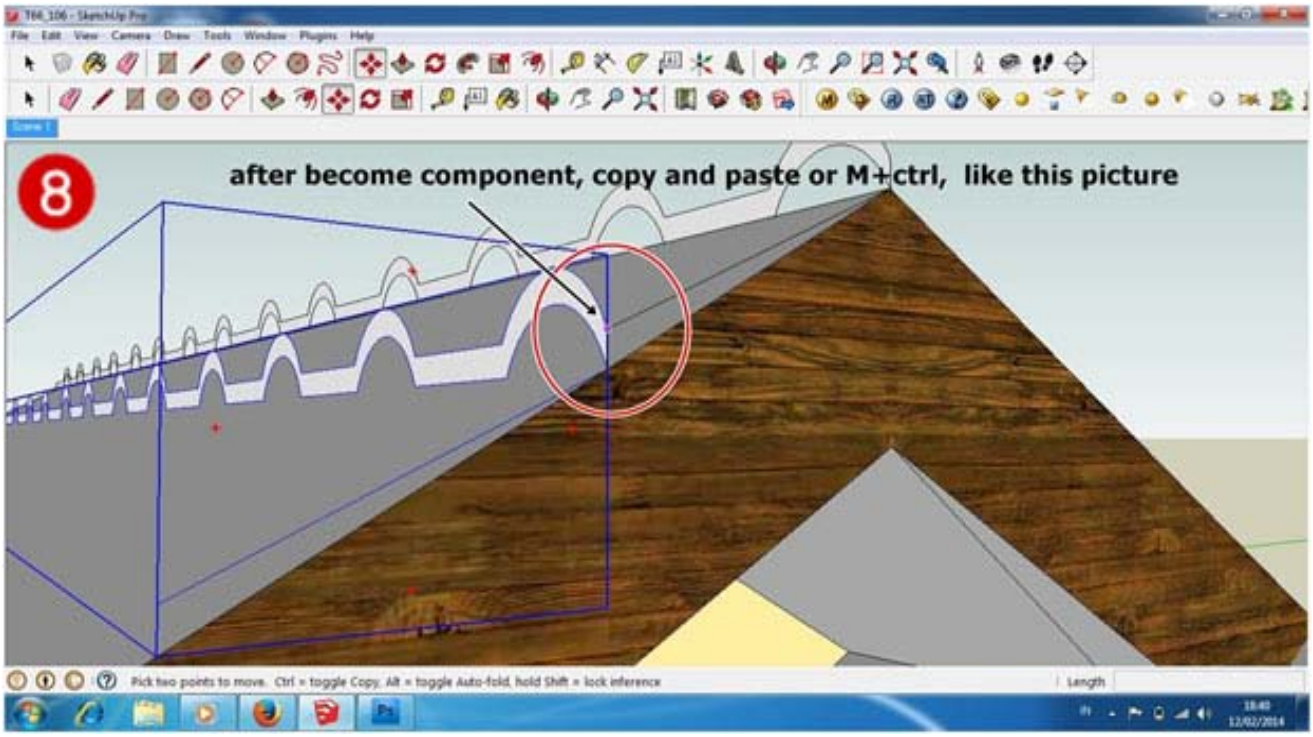

3
then, Drawing a curved line, as shown here, ..
Select objects. Shift to extend select. Drag mouse to select multiple.
Measurements

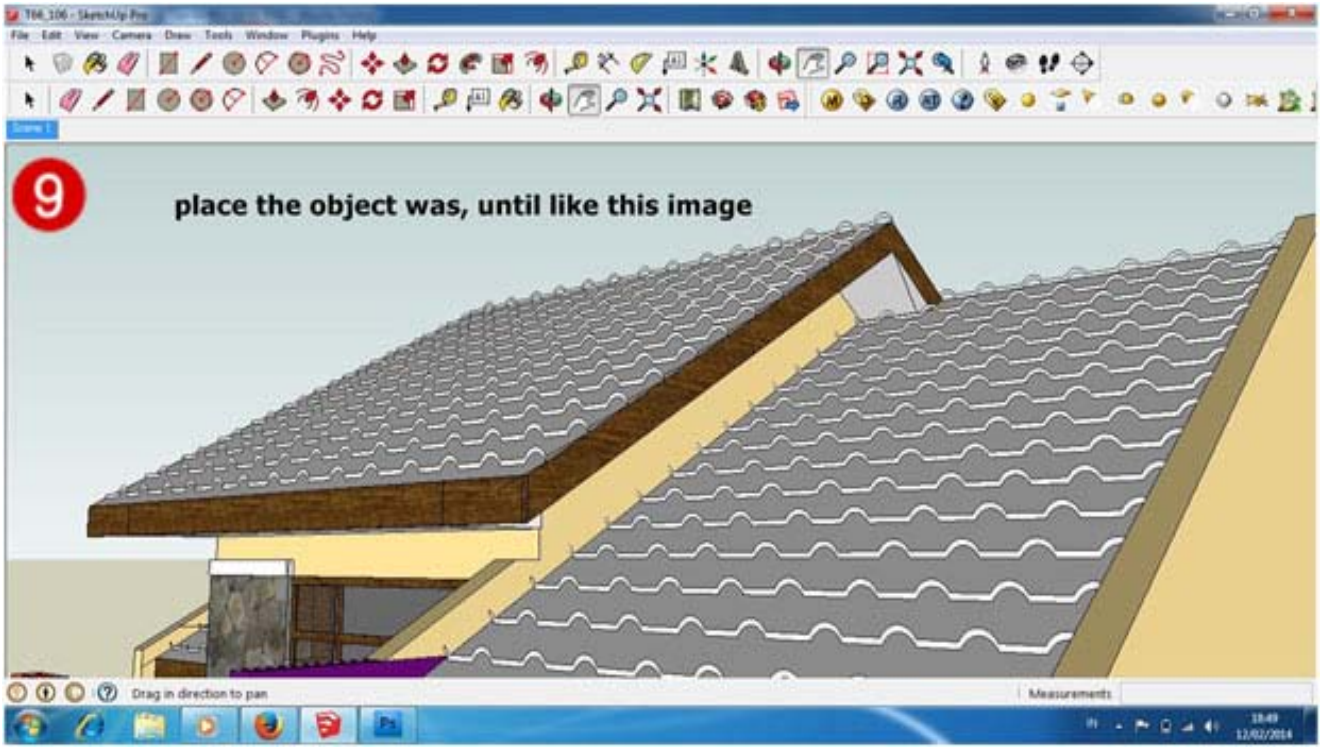

4
Select the curve, and copy paste, or press M + Ctrl, drag
Endpoint
Place copied elements or enter value.
Length ~ 0.29m

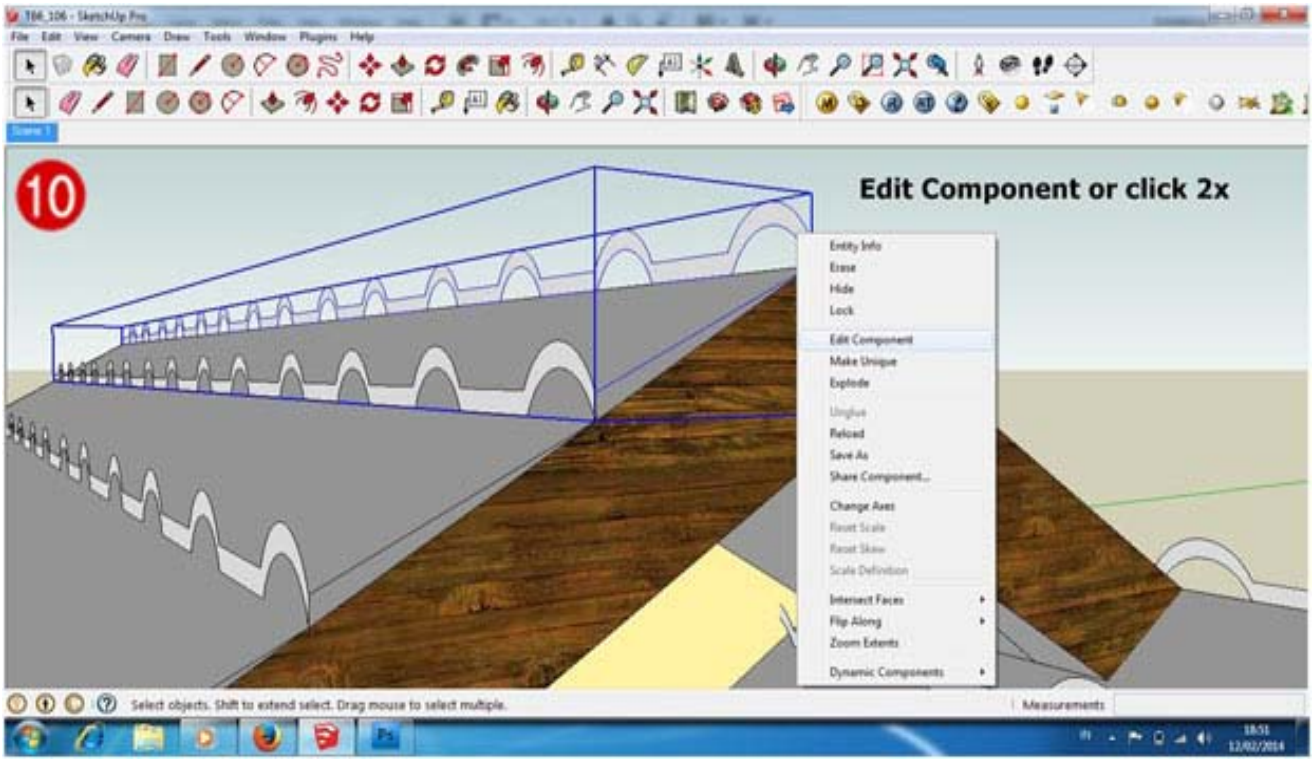

5
Erase this rectangle,..
Select objects. Shift to extend select. Drag mouse to select multiple.
Measurements

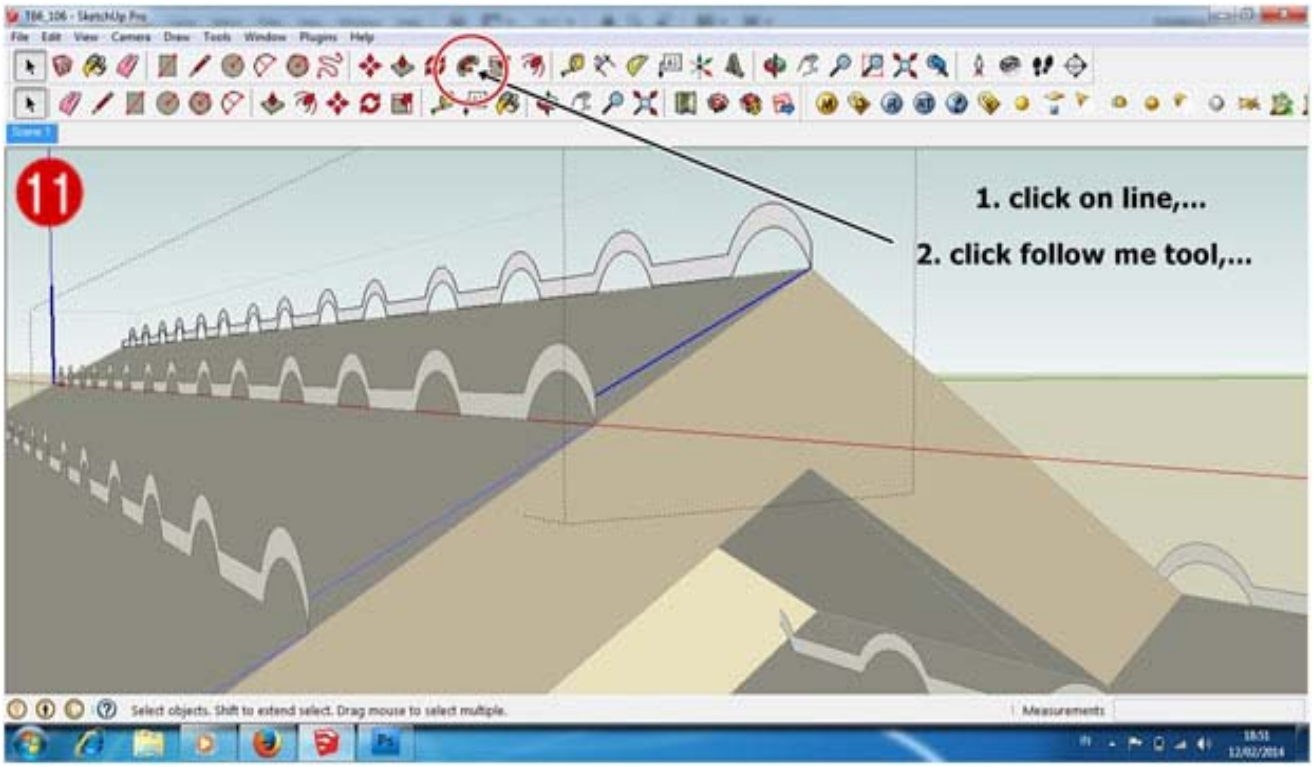

6
Make a line, like in the picture,..
Select start point
Length

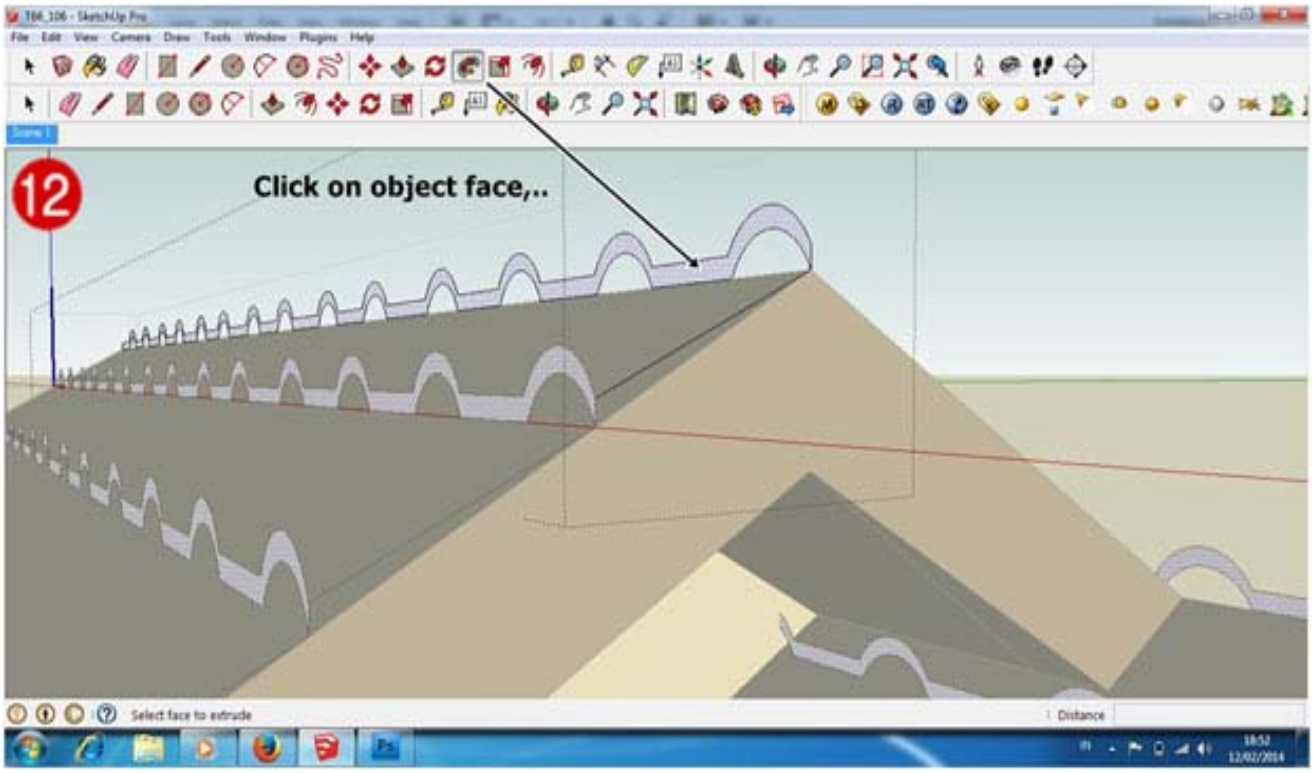

7
Select object, and create componenent,..
Create Component
General
Name:
Description:
Alignment
Glue to:
None
Set Component Axes
Always face camera
Replace selection with component
Create
Cancel
Measurements

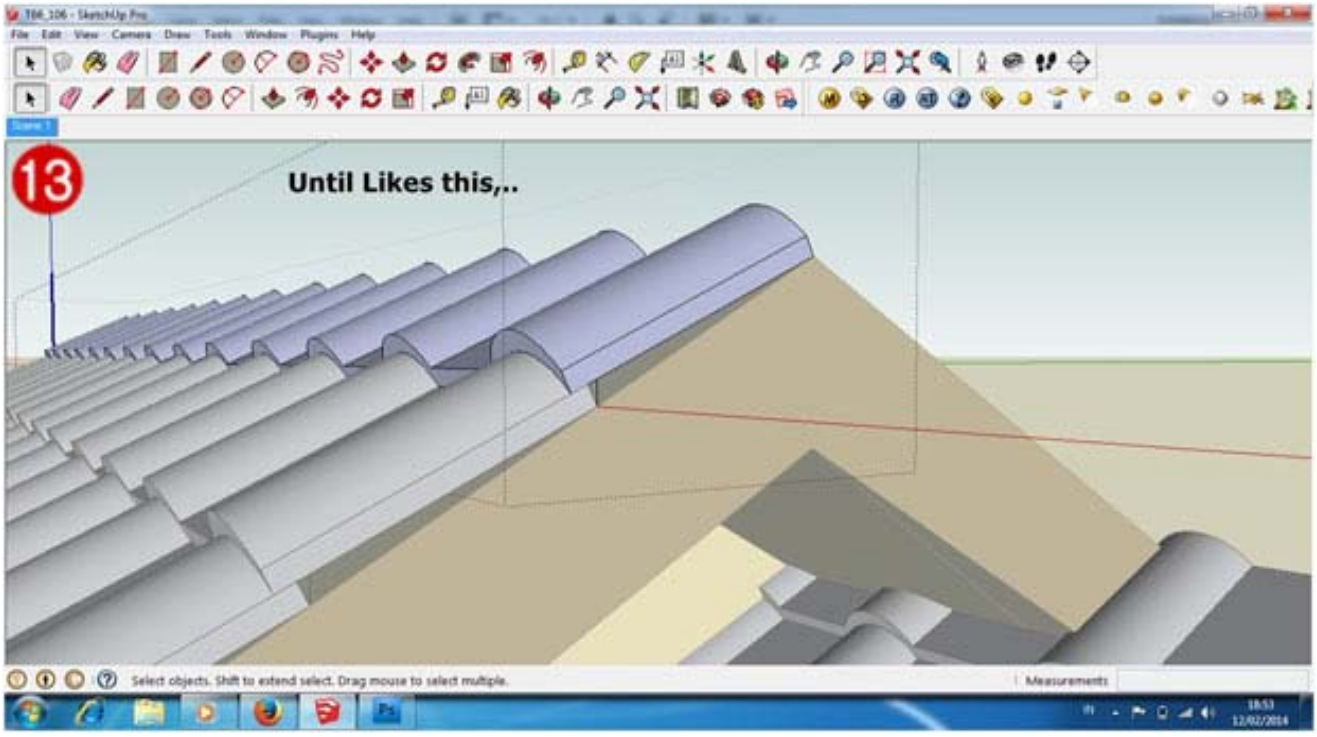

8
after become component, copy and paste or M+ctrl, like this picture
Pick two points to move. Ctrl = toggle Copy; Alt = toggle Auto-fold; hold Shift = lock inference
Length

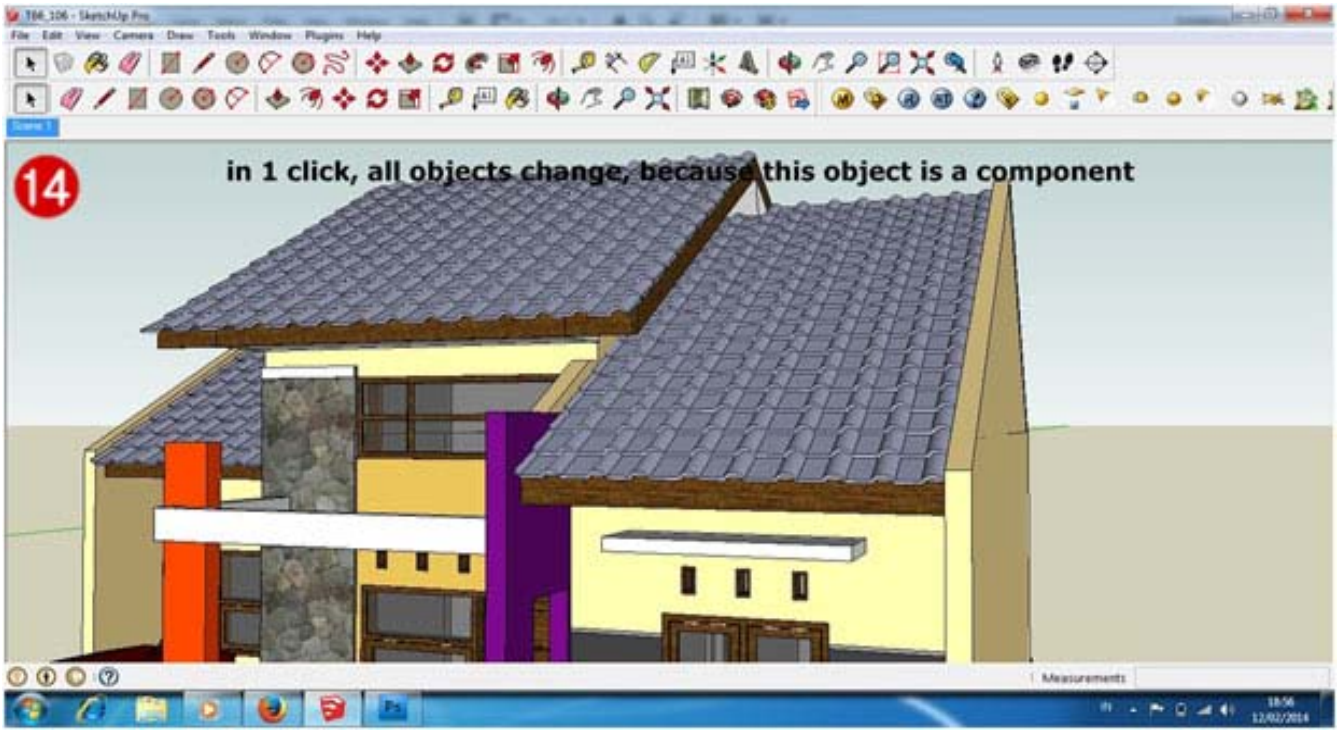

9
place the object was, until like this image
Drag in direction to pan
Measurements

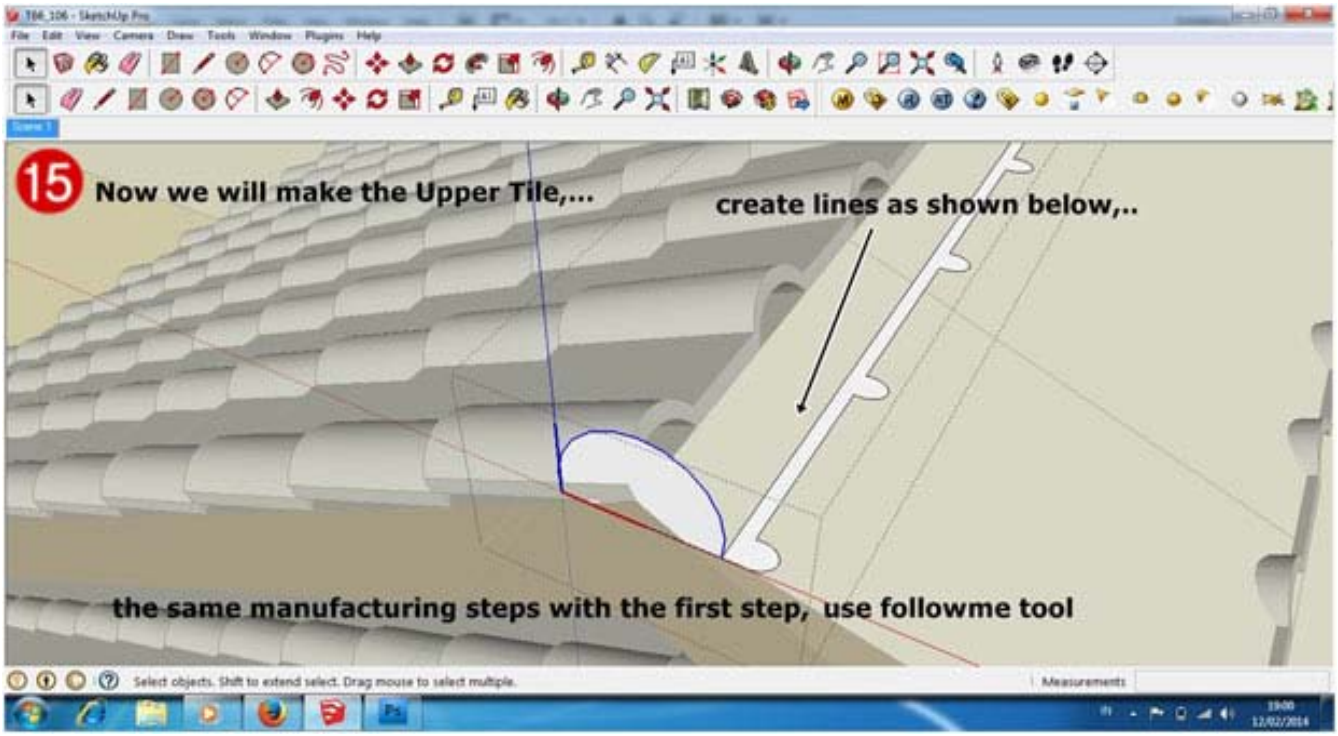

10
Edit Component or click 2x
Entity Info
Erase
Hide
Lock
Edit Component
Make Unique
Explode
Unglue
Reload
Save As
Share Component...
Change Axes
Reset Scale
Reset Skew
Scale Definition
Intersect Faces
Flip Along
Zoom Extents
Dynamic Components
Select objects. Shift to extend select. Drag mouse to select multiple.
Measurements

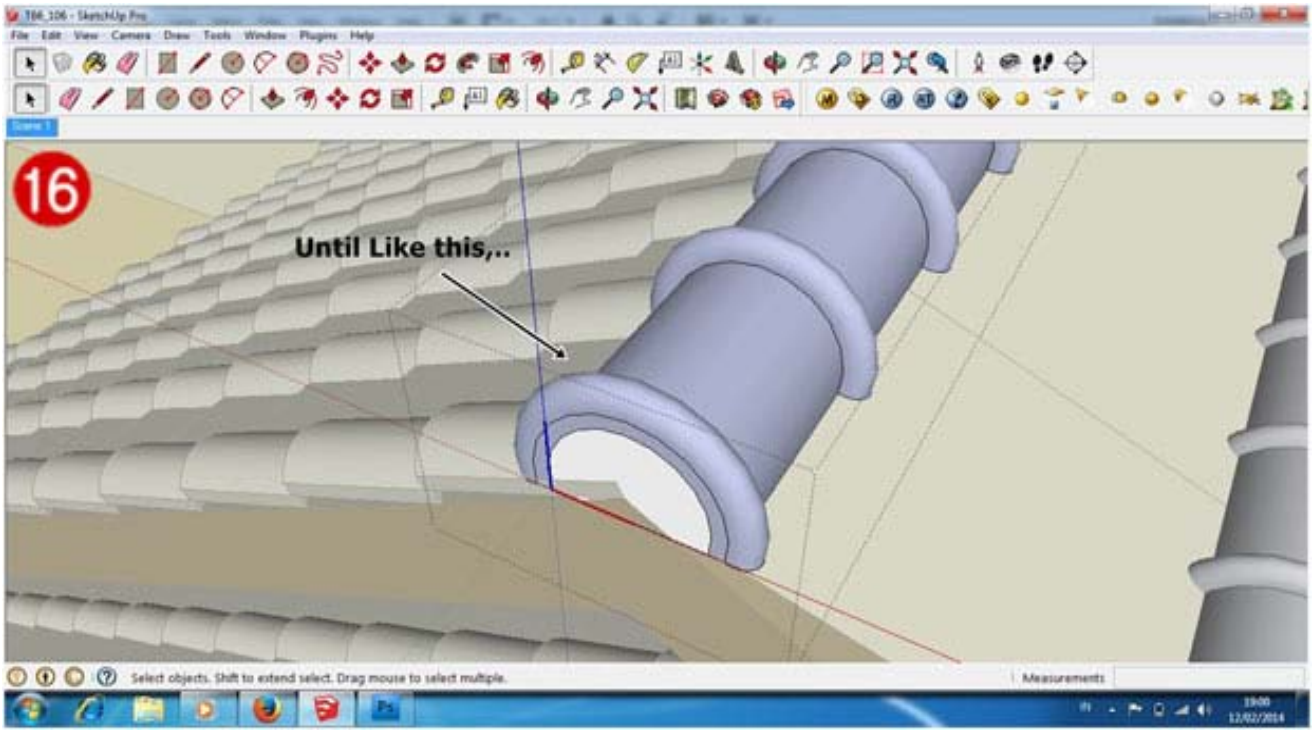

11
1. click on line,...
2. click follow me tool,...
Select objects. Shift to extend select. Drag mouse to select multiple.
Measurements

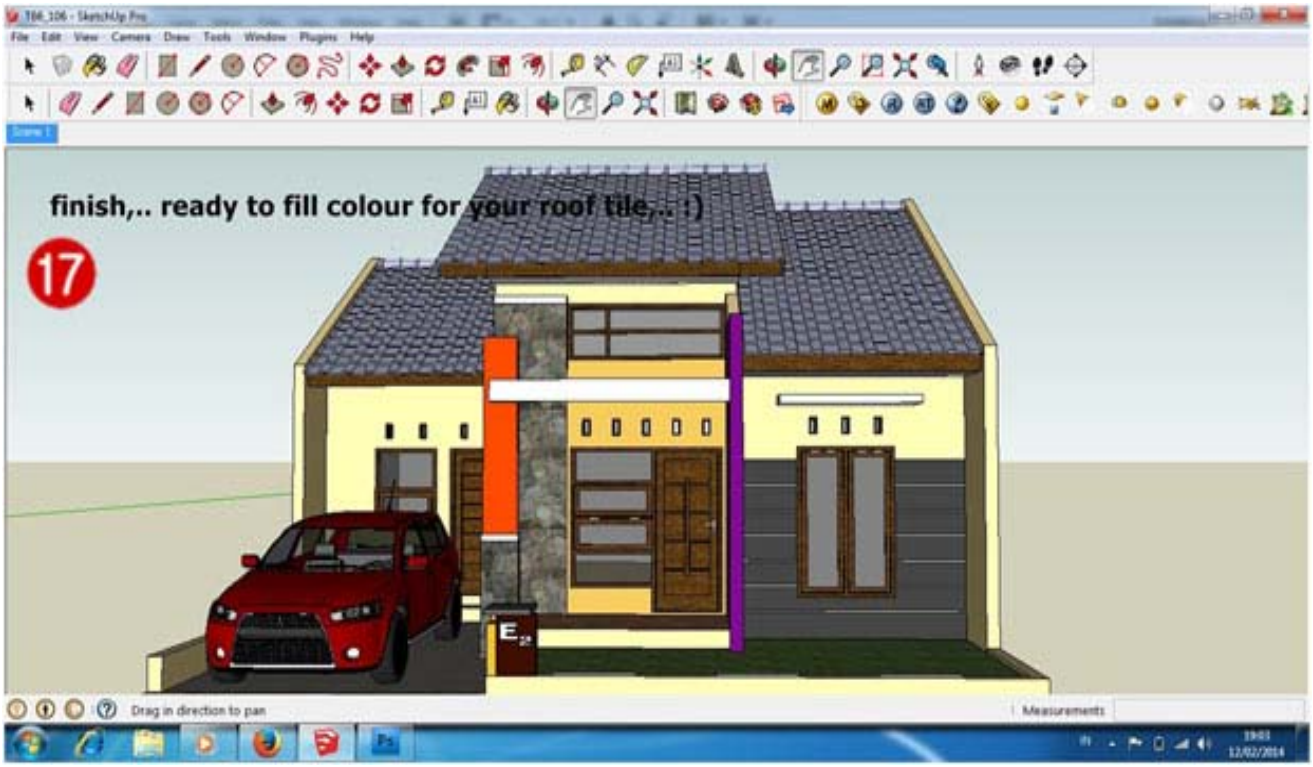

12
Click on object face,..
Select face to extrude
Distance


13
Until Likes this,..
Select objects. Shift to extend select. Drag mouse to select multiple.
Measurements


14
in 1 click, all objects change, because this object is a component

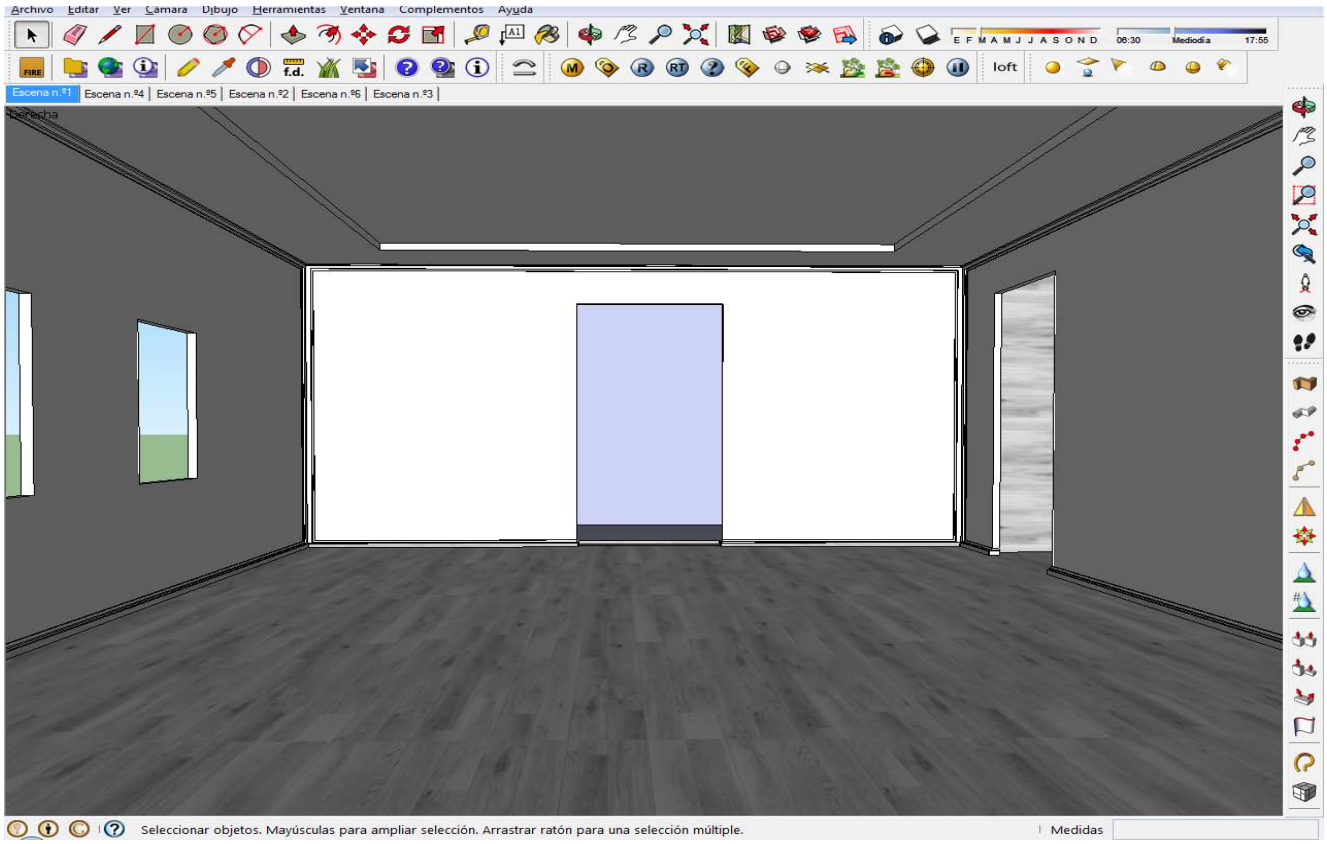

15
Now we will make the Upper Tile,...
create lines as shown below,..
the same manufacturing steps with the first step, use followme tool

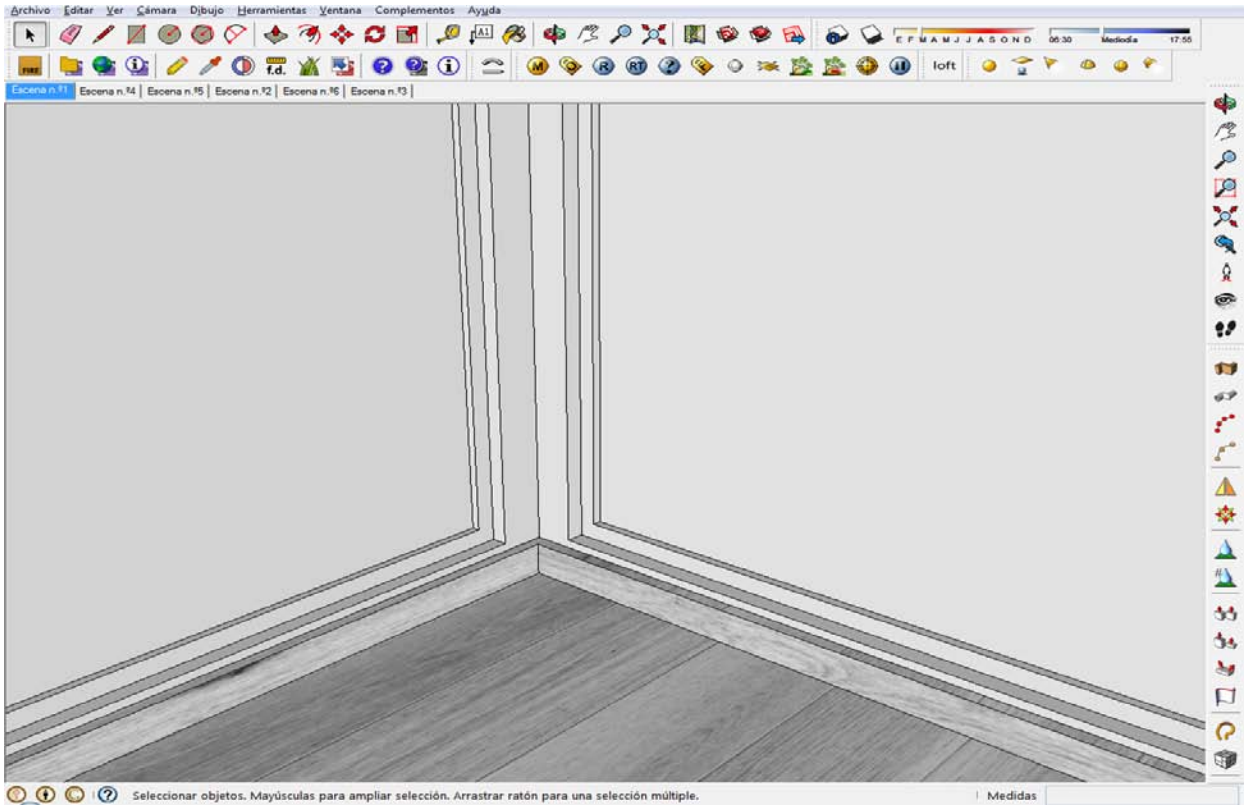

16
Until Like this,..

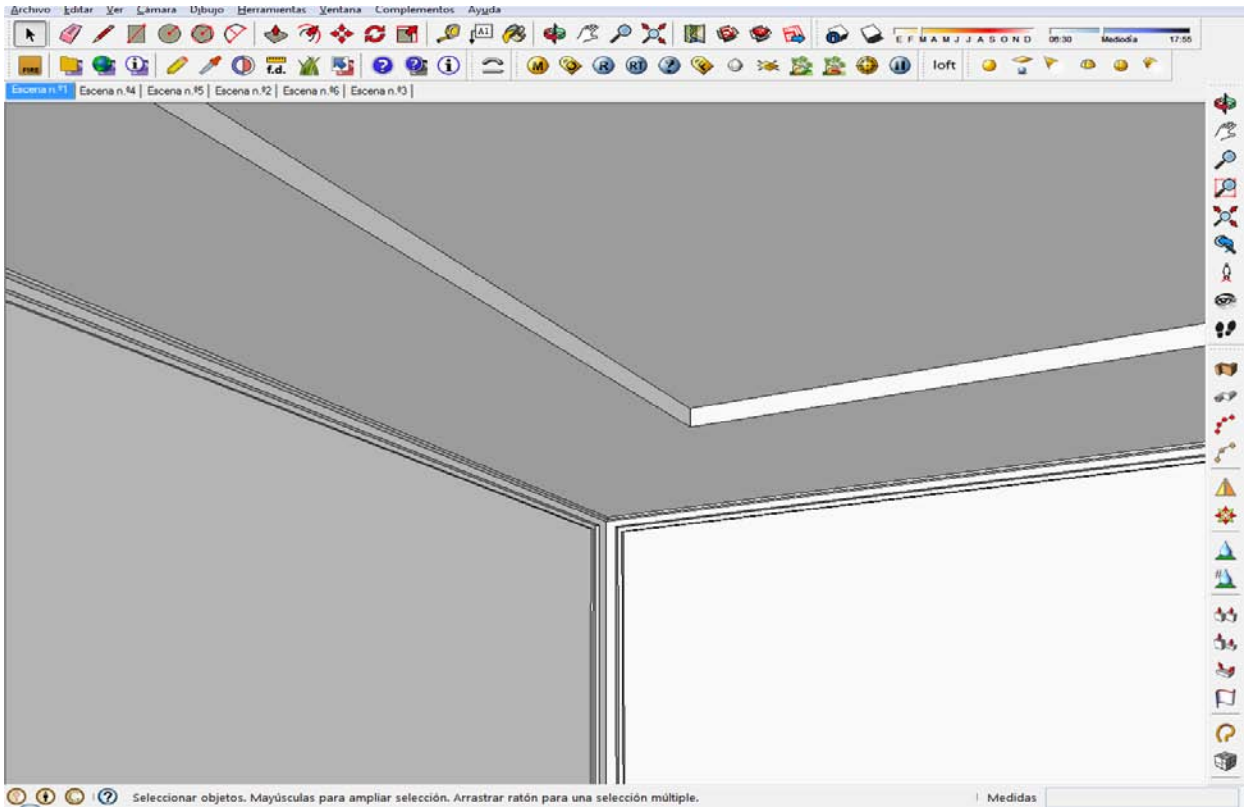

finish,.. ready to fill colour for your roof tile,.. :)
17

# Making of scandinavian interior with Sketchup, Vray and Photoshop

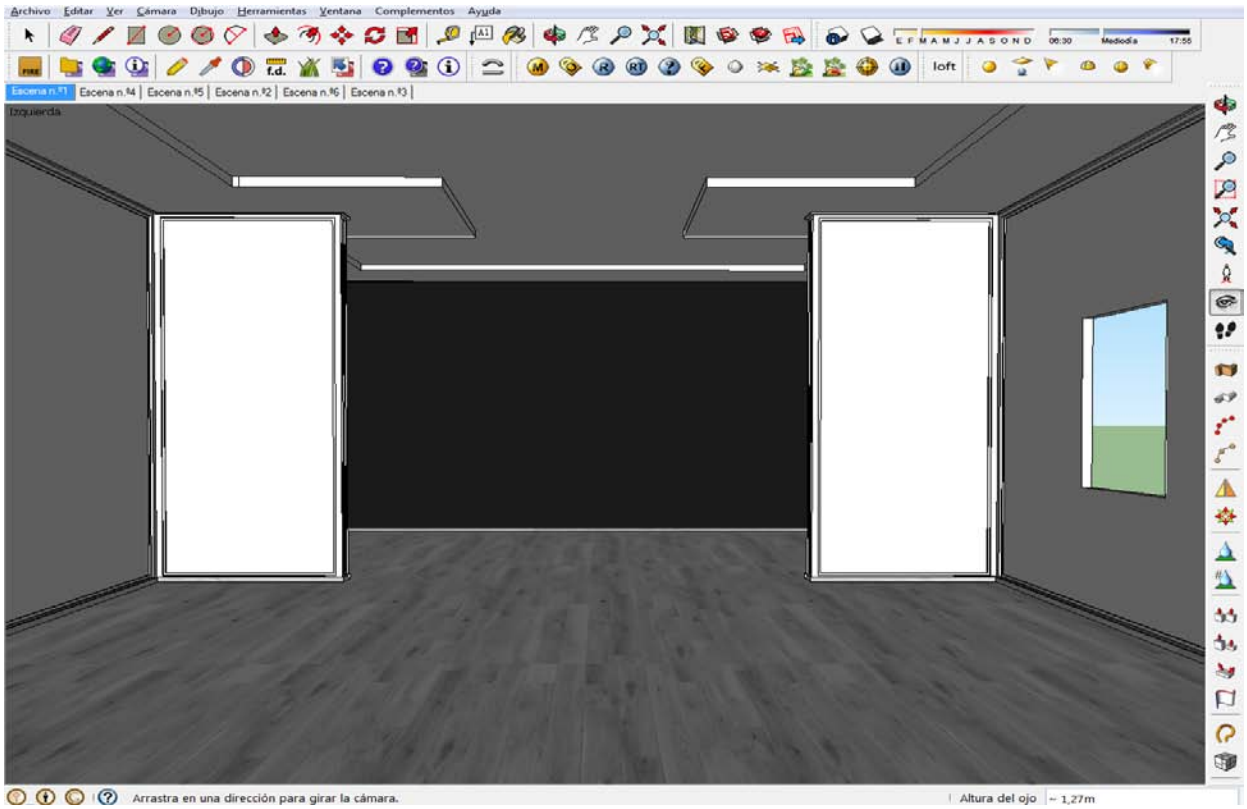
The space was entirely modeled by me; I added details such as moldings to give it that "Scandinavian" touch.



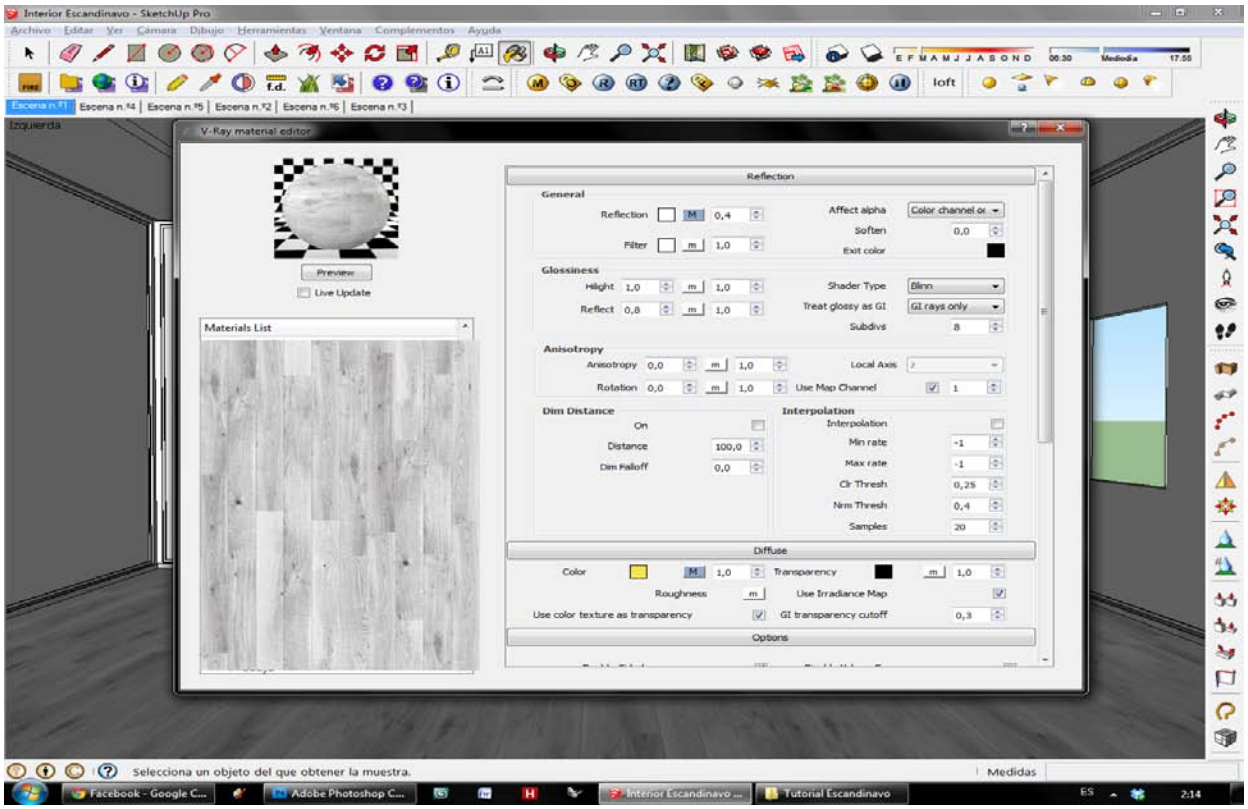


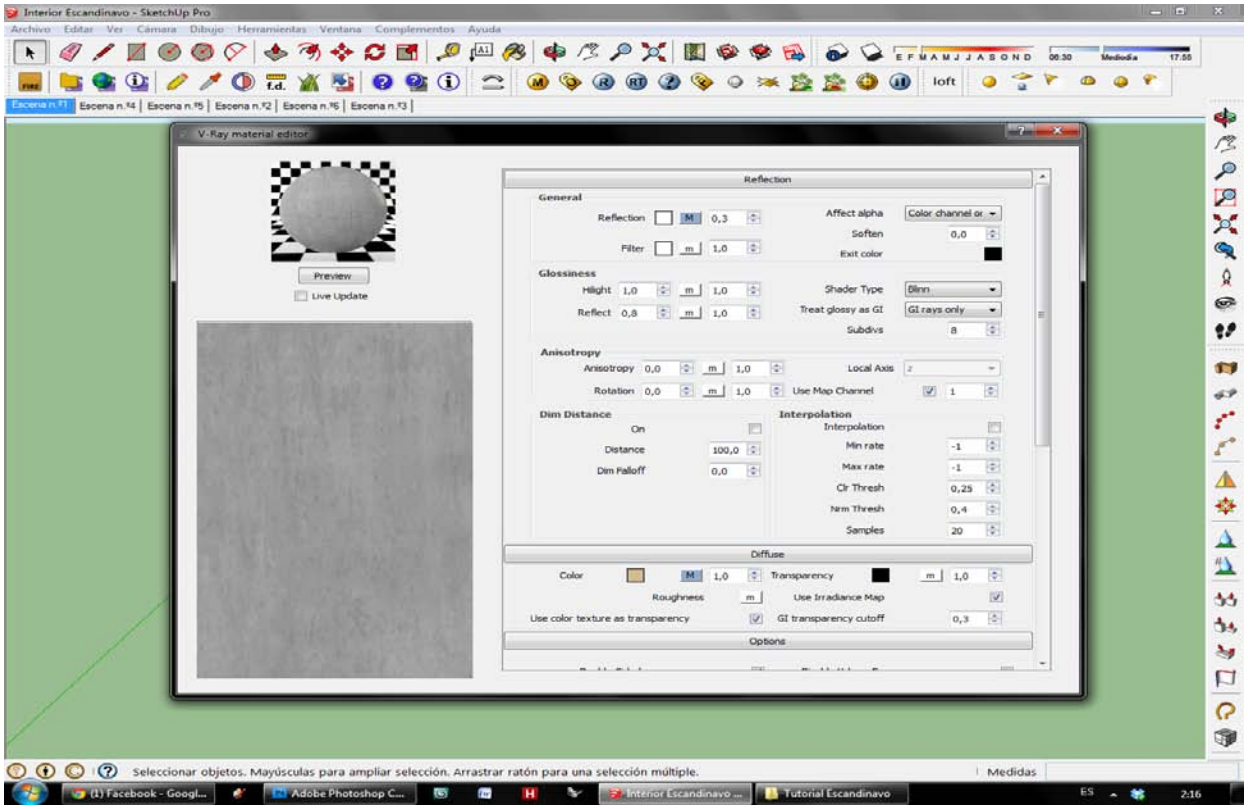



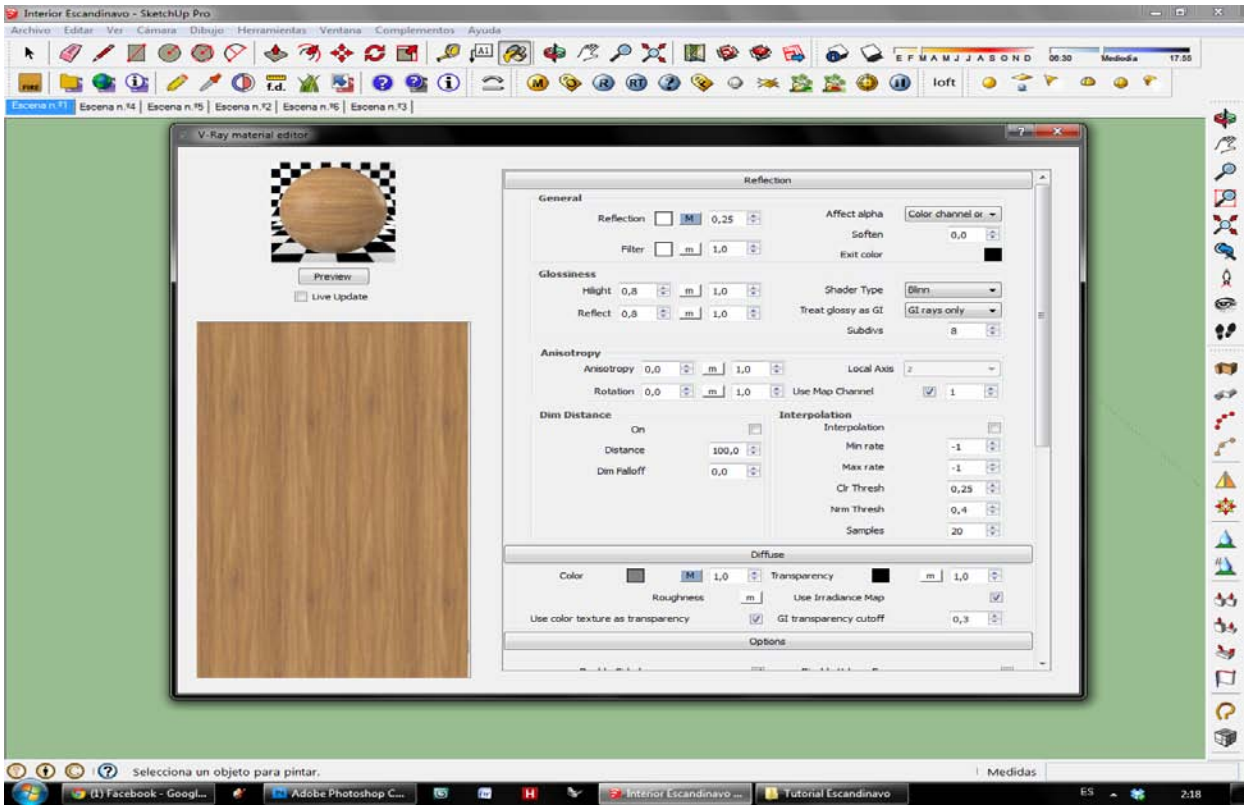

I left gaps for the windows and doors, as I had already made models for use there.

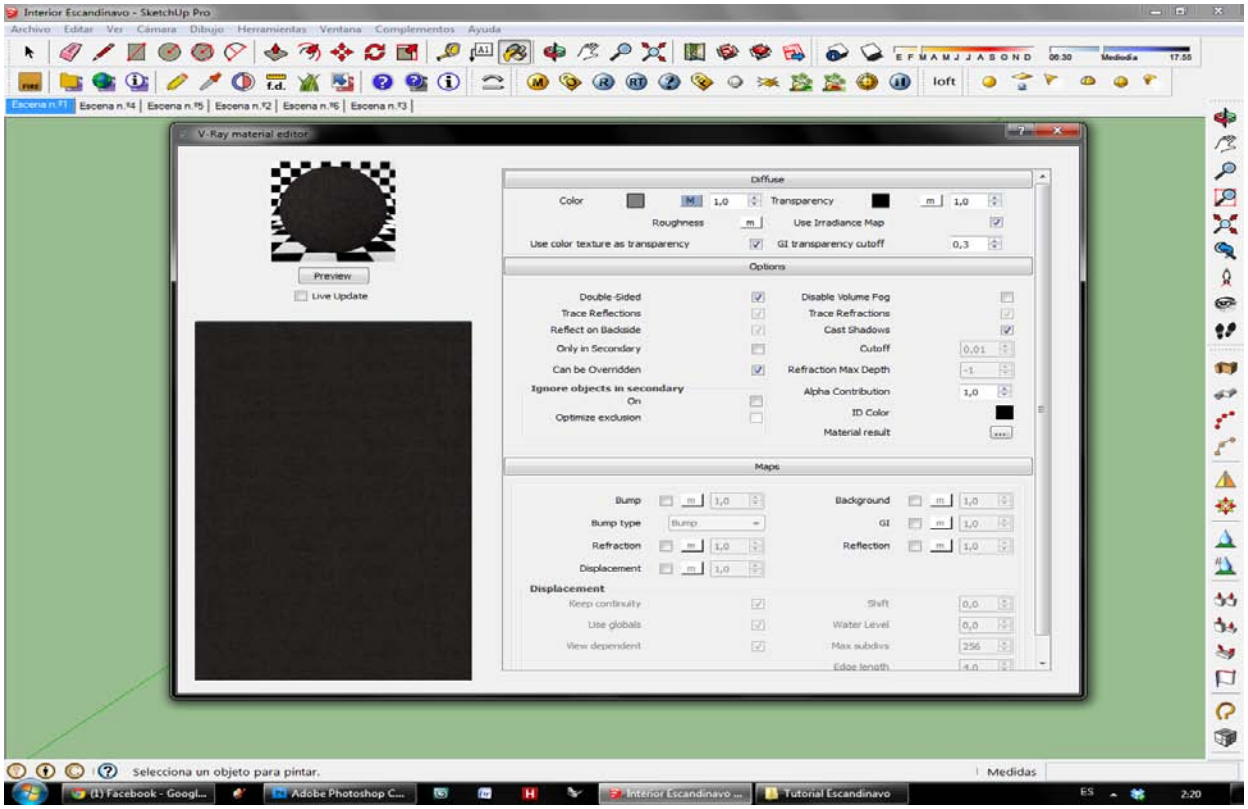


The materials were simple, I did not use many, and none was Bump or Displacement.

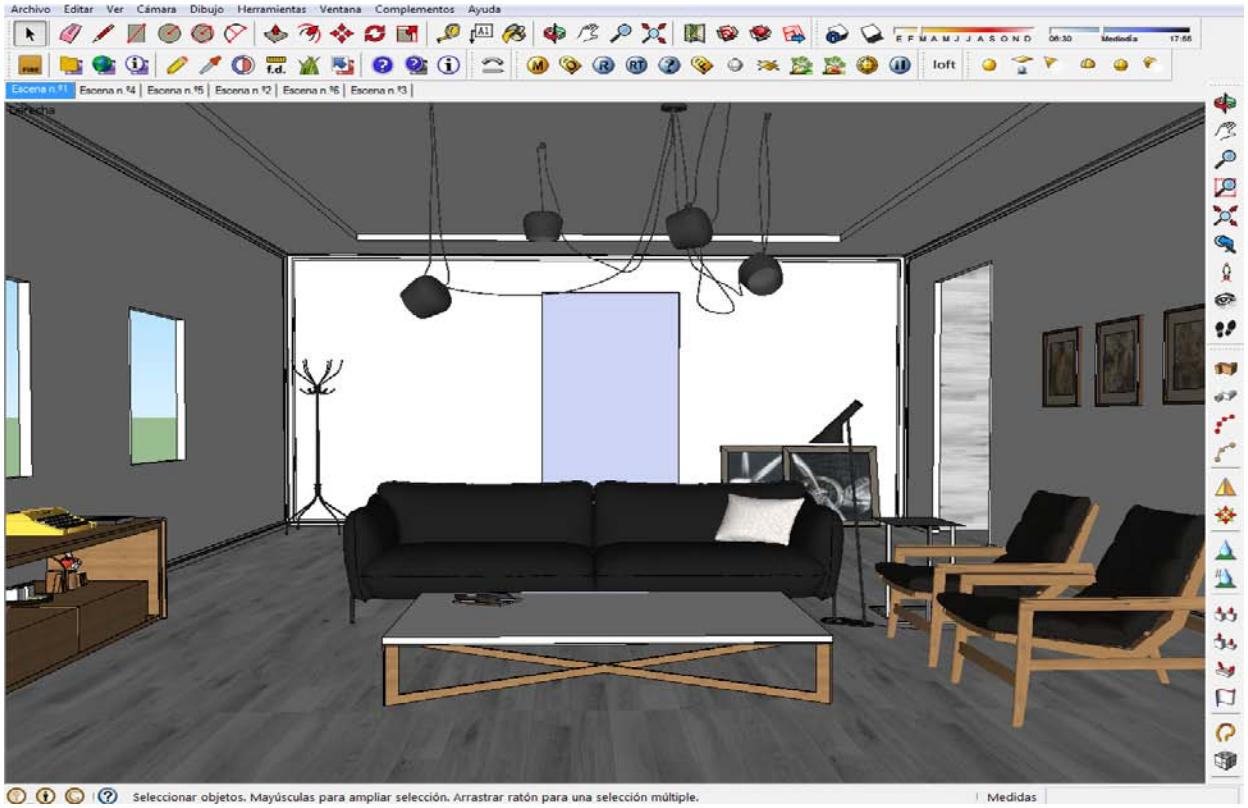

Interior Escandinavo - SketchUp Pro
V-Ray material editor
Preview
Live Update
Materials List
Reflection
General
Glossiness
Anisotropy
Dim Distance
Interpolation
Diffuse
Options
Selecciona un objeto del que obtener la muestra.
Medidas

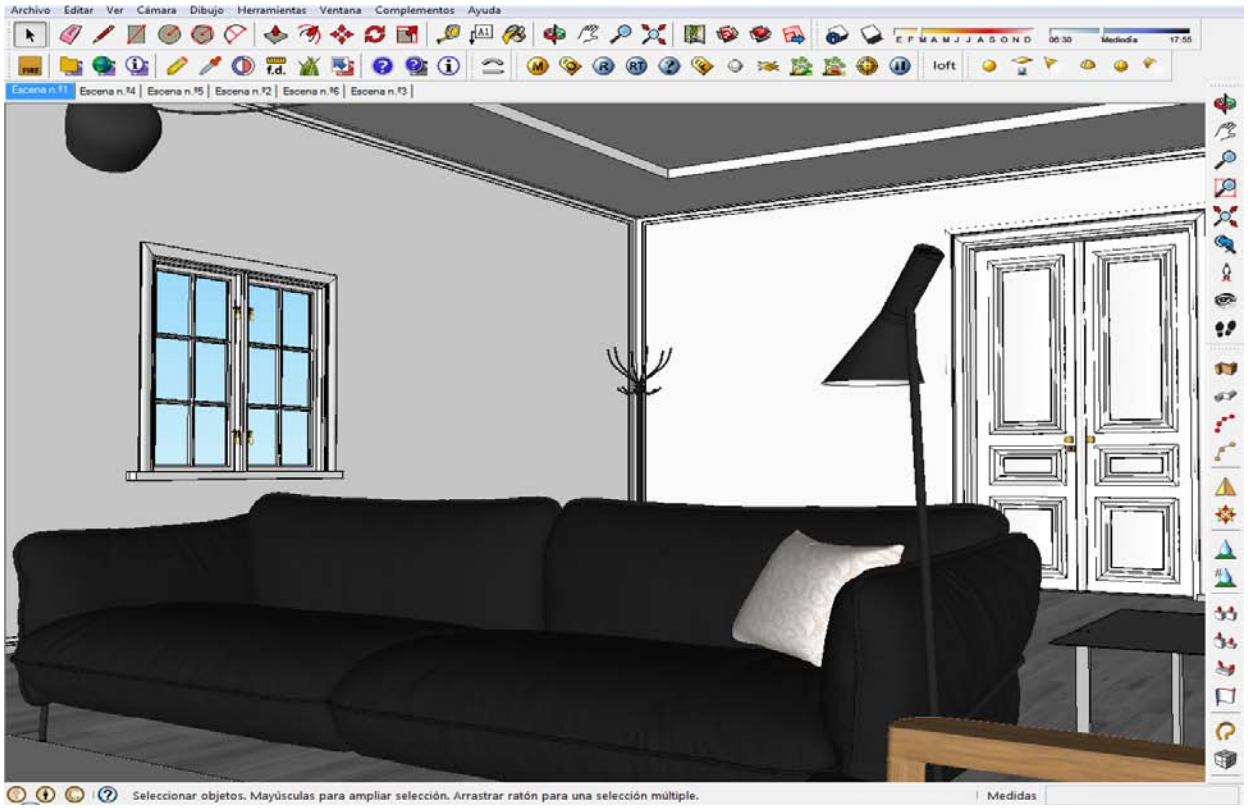

Interior Escandinavo - SketchUp Pro
V-Ray material editor
Preview
Live Update
Reflection
General
Glossiness
Anisotropy
Dim Distance
Interpolation
Diffuse
Options
Seleccionar objetos. Mayúsculas para ampliar selección. Arrastrar ratón para una selección múltiple.
Medidas


Interior Escandinavo - SketchUp Pro
V-Ray material editor
Preview
Live Update
Reflection
General
Reflection
Filter
Glossiness
Hilight
Reflect
Anisotropy
Anisotropy
Rotation
Dim Distance
On
Distance
Dim Falloff
Interpolation
Interpolation
Min rate
Max rate
Clr Thresh
Nrm Thresh
Samples
Diffuse
Color
Transparency
Roughness
Use Irradiance Map
Use color texture as transparency
GI transparency cutoff
Options
Affect alpha
Soften
Exit color
Shader Type
Blinn
Treat glossy as GI
GI rays only
Subdivs
Local Axis
Use Map Channel
Selecciona un objeto para pintar.
Medidas

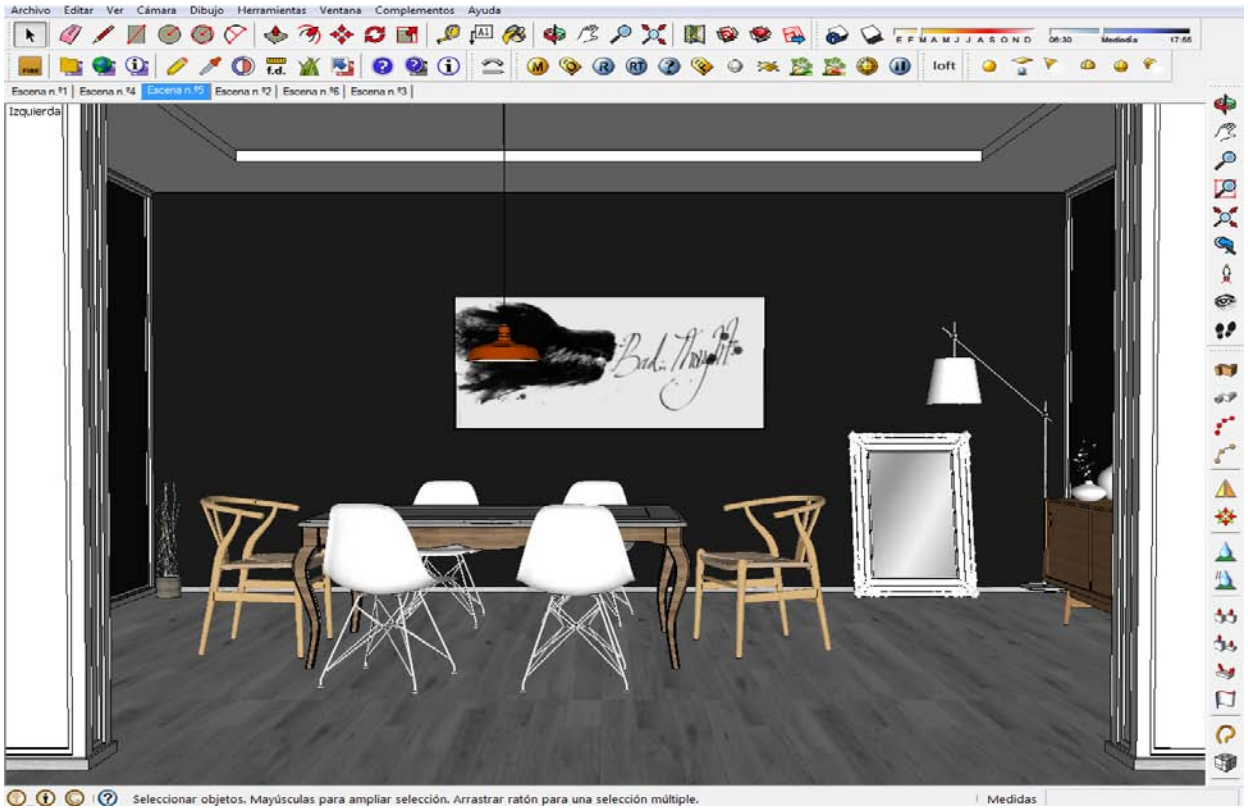

Interior Escandinavo - SketchUp Pro
V-Ray material editor
Preview
Live Update
Diffuse
Color
Transparency
Roughness
Use Irradiance Map
Use color texture as transparency
GI transparency cutoff
Options
Double-Sided
Trace Reflections
Reflect on Backside
Only in Secondary
Can be Overridden
Ignore objects in secondary
On
Optimize exclusion
Disable Volume Fog
Trace Refractions
Cast Shadows
Cutoff
Refraction Max Depth
Alpha Contribution
ID Color
Material result
Maps
Bump
Bump type
Refraction
Displacement
Background
GI
Reflection
Displacement
Keep continuity
Use globals
View dependent
Shift
Water Level
Max subdivs
Edge length
Selecciona un objeto para pintar.
Medidas

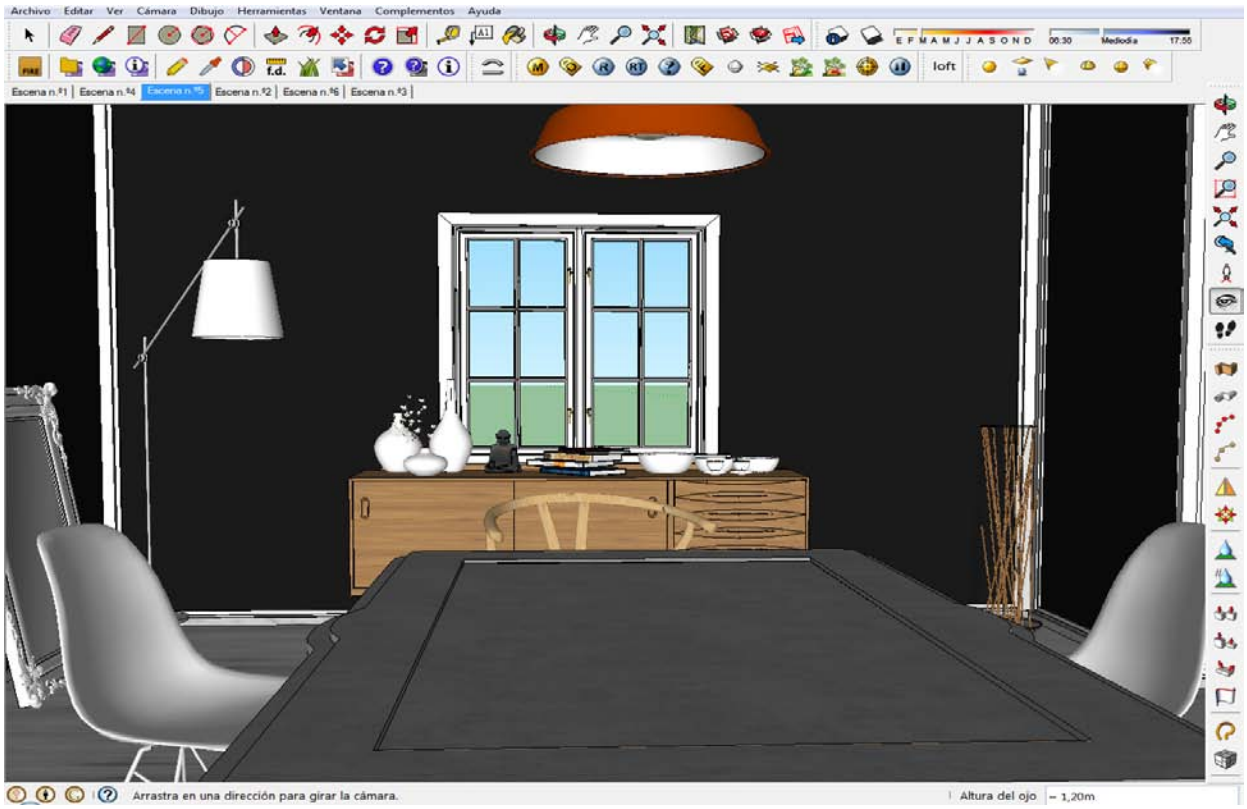
The composition was my favorite part, many objects downloaded from the SketchUp Warehouse, other sites such as SUDesign and SketchUpTexture.



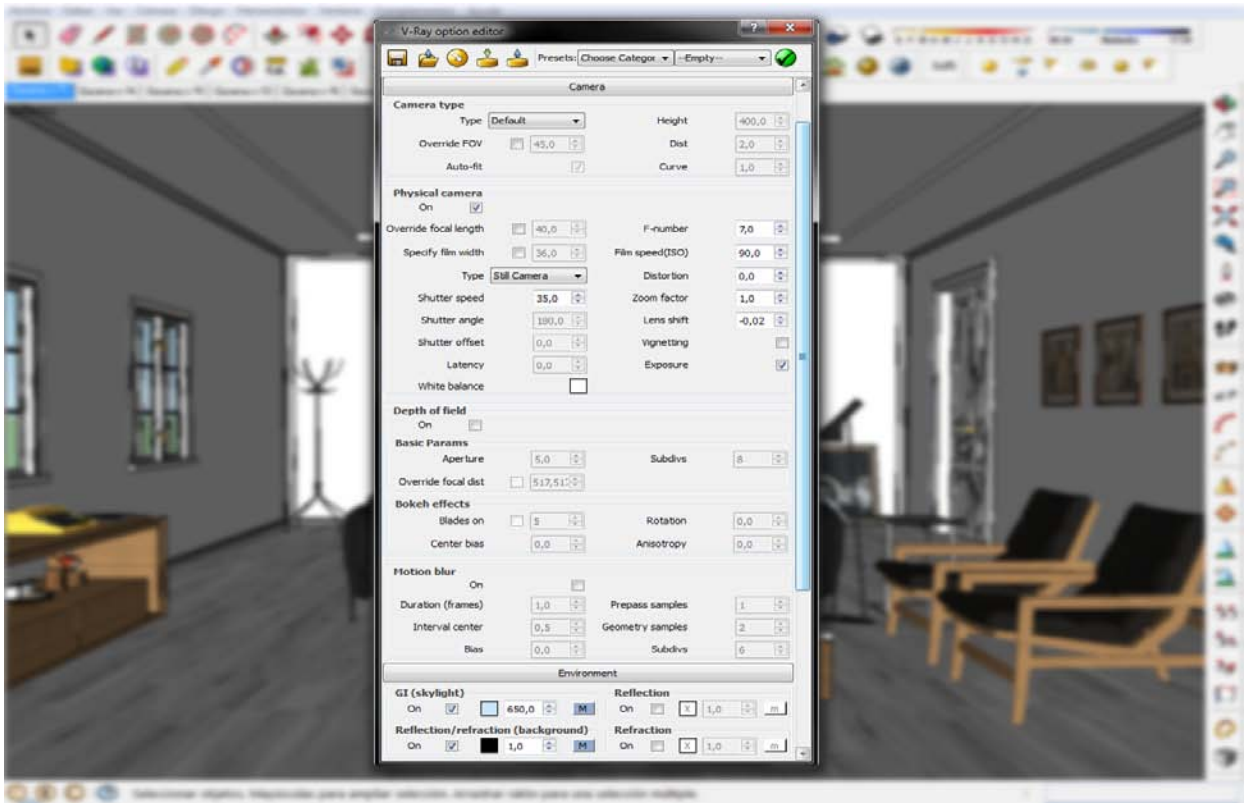



Then I bought some items in DesignConnected.

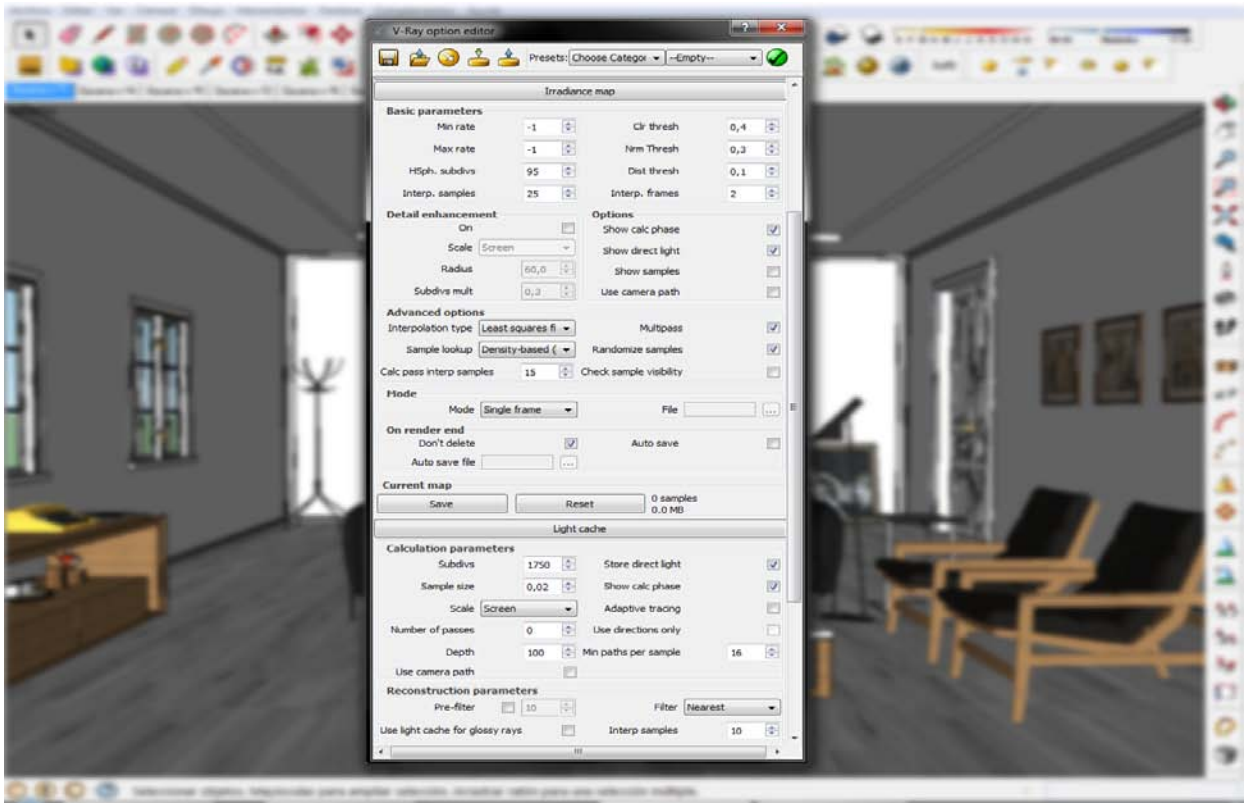


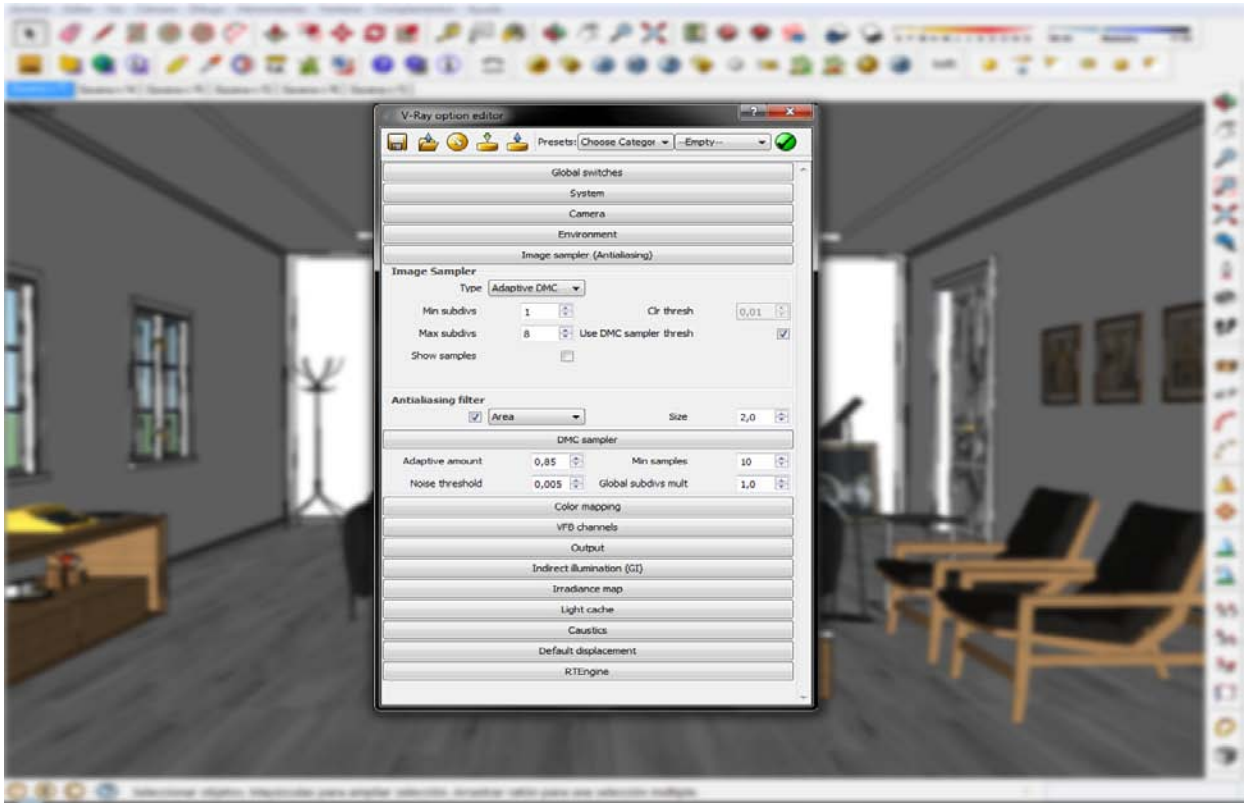


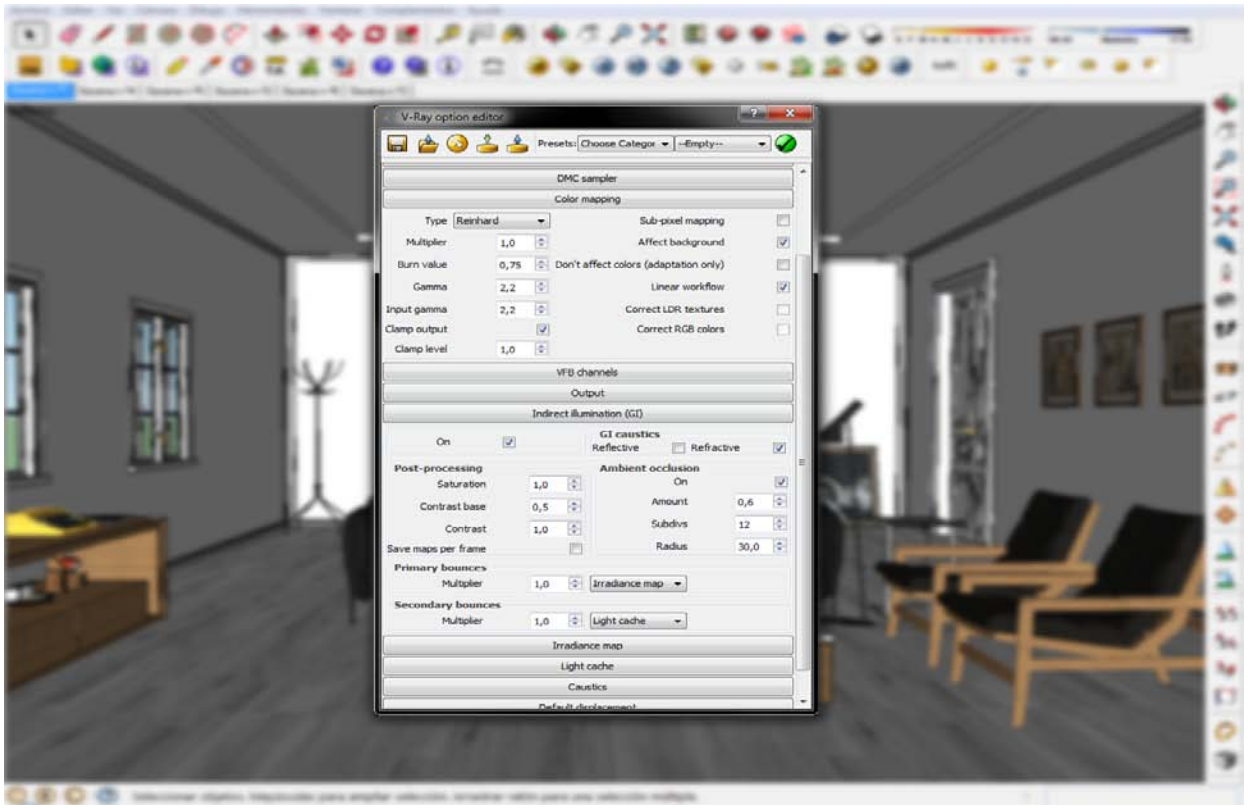
The lighting was done with HDRI map, and later retouch the Camera options.




In some scenes I used to enhance the light, a Vray Dome Light.

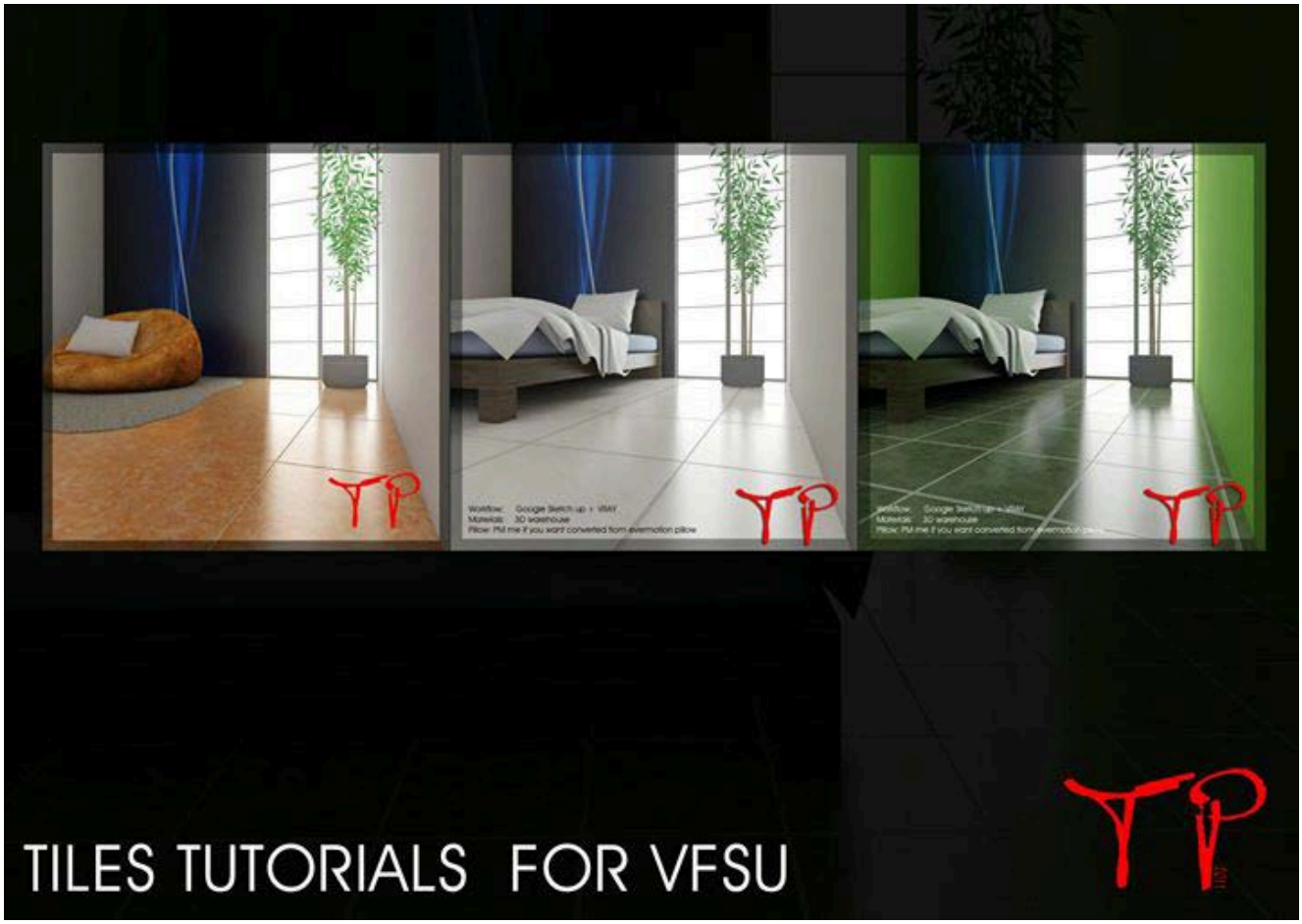


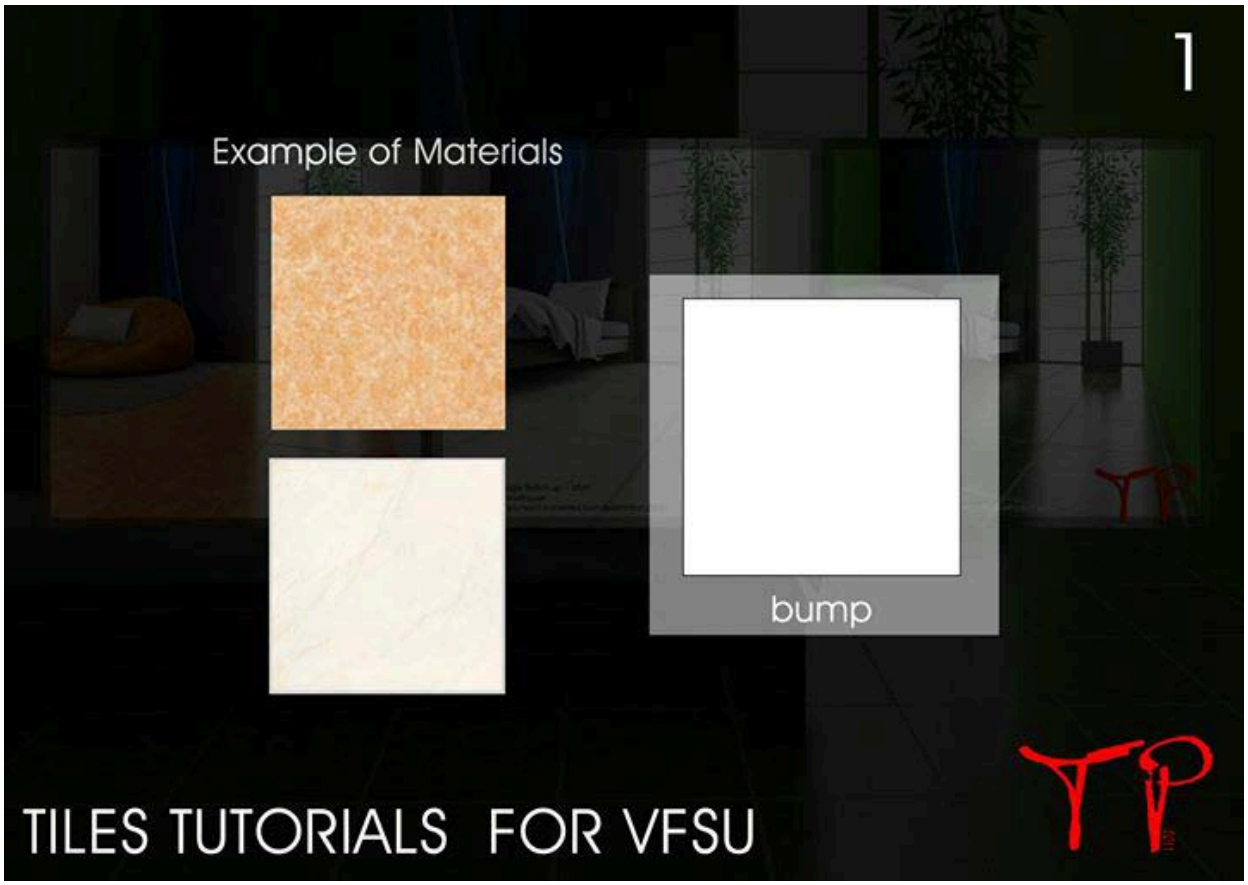

V-Ray option editor
Presets:
Global switches
System
Camera
Environment
Image sampler (Antialiasing)
Image Sampler
Type
Adaptive DMC
Min subdivs
Max subdivs
Show samples
Clr thresh
Use DMC sampler thresh
Antialiasing filter
Area
Size
DMC sampler
Adaptive amount
Noise threshold
Min samples
Global subdivs mult
Color mapping
VFB channels
Output
Indirect illumination (GI)
Irradiance map
Light cache
Caustics
Default displacement
RTEngine

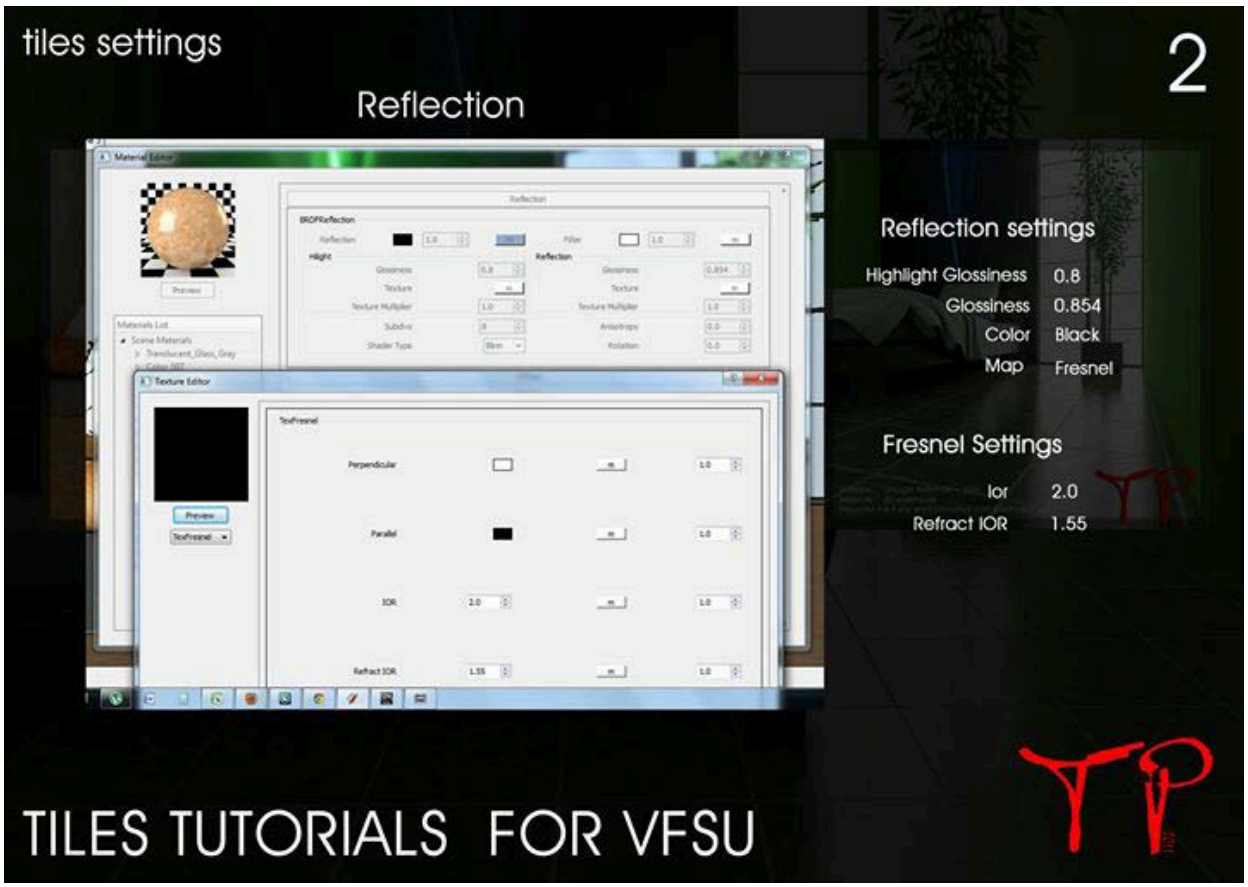

V-Ray option editor
Presets:
DMC sampler
Color mapping
Type
Reinhard
Multiplier
Burn value
Gamma
Input gamma
Clamp output
Clamp level
Sub-pixel mapping
Affect background
Don't affect colors (adaptation only)
Linear workflow
Correct LDR textures
Correct RGB colors
VFB channels
Output
Indirect illumination (GI)
On
GI caustics
Reflective
Refractive
Post-processing
Saturation
Contrast base
Contrast
Save maps per frame
Ambient occlusion
On
Amount
Subdivs
Radius
Primary bounces
Multiplier
Irradiance map
Secondary bounces
Multiplier
Light cache
Irradiance map
Light cache
Caustics

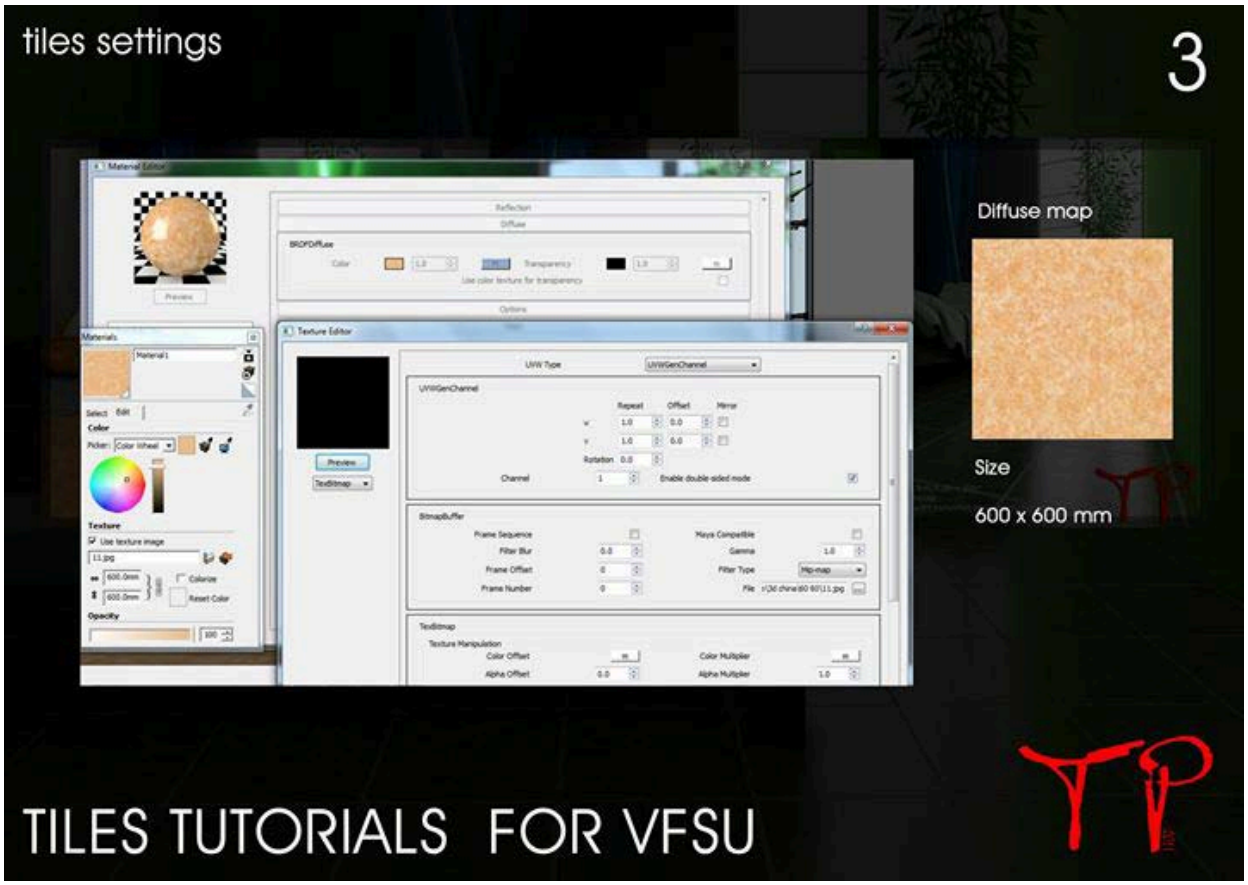
And these were the final images; in Postproduction I simply added light effects, adjusted and changed tones and colors.

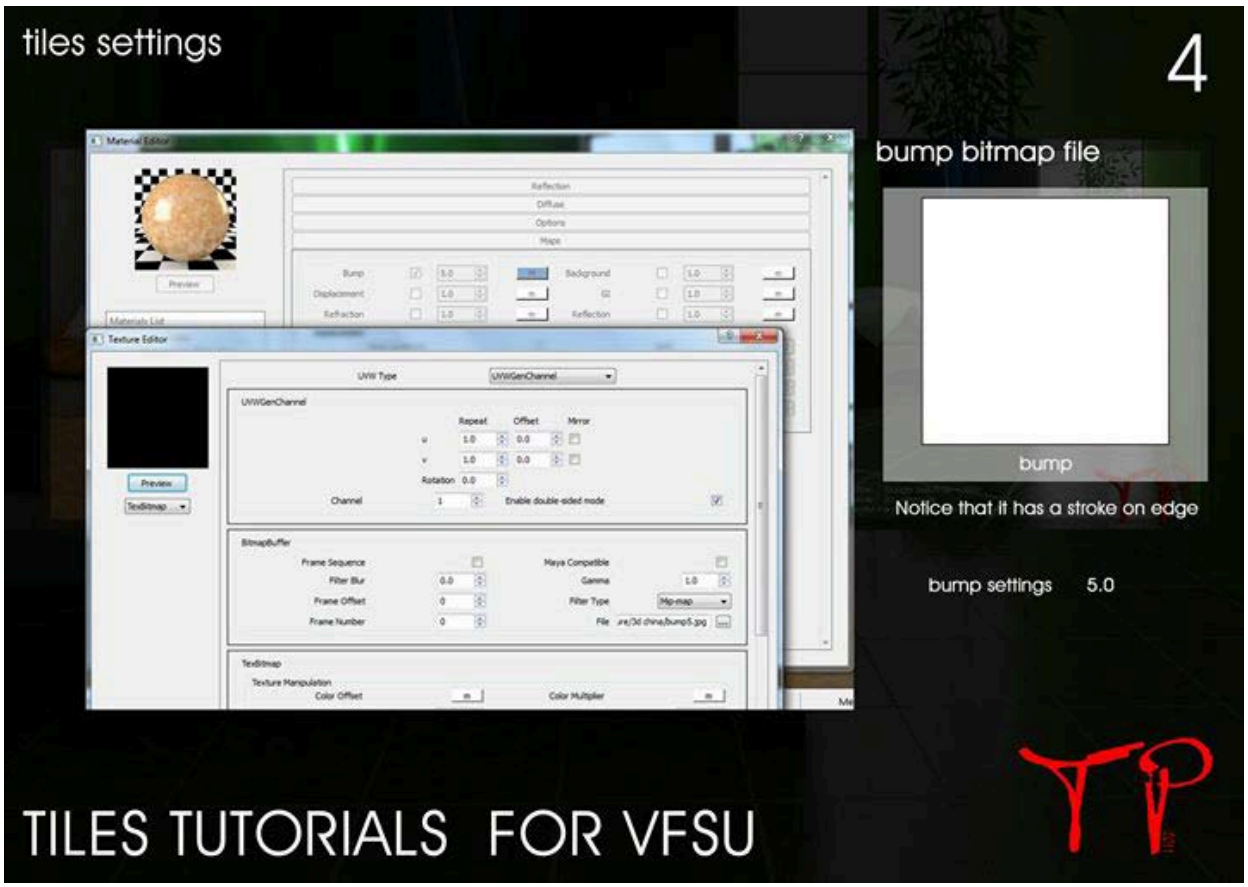
# Tiles setting in Sketchup




1
Example of Materials
bump
TILES TUTORIALS FOR VFSU


tiles settings
2
Reflection
Reflection settings
Highlight Glossiness 0.8
Glossiness 0.854
Color Black
Map Fresnel
Fresnel Settings
Ior 2.0
Refract IOR 1.55
TILES TUTORIALS FOR VFSU


tiles settings
3
Diffuse map
Size
600 x 600 mm
TILES TUTORIALS FOR VFSU

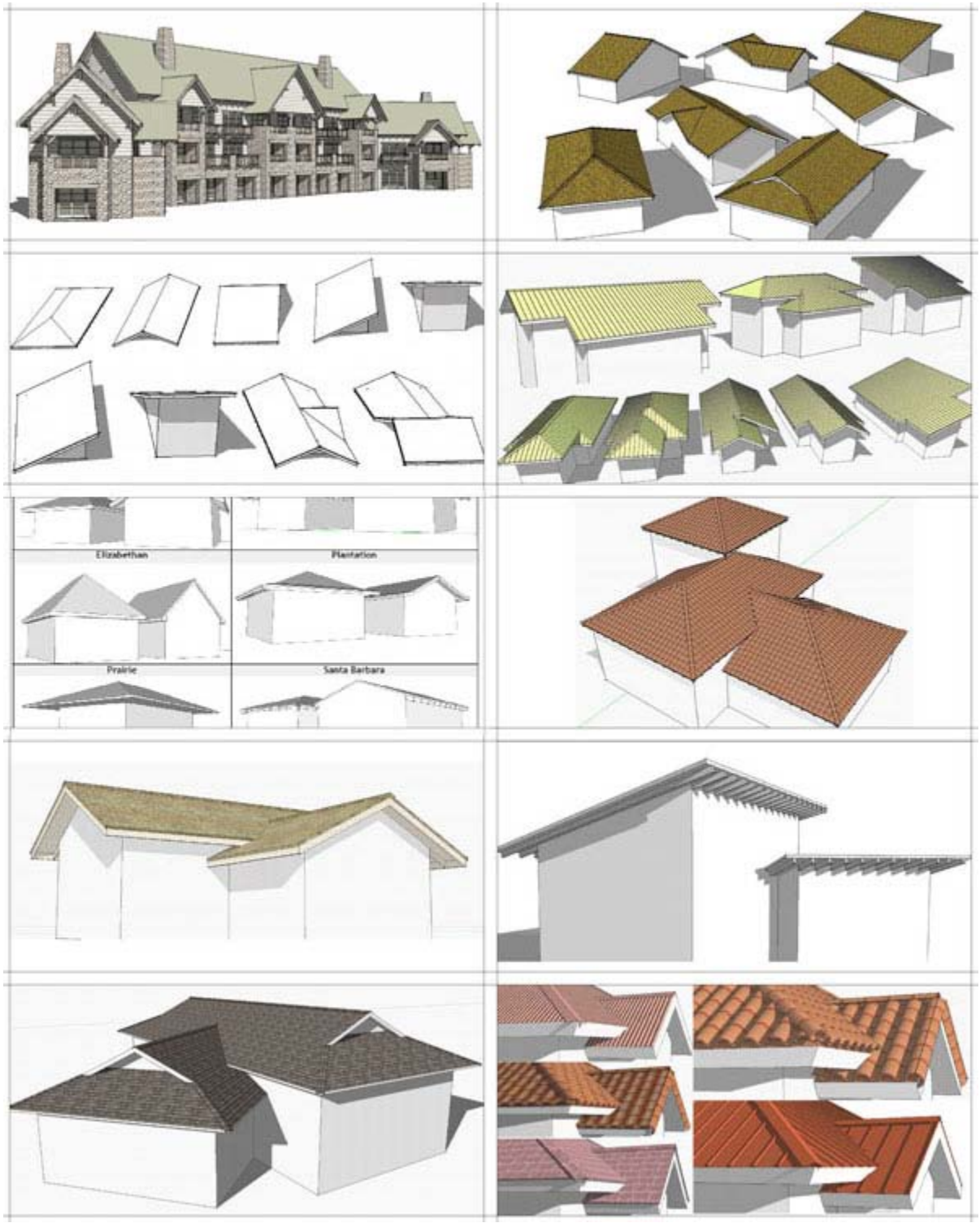

tiles settings
4
bump bitmap file
bump
Notice that it has a stroke on edge
bump settings 5.0
TILES TUTORIALS FOR VFSU

# How to make a Roof in Google Sketchup

Download Plugin Instan Roof - Download Click Here or Download Via Website

Copy InstantRoof.rbs Paste In - C:\Program Files (x86)\Google\Google SketchUp 8\Plugins

- *Create a complex roof in seconds - just select faces and edges; then run Instant Roof.*
- *Hip, gable, shed, dutch-gable, mansard, plantation, gambrel, open-trellis, combined, more...*
- *Eave types: boxed-in, exposed, soffited*
- *Hips and rafters with customizable ends*
- *Fascia, fascia-trim, ridge and hip tiles, shingles, or sheet-metal*
- *Complete mission tile or standing-seam roof*
- *Use default roof styles - or create your own*
- *Export and Import user defined roof styles*
- *Choose any unit type supported by Sketchup: Metric- angles for slope or Feet/ inches - ratio for slope*
- *Upgrade to Pro version for more roof slopes (The free version will only create the following roof slopes: 1/8:12 (0.6 degrees) ; 2:12 (9.5 degrees) ; 6:12 (26.6 degrees) ; 16:12 (53 degrees) or 24:12 (63 degrees).*

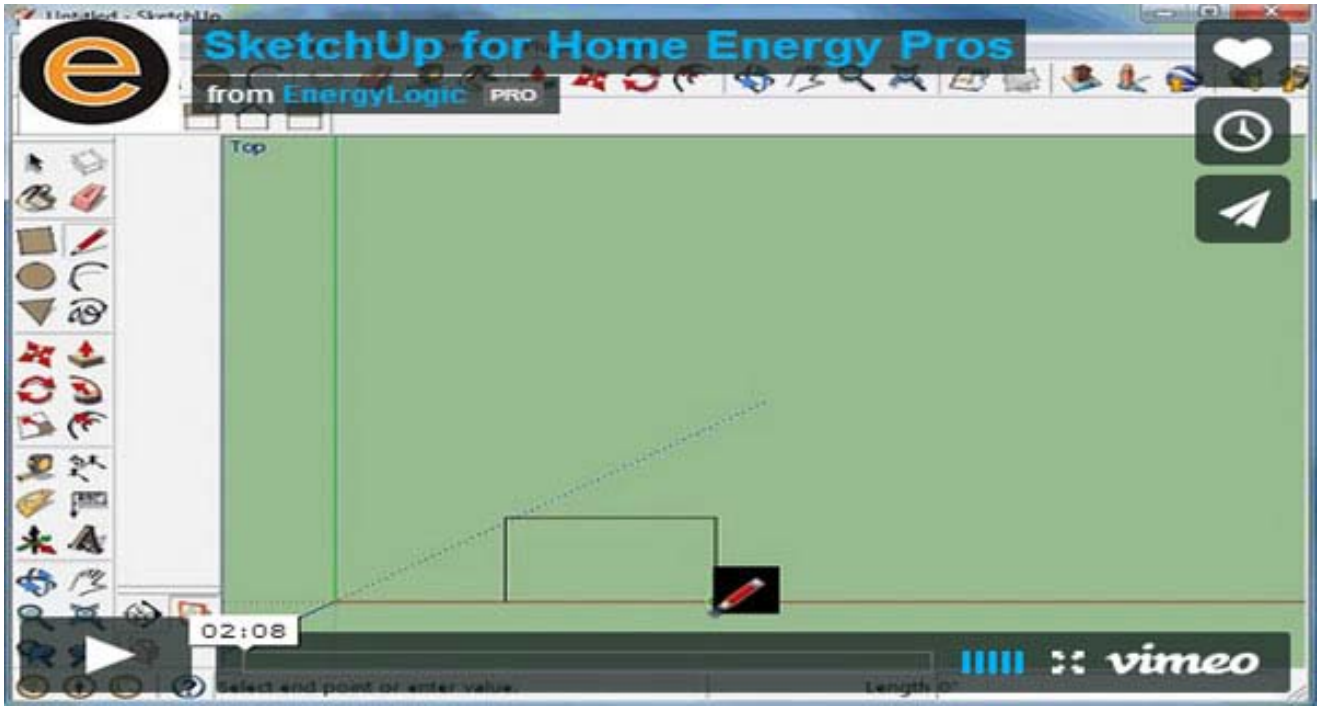



Reference: [www.tutorial-update.blogspot.in](http://www.tutorial-update.blogspot.in)

# SketchUp Training for Home Energy Professionals RESNET 2014

This course is designed for HERS Raters or other energy professionals with equivalent experience with energy modeling. It has been specifically designed to help complete take-offs for quick from-plans rating data collection.

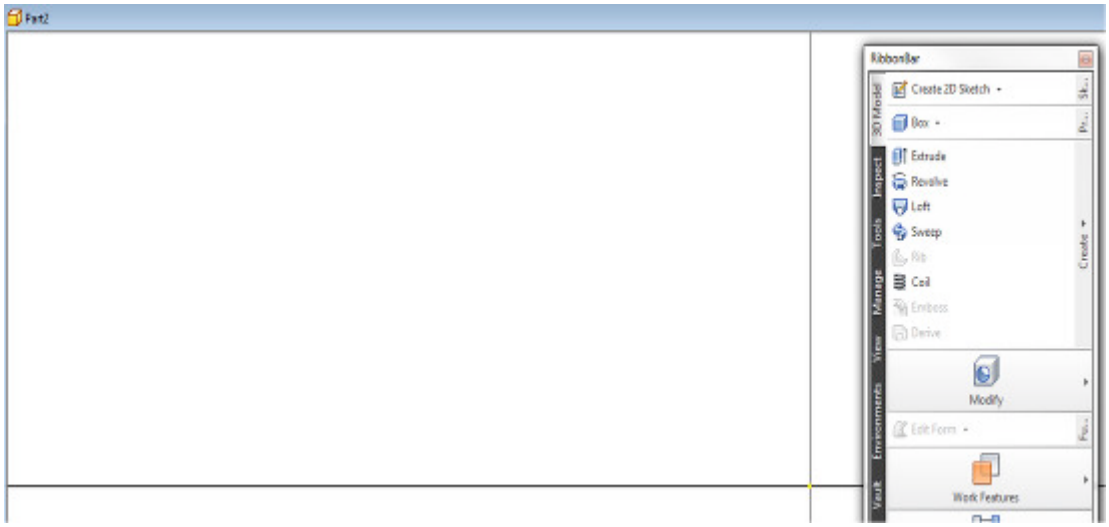
http://vimeo.com/53178648



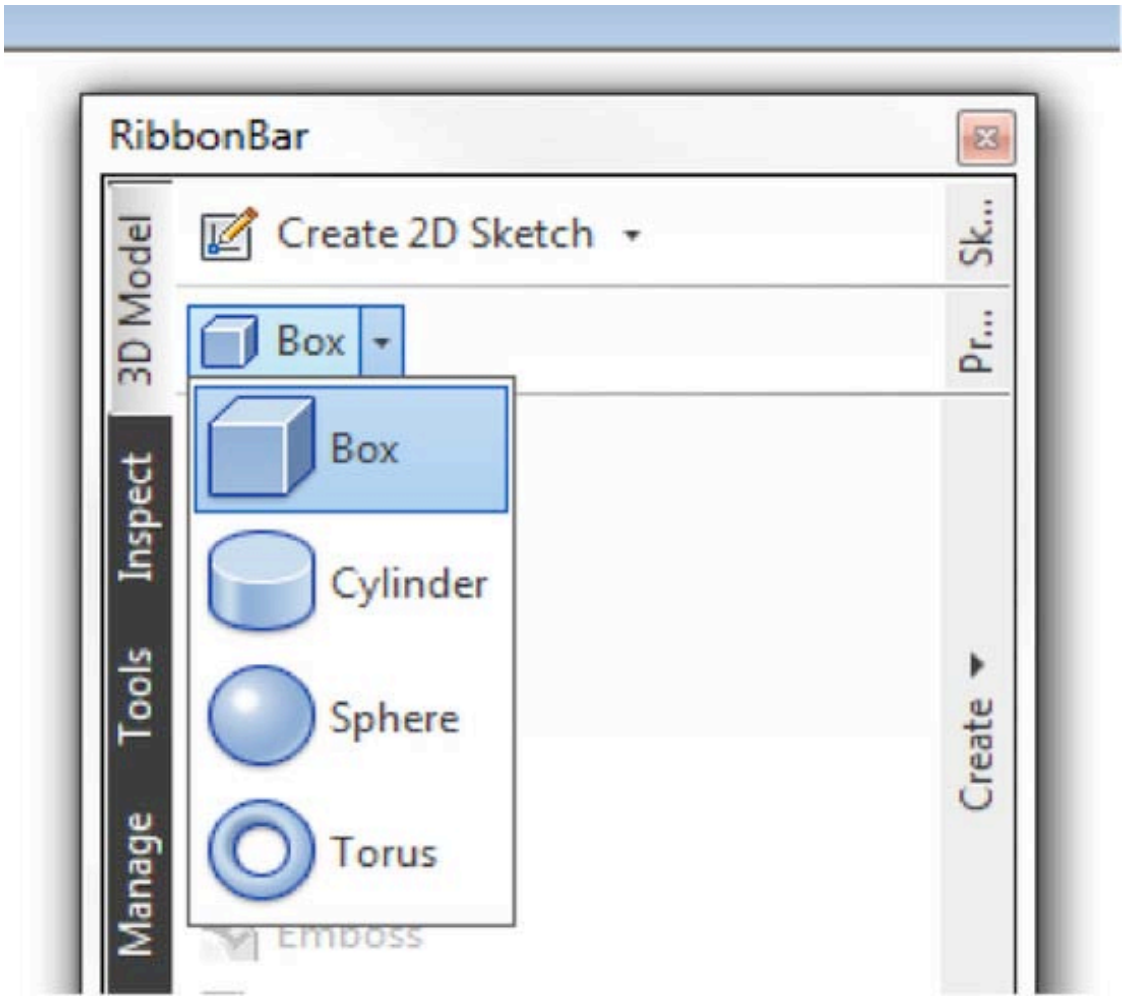
# Create 3D Objects Without A Sketch Plane

This tip from David Edward Gaskill illustrates how to create simple 3D objects in Autodesk Inventor without starting with a sketch plane and a 2D sketch:

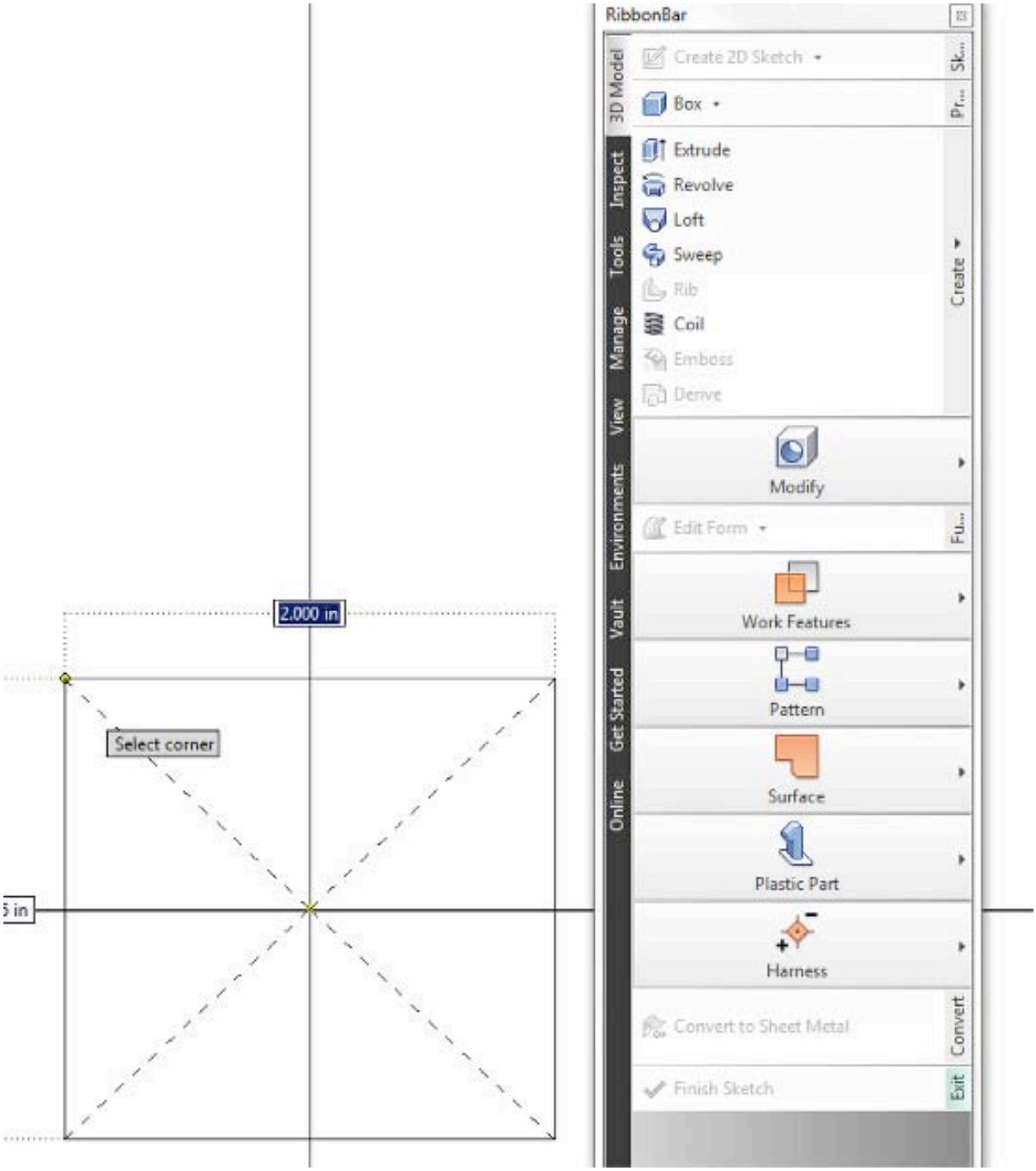
Here is a tip for Inventor that allows you to create a box, cylinder, torus, or sphere without having to create any 2D geometry.




Start a new part, then go to the 3D model ribbon (click the image for a larger view).



Select box or use the arrow-down button for more selections.




Sketch to pick the center for the object to be created, and then drag to the desired shape. Once you have sketched the shape, the extrude dialog box will come up. Place the extrude distance. You now have a box without having to create a sketch plane first. This saves several steps, and is fully editable.

Reference: [www.cadtips.cadalyst.com](http://www.cadtips.cadalyst.com)

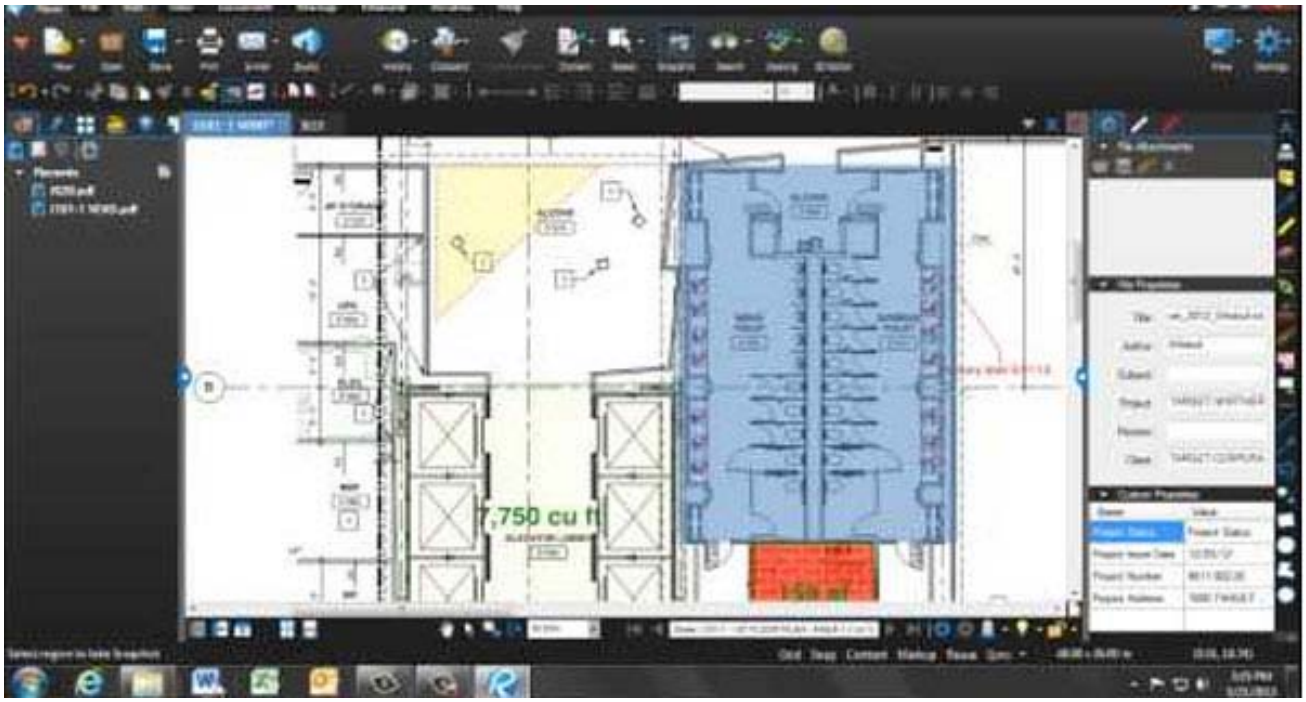
# Bluebeam Software Launches Revu 12 for Better Field-Ready Document Management and Project Collaboration

Bluebeam Software, leading developer of PDF-based markup, measurement and collaboration solutions for architecture, engineering and construction (AEC), oil and gas, manufacturing and other technical professionals, is announcing the release of Revu 12, the latest version of the company's flagship solution. This year's Revu enhancements better enable users in document-intensive industries to digitally collaborate on project documents and more easily connect the office to the field.

"Revu 12 introduces and refines features to make accessing and managing project information more field-friendly, wherever the field might be," says Richard Lee, Bluebeam Software President and CEO. "Our customers need to keep projects moving whether they are in an office, at the jobsite or on a camping trip, and the technology in Revu 12 makes it easier to finish projects faster and work better."

New in Revu 12, Capture gives users the ability to add multiple photos from the field or an image library to any markup. The Capture viewer allows users to easily click through all embedded images, and the photos display in PDF summary reports so team members can see more details.

Revu's 3D PDF features enable all project partners to get to hard-to-reach places within 3D models that have been exported from Revit®, Navisworks®, SolidWorks® or any IFC file. With Revu 12's new SketchUp Pro plug-in, users can now create 3D PDFs from SketchUp Pro to leverage all of Revu's 3D markup and navigation functionality for faster issue resolution.



Reference: www.sys-con.com

# To 3D Print Coney Island

One artist is recreating a 100-year-old amusement park with very new technology.

Fred Kahl, a creative director and designer at New York media firm Funny Garbage, is using a very new technology to create a very old thing. The new technology: MakerBot 3D printers. The old thing: The demolished Luna Park amusement park at Coney Island—resurrected detail by detail, ride by ride.

“Long ago, I came to the realization that I just wanted to make work for myself and not play the gallery game,” Kahl says about his dream to spend 30 years quietly creating a single diorama. “Since I first learned about Luna Park, I knew it would be my Étant donnés,” referring to Duchamp’s miniature Xanadu.

Kahl’s introduction to Coney Island in 1984 consumed his imagination, like it did for many artists who have painted, photographed, and performed there. “There was still a lot of traces of the old Coney Island left at that time, but it was in this magical state of decay,” he says. It was Ric Burns's 1991 Coney Island documentary on PBS’s American Experience that sparked the idea of bringing Luna Park back to life: “I would recreate the park in matchsticks during my retirement,” Kahl thought.

Luna Park’s designer Frederic Thompson was a turn-of-the-century renegade who dropped out of the Beaux Art Academy to create fantastical proto-postmodern architecture by mixing and matching disparate styles. All this was further embellished by hundreds of thousands of Edison's new light bulbs. Rem Koolhaas cites Coney Island and Thompson in his book Delirious New York as an early influence on the skyscraper.

“What is special to me about Luna Park is the fantasy architecture and its particular place in history as society was transformed by technology,” Kahl says. “These are themes that are relevant to us today as our world is transformed by the third industrial revolution. Its also about a deep love of Coney Island as the cultural melting pot and showcase for cutting-edge technologies.”

Kahl is not a nostalgist, though. “Creating inspiring fantasy architecture is also important to me amidst the city's rezoning of Coney's amusement zone,” he says. “There's a lot of development that's going to happen out there and I'd prefer to see innovative architectural forms instead of bland refrigerator boxes.” If his MakerBot opus can influence that, he says, that “would be great.”

First he has to make sure the five 3D printers working out of his home studio are churning out the goods. “At any given time I have at least three machines printing," he says. "I try to start prints every morning and every evening. It’s still a lot of work maintaining them, though; bearings need replacing, boards fry, extruders clog. I can't even tell you how many hours I've put into this. It’s totally obsessive.”

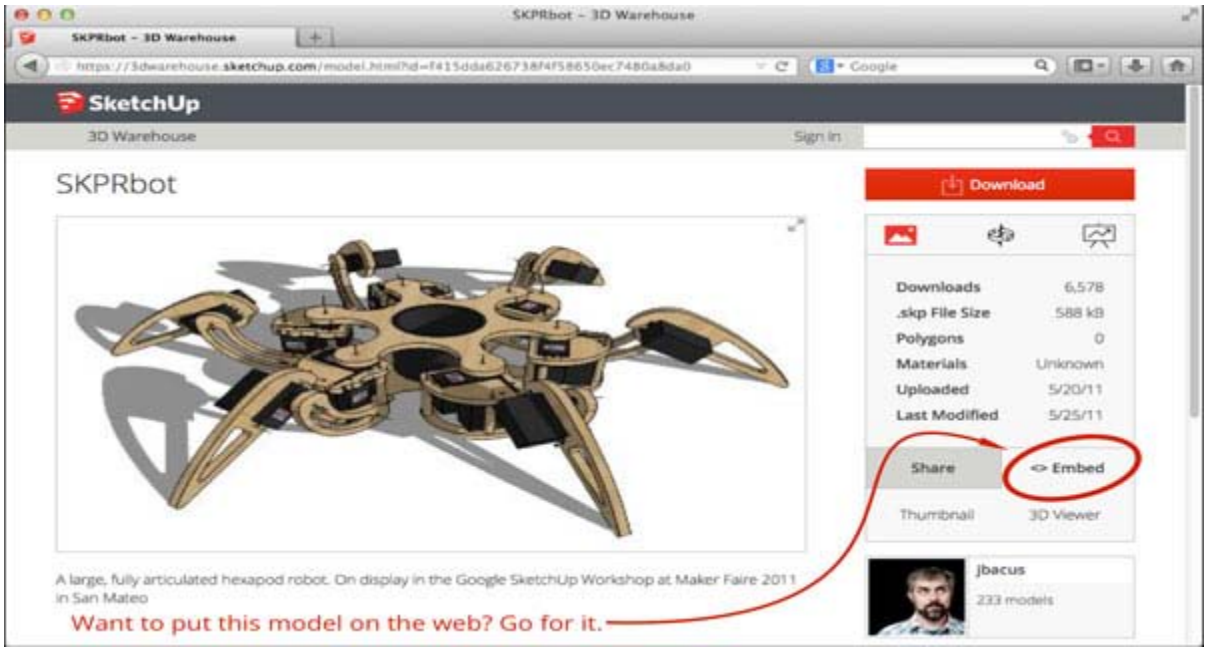
Reference: www.theatlantic.com

# SketchUp 2014 is here

If you poke around SketchUp.com today, you'll notice a few things are different. For one, a new version of SketchUp is available for download in ten languages. You'll also find that we've completely rebuilt 3D Warehouse, our online repository for the millions of models shared by Sketchup users worldwide. SketchUp 2014 is here, and there's quite a bit to explore.

**A new look for 3D Warehouse**: Every day, 7,000 people search for a "sofa" on 3D Warehouse, and then find around 10,000 sofa models to choose from. That is an incredible amount of choice - probably the most you'll find on the web. Today, we're giving the millions of models in 3D Warehouse a facelift at 3dwarehouse.sketchup.com. As you poke around the new 3D Warehouse, you may notice that you can now navigate 3D models on the web as you do in SketchUp (using a WebGL enabled browser).

Bringing a SketchUp viewer to the web is a big deal to us. We spent a lot of time tuning our WebGL Viewer so that your models operate smoothly and retain their SketchUp feel. We're also thrilled that SketchUp users can now share orbitable 3D projects (in full screen, if you like) on their own webpages using the 3D Warehouse embed gadget.




As you read this, our 3D Warehouse render robots are churning through tens of thousands of models a day, converting raw .skp files into a 3D streaming format dialed for SketchUp models. In the meantime, any newly uploaded models published to 3D Warehouse will render after just a few minutes, so you can start orbiting your new models pronto.

While this new Viewer turns any webpage into a 3D stage, we also wanted to point a spotlight on the most useful models in 3D Warehouse. So, working with product manufacturers, we've started curating the highest quality collections of real world models into their own category: Product Catalogs. Now, when you need a particular faucet, sliding door, window arrangement, or office chair, 3D Warehouse helps you choose a component that can actually be specified.

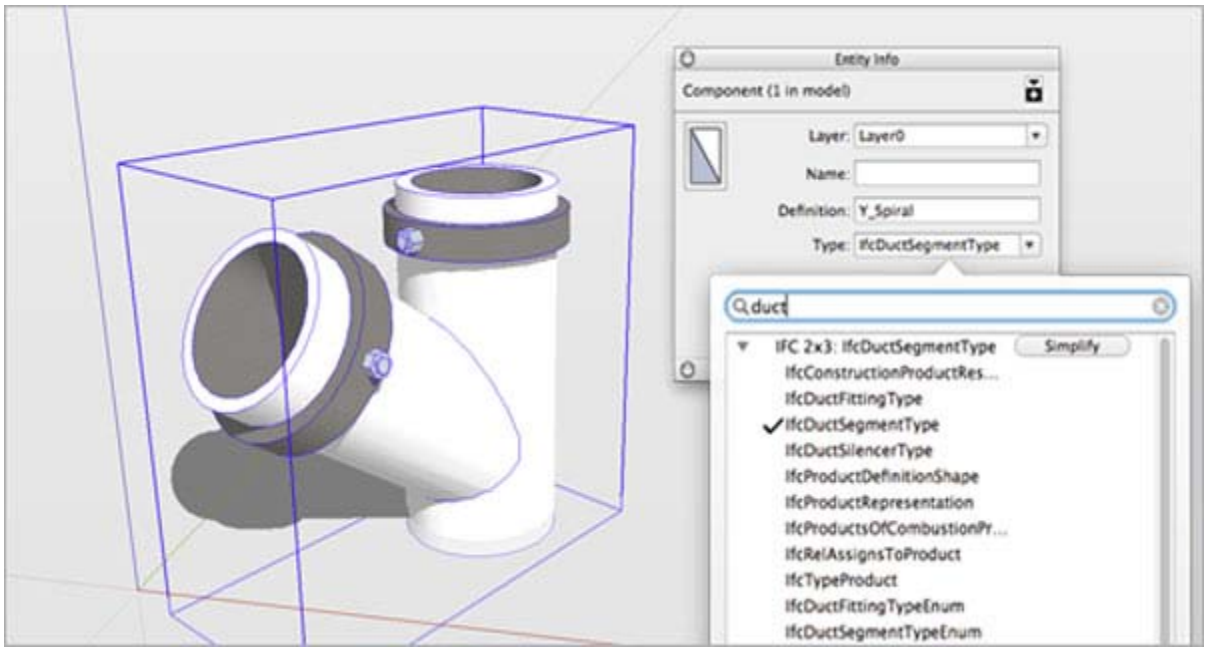
There's quite a bit more to discover in the new 3D Warehouse -- new upload options, increased file size limits, a refreshed UI -- you canlearn more about it all here.

**A closer look at information modeling**: In a world of ever-evolving CAD acronyms, people often ask "*Is SketchUp Pro BIM?*"

BIM is short for building information modeling, and the fact is, we've always considered SketchUp Pro to be a highly capable and inclusive information modeler. But what does that mean?

As we see it, the foundation of information modeling is an association between information of any kind and the graphical geometry in a model. And SketchUp's core tools -- groups, components, the Ruby API -- have always enabled users to make this association and use the data embedded in models. BIM professionals may use information models for clash detection and quantity takeoffs; woodworkers may use them for joinery design and cut lists. In fact, a quick scan of Extension Warehouse shows that SketchUp users have been modeling, specifying, scheduling, analyzing, and reporting with information for some time now.

Building on this open and flexible information modeling capability, SketchUp Pro 2014 includes a feature called Classifier that lets you tag objects with standard classifications or types. We've preloaded this release with IFC 2x3 classifications (a standard for building information modelers), but you're free to use any classification system you want. If you're wondering if this tool is for you, we'd encourage you to learn more about it here.




Reference: www.sketchupdate.blogspot.in

# Information Modeling in Sketchup

When SketchUp was invented more than a dozen years ago, our team envisioned a tool which was simple to learn and simple to use, but powerful and capable of building complex models of all kinds of real world things. SketchUp, we dreamed, would be a tool which made designing, building and operating things easier, faster and more efficient. Maybe, even, more fun.

The key to that dream was an arsenal of simple and direct modeling tools coupled with a plastically flexible and 'sticky' geometry model. Editing a model should be as simple as touching a face and pushing and pulling it into shape. The SketchUp Way was born.

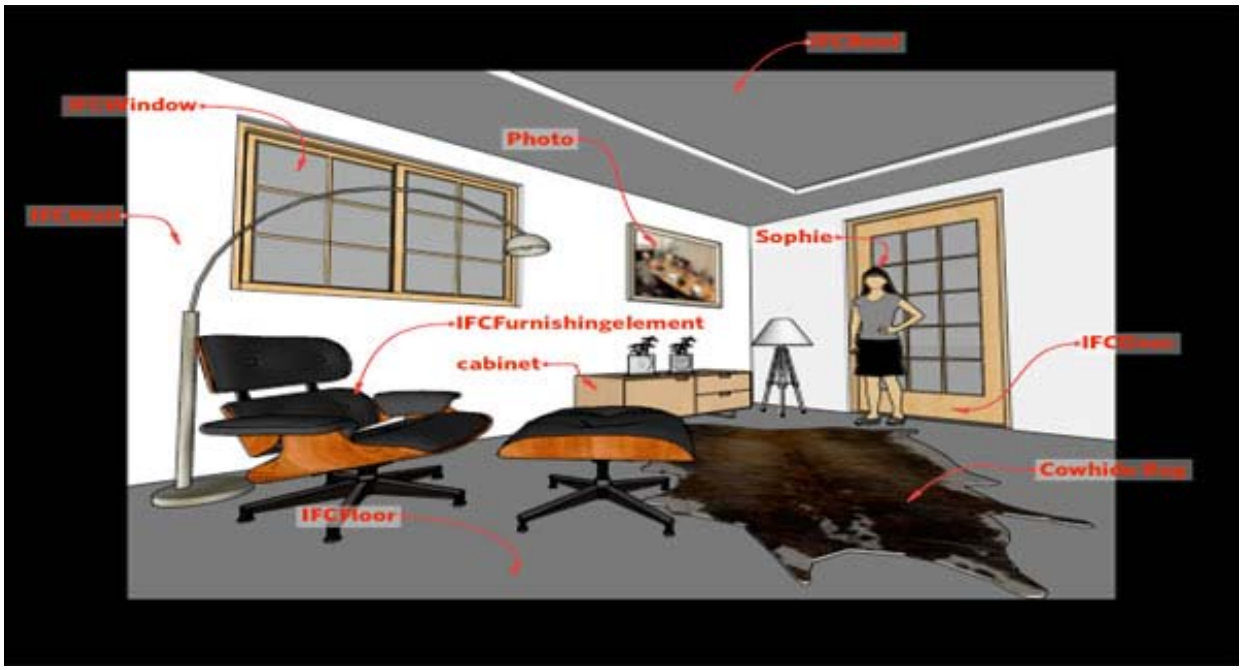
Almost. The wonderfully creative pure plasticity of SketchUp modeling could really become a problem when models progressed beyond a basic level of detail. SketchUp also needed a way to build complexity up from the bottom, a way to make assemblies of component objects. Enter "Components."

Components have become the best-used and most essential model organizing principle in every expert SketchUp users' toolkit. Not only do components isolate geometry to keep it all from sticking together, but they give a simple way to think of a model as being composed of individual objects. Objects which represent something real.

Over the years, we've extended Components more than any other single feature in SketchUp. We've added tools to slice them, dice them, add parameters and configure them. We've built a huge 3D Warehouse full of them, free for you to use as you see fit. We've added features to help you count them, analyze them and add any kind of data you can imagine to them. And our developer partners have extended them even more- there are more than 80 extensions in the Extension Warehouse that depend on some aspect of components to do the magic that they do.

One thing we've noticed, though, is that all this great information and advanced capability that folks are adding to their models with components remains largely isolated inside their SketchUp models. What was missing (until now) was a way to add additional information to the model in some standardized way that would make it possible to share, analyze and extend it outside of SketchUp.

And so in SketchUp 2014 we're introducing an open system of "Classification" that lets you build models made of components (make 'em yourself or add them from 3D Warehouse) that contain information in a structured way. Actually, in any structured way that you want. Want to adopt an open standard? We've got you covered. Or maybe you'd rather go your own way? Works for us, too. We're calling this simple combination of components and structured data "information modeling" and we think you're going to use it a lot.



The most important thing about SketchUp's information modeling is that it offers you an unrestricted way to represent not just what a design looks like but also more of what it actually is. And you can do it without giving up the fast, fluid and 'free' modeling behavior that you fell in love with about SketchUp in the first place.

To prove that this system works, we've built a special workflow around IFC— an open classification system for folks who are doing BIM in the construction industry. You can classify components in your models with IFC types, assign and edit relevant attributes to those components and then export the resulting models into the IFC format for use in other BIM tools.

But don't stop at IFC. In SketchUp 2014, you're free to use any published schema to classify components in your models. Interested in COBie? Import the official COBie schema from BuildingSmart. Or maybe you're more interested in something like gbxml for green building, or CityGML for urban simulation. Or, you might just want to make your own classification system. We've got you covered however you want to work.

Reference: www.sketchupdate.blogspot.in

# Magazine Details – The Creative team of Sketchup-ur-Space

Started in September 2010, Sketchup ur Space (SuS) was the first online magazine devoted to SketchUp, that unique, innovative 3D design tool from Google. It holistically covers features, events, news, updates, reviews and many tips and tricks.

## 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.

## 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.

## Abhishek Mondal: abhishek@jobs2india.com

Abhishek 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...