

# Sketchup for Tablet Application



*Learning to model terrain in SketchUp*  
- Daniel Tal

*wall texture tutorials for Sketchup*  
- Thruy Pagunsan

*Tricks on how to speed up rendering for 3d models*  
- Jonathan Pagaduan Ignas

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## *A letter to the Desk of Editor*

Hello friends!

Every day we are getting great responses for our magazine. Some newbie SketchUp designers are showing their interest to publish their stunning projects with our magazine. We are giving our best effort to improve the quality and standard of the magazine so that we can telegraph the various horizons of SketchUp to the SketchUp community. Keeping this in mind we are publishing the September issue of our magazine in a more intuitive way.

The present theme of our magazine is focusing on “Future SketchUp development for viewing SketchUp models in a mobile ready format”. In this issue the readers will find an informative article presented by Daniel Tal, a licensed practicing landscape architect in Denver, Colorado, and a Google SketchUp specialist, highlighting “Learning to model terrain in SketchUp”.

An unique cover story on “SketchUp for tablet application” from SketchUp-ur-space team providing useful information on various 3rd party applications to view SketchUp models on iPad, iPhone and Android. The readers will get an interview with Klara Theresya, a graduate of architecture and the most promising 3d modeler and renderer.

Our current issue includes some exclusive tutorials from some renowned SketchUp experts. The readers will find wall texture tutorials for SketchUp and post process tutorials which are render in SketchUp and post process in Photoshop by Thruiy Pagunsan. The readers will also find Tips and Tricks on how to speed up rendering for 3d models by Jonathan Pagaduan Ignas. Another good tutorials on rendering with Photoshop techniques by Elder Cavalcantii.

Besides, there will be some latest news and blogs on SketchUp.

Now-a-days communication systems become fastest and we find a technological revolution in communication systems. The emergence of tablet gadgets makes the communication foundation more advance. The SketchUp users can also think to utilize iPhone, iPad and Android devices to view and convert their SketchUp files to a mobile ready format and present their work to the client in quickest possible way and enhance the performance. Is Trimble planning to launch a SketchUp application for the new world of presentation so that the designers get the ability to refine the look of the model conveniently?

Hope that you will like this publication of SketchUp ur Space. We will eagerly wait to get feedback from you. Please send me your suggestions at [rajib@sketchup-ur-space.com](mailto:rajib@sketchup-ur-space.com).

**THE GOAL OF EDUCATION IS THE ADVANCEMENT OF  
KNOWLEDGE AND THE DISSEMINATION OF TRUTH**



Best Wishes  
Rajib Dey  
Editor

**Happy Reading!**

## *Interview with Klara Theresya, The Sketchup modeler*



### **Rendezvous with Klara Theresya**

The leading geo modeler who have modeled several of the city's most visible buildings and structures, including Luna Park, the Anzac Bridge, Pyrmont Bridge and the Sydney monorail

**Hello Klara! Welcome to the globe of SketchUp. We would like to hear something about you.**

I would like to introduce myself, my name is Klara Theresya, I am a fresh graduated of architecture department. I feel honored and embarrassed at the same time to be interviewed in SketchUp-ur-space magazine. It is such a pleasure for me. Thank you very much

**When you first get started to utilize SketchUp in your project and why?**

It was couple years ago I started to utilize SketchUp in my project. I found it such simple and easy to use.

**What are the core areas of SketchUp and how does it incorporate with your project?**

Well, I love SketchUp pretty much because of its simplicity, so i can complete the work easier and i think it fits to complete my projects.

**What type of work do you perform with SketchUp?**

I perform 3d modelling works and rendering works too.





**You were chosen as the 2nd runner up in the SVA rendering challenge: The Robie House. Tell something about this competition.**

It was such a great competition. There were many beautiful images. I was grateful for being chosen as second runner up.

**What is most memorable project which you completed with SketchUp?**

It was Robie House rendering project.

**What are the things that allow you to be motivated and inspired to work? Who are your inspirations in the sphere of 3d modeling and why?**

There are many things that motivate me to work in architectural projects. It is all about architecture, I love architecture, and it is my passion that's why I put so much effort to keep learning 3d visualization represents the works so well. So I keep learning both in design and 3d visualization.

**While working with SketchUp which plug-in seems to be best for rendering work?**

I still love v-ray most for rendering work.

**Do you want to provide some advices for newbie SketchUp users?**

Well, i can say that I'm kind of newbie too, there are a lot of things i must learn. But i can say pick the most suitable gun, never get bored in learning, and do it over and over again :D.

**Please provide your suggestions on more up gradation of SketchUp in near future?**

Well, this is my wish to come true. I hope SketchUp will be able to be more stable, not bugging all the time.

**How SketchUp-ur-space is going and what improvements should be included to make the magazine more attractive to the SketchUp users.**

SketchUp-ur-space is already going very well and help SketchUp user a lot. More tutorials will give more attractions to SketchUp user, at least to me.

## *Sketchup for tablet application*

With the emergence of multi-touch tablets like iPad, iPhone, Android etc, we see a paradigm shift in 3D technology. We experience new opportunities in the 3D modeling sectors. Sketchup is a master tool for 3D modeling but there is not a simple viewer for skp models on Android, iPad and iPhone.

If you think from a perspective of a sketchup user you may want to make a SU model & import the SKP file as interactive 3D models and view on the iPad.

It will be very useful for explaining projects to clients. Export the model from your pc as a google earth compatible model then view using cubits from the app store.



It will be very useful for verifying dimension on site survey, plug in photos from the camera to support the dimension data. Designers can be benefitted by getting ideas about concepts & spaces and demonstrate concepts to the customers. The users can also get the ability to rotate/orbit/pan/zoom/exploding view in a 3D model as the same way as google earth works.

Sketchup for tablet application will facilitate landscape designing to a great extent. The landscape designers can create a G3 model by applying sketchup to lay out terrain models. Import the model to tablets and walk through the models containing all the data literally before you.



Trimble has to make some huge alterations to sketchup for applying it on the tablets application. Write a viewer is not difficult but it has to be applied devoid of OpenGL. Besides sketchup hinges on hover state for numerous inferencing operations with the several drawing and manipulation tools. Touch sensors in tablets does not allow for a hover state.

There are lots of 3rd party applications which facilitate a user to can bring their SketchUp models to their preferred smartphone and tablet and showcase their design.

### **SightSpace 3D**

In recent years Limitless Computing Inc.®, a provider of 3D mobile Augmented Reality, released SightSpace 3D for Android customers. It is the only mobile Augmented Reality application for Google SketchUp™. It is accessible for the Android Market @r \$14.99.

SightSpace 3D facilitates observation of Google SketchUp designs on Android devices with Augmented Reality capabilities which superimpose digital models over prevailing physical environments. Stereoscopic 3D is accessible at the time of using Augmented Reality wearing 3D glasses.



This product is well versed with iPhone 3GS, iPhone 4, iPhone 4S, iPod touch (3rd generation), iPod touch (4th generation) and iPad. Requires iOS 4.2 or later. One can view SketchUp models on the iPad, iPhone, or iPod.

The users can easily track a SketchUp model with single finger, panning with two, and pinching to zoom in and out. The sketchup users can easily load models into tablets with the incorporation of Google 3D Warehouse.

The users will be able to export any geo-located sketchUp model to a KMZ file, placed on an iPad 2 or iPhone 4, and glimpse in real-time & real place to have a visual look of the space. This can be applied for for observing construction projects, urban planning, kitchen designs etc.

### **Babel3D**

Babel3D contains a supporting application for 3D visualization on mobile devices known as Glovius, accessible on both iOS and Android based devices as well as tablets. The users will get the ability to covert sketchup files into various other 3D file formats. The users can open outsized 3D model files and downloads the models to the iPad being viewed offline. The models can be rotated, zoom and moved. One can get the applications for free on the Apple App Store and in the Android Market.



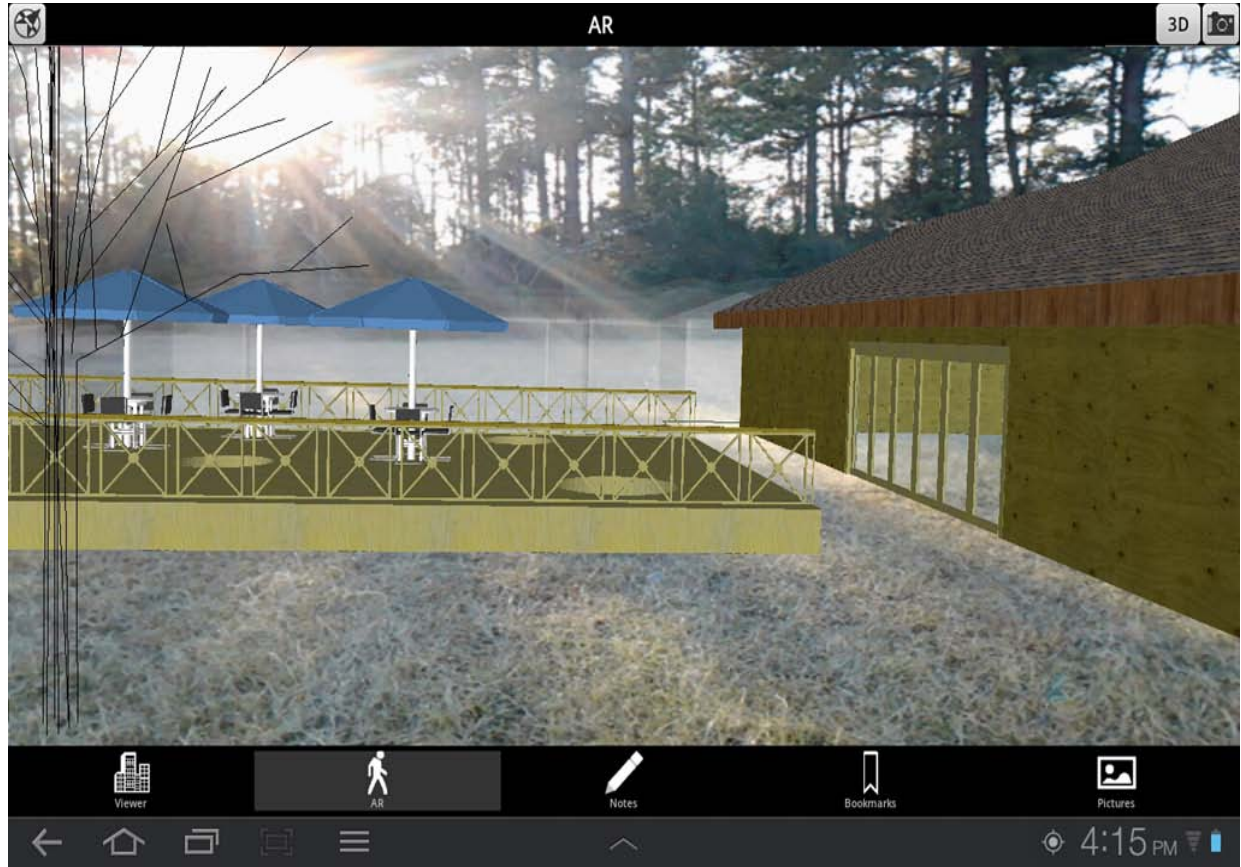


The application is compatible with SketchUp, 3DS, OBJ, STEP, IGES, JT, and other professional CAD formats like SolidWorks, Catia, Pro/E, Inventor, and NX.

The application supports display of annotations (right now, only for JT), and section planes alongside the standard three ortho-normal directions. The users get the ability to interact with the model applying the touch interface - pinch to zoom, single finger drag to rotate, two finger drag to pan, and double tap on the screen to reset the model. The user will also be able to save and email snapshots from within the app.

#### **NaviCad**

There is another application accessible on the iPhone and the iPad which facilitate users to search and view numerous Sketchup 3D models and navigate in 3D. It is the sole application to glance google 3D warehouse on the iPhone.



**The NaviCad provides the following benefits for iPhone users :-**

- Run off with rotating the model
- Pinching zooms in/out
- With some models, double-tapping on a section of the model showing up the section and making it the focus of rotation.

The IN/OUT button available with the navigation bar switch the users between being inside and outside the model applicable for models containing an inside similar to stadiums and arenas. If one exists in inside and contains the iPhone 3GS, while shifting the device around, it operates similar to a window to the model since the app controls together the phone's accelerometer and compass functionality. By applying NaviCAD the users can renders models generated with Google Building Maker.

**Cubits**

It can be termed as an iOS Viewer for SketchUp models and available with App Store. Cubits comes up with pleasant camera implementation and a swift renderer. Confine clutter-free screenshots of your models to the camera roll. By utilizing Cubits the users can view and save 3D models from Google 3D warehouse on the iPhone or iPad. You can also zoom, rotate in 3D. It's very useful for presenting mock-ups to the clients.

The users will be able to put KMZ files exported from SketchUp, synchronize them from iTunes. KMZ files can also be sent through email as attachment. The receiver can open his email account and access the attachment on his iPad. Just select the attachment and it will inquire whether you like to open in Cubits. Select Cubits and the program will be opened with the image on the screen.

Export your project as a KMZ, Send it by email, as a attachment, to an email account that you can access on your iPad. When you get the attachment just select it and it will ask if you want to open in Cubits select Cubits. Note it may give more than one choice. Selecting Cubits will then open the program with your image on the screen 1 finger to rotate, two scroll two fingers to pinch to enlarge/reduce image.

The SKP users can download and view models being uploaded to Google 3D Warehouse from SketchUp or Building Maker.

### **Walkabout3d Mobile**

It is a newly launched user-friendly application for the iPhone facilitating SketchUp users to create and view the scenes of their designs directly on an iPhone and allocate the view of their design ideas to their clients.

The users can freely download WalkAbout3d Mobile in the iPhone App Store and is well-matched with the Trial version of WalkAbout3d.

The users can just click on the "Generate Panorama" button to produce the panoramic views while walk through a SketchUp design and categorize and illustrate each one to be demonstrated within the iPhone app.

The users will be capable of discovering the accurate location of each panoramic view on a map view within the app by geo-referencing a SketchUp model within SketchUp. All location details will be placed into Walkabout3d mechanically.

Allocation of scenes is performed by uploading the panorama project to webservice as per your requirement, and a "user account system" is available on the WalkAbout3d website providing users an simple way to get and distribute their WalkAbout3d Mobile projects from.



### **3DeeWarehouse**

3DeeWarehouse is a crucial 3D application for the iPhone. It facilitate users to download and exhibit 3D models from Google's 3D Warehouse on your iPhone, and to glimpse them in 3D – interweaved for the glasses-free 3DeeShell, or like an anaglyph. Enfold your iPhone 3G in the Wazabee 3DeeShell (Patent Pending), slide in the lens, and experience amazingly realistic 3D models. Its special lens conveys glasses-free 3Dee, right before your eyes. The 3DeeShell, allows users to virtually view any stereoscopic 3D object in their iPhone in accurate colour and with detail.





### **SimLab 3D OBJ Viewer**

Now PDF file can be read with the iPad. One can utilize Simlab plugin for SU which facilitate users to generate a PDF file with embedded 3D model which is viewed, rotated, etc, directly in the PDF. Export sketchup models as .obj file. Now apply SimLab 3D OBJ Viewer which allows the user to view 3D OBJ (Wavefront) files (\*.obj). SimLab 3D OBJ Viewer supports importing 3D Geometry, material colors, and texture. The users can also pan and zoom the imported model. Now transfer the obj file to ipad through itunes. Open application & select your .obj file and view.

### **3DVIA Mobile**

It is a mobile 3D model and content sharing application for Apple iPhone and iPad which facilitates users to allocate and view their 3d SKP models on an Apple iPhone and iPad in a fully interactive 3D viewer 3DVIA is compatible with 30 file formats including. 3DXML, .dae (COLLADA), .3ds, .obj, IGES, STEP and .kmz. After the model being exported to 3DVIA, it is totally unconcerned on what OS it was modeled. One can all the time open an skp file that was generated on Windows, on Mac (and vice versa).

### **SketchBook® Pro**

SketchBook® Pro from Autodesk is a professional-grade paint and drawing application that . offers a total set of sketching & painting tools through a modernized and insightful user interface intended absolutely for the iPad experience. The application is very useful for professional artists, illustrators, and designers to draw, sketch and paint professionally with natural sketching tools. The tools are secreted in a respiratory of widget known as Lagoon. SketchBook Pro is the first ever application to break the iOS/OS X barrier with its syncing capabilities.



## *Learning to model terrain in SketchUp*

### **The World's Not Flat**

*Originally published in the October 2012 edition of Landscape Architecture Magazine*

There is no such thing as a flat site (**Fig 1**). Terrain, slopes, and grading are an intrinsic part of site related projects, but many people struggle with representing terrain in a digital form. In the 7 years I've been teaching students and professionals to create models in SketchUp, the most common question I get is how to work from a digital site survey (for example from AutoCAD) with contours to generate a SketchUp model that integrates the site features, like buildings, walls, roads and walks into the terrain.

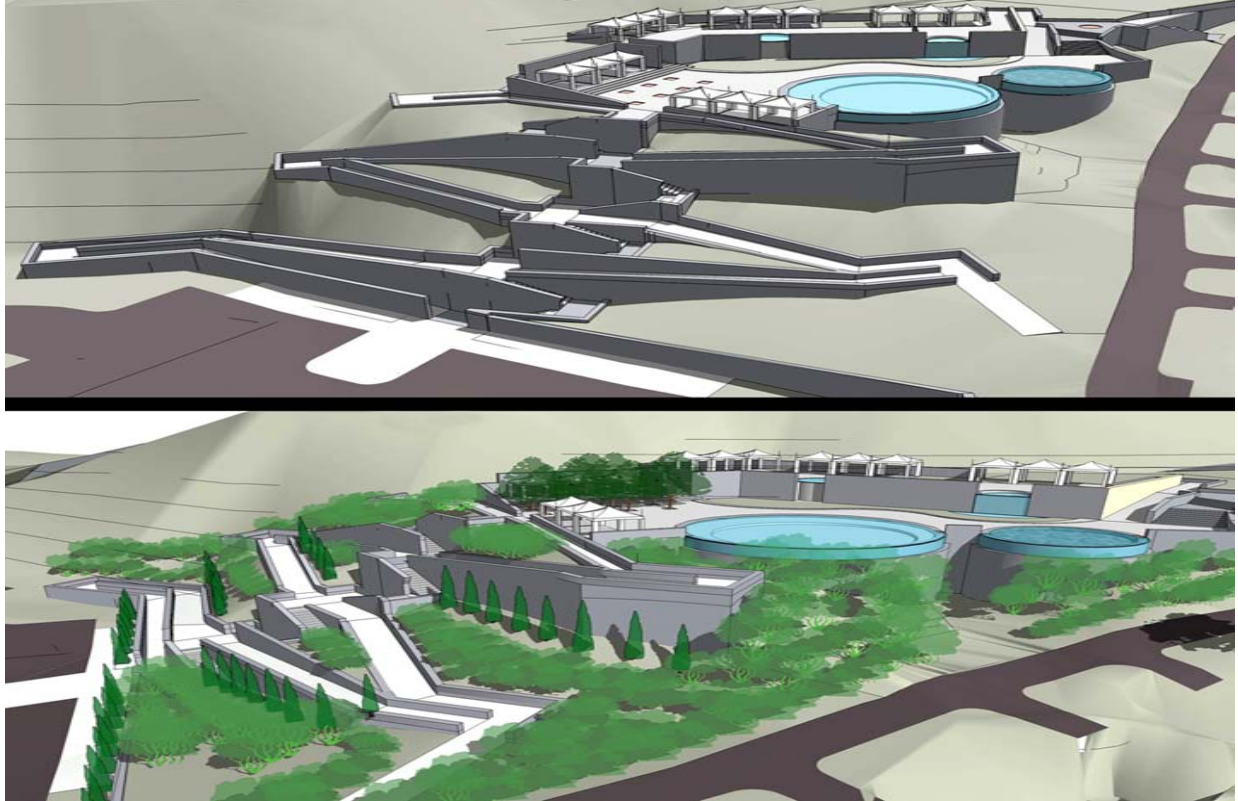


It's actually not that hard. You'll need to be working in SketchUp Pro, as the free version of SketchUp is unable to import DWG files from AutoCAD. You'll also need to install several free ruby scripts—plugins that customize your SketchUp application and increase its capabilities. With a basic knowledge of SketchUp and the right tools, you should be able to convert a 2D contour map from AutoCAD into a digital elevation model in SketchUp in less than a day. Many different types of terrain models can be created from small residential scales to larger master plans (**Fig 2 & Fig 3**).





Such a model will give you a feel for how your design will actually look on the land. It will also make your proposal much clearer to a client who is not trained to read traditional grading plans (**Fig 4**). But be warned that SketchUp has some limitations as a tool for grading design. First is the accuracy of the generated terrain. SketchUp is able to create a general representation of the site and grades but is not a very good tool for fine grading. It does not have tools that can perform Cut/Fill calculations or automatically indicate percent slopes and spot elevations.



The process for creating SketchUp terrain models from AutoCAD plans outlined below assumes you have some basic knowledge of grading, AutoCAD (or similar Cad programs), and SketchUp. There are nuances throughout the process that are not reviewed in this article. However, if you have those basic skills, you should be able to navigate this methodology.

### SketchUp Tools and Plugins

Before you begin, it may be helpful to review a few basic tools that are included in SketchUp. The From Contour tool is used to generate a digital elevation model from imported contour lines or other lines with a Z-value. The tool stitches together contours, connecting vertices with flat, triangulated faces. It can also be used to re-grade around site elements like walls, steps, and other objects to merge them into the terrain you've generated from the contours. Another tool, Drape, lets you project linework representing walks, roads and trails onto the terrain model you've generated. These Sandbox tools are a part of SketchUp, but they may need to be enabled if they've never been used. If you don't know how to do this, google "enable sandbox tools SketchUp."

You will also need to download and install four ruby script plug-ins before you start. All of them are available for free online.

Simplify Contours is an essential tool, available through SketchUp's website. The Ruby Script removes about 50% or more of the points (also called vertices) that compose a typical surveyed contour line. The Ruby selects vertices that are at shallow angles relative to each other and removes them. This limits the loss of the terrain's profile. The greater the number of points or vertices, the greater the number of faces created when using From Contour on imported contour data. This will cause the terrain process to take considerably longer because SketchUp needs to process more information. Decreasing vertices makes it easier for SketchUp to complete functions like From Contour and Drape. Reducing the number of points that define a contour line reduces the accuracy of that line; however in most cases the difference is not noticeable.



Tools on Surface, also called Surface Operations, allows you to draw lines and shapes directly on terrain (**Fig 5**). Its primary function is to supplement SketchUp's Drape tool and fix incorrectly draped line work. An Offset function allows contours and outlines to be offset on the surfaces. The tool is available from SketchUcation ([www.SketchUcation.com](http://www.SketchUcation.com)). Google "SketchUcation Tools on Surface". Free registration is required.



Joint PushPull allows multiple surfaces to be extruded or depressed at the same time. For example, a road profile draped onto terrain can be selected and depressed creating a 6" curb. Google "SketchUcation Joint PushPull".

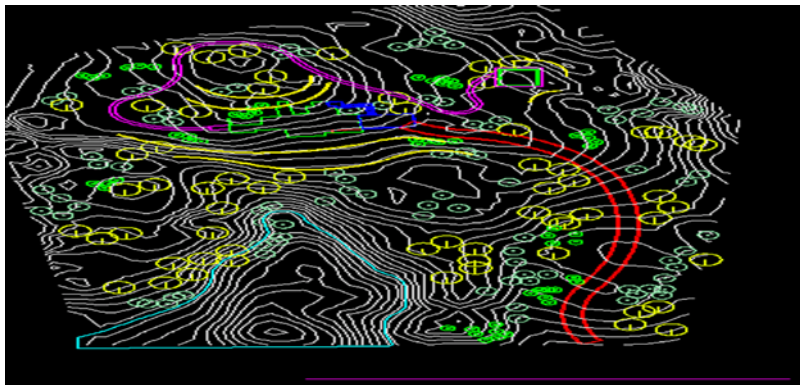
DropGC allows components representing vegetation and other objects to be dropped onto terrain, so that they are directly on the surface. This tool is essential for placing trees and other vegetation in one quick step instead of trying to place each onto the terrain individually. It is available from [www.smustard.com](http://www.smustard.com)

#### **Additional Ruby Scripts**

There are additional Ruby Scripts that are ideal for working with Terrain reviewed at the end of the article.

#### **Preparing the File in AutoCAD**

Before you open your grading plan in SketchUp, you will need to prepare it in AutoCAD (**Fig 6**).





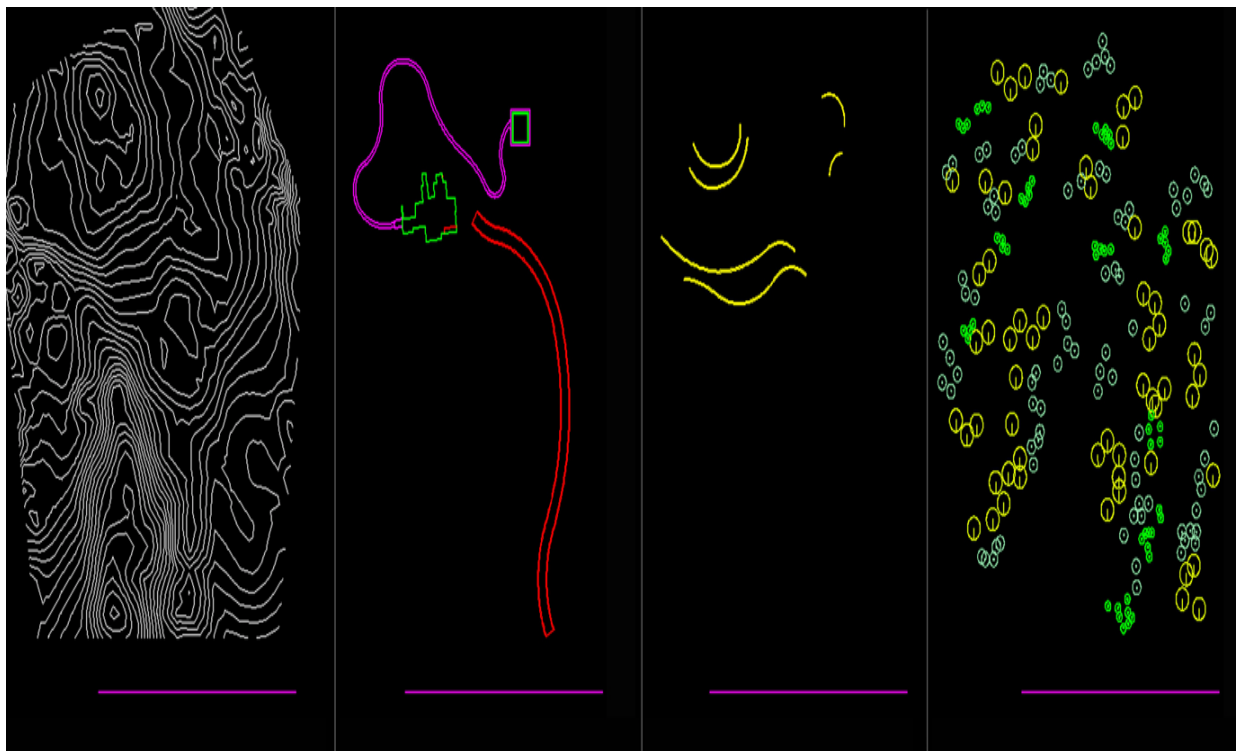
**Check Z-values:** All contour lines must have Z values, representing their elevations. In AutoCAD, select and List a contour line, and check the Z value. If it is 0 then the contour has no elevation and you will need to type in its elevation using the Properties menu. Pay particular attention to the proposed contour lines that you've created yourself. Surveyed contours typically possess Z elevations already, but it won't hurt to check these too.

Your other linework—the roads, paths, walls, steps, and building footprints, should all have a Z value of zero. If not, they should be flattened in CAD. Freeze the contour data so it is not visible, then type "flatten" in AutoCAD and select the site plan linework. AutoCAD will ask to include Hidden Lines as part of flatten. Answer "no."

**Close Polylines:** You will also want to insure that all linework areas are closed lines or polylines. Closed areas are easier to drape on the terrain. It is possible to fix flaws created by draped lines that are not closed however, this can be a time consuming processes. Better to have it done correctly in AutoCAD.

**Minimize Contour Data:** Minimize the amount of contour data imported into SketchUp. The more contour lines the longer the process can take and having more data does not necessarily make a more accurate terrain model. SketchUp produces the terrain model using the Z-value of the line—it does not require you to build from contours at a regular interval. So, if you are showing a hill with a continuous slope, it is not necessary to show every contour that makes up that slope. Just showing the contours at the top and bottom should be enough.

**Separate Different Layers into Separate Files:** Instead of importing your whole AutoCAD file into SketchUp, it's best to isolate different types of information and save it in separate files using the WBLOCK command. I typically create separate CAD files for contours, roads, trails, walks, walls and steps, building footprints, and vegetation—which were each originally drawn on separate layers in CAD. Each one of these files will be imported into SketchUp one at a time. This insures that only relevant linework is inserted into SketchUp, and adding the data to your model in stages makes it easier for SketchUp to process (**Fig 7**).



In order to align each file in SketchUp, you will need to create a benchmark that can be included in each file. Create a new layer in AutoCAD called Benchmark and make it the active layer. Then, draw a horizontal line that does not cross any of your other linework (for example in the bottom right of the plan).

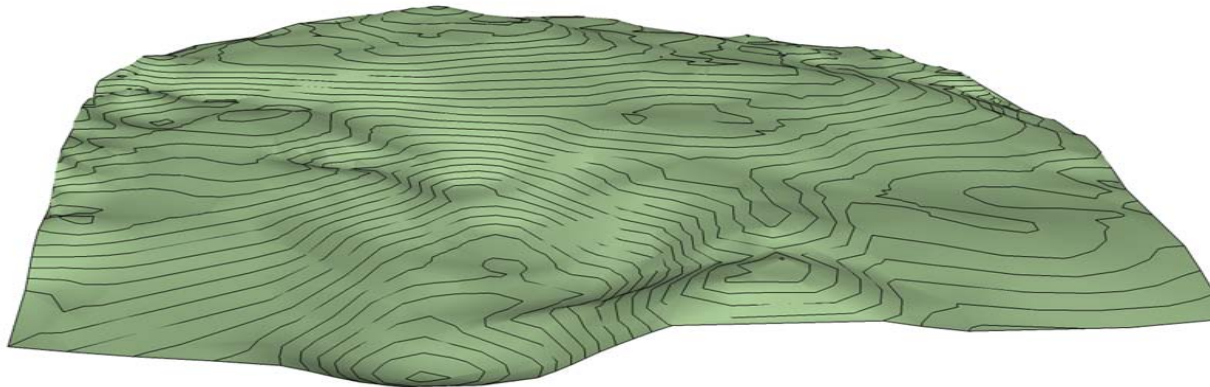
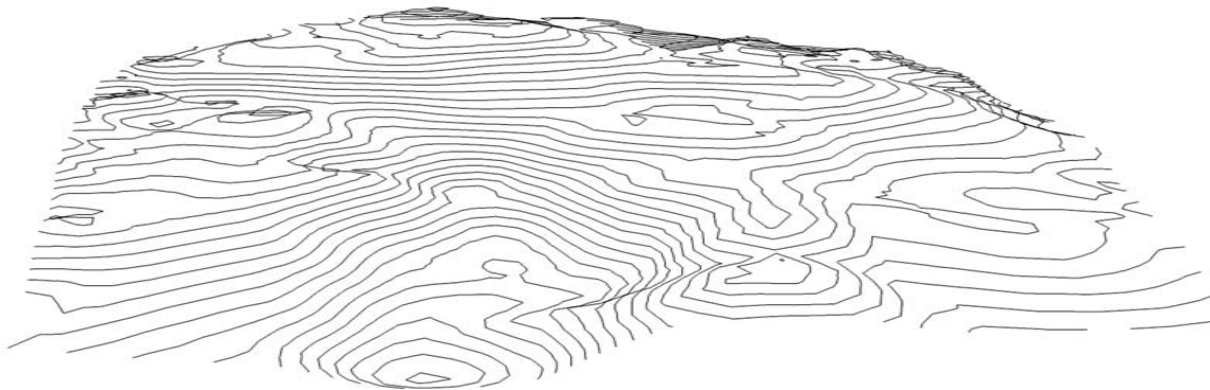
### Creating the Model

**Importing DWG Files** import, From the Browser menu select DWG at bottom. Navigate to the location of files you saved using the WBLOCK command and select the contour file. Once you've imported the contour file, look to make sure the bench mark line is present in the imported linework (it might be hidden behind one of the Green or Red Axis line). This will save you a lot of headaches later. If all the contour lines are a group, explode them.⌘:

Now it's time to import the files into SketchUp. Always start by importing the Contour information. To import DWG files, in SketchUp go to File

**Simplifying Contours for Easier Processing:** Select all the contours and use the Simplify Contour Ruby script on to remove vertices. Once the plugin is selected, SketchUp will ask for an Angle. This represents the angle of 'bend' between points (vertices) along a contour line. The default of 10 usually works fine. SketchUp will remove points that create angles of 10 degrees or less. The result is some contour lines will be deleted while others will be straightened slightly as some points are removed. If too many contours are deleted, undo the result and try Simplify Contour again. This time try adjusting the angle down in the hopes that SketchUp will not delete too many contours. If this process does not work, create a terrain without using Simplify Contour. However the rest of the process of draping and working with the terrain itself will take longer and SketchUp might function at a slower rate due to having to process a greater amount of information.

**Create Terrain from Contours:** Select all the contours again and select From Contours on the Sandbox menu. This will stitch the contours together, creating the triangulated irregular network (of faces) or TIN. The created surface is a single group (**Fig 8**).



**Overlaying roads, trails, and other linework on the terrain:** Import each of these layers individually to cut down on processing. When you import the road linework, you'll notice it is below the TIN. This is because the imported linework has no elevation data. Use the benchmark lines to align the information, and then move the linework directly upward over the terrain model. You can lock the direction of movement by using the up arrow on the keyboard when using the move tool. To drape the linework onto the terrain, select the linework. Activate the drape tool. Hover the drape tool over the terrain until it becomes selectable (you'll see it is highlighted in blue). Then, left click to activate the operation. The roads should now be draped onto the terrain. The process is identical for trails, planting areas and similar hardscape (**Fig 9**).

**Painting the Draped Layers:** Interested in painting the road's surface? Enter the TIN / Terrain Group instance, by double clicking on the terrain surface. Select the area with the outlined road. If Drape worked correctly the road surface should be its own discreet surface. If drape did not subdivide the road surface, use Tools On Surface to fix this issue. Using the Line on Surface tool draw an edge across the intended road surface, dissecting it in half. The typical result is that half the road will now be correctly subdivided. Continue to further subdivide the road with the Line on Surface tool until the surface is correctly subdivided. You can go back and erase all the extra

lines after this is completed. You should now be able to apply an appropriate color to the surface. In this case, I've applied an Asphalt color to the road area.

**Extruding Surfaces to Create Curbs:** If you wish to create a depressed road with a curb, select the road surface and click Offset from the Tools on Surface menu. The selected road surface can be offset inward 6 inches creating a curb outline. Next select the road surface, right click over it and select Joint Push Pull. Depress the road 6 inches (**Fig 10**).

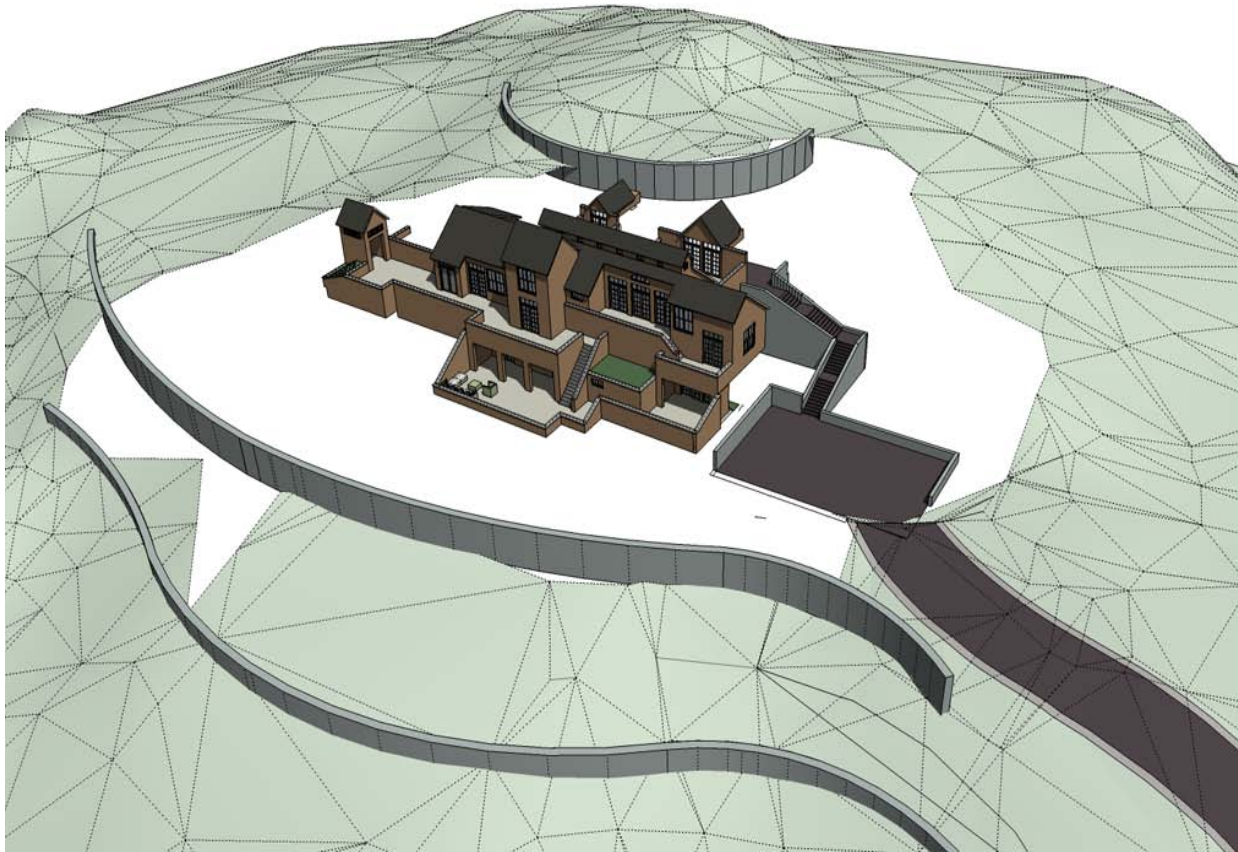


**Grading Walls, Steps and Structures into the Site:** Most site plans will require that walls, steps and similar objects like buildings be integrated into the terrain, not just draped on top of it. The process is simple but does require you to think through the integration as a grading exercise if you haven't already.

First, the wall, steps or building are modeled, giving them extrusion and volume. Next, they are aligned and placed onto the terrain. This is where having proposed grades and spot elevations is useful, as it allows these objects to be placed based on more accurate grading parameters. For example, the building can be elevated based on its finished floor elevation. Steps and walls can be positioned based on bottom of wall or step elevations. If you are unsure about the correct position (it has not been figured out), the placement of these elements on the terrain to your best judgment.

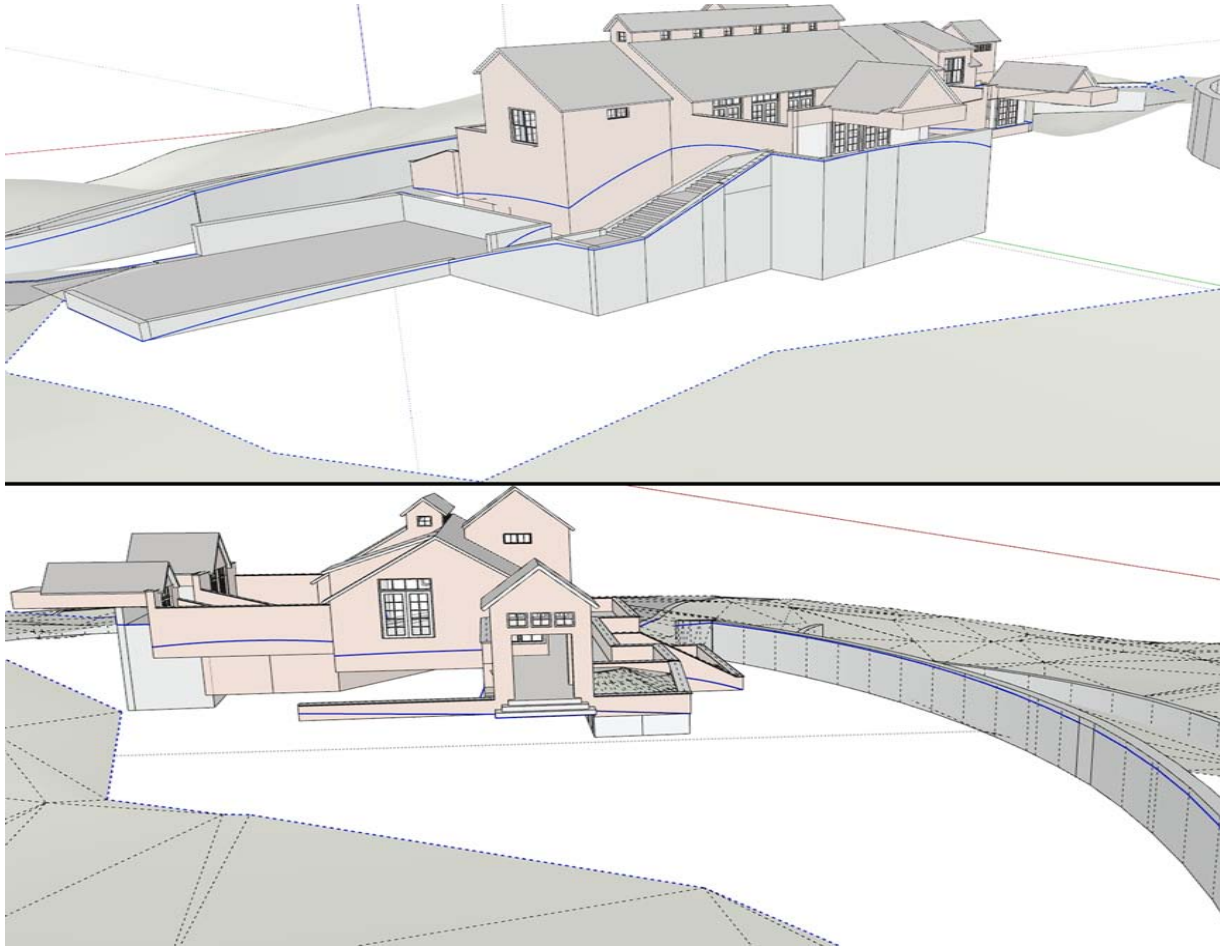
Next, go to View - Hidden Geometry and make the hidden geometry visible. This reveals the many hidden lines that make up the terrain model, so that you can select individual faces of the terrain. Delete terrain faces around the object that will be re-graded into the surface (**Fig 11**).



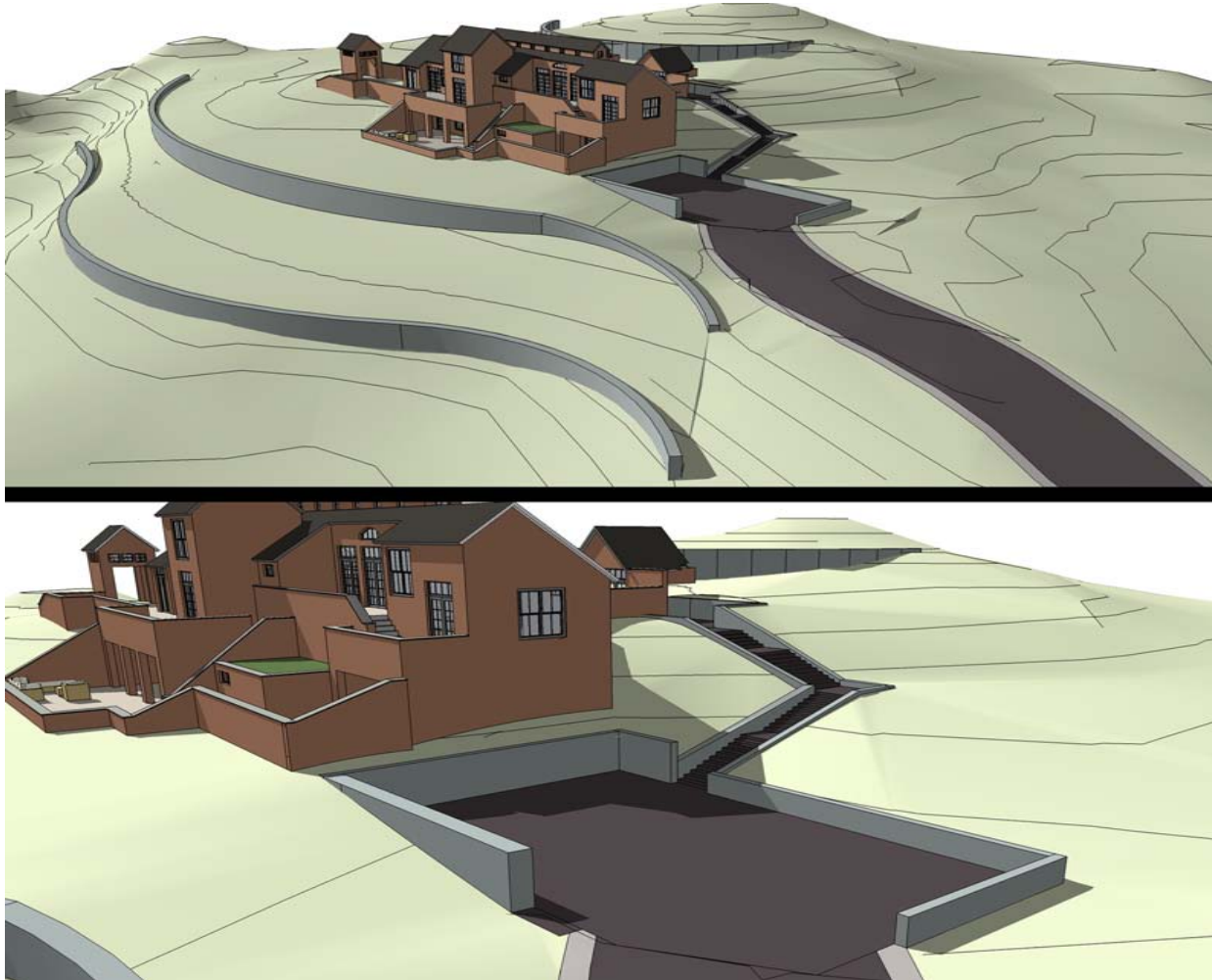


Select the terrain model group and enter the group instance by double clicking on the terrain itself. Using [SOME SPECIAL TOOL?], draw edges and arcs along the surface of the walls, steps or buildings. These lines represent the location where newly generated grades will meet the object. Be conscious of what lines and arcs are added and again, consider this in terms of a grading exercise trying to achieve the most realistic result for the object (**Fig 12**).





Select all these new lines and the edges of the adjacent terrain, then activate From Contour on the Sandbox menu. This will result in the terrain and object being integrated and graded. It might be necessary to clean up some of the excessive created faces. Don't hesitate to undo and retry the process until the desired results are reached (**Fig 13**).

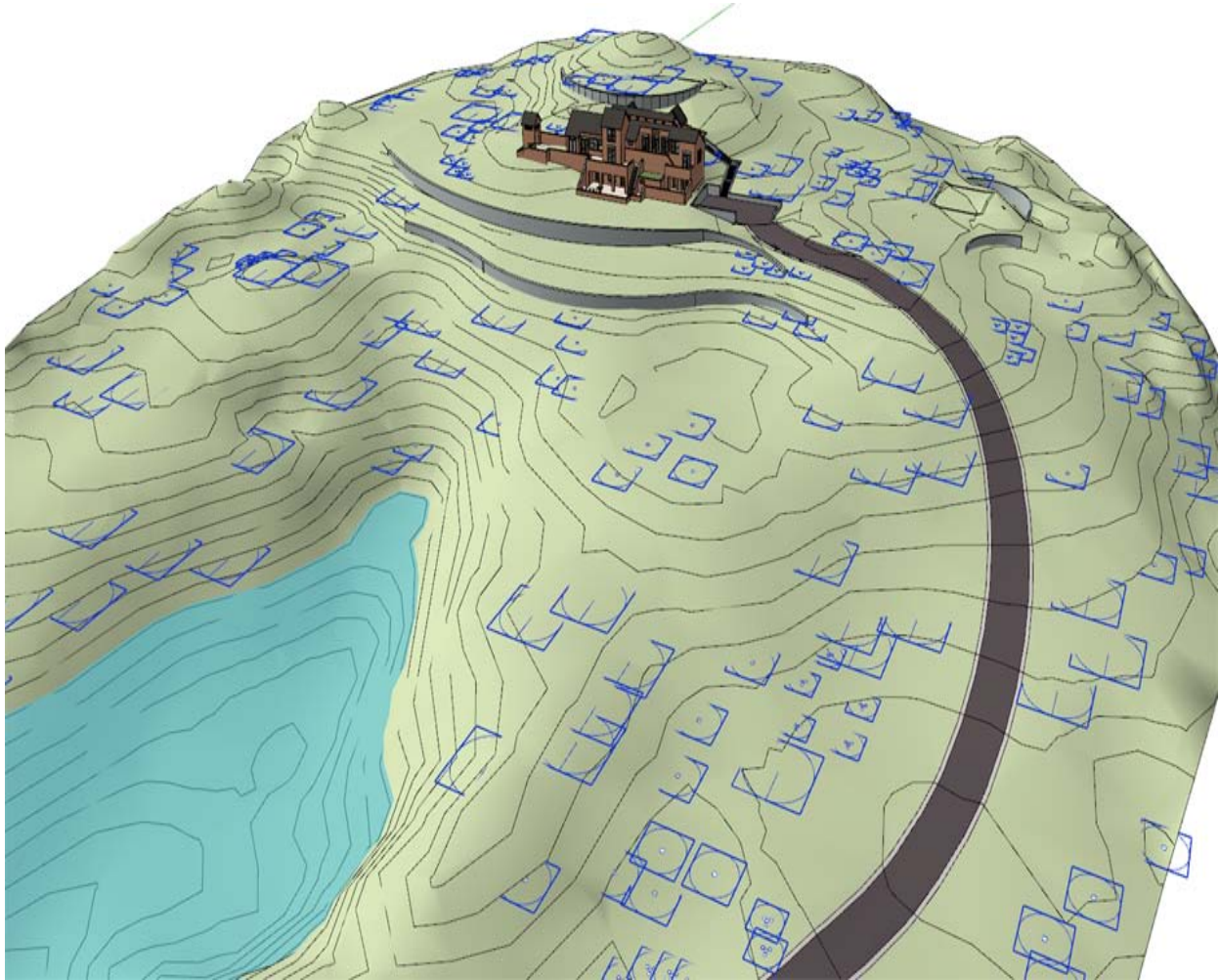


### The Drop tool and Converting Vegetation Blocks to 3D Components

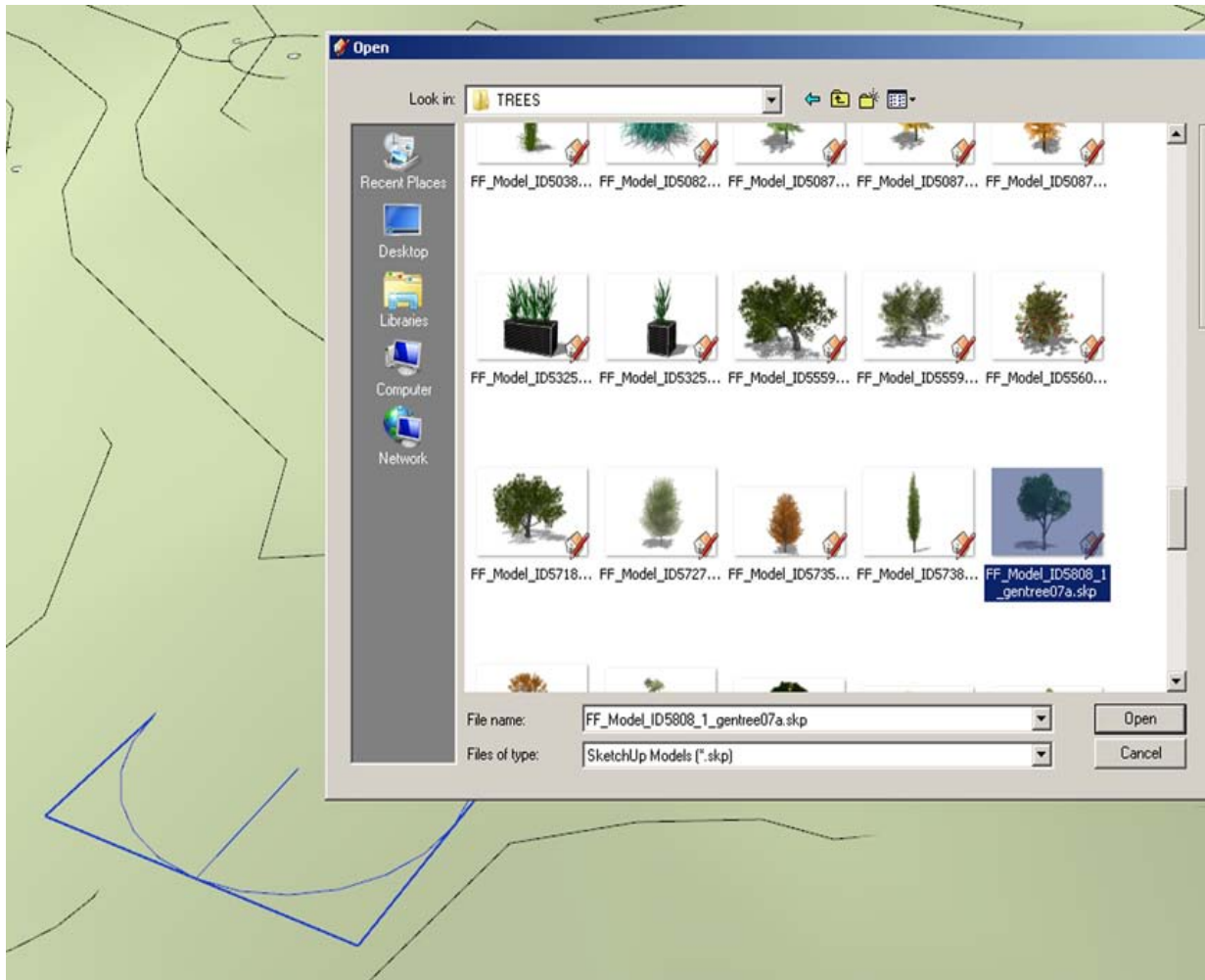
Vegetation and other site amenities, like pedestrian lights and furnishings, can be quickly and easily placed onto the terrain. But these features are typically imported as 2D blocks rather than linework, so the drape command will not work on them.

Import the file containing these blocks, align it using the benchmark and move the blocks up over the terrain. Explode the group containing the blocks, but be sure not to explode the individual blocks themselves.

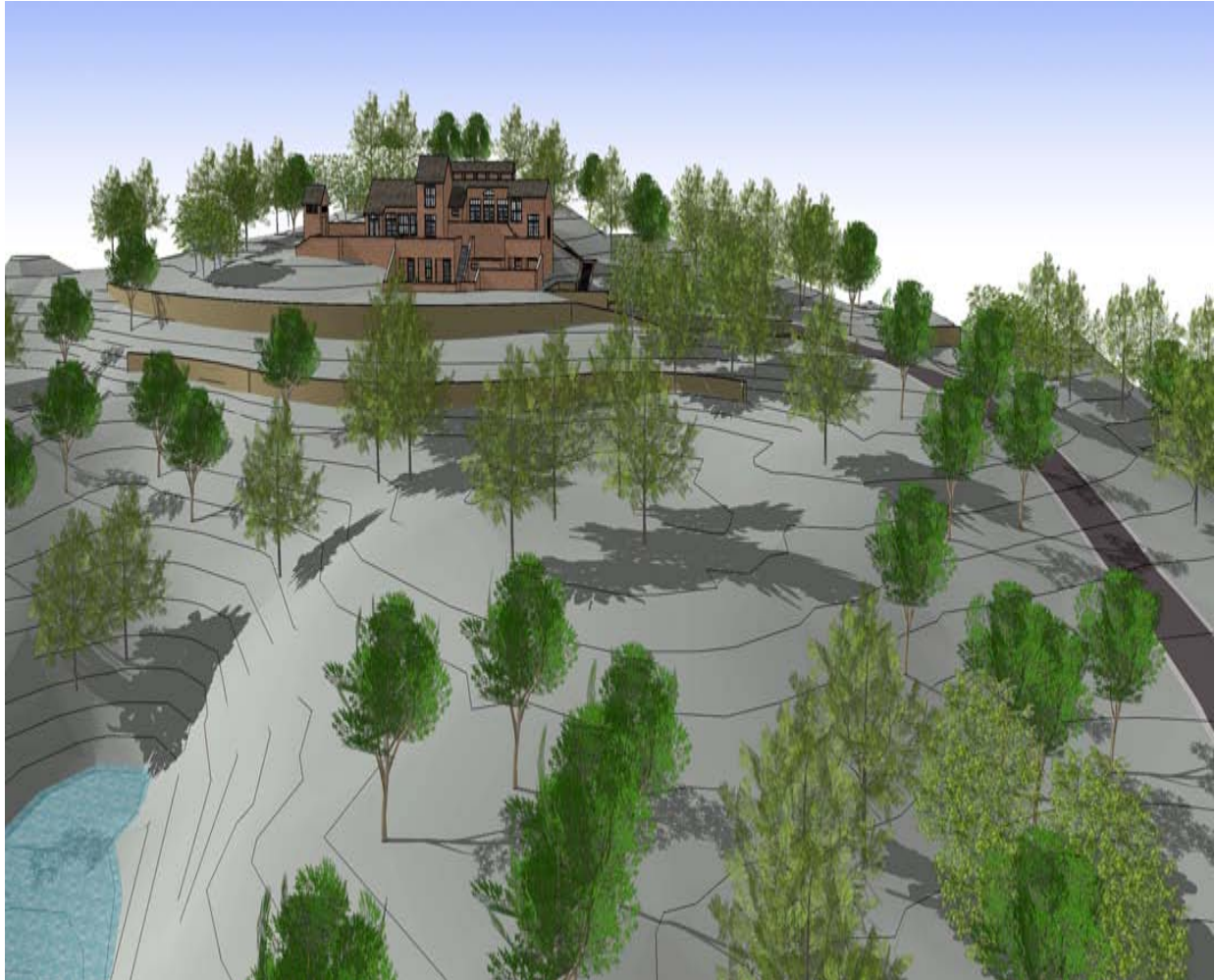
It is recommended that you save the file first before performing the next step as it is not possible to undo this step. Select the blocks, right click over one of them and select Drop at Intersection from the right-click context menu. Once dropped, each block will hug the terrain (**Fig 14**). If Drop does not work it is because an object other than a component or group was selected. Sometimes it's best to perform Drop on a limited number of blocks to insure the process works.



Replace the blocks with 3D components by selecting and right-clicking over a block. This will bring up the right-click context menu. From the options, select Reload. Navigate to your component folder and select a 3D component to replace the block. For example, you can select a 2D block representing a tree and then reload a 3D tree to replace it. All versions of that 2D block will be replaced with a 3D tree (**Fig 15 & Fig 16**). Repeat this step for every block and object type.







The model is complete and ready to be rendered (**Fig 17**).



#### **Additional Ruby Scripts and Software for grading:**

The tools laid out above will provide some basic functionality. But there are additional plugins that can help streamline the process. These tools are not free but solve some of the issues that SketchUp has when working with the base method; for example, by creating finer and smoother grades.

The Ruby Script Instant Road by Vali Architects ([www.valiarchitects.com](http://www.valiarchitects.com) - cost \$25) allows for draping a single face representing a road onto terrain (**Fig 18 & Fig 19**). The Plugin grades the road onto the surface creating a much smoother and realistic surface in comparison to the Drape tool. Instant Walls is an excellent tool allowing for the creation of walls, colonnades, fences and more by simply drawing a line, series of lines or arcs on surfaces, selecting the drawn edges and with one click converting them into the chosen element (**Fig 20**). These auto-generated structures will hug the terrain once created (**Fig 21**).









Other scripts by Vali include Instant Roof and Instant grade, which are worth exploring as they are quick shortcuts to creating detailed structures and integrating site elements into terrain.

A ruby script called Artisan created by the civil engineer Dale Martins is a series of tools bundled in a single menu that allow you to work with complex forms and shapes common in terrain modeling. These tools offer alternative

to the some of the clunky counterparts found in the Sandbox menu. For example, the Artisan Sculpt Brush provides an excellent way to extrude or depress terrain creating swales, hills or other landforms by simply dragging the tool across the terrain surface. The strength of the tools extrusion is easily adjusted using the arrow keys on a keyboard. Other Artisan brushes make it quick to select terrain surfaces, level areas of terrain, or select surface vertices. Not to mention the many other tools it includes to further refine organic forms and shapes making Artisan is indispensable. The tool cost \$39 and can be purchased at [www.artisan4sketchup.com](http://www.artisan4sketchup.com). There is an excellent post by SketchUp on their official blog about Artisan:

<http://sketchupdate.blogspot.com/2011/03/organic-modeling-with-artisan-plugin.html>

There are more tools beyond these as well. For example, it is possible to create terrain from point / cloud data using the right Ruby Script (ask on SketchUcation is this is what you need). Additional Ruby Scripts provide the means for further smoothing out terrain and generating new contour lines from any adjusted grading done to the model.

Daniel Tal is a landscape architect and Author of the forthcoming book, *Rendering In SketchUp: From Modeling to Presentation for Architecture, Landscape Architecture and Interior Design* (due on book shelves in February 2013). The book reviews how to create photorealistic graphics in SketchUp. Daniel is also the author of *Google SketchUp for Site Design*. To find out more about Daniel and related services go to [www.ambit-3d.com](http://www.ambit-3d.com) or contact Daniel at [ambit3d@gmail.com](mailto:ambit3d@gmail.com)

## *SketchUp's upcoming 3D Basecamp 2012*

### **SketchUp's upcoming 3D Basecamp 2012**

3D Basecamp is considered as the premier gathering of SketchUp devotees to learn and interact with one another. This year 3D basecamp is going to occur in Boulder, Colorado on October 15th, 16th and 17th. Day One of the event will be held at the Boulder Theater. Days Two and Three will be happened to another location - Rembrandt Yard, an event space/art gallery. From this basecamp the sketchup users will come to know the future of Trimble Sketchup.

It will be the largest 3D Basecamp still now and there will be gathering of 250 to 300 people from all over the world. The upcoming 3D Basecamp will focus on the huge spectrum of plugins, add-ons and extensions being developed with SketchUp's Ruby API. Attendees can also familiar with the current and innovative product line practice through the RUBY API and some developer-level tools.



There will be also a Ruby Scripting class for beginners useful for people willing to discover the basics of building plugins for SketchUp. Advanced Ruby developers can also participate in a separate, all-day scripters' conference.

There will be also arrangements for a small area for vendor tables, a SketchUp Lab organized by members of our Support and QA teams, and a 3D printing area.

Most of the attendees at Basecamp are intermediate to expert-level SketchUp users. If you want to see how some of the best sketchuppers in the world use our product, and maybe see what's possible, then Basecamp might indeed be for you.

The 3D Basecamp 2012 can bring good job opportunities for expert Ruby developers who engage in developing and deploying Ruby On Rails Web Applications. Attendees can make an impression for himself to the Trimble team or any of the other third-party developers and can achieve on spot job offer.

Registration has been started for 3D Basecamp earlier this week. If you register and fail to attend the basecamp, you can ask for a refund. The amount you'll receive depends on when you inform about your cancellation.

- On or before September 15th, you'll get a 100% refund.
- September 16th to October 1st, you'll get a 50% refund.
- After October 1st, no refunds will be made.

For Registration with the base camp, go through the following link: [www.eventbrite.com](http://www.eventbrite.com)



## SketchUp Exporter

### SketchUp Exporter

Big news for our SketchUp users: thanks to Alex Schreyer, we now have a plugin to export 3D models directly from SketchUp to Sketchfab. The plugin adds a menu item "Upload to Sketchfab" to the File menu in SketchUp. All you need to do before you can upload your models is register on Sketchfab.com and get your private API key. You can find it on your dashboard, once you have filled in your email address. Once the plugin is installed, it just takes 1 click to publish from SketchUp to Sketchfab! Here is a little video demo:

For current SketchUp version: [download the SketchUp-to-Sketchfab exporter v 1.3 \(.rbz\)](#)

Download the RBZ file. Then open SketchUp (v.8 M2 and above) and go to the Preferences dialog. On the Extensions tab, select "Install Extension..." and browse to the file.

For older SketchUp version: [download the SketchUp-to-Sketchfab exporter v 1.3 \(.zip\)](#)

Download the ZIP file and unzip it into the SketchUp plugin directory (usually at C:\Program Files\Google\SketchUp\Plugins\ in Windows or /Library/Application Support/Google SketchUp/SketchUp/Plugins/ on the mac). Keep the folder structure as it is in the ZIP file. Then re-start SketchUp and look for the new menu item in the File menu. If you are updating, just overwrite the old version of this plugin.

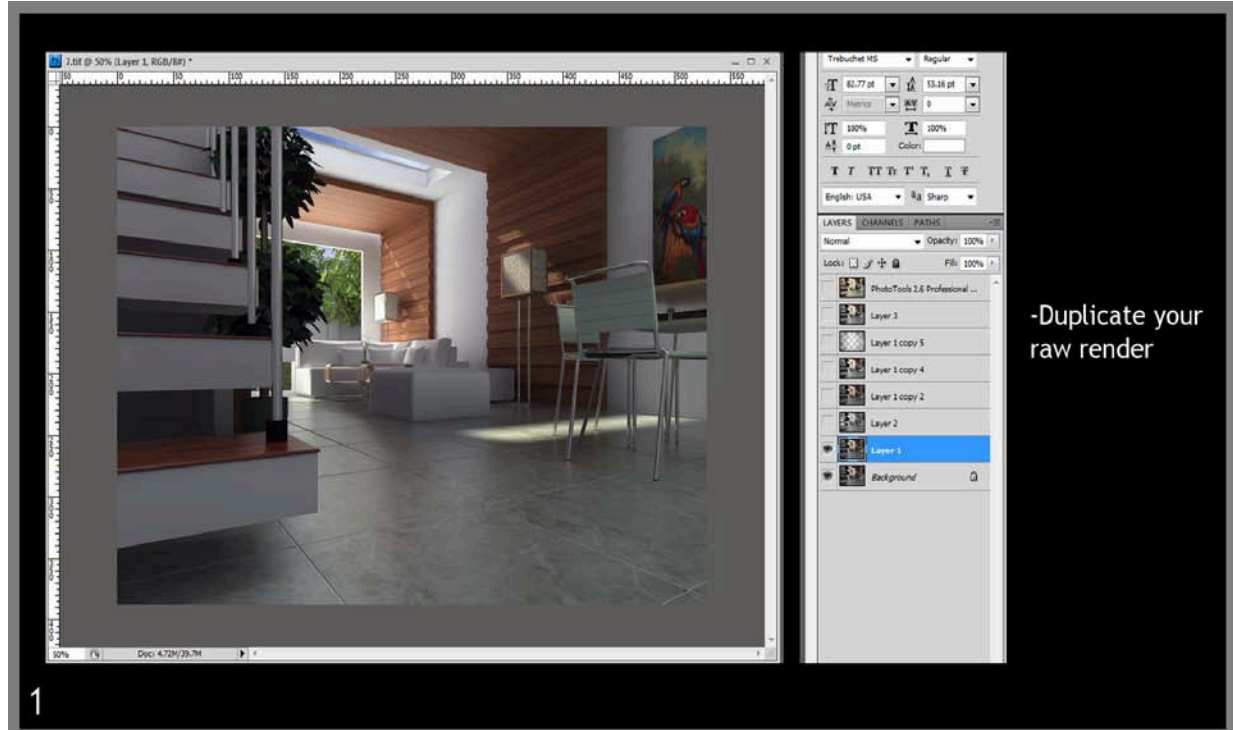
Credit: many thanks again to [Alex Schreyer](#) for making this possible.

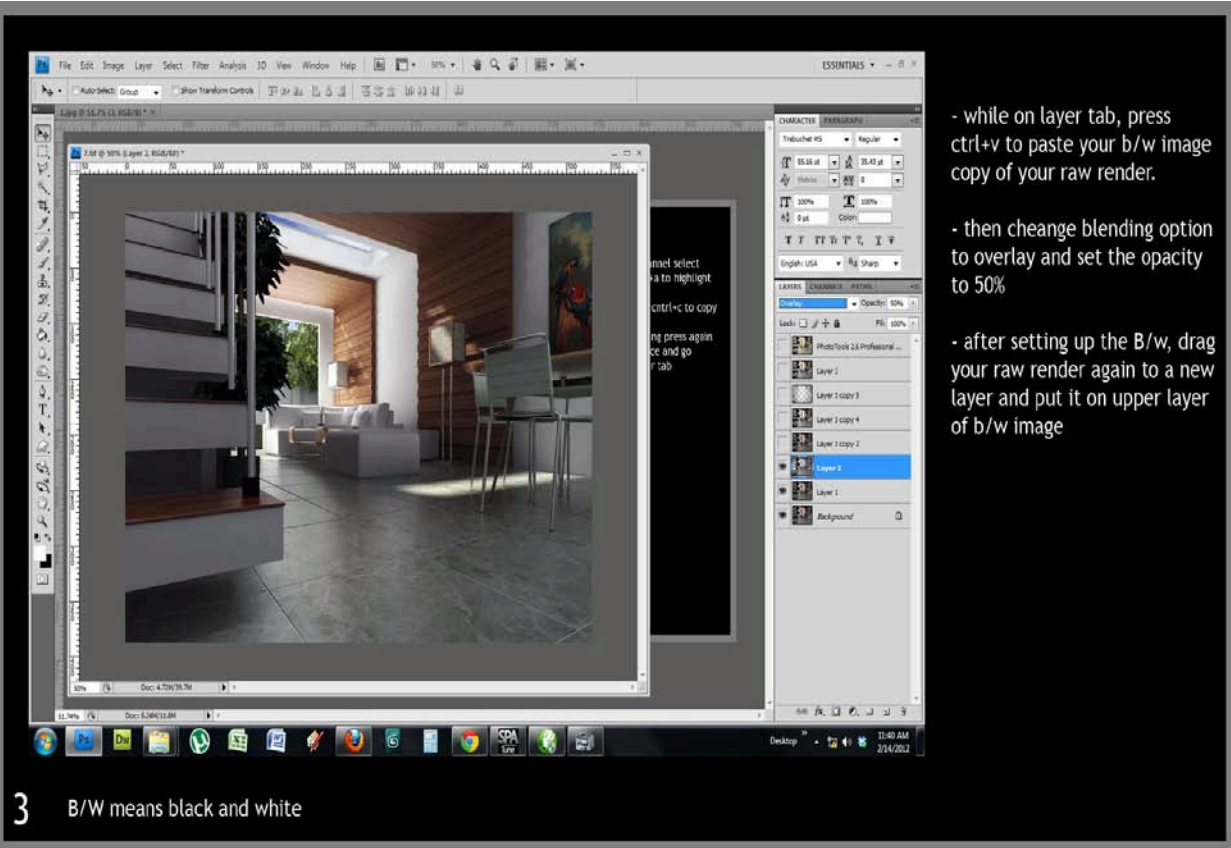
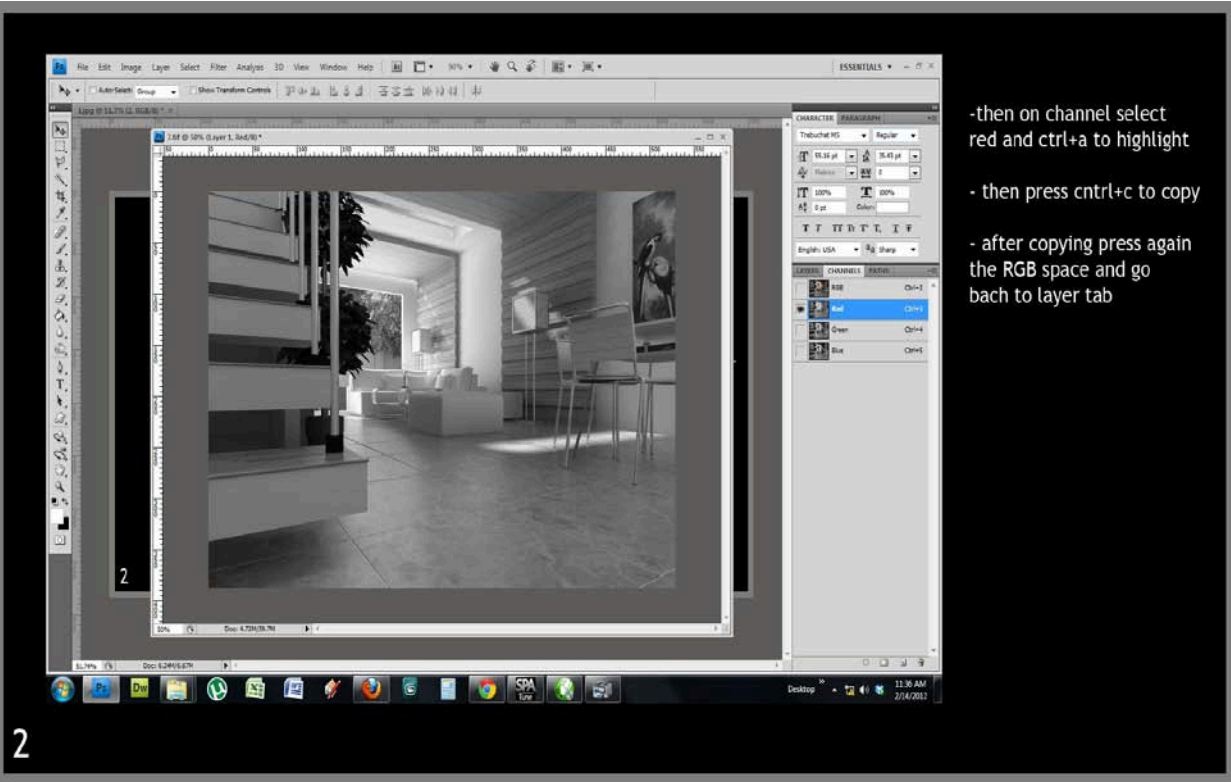
And if you feel like crafting a plugin for your own favorite software to publish on Sketchfab, We would love to get in touch! Please contact us at [support@sketchfab.com](mailto:support@sketchfab.com), we will provide all necessary technical support.



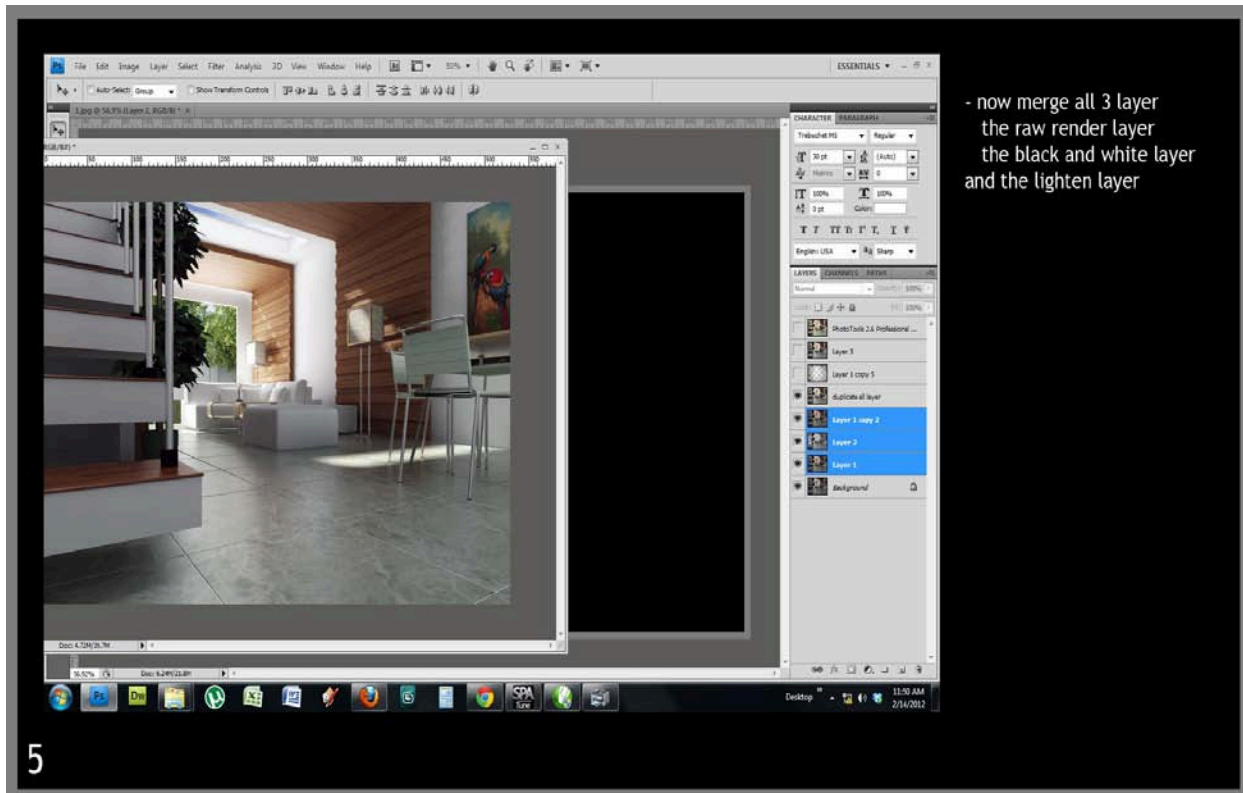
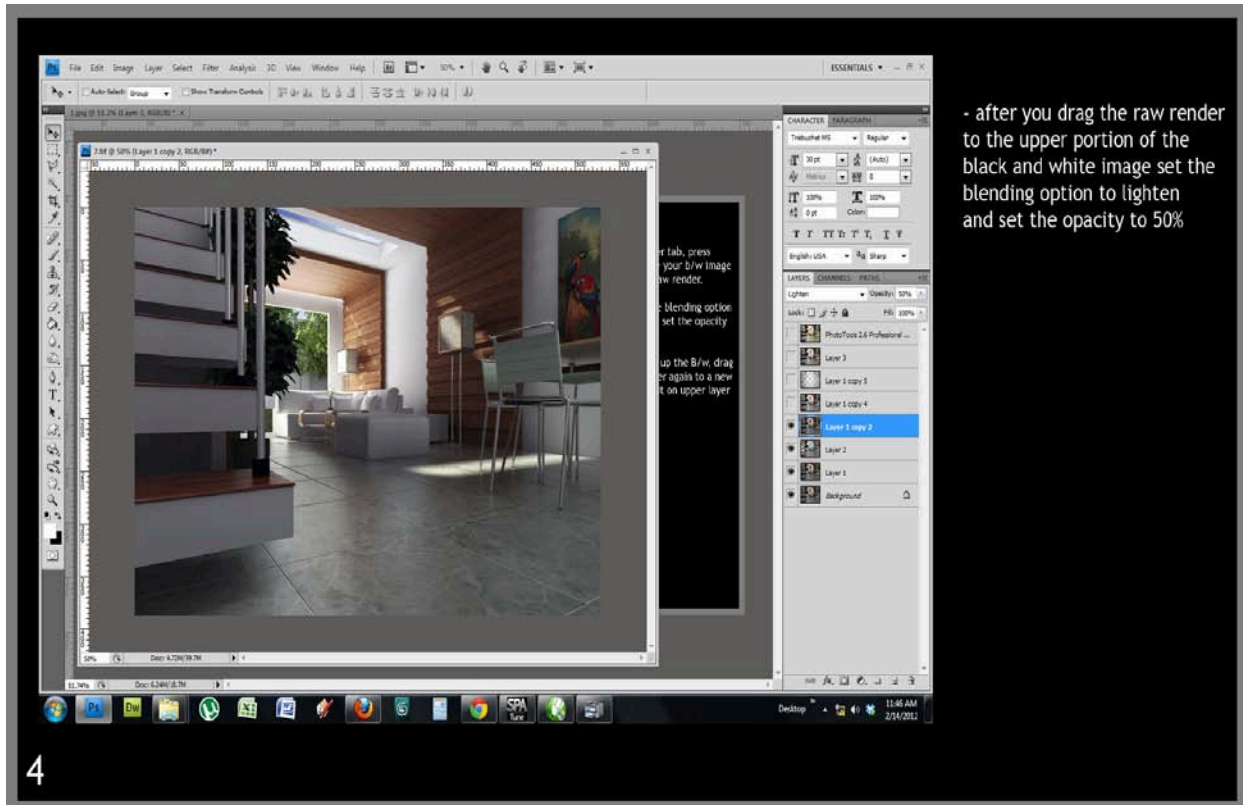
# Post process tutorials - render in sketchup and post process in Photoshop

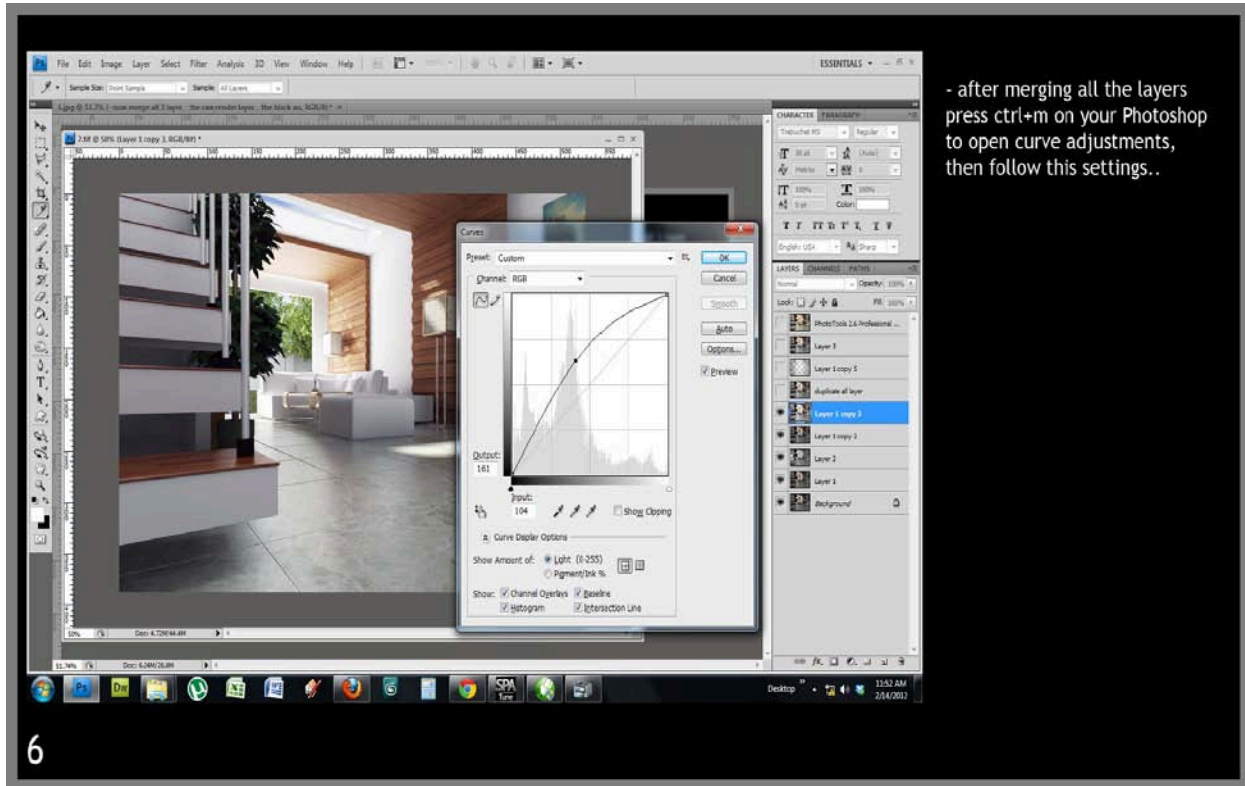
Post process tutorials render in sketchup and post process in Photoshop







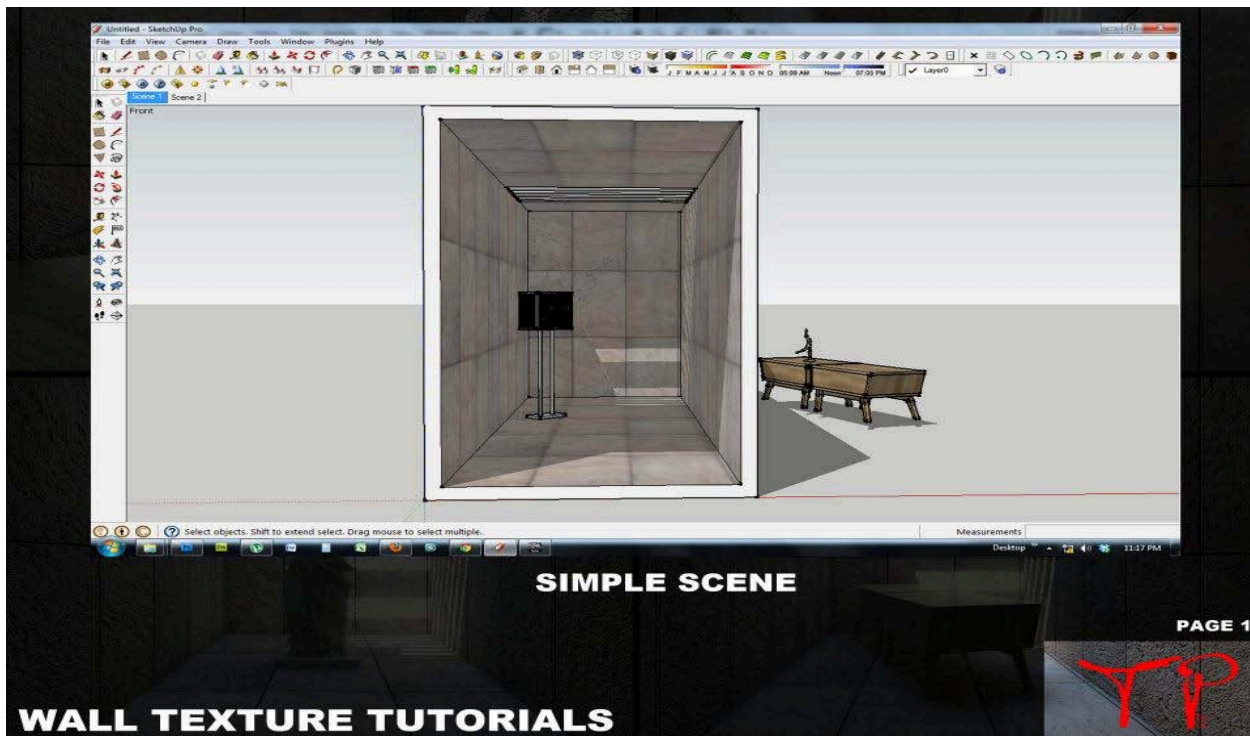
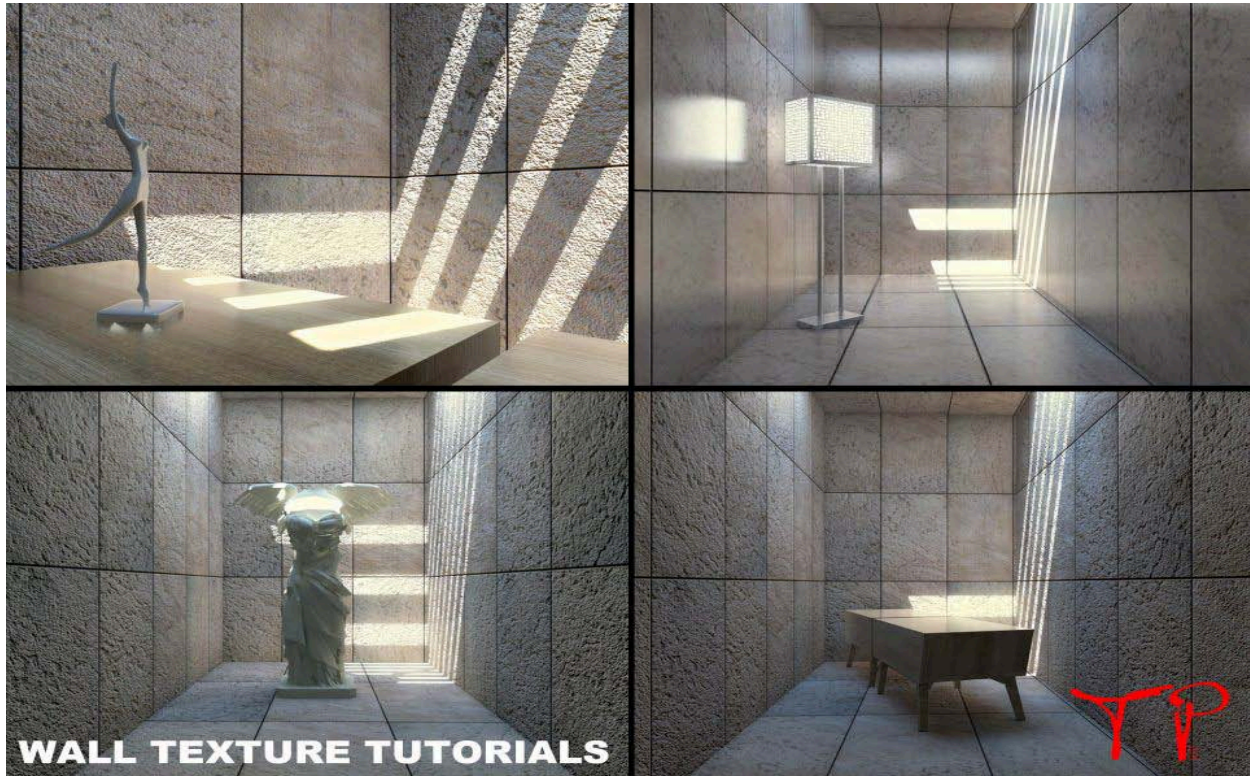




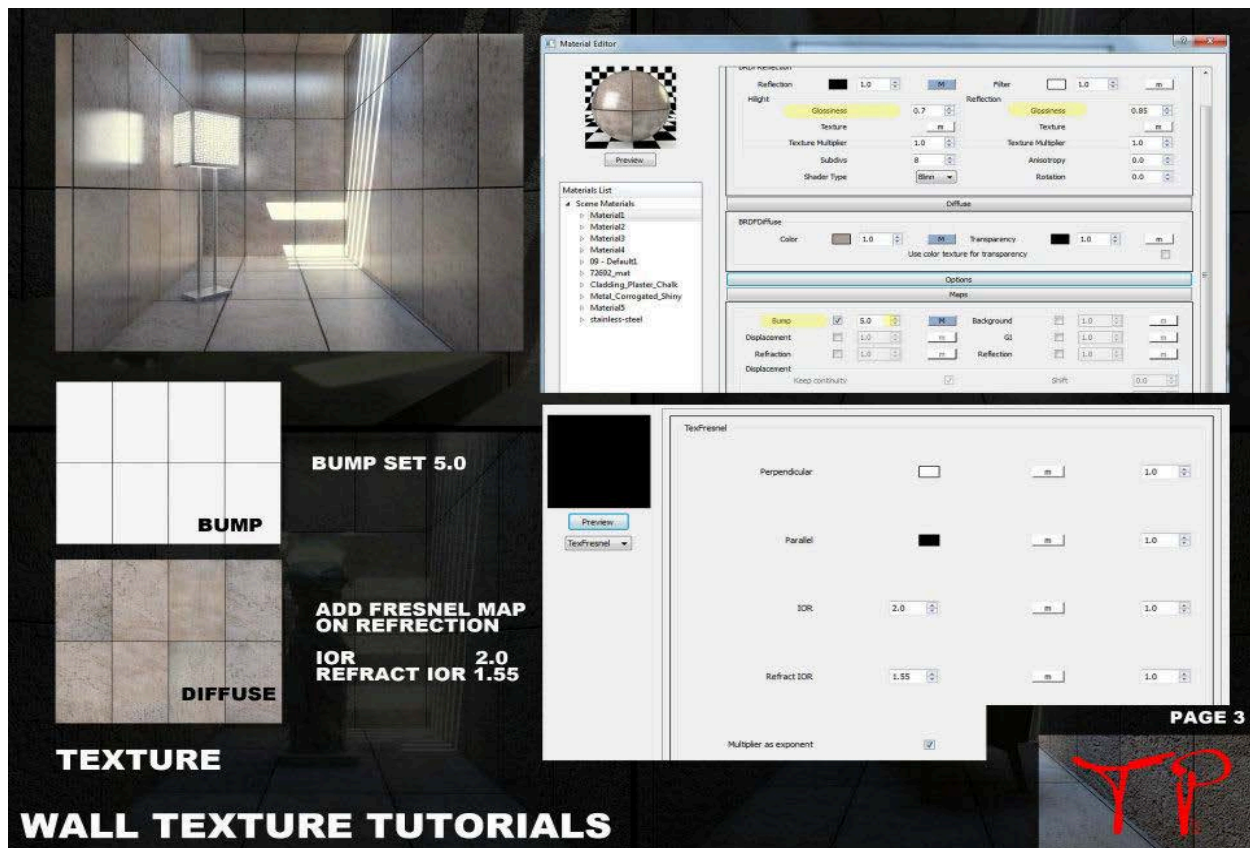
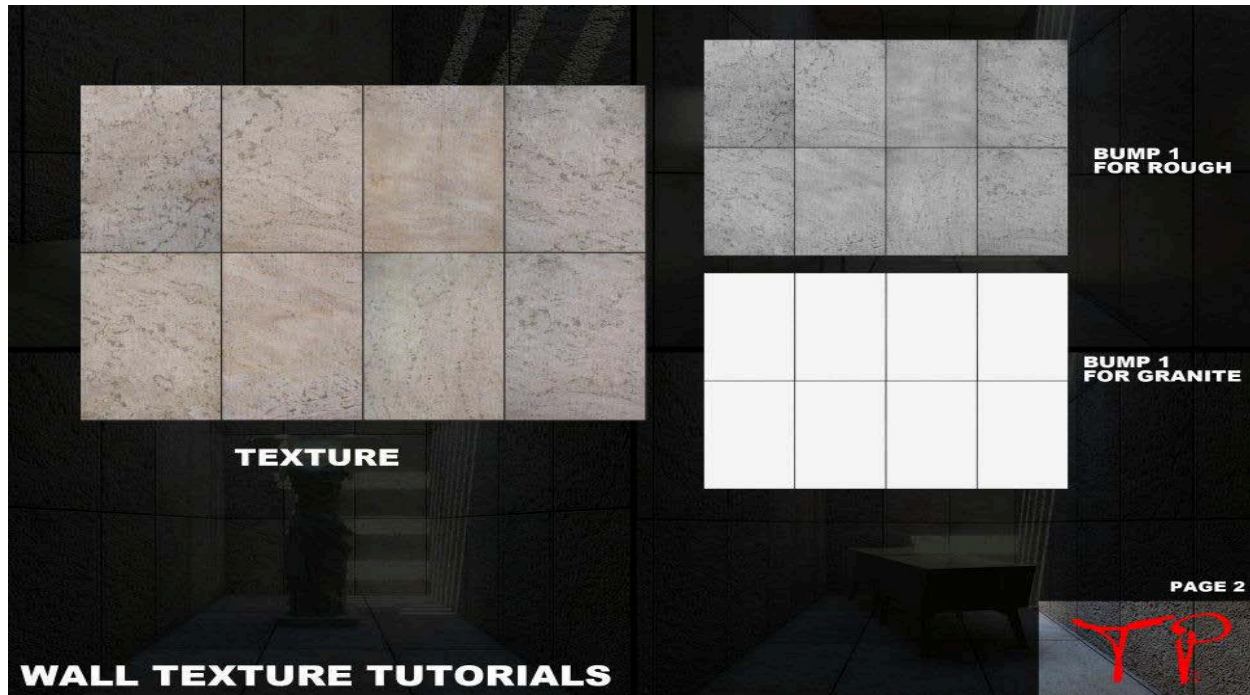


## Wall Texture Tutorials

### Tutorial







**TEXTURE**  
**WALL TEXTURE TUTORIALS**

**ADD FRESNEL MAP  
ON REFRECTION**  
**IOR REFRACT IOR 1**

**ADD BITMAP  
AND SET THE  
BUMP TO 5.0**

PAGE 5

# *Tips and Tricks on how to speed up rendering for 3d models by Jonathan Pagaduan Ignas*

- As much as possible limit ur polycount to minimum. the more poly the slower the rendering.
- If your using vray, always proxy the ones with high polycount.
- Don't put too much subdivisions on your shadows (as much as possible).
- Remove unwanted object on your scene
- Don't use so giant/ultra/high texture if your rendering small output try to proportion both.
- Material wise: avoid using too much glossiness and highlights, a simple diffuse, bump and reflection(with .95 - .75) will do.. try not to use archshaders..
- Use high polys object only when the object is very near to the view or camera
- For exterior: standard directlight(as ur sun) and vray environment light is much more faster to render compared to vraysun and sky.. u just need to tweak the colors to achieved the sun&sky effect..
- Know the difference between copy and instance.. simple but effective
- Purge undo window, specially commands on the list that eat up memory..
- This i part of my resource management, i always shutoff my antivirus while rendering (or dont install at all), specially anti-virus like norton and mcafee (which sucks bigtime) this are memory hog application, same as old Nero updates, always check taskbar once a while, even screensaver and windows eyecandy specially in vista, i turn them off back to basic.
- Use map efficiently, instead of modelling small details, in par with [#7.]
- Use xref scene (but not sure duh, havent tried it yet)
- Use polygon friendly 3dsmax plugins such as mootools' polycruncher, best of all its free tongue
- Be wary of iteration levels when making curves/meshsmoothing
- When using irradiance map, check interpolation, par it with reflection and refraction interpolation on the submenu. (match it with IR min/max rate with interpolation min/max rate)
- Caustics are time killer
- First pass, brute force vs. irradiance map, (case to case basis)
- Hardcore noisethreshold and AA subdivision rate, (case to case basis)
- Be wary of glossy reflection and frosted materials..(case to case basis)
- Instead of using dof in physical cam, Photoshop can do the trick with an ease with zbuffer channel or plugins like Alien Skin's DoF and DoF Generator PRO by Richard Rosenman.
- Post process can short the rendering workflow, proffesional composition programs like Autodesk's Combustion and the likes.. just know variations in renderchannels in vray render elements (F10).
- Evermotion Archshaders and Archinterior/Exterior Materials are on overkill settings, dont be lazy to edited it once a while, dont just copy and salvage someone's craft as it is.
- Irradiance and Light Cache (save to file), skip the computation when using the same sets and scene over and over again.
- Balance with the resolution output and irradiance map settings.
- Before u place all the shaders. try to override first the materials in the rendering parameters(global switches.).to make sure all polygons are modelled correctly for test rendering so that you would knw the



types of shaders u placed individually and u can trace easily which materials could possibly caused the rendering longer.

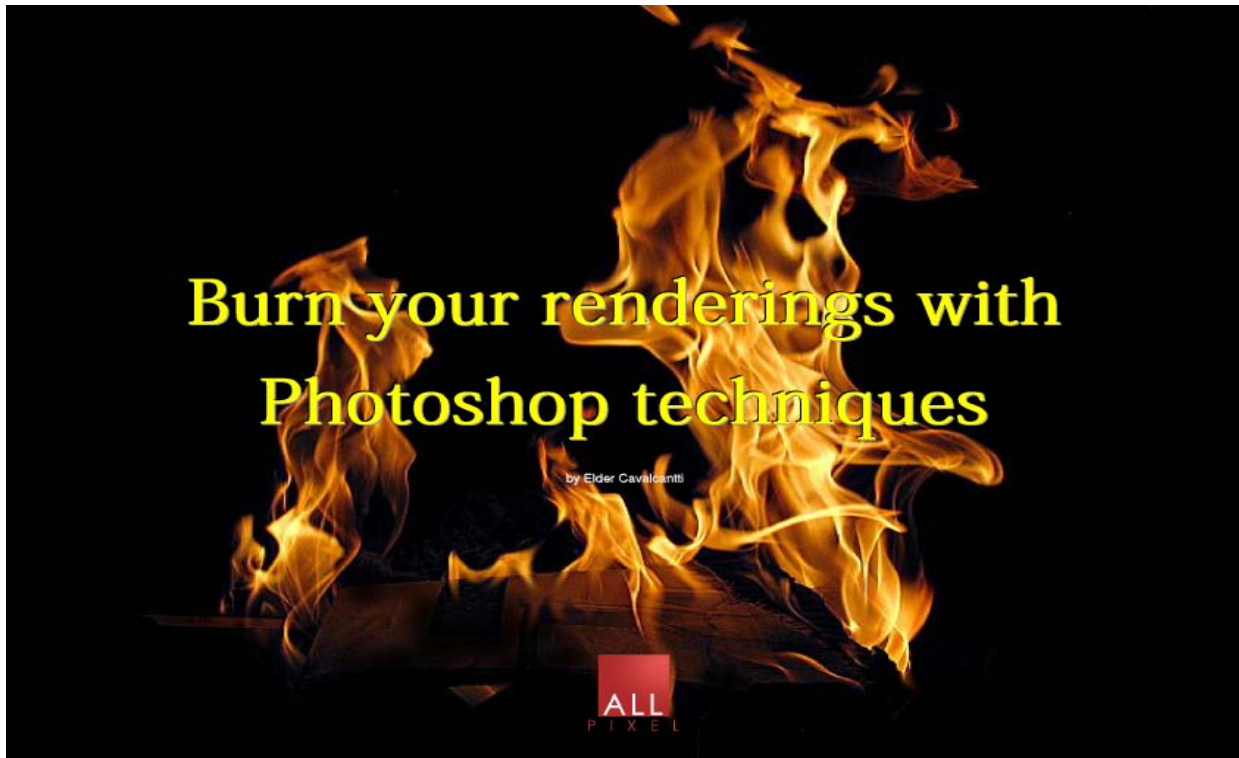
- Too many lights can also coz the overkill of the rendering.
- Use always the default parameters for fast test renders..
- For me I prefer ADAPTIVE QMC rather than Adaptive Subdivision...
- Check your Raycast Parameters too..Like render region division,region sequence etc..
- If ure using vray displacement mode,try to limit the area if 2d mapping ang setup for it eats a lot of ram.
- Use 64bit Max
- The use of X-refs is invaluable--primarily due to their ability to link large sections of scenery together and provide a means to keep your master scene to ballooning to an unwieldy size.
- Attach those objects - 3ds Max is much more efficient working with 9000 10k polygon objects than 200,000 1k polygon objects. Attaching all the components that are not being individually animated adds a significant amount of speed and flexibility to the scene you're working on.
- Geometry Proxies - Ah yes, my new favorite tool! A geometry proxy is an optimized piece of geometry that is designed to load and render much more efficiently in specific render engines such as Mental Ray & Vray.
- Bitmap Proxies - Bitmap proxies are a great way to minimize the amount of RAM that you are expending on a scene.
- Centralize your data - Centralizing your data adds a level of organization to any project.
- Work Locally and Incremental Saves - Why you ask? Well, as you save to the network share, you can run into some traffic issues which can on occasion cause crashing and corrupted documents
- Layers, Groups and Selection Sets - Any organized 3ds Max user has used these at one time or another, though some more than others.
- Maxscripting - it can bring repetitive and laborious tasks to heal. This has saved me countless of production hours and has allowed us to tackle projects that would be impossible with the stock tools in 3ds Max.
- Learn Photoshop and other compositing softwares (AE, Combustion). you will save hell a lot of render times.
- Understand photography. train your eyes. its good to have a vision of what you want to achieve before you start with your rendering workflow. for example, you'll know when to cancel a render process (region render) rightaway soon as you spot something wrong on your buffer rather than waiting for the whole scene to finish then realizing something's wrong (so much time wasted already) and you have to re-render again. trained eyes helps to influence clients and manage them to understand your vision.
- Bitmaps - these tend to take up large amounts of RAM, especially if the maps are large. Since textures are managed by 3dsmax, VRay has no direct control over their memory usage. However, you can use the Bitmap pager settings of 3dsmax to reduce the RAM taken up by bitmaps. Turn on and adjust the bitmap pagers into a higher amount, this will address your computer to process the memory in using bitmaps. This is especially useful in rendering large image.
- You might want to check the multi-threading option if you are using a dual processor.
- Use Low resolution for rendering tests.
- Use Rendering Region: render only what interests you. Time to time check your shaders, verify the little differences.. and quickly find the result you're looking for.
- Do not add Glossy effects. Add it just when you think that the scene works fine.

- Geometry - scenes with lots of objects and/or triangle counts require more memory to render. There are several ways to reduce this amount: -Adjust the raycaster settings in the System rollout (reduce Max. levels, increase Min. leaf size, increase Face/level coefficient, switch from Static to Dynamic Default Geometry).
- Displacement mapping - objects displaced with the 2d displacement mapping method may require a lot of RAM to render, especially with large displacement maps. If this is the case, use the 3d displacement mapping method. Also, if you have several distinct displacement modifiers with the same displacement map, it is better to replace them with one modifier, applied to all the necessary objects. This is because each modifier will take RAM for the displacement map, separately from other modifiers, even if they have the same map.
- Bitmap filtering - Summed area filtering uses much more memory than Pyramidal filtering. Use summed-area filtering only for smaller bitmaps
- Shadow maps - these may also take up significant amounts of RAM. Again, these are managed by 3dsmax and V-Ray has no direct control over their memory usage. To reduce memory usage, you can switch to raytraced V-RayShadows instead.
- Image buffer - large output resolutions require a significant amount of RAM to store the final image. Additional G-Buffer channels increase that amount. There are several ways to reduce this amount:
  - Use the 3dsmax Bitmap pager, if you are rendering to the 3dsmax default VFB.
  - If you use V-Ray's own VFB, use the Render to V-Ray raw image file option and then use the V-Ray raw image file viewer to convert the resulting file to a different format.
- Image samplers (AA) - the image sampling algorithms of V-Ray require some amount of RAM to hold all the data for the sampled image. This amount can be quite large, depending on the chosen bucket size and sampling rate. To reduce that amount:
  - Reduce the bucket size.
  - Switch to a different image sampler - for example, the Adaptive QMC sampler uses less RAM than the Adaptive subdivision sampler.
- Global illumination caches - irradiance maps, photon maps and light maps all require additional memory to store them. Each of these has different methods for controlling its memory usage: -
  - For the irradiance map - the memory depends on the number of samples in the map; you can reduce this number by using lower Min/Max rate, and more loose threshold values (higher Color threshold, higher Normal threshold, lower Distance threshold).
  - For the photon map - the memory depends on the number of photons stored. You can reduce this number by reducing the Diffuse subdivs for the lights, or by increasing the Max. density.
- If not necessary, adjust your trace depth controls to a lower amount.
- Even though you select the V-Ray VFB as your output, the 3dsmax VFB is still created and thus taking additional memory. If you want to reduce that memory, you need to uncheck the "GET RESOLUTION FROM MAX" option. Set the 3dsmax resolution to lower value like 100 x 100, and then select your real output resolution in the V-Ray VFB option
- Inspect your scene -was there are lots of unused polys, was there are lot of models that only clutters the scene but are not viewable on camera, was there are lots of unused materials on the editor.... meaning, sometimes we think that our render setup is hampering the rendertime, but if we just inspect our scene, the things mention above are factors that affects.

- Another one. Sometimes our model in autocad was located far from the axis origin, this happens most of the time. Then once we link it up to our rendering program, we just let them as it is. This also prolongs the rendertime when executed. Bring it back in 0,0 axis position while still in autocad.
- Overlapping of Models and meshes. - a scene with much of these will take longer time to render. You need to tweak your setting into higher so as to cover up those splotches.
- Rendering Large Image - rendering a large output image takes longer time when rendered as a whole. Use alternatives, like split rendering, or some render plugins like Super Render - wherein the scene will be subdivided into bucket window then automatically combining them after the last bucket.



## Tutorial Fire - by Sir Elder

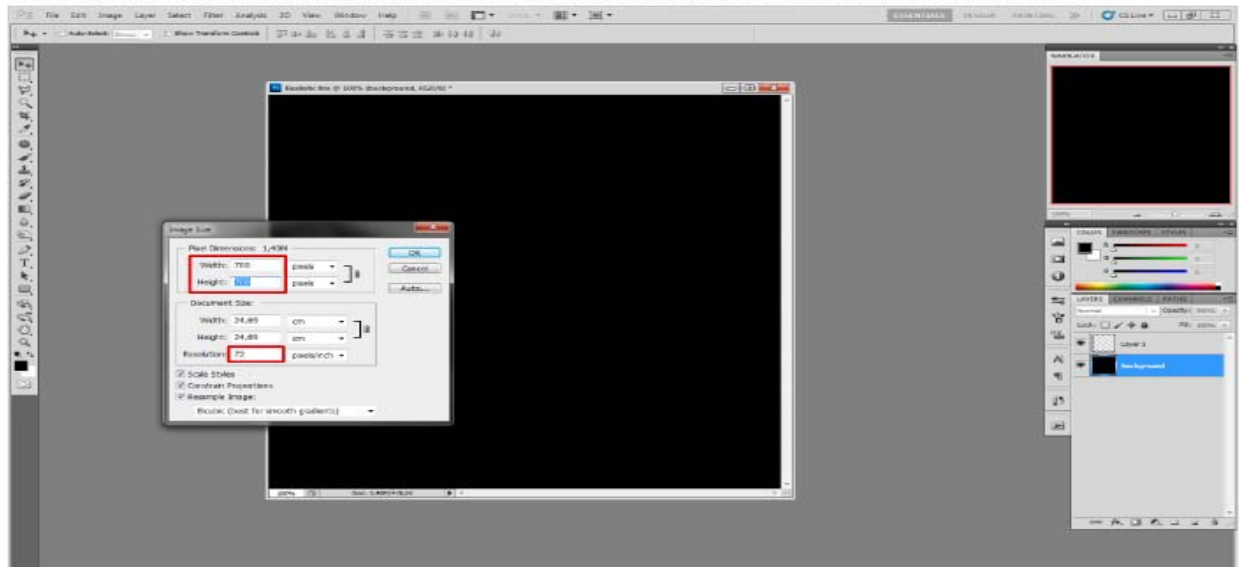


In this little tutorial I'll try to explain and show you how to use a simple ordinary photoshop fire brush to get something that looks like real fire. You can easily find dozens of fire brushes on the net. The question is: how to use them to generate the desired effect? How to transform it into a powerful photorealistic fire illustration?

This procedure explained here will be useful to you whenever you wish to simulate the appearance of real fire in your renderings for interior and exterior scenes. Objects such as fireplaces, torches and even a simple scene with presence of candles will look much better and more impressive if you apply these simple steps. I will use a very simple step by step, making this as simple and easy as I can. I'm using Photoshop CS5 but it works to most versions of the program. I hope you enjoy this stuff and I hope it can be useful to you sometime. So, as Steve Jobs would say, let's begin...

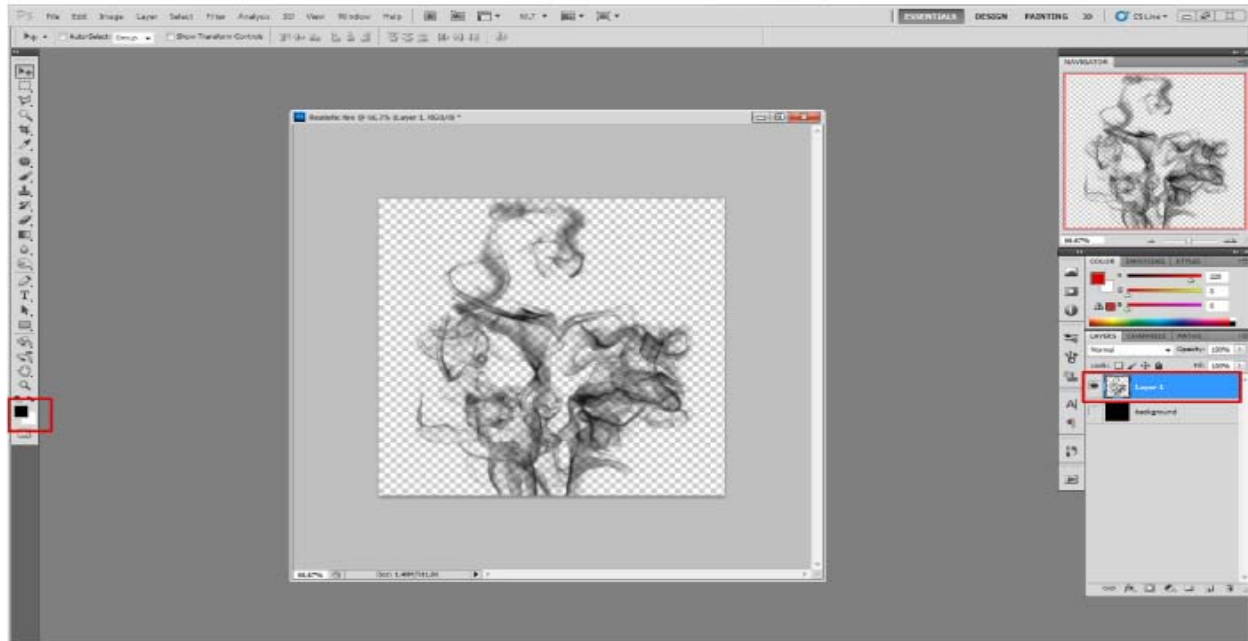
\*\*\* First of all, you must go to **Google** and look for **photoshop fire brushes** in ABR format. Any one will work for us. The important is the technique and not the brush itself.

For this exercise, please open you PS and just create a new document with **700 x 700 pixels**. You will duplicate it and fill the bottom layer with 100% black, as shown below:



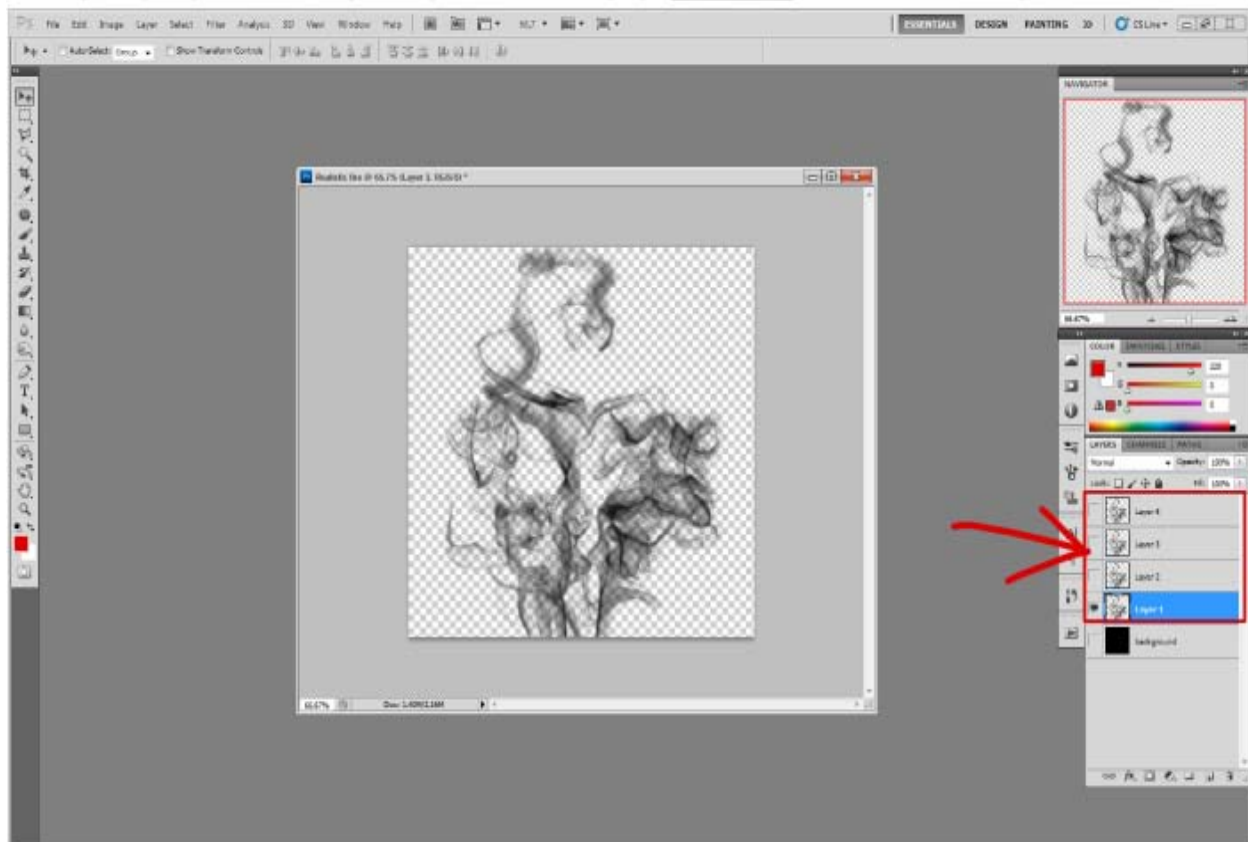
**STEP 01:**

For now, please just click once with your favorite brush in the empty space of the top layer document with black color. (I assume you know how and installed the brushes when open the program)



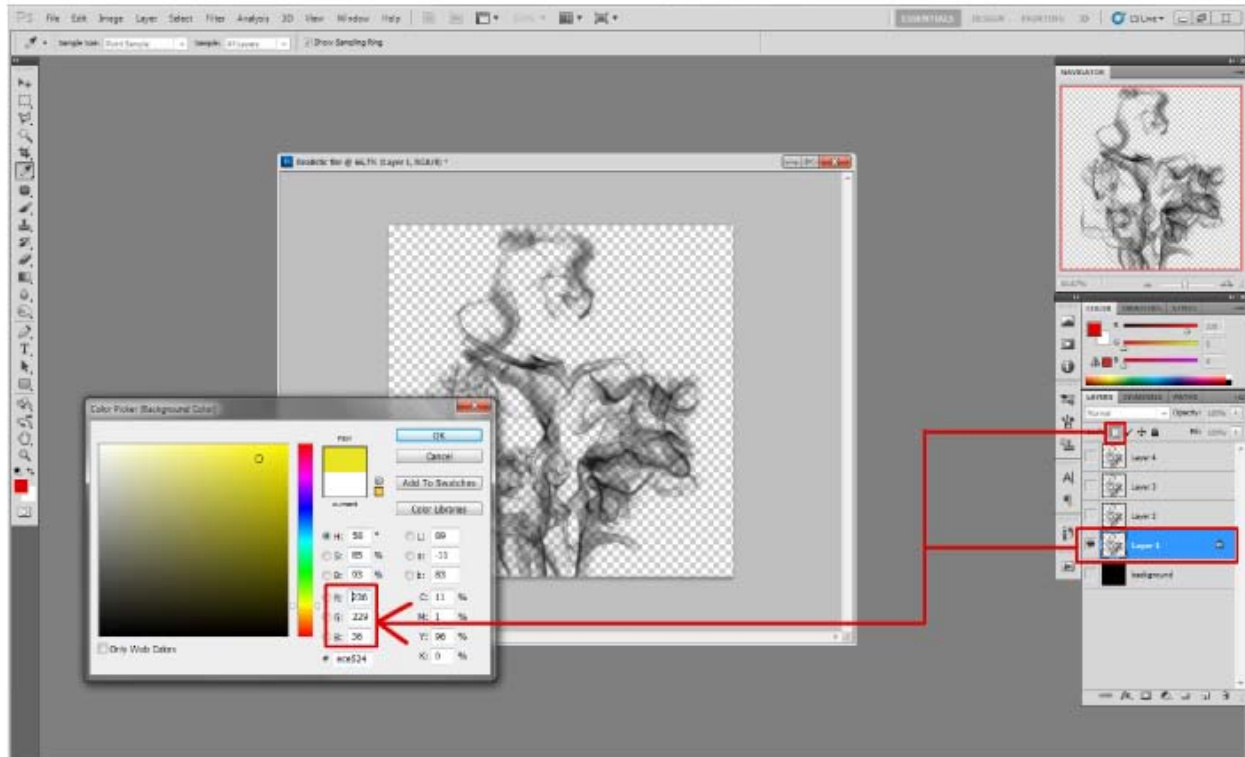
**STEP 02:**

Please, copy 3 times your original fire stamp. You will get something like below. For make it easy for you, rename the layers as shown here and turn the 3 top layers off :



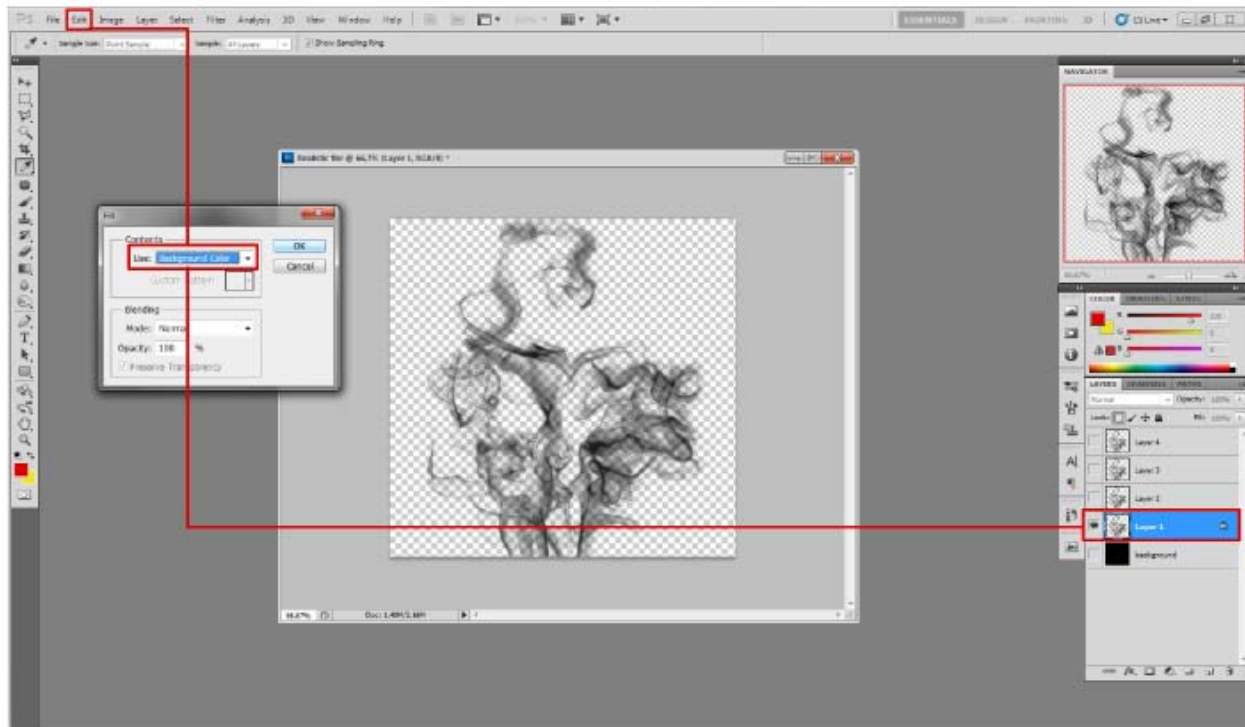
**STEP 03:**

Choose a yellow color to your **background** and check 'Lock transparent pixels' for layer 1, as the image below. Notice the small padlock icon beside the layer name.



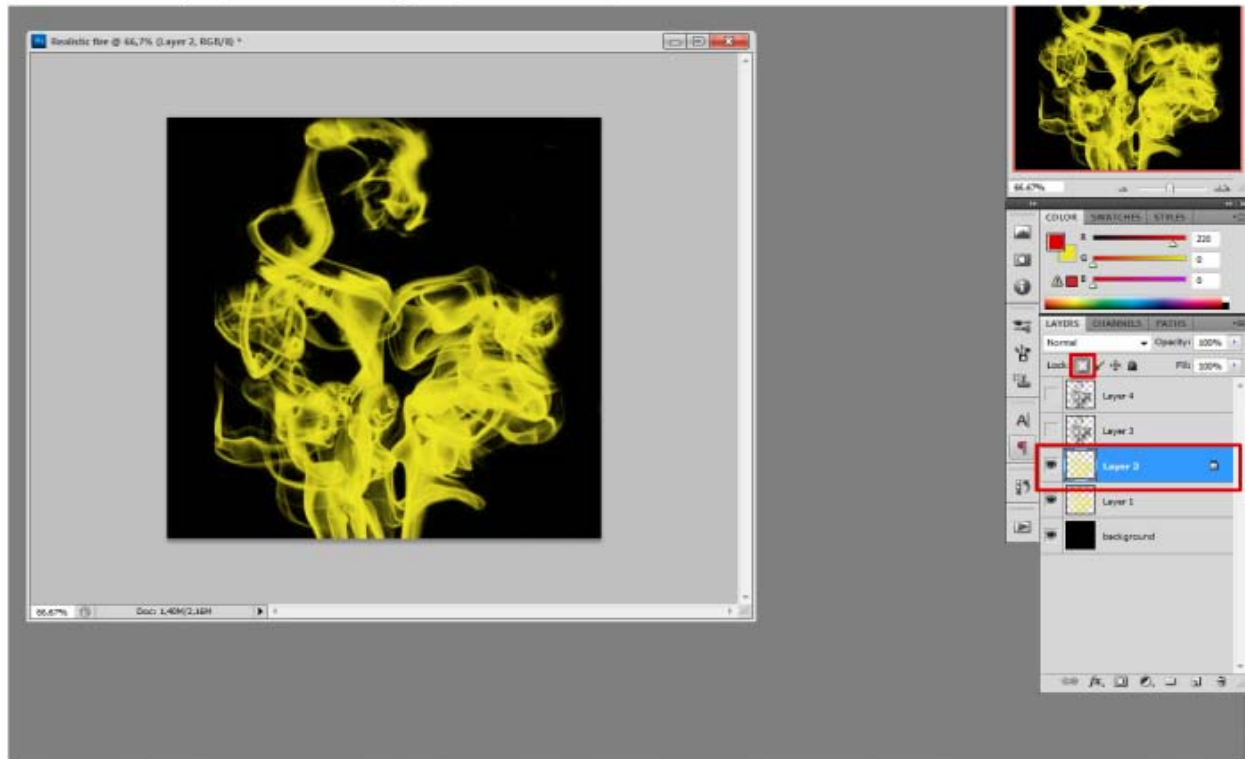
**STEP 04:**

Click menu **Edit > Fill > Background Color > OK**. This will cover all the black pixels in the image with your BG color.



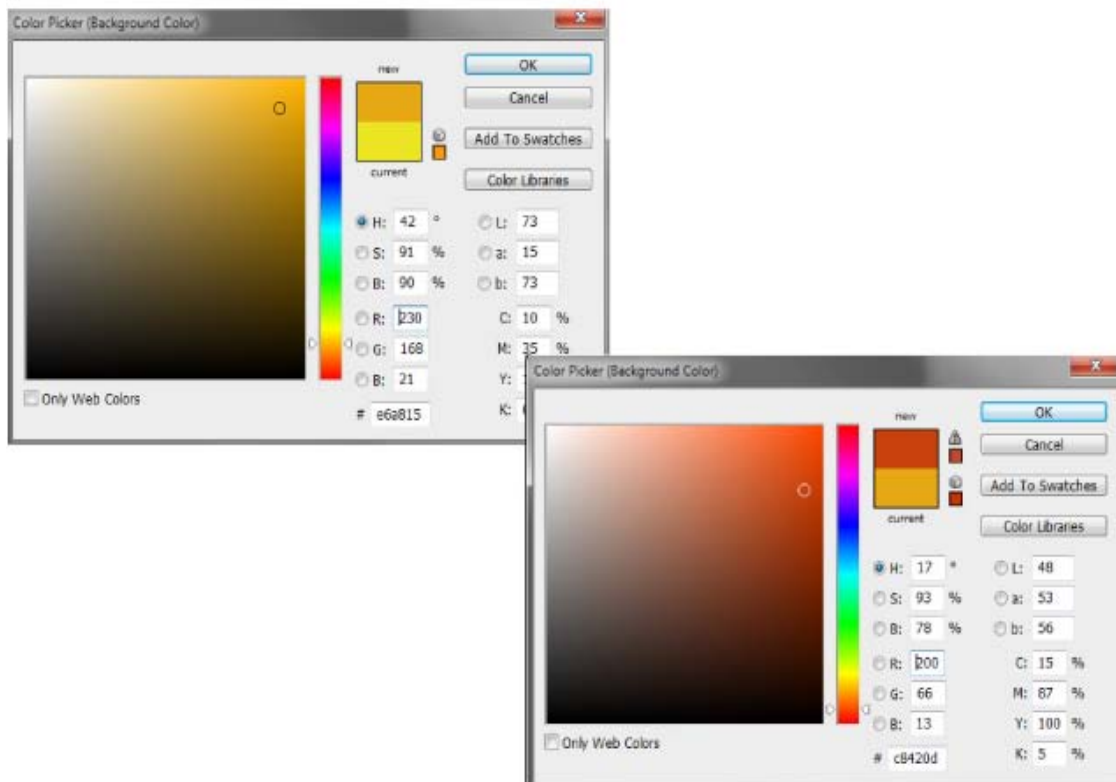


And do the same for the **layer 2...** (ps. note I turn ON the background just for better visualization)



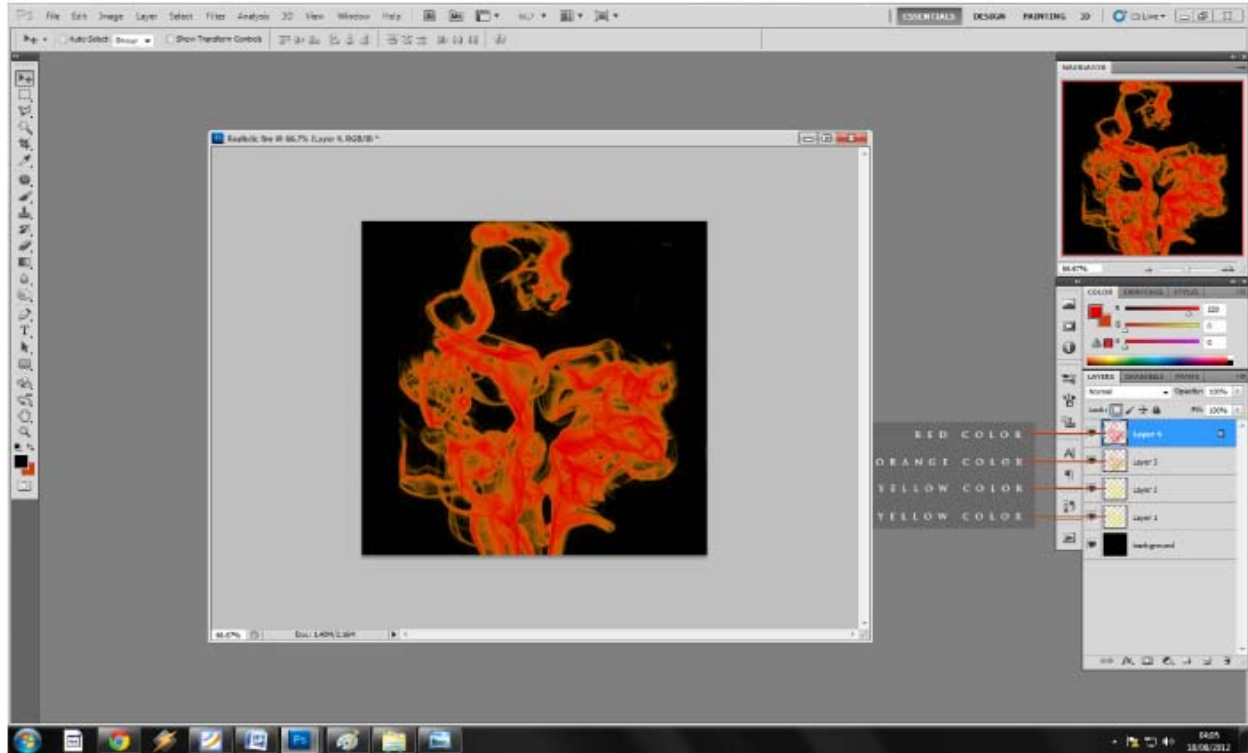
#### STEP 05:

Repeat the step 04 for the layers 3 and 4 respectively with an orange color and a red color. The exact RGB code does not matter. This is not a recipe and you can think and find by yourself the best for you. I got these colors almost randomly, just playing with the sliders...



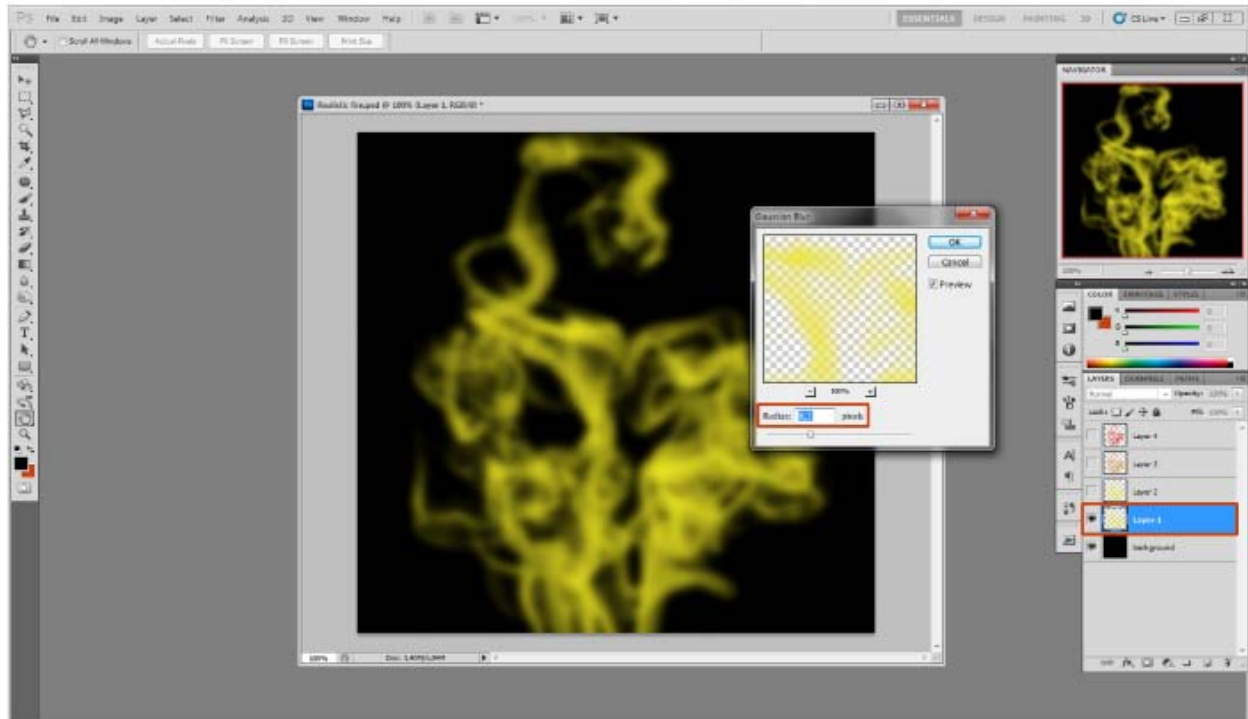
# STEP 06:

If you did everything right until now, your image should be as shown below. This appearance is really terrible but don't worry about it. Now it's time to play with the blend modes.



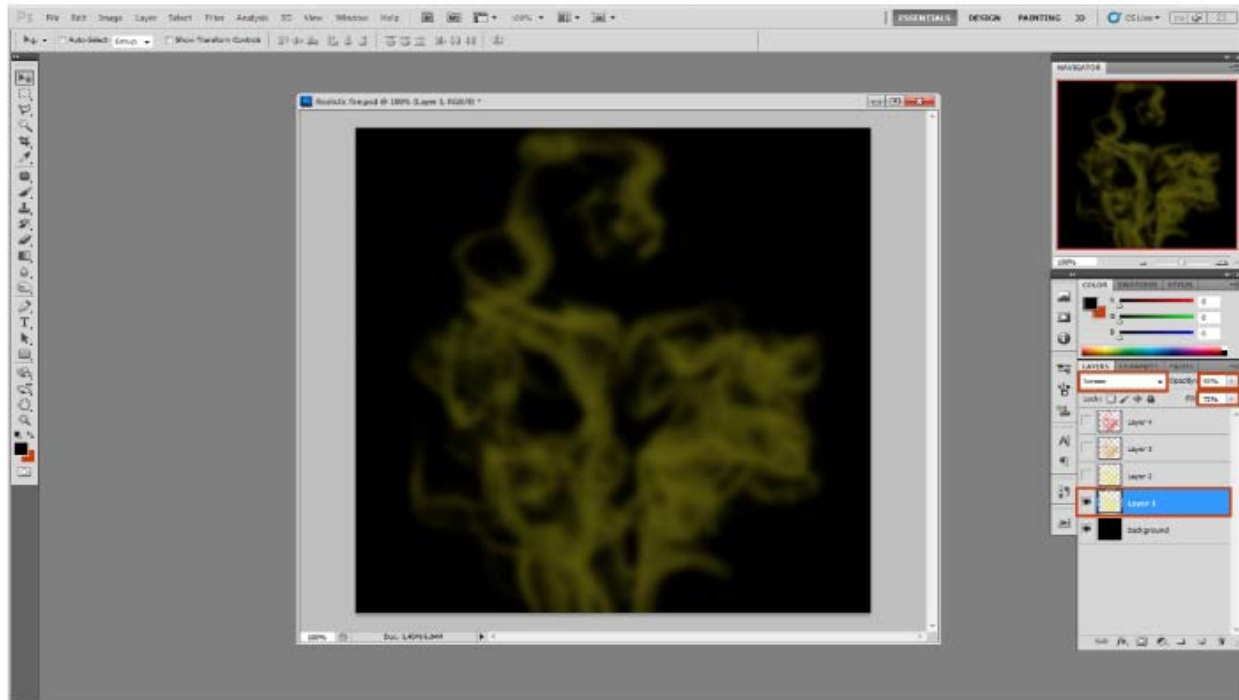
# STEP 07:

First, turn off the other layers and go to **Layer 1**. Click menu **Filter > Blur > Gaussian Blur**. Here in this case, I have used **6,1** for radius value but you can play and achieve the better for you.



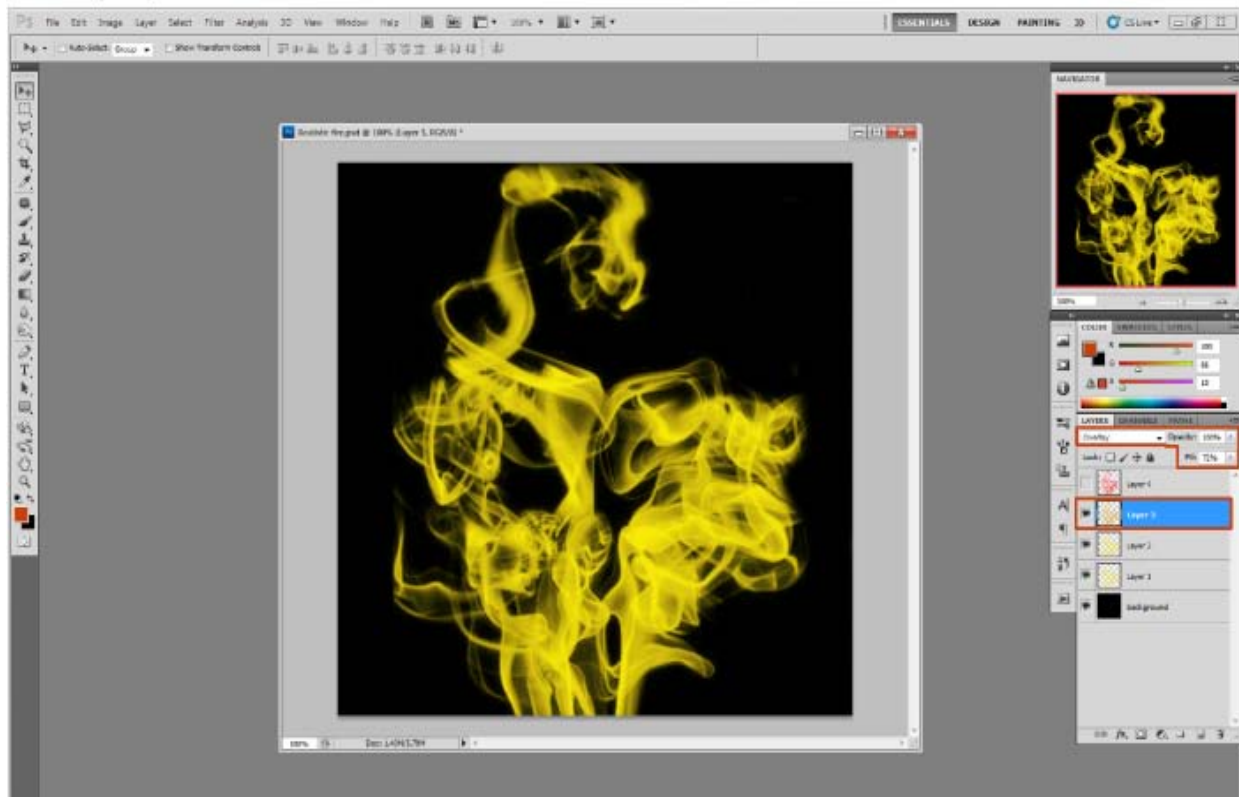
**STEP 08:**

Still in the same layer and now, please, switch its blend mode from Normal to **Screen** and use approximately **55%** for Opacity and **72%** for Fill, as shown below.  
For the **layer 2** please keep **Normal Mode** and 100% for Opacity and Fill.



**STEP 09:**

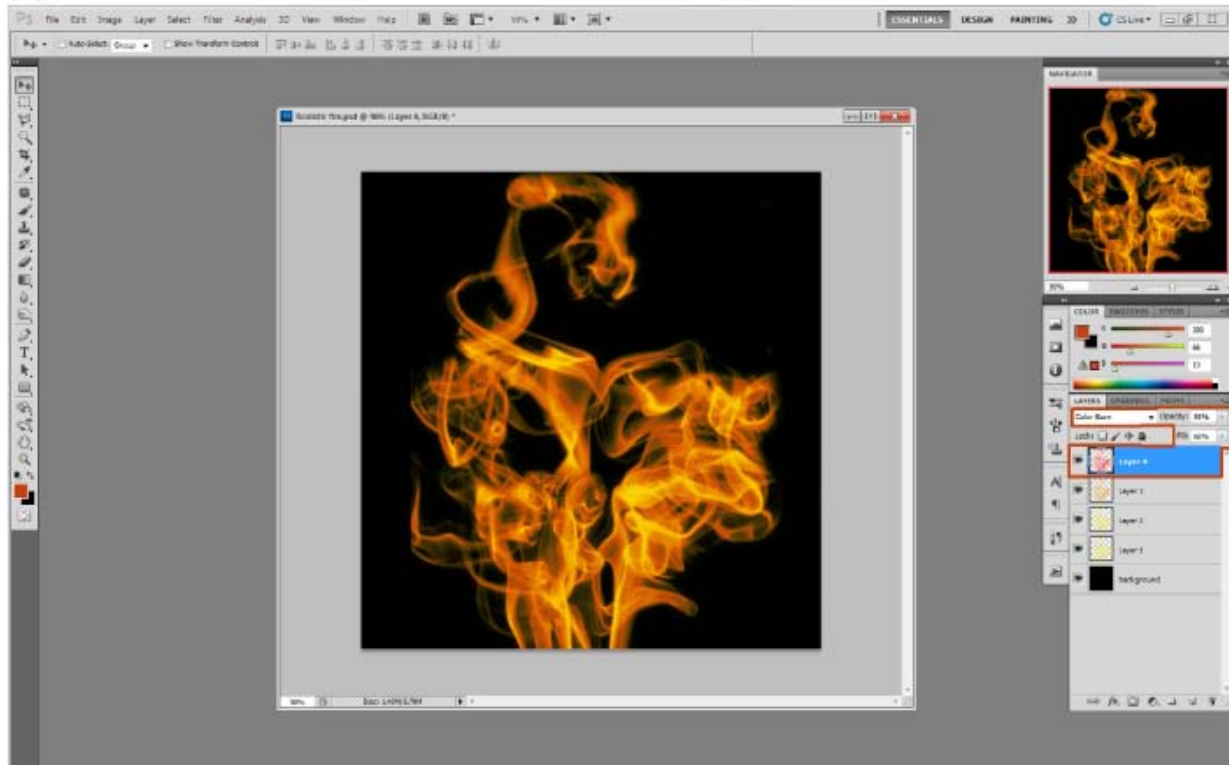
Now go to **Layer 3**. Change the blend mode from Normal to **Overlay** and use approximately **100%** for Opacity and **72%** for Fill. You'll note the appearance has improved but it still doesn't look like fire. That's alright. Stay calm.



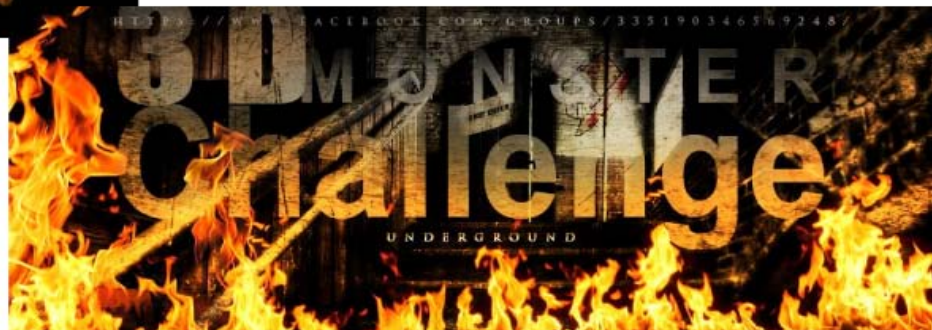


**STEP 10:**

Finally, go to **Layer 4**. Change the blend mode from Normal to **Color Burn** and use approximately **93%** for Opacity and **65%** for Fill. And we're finished. Now we have a perfect fire presentation. Do you agree ?



Here is our final result and another example where I used exactly the same technique and little adjustments for brightness and contrast. I hope you enjoy this!



## Tutorial Highlighting in Photoshop - by Sir Elder

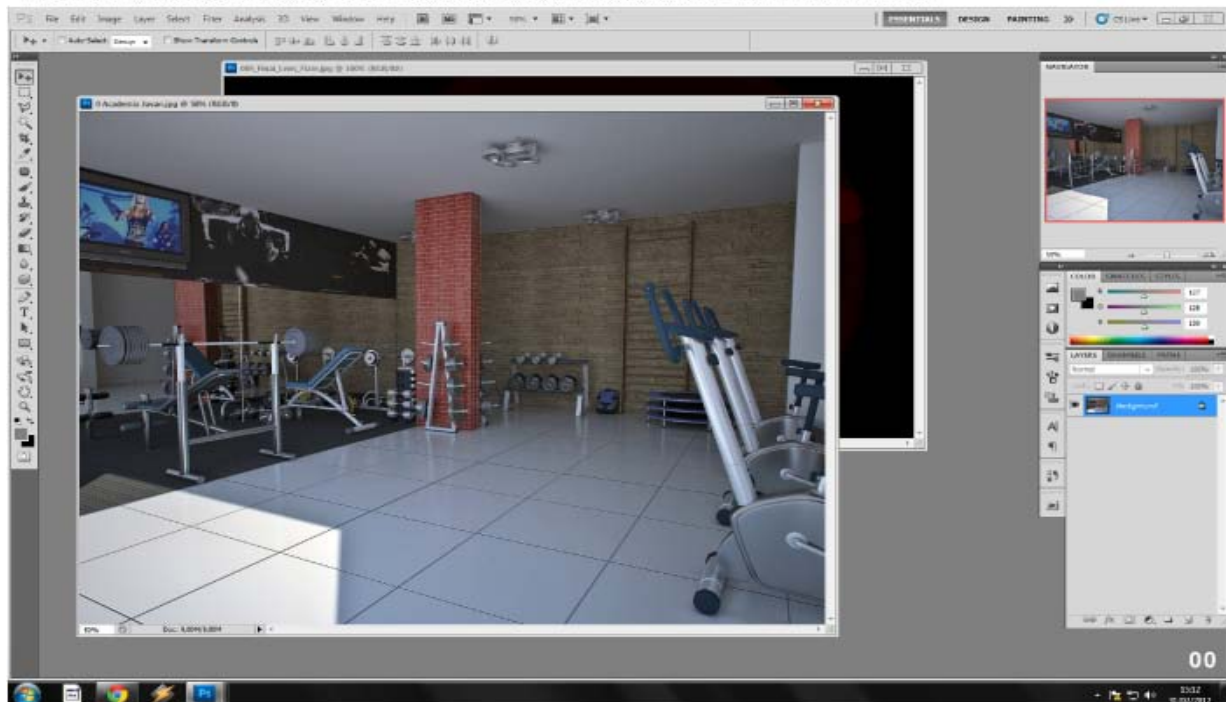
# Highlighting your spot lights with Photoshop

by Elder Cavalcanti



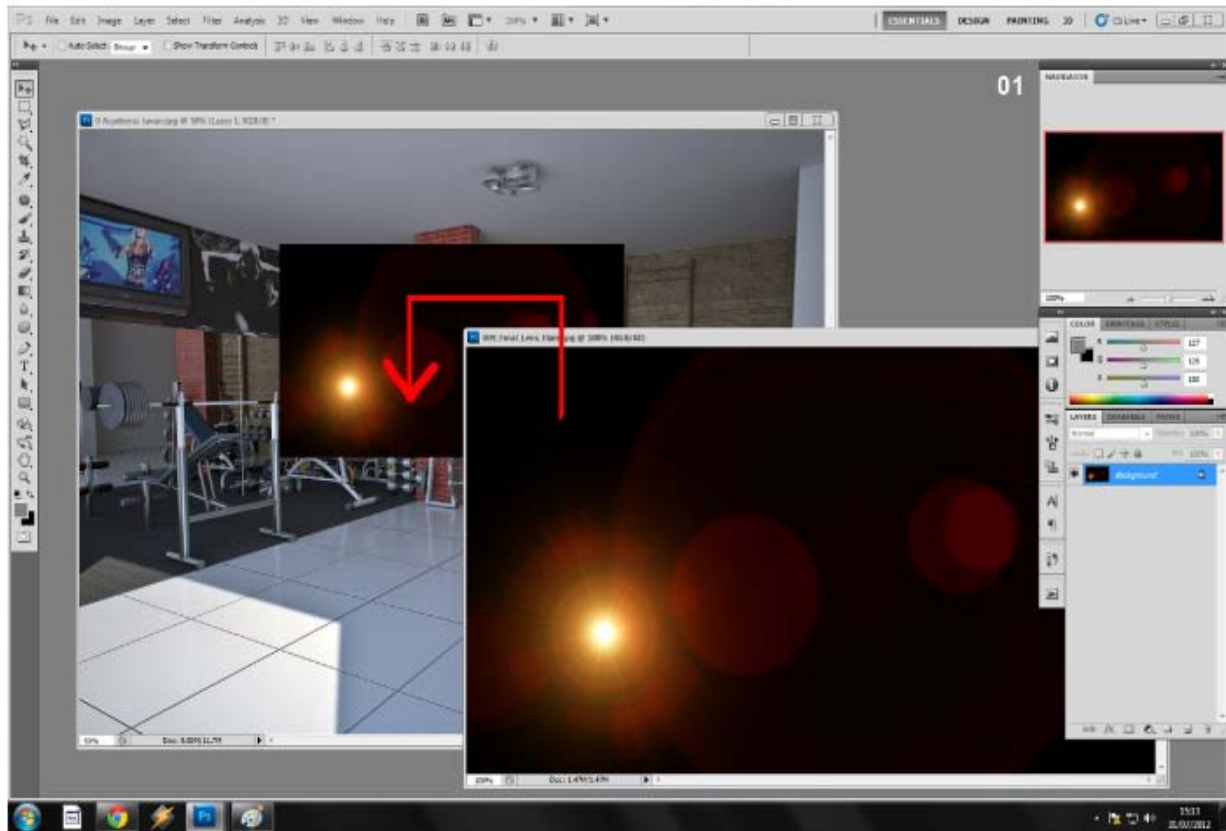
In this little tutorial you will get basic idea about how you can highlight all your light sources in the focal points in your scene. We are using Photoshop CS5 and a terribly ugly scene made by our friend **Javan Arraes**. The worst gym ever seen in my life. We'll try to do a miracle and save it. (he'll kill me when read this, hehe). The ideal for procedures like this one is to use non-destructive techniques only (like layer masks and adjustment layers). So, let's begin...

\*\*\* First of all, you must go to **Google** and look for **lens flare**'s images. Any one will work for us. So just open your 2 images in Photoshop like bellow :



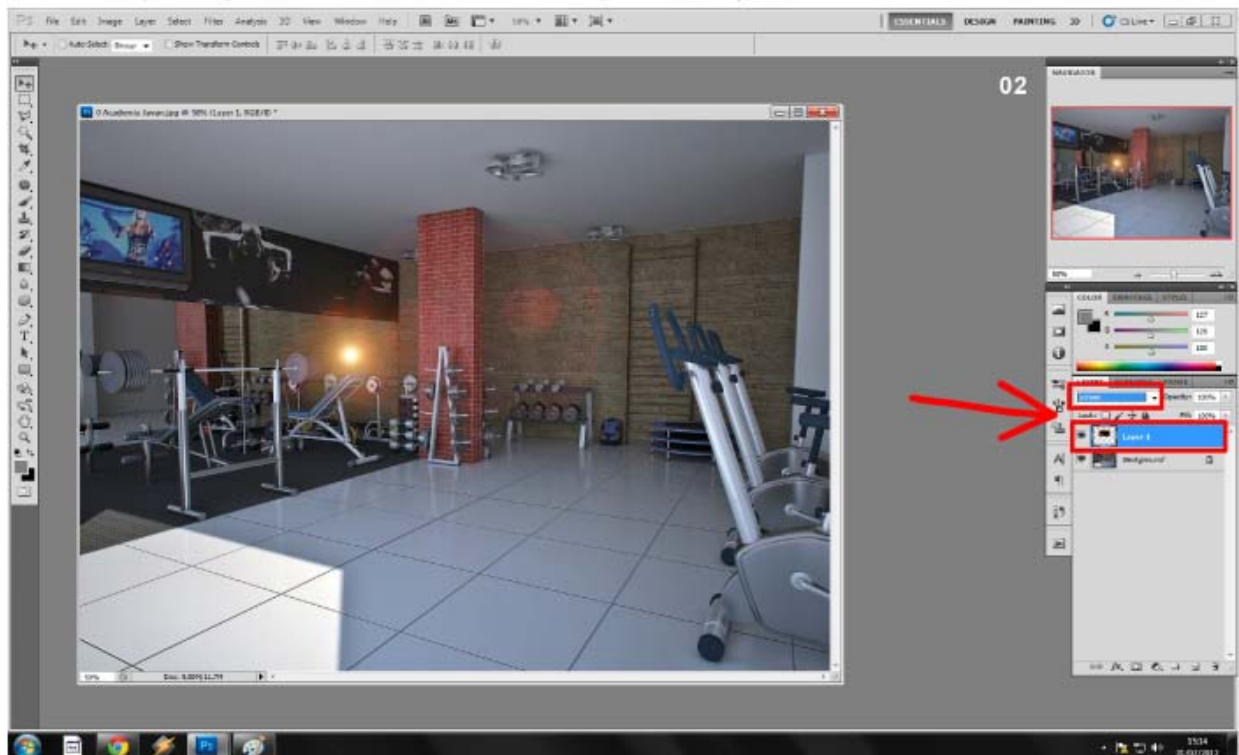
# STEP ONE:

For now, please just click, hold and drag the image you chosen in Google into your scene.



# STEP TWO:

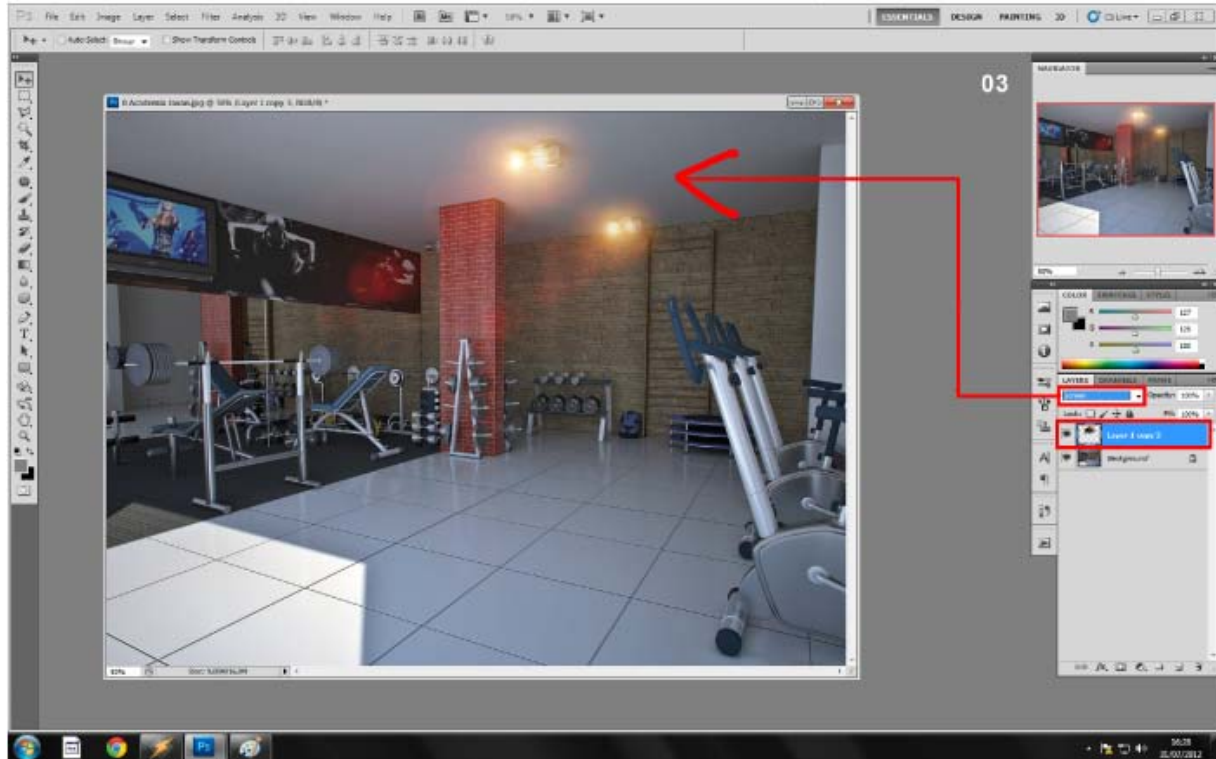
Please take the top layer and change it's blend mode from Normal to Screen. You'll notice that your lens flare shape got a better look.





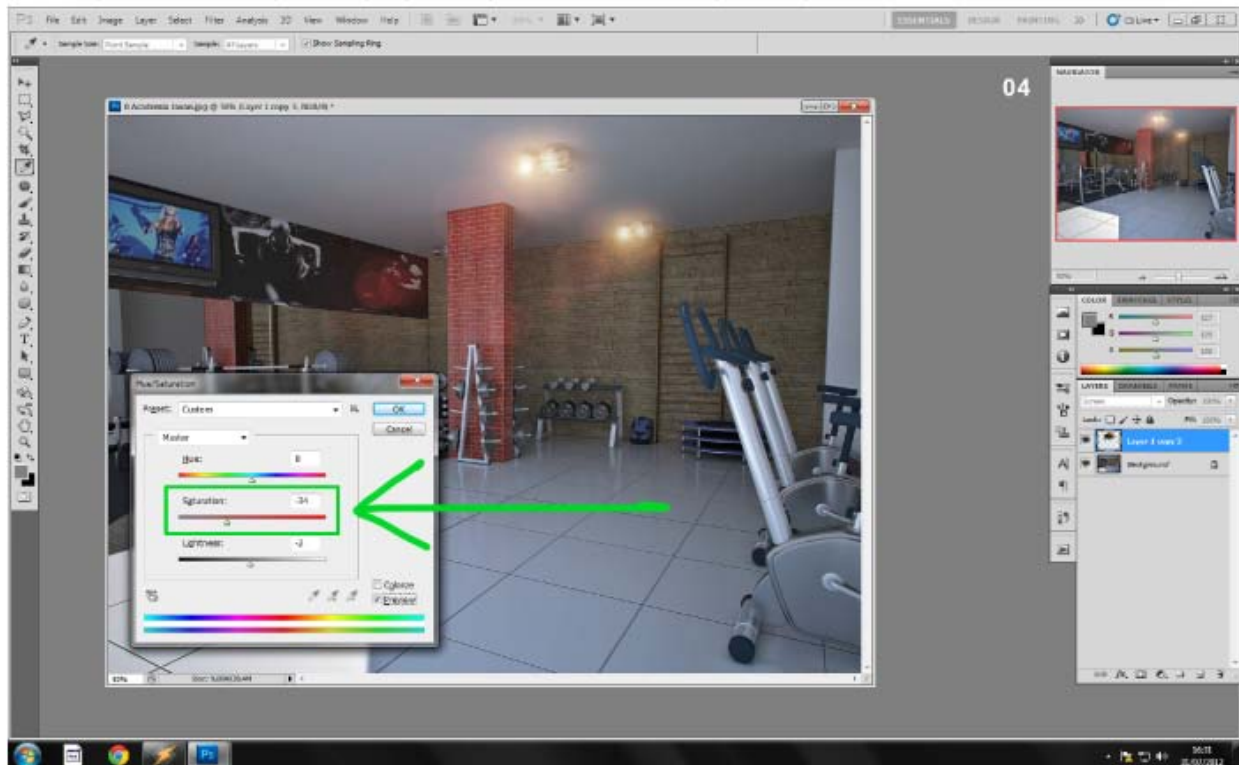
### STEP THREE:

Place your first light source image on the ceiling fixture. Click CTRL J to copy the layers and repeat the procedure for each point of light and merge them. Keep the Screen blend mode.



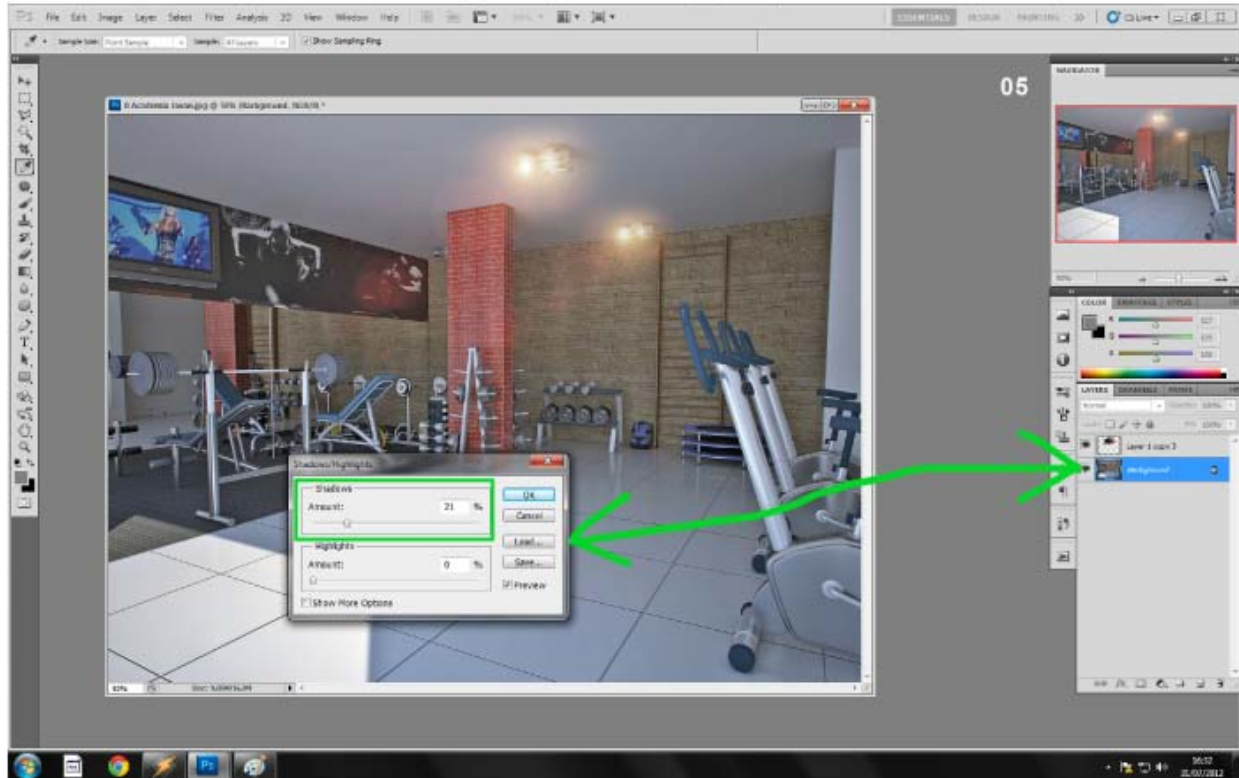
### STEP FOUR:

CTRL+U to adjust the saturation and change the color of your lights according the effect and color's temperature you desire for your scene.



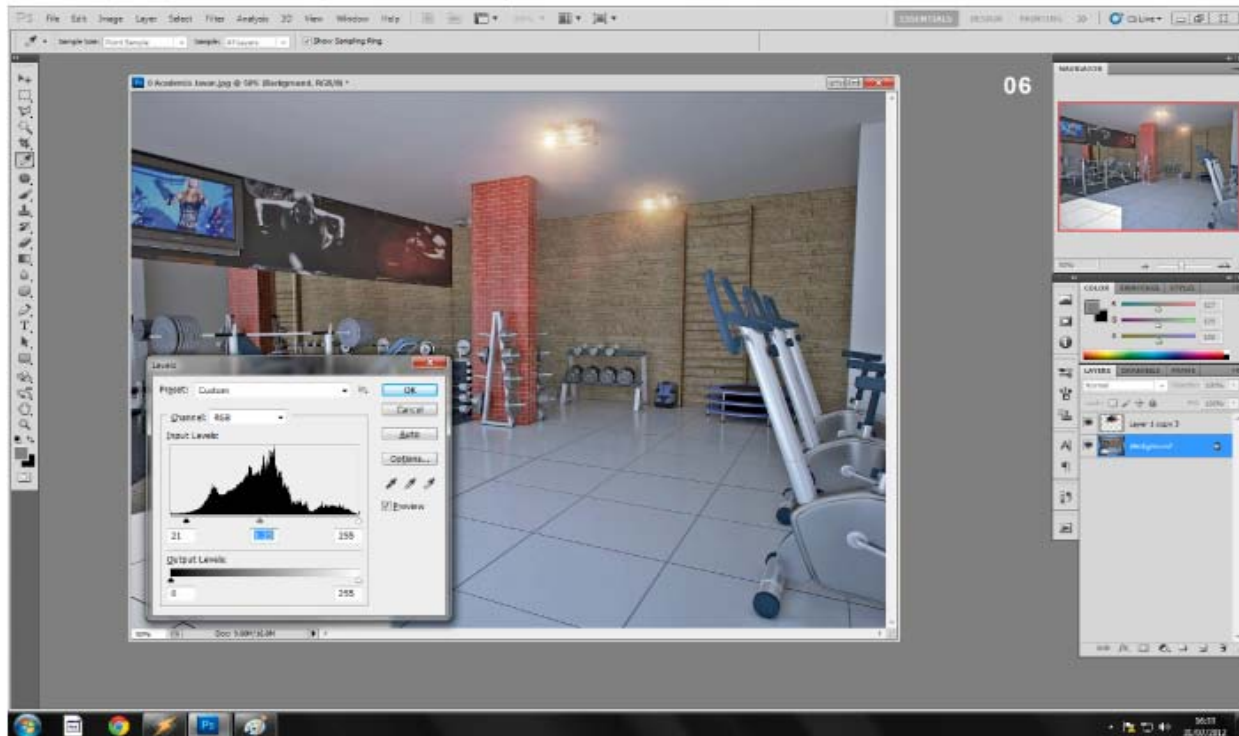
**STEP FIVE:**

Go to background layer and click **Image > Adjustments > Shadows/Highlights**. Using your sense and feeling, try fix the lights and shadow areas where your render engine fail.



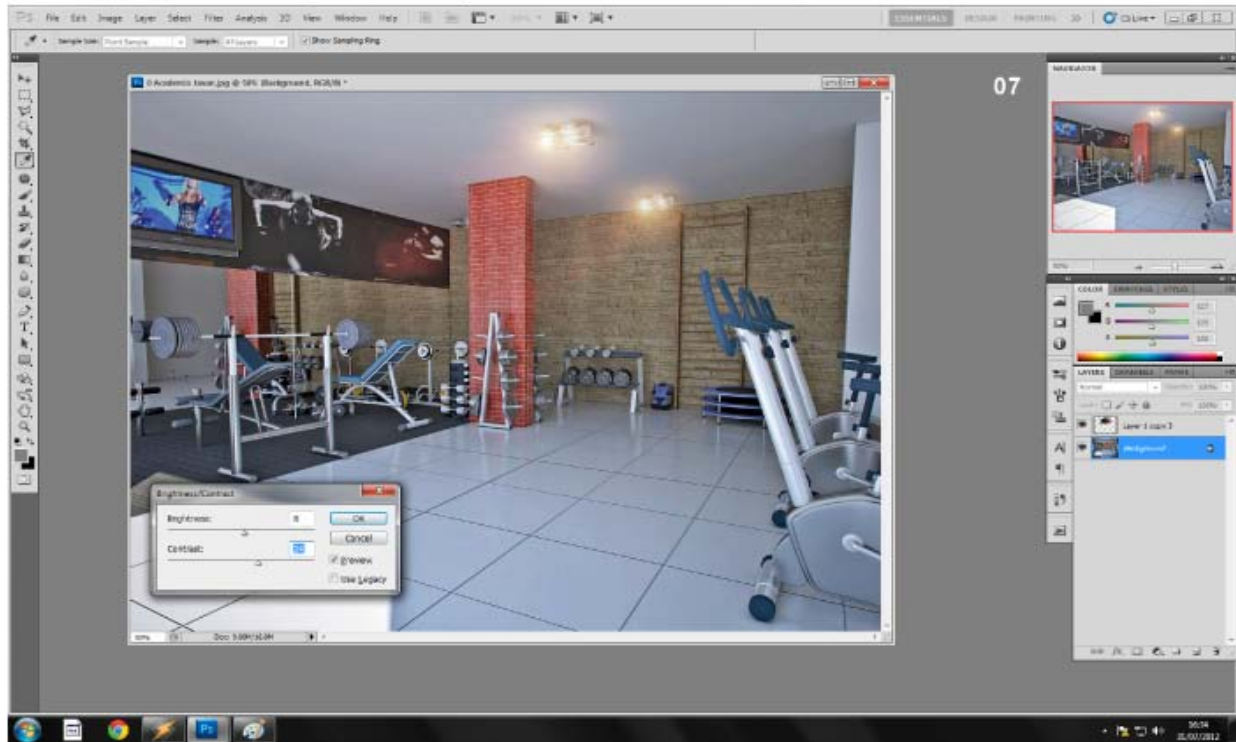
**STEP SIX:**

Remain in background layer and click **Ctrl+L** to adjust and fix a little more the lights and shadow areas.



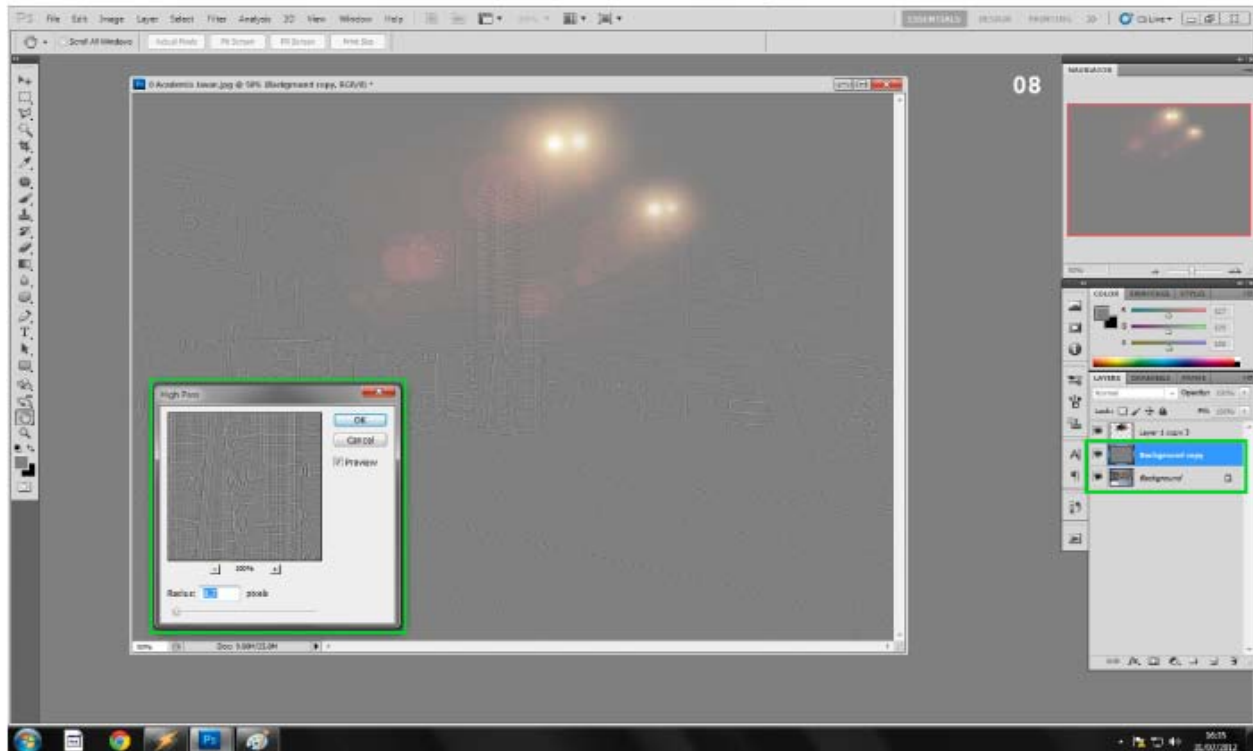
**STEP SEVEN:**

Remain in background layer and click menu **Image > Adjustments > Brightness/Contrast**. Play to taste with the sliders until you are satisfied with the scene contrast.



**STEP EIGHT:**

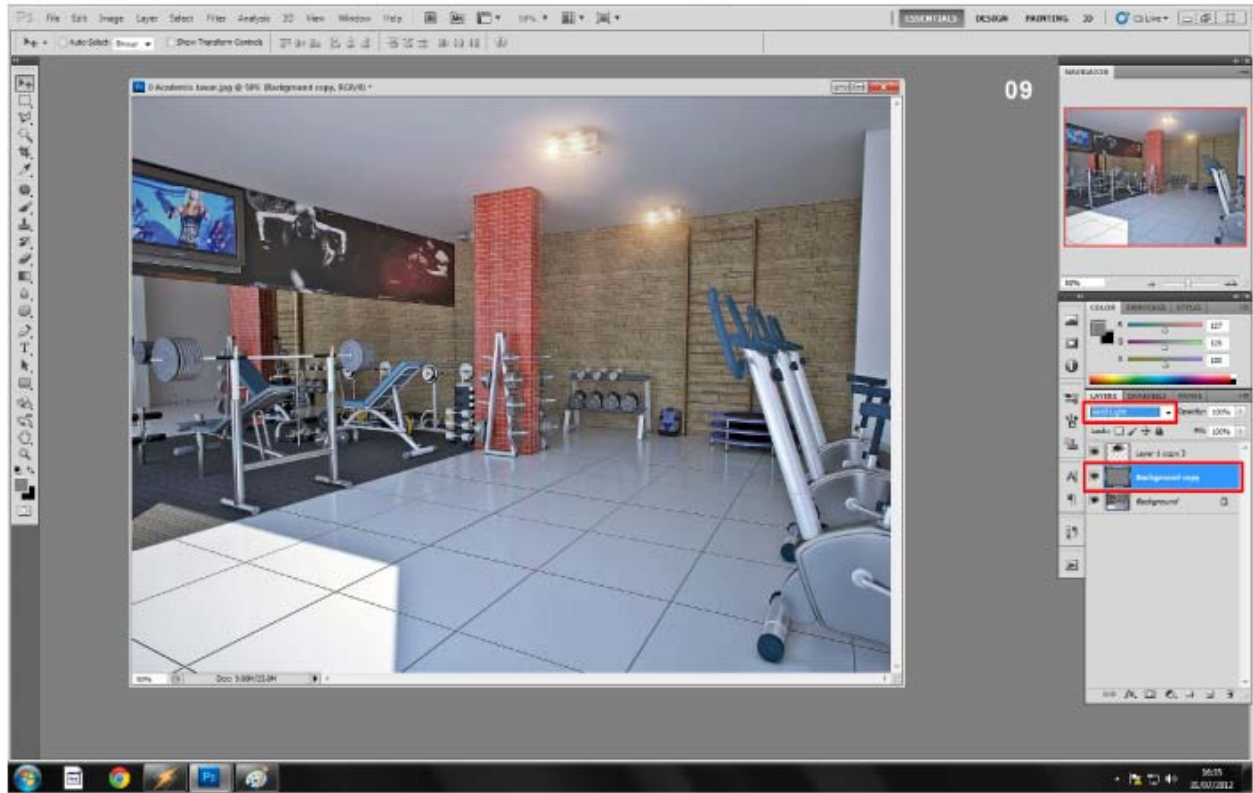
Now we'll try a little more sharpen effect. Click **CTRL+J** to duplicate the background layer and go to **Filter > Other > High Pass**.



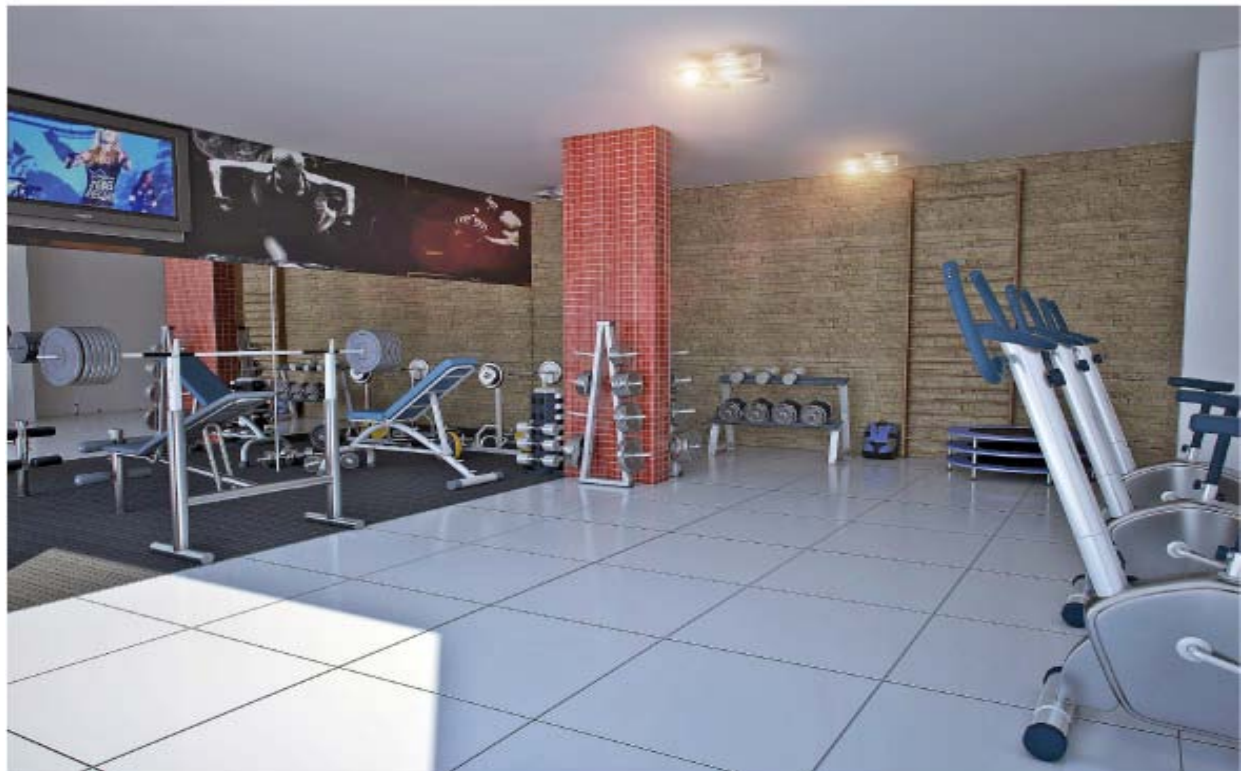


**STEP NINE:**

Change the blend mode from Normal to Overlay or High Light. You will get a much more sharpen look in the image. Mask the effect if needed.



**OUR FINAL RESULT :**



## *LumenRT is a gate to a new World of emotions!*

### *Architecture is all about emotions*

Marcin Rybak is a Polish Designer and Architect with over 14 years of experience in this industry. In this interview he explains how LumenRT revolutionized his approach to Architecture, and helped him sell his designs faster and more effectively.

#### **About LumenRT**

*E-on: How did you learn about LumenRT, and why did you choose it over any other 3D application?*

I use SketchUP in my every day design job, so LumenRT seemed to be a friendly and natural extension. I know there are other competing solutions on the market, but SketchUP's strength is that it's very intuitive, and LumenRT follows the same philosophy, and that's what sold me to LumenRT!

The most important thing for an Architect is to find the magical software that can translate his imagination into designs he may show to his clients. Plus two fundamental factors: time and cost; you need to do this fast and at an affordable price.

LumenRT's ease of use is also a very important thing. Architecture is all about comprehending space. People can "feel" the space thanks to light. LumenRT has the most advanced lighting technology I know – models look just like in the real world. That is the key!



LumenRT is the package I was looking for. User friendly, minimum effort – maximum effect. For Architect Designers like myself, LumenRT is the secret weapon that helps convincing my clients. Seeing is believing. There is no: "maybe", "I need to think about it" or "I am not sure". Their feedback instantaneous and is as simple as yes or no.

*E-on: What is your feeling about the idea of using LumenRT LiveCubes to allow your clients to navigate and explore designs?*

This is another killer feature. This is where magic starts.

*E-on: What kind of improvements/additions would you like to see in LumenRT?*

Animated sky, wind effect, dust, birds on the sky, people walking, waves, 3D connexion support\*.

\*Editor's note: This interview was conducted prior to the release of LumenRT 3, which now includes animated content such as trees swaying in the breeze, flying birds, animated characters and animals and a lot more. More information available [here](#).

This particular project is called "Virtual Walk" and was created to show my clients the infinite possibilities of LumenRT.

LumenRT is a gate to a new World of emotions! Architecture is all about emotions.

As I said, seeing is believing. If you manage to make your client connect with your designs through emotions, you are the winner.



Another aspect worth mentioning is cost. Commonly, Designers try to gain new clients by physically building show apartments. This has always been pretty expensive. And once it is built, there is no design options to show. LumenRT gives us the possibility to present not only one specific configuration set in stone, but as many as the client will request, including variations in style and design.

The Virtual Walk scene was created in 3 days: one day for design and modeling, the second day for texturing and final touches, and the last day to generate several animations and visuals.

In short, the technology behind LumenRT gives us the possibility to create show homes or apartments without the need of physically building it. It is a much cheaper process, and much more effective since it allows for many design options.



### About Marcin Rybak

*E-on: Tell us a bit about yourself and your company.*

I am a Polish architect with fourteen years of experience within different aspects and across many sectors of this profession.

I have been working for the residential market for almost nine years. During this period, I've designed more than 1000 apartments in 5 housing complexes. I have also designed many car service stations, showrooms and have also done a lot of interior design.





I currently work mainly for the Oil and Gas industry, and have just completed the third strategic high pressure gas pipeline across Poland.

My passion for Design has grown alongside my experience in artistic and architectural drawing. Visualization and animation is something I really enjoy since I became involved in 3D design and visualization back in 2009.

At the moment, I also teach Design, Perspective Drawing and Interior Design courses.



Parallel to my activity as an architect for major infrastructure projects, I also lead a small group - design oriented, called Archimodes.

This is the place where my passion for unique designs and new trends in Architecture is highly valued. For us, there's an intrinsic link between Architecture and Humanity's place in the universe, the place where men will fulfil their dreams and their needs. We do not follow any style or trend. Our Designs are always Human oriented, there is no such a thing we can call "our style".

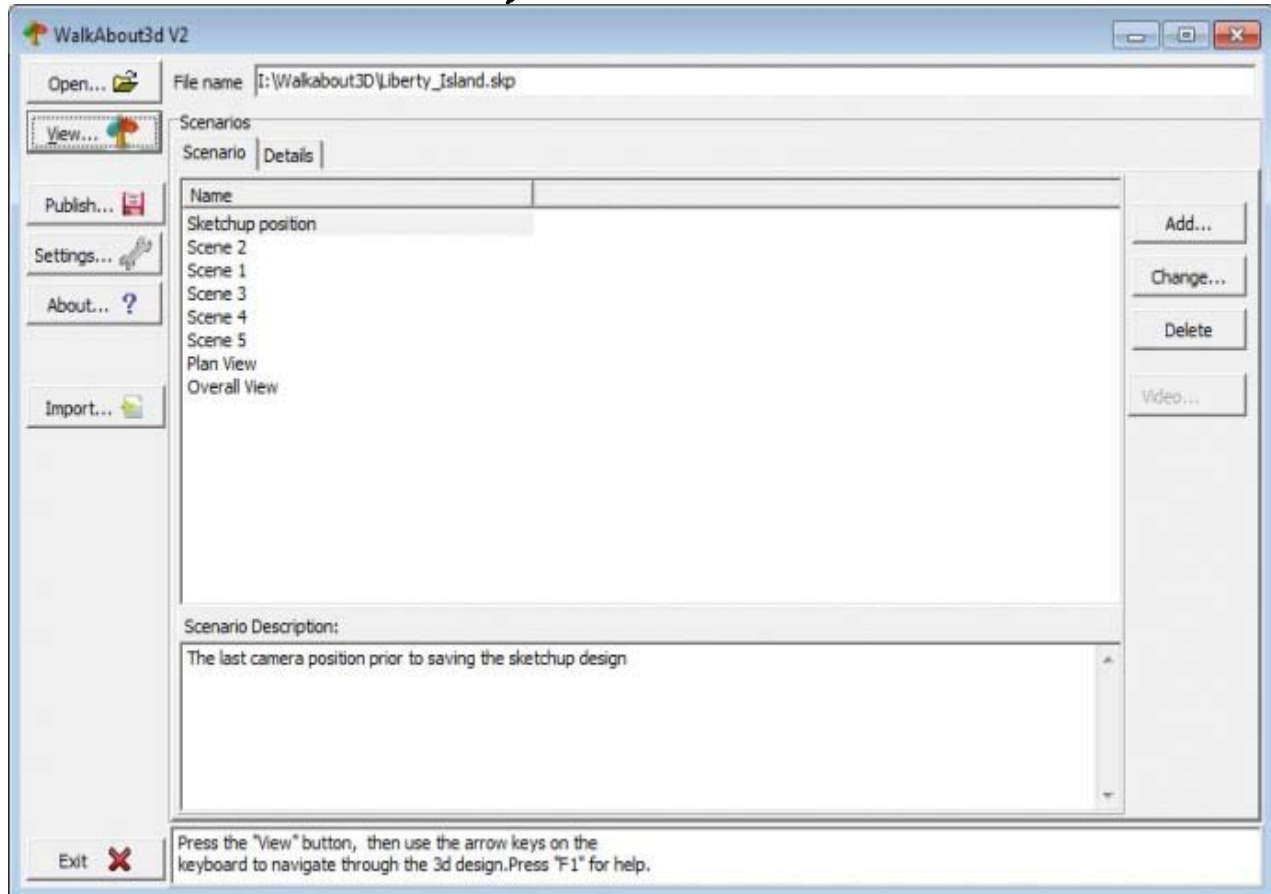


The best description of our projects direction is "Genius Loci - the protective spirit of a place". Every place has its own history and meaning. Our goal is to understand how a place and Man will coexist, and Architecture is our answer to this.

Learn more about Archimodes at [www.archimodes.eu](http://www.archimodes.eu)

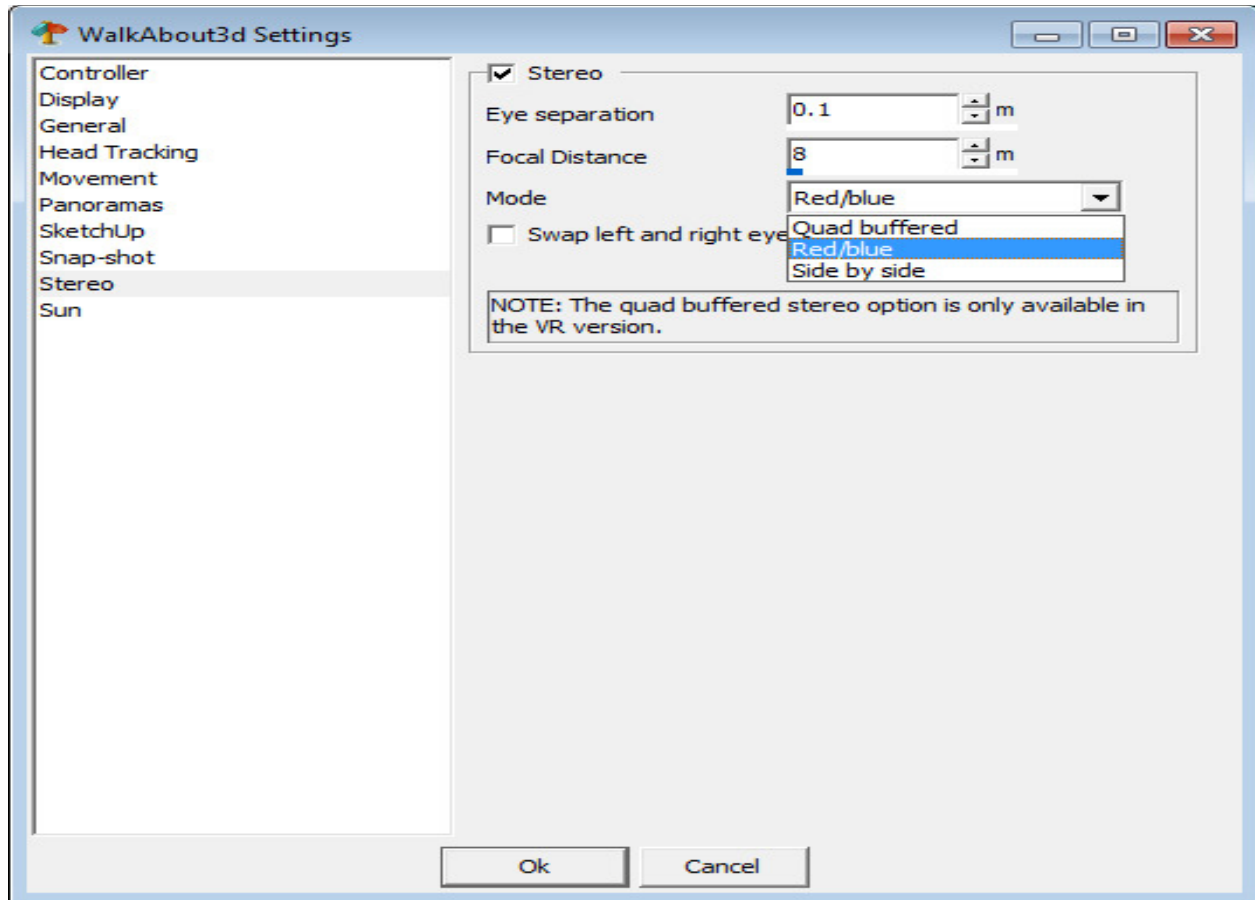


## WalkAbout3D ' Real-time Sketchup Walk-throughs in Stereo 3D



The program WalkAbout3D is an interesting software that acts as a real-time walk-through type of viewer for SketchUp and it comes with stereoscopic 3D support as well. The software offers you an intuitive and easy to use full-screen interface where you can explore projects made with SketchUp in a similar way like you play a game in first person or 3rd person view, by walking, running or flying around the 3D models or scenes you've designed. You can use the software as a kind of plug-in for SketchUp or as a standalone software, have in mind that it is a commercial program, but there is a free viewer with more limited functionality also available.





The software uses OpenGL rendering for the 3D walk-throughs, so unfortunately no 3D Vision support on GeForce is available. However you still get three different options for walking around your SketchUp projects in stereo 3D ' anaglyph 3D with Red-Cyan, Side by Side and Quad-Buffer OpenGL mode. In order to be able to use the QB OpenGL 3D mode you will have to own a professional level graphics video card from either the Nvidia Quadro series or AMD FireGL and you would also have to get a more expensive VR License of the software.



WalkAbout3D is easy to use and can be quite helpful for anyone using SketchUp for 3D design, the software runs quite well and handles well with different projects, and even the stereoscopic 3D support works quite well. Using the anaglyph 3D mode makes it very easy to get stereoscopic 3D support without having to own specially 3D-capable software and it works quite well, the Quad-buffer OpenGL 3D mode with a Quadro GPU and 3D Vision also works well.



The Side by Side mode intended mostly for 3D HDTVs however needs some more work ' adding some elements from the view on both the left and right frames. Notice that when you call the menu at the bottom it only shows in the left view and also the close button at the top, on the other hand the navigation compass is only being displayed on the right eye frame. And though these are not serious issues they need to be fixed in order for the user to get a better experience when using the Side by Side stereo 3D mode. Other than that the other issue that I've encountered playing with the software and that is a bit annoying is that in some projects some of the textures are not being properly mapped on the objects they are supposed to be and this happens not only in stereo 3D mode, but also in 2D mode. This happens mostly on SketchUp 7 and 8 projects, but I've also seen it on a few made with version 6 as well, but overall a good and useful tool for anyone that uses SketchUp a lot and is interested in being able to explore as well as present his projects in a more realistic and useful way. There is a trial version available that you can download and sue for 120 minutes as well as the free viewer that I've already mentioned with both supporting Side by Side and Anaglyph 3D mode, but not the Quad-Buffered OpenGL 3D mode.

The project used in the Side by Side example above is a free sample 3D scan from Realruns.net, a project by the Swedish artist Caspar Forsberg, that you can view with the free Walkabout3D viewer and you can also check out a few more 3D scan samples available on that website. Of course these also work with the full WalkAbout3D software and not only with the viewer.

[You can check out the official WalkAbout3D website for more information?](#)



## SketchUp Tips Hand – 3D Basecamp Registration

Registration for SketchUp's upcoming 3D Basecamp opened earlier this week. SketchUp's own Aidan Chopra said Basecamp half-sold-out in the first two hours of registration. There are still a few dozen spots left, but he doesn't expect them to last through the weekend.

All in, SketchUp plans on hosting a total of 250 to 300 people. I'll be one of them in Boulder, CO, Oct 13-15, learning about the future of Trimble SketchUp, and covering the event on the FormFonts Blog for those that can't, don't, won't be there.

However, the SketchUp team is already throwing some heavy signals to the user/developer community. The theme of this year's 3D basecamp (roughly) is celebrating the vast universe of plugins, add-ons and extensions that have been developed using SketchUp's Ruby API.

"From individual hackers to full-fledged commercial outfits, a very large number of developers have contributed to making SketchUp into more than just a successful 3D modeling tool. This year's 3D Basecamp will do its best to shine a spotlight on the people and plugins that have made millions of SketchUp fanatics happy and more productive."

### A few personal insights from the SketchUp 3D Basecamp conference registration process:

1) SketchUp is telegraphing strongly that it intends to deal with ongoing and new product line practice through the RUBY API, and possibly some developer-level tools. While no surprise, some may be surprised just how seriously the team is pushing the 'code it yourself' solution.

Trimble is a big company with 23 separate divisions, each with multiple products of their own. So the Trimble team will be plenty busy integrating them into the SketchUp platform for Trimble. And fair enough. At least with Ruby, third-parties will be able to develop in parallel.

2) SketchUp is basically holding an open casting call for talented Ruby developers. If you're a Ruby-on-Rails guru and have any 3D inclinations, get yourself to Boulder for 3D Basecamp. Impress the Trimble team or any of the other third-party developers, and you'll likely get a job offer on the spot. Script-kitties need not apply.

3) SketchUp may reveal new developer tools and APIs. Registration hints of a possible "advanced Ruby training session" at the end of the conference which is likely to reveal the deep-foo. If you seriously want to prosper in the new SketchUp ecology, you'll want to be in that room.

4) SketchUp may be considering an 'app store' for Ruby developers. While this sounds like a good idea, our experience selling Ruby Scripts in the early days on FormFonts (2003-2004) showed there are many non-technical problems with app-stores.

And not to rely on ancient history alone, a May 2012 report on earnings statistics at the Apple App Store by Distimo, a market research company in the Netherlands, backs up our early findings. It's worth reading (the average app on Apple makes only \$7000 a year).

That said, third-party Ruby scripts, apps, and plug-in going forward are likely to look a lot more like full-fledged applications that what we've seen before. They'll probably require actual teams of Ruby developers, cutting-edge software product line practice, and dedicated professional marketing.

As for juicy insider tidbits regarding this year's 3D Basecamp? Aidan says: "I can guarantee that this year's BC will be 100% clown-free. Also, there will be projectors. A real hootenanny." As long as Aidan and his inimitable style is still with us, SketchUp will always feel like SketchUp!



## *A New Maintenance Release for SketchUp 8*

The folks at SketchUp have just released a new maintenance release of SketchUp 8 today. It contains some bug fixes including one that appeared when Apple pushed an update for Safari. But the main thing you'll notice is a change in the icons. the one for sketchUp will look like this:



Most likely when you open SketchUp you'll be prompted to get the update. If you don't you can go to [SketchUp.com](http://SketchUp.com) and download it.

## A brand new brand for SketchUp

Glance at the masthead of this blog and you'll know something's up. Our new graphic identity is only the most obvious of the changes we've made in SketchUp 8 M4. It's unusual for us to do four maintenance releases between major versions, but then, it's been a bit of an unusual year, hasn't it?

Our move to Trimble gave us an opportunity (and an imperative) to finally build a proper graphic identity for SketchUp. In many ways, this was one of my favorite short-term benefits of the acquisition; it always irked me that our tool, which is so good at making pictures, had a logo that consisted of its name typed out in a particular font. Blech.

Devoted students of SketchUp history (sketchupologists?) will recall that until March of 2006, our logo looked like this:

This kind of logo is known as a logotype or wordmark, meaning that there's no symbol attached to the word; the word is the logo. The trouble with using a logotype for a piece of software is that, most of the time, individual programs on your computer are represented by application icons that live on your desktop or in a strip along the bottom of your screen. SketchUp's icons have looked like this over the years:



*SketchUp's application icons have, in my opinion, gotten progressively less good over the years. The last one (on the right) only appeared on Google's More > Even more page. None of these icons were ever really used as product logos.*

The Google years brought several logos as we responded to successive top-down branding directives. None were particularly inspired, and none solved the we-need-an-icon problem, either.

*SketchUp*  
from Google®

Google  
SketchUp

Google SketchUp

As we kicked off our new branding effort in June, we were determined to kill two birds with one stone: We would design a symbol (some people call it a "mark") that would do double duty as our product icon.



For the mark/icon itself, we were looking for a form that communicated a number of things. Less important were notions of informality and simplicity, though we obviously didn't want our symbol to convey stodginess or head-banging complexity. We focused on the notions of three-dimensionality, dynamism (movement) and perspective.

When we saw the sketch of the shape that would eventually become our icon, we knew we were on the right track. It's derived from a cube—which is the go-to symbol of 3D for apps like ours—but it isn't really a cube at all. The implied stairs or levels are an apt representation of our roots in architecture and other construction disciplines.



*If you look closely, you'll notice the chevrons formed by the top surfaces even point "Up" in a nod to our signature tool.*

Whereas application icons are often very colorful—with lots of fine detail, gradients and shading—corporate marks need to be much more flexible. They need to be able to scale up and down without looking smudgy or oafish; they need to be able to be printed in a single color when necessary; they need to be readable on black, white, colored and photographic backgrounds; they need to be able to be reversed into white sometimes. The best logos look good no matter where you use them.

We decided it was best to stick to a single color. But which one? SketchUp's hue has shifted slightly over the years, but it's always been a flavor of red. As we looked at ruby and garnet, crimson and cadmium, burgundy and brick, we kept coming back to a desire for SketchUp's red to be as simple and positive as the rest of our brand. Our choice, Pantone 1795, is saturated, definitely not brown or purple, and stop-sign-visible at a thousand paces. I cheer up whenever I see it.



We chose a typeface called Whitney for the word "SketchUp". On the Comic Sans-to-Baskerville continuum of font gravitas, Whitney is friendly, professional and clean. Just like us, we think. To unquify things a bit, we tweaked the ascenders and descenders to match the angles in our symbol. Setting them next to each other, we have the makings of the world's greatest t-shirt:



For the rest of the SketchUp Pro family of applications, we derived icons from the SketchUp symbol. LayOut is represented by an orthographic top view of the stair-step shape. Style Builder is an outline of the mark, rendered with stylized edges. All three icons are SketchUp Red, which ties them together and sets them apart.

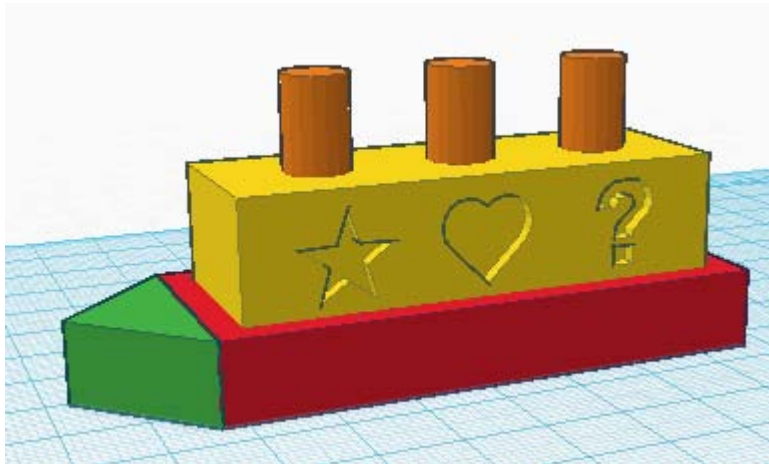


Some of you are probably wondering why we didn't just wait until SketchUp 9 to change this stuff. The answer is actually pretty simple. With the deadline looming on purging the old Google SketchUp logo from our product, we had three choices: lop off the first word and hobble along without a real graphic identity; come up with an interim solution; or go through the difficult but worthwhile process of solving the problem once and for all. The first option was totally unsatisfying, the second caused more issues than it solved, and the third offered us the opportunity to make a fresh start. It was an easy decision.

## Getting Started in Tinkercad

Tinkercad is a FREE, easy to use, web-based, 3D modeling application geared toward kids in K-12, but anyone can use it to make handy and fun objects that can be printed using a 3D printer.

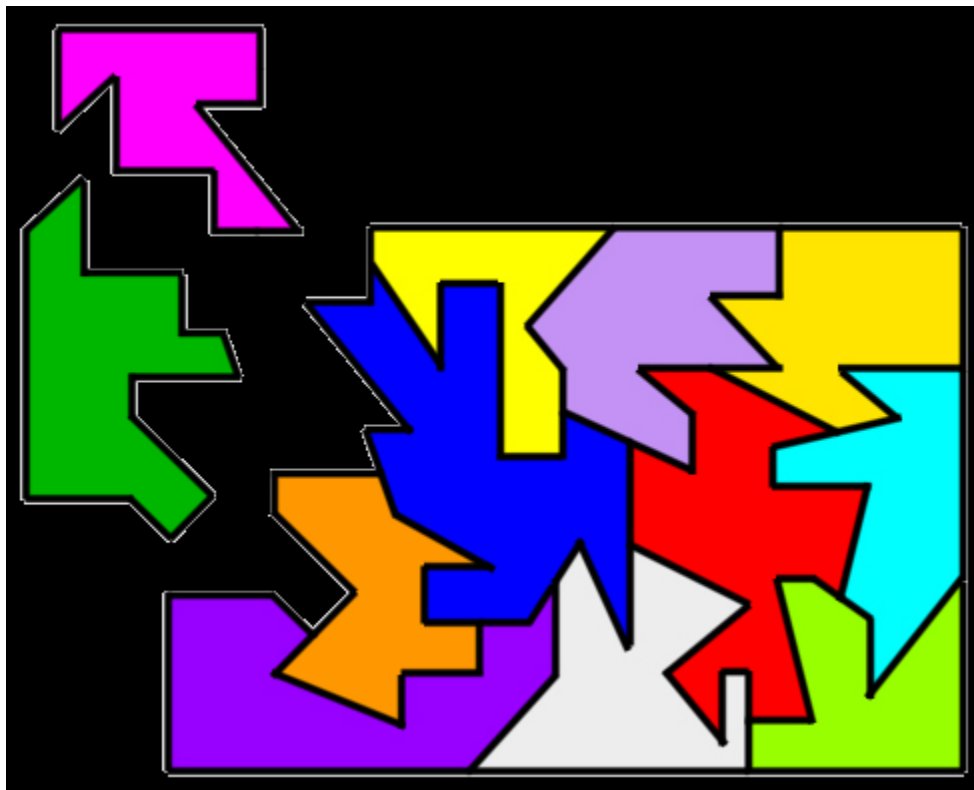
This [Getting Started Project \(PDF\)](#) walks you through the steps to make a boat, complete with fun cutout shapes for windows. Print it out, or read it on-screen, and start building!



### Puzzles

Google's 3D Warehouse has 10 puzzle models that you can download. [This page](#) shows you how to find and download the models, and also shows how to solve them.

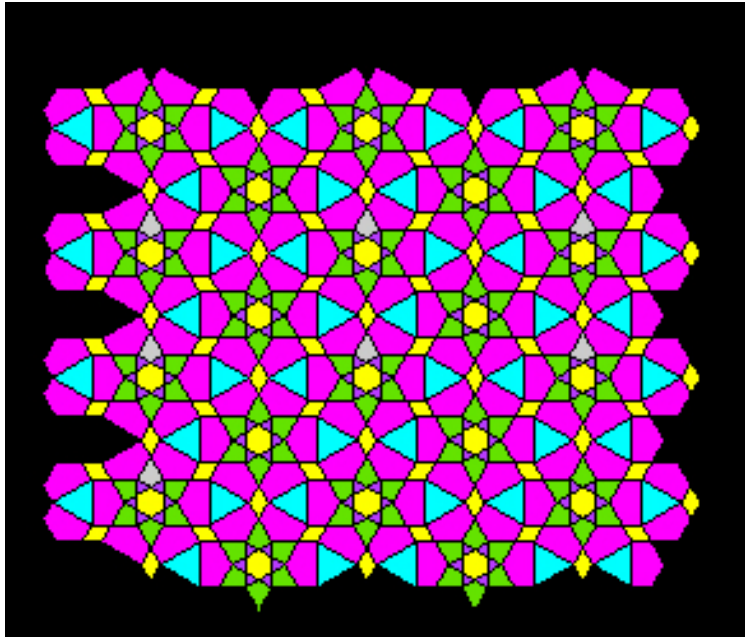
These puzzles are made in the [book ModelMetrics Intermediate Series Book 3: Puzzles](#)





## Mosaics

Google's 3D Warehouse has 52 mosaic models that you can download. [This page](#) shows you how to find and download the models, and shows several ways you can color them (including printing them out).



These mosaics are made in two books:

[GeomeTricks Periodic Patterns Book 2: Mosaics with Regular Polygons](#)

[Geometricks Periodic Patterns Book 3: Advanced Mosaics](#)

## Build Your Own Triple Monitor Wood Mount and Surround Yourself with Screens

This inexpensive triple monitor stand is a sturdy and attractive mounting solution for your desk. All you need are some basic carpentry skills to make your own version.

Reddit user LukyNumbrKevin [shared the detailed parts list](#) and a [image walk-through](#) for this project. The total cost for his Nvidia Surround monitor setup—including the cost of the monitors found on Craigslist—is just \$238.

After seeing monitor mounts for more than \$200, he used Google Sketchup to design his own.

You can use pipes to create a [DIY triple monitor stand](#), but if you prefer a wood base or working with wood better, follow Kevin's lead.



## *Novedge Webinar Series 54: Creating Better Renderings for Client Presentations with iRender nXt*

How to use SketchUp and IRender nXt to produce photorealistic renderings from 3D designs. Learn the work flow for creating a full set of interior and exterior, daytime and night-time renderings of 3D designs for client presentations. We will start with basic rendering settings and lights, then move on to advanced concepts such as using lighting channels to balance light sources and create dynamic, well-lit scenes.

*Who is presenting:*

Al Hart, of Render Plus Systems, has been developing and interfacing rendering software on PCs for more than 20 years. Al has been a long time advocate of SketchUp and contributor to the SketchUp design community.

*Who should attend:*

The Webinar will be geared to beginning users, particularly architects and builders, who want to design with SketchUp and create photorealistic renderings for better client presentations.

[Register Now](#)





## SketchUp Pro for Landscape Architecture

SketchUp Pro is software for creating and presenting professional 3D models. Landscape Architecture firms use SketchUp Pro to quickly and effectively communicate 3D ideas and information, enhancing collaboration, reducing inefficiencies and solving design problems.

*"As a senior level designer, I just don't have the time in my day to fully learn and effectively use complex 3D CAD tools. SketchUp has allowed me to intuitively and quickly create fully 3D preliminary design studies in a very short time period. I find it to be an ideal front-end design tool."*

Visit the Landscape Architecture [image gallery](#) and check out some [case studies](#) from Landscape Architecture customers.

### Use SketchUp Pro for:

- Creating endless iterations while meeting tight deadlines
- Adding live section cuts to produce dynamic plans and sections
- Creating and modifying 3D terrain with the Sandbox tools
- Creating 3D walk-through animations
- Real-time shadow studies and line-of-sight analysis
- Creating hi-resolution printouts and digital presentations with [LayOut](#)
- Accessing the world's biggest repository of entourage objects such as trees, vehicles, figures - all for free
- Placing a building in its real-world context in [Google Earth](#)

You can purchase a SketchUp Pro license for \$495 through our [online store](#).



## *Sketchup with Del Monte*

**Students were invited to showcase their artistic skills by sketching with the four flavours of Del Monte.**

Food meets art at Del Monte's unique engagement initiative, interestingly called Sketchup contest. Through the activity, the processed food and beverages brand gives consumers a chance to discover the artist in them with the help of Del Monte's colourful and delicious range of sauces.

In Delhi, the Sketchup contest was executed on August 23 at the Hindu College campus, wherein the Del Monte team invited students to showcase their artistic skills by sketching using the four flavours (and thus, the four colours) of Del Monte. The students were free to draw anything of their choice. The images of the sketches were uploaded on the World Foody page on Facebook. The picture with maximum number of Likes will get to win laptops and smartphones.

The contest aims to connect with consumers, enabling them to showcase interesting pieces of art drawn using Del Monte sauces such as Tomato Ketchup, Zingo, Twango and Mustard Now. The artwork entries featured imaginative designs such as ketchup gardens and cartoon characters, among others.

Speaking about the initiative, Yogesh Bellani, chief operating officer, FieldFresh Foods, says, "Innovation is the hallmark of our brand. Sketchup is a first of its kind initiative to innovatively engage with the youth who are key influencers in the ketchup and sauces category. This is to unleash their imagination in a creative manner and bring them closer to brand Del Monte. The contest provides a platform to food lovers to blend their love for food with art in a fun-filled manner."

As part of Del Monte's key consumer connect initiatives, Sketchup started in mid-August in Bengaluru and will run till the first week of September. The activity will also cover Mumbai.



**Students participating at Del Monte Sketchup contest**

## *Sketchup ur Space - The Creative Team*



**Rajib Dey**

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 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 is enthusiastic helps to put the content of the SketchUp ur 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.