SKETCHUP-UR-SPACE

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SKETCHUP-UR-SPACE
the first ever SketchUp magazine

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A letter direct from the editor desk highlighting on June edition

We are going to publish another fabulous edition of sketchup ur space. Since its inception in 2010, our magazine has grown and thrived worldwide. We are getting constant support from our guest columnists and it empowers us to continue the publication successfully all the times.

In this current issue, there are lots of nice articles, tutorials, blog etc. presented by our team and some recognized sketchup professionals.

In the cover story section, there is an informative discussion on how sketchup and 3d printing are co-related. Sketchup is very useful for designing and printing a printable object as it contains several STL plugins. This exclusive cover story is prepared by our in-house team.

In article section, Jacopo Allamprese, a promising aerospace engineer, shares his experience on how he utilizes sketchup for making the design of an F1 car for a virtual design competition.

In another article, our in-house team prepares an article that evaluates the crucial role of sketchup in film making industries to pre-visualize scenes and shots as well as designing sets, giving special effects, deciding camera angles and shot sequences and much much more!

In tutorial section, Amir Modi, the CG architect and freelance 3d visualize, presents an instructional article that focuses on how to apply v-ray, 3ds max and photoshop for modeling and rendering of the design of a Gym.

In the second tutorial, Graficad2d3d presents a tutorial which briefly demonstrates how to apply sketchup and v-ray to create the design of an interior scene.

In blog section, the readers will be familiar with the most updated version of Raylectron alias Raylectron v4.xx. This newest application can transform your rendering and animation capabilities to the next level.

In blog section, there will be news on special sketchup class for woodworkers organized by USA based Centre for furniture Craftsmanship.

In news section the readers will get various updated newsworthy contents on sketchup.

Hope our readers will enjoy this issue to a great extent.

If you have any queries concerning publication, subscription, troubles navigating the site, please mail us at rajib@sketchup-ur-space.com

Best wishes
Rajib Dey
Editor

Q&A with V-Ray for SketchUp artist and blogger Nomer Adona

Since the release of SketchUp 4, 3D visualization with SketchUp has been a hobby for Nomer Adona. He once worked in the visualization industry – only using free-hand drawings to visualize his concepts – and now teaches art and design at Saigon South International School (SSIS) in Vietnam.

Nomer began integrating V-Ray for SketchUp into his visualization process with the plug-in's first beta release, and continues to use it on a regular basis. "V-Ray is considerably fast in comparison to other rendering engines. I have no doubt that the combination of quality and speed is the main reason why visualizers like me love V-Ray for SketchUp," Nomer said.

In addition to teaching art and design to his students at SSIS, he's become a well respected teacher within the SketchUp and V-Ray communities by publishing online tutorials on his personal blog, nomeradona.blogspot.com. Since 2009, he's also been a contributing writer for SketchUpArtists.org, where he shares his SketchUp and V-Ray for SketchUp experiences. According to Online Editor and Co-Founder of SketchUpArtists, "Nomer is a master of 3D digital still life and interiors. He has a passion for bringing 3D and art together and his expertise has always inspired and amazed. His work always reveals his skills in composition and the knowledge of how colors work, whether it's hand drawn illustration, photography or 3D rendering … he is a true SketchUp artist and render master."

We asked Nomer a few questions about his experiences as a teacher of art, design, SketchUp, and V-Ray for SketchUp. Here is what he had to say.

What made you want to teach art and design at Saigon South International School?

First of all I love teaching: I love inspiring, motivating, engaging people particularly in art and design. I also love sharing my knowledge and learning from other people. I found teachers in international schools to be open minded, knowledgeable and most of all full of life experiences in a multi-cultural world. I found that most students in international schools are risk takers, inquirers, opinionated and reflective. The environment of teaching in an open arena is much more appealing than working in a four-walled architectural office.

Saigon South International School (SSIS) is a very prestigious school in Asia with a strong academic and a balanced program. It has a beautiful suburban campus overlooking a river and the facilities are first-rate. Most of all, its greatest assets are the students and the teaching faculty, the reason I opted to stay and would want to continue teaching in this school.

Do you teach your students how to use V-Ray and/or SketchUp?

SketchUp was introduced in our school. We tried to implement using this software from middle school to high school. Last year our middle school started introducing in connection with the math curriculum. I am also regularly teaching my Integrated and IB art students to use SketchUp. This year we are piloting the introduction of the V-Ray for SketchUp engine.

Have you worked any jobs in 3D visualization, or has it been only a hobby for you?

Since 1990 my work was mainly conceptualization, and you have to be a visualizer in order to express your concepts. Back then I only used free-hand drawing. Everything changed when I bought my first computer 1997 and I began studying visualization using 3ds Max. Such study was on and off since most of my work was conceptualization, and I found that hand sketching was faster than modeling digitally.

My interest with 3D digital visualization was revived when I was introduced by a colleague to SketchUp 4, which was very quick way of doing conceptual work. Because I was teaching already then, visualization became a hobby, a way of releasing my creative expression. From time to time, I'd accept rendering services, but it was not really my main job.

When did you begin using V-Ray for SketchUp, and how did you learn how to use the plug-in?

When you grow with 3D visualization, you start looking for different possibilities. Through the Sketchucation.com forum, I learned that the development of V-Ray for SketchUp was ongoing. When the first beta version of V-Ray for SketchUp was released (the one with ASGvis watermarked), I tried and started using it. Since then, I started using it regularly. Much of my learning was through trial and error, since there were very few online learning resources at that time (the manual was not

even there). The ASGvis forum was always a very good place where I could post questions and read other user's discoveries.

What do you like about V-Ray and SketchUp?

The quality it produces. It is considerably fast too against other rendering engines. I don't have any doubt that the combination of quality and speed was the main reason why visualizers like me love V-Ray for SketchUp.

What is your favorite project you've designed with V-Ray and SketchUp so far, and why is it your favorite?

My favorite was when I used it for my worship series painting. I used the software basically to study lighting before painting. It was an unorthodox approach on how 3D digital media visualization could be used with traditional painting media. I think this is the way I want to pursue my art.

What or who inspires you?

I love media exploration. Discovering new things and then sharing what I have discovered with others is what inspires me most. When it comes to people, the guys who inspire me are "Biebel" and some Filipino visualizers like "architekthura" and "celes."

View Nomer Adona's blog at nomeradona.blogspot.com, and read his posts onSketchUpArtists.org.

3D Printing With SketchUp, a fine art attraction

The 3 Dimensional Printing (3D Printing) is a process for making a physical object from a three-dimensional digital model, typically by laying down many successive thin layers of a material. It is often called additive manufacturing (AM), reasons the additive nature of process in which successive layers of material are laid down under the computer control. A 3D printer is a type of industrial robot. Now a day, 3D Printing with SketchUp is more than just prototyping. It offers transformative advantages at every phase of creation, from initial concept design to production of final products and all steps in between. Today's competitive environment makes choosing the right 3D printers more important than ever.

Now, the good news is here that the most user friendly 3D Printing process -- SketchUp is here for us. Invented in year 2000, the beginner-friendly Computer Assisted Design (CAD) software was operated independently, later was owned by Google (2006-2012) and currently is in the possession of Trimble Navigation -- a mapping, surveying, and navigation equipment company. The company provides a freeware version, called SketchUp Make. It also has a paid version with additional functionality, SketchUp Pro, which is available. The free version is easily downloadable from internet.

If the know-how of the SketchUp 3 D Printing is to be discussed, it would certainly include 3D printable architecture of house, furniture, in the likes of cabinet, cup-board or dresser and also the mechanical devices specially, drone propeller blades. The internal measurement system of SketchUp is precise and easy to use, making it a good choice for creating tightly fitted pieces, such as wheels, lids, hinges, swivel ball joints, and some types of action figure jointing.

Working in 3D Printing with SketchUp is fantastic fun. It's challenging and allows for almost boundless creative expression. The techniques were initially devised in the 90s as a means to produce relatively inexpensive prototype parts for industrial and automotive design work, however as costs begin to decline; 3D printing is finding its way into an expanding variety of industries. The 3D Printing with SketchUp is a game changer. Its sheer cost effectiveness and flexible use has made it a god gift for the budding 3D designers.

The working process of 3D Printing is very smart. Among different 3D Printing method, 3D Printing with SketchUp is most consisting. In additive manufacturing, three-dimensional objects are created from a raw material in either liquid or particle form. The microscopical thin layers of raw materials are deposited in a 3D printer and the print gradually materialized as the layers are built up step by step. The acuteness in a 3D print is determined by the thinness of the layers, and the raw material can be anything from synthetic resin, to ceramic powder, metal, or even glass.

The standard operation of 3D Printing with SketchUp has traditionally been rapid prototyping in mechanical and automotive design settings. 3D printing makes it quick and inexpensive to produce concept models, and perform fit & functionality tests. The technology has even advanced to the point where it is possible to print small quantities of production quality parts.

The prices of 3D printer and the raw materials have gone down. The 3D Printing with SketchUp have range of applications with hundreds of niches. Those are the like of jewellery making, sculpture, toy, prosthetics, educational models, geographical and topological models for GIS data and many more aspects.

The 3D Printed Metal Jewellery is one among the most interesting aspects. As technological advancement strive for a universal presence, the personal aspect in wonderfully creative individual springs into action with heart-strumming results. While customizable 3D printed jewellery becomes increasingly humdrum in its manufacturing process, many individuals take it upon themselves to add their personal effort and purpose to a piece as intimate as an engagement ring. This is now a popular career option. 3D printed jewellery designer Jack Mayer is a true example. From a career in computer science to one of London's foremost experts on 3D printed jewelry, it can be said that Jack Meyer's true passion found him. Presently, Jack is a familiar face at major 3D printing events such as the London 3D Printshow. As the Senior CAD and Technology instructor for Holts Academy in London, and owner of CAD Jewellery Skills, Jack's whirlwind discovery of 3D printed art and jewelry lead to launching his own manufacturing company, and then to teaching a new generation of award-winning fine jewellers. In the last decade a realistic and asymmetrical 3D Printed Sculpture has become very popular. It is a fine art and design form. Dutch artist, sculptor, and special effects make-up artist Jacqueline Baselier has experimented with various techniques, which increasingly include 3D printing and it made her popural. Jacqueline works readily creating sculptures with 3D printing technology. Its appeal is readily noticeable to artists in her line of work. In the sculpting, the 3D printing with SketchUp offers a wide range of materials, freedom of design, and the ability to concentrate on ideas rather than on manual work.

The world of 3D printed fantasy design with SketchUp is unlike any other. It not only imagines another world, but makes it real. At the core concept of art is creativity. The main urge is to express the creativity within you and to bring something into the world that hasn't been there before. The 3D Printing form of art with SketchUp inspires the artists. And it all starts with an idea.

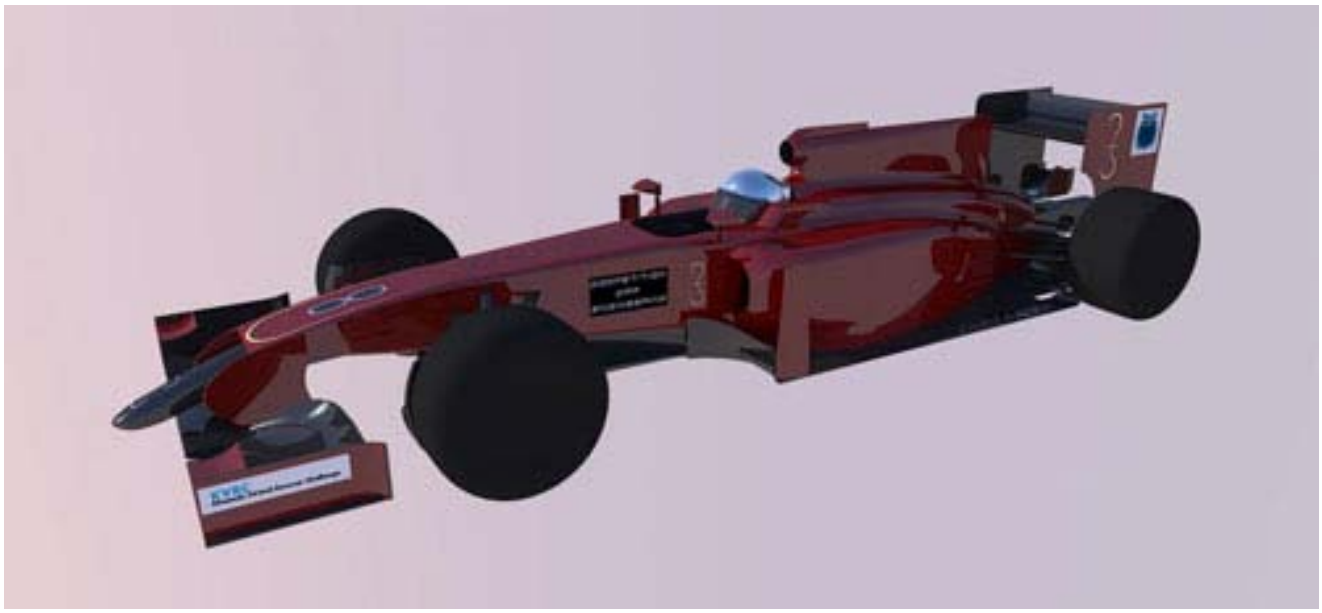
The biggest misconception about 3D printing with SketchUp is that a budding artist needs to be a computer programmer to get it started. That is simply not true. The improvements of easy-to-use 3D modeling digital tools have played a big role in making 3D printing successful. Whether you want to start your project from scratch, mix and match or create a model from a picture you will be met with user friendly tools and helpful guides.

The 3D printing with SketchUp technology in the world would mean nothing without an awesome community behind it. It is always grateful to be surrounded by makers, designers, concept builders and creators. The 3D Printing with Sketch Up hopes to offer a community where you can safely experiment, play and create.

Designing for Speed, How I used SketchUp to design racing car

The Khamsin Virtual Racecar Challenge (KVRC) is a virtual design competition in which participants design the bodywork of a virtual Formula One racing car in compliance with a subset of current FIA rules. The aerodynamic performance of the design are assessed using Computational Fluid Dynamics to evaluate the proposed design drag, downforce and distribution of forces. The aerodynamic performances are then used in a virtual laptime calculator that uses standardised engine performances and track data to evaluate the lap-time associated with the proposed design. The fastest design wins the race.

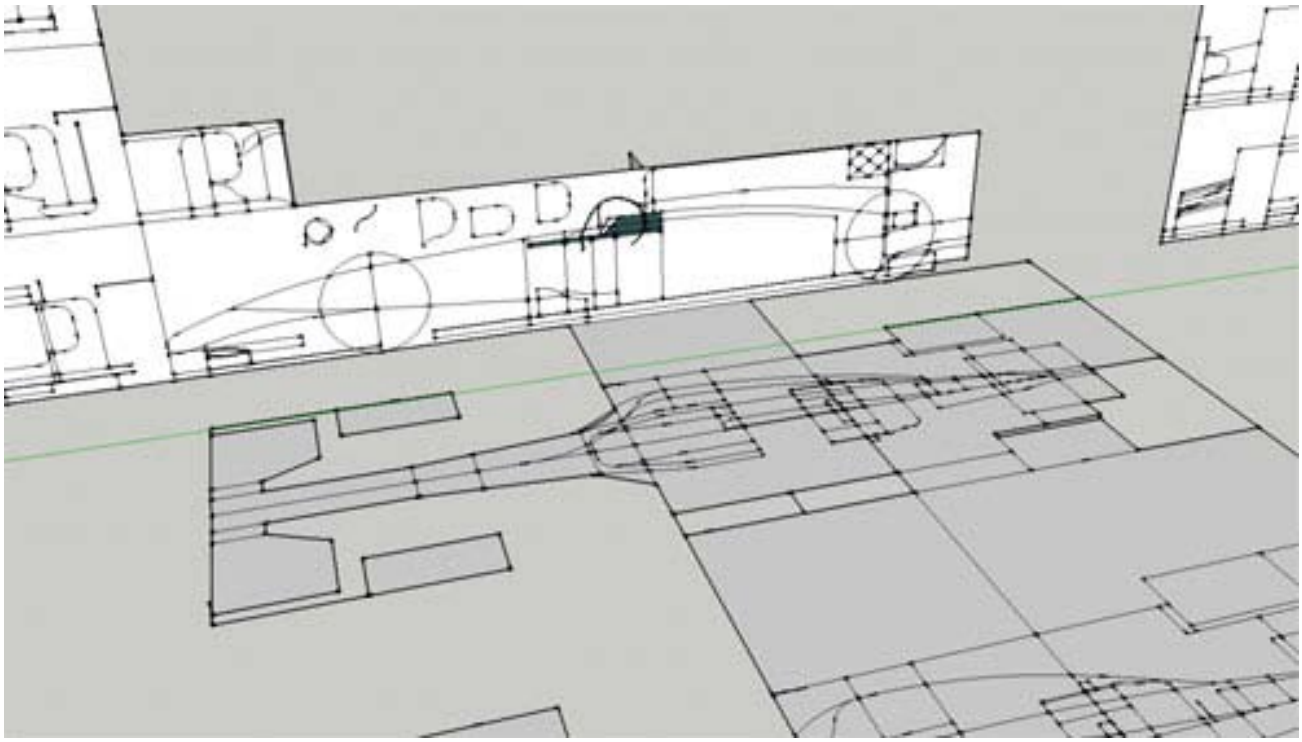
Jacopo, an Aerospace Engineering student at Politecnico di Milano, Italy, took part in the KVRC 2013 and 2014 challenge. He won the Magny-Cours race and finished overall second in the KVRC 2014 challenge, which demonstrate his high level of skills in 3D modelling in SketchUp and understanding of vehicle aerodynamic. Now, lets him share some of his design philosophy and practical tips and tools that he refined and used routinely during the challenge.



Designing an F1 car using SketchUp (or any other software) is quite a task. Curved surfaces, unusual geometries and functional complexity is what you must deal with as these have a large impact on the overall design perforrmance. Experience using SketchUp and modeling complex curved geometries is of great help, but practice and experimenting with SketchUp make designing a F1 car a job that everybody can do.

First steps

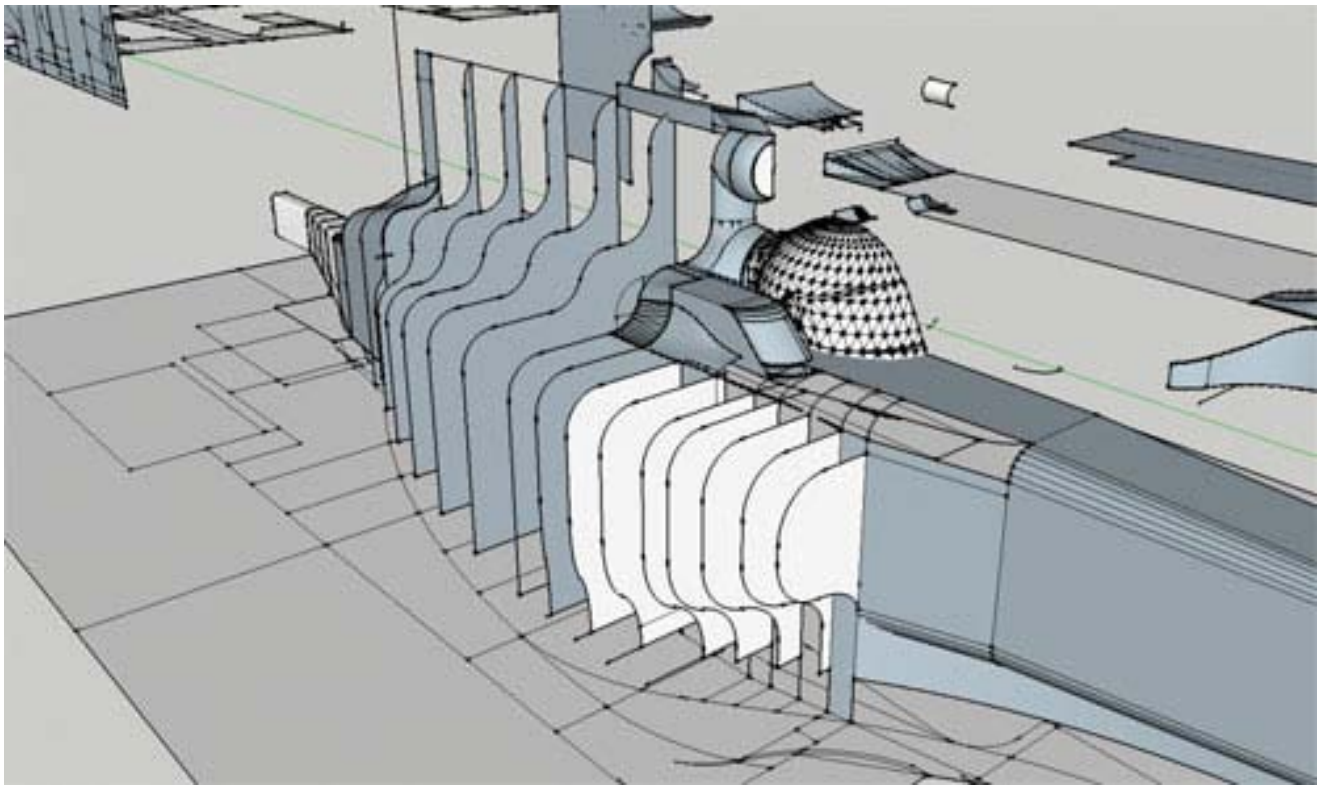
As mentioned before, complexity is one of the main obstacles that any F1 car designer faces. As a first step it is necessary to reduce the system to its basic and schematic components: top and side projections of the car.



This is a key step as it will enable you to foresee tedious geometric problems that you would otherwise detect only once the car is complete. And by then it's too late to fix easily... Nothing else but imagination and experience can help.

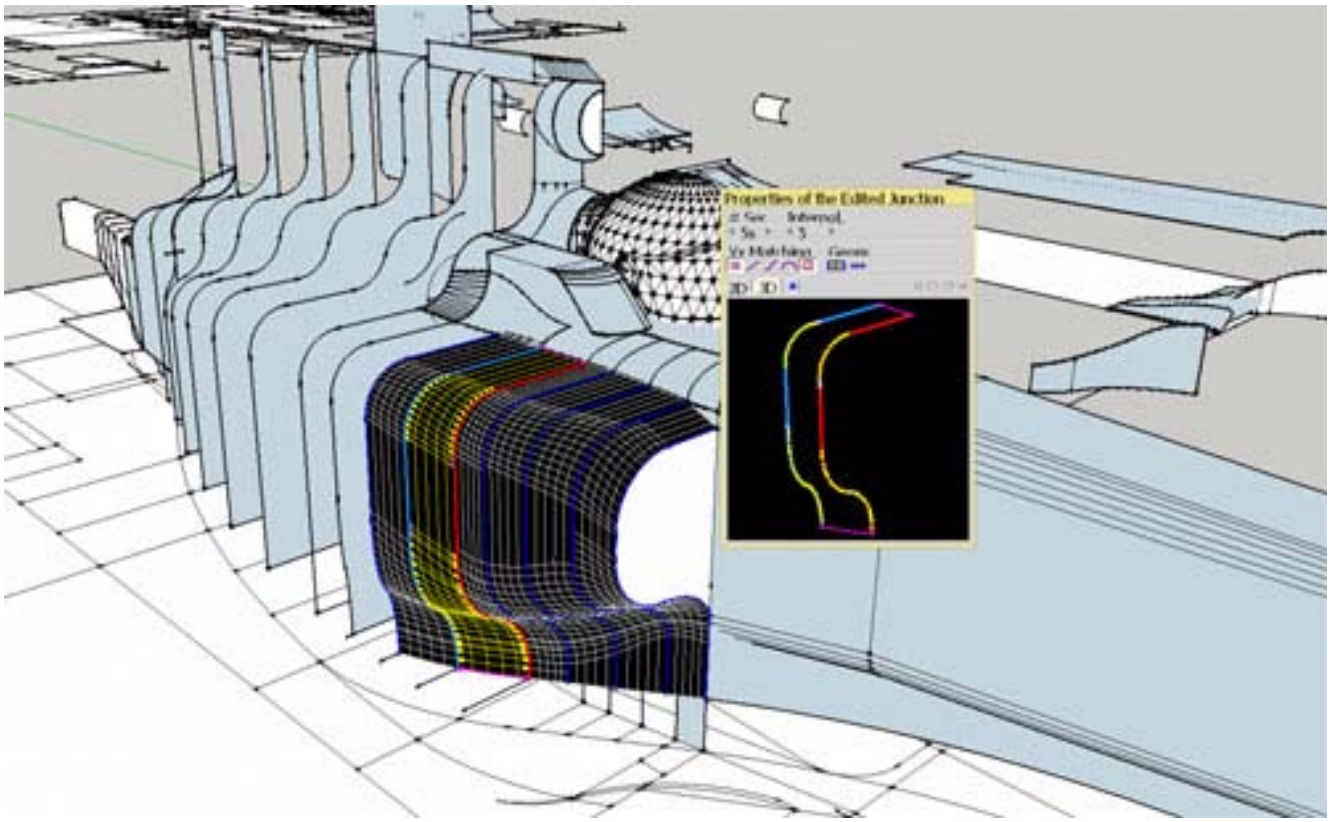
Naval techniques

The following step is to convert the 2D projections into a 3D realization of the car, starting with its “skeleton”. The best approach is using *cross sections*, which is just how it is done with some old school wooden vessel.



When the skeleton is completed, it needs to be covered by the“skin”, which will form the actual car's bodywork. Now, there's a bad way and a good way to do that. The bad one involves constructing the skin by hand, by joining the polygons (i.e. the sections) of the skeleton through triangles. The good one consists in using appropriate plug-in, such as “Curviloft” - my recommendation. This second way allows for a a faster and more detailed skin. It has, however, downsides that I will detail later on.

Some parts of the car, particularly small details, do require the use of more conventional methods, such as combination of extrude tool, and intersect tool...



The model is now pretty much constructed. Still, there are other aspects to take into consideration...

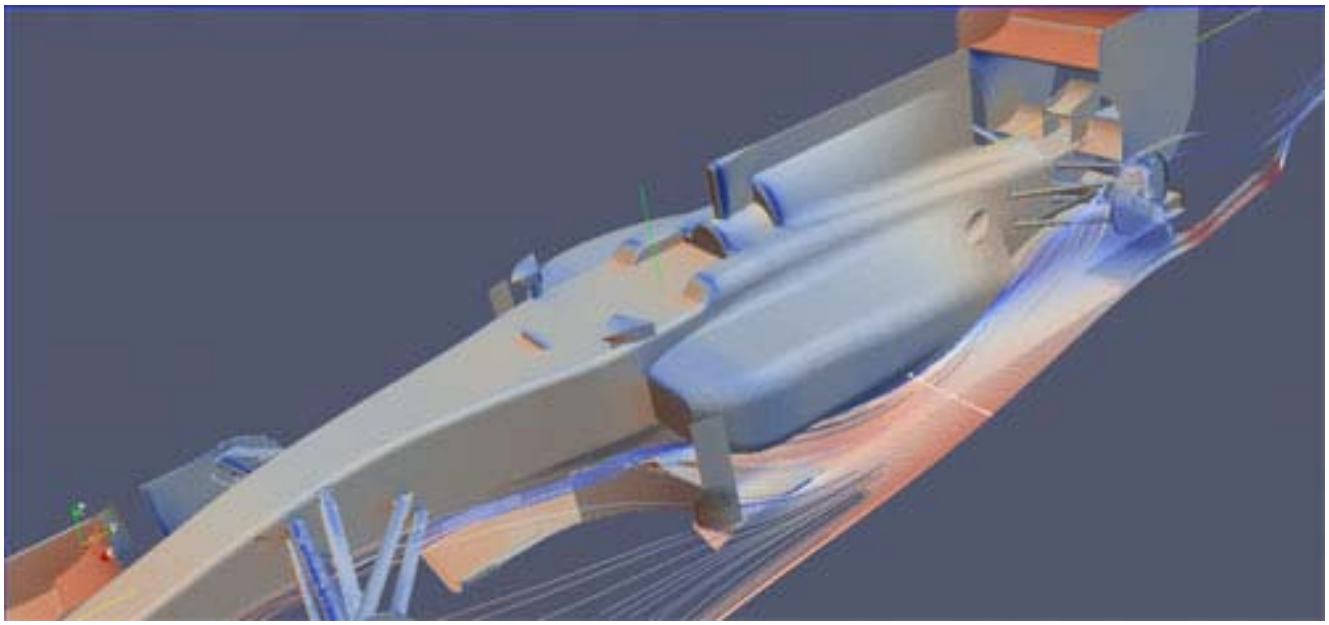
Organising design elements in groups

In order to reduce complexity, it's recommended to build the car part by part. For example, the sidepod part will be constructed separately from the underfloor, the front and rear wings parts, etc... Once each part is constructed, it's a good idea to create a group to store the part geometry by selecting the geometry, and select menu Edit>Create group. Once all parts are constructed, the entire car is assembled by matching the parts.. An advantage of “grouping” parts is that you will be able to easily modify the part itself even after the car is completed without compromising other parts.

Dealing with plug-in(s)

Curviloft is a very useful plugin, but it's more difficult to use properly than it first appear. Problems occur when it is applied to join a long sequence of polygons: it's not rare to observe (small) holes being accidentally created on the surface we want to create. This issue can be either solved manually modifying the conjunction lines between the polygons (a feature that Curviloft itself offers), or designing polygons more “wisely”. This may means\, for example, designing polygons with similar number of segments and comparable geometry, or placing the polygons at a constant distance each other. I also noticed that using more polygons yielded better results.

While it may seem that I am drawing too much attention to surface smoothness and accuracy, these aspects are essential when it comes to meeting competitive requirements for vehicle aerodynamic such as the one required in the CFD based KVRC Challenge. Attention to details was one of the key elements that allowed me to win one of the races and scoring an overall second place during the KVRC 2014 Challenge.



Img4:http://s1372.photobucket.com/user/jorehir/media/CFDFrance1_zpsc1a2ce80.png.html

A more technical note

If you intent to construct a model just an aesthetics exercise, you can ignore this last note. But for those who are interested in challenging themselves through a Challenge such as KVRC and trying to emulate F1 engineers, I advise to pay a significant attention to the design of the wings, airfoils, underfloor and diffuser: those are areas where attention to details is a key factor. Keep in mind that you should always relate your SketchUp design work to the settings used in the CFD solver, particularly meshing. If those settings can't realistically capture and model your proposed design details, it's better not to overdesign your car.

Useful Links

KVRC: www.khamsinvirtualracecarchallenge.com
Khamsin, a SketchUp Plugin for CFD Modelling: www.hibouscientificsoftware.com.au
Virtual Stopwatch: www.competition-car-engineering.com
Curviloft: http://sketchucation.com/forums/viewtopic.php?t=28586

SketchUp has become an invincible tool of film making and set designing

SketchUp, the exciting 3D modeling programme has ushered a new era of film making. The creative heads behind the screen prefer SketchUp as their best tool to produce the on-screen magic. The Film and Stage plug-in option is a great way for film makers and directors to pre-visualize shots and scenes in SketchUp.

Let us draw some quick examples. Remember that Steven Spielberg's science fiction film E.T., the Extra Terrestrial released in 1982? A lonely boy who met an E.T. and befriended with the creature? That magical movie could still touch our soul. Jim Bissell was one among those people with Spielberg, who later in his career has brought to the silver screen some of the most powerful, moving, and magical film imagery of the past 30 years. Bissell began using Google SketchUp for his work in 2004, and it has since become an integral part of the design process for each of his films.

According to Bissell, SketchUp is easy to use and its make this product invaluable. Bissell's first major success with SketchUp was in his role as Art Production Designer for George Clooney's Good Night and Good Luck (2005). The film was nominated for six Academy Awards, including a nomination recognizing Bissell for Best Achievement in Art Direction. Bissell's next project was 300 (2006), which garnered him an Art Director's Guild nomination for Excellence in Production Design. "I applied many of the lessons from Good Night and Good Luck to 300, including the way I used SketchUp," he said in an interview.

According to Bissell, SketchUp has become even more useful over the years with the addition of features like LayOut, which lets you insert scaled views of your SketchUp models in documents you can use for both online and print presentations.

The Film & Stage plugin in SketchUp is used to discover the use of different camera lenses and aspect ratios on location or on a production set. The Film & Stage plugin includes a superior camera tool and several pre-viz components that leads to rapid development of studio sets.

SketchUp has already been vastly used in Hollywood and the programme has an immense presence in 2006 Golden Globe Awards. SketchUp 3D modeling software for designers, was involved with the making of 'Good Night & Good Luck', a 2005 Warner Independent Film. The film has been nominated for four Golden Globe Awards, including 'Best Motion Picture' and 'Best Director'. Using the 'Good Night and Good Luck' script, production designer Bissell modeled the entire studio set in SketchUp. All sets and camera angles were pre-visualized with this dynamic 3D modeling tool. The final movie maintains the integrity of the virtual sets designed in SketchUp. "I've used SketchUp to design movie sets for almost two years and I love the ease with which I can add to an existing design," said Bissel. "Making quick edits is crucial to the movie production process and this software delivers on its promise of ease and accessibility," he added.

SketchUp can work with an array of cameras, lights, dollies, cranes, grips, characters and more. It uses the enhanced camera feature to plan quickly and easily shots, calculate camera angles, and obtain a 3D visual of the scene before filming. The use of sketchUp software is to create animations and visuals, constructing sets (from design to working drawings to finished set in), importing digital photos, establishing special effects and plan shots etc. SketchUp will allow a director to

create a virtual 3D set and use it to create both story boards and floor plans. Make drawings of every piece of stage scenery of film location and pass them along to set designers.

There are many 3D models of accessories to create a filming atmosphere in you sketches. The "3D Warehouse" feature allows users to import models and use them for their own sets. A director can make scenes in his/her SketchUp model, and then play back those scenes into an animation. SketchUp also helps with location drawings.

SketchUp is now using to build popular TV programme's Set designs too. Using SketchUp, the set designers quickly created wall structures, blocked out the back dining room and placed the foreground counter where the product needed to be featured for filming. Resizing walls and moving components was a snap. The designers then can add in details such as props, appliances and finally shadowing.

New Release of Raylectron version 4

SoftByte Labs, Inc has released a new version of Raylectron alias version 4.xx, much faster and easier to use.

Raylectron already contain just about all the settings to fine tune the output, therefore, no further processing by other software is required.

The material editor is simple, yet powerful. Any materials can produce different effects, such as reflection (like mirror), refraction (like glass), transparency, glossiness, shininess, bump maps, normal maps and background images. Create your own grass & fur. Shadows are not fake or simulated like "Soft shadows". Caustics are also real, not fake or simulated.

Create your own animation which gives you a hands-free tour of a model.

Raylectron utilize all the CPU cores and threads (user selectable) to render as fast as possible and new GPU version available.

Some of the unique features:

- Render OBJ files.
- Ability to create Grass & Fur, such as landscape, hay, carpet, hair, fabric such as sofa, chairs, and so on, any texture with a fur/thread like material.
- Create your own animation.
- Fix Reversed Face Material tool.
- Start/Stop lets you fine-tune your lights/materials and camera position.
- Ability to stop the render, save it, reopen it later and resume the render.
- Rotate model while rendering.
- Rotate, pan, zoom, modify the materials and lights right from Raylectron.
- There are also four types of light source. The sun, the sky, environment maps and any materials set as a light source (emitter) with settings for the power and coverage angle.
- Save as transparent background so you can use the images on any background you like, including on web sites.
- Support HDR maps and can save the rendered image as an HDR, it can also save in jpg, png and many other formats.
- Instancing of components and groups allow you to duplicate any component or group without increasing the poly count and memory usage.
- It works entirely inside Sketchup, and the rendering process free Sketchup so you can continue working on your model.
- GPU Acceleration

- Plus many more features...

Raylectron v4 is available for free evaluation.

For additional information about Raylectron:

Website: http://raylectron.com/
Trimble Sketchup:http://extensions.sketchup.com/en/content/raylectron-render
Facebook: https://www.facebook.com/raylectron

SketchUp Class in Rockport, September 8-12, 2014

Centre for furniture Craftsmanship, situated in United State's Rockport is going to organize special SketchUp class for woodworkers'. The class will be held September 8-12, 2014. This course is for amateur and professional furniture makers who want to develop more effective design processes by using SketchUp, a free 3D-modeling program that is increasingly popular among the woodworkers.

The participants need to bring their own laptop, either PC or Mac, with a three-button, scroll-wheel mouse. The basic knowledge of computer application is required for a participant.

Bob Lang, the executive editor and project illustrator of Popular Woodworking magazine will teach the enrolling students there with his best effort. Lang has been a professional cabinetmaker since the early 1970s, he is the author of the digital books Woodworker's Guide to SketchUp (2010) and Building Blocks of SketchUp (2013), as well as Drafting and Design for Woodworkers (Popular Woodworking Books, 2008), and several books of shop drawings. The tusion fee is $730.

Having a handy experience with SketchUp and written about it extensively, Lang has identified common areas in which new users stumble and self-taught users work harder than necessary. He will offers simple exercises that focus on those areas to build foundation skills quickly. He expects that the participants learn how to model designs, and extract information accurately, to make the actual building process more predictable and rewarding.

Lang, in his blog stated that there are still few spot open. So if anyone wants to have their problem solve in design and planning can go to register their details in institute's website.

"As always, these classes are a lot of fun, and the best way to learn is by watching someone who knows what they're doing, and then practicing. That's what we do and the class is limited in size so there will be plenty of time for you to get your questions answered. We start with the basics and by the end of the week you'll be able to model what you want and you'll be able to extract all the information you need for a successful build from your model," Land said in his blog.

He also added that the first two days will follow the format of ‘Building blocks of SketchUp’ and the students can find a detailed list of what will be covered as soon as they get into the class. Then students will finish the week working on ‘Woodworking with SketchUp’.

However, the Center for Furniture Craftsmanship is a premier institute in this field. The mission of the Center for Furniture Craftsmanship is to provide the best possible education for people who want to design and build functional, beautiful, and expressive work out of wood to the highest standard of craftsmanship. The detail contact of the institution is:

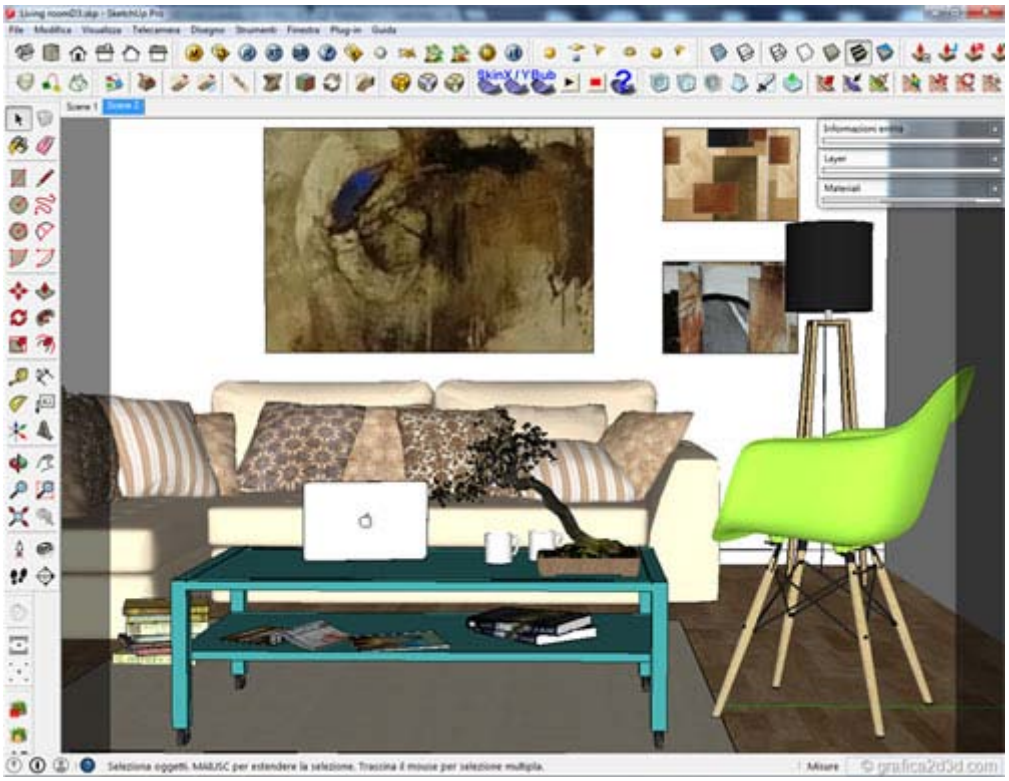
25 Mill Street
Rockport, Maine 04856
cfc@woodschool.org

Phone: 207-594-5611
Fax: 207-594-7511

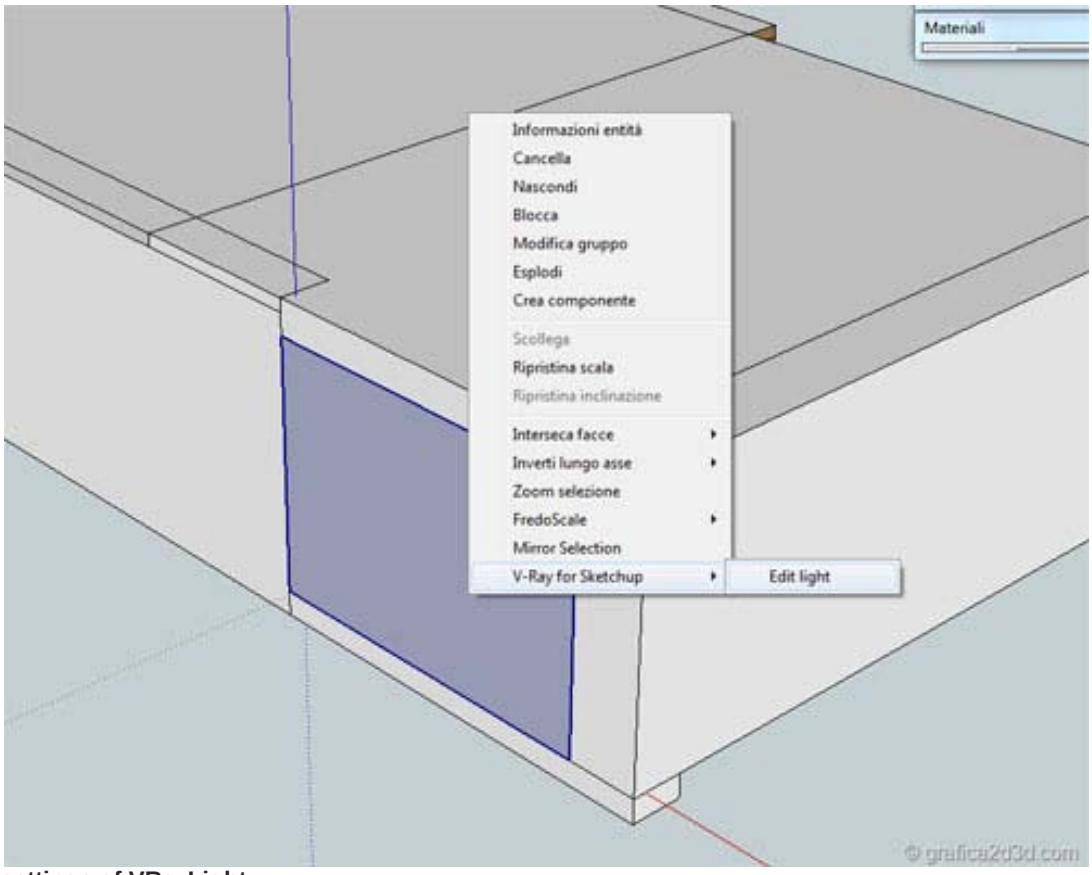
Interior V-Ray Sketchup Tutorial (Making of)

Public settings of this scene of an extension that I made with sketchup and vray, some objects were found from 'excellent site http://www.sketchuptexture.com/ one of the best sites for objects and materials for sketchup.

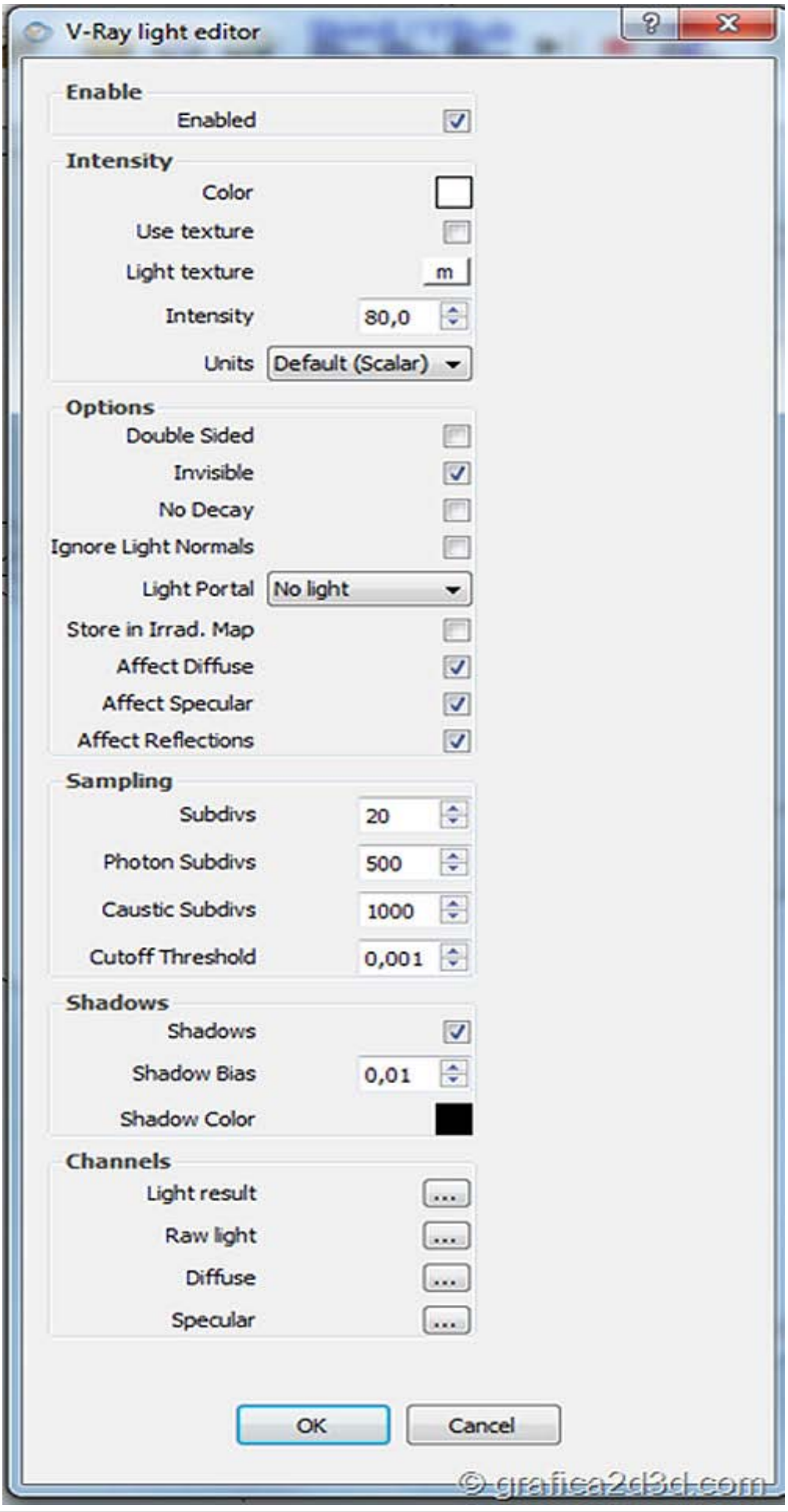
3D Model



The interior is lit with a vray light outside the window



settings of VRayLight


V-Ray light editor
Enable
Enabled
Intensity
Color
Use texture
Light texture
m
Intensity
80,0
Units
Default (Scalar)
Options
Double Sided
Invisible
No Decay
Ignore Light Normals
Light Portal
No light
Store in Irrad. Map
Affect Diffuse
Affect Specular
Affect Reflections
Sampling
Subdivs
20
Photon Subdivs
500
Caustic Subdivs
1000
Cutoff Threshold
0,001
Shadows
Shadows
Shadow Bias
0,01
Shadow Color
Channels
Light result
Raw light
Diffuse
Specular
OK
Cancel
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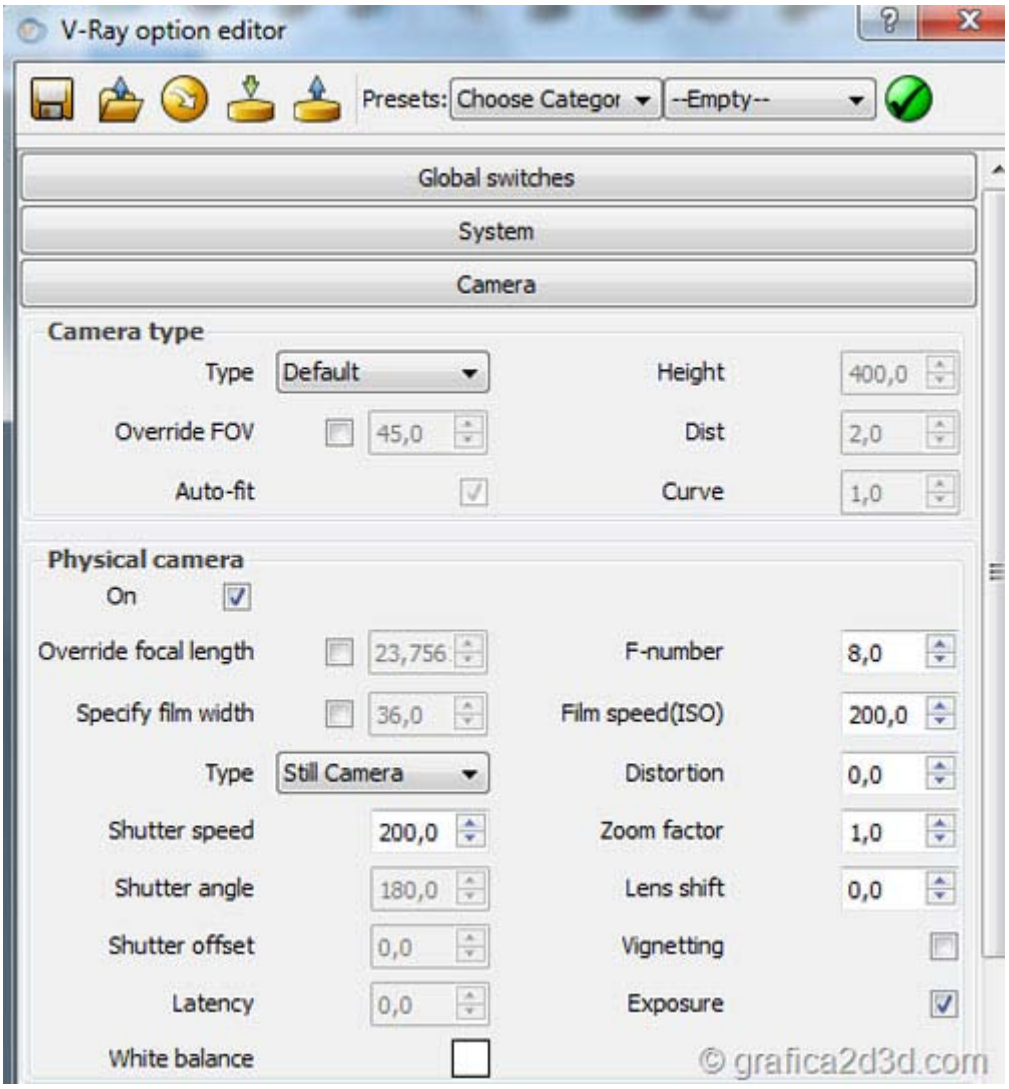
V-Ray option editor
Presets:
Choose Categor
--Empty--
Global switches
System
Camera
Camera type
Type
Default
Height
400,0
Override FOV
45,0
Dist
2,0
Auto-fit
Curve
1,0
Physical camera
On
Override focal length
23,756
F-number
8,0
Specify film width
36,0
Film speed(ISO)
200,0
Type
Still Camera
Distortion
0,0
Shutter speed
200,0
Zoom factor
1,0
Shutter angle
180,0
Lens shift
0,0
Shutter offset
0,0
Vignetting
Latency
0,0
Exposure
White balance
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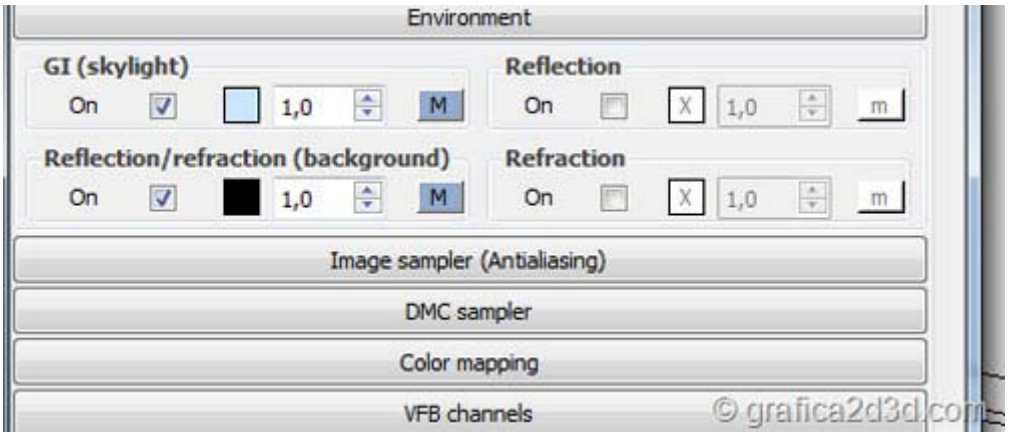
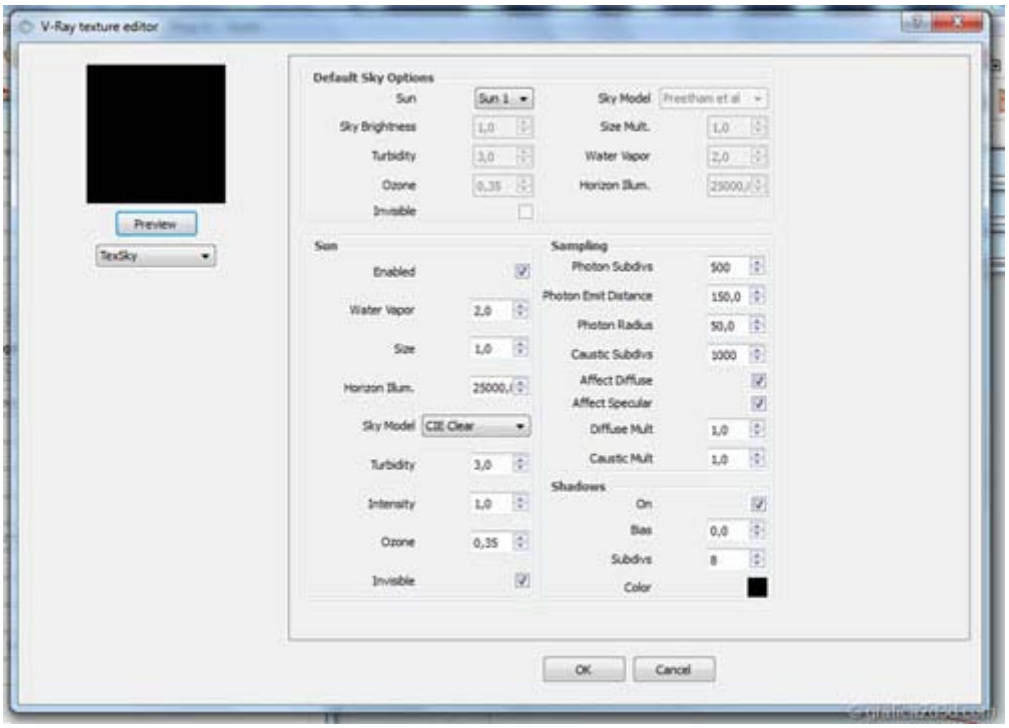

Environment
GI (skylight)
On
1,0
M
Reflection
On
X
1,0
m
Reflection/refraction (background)
On
1,0
M
Refraction
On
X
1,0
m
Image sampler (Antialiasing)
DMC sampler
Color mapping
VFB channels
© grafica2d3d.com


V-Ray texture editor
Preview
TexSky
Default Sky Options
Sun
Sun 1
Sky Model
Sky Brightness
Size Mult.
Turbidity
Water Vapor
Ozone
Horizon Illum.
Invisible
Sun
Enabled
Water Vapor
Size
Horizon Illum.
Sky Model
CIE Clear
Turbidity
Intensity
Ozone
Invisible
Sampling
Photon Subdivs
Photon Emit Distance
Photon Radius
Caustic Subdivs
Affect Diffuse
Affect Specular
Diffuse Mult
Caustic Mult
Shadows
On
Bias
Subdivs
Color
OK
Cancel

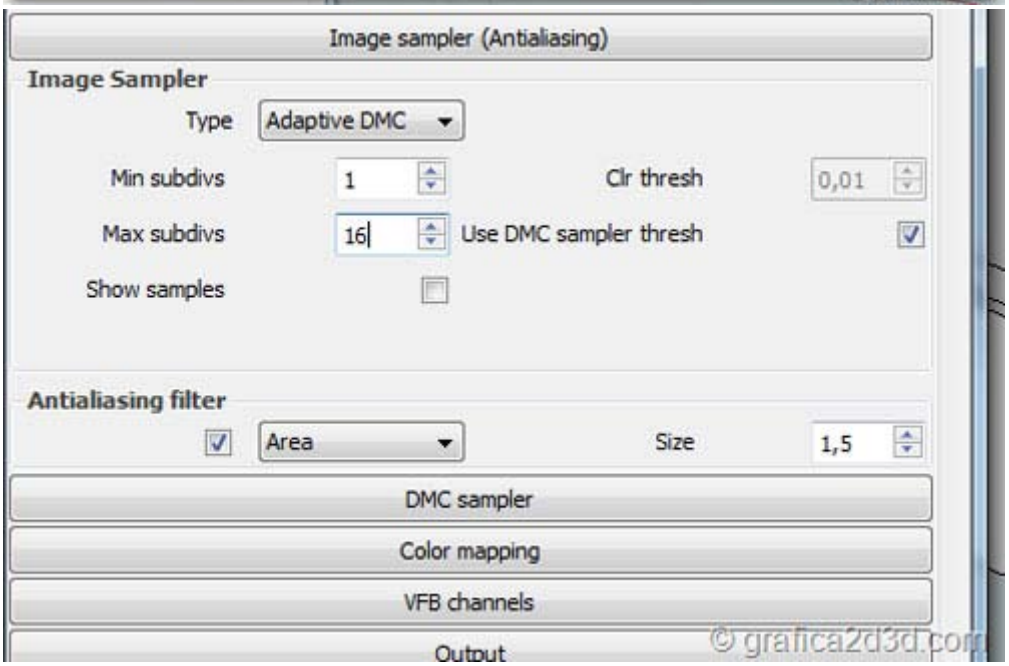
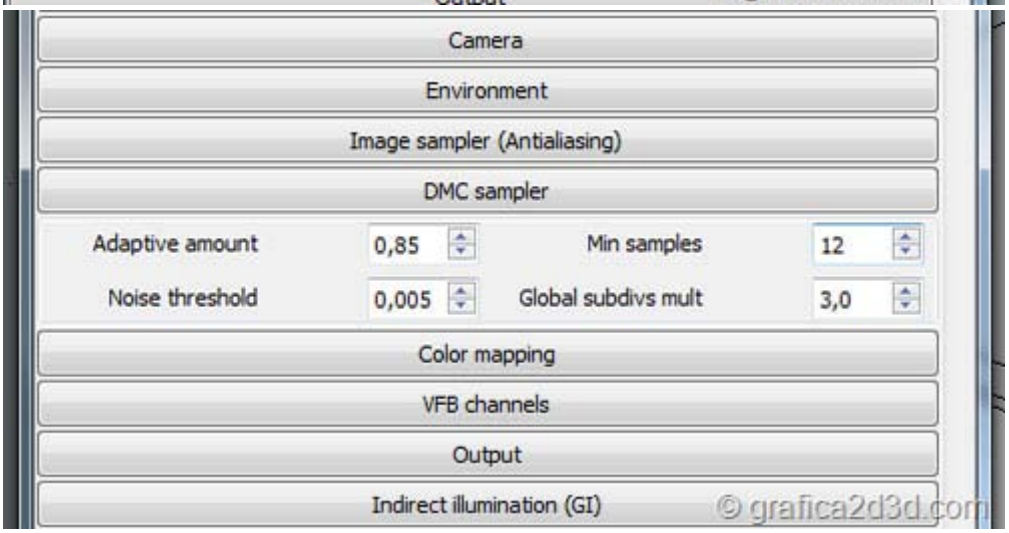
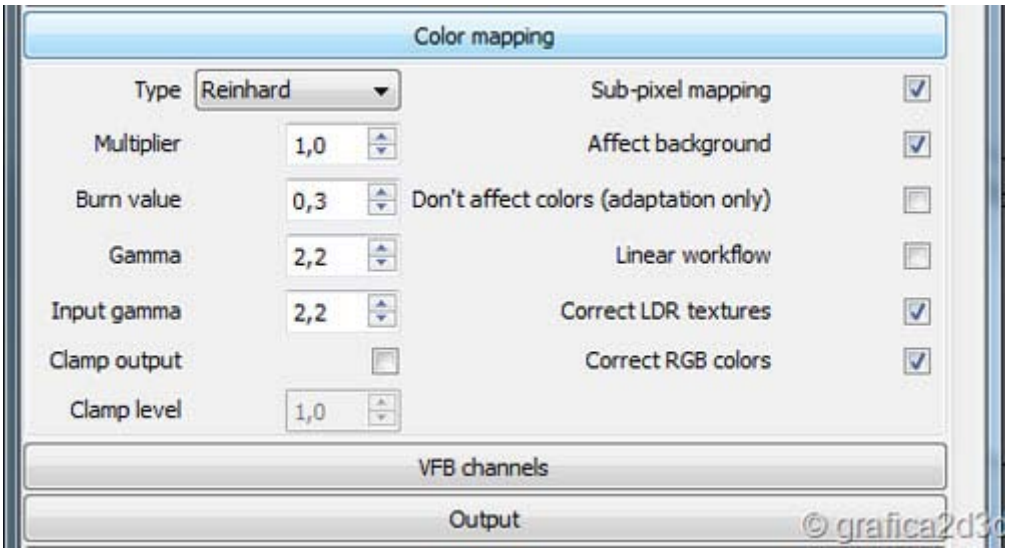
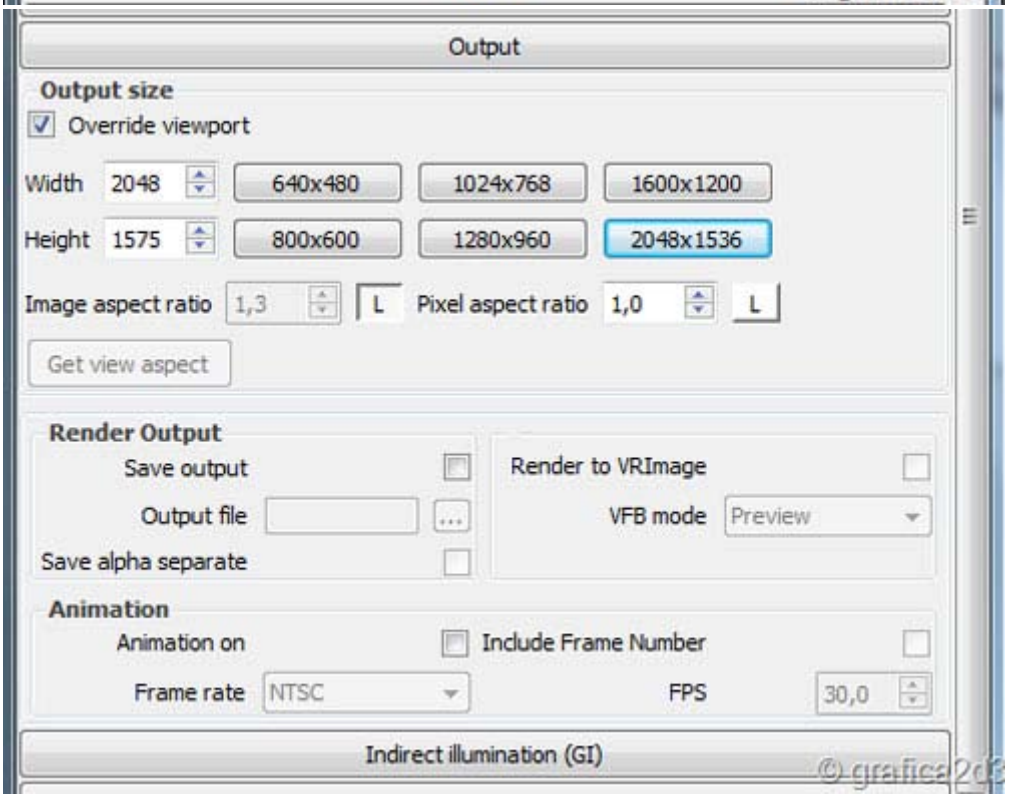
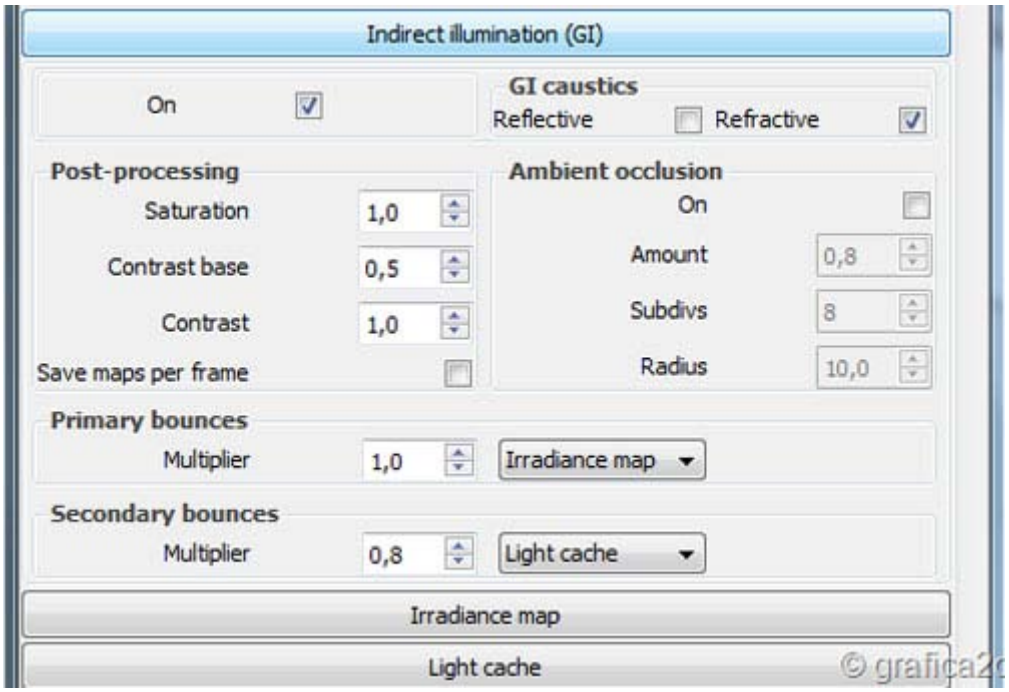


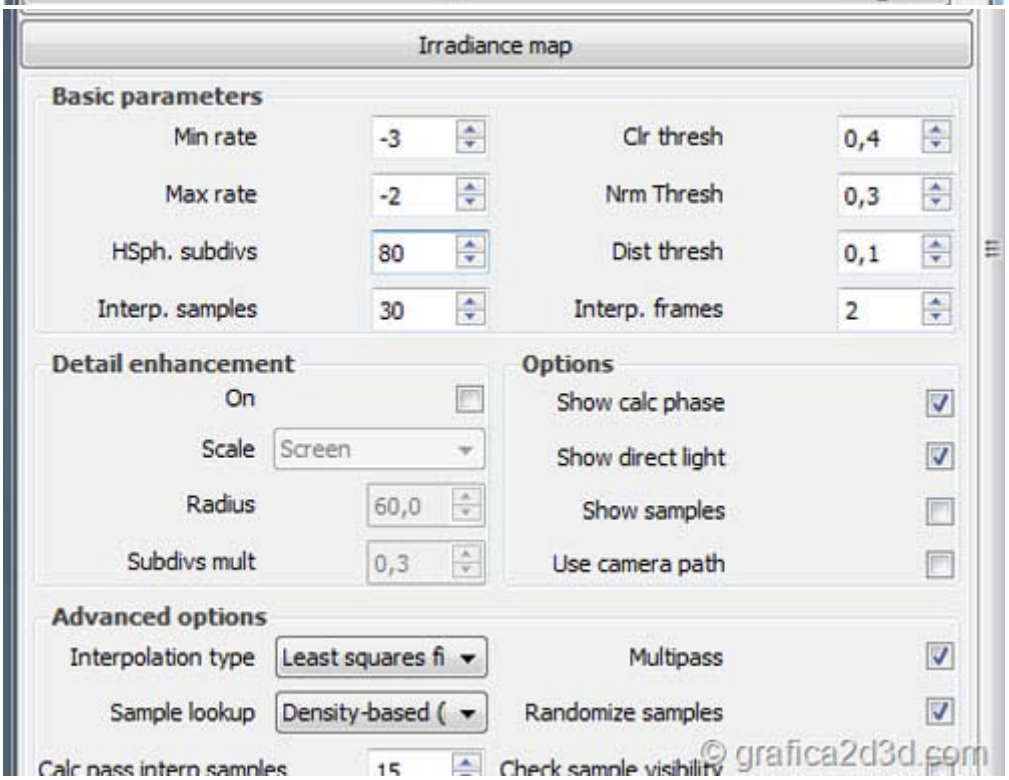
Image sampler (Antialiasing)
Image Sampler
Type
Adaptive DMC
Min subdivs
1
Clr thresh
0,01
Max subdivs
16
Use DMC sampler thresh
Show samples
Antialiasing filter
Area
Size
1,5
DMC sampler
Color mapping
VFB channels
Output
© grafica2d3d.com

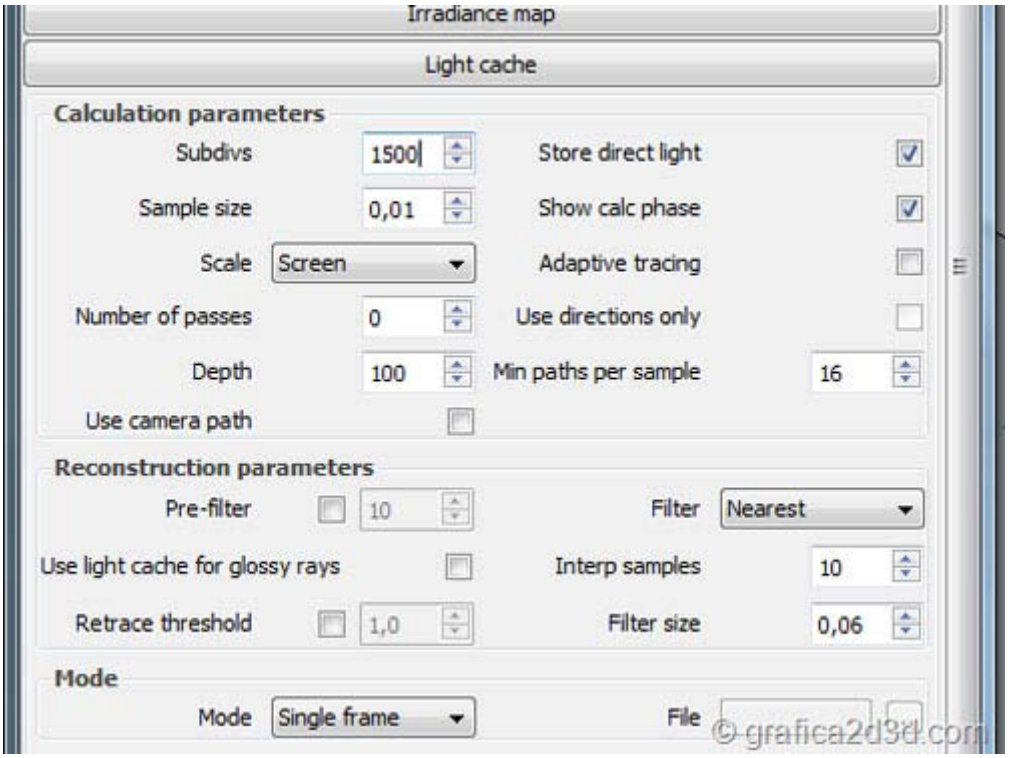

Camera
Environment
Image sampler (Antialiasing)
DMC sampler
Adaptive amount
0,85
Min samples
12
Noise threshold
0,005
Global subdivs mult
3,0
Color mapping
VFB channels
Output
Indirect illumination (GI)
© grafica2d3d.com

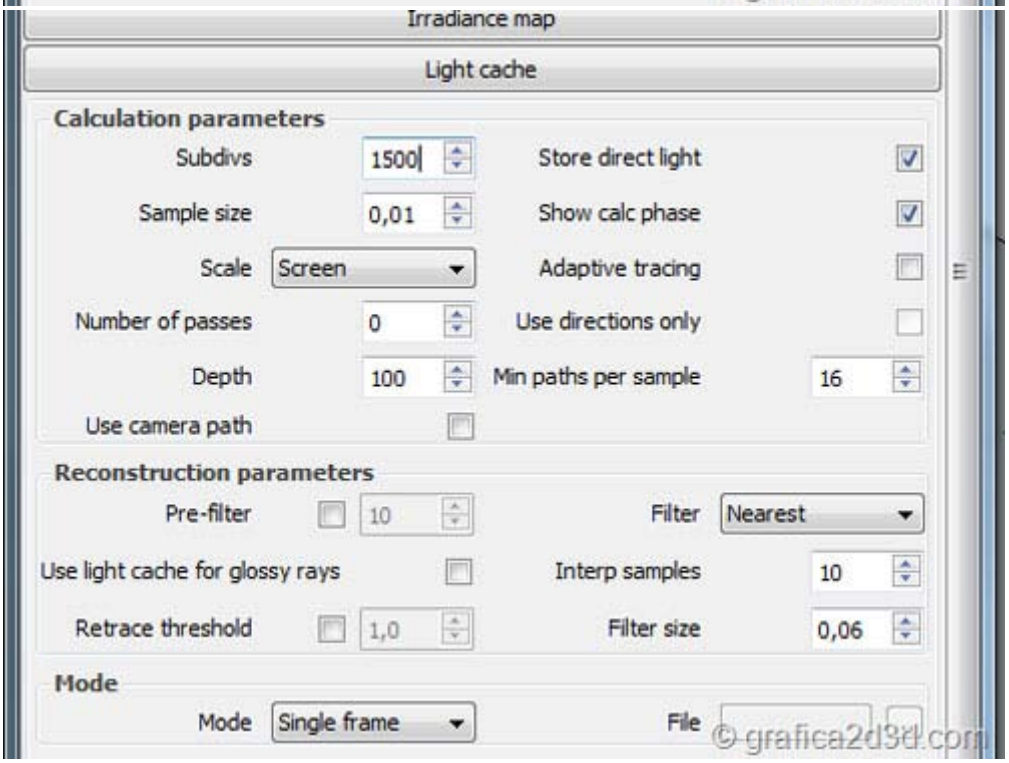

Color mapping
Type
Reinhard
Multiplier
1,0
Burn value
0,3
Gamma
2,2
Input gamma
2,2
Clamp output
Clamp level
1,0
Sub-pixel mapping
Affect background
Don't affect colors (adaptation only)
Linear workflow
Correct LDR textures
Correct RGB colors
VFB channels
Output
© grafica2d3


Output
Output size
Override viewport
Width
2048
Height
1575
640x480
1024x768
1600x1200
800x600
1280x960
2048x1536
Image aspect ratio
1,3
L
Pixel aspect ratio
1,0
L
Get view aspect
Render Output
Save output
Output file
Save alpha separate
Render to VRImage
VFB mode
Preview
Animation
Animation on
Include Frame Number
Frame rate
NTSC
FPS
30,0
Indirect illumination (GI)
© grafica2d3


Indirect illumination (GI)
On
GI caustics
Reflective
Refractive
Post-processing
Saturation 1,0
Contrast base 0,5
Contrast 1,0
Save maps per frame
Ambient occlusion
On
Amount 0,8
Subdivs 8
Radius 10,0
Primary bounces
Multiplier 1,0
Irradiance map
Secondary bounces
Multiplier 0,8
Light cache
Irradiance map
Light cache
© grafica2


Irradiance map
Basic parameters
Min rate -3
Max rate -2
HSph. subdivs 80
Interp. samples 30
Clr thresh 0,4
Nrm Thresh 0,3
Dist thresh 0,1
Interp. frames 2
Detail enhancement
On
Scale Screen
Radius 60,0
Subdivs mult 0,3
Options
Show calc phase
Show direct light
Show samples
Use camera path
Advanced options
Interpolation type Least squares fi
Sample lookup Density-based (
Multipass
Randomize samples
Calc pass interp samples 15
Check sample visibility
© grafica2d3d.com


Irradiance map
Light cache
Calculation parameters
Subdivs
1500
Store direct light
Sample size
0,01
Show calc phase
Scale
Screen
Adaptive tracing
Number of passes
0
Use directions only
Depth
100
Min paths per sample
16
Use camera path
Reconstruction parameters
Pre-filter
10
Filter
Nearest
Use light cache for glossy rays
Interp samples
10
Retrace threshold
1,0
Filter size
0,06
Mode
Mode
Single frame
File
© grafica2d3d.com


Irradiance map
Light cache
Calculation parameters
Subdivs
1500
Store direct light
Sample size
0,01
Show calc phase
Scale
Screen
Adaptive tracing
Number of passes
0
Use directions only
Depth
100
Min paths per sample
16
Use camera path
Reconstruction parameters
Pre-filter
10
Filter
Nearest
Use light cache for glossy rays
Interp samples
10
Retrace threshold
1,0
Filter size
0,06
Mode
Mode
Single frame
File
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3D Model

Making the model of a Gym with V-Ray and 3D Max

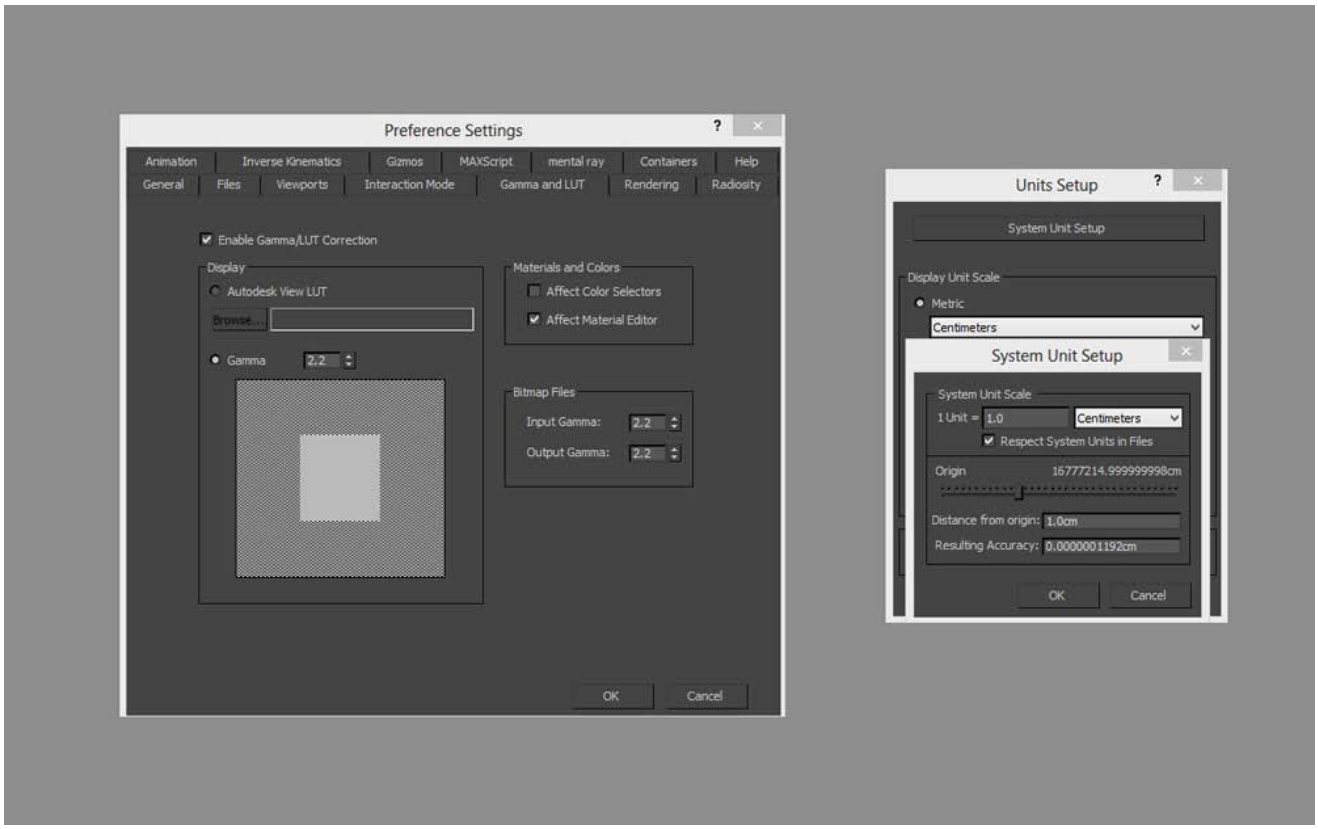
Amir recently presented his personal project of an industrial gym space on our community. He achieved to impress us and thus we asked him to share with all of us a making of article. Enjoy it!

Hi everyone

My name is Amir Moradi and I'im an architect. I would like to share with the community one of my personal project's workflow and I hope that you will find it useful enough. I would also like to thank Vray World which gave me this opportunity for sharing my Making Of article. You can see here the overall project which recently presented on Vray World.

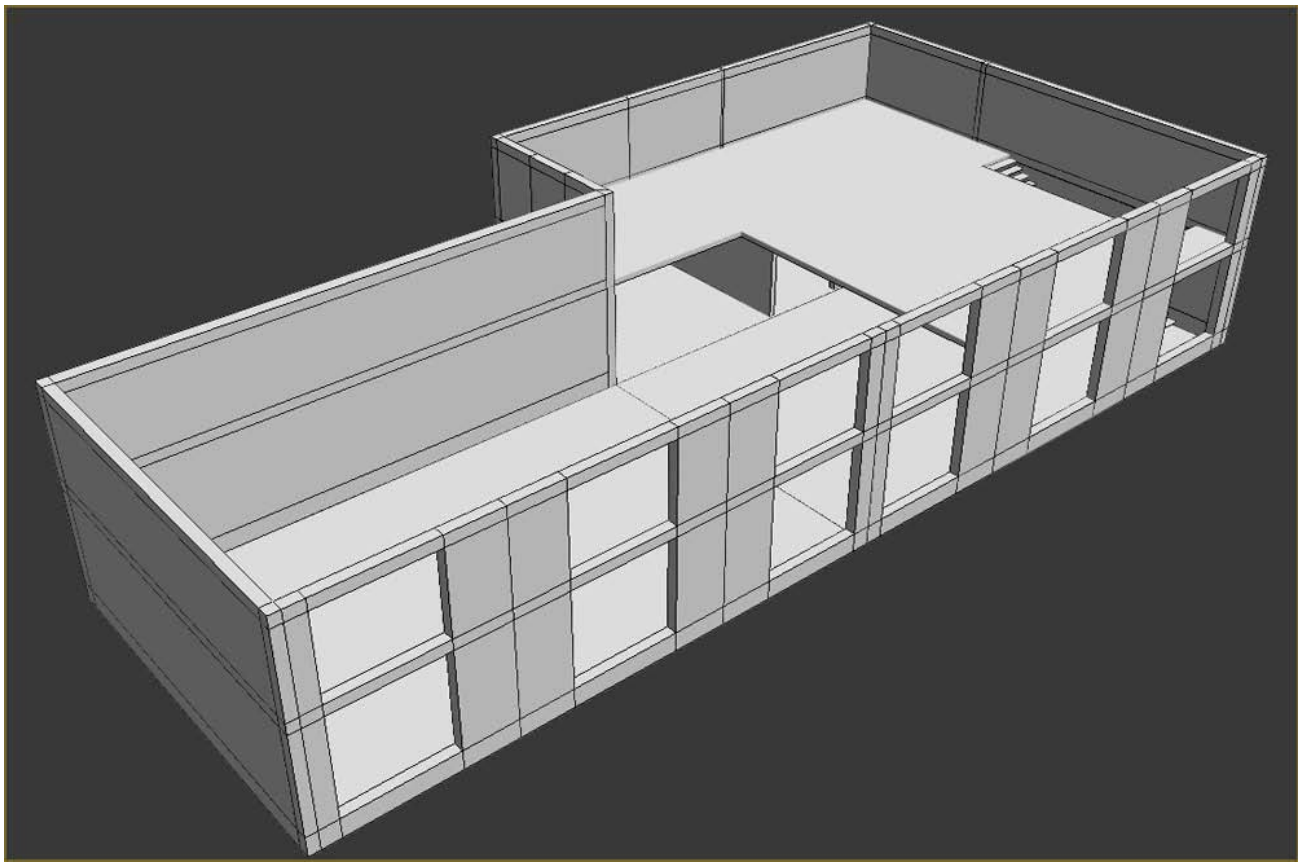
Basic Setup

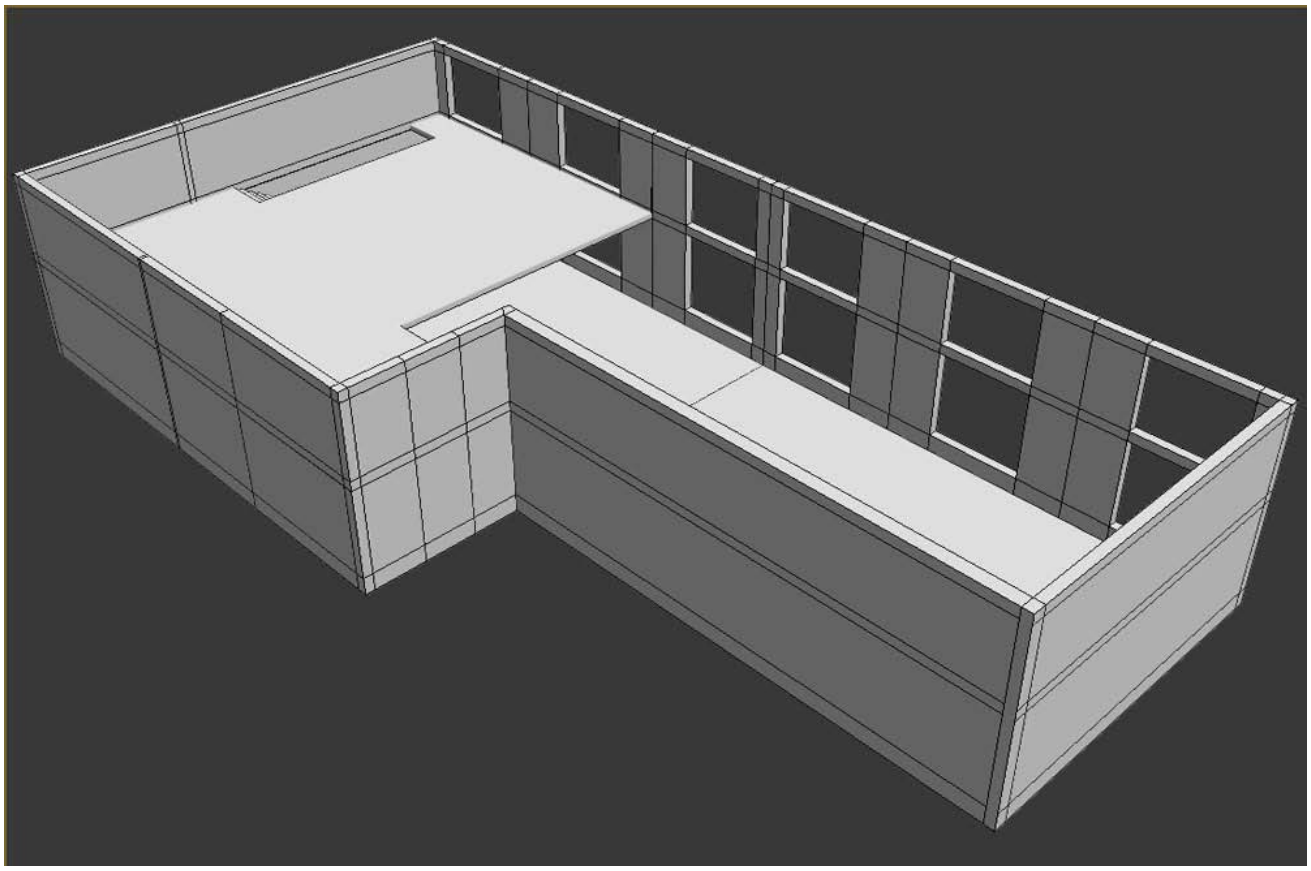
Here are both the gamma settings and units setup that I usually prefer for my projects.



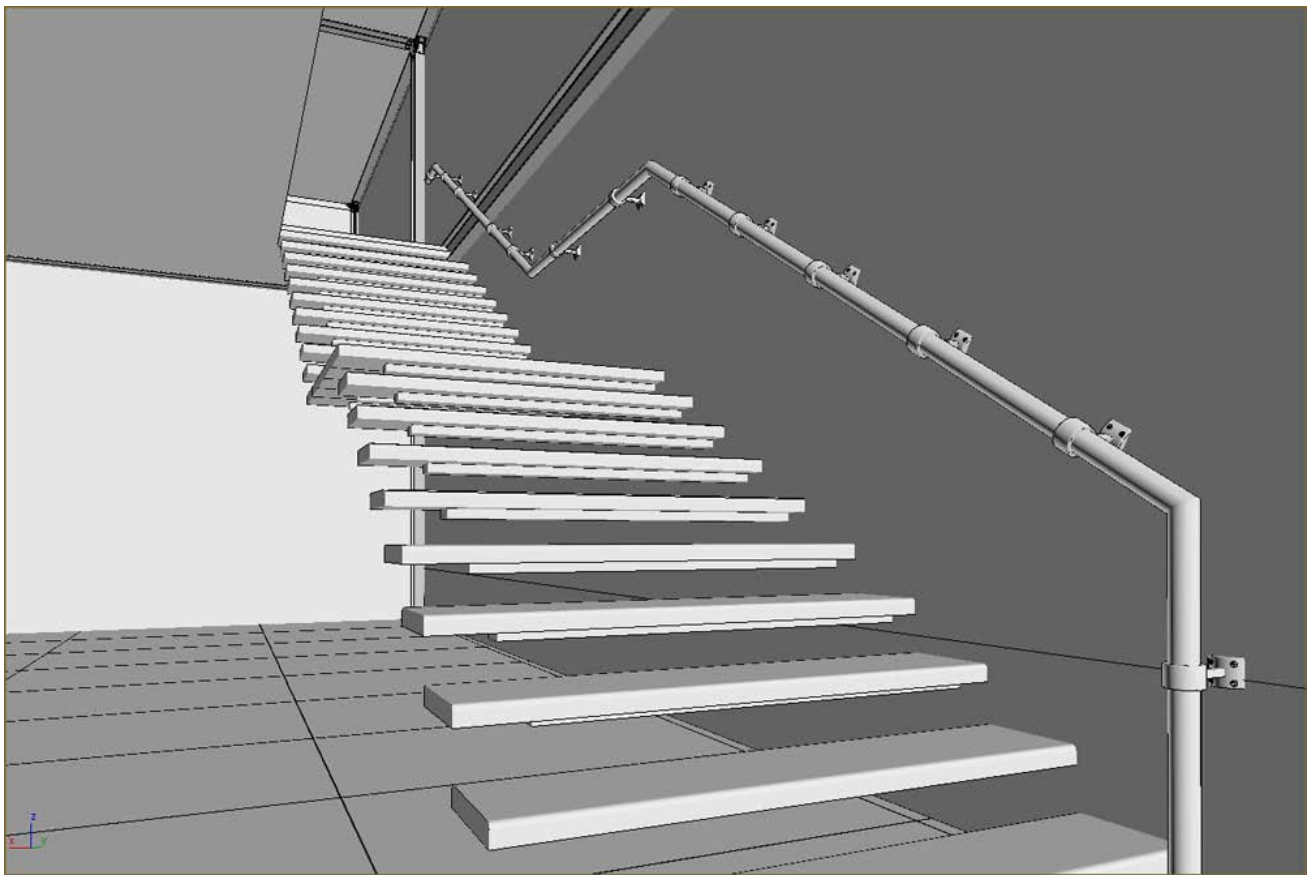
Modeling

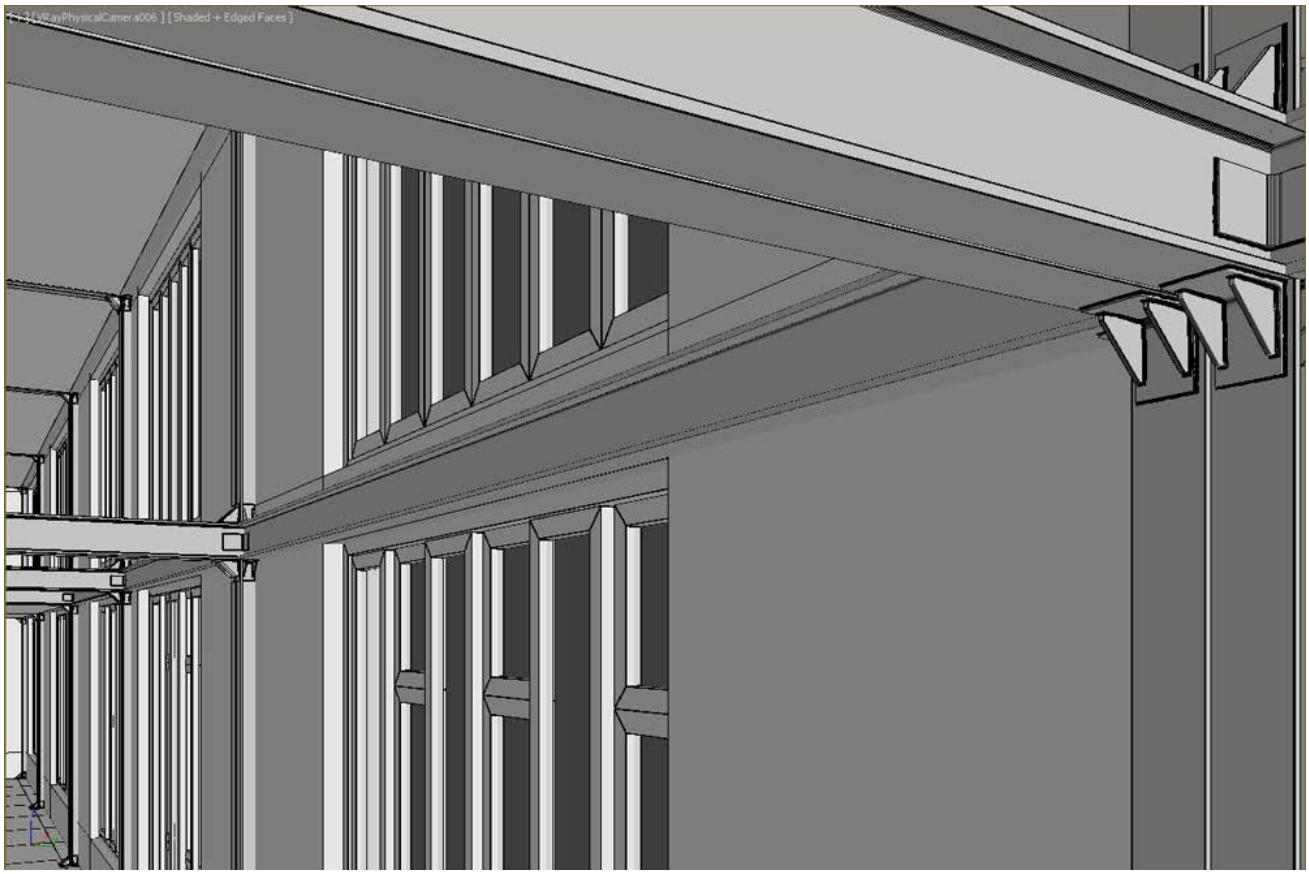
There is nothing special in the modeling process of this building as it has a very simple form. It's just my imagination about a small gym which has a high ceiling with some large openings to get more day light.

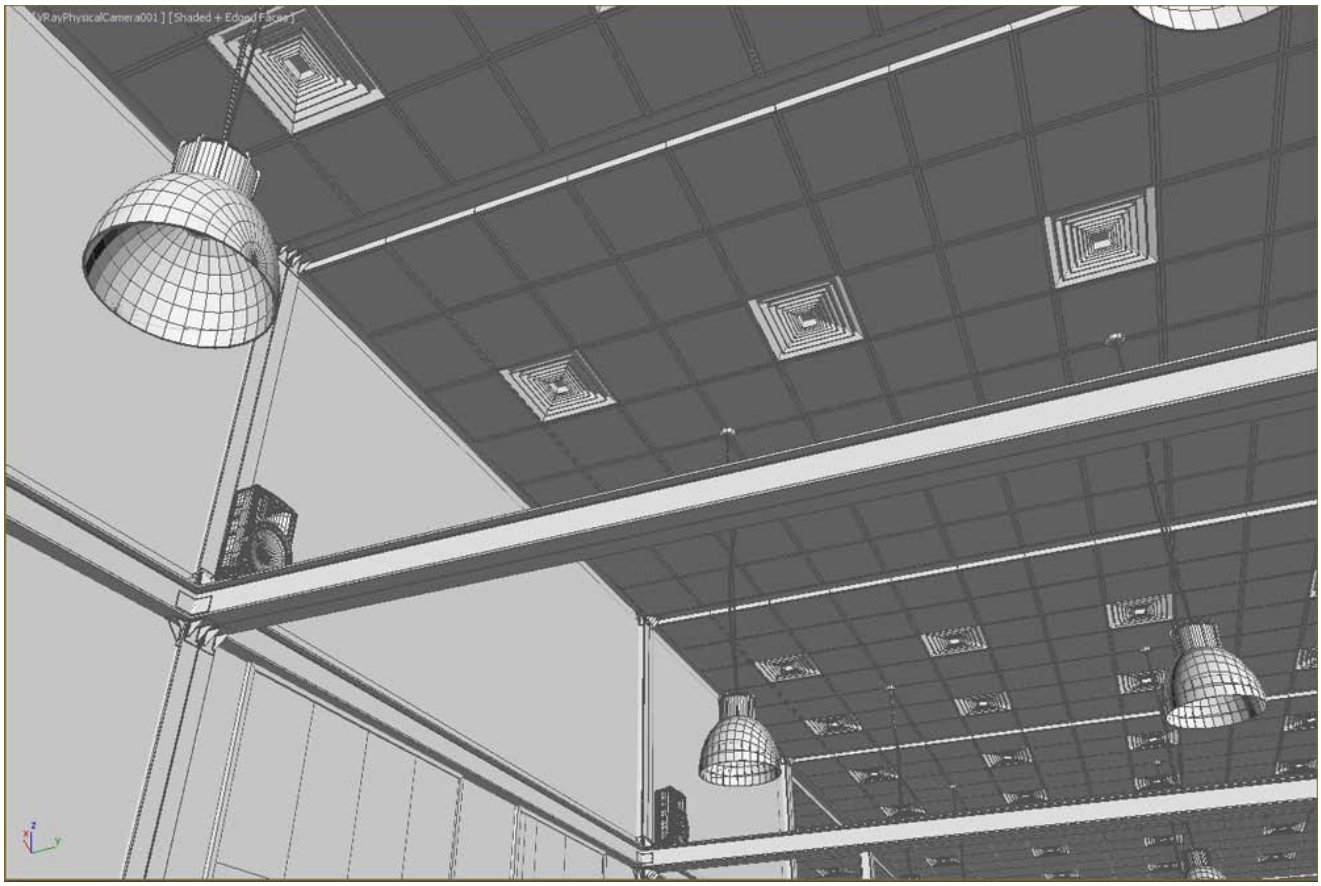


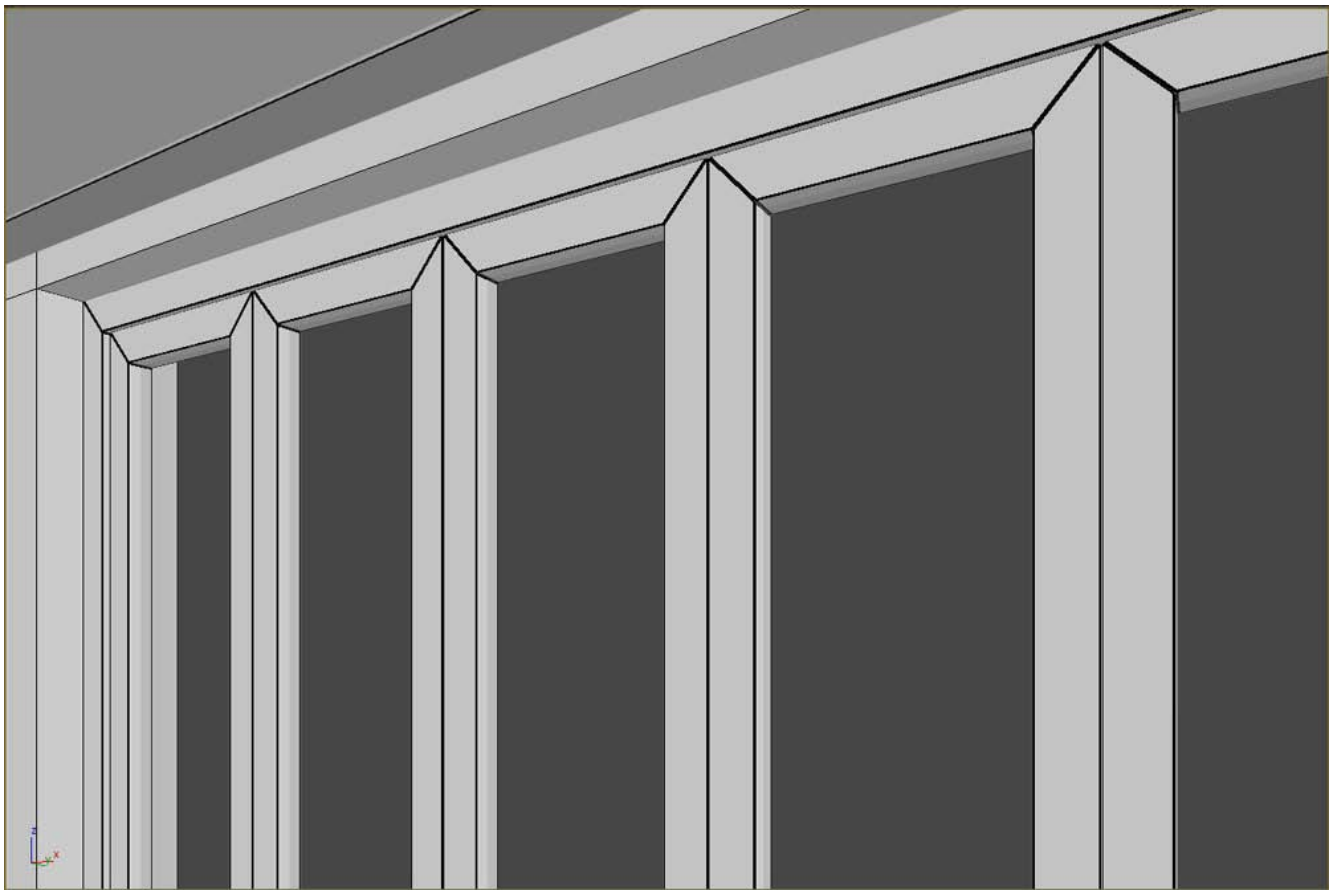


After that, I started adding some details to my scene like columns, stairs, hand rails, window frames, ceiling lights and other things. I didn't want to show steel only on some sport machinery, so I decided to show it as a major material, that's why I put the steel columns in expose.

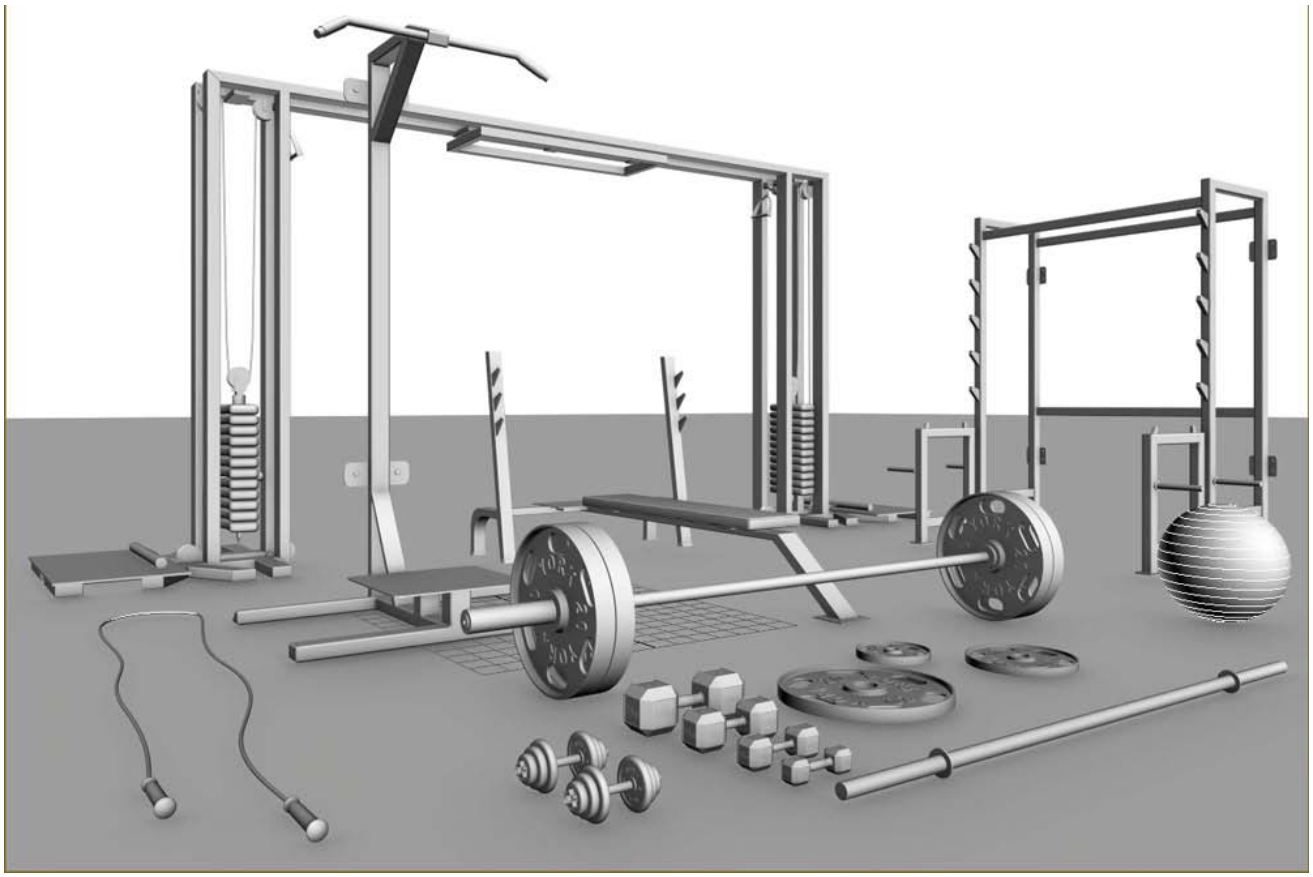



[VRayPhysicalCamera006] [Shaded + Edged Faces]


[VRayPhysicalCamera001] [Shaded + Edged Faces]

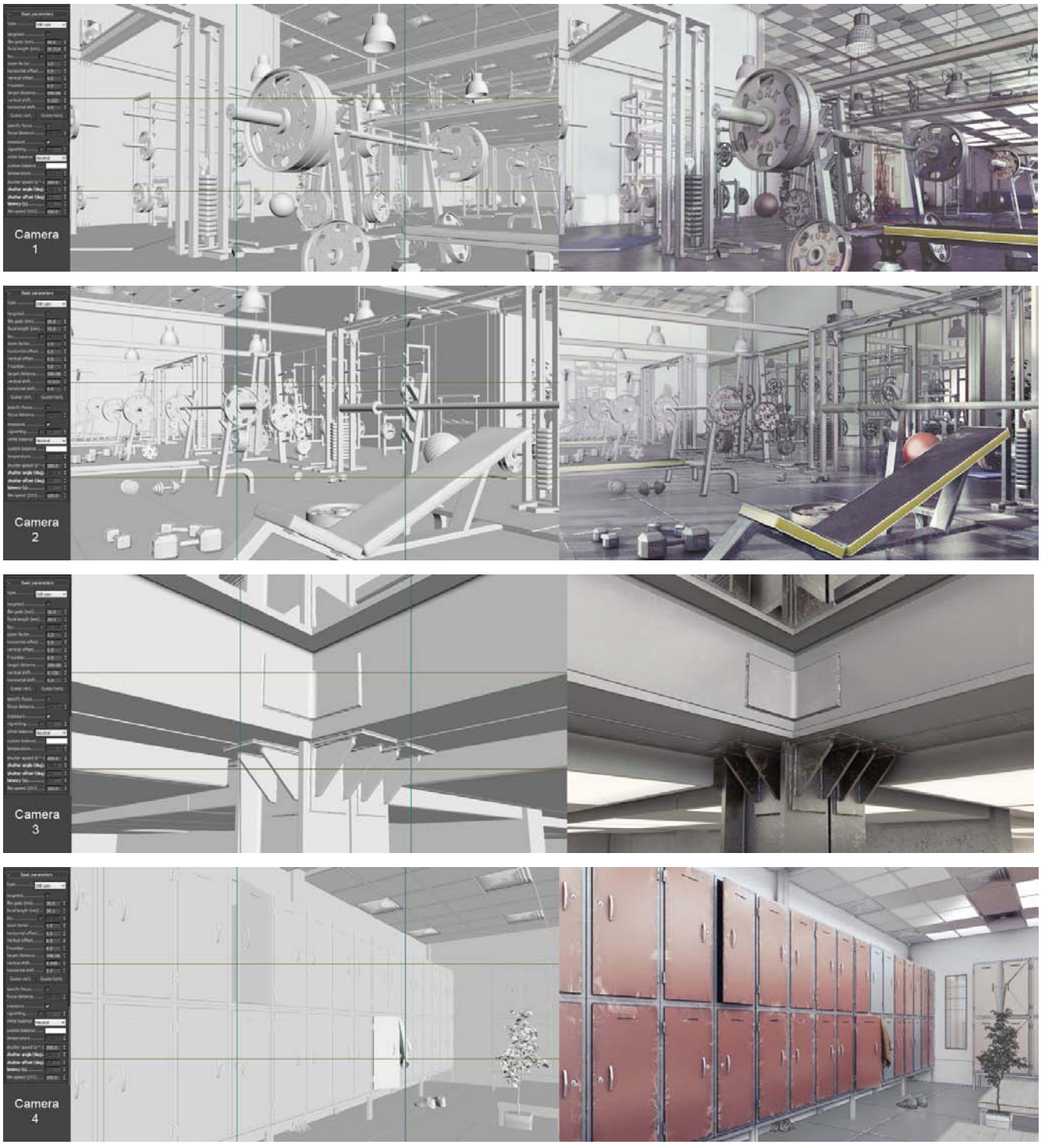


Here are some of my objects that I made them for this project. All of these objects have been modeled in 3ds Max and I think that is very delightful to make your scene's objects by yourself.



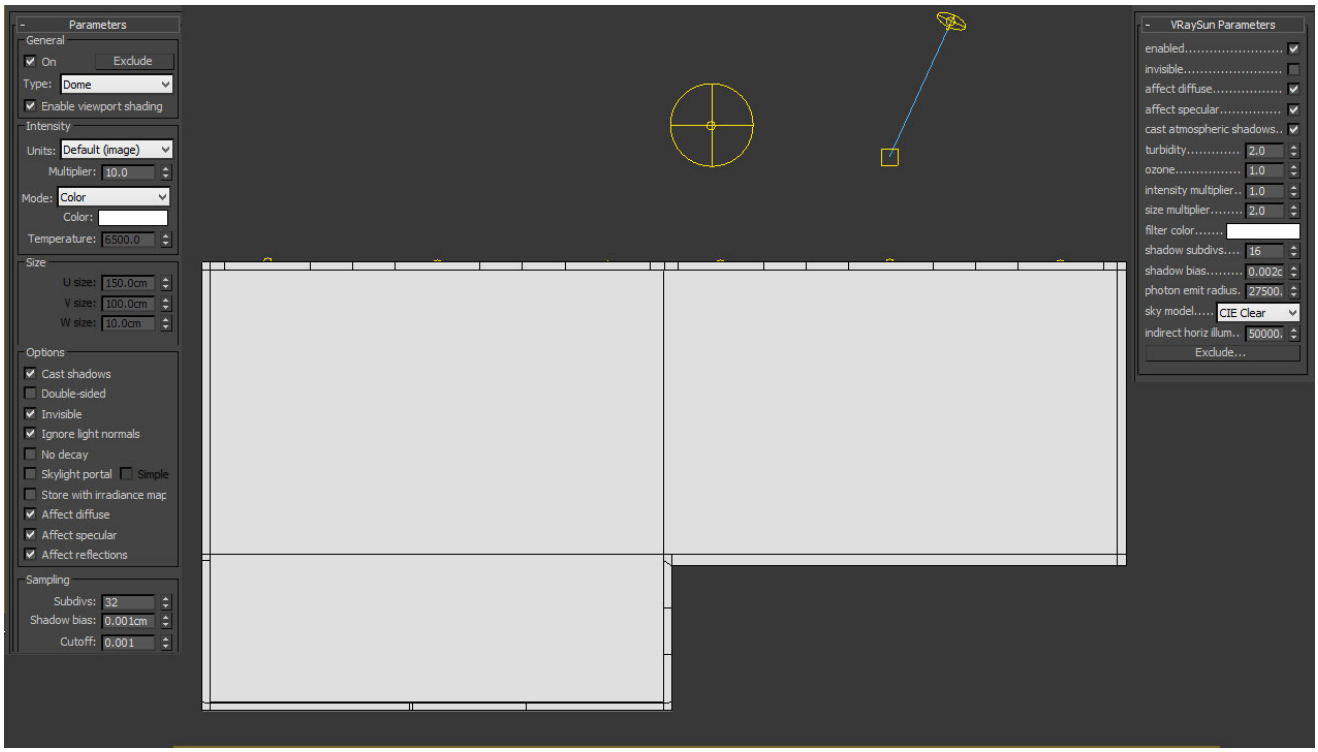
Camera Settings

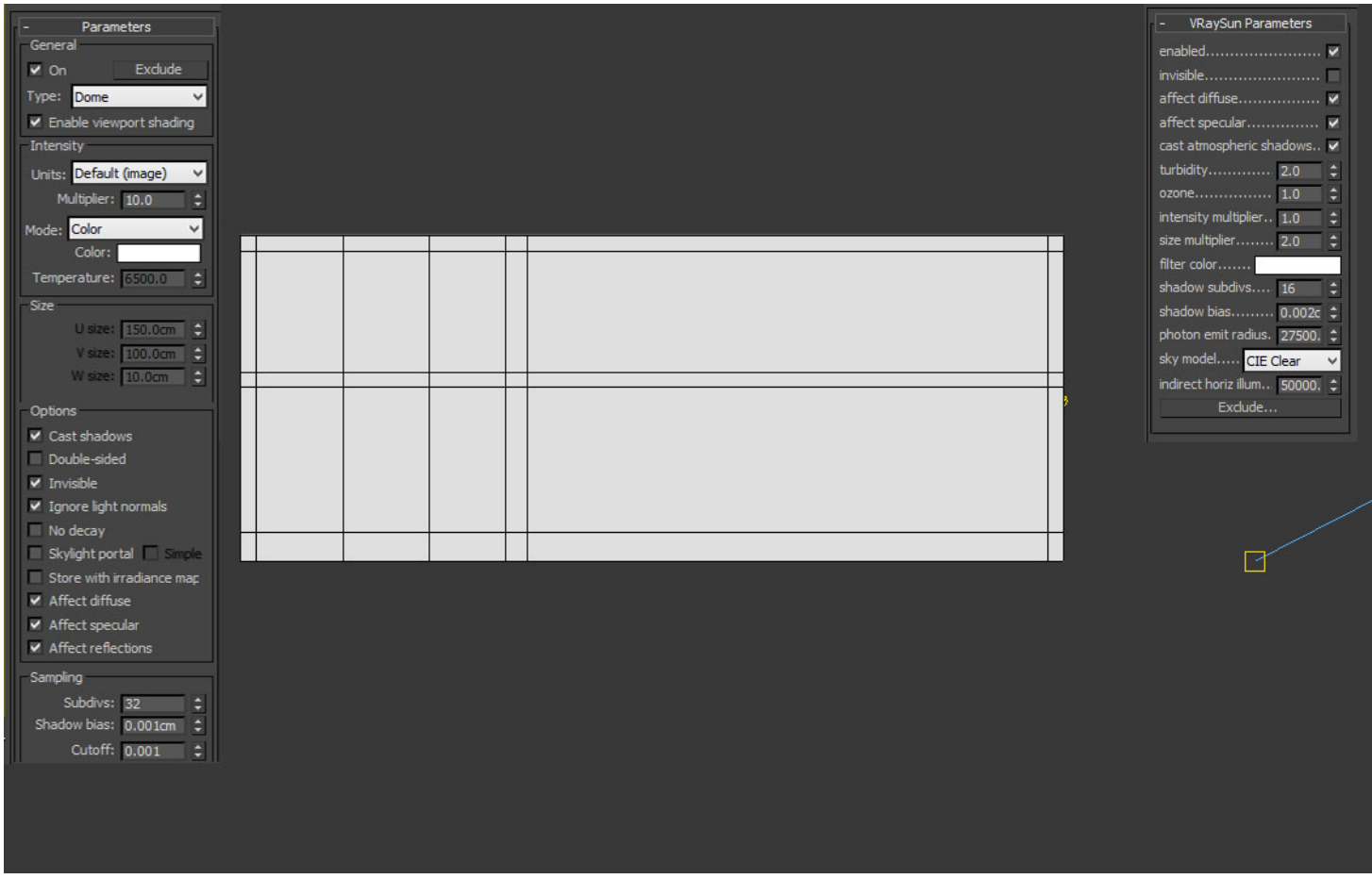
About the views I should tell you honestly that I always like one of views more than the others and in this work I like Camera 1 so much! Here are the camera settings I´ve used to each view separately.



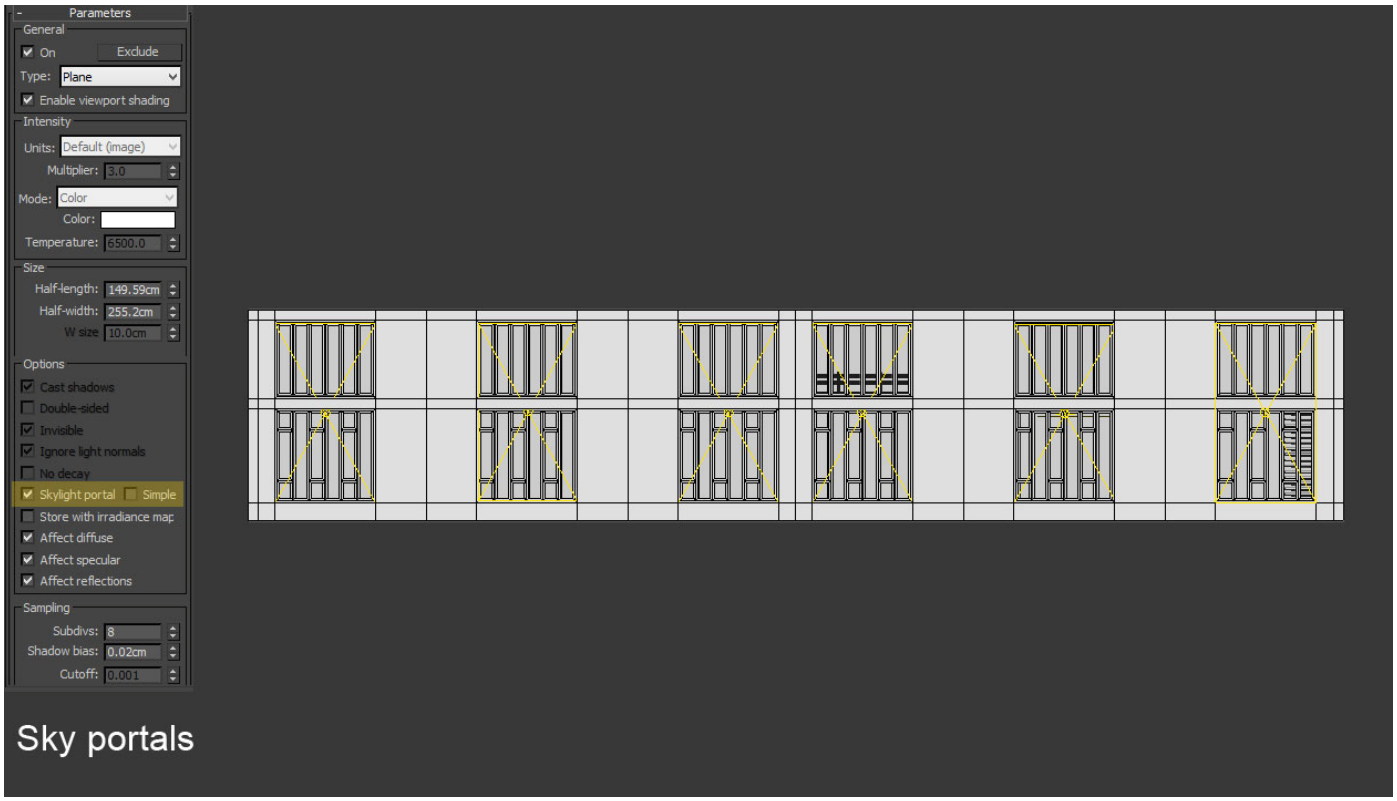
Lighting

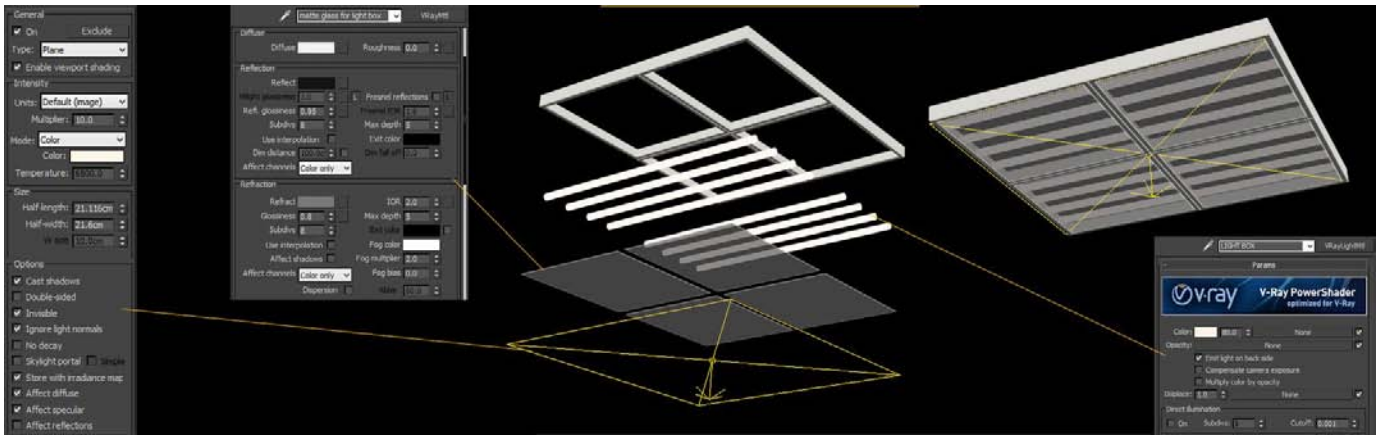
After finishing the modeling and arranging the objects in the space I started the lighting. It's better for me to do the lighting before texturing in a completely white condition. It could help you to see much better the shadows. Sometimes, after texturing you can also edit your light a bit more to get a better result. At this work I used Vray sun - Dome light + HDRI



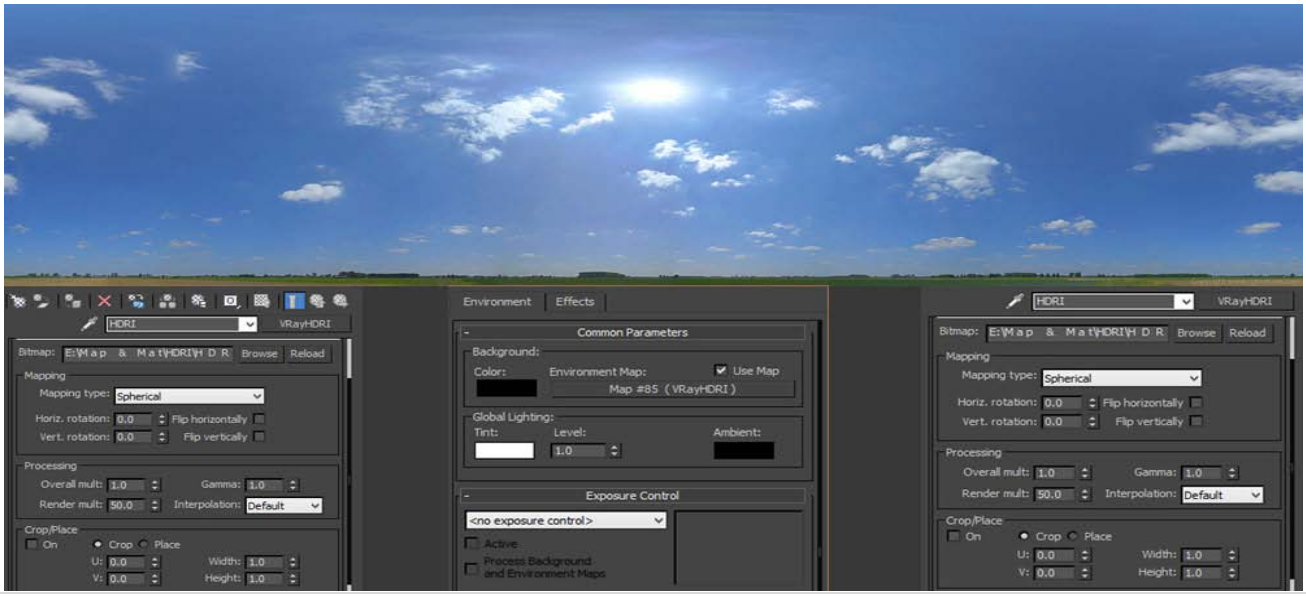


I used Vray planes for ceiling light boxes & sky portal & Vray sphere for lamps.


Parameters
General
On
Exclude
Type: Plane
Enable viewport shading
Intensity
Units: Default (image)
Multiplier: 3.0
Mode: Color
Color:
Temperature: 6500.0
Size
Half-length: 149.59cm
Half-width: 255.2cm
W size 10.0cm
Options
Cast shadows
Double-sided
Invisible
Ignore light normals
No decay
Skylight portal
Simple
Store with irradiance map
Affect diffuse
Affect specular
Affect reflections
Sampling
Subdivs: 8
Shadow bias: 0,02cm
Cutoff: 0.001
Sky portals


V-Ray PowerShader

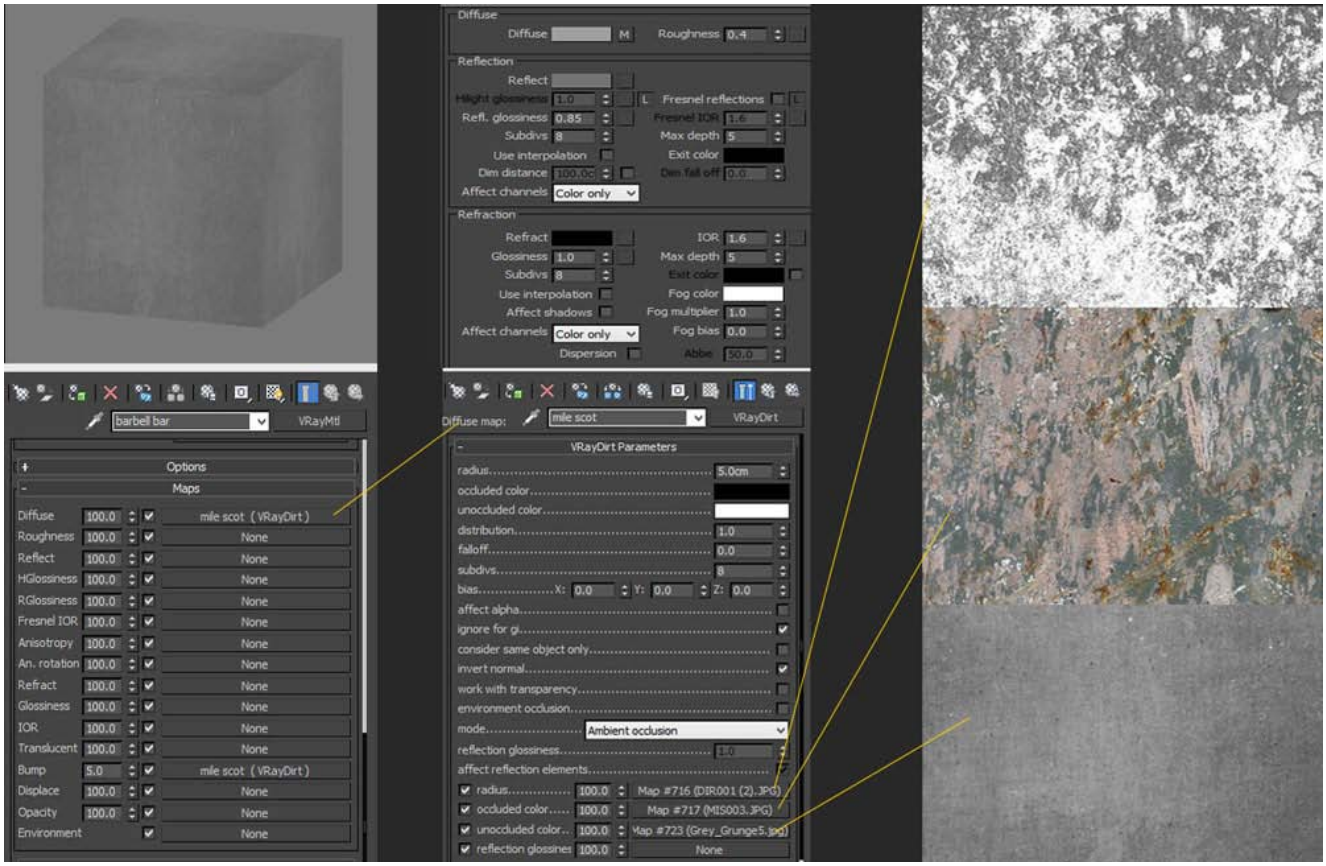
Light boxes.


Environment
Effects
Common Parameters
Background:
Color:
Environment Map:
Use Map
Map #85 (VRayHDRI)
Global Lighting:
Tint:
Level:
Ambient:
Exposure Control
<no exposure control>
Active
Process Background and Environment Maps
HDRI
VRayHDRI
Bitmap:
Browse
Reload
Mapping
Mapping type: Spherical
Horiz. rotation:
Vert. rotation:
Flip horizontally
Flip vertically
Processing
Overall mult:
Render mult:
Gamma:
Interpolation: Default
Crop/Place
Crop
Place
Width:
Height:

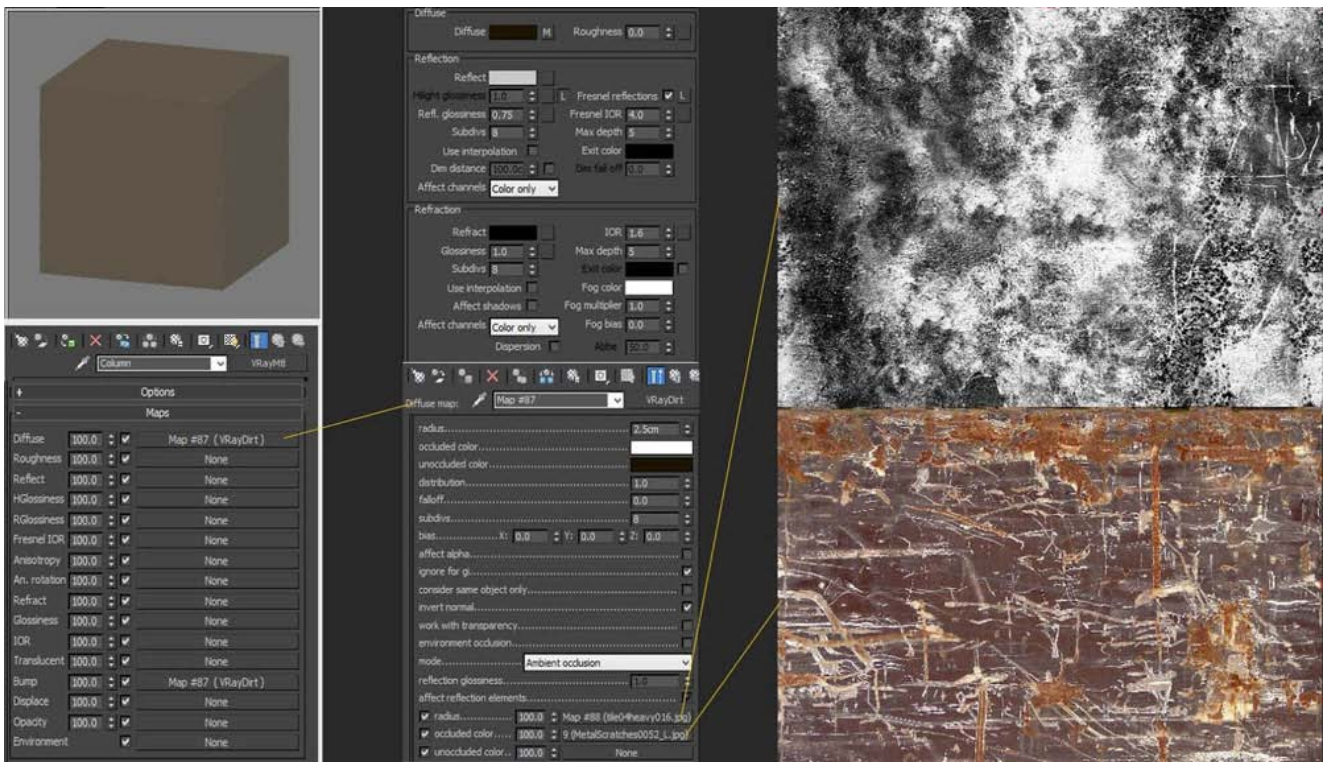
Texturing

Now it's the time for making & assigning materials to the objects. In this case I have decided not to make things very clean and sleek, so I made rusty material for that.

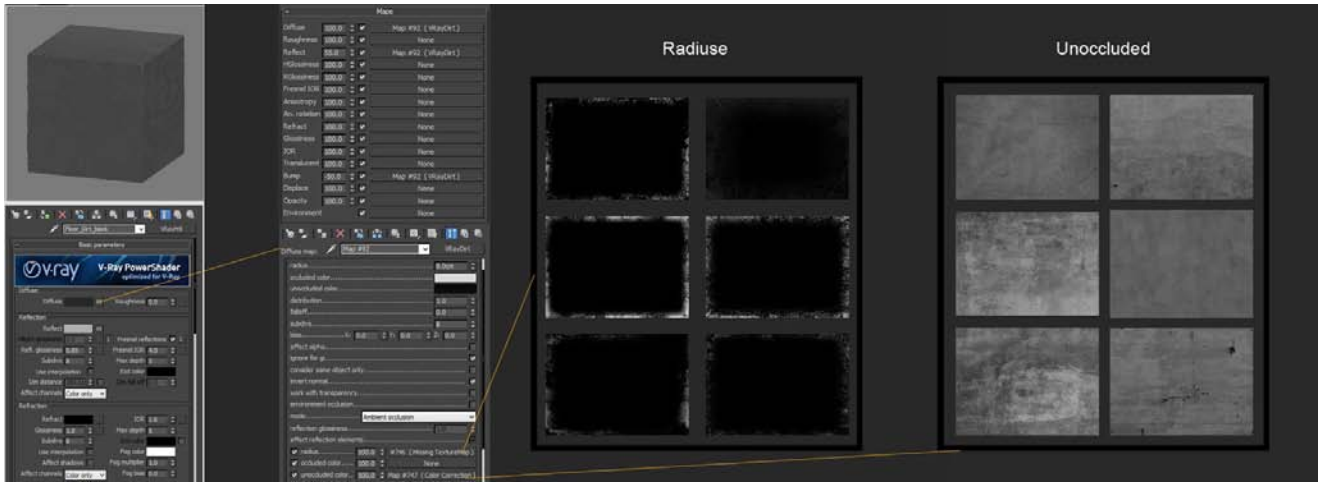
Bar material.



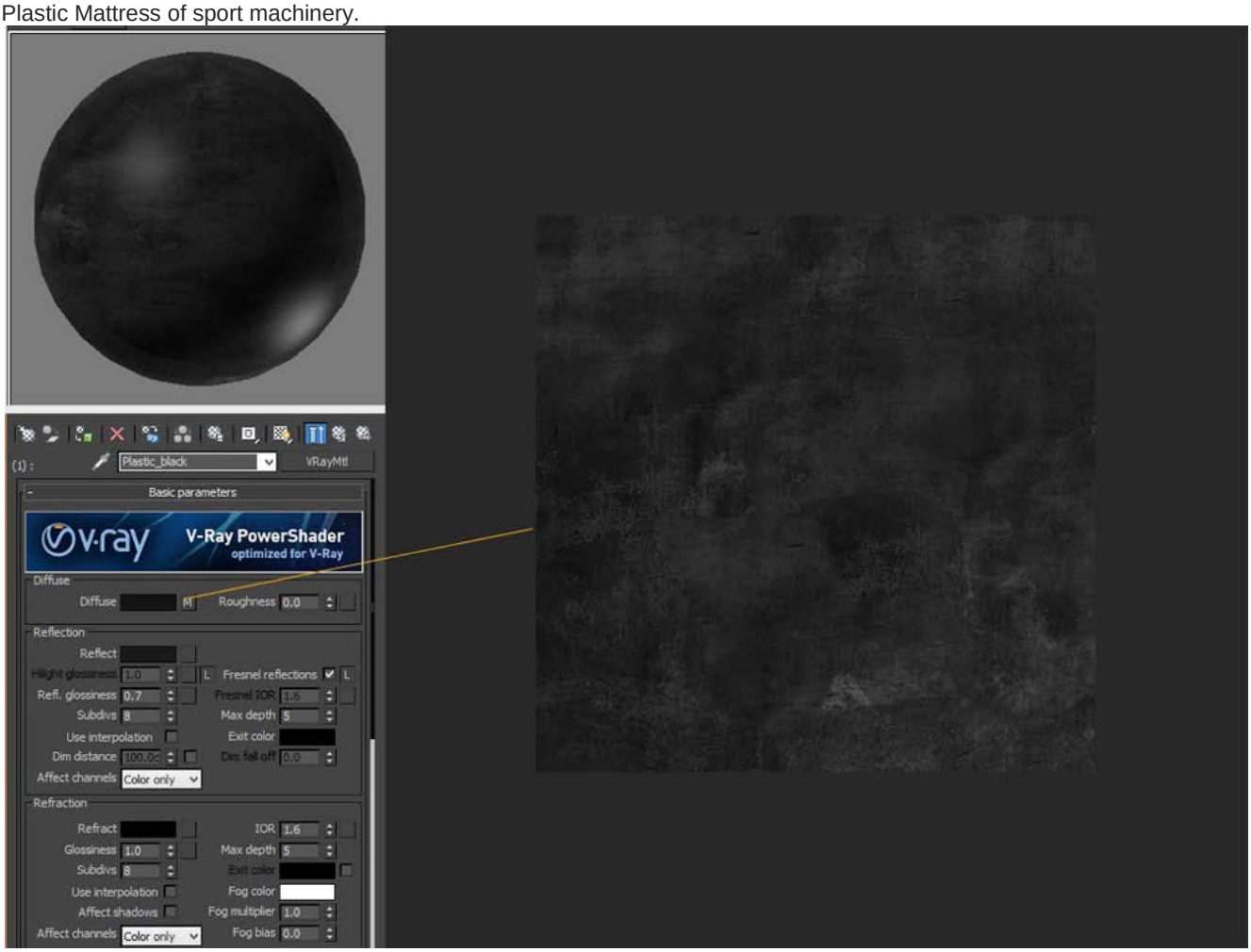
Column material.



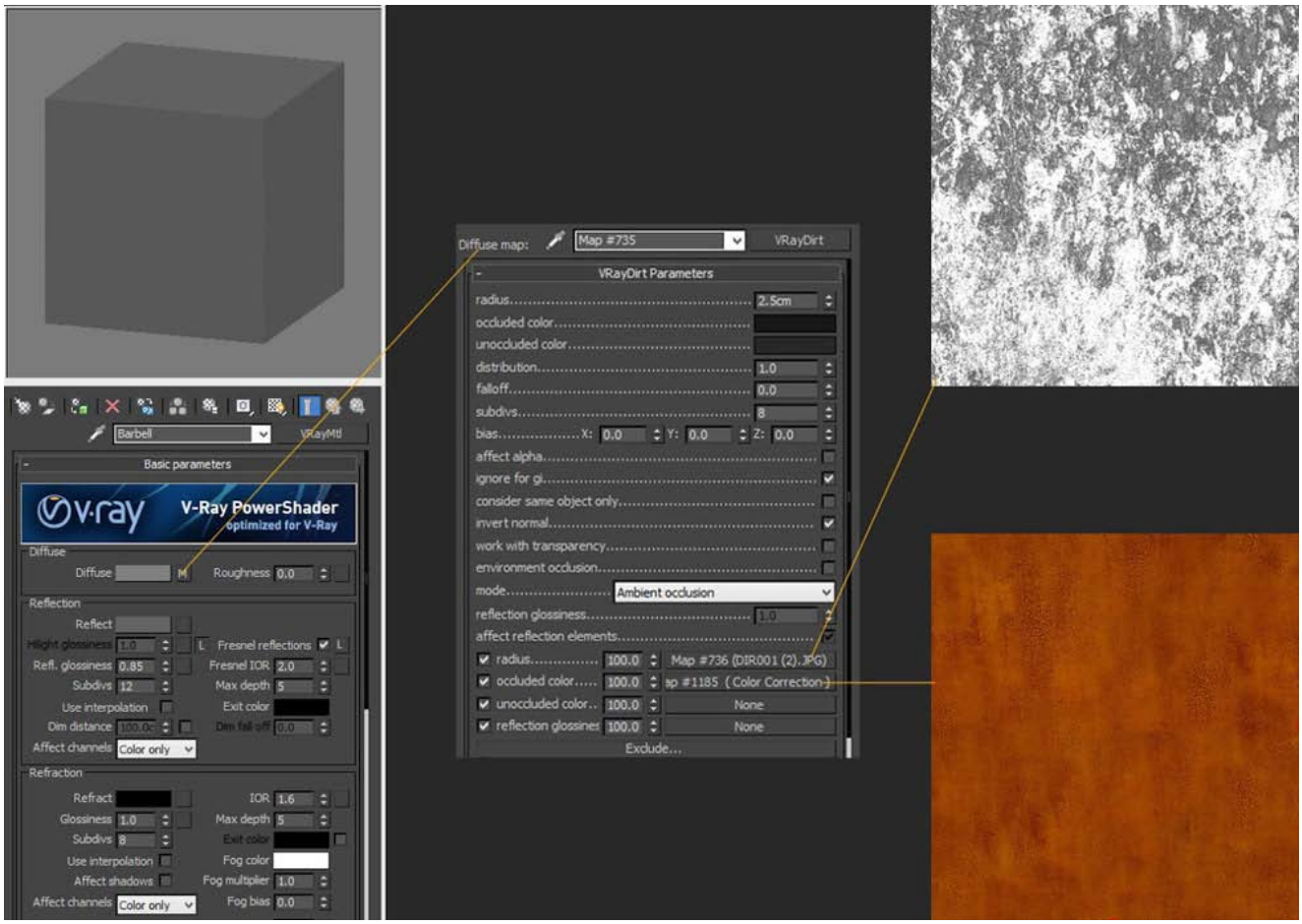
Floor.



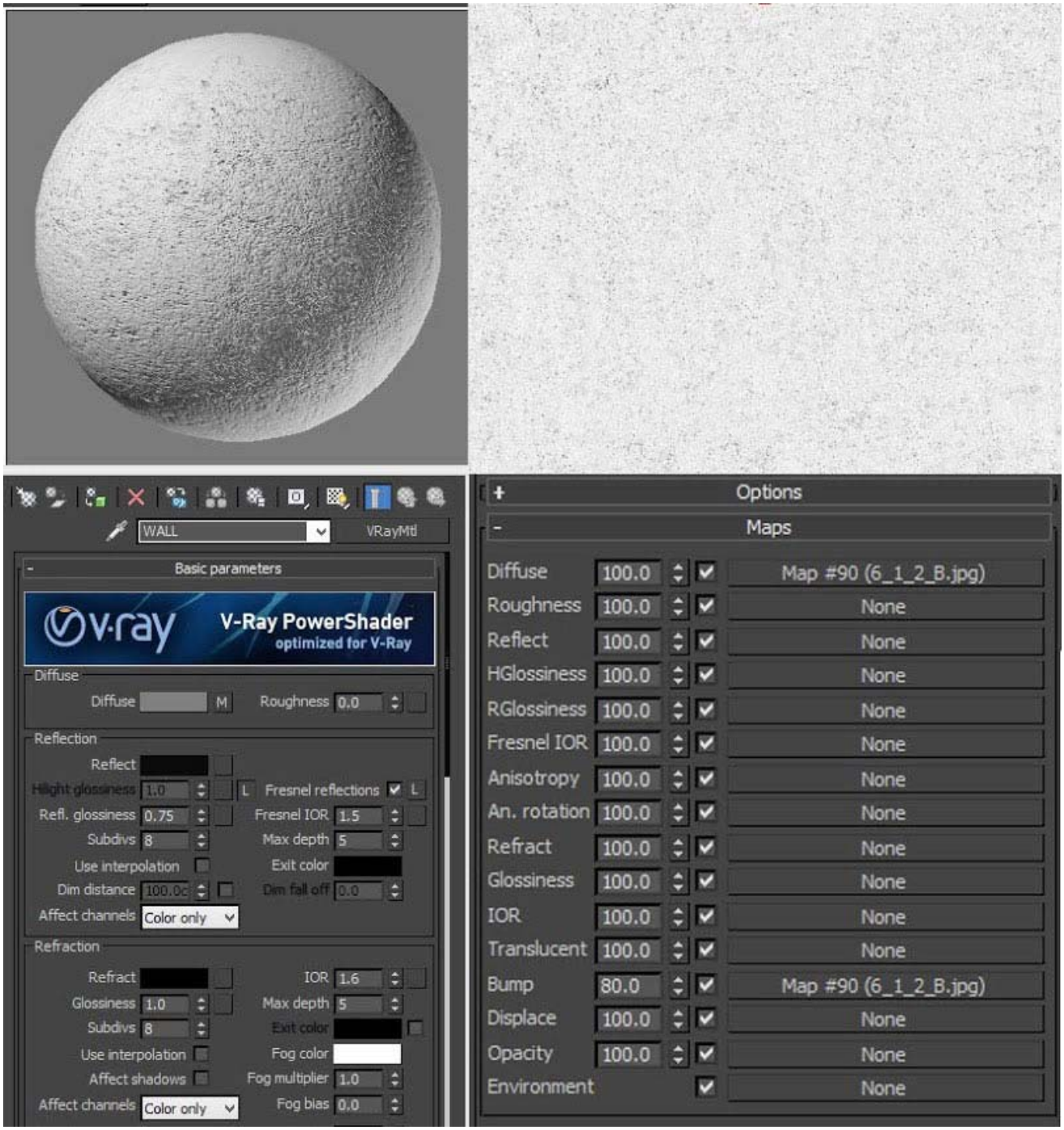
Plastic Mattress of sport machinery.



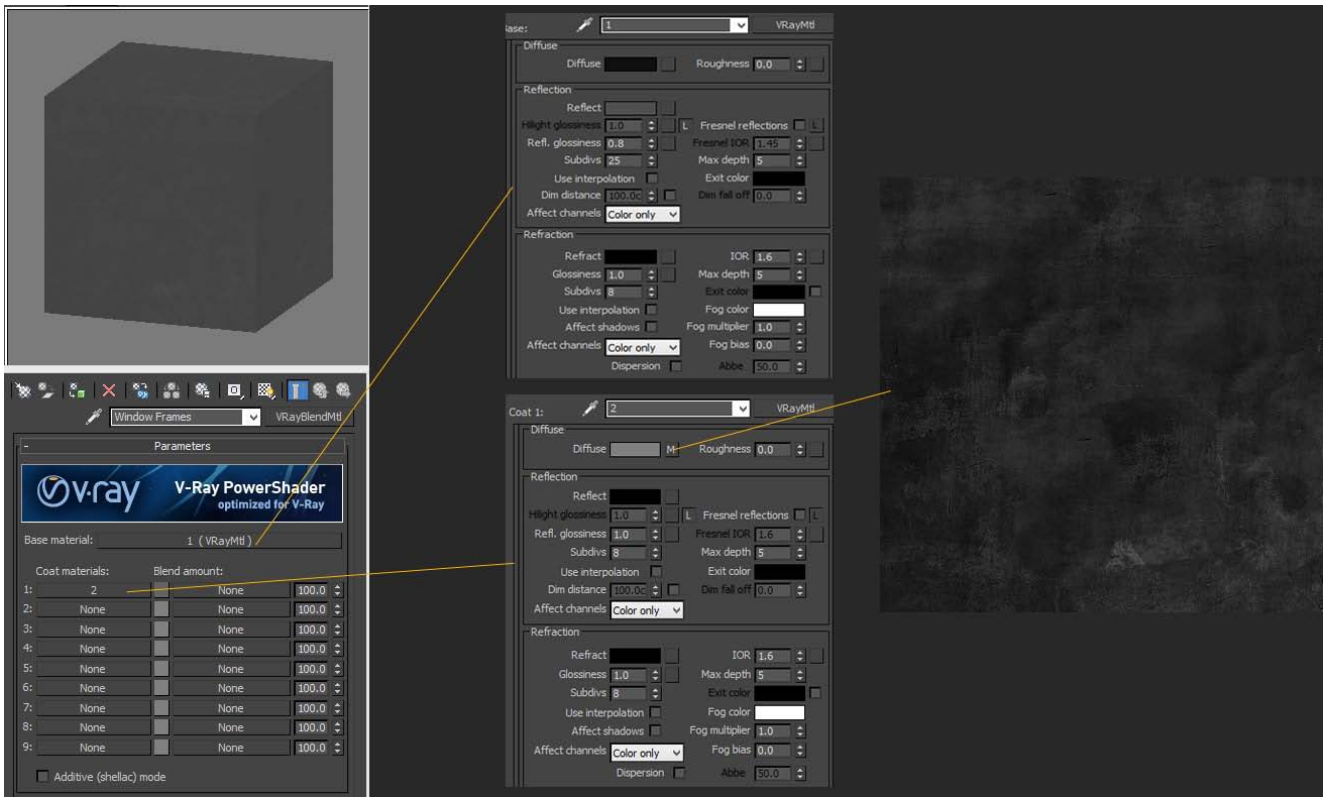
Weight material.



Wall material.

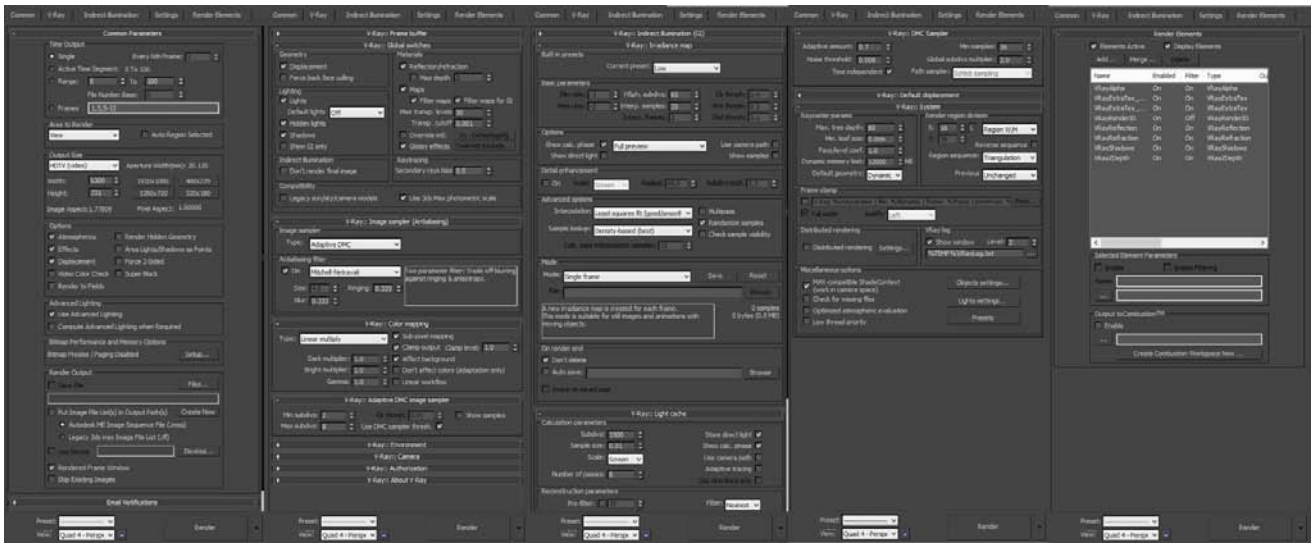


Window frame.



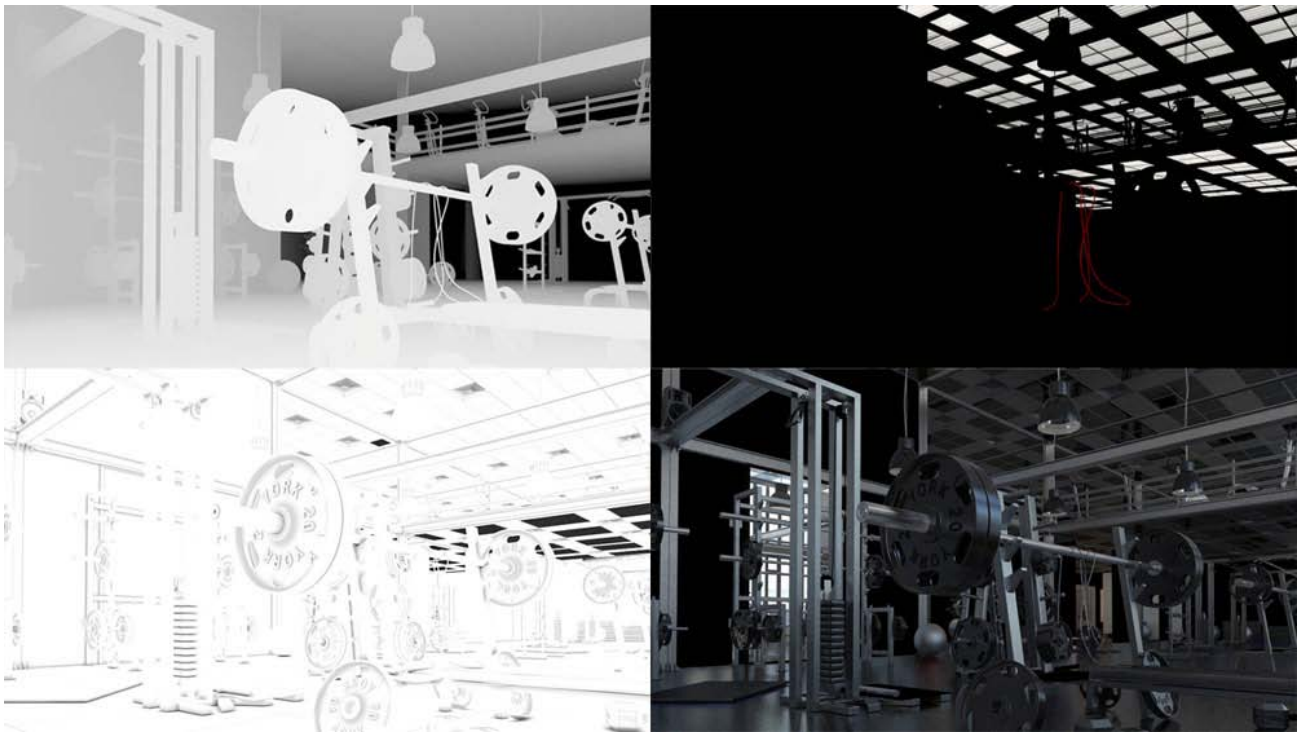
Render Settings

After following all steps now it's the time to set the final render setting . The important thing in this section is to reach a nice quality with some reasonable settings for a balance between render time & quality.

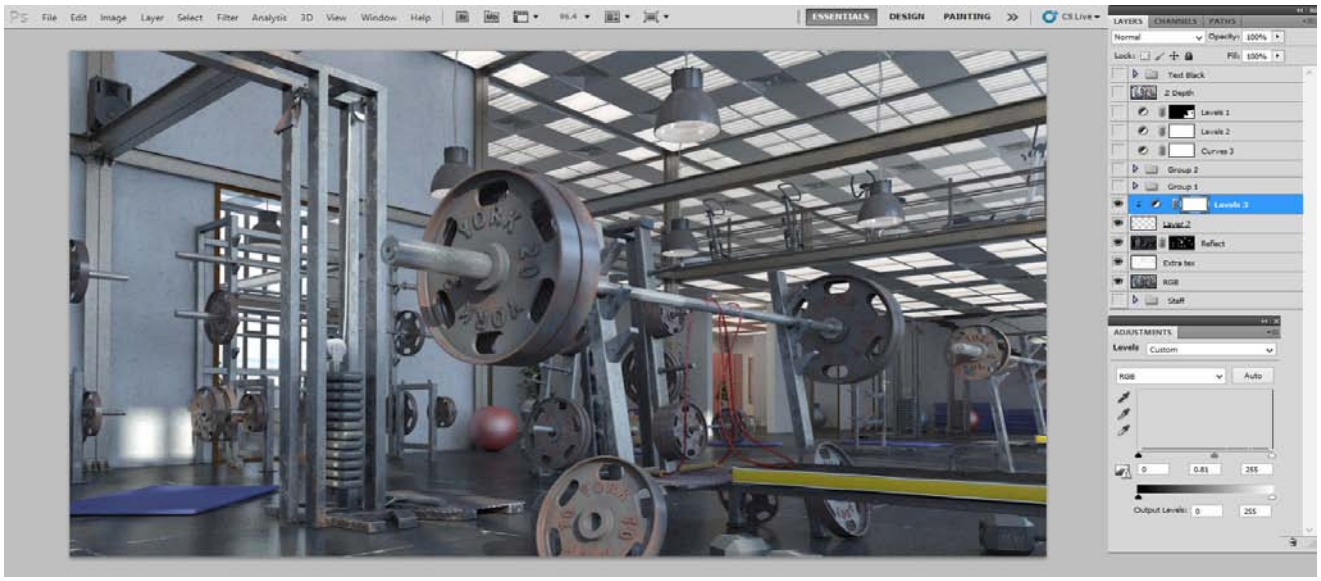


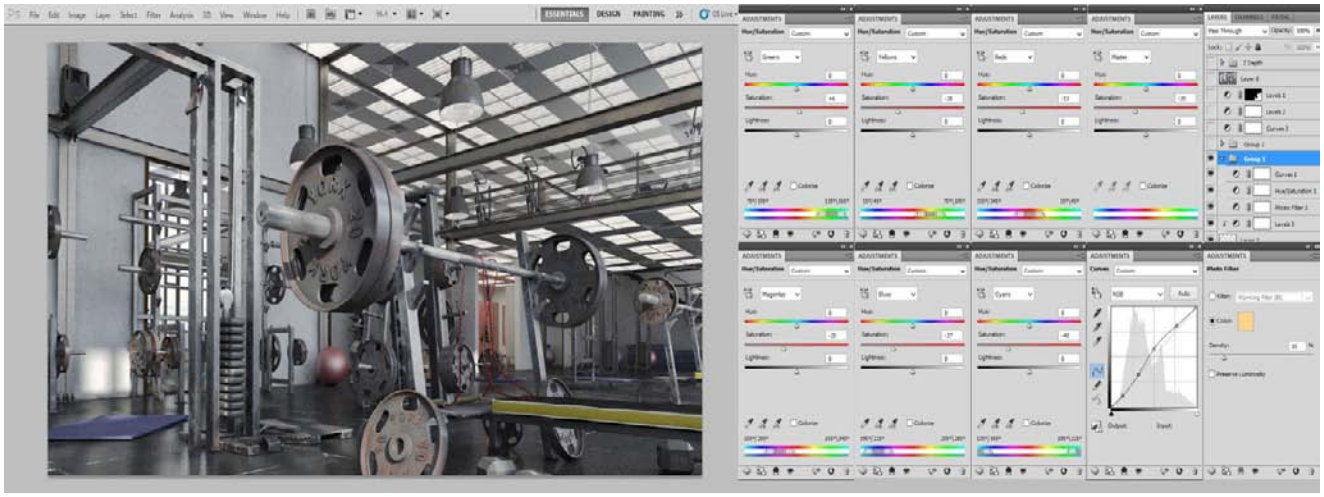
Post Production

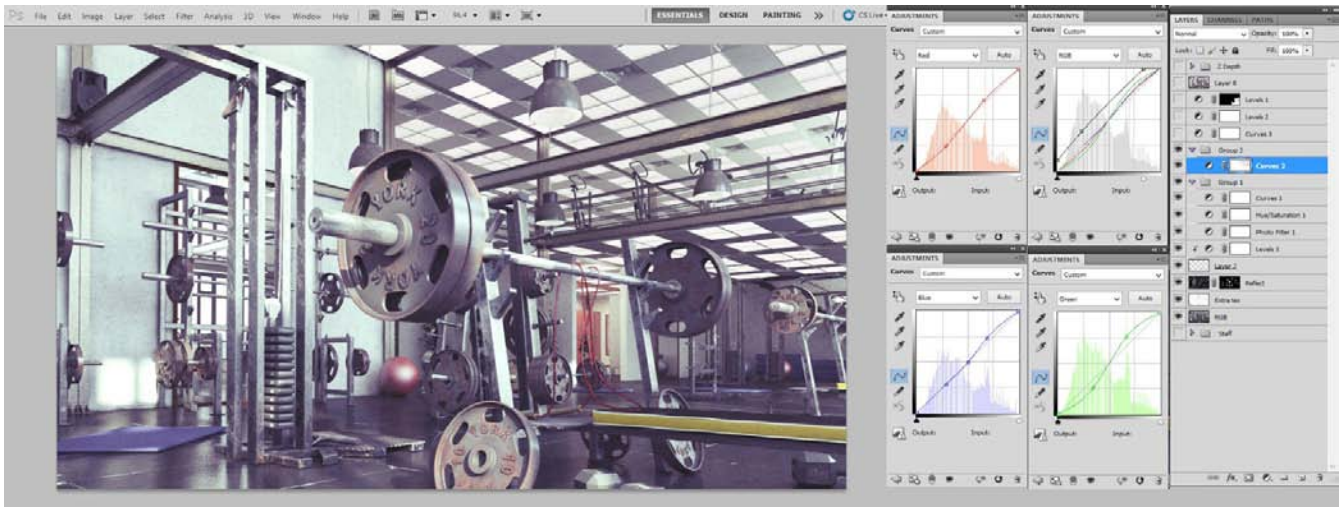
For the post production I've used Photoshop with some of my render elements. You can see one of render post production steps here. These are my render elements that I used for post production: Reflection – Refraction – extra tex – Z Depth

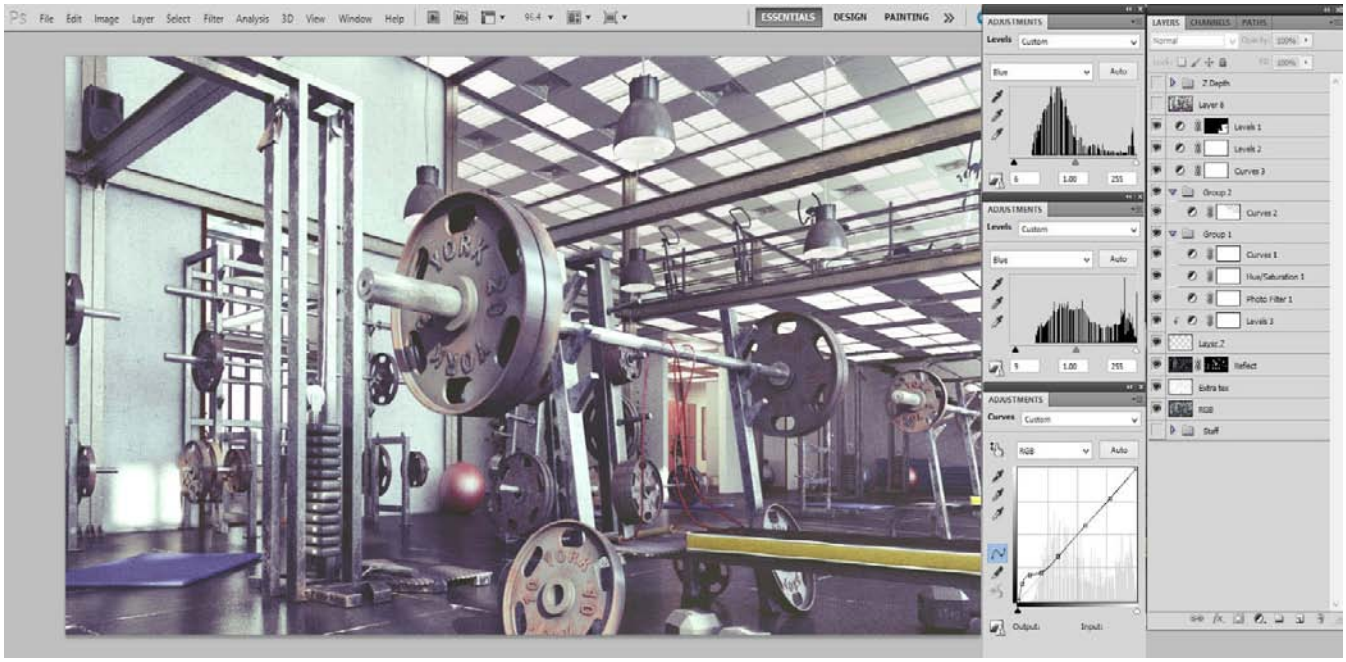


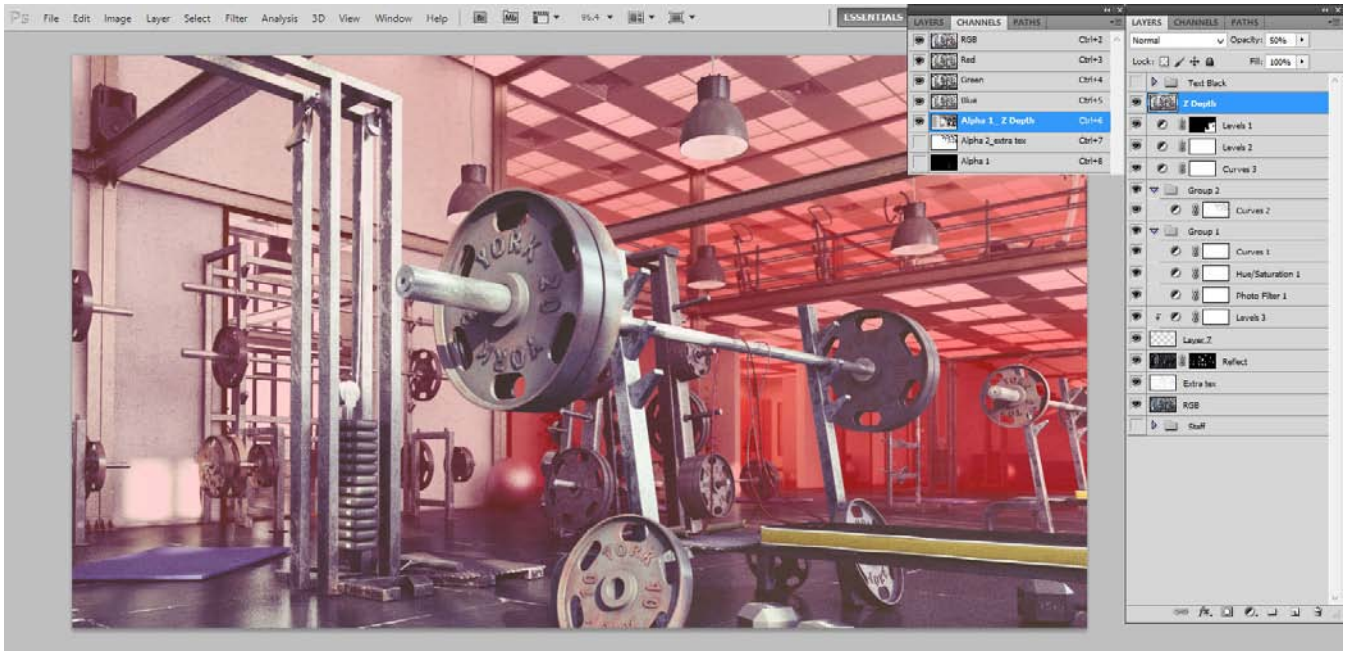
Steps of post production :



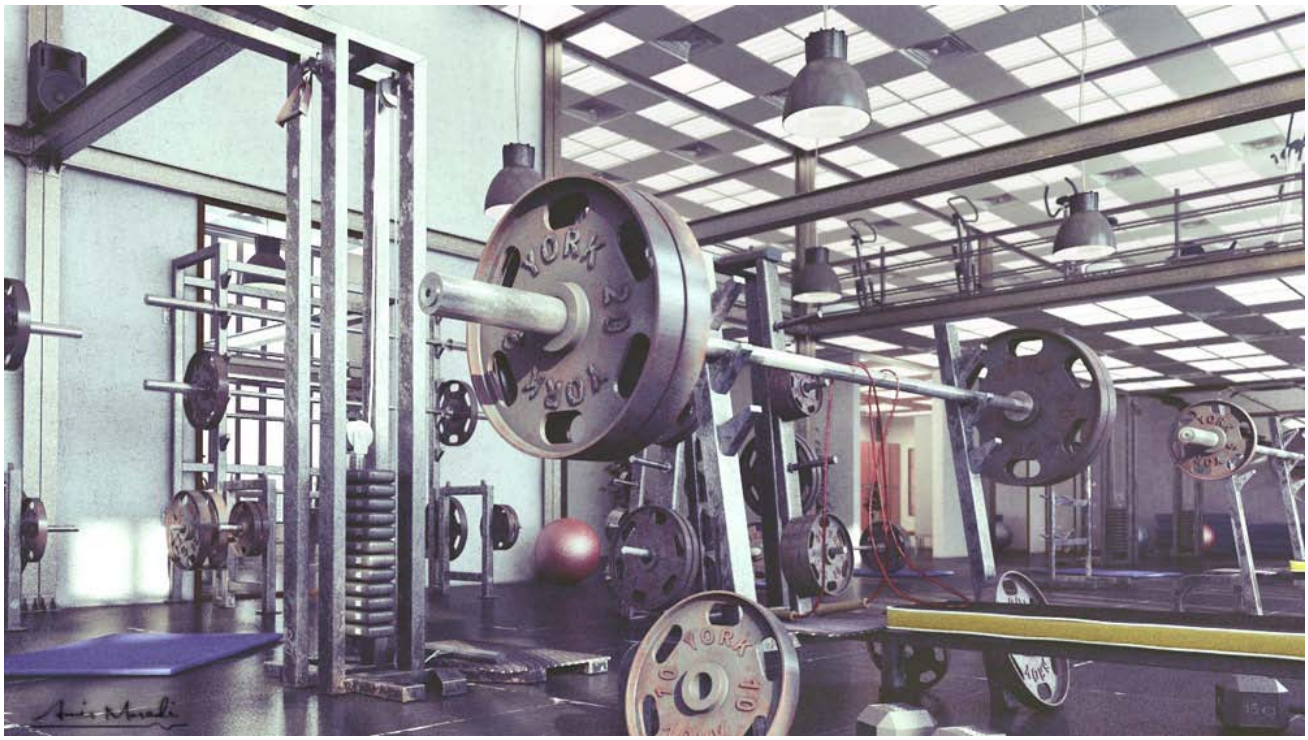


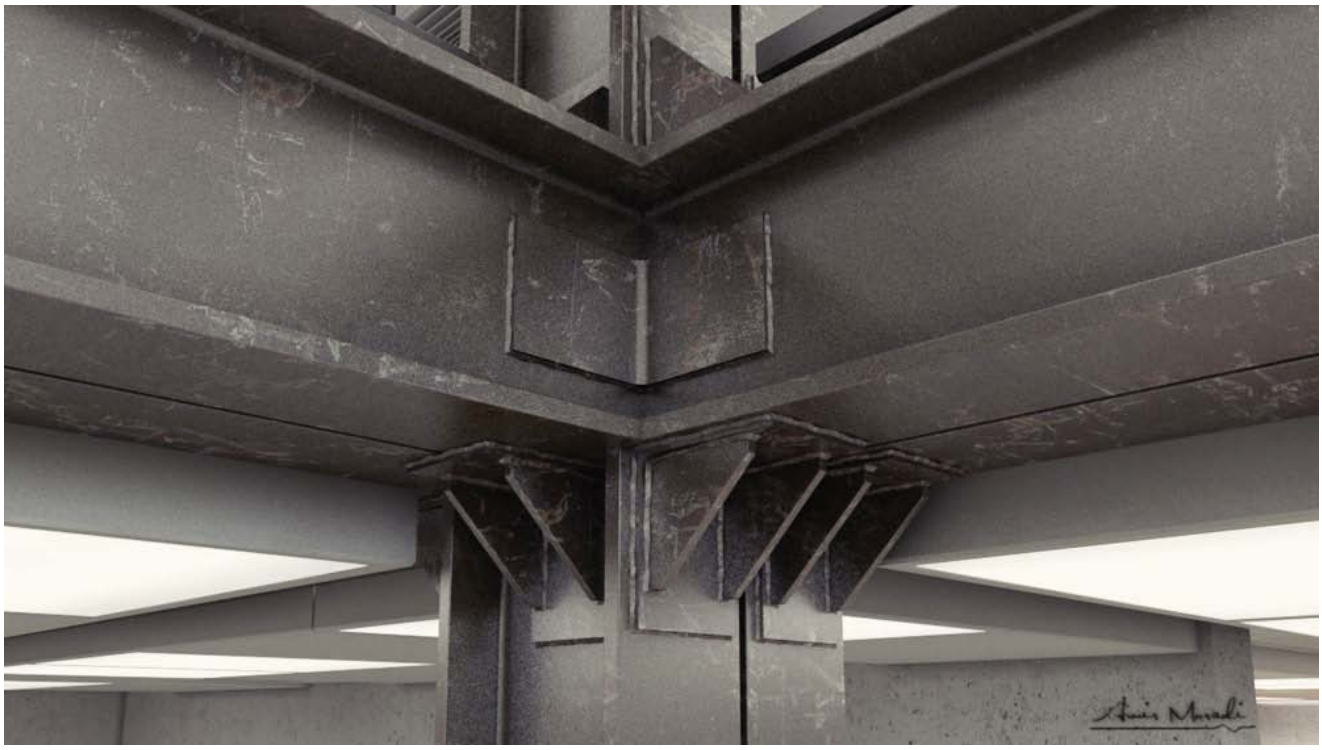






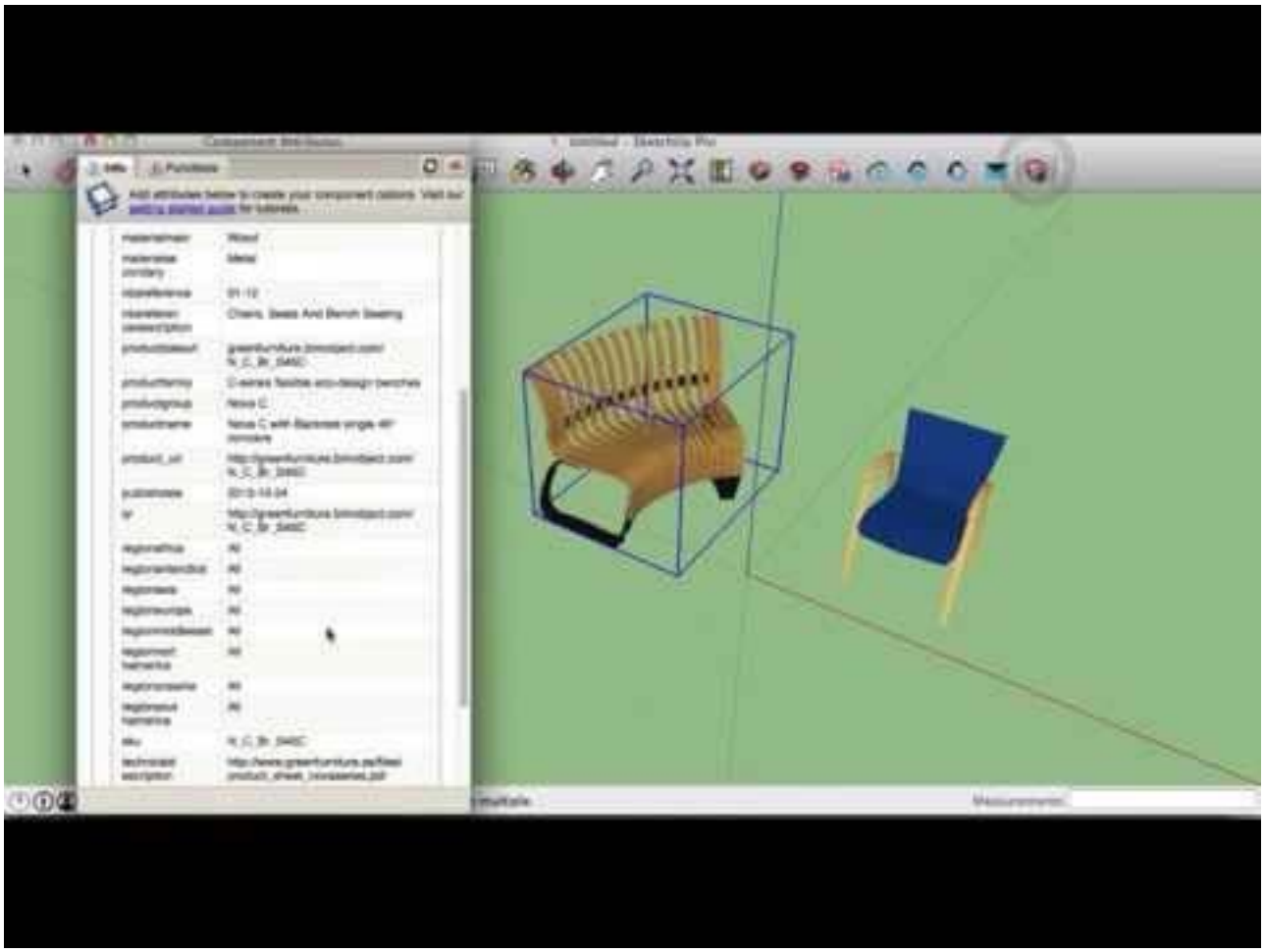
Post Production





Avail best-in-class web service inside sketchup with BIMobject® App 2.0

BIMobject® declares the availability of the latest app, BIMobject® App 2.0 for Trimble Sketchup. This newest application can be downloaded from the Trimble Sketchup Extension Warehouse.



The sketchup users from all through the globe can access the BIMobject® App 2.0 at totally free of cost. The Sketchup users can avail some toolsets to explore, observe source, update and repossess real BIM objects from real manufacturers through the wide array of features and product information. It will help in generating superior quality BIM models and facilitates architects, designers and engineers to produce more informed design as well as empower them to create perfect product selection. The SketchUp users can experience performing with real products rather than wasting precious time producing their own objects.

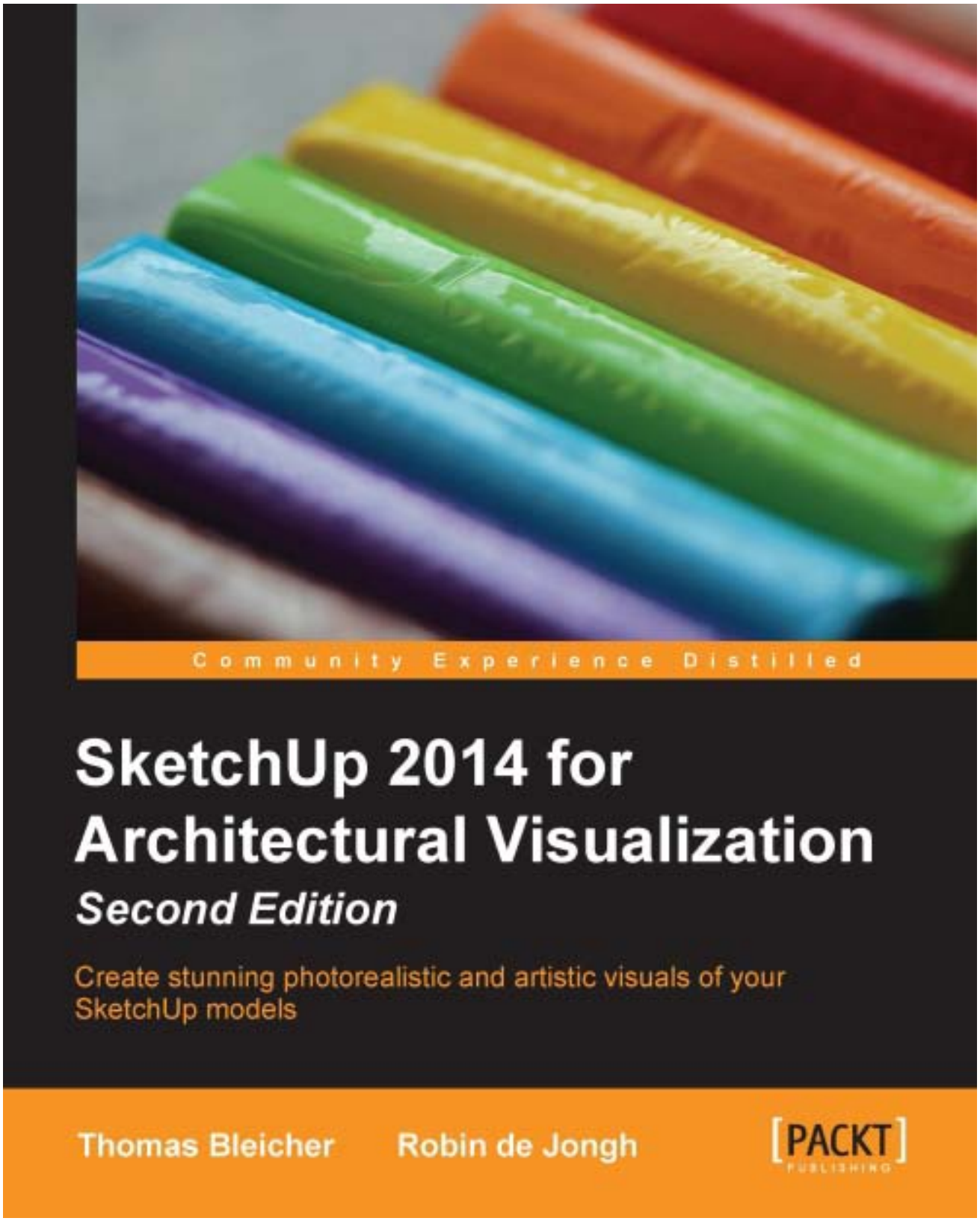
With this amalgamation, the sketchup users can get the best-in-class web service within the Trimble Sketchup. The purpose of the application is to provide ability to the users for instantly searching BIMobjects cloud database online and downloading and incorporating the proprietary BIM objects in a SketchUp project.

This latest application also offers a huge set of attribute data and product information to BIM objects in Sketchup. Complete update of the object's properties and BIMail ™ and news integration are other significant aspects that allow designers to converse with manufacturers.

https://www.youtube.com/watch?v=moYySRHe4vU&list=UUgiFKWIvNnKmXocLRwVWLuQ

An exclusive sketchup book ‘SketchUp 2014 for Architectural Visualization’ 2nd edition is just launched

Thomas Bleicher and Robin de Jongh have jointly published the 2nd edition of the exclusive book alias ‘SketchUp 2014 for Architectural Visualization’. The book contains total 448 pages and is written in english language. The book is available in PDF format.



SketchUp is an impressive and outstandingly puissant 3D modeling software recognized globally by numerous architects, visualizers, and drafters. It facilitates to produce animated 3D drawings and naturalistic renderings that simply approximate real-life objects.

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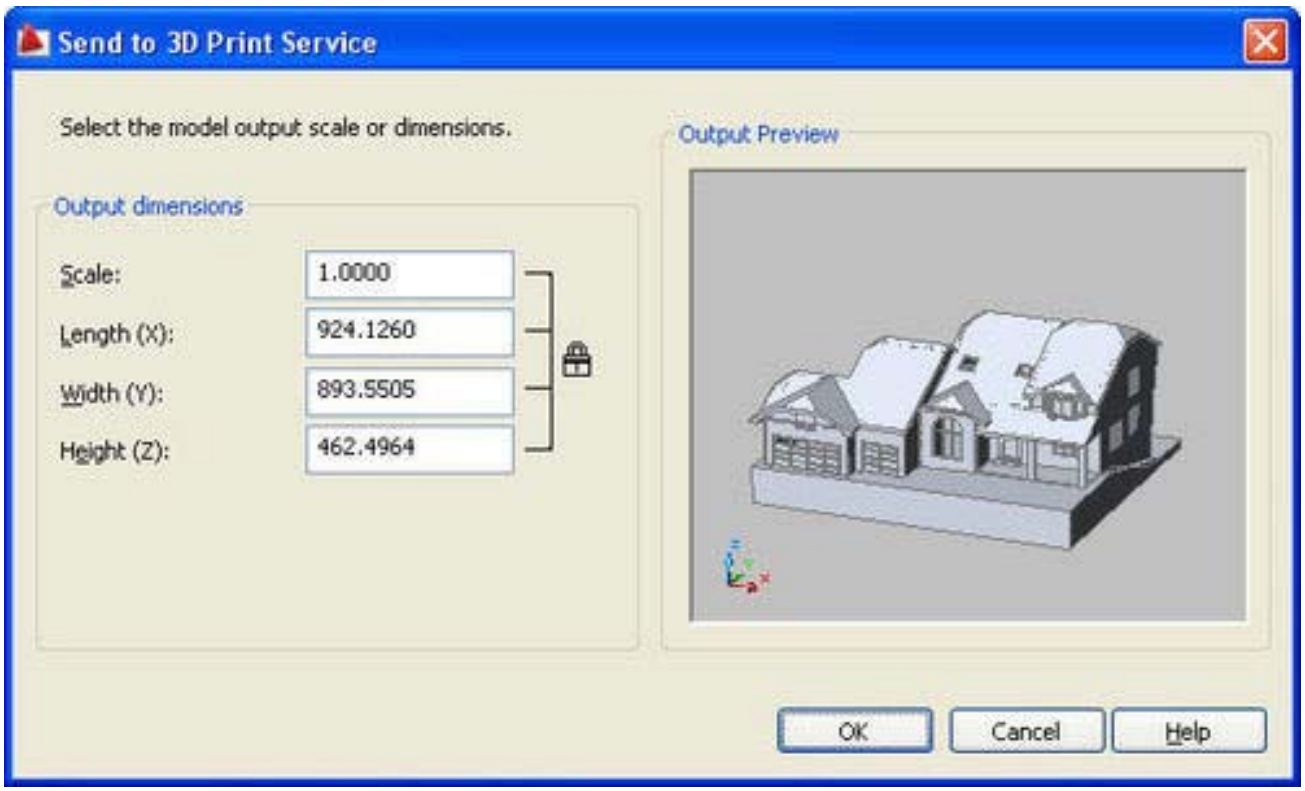
This book provides a brief debut on SketchUp 2014. This sketchup book will sharpen your skill to start with sketchup 2014 promptly in an efficient manner to present top-notch quality photorealistic or artistic outputs of all the designs. The users will be familiar with how to map about and establish the content of the scenes, apply SketchUp and other professional rendering software for making eye-catching visuals and animations as well as how to insert an aesthetic touch to all the images.

Download the book

Buy it now

Computer Aided Design (CAD) programme for the 3D Printing

The computer aided designs (CAD) software program enables a designer to shape their models. One of the best among is **TinkerCAD**. This is probably most easy and powerful program. The essence of TinkerCAD is using basic shapes as building blocks to piece together and form designs with. TinkerCAD is compatible with all 3D printers that use the standard STL file format, and it also lets you easily export the files you've created to an external program or device if you'd like to work on it further and produce something a bit more complex. Best of all, it's completely free.



Another useful program is **AutoDesk123D**. It is a family of apps that let you to make CAD's in different categories and in various different ways. It works in different ways. **123D Catch** is an amazing program that generate 3D model from photo. But if you want to design animals and strange creatures for animation, then the use of **123D creature** is must. For designing electronic circuits CAD, **123D Circut** is important. 123D Design is for basic design creation and **123D Make** create unique 3D models from 2D slice.

In this respect, we need to discuss what **SketchUp** is. Invented in year 2000, the beginner-friendly Computer Assisted Design (CAD) software was operated independently, later was owned by Google (2006-2012) and currently is in the possession of Trimble Navigation -- a mapping, surveying, and navigation equipment company. The company provides a freeware version, called SketchUp Make. It also has a paid version with additional functionality, SketchUp Pro, which is available. The free version is easily downloadable from internet. So, the designer can use it freely and easily.

In this respect, FreeCAD needs to be discussed. If the designer have had a bit of experience with CAD then FreeCAD could be good for them. If not, you may find it a bit complicated. The site claims no previous CAD experience is necessary but compared to TinkerCAD, AutoDesk 123D and SketchUp it is fairly more complex.

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...