



chaos
Enscape

17 Advanced Enscape Tips from Real Users



chaos

Introduction

As an Enscape user, you understand the power of 3D visualization in bringing 2D designs to life. It not only helps stakeholders better grasp your vision but also improves communication and collaboration, leading to the best possible final product.

Enscape is a fast and easy-to-use solution with a gentle learning curve, making it accessible for beginners. However, its flexibility works two-fold, Enscape also offers extensive depth for long-term users to explore and master.

With so much to explore, seasoned Enscape users have found numerous ways to streamline their workflow.

You asked, we answered

Our community often requests new tips and tricks, so we asked Enscape experts to share their best tips, tricks, and advice. These user-tested tips have been honed through years of practice, helping you to enhance your renderings, optimize your workflow, and deliver superior client presentations.

Whatever you're looking to improve, this ebook has invaluable insights. Explore this treasure trove of expert advice and elevate your Enscape experience.

If this ebook inspires you to share your own Enscape tip or experience, we would love to hear from you. Click [here](#) to contribute and help us continue building a resourceful community.

Materials and textures

Adding accurate materials and textures in renderings enhances realism, visual complexity, and provides clients with a tactile quality before construction begins. Clients can quickly identify the different building materials, helping them understand the scene faster and engage with your design. When combined with the right light and shadow, your renderings gain atmosphere and mood. Accurate materials and textures also convey context and history, offering clients a more captivating and believable experience.



01

Improve efficiency with proper material setup

Neil Fraser – Director, Curio Architects

Spend time ensuring that elements such as walls, floors, and roofs have the correct material from the start (or at least in an editable way) to ease the workflow. From there, the presets and rendering ability make creating visualizations a breeze.



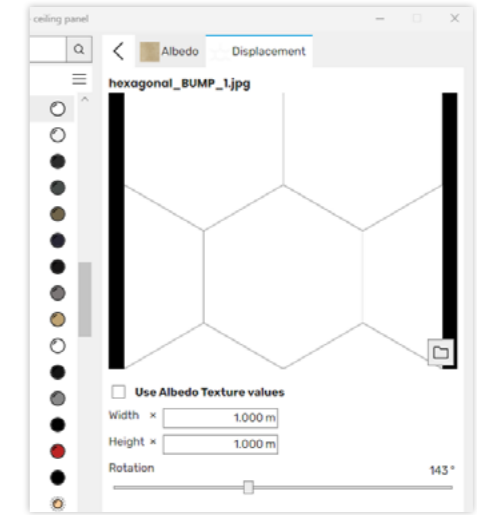
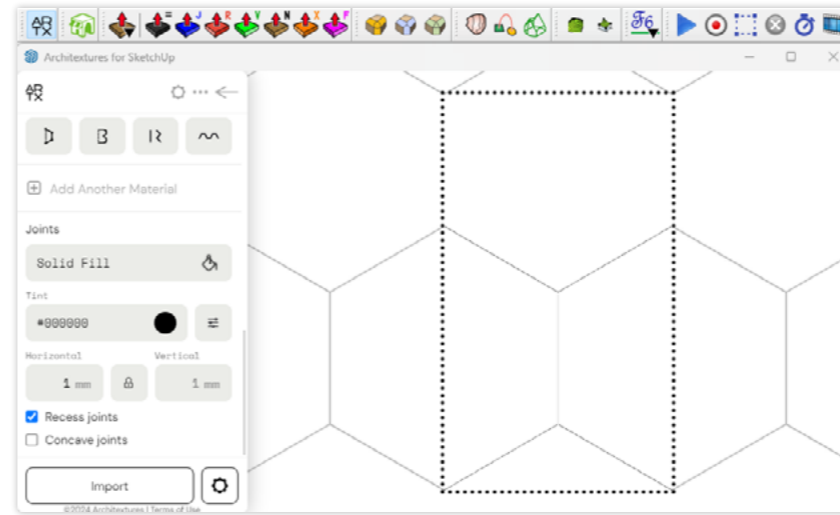
02 Learn how to master custom tiling patterns

Ofri Gerber – Architect / 3D Archviz, Studio Ofri Gerber

Here's how to make seamless tiles with a "grout" B/W bump map. This is what I do when the client picks a specific material and wants it tiled in a particular pattern (with a reference from the supplier). For example, acoustic wood wool ceiling tiles in a hexagonal pattern:

1. Find high resolution seamless texture as in the client reference.
2. Add the material to the ceiling surface in SketchUp. Scale it to the right proportion as in reference.
3. Create a black and white AO height map of the spacing with ARTX plugin (or you can simply draw it in SketchUp and export it as 2D). The ARTX plugin automatically creates the right edges of the tiles.
4. Add the map you created to the height map of the material in the Enscape material editor. You should add it as a displacement map with a value of about 2-3 cm depth.

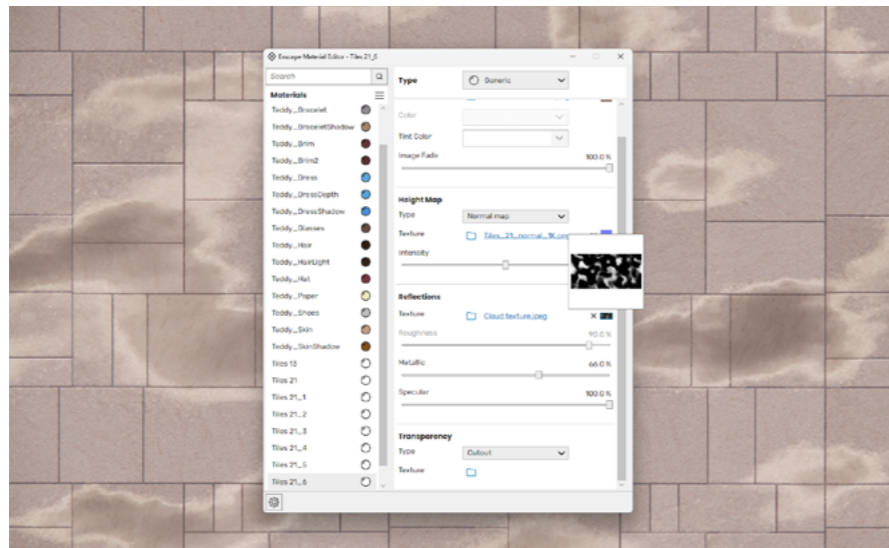
That's it! A simple and fast way to create seamless texture tiling in any pattern that the client wants.



03 Craft realistic rain texture

Vijay Aadithya - Grad Student, Georgia Institute of Technology

To create a rain-based texture on the ground, replace the reflection mask with a cloud texture, increase the specular value to 100, and play with the metallic setting of a material. Additionally, for natural settings, always keep sun brightness at 15% to 20%.



04

Enhance realism with the Enscape Material Editor

Joshua Heasman - Architect, Joshua Heasman Architecture

Firstly, I get the camera angle right. Then, I focus on lighting from the sun to achieve a soft glow—usually evening light. Once that's set, I compose the image by placing objects and vegetation and work in materials.

Materials are extremely important, and I use Enscape to design and pitch a concept to a client. The Enscape Material Editor is fantastic for this.

The key for me is selling the client the most realistic possible representation of the project. The material editor helps me achieve this by allowing me to create custom materials that match real-life products. The key to making them look real is adding surface mapping and getting the texture, tone, and reflectivity correct.

Most of the renders don't need any post-editing, which saves time and ensures consistency.



05

Revolutionize walkthroughs with a game controller

Jeremy Nesemeier - Owner, County Line Design

You've got to get yourself a video game controller to navigate Enscape—I use it 100% of the time. It's great when I'm doing a walkthrough with a client and I want to provide a real walking experience. It's smooth and easy to look around. I use an Xbox controller because I'm already familiar with it.

Pro tip: Learn the quick commands!

[See a game controller walkthrough in action here >](#)



06 Invite client feedback with sketch-like renderings

Ken Parel-Sewell - President, One World Architect

When presenting a work-in-progress to clients, we've found that a common issue is renderings look "too finished." This can stymie conversations about needed changes in the design. To help our clients feel like the work is still in progress and that changes are still welcome, we try to give a drawing-like character to our renderings.

We overlay a hidden line rendering over the photorealistic rendering. By adding lines back, the resulting image looks like an awesome drawing of something we are working on, not a photograph of something complete.



Light and shadow

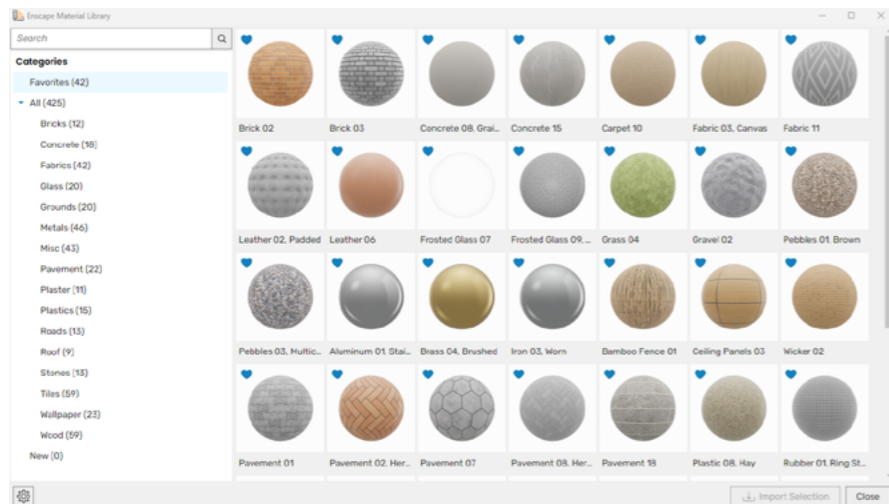
Light and shadow are fundamental in renderings, bringing layers of realism, creating depth, and setting the mood. Proper lighting highlights important elements and showcases the chosen materials and textures. By effectively using light and shadow, you guide the viewer's eye and evoke specific emotions, enhancing the storytelling of your scene and making the rendering more engaging and immersive.



07 Streamline workflows with organized libraries

Stefano Domenici – Architect, SDA

At our practice, we've created several light sources that we place strategically inside and outside of models to enhance what we want to show. We have also created a library of our favorite materials and textures for easy access.



08 Improve renderings with strategic shadows

Steven Garubba – Founder/Arch. Designer, Criterion Workshop

For exterior renderings, I constantly see people make the mistake of having overly washed-out images with light and not enough shadow. Shadow can be used as a tool to frame your subject, such as the architecture, the people inhabiting the space, or any detail you want to focus on.

Many designers forget to add context behind the camera or outside the scene. Trees and contextual buildings can be vital for introducing more shadows into the foreground of your scenes. Sometimes, I even like to soften my renderings with tree shadows against the face of my buildings and lower the sun brightness to lessen the harshness of the shadow.



09 Create immersive experiences with mono panorama

Jeremy Foster – Director, J Foster Architects

I typically start with white card renders (white mode). I use auto exposure or turn this off so as not to overexpose certain shots. Image saturation is set to 70%, sun brightness is set to 20%, and I attach a custom skybox, typically studio lighting. I sometimes use 10% outlines in a sketch design.

For photorealistic images, I set the sun brightness to 20% and shadow sharpness to 20%.

For client presentations, I always use a mono panorama and stitch these together to create a tour on the Enscape website. These are incredibly immersive and easy to navigate between views.



10

Capture perfect skybox backgrounds with drone photography

Bernardo Couto Carneiro - Architect, Couto Arquitetura

For the backgrounds with the skybox, I used a drone centered on the terrain and took photos at the height of each floor.

I also took photos at times when the natural lighting was good, which makes all the difference when using the skybox.

In the night scenes, I took the photos with the drone at a time when the city lights were already on, but there was still a little natural light so it wasn't so dark.

I lit the entire building from the inside with spherical lights and the facade with some accent lights to draw more attention to the building that would be presented.



11 Transform your renderings with atmospheric effects

Lwazi Grant – Interior Designer, Interlink Design

Harness sunlight, artificial lights, and ambient lighting to enhance depth and realism.

Explore different times of the day to create diverse lighting atmospheres.

Fine-tune atmospheric elements like fog and haze to deepen the scene's immersion.



Assets

Using assets in renderings allows you to provide crucial context for your design, enhancing its realism. Assets can demonstrate proper scale and proportions and illustrate how a space is intended to be used, such as furniture placement, vehicle infrastructure, or human interaction.

Vegetation assets help your renderings integrate with the environment, letting viewers imagine the design in its natural setting. Assets set a tone and evoke specific emotions that can persuade clients, making the rendering more engaging and relatable, which helps clients understand a space's usability and functionality.



12

Bring renderings to life with asset library objects

Lance Windsor – Pr. Manager & Graphic Designer, PLJBD Architects Inc.

Empty space can be the enemy. I've seen too many users in my area produce renderings that lack a realistic feel because they fail to include Asset Library objects.

Cars and people can add life to your renderings, but make sure you know your audience. Be sure to add people and cars matching your building design's style or income level.

Additionally, ground cover can be important. Blank lawns look empty and fabricated. Throw some leaves or dandelions in. Even the best-manicured lawns have these from time to time.

Lastly, we all know to add trees to the background to fill voids. However, adding some trees behind the camera can also be a good practice. Even though you don't see the trees, you will see the shadows. Some sparse tree shadows on the lawn and even some on the building will add depth to your rendering. Drive around your town or city. Look at yards, porches, parking lots, and storefronts. Let your renderings imitate the life around you.



Post-production

To achieve an especially realistic rendering, you might use Enscape for all the initial work before refining it with tools like V-Ray or Photoshop. Post-production allows for fine-tuning lighting, adjusting color grading, and tidying up any imperfections from the initial rendering. Through post-production, you can fully bring the scene to life, ensuring your design is communicated in the best way possible.



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Elevate post-processing with 32-Bit EXR files

Danny Jones + Dana Satterlee - Director of Creative Labs, CPL

32 Bits will blow your mind!

Saving out an EXR file will open up a whole new world of possibilities when post processing your images.

Saving this EXR file to a TIFF file will allow you to import into Adobe Lightroom and use its amazing controls to find the balance on your lighting and tonality.

[Learn more about Danny and Dana's work in this case study >](#)



14

Achieve realism with HDRI and strategic POVs

Rancel Vasquez - Architectural designer, Renvera.arq

When I approach my visualizations, I pay special attention to every detail. Using references is essential—if you do not visualize the upper step, you will hardly find the motivation to reach it.

To achieve the best result, it is essential to pay close attention to each phase of the rendering process, from selecting lighting to the solar orientation that best highlights your project to searching for intriguing shadows and achieving a balance between illuminated and shadowed facades.



The quality of 3D models and assets is crucial. To add realism to the project, it is important to explore vegetation, vehicles, and other externally produced 3D models.

Image composition and camera placement are of primary importance. Be sure to find a focal approach that gives the illusion of being a professional photograph, taking into account the rule of thirds and applying a two-point perspective to obtain a professional result.

For post-production, tools like Photoshop or Affinity Photo allow you to add the final touch and any details necessary to reach your desired look. For example, balance the green tones of the vegetation, generate warm lighting with a Bloom effect, incorporate more attractive skies if necessary, and, above all, guarantee a chromatic balance as close to reality as possible.

As I mentioned at the beginning, I recommend always having a reference on hand to aspire to or even surpass. A reference will help you be inspired to create a standout rendering, and help you identify what Enscape can help you with and what you need post-production for.



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Achieve realism with HDRI and strategic POVs

Paulo Pereira - Arquitecto

To execute these renders, I haven't applied any additional artificial lighting, just a specific HDRI for each rendering to match the intended environment for each scene. For the execution of each image, there was a dedicated AutoCAD 3D project, which was then converted into SketchUp, followed by allocating a series of assets from Enscape and SketchUp.

The points of view for each render were selected in accordance with the type of project and in proportion to the human visualization in order to enhance the architecture and its connection with the evolving environment. I always tried to present the client with an image of the project that looks as close as possible to reality. I also used VR visualization for the first time, which naturally surprised the artist.



AI

Using AI within architectural visualization is fast becoming the standard as the technology advances and new use cases emerge. AI provides architects and designers with a tool that handles time-consuming processes and enhances renderings with small details that might otherwise be overlooked.

For clients, AI allows non-professionals to share their ideas and visions from the start, accelerating the design process. While the use of AI is still contentious, and its output can be inconsistent, exploring AI's potential in the architecture space is worthwhile.

[Read more about AI in architecture here >](#)



16 Enhance Enscape assets with AI upsampling

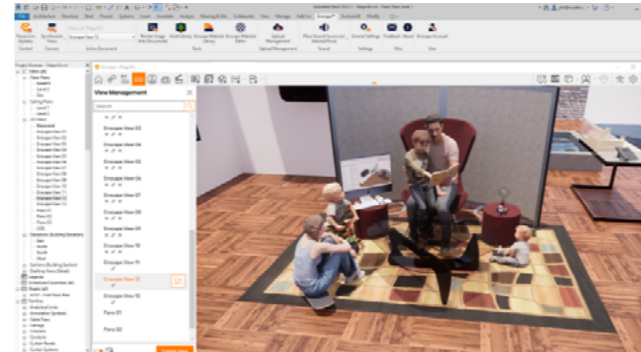
Phil Read – CEO, Read Thomas

Enscape's people assets are a great way to communicate scale, context, activity, function, and more. This is perfect when you're exploring the project or creating animations.

However, the lack of detail in faces and other features can be distracting. If you zoom in closely, you'll notice a lack of detail in the people assets, which contrasts with the higher detail in the background and makes it seem like the assets are out of focus.

Upsampling the image creates the illusion of detail in face, hair, eyes and other features. In my example, the upsampling took about a minute using an AI tool called Magnific. The results were so good that when I showed someone, their only complaint was that the final image seemed "too perfect."

I achieved this by using my Revit / Enscape sample project, I added a selection of people assets. Then, created a series of favorited views. Finally, I batch export all three views. I then went to Magnific and uploaded the first image. After a bit of testing, I set the Scale Factor to 4x, selected Optimized for Film and Photography and set the Resemblance slider to 10.



After about a minute, you have your results with wonderful and natural looking detail! The skin, hair, eyes and other features seem remarkably realistic. I can't imagine the time and expertise required to create this kind of natural looking result via manual photo editing.



17

Explore new horizons with AI and advanced Enscape techniques

Austin Gawrys –Designer, Architect Workshop

Never stop learning new techniques or workflows. Over my eight years using Enscape, I've constantly reevaluated how I use the software and observed industry trends.

It's not sufficient to just consider practices within your office or on the Enscape Forum; pay attention to broader industry developments. Question how images are produced, explore how it can be done in Enscape or through post-production, and develop your own workflow.

When Midjourney and other AI software first emerged, there were no official tutorials on incorporating them into Enscape renderings. However, by closely observing other artists, you could discern the integration of AI skies, entourage, backgrounds, and photomashing, even before generative AI was available in Photoshop. You had to be vigilant to recognize this possibility.

As we embark on this new phase of discovery, it's crucial to note what artists using other software are achieving and explore how you can leverage this in your own work.



One final tip, which I have yet to see others talk about online, is to use AI-generated HDRI backgrounds. It's quite simple to convert them through Photoshop and achieve precisely what you want in Enscape.



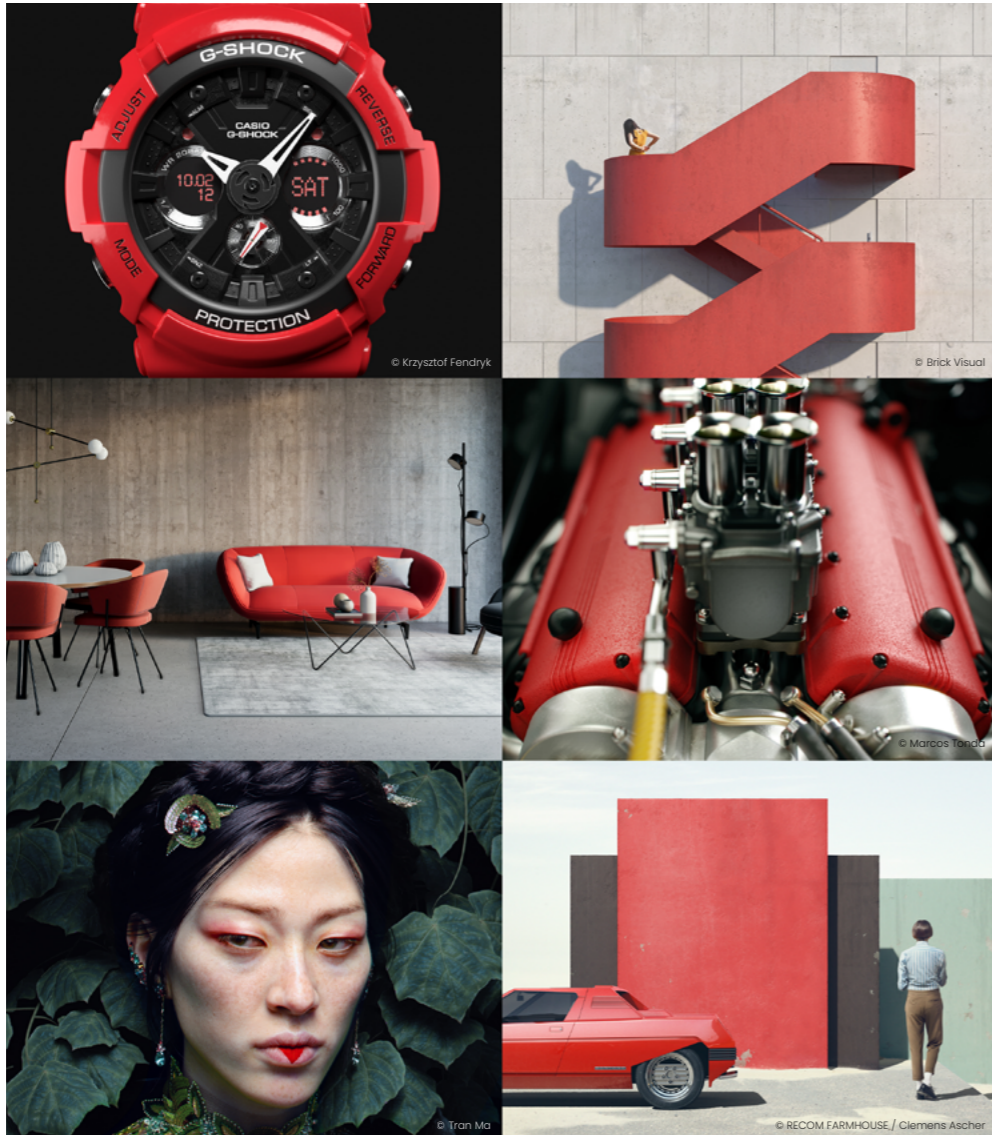
About Enscape

Enscape is a real-time visualization and VR plugin that streamlines architecture and design workflows. It is the only solution that offers direct integration with the most used CAD and BIM tools in the AEC industry, enabling you to work with one project and maintain a single source of truth across all project phases.

Ideate: Explore concepts in real time, evaluate ideas quickly, and envision your space before it's built.

Communicate: Convey design intent clearly, iterate effectively, and bring ideas to life with ease.

Present: Showcase designs with immersive 3D experiences, impress clients and win more work.



About Chaos

Founded in 1997, Chaos is a leading global visualization technology company.

Headquartered in Karlsruhe, Germany, Chaos has nearly 800 employees and offices in 11 cities worldwide.

Chaos is defining visualization by offering accessible tools, simplifying and accelerating workflows, and empowering visual storytelling for artists, architects, designers, and other creative professionals.

Chaos' portfolio of visualization technologies for architecture and design, media and entertainment, and product e-commerce includes:

V-Ray, a physically based renderer that has been honored with an Academy Award and an Engineering Emmy;

Enscape, a high-quality real-time rendering and virtual reality plugin;

Corona, a high-performance photorealistic rendering engine;

Cylindo, a 3D furniture product visualization platform for e-commerce;

anima, a 3D/4D animation software to add realistic people and crowds to visualizations.



Defining visualization.

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