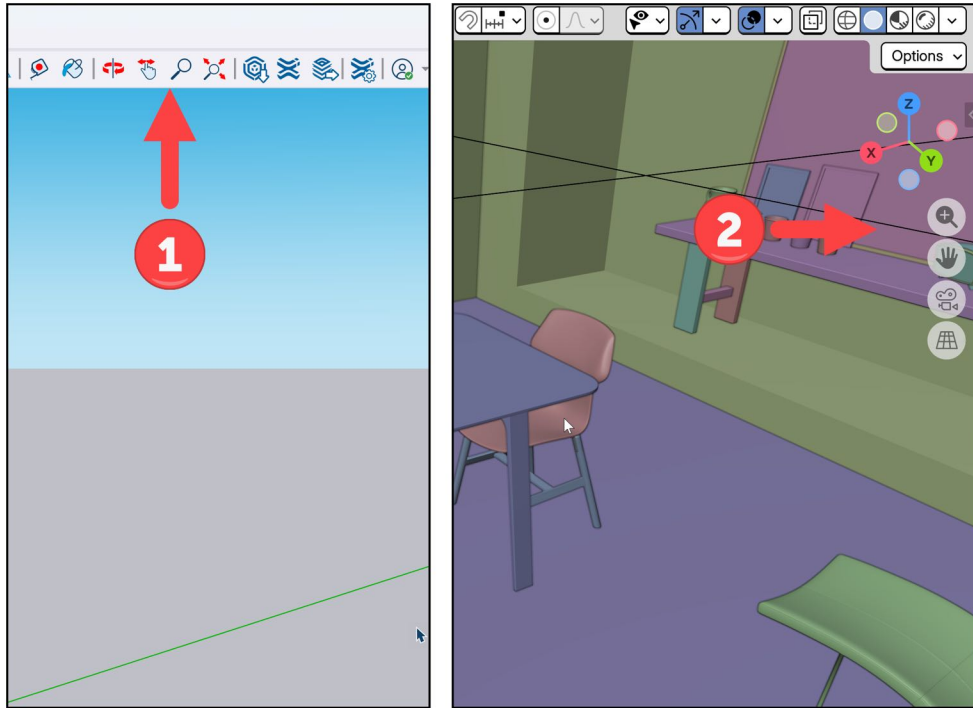


Beyond menus, both applications provide clickable icons for users who prefer visual controls over keyboard shortcuts. These icons offer quick access to common navigation functions without memorizing key combinations.



**Figure 1.19** - Navigation Icons Comparison

In **Figure 1.19**, you can see how navigation icons compare between applications:

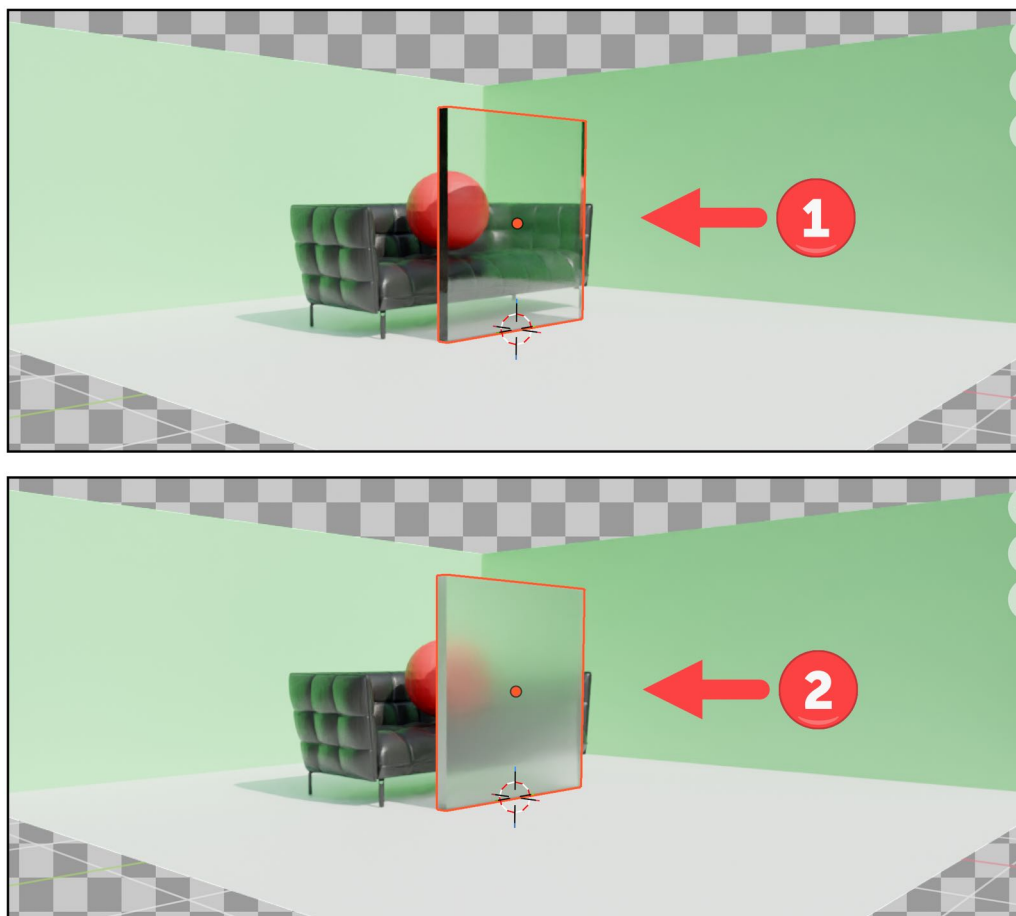
- 1 → In SketchUp, you find navigation icons in the *Getting Started* toolbar. These include tools for *Orbit*, *Pan*, and *Zoom* that you can use to control your view.
- 2 → In Blender, similar icons appear in the top right corner of the *3D Viewport*. The navigation gizmo allows you to orbit by clicking and dragging, while additional icons below provide controls for panning, zooming, camera view, and perspective projection.

The navigation gizmo in Blender provides visual feedback about your current orientation. You can click and drag on this gizmo to orbit the view, or click the axis letters (X, Y, Z) to snap to orthographic views. This gizmo serves as a helpful reference when you feel spatially disoriented in your scene.

4 → For colored glass, adjust the *Base Color*. The color affects light passing through the material.

The *IOR* value determines how much light bends when entering the material. Higher values create more distortion visible through the surface. While the default value of 1.45 works for most glass, adjusting this parameter adds realism for specialized applications.

As you can see from Figure 6.19, applying a glass material and changing the shading mode to *Material Preview* is not enough to produce a true visualization of the material. The same happens with glossy surfaces and reflections. In the example scene, I'm using the sofa model and placing a glass object in front of it.

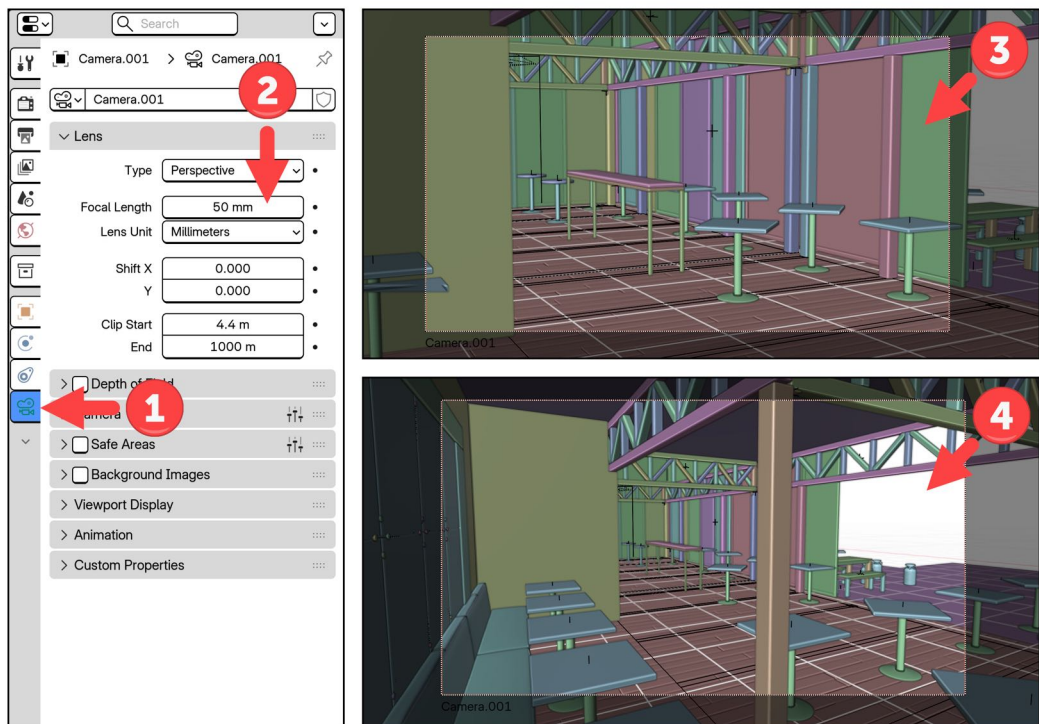


**Figure 6.20** - Comparing different settings for glass

ually positioning the camera, you simply find the view you like and let Blender handle the alignment.

When you press the **Numpad 0** key, you go to the active camera view, where you can see exactly what your render will capture. From this view, you can select the camera border and use transformation keys like **G** and **R** to adjust the camera framing directly. This interactive approach makes it easy to fine-tune your composition while seeing the results in real time.

Selecting the camera will give you access to important settings, including *Focal Length*, which is critical for architecture and interiors. Most interior architecture photography uses wide-angle lenses to capture more of a room in a single frame. Replicating this effect in Blender requires adjusting the *Focal Length* to match real-world camera behavior.



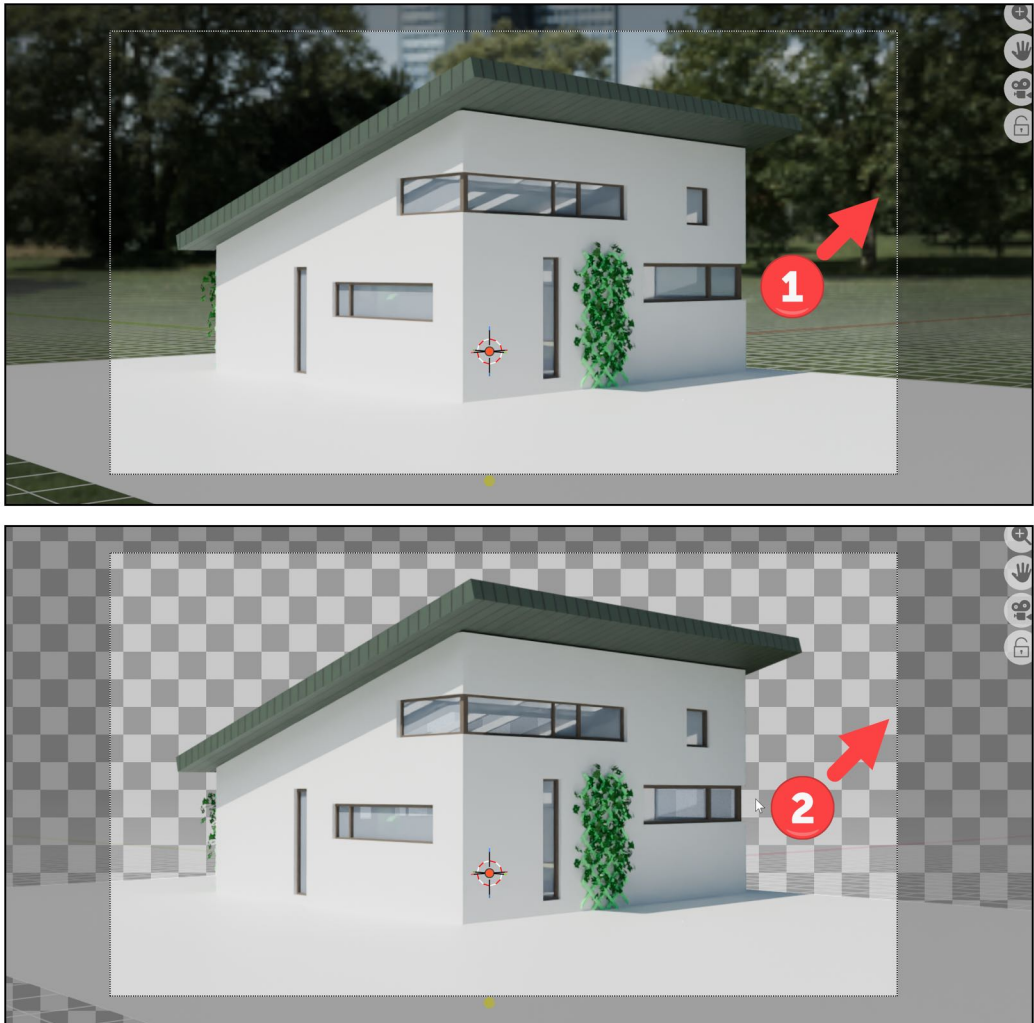
**Figure 8.11** - Camera Focal Length settings

To change the *Focal Length* in cameras, you can follow the steps described by **Figure 8.11**:

**1** → With a camera selected, go to the *Data* tab in the *Properties Editor*.

However, if you prefer to render your scene and composite it with a different background later, you will most likely want to remove the texture from the visible background while keeping its lighting contribution.

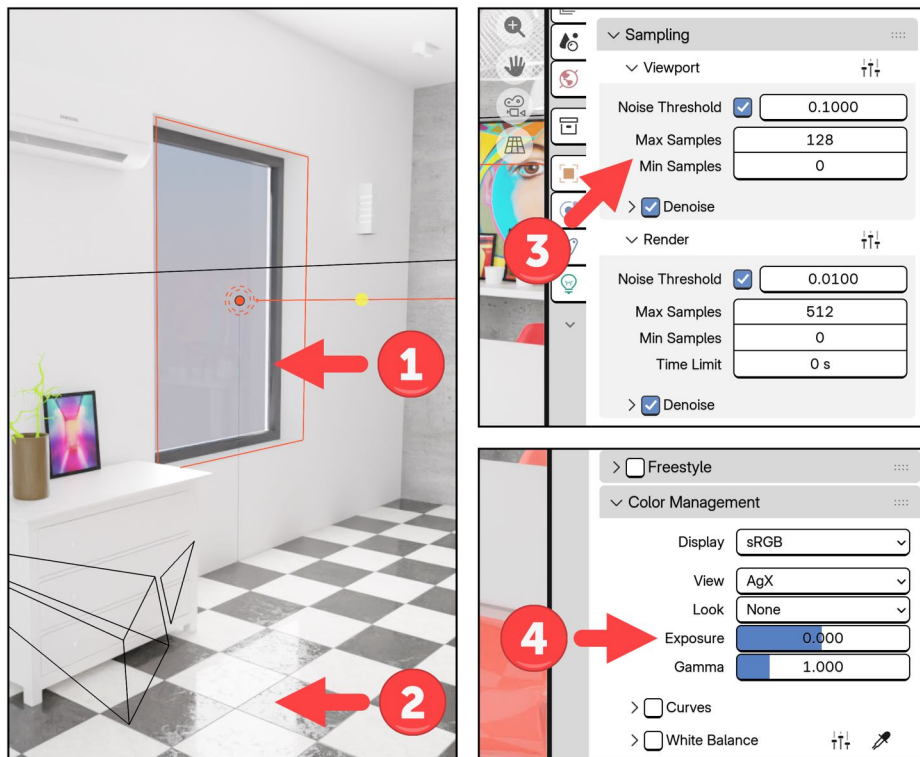
For instance, if you disable the *Camera* option from the *Ray Visibility* and enable the *Transparent* option from the *Render* tab, you remove the texture from the background while maintaining all the lighting benefits. **Figure 8.17** compares the texture appearing in the background (1) versus a transparent background (2).



**Figure 8.17** - Removing the texture in your Render

- 1 → Create an *Area Light* using **Shift+A** and navigate to **Light → Area**. Position the light at a window opening and resize it to fit the window dimensions.
- 2 → If you already have a light in your scene that is not an *Area* type, you can convert it by selecting the light object and using the type selector in the *Properties Editor* to change it to *Area*.
- 3 → Adjust the *Power* value of your light to match the interior scene. Start with moderate values and increase until the illumination looks natural without overexposing the window areas.
- 4 → In the *Shape* field, you can use numeric input to set precise dimensions for this light. This is useful when you need the light to match exact window measurements.

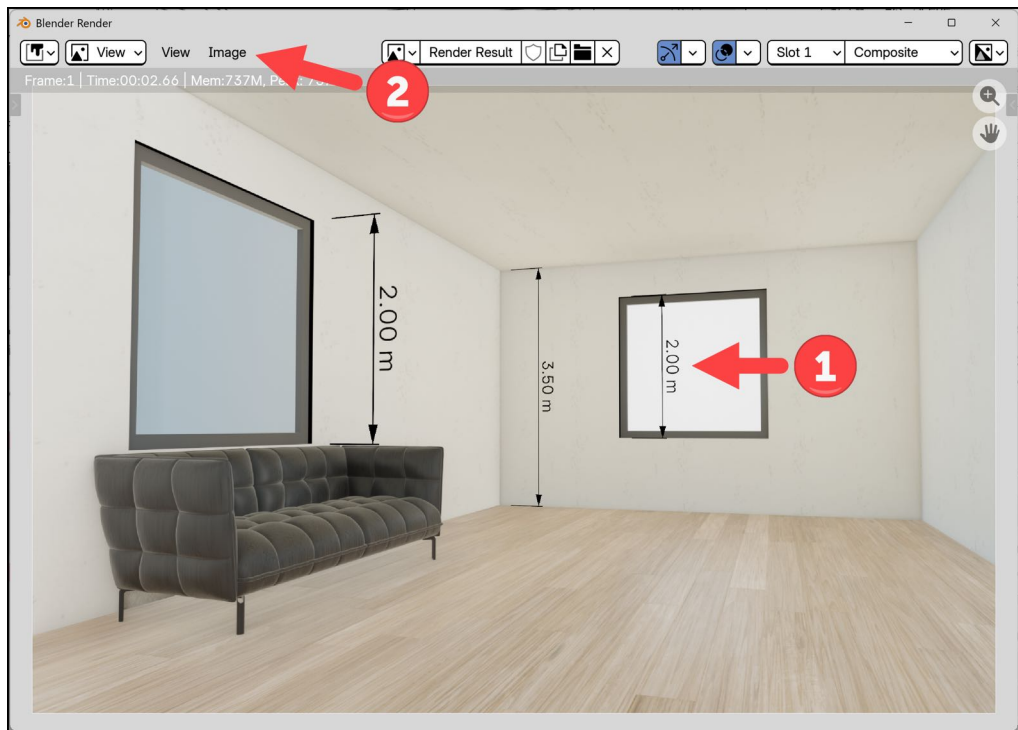
To resize an *Area Light* interactively, you can use the handles at the corners of your light and drag them to change the dimensions. This visual approach works well when you want to match the light size to an existing window opening without calculating exact measurements.



**Figure 8.22** - Rendering with Area Lights

To blend your dimension lines image with the render, you need to add two new nodes. Press **Shift+A** to open the Add menu and create an **Input → Image** node (2). Then add a **Color → Alpha Over** node (3), which handles the transparency blending between two images.

With the *Image* node selected, use the *Open* button to load the annotation image you created from the *MeasureIt-ARCH* render. This is the PNG file with the transparent background containing only your measurements.



**Figure 8.31** - Final render with dimension lines

Now connect the nodes to create the compositing chain. Take the *Image* output from the *Render Layers* node and connect it to the bottom input socket of the *Alpha Over* node, which serves as the background layer. Connect the *Image* output from your annotation *Image* node to the top input socket of the *Alpha Over* node, which serves as the foreground layer. Finally, connect the *Image* output from the *Alpha Over* node to the *Image* input of the *Composite* node. This configuration places the dimension lines on top of your scene render, with the transparent areas allowing the background to show through.

As a result, after pressing the **F12** key to render the scene, you get your dimension lines placed on top of the render output (1)(**Figure 8.31**). The annotations appear crisp and clear