



## 26.2 Editors - Properties Editor - Render Properties Tab

### Table of content

Detailed Table of content.....	1
Render Tab.....	3
Workbench - Performance panel.....	3
Sampling panel.....	3
Lighting panel.....	3
Color panel.....	4
Options panel.....	5
Simplify panel.....	7

### Detailed Table of content

#### Detailed table of content

Detailed Table of content.....	1
Render Tab.....	3
Workbench - Performance panel.....	3
High Quality Normals.....	3
Sampling panel.....	3
Viewport Samples.....	3
Render.....	3
Viewport.....	3
Lighting panel.....	3
Flat.....	3
Studio.....	4
Light library browser.....	4
Rotation.....	4
User Preferences.....	4
Matcap.....	4
User Preferences.....	4
Flip Matcap.....	4
Color panel.....	4
Material.....	5
Object.....	5
Vertex.....	5
Single.....	5
Random.....	5
Texture.....	5
Options panel.....	5
X Ray.....	5
Backface Culling.....	5
Show X-Ray.....	5
X-Ray Alpha.....	5
Shadow.....	6
Shadow Intensity.....	6
Shading Shadow Options.....	6

Cavity.....	6
World.....	6
World Space / Ridge Valley.....	6
Shading Options.....	6
Screen.....	6
Screen Space / Ridge Valley.....	6
Both.....	6
Outline.....	6
Outline Color.....	6
Specular Lighting.....	7
Simplify panel.....	7
Enable.....	7
Viewport.....	7
Max Subdivisions.....	7
Max Child Particles.....	7
Volume Resolution.....	7
Render.....	7
Max Subdivisions.....	7
Max Child Particles.....	7
Grease Pencil.....	8
Playback Only.....	8
Fill.....	8
Modifiers.....	8
Shader Effects.....	8
Layers Tinting.....	8
Antialiasing.....	8

## Render Tab

There are four different render engines available. Workbench, EEVEE, EEVEE (Legacy), and Cycles. This chapter has a focus on the Workbench render engine panels.

### Workbench - Performance panel

#### High Quality Normals

Use high quality tangent space. Slower but more accurate.



### Sampling panel

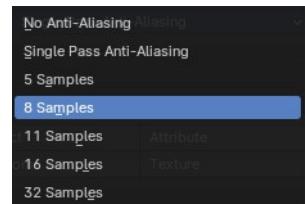
#### Viewport Samples

The number of samples when rendering in the viewport.



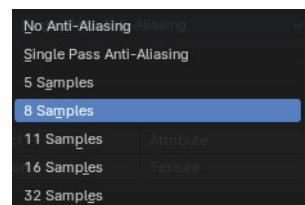
#### Render

The number of antialias samples when rendering to file.



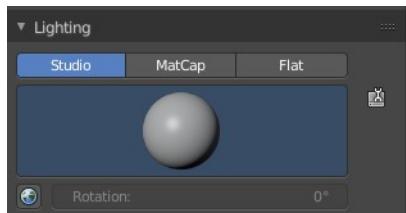
#### Viewport

The number of antialias samples when rendering in viewport.



### Lighting panel

The Workbench renderer uses OpenGL. OpenGL rendering is not influenced by the lights that you place in the workspace. But by a special OpenGL light setup. It can be tweaked in the Lighting panel and the User Preferences.



#### Flat

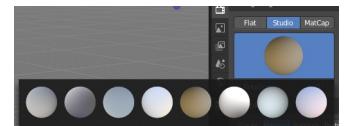
Use a flat lighting.

## Studio

Use a Studio light setup.

### Light library browser

Choose a predefined studio light setup.

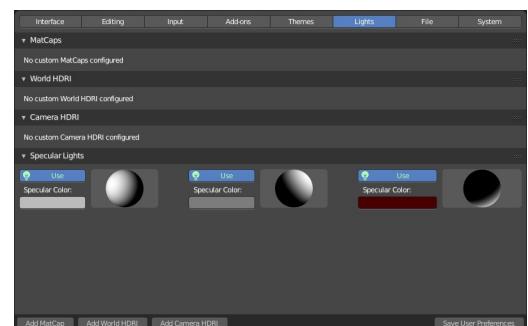


## Rotation

Rotate the studio light setup.

### User Preferences

A click at this button opens up the user preferences where you can add and manage the OpenGL Lights.



## Matcap

Use Matcaps to render the scene.

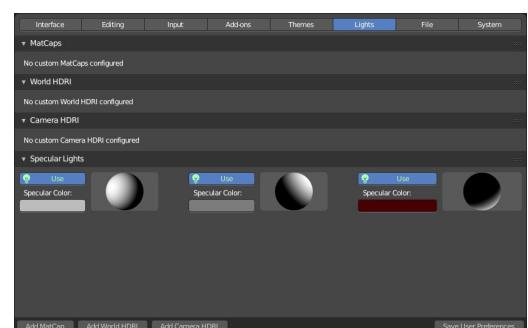


### User Preferences

A click at this button opens up the user preferences where you can add and manage the Matcaps.

### Flip Matcap

Flips the matcap.



## Color panel

Workbench renderer is meant for fast preview display. It does not use materials like Eevee or Cycles. You choose a color instead.

This panel allows you to define the color of the surface of the object. This



settings are also dependent of the chosen lighting.

## Material

Uses the material including textures for the mesh.

## Object

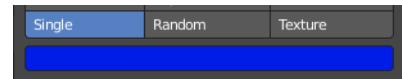
Uses the Object color.

## Vertex

Uses the Vertex color.

## Single

Uses a single color for the selected mesh.



## Random

Uses a random color for the mesh.

## Texture

Renders the texture, and ignores the material settings.

## Options panel

### X Ray

Render the faces transparent.



### Backface Culling

Don't calculate back faces.

### Show X-Ray

Set X-Ray active, and adjust the amount of alpha that is used for the x-ray effect.

Note that you can have either X-Ray or Shadow and Cavity active. Not both at the same time.

### X-Ray Alpha

This slider shows up when you tick Show X Ray. Adjust the intensity.

## Shadow

Render Shadow.



## Shadow Intensity

This slider shows up when you tick Shadow. Adjust the intensity.

## Shading Shadow Options

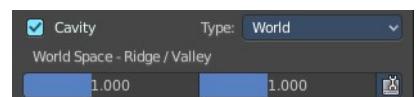
Adjust a shadow shift relative to the light source.

## Cavity

Show Cavity. Cavity highlights ridges and valleys in the scene geometry. Once activated Cavity shows some further settings.

## World

Draw the cavity shading in world space.

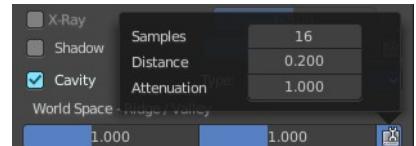


## World Space / Ridge Valley

Factor for the cavity ridges and valleys.

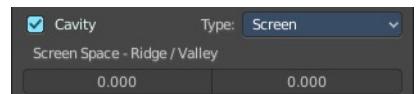
## Shading Options

Adjust samples, distance and attenuation for the cavity ridges and valleys.



## Screen

Draw the cavity shading in Screen space.



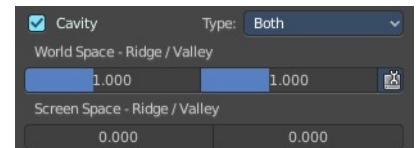
## Screen Space / Ridge Valley

Factor for the curvature ridges and valleys.

## Both

Draw the cavity shading in both, World Space and Screen space.

Settings see above.



## Outline

Show the not selected objects with an outline.

## Outline Color

Define the color of the outline for not selected objects.

## Specular Lighting

Render specular highlights.

## Simplify panel

Sometimes you want to simplify the rendering without to loose the already tweaked settings and adjustments. For test renderings for example. Simplify allows you to set global limits on subdivision, shadow samples and more.

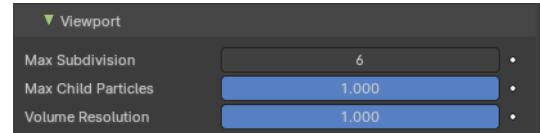


## Enable

In the header is a checkbox to enable Simplify.

## Viewport

This section affects the rendering with cycles in the Viewport.



## Max Subdivisions

Limit the number of maximum subdivisions.

## Max Child Particles

Limit the number of child particles

## Volume Resolution

Simplify volumes by adjusting volume percentage of volume objects in viewport.

## Render

This section affects the final rendering.



## Max Subdivisions

Limit the number of maximum subdivisions.

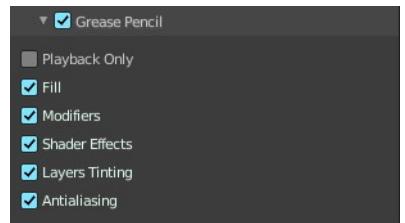
## Max Child Particles

Limit the number of child particles.

## Grease Pencil

### Playback Only

Simplify the grease pencil strokes only during playback.



### Fill

Display Fill strokes in viewport.

### Modifiers

Display Modifiers.

### Shader Effects

Display Shader effects.

### Layers Tinting

Display layer tint.

### Antialiasing

Use antialiasing to smooth stroke edges.