



26.16 Editors - Properties Editor - Texture Properties Tab

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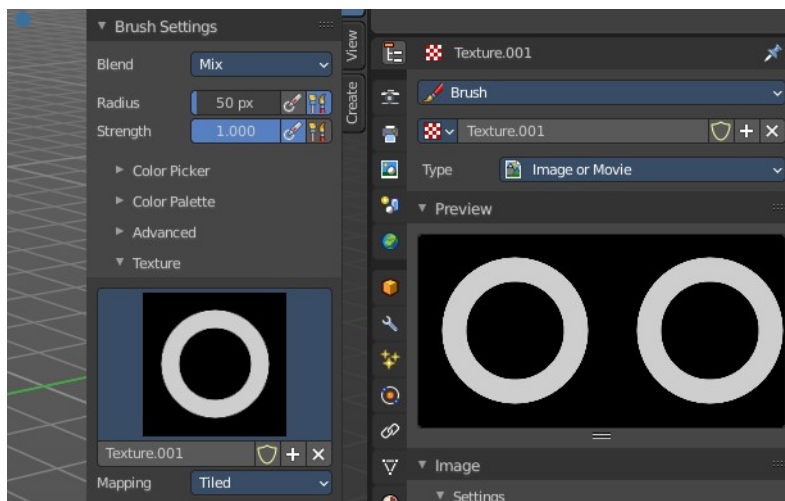
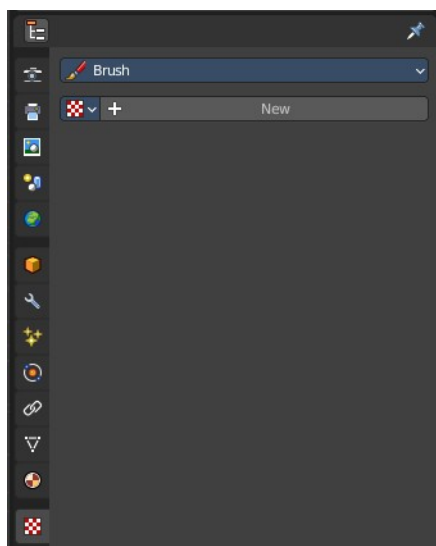
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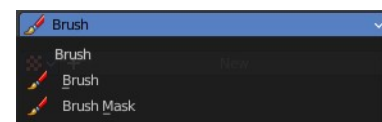
Properties Editor - Texture Tab

In this panel you can create or load textures for the brushes in the image painting modes. Note that with the Workbench renderer you have less options.



Brush drop down box

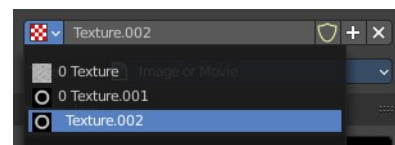
What kind of brush texture you want to create. A brush texture, or a brush mask texture. Brush textures appears in the texture panel of the brush settings. Brush mask textures appears in the texture mask panel of the brush settings.



Texture property

Texture browser

A texture browser with the available textures.



Edit Box

The name of the currently active palette. You can also rename the palette here. A click into the edit box makes the name editable.

Number of users

See how many users the palette currently has.

Fake User

Fake User sets the element to have a fake user. Data without a user is normally not saved. But sometimes you want to force the data to be kept even when the data block has no user.

New Texture

Add a new texture

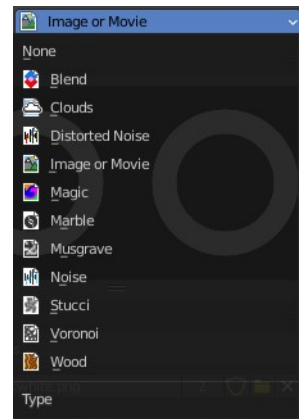
Remove Texture

Removes the texture as the active texture. Note that the texture is still in the list.

Type

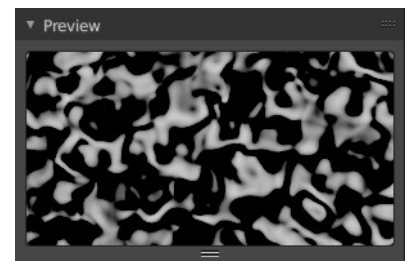
The image type to use. Image or Movie uses pixel based material that you have to load externally. The rest are procedural computer generated textures. Some of them are based at different noise algorithms.

Each texture type has its own settings which will be described below.



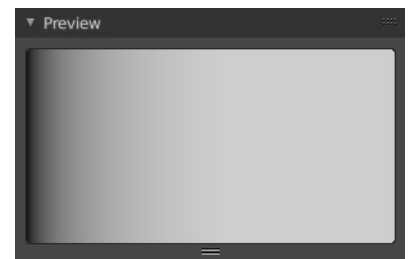
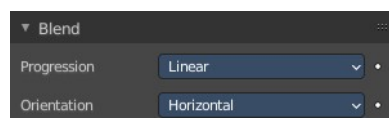
Preview panel

A preview window for the texture.



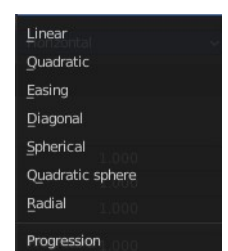
Blend panel

Image Type Blend.



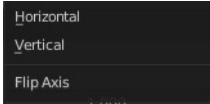
Progression

The style of the color blending.



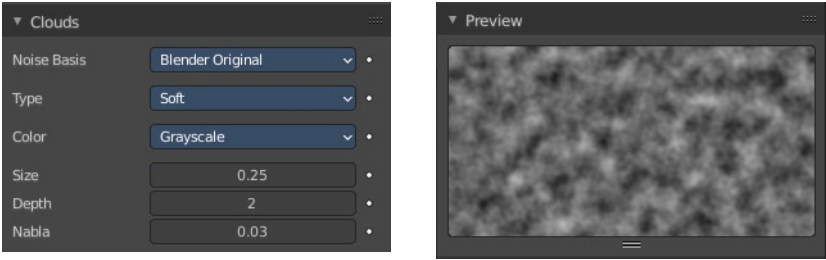
Orientation

The direction. Horizontal or vertical.



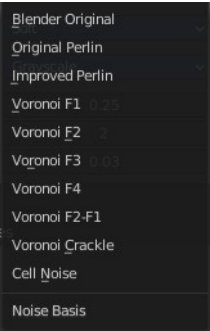
Clouds panel

Image type clouds



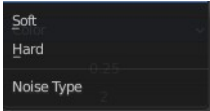
Noise Basis

What noise method to use.



Type

Smooth transitions or sharp transitions. Changes contrast and sharpness.



Color

Grayscale

Grayscale based noise. The value returned is greyscale 8 bit.



Color

The noise gives an RGB value. The value returned is rgb 24 bit.

Size

The dimension of the Noise table.

Depth

The depth of the Clouds calculation. A higher number results in a long calculation time, but also in finer details.

Nabla

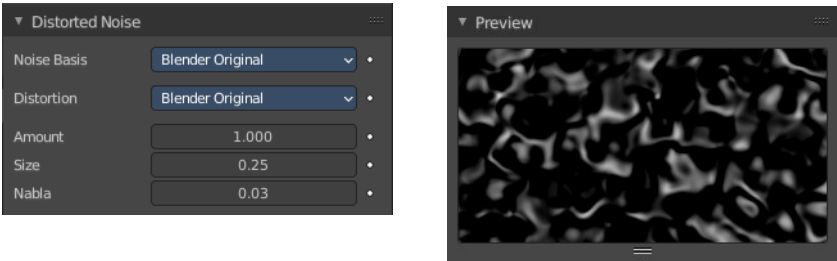
Size of derivate offset used for calculating normal.

In order to calculate a normal, you usually use three samples in texture space. Typically that's the current

sample location, and two other positions in texture U and V directions. This "nabla" value defines how far away these positions are.

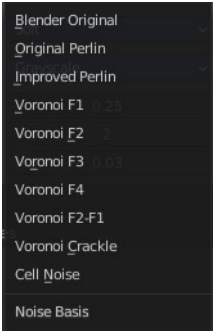
Distorted Noise panel

Image type Distorted Noise



Noise Basis

What noise method to use.



Distortion

What noise method to use for the distortion.



Amount

The amount of distortion.

Size

The dimension of the Noise table.

Nabla

Size of derivate offset used for calculating normal.

In order to calculate a normal, you usually use three samples in texture space. Typically that's the current sample location, and two other positions in texture U and V directions. This "nabla" value defines how far away these positions are.

Image panel - Settings Subpanel

Image type Image or Movie.

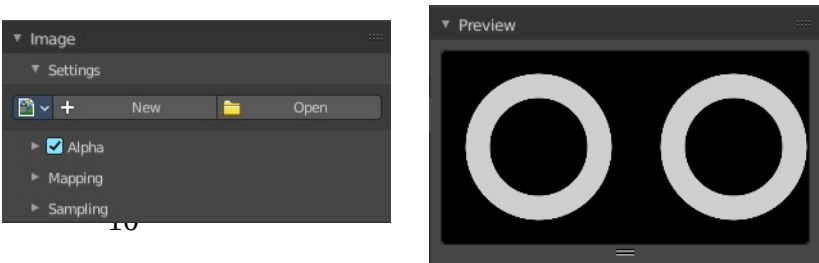
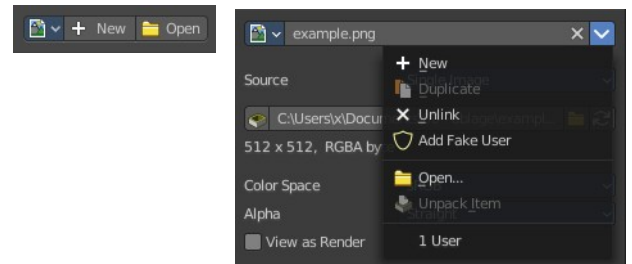


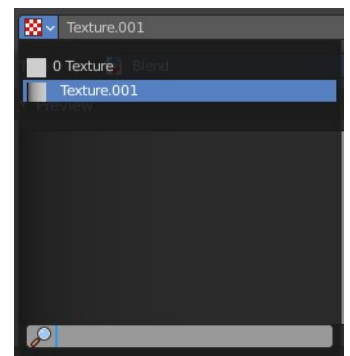
Image Property

Load an image and / or switch to other images.



Texture browser

A texture browser with the available textures.



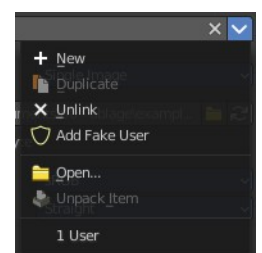
Edit Box

The name of the currently active palette. You can also rename the palette here. A click into the edit box makes the name editable.

Unlink Data-Block

Remove the texture.

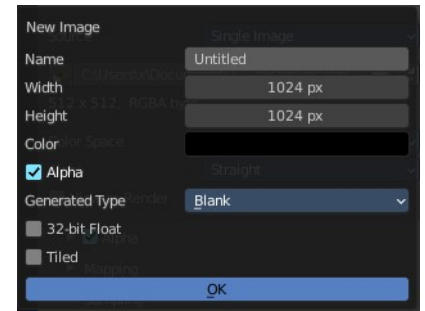
File selector menu



New

Create a new image.

Creates a new image. You will get a dialog where you can define settings for the new image.



Name

The name of the new image

Width

The width of the new image.

Height

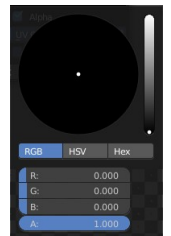
The height of the new image.

Color

Adjust the color of the new image. A click will call a color picker.

Alpha

Check this checkbox if the new image should have an alpha channel.



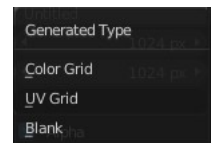
Generated Type

Here you can define what kind of texture you want to create.

Blank is one plain color.

UV Grid is a checker texture in black and white.

Color Grid is a colored checker texture.



32 Bit Float

Check this checkbox if the image should be in 32 Bit floating point bit depth per channel. Else it is in 8 bit per channel.

Duplicate

Not supported here.

Unlink Datablock

This deletes the selected image. Unfortunately not immediately. You need to save the scene and to reload it.

And you need to make sure that it is not linked to anything else. A mesh or a fake user for example. Have a look if there is a number besides the F button. When this is the case then the image has still a user, and so still loads with loading the scene.

Fake User

With this button you assign a fake user to this selected image.

Data, like images, that is not longer linked to anything else gets removed when you save and reload a scene. Bforartists has the concept of fake users to go around this behavior. An image with a fake user is in fact linked to something. And so it is not lost when you save and reload the scene.

Open Image

Opens the file browser to load an image.

Unpack

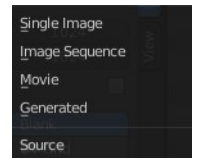
Unpack packed files to a directory.

User

The number of users that uses this data. Data with a user number of 0 will be removed with closing Bforartists.

Source

Choose the image type. This type gets usually automatically set. When you create a new image, then this image is generated. When you load an image then the Source switches to Single Image.



Generated images does not have a path.

Source Type Generated

X / Y

The image width and height.

Float Buffer

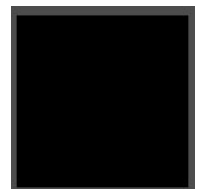
Use a floating point buffer. 8 Bit images uses integers. 32 Bit works with floats.

Generated Type Blank

This type displays an image with one blank color

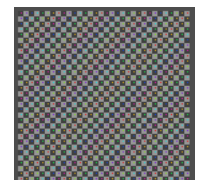
Color

The color of the blank image.



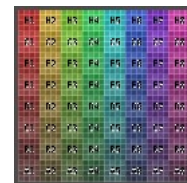
Generated Type UV Grid

This type displays a with a black and white checker texture but colored dots.



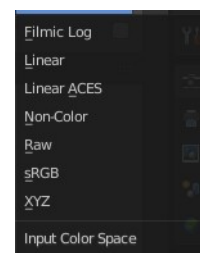
Generated Type Color Grid

This type displays a with a colored checker texture with numbers.



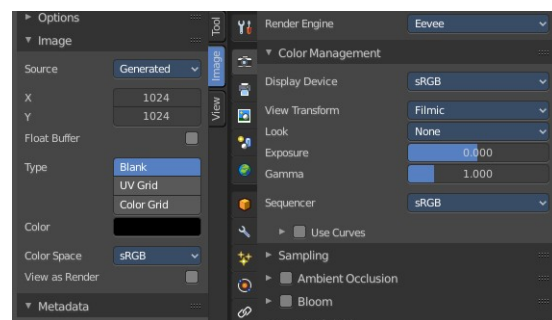
Color Space

Choose the color space type for the image.

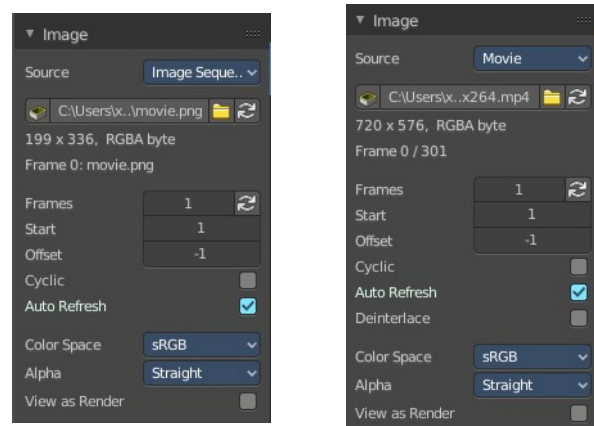


View as Render

Displays the image with the color management settings.



Source Type Movie + Image Sequence



Path edit box



Pack

With this button you can pack the movie or the image sequence into the blend file. It gets packed when you

save the blend file the next time.

Path edit box

See and edit the path to your movie or image sequence files.

Open

Open a new movie or image sequence files. A file dialog will appear.

Refresh

Reread the movie or image sequence files.

Info string

Some information about the currently loaded movie. Frames, resolution and color space.

Frames

The number of frames of the movie or image sequence.

Match Movie Length

Set Users Image Length to the one of this video.

Start

The start frame of the movie or image sequence

Offset

Offset the number of the frame to use in the animation. -1 means off.

Cyclic

Cycle the images in the movie.

Auto Refresh

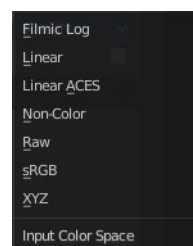
Always refresh image on frame changes.

Deinterlace

Deinterlace the movie file on load.

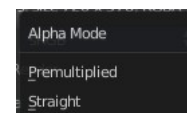
Color Space

Choose the color space type for the movie or image sequence files.



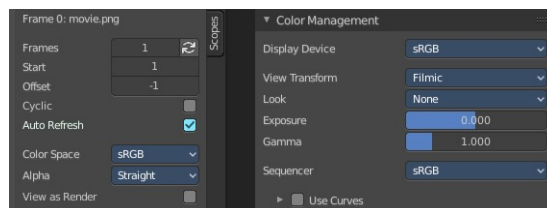
Alpha

Choose the alpha channel mode. Straight or Premultiplied.



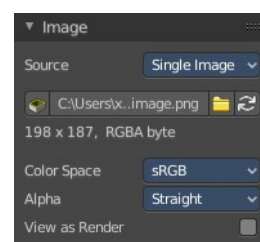
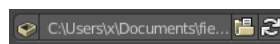
View as Render

Display the image with using the color management settings.



Source Type Single Image

Path edit box



Pack

With this button you can pack the movie or the image sequence into the blend file. It gets packed when you save the blend file the next time.

Path edit box

See and edit the path to your movie or image sequence files.

Open

Open a new movie or image sequence files. A file dialog will appear.

Refresh

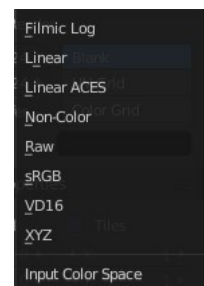
Reread the movie or image sequence files.

Info string

Some information about the currently loaded image. Resolution and color space.

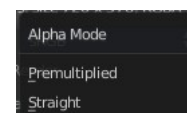
Color Space

Choose the color space type for the movie or image sequence files.



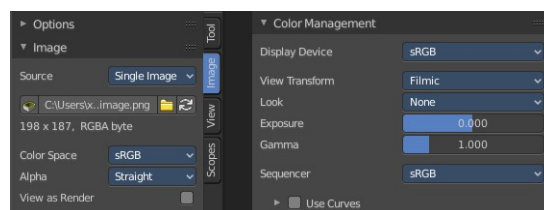
Alpha

Choose the alpha channel mode. Straight or Premultiplied.



View as Render

Display the image with using the color management settings.



Source Type Udim

UDIM is an enhancement to the UV mapping and texturing workflow. And does not belong here. But in the UV Editor. It is just in the list because it shares the same menus with the UV Editor.



Image panel - Alpha Subpanel

Use the Alpha channel that is stored in the image.

Calculate

Calculate an alpha based on the RGB values of the Image. Black (0, 0, 0) is transparent, white (1, 1, 1) opaque.

Enable this option if the image texture is a mask. Note that mask images can use shades of gray that result in semi-transparency, like ghosts, flames, and smoke/fog.

Invert

Reverses the alpha value. Use this option if the mask image has white where you want it transparent and vice versa.

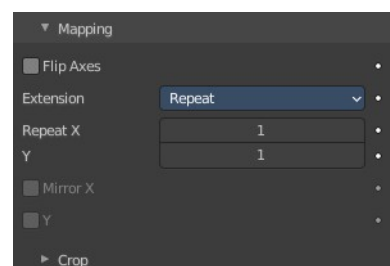


Image panel - Mapping Subpanel

Control how the image is mapped or projected onto the 3D model.

Flip Axes

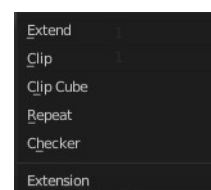
Rotates the image 90 degrees counterclockwise when rendered.



Extension

Extend

Outside the image the colors of the edges are extended.



Clip

Clip to image size and set exterior pixels as transparent. Outside the image, an alpha value of 0.0 is returned. This allows you to 'paste' a small logo on a large object.

Clip Cube

Clips to cubic-shaped area around the images and sets exterior pixels as transparent. The same as Clip, but now the 'Z' coordinate is calculated as well. An alpha value of 0.0 is returned outside a cube-shaped area around the image.

Repeat

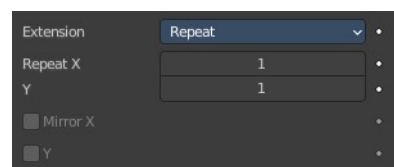
The image is repeated horizontally and vertically.

Repeat X / Y

X/Y repetition multiplier.

Mirror X / Y

Mirror on X/Y axes. These buttons allow you to map the texture as a mirror, or automatic flip of the image, in the corresponding X and/or Y direction. They become active when the Repeat value is higher than 1.



Checker

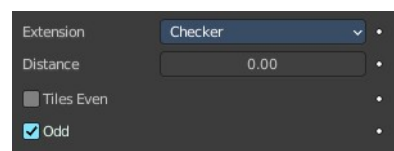
Checkerboards quickly made. You can use the option size on the Mapping panel as well to create the desired number of checkers.

Distance

Governs the distance between the checkers in parts of the texture size.

Tiles Even / Odd

Set even/odd tiles.



Crop Sub tab

Crop Minimum X / Y + Crop Maximum X / Y

The offset and the size of the texture in relation to the texture space. Pixels outside this space are ignored. Use these to crop, or choose a portion of a larger image to use as the texture.



Image panel - Sampling Subpanel

Interpolation

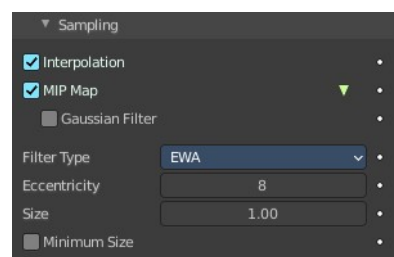
Interpolate pixels using selected filter type.

MIP Map

Use auto generated MIP maps.

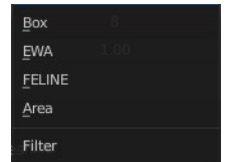
Gaussian Filter

Use Gauss filter to sample down the mip map images.



Filter Type

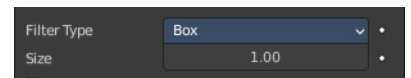
The texture filter to use for sampling images.



Type Box

Size

Multiply the filter size used by MIP map and interpolation.



Type EWA

Eccentricity

Maximum eccentricity. Higher values gives less blur at distance angles and is slower.

Size

Multiply the filter size used by MIP map and interpolation.



Type FELINE

Light Probes

Maximum number of samples. Higher values gives less blur at distance angles and is slower.

Size

Multiply the filter size used by MIP map and interpolation.



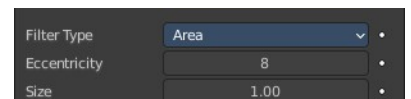
Type Area

Eccentricity

Maximum eccentricity. Higher values gives less blur at distance angles and is slower.

Size

Multiply the filter size used by MIP map and interpolation.



Minimum Size

Use the filter size as a minimal filter value.

Magic panel

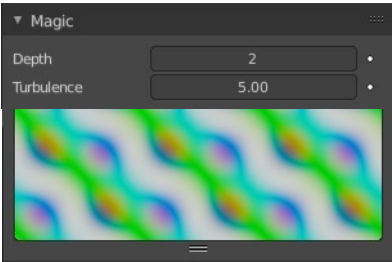
Image type Magic.

Depth

The depth of the calculation. A higher number results in a long calculation time, but also in finer details.

Turbulence

The strength of the pattern.



Marble panel

Image type Marble.

Noise Basis

What noise method to use.

Pattern

Settings for soft to more clearly defined Marble.

Second basis

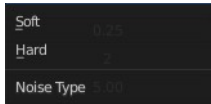
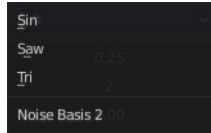
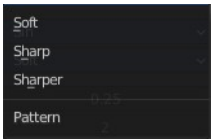
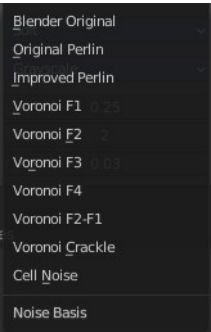
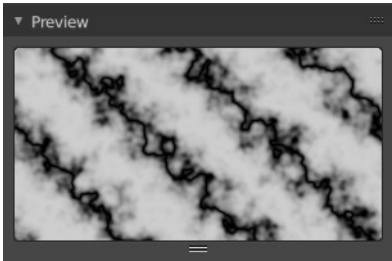
Shape of wave to produce bands.

Type

The noise function works with two methods. Soft or hard.

Size

The dimensions of the noise table.



Depth

The depth of the Marble calculation. A higher value results in greater calculation time, but also in finer details.

Turbulence

The turbulence of the sine bands.

Nabla

Size of derivate offset used for calculating normal.

In order to calculate a normal, you usually use three samples in texture space. Typically that's the current sample location, and two other positions in texture U and V directions. This "nabla" value defines how far away these positions are.

Musgrave panel

Image type Musgrave.

Noise Basis

What noise method to use.

Type

What noise type to use.

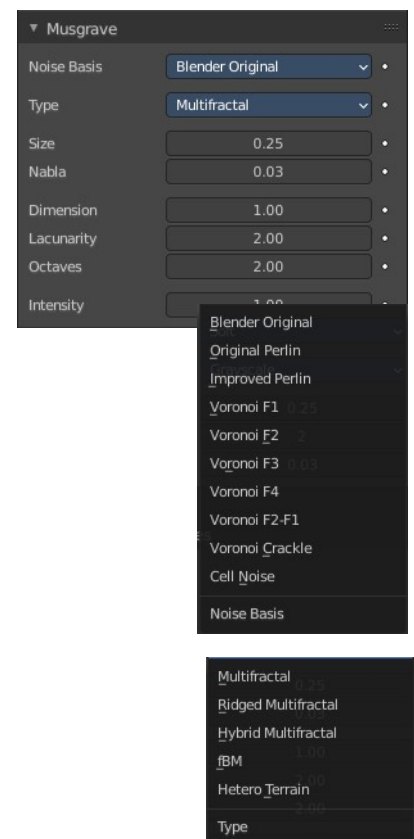
Size

The input noise scale.

Nabla

Size of derivate offset used for calculating normal.

In order to calculate a normal, you usually use three samples in texture space. Typically that's the current sample location, and two other positions in texture U and V directions. This "nabla" value defines how far away these positions are.



Dimension

Fractal dimension controls the contrast of a layer relative to the previous layer in the texture. The higher the fractal dimension, the higher the contrast between each layer, and thus the more detail shows in the texture.

Lacunarity

Lacunarity controls the scaling of each layer of the Musgrave texture, meaning that each additional layer will have a scale that is the inverse of the value which shows on the button. i.e. Lacunarity = 2 → Scale = 1/2 original.

Octaves

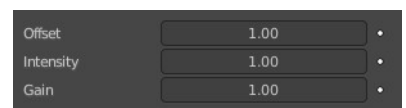
Octave controls the number of times the original noise pattern is overlayed on itself and scaled/contrasted with the fractal dimension and lacunarity settings.

Intensity

Light intensity. Called Offset for Hetero Terrain.

Offset

Hybrid Multifractal and Ridged Multifractal type. Both have a “Fractal Offset” button that serves as a “sea level” adjustment and indicates the base height of the resulting bump map. Bump values below this threshold will be returned as zero.

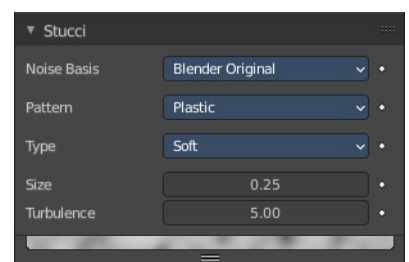


Gain

Hybrid Multifractal and Ridged Multifractal type. Setting which determines the range of values created by the function. The higher the number, the greater the range. This is a fast way to bring out additional details in a texture where extremes are normally clipped off.

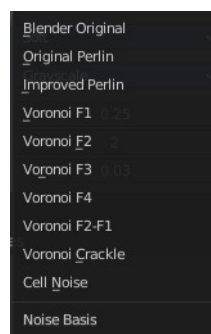
Stucci panel

Image type Stucci.



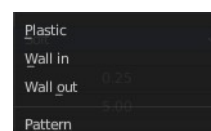
Noise Basis

What noise method to use.



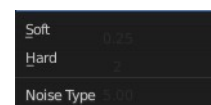
Pattern

Plastic is the standard Stucci, while the “walls” is where Stucci gets its name. This is a typical wall structure with holes or bumps.



Type

There are two methods available for working with Noise. Soft or Hard.



Size

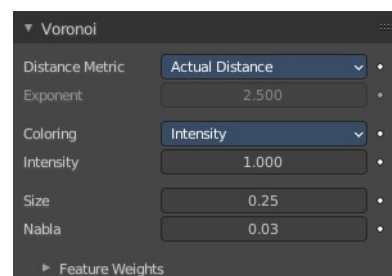
Dimension of the Noise table.

Turbulence

Depth of the Stucci calculations.

Voronoi panel

Image type Voronoi.



Distance Metric

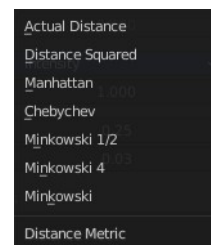
This procedural texture has seven Distance Metric options. These determine the algorithm to find the distance between cells of the texture.

Exponent

The Minkowski setting has a user definable value (the Exponent button) which determines the Minkowski exponent e of the distance function.

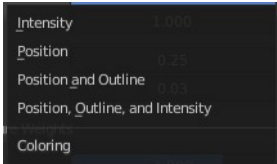
$$(x^e + y^e + z^e)^{1/e}$$

A value of one produces the Manhattan distance metric, a value less than one produces stars (at 0.5, it gives a Minkowski 1/2), and higher values produce square cells (at 4.0, it gives a Minkowski 4, at 10.0, a Chebychev). So nearly all Distance Settings are basically the same – a variation of Minkowski.



Coloring

Different ways to calculate color and intensity of the texture output.



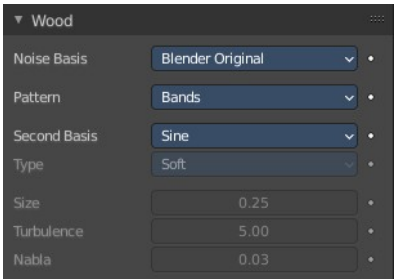
Feature Weights subpanel

These four sliders at the bottom of the Voronoi panel represent the values of the four Worley constants, which are used to calculate the distances between each cell in the texture based on the distance metric.



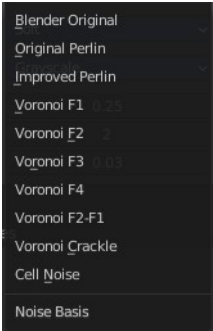
Wood panel

Image type Wood.



Noise Basis

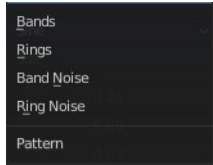
What noise method to use.



Pattern

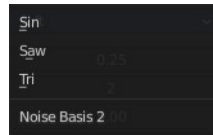
The wood pattern.

Type, Size Turbulence and Nabla are just active with Pattern Type Band Noise and Ring Noise.



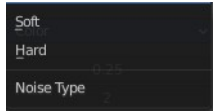
Second basis

Shape of wave to produce bands.



Type

Smooth transitions or sharp transitions. Changes contrast and sharpness.



Turbulence

The turbulence of band noise and ring noise.

Nabla

Size of derivate offset used for calculating normal.

In order to calculate a normal, you usually use three samples in texture space. Typically that's the current sample location, and two other positions in texture U and V directions. This "nabla" value defines how far away these positions are.

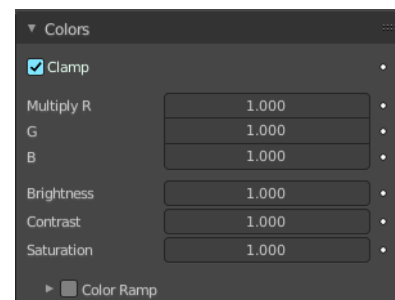
Colors Panel

Clamp

Clamps the range by setting the negative rgb and intensity values to zero.

Multiply R G B

Multiply factor for the r g and b channel.



Brightness

The brightness of the texture.

Contrast

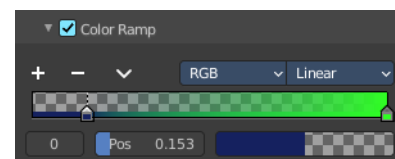
The contrast of the texture.

Saturation

The saturation of the texture.

Color ramp subpanel

Specify a range of colors based on color stops. The color between the color stops gets interpolated.



+

Add a stop to your color ramp. The stop will be added after the selected one, in the middle to the next one.

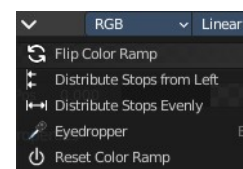
-

Deletes the selected color stop from the list.

Tools menu

Flip Color Ramp

Flips the gradient, inverting the values of the color ramp.



Distribute Stops from Left

Rearrange the stops so that every step has the same space to the right.

Distribute Stops Evenly

Space between all neighboring stops becomes equal.

Eyedropper (pipette icon) E

An Eyedropper to sample a color or gradient from the interface to be used in the color ramp.

Reset Color Ramp

Resets the color ramp to its default state.

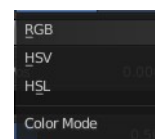
Color Mode

RGB

Blends color by mixing each color channel and combining.

HSV/HSB

Blends colors by first converting to HSV or HSL, mixing, then combining again. This has the advantage of maintaining saturation between different hues, where RGB would de-saturate, this allows for a richer gradient.



Interpolation

Ease

Uses an Ease Interpolation for the color stops.

Cardinal

Uses a Cardinal Interpolation for the color stops.

Linear

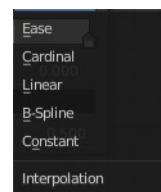
Uses a Linear Interpolation for the color stops.

B-Spline

Uses a B-Spline Interpolation for the color stops.

Constant

Uses a Constant Interpolation for the color stops.



Color Ramp

The color band. A click at one of the color stops makes it the active one. You can move the color stops by clicking at them and dragging them around.



Active Color Stop elements

Adjust the active color stop.

Choose active color stop

Choose the color stop by index.



Pos

The position of the active color stop. The range goes from 0.000 to 1.000

Color

The color of the active color stop. Clicking at it opens a color picker.

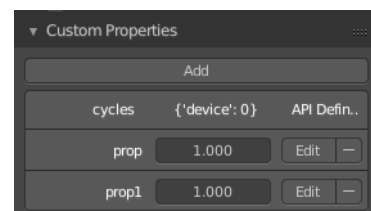
Custom Properties Panel

Allows to define custom properties that can be used for scripting.

Here you might also find custom properties from addons or scripts.

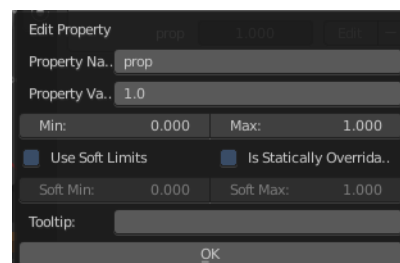
Add

Adds a new property.



Edit

Opens a panel where you can adjust the settings for the custom property.



Remove

Removes the property.