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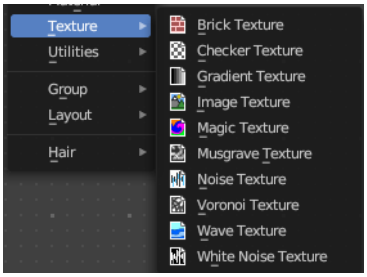
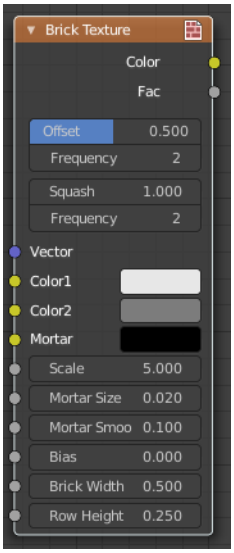
Texture nodes.



Brick Texture



The Brick Texture node is used to add a procedural brick texture.

Inputs

Color 1, Color 2 and Mortar

Color of the bricks and mortar.

Scale

Overall texture scale.

Mortar Size

The size of the filling between the bricks known as “mortar”; 0 means no mortar.

Mortar Smooth

Blurs/softens the edge between the mortar and the bricks. This can be useful with a texture and displacement textures.

Bias

The color variation between Color 1/2. Values of -1 and 1 only use one of the two colors; values in between mix the colors.

Brick Width

The width of the bricks.

Row Height

The height of the brick rows.

Properties

Offset

Determines the brick offset of the various rows.

Frequency

Determines the offset frequency. A value of 2 gives an even/uneven pattern of rows.

Squash

Amount of brick squashing.

Frequency

Brick squashing frequency.

Outputs

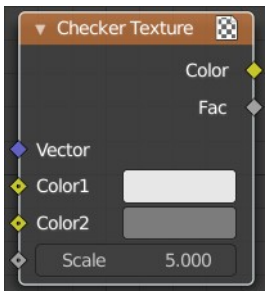
Color

Texture color output.

Factor

Mortar mask (1 = mortar).

Checker Texture



Adds a checker texture.

Inputs

Vector

Vector input.

Color 1

The first checker color.

Color 2

The second checker color.

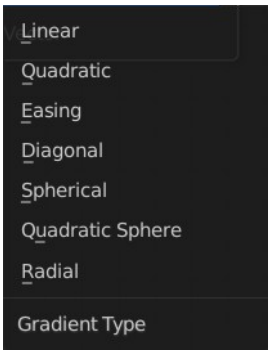
Scale

The scale of the checker texture.

Properties

Gradient Type

What gradient type to use.



Output

Color

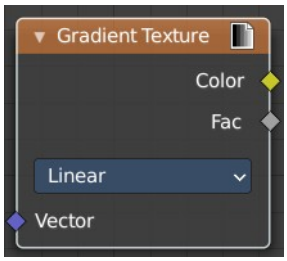
The checker texture output.

Factor

Factor output.

Gradient Texture

Add a gradient texture.



Inputs

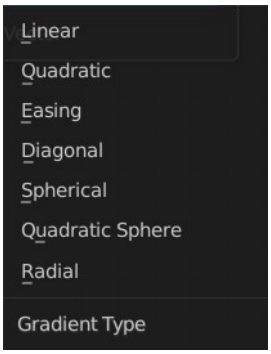
Vector

Vector input.

Properties

Gradient Type

What gradient type to use.



Output

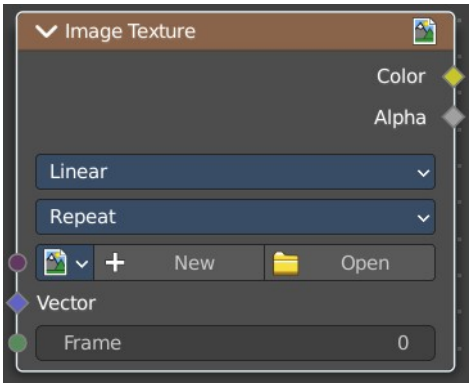
Factor

Factor output.

Color

Color output.

Image Texture



The Image Texture is used to add an image file as a texture.

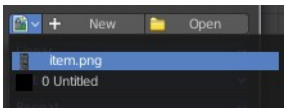
Inputs

Image

The Image input. Open an image, choose an existing image, or generate a new image.

When you click at Open then a file browser opens up. When you click at New then a popup dialog opens. up where you can create a new image.

Image Browser



The image browser at the left allows you to pick an already existing texture.

New/Open

Create a new image, or open an image.

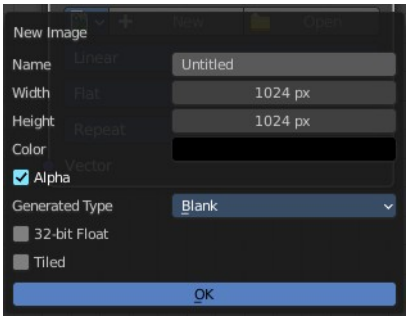
Image Edit Box

The name of the image.

Fake User

Keep the texture in the blend file even if it is not used.

New Image



Create a new image.

The settings of this image can be further adjusted in the sidebar of the UV Editor.

Open Image

Open an image.

Remove

Remove the image. Note that it is still in the blend file as long as it has users, and as long as you haven't purged it. By saving and reloading the blend file for example.

Vector

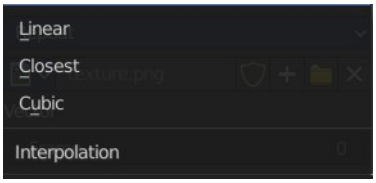
Texture coordinate for texture look-up. If this socket is left unconnected, UV coordinates from the active UV render layer are used.

Frame

The frame of an image sequence, if available.

Properties

Interpolation



Method to scale images up or down for rendering.

Linear

Regular quality interpolation.

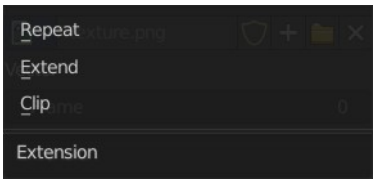
Closest

No interpolation, use only closest pixel for rendering pixel art.

Cubic

Smoother, better quality interpolation. For bump maps this should be used to get best results.

Extension



Extension defines how the image is extrapolated past the original bounds:

Repeat

Will repeat the image horizontally and vertically giving tiled-looking result.

Extend

Will extend the image by repeating pixels on its edges.

Clip

Clip to the original image size and set all the exterior pixels values to transparent black.

Outputs

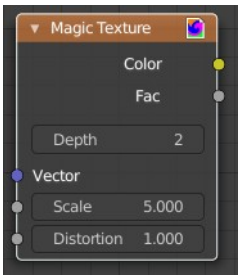
Color

RGB color from image. If the image has alpha, the color is premultiplied with alpha if the Alpha output is used, and unpremultiplied or straight if the Alpha output is not used.

Alpha

Alpha channel from image.

Magic Texture



The Magic Texture node is used to add a procedural psychedelic color texture.

Inputs

Vector

Texture coordinate to sample texture at; defaults to Generated texture coordinates if the socket is left unconnected.

Scale

Scale of the texture.

Distortion

Amount of distortion.

Properties

Depth

Number of iterations.

Outputs

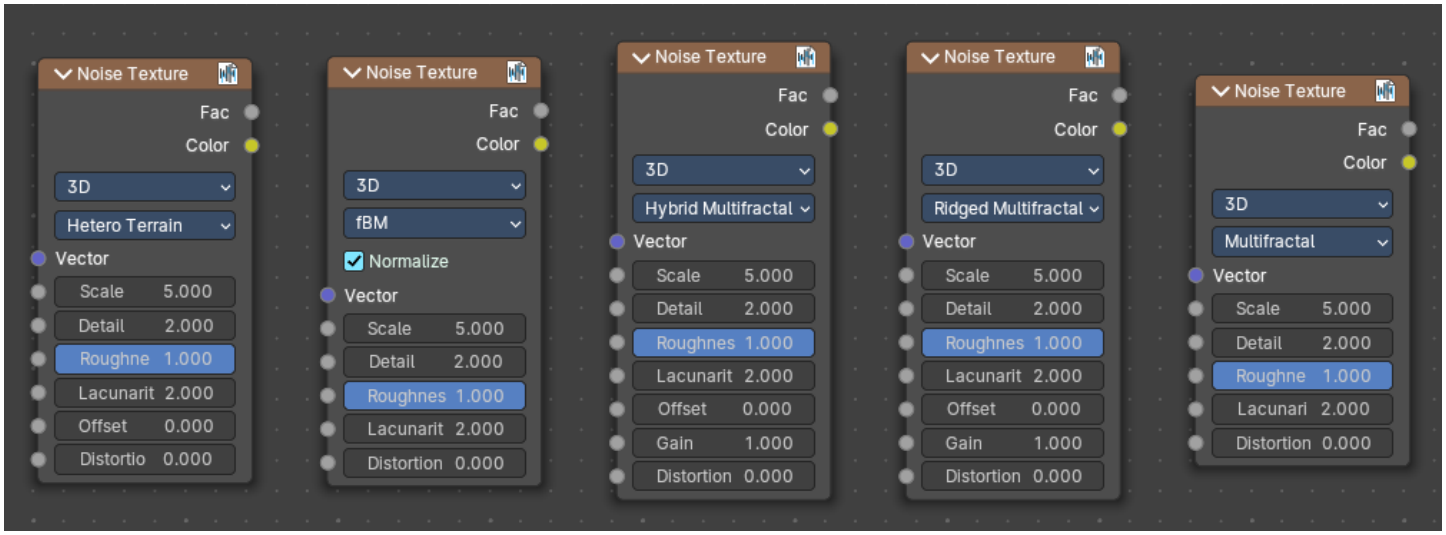
Color

Texture color output.

Factor

Texture intensity output.

Noise Texture



The Noise Texture node evaluates a fractal Perlin noise at the input texture coordinates. This nodes allows great control over how noise octaves are combined.

Inputs

The inputs are dynamic, they become available if needed depending on the node properties.

Vector

Texture coordinate to evaluate the noise at; defaults to Generated texture coordinates if the socket is left unconnected.

Normalize

Normalize the output to the 0 - 1 range.

W

Texture coordinate to evaluate the noise at. Appears with 4 dimensions.

Scale

Scale of the base noise octave.

Detail

Number of noise octaves. The fractional part of the input is multiplied by the magnitude of the highest octave. Higher number of octaves corresponds to a higher render time.

Roughness

Adds a roughness noise.

Lacunarity
The scale of a perlin noise octave relative to the perlin noise octave from the previous octave.

Offset
An added offset to each octave, determines the level where the highest octave will appear.

Gain
An extra multiplier to tune the magnitude of octaves.

Distortion
Amount of distortion.

Properties

Dimensions

The dimensions of the space to evaluate the noise in.

1D
Evaluate the noise in 1D space at the input W.

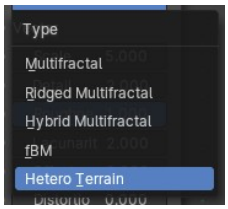
2D
Evaluate the noise in 2D space at the input Vector. The Z component is ignored.

3D
Evaluate the noise in 3D space at the input Vector.

4D
Evaluate the noise in 4D space at the input Vector and the input W as the fourth dimension.

Type

Type of the perlin noise texture.



Multifractal
The result is more uneven (varies with location), more similar to a real terrain. Uses a multiplicative cascade.

Ridged Multifractal
Creates sharp peaks. Calculates the absolute value of the noise, creating “canyons”, and then flips the surface upside down.

Hybrid Multifractal
Creates peaks and valleys with different roughness values, like real mountains rise out of flat plains. Combines the additive cascade with a multiplicative cascade.

fBM (fractal Brownian Motion)

Produces an unnatural homogeneous and isotropic result. Uses an additive cascade, the values are simply added together.

Hetero Terrain (Heterogeneous Terrain)

Similar to Hybrid Multifractal creates a heterogeneous terrain, but with the likeness of river channels.

Outputs

Factor

Value of fractal noise.

Color

Color with different fractal noise in each component.

Voronoi Texture

Add a voronoi texture.

Inputs

Vector

Vector input

Scale

The scale of the voronoi texture.

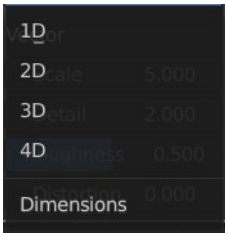
Randomness

The detail of the voronoi texture.

Properties

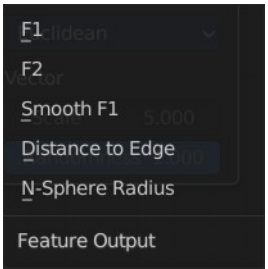
Dimensions

How many dimensions to use for the voronoi texture.



Feature Output

Feature output mode.



F1

Computes the distance to the closest point as well as its position and color.

F2

Computes the distance to the second closest point as well as its position and color.

Smooth F1

Smoothed version of F1.Weighted sum of neighbor voronoi cells.

Distance to Edge

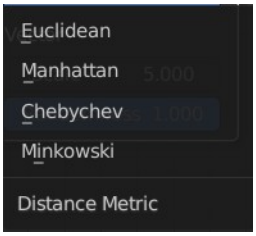
Computes the distance to the edge of the voronoi cell.

N-Sphere Radius

Computes the radius of the n-sphere inscribed in the voronoi cell.

Distance Metric

Distance calculation mode. The modes are different mathematical methods.



Output

Factor

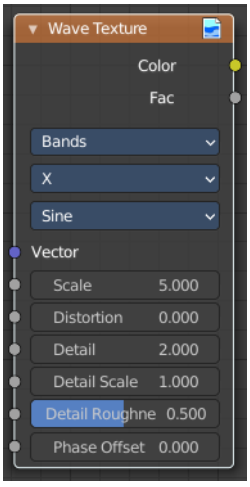
Factor output.

Color

Color output.

Wave Texture

The Wave Texture node adds procedural bands or rings with noise distortion.



Inputs

Vector

Texture coordinate to sample texture at; defaults to Generated texture coordinates if the socket is left unconnected.

Scale

Overall texture scale.

Distortion

Amount of distortion of the wave (similar to the Marble texture in Blender Internal).

Detail

Amount of distortion noise detail.

Detail Scale

Scale of distortion noise.

Detail Roughness

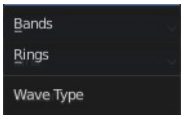
Adds a roughness noise.

Phase Offset

Set an offset for the phase.

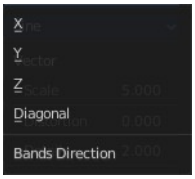
Properties

Wave Type



Bands or Rings shaped waves.

Bands direction



In which direction the bands should point.

Wave Profile

Controls the shape and look of the wave type.

Saw

Uses a saw tooth profile.

Sine

Uses the standard sine profile.

Triangle

Uses a triangle shape.

Outputs

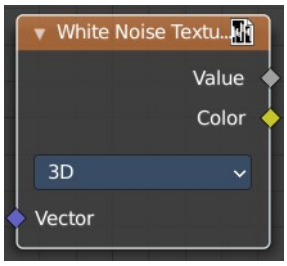
Color

Texture color output.

Factor

Texture intensity output.

White Noise Texture



Add a white noise texture.

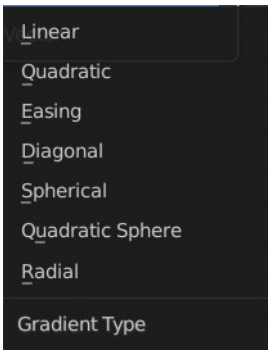
Inputs

Vector

Vector input.

Properties

Gradient Type



What gradient type to use.

Output

Vector

Factor output.

Color

Color output.