



## 26.14.7 Editors - Properties Editor - Object Data Properties Tab - Grease Pencil Object

### Table of content

Detailed table of content.....	2
Layers panel.....	5
Layer list.....	5
Add new layer.....	5
Remove layer.....	5
Layer Specials.....	6
Move Grease Pencil Layer up or down.....	6
Isolate Layer.....	6
Isolate Layer.....	6
Blend.....	7
Opacity.....	7
Use Lights.....	7
Autolock inactive layer.....	7
Disallow Locked Materials Editing.....	7
Layers panel - Masks subpanel.....	7
List view.....	7
Add.....	7
Subtract.....	8
Move Up / Down.....	8
Layers panel - Transform subpanel.....	8
Layers panel - Adjustment subpanel.....	8
Tint Color.....	8
Stroke Thickness.....	8
Layers panel - Relations subpanel.....	8
Parent.....	8
Type.....	9
Bone.....	9
Pass Index.....	9
View Layer.....	9
Layers panel - Display subpanel.....	9
Custom Channel Color.....	9
Show Only On Keyframed.....	9
Onion Skinning Panel.....	9
Mode.....	10
Opacity.....	10
Filter By Type.....	10
Keyframes Before/After.....	10
Custom Colors.....	10
Display.....	10
Vertex groups panel.....	11
Active Vertex Group list.....	11
Add +.....	11
Remove -.....	12
Move Vertex Group Up.....	12
Move Vertex Group Down.....	12

Assign.....	12
Remove.....	12
Select.....	12
Deselect.....	12
Weight.....	12
Strokes panel.....	12
Stroke Depth Order.....	12
Stroke Thickness.....	13
Thickness Scale.....	13
Curve Resolution.....	13
Viewport Display panel.....	13
Edit Line Color.....	13
Canvas.....	13
Custom Properties Panel.....	14
Add.....	14
Edit.....	14
Remove.....	14

## Detailed table of content

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Detailed table of content.....	2
Layers panel.....	5
Layer list.....	5
Layer name.....	5
Mask Layer.....	5
Onion Skinning.....	5
Viewport/Render Visibility.....	5
Lock.....	5
Search Field.....	5
Add new layer.....	5
Remove layer.....	5
Layer Specials.....	6
Duplicate Layer.....	6
Show All.....	6
Hide Others.....	6
Lock All.....	6
Unlock All.....	6
Merge Down.....	6
Merge All.....	6
Copy Layer to Selected.....	6
Copy all Layers to Selected.....	6
Move Grease Pencil Layer up or down.....	6
Isolate Layer.....	6
Isolate Layer.....	6
Blend.....	7
Opacity.....	7
Use Lights.....	7
Autolock inactive layer.....	7
Disallow Locked Materials Editing.....	7
Layers panel - Masks subpanel.....	7

List view.....	7
Name of the grease pencil layer.....	7
Invert.....	7
Hide.....	7
Search Field.....	7
Add.....	7
Subtract.....	8
Move Up / Down.....	8
Layers panel - Transform subpanel.....	8
Layers panel - Adjustment subpanel.....	8
Tint Color.....	8
Factor.....	8
Stroke Thickness.....	8
Layers panel - Relations subpanel.....	8
Parent.....	8
Type.....	9
Bone.....	9
Pass Index.....	9
View Layer.....	9
Use Masks in Render.....	9
Layers panel - Display subpanel.....	9
Custom Channel Color.....	9
Show Only On Keyframed.....	9
Onion Skinning Panel.....	9
Mode.....	10
Frames.....	10
Keyframes.....	10
Selected.....	10
Opacity.....	10
Filter By Type.....	10
Keyframes Before/After.....	10
Custom Colors.....	10
Display.....	10
View in render.....	10
Fade.....	10
Loop.....	11
Vertex groups panel.....	11
Active Vertex Group list.....	11
Group name.....	11
Lock.....	11
Drag Handler.....	11
Search Field.....	11
Invert.....	11
Sort by Name.....	11
Add +.....	11
Remove -.....	12
Move Vertex Group Up.....	12
Move Vertex Group Down.....	12
Assign.....	12
Remove.....	12
Select.....	12
Deselect.....	12
Weight.....	12

Strokes panel.....	12
Stroke Depth Order.....	12
2D Layers.....	12
3D Location.....	12
Stroke Thickness.....	13
World Space.....	13
Screen Space.....	13
Thickness Scale.....	13
Curve Resolution.....	13
Viewport Display panel.....	13
Edit Line Color.....	13
Canvas.....	13
Color.....	13
Scale X/Y.....	13
Offset X/Y.....	13
Subdivisions.....	14
Custom Properties Panel.....	14
Add.....	14
Edit.....	14
Remove.....	14

## Layers panel

Grease Pencil objects each have a list of 2D layers for grouping and arranging strokes in a List view. Any stroke can only belong to a single 2D layer. There is always only one active layer in the list (the selected one). When you draw, the new strokes are added to the active layer. By default the view order of the layers in the viewport is top to bottom.

Every layer correspond to a channel in the Dope Sheet editor (in Grease Pencil mode). Layers can also be used together with Modifiers to only affects part of your drawing.

### Layer list

#### Layer name

The name of the layer.

#### Mask Layer

Toggle the Masks visibility in the layer.

#### Onion Skinning

Toggle the use the layer for Onion Skinning.

#### Viewport/Render Visibility

Toggle layer visibility in the viewport and in render.

#### Lock

Toggle layer from being editable.

#### Search Field

You can expand a search field at the bottom of the list. Type in your term and hit enter to filter for your term.

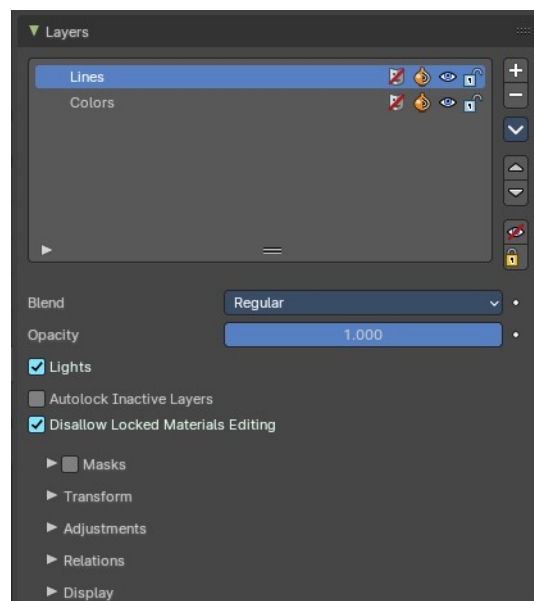


#### Add new layer

Adds a new layer.

#### Remove layer

Removes the selected layer.



## Layer Specials

### Duplicate Layer

Makes an exact copy of the selected layer appending a number to differentiate its name.

### Show All

Turns on the visibility of every layer in the list.

### Hide Others

Turns off the visibility of every layer in the list except the active one.

### Lock All

Locks edition of all the layers in the list

### Unlock All

Unlocks edition of all the layers in the list.

### Merge Down

Merge the selected layer with the layer below. The new layer keeps the name of the lower layer.

### Merge All

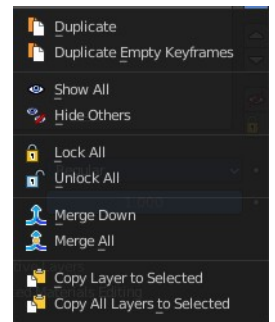
Merge the selected layer with all layers. The new layer keeps the name of the active layer.

### Copy Layer to Selected

Appends the active layer to the selected object.

### Copy all Layers to Selected

Appends all layers to the selected object.



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## Move Grease Pencil Layer

Move Grease Pencil Layer up or down.

## Isolate Layer

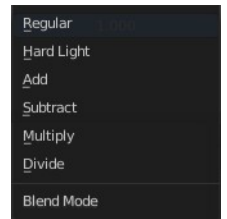
Hide and lock the layer.

## Isolate Layer

Lock the layer.

## Blend

The layer blending operation to perform. See Color Blend Modes.



## Opacity

Used to set the opacity of the layer.

## Lights

When enabled, the layer is affected by lights.

## Autolock inactive layer

Locks automatically the edition of every layer in the list except the active one. This way you avoid to make unwanted changes in other layers without the need to lock them every time.

## Disallow Locked Materials Editing

Disallow the editing of locked materials.

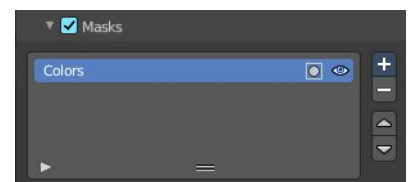
## Layers panel - Masks subpanel

Use another grease pencil layer as a mask.

## List view

### Name of the grease pencil layer

The name of the layer.



## Invert

Invert the mask.

## Hide

Set mask layer visible or invisible.

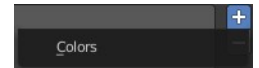
## Search Field

You can expand a search field at the bottom of the list. Type in your term and hit enter to filter for your term.



## Add

Add a grease pencil layer as a mask layer. The layer must already exist.



## Subtract

Remove the grease pencil layer from the list.

## Move Up / Down

Move the selected grease pencil mask one up or one down.

## Layers panel - Transform subpanel

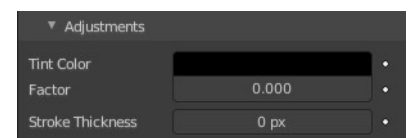
Allows to transform the current grease pencil layer in the 3d view.



## Layers panel - Adjustment subpanel

### Tint Color

Color that tint any material colors used in the layer.



### Factor

The Factor controls the amount of tint color to apply.

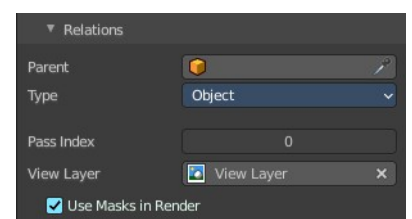
### Stroke Thickness

Thickness value that override the strokes thickness in the layer.

## Layers panel - Relations subpanel

Select a Parent object and Type to manipulate the layer. The layer will inherit the transformations of the parent.

This can be used for rigging for cut-out animation.



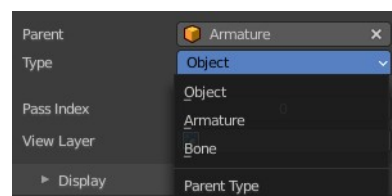


## Parent

The Parent object.

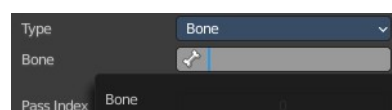
## Type

What type of object. When the parent is an armature, then you can choose between object, armature or bone.



## Bone

When the type is a bone, then choose which bone of the armature.



## Pass Index

The layer index number. It can be used with some modifiers to restrict changes to only certain areas.

## View Layer

Defines the View Layer to use for the Grease Pencil layer. If empty, the layer will be included in all View Layers. This is useful to separate drawings parts for compositing.

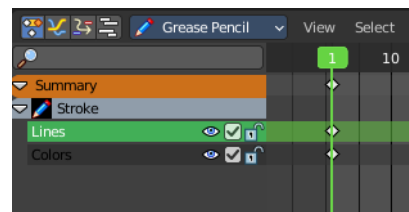
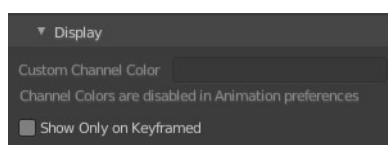
## Use Masks in Render

Include the mask layer when you render the view layer. You need to have a view layer selected to reveal this option.

## Layers panel - Display subpanel

### Custom Channel Color

Sets the color to use in the channel region of the Dope Sheet.

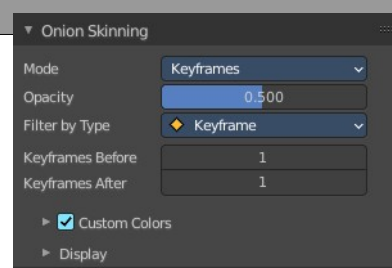


### Show Only On Keyframed



The layer is just visible in the viewport if it has a keyframe in the actual frame.

## Onion Skinning Panel



Onion Skinning show ghosts of the keyframes before and after the current frame. This allows animators to judge and pose in between two frames.

## Mode

### Frames

Shows Frames in the range determined by the Before/After settings.

### Keyframes

Shows Keyframes in the range determined by the Before/After settings.

### Selected

Shows only on the manually selected keyframes in the Dope Sheet.

## Opacity

Control the opacity of the ghost frames.

## Filter By Type

Filters what type of frames to show in the Onion Skinning range.

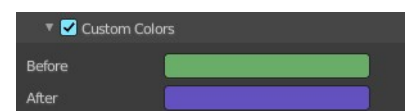
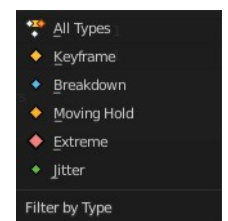
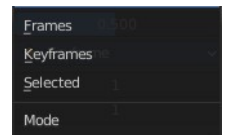
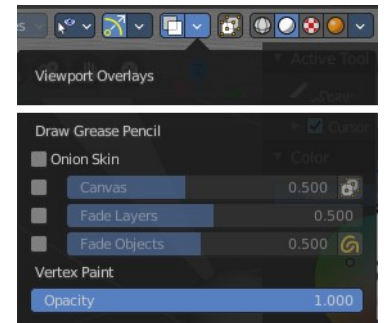
## Keyframes Before/After

Sets how many frames or keyframes, depending on the Mode, to show before and after the current frame.

## Custom Colors

Before/After

Custom color of the ghost frames before and after the current frame.



## Display

### View in render

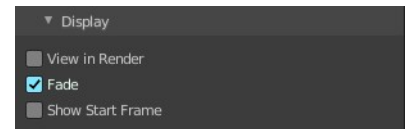
Show the onion skinning in final render image e.g. for a motion blur effect.

### Fade

Opacity of the ghosts frames decrease the further away from the current frame.

### Loop

Help working on loop animations showing the first keyframe/frame as ghost when you are on the last frame of your animation.



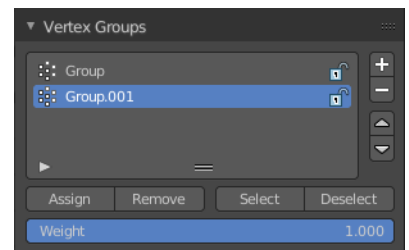
## Vertex groups panel

A Vertex group is a group of vertices, a selection of the mesh. It is for example used to weight a specific mesh part to a bone. Or to control the growth of hair particles.

This panel allows you to manage and edit vertex groups. Weight painting creates vertex groups automatically.

In Edit mode this panel shows the inactive controls active.

Vertex groups exists for mesh and lattice objects.



## Active Vertex Group list

A List of the vertex groups for this mesh.

### Group name

The name of the group. It can be renamed by double clicking at it.

### Lock

The lock icon at the end of a group name locks the group from being editable.

### Drag Handler

The two vertical lines at the end is a handler with which you can expand the list.

### Search Field

You can expand a search field at the bottom of the list. Type in your term and hit enter to filter for your term.



### Invert

Exclude the search term instead of searching for it.

## ***Sort by Name***

Sort the List by name.

## **Add +**

Create an empty vertex group.

## **Remove -**

Deletes the active vertex group.

## **Move Vertex Group Up**

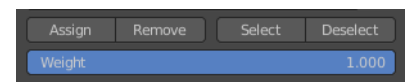
Moves the selected vertex group up in the list.

## **Move Vertex Group Down**

Moves the selected vertex group down in the list.

## **Assign**

Assign the selected vertices to the active vertex group.



## **Remove**

Remove the selected vertices from the active group.

## **Select**

Select all vertices in the group.

## **Deselect**

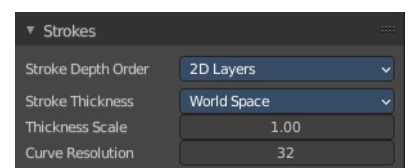
Deselect all vertices in the group.

## **Weight**

The weight value that gets assigned to the selected vertices.

# Strokes panel

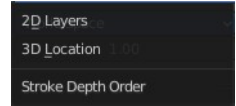
General settings for Grease Pencil strokes.



## Stroke Depth Order

### 2D Layers

The Strokes drawing order respect the order of the 2D layers list (top to bottom) and ignores the real position of the strokes in 3D space. See 2D Layers for more information.



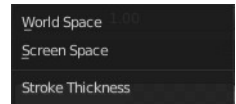
### 3D Location

The strokes drawing order is based on the stroke location in 3D space.

## Stroke Thickness

### World Space

The thickness is relative to world space. Stroke thickness change with the screen zoom factor.



### Screen Space

The thickness is relative to screen space. Stroke thickness remains the same regardless of the screen zoom factor.

## Thickness Scale

Sets a thickness scale factor for all strokes.

## Curve Resolution

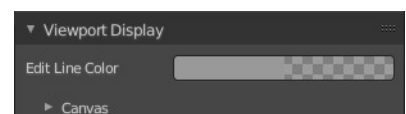
The number of segments generated between two control points when editing strokes in curve edit mode.

## Viewport Display panel

Display settings for Edit Lines in Edit Mode and Sculpt Mode.

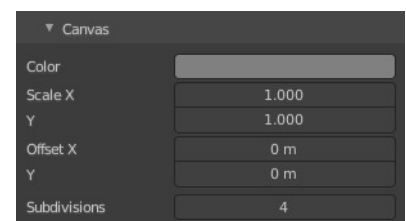
### Edit Line Color

Sets the color of the Edit Lines.



### Canvas

In 3D space sometimes is difficult to assess on which plane are you drawing. The Canvas is a display overlay helper that shows a grid at the current Drawing Plane. You can enable the Canvas visualization in the Viewport Overlays.



### Color

Color of the Canvas grid lines.

## Scale X/Y

Defines the X and Y scale of the Canvas.

## Offset X/Y

Sets the Canvas position offset from the object’s origin.

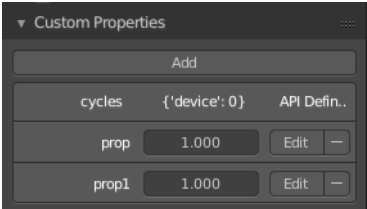
## Subdivisions

Specifies the number of subdivisions to use for the grid.

# Custom Properties Panel

Here you can define custom properties that can be used for scripting.

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

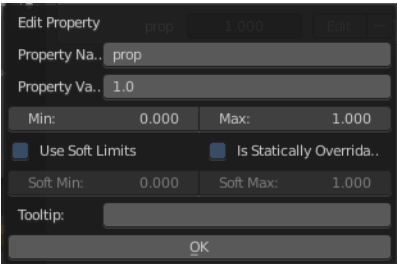


## Add

Adds a new property.

## Edit

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



## Remove

Removes the property.