



## 7.2.20 Editors - 3D Viewport - Tool Shelf - Curve - Edit Mode

### Table of content

Tool Shelf - Hair Curve - Edit Mode.....	2
Tweak, Select, Transform, 3D Cursor Measure and Annotate tools.....	2
Draw.....	2
Tool Settings.....	2
Type.....	2
Method.....	3
Refit.....	3
Split.....	3
Tolerance.....	3
Detect Corners.....	3
Taper Start / End.....	3
Radius Min/Max.....	3
Use Pressure.....	3
Depth.....	3
Cursor.....	3
Surface.....	3
Absolute Offset.....	3
Only First.....	3
Plane.....	3
Normal to Surface.....	3
Tangent to Surface.....	4
View.....	4
Curve 2D.....	4
As Nurbs.....	4
Last Operator Draw Curves.....	4
Error.....	4
Fit Method.....	4
Corner Angle.....	4
Cyclic.....	4
Radius.....	4
Header Value.....	4
Tool Settings.....	4
Drag.....	5
Active Tool.....	5
Tweak, Select Box, Circle and Lasso.....	5
Last Operator Transform.....	5
Values X Y Z W.....	5
Axis.....	5
Orientation.....	5
Proportional editing.....	5
Proportional Falloff.....	5
Proportional Size.....	5
Connected.....	5
Projected(2D).....	5
Tilt.....	6
Header Value.....	6
Tool Settings.....	6

Drag.....	6
Active Tool.....	6
Tweak, Select Box, Circle and Lasso.....	6
Last Operator Transform.....	6
Angle.....	6
Proportional editing.....	6
Proportional Falloff.....	6
Proportional Size.....	6
Connected.....	6
Projected(2D).....	7

## Tool Shelf - Hair Curve - Edit Mode

With a hair curve object in edit mode you will find some tools to edit the curve geometry in the tool shelf.

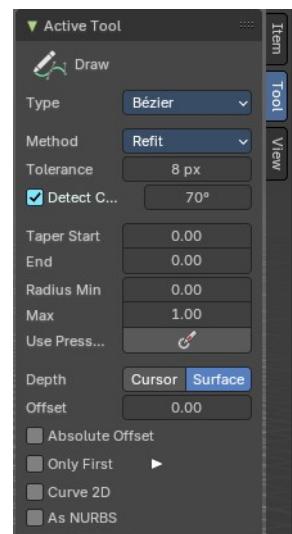
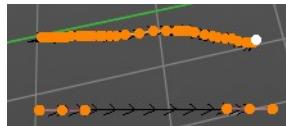


## Tweak, Select, Transform, 3D Cursor Measure and Annotate tools

The tweak, select, transform, 3d cursor, measure and annotate tools at the end of the list are explained in the chapter 7.1.1 Editors - 3D View - Tool Shelf - Object Mode. We won't cover this tools again here.

## Draw

Allows you to draw a curve into the viewport.



## Tool Settings

### Type

Set the draw method for the curve. Poly draws a simple polygon shape. Bezier creates a Bezier curve type with handlers.

With type Bezier you will get more options.



## Method

The curve fitting method for a Bezier curve.



### Refit

Incrementally refit the curve.

### Split

Split the curve until it fits.

## Tolerance

Allow deviation for a smoother but less precise line.

## Detect Corners

Detect corners and use non aligned angles.



### Taper Start / End

Taper factor for the radius of each curve point.



## Radius Min/Max

Minimum or maximum radius when the pressure is applied.

## Use Pressure

Use tablet pressure to draw the curve.

## Depth

The method of projecting depth. Cursor or surface.

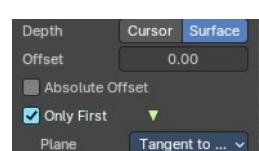
### Cursor

Cursor has no further settings.

### Surface

#### Absolute Offset

Apply a fixed offset, and don't scale by the radius.

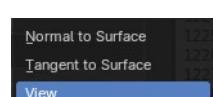


#### Only First

Use the start of the stroke for the depth.

### Plane

The plane for the projected strokes.



#### Normal to Surface

Draw in a plane perpendicular to the surface.

## Tangent to Surface

Draw in the surface plane.

## View

Draw in a plane that is aligned to the viewport.

## Curve 2D

Paint in 2d at the groundplane.

## As Nurb

Draw nurbs instead of bezier curves.

## Last Operator Draw Curves

### Error

Adjust the error distance threshold in object units



### Fit Method

The curve fitting method. Choose between Refit and Split.

### Corner Angle

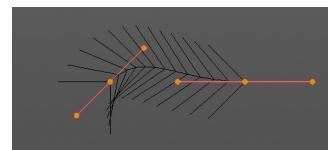
Corners above this angle are considered as corners.

### Cyclic

With curve type Bezier the curve gets closed. Has no effect at curve type Poly.

## Radius

Bezier curves have a radius. This is displayed by the black lines that points away from the curve. The radius tool allows you to resize this radius.

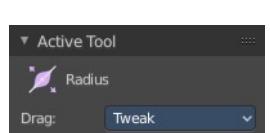


## Header Value

When you resize the curve radius then you will see a value in the header. It tells you the current scale factor. This factor always starts with 1.

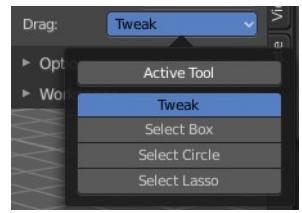
Shrink/Fatten: 0.899492

## Tool Settings



## Drag

When you click at the widget of the active tool, then you perform the tool action.  
Adjust what should happen when you click outside of the widget, in the empty area.



## Active Tool

When you click off the widget then the click still does the same than clicking at the widget. It performs the active tool.

## Tweak, Select Box, Circle and Lasso

When you choose this options then you will set the off click to the different select methods. Whereas tweak works more than a move tool then. Tweak is the default.

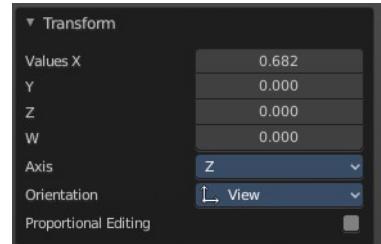
## Last Operator Transform

### Values X Y Z W

The axis to increase the radius. Just X has an effect with the curve radius.

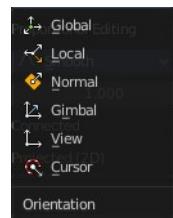
### Axis

The axis to use. This has no effect with a curve object.



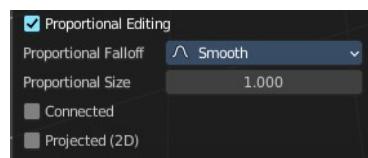
### Orientation

Adjust the orientation of the extrusion. It usually starts with Normal.



### Proportional editing

Enables proportional editing. Activating proportional editing reveals further settings.



### Proportional Falloff

Adjust the falloff methods.

### Proportional Size

See and adjust the falloff radius.

### Connected

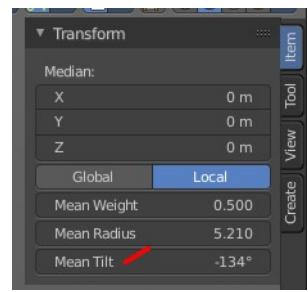
The proportional falloff gets calculated for connected parts only.

### Projected(2D)

The proportional falloff gets calculated in the screen space. Depth doesn't play a role. When it's in the radius, then it gets calculated.

## Tilt

With this tool you can tilt the curve. It is the mean tilt value in the Transform panel of the Sidebar.

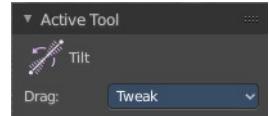


## Header Value

When you rotate the curve with the tilt tool, then you will see a value in the header. It tells you the current rotation relative to the starting rotation. This value always starts with 0.

Tilt: 51.17°

## Tool Settings

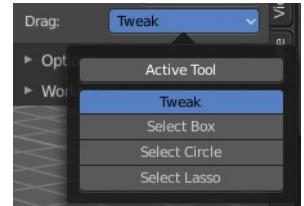


## Drag

When you click at the widget of the active tool, then you perform the tool action. Adjust what should happen when you click outside of the widget, in the empty area.

## Active Tool

When you click off the widget then the click still does the same than clicking at the widget. It performs the active tool.



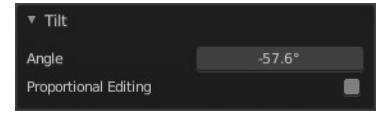
## Tweak, Select Box, Circle and Lasso

When you choose this options then you will set the off click to the different select methods. Whereas tweak works more than a move tool then. Tweak is the default.

## Last Operator Transform

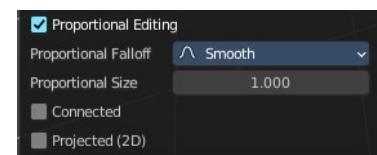
### Angle

This value tells you the current rotation relative to the starting rotation. This value always starts with 0.



### Proportional editing

Enables proportional editing. Activating proportional editing reveals further settings.



### Proportional Falloff

Adjust the falloff methods.

### Proportional Size

See and adjust the falloff radius.

### Connected

The proportional falloff gets calculated for connected parts only.

## **Projected(2D)**

The proportional falloff gets calculated in the screen space. Depth doesn't play a role. When it's in the radius, then it gets calculated.