



## 7.2.14 Editors - 3D Viewport - Tool Shelf - Grease Pencil - Draw Mode

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## Tool Shelf - Grease Pencil - Draw Mode

In Sculpt Mode you will mainly find draw tools in the tool shelf.

The brushes settings are covered in the chapter 7.3.12 Editors - 3D View - Sidebar - Tool Tab - Grease Pencil - Draw Mode

For the Annotate tools group see chapter 7.2.1 Editors - 3D View - Tool Shelf - Object Mode

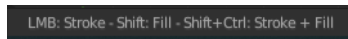


### 3D Cursor Tool

The 3D cursor tool is explained in the chapter 7.2.1 Editors - 3D View - Tool Shelf - Object Mode. We won't cover this tool again here.

### Footer

Some of the brushes and tools shows some further information in the footer.



### Hotkeys

Some tools have some additional hotkey functionality. We will cover it one by one.

### Draw

The Draw tool allows you to draw free-hand strokes. You paint with the left mouse.

Holding down Shift while drawing reveals a stabilizer widget which gives you more fine control over painting the stroke.

Holding down ALT while drawing will allow you to draw straight horizontal or vertical lines.

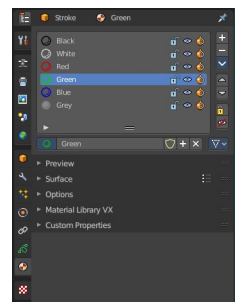
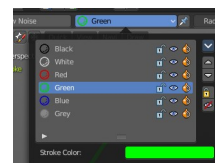
Holding down CTRL while drawing will turn the brush into an eraser brush.

Pressing B will allow you to box select stroke parts and delete them.



### Draw Color

The Draw color is in real a material. To change the color you need to change the material. Or create one with the color that you need. The Grease Pencil Stroke object comes already with a few predefined colors. You can choose between them in the header tools area.



New materials can be created in the Properties editor in the Materials tab. You can also change the color of an existing material. But note that all previously drawn strokes will also change their color then. It is one material for one color.

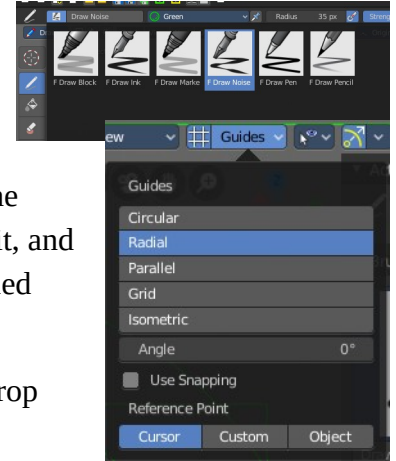
## Brushes

In the Brush browser you will find some more brush types for the Draw tool.

## Guides

When you activate the Draw tool, then the Guides panel shows in the header. The Guides tools are directly connected with the Draw brush, it is a tools subset for it, and allows you to draw some guide shapes. Some perform around a center point called Reference Point.

You need to activate the Guides by clicking at the button at the left side of the drop down box.



### Guides Hotkeys

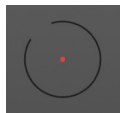
There are some special hotkeys just for the Guides tools. They don't have a regular menu entry. Better said, they are connected to the Guides panel.

- J/K** adjust guide angle by 15°, with holding alt key by 45°
- C** turn on Circular guide then toggle between Circular and Radial
- V** turn off guides
- L** turn on Parallel Line guide
- Alt L** Use angle of last freehand stroke for Parallel mode
- M** toggle between Circular & Radial mode or 90° in Parallel mode
- O** sets the reference point (only in Cursor or Custom mode)

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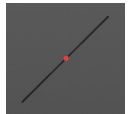
### Circular

Draws a circle around the reference point.



### Radial

Draws a line from the starting point through the reference point.



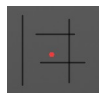
### Parallel

Draws parallel horizontal lines. You can draw rotated lines with changing the angle slider.



### Grid

Draws parallel horizontal and vertical lines.



### Isometric

Draws parallel horizontal and vertical lines. You can draw rotated lines with changing the angle slider. Vertical lines can still be drawn.



## Angle

Radial, Angle, Isometric. The angle.

## Use Snapping

Enable snapping to guides angle or spacing options.

## Reference Point

Circular, Radial. What reference point to use.

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## Fill

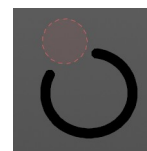
This tool does not fill, but extend strokes of closed strokes areas by click drag, coming from the border. For example, when you create a Bezier circle. When you then click in the inner area, drag the mouse and release it, then the outer line of this Bezier circle gets extended into the inner direction by the in the brush panel adjusted amount.



When you use this tool outside of closed geometry, then it draws a frame around the current view.

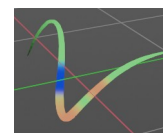
## Erase

Erase stroke curve points under the mouse.



## Tint

With the tint tool you can pant onto strokes points and mix the material base color with a selected vertex color.



You first have to set up the colors in the color panel in the sidebar. The colors can be seen in viewport shading Material Preview and Rendered.

## Cutter

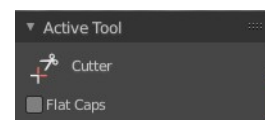
Lasso select delete tool. Erases stroke curve points in the selection.



## Tool settings

### Flat Caps

Define if after cutting the stroke the cap of the cut side will be set as flat.

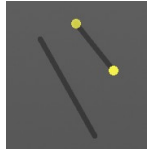


## Eye Dropper

Pick a grease pencil material and make it the draw color.

## Line

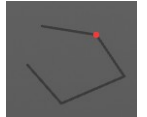
Draw straight lines by click drag. The yellow points are handlers that can be dragged around. Right mouse abandons the action. Pressing enter or middle mouse button confirms and makes the stroke real.



Hotkey E allows you to extrude the line.

## Poly line

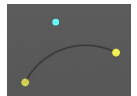
Draw straight lines by click drag. Clicking creates a new line in the polygon. Right mouse abandons the action. Pressing enter or middle mouse button confirms and makes the stroke real.



The polygon cannot be closed.

## Arc

Draw simple arcs by click drag. The yellow points are handlers that can be dragged around. Right mouse abandons the action. Pressing enter or middle mouse button confirms and makes the stroke real.



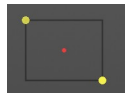
## Curve

Draw complex Bezier style curves by click drag. First you create a straight line. The handlers allows you to deform the curve to your needs. Right mouse abandons the action. Pressing enter or middle mouse button confirms and makes the stroke real.



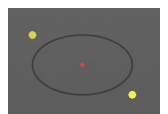
## Box

Draw rectangular shapes by click drag. Hold Shift to create square shapes. The handlers allows you to adjust the rectangle to your needs. Right mouse abandons the action. Pressing enter or middle mouse button confirms and makes the stroke real.



## Circle

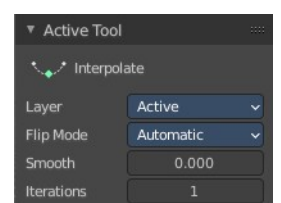
Draw oval shapes by click drag. Hold Shift to create square shapes. The handlers allows you to adjust the rectangle to your needs. Right mouse abandons the action. Pressing enter or middle mouse button confirms and makes the stroke real.



## Interpolate

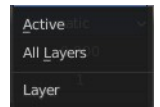
Interpolate grease pencil strokes between frames. You need to have two frames to interpolate between.

## Tool settings



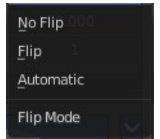
## ***Layer***

What layers to include in the interpolation.



## ***Flip Mode***

How to invert destination stroke to match start and end with source stroke.



## ***Smooth***

Amount of smoothing to apply to interpolated strokes, to reduce jitter or noise.

## ***Iterations***

How often to smooth newly created strokes.