

How to use drawing tools

In addition to its photo-editing features, Adobe Photoshop CS5 has a full suite of drawing tools. This guide teaches you how to draw shapes in Photoshop. If you've used other drawing tools, such as Adobe Illustrator CS5, you will see that Photoshop's approach to drawing is slightly different. Everything in Photoshop is based on the idea of film exposure, of letting light show through rather than placing things onto a canvas.

Photoshop uses both bitmapped and vector images. *Bitmapped* images are made up of individual pixels and do not scale well; *vector* images are constructed from mathematical formulas and scale very well.

Types of shapes

This guide addresses adding shapes as shape layers, which gives you the most flexibility in determining how your shapes appear. However, adding shapes as separate layers adds to your image's file size and may eventually affect Photoshop's speed. Shape layers are added as vector *masks*—that is, they are vector shapes through which only part of the background shows.

If you're creating very simple shapes that do not need to be scaled, you can create bitmaps by using the Fill Pixels option. This option creates shapes that are *rasterized* or created from individual pixels. Because Fill Pixels shapes don't require additional layers, they can improve performance.

You set shape options in the Shape options bar (**Figure 1**).

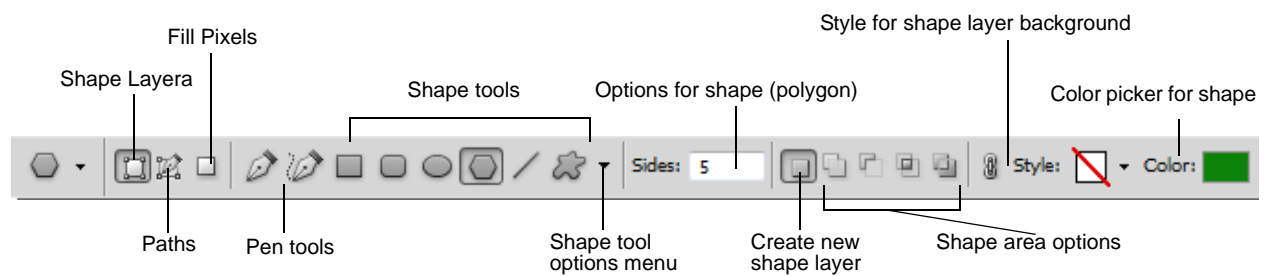


Figure 1 Shape options bar

Drawing shape layers

Shape layers are essentially vector masks that hide a background. They consist of two parts: a mask and a background color.

Shape layers offer the most flexibility in determining a shape's appearance, position, and visibility. Because the shape masks are vector shapes, you can transform these shapes without loss of clarity.

To draw a shape in a shape layer:

1. Start Photoshop and create a new file or open an image.
2. Click one of the shape tools in the Tools panel, such as the Polygon tool.

By default, the Tools panel shows the Rectangle tool. To access other shapes, click the Rectangle tool and hold down the mouse button (**Figure 2**).

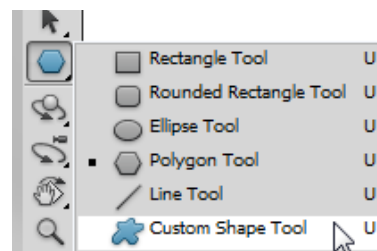


Figure 2 Tools panel

- In the options bar, make sure Shape Layers and Create New Shape Layer are selected (**Figure 1**).
- Hold down Shift+Alt while you Right-click (Windows) or hold down Control+Option+Command while you click and hold (Mac OS).

The heads-up-display (HUD) color picker appears (**Figure 3**). You can release the keys after the HUD appears.

- Then drag to select a color hue and shade, and release the mouse button.

Note: Temporarily press the spacebar to maintain the selected shade while you select another hue, or vice versa.

Note: To quickly select a color from the canvas to apply to a shape, Alt-click (Windows) or Option-click (Mac OS) and drag the eyedropper.

- From the Shape Tool Options pop-up menu (**Figure 1**), select options for the shape you chose.

In the example (**Figure 3**), the polygon is set to Star, leaving the Indent Sides By setting at its default of 50%.

- Draw the shape by dragging the pointer across the canvas (**Figure 4**).

When the mouse is released, the shape fills with the selected color (**Figure 5**).

- If the Layers panel is not already visible, choose Window > Layers.

Observe that the shape is on a separate layer with the default name of Shape 1 (**Figure 6**). The link icon between the shape and fill indicates the two are linked.

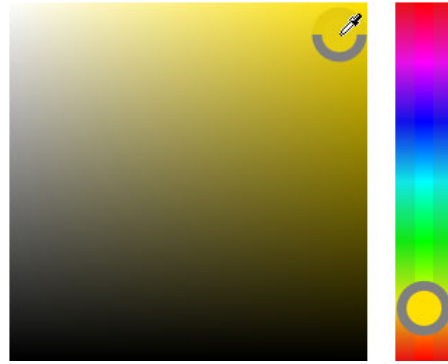


Figure 3 HUD color picker

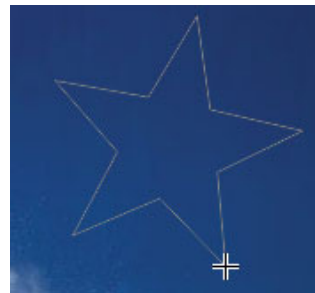
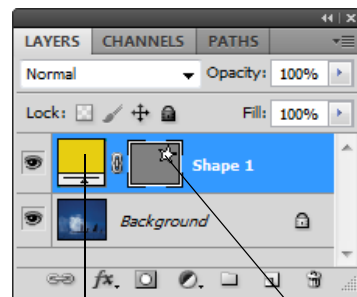


Figure 4 Shape appearance as you draw it



Figure 5 Shape filled with color



Fill thumbnail

Mask thumbnail

Figure 6 Shape layer in Layers panel

Adjusting a shape's path

A *path* is the edge of a vector shape. By changing the path, you change the appearance of the vector mask and thus the appearance of the shape. One way to change the shape's path is by moving one of its anchor points. *Anchor points* appear at the shape's corners.

To adjust a shape's path:

1. Click the Path Selection tool, hold down the mouse button, and select the Direct Selection tool (**Figure 7**).
2. Click the edge of the shape to select its path.

Anchor points—small hollow squares—appear at the corners of the shape .

3. Move the pointer over an anchor point.
4. Click to select the anchor point.

Observe that the anchor point changes from a hollow square to a solid square when you select it (**Figure 8**).

5. Drag to change the shape.

In example (**Figure 9**), a corner of the star has been moved down by dragging its anchor point.

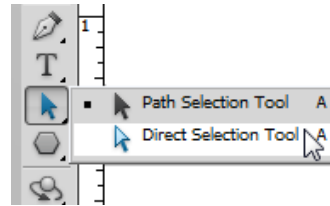


Figure 7 Tools panel

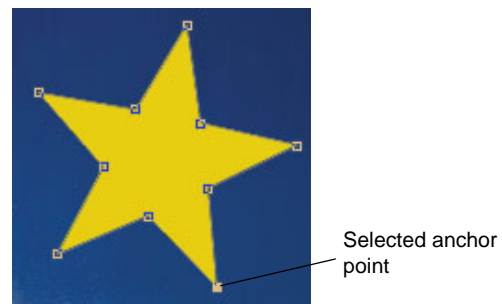


Figure 8 Moving a point with the Direct Selection tool

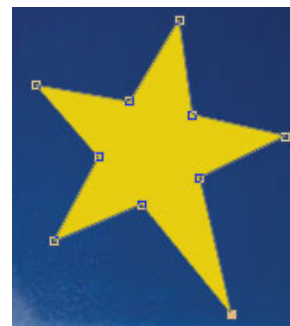


Figure 9 Path change completed

Adding to and subtracting from shape areas

You can add to or subtract from a shape layer to show more or less of the background. You set add and subtract options in the Shape options bar (**Figure 10**).

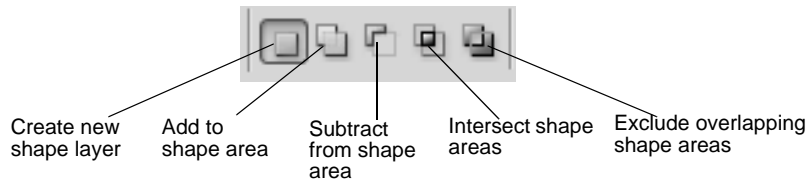


Figure 10 Shape area options in the options bar

- *Create New Shape Layer* Create a new shape layer.
- *Add To Shape Area* Add to the existing shape.
- *Subtract From Shape Area* Subtract from the existing shape. You will only observe the effect of subtracting if you draw over an existing shape.
- *Intersect Shape Areas* Show only those areas where the last two shapes drawn intersect.
- *Exclude Intersecting Shape Areas* Show all parts of a shape except where the last two drawn shapes intersect.

To add to a shape layer:

1. Click the shape thumbnail in the Layers panel to select the shape.
2. Select a shape tool, such as the Ellipse tool.
3. Click the Add To Shape Area icon in the Shape options bar.
4. Draw a shape that adds to the image (**Figure 11**).

Observe that the new shape appears in the shape layer (**Figure 12**).

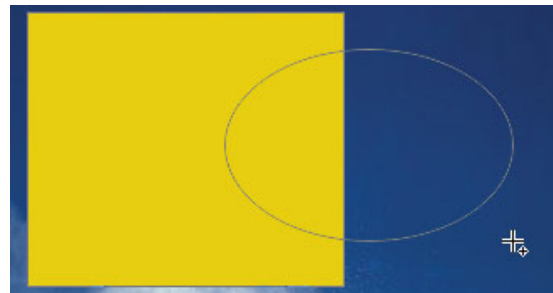


Figure 11 Adding to a shape layer

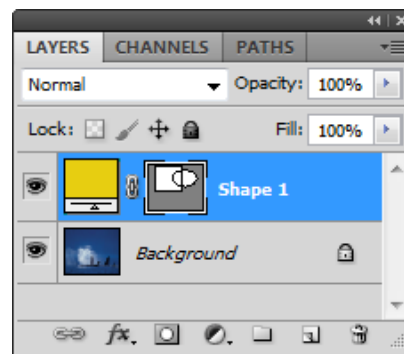


Figure 12 Layer panel

To subtract from a shape layer:

1. Click the mask thumbnail in the Layers panel to select the shape.
2. Select a shape tool, such as the Ellipse tool.
3. Click the Subtract From Shape Area icon in the Shape options bar.
4. Draw a shape that overlaps the image (**Figure 13**).
5. Observe that the shape has been modified in the shape layer.



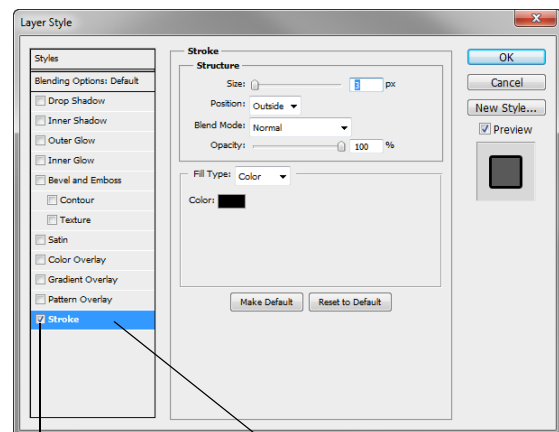
Figure 13 Subtracting from a shape layer

Controlling shape appearance with layer styles

Because shapes are on a layer, you can change their appearance by using layer styles. You can add a drop shadow to the shape, make the shape appear embossed or beveled, or outline the shape with a stroke.

To modify a shape by using layer styles:

1. If it is not already visible, choose Window > Layers to open the Layers panel.
2. Double-click the shape's layer to open the Layer Style dialog box (**Figure 14**).
3. One of the simplest things you can do is apply a stroke or outline to the shape. Select the Stroke option to apply a stroke. Make sure the Preview option is selected so you can observe the effects of applying the stroke.
4. Now, set options for the stroke by clicking the word itself. You can set the size, position, blend mode, opacity, fill type, and color of the stroke.
5. Click OK to apply the stroke (**Figure 15**).



Check this box to apply Stroke

Click here to set options for Stroke

Figure 14 Layer Style dialog box



Figure 15 Stroke applied

6. Apply one or more additional layer styles to the shape.

The example (**Figure 16**) shows the shape with the Bevel style, to give the shape a slightly raised appearance, and the Drop Shadow style, to make the shape appear slightly above the page.

Note: You can apply layer styles to rasterized shapes as well. However, the advantage of creating shapes on shape layers is that you can resize them without loss of resolution.



Figure 16 Bevel and Drop Shadow applied