

How to blend, feather, and smooth

Quite often, you need to select part of an image to modify it. When you select uniform geometric areas—squares, circles, ovals, rectangles—you don't need to worry too much about getting the selection exactly right. Unfortunately, most of the selections you'll make in Adobe Photoshop are likely to be irregular shapes, such as people, trees, or flags. In the example (**Figure 1**), the selection of the ship has plenty of irregular edges, most notably in the sails.



Figure 1 Irregular selection

Photoshop's smoothing, feathering, and blending features help you manage such irregular selections.

- *Smoothing*: Reduce the jagged edges that often result from making selections with one of the lasso tools.
- *Feathering*: Soften a selection's edges by making a boundary area between the selection and the pixels behind it. Feathering is especially useful when you copy a selection to a new background. A selection's jaggedness may be emphasized because of contrast between the selection and its new background. Feathering helps reduce this jaggedness.
- *Blending*: The way colors appear when overlaid—when one layer overlays another, for example. You can fine-tune the way a selection appears by adjusting how the selection blends with its background. Photoshop provides a wide range of blending options.

Smoothing and feathering with the Refine Edge command

You can use the Refine Edge command to change your selection and preview these changes over a dark or light background. This makes it easier to edit your selection before you copy and paste it elsewhere.

To smooth and feather an image:

1. Start Photoshop and open an image.
2. Double-click the Background layer.

The New Layer dialog box opens (**Figure 2**).

3. Rename the layer or accept the default name, Layer 0.
4. Click OK to close the New Layer dialog box.
5. Select the Lasso tool in the Tools panel (**Figure 3**).

Note: Some users find the Polygonal Lasso tool easier to use because you can make a series of short segments instead of one continuous line. To access the Polygonal Lasso tool, click the Lasso tool and hold down the mouse button.

6. Using the Lasso tool, select part of the image.

Preferably, select some irregular shapes like the sails in the example (**Figure 1**).

7. Complete the selection by closing the selection loop, and release the mouse.

For more information on making selections, see Photoshop Help.

8. Choose Select > Refine Edge.

The Refine Edge dialog box appears (**Figure 4**).

The selection appears on a white background by default. You can choose a different background option in the View Mode area. White or black will be most useful in adjusting smoothing and feathering.

9. Under Smooth, drag the slider to the right.

Any jagged edges become smoother.

10. When you are satisfied with the selection's appearance, release the mouse button.

11. Under Feather, drag the slider to the right.

The outline of the selection becomes blurred. This is the effect of the feathering.

It is best to limit feathering to 3–5 pixels. Increasing the feathering beyond 5 pixels can produce interesting effects, but unless these effects are part of your design goals, you will not want to apply them.

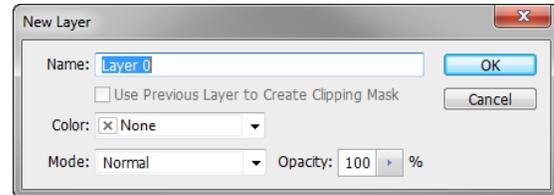


Figure 2 New Layer dialog box

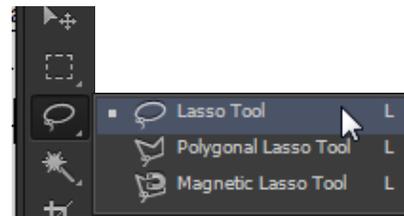


Figure 3 Lasso tool

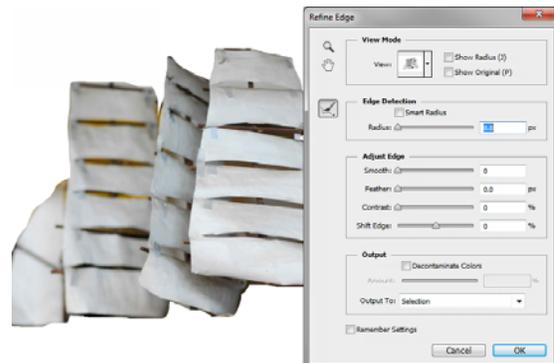


Figure 4 Refine Edge dialog box

- Click the Decontaminate Colors option.

Decontaminate Colors replaces color fringes with the color of the subject. Because this option changes pixel color, it requires output to a new layer or document, preventing unexpected changes to the current layer. You can accept the default Output To: New Layer With Layer Mask option.

- When you are satisfied with the selection's appearance (**Figure 5**), click OK to close the Refine Edge dialog box.

- Open the Layers panel.

Notice that now the selection is on a new layer with layer mask

- Click the Create A New Layer button to add a new layer (**Figure 6**).

- In the Layers panel, drag the new layer below the layer mask.

- Select the Paint Bucket tool in the Tools panel (**Figure 7**).

- Click The Set Foreground Color selection box in the Tools panel.

The Color Picker opens (**Figure 8**).

- Select a color for the background layer behind the layer mask.

- Click OK.

Make sure the Paint Bucket tool is still selected.

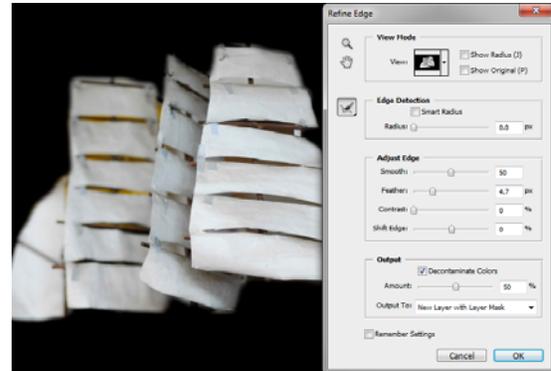
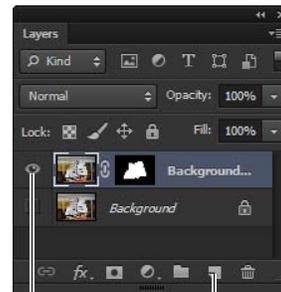


Figure 5 Smoothing and feathering applied



Turn visibility on Create A New Layer button

Figure 6 Layers panel

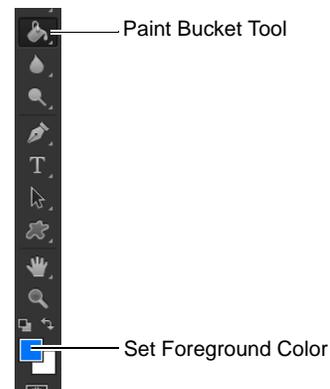


Figure 7 Tools panel

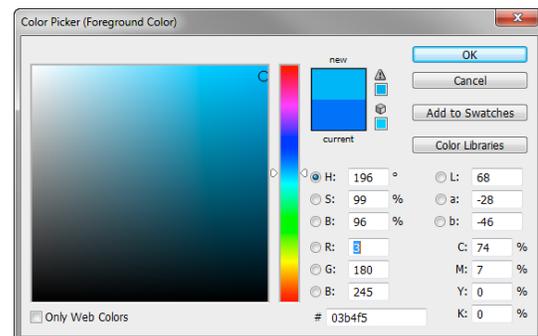


Figure 8 Color Picker

21. Click in the new layer to add a new background color.

Observe that the background layer now displays a thumbnail of a solid color (**Figure 9**).

22. (Optional) To change the opacity of the solid color layer, enter a value between 0% and 100% in the Set Opacity text area (**Figure 9**). For example, **Figure 10** has the opacity set to 70% and the visibility of Layer 0 is turned on.

The selection now appears on a new transparent, colored background (**Figure 10**).

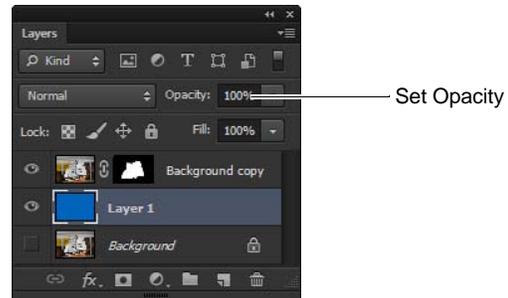


Figure 9 Layers panel with solid color layer



Figure 10 Selection on layered background

Layer blending options

Blending options let you determine how colors in the upper layer—known as the *blend color*—and the lower layer—known as the *base color*—blend with one another.

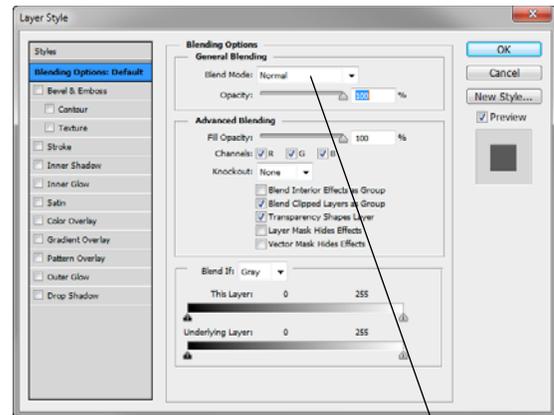
Photoshop offers a wide range of blending modes. A few are defined here. For more information on blending modes, see the topic “List of Blending Modes” in Photoshop Help. Blends only apply where the two layers overlap.

- *Lighten*: Photoshop looks at the colors in each layer and selects the lighter of the base or blend color as the result color. Pixels darker than the blend color are replaced, and pixels lighter than the blend color do not change.
- *Darken*: Photoshop looks at the colors in each layer and selects the darker of the base or blend color as the result color. Pixels lighter than the blend color are replaced, and pixels darker than the blend color do not change.
- *Color Dodge*: Photoshop compares the colors in each layer and brightens the base color to reflect the blend color by decreasing the contrast.
- *Hue*: Photoshop creates a new color with the luminance and saturation of the base color and the hue of the blend color.

Because you can preview these changes, the best way to decide which mode works for you is to experiment with different blends.

To apply blending options to a layer:

1. Open an image with at least two layers.
2. Click the top layer to select it.
3. Choose Layer > Layer Style > Blending Options.
The Layer Style dialog box appears (**Figure 11**).
4. Make sure the Preview option is selected, so you can observe your changes as you make them.
5. Select Lighten from the Blend Mode pop-up menu.
Observe the results (**Figure 12**).
6. Select Darken from the Blend Mode pop-up menu.
Observe the results (**Figure 12**).
7. Select Color Dodge from the Blend Mode pop-up menu.
Observe the results (**Figure 12**).
8. Select Hue from the Blend Mode pop-up menu.
Observe the results (**Figure 12**).



Blend Mode pop-up menu

Figure 11 Layer Style dialog box

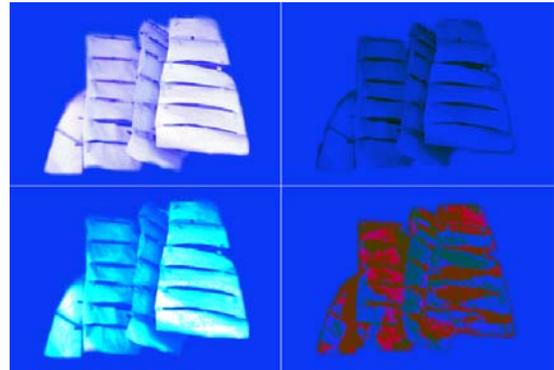


Figure 12 Blending modes: Lighten upper-left, Darken upper-right, Color Dodge lower-left, Hue lower-right