



Brush Basics

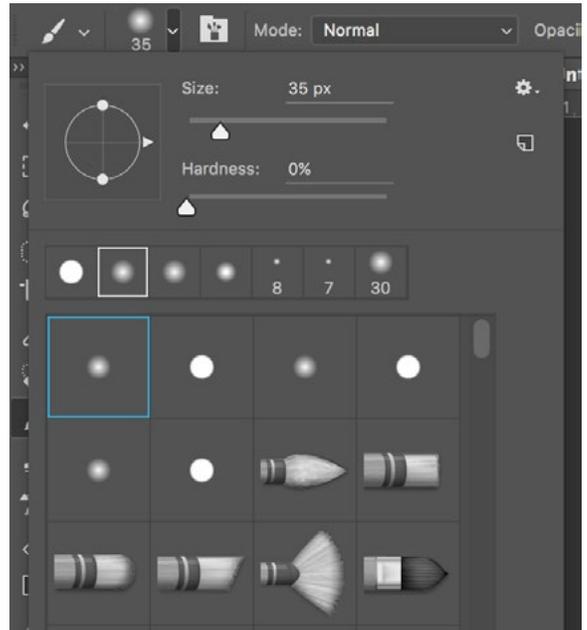
Brush Basics

In this lesson, we're going to cover the essential techniques and tips associated with the Brush Tool. Learning the basics paves the way to learning the advanced techniques that will help to make you a Photoshop rock star!

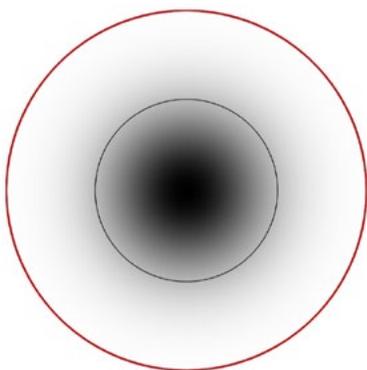
Brush Size & Hardness

There are a couple ways to change the size and hardness of your brush. One method is by clicking on the brush tip icon in the left side of the Options Bar, which is located above your image window. Clicking this icon will give you a pop-up box with sliders for both size and hardness, as well as a menu of brush styles to choose from.

The easier method for changing brush size and hardness is to use keyboard shortcuts. Change the size of your brush by using the left and right bracket keys ([]). Change the hardness of your brush by using those same bracket keys while holding down the Shift key.



The Brush Options can be accessed by clicking on the Brush tip icon in the left side of the Options Bar.



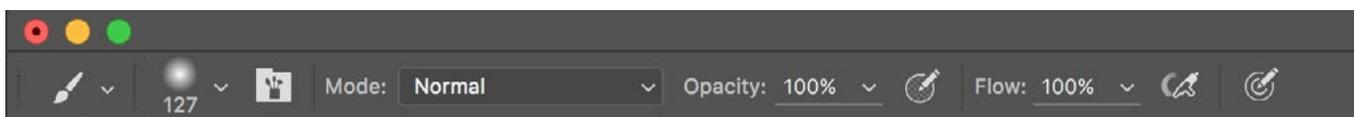
The black circle represents the brush head (cursor). The red circle represents the actual reach of the brush.

Understanding Brush Hardness When we change the hardness of a brush, we are determining how much fade-out there is and what percentage of the brush stroke will be solid. With a very hard-edged brush, where the hardness is set to 100% or close to it, the stroke will be very solid and will have very little fade-out. If hardness is set to zero, it means that zero percent of your brush is going to be solid. If the hardness is set to 50%, it means that half of the stroke's radius will be solid before it starts fading out.

It's important to understand that the cursor, or brush head, does not represent the actual edge of your brush. This circular brush head shows the half-way point of the fade-out. When you are painting over specific areas of your image, it's important to know what the actual cursor represents in order to prevent overspill when painting with a color or on a mask.

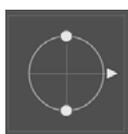
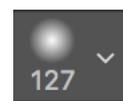
The Settings in the Options Bar

The Options Bar is the horizontal bar directly above your image window and it contains all the settings relating to the active tool. Let's look at a few of these settings.



The Options Bar

Brush preset picker: The icon for the brush tip preview will give you a box containing lots of brush settings. There are sliders for both brush size and hardness, as well as settings for shape, style



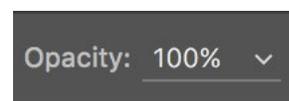
and angle (for non-round brushes). The circle in the top left of this box can be squeezed and rotated, which is how you change the shape and angle.

Blending mode menu: We will cover Blending Modes more in depth during later Masters Academy videos, but I do want to point out two



Blending Modes that are specific to the Brush Tool. These are “Behind” and “Clear.” When you choose the “Behind” mode, the brush will act as if you're painting on the layer behind the active layer. This means that it will only paint in the areas of the layer that are empty, or transparent. When you choose the “Clear” mode, it will actually delete from the layer you're working on.

Opacity: The Opacity setting controls how much you can see through the brush. When it's set to 100%, you get



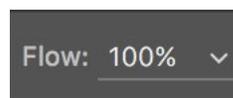
100% of your foreground color and it completely covers what's underneath. When you lower the opacity, you will be able to see through the paint to what's underneath. As long as you don't let go of the mouse button, the paint won't add up. If you release the mouse button and then paint again, the paint will start to add up.

To change the opacity, you can click and drag left or right on the word "Opacity." You can also use the number keys on your keyboard to change the opacity setting. (Ex: hitting the 5 key will set the opacity to 50%) To set it back to 100%, hit the 0 (zero) key.

Pressure for Opacity: The next icon, which looks like a pencil and a circle, is applicable when you are using a graphics tablet that has a pressure-sensitive pen. Turning this setting on will activate pressure sensitivity, which means that the harder you press with the pen, the higher the Opacity setting will be.



Flow: At first glance, Flow and Opacity seem to be identical. The difference is that the Flow setting will allow for paint build-up every time you overlap your paint strokes. To change the Flow setting using keyboard shortcuts, hold down the Shift key while hitting the number keys. (5 will give you 50%, etc.)



Airbrush: When this is turned on, the paint will build up if you keep the mouse button held down while keeping your cursor stationary.



Pressure for Size: This is another setting that is only applicable if you're using a graphics tablet. With this setting turned on, it will force the size of your brush to be controlled by pen pressure.



The Brush Panel

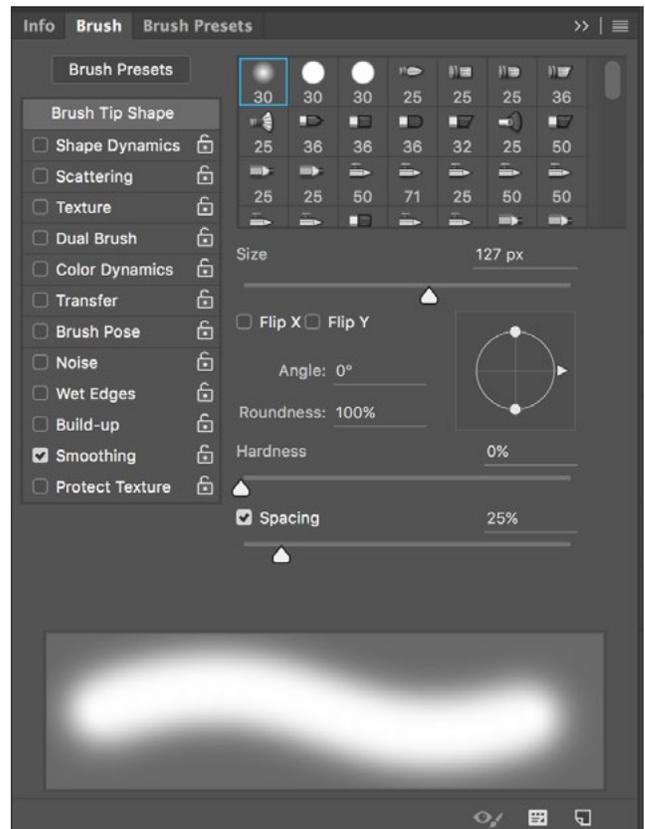
The Brush Panel contains many more settings pertaining to your active brush. It can be accessed by clicking on the Brush Panel icon in the Options Bar. (see icon at right.) We're going to cover some of the basic and essential settings in this panel.



Spacing When you open the Brush Panel, you will see some of the same settings that you get in the Options Bar. There are also some different settings, the most important of which is called Spacing.

The Spacing setting is the bottom slider in the Brush Panel and it controls how much space there is between each placement of the brush on your canvas. This is a critical setting when you are using brushes, especially when using hard-edged brushes. The default Spacing setting is 25%, which is fine for soft-edged brushes, but with hard edged brushes, 25% can make the edges look jagged. Because of this, it's best to use a Spacing setting of 1% or close to 1% when using a really hard-edged brush.

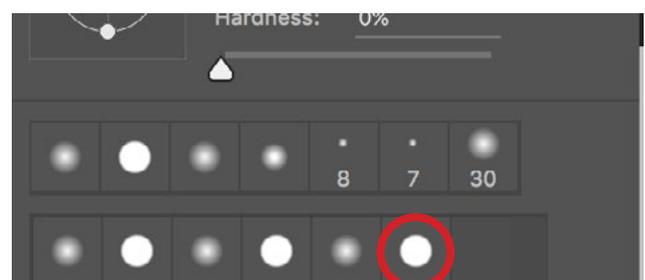
Here's a little tip for using the brush presets found within the Options Bar. When you click on the brush preview icon, you get that pop-up box that contains several brush presets/styles to choose from. Note that the third hard-edged brush in the default list already has its spacing setting at a very low position. Therefore, this hard-edged preset will give you smooth edges without having to open the Brush Panel and adjust the Spacing slider.



The Brush Panel



The top stroke had the Spacing setting at 25% and the bottom stroke had the Spacing setting at 1%.



The brush preset shown above already has a low Spacing setting.

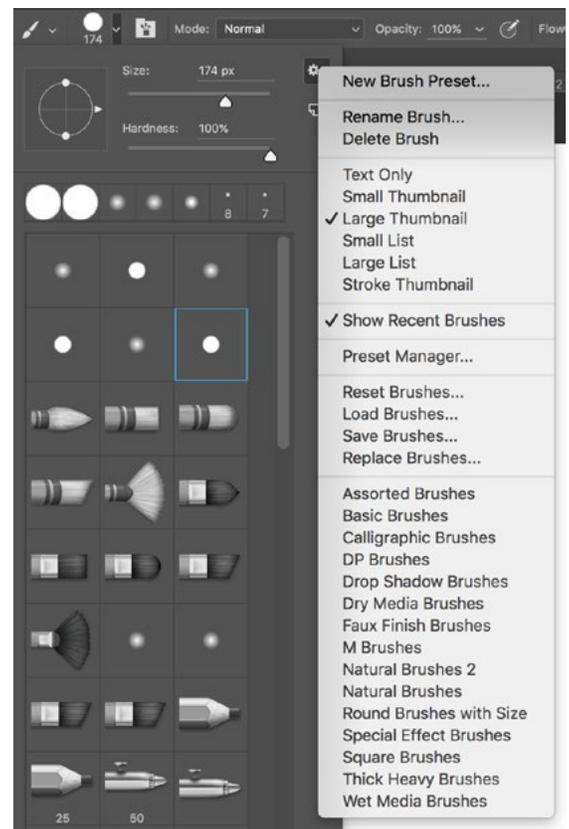
When it comes to using soft-edged brushes, it is best to not keep the Spacing setting so low. This is because your paint strokes will get more of an abrupt edge to them. For soft-edged brushes, the default setting of 25% works very well.

Learning what Brush Presets do If you keep the Brush Panel open while clicking through the various Brush Presets, you will see the settings change for each one within the panel options. This will give you a better idea of how each brush will act and will eliminate a lot of trial and error. If you hold down the Option key (Alt on Win) while hovering your cursor over the different brush presets, you will see a scissors icon appear next to the cursor. This means that you can click on a preset to delete it.

Smoothing Within the Brush Panel, you will see an option on the left called Smoothing, and most brush presets automatically have this setting turned on. This setting will assist in keeping your brush strokes smooth and not jagged. In other words, instead of a curve being made of several straight segments, it will look like an actual curve.

When you are looking at the brush preset box within the Options Bar, you will notice that there is a little gear icon in the upper right. Clicking on it will give you a drop-down menu with several useful choices. One of those is new Brush Preset. This will save your current settings as a new brush preset. After choosing this option, you will be prompted to give the preset a name and then click OK. It will then appear at the bottom of the presets list.

You can also change what the brush preset previews look like. You have options like large thumbnails, small thumbnails, list view, etc. The Stroke Thumbnail option is useful if you have a tablet. This will give you



The gear icon at the top of the Brush Presets will give you lots of options.

a preview that shows you what your brush stroke would look like with different amounts of pressure applied.

At the bottom of the menu are several additional brush sets to choose from. When you select one, you'll be given the option to Append the list (add the new set to the bottom of the current brush presets in the list) or clear the current brushes and add the new set.

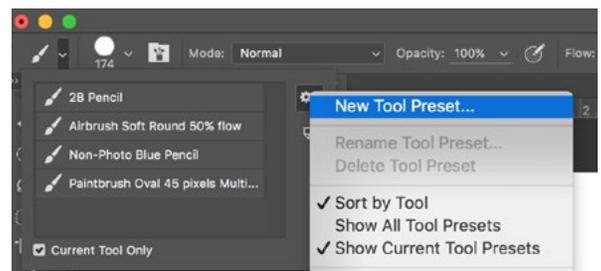
If you get a brush preset file from an outside source (a friend, website, etc.), you can load them by choosing the "Load Brushes" option from this list. Alternatively, you can use the "Save Brushes" option to save your current brushes as a file that you can share with someone else.

Define new Brush Preset

If you want to create a special, custom brush, you can do so by turning the contents of a Photoshop document into its own brush. For example, you can create a logo for yourself in Photoshop and then turn that logo into a brush that can be used in any document. The image you're using must be black and white and the opacity slider must be set to 100%.

Go to the Edit menu and choose Define Brush Preset. A box will appear prompting you to give the new brush preset a name. Click OK. Now, that preset will appear in your preset list regardless of what document you're working on.

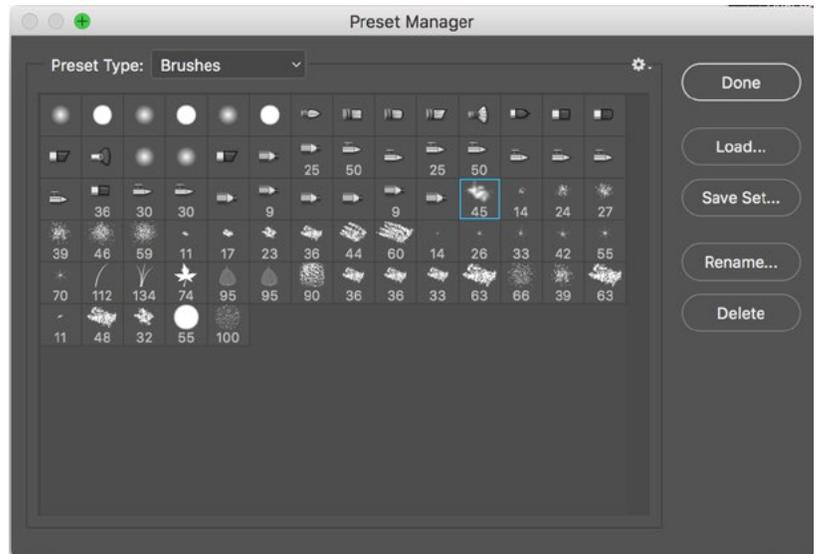
If you're using this brush preset as a company logo, or something else that should always have the same opacity and color, you might want to make use of the Tool Presets feature, which will allow you to save things like color and opacity within the preset. The Tool Presets box can be accessed by clicking the left-most icon within the Options Panel. It will look like the icon of the active tool. To create a new Tool Preset for a brush, first set all of the brush options exactly as you want them, including color and opacity. Then click on the little gear icon at the top right of the Tool Preset



The Tool Presets, in the Options Panel.

box (see screen shot) and choose New Tool Preset. A dialog box will appear where you can give the preset a name. You will also need to turn on the Color check box if you want to include the chosen foreground color in the preset.

You can now share the custom brush with a friend. To do this, open the Brush Presets from the Options Bar and click on the gear icon. From the pop-up menu, choose Preset Manager. In the Preset Manager dialog box, select the brush (or brushes) you would like to send to someone. Then click the Save Set button on the right. You'll be prompted to give the brush a



The Brush Preset Manager

name and choose a location on your hard drive. Saving them this way will allow you to save just one brush instead of all the brush presets you have loaded.

Keyboard Shortcuts

| | |
|--|--------------------------------------|
| Change brush size | Left and right bracket keys ([]) |
| Change brush hardness | Bracket keys + Shift key |
| Fill with foreground color | Option+Delete (Win: Alt+Backspace) |
| Fill with background color | Command+Delete (Win: Ctrl+backspace) |
| Swap foreground/background colors | X |