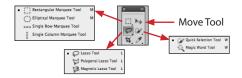
# **Working with Selection Tools**

The *Selection Tools* are located at the top of the Toolbar to the left and below the *Move Tool*. To access the related tools of the specific selection tool, click and hold on the tool to get the pop-up window with other tool options.



## The move & selection tools have the following general functions:

The *Move tool* moves selections, layers, and guides.

The *Marquee tools* make rectangular, elliptical, single row, and single column selections.

The Lasso tools make freehand, polygonal (straight-edged), and magnetic (snap-to) selections.

The Quick Selection tool lets you quickly "paint" a selection using an adjustable round brush tip.

The *Magic Wand* tool selects similarly colored areas.



When making a new selection, the first button (A) in the Selection Options will only allow one selection at a time. Once a selection is made, the remaining buttons allow interactions between the primary one and successive ones.

- A. New
- **B.** Add To Press Shift key for Shortcut
- C. Subtract From Press Option (Mac) / Alt (PC) key for Shortcut
- D. Intersect With Press Shift + Option (Mac) / Shift + Alt (PC) key for Shortcut

#### Marquee Selection Tool Settings:

**Rectangular Marquee** - Makes a rectangular selection (or a square, when used with the Shift key).

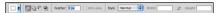
Elliptical Marquee - Makes an elliptical/oval selection (or a circle, when used with the Shift key).

Single Row or Single Column Marquee - Defines the border as a 1-pixel-wide row or column.

Specify a feathering setting in the options bar - usually this should be 0, since feathering (softening the selection edges) can be done after the selection is made. Turn anti-aliasing on to get smoother edges when the shape is rounded (not a flat side).

For the Rectangle Marquee tool or the Elliptical Marquee tool, choose a *style* in the options bar:

*Normal* - Determines marquee proportions by dragging.



*Fixed Ratio* - Sets a height-to-width ratio. Enter values (decimal values are valid) for the aspect ratio. For example, to draw a marquee twice as wide as it is high, enter 2 for the width and 1 for the height.

Feather: 0 px Anti-alias Style: Fixed Ratio Width: 1 ## Height: 1

Fixed Size - Specifies set values for the marquee's height and width. Enter pixel values in whole numbers.

Feather: 0 px Acti-alias Style: Fixed Size Width: 1 in # Height: 1 in

Hold down *Shift* as you drag to constrain the marquee to a square or circle (release the mouse button before you release Shift to keep the selection shape constrained).

To drag a marquee from its center, hold down *Alt (Windows) or Option (Mac OS*) after you begin dragging.

To reposition a rectangle or elliptical marquee, first drag to create the selection border, keeping the mouse button depressed. Then hold down the *Spacebar* and continue to drag. Release the spacebar, but keep the mouse button depressed, if you need to continue adjusting the selection border.

To reposition the selection "marching ants" once the selection is made, click anywhere inside the selection and drag.



## **Lasso Selection Tool Settings:**

The Lasso tool is useful for drawing freeform segments of a selection border.

Drag to draw a freehand selection border.

To close the selection border, release the mouse without holding down Alt or Option.

The *Polygonal Lasso tool* is useful for drawing straight-edged segments of a selection border.



Click in the image to set the starting point.

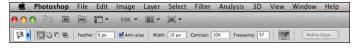
Do one or more of the following:

- To draw a straight segment, position the pointer where you want the first straight segment to end, and click. Continue clicking to set endpoints for subsequent segments.
- To draw a straight line at a multiple of 45°, hold down Shift as you move to click the next segment.
- To draw a freehand segment, hold down Alt (Windows) or Option (Mac OS), and drag. When you finish, release Alt or Option and the mouse button.
- To erase recently drawn straight segments, press the Delete key.

#### Close the selection border:

Position the Polygonal Lasso tool pointer over the starting point (a closed circle appears next to the pointer), and click. If the pointer is not over the starting point, double-click the Polygonal Lasso tool pointer, or Ctrl-click (Windows) or Command-click (Mac OS).

The *Magnetic Lasso tool* snaps the selection to the <u>edges</u> of defined areas in the image.



#### **Options:**

*Width* - To specify a detection width, enter a pixel value for Width. The Magnetic Lasso tool detects edges only within the specified distance from the pointer.

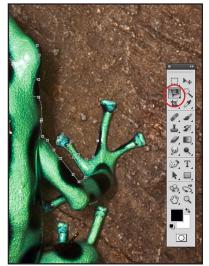
To change the lasso pointer so that it indicates the lasso width, press the *Caps Lock key*. You can change the pointer while the tool is selected but not in use. Press the right bracket (]) to increase the Magnetic Lasso edge width by 1 pixel; press the left bracket ([) to decrease the width by 1 pixel.

**Contrast** - To specify the lasso's sensitivity to edges in the image, enter a value between 1% and 100% for Contrast. A higher value detects only edges that contrast sharply with their surroundings; a lower value detects lower-contrast edges.

**Frequency** - To specify the rate at which the lasso sets fastening points, enter a value between 0 and 100 for Frequency. A higher value anchors the selection border in place more quickly.

Click in the image to set the first fastening point. Fastening points anchor the selection border in place.

Release the mouse button or keep it depressed, and then move the pointer along the edge you want to trace. The most recent segment of the selection border remains active. As you move the pointer, the active segment snaps to the strongest edge in the image, based on the detection width set in the options bar. Periodically, the Magnetic Lasso tool adds fastening points to the selection border to anchor previous segments. If the border doesn't snap to the desired edge, click once to add a fastening point manually. Continue to trace the edge, and add fastening points as needed.



To erase recently drawn segments and fastening points, press the Delete key until you've erased the fastening points for the desired segment.

To close the border with a magnetic segment, double-click, or press Enter or Return. (To manually close the border, drag over the starting point and click.)

To reposition the image if you are very zoomed in to match selecting the edge more accurate, press the *Spacebar* (which temporarily switches to the Hand tool) and drag on the image to move it over.

**Note:** If the Magnetic Selection tool gets too close to the <u>edge of your document window</u>, the tool jumps making a random selection. Before the tool gets too near the edge, press the *Spacebar* and reposition the area of selection to the center of they window.

## **Quick Selection Tool Settings:**

You can use the Quick Selection tool to quickly "paint" a selection using an adjustable round brush tip. As you drag, the selection expands outward and automatically finds and follows defined edges in the image. New is the default option if nothing is selected. After making the initial selection, the option changes automatically to Add to.

#### **Options:**

*Sample All Layers* - Creates a selection based on all layers instead of just the currently selected layer.

**Auto**-Enhance - Reduces roughness and blockiness in the selection boundary. Auto-Enhance automatically flows the selection further toward image edges and applies some of the edge refinement you can apply manually in the Refine Edge dialog with the Contrast and Radius options.

Paint inside the part of the image you want to select.

The selection grows as you paint. If updating is slow, continue to drag to allow time to complete work on the selection. As you paint near the edges of a shape, the selection area extends to follow the contours of the shape edge.

To subtract from a selection, click the Subtract from option in the options bar, then drag over the existing selection.

To temporarily switch between add and subtract modes, hold down the Alt (Windows) or Option (Mac) key.

## Magic Wand Tool Settings:

The Magic Wand tool lets you select a <u>consistently colored area</u> (for example, a red flower) without having to trace its outline. You specify the selected color range, or tolerance, relative to the original color you click on.

#### **Options:**

**Tolerance** - Determines the color range of selected pixels. Enter a value in pixels, ranging from 0 to 255. A low value selects the few colors very similar to the pixel you click. A higher value selects a broader range of colors.

Anti-aliased - Creates a smoother-edged selection.

**Contiguous** - Selects only adjacent areas using the same colors. Otherwise, all pixels in the entire image using the same colors are selected.

*Sample All Layers* - Selects colors using data from all the visible layers. Otherwise, the Magic Wand tool selects colors from the active layer only.

In the image, click the color you want to select. If Contiguous is selected, all adjacent pixels within the tolerance range are selected. Otherwise, all pixels in the tolerance range are selected.

**Note:** The Selection Tools work well for images that have well-defined edges. If an item you need to select has soft or transparent edges, a selection tool will be used as just an initial step in selecting to object, The *Refine Edge* option will be necessary to improve on the qualify of the selection beyond what the tool itself it capable of.



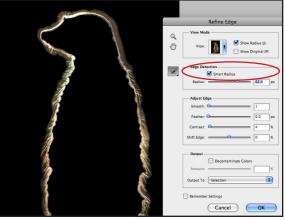


## Refine selection edges

The *Refine Edge* option improves the quality of selection edges, letting you view the selection against different backgrounds for easy editing. Start by making a selection with the tool that will get the object most accurately selected. In most cases, the magnetic lasso or quick selection tool will be a good starting point. Make sure the entire object is selected as close to the edges as possible.

**View Mode** - From the pop-up menu, choose a mode to change how the selection is displayed. For information about each mode, hover the pointer over it until a tool tip appears. Show Original displays the original selection for comparison. Show Radius displays the selection border where edge refinement occurs.







Smart Radius Automatically adjusts
the radius for hard
and soft edges found
in the border region.
Deselect this option if
the border is uniformly
hard- or soft-edged, or
if you want to control
the Radius setting and
refinement brushes
more precisely.



Refine Radius and Erase Refinements tools - Let you precisely adjust the border area in which edge refinement occurs. To quickly toggle from one tool to the other, press Alt (Windows) or Option (Mac OS). To change the brush size, press the bracket keys.

Brush over soft areas such as hair or fur to add fine details to the selection.

*Radius* - Determines the size of the selection border in which edge refinement occurs. Use a small radius for sharp edges, and a large one for softer edges.

**Smooth** - Reduces irregular areas ("hills and valleys") in the selection border to create a smoother outline.

**Feather** - Blurs the transition between the selection and surrounding pixels.

**Contrast** - When increased, soft-edged transitions along the selection border become more abrupt. Typically, the Smart Radius option and refinement tools are more effective.

**Shift Edge** - Moves soft-edged borders inward with negative values or outward with positive ones. Shifting these borders inward can help remove unwanted background colors from selection edges.

**Decontaminate Colors** - Replaces color fringes with the color of fully selected pixels nearby. The strength of color replacement is proportionate to the softness of selection edges. Important: Because this option changes pixel color, it requires output to a new layer or document. Retain the original layer so you can revert back to it if needed. (To easily see changes in pixel color, choose Reveal Layer for the View Mode.)

**Amount** - Changes the level of decontamination and fringe replacement.

Output To - Determines whether the refined selection becomes a selection or mask on the current layer, or produces a new layer or document.



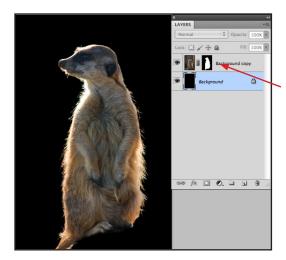
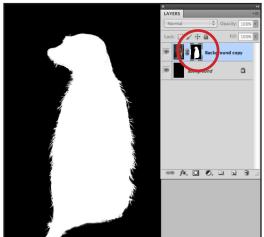


Image was output with a Layer Mask created to hide the original background in the image rather than delete it.

The image is copied onto a new layer with the Layer Mask applied. The mask is shown as the thumbnail to the right of the image thumbnail.

The background layer in this example was filled with black to put a solid color behind the image and eliminate the original background.



To view the Layer Mask as an overlay in the document window in order to check the accuracy of the mask, press the Option (Mac) or Alt (Windows) key and click on Layer Mask thumbnail.

To hide the Layer Mask and see the image, press the Option (Mac) or Alt (Windows) key and click on Layer Mask thumbnail.



To hide the Layer Mask and see the original background in the image, press the Shift key and click on Layer Mask thumbnail. A red X will indicate the mask is temporarily disabled.

No one selection tool is always capable of doing the entire selection perfectly. Use the best tool for the job and once an initial selection is made, use another selection tool with settings in the Selection Options to improve the accuracy of the selection. The first considerations should be the shape of the object and how strongly defined the edges are. For any objects with soft edges the Refine Edge settings will greatly improve the quality of those settings.