



Cropping for Print

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In this lesson, we're going to talk about printing and how to crop our images before we print them. This might sound like a simple topic, but there's actually a lot more involved than first meets the eye. Every online printer has a list of print sizes to choose from and it can be difficult to decide what aspect ratio would work for a particular image.

After cropping an image to your liking in Lightroom or Photoshop, you may find that the aspect ratio does not conform to the standardized print sizes that you can order and that it does not conform to the standard sizes of frames that you can buy. If you were to order custom sizes and have custom frames made, the cost of the print will go up dramatically.

Often times, an image will need to be cropped in order to fit a specific aspect ratio offered by the print company. Sometimes, I will even retouch extra content along the edge of a frame so that I can extend the edge of the image to fit a certain print size.

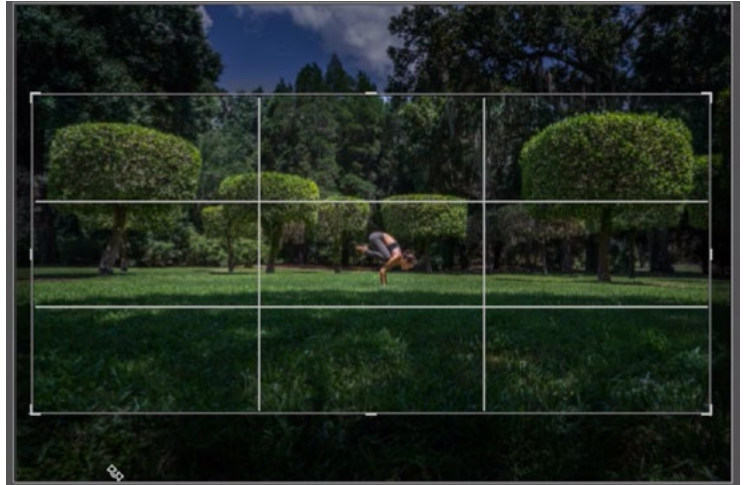
I am currently going through the process of choosing images and print sizes to go in my home and I came up with a way of visualizing image sizes vs. print sizes. I'm going to share this system with you here, and you will also receive the overlay guide we'll be using. It can be found in the downloads area on this lesson page. Note that this cropping visualizer guide contains the sizes and aspect ratios provided by Bay Photo, which is an online printer that I have used recently and that offers a lot of size options. At the end of this lesson, I will show you how to create your own cropping visualizer if you are printing yourself or if you are using a different online printing company that offers different sizes.

20x24	30x30
20x30	30x40
20x40	30x45
20x60	30x60
20x80	30x80
24x24	40x40
24x30	40x60
24x36	40x80
24x48	

Above, you can see some of the standard print sizes offered by Bay Photo.

Using the Crop Visualizer Overlay in Lightroom (Timestamp 4:24)

Crop ratios in Lightroom I'll open an example image in Lightroom and I'll activate the Crop Tool in the Develop Module. This will show you how I have cropped the image to my ideal size. This size is very long (horizontally) and probably does not match any of the standard print sizes offered by the online printer. If I were to have this printed and framed to a custom size that matches my crop, it would be very expensive.



With the Crop Tool active in Photoshop, you can see how I've cropped this image to my ideal size.

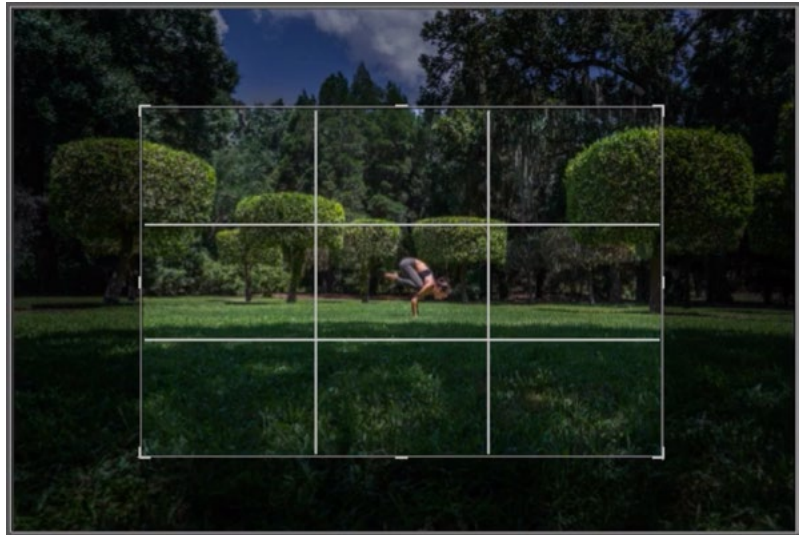
With the Crop Tool active, some settings will appear on the right side of the interface. One of these is the Aspect menu. Click on this and a menu will appear, offering many of the standard aspect ratios for printing. If you don't see the aspect ratio that you need, you can choose the Custom option. That's what I'll do here. A dialog will appear where we'll enter in a custom ratio. I like the 60" x 40" print size offered by the online print company, so that's what we'll type in. When we click OK, the cropping rectangle will change to take on the proportions we specified.

Note that in Lightroom, the Crop Tool works in proportions and not inches (or centimeters, pixels, etc.). That's because the final size of the picture is not determined until we export it using the settings in the Export dialog.



The Aspect menu (above) can be used to choose a standard ratio or enter in a custom ratio.

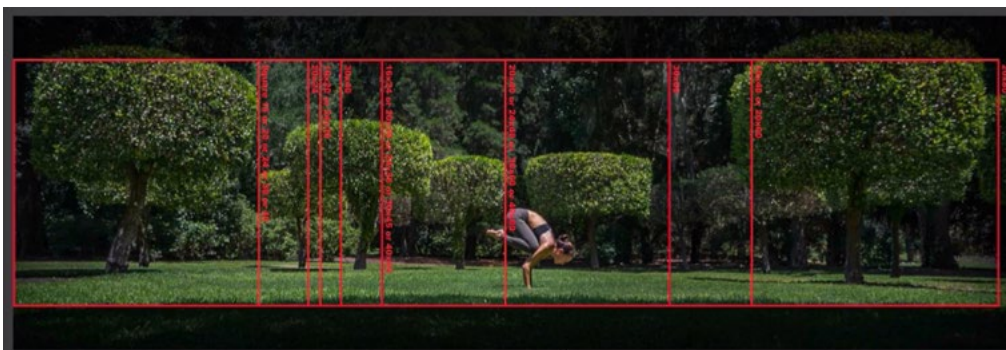
Looking at the 60 x 40 crop rectangle, I don't think this aspect ratio is ideal for the image. This is where I would go back to the print company's website and see if maybe there's another size that would work. I see that there's an 80" x 40" size, so I'll go back to Lightroom and try that. The process of going back and forth like this can be time-consuming and frustrating. It would be very convenient to be able to visualize all of the size offerings all at once.



The crop ratio for the 60x40 print size does not look ideal for this image.

How the crop visualizer overlay works Looking at all of the print sizes offered by Bay Photo, I have taken all of the numbers and created something that can be used in both Lightroom and Photoshop to visualize how I would need to crop my images in order to fit them to these various sizes. Let's look at how it works.

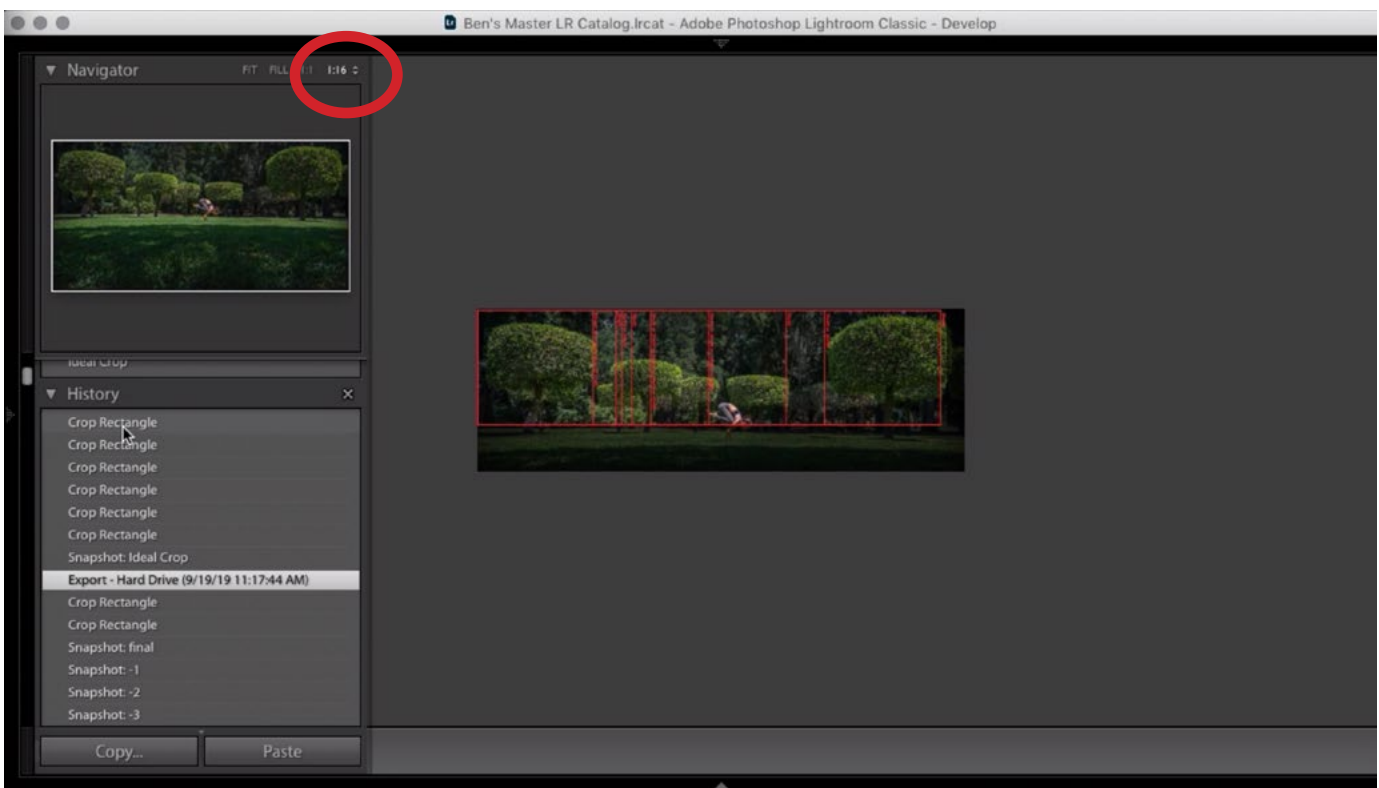
First of all, we'll use the Crop Tool to set the image to the ideal crop. This is the way I would like the image to be cropped if print ratios were not an issue. Then, we'll click on the View menu at the top of the screen, choose the Loupe Overlay option and select "Choose Layout Image." We'll be prompted to navigate to the overlay file on the hard drive and then click Choose. The colored overlay guide will appear over the image. We'll temporarily hide the left and right side panels in the interface by tapping the Tab key. This will give us a better view of the overlay.



The Loupe Overlay feature was used to place the crop ratio visualizer over the image in Lightroom.

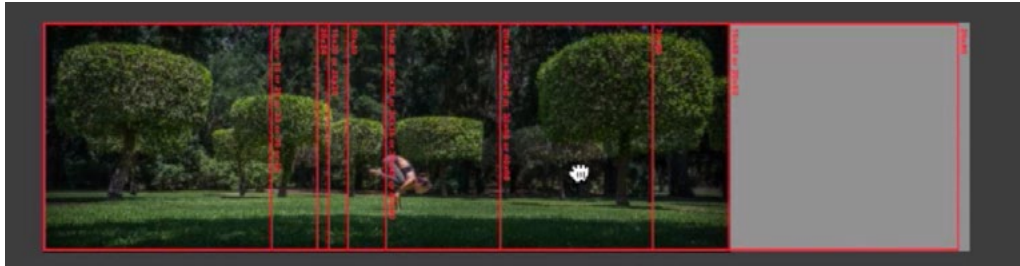
The bottom left corner of the red overlay is where the individual proportions start from, so the first vertical line shows the proportions for a square crop. The second line shows a 20" x 24" crop ratio and so on. Some of the print sizes use the same proportions so you will see that some of the vertical lines have multiple sizes listed.

So how do we find the print size that's closest to the ideal crop that we specified? Well, we will need to resize and reposition the overlay to find the guide that best matches our crop. Note that we need to hold down the Command key (Ctrl on Win) if we want to change the overlay. With the Command key held down, we can click and drag the overlay to move it around, positioning the top left corner to align with the top left corner of the image. With the Command key still held down, we can click and drag on the corner handles to resize the overlay. We'll first zoom out on the image by choosing the 1:16 zoom view in the top right corner of the Navigator panel. This will zoom out enough on the image so that we can expand the overlay.



The view ratio menu (circled) is set to 1:16. This zooms out on the image enough so that we can expand the overlay to extend far beyond the image frame.

With the Command key held down, we'll click and drag on the bottom right corner handle to expand the overlay until one of the vertical lines aligns with the right side of the image, where the print size is as close to our crop size as possible. In the example image, the line that represents the 16x48 size or the 20x60 size is the one that best matches our crop.



By expanding the overlay, we can see which of the print sizes best matches the ideal crop for this image.

After finding the print size that is closest to the crop, we can tweak the crop to perfectly match the print size. Make a note of the desired size and then turn off the overlay by clicking on the View menu, choosing Loupe Overlay and clicking on the "Show" option to remove the checkmark from that item. In the example, we want to size the image to 80" x 30" so we'll activate the Crop Tool and choose "Custom" from the Aspect menu. In the dialog that pops up, we'll enter 80 for the width and 30 for the height. When we click OK, the crop rectangle will take on that ratio. We can now position the image so that it fits nicely within the crop rectangle.

After setting the crop rectangle to the specified aspect ratio, it's a good idea to create a Snapshot and we can do this from within the Snapshots panel on the left side of the Develop Module. When we create a new Snapshot, it remembers the current state of the document. This includes the adjustment settings, cropping and anything else that affects the visual look of the picture. We'll click the Plus icon in the top right corner of the Snapshots panel and a dialog will appear, asking us to name the new Snapshot. I like to name the Snapshots according to what the crop is so that I know its purpose in the future. I will also create a Snapshot named "Ideal Crop" and this is for the version that I would use if print ratios were not an issue. This is also the crop I'd use if I were posting the image online. To bring an image back to one of these crops, simply click on the appropriate Snapshot from within the Snapshots panel.

Note that I have also created a vertical overlay guide and you can load that by choosing the appropriate file (that you can download from the lesson page) when using the “Choose Layout Image” option from the View menu.

Additional Crop Overlay Tips (17:24)

Unable to drag the overlay far enough outward When positioning the overlay guide over the image, you may not be able to extend the edges far enough to the left or the right. That’s because the edge bumps up against the edge of the image window and it won’t let you extend it farther. When this is the case, you can try to change the view ratio in the upper right corner of the Navigator panel. If this isn’t enough, you could either create another version of the overlay (that doesn’t contain the really long print sizes) or you could opt to size the image in Photoshop.

Reset Crop It can be easier to see what your print options are if you are viewing the original image size with no cropping already applied. You can reset any cropping by activating the Crop Tool and then clicking the Reset button at the bottom of the crop settings. If you had already cropped the image to your ideal crop, it will be useful to create an “Ideal Crop” Snapshot before resetting the crop. This will allow you to easily return to the ideal version after cropping for print.

Cropping in Camera When cropping for making prints, you may want to consider the way you are cropping in camera, before you even snap the shutter. If the important elements in the scene are very close to the edges of the image, you’ll be much more limited in the number of aspect ratios you can crop to because changing the crop will likely cut off some important content. If you think you might be printing the image, it might be a good idea to make the in-camera crop a little



Here is an instance where I cropped the image too tightly in camera. This limits the number of print sizes I can use.

looser than you would ideally use. This will give you more leeway in cropping for printing to a certain aspect ratio. If you are in a position where you can not zoom out or back up, then consider taking additional shots of the scene where you tilt your camera different directions to capture more of the scene. Then, should you need to expand the image, you can use one of these supporting captures to extend the edge[s] of the frame.

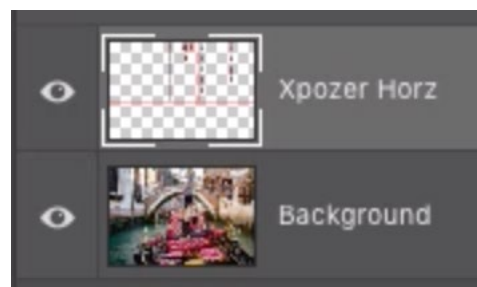
Red overlay indicates work required When I am retouching my images in Photoshop, I will create a layer in which I will paint in a red overlay in all areas that require retouching. This helps me to keep track of what areas need work. If I plan on tightly cropping the image, I may not tackle the areas near the edges of the frame that contain that red overlay because I assume that they will be cropped out. I will, however, leave the overlay active in case I need to go back later and create a different type of crop for a specific print size. When I reset the crop in Lightroom, I may see some of this red overlay near the edges of the frame and this lets me know that further retouching is required if I want to include that part of the scene.



When extending the crop on this image, I can see some of the red overlay layer that indicates that retouching is needed. If I wish to include this area in the print, I will need to go back and finish the retouch work first.

Using the Overlay Guide in Photoshop (39:28)

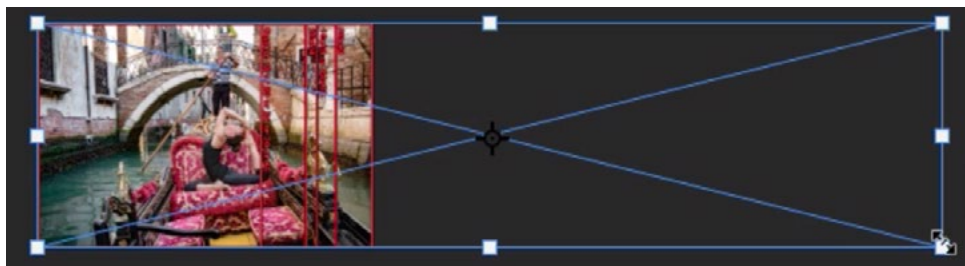
Let's look at how to use the same overlay in Photoshop. Here, we'll have more versatility because we're not limited in how far we can zoom out on the picture. With the image open in Photoshop, we'll drag the overlay guide into the document as a separate layer that sits above the image layer. (Later in the lesson, we'll talk about how we can get the guide into the Libraries panel so it's always at the ready.)



The overlay layer is positioned directly above the image layer.

Overscroll setting Before scaling anything, there is a setting that we should change within the Preferences. We'll click on the Photoshop menu and choose Preferences > Tools. (In Windows, the Preferences can be found under the Edit menu.) The Tools category of the Preferences window will open and we want to make sure that the Overscroll check box is turned on. This will allow us to move the image around within the document window and it won't need to be centered when we zoom out.

Position the guide If we drag the guide in from the Libraries panel, it will already have free active transform handles. If we drag it from another document window, it will not have free transform handles. We can activate the free transform handles by clicking on the Edit menu and choosing Free Transform. Now, we can drag the handles around the edge of the layer to resize the overlay guide. We'll position the guide so that the top left corner aligns with the top left corner of the image and then we'll drag the bottom right corner to scale the guide. As we do this, we'll watch to see when



We're using the Free Transform command to scale the overlay to see which print size best matches the image.

the red lines align with the right side of the image. This will show us what print size best matches the aspect ratio of the image.

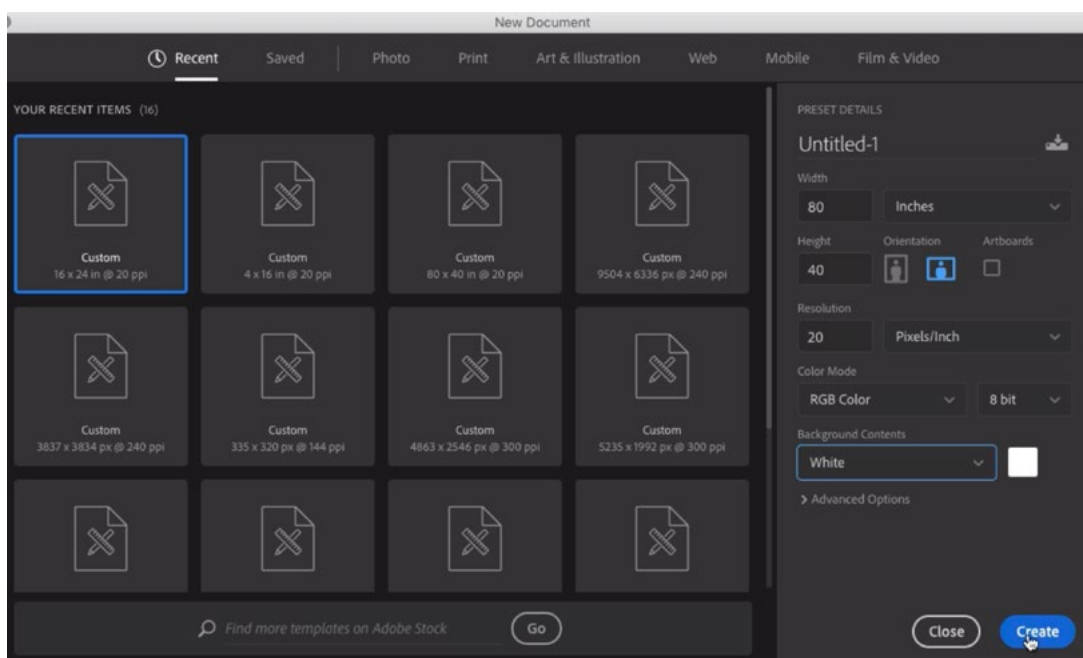
After using the overlay to find the best print size, we'll activate the Crop Tool and use the ratio settings in the Options Bar to constrain the crop to that ratio so that we can best crop the image for printing.

Creating a Crop Overlay Guide (44:23)

Now we'll learn how to create one of these crop overlays from scratch. You will receive the horizontal and vertical guides that we have been using up until now, but these are based on a specific online print company. Perhaps you want to use a different online print company that offers different print sizes.

We'll first go to the website that shows the different print sizes offered and we'll make note of the largest size offered. In the video example, that's a 40" x 80" size.

We'll open Photoshop, click on the File menu and choose New. The New Document dialog will appear and the settings will be on the right. We'll type 80 into the Width field and 40 into the Height field. Because we're never going to print this document, we can use a very low Resolution setting in order to keep the file size small. In this case, we'll enter 20 in for the Resolution and click the Create button.



At left is the New Document dialog. In order to create a crop guide overlay, we're creating a document that has the same dimensions as the largest print size, 80x40.

With the new document now open in Photoshop, we'll activate the Shape Tool from within the Toolbar on the left side of the interface. With the Shape Tool active, some settings will appear within the Options Bar at the top of the screen. It's most ideal to work through these settings before you click within the document to create the shape. This will make it so the tool remembers the settings the next time you make a shape. In the Options Bar, we want to make sure that the dropdown menu is set to Shape (not Pixels or Path) and that the Fill is set to None. We'll set the Stroke color to a vibrant red and the stroke width to 6px. We'll also make sure that the tool is set to create a New Layer (This is the menu to the right of the W and H fields.)

Now we want the shape to begin precisely in the top left corner of the document and some guides will help us achieve that. If the Rulers are not already visible in the interface, we'll access them by clicking Command+R (Ctrl+R on Win). Then, we'll drag out guides that snap to the top, left and bottom edges of the document. We can now turn off the Rulers by again typing Command+R (Ctrl+R on Win).

With the Shape Tool active, we'll line up the crosshair to match the top left corner of the document, using the guides to ensure perfect alignment. Now we will click the mouse button once. The Create Rectangle dialog will appear and we'll type 80 in and 40 in into the Width and Height fields. It's important to type the "in" for inches because the Shape Tool is going to use whatever units are

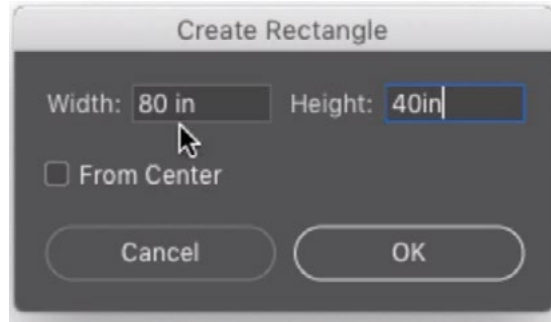


LEFT: With the Rulers visible, we're dragging out guides that align with the top, bottom and left side of the document.

BELOW: The Shape Tool is being used to click precisely on the top left corner of the document.



currently being used by the Rulers. Typing “in” will ensure that the shape is measured in inches. We’ll click OK and it will make a shape that is the exact size of the document because this is an 80” x 40” document.



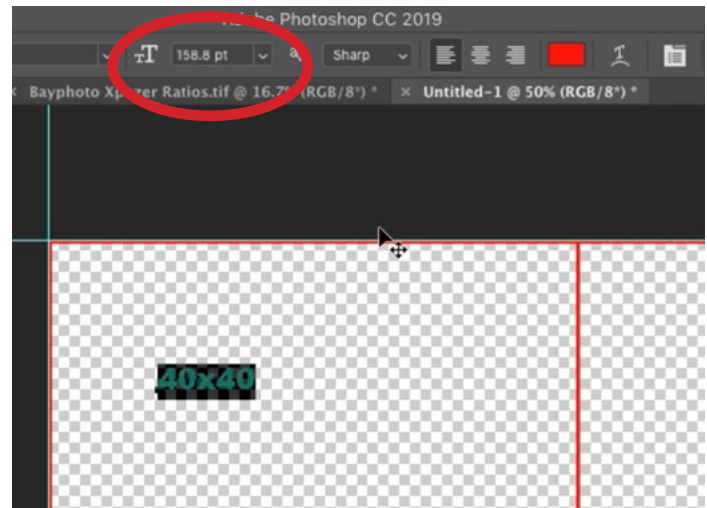
After clicking with the Shape Tool, this dialog appears. We’re entering the print size into the Width and Height fields.

We’ll go back to the website that lists the print company’s sizes and we’ll make a note of the next size down. In the video example, that is 40” x 60”. Back in Photoshop, we’ll repeat the shape-making process. With the Shape Tool active, we’ll click in the upper left corner of the document, using the guides to ensure perfect alignment. When the Create Rectangle pops up, we’ll type 60 in and 40 in into the Width and Height fields. The second guide shape will be created. We’ll continue this process until we’ve created a shape for every print size that has 40 inches for the vertical dimension. In the video example, that’s 40x80, 40x60 and 40x40.

We don’t need the white background layer, so we’ll drag that layer to the trash can icon at the bottom of the Layers panel. This will leave us with the transparent checkerboard under all of our rectangular shapes.

After creating the guide shapes, it’s important that we add some text that indicates what the dimensions are. We’ll activate the Text Tool, click on the Foreground color swatch at the bottom of the Toolbar and choose the same vibrant red from the Color Picker. We currently have shape layers that take up the entire document, so we need to be careful before we start to add text. If there is an active shape layer and we click within the document to add text, it’s going to think that we want the text to interact with the shape. We want the text to be independent of the shapes, so we need to make sure that none of the layers are active. We can do that by clicking somewhere outside of the layers in the Layers panel. Clicking in the empty space below the layers will work fine.

Now we can click within the document to add text. Some placeholder text will appear and it will automatically be selected. We'll type in the dimensions for the first rectangular guide, which is for the square print size. We'll type in 40x40 because that is the print company's square print size. If the type is not an appropriate size, we'll first make sure that all the text is selected by using the keyboard shortcut Command+A (Ctrl+A on Win). This will highlight all of the text. Then, we can use the size setting within the Options Bar to adjust



The Type Tool was used to add text indicating the dimensions of a guide. The size setting (circled) can be used to scale the text.

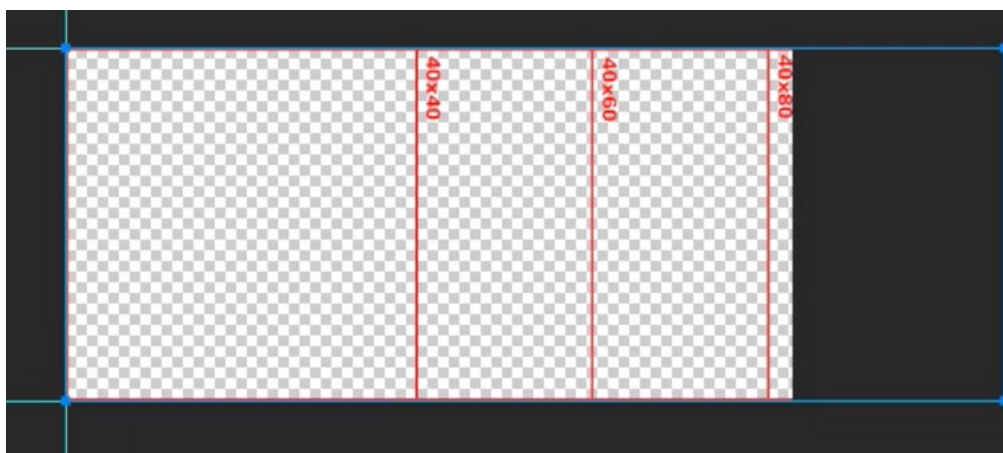
the type size. Then, we'll activate the Move Tool and the text cursor will go away so that we can see the text. We want the text to appear along the vertical side of the square guide, so we'll rotate the text 90 degrees by clicking on the Edit menu and choosing Rotate > Transform > Rotate 90 degrees Clockwise. We'll use the Move Tool to position the text along the line.

Next, we want to duplicate that text so that we can use it for the next guide. We'll drag a copy of this layer by holding down the Option key (Alt on Win), clicking on the text and dragging it to the right. It's the Option key that makes it create a copy instead of simply moving the layer. We'll position this new text along the next vertical guide line. We'll continue this process of duplicating the text for each of the guides we had created. The last bit of text will be positioned right outside of the document bounds because it's to the right of the last guide, which takes up the entire document. To make this text visible, we'll click on the Image menu and choose Reveal All. This will expand the document bounds to reveal any content that's currently hidden outside of the document frame. Now we just need to go in and change the text for each of the guides so that it reads the appropriate dimension.

We added guides for all of the print sizes that are 40" tall, so let's move on to the next set of print sizes. The next guide we're going to create is for the 30" x 80" print size, but we're going to encounter a challenge. With this guide overlay, we're not trying to get the guides to be the correct size. We're trying to make them the correct aspect ratio, with the height being consistent across the entire document. This is going to take a bit more work.

We'll click on the Image menu and choose Image Size. The Image Size dialog will appear and here we can see that the document is currently 40 inches tall. We're going to tell Photoshop to make the document 30 inches tall by typing 30 into the height field. We're also going to turn off the Resample check box. With the Resample check box turned off, it will not change the amount of information we have. It will only change how big it will print. We'll click OK to exit the Image Size dialog. The document will not change visibly, but if we were to view the Rulers, we would see that the document is now 30 inches tall.

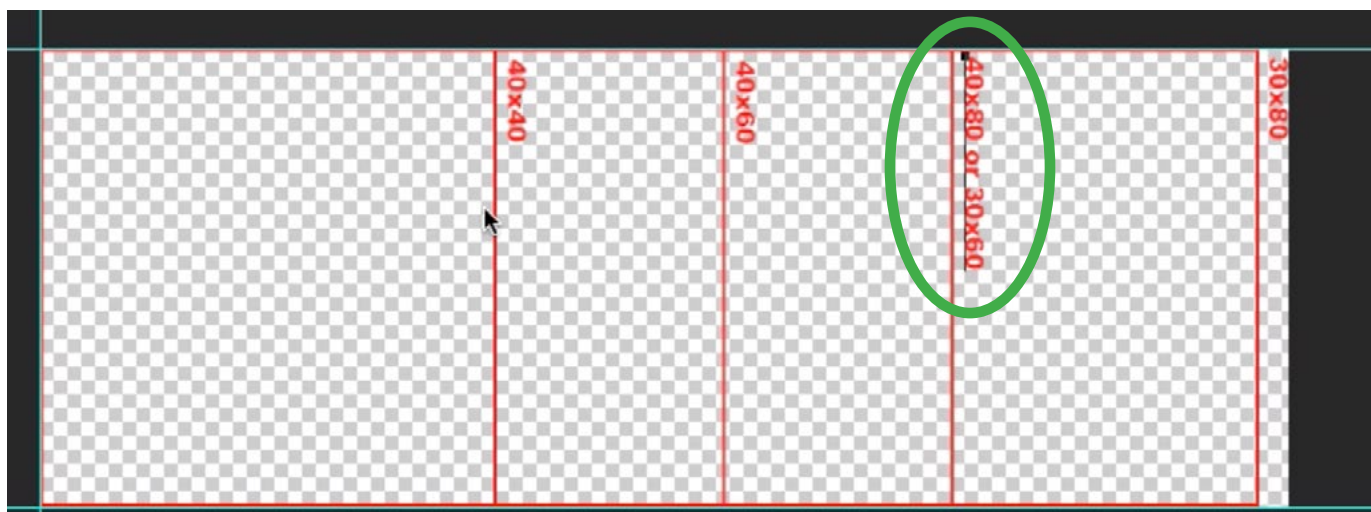
We will now create guides for all of the print sizes that have a 30-inch height and we'll use the same shape-making process that we used before. We'll activate the Shape Tool and click precisely in the upper left corner of the document. The Create Rectangle box will appear and we'll type in 80 in for the Width, 30 in for the Height and then click OK. The rectangle will be created, but it's so long that it extends out beyond the bounds of the document. To expand the document to include this entire shape, we'll click on the Image menu and choose Reveal All.



We used the Shape Tool to create the next print size and you can see that it extends beyond the document bounds. We can expand the document to contain the shape by using the Reveal All command.

This new guide will need a text label, so we'll duplicate one of the other text layers and drag it to the right of the vertical guide line. It will be outside of the document bounds so we'll need to use the Reveal All command again to make it visible. We'll activate the Type Tool and change the text to read 30 x 80.

We'll continue this process for all of the print sizes on the website. As we do this, we will encounter some sizes that are the same aspect ratio as a different size that we already created a guide for. For example, the 40 x 80 print size has the same aspect ratio as the 30 x 60 print size. When this is the case, we'll simply add text to the already existing guide to include the additional size.



As we create guides for all the print sizes, some of them will share the same aspect ratio. When this is the case, we'll simply include more than one print size on the guide line (circled.)

After all of the guides have been created, it's time to save the file. We need to save the document as a PNG file in order to maintain the transparency. We'll click on the File menu and choose Save As. In the Save As dialog, we'll name the file and change the Format menu to PNG before clicking the Save button. You could also save the file by using the Export As or Save for Web commands. Just make sure that the Transparency check box is turned on and that you're using the PNG-24 setting.

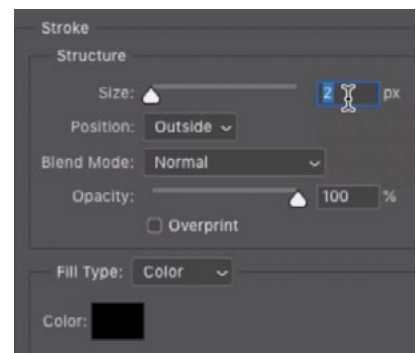
Now we have our guide overlay for all of the horizontal print sizes. We can easily create a guide for the vertical print sizes by rotating this document and then saving it again. We'll click on the Image menu and choose Image Rotation > 90 degrees Counter Clockwise. Rotating this way will make it so that the text is not upside down. Then, we'll save the document again, including the word "vertical" in the file name.

Saving the Guide Overlays into the Libraries Panel (1:11:57)

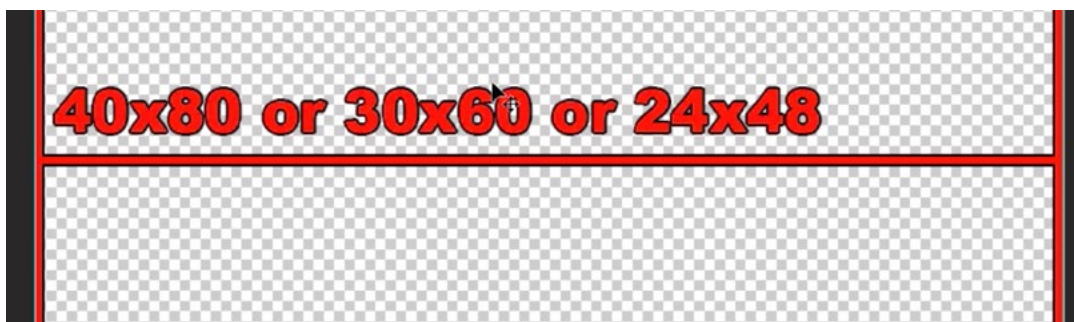
Our guide overlays have successfully been created, so let's look at how we can add them to the Libraries panel so that they can be easily accessible in Photoshop. The Libraries panel can hold all kinds of elements that you frequently use. It can be an image, graphic, color swatch, etc. You can simply drag these elements from the panel into your document. It makes it easy because you don't need to remember where you stored all of the individual elements on your hard drive.

If the Libraries panel is not already open, we can access it by clicking on the Window menu and choosing Libraries. Before dragging anything into the Libraries panel, we need to make sure that everything is on one layer. We'll click on the Select menu and choose All Layers. Then, we'll click on the Layer menu and choose Merge Layers.

Option to add stroke With the entire guide on one layer, we could do something a little extra at this point to make the guides stand off the underlying images better. We'll click on the FX menu at the bottom of the Layers panel and choose Stroke. The Layer Style dialog will appear and we'll set the size of the stroke to a small number (2), the position on the outside and we'll set the color to Black. We'll click OK to exit the dialog and we'll see the black stroke appear around the entirety of the guide.

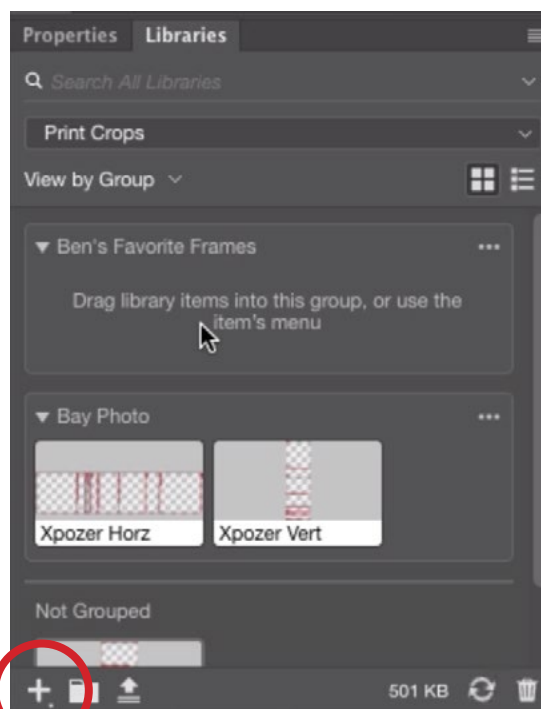
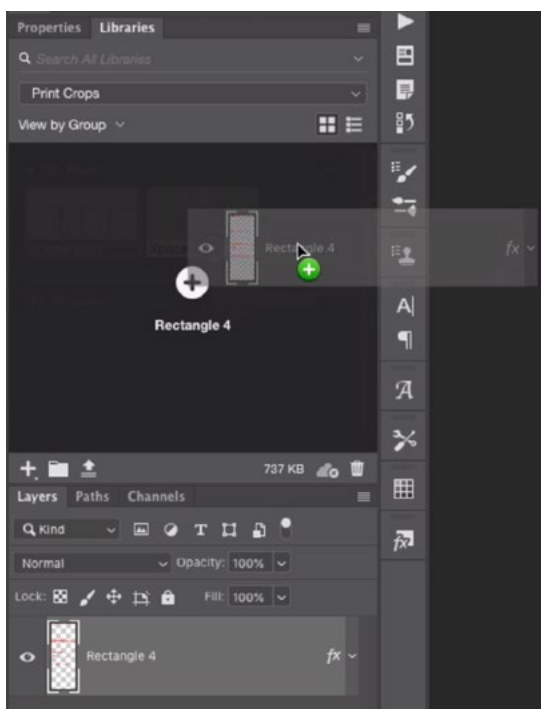


The Stroke settings in the Layer Style dialog are being used to make the overlay layer stand out more.



The black stroke around the layer will help to make the guide stand out better when placed over an image.

To add the layer to the Libraries panel, we'll make sure the Libraries panel is expanded and we'll click and drag the layer from the Layers panel into the Libraries panel. The Libraries panel now allows you to create groups in which to place various design elements. This can be convenient because we can create a different group for each printing company we use, placing the coordinating size guides in the groups. If you would like to organize your libraries by groups, make sure that the menu at the top of the panel is set to View by Group. Then, you can click the little plus icon at the bottom of the panel to create a new group. To use an element from your library into the current document, simply click and drag the library item into the document. It will automatically have transform handles around it so that you can scale and reposition the item.



FAR LEFT: The guide layer is being dragged into the Libraries panel.

DIRECTLY LEFT: A new group can be created by clicking the plus icon at the bottom of the Libraries panel.