

# IMAGE RESOLUTION BASICS

## DPI AND PPI

Digital images are made up of thousands of pixels (blocks of color), and the number of pixels in the image determines its resolution.

Resolution is described in two different terms: DPI (dots per inch) and PPI (pixels per inch). DPI is a printing term and PPI is used when referring to screen displays. Often used interchangeably, we use the term DPI.

## WHAT IS RESOLUTION?

The image's resolution is the number of pixels divided by the size it is being viewed at – so if the image is 720 pixels wide by 720 pixels tall, and it's being viewed at 10 inches square, it has a resolution of 72 pixels per inch.

## WHY IS RESOLUTION IMPORTANT?

Resolution determines how clear the image will look – the higher the resolution, the clearer the image and the better it will look in a design. Low resolution images become pixelated (fuzzy) and unprofessional.

## RESOLUTION SIZE

For print purposes, we require images to be 300 DPI at the size they will be in the design. The resolution for the web is much lower, around 72 DPI. For this reason, **images taken from the web will usually not work for images in printed materials.**

## HOW CAN I TELL WHAT THE RESOLUTION IS?

It's challenging to know the resolution of an image without a photo editing program like Photoshop.

Although not fool-proof, it is possible to gauge the resolution of an image by looking at the size of the file itself. The more pixels an image contains, the larger the file will be on your computer.

Generally speaking for **print quality**, if the image is:

Less than **250 KB**, it will not work at any print size, but could be used for web/email purposes

**250-500 KB**, it might be usable as a small thumbnail sized photo

**500 KB - 1 MB**, it's likely usable at 1.5" × 1"

**1 MB - 1.5 MB**, it's likely usable at 3" × 2"

**1.5 MB - 2 MB**, it's likely usable at 5.5" × 4"

**3.5 MB**, it's likely usable at 8.5" × 10"

**6 MB** or higher, it's likely usable at 16" × 12"

We advise keeping your design request in mind when considering image sizes. For example, if you are requesting an 11" × 17" poster, an image that is 1.5" × 1" will be far too small.

Here is a handy link to a pixels/inches/size converter: [tiporama.com/tools/pixels\\_inches.html](http://tiporama.com/tools/pixels_inches.html)



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