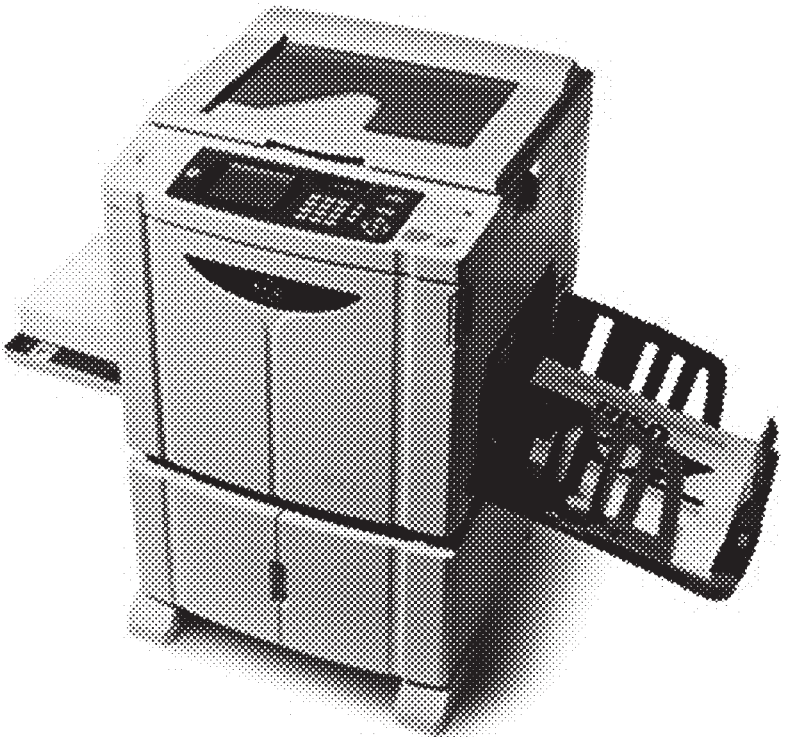


# MCAD RISO

*Making a Risograph print at  
the MCAD Service Bureau*



## WHAT IS RISOGRAFING?

The Risograph is kind of like a tiny little screen printing studio. It prints one color at a time from a master stencil. This is a great process for bold designs, posters, comic art, or pretty much anything with a nice “graphic” quality to it.

(If you want photo-quality prints we recommend color laser or inkjet instead.)

*For inspiration Google “Risograph” to find plenty of awesome examples.*

## TURNAROUND TIME

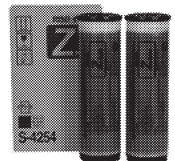
Riso prints will be run 9am - 9pm Monday - Thursday, and 9am - 5pm on Fridays. *No printing on weekends.*

One or two color single side prints take up to 48 hours. *No RUSH fee.* Add 24 hours for each additional color. Add 72 hours total for a booklet.

## COLORS

Inks are not 100% opaque so you can ‘mix’ two colors (or tints of two colors) to achieve even more colors! **Come to the SB and look at our color samples.** *Riso colors are not Pantone compatible but here is a list of the nearest Pantone equivalent colors to aid you in the design process.*

Blue (3005U)			Black (BlackU)
Fluorescent Pink (806U)			Bright Red (Warm RedU)
Yellow (YellowU)			Mint (324U)
Kelly Green (368U)			Violet (265U)



# PAPER

Riso prints work best on a slightly heavier, uncoated stock. We cannot run Riso prints on any kind of coated or glossy paper. Anything with a toothy finish will work well (this is often called “vellum” finish).

Paper weight: 60-300 gsm

## Paper Sizes we stock and Printable Areas

Letter (8.5x11): 7.75 x 10.25

Tabloid (11x17): 10.25 x 16.25

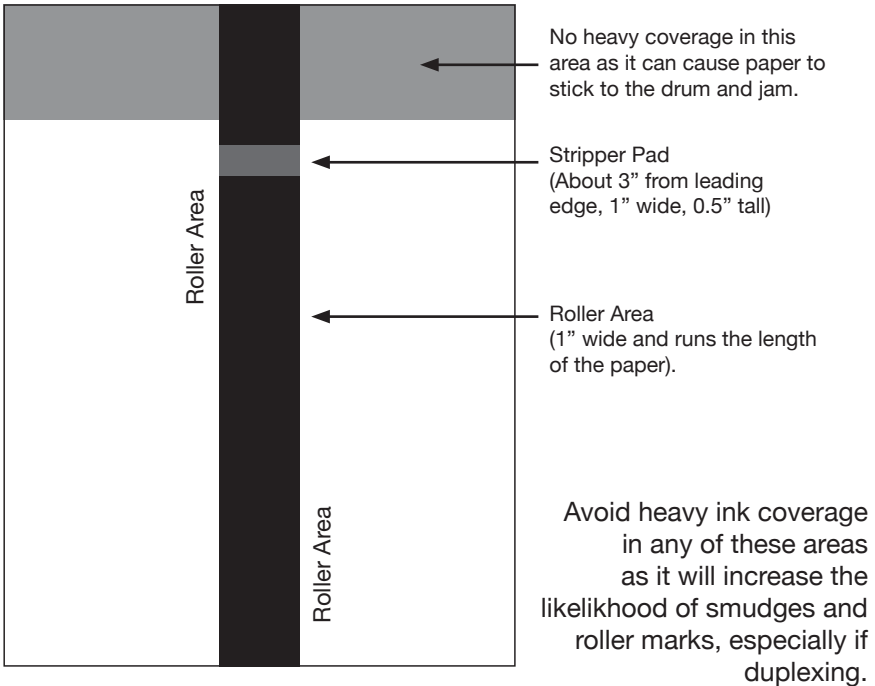
(That is about 3mm on each side, with 7mm on the trailing edge.

Using a 1/8” border should do the trick in most cases.)

## Customer Supplied Paper

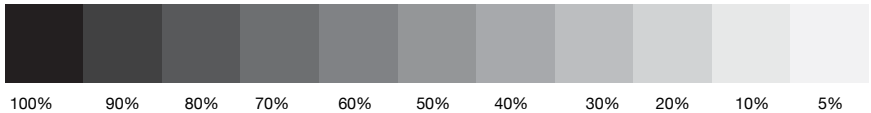
1-color: minimum 4x6”, maximum 12.5x17”

2 or more colors: min 7.25x10.25”, max 12.5x17”



## ARTWORK PREP

The Riso runs one color at a time. Therefore your designs and files need to be separated out into greyscale layers for each color that will be printed, just like if you were screen printing. (100% black in your file will be 100% of whichever color ink we have in the printer).



Build a color mock-up of your image, then separate into layers for each color in varying percentages of black/grey. 100% black will be 100% of the color you choose for that layer. Arrange layers in print order. Typically lighter colors should be printed first.

We prefer native application files so that we can output in the best way. Text-heavy designs should be done in Illustrator or InDesign to avoid half-toning.

Consider that when placing an order and running your prints, you have a choice between five output options:

- Line - Solid or Grain Touch
- Photo - Grain Touch
- Halftone Small
- Halftone Large
- Halftone Tiny

The Line setting is perfect for vector-based or text-heavy art or designs. Gradient and Halftone settings should be used for any art with tonal variations (photos, color gradients, etc.). Note that different print settings can be used for each color when printed.

### Photoshop

Layers for each color, as a percentage of grey, labeled.

## Illustrator

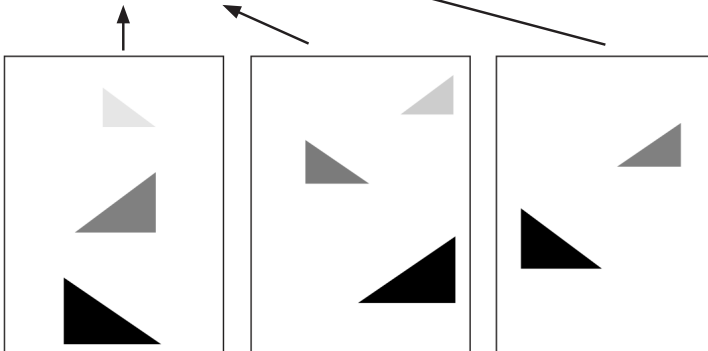
Layers for each color, as a percentage of grey, labeled. Outline text and embed any linked images. Make sure any areas of pure black (100% of whatever color you want) is set to a rich black. Avoid Effects and Transparencies if you can. If you need to use them, export your project as a TIFF.

## InDesign

Packaged InDesign document. Layers for each color, as a percentage of grey, labeled. For multi-page documents it may be best to separate into individual InDesign documents, or keep separate and labeled layers for each page. Make sure any areas of pure black (100% of whatever color you want) are set to a rich black. Avoid Effects and Transparencies if you can. If you need to use them, export your project as a TIFF.



**\*\*Please also include a color laser print or PDF of a color mock-up so we know what the finished image is supposed to look like.\*\***



Blue Layer

Yellow Layer

Mint Layer

**Stop by the SB to see all of our Risograph color and setting examples.**

# IMPERFECTIONS

## Smudging

Part of the Riso experience. Riso ink is a lot like newsprint ink and can smudge, even when dry.

## Roller Marks and Ink Coverage

Heavy ink coverage on a print can result in roller marks on successive layers or on the reverse side if duplexing. The Riso feeds paper using a big rubber tire that travels down the entire middle of the page. Heavy ink coverage in this area can increase the chance for roller marks. It is not possible to print full bleed or full coverage at 100% density with a Riso. Large areas of block color will not be even in tone. Avoid heavy ink coverage down the middle and at the leading edge of images to avoid roller marks. (Smudges can be erased with a soft rubber eraser.)

## Registration and Trapping

Will never be perfect. Risographs excel at simple 1 and 2 colour graphic-oriented printing. For more complex artwork, you may want to trap your files. Trapping is the process of adding overlap or knocking out negative space where colours interact to avoid misregistration. Thicker papers make mis-registration more likely.

## Text

The smallest text you can get away with is 6pt. Set text under 12pt to 100% Registration black for the most solid color. Use normal black (100% of K) for type 14pt or above.

## Duplex

Possible but can be tricky, especially if front-to-back registration is important. There will likely always be some misregistration of up to a few millimeters. Duplexing also runs the risk of extra roller marks on either side of the print. We recommend only light ink coverage on the second side of a print. If you are printing a booklet we definitely need a packaged InDesign file. The printer's spreads have to be output one at a time for each color.

## Drying Time

Prints are wet when they first come out and may need to dry for several hours to a day before use or printing of successive layers, to avoid smudging. Even when “dry” Riso ink can still smudge (think of it like a newspaper).

## GENERAL

Consult with us well in advance regarding your project. We can assist with file setup and make paper and ink recommendations.

## RESOURCES

<http://www.peowstudio.com/print/>  
<http://www.colourcodeprinting.com/riso.html>  
<http://www.workflowstudio.co.uk/risograph-printing>  
<http://www.perfectly-acceptable.com/>  
<http://hatopress.net/printing/>  
<http://stencil.wiki/>  
<http://riso.deconstructed.org.uk/>

## PRICING

Riso orders require a 10 copy minimum. The more you print, the lower your cost-per-copy. Add print fee, master fee, and paper cost to get final cost.

	10 to 20	21 to 100	100+
1 Color Letter	\$0.25	\$0.10	\$0.07
11x17	\$0.40	\$0.15	\$0.10
2 Colors Letter	\$0.35	\$0.17	\$0.13
11x17	\$0.50	\$0.23	\$0.15
3 Colors Letter	\$0.50	\$0.30	\$0.20
11x17	\$0.75	\$0.37	\$0.25
4 Colors Letter	\$0.65	\$0.37	\$0.30
11x17	\$0.85	\$0.50	\$0.35

### Premium Papers (see SB for more)

Mohawk Via Radiant White	
Letter 105gsm	\$0.12
11x17 105gsm	\$0.20
11x17 176gsm	\$0.40
11x17 216gsm	\$0.60
Mohawk Via Cream White	
Letter 105gsm	\$0.10
11x17 105gsm	\$0.20
11x17 176gsm	\$0.40
11x17 216gsm	\$0.50

Master Set Up: \$1.00 PER COLOR!

**mcad**  
service bureau  
+ Digital Print Lab



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