



This document summarizes submission requirements for magazine ads and reviews the relevant design considerations, digital file submission protocols, contract colour proofing and ink and paper specifications. This document has been developed by Magazines Canada's Technical Standards Committee (TSC).

**1a.** This document relates to high-speed, heat-set, web offset lithographic printing processes used in magazine/newspaper printing.

**1b.** This document is only a summary of ad submission requirements; users are encouraged to contact individual publishers for more specific information, such as unit sizes and availability of non-process colours.

**1c.** Magazines Canada follows industry SWOP Specifications for contract colour proofs ([www.swop.org](http://www.swop.org)). A contract colour proof must be made according to the IDEAlliance SWOP Specifications 2007 (SWOP 11th Edition). In the past, SWOP was based on a common proofing paper, a No. 5 grade coated stock. Since the SWOP Specifications 2007, SWOP also specifies a brighter No. 3 grade coated stock.

SWOP is now implemented for two printing conditions – a Coated Grade No. 3 and a Coated Grade No. 5 sheet. For each printing condition there exists (i) a characterization data set consisting of measurements from printed IT8.7/4 targets (ii) an ICC profile made from the dataset, and (iii) a colour control bar with target values for Grades No. 3 and No. 5 printing. All this data is available free at [www.idealliance.org](http://www.idealliance.org) or [www.swop.org](http://www.swop.org).

**1d.** CONTRACT COLOUR PROOFING MUST BE DONE WITH SWOP CERTIFIED SYSTEMS AND IN ACCORDANCE WITH THE SWOP SPECIFICATIONS 2007 FOR GRADE NO. 3 OR GRADE NO. 5 PRINTING.

**1e.** A COLOUR CONTROL BAR MUST BE PRESENT ON ALL SUBMITTED PROOFS.

**DESIGN CONSIDERATIONS**

Proper file design is essential to avoid costly delays and revisions during production. Detailed design information for magazine print production is available in the Magazines Canada sponsored guide "Look Like a Hero" ([www.looklikeahero.com](http://www.looklikeahero.com)).

**2a.** Document sizes should be set to the trim size of the magazine page.

**2b.** Live area (critical printing elements) should be kept to a minimum of 1/4" inside the trim.

**2c.** Marks should be included and offset at least 6mm (1/4") from trim area.

**2d.** Bleeding elements should extend a minimum of 1/8" beyond the page trim for full page submissions.

**2e.** Minimum tint values (for print) should maintain a 3% dot.

**2f.** Two-colour solid overprints larger than 3 mm square should have one of the colours screened to a maximum of 70% to optimize wet ink trapping. Maximum screened value of any one colour should not exceed 85%, unless it becomes a solid colour (to avoid mottle in areas of flat tint colour).

**2g.** Small type and thin lines should be kept to one colour to avoid registration problems. All coloured type should be reproduced with the minimum of colours

**2h.** Reversed lettering should be reproduced in a minimum of colours. Avoid small sizes (under 8 pt.) or light type faces. Fine serifs and thin lines, if used, should be restricted to one colour. Background tints of not more than 30% where type is surprinted, and not less than 70% where type is reversed, are recommended to ensure legibility.

**2i.** Undercolour Removal (UCR) should be used so that the total area coverage in the darkest areas does not exceed 300% for four-colour work.

**2j.** Grey Component Replacement (GCR), if used, should not exceed 75%.

**2k.** Any unpaid special or spot colours should be converted to process colour before final material is created, keeping in mind that often Pantone Matching System® (PMS) colours cannot be matched exactly using four-colour process inks.

**DIGITAL FILE SUBMISSIONS**

Consultation with the publisher/printer is essential to determine the suitability of the submission. Costs incurred from problematic files are the responsibility of the file provider.

**3a.** Due to the variable nature of application (native) files or PostScript files, these file types should only be used when agreed upon by the receiving publisher/printer.

**3b.** PDF/X-1a: 2001 is endorsed by the TSC and accredited through ISO 15930-1, as a digital format for complete digital exchange (graphics and fonts included). It has requirements that enable blind transfer for print production making it suitable for advertising submissions. Its use is encouraged.

**3c.** It is imperative that appropriate software be used when creating compliant PDF/X-1a: 2001 files. In addition, appropriate settings and printer drivers (PPDs) must be selected when producing PostScript files that are to be distilled to PDF and converted to PDF/X-1a: 2001.

**3d.** Generic PDF files, properly created using specific job options, may be accepted with prior approval of the publisher/printer.

dMACS CAPSULE	
Screen Ruling:	133 or 150 lpi
UCR:	300% maximum
GCR:	75% maximum
DigitalFiles:	PDF/X-1a:2001 <a href="http://www.magazinescanada.ca">www.magazinescanada.ca</a> for details
Colour control bars:	IDEAlliance ISO 12647-7 Digital Control Strip 2007
Proofs:	dMACS approved proofs, from the final file
Stock & Inks:	Matching values from ISO 12647-2 and tolerances as per ISO 2846-1
Live Area:	Minimum of 1/4" inside trim
Bleed Area:	Minimum of 1/8" beyond trim
Trapping:	.0017" or .125 pts

**3e.** PDF/X-3 files can contain colour profiles and are not acceptable for ad submissions.

**3f.** A job jacket (e.g. JDF) should accompany the file.

**3g.** File compression should not be used unless agreed upon by both the sender and receiver. If employed, only lossless compression (non-JPEG) is recommended.

**3h.** Digital colour bars should be included with the file in the non-image area. The components of this colour control bar are described in the next section.

**3i.** The screening attributes of file elements should be 133 or 150 lpi.

**3j.** Files should be sent electronically (ftp, drop box, or email) after prior consultation with the publisher/printer.

## CONTRACT COLOUR PROOFS

Proofs can be used to evaluate (i) the position of elements on the page and/or editorial content (ii) colour (iii) colour with a halftone or dot structure. A given proofing system may meet one or more of these requirements.

Proofs can be created using different technologies. There are three main categories of proofing technologies: hardcopy, soft-copy and conventional/traditional proofing systems. Today hard-copy proofing systems are largely inkjet based. Softcopy proofing systems are based on calibrated LCD monitor display systems. Traditional/conventional proofing systems include systems such as the Kodak Approval or Fuji FinalProof. All systems rely on the use of colour management to ensure proper colour and tonal rendition.

**4a.** Hardcopy proofing systems include a wide variety of inkjet, thermal, dye sublimation and laser products. Most current proofing systems are now based on inkjet technology as it provides good quality at an affordable price. Inkjet proofing systems are versatile and feature rich and can be used to create a contone colour proof or a halftone dot proof, according to the SWOP Specifications 2007.

**4b.** Colour calibrated soft proofing is growing in popularity. Soft proofing enables online colour accurate revisions, approval and sign off. Several different systems and configurations are now certified according to the SWOP Specifications 2007. Soft proofing can be used by the designer, prepress department and also at press side. Soft proofing systems are generally based on ICC profile technology and use commercial flat-panel displays and a measuring instrument. A number of publishing houses now only accept soft proofs. For a fuller discussion of soft proofing, see: Soft Proofing: A Guide to Benefits & Best Practices, a Magazines Canada White Paper.

**4c.** Conventional/traditional proofing system are used for high-end situations. Often the proof and the printing plates are generated in the same way with the same screening and RIP parameters. The proofs can contain a dot pattern with characteristics similar to that of the final plates and as such can be measured in a similar fashion to mechanical and press proofs. Conventional proofing systems (e.g. Kodak Approval, Fuji FinalProof) can use printing stock for the proof, thus removing any substrate differences between the proof and the press run.

**4d.** A COLOUR CONTROL BAR MUST BE PRESENT ON ALL SUBMITTED PROOFS. The control bar can be constructed within the proofing system or downloaded as a pdf and added to the proof during processing. The currently recommended control bar is the "IDEAlliance ISO 12647-7 Digital Control Strip 2007". The control bar contains 54 patches and can be downloaded for free from [www.swop.org](http://www.swop.org).

**4e.** Each patch on the control bar has target CIE  $L^*a^*b^*$  aim values for SWOP proofing on No. 3 Grade or No. 5 Grade coated paper. If necessary, the patches on the proofing control bar can be measured to verify that the proof has been created according to SWOP No. 3 or No. 5 Grade specifications.

**4f.** Contract colour proofs are best created with a SWOP certified system. The list of currently certified systems and configurations is available at [www.swop.org/certification](http://www.swop.org/certification). When using a certified system, users must download and use the appropriate Application Data Sheet (ADS). The ADS is critical because it provides directions for producing proofs that meet the criteria of a "certified proof."

**4g.** ICC profiles can be downloaded free from the SWOP web site at [www.swop.org](http://www.swop.org). These profiles should be used as source profiles to make proofs that match the corresponding press characterizations.

**4h.** All proofs must be clearly identified with the Job ID and the name of the proofing system used.

**4i.** Uncalibrated soft proofs, screen proofs, PDFs, JPEGs and the like are not acceptable for contract colour proofs for magazine publishing. Non-contract proofs are suitable for content reference only. Publishers/printers cannot be held responsible for colour reproduction of material supplied without a contract proof.

## INK AND PAPER

**5a.** Inks must be used that conform in colour to ISO 2846-1: "Graphic technology – Colour and transparency of printing ink sets for four-colour printing – Part 1: Sheet-fed and heat-set web offset lithographic printing." The tolerances shown in the table below are values from ISO 12647-2, Graphic technology – Process control for the manufacture of halftone colour separation, proof and production prints – Part 2: Offset lithographic processes. The CIELAB aim values (spectrophotometry using 0/45 or 45/0 geometry and D50/2° observer weighting factors) are:

### #3 Coated

	L*	a*	b*	$\Delta E^*ab$
Black	20	0	0	5
Cyan	55	-36	-44	5
Magenta	46	70	-3	5
Yellow	84	-5	88	5

### #5 Coated

	L*	a*	b*	$\Delta E^*ab$
Black	31	1	2	5
Cyan	59	-27	-36	5
Magenta	52	57	2	5
Yellow	86	-3	77	5

Inks conforming to MACS should include a Certificate of Analysis.

**5b.** Proofing stock should conform to SWOP Specifications 2007. The No. 3 Grade should have CIE  $L^*a^*b^*$  values of  $L^*=93$ ,  $a^*=0$ ,  $b^*=0$ . The No. 5 grade aim values are:  $L^*=90$ ,  $a^*=0$ ,  $b^*=4$ .

## OTHER RESOURCES

The following brief list of additional sources of information and software should not be considered an endorsement from Magazines Canada.

GENERAL INTEREST  
[www.cip4.org](http://www.cip4.org)  
[www.ddap.org](http://www.ddap.org)  
[www.disc-info.org](http://www.disc-info.org)  
[www.gwg.org](http://www.gwg.org)  
[www.idealliance.org](http://www.idealliance.org)  
[www.ipa.org](http://www.ipa.org)  
[www.magazinescanada.ca](http://www.magazinescanada.ca)  
[www.npes.org](http://www.npes.org)  
[www.planetpdf.com](http://www.planetpdf.com)  
[www.swop.org](http://www.swop.org)  
[www.primstandard.org](http://www.primstandard.org)

PDF/X-1(a) SOFTWARE  
[www.adobe.com](http://www.adobe.com)  
[www.apagoinc.com](http://www.apagoinc.com)  
[www.callassoftware.com](http://www.callassoftware.com)  
[www.enfocus.com](http://www.enfocus.com)