

# Ghent PDF Output Suite 4.0

These test pages should be processed like regular PDF/X-4 print jobs. The pages contain test patches with essential PDF/X features. Errors are identified either with a cross or by a deviation from the integrated reference images. These patches are all CMYK and Spot. They do not contain any ICCbased elements.

**GWG 6.0 - Use of shadings**

			
			

The shadings should look like the reference image

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**GWG 6.1 - Use of shadings**

			
			

The shadings should look like the reference image

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**GWG 1.1 - CMYK Overprint Mode**

	
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Rect (overpr) 0 / 0 / 10 / 50	Cross (overpr) 90 / 10 / 90 / 0
Cross 90 / 10 / 90 / 0	Rect 90 / 10 / 10 / 50

If an X appears the Overprint Mode (OPM) is not respected.

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**GWG 1.0 - CMYK Overprint Test**

				
				

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**GWG 19.0 – DeviceN Overprint (Black)**

OP is true for all topmost elements.

			
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a + b: must be rendered to solid Black (100C100K) rectangles  
A faint X means, that OP is not honored (or image was converted to DeviceCMYK for b)  
c + d: must be rendered to solid Cyan rectangles  
c: X means, that color space might have been converted to DeviceCMYK upfront (OPM 1)  
d: X means, that 0% Channels might have been ignored or color was converted

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**GWG 19.1 – DeviceN Overprint (Yellow)**

			
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Cross: Cyan (DeviceN - 100C)  
Overprinting: 0COM100YOK  
Reference: 100COM100YOK (Green)

a + b: must be rendered to solid Green rectangles  
Cyan X means, that OP is not honored (or image was converted to DeviceCMYK for b)  
c + d: must be rendered to solid Cyan rectangles  
c: X means, that color space might have been converted to DeviceCMYK upfront (OPM 1)  
d: colored X means, that 0% Channels might have been ignored or color was converted

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**GWG 19.2 – DeviceN Overprint (White)**

OP is true for all topmost elements.

			
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a + b: must be rendered to solid Red rectangles  
White X means, that OP is not honored (or image was converted to DeviceCMYK for b)  
c + d: must be rendered to solid White rectangles  
c: X means, that color space might have been converted to DeviceCMYK upfront (OPM 1)  
d: colored X means, that 0% Channels might have been ignored or color was converted

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**GWG 8.2 - DeviceN Support (4 colors)**

	
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If a check mark ✓ is visible in the upper right corner then DeviceN is respected (= GOOD).  
If no check mark appears then DeviceN color was transformed to CMYK (= ERROR).  
If the images are missing completely then DeviceN is not supported at all (= ERROR).

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# Ghent PDF Output Suite 4.0

Diese Testseiten sollten wie normale PDF/X-4-Druckdaten im Workflow verarbeitet werden. Die Testelemente enthalten wichtige PDF/X-Funktionen. Fehler sind entweder als Kreuz oder als Abweichung zum Referenzbild zu erkennen. Alle Objekte sind in CMYK oder Spot ohne ICCbasierte Farben definiert.

**GWG 16.0 - Transparency Basic Blend Modes (DeviceCMYK, Non-Knockout)**

Darken	Multiply	Color Burn	Lighten	Screen	Color dodge	Overlay	Soft Light

If an 'X' appears, rendering of Non-knockout Transparency Groups (a transparency effect) is not performed correctly.

PDF/X Output Intent	ISO Coated v2 300% (ECI)
Transparency Group	Non Knockout (Blend Mode Normal), TBCS*: DeviceCMYK
Source object	DeviceCMYK, using defined Blend Mode
Backdrop	DeviceCMYK

\* TBCS = Transparency Blending Color Space

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**GWG 16.1 - Transparency Basic Blend Modes (DeviceCMYK, Knockout)**

Darken	Multiply	Color Burn	Lighten	Screen	Color dodge	Overlay	Soft Light

If an 'X' appears, rendering of Knockout Transparency Groups (a transparency effect) is not performed correctly.

PDF/X Output Intent	ISO Coated v2 300% (ECI)
Transparency Group	Knockout (Blend Mode Normal), TBCS*: DeviceCMYK
Source object	DeviceCMYK, using defined Blend Mode
Backdrop	DeviceCMYK

\* TBCS = Transparency Blending Color Space

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**GWG 16.2 - Transparency Basic Blend Modes (DeviceCMYK, Isolated)**

Darken	Multiply	Color Burn	Lighten	Screen	Color dodge	Overlay	Soft Light

If an 'X' appears, rendering of Isolated Transparency Groups (a transparency effect) is not performed correctly.

PDF/X Output Intent	ISO Coated v2 300% (ECI)
Transparency Group	Isolated (Blend Mode Normal), TBCS*: DeviceCMYK
Source object	DeviceCMYK, using defined Blend Mode
Backdrop	DeviceCMYK, using defined Blend Mode

\* TBCS = Transparency Blending Color Space

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**GWG 16.6 – Image Softmasks (DeviceCMYK)**

Actual test object      Reference Image

<http://www.gwg.org/gwg/gwg16x/>      <http://www.gwg.org/gwg/gwg16xref/>

If a solid black contour appears at the edges of the left image, the Image Softmask (a transparency effect) is not rendered correctly.

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**GWG 16.8 – Vector Softmasks (part 1)**

Actual test objects      Reference Images


Drop Shadow    Inner Shadow    Outer Glow    Inner Glow    Bevel and Emboss

Each of these transparency effects (vector soft masks) should match the reference images.

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**GWG 16.9 – Vector Softmasks (part 2)**

Actual test objects      Reference Images


Satin    Basic Feather    Directional Feather    Gradient Feather

Each of these transparency effects (vector soft masks) should match the reference images.

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**GWG 16.10 – Text Softmasks (part 1)**

Actual test objects      Reference Images


A    B    C    D    E

Drop Shadow    Inner Shadow    Outer Glow    Inner Glow    Bevel and Emboss

Each of these transparency effects (Text Softmasks) should match the reference images.

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**GWG 16.11 – Text Softmasks (part 2)**

Actual test objects      Reference Images


F    G    H    I

Satin    Basic Feather    Directional Feather    Gradient Feather

Each of these transparency effects (Text Softmasks) should match the reference images.

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# Ghent PDF Output Suite 4.0

Ces pages de test doivent être utilisées comme n'importe quel travail PDF/X-4. Les pages contiennent des patches de test comprenant des fonctionnalités PDF/X essentielles. Les erreurs sont identifiées soit par une croix, soit selon une déviation par rapport aux images de référence intégrées.

GWG 9.0 - Font Support	
Type1 PostScript:	ääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð (NewCenturySchlbk Italic) Expected result: äääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð (NewCenturySchlbk Italic)
TrueType:	ääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð (BookAntiqua-BoldItalic) Expected result: äääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð (BookAntiqua-BoldItalic)
CID (Type1):	ääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð (WarnockPro-BoldIt) Expected result: äääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð (WarnockPro-BoldIt)
CID (TrueType):	ääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð (PalatinoLinotype BoldItalic) Expected result: äääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð (PalatinoLinotype BoldItalic)
Multiple Master:	dit is een multiple master ex punto non dit is een multiple master ex punto non (ExPontoMM) Expected result: dit is een multiple master ex punto non dit is een multiple master ex punto non (ExPontoMM)
Type 3 Vector:	ääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð \$£ABCD...XYZ (T1 / Garamond Bold) Expected result: äääüÄÖÜäääffl@@@DCEÆØæfjÿþ‰þ½ð \$£ABCD...XYZ (T1 / Garamond Bold)
Type 3 Bitmap:	null fällt ein negativer Zahlungsstrom an. In den Jahren eins bis fünf (T10) Expected result: null fällt ein negativer Zahlungsstrom an. In den Jahren eins bis fünf (T10)
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	9.0

GWG 9.1 – OpenType Font Support	
Warnock Pro Semibold – OpenType (Type 1)	
ääüÄÖÜäääffl flC®@OEÆØæfjÿþ‰%	ääüÄÖÜäääffl flC®@OEÆØæfjÿþ‰%
Arial Unicode MS – OpenType (TrueType)	
ääüÄÖÜäääffl flC®@OEÆØæfjÿþ‰%	ääüÄÖÜäääffl flC®@OEÆØæfjÿþ‰%
If the text in the line above does not look like the image in the line below an error in the rendering of the font occurred.	
14 jan 2012	PDF/X-4
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	9.1

GWG 5.1 - Font subset and substitution	
Placed EPS-file n°1 (VVLNKX+Myriad-Roman)	Placed EPS-file n°2 (VVLNKX+Myriad-Roman)
subsetted font	12345
- If all characters are correct and appear in the right order, the subset fonts have been processed correctly. - If some characters do not appear or display in the wrong order, incorrect handling of subset fonts has occurred.	
expected result	12345
45678	45678
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	5.1

GWG 5.2 - Font subset and substitution	
Placed EPS-file n°1 (FEPTUI+Myriad-Roman)	Placed EPS-file n°2 (PGNBEO+Myriad-Roman)
subsetted font	12345
- If all characters are correct and appear in the right order, the subset fonts have been processed correctly. - If some characters do not appear or display in the wrong order, incorrect handling of subset fonts has occurred.	
expected result	12345
45678	45678
11 Nov 2012	Ghent PDF Workgroup © www.gwg.org
	5.2

GWG 5.0 - Font Substitution	
	
If a check mark ✓ appears above, then the embedded font is used (correct behavior). If an other character appears, the embedded font was substituted with a Symbol font installed in the system (host or RIP).	
If a check mark ✓ appears above, then the embedded font is used (correct behavior). If an other character appears, the embedded font was substituted with a Symbol font installed in the system (host or RIP).	
16 Nov 2005	Ghent PDF Workgroup © www.gwg.org
	5.0

GWG 18.1 - 16Bit Image (DeviceCMYK)	
	
No "X" must be visible when rendered correctly. Reference image (cross): 8Bit, ZIP Test image: 16 Bit, ZIP	
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GWG 17.0 - JPEG2000 compression (DeviceCMYK)	
	
No "X" must be visible when rendered correctly.	
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	17.0

GWG 17.3 - JBIG2 compression	
	
No "X" must be visible when rendered correctly.	
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	17.3

# Ghent PDF Output Suite 4.0

Deze testpagina's moeten verwerkt worden als gewone PDF/X-4 print jobs. De pagina's bevatten test patches met essentiële PDF/X-4 features. Fouten worden aangeduid met ofwel een kruis of door een afwijking met het geïntegreerde referentiebeeld. Alle test patches zijn CMYK en bevatten geen ICC gebaseerde elementen.

**GWG 2.0 - Spot to CMYK Overprint**

this row: cmyk over spot	a	b	c	d	e
font					
this row: spot over cmyk	f	g	h	i	j
font					

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**GWG 4.1 - White Overprint Mode**

Spot White	almost White
a	b
Rect .75 / .5 / 100 / 0	Cross (overpr) .2 / .2 / .2 / 0
Cross (overpr) 0% GWG Green	Cross (overpr) 15 / 100 / 100 / 0
Rect .2 / .2 / .2 / 10	Rect .2 / .2 / .2 / 10

If a visible **X** appears, the "Overprinting White" is not handled.

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**GWG 3.0 - Gray Overprint Patch**

OPM0	OPMO	OPM1	
a	a 50% K over spot b 50% gray over spot c 50% sep. black over spot d 50% K over CMYK e 50% gray over CMYK f 50% sep. black over CMYK	g	j
b	50% K over spot 50% gray over spot 50% sep. black over spot 50% K over CMYK 50% gray over CMYK 50% sep. black over CMYK	h	k
c		i	l

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**GWG 4.0.1 - White Overprint Patch**

OPM0	OPMO	OPM1	
a	a CMYK over spot b Gray over spot c Sep. black over spot d CMYK over CMYK e Gray over CMYK f Sep. black over CMYK	g	j
b	CMYK over spot Gray over spot Sep. black over spot CMYK over CMYK Gray over CMYK sep. black over CMYK	h	k
c		i	l

10 Nov 2006      Ghent PDF Workgroup © www.gwg.org      4.0.1

**GWG 3.1 - Gray Image Overprint (CMYK over Spot)**

During flattening (in InDesign or Acrobat) of drop shadows over spot colors overprinting grayscale images with a white background are created.

Reference		Reference	
Correct		Wrong	

Overprinting must be honored for the output.

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**GWG 12.0 - White Overprint/Knockout**

Overprint	Knockout
CMYK	
Vector	
Text big	
Text 6pt	

If filled **X** appear the Overprint settings were not respected.

29 Aug 2013      Ghent Workgroup © www.gwg.org      12.0

**GWG 8.1 - DeviceN Support (5 colors)**

Duotone (should appear only in Black and GWG Green separations)	Colorized TIFF (should appear only in GWG Green separation)
Spot color gradient (should appear only in GWG Green and Cyan separations)	

If a **X** appears instead of the green checkmarks ✓ then DeviceN is not supported!

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**GWG 8.01 - DeviceN Support (6 colors)**

Duotone (should appear only in Black and Pantone 265C separations)	Colorized TIFF (should appear only in Pantone 265C separation)
Spot color gradient (should appear only in Pantone 265C and GWG Green separations)	

If a **X** appears instead of the green checkmarks ✓ then DeviceN is not supported!

11 Jan 2007      Ghent PDF Workgroup © www.gwg.org      8.01