



technical fact sheet

courier

Arjo Wiggins - United Kingdom

- An outstanding range of watermarked and unwatermarked business papers, boards & envelopes
- Guaranteed results for pre-printing & subsequent use on office printers & copiers, mono & color (except 300gsm)

COMMON ATTRIBUTES	Units	Test Method	90gsm	100gsm	104gsm	160gsm	300gsm
Rec. pH of Fount Solution			5.5 +/- 0.5				
Surface pH	%	TAPPI 5290M	µ7.0				

Wove

	Um	ISO 534	112	122	-	174	370
Caliper							
Ultra White Opacity	%	ISO 2471	88	89.5	-	N/A	N/A
Bendtsen Roughness	MI/min	ISO 2494	200	200	-	200	200
Moisture Content	%	ISO 287	5.2		-	5.2	6.7
Relative Humidity	%	TAPPI T502	28-40		-	28-40	40-60
Whitest Shade Opacity	%	ISO 2471	89	90	-	n/a	n/a
Stiffness MD	mN	ISO 2493	150	180	-	200	280
Stiffness CD	mN	ISO 2493	90	100	-	110	180

Laid

	Um	ISO 534	113	124	-	-	370
Caliper							
Ultra White Opacity	%	ISO 2471	88	89.5	-	-	N/A
Bendtsen Roughness	ml/min	ISO 2494	200	200	-	-	200
Moisture Content	%	ISO 287	5.2		-	-	7.0
Relative Humidity	%	TAPPI T502	28-40		-	-	40-60
Whitest Shade Opacity	%	ISO 2471	89	90	-	-	n/a
Stiffness MD	mN	ISO 2493	150	180	-	-	240
Stiffness CD	mN	ISO 2493	90	100	-	-	130

Superwove

	Um	ISO 534	98	-	117	-	310
Caliper							
Whitest Shade Opacity	%	ISO 2471	91	-	92.5	-	n/a
Bendtsen Roughness	MI/min	ISO 2494	50	-	50	-	50
Moisture Content	%	ISO 287	5.2	-	5.2	-	6.7
Relative Humidity	%	TAPPI T502	28-40		-	28-40	40-60
Whitest Shade Opacity	%	ISO 2471	91	-	92.5	-	n/a
Bendtsen Roughness	MI/min	ISO 2494	50	-	50	-	50
Stiffness MD	mN	ISO 2493	140	-	150	-	100
Stiffness CD	mN	ISO 2493	80	-	90	-	55



courier (cont'd)

Technical Capabilities

Courier is guaranteed for pre-printing and subsequent use on colour and mono desk-top laser or ink-jet machines, subject to manufacturers guidance on grammage, roughness and use. Ensure laser suitable inks and materials are used for pre-printing.

300gsm is suitable for ink-jet printing in printers which have a suitable path and feed mechanism for the thick sheet. Laser printing can only be carried out successfully in printers which can adjust for the high grammage and moisture content.

Printing Process	Litho, Letterpress, Silk Screen, Dry Offset (Toray)
Screen Ruling	For standard process color printing it is not usual to exceed 150 lpi. However, screen rulings of 200 lpi can be achieved with careful ink control.
Printing Inks	Conventional positive drying, quick setting, 'hard dry' inks, with or without IR drying assistance. UV cured inks can be used. Use laser suitable inks when subsequent laser processing is required. Avoid using press stable/stay fresh ink systems.
Hot Foil Blocking	All textures accept hot foil blocking, but fine detail may suffer on the laid finish. Not recommended if subsequent laser printing required. If laser printing is essential, ensure the foiled image is indented to below the paper surface and trial first.
Varnishing	A gloss varnish is not easily achieved. It is essential to pre-seal the surface with either Acrylic or Glycol sealers. Silk screen UV varnish must be used and repeat varnishings may be necessary to achieve the desired effect. Ensure the printing inks are suitable for UV varnishing, and are thoroughly dry before varnish application. Other machine varnish applications are not advisable as a visual effect will not be achieved.
Sealing	Used to give minimal protection to printed material to help avoid marking when further processing is required. Ensure printing inks are suitable for sealer application, and inks are thoroughly dry.
Film Laminating	Accepts laminates easily. Since it is uncoated, it may require a larger amount of adhesive and may extend the time required to reach a strong bond between paper and laminate surfaces.
Embossing (blind)	Embossing may be done, however embossed papers are more prone to misfeeds and jams within office printing technologies.
Die Cutting	Die cutting can be performed without difficulty, yet die-cut and perforated papers may be more prone to misfeeds and jams with office printing technologies.
Creasing	All textures may be folded. Boards may require pre-creasing. The Laid texture may have some splitting when the board is folded due to the method of manufacture.
Die Stamping	All textured can be die stamped, though it is not recommended when subsequent office printing is required. A shallow emboss is less likely to cause problems.