

**JAMES
CROPPER**

EST. 1845



TECHNICAL SERVICES DOCUMENT

Rydal Packaging Collection White & Black

TARGET SECTOR

Luxury Packaging



MANUFACTURED IN GREAT BRITAIN

Rydal Packaging Collection White & Black

THE NATURAL PAPER CHOICE FOR PREMIUM PACKAGING

White is one of the key elements of any palette and is also the perfect canvas for creative expression.

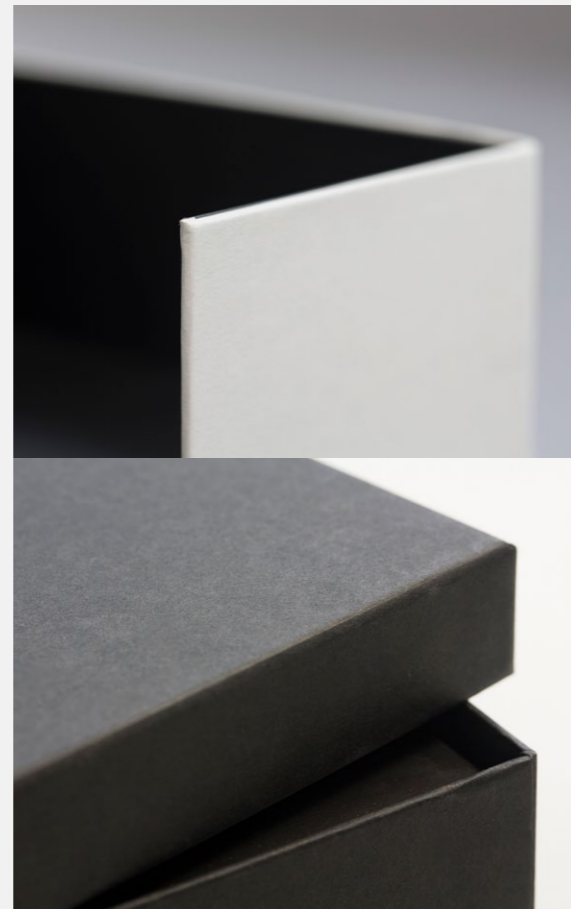
Black is a classic colour, recognised as stylish and timeless, and James Cropper are internationally renowned as expert creators of Black papers.

While beauty and functionality have always been expected of luxury products, today's consumers also insist they are environmentally and socially responsible - and this extends across the supply chain.

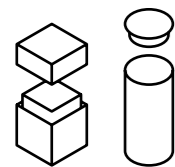
The Rydal Packaging Collection was created to directly answer this need while safeguarding the beauty of premium paper and ensuring a variety of application possibilities for brands.

Whether you are looking for a deep black fresh fibre paper from responsible forestry sources, a recycled quality to meet the legislative requirements for USA retail bags, or even want to go 100% recycled, then we have a product designed for your project...be it a luxury bag, tube, garment tag, folding or rigid box. The Rydal collection includes 40% and 100% PCW recycled and 100% fresh fibre options all engineered with attributes suited specifically to the end use.

The recycled qualities in the Rydal collection include our innovative CupCycling™ fibre, sourced from used coffee cups. This unique post-consumer fibre stream is giving a second life to a valuable resource whilst helping to solve a troubling problem for society - designed with circular economy principles at the core.

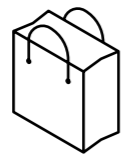


APPLICATIONS



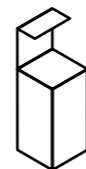
120 g/m² - Rigid Boxes

High strength properties combined with a natural finish make this box liner equally suited for covering rigid boxes or wrapping tubes.



220 g/m² - Retail Carrier Bags

The high surface strength ensures good glueability and prevents splitting on folds for superb converting performance.



350 g/m² - Folding Boxes

The luxurious antique feel of Rydal makes it the preferred choice for high end folding box boards or garment tags.

With luxury goods in mind, the Rydal collection has been engineered to provide a natural and tactile feel. Printers and converters will experience an easy reproduction as the papers have been specially designed to ensure outstanding print performance and converting characteristics.

APPLICATION SUITABILITY

- Cosmetic packaging
- Fragrance packaging
- Gift packaging
- Retail packaging
- Wines & spirits packaging
- Portable electronic packaging

PRINT SUITABILITY

- Lithography
- Silk Screen
- Dry Toner
- Blind Embossing
- Die Stamping
- Foil Blocking
- Relief processes
- Laser Cutting
- Varnishing

Can I use Rydal for a variety of applications?

Yes, the Rydal collection has been designed with the application in mind and is suitable for box covering and lining, folding boxboard and bag applications.

Each fibre recipe is available in three standard substances (120, 220 and 350 gsm).

Is the recycled content post-consumer?

Yes, James Cropper uses post-consumer waste (PCW) in the recycled products, which means they classify for many legislative requirements.

Does Rydal contain CupCycling™ fibre?

Yes, all recycled fibre products contain a minimum of 20% *CupCycling fibre.

Is Rydal manufactured to recognised industry standards?

Yes, for further information regarding compliance, please review the technical data relating to this product.

Can James Cropper emboss or varnish Rydal?

It is possible to apply embossing or varnishing as part of our Tailor Made Service offer. Please speak to your sales contact to discuss in more detail.

Can you convert paper on-site at James Cropper?

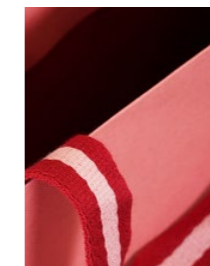
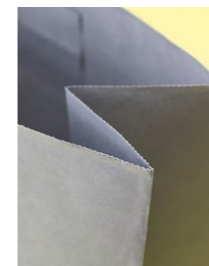
James Cropper offer a lamination service for production makings to convert paper into a thicker board, but do not offer packaging conversion.

Can I use different printing methods on Rydal?

Yes, further information regarding print suitability is provided. Please request samples for print trials.

Is Rydal suitable for foiling?

Yes, the Rydal Packaging Collection is compatible with metallic, pigment and holographic foils, making it perfect for any packaging project.



Can I have a unique colour?

Yes, James Cropper regularly develops new colours for packaging projects as part of our Tailor Made Service offer. Please speak to your sales contact to discuss in more detail.

Can PaperGard antimicrobial technology be applied to Rydal?

Yes, for those brands wanting the added assurance of antimicrobial product protection, James Cropper's innovative PaperGard silver ion technology can be included for all Rydal packaging options.

*CupCycling™ is the trademark for upcycled disposable coffee cup fibres



White

TECHNICAL DATA	Bright White 40% PCW Recycled			Natural White 100% PCW Recycled			Pure White 100% Fresh Fibre			Tolerance	Standard
Grammage g/m ² :	120	220	350	120	220	350	120	220	350	± 5%	ISO 530
Thickness µm :	175	310	485	170	295	470	190	315	485	± 7.5%	ISO 534
Bulk ml/g :	1.46	1.41	1.39	1.42	1.35	1.34	1.58	1.43	1.39		
Burst kPa :	400	680	900	400	640	901	330	600	750	Minimum	ISO 2758
Tear (MD) mN :	1050	1750	2800	950	1600	2720	850	2200	2700	Target	ISO 1924-2
Tear (CD) mN :	1100	1850	3600	1050	1750	3280	950	2400	2800	Target	ISO 1924-2
Cobb (1 min) g/m ² :	25	25	25	25	25	25	25	25	25	Target	ISO 535
Bendsten Smoothness ml/min :	1000	1000	1000	1000	1000	1000	1000	1000	1000	Target	ISO 2494
Wax Pick / Clear :	16	16	16	14	14	14	16	16	16	Minimum	Dennison
Moisture % :	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	Nominal	ISO 287
Stiffness (MD) mN :	26	108	415	26	105	318	90	340	440	Target	ISO 5628
Stiffness (CD) mN :	17	72	190	17	50	180	45	170	240	Target	ISO 5628
Brightness :	112	112	112	109	109	109	114	114	114	Target	TAPPI
CIE Whiteness (D65-10°) :	151	151	151	145	145	145	155	155	155	Target	D65-10°
Tensile MD kN/m :	9.0	15	24	8.5	14	19	7	14	17	Target	ISO 1924-2
Tensile CD kN/m :	6.5	8	12	5.0	8	10	4	8	10	Target	ISO 1924-2



Black

TECHNICAL DATA	Eclipse Black 40% PCW Recycled			Shadow Black 100% PCW Recycled			Obsidian Black 100% Fresh Fibre			Tolerance	Standard
Grammage g/m ² :	120	220	350	120	220	350	120	220	350	± 5%	ISO 530
Thickness µm :	170	295	462	160	290	450	170	295	462	± 7.5%	ISO 534
Bulk ml/g :	1.42	1.34	1.32	1.33	1.32	1.29	1.42	1.34	1.32		
Burst kPa :	400	680	1010	360	615	800	400	680	1010	Minimum	ISO 2758
Tear (MD) mN :	1050	2250	3400	950	1750	2900	1050	2250	3400	Target	ISO 1924-2
Tear (CD) mN :	1100	2400	4600	1000	1850	4300	1100	2400	4600	Target	ISO 1924-2
Cobb (1 min) g/m ² :	25	25	25	25	25	25	25	25	25	Target	ISO 535
Bendsten Smoothness ml/min :	1000	1000	1000	1000	1000	1000	1000	1000	1000	Target	ISO 2494
Wax Pick / Clear :	14	14	14	14	14	14	14	14	14	Minimum	Dennison
Moisture % :	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	Nominal	ISO 287
Relative Humidity :	45	45	45	45	45	45	45	45	45	± 10	
Stiffness (MD) mN :	18.5	85	400	18.5	100	385	18.5	85	400	Target	ISO 5628
Stiffness (CD) mN :	11	55	190	7.5	50	180	11	55	190	Target	ISO 5628
Tensile MD kN/m :	9.12	14.57	21.65	8.35	13.42	18.55	9.12	14.57	21.65	Target	ISO 1924-2
Tensile CD kN/m :	6.49	9.49	12.52	5.26	7.63	10.35	6.49	9.49	12.52	Target	ISO 1924-2

ENVIRONMENTAL CREDENTIALS



Acid free white



Non carbon black



CONEG
Compliant



Fully Recyclable



94/62/CE &
EN71-3 Compliant



CHP Recycling
Energy



Elemental
Chlorine Free



REACH
Compliant
(EC No 1272/2008)

MILL CERTIFICATIONS

ISO 14001 cert. no. EMS 57536

ISO 9001-2000 cert. no. FM 10048

ISO 50001:2011 cert. no. ENMS 623280

OHSAS 18001 cert. no. OHS 93474

FSC® STD-40-004 cert. no. TT-COC002177

PEFC/ 16-44-002 cert. no. BMT-PEFC-0252

Manufactured in Great Britain

All recycled fibre products contain
a minimum of 20% CupCycling fibre.



BY JAMES CROPPER

Bright White +
Eclipse Black

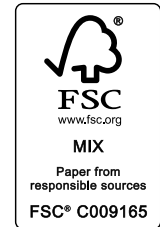
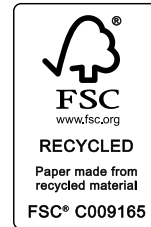
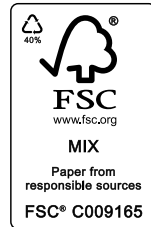
40% PCW Recycled

Natural White +
Shadow Black

100% PCW Recycled

Pure White +
Obsidian Black

100% Fresh Fibre



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[RYDAL PACKAGING COLLECTION](#)