

Candlesce®

PREMIUM PAPERBOARD



CIRCULAR SBS PAPERBOARD
for Folding Carton & Print Applications



CLEARWATER
PAPER®

CANDESCENCE® PRODUCT GUIDE

Candesce® C1S FOLDING CARTON

| English | Units | 10-129 | 11-138 | 12-143 | 14-163 | 15-172 | 16-182 | 17-193 | 18-199 | 20-217 | 22-233 | 24-250 | 26-273 | 28-294 |
|---------------------------|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Caliper (nominal) | mils | 10 | 11 | 12 | 14 | 15 | 16 | 17 | 18 | 20 | 22 | 24 | 26 | 28 |
| Basis Weight (nominal) | lbs/3msf | 129 | 138 | 143 | 163 | 172 | 182 | 193 | 199 | 217 | 233 | 250 | 273 | 294 |
| Brightness | GE | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| b* Value | Spectro | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Smoothness (primary side) | Sheffield | 12 | 15 | 15 | 18 | 18 | 18 | 20 | 20 | 22 | 23 | 25 | 32 | 35 |
| Parker Print | microns | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| Plybond / ZDT | lbs/in ² | 65 | 65 | 55 | 45 | 45 | 45 | 45 | 40 | 40 | 40 | 40 | 40 | 40 |
| Stiffness – MD | g-cm | 50 | 55 | 80 | 115 | 145 | 165 | 200 | 225 | 295 | 385 | 460 | 560 | 650 |
| Stiffness – CD | g-cm | 25 | 28 | 40 | 55 | 70 | 80 | 90 | 110 | 150 | 195 | 230 | 275 | 345 |
| Metric | Units | | | | | | | | | | | | | |
| Thickness | microns | 254 | 279 | 305 | 356 | 381 | 406 | 432 | 457 | 508 | 559 | 610 | 660 | 711 |
| Basis Weight (nominal) | g/sq.m | 210 | 225 | 233 | 265 | 280 | 296 | 314 | 324 | 353 | 379 | 407 | 444 | 478 |
| Stiffness – MD | mN | 98 | 108 | 162 | 233 | 294 | 280 | 392 | 441 | 579 | 755 | 902 | 1098 | 1275 |
| Stiffness – CD | mN | 51 | 55 | 81 | 112 | 142 | 162 | 177 | 223 | 305 | 396 | 467 | 558 | 677 |

Candesce® C1S provides superior printability, uniform ink absorption, and state-of-the-art converting performance. The consistent blue-white shade, brightness, and ultra-smooth printing surface deliver vivid color throughout the spectrum for your most demanding print applications.

PRODUCT USES

- Health and beauty packaging
- Pharmaceutical packaging
- Confectionery and bakery boxes
- Dry and frozen food packaging
- Consumer electronics
- Business and greeting cards

Candesce® is manufactured at Clearwater Paper's three strategically located SBS paperboard mills, enabling supply redundancy, enhanced logistical flexibility, and consistent product quality to deliver superior service and reliability.

Our sustainable product portfolio includes:

- Candesce® C1S
- Candesce® Top Sheet
- Candesce® C1S Blister
- Candesce® Foldover Blister
- Candesce® Skin
- Candesce® Cupstock
- Candesce® Gable Pak®
- Ancora® C2S
- ReImagine® C1S with 30% PCF*
- ReImagine® C1S Blister with 30% PCF*
- ReImagine® Foldover Blister with 30% PCF*
- NuVo® Cupstock with 35% PCF*

*PCF - Post-Consumer Recycled Fiber



CANDESCENCE® PRODUCT GUIDE

Candesce® C1S TOP SHEET LINER

| English | Units | 8-114 | 9-120 | 9-120 | 10-129 | 12-143 |
|---------------------------------------|---------------------|-------|-------|-------|--------|--------|
| Caliper (nominal) | mils | 8 HS | 9 | 9 HS | 10 | 12 |
| Basis Weight (nominal) | lbs/3msf | 114 | 120 | 120 | 129 | 143 |
| Brightness | GE | 89 | 89 | 89 | 89 | 89 |
| b* Value | Spectro | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Smoothness (primary side) | Sheffield | 15 | 15 | 15 | 20 | 20 |
| Parker Print | microns | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| Plybond / ZDT | lbs/in ² | 115 | 90 | 90 | 80 | 55 |
| Stiffness – MD (Taber bending moment) | g-cm | 33 | 37 | 37 | 50 | 80 |
| Stiffness – CD (Taber bending moment) | g-cm | 13 | 15 | 15 | 20 | 30 |
| Metric | Units | | | | | |
| Thickness | microns | 203 | 229 | 229 | 254 | 305 |
| Basis Weight (nominal) | g/sq.m | 185 | 195 | 195 | 210 | 233 |
| Stiffness – MD | mN | 65 | 73 | 73 | 98 | 156 |
| Stiffness – CD | mN | 25 | 30 | 30 | 40 | 60 |

PRODUCT USES

- Litho laminated packaging
- Premium corrugated packaging
- Retail-ready packaging
- Shelf-ready packaging

HS = High Strength

Candesce® Top Sheet Liner offers the exceptional printability of folding carton board with the strength of corrugated package. The coated liner provides increased shelf appeal by extending your brand image to corrugated packaging.

CANDESCENCE® ADVANTAGES

CONSISTENT PERFORMANCE

Our proprietary fiber blending technology provides consistency in die-cutting, glue adhesion and high-definition printing.

HIGH-DEFINITION COATING

Ultra-smooth print surface enhances upscale images for premium graphic applications.

OPTIMIZED CONVERTING SPEEDS

Genuine SBS provides significant converting speed improvements to increase folder/gluer machine capacity versus FBB, CUK, and CRB.

DEPENDABLE FILL PERFORMANCE

Designed with structural strength to maximize product filling speeds and reduce downtime versus CRB and FBB.

CALIPER CHOICES

Range of folding carton calipers from 10pt to 28pt provides consistency across multiple brand designs.

SHADE PRECISION

Color shade balance enhances the print accuracy of skin tones.

COLOR LOSS RESISTANCE

Free of optical brighteners (OBA) to maintain print color vibrancy.



SELECTED STANDARDS & CERTIFICATIONS

Fiber Procurement and Chain-of-Custody

- FSC® Chain of Custody Certifications: SA-COC-012976
FSC® Controlled Wood COC Certifications: SA-CW-012976
FSC® certified paperboard available by request only
- SFI® fiber sourcing, chain of custody, and product labeling certification: NSF-SFI-COC-C0035688
- PEFC™ chain of custody: NSF-PEFC-COC-0035688
PEFC™ certified paperboard available by request only

Sustainability

- BPI® (Biodegradable Products Institute) certifications:
#10529756-1 - Lewiston, ID Mill
#10529756-2 - Cypress Bend, AR Mill
For more information, contact your Clearwater Paper representative



Health and Safety

- U.S. California Proposition 65 compliant
- CONEG model heavy metal and EC/94/62 article II compliant
- Elemental Chlorine Free (ECF) bleached fiber
- RoHS3 (Restriction of Hazardous Substances) compliant
- Canadian Environmental Protection Act, 1999 compliant
- European Chemicals Agency (ECHA) Substances of Very High Concern (SVHC) compliant

Food Contact

- USFDA 21 CFR176.170 - Contact with aqueous and fatty foods
- USFDA 21 CFR176.180 - Contact with dry food and food

Manufacturing

- ISO 9001: 2015 certification numbers: QSR-249 (Lewiston); QSR-2006 (Augusta)
- TCB Audit Services C21082a certification (Cypress Bend)



Visit our website to learn more about our sustainable products:
clearwaterpaper.com



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The product values fall within standard mill tolerances and are subject to change without notice.

Candesce® C1S is tightly controlled to caliper. Basis weight may vary by production run.

Average b* value data is presented for relative paperboard shade comparisons, not as product specifications.

Not all calipers are produced at all mills.

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