



Paper Thickness Average Caliper Bulking Chart

These are averages. Variations will be found if paper is run on light or heavy side of basis weight, depending on various mill runs. The thicker the caliper, the wider the variation.

		Thistones
	Basis	Thickness (Inches)
Bond, Cotton Fiber	13	.0025
(Flat Finish)	16	.003
17" x 22"	20	.0035
	24	.004
(Cockle Finish)	13	.003
	16	.0035
	20	.004
	24	.00475
Bond, Sulphite	13	.003
17" x 22"	15	.0035
	20	.004
	24	.0045
Ledger	24	.004
17" x 22"	28	.005
	32	.0055
	36	.006
Coated Book	60	.003
(Gloss)	70	.0035
25" x 38"	80	.004
	100	.005
	120	.006
Coated Book	70	.004
(Dull)	80	.0045
25" x 38"	100	.0055
Offset	50	.00375
(Regular Finish)	60	.0045
25" x 38"	70	.005
	80	.0055
	100	.007
	120	.008
	150	.010

	Basis	Thickness (Inches)
Cover	50	.0065
(Uncoated)	65	.0095
20" x 26"	80	.0115
Cover	60	.0055
(Coated)	80	.008
20" x 26"	100	.010
Index Bristol	90	.007
25.5" x 30.5"	110	.0085
	140	.011
Vellum Bristol	57	.007
Cover	67	.008
22.5" x 28.5"	80	.010
Tag	100	.007
24" x 36"	125	.009
	150	.011
	175	.013
	200	.015
	Ply	Thickness

	1 1 y	HIICKIICSS
Board	3	.015
22" x 28"	4	.018
	5	.021
	6	.024
	8	.030
	10	.036

Note: Minimum thickness for a standard post card is .007"

Bulk Determination Table For Books

Four sheets (eight pages) of paper measured by a micrometer will produce the number of pages opposite the readings to bulk one inch. Four sheets (8 pages) are typically measured to get a better average reading than would be obtained by measuring a single sheet. Note: number of pages (front and back of sheet) is twice the number of sheets of paper.

.0055 1,454 .023 348 .006 1,332 .0235 340 .0065 1,323 .024 332 .007 1,142 .0245 326 .0075 1,066 .025 320 .008 1,000 .0255 314 .0085 .942 .026 308 .009 .890 .0265 302 .0095 .842 .027 .296 .010 .800 .0275 .290 .010 .800 .0275 .290 .0105 .762 .028 .286 .011 .728 .0285 .280 .0115 .696 .029 .276 .012 .666 .0295 .272 .0125 .640 .030 .268 .013 .616 .0305 .262 .0135 .594 .031 .258 .014 .570 .0315 .254	Caliper 4 sheets	Pages per Inch	Caliper 4 sheets	Pages per Inch
.0065 1,323 .024 332 .007 1,142 .0245 326 .0075 1,066 .025 320 .008 1,000 .0255 314 .0085 942 .026 308 .009 890 .0265 302 .0095 842 .027 296 .010 800 .0275 290 .0105 762 .028 286 .011 728 .0285 280 .0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .	.0055	1,454	.023	348
.007 1,142 .0245 326 .0075 1,066 .025 320 .008 1,000 .0255 314 .0085 942 .026 308 .009 890 .0265 302 .0095 842 .027 296 .010 800 .0275 290 .0105 762 .028 286 .011 728 .0285 280 .0115 696 .029 .276 .012 666 .0295 .272 .0125 640 .030 .268 .013 616 .0305 .262 .0135 594 .031 .258 .014 .570 .0315 .254 .0145 .552 .032 .250 .015 .534 .0325 .246 .0155 .516 .033 .242 .016 .500 .0335 .238	.006	1,332	.0235	340
.0075 1,066 .025 320 .008 1,000 .0255 314 .0085 942 .026 308 .009 890 .0265 302 .0095 842 .027 296 .010 800 .0275 290 .0105 762 .028 286 .011 728 .0285 280 .0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .0175	.0065	1,323	.024	332
.008 1,000 .0255 314 .0085 942 .026 308 .009 890 .0265 302 .0095 842 .027 296 .010 800 .0275 290 .0105 762 .028 286 .011 728 .0285 280 .0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .0185 432 .036	.007	1,142	.0245	326
.0085 942 .026 308 .009 890 .0265 302 .0095 842 .027 296 .010 800 .0275 290 .0105 762 .028 286 .011 728 .0285 280 .0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .0365	.0075	1,066	.025	320
.009 890 .0265 302 .0095 842 .027 296 .010 800 .0275 290 .0105 762 .028 286 .011 728 .0285 280 .0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .0195 410 .037	.008	1,000	.0255	314
.0095 842 .027 296 .010 800 .0275 290 .0105 762 .028 286 .011 728 .0285 280 .0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037	.0085	942	.026	308
.010 800 .0275 290 .0105 762 .028 286 .011 728 .0285 280 .0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 <td>.009</td> <td>890</td> <td>.0265</td> <td>302</td>	.009	890	.0265	302
.0105 762 .028 286 .011 728 .0285 280 .0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038	.0095	842	.027	296
.011 728 .0285 280 .0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385	.010	800	.0275	290
.0115 696 .029 276 .012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039	.0105	762	.028	286
.012 666 .0295 272 .0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395	.011	728	.0285	280
.0125 640 .030 268 .013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.0115	696	.029	276
.013 616 .0305 262 .0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.012	666	.0295	272
.0135 594 .031 258 .014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.0125	640	.030	268
.014 570 .0315 254 .0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.013	616	.0305	262
.0145 552 .032 250 .015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.0135	594	.031	258
.015 534 .0325 246 .0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.014	570	.0315	254
.0155 516 .033 242 .016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.0145	552	.032	250
.016 500 .0335 238 .0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.015	534	.0325	246
.0165 484 .034 234 .017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.0155	516	.033	242
.017 470 .0345 232 .0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.016	500	.0335	238
.0175 456 .035 230 .018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.0165	484	.034	234
.018 444 .0355 224 .0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.017	470	.0345	232
.0185 432 .036 222 .019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.0175	456	.035	230
.019 420 .0365 220 .0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.018	444	.0355	224
.0195 410 .037 216 .020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.0185	432	.036	222
.020 400 .0375 214 .0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.019	420	.0365	220
.0205 390 .038 212 .021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.0195	410	.037	216
.021 380 .0385 208 .0215 372 .039 206 .022 364 .0395 202	.020	400	.0375	214
.0215 372 .039 206 .022 364 .0395 202	.0205	390	.038	212
.022 364 .0395 202	.021	380	.0385	208
	.0215	372	.039	206
.0225 356 .040 200	.022	364	.0395	202
	.0225	356	.040	200

Formula:

To determine the bulk of a given number of pages: Caliper eight pages (four sheets) and then multiply the result by the given number of pages and divide by 8.

Example:

Eight pages caliper .016. What will 320 pages bulk? $320 \times .016 \div 8 = .640$

Answer: .640" or approximately 5/8"

Formula:

To determine the number of pages per inch: Caliper eight pages and refer to the chart.

Example:

Eight pages caliper .016. How many pages per inch? Answer: 500 pages per inch