

CONVERSION CHARTS for PAPER (GSM TO BASIS WEIGHT)

PAPER INDUSTRY WEIGHT COMPARISONS. Paper is available for purchase in a variety of sizes, finishes, colors, thickness (or caliper) and weights. Understanding and being able to compare the difference is often the key to selecting the best paper for your project. As there are many techniques for measuring paper weights, the process used for comparison is not always easy. In spite of the many techniques used to measure paper weight, (metric vs. pounds) paper can still be compared using 'equivalent weights'. The various measures can easily be synchronized by using a 'conversion formula'. A practical way to show the results for comparison is to create a **conversion**

GSM

The **GSM** (grams per square meter) tells paper consumers how dense a paper is. This is used as a baseline measurement in Metrics and as a result it is still used as the 'standard size' when comparing the weights of different sized papers. Manufacturers of Digital Printing Equipment today utilize this measure as a guideline for machine settings. GSM is used as the Metric Standard when comparing the weights of papers.

BASIS WEIGHT

Paper in the United States is categorized by its **basis weight**. This measure of weight is expressed in terms of pounds. The basis weight is the weight of 500 sheets (one ream) of the paper in its basic or parent size. As different weights and types of paper are manufactured in different sized sheets, this makes it particularly difficult to compare the many types of paper.

GSM SORT to BASIS WEIGHT (PAPER)

GSM	Basis Weight	GSM	Basis Weight
25	17 Text	160	108 Text
30	20 Text	162	60 Cover
30	8 Bond	163	90 Index
34	9 Bond	163	100 Tag
36	24 Text	170	63 Cover
44	30 Text	175	80 Bristol
45	12 Bond	176	65 Cover
49	33 Text	178	120 Text
49	13 Bond	179	66 Cover
52	35 Text	184	68 Cover
59	40 Text	189	70 Cover
60	16 Bond	197	90 Bristol
64	43 Text	199	110 Index
67	45 Text	203	125 Tag
74	50 Text	216	80 Cover
75	20 Bond	219	100 Bristol
81	55 Text	227	84 Cover
89	60 Text	243	90 Cover
90	24 Bond	244	150 Tag
104	70 Text	253	140 Index
105	28 Bond	263	120 Bristol
108	40 Cover	270	100 Cover
111	75 Text	285	175 Tag
118	80 Text	298	110 Cover
120	32 Bond	307	140 Bristol
125	57 Bristol	307	170 Index
133	90 Text	325	120 Cover
135	50 Cover	326	200 Tag
135	36 Bond	351	160 Bristol
144	97 Text	352	130 Cover
147	67 Bristol	395	180 Bristol
148	100 Text	398	220 Index
149	55 Cover	407	250 Tag
150	40 Bond	439	200 Bristol
155	105 Text	488	300 Tag

BASIS WEIGHT SORT to GSM (PAPER)

Basis Weight	GSM	Basis Weight	GSM
8 Bond	30	120 Cover	325
9 Bond	34	130 Cover	352
12 Bond	45	90 Index	163
13 Bond	49	110 Index	199
16 Bond	60	140 Index	253
20 Bond	75	170 Index	307
24 Bond	90	220 Index	398
28 Bond	105	100 Tag	163
32 Bond	120	125 Tag	203
36 Bond	135	150 Tag	244
40 Bond	150	175 Tag	285
57 Bristol	125	200 Tag	326
67 Bristol	147	250 Tag	407
80 Bristol	175	300 Tag	488
90 Bristol	197	17 Text	25
100 Bristol	219	20 Text	30
120 Bristol	263	24 Text	36
140 Bristol	307	30 Text	44
160 Bristol	351	33 Text	49
180 Bristol	395	35 Text	52
200 Bristol	439	40 Text	59
40 Cover	108	43 Text	64
50 Cover	135	45 Text	67
55 Cover	149	50 Text	74
60 Cover	162	55 Text	81
63 Cover	170	60 Text	89
65 Cover	176	70 Text	104
66 Cover	179	75 Text	111
68 Cover	184	80 Text	118
70 Cover	189	90 Text	133
80 Cover	216	97 Text	144
84 Cover	227	100 Text	148
90 Cover	243	105 Text	155
100 Cover	270	108 Text	160
110 Cover	298	120 Text	178

The values in the tables are intended to serve as a guide only. They should not be used as exact specifications as there can be variances due to other characteristics of the paper. Please consult a Paper Mart Specialist to be certain that you are selecting the correct paper for your project.