



Equivalent Weights In Paper

Commonly specified American paper weight is based on two measures:

1. BASIS WEIGHT:

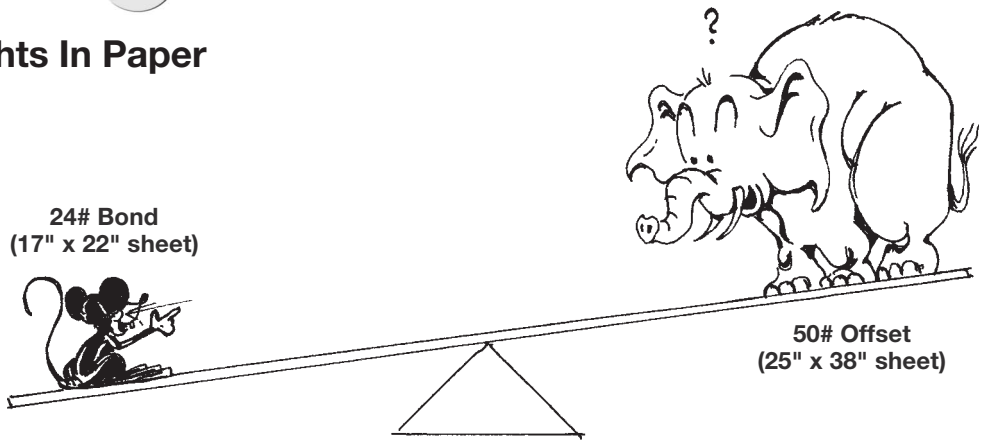
The nominal weight (in pounds) of one ream (500 sheets) of a particular paper in its normal manufacturing size (basis size).

2. **BASIS SIZE:** The normal size of each type of paper as determined by manufacturing tradition based on common usage.

Confusion arises because *different basis sizes are used to determine the basis weight of different grades of paper*. That makes direct comparison of *weights* between different grades difficult.

While we generally use paper in 8.5" x 11" finished sizes, it is the basis size that determines the basis weight. These are the most commonly used 'basis sizes':

Bond, Writing, Stationery, Ledger	17" x 22"
Cover	20" x 26"
Book, Text, Offset, Coated	25" x 38"
Index	25.5" x 30.5"
Vellum Bristol Cover	22.5" x 28.5"
Tag	24" x 36"



The chart on the reverse side shows the equivalent weights between the most common grades.

The most commonly used equivalents are between bond and offset, two papers with very similar applications. A flyer might be quoted as 20# Bond by one printer and 50# Offset by another. The chart will show that they are essentially the same weight and could be used interchangeably. However, a 24# Bond would be one step heavier than 50# Offset as illustrated by the mouse at the top of the page.

You can also use the chart to determine, for example, that 60# Cover would be equal to 47# Bond, or about twice the weight of a 24# Bond letterhead.

European and Asian papers which adhere to ISO (Metric) Standards are much easier to compare among themselves. They are all measured as grams per square meter (gm/m²). Thus any two papers can be compared directly to each other without reference to sheet or basis size.

		Offset, Book & Text	Cover	Vellum Bristol Cover	Index	Tag	ISO- (Metric)
BASIS SIZE*	Bond 17" x 22"	25" x 38"	20" x 26"	22.5" x 28.5"	25.5" x 30.5"	24" x 36"	grams/meter ²
Bond	13	33	18	22	27	30	49
Duplicator	15	38	21	25	31	35	56
Ledger	16	41	22	27	33	37	60
Mimeo &	20	51	28	34	42	46	75
Writing	24	61	33	41	50	55	90
	28	71	39	48	58	65	105
	32	81	45	55	67	74	120
	36	91	50	62	75	83	135
Book	16	40	22	27	33	36	59
Offset &	18	45	25	30	37	41	67
Text	20	50	27	34	41	45	74
	24	60	33	40	49	55	89
	28	70	38	47	57	64	104
	30	75	41	50	61	68	111
	31	80	44	54	65	73	118
	35	90	49	60	74	82	133
	39	100	55	67	82	91	148
	47	120	66	80	98	109	178
Cover	36	91	50	62	75	83	135
(Uncoated,	43	110	60	74	90	100	162
Antique Finish)	47	119	65	80	97	108	176
	58	146	80	99	120	133	216
	65	164	90	111	135	150	243
	72	183	100	124	150	166	270
Vellum Bristol	33	85	46	57	69	77	125
Cover	39	100	54	67	81	91	147
	47	120	65	80	98	109	175
Index	43	110	60	74	90	100	163
	53	135	74	91	110	122	199
	67	170	93	115	140	156	253
Tag	43	110	60	74	90	100	163
	54	137	75	93	113	125	203
	65	165	90	111	135	150	244
	76	192	105	130	158	175	285
	87	220	120	148	180	200	326

* BASIS SIZE is the common manufactured sheet size in a particular grade of paper. The paper's weight (bold figures) is based on the weight in pounds of one ream (500 sheets) of that paper in it's basis size. For example, "20# Bond" is based on the fact that 500 sheets of that grade (one ream) in 17" x 22" size (basis size) would weight 20 pounds. By quick calculation, you can conclude that 500 sheets of 20# Bond in 8.5" x 11" size (1/4 of 17" x 22" sheet) would weight 5 pounds.