

Typical Storage Requirements (Physical and Electronic)

Think about the total volume of paper files your business generates, and how much storage space is required. Here is an example.



Use the table below to calculate physical storage space of paper documents and electronic storage space of scanned documents.

Pages	=	DVDs	CDs	Linear Inches	Boxes	File Cabinets
1000	=	1	1	10	1	1
2,500	=	1	1	15	1	1
10,000	=	1	1	60	4	1
20,000	=	1	1	120	8	2
50,000	=	1	4	299	20	5
100,000	=	1	7	599	40	10
250,000	=	3	18	1,497	100	25
500,000	=	5	36	2,994	200	50
750,000	=	8	54	4,491	300	75
1,000,000	=	11	71	5,988	400	100
2,500,000	=	27	179	14,970	1,000	250
5,000,000	=	53	357	29,940	2,000	500
7,500,000	=	80	536	44,910	3,000	750
10,000,000	=	106	714	59,880	4,000	1,000
25,000,000	=	266	1,786	149,701	10,000	2,500
50,000,000	=	532	3,571	299,401	20,000	5,000
100,000,000	=	1,064	7,143	598,802	40,000	10,000

Table Assumptions –

- Pages are letter size 8 1/2 by 11 inches, A4.
- Boxes are 15 1/2 long x 12 wide x 10 deep, 400 x 300 x 250 mm.
- File Cabinets are 4 drawer cabinets.
- Linear Inches is calculated as paper stacked on its side as in a file cabinet or box. Linear Inches is assumed to be paper stored loose enough for active filing. Paper stored for archive would take 25% less space.
- CDs are based on 700 MB per CD.
- DVDs are based on 4.7 GB per DVD.

These size estimates are based on actual system metrics taken over a long period of time. Storage is a small part of total system cost, so even moderate errors in size estimates do not affect overall system cost very much. After even one percent of a project's documents have been scanned, a very accurate estimate of the - per document and per file cabinet (etc.) can be made.

If the actual size of the digital images of the average scanned document is 10 percent larger than the above estimate, then the overall storage system estimate can be increased by 10 percent (with very little effect on overall system cost).

These metrics are also chosen in rounded form, so that system estimates come out to exact rounded numbers which make the systems easier to describe and discuss. These metrics are of greatest benefit in bringing design meetings to closure on the topic of system sizing by eliminating the need to discuss (ad infinitum) whether the average size of an image is 50 or 51KB.