Dimensional Weight

How-to guide: what the workbook does, how to use it and what every number means. mfgcalcs.com

Dimensional Weight

Work out every shipping carton's dimensional and billable weight, what dimensional weight costs a month, and how tall the carton could be before it costs anything.

For: Packaging engineers, shipping and logistics managers and e-commerce operations teams choosing cartons and services.

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Quick start

1. On Setup, type your company and currency, and list your shipping services with their dimensional divisor and average rate per billable pound.
2. On Cartons, give each carton a row: product, service, rated length, width and height, actual weight and shipments a month.
3. Fix anything the Check column names.
4. Open the Dashboard: the cartons billed on dimensional weight and what it costs each month.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Company, currency, and the shipping services with their dimensional divisor and average rate per billable pound.
Cartons	One row per shipping carton: dimensions, weight, service and volume in; dimensional and billable weight and its cost out.
Dashboard	Dimensional against actual weight for every carton, and what dimensional weight costs each month.
Method	How every number is calculated, with assumptions, limits and sources.
Verify	Self-check: the workbook's formulas recomputed on fixed inputs against an independent reference.

What each number means

Quantity	How it is calculated	Units
Cube	Length x width x height, after the carrier's rounding.	in^3
Dimensional weight	Cube / divisor.	lb
Billable weight	The larger of actual and dimensional weight, rounded up to the whole pound.	lb
Billed on dimensional	Yes when dimensional weight is above actual weight.	-

Quantity	How it is calculated	Units
Extra pounds	Billable weight - actual weight rounded up.	lb
Height for no extra	Actual weight rounded up x divisor / (length x width).	in
Extra pounds and cost a month	Extra pounds x shipments a month; x rate per lb.	lb, currency

Assumptions, limitations, sources and the self-check (the Verify sheet, which recomputes the workbook's formulas on fixed test inputs) are in the workbook. The last page shows the Dashboard with the example data for Halcyon Home Goods, a fictional business.

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Engineering estimates for planning and improvement work. Verify the results against your own process, data and standards before you rely on them.

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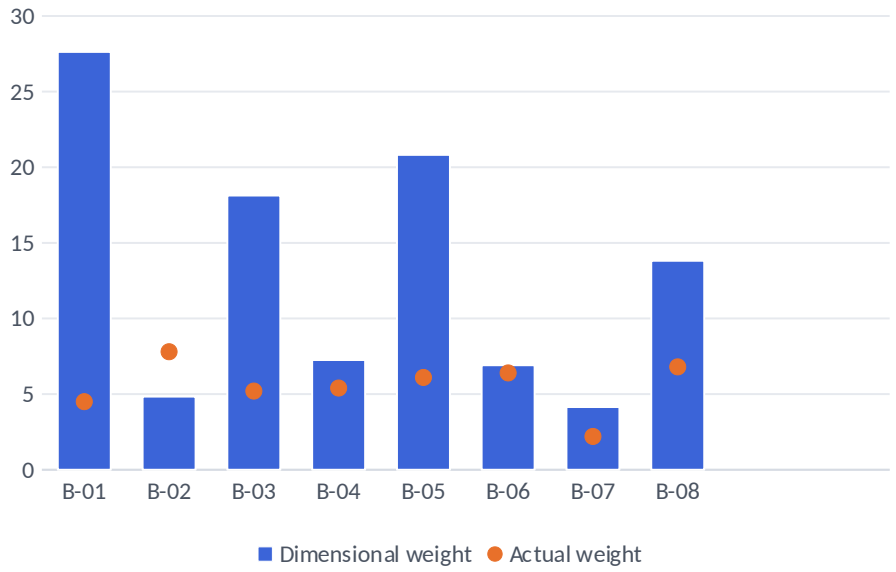
Dimensional against actual weight for every carton, and what dimensional weight costs each month.

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Halcyon Home Goods (example): 8 cartons, 3,850 shipments a month. Amounts in USD.

CARTONS	SHIPMENTS A MONTH	BILLED ON DIMENSIONAL	DIMENSIONAL COST A MONTH
8	**3,850**	**7**	**32,638**
Rows on Cartons	All cartons	Dimensional above actual weight	Extra pounds x rate per lb

Dimensional against actual weight (lb)



Dimensional weight cost a month

