Fold Allowance Chart

How much longer the outside layer must be to fold flat over the inside

Extra length per 180-degree fold = pi x gap between layer centrelines

Gap = half the inner layer + every layer in between + half the outer layer. Same idea as sheet-metal bend allowance.

OUTSIDE LAYER, EXTRA LENGTH OVER THE INNERMOST LAYER (mm, one fold)

Inner / between	outer 1.2 mm (3 oz)	outer 1.6 mm (4 oz)	outer 2.0 mm (5 oz)	outer 2.4 mm (6 oz)
0.8 mm / 0 mm	3.1 mm (0.12 in)	3.8 mm (0.15 in)	4.4 mm (0.17 in)	5.0 mm (0.20 in)
0.8 mm / 0.8 mm	5.7 mm (0.22 in)	6.3 mm (0.25 in)	6.9 mm (0.27 in)	7.5 mm (0.30 in)
0.8 mm / 1.6 mm	8.2 mm (0.32 in)	8.8 mm (0.35 in)	9.4 mm (0.37 in)	10.1 mm (0.40 in)
0.8 mm / 2.4 mm	10.7 mm (0.42 in)	11.3 mm (0.45 in)	11.9 mm (0.47 in)	12.6 mm (0.49 in)
1.2 mm / 0 mm	3.8 mm (0.15 in)	4.4 mm (0.17 in)	5.0 mm (0.20 in)	5.7 mm (0.22 in)
1.2 mm / 0.8 mm	6.3 mm (0.25 in)	6.9 mm (0.27 in)	7.5 mm (0.30 in)	8.2 mm (0.32 in)
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1.2 mm / 2.4 mm	11.3 mm (0.45 in)	11.9 mm (0.47 in)	12.6 mm (0.49 in)	13.2 mm (0.52 in)

Inner = the innermost layer that crosses the fold (often the liner). Between = total of any other layers that cross the fold, such as a full-length bill divider. Card pockets that stop short of the fold do not count. A trifold folds twice: double the figure.

WHAT MAKERS USE (leatherworker.net, Maze Leather, MakeSupply)

Rule	In mm
Add the outer leather's thickness (1/16 in for 4 oz)	about 1.6 mm
Add 1/8 in regardless	3.2 mm
Liner 1/4 in shorter	6.4 mm
Back 1/4 to 1/2 in longer	6.4 - 12.7 mm
3/8 in typical, 1/2 in the most	9.5 - 12.7 mm
Add about 15 mm	15 mm
1/2 to 3/4 in	12.7 - 19 mm

The geometry gives the minimum for the leather to lie flat when empty. Makers add more for a full wallet, for trimming, and because leather stretches and compresses. Confirm with a scrap test (page 2).

Fold Allowance Worksheet and Scrap Test

Measure, calculate, then prove it on scrap

WORKSHEET

A. Innermost layer crossing the fold (mm) _____

B. All layers between, total (mm) _____

C. Outer layer (mm) _____

D. Gap = A/2 + B + C/2 (mm) _____

E. Extra per fold = 3.14 x D (mm) _____

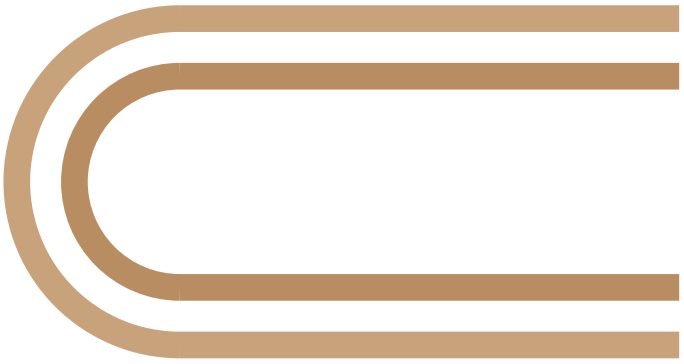
F. Number of folds (bifold 1, trifold 2) _____

G. Outer cut length = inner length + E x F (mm) _____

H. Add for contents / trim allowance (your choice, mm) _____

SCRAP TEST (after a method shared on leatherworker.net)

1. Cut two strips of the real leathers, same length, about 1 in wide.
2. Lay them back to back the way the item is built, clamp or glue one end flush.
3. Fold them to the closed shape, with cards or bills inside if the item will carry them.
4. Measure how far the inner strip sticks out past the outer at the free end. That is the allowance.
5. Trim the inner pattern by that amount, or add it to the outer.



Difference = pi x (R outer - R inner): the radius of the fold cancels out.