

POWDER COATINGS COST CHART

Chart showing the cost per unit area (\$/ft²) of powder coatings at a transfer efficiency of 100%

Thickness of cured film (mils)

		1	2	3	4	5	6	7	8	9	10
Cost index	1	0.0052	0.0104	0.0156	0.0208	0.0260	0.0312	0.0364	0.0416	0.0468	0.0520
	2	0.0104	0.0208	0.0312	0.0416	0.0520	0.0624	0.0728	0.0832	0.0937	0.1041
	3	0.0156	0.0312	0.0468	0.0624	0.0780	0.0937	0.1093	0.1249	0.1405	0.1561
	4	0.0208	0.0416	0.0624	0.0832	0.1041	0.1249	0.1457	0.1665	0.1873	0.2081
	5	0.0260	0.0520	0.0780	0.1041	0.1301	0.1561	0.1821	0.2081	0.2341	0.2601
	6	0.0312	0.0624	0.0937	0.1249	0.1561	0.1873	0.2185	0.2497	0.2810	0.3122
	7	0.0364	0.0728	0.1093	0.1457	0.1821	0.2185	0.2549	0.2914	0.3278	0.3642
	8	0.0416	0.0832	0.1249	0.1665	0.2081	0.2497	0.2914	0.3330	0.3746	0.4162
	9	0.0468	0.0937	0.1405	0.1873	0.2341	0.2810	0.3278	0.3746	0.4214	0.4683
	10	0.0520	0.1041	0.1561	0.2081	0.2601	0.3122	0.3642	0.4162	0.4683	0.5203
	11	0.0572	0.1145	0.1717	0.2289	0.2862	0.3434	0.4006	0.4579	0.5151	0.5723
	12	0.0624	0.1249	0.1873	0.2497	0.3122	0.3746	0.4370	0.4995	0.5619	0.6244
	13	0.0676	0.1353	0.2029	0.2706	0.3382	0.4058	0.4735	0.5411	0.6087	0.6764
	14	0.0728	0.1457	0.2185	0.2914	0.3642	0.4370	0.5099	0.5827	0.6556	0.7284
	15	0.0780	0.1561	0.2341	0.3122	0.3902	0.4683	0.5463	0.6244	0.7024	0.7804
	16	0.0832	0.1665	0.2497	0.3330	0.4162	0.4995	0.5827	0.6660	0.7492	0.8325
	17	0.0884	0.1769	0.2653	0.3538	0.4422	0.5307	0.6191	0.7076	0.7960	0.8845
	18	0.0937	0.1873	0.2810	0.3746	0.4683	0.5619	0.6556	0.7492	0.8429	0.9365
	19	0.0989	0.1977	0.2966	0.3954	0.4943	0.5931	0.6920	0.7908	0.8897	0.9886
	20	0.1041	0.2081	0.3122	0.4162	0.5203	0.6244	0.7284	0.8325	0.9365	1.0406
	21	0.1093	0.2185	0.3278	0.4370	0.5463	0.6556	0.7648	0.8741	0.9834	1.0926
	22	0.1145	0.2289	0.3434	0.4579	0.5723	0.6868	0.8013	0.9157	1.0302	1.1446
	23	0.1197	0.2393	0.3590	0.4787	0.5983	0.7180	0.8377	0.9573	1.0770	1.1967
	24	0.1249	0.2497	0.3746	0.4995	0.6244	0.7492	0.8741	0.9990	1.1238	1.2487
	25	0.1301	0.2601	0.3902	0.5203	0.6504	0.7804	0.9105	1.0406	1.1707	1.3007
	26	0.1353	0.2706	0.4058	0.5411	0.6764	0.8117	0.9469	1.0822	1.2175	1.3528
	27	0.1405	0.2810	0.4214	0.5619	0.7024	0.8429	0.9834	1.1238	1.2643	1.4048
	28	0.1457	0.2914	0.4370	0.5827	0.7284	0.8741	1.0198	1.1655	1.3111	1.4568
	29	0.1509	0.3018	0.4527	0.6035	0.7544	0.9053	1.0562	1.2071	1.3580	1.5088
	30	0.1561	0.3122	0.4683	0.6244	0.7804	0.9365	1.0926	1.2487	1.4048	1.5609
	31	0.1613	0.3226	0.4839	0.6452	0.8065	0.9677	1.1290	1.2903	1.4516	1.6129
	32	0.1665	0.3330	0.4995	0.6660	0.8325	0.9990	1.1655	1.3319	1.4984	1.6649
	33	0.1717	0.3434	0.5151	0.6868	0.8585	1.0302	1.2019	1.3736	1.5453	1.7170
	34	0.1769	0.3538	0.5307	0.7076	0.8845	1.0614	1.2383	1.4152	1.5921	1.7690
	35	0.1821	0.3642	0.5463	0.7284	0.9105	1.0926	1.2747	1.4568	1.6389	1.8210
	36	0.1873	0.3746	0.5619	0.7492	0.9365	1.1238	1.3111	1.4984	1.6857	1.8731

How to use this chart:

1. Calculate the cost index by multiplying the price of the powder coating (\$/lb) by the specific gravity of the powder coating.
2. Determine the desired thickness of the cured film (mils).
3. Find the cost per unit area (\$/ft²) at the intersection of the closest value for the cost index and the thickness of the cured film.
4. For a transfer efficiency lower than 100% (or if a more precise value is needed or if your data exceed the chart's data), use the following equation:

$$\text{Cost per unit area (\$/ft}^2\text{)} = \frac{\text{Cost index} \times \text{Film thickness (mils)}}{1.922 \times \text{Transfer efficiency (\%)}}$$

Example: Powder coating with price of \$6 per pound, specific gravity of 1.5, film thickness of 4 mils, and transfer efficiency at 95%

$$\text{Cost index} = 6 \times 1.5 = 9$$

$$\text{Cost per unit area} = \frac{9 \times 4}{1.922 \times 95} = 0.1972 \text{ \$/ft}^2$$

Source: Protech Chemicals, Montreal, Que.