



Life Cycle Cost Comparative

A cost per square foot analysis of commercial flooring options

		FRITZTILE	EPOXY TERRAZZO	MODULAR CARPET	BROADLOOM	VCT	COMMERCIAL SHEETVINYL		
LIGHT TRAFFIC	10 YEARS	Initial Cost	\$67,482	\$157,489	\$29,274	\$25,939	\$21,600	\$34,725	
		Maintenance	47,464	47,464	75,662	75,662	113,913	113,913	
		Repair	1,044	8,598	1,709	5,031	1,709	3,322	
		Replacement	0	0	42,656	42,656	44,987	59,031	
		Total Cost	\$115,990	\$213,551	\$155,825	\$149,288	\$182,209	\$210,991	
		10 year Cost Difference		\$97,561	\$39,835	\$33,298	\$66,219	\$95,001	
		30 YEARS	Initial Cost	\$67,482	\$157,489	\$29,274	\$25,939	\$21,600	\$34,725
		Maintenance	196,977	196,977	313,998	313,998	472,744	472,744	
		Repair	4,333	35,682	7,091	20,880	7,091	13,788	
		Replacement	0	0	204,099	165,140	186,697	228,536	
	Total Cost	\$268,792	\$390,148	\$554,462	\$525,957	\$688,132	\$749,793		
	30 year Cost Difference		\$121,356	\$285,670	\$257,165	\$419,340	\$481,001		
	▶ AVERAGE ANNUAL COST PER SQUARE FOOT								
	Over 10 years	\$1.55	\$2.85	\$2.08	\$1.99	\$2.43	\$2.81		
	Over 30 years	\$1.19	\$1.73	\$2.46	\$1.34	\$3.06	\$3.33		
	Years until the cumulative cost of Fritztile is lower or breaks even.	-	1	10	8	8	6		
	Estimated Functional Life (Years)	40+	40+	10	8	10	8		
HEAVY TRAFFIC	10 YEARS	Initial Cost	\$67,482	\$157,489	\$29,274	\$25,939	\$21,600	\$34,725	
		Maintenance	66,204	64,204	104,035	104,035	152,183	152,183	
		Repair	1,392	11,464	2,278	6,708	2,278	4,430	
		Replacement	0	0	45,007	84,289	41,169	116,647	
		Total Cost	\$135,078	\$235,157	\$180,594	\$220,971	\$217,230	\$116,647	
		10 year Cost Difference		\$100,079	\$45,516	\$85,893	\$82,152	\$172,907	
		30 YEARS	Initial Cost	\$67,482	\$157,489	\$29,274	\$25,939	\$21,600	\$34,725
		Maintenance	274,748	274,748	431,747	431,747	631,564	631,564	
		Repair	5,778	47,575	9,455	27,839	9,455	18,384	
		Replacement	0	0	252,162	349,802	230,662	484,090	
	Total Cost	\$348,008	\$479,812	\$722,638	\$835,327	\$893,281	\$1,168,763		
	30 year Cost Difference		\$131,804	\$374,630	\$487,319	\$545,273	\$820,755		
	▶ AVERAGE ANNUAL COST PER SQUARE FOOT								
	Over 10 years	\$1.80	\$3.14	\$2.41	\$2.95	\$2.90	\$4.11		
	Over 30 years	\$1.55	\$2.13	\$3.21	\$3.71	\$3.97	\$5.19		
	Years until the cumulative cost of Fritztile is lower or breaks even.	-	1	7	5	6	5		
	Estimated Functional Life (Years)	40	40+	7	5	7	5		

Inflation Rate: 3.00% Model Size: 7,500 ft²



Cost Per Square Foot Numbers Used in Calculations

		Fritztile	Epoxy Terrazzo	Modular Terrazzo	Broadloom	VCT	Commercial Sheet Vinyl
Initial	Material	6.28	12.72	2.90	2.40	1.15	2.60
	Freight	0.25	0.55	0.12	0.12	0.18	0.18
	Installation	1.75	7.01	0.55	0.61	0.90	1.20
	Floor Preparation	0.72	0.72	0.33	0.33	0.65	0.65
	Totals	\$9.00	\$21.00	\$3.90	\$3.46	\$2.88	\$4.63
Recurring Replacement	Material	0.00	0.00	2.90	2.40	1.15	2.60
	Freight	0.00	0.00	0.12	0.12	0.18	0.18
	Installation	0.00	0.00	0.55	0.61	0.90	1.20
	Rip Out	0.00	0.00	0.28	0.33	0.88	0.88
	Floor Preparation	0.00	0.00	0.33	0.33	0.65	0.65
	Disruptions	0.00	0.00	0.70	0.70	0.70	0.70
Totals	\$0.00	\$0.00	\$4.88	\$4.49	\$4.46	\$6.21	
Annual Maintenance & Repair (Light Traffic)	Maintenance	0.55	0.55	0.88	0.88	1.32	1.32
	Repair	0.01	0.10	0.02	0.06	0.02	0.04
	Totals	\$0.56	\$0.65	\$0.90	\$0.94	\$1.34	\$1.36
Annual Maintenance & Repair (Heavy Traffic)	Maintenance	0.77	0.77	1.21	1.21	1.77	1.77
	Repair	0.02	0.13	0.03	0.08	0.03	0.05
	Totals	\$0.79	\$0.90	\$1.24	\$1.29	\$1.80	\$1.82

TERMS AND CONSIDERATIONS

LIFE - Length of useful performance, calculated in years, of the floor material being considered. This will determine the number of times the flooring will be replaced during the Life Cycle Period. "Appearance retention" time, or how many years the appearance is acceptable, is as important as being "worn out."

INITIAL COSTS

MATERIAL - The price of the flooring material only. Fritztile is sold to distributors and dealers at quantity based pricing. Though quantity price breaks available to end users can vary by seller, a job size of 20,000 square feet for example, can easily be 50 cents a square foot less than our 7,500 square feet model.

FREIGHT - The cost to ship the flooring material to the installation site.

INSTALLATION - The labor and supply costs involved with the installation of the floor.

FLOOR PREP - The supplies and labor involved in preparing the subfloor for the new installation.

RIP OUT - The cost to remove the floor to be replaced. Rip Out is not necessary the first year since the model assumes a new facility.

DISRUPTIONS - The costs that are incurred in removing all personnel, furniture, or other equipment from the area needing a new floor. These costs can also include lost revenue and time needed to select and plan a new floor installation. The disruption cost can differ greatly depending on the setting.

ANNUAL MAINTENANCE & REPAIR - LIGHT & HEAVY TRAFFIC

Maintenance is the ongoing cost per square foot to care for the flooring. Using a low maintenance floor such as Fritztile greatly reduces the cost of maintenance over the floor's life. We have defined light traffic to be 70% - 75% of the cost of heavy traffic. The actual maintenance cost can vary significantly depending on the environment. The costs developed approximates the median maintenance cost for each flooring. We estimate the following to be the means for heavy traffic

Repair costs are incurred on most floors, with the cost amount relating to the toughness and the suitability of the floor covering.