

Cost Of Ownership

What others say...

EDUCATION

If a diamond cost less than a cubic zirconium, which would you purchase? If a Mercedes Benz cost less than a Yugo, which car would you prefer to own? Silly question? Not really when it comes to floor covering.

The single greatest cost of any floor covering is the cost to maintain it over its life. Cost of Ownership is simply the calculation of the REAL cost of owning a floor including product, installation, and maintenance. Maintenance requirements of different floor covering products vary widely, which makes the evaluation of Cost of Ownership THE critical measurement of flooring from the financial perspective.

One of Forbo's stated corporate objectives is to be the lowest maintenance cost floor. The following brochure contains information on "what others say" about the cost of ownership of various types of floorcoverings, and also information on "what we say" about the cost of ownership of our linoleum (**MARMOLEUM® & ARTOLEUM®**) floor covering.

If you prefer a diamond to cubic zirconium, then evaluate the cost of ownership of our linoleum floor covering for your needs and you may find it costs dramatically less to own the diamond.



Life Cycle Cost in Education Flooring Materials and Assemblies

The selection of materials for educational facilities is usually driven by the initial cost of the materials. Costs not normally associated with building materials, such as those incurred by operations and maintenance, can be reduced by appropriate materials selection. At the University of Florida, we have investigated interior flooring materials and assemblies within the context of a Service Life Cycle Cost (LCC) analysis. The use of an LCC methodology addresses one issue that does not often receive the appropriate level of attention and energy: lowering the initial cost of a facility will most likely result in higher continuing costs in the form of increased operations and maintenance and more frequent replacement events. In other words, less expensive buildings seem to cost more over time. Our study has directly addressed this issue by comparing the service life cycle cost with relative initial cost of flooring materials. The analysis of interior flooring materials using an LCC methodology resulted in specific conclusions regarding the relative worth of particular installations based on a building service life of 50 years.

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The following chart documents the conclusions reached by the LCC analysis. All dollar values are given on a per square foot basis.

Identification Number & Ranking	Description of System	Capital Cost (\$/sq ft)	System Service Life (years)	Number of Replacement Systems	Net Present Worth of Replacement Systems	Operations & Maintenance (% of Capital Cost)	Total NPW of O&M	TOTAL COST OF SYSTEM IN NPW
Hard Flooring								
1A	Ceramic Tile (6" x 6" x 1/2") Mortar & Grout	\$7.31	50	0	\$0.00	1.00%	\$8.25	\$15.56
2A	Ceramic Tile (6" x 6" x 1/2") Mastic & Grout	\$6.69	30	1	\$16.24	2.00%	\$15.09	\$38.02
3A	Quarry Tile Mortar & Grout	\$8.70	35	1	\$18.85	2.00%	\$15.11	\$40.67
4A	Exposed Concrete Sealant (2 coats)	\$0.79	50	0	\$0.00	76.00%	\$67.72	\$68.51
5A	Terrazzo (1 3/4") Cast in place	\$7.10	50	0	\$0.00	8.00%	\$64.07	\$71.17
6A	Epoxy resin	\$1.60	12	4	\$2.38	37.00%	\$66.78	\$85.16
7A	Laminated wood (synthetic core) vapor barrier & adhesive	\$12.00	20	2	\$21.67	5.00%	\$67.68	\$140.50
8A	Wood plank (2 1/4") vapor barrier & urethane	\$9.31	30	1	\$22.60	24.00%	\$152.03	\$283.94
9A	Bamboo flooring vapor barrier & adhesive	\$13.22	25	1	\$77.68	17.00%	\$253.50	\$294.40
Resilient Flooring								
1B	Linoleum (125") Adhesive	\$4.50	30	1	\$10.92	2.00%	\$10.15	\$25.57
2B	Vinyl Composition Tile (VCT) Adhesive	\$1.43	15	3	\$2.23	86.00%	\$138.72	\$151.25
3B	Vinyl Sheet Adhesive	\$2.05	15	3	\$3.19	60.00%	\$138.74	\$156.71
4B	Rubber Sheet (185") Adhesive	\$5.30	10	4	\$7.12	23.00%	\$137.50	\$189.65
5B	Cork (185") Adhesive	\$3.43	6	8	\$4.10	36.00%	\$139.28	\$208.82
Soft Flooring								
1B	Carpet tile (18" x 18", 20oz/yd ²) Hard Back	\$2.21	10	4	\$19.53	29.00%	\$72.29	\$94.04
2B	Carpet tile (18" x 18", 20oz/yd ²) Cushion Back	\$2.51	12	4	\$26.33	25.00%	\$70.78	\$99.62
3B	Carpet (Nylon loop pile 40oz/yd ²) Adhesive	\$3.61	11	4	\$34.74	18.00%	\$73.30	\$111.65

3-4
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