Oakbrook Condo Deck Replacement Analysis

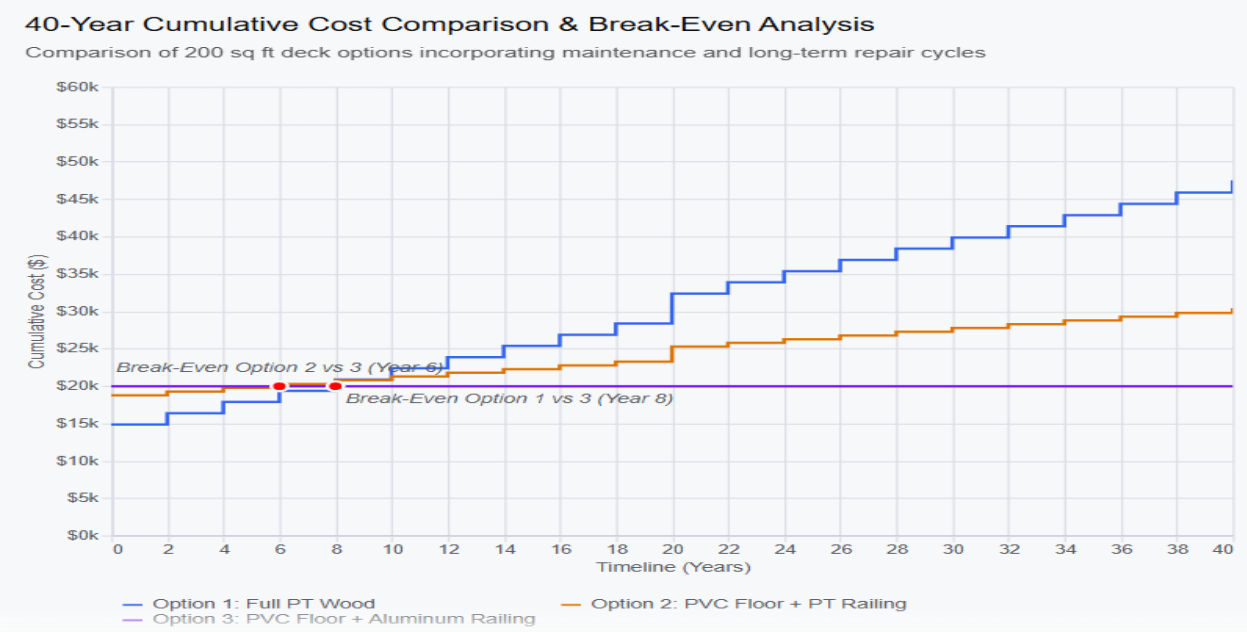
Cost comparison and breakeven analysis between three deck options for a 200 square foot deck with railing over 40 years: Option 1 - pressure treated deck with an initial cost of $14850.00 and a bi-annual cleaning and staining cost of $1500; Option 2 - a Timber Tech PVC deck with pressure treated railing with an initial cost of $18750.00 and bi-annual cleaning and staining of the railings cost of $500; Option 3 - Timber Tech PVC deck floor with Westbury C10 Aluminum Railing with an initial cost of $19950.00 and no bi-annual maintenance.

To find your exact break-even timeline, we will track the cumulative costs of all three configurations over a **40-year horizon**.

Over 40 years, **Option 3 (All-PVC & Aluminum) is the most cost-effective choice, breaking even with the full pressure-treated deck by Year 8**. Option 2 (PVC with Wood Railing) takes a hit due to the recurring $500 railing maintenance, meaning it never beats the all-maintenance-free Option 3 and becomes more expensive than it by Year 6.

40-Year Cumulative Cost Comparison Chart

The visualization below displays how professional maintenance completely shapes long-term costs. Option 1 climbs steeply every 2 years by $1,500. Option 2 climbs at a gentler rate ($500 every 2 years). Option 3 remains entirely flat. In addition, Options 1 and 2 include structural wood surface or railing replacements at **Year 20** to ensure the natural lumber elements can safely survive the full 40 years.



Direct Lifetime Comparison

Milestone	Option 1: Full Pressure-Treated	Option 2: PVC Floor + PT Railing	Option 3: PVC Floor + Aluminum Railing
Year 0 (Upfront)	**$14,850**	**$18,750**	**$19,950**
Year 6	$19,350	$19,950 *(Crosses Option 3)*	**$19,950**
Year 8 (Break-Even)	$20,850 *(Crosses Option 3)*	$20,450	**$19,950**
Year 20 (Wood Refresh)	$31,350 *(Includes $2.5K floor swap)*	$24,750 *(Includes $1.5K rail swap)*	**$19,950**
Year 40 (Final Total)	**$46,350**	**$34,750**	**$19,950**

Financial Milestone Breakdown

- **Year 0 (Upfront Investment):** Option 1 is the cheapest option on day one, saving you $5,100 over Option 3. Option 2 sits in the middle, saving you $1,200 initially over Option 3.
- **Year 6 (The Hybrid Trap):** By Year 6, the $500 bi-annual staining cost for the wood railings on Option 2 has totally wiped out its initial upfront savings. From this year forward, **Option 2 is permanently more expensive than Option 3**.
- **Year 8 (The True Break-Even Point):** At your 4th staining cycle for the full wood deck (Option 1), cumulative maintenance hits $6,000. Total invested in Option 1 reaches **$20,850**, officially surpassing the upfront cost of the zero-maintenance Option 3.
- **Year 20 (The Mid-Life Structural Refresh):** To make it to Year 40, wood elements must be structurally refreshed due to rotting and warping. Option 1 requires an estimated $2,500 floorboard replacement, pushing its cost to **$31,350**. Option 2 requires a $1,500 replacement of the rotted wood railing components, pushing its total to **$24,750**. Option 3 remains unphased at **$19,950**.
- **Year 40 (Final Totals):** After 40 years, Option 1 demands a staggering **$46,350** total investment. Option 2 finishes at **$34,750**. Option 3 finishes exactly where it started at **$19,950**.

The Verdict

Investing in **Option 3 (TimberTech PVC with Westbury Aluminum Railing)** provides the highest financial return. By paying an extra $5,100 upfront, you protect yourself from future labor inflation and net **$26,400 in total cash savings** over Option 1, while entirely eliminating 20 separate rounds of staining and cleaning maintenance.