



What is Value Engineering & Why Does it Matter?

Value Engineering offers a methodical, organized way of analyzing project requirements, including design concepts and materials, to **optimize costs and maximize value**, while maintaining the required performance, quality, reliability and safety over the life of the project.

With the primary goal to preserve (or improve!) quality, performance and function, while lowering costs, Value Engineering ensures customers do not overpay for quality and performance when an equally effective, less expensive option exists. This allows customers to maximize their available budget without sacrificing quality.

In this brochure, we explore decorative surface materials as a way to maximize value. Case Studies will demonstrate how thermally fused laminate (TFL) and laminates, versus other alternate materials such as wood veneers, can be used in projects to significantly lower both labor and material costs—without sacrificing quality and performance.



What is TFL? How is it made?

TFL (thermally fused laminate) makes an excellent decorative surface material for a variety of settings and applications. As a finished panel, it delivers significant material and labor cost savings (versus laminates, which require application to a substrate, or veneers, which require finishing).

Our Eurodekor TFL Particleboard is produced by fusing resin-impregnated decorative paper onto both sides of our high-quality Eurospan Particleboard. Heat and pressure activate the resin, producing a decorative surface that is nonporous, hygienic and won't peel away.

Benefits

- Easy to Process
- Durable
- Fade Resistant
- High Quality
- Hygienic

Applications

- Residential and commercial settings, including hospitality and healthcare
- Suitable for vertical and low-traffic horizontal surfaces





What are laminates? How are they made?

Laminates are considered to be some of the most hard-wearing, durable and versatile decorative surface materials. Constructed by fusing melamine resin-impregnated decorative paper with phenolic resin-impregnated kraft papers, they must be bonded to a substrate, such as particleboard or medium density fiberboard (MDF), during the fabrication process.

The flexibility of laminates makes them ideal for curved applications. Additionally, thinner laminates can be postformed for edges with a tighter radius, such as countertop edges. Due to their exceptional durability, laminates work well for high-traffic horizontal applications, including countertops and desktops.

Benefits

- Suitable for curved & postformed applications
- Highly Durable
- Fade Resistant
- High Quality
- Hygienic

Applications

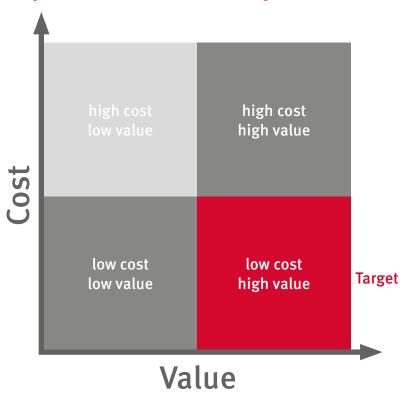
- Residential and commercial applications
- Suitable for high-traffic horizontal and vertical surfaces



A Comparison: TFL vs. Laminates vs. Wood Veneers

	TFL	Laminates	Wood Veneers
Deliver the look of natural wood	✓	✓	✓
Resistant to stain, scratch & fade	✓	✓	
Reproducible in color, pattern and texture years after installation	✓	√	
Sealed, nonporous surface that is easy to clean	√	√	
Save time & money in processing as a finished panel	✓		
Resistant to buckling & bubbling with moisture exposure	√		
Resistant to chipping & delamination	✓		
Material & labor processing costs	\$	\$\$	\$\$\$

Explore Our Value Comparisons



To see how surface materials can significantly reduce project costs, we partnered with select fabricators for side-by-side cost comparisons of both completed, real-world and speculative projects. The pages that follow show estimated costs* for projects using **TFL** with laminate for high-traffic applications, high pressure laminates (HPL) and wood veneers.

Our analysis shows a combination of TFL and laminates can save up to 50% compared to HPL alone and up to 79% compared to wood veneers in material and labor costs.

^{*}Estimated costs were based on material costs in the region of each fabricator at the time of estimation, as noted for each project.



TFL vs. Veneer Savings: 79%

The Metropolitan: Kitchen

Fabricator: Nexis3

Architect: Mauro Cringoli, RA at FORTIFIED

Project Scope: 65 High-End Contemporary Apartments/Kitchen Cabinets

Location: Downtown Rochester, NY

*Costs were based on 11/2021 prices in Rochester, NY







Total Material & Labor Costs: \$77,621

Total Material & Labor Costs: \$119,234

Total Material & Labor Costs: \$363,188

TFL vs. HPL Savings: 35%

HPL vs. Veneer **Savings: 67%**

TFL vs. Veneer Savings: 79%

The Metropolitan: Laundry & Bath

Fabricator: Nexis3

Architect: Mauro Cringoli, RA at FORTIFIED

Project Scope: 65 High-End Contemporary Apartments/Bath & Laundry Storage

Location: Downtown Rochester, NY

*Costs were based on 11/2021 prices in Rochester, NY







EGGER TFL

HPL

Total Material & **Labor Costs:** \$4,955

Total Material & **Labor Costs:** \$6,270

Total Material & **Labor Costs:** \$11,053

TFL vs. HPL Savings: 21% HPL vs. Veneer Savings: 43%

Savings: 55%

TFL vs. Veneer

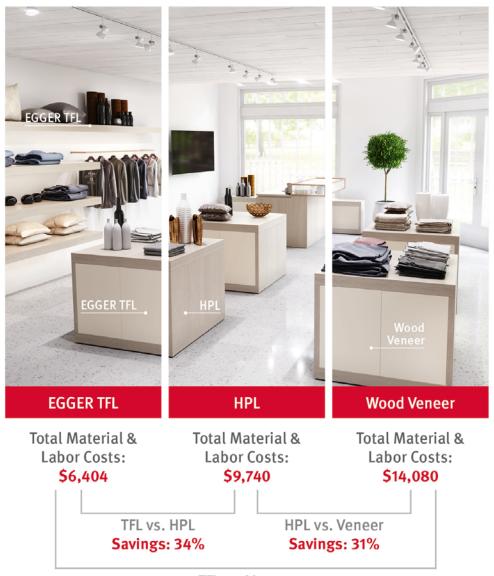
Walk-In Closet

Estimator: Thompson Millwork (based on rendering)

Project Setting: Residential or Multifamily

Application: Closet

*Costs were based on 2/2022 prices



TFL vs. Veneer **Savings: 55%**

Retail Shop

Estimator: Thompson Millwork (based on rendering)

Project Setting: Commercial Space

Application: Retail Space

*Costs were based on 2/2022 prices





Total Material & Total Material & Total Material & Labor Costs: Labor Costs: \$4,175 \$6,100 \$8,086

TFL vs. HPL HPL vs. Veneer Savings: 32% Savings: 25%

TFL vs. Veneer **Savings: 48%**

Hospitality Guest Room

Estimator: Thompson Millwork (based on rendering)

Project Setting: Hospitality

Application: Hotel Guest Room
*Costs were based on 2/2022 prices







Total Material & Labor Costs:

\$18,679

Total Material & Labor Costs: \$23,693

Total Material & Labor Costs: \$37,466

TFL vs. HPL **Savings: 21%**

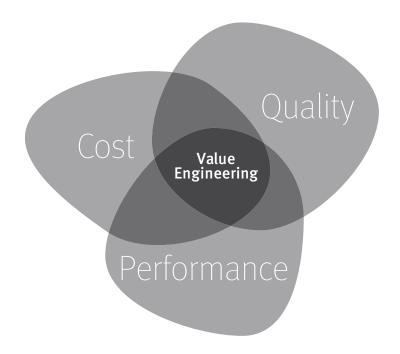
HPL vs. Veneer **Savings: 37%**

TFL vs. Veneer Savings: 50%

Restaurant & Bar

Estimator: Thompson Millwork (based on rendering)

Project Setting: Commercial Space
Application: Restaurant & Bar
*Costs were based on 2/2022 prices



Headline?

Ready to explore Value Engineering in more depth for your projects?

- Visit egger.com/ve
- Schedule our one hour AIA-, IDCEC- and IIDA-certified CEU course, "Value Engineering: A Cost Comparison of TFL & Laminate Versus Alternate Materials."



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