

PARALLEL LAMINATED VENEER



A cost-effective alternative to your LVL, OSB, Plywood, and Solid Wood industrial needs.

Tolko's Parallel Laminated Veneer (PLV) is a value added choice to help eliminate waste and improve substrate performance in a host of industrial applications. The product is available in multiple thicknesses and comes in sheet form, ready to cut into your components. PLV has a high strength-to-weight ratio and excellent dimensional stability compared to other composite and solid wood products. Our PLV is made with Douglas-fir, Larch and Spruce Metriguard Rated Veneer and produced at our mills in British Columbia.

FEATURES AND BENEFITS OF TOLKO PLV

- ✓ High Strength-to-Weight Ratio Compared to other composite wood products.
- Dimensional Stability Our controlled, exacting manufacturing process produces an extremely stable product.
- ✓ Fastener Holding Consistent density yields improved fastener holding results compared to solid sawn wood. For an even stronger hold, we offer PLV-X with cross-bands (perpendicular layer of veneer) in various layers.
- Consistency Each piece of Tolko PLV is 100% usable with quality you can count on. This eliminates the need to cull, sort and cut out defects, to maximize recovery and efficiency in your plant.
- Environmental All Tolko products are manufactured to PEFC, SFM, and SFI standards. SFI fully qualifies under the LEED standard via the LEED Alternative Compliance Path process. LEED Professionals please refer to: LEED v4.1 (page 214-215).
- Exempt from Formaldehyde Regulations HUD, CARB, and EPA TSCA Title VI exempt.
- ✓ ISPM-15 Exempt Tolko's Plywood and PLV products are exempt from the requirements in ISPM-15.







Our free <u>Tolko Product Guide</u> app is available for download. Set yourself up for success by finding the best Tolko lumber, plywood, OSB, and EWP products for each application.



TOLKO PLV SPECIFICATIONS								
Product Application	Industrial							
PLV Construction	All parallel layup							
PLV-X Construction	Customer-defined cross bands							
Thickness Category	3/4" 7/8", 1-1/8", 1-3/8", 1-1/2", 1-5/8", 1-3/4"							
Lengths	96", 97"							
Widths	48", 49"							

APPLICATIONS

- ✓ Windows and Doors
- Upholstered Furniture
- Export & Domestic Packaging
- ✓ RV Components

- ✓ Office Furniture Components
- ✓ Display Components
- Other uses where improved structural properties are required

PROPERTIES OF TOLKO PLV: COMPARISON AGAINST LVL, OSB, PLYWOOD, AND SOLID WOOD

Mechanical Property	Tolko PLV ^{(1) (2)}		2.0E LVL ⁽³⁾		OSB ⁽³⁾		DFP Plywood ⁽³⁾		Poplar Solid Wood ⁽³⁾		Spruce Solid Wood ⁽³⁾	
Internal Bond (psi)	60 - 61		60		40 - 50		40		_		-	
Specific Gravity	0.51		0.51		0.45 - 0.49		0.50		0.36		0.38	
Oven-dry Basis Density (pcf)	31.7		32.0		31 - 39		32		23		24	
Tension Parallel to Grain (psi)	7,610		7,000 - 8,000		-		_		850		5,000	
	Parallel O	rientation	Parallel O	rientation	Parallel O	rientation	Parallel Orientation		Parallel Orientation		Parallel Orientation	
Edgewise Bending, Fb, (psi) - MOR	7,000 - 10,500		9,000		3,500 - 5,000		5,000		8,400		4,700	
Edgewise Modulus of Elasticity (10 ⁶ psi) - MOE	1.55 - 2.05		2.0		0.5 - 0.8		1.0		1.2		1.0	
	Parallel	Perp. ⁽⁴⁾	Parallel	Perp. ⁽⁴⁾	Parallel	Perp. ⁽⁴⁾	Parallel	Perp. ⁽⁴⁾	Parallel	Perp. ⁽⁴⁾	Parallel	Perp. ⁽⁴⁾
Compression Stress (psi)	9,540	1,400	6,500 - 9,000	1,300	_	_	_	_	4,250	180	5,600	730
Janka Hardness (lbf)	645	465	_	-	_	_	_	_	220	210	390	370
	Face	Edge	Face	Edge	Face	Edge	Face	Edge	Face	Edge	Face	Edge
Staple Holding (lbf)	274	285	250 - 300	250 - 300	135	_	140	_	290	240	_	_
Nail Holding (lbf)	128	150	125	150	75	_	60	_	_	_	_	_
Screw Holding (lbf)	276	295	250 - 300	250 - 300	65	_	_	_	_	_	_	_

1 lbf = 0.454 kg, 1 psi - 6.9kPa

Footnotes:

- (1) PLV properties are averages and are not to be used for design purposes. Other properties available upon request.
- (2) Various strength grades available including custom layups with cross bands.
- (3) Estimated value averages from published 3rd party data (not to be used for design purposes).
- (4) Perp. = Perpendicular



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