

Three Beam Strategy

With three beams to choose from, it can sometimes become difficult to decide which is best for the given application. Each of our beams have characteristics which make them the right choice for different situations which are summarized in the table below.

		TimberStrand® LSL	Microllam® LVL	Parallam® PSL	Notes
Span Length	<i>Short</i>	BEST	Good	Better	Shear will most likely control and with an $f_v = 310$ psi, TimberStrand® LSL is one of the strongest wood beams in the market
	<i>Long</i>	Good	Better	BEST	Deflection or moment will typically control, making Parallam® PSL is ideal due to its high MOE of 2.0×10^6 psi and $f_b = 2900$ psi
Exterior Treatment		No	No	Yes	Decay- and insect-resistant Parallam Plus PSL headers, beams, columns, and posts are perfect for framing applications where there is direct contact with the ground or moisture. Product comes with 30-year warranty.
Lateral Connection	<i>Face</i>	0.5		0.5	Proper precautions should be taken to prevent splitting in wood members. See Fastener Spacing guide.
Specific Gravity	<i>Edge</i>	0.5		0.5	
Withdrawal	<i>Face</i>	0.5		0.5	
Specific Gravity	<i>Edge</i>	0.42		0.5	
Holes		3" to 4-5/8" anywhere, depending on depth, but last 8" of span	2" without engineering analysis in center third of beam and depth		All holes must be circular and in the center third of the depth. See Beams, Headers, and Columns Guide (#TJ-9000) for more information.
Available lengths		Up to 60'		Contact iLevel® for availability	
Sizes	<i>Width</i>	1-3/4", 3-1/2"	1-3/4"	3-1/2", 5-1/4", 7"	Parallam® PSL beams 20" and deeper have a modulus of elasticity of 2.2E.
	<i>Height</i>	9-1/2", 11-7/8", 14", 16"	5-1/2", 7-1/4", 9-1/2", 11-7/8", 14", 16"	9-1/2", 11-7/8", 14", 16", 18", 20", 22", 24"	
Re-sizing	<i>Minimum Width</i>	1-3/4"	1-3/4"	1-3/4"	All beams can be ripped to a minimum width of 1-3/4". Microllam® LVL comes standard in this width.
	<i>Minimum Depth</i>	3-1/2"	3-1/2"	3-1/2"	All beams can be cut to a minimum depth of 3-1/2". See section 5.6 in ESR-1387