RedBUILT™
Formerly the Commercial Division of Trus Joist

INNOVATION CELEBRATING 50 YEARS EXCELLENCE

RedLam™ LVL

Laminated Veneer Lumber

- Engineered to project specifications
- Consistent strength
- Consistent quality
- Finished lengths up to 80 feet

REDLAM™ LAMINATED VENEER LUMBER

RedLam™ LVL can be used as main carrying beams, flush beams, headers and wall framing. The RedLam™ LVL manufacturing process removes and disperses the natural defects inherent in wood and produces a product that is strong, dimensionally stable and very reliable.

STRONGER THAN NATURE

Our production process creates wood members with structural qualities equal to or greater than equivalent sizes of dimensional lumber and most glulam beams.

SIZES FOR EVERY NEED

RedLam™ LVL is manufactured in standard widths from 1½" – 3½", in lengths up to 80 feet, with depths of 9½" – 24" including wall framing in 2x and 3x sizes from 3½" – 11¼".

REDLAM™ LVL BEAMS AND HEADERS

RedLam™ LVL beams work well in applications all over the structure. No matter where they're used, they install quickly with little or no waste. RedLam™ LVL is very stable and resists warping, splitting and shrinking.

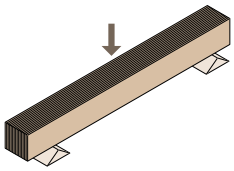
RedLam™ LVL Available Sizes

	Depth												
Available Thickness	**3½"**	**5½"**	**7¼"**	**9¼"**	**9½"**	**11¼"**	**11⅞"**	**14"**	**16"**	**18"**	**20"**	**22"**	**24"**
1½"	x	x	x	x	x	x	x						
1¾"	x	x	x	x	x	x	x	x	x	x	x	x	x
2½"	x	x	x	x		x							
3½"	x	x	x	x	x	x	x	x	x	x	x	x	x
5¼"(1)					x		x	x	x	x	x	x	x
7"(1)					x		x	x	x	x	x	x	x

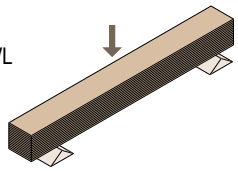
(1) Beams built-up using multiple plies of standard thickness RedLam™ LVL. For additional information regarding connection of plies and side load capacity, contact your RedBuilt™ technical representative.

Beam, Plank and Column Orientation Diagrams

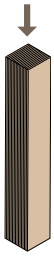
Beam Orientation
Load RedLam™ LVL parallel to glue line.



Plank Orientation
Load RedLam™ LVL perpendicular to glue line.



Column Orientation



Resource Efficiency

Consider all of the positive attributes of wood when selecting your building material of choice. In addition to its structural properties, high strength-to-weight ratio, and ease of construction, wood is a naturally occurring, renewable resource that requires less energy to produce than steel or concrete. And it sequesters carbon–whether on the stump or in your structure.

Our RedLam™ LVL, as well as other RedBuilt™ products, are now available with FSC credits. Whether you're looking for LEED certification or simply because you want to ensure efficient use of raw materials, we can help. By making better use of every tree, RedBuilt™ produces cost-effective, consistently available engineered wood products that reduce environmental impact. The result is a quality wood product that offers superior strength and reliable performance.

FSC©

FSC Supplier
SCS-COC 001848

The mark of responsible forestry
© 1996 Forest Stewardship Council

BEAM DESIGN STRESSES

Orientation		RedLam™ LVL Beam/Joist	RedLam™ LVL Plank(5)
Grade		2.0E	2.0E
Shear modulus of elasticity	G =	125,000 psi	125,000 psi
Modulus of elasticity	E =	2.0 x 10^6 psi	2.0 x 10^6 psi
Flexural stress	F_b =	2,900 psi(1)	3,430 psi
Tension stress	F_t =	1,660 psi(2)	1,660 psi(2)
Compression perpendicular to grain	$F_{c\perp}$ =	750 psi(3)	480 psi(3)
Compression parallel to grain	$F_{c\parallel}$ =	2,635 psi	2,635 psi
Horizontal shear parallel to grain	F_v =	285 psi	190 psi
Equivalent specific gravity	SG =	0.50(4)	0.50(4)

(1) For 12" depth. For other depths, multiply F_b by $\left[\frac{12}{d}\right]^{0.136}$
(2) F_t is adjusted for volume effects for a range of common conditions.
(3) $F_{c\perp}$ may not be increased for duration of load.
(4) For lateral connection design only.
(5) For square members only. Other rectangular members should be used in beam orientation.

RedLam™ LVL is intended for dry-use, untreated applications

For uniformity loaded simple span beams, deflection is calculated as follows:

$$\Delta = \frac{270wL^4}{Ebd^3} + \frac{28.8wL^2}{Ebd}$$

Where: Δ = Deflection, inches; w = Uniform load in plf; L = Span, feet; E = Modulus of Elasticity, psi; b = Beam width, inches; d = Beam depth, inches

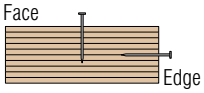
Code Evaluations: See ICC ESR-2993

NAILING INFORMATION

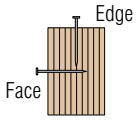
Minimum Nail Spacing

Nail Type		Nail Size	RedLam™ LVL Face	RedLam™ LVL Edge(1)
8d	Box	0.113" x 2½"	2"	3"
	Common	0.131" x 2½"	2"	3"
10d	Box	0.128" x 3"	2"	3"
	Common	0.148" x 3"	3"	4"
12d	Box	0.128" x 3¼"	2"	3"
	Common	0.148" x 3¼"	3"	4"
16d	Box	0.135" x 3½"	3"	4"
	Sinker	0.148" x 3¼"	3"	4"
	Common	0.162" x 3½"	4"	8"

(1) For headers and beams. For Red-I™ joists and open-web trusses, see the nailing criteria in the respective specifier's guide.



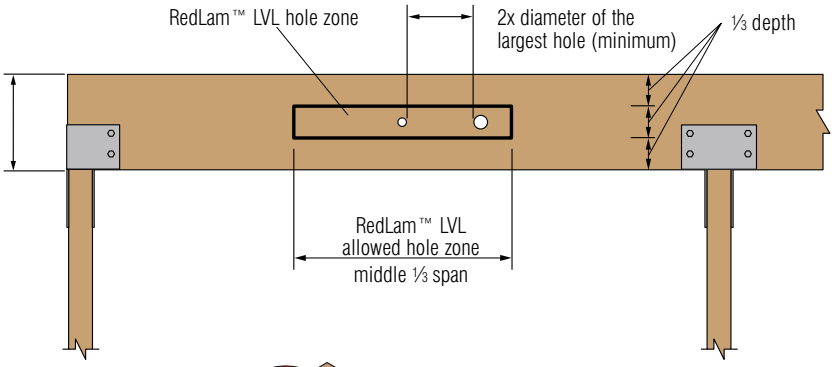
Flatwise orientation
(typical with Red-I™ joists and plywood edge blocking)



Edgewise orientation
(typical with rim board, beams, and headers)

- If more than one row of nails is used, offset rows at least ½" and stagger. Use 10d (3") common nails, maximum, and maintain ⅜" minimum edge distance.
- Nailing pattern to be per plans and specifications, and nail spacing should comply with criteria listed on this page.

HEADERS AND BEAMS



DO NOT cut, notch, or drill holes in headers or beams except as indicated in the illustrations and tables

General Notes

- Allowed hole zone suitable for headers and beams with uniform loads only.
- Round holes only.
- No holes in cantilevers.
- No holes in headers or beams in plank orientation.

Header or Beam Depth	Maximum Round Hole Size
5½"	1¾"
7¼" – 20"	2"

- See illustration for allowed hole zone.

SERVICE AND SUPPORT YOU CAN COUNT ON.

RedBuilt™ is committed to creating superior structural solutions. How? By offering efficient structural building products supported by the broadest range of services available:

- RedBuilt™ representatives and experienced technical staff are located throughout the United States to help with technical information, installation questions, or code compliance.
- At RedBuilt,™ our goal is to help you build solid and durable structures by providing high-quality commercial building products and unparalleled technical and field support. A limited warranty for our products is in effect for the expected life of your structure.

Our team of RedBuilt™ representatives—one of the industry's largest—isn't afraid to get its hands dirty. If you call us with a problem that you believe may be caused by our products, our representative will contact you within one business day to evaluate the problem and help solve it—**GUARANTEED**.

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REPRESENTATIVE INFORMATION

RED0037–1/10

This document supersedes all previous versions. If this is more than one year old, contact your dealer or RedBuilt™ rep.