



Ripping Versa-Lam® LVL

Versa-Lam® LVL beams, columns, studs and rim boards may be ripped down for shallower depth applications. Due to the vertical layup of veneers in Versa-Lam® LVL, cutting the product to a shallower depth does not decrease any of the specified strengths in beam and joist applications (bending, horizontal shear, modulus of elasticity). Section properties however are reduced when any beam is ripped to a smaller depth. Such Versa-Lam® LVL applications may be sized using product literature if the ripped depth matches a published depth, the closest shallower published depth or analyzed with the BC Calc® sizing software using the *Cut Versa-Lam®* option (available for beams only).

Versa-Lam® LVL beams may also be ripped on edge to reduce the thickness per following limitations:

- Versa-Lam® 2.1E 3100 SP, 1.8E 2650 SP, and 1 ¾" 2.1E 2800 DF grade product may be ripped down to a thickness not less than 1 ½";
- Versa-Lam® 2.1E 3100 DF, 2.3E 3100 DF, and 1.8E 2650 DF grade beams may be ripped down to a 3-1/2" thickness (from 5-1/4" or 7" thick beams) without any reduction in specified strengths. These Versa-Lam® grades may be ripped down to thinner pieces not less than 1-1/2", but the allowable bending values shall be reduced as shown in Table 1. All other specified strengths remain as published, except for tension.

Table 1: Reduced Specified Bending Strength Values for Ripped Down Beams

Grade	Original Specified Bending Strength [psi]	Reduced Specified Bending Strength [psi]
Versa-Lam® 2.1E 3100 DF Versa-Lam® 2.3E 3100 DF	5730	5175
Versa-Lam® 1.8E 2650 DF	4900	4435

The following Versa-Lam® LVL products and applications shall never be cut:

- Cut-Down Versa-Lam® may not be utilized as truss chords or other similar tension applications;
- Versa-Lam® LVL used in column and stud applications may not be cut to a thinner thickness;
- 1-5/16" Versa-Lam® 1.5E 1800 may not be cut to a thinner thickness.

Any cutting of Versa-Lam® LVL shall be conducted in a workmanlike manner with the proper equipment and safety measures. When ripping to a smaller thickness, the product shall be cut such that the grade stamp remains on the finished product. If a remaining section does not have a grade stamp, it is the responsibility of the builder to provide proper documentation to the building official that sufficiently identifies the product.

Original product tolerances shall be maintained as shown in Table 2.

Table 2: Versa-Lam® Tolerances

Application	Beam	Column & Stud	Rim Board
Thickness	± 1/16"	N/A	± 1/16"
Depth	± 1/16"	± 1/16"	-1/32" / +1/16"