



STRENGTH CHARACTERISTICS

J-Frame Strength Characteristics

At Juken New Zealand Ltd, we pride ourselves on the excellent, consistent, structural performance across our complete range of Engineered Timber Solutions.

From time to time, we are asked by Specifiers, Designers, Engineers and Builders for the Engineering or Structural properties of J-Frame.

It's a common held belief in our industry that J-Frame is Stronger than "regular" Radiata sawn Timber of the same size. This is due to the J-Frame manufacturing process, building in quality structural properties.

While anecdotal evidence may support this in some instances, it's important that we communicate that the Juken New Zealand Codemark (CM70031) states that ***"the characteristic properties of J-Frame are to be taken as 'above the minimum of MSG 8 in respect of LVL 8 and above the minimum of MSG 10 for LVL 10 as documented in table 2.3, NZS3603:1993 (Timber Structures Standard)."***

We make no other claim for characteristic structural properties.

For the purposes of design and construction with J-Frame, please use the characteristic stresses listed in the table below, as per MSG 8 and MSG 10 in table 2.3, NZ 3603:1993.

At 16% Moisture Content

J-Frame	Bending Strength f_b (MPa)	Compression Strength f_c (MPa)	Tension Strength f_t (MPa)	Modulus of Elasticity E (GPa)	Lower Bond Modulus of Elasticity E_{lb} (GPa)
LVL 10	20.0	20.0	8.0	10.0	7.5
LVL 8	14.0	18.0	6.0	8.0	5.4

Shear strength for dry J-Frame shall be taken as $f_s = 3.8$ MPa.

Compression perpendicular to grain for dry J-Frame shall be taken as $f_p = 8.9$ MPa