

A new dimension in strength, stability, safety & sustainability

Designed and manufactured in New Zealand, the innovative Prolam PLX20 steel reinforced laminated timber beam provides superior support for today's build.

Prolam PLX20 is ideal for:

- · Garage lintels
- Ridge beams
- Floor beams
- Rafters

Stronger by design

PLX20 beams offer unparalleled load bearing capacity and spanning capability. Precision engineered from quality pine, the PLX20 has steel laminated in the top and bottom laminates for extra strength and stiffness. It allows a smaller beam to span further, making it ideal for garage lintels and other wide structures.

Quick to specify

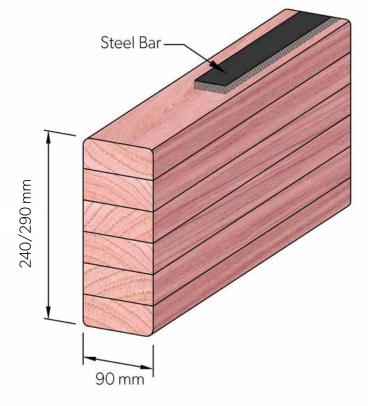
The Prolam specifier makes designing with the PLX20 very quick and easy, creating a PS1 for inserting into the specification.

Easy to install

Compact and up to 40% lighter than other products, PLX20 beams are faster, simpler and safer to install. They save you time and money with no extra assembly, equipment or staff required for installation, and the ability to cut the beams to length on site and secure with Prolam's recommended fixings.

A sustainable choice

PLX20 beams are made from FSC accredited timber sourced from renewable and sustainably managed New Zealand plantations (using 14 times less energy than their steel equivalents).



Watch video

https://www.youtube.com/watch?v=p0oZFgKluA0

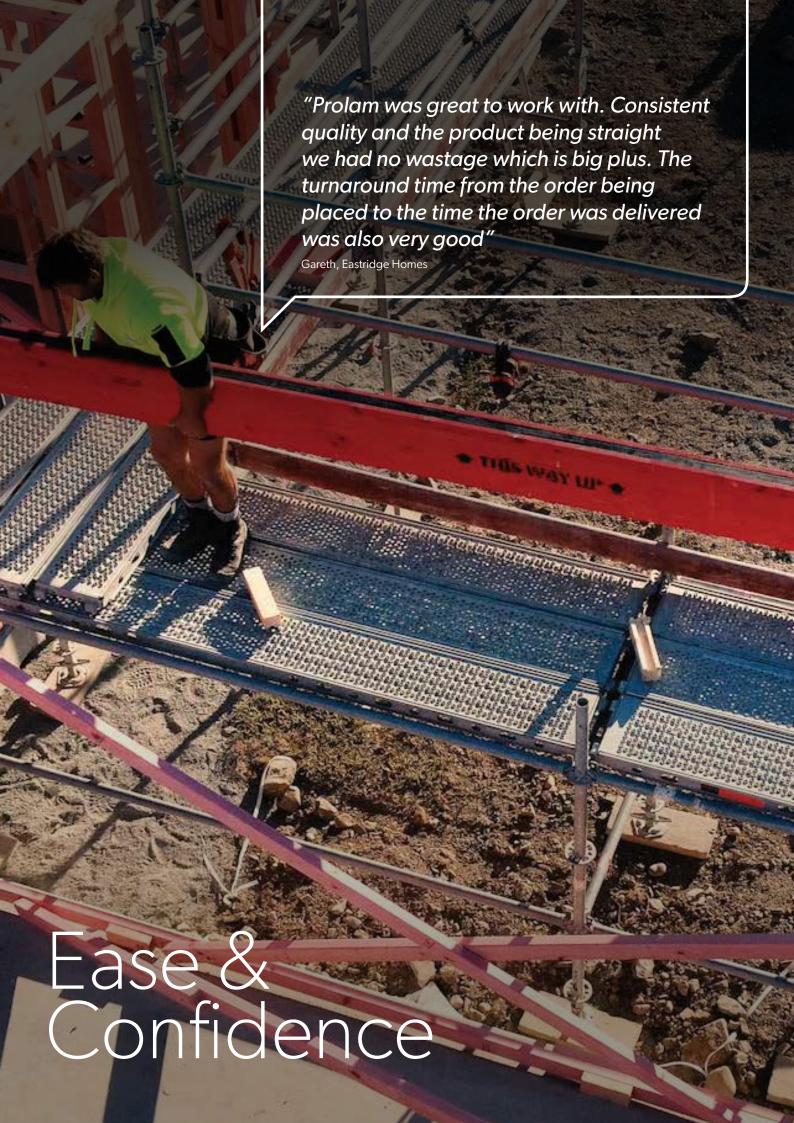


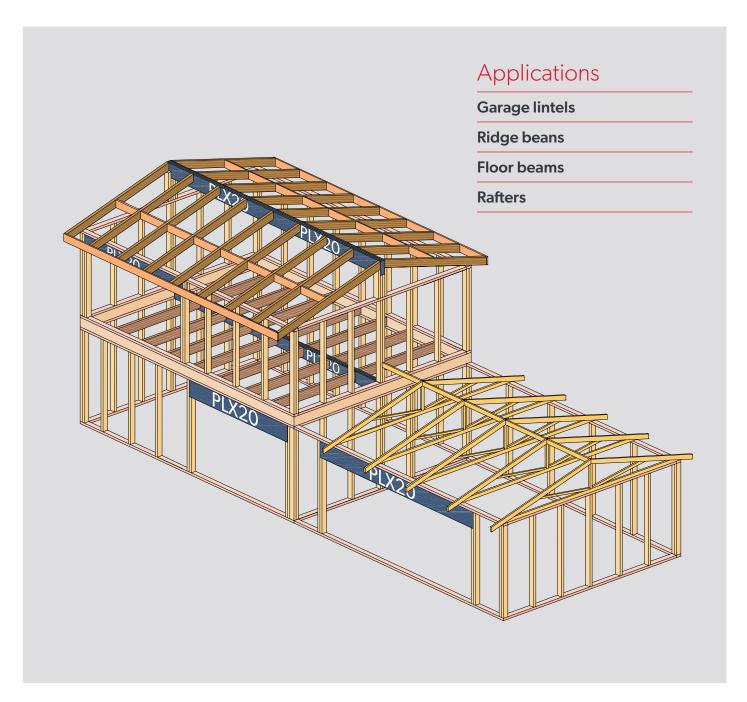


"I prefer Prolam PLX20's over other garage door beams. We used to use a Hiab or have four guys to lift some beams into place. PLX20 can be installed with just two guys due to it being lightweight."

Chris, Setout Homes Ltd







Optimal design freedom & flexibility

Code: PLX20H1-250100 & PLX20H1-300100 Sizes: 240mm x 90mm & 290mm x 90mm

Lengths: 3.6m, 4.2m, 4.8m, 5.4m, 6.0m, 6.6m

 $\underline{\text{Precamber (mm)} = \text{Length (mm)}/800}$

Treatment: H1.2

Grade: Non-Visual

Limitations: Only for use in interior (service class 1) areas.

Not for exterior use.

Ease & confidence

- Up to 40% lighter than alternative products
- High strength and durability
- Greater spanning capability
- Simple to specify using the Prolam Specifier
- Fast and easy to install
- Innovative manufacturing process
- High timber to steel ratio
- Manufacturing from FSC certified timber
- Competitively priced
- Made in New Zealand
- 50 year warranty

For a strong and safe build

Characteristic St	rengths (MPa)		Elastic Moduli (MPa)			
Beam Size	Bending	Tension parallel to grain	Shear in Beam	Compression parallel to grain	Short modulus of elasticity parallel to the grain	Short duration modulus of rigidity for beams
PLX20H1-250100 240 x 90mm	40	4	3.7	18	20000	480
PLX20H1-300100 290 x 90mm	45	4	3.7	18	21000	480

Notes

- 1. Intended for use as a beam and not as tension or compression member
- 2. Bending strength and MoE have been determined from testing. Other properties are based on SG6 timber.
- 2. Beam design to be in accordance with NZ3603 assuming a timber member using appropriate factors (eg $\phi = 0.8$)
- 3. Provisional k2 factor of deflection = 1.5
- 4. Joint group J5 for design of connections

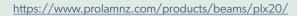
Span table

Lintel supporting roof and ceiling														
Roof Width (m)		2	3	4	5	6	7	8	9	10	11	12	13	14
Wind Zone Maximum lintel span (m)														
PLX20H1-250100 (240x90mm)	Low	6.2	5.9	5.6	5.4	5.2	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.3
	Medium	6.2	5.8	5.5	5.3	5.1	4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2
	High	5.7	5.3	5.0	4.8	4.7	4.5	4.4	4.3	4.2	4.1	4.0	3.9	3.9
	Very High	5.3	5.0	4.7	4.5	4.4	4.2	4.1	4.0	3.9	3.8	3.8	3.7	3.6
	Extra-High	5.1	4.7	4.5	4.3	4.2	4.0	3.9	3.8	3.7	3.6	3.6	3.5	3.4
PLX20H1-300100 (290x90mm)	Low	7.2*	6.8*	6.5	6.3	6.1	5.9	5.7	5.6	5.5	5.4	5.3	5.2	5.1
	Medium	7.2*	6.8*	6.5	6.2	6.0	5.8	5.6	5.5	5.3	5.2	5.1	5.0	5.0
	High	6.6	6.2	5.9	5.7	5.5	5.3	5.1	5.0	4.9	4.8	4.7	4.6	4.5
	Very High	6.2	5.8	5.5	5.3	5.1	5.0	4.8	4.7	4.6	4.5	4.4	4.3	4.2
	Extra-High	5.9	5.5	5.3	5.1	4.9	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0

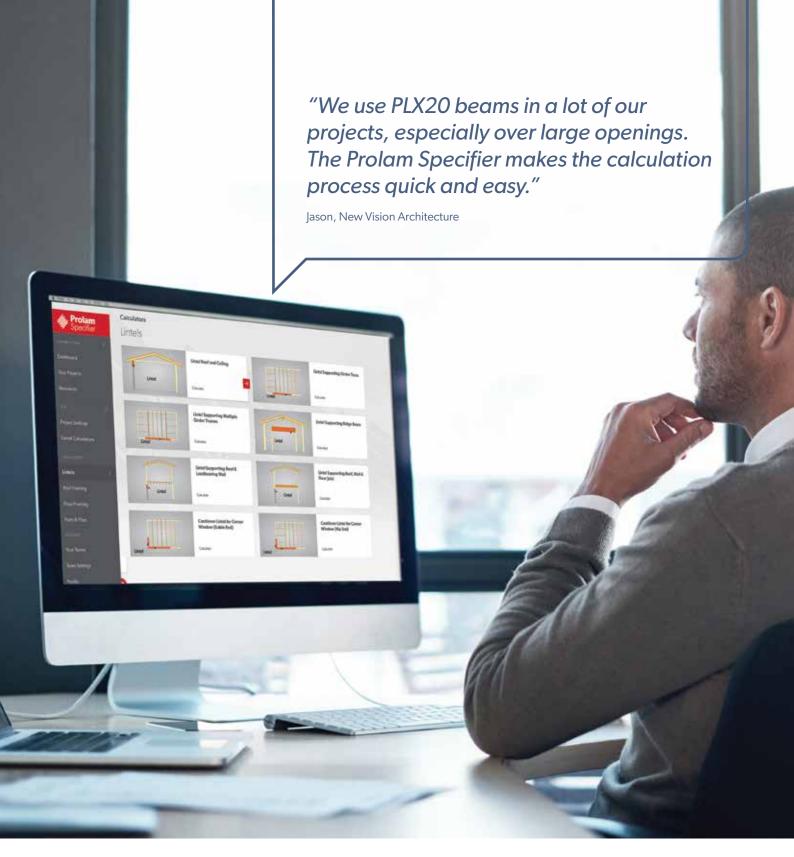
^{*}PLX20 beams lengths are from 3.6m - 6.6m

 $PLX20 \ is \ manufactured \ in accordance \ with \ the \ AS/NZS \ 1328 \ Glue \ Laminated \ Structured \ Timber \ Standard, \ under \ an \ approved \ quality \ system \ based \ on \ the \ 1SO \ 9000 \ series \ of \ standards. \ As \ such, \ if \ the \ product \ is \ used \ in \ accordance \ with \ Prolam \ product \ literature, \ it \ will \ meet \ the \ durability \ clauses \ of \ the \ New \ Zealand \ Building \ Code \ B2.$

For detailed specs and information







Specify with certainty

The Prolam Specifier, our online specification tool, is your fast track to finding the perfect match for your project.

An efficient and reliable tool for designing structural timber elements, the Prolam Specifier gives you the ability to adjust design parameters for precise product specification.

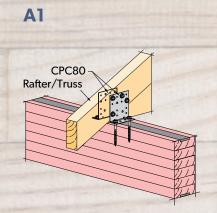
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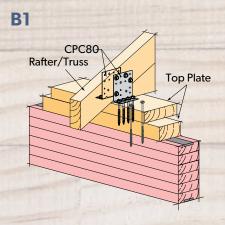
https://www.prolamnz.com/specifier/

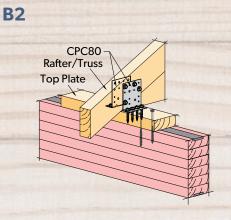


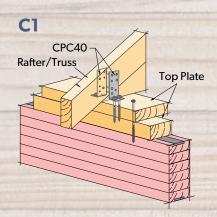


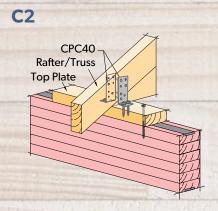
PLX20 Uplift Fixings

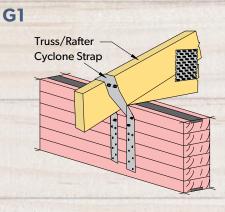


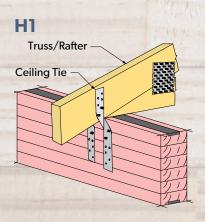


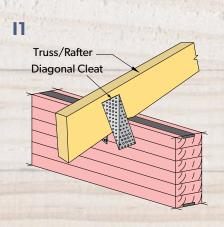


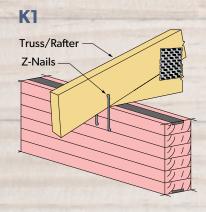












	Characteristic Strength	ULS Capacity
A1	16 kN/Pair	11.2 kN/Pair
B1 & B2	16 kN/Pair	11.2 kN/Pair
C1 & C2	8 kN/Pair	5.6 kN/Pair
G1	12 kN	9.6 kN
H1	10.5 kN/Pair	8.4 kN/Pair
11	20 kN/Pair	16 kN/Pair
J1	- a crisi alli	5 kN/Pair
K1	3.2 kN/Pair	2.5 kN/Pair
LI	4 kN/Pair	3.2 kN/Pair



Building Better Together

At Prolam, we support architects and building professionals to design and build with strength, confidence and ease using premium engineered timber solutions.



NZ made quality

Innovative timber solutions designed and made in New Zealand using high quality, locally sourced materials – creating local employment and training opportunities



Fast and efficient

Industry-best lead times via a secure supply chain, proactive management of stock holdings and next level production efficiencies



Solid eco-credentials

FSC certified and made from renewable New Zealand plantation timber, with research-backed resistance to fire and harsh environmental conditions



Strong and safe

Precision engineered for a superior fit, optimal structural integrity, dimensional stability, and easy and safe installation



Confident compliance

Prolam sets the benchmark in building code compliance and certification for glulaminated timber products - for smooth engineering and building consent approvals



Cutting edge technology

Advanced manufacturing processes and smart tools that streamline product specification, supply, installation and certification



Built-in ease

Control at every step, with expert technical advice on tap – from knowledge of local industry codes, precise product selection to installation and after sales support









