

**Building  
better  
together**



**Prolam**®  
PLX20

RESIDENTIAL | COMMERCIAL

[prolamnz.com](http://prolamnz.com)



**Prolam**®  
Engineered Laminated Timber

## 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, floor beams, and other highly loaded beams.

### Quick to specify

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

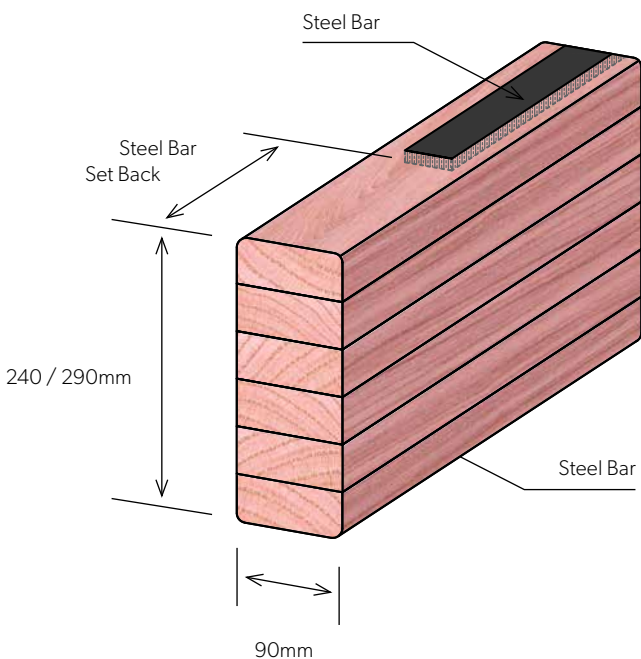
### Easy to install

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

FSC options are available upon request.

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





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



**SCAN FOR MORE**

Watch the video to find out more

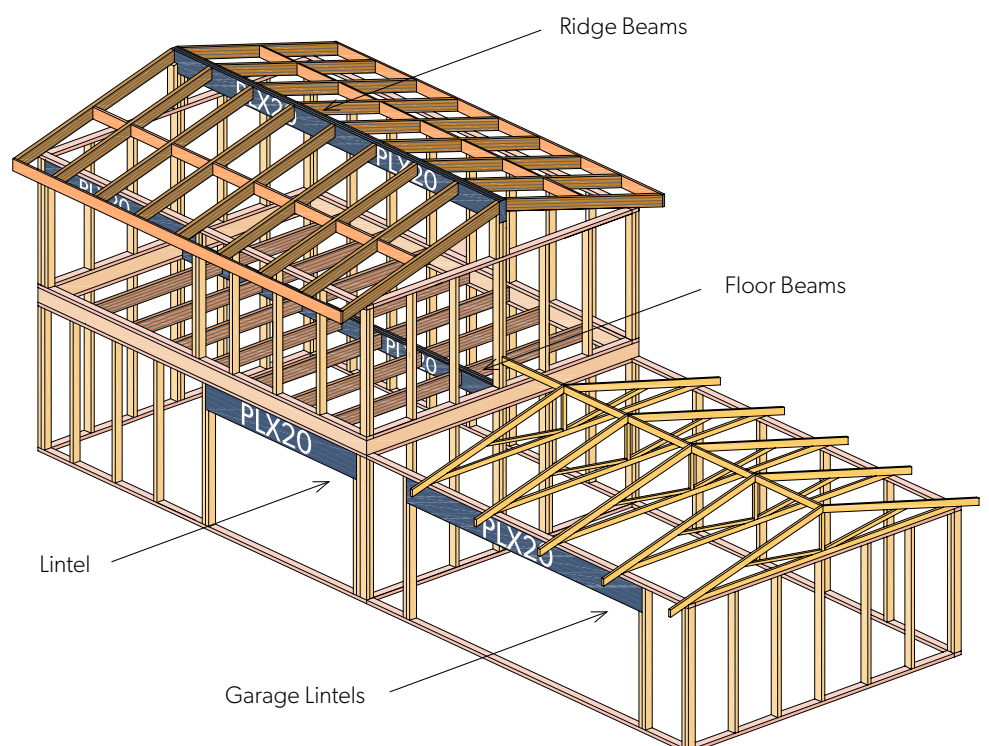


Freedom,  
flexibility,  
ease &  
confidence

# Prolam® PLX20

## Applications

- ▶ Garage lintels
- ▶ Ridge beams
- ▶ Floor beams
- ▶ Rafters





Specifying PLX20 beams using the Prolam Specifier is easy and fast. The PLX20 beams are perfect for a lot of garage door lintel situations, with minimal deflection compared to other beams out there

Hayden, F&T Detailer



**SCAN FOR MORE**

Watch the video to find out more

## 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
- ▶ Manufactured from sustainable New Zealand timber
- ▶ Competitively priced
- ▶ Made in New Zealand
- ▶ 50 year warranty

## 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
Treatment:	H1.2
Grade:	Non-Visual
Limitations:	Only for use in interior areas (Service Class 1) Not for exterior use.

All beams are precambered.

## For a strong and safe build

Characteristic Strengths (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
<b>PLX20H1-250100</b> 240 x 90mm	40	4	3.7	18	20,000	480
<b>PLX20H1-300100</b> 290 x 90mm	45	4	3.7	18	21,000	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.
  3. Beam design to be in accordance with NZ3603 assuming a timber member using appropriate factors (eg = 0.8).
  4. Provisional k2 factor of deflection = 1.5.
  5. 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)													
<b>PLX20H1-250100</b> (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
<b>PLX20H1-300100</b> (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 can be specified with 3.3m - 6.6m lengths

PLX20 is manufactured in accordance with the AS/NZS 1328 Glue Laminated Structured Timber Standard, under an approved quality system based on the ISO 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.

## Steel lengths

Beam Length (m)	Steel Length (m)	Steel Set Back (mm)
3.6	3.2	200
4.2	3.6	300
4.8	4.2	300
5.4	4.7	350
6.0	5.3	350
6.6	6.0	300



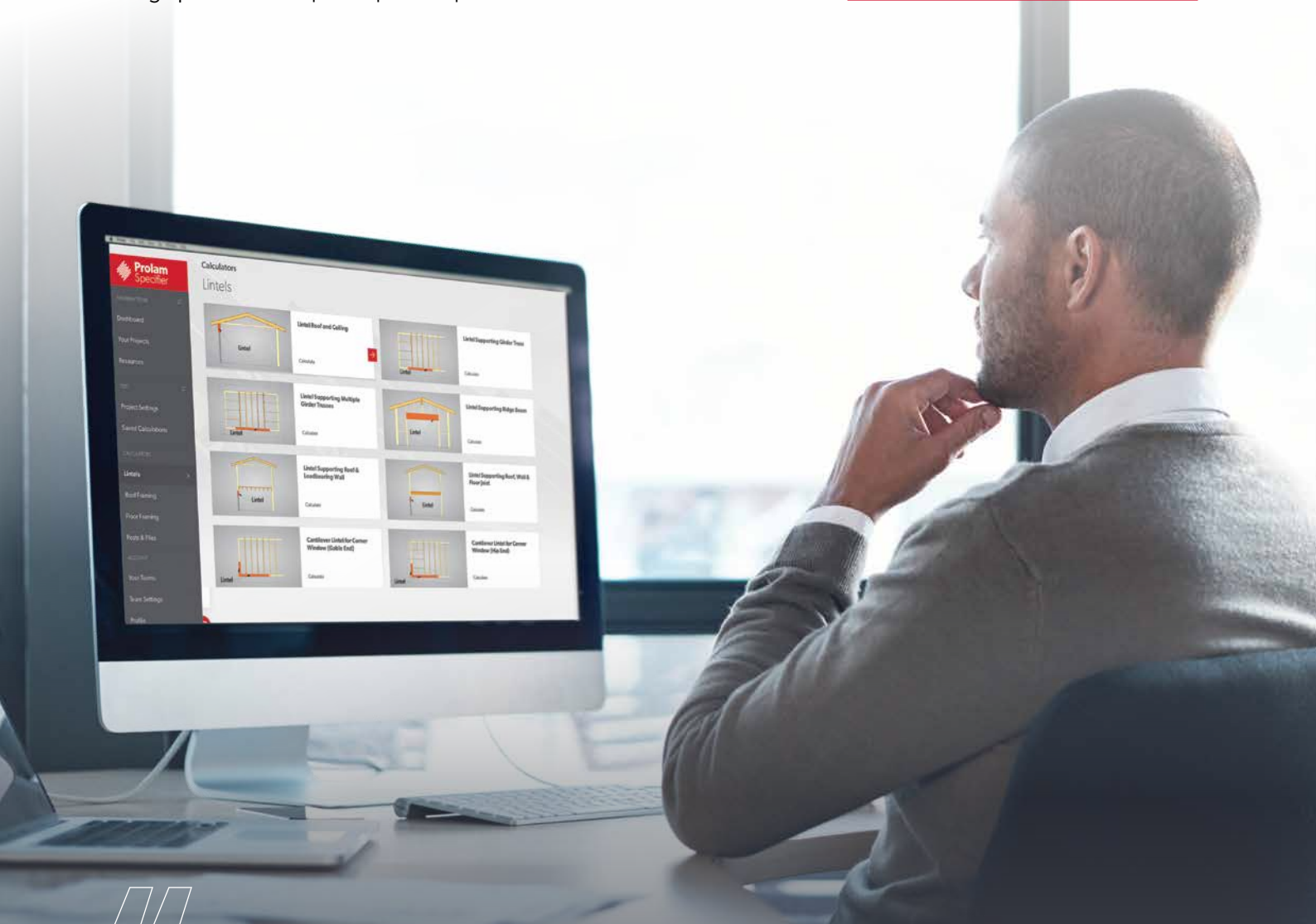
**SCAN FOR MORE**  
Detailed specs  
and information

The steel bar in each beam has a setback length for cutting the beam to length on-site (as per above table). Please ensure steel is not cut.

## 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.



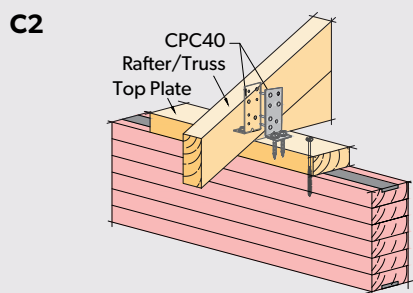
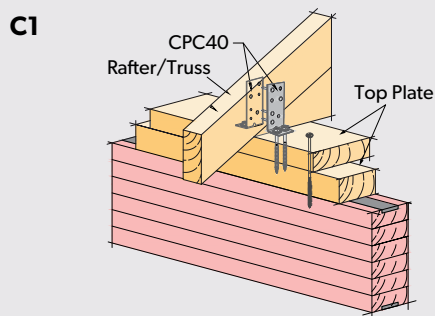
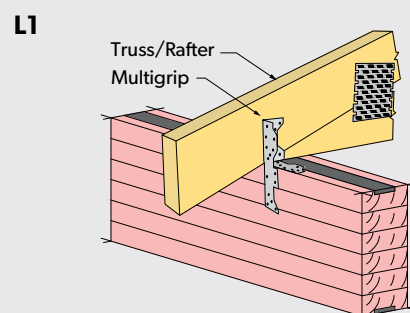
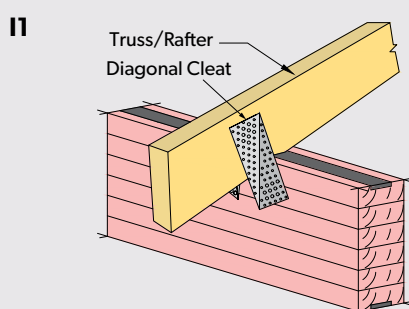
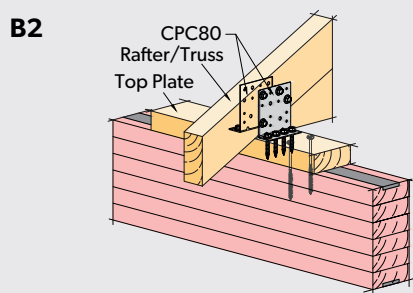
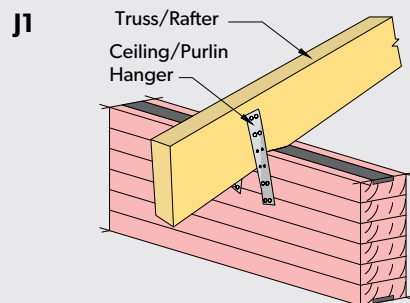
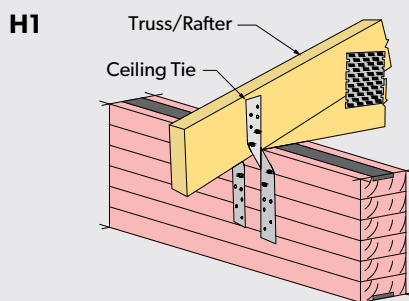
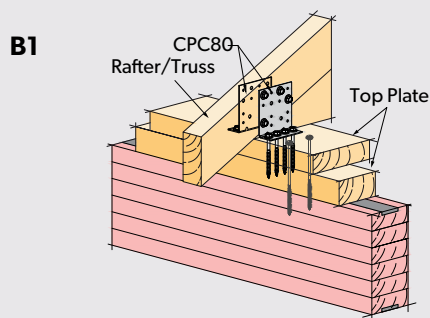
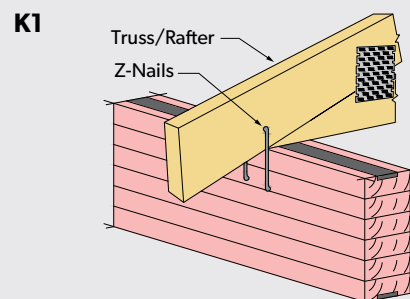
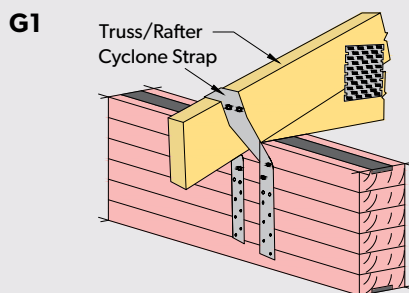
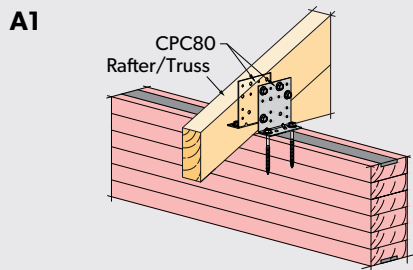
We use PLX20 beams in a lot of our projects, especially over large openings. The Prolam Specifier makes the calculation process quick and easy.

Jason, New Vision Architecture



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Register today

## Uplift fixings



	Characteristic Strength	ULS Capacity
<b>A1</b>	16 kN/Pair	11.2 kN/Pair
<b>B1 &amp; B2</b>	16 kN/Pair	11.2 kN/Pair
<b>C1 &amp; C2</b>	8 kN/Pair	5.6 kN/Pair
<b>G1</b>	12 kN	9.6 kN
<b>H1</b>	10.5 kN/Pair	8.4 kN/Pair
<b>I1</b>	20 kN/Pair	16 kN/Pair
<b>J1</b>	-	5 kN/Pair
<b>K1</b>	3.2 kN/Pair	2.5 kN/Pair
<b>L1</b>	4 kN/Pair	3.2 kN/Pair

Avoid drilling through or damaging the steel bar for fixings and take care to prevent the steel plate from damaging the screw threads.



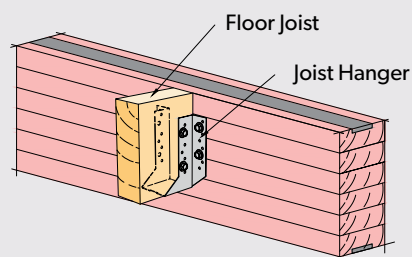
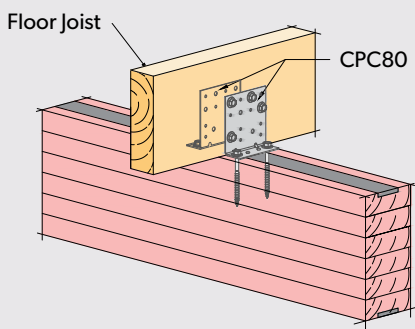
# Strong & safe



PLX20s are much easier to install, as scaffolding or a Hiab are not needed, thus saving you both time and money

Dain, Builder

## Floor Joist to PLX20 fixings



## Have technical questions?

Our sales team and structural engineers are on-hand to support you to find the right solution for your project.

**Call 03 526 7436 or visit our Prolam Specifier at [specifier.prolamnz.com](http://specifier.prolamnz.com)**

# Building better together

At Prolam, we support engineers, 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



### **Solid eco-credentials**

Made from New Zealand plantation timber, with research-backed resistance to harsh environmental conditions, FSC certified timber options available



### **Confident compliance**

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



### **Built-in ease**

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



### **Fast and efficient**

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



### **Strong and safe**

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



### **Cutting edge technology**

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



**Prolam**<sup>®</sup>  
**Specifier**

**Specify with certainty**

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Trusses

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Pergolas



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**Planning a project?**

Our team of experts are ready to assist.

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