Building
better
together

Prolam® Pergolas

Prolam® Pergolas

Our five-step guide to designing and building the perfect pergola

RESIDENTIAL | COMMERCIAL

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Prolam®
Engineered Laminated Timber

Prolam®
Pergolas

Elevate any outdoor space

Transform outdoor spaces with stunning Prolam Pergolas: beauty, durability, and functionality combined. Your easy five-step solution.

Prolam®
Engineered Laminated Timber

Discover more

- PL8 & PL12 structural grades readily available
- Unmatched quality and dimensional stability (no twisting or warping)
- Weather-resistant treatment: MCA H3.2 & H5
- Available in a wide range of sizes and lengths
- Aesthetic excellence - grades and finishes for visual appeal and beauty

CodeMark CERTIFIED

NZ's only CodeMark certified PL8 & PL12 H5 glulam posts

Five easy steps to your perfect pergola

Prolam
Engineered Laminated Timber

STEP 1

Determine the pergola size:
length, **width**, and **height**.

STEP 2

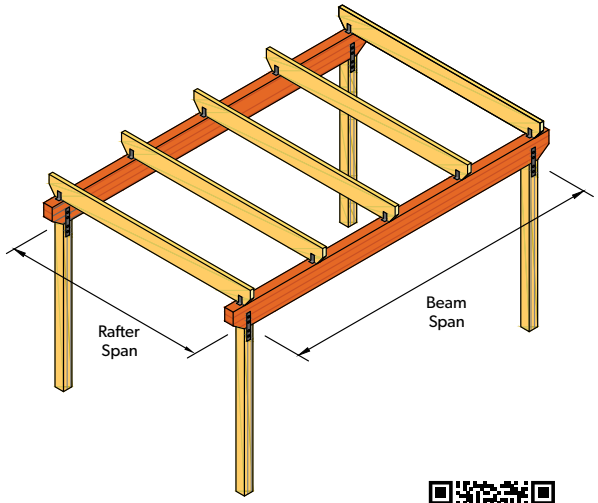
Use the table below to select the correct size outer beams.

PL8 Prolam® Pergola Beams

Tables are for wind zones up to high.

For **very high** wind zone, multiply the maximum beam spans by 0.85.

For **extra high** wind zone, multiply the maximum beam spans by 0.75.



Scan for PL12
beam options

Rafter Span (m)			1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0
BEAM SIZE			Maximum Beam Span (m)								
PL8	PLVL8H3-15050	140 x 42mm	2.6	2.5	2.4	2.3	2.2	2.1	2.1	2.0	2.0
	PLVL8H3-20050	190 x 42mm	4.1	3.9	3.7	3.5	3.4	3.3	3.1	2.9	2.7
	PLVL8H3-25050	240 x 42mm	5.6	5.2	4.9	4.6	4.3	3.9	3.7	3.4	3.3
	PLVL8H3-30050	290 x 42mm	6.0*	6.0*	5.8	5.2	4.7	4.3	4.0	3.8	3.6
	PLVL8H3-150100	140 x 88mm	4.2	3.9	3.6	3.4	3.2	3.1	2.9	2.8	2.8
	PLVL8H3-200100	190 x 88mm	5.6	5.1	4.8	4.5	4.3	4.1	4.0	3.8	3.7
	PLVL8H3-250100	240 x 88mm	6.0*	6.0*	5.9	5.6	5.4	5.2	5.0	4.8	4.7
	PLVL8H3-300100	290 x 88mm	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*	5.8	5.6
	PLVL8H3-150125	140 x 112mm	4.5	4.1	3.8	3.6	3.4	3.3	3.2	3.1	3.0
	PLVL8H3-200125	190 x 112mm	5.8	5.4	5.1	4.8	4.6	4.4	4.3	4.1	4.0
	PLVL8H3-300125	290 x 112mm	6.0*	6.0*	6.0*	6.0*	5.7	5.5	5.3	5.2	5.0
	PLVL8H3-350125	315 x 112mm	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*
	PLVL8H3-150150	140 x 135mm	4.6	4.3	4.0	3.8	3.6	3.5	3.3	3.2	3.1
	PLVL8H3-200150	190 x 135mm	6.0*	5.6	5.3	5.0	4.8	4.6	4.5	4.3	4.2
	PLVL8H3-250150	240 x 135mm	6.0*	6.0*	6.0*	6.0*	6.0*	5.8	5.6	5.4	5.3
	PLVL8H3-300150	290 x 135mm	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*	6.0*

* The beam lengths have been limited to a maximum of 6m.

STEP 3

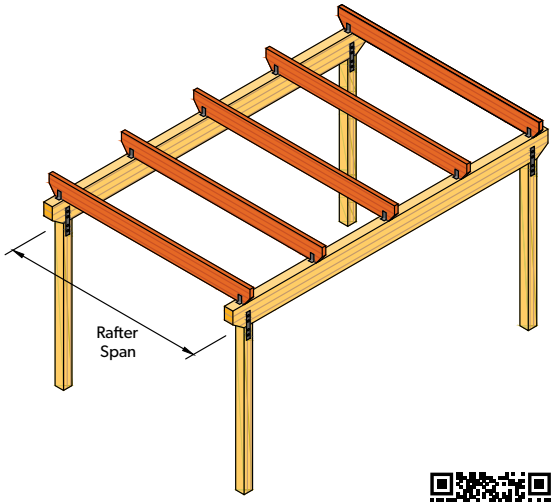
Use the table below for rafter size based on the rafter and spacing.

PL8 Prolam® Pergola Rafters

Tables are for wind zones up to high.

For **very high** wind zone, multiply the maximum beam spans by 0.85.

For **extra high** wind zone, multiply the maximum beam spans by 0.75.



Scan for PL12
rafter options

Rafter Spacing (mm)			600	750	900	1000	1200
RAFTER SIZE			Maximum Rafter Span (m)				
PL8	PLVL8H3-10050	88 x 42mm	1.1	1.1	1.1	1.1	1.1
	PLVL8H3-15050	140 x 42mm	2.7	2.7	2.6	2.6	2.6
	PLVL8H3-20050	190 x 42mm	4.4	4.3	4.3	4.2	4.1
	PLVL8H3-25050	240 x 42mm	6.0*	5.9	5.8	5.5	5
	PLVL8H3-30050	290 x 42mm	6.0*	6.0*	6.0*	6.0*	5.8
	PLVL8H3-10075	88 x 63mm	1.7	1.6	1.6	1.6	1.6
	PLVL8H3-15075	140 x 63mm	4	3.9	3.9	3.8	3.7
	PLVL8H3-20075	190 x 63mm	5.9	5.7	5.5	5.4	5.2
	PLVL8H3-25075	240 x 63mm	6.0*	6.0*	6.0*	6.0*	6.0*
	PLVL8H3-100100	88 x 88mm	2.3	2.3	2.2	2.2	2.2
	PLVL8H3-150100	140 x 88mm	4.8	4.7	4.5	4.4	4.2
	PLVL8H3-200100	190 x 88mm	6.0*	6.0*	5.9	5.8	5.6
	PLVL8H3-250100	240 x 88mm	6.0*	6.0*	6.0*	6.0*	6.0*

* The beam lengths have been limited to a maximum of 6m.

CodeMark CERTIFIED

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Five easy steps to your perfect pergola

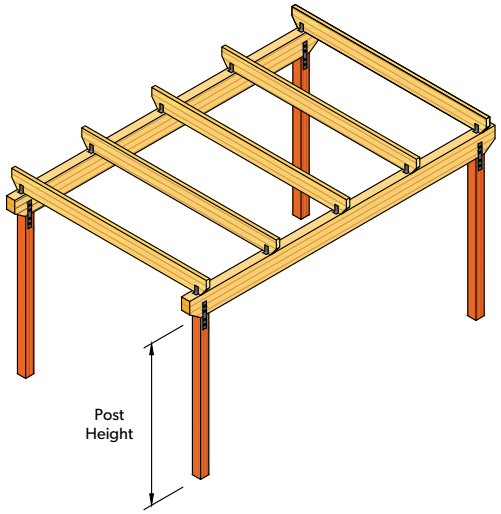
STEP 4

Use the table below to work out the number and size of posts required.

Prolam® Pergola Posts

Post to beam fixing is for lateral loads.

Vertical (bearing) loads may require additional capacity. Footing depth is into Good Ground as defined by NZS3604.



	Height	Maximum Roof Area Per Post	Footing Depth	Footing Diameter	Post to Beam Fixing
POST SIZE	**(m)**	**(m^2)**	**(m)**	**(mm)**	**(kN)**
PLP8H5-100 88 x 88mm	1.8	3.3	0.7	300	1
	2.1	2.9	0.7	300	1
	2.4	2.6	0.7	300	1
PLP8H5-125 112 x 112mm	1.8	6.1	1	450	1.5
	2.1	5.5	1	450	1.5
	2.4	5.0	1	450	1
	2.7	4.5	1	450	1
	3	4.2	1	450	1
PLP8H5-150 135 x 135mm	1.8	10.7	1	450	2.5
	2.1	9.6	1	450	2
	2.4	8.7	1	450	2
	2.7	8.0	1	450	2
	3	7.3	1	450	1.5
PLP8H5-200 180 x 180mm	1.8	25.4	1.2	450	5.5
	2.1	22.8	1.2	450	5
	2.4	20.6	1.2	450	4.5
	2.7	18.9	1.2	450	4
	3	17.4	1.2	450	3.5
PLP8H5-250 220 x 220mm	1.8	42.6	1.5	600	9
	2.1	38.5	1.5	600	8
	2.4	35.1	1.5	600	7.5
	2.7	32.3	1.5	600	6.5
	3	29.9	1.5	600	6

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STEP 4 continued

	Height	Maximum Roof Area Per Post	Footing Depth	Footing Diameter	Post to Beam Fixing
POST SIZE	**(m)**	**(m^2)**	**(m)**	**(mm)**	**(kN)**
PLP12H5-100 88 x 88mm	1.8	4.3	0.8	300	1
	2.1	3.8	0.8	300	1
	2.4	3.4	0.8	300	1
PLP12H5-125 112 x 112mm	1.8	8.1	1	450	2
	2.1	7.2	1	450	1.5
	2.4	6.5	1	450	1.5
	2.7	6.0	1	450	1.5
	3	5.5	1	450	1.5
PLP12H5-150 135 x 135mm	1.8	14.1	1.1	450	3
	2.1	12.7	1.1	450	3
	2.4	11.5	1.1	450	2.5
	2.7	10.5	1.1	450	2.5
	3	9.6	1.1	450	2
PLP12H5-200 180 x 180mm	1.8	33.4	1.3	450	7
	2.1	29.9	1.3	450	6
	2.4	27.1	1.3	450	5.5
	2.7	24.8	1.3	450	5
	3	22.8	1.3	450	5
PLP12H5-250 220 x 220mm	1.8	56.0	1.6	600	11.5
	2.1	50.6	1.6	600	10.5
	2.4	46.2	1.6	600	9.5
	2.7	42.5	1.6	600	8.5
	3	39.3	1.6	600	8

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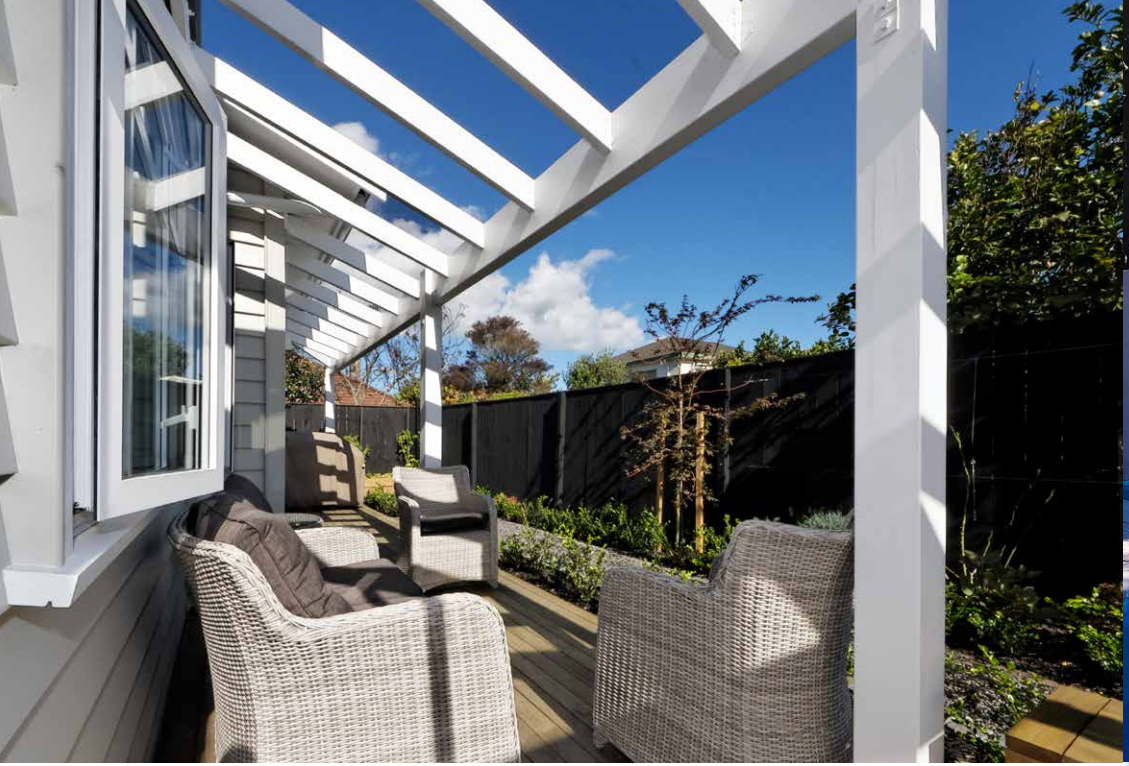
STEP 5

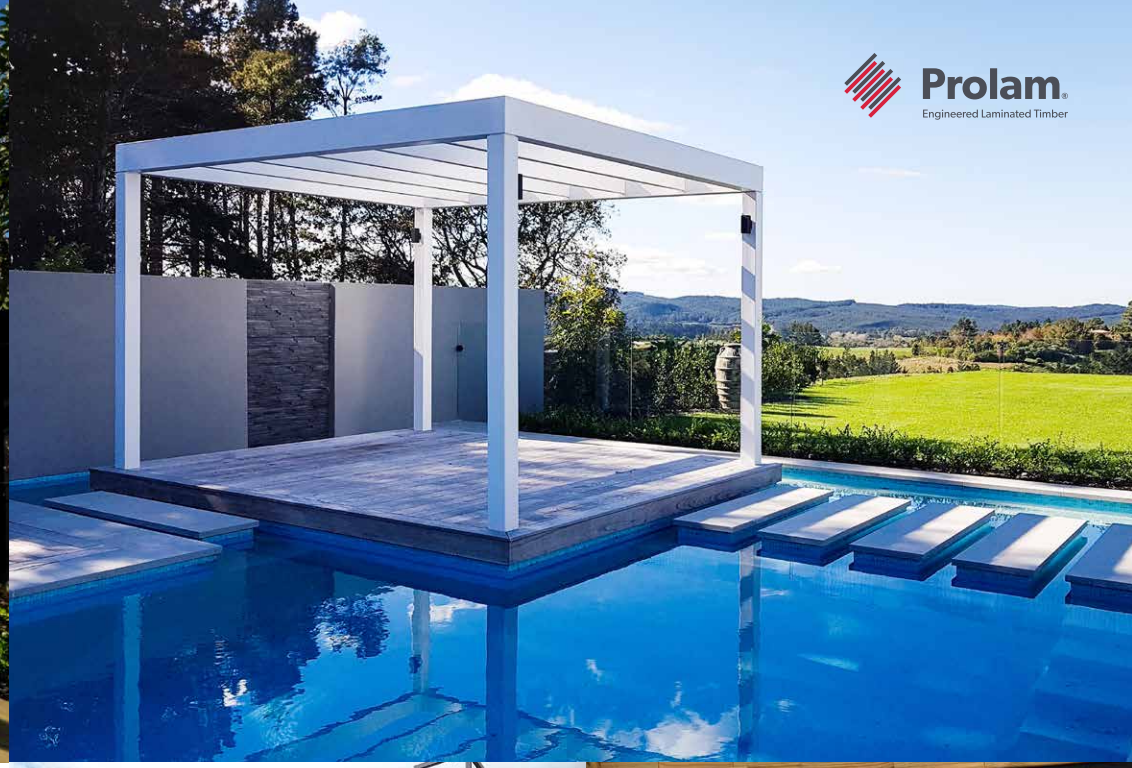
Choose the fixings

Check our recommended fixing options including concealed and exposed brackets and hangers

Scan to see fixing options or see in-store.

Scan for **fixing options**





Design your own or let us do it for you - for free! *

At Prolam, we believe in offering options that fit your needs. Whether you're ready to craft your own pergola design or prefer to rely on our expert team, the choice is yours — at no extra charge for standard designs. With our intuitive tools and professional design service, realising your dream outdoor space is effortless.

Take the reins or lean back while we transform your vision into reality.

If any of the Prolam charts don't cover your desired design, we're here to help with that too.

Call us at 03 526 7436 or simply scan the QR code and fill out our easy form to get started.

*Additional costs may apply for complex designs.

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® Specifier

Specify with certainty

Prolam®
Engineered Laminated Timber

Ask about our range

- Prolam® Posts
- Prolam® PLX20
- Prolam® Beams
- Prolam® Crib Walls
- Prolam® Fascia
- Prolam® PLX Portal
- Prolam® Exposed Trusses
- Prolam® Pergolas

Kiwi made quality

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