

Glulam Cheat Sheet



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1 Introduction

Glulam is a smart and innovative solution. Use this cheat sheet to answer any of your questions regarding glulaminated timber products, including how to use it and incorporate it into your designs.

2 What is Glulam

Glue Laminated Timber, also called glulam, is a structural timber product comprising a number of layers of dimensioned timber bonded together with durable, moisture-resistant structural adhesives.

This means gluing pieces of timber together to make bigger pieces. It is a way of manufacturing timber elements that cannot be easily sourced in solid sawn timber due to their large size or unusual shape. Glulam is used for a range of purposes from joinery timber through to large span structural beams. Wherever a steel or concrete structure is needed for a building, glulam can also be used.

How it's made

Check out our process video here.

4 Cost

Glulam is normally slightly higher cost than solid timber elements, but prices will vary depending on structural grade, treatment, size, shape & finish.

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5 Availability

Glulam is readily available, depending on time it takes to source the correct feedstock. Techlam's average lead time from order to dispatch can be anywhere from 5-7 working days, for larger scale project, a few months may be needed. Contact our sales team for an accurate leadtime – sales@techlam.co.nz

6 Where to use Glulam

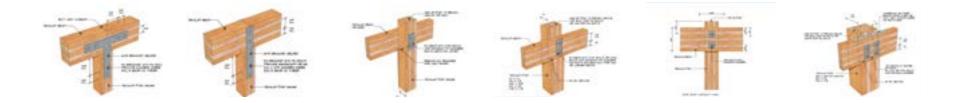
Glulam can be used almost anywhere, for structural or visual purposes. Most common uses are portals, posts, flooring, lintels, rafters, pergolas.

7 Performance & Efficiency

The performance of glulam is very superior to other building products. In a situation where span and strength are needed, Glulam will often be a stronger and more flexible solution rather than using steel or concrete. Increased efficiency can be created easily by having prefabricated glulam members that are pre stained. Ready to be erected on site.

8 How to incorporate it into your designs

Where a structural member is needed, use a glulam beam or post, we are able to manufacture glulam in almost any shape or size. All that is needed is a small type of connection that will be able to attach it. Connection types can be very simple, see some simple examples below. Or if a hidden connection is needed, consult one of our team.



Prefabrication

Prefabrication is where we cut or slot a glulam member so that is doesn't have to be done on site to fit with the steel or metal connection, and it can be installed straight away. Saving time and wastage for the onsite team. We are also able to provide the needed hardware along with prefabricated glulam product as an all-in-one package. Our prefabricated products can also be pre stained if needed.

10 Why use Glulam Carbon

Glulam sequesters carbon throughout it's life, therefore a very environmentally friendly building product. See our full environmental document <u>HERE</u>.

Acoustics

Depending on the design of a building, Glulam can provide a nice quiet environment, as timber absorbs sound and only partly reflects it. Timber is better at absorbing noise along the length of the beam, rather than against the grain.

Fire

The fire ratings of glulam products are superior to other products as Glulam chars, rather than burns. To get the required rating on a glulam member, all that is needed is to add to each dimension of the member needed for the structural strength. Appropriate structural advice should be sought when designing structural timber members and associated connections.

Biophilia

Using timber in your designs creates a biophilic effect. Biophilia is the subconcious connection to nature, that has been proven to create relaxing atmospheres with improved concentration, reduced stress and increased productivity. Using timber and other natural design elements in your designs will create this connection.

Samples

Physical glulam samples are available on request, just email sales@techlam.co.nz stating what you would like.

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