FLOOR BEAMS – 1.5 kPa – LIVE LOAD

Section Size dxb (mm)	Span of Glulam Beam, Length (m)									
	2.5	**3**	**3.5**	**4**	**4.5**	**5**	**5.5**	**6**	**6.5**	**7**
	Maximum Tributary Width (m) at Span L									
225 x 65	2.9									
225 x 90	4.0	2.5								
270 x 90	6.0	4.2	2.7							
315 x 90		5.8	4.2	2.9						
360 x 90		7.8	5.5	4.2	3.0	2.1				
360 x 90 Precambered					*3.3*	*2.6*				
precamber required(mm)					*5*	*5*				
405 x 90			7.3	5.4	4.2	3.1	2.3			
405 x 90 Precambered						*3.3*	*2.7*			
precamber required(mm)						*5*	*6*			
450 x 90				7.0	5.3	4.2	3.2	2.4		
450 x 90 Precambered							*3.4*	*2.8*		
precamber required(mm)							*6*	*7*		
495 x 90						5.3	4.2	3.2	2.5	1.9
495 x 90 Precambered								*3.5*	*2.9*	*2.5*
precamber required(mm)								*6*	*7*	*8*

Live load = 1.5 kPa, Dead Load = 0.5 kPa Beams Fully Restrained

Maximum Precamber = 1.5 x Dead Load deflection or span / 400, whichever is the least

If precamber width not shown there is no additional benefit of precamber

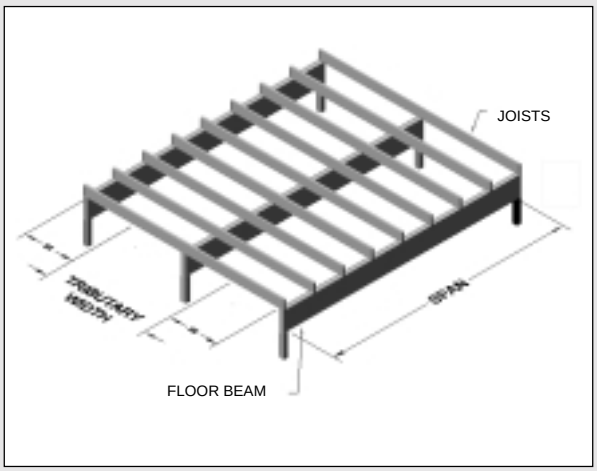
Glulam Grade = GL 8

Instructions

To use this table you will need to know:

- The Span of the floor beam.
- The Maximum Tributary Width – (this is the measured spacing between floor beams).

1. Under the 'Span of Glulam Beam' heading, locate the column headed with a span that meets or exceeds the required span.
2. Read down this column until you find a figure equal to or greater than the Maximum Tributary width required.
3. The section size of the Glulam beam can be read off the left hand column.



Example:

For a floor beam spanning 5m at centres of 3m carrying a normal domestic floor load of 1.5kPa

Span of Glulam Beam = 5

Maximum Tributary Width = 3

Therefore Section Size = 405 x 90

Section Size dxb (mm)	Span of Glulam Beam, Length (m)											
	4.5	**5**	**5.5**	**6**	**6.5**	**7**	**7.5**	**8**	**8.5**	**9**	**9.5**	**10**
	Maximum Tributary Width (m) at span L											
540 x 90	8.3	6.5	5.2	4.3	3.3	2.6	2.0					
540 x 90 Precambered					*3.5*	*3.0*	*2.5*					
precamber required(mm)					*7*	*8*	*9*					
585 x 90		7.9	6.4	5.2	4.3	3.4	2.6	2.1				
585 x 90 Precambered						*3.6*	*3.1*	*2.6*				
precamber required(mm)						*8*	*9*	*9*				
630 x 90			7.6	6.2	5.2	4.3	3.5	2.7	2.2			
630 x 90 Precambered							*3.7*	*3.2*	*2.7*			
precamber required(mm)							*9*	*9*	*10*			
675 x 135					9.9	8.4	7.2	5.7	4.5	3.6	2.9	2.4
675 x 135 Precambered								*6.2*	*5.3*	*4.7*	*4.1*	*3.6*
precamber required(mm)								*10*	*11*	*11*	*12*	*13*
720 x 135						9.8	8.3	7.2	5.8	4.7	3.8	3.1
720 x 135 Precambered									*6.2*	*5.4*	*4.8*	*4.2*
precamber required(mm)									*11*	*11*	*12*	*13*
765 x 135							9.6	8.3	7.2	5.9	4.8	3.9
765 x 135 Precambered										*6.3*	*5.5*	*4.9*
precamber required(mm)										*12*	*12*	*13*
810 x 135								9.4	8.2	7.2	5.9	4.9
810 x 135 Precambered											*6.3*	*5.6*
precamber required(mm)											*12*	*13*
855 x 135									9.3	8.2	7.2	6.0
855 x 135 Precambered												*6.4*
precamber required(mm)												*13*
900 x 135											8.1	7.2
945 x 135												8.1

Live load = 1.5 kPa, Dead Load = 0.5 kPa — Beams Fully Restrained

Maximum Precamber = 1.5 x Dead Load deflection or span / 400, whichever is the least

If precamber width not shown there is no additional benefit of precamber

Glulam Grade = GL 8

Tip:

Factory sealer coating has a limited life. If Glulam is to be exposed to weather for more than 4 weeks, a further protective coating will need to be applied. Consult coatings specialist.

Use web slings for lifting heavy Glulam beams to avoid bruising and crushing of timber.

FLOOR BEAMS – 2.0 kPa – LIVE LOAD

Section Size dxb (mm)	Span of Glulam Beam, Length (m)									
	2.5	**3**	**3.5**	**4**	**4.5**	**5**	**5.5**	**6**	**6.5**	**7**
	Maximum Tributary Width (m) at Span L									
225 x 65	2.3									
225 x 90	3.2	2.1								
270 x 90	4.8	3.3	2.3							
315 x 90	6.6	4.6	3.3	2.4						
360 x 90	8.8	6.0	4.4	3.3	2.5	1.8				
360 x 90 Precambered						*2.1*				
precamber required(mm)						*5*				
405 x 90		7.8	5.5	4.2	3.3	2.6	1.9			
405 x 90 Precambered							*2.2*			
precamber required(mm)							*5*			
450 x 90			7.1	5.2	4.1	3.3	2.7	2.0		
450 x 90 Precambered								*2.2*		
precamber required(mm)								*6*		
495 x 90			9.0	6.6	5.0	4.0	3.2	2.7	2.1	1.6
495 x 90 Precambered									*2.3*	*1.9*
precamber required(mm)									*6*	*7*

Live load = 2.0 kPa, Dead Load = 0.5 kPa Beams Fully Restrained

Maximum Precamber = 1.5 x Dead Load deflection or span / 400, whichever is the least

If precamber width not shown there is no additional benefit of precamber

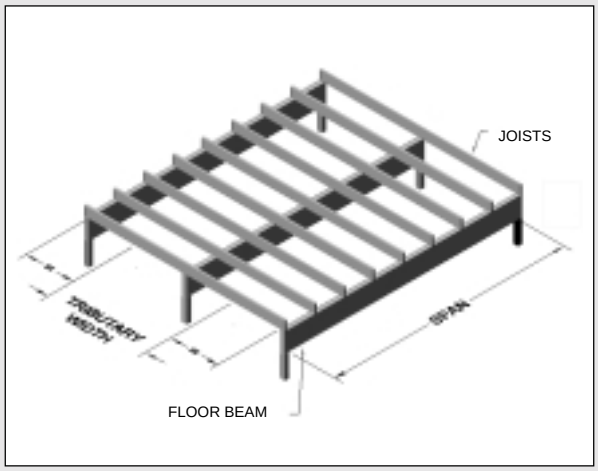
Glulam Grade = GL 8

Instructions

To use this table you will need to know:

- The Span of the floor beam.
- The Maximum Tributary Width – (this is generally the measured spacing between floor beams).

1. Under the 'Span of Glulam Beam' heading, locate the column headed with a span that meets or exceeds the required span.
2. Read down this column until you find a figure equal to or greater than the Maximum Tributary width required.
3. The section size of the Glulam beam can be read off the left hand column.



Example:

For a floor beam spanning 5m at centres of 3m carrying a deck load of 2.0kPa

Span of Glulam Beam = 5

Maximum Tributary Width = 3

Therefore Section Size = 450 x 90

FLOOR BEAMS – 2.0 kPa – LIVE LOAD – continued

Section Size dxb (mm)	Span of Glulam Beam, Length (m)												
	4	**4.5**	**5**	**5.5**	**6**	**6.5**	**7**	**7.5**	**8**	**8.5**	**9**	**9.5**	**10**
	Maximum Tributary Width (m) at Span L												
540 x 90	8.2	6.2	4.9	3.9	3.2	2.7	2.1	1.7					
540 x 90 Precambered							*2.3*	*2.0*					
precamber required(mm)							*7*	*8*					
585 x 90		7.6	6.0	4.8	3.9	3.2	2.7	2.2	1.8				
585 x 90 Precambered								*2.3*	*2.0*				
precamber required(mm)								*7*	*8*				
630 x 90		9.1	7.1	5.7	4.7	3.9	3.2	2.7	2.3	1.8			
630 x 90 Precambered									*2.4*	*2.1*			
precamber required(mm)									*8*	*9*			
675 x 135					9.1	7.6	6.4	5.4	4.6	3.7	3.0	2.4	1.9
675 x 135 Precambered										*4.0*	*3.5*	*3.1*	*2.7*
precamber required(mm)										*9*	*10*	*11*	*12*
720 x 135						8.8	7.4	6.3	5.4	4.7	3.8	3.1	2.5
720 x 135 Precambered											*4.1*	*3.6*	*3.2*
precamber required(mm)											*10*	*11*	*11*
765 x 135							8.6	7.3	6.3	5.5	4.8	3.9	3.2
765 x 135 Precambered												*4.2*	*3.7*
precamber required(mm)												*11*	*11*
810 x 135							9.8	8.4	7.2	6.3	5.5	4.8	4.0
810 x 135 Precambered													*4.2*
precamber required(mm)													*11*
855 x 135								9.5	8.2	7.1	6.2	5.5	4.8
900 x 135									9.2	8.0	7.0	6.2	5.5
945 x 135										9.0	7.9	7.0	6.2

Live load = 2.0 kPa, Dead Load = 0.5 kPa Beams Fully Restrained

Maximum Precamber = 1.5 x Dead Load deflection or span / 400, whichever is the least

If precamber width not shown there is no additional benefit of precamber

Glulam Grade = GL8

Tip:

If the ends of Glulam beams are cut on site, make sure the exposed end grain is thoroughly recoated with a protective sealer.

If non-galvanised steel connections are used dark staining may result from exposure to moisture. Use rustproof fixings in external areas.

FLOOR BEAMS – 3.0 kPa – LIVE LOAD

Section Size dxb (mm)	Span of Glulam Beam, Length (m)										
	2.5	**3**	**3.5**	**4**	**4.5**	**5**	**5.5**	**6**	**6.5**	**7**	**7.5**
	Maximum Tributary Width (m) at Span L										
225 x 65	1.6										
225 x 90	2.2	1.5									
270 x 90	3.3	2.3	1.7								
315 x 90	4.6	3.2	2.3	1.8							
360 x 90	6.1	4.2	3.1	2.3	1.8	1.3					
405 x 90	7.7	5.3	3.9	2.9	2.3	1.8	1.4				
450 x 90		6.6	4.8	3.6	2.8	2.3	1.9	1.5			
495 x 90		8.3	5.8	4.4	3.4	2.8	2.3	1.9	1.5	1.2	
495 x 90 Precambered									*1.6*	*1.3*	
precamber required(mm)									*5*	*6*	

Live load = 3.0 kPa, Dead Load = 0.5 kPa — Beams Fully Restrained

Maximum Precamber = 1.5 Dead Load deflection or span / 400, whichever is the least

If precamber width not shown there is no additional benefit of precamber

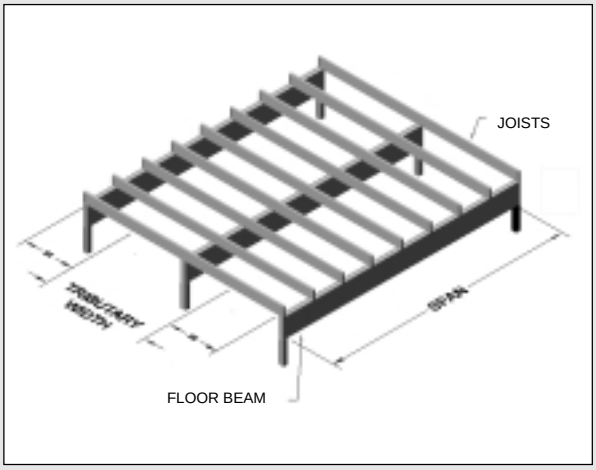
Glulam Grade = GL8

Instructions

To use this table you will need to know:

- The Span of the floor beam.
- The Maximum Tributary Width – (this is generally the measured spacing between floor beams).

1. Under the 'Span of Glulam Beam' heading, locate the column headed with a span that meets or exceeds the required span.
2. Read down this column until you find a figure equal to or greater than the Maximum Tributary width required.
3. The section size of the Glulam beam can be read off the left hand column.



Example:

For a floor beam spanning 5.8m at centres of 1.5m carrying a deck load of 3.0kPa

Span of Glulam Beam = 5.8

Maximum Tributary Width = 1.5

Therefore Section Size = 450 x 90

FLOOR BEAMS – 3.0 kPa – LIVE LOAD – Continued

Section Size dxb (mm)	Span of Glulam Beam, Length (m)													
	3.5	**4**	**4.5**	**5**	**5.5**	**5**	**6.5**	**7**	**7.5**	**8**	**8.5**	**9**	**9.5**	**10**
	Maximum Tributary Width (m) at Span L													
540 x 90	7.2	5.3	4.1	3.3	2.7	2.2	1.9	1.6	1.3					
540 x 90 Precambered									*1.4*					
precamber required(mm)									*6*					
585 x 90	8.8	6.4	4.9	3.9	3.2	2.6	2.2	1.9	1.6	1.3				
585 x 90 Precambered										*1.4*				
precamber required(mm)										*7*				
630 x 90		7.7	5.9	4.6	3.7	3.1	2.6	2.2	1.9	1.7	1.4			
630 x 90 Precambered											*1.5*			
precamber required(mm)											*7*			
675 x 135				9.1	7.3	6.0	4.9	4.1	3.5	3.0	2.6	2.1	1.7	1.4
675 x 135 Precambered												*2.2*	*2.0*	*1.8*
precamber required(mm)												*8*	*9*	*10*
720 x 135					8.5	7.0	5.8	4.9	4.1	3.5	3.0	2.7	2.2	1.8
720 x 135 Precambered													*2.3*	*2.0*
precamber required(mm)													*9*	*9*
765 x 135					9.8	8.1	6.7	5.6	4.8	4.1	3.6	3.1	2.7	2.3
765 x 135 Precambered														*2.4*
precamber required(mm)														*9*
810 x 135						9.2	7.7	6.5	5.5	4.7	4.1	3.6	3.1	2.8
855 x 135							8.7	7.4	6.3	5.4	4.7	4.1	3.6	3.2
900 x 135							9.9	8.3	7.1	6.1	5.3	4.6	4.1	3.6
945 x 135								9.4	8.0	6.9	6.0	5.2	4.6	4.0

Live load = 3.0 kPa, Dead Load = 0.5 kPa — Beams Fully Restrained

Maximum Precamber = 1.5 x Dead Load deflection or span / 400, whichever is the least

If precamber width not shown there is no additional benefit of precamber

Glulam Grade = GL8

Tip:

Delivery wrappings are not intended for longer term protection against the weather. Water can get under the wrapping but cannot get out. Wrapping should be split to provide drainage.

Make sure any pre-cambered beams are fixed in place with the camber curving upwards.